THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

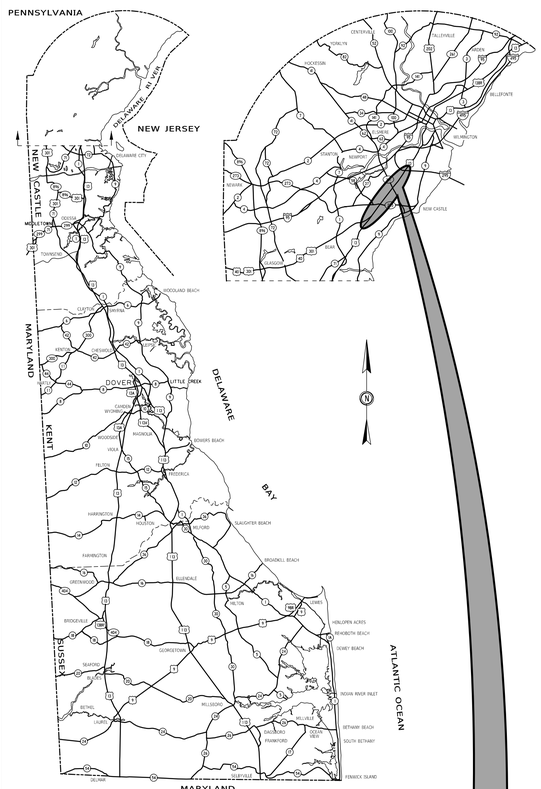
CONSTRUCTION PLANS FOR:

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

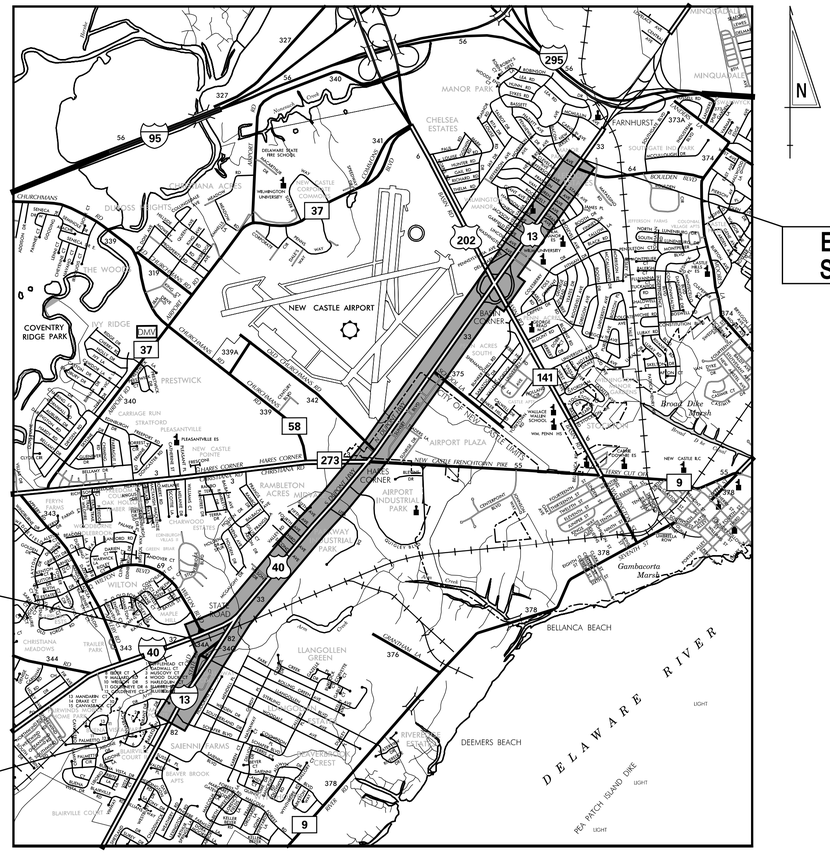
CONTRACT NUMBER: T201901102

FEDERAL AID PROJECT NUMBER: NH-N024(25)

COUNTY: NEW CASTLE M.R. #: N32, N33, N82



GENERAL LOCATION OF CONTRACT



LOCATION MAP

NOT TO SCALE

DESIGN DESIGNATION

MRD #: N82	ROAD NAME: US 13 (SOUTH OF US 40)		
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 5,312	YEAR: 2040
TYPE OF CONSTRUCTION: PEDESTRIAN IMPROVEMENTS		DESIGN SPEED: 50 MPH	
A.A.D.T. CURRENT: 49,207	YEAR: 2019	TRUCKS: 8.62%	
A.A.D.T. PROJECTED: 54,641	YEAR: 2040	DIRECTION OF DISTRIBUTION: 56.67%	

DESIGN DESIGNATION

MRD #: N32	ROAD NAME: US 40		
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 2,950	YEAR: 2040
TYPE OF CONSTRUCTION: PEDESTRIAN IMPROVEMENTS		DESIGN SPEED: 55 MPH	
A.A.D.T. CURRENT: 27,327	YEAR: 2019	TRUCKS: 8.62%	
A.A.D.T. PROJECTED: 30,345	YEAR: 2040	DIRECTION OF DISTRIBUTION: 56.67%	

DESIGN DESIGNATION

MRD #: N33	ROAD NAME: US 13 (SOUTH OF SR 273)		
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 8,389	YEAR: 2040
TYPE OF CONSTRUCTION: PEDESTRIAN IMPROVEMENTS		DESIGN SPEED: 50 MPH	
A.A.D.T. CURRENT: 77,722	YEAR: 2019	TRUCKS: 8.62%	
A.A.D.T. PROJECTED: 86,305	YEAR: 2040	DIRECTION OF DISTRIBUTION: 56.67%	

DESIGN DESIGNATION

MRD #: N33	ROAD NAME: US 13 (NORTH OF SR 273)		
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 6,543	YEAR: 2040
TYPE OF CONSTRUCTION: PEDESTRIAN IMPROVEMENTS		DESIGN SPEED: 45 MPH	
A.A.D.T. CURRENT: 60,616	YEAR: 2019	TRUCKS: 8.62%	
A.A.D.T. PROJECTED: 67,310	YEAR: 2040	DIRECTION OF DISTRIBUTION: 56.67%	

DESIGN DESIGNATION

MRD #: N/A	ROAD NAME: US 13 (RAMP B1, RAMP B2, RAMP C1, RAMP C2, RAMP D)		
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 252-766	YEAR: 2040
TYPE OF CONSTRUCTION: PEDESTRIAN IMPROVEMENTS		DESIGN SPEED: 15 MPH	
A.A.D.T. CURRENT: 2,332-7,089	YEAR: 2019	TRUCKS: 8.62%	
A.A.D.T. PROJECTED: 2,589-7,872	YEAR: 2040	DIRECTION OF DISTRIBUTION: N/A	

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA / REVISIONS

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
14	STATE ROAD CROSSING
34	TYBOUTS CORNER TO HARES CORNER
82	STATE ROAD TO WILMINGTON CAUSEWAY WIDENING
217	BEAR TO HARES CORNER DUAL ROAD GRADING
218	HARES CORNER TO FARNHURST
299	STATE ROAD TO HARES CORNER
300	HARES CORNER TO FARNHURST
849	BEAR TO STATE ROAD
851	TYBOUTS CORNER TO HARES CORNER
65-010-04	I495, US 13 INTERCHANGE CONSTRUCTION
65-110-03	BOULDEN BLVD / BACON AVE
72-080-01	US ROUTE 13 SAFETY IMPROVEMENTS
84-001-03	STATE ROAD SAFETY IMPROVEMENTS AND REHABILITATION
84-107-03	HARES CORNER INTERIM IMPROVEMENTS
85-061-19	US 13, N. OF HARES CORNER TO I-295 INTERCHANGE 4R
T200800708	BOULDEN BLVD / BACON AVE
T201100101	US 13, SR 273 TO US 40 LIGHTING
T201107401	BR 1-665N AND 1-665S CARRYING US 13 OVER BAYLOR BOULEVARD
T201606119	P&R NORTH XIX, FY 2016 US 40 (PULASKI HIGHWAY)
T201606121	P&R NORTH XXI, FY 2016 US 13 (DUPONT PARKWAY)
T201901103	US 13 MEDIAN LIGHTING - LLANGOLLEN BLVD TO I-495
T201901104	US 13 MEDIAN TREATMENTS - US40 TO I-495
T201904105	US13 AND SR273 BUS BIKE RIGHT TURN
T202204001	FY 22, INTERSECTION IMPROVEMENTS PROGRAM

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

8/5/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

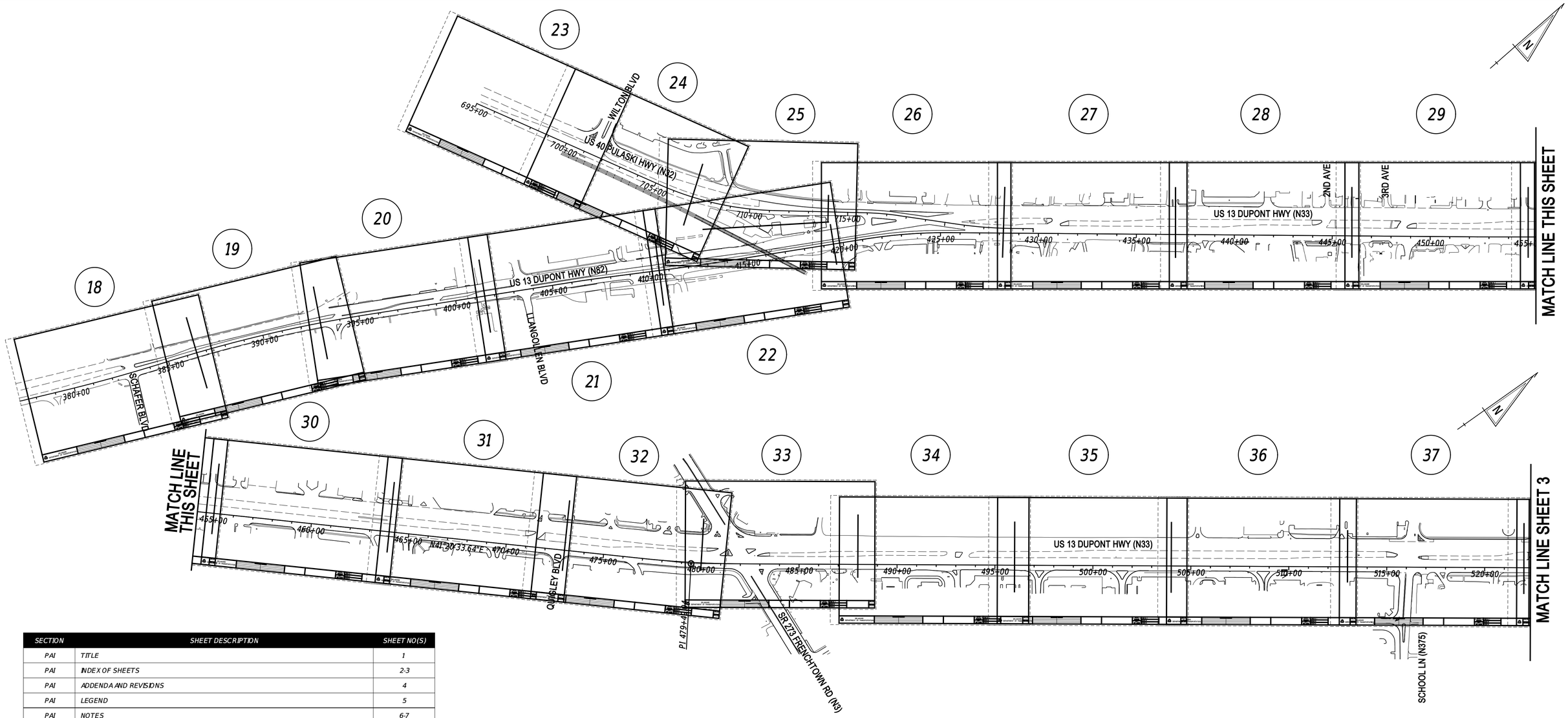
PHILIP ANDREW HORSEY — REGISTERED — No. 12429 — DELAWARE — PROFESSIONAL ENGINEER

SEAL

APPROVED FOR ADVERTISEMENT

DIRECTOR OF TRANSPORTATION SOLUTIONS

08/08/2024
DATE



SECTION	SHEET DESCRIPTION	SHEET NO(S)
PAI	TITLE	1
PAI	INDEX OF SHEETS	2-3
PAI	ADDENDA AND REVISIONS	4
PAI	LEGEND	5
PAI	NOTES	6-7
PAI	TYPICAL SECTIONS	8-13
PAI	HORIZONTAL AND VERTICAL CONTROL	14-17
PAI	CONSTRUCTION PLANS	18-48
PAI	PROFILES	49-66
PAI	GRADES AND GEOMETRICS	67-98
PAI	STORMWATER MANAGEMENT PLAN	99-101
PAI	CONSTRUCTION DETAILS	102-109
PAI	PEDESTRIAN RAMP PLANS, SCHEDULE, AND DETAILS	110-114
PAI	BRIDGE 1-664 PLANS AND DETAILS	115-120
PAI	BORING LOGS	121-123
PAI	ENVIRONMENTAL COMPLIANCE PLANS	124-127
PAI	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL NOTES AND PLANS	128-189
PAI	DETOUR PLANS	190-194
PAI	LIGHTING PLANS	195-202
PAI	SIGNING, STRIPING AND CONDUIT PLANS	203-231
PAI	PERMANENT SIGN SCHEDULES	232-246
PAI	SIGNALIZATION PLANS	247-265

PENNONI ASSOCIATES INC. — PEN TABLE: $PENTBLS
FILE NAME: SFILEAS — PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSIONS — DATE PLOTTED: 13-JUN-2024@ 06:12
MICROSTATION WORKSPACE: $WORKSPACES — USER NAME: $USERS — OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

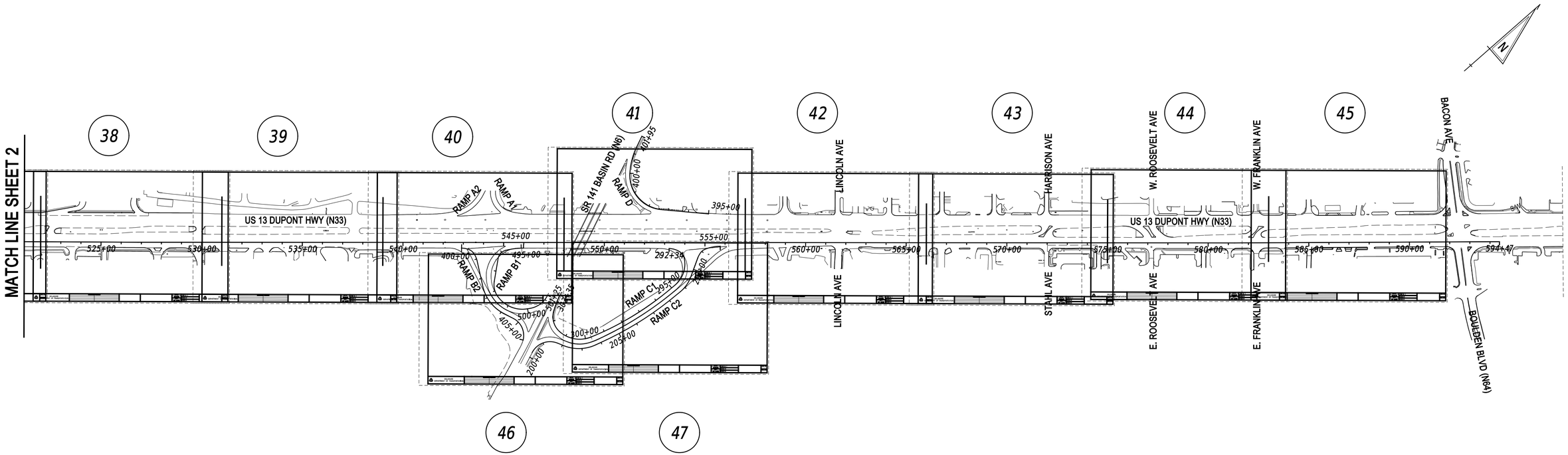
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

INDEX OF SHEETS

SECTION	
PAI	
SHEET NO.	
2	



PENNONI ASSOCIATES INC.	PRN TABLE: $PRNTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:12
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

SCALE
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

INDEX OF SHEETS

SECTION
PAI
SHEET NO.
3

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MICROSTATION WORKSPACE:	$WORKSPACES	USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102	DESIGNED BY:	O. GREEN	PAI
COUNTY			SHEET NO.
NEW CASTLE	CHECKED BY:	P. HORSEY	4

ADDENDA AND REVISIONS

MANMADE ROADSIDE FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED	ID
BARRIER - DOUBLE-FACED, PERMANENT	BARRIER, TYPE "X"		B XXX
BARRIER - SINGLE-FACED, PERMANENT, TEST LEVEL 4 / TEST LEVEL 5			
BARRIER - HIGH TENSION CABLE (HTCB)			
BARRIER - HTCB END TERMINAL			
BOLLARD - STEEL POLE			
BOLLARD - WOOD POST			
CURB, TYPE 1 AND TYPE 3	CURB, TYPE "X"		C XXX
CURB, TYPE 2			
CURB & GUTTER, TYPE 1	C&G, TYPE "X"		
CURB & GUTTER, TYPE 2			
CURB & GUTTER, TYPE 3			
CURB OPENING - SUMP / ON GRADE			C O
CURB/SW OPENING - ADJACENT CURB			CO SW
CURB/SW OPENING - NON-ADJACENT CURB			
FENCE - CHAINLINK OR STRANDED			F XXX
FENCE - STOCKADE OR SPLIT RAIL			
FLAG POLE	F.P.		
GUARDRAIL - STEEL BEAM, TYPE 1			
GUARDRAIL - STEEL BEAM, TYPE 2			
GUARDRAIL - STEEL BEAM, TYPE 3			
GUARDRAIL - WIRE ROPE			
GUARDRAIL - END ANCHORAGE			GR XXX
GUARDRAIL - END TREATMENT, TYPE 1			
GUARDRAIL - END TREATMENT, TYPE 2			
GUARDRAIL - END TREATMENT, TYPE 3			
IMPACT ATTENUATOR			
LAMP AND POST - RESIDENTIAL	LAMP		
MAILBOX	MB	MB	
PARKING METER AND POST	P.M.		
PAVEMENT - FLEXIBLE			
PAVEMENT - RIGID			
PILE - BRIDGE			
PILLAR OR MISCELLANEOUS POST			
TRAFFIC SIGN AND POST			
WALL - BRICK OR BLOCK			
WALL - STONE			

DRAINAGE FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED	ID
BIOFILTRATION SWALE		BFS	
DITCH OR STREAM (V-SHAPE / TRAPEZOIDAL)			
DIRECTIONAL STREAM FLOW ARROW			
DRAINAGE INLET	C.B. / D.I.		DI XXX
DRAINAGE JUNCTION BOX	J.B.		JB XXX
DRAINAGE MANHOLE	Ⓓ		MH XXX
DRAINAGE PIPE AND FLOW ARROW	SIZE/TYPE LABEL		P XXX
FLARED END SECTION			FES XXX
RIPRAP - AREA FEATURE			RR XXX
RIPRAP - LINEAR FEATURE			
SAFETY END STRUCTURE			SES XXX
UNDERDRAIN			UD XXX
UNDERDRAIN OUTLET			UDO XXX

UTILITY FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED
COMMUNICATIONS DISTRIBUTION BOX	CD / TV	
COMMUNICATIONS MANHOLE	Ⓒ / Ⓣ	Ⓒ
COMMUNICATIONS TEST POINT	CT / T	
COMMUNICATIONS - UNDERGROUND	COMM(A)	COMM
ELECTRIC - UNDERGROUND	E(A)	E
ELECTRIC MANHOLE	Ⓔ	Ⓔ
ELECTRIC METER	EM	
ELECTRIC TRANSFORMER	E	
GAS - UNDERGROUND	G(A)	G
GAS MANHOLE	Ⓖ	Ⓖ
GAS METER	G.M.	
GAS VALVE	G.V.	
GAS PUMP - SERVICE STATION	G.P.	
IRRIGATION - UNDERGROUND	IR(A)	IR
ITMS - UNDERGROUND	ITMS(A)	ITMS
LIGHTING - UNDERGROUND	LI(A)	LI
LUMINAIRE - POLE MOUNTED		
MANHOLE - UNDETERMINED OWNER	⑦	
RAILROAD TRACKS		
SANITARY - UNDERGROUND	S(A)	S
SANITARY SEWER MANHOLE	Ⓢ	Ⓢ
SANITARY SEWER VALVE	S.V.	
SANITARY SEWER CLEANOUT OR VENT	S.C.O.	
SEPTIC DRAIN FIELD	S.D.F.	
SIGNALIZATION - UNDERGROUND	SIG(A)	SIG
SOIL BORING LOCATION		
TELEPHONE BOOTH	B	
TRAFFIC - CONDUIT JUNCTION WELL	J.W.	
TRAFFIC - LIGHT POLE AND BASE		
TRAFFIC - PEDESTRIAN POLE & BASE		
TRAFFIC - SIGNAL CABINET & BASE		
TRAFFIC - SIGNAL POLE AND BASE		
UTILITY BOX	U	
UTILITY MARKER	UM	
UTILITY POLE GUY WIRE ANCHOR		
UTILITY POLE		
UTILITY TEST HOLE LOCATION		
WATER - UNDERGROUND	W(A)	W
WATER - FIRE HYDRANT	F.H.	F.H.
WATER METER	W.M.	
WATER VALVE	WV	WV
WELL HEAD	WELL	

PAVEMENT SECTION(S)

OVERLAY PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS	
RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS	
DRIVEWAY AND ENTRANCE PAVEMENT - SEE NOTES FOR MATERIALS AND DEPTHS	

NATURAL ROADSIDE FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED
HEDGEROW OR THICKET		
MARSH BOUNDARY LINE		
TREE - CONIFEROUS		
TREE - DECIDUOUS		
TREE STUMP		
SHRUBBERY		
WETLAND BOUNDARY - DELINEATED	WL	
WOODS LINE BOUNDARY		

RIGHT-OF-WAY FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED
DENIAL OF ACCESS	DA	DA
EASEMENT - OTHERS	EASEMENT TYPE	
PERMANENT EASEMENT	PE	PE
PROPERTY LINE		
PROPERTY MARKER - CONCRETE	C.M.	
PROPERTY MARKER - IRON PIPE	I.P.	
RIGHT-OF-WAY BASELINE	100+00	100+00
RIGHT-OF-WAY LINE	R/W	R/W
RIGHT-OF-WAY BY PE	R/W-PE	
RIGHT-OF-WAY & DENIAL OF ACCESS	R/W-DA	R/W-DA
RIGHT-TO-ENTER		RTE
TEMPORARY CONSTRUCTION EASEMENT		TCE

SURVEY CONTROL & MONUMENTATION

FEATURE DESCRIPTION	EXISTING
POINT OF CURVATURE OR TANGENCY	
POINT OF INTERSECTING TANGENTS	
SURVEY BENCHMARK LOCATION	B.M.
SURVEY NGS POINT LOCATION	
SURVEY TIE POINT LOCATION	T.P.
SURVEY TRAVERSE POINT	

MISCELLANEOUS FEATURES

FEATURE DESCRIPTION	PROPOSED
BRICK PATTERNED SURFACE	
BUTT JOINT	
CLEAR ZONE	CZ
CONSTRUCTION BASELINE	100+00
LATERAL OFFSET	LO
LIMIT OF CONSTRUCTION	LOC
PAVEMENT PATCH	
PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH	
P.C.C. SIDEWALK - 4"	
P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)	

IDENTIFIERS

FEATURE DESCRIPTION	ID
ABANDON BY CONTRACTOR	AB C
ABANDON BY OTHERS	AB O
ADJUST BY CONTRACTOR	A C
ADJUST BY OTHERS	A O
BEST MANAGEMENT PRACTICE	BMP XXX
BUS STOP PAD / TYPE	BSP Y
BUS STOP WITH SHELTER PAD / TYPE	BSSP Y
CONCRETE SAFETY BARRIER	B XXX
CONVERT TO JUNCTION BOX	CJB XXX
CONVERT TO DRAINAGE MANHOLE	CMH XXX
DO NOT DISTURB	DND
ENERGY DISSIPATOR	ED XXX
FILL WITH FLOWABLE FILL	FF C
LANDSCAPE PLANTINGS	LS XXX
PEDESTRIAN CONNECTION / TYPE	PC YX
PEDESTRIAN CONNECTION / TYPE WITHOUT DETECTABLE WARNING SYSTEM	PC-N XXX
RELOCATE BY CONTRACTOR	RL C
RELOCATE BY OTHERS	RL O
RELOCATE BY PROPERTY OWNER	RL PO
REMOVE BY CONTRACTOR	RM C
REMOVE BY OTHERS	RM O
REMOVE BY TRAFFIC CONTRACTOR	RM TC
RIGHT-OF-WAY MONUMENT	M XXX

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBLSS | FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS | MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:12 | MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LEGEND

SECTION
PAI
SHEET NO.
5

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED JANUARY 2024 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2024, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2. ELECTRONIC DESIGN DATA FILES THAT WILL BE MADE AVAILABLE TO THE BIDDERS INCLUDE:

(X)	NONE
( )	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
( )	DESIGN FILE, IN .DGN FILE FORMAT, THAT CONTAINS 3D TRIANGLES REPRESENTING THE EXISTING SURFACE.
( )	DESIGN FILE, IN .DGN FILE FORMAT, THAT CONTAINS 3D FEATURE LINES FOR THE PROPOSED DESIGN. 3D FEATURE LINES ARE FOR THE PROPOSED TOP SURFACE ELEVATION ONLY.

NOTE: THE DOCUMENT ENTITLED "ELECTRONIC FILE SHARING RELEASE" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

NOTE: THERE MAY BE SOME AREAS OF THE PROJECT NOT INCLUDED IN THE ELECTRONIC DESIGN DATA FILE(S). IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE DESIGN DATA FILE AND DETERMINE THE LIMITS OF THE PROJECT INCLUDED.

3. PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR, INCLUDE:

(X)	CROSS SECTIONS
(X)	RIGHT-OF-WAY PLANS (WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR)

PROJECT NOTES

SECTION 100

1. ANY DAMAGE TO ITEMS NOTED TO BE RELOCATED OR RESET BY THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

2. THE CONTRACTOR WILL CONTACT THE DELAWARE TMC AT 302-659-4600 PRIOR TO ANY UNMANNED AERIAL VEHICLE (UAV) FLIGHTS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE FOLLOWING INFORMATION: THE REGISTRATION NUMBER OF THE UAV, THE FLIGHT TIME, LOCATION OF THE FLIGHT, THE PILOT'S NAME AND THE PILOT'S CONTACT NUMBER DURING THE FLIGHT.

SECTION 200

3. THE CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE POSITIONED IN ACCORDANCE WITH THE LATEST VERSION OF THE UNITED STATES POSTAL SERVICE GUIDELINES. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE IN AN APPROPRIATE SIZE PVC SLEEVE. ACCEPTABLE POST SHALL BE 4 INCH X 4 INCH WOOD POST OR 4 INCH DIAMETER WOOD POST. FOR RELOCATING MULTIPLE MAILBOXES TOGETHER ALL POST SHALL BE SEPARATED BY A DISTANCE OF NO LESS THAN 3/4 OF THEIR FULL HEIGHT ABOVE THE GROUND. MULTIPLE MAILBOXES ATTACHED TO A SINGLE HORIZONTAL BOARD SHALL NOT BE LOCATED INSIDE THE CLEARZONE. EACH MAIL BOX SHALL BE PLACED ON AN INDIVIDUAL POST MEETING THE CRITERIA ABOVE. ALL MAILBOXES SHALL BE SET NOT TO IMPEDE THE MINIMUM PAR (PEDESTRIAN ACCESS ROUTE) WIDTH AS DETERMINED BY THE CURRENT EDITION OF THE PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY. IF MAILBOXES ARE NOT SET IN ACCORDANCE WITH THE ABOVE DIRECTIONS, RESETTING OF THE MAILBOXES WILL BE AT THE COST OF THE CONTRACTOR. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

4. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   a. WOODEN SIGN
   b. FLOWER POTS
   c. LARGE ROCKS
   d. PARKING BUMPERS
   e. DRAINAGE INLETS
   f. DRAINAGE PIPES OUTSIDE THE LIMITS OF ITEM 202000 - EXCAVATION AND EMBANKMENT
   g. PEDESTRIAN POLE BASES & POLES
   h. POSTS
   i. CONCRETE BARRIER
   j. BARRIER WALL
   k. FLAG POLE AND RESETTING OF FLAG POLE
   l. BOLLARDS
   m. CONCRETE PAD
   n. DELINEATORS
   o. LAMPS
   p. PRIVATE LAMP POSTS
   q. I-BEAM
   r. TIMBER WALL
   s. PLANTER
   t. TRANSVERSE WALL
   u. CANTILEVER SIGN STRUCTURE #SC1155 INCLUDING CUTTING OFF THE BASE 1' BELOW GRADE
   v. GROUT BAGS

5. EXCAVATION FOR THE FOLLOWING SECTION(S) WILL NOT BE INCIDENTAL TO THEIR INDIVIDUAL CONSTRUCTION ITEMS AND WILL BE QUANTIFIED AND PAID UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT:
   a. STAIRS
   b. PAVEMENT PATCHING
   c. PCC DRIVEWAYS
   d. SIDEWALKS USING MODULAR BLOCK WALLS

6. ONLY EXISTING FEATURES WITHIN THE LOC IDENTIFIED WITH REMOVE BY CONTRACTOR OR BY OTHER METHODS ARE TO BE REMOVED OR DISTURBED.

PROJECT NOTES (CONT.)

SECTION 400

7. THE PAVEMENT SECTION FOR FLEXIBLE PAVEMENT RESIDENTIAL DRIVEWAYS SHALL BE 2" BITUMINOUS CONCRETE, TYPE 'C' OVER 8" GRADED AGGREGATE BASE COURSE, TYPE 'B', UNLESS OTHERWISE NOTED ON THE PLANS. THE PAVEMENT SECTION FOR COMMERCIAL ENTRANCES IS NOTED ON SHEET 102, COMMERCIAL DRIVEWAY RECONSTRUCTION DETAIL. PROPOSED PAVEMENT SHALL BE EQUAL TO OR EXCEEDING EXISTING PAVEMENT DEPTH.

SECTION 600

8. DRAINAGE INLET GRATES ADJACENT TO THE ROAD, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE 1 OR TYPE 4, SHALL BE REPLACED. THE ACTUAL LOCATIONS, THE NEED FOR ANY GRATE MODIFICATIONS OR FOR NEW FRAMES SHALL BE DETERMINED BY THE ENGINEER. ALL REPLACED GRATES/FRAMES SHALL BE DELIVERED TO THE NEAREST DISTRICT MAINTENANCE YARD WITH THE COST OF DELIVERY INCIDENTAL TO ITEM 602100 - REPLACING DRAINAGE INLET GRATE(S). FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.

9. STATION AND ELEVATION DATA GIVEN FOR DRAINAGE STRUCTURES ARE TO BE APPLIED TO THE CENTER OF THE GRATE FOR INLETS AND TO THE CENTER OF THE STRUCTURE FOR JUNCTION BOXES AND MANHOLES.

SECTION 700

10. IN AREAS WHERE PROPOSED CURB MEETS EXISTING CURB AND THE TWO CURB TYPES ARE NOT SIMILAR, THE PROPOSED CURB SHALL BE TRANSITIONED IN 10 LINEAR FEET, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK, INCLUDING SAW CUTTING EXISTING CURB SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.

11. WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, THE EXISTING SIDEWALK SHALL BE SAWCUT AT THE TIE-IN POINT OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 762001 - SAWCUTTING, CONCRETE, FULL DEPTH.

12. PORTLAND CEMENT CONCRETE CHANNELIZING ISLANDS THAT ARE LESS THAN 75 SQ FT MAY BE POURED MONOLITHICALLY, OR AS DIRECTED BY THE ENGINEER.

13. THE NEW CASTLE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL SUPPLY AND THE STATE'S CONTRACTOR SHALL INSTALL NEW SELF SEALING MANHOLE FRAMES AND COVERS ON ALL COUNTY SEWER MANHOLES THAT ARE NOT BEING RELOCATED, WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE COUNTY'S STANDARD SPECIFICATIONS. THE EXISTING MANHOLE FRAMES AND COVERS THAT ARE REMOVED SHALL BECOME THE PROPERTY OF THE STATE'S CONTRACTOR. PAYMENT SHALL BE INCIDENTAL TO ITEM 711500 - ADJUST AND REPAIR EXISTING SANITARY SEWER MANHOLE.

14. THE CONTRACTOR SHALL DELIVER ALL EXCESS MILLED MATERIAL TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S BEAR MAINTENANCE YARD. THE MATERIAL SHALL BE NEATLY STOCKPILED AT THE YARD. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO THE MILLING ITEM UTILIZED FOR PAYMENT ON THE CONTRACT.

15. ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.

16. A CONTAMINATED MATERIALS MANAGEMENT PLAN (CMMP) AND HEALTH AND SAFETY PLAN (HASP) HAVE BEEN PROVIDED AS PART OF THE CONTRACT DOCUMENTS. COOPERATION SHALL BE MAINTAINED WITH DNREC PERSONNEL AND THE DEPARTMENT'S ENVIRONMENTAL REPRESENTATIVE THROUGHOUT THE DURATION OF THE CONTRACT TO ENSURE THAT THE GOALS OF THE PROGRAM ARE ADDRESSED. EXCAVATION WORK WILL TAKE PLACE IN AREAS THAT MAY CONTAIN CONTAMINATED SOIL AND/OR GROUNDWATER.

17. WORKER SAFETY TRAINING AND PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS FOR EXCAVATION CONTRACTORS OUTLINED IN THE HASP ARE:
   a. 24-HOUR OSHA HAZWOPER TRAINING
   b. MODIFIED LEVEL D PERSONAL PROTECTIVE EQUIPMENT (HARD HATS, STEEL TOE BOOTS, NITRILE GLOVES, SAFETY VESTS)

   CONTRACTOR IS REFERRED TO THE PROJECT'S HASP FOR DETAILED INFORMATION REGARDING REQUIRED HEALTH AND SAFETY PRACTICES FOR THIS CONTRACT. ALL COSTS ASSOCIATED WITH THE REQUIRED TRAINING, PERSONAL PROTECTIVE EQUIPMENT, ETC, TO BE IN COMPLIANCE WITH THE PROJECT'S HASP SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 763000, INITIAL EXPENSE.

18. NO SOIL CAN BE TAKEN OFF SITE WITHOUT APPROVAL OF THE ENGINEER. CONTAMINATED SOIL DISPOSAL WITH BE HANDLED BY THE DEPARTMENT'S ENVIRONMENTAL REPRESENTATIVE. ALL SOIL EXCAVATED DUE TO THE PROJECT'S CONSTRUCTION SHALL BE STOCKPILED IN THE DESIGNATED STOCKPILE AREAS, REUSED AS BACKFILL MATERIAL, OR DIRECT LOADED INTO THE ENVIRONMENTAL REPRESENTATIVE'S TRUCKS, AS DIRECTED IN ACCORDANCE WITH THE CONTAMINATED MATERIALS MANAGEMENT PLAN (CMMP) AND DELDOT STANDARD MATERIAL SPECIFICATIONS. SOIL THAT IS ENVIRONMENTALLY SUITABLE FOR REUSE WILL BE PAID FOR UNDER THE APPROPRIATE ITEM (201000, 202000, 207000, 208000, 211000). THE CONTRACTOR SHALL REUSE CONTAMINATED SOIL AS EMBANKMENT, FILL OR OTHER APPROPRIATE ON-SITE USE AS DETERMINED AND APPROVED BY THE ENGINEER AND THE ENVIRONMENTAL REPRESENTATIVE, AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

19. THE STATE'S CONTRACTOR SHALL CONTACT DELDOT'S HAZMAT PROGRAM MANAGER JEFF LEONARD AT (302) 894-6308 OR DOT_HAZMAT@DELAWARE.GOV TO COORDINATE HAZMAT SOIL TESTING REQUIRED TO BE PERFORMED AT LEAST ONE MONTH IN ADVANCE OF EXCAVATION WORK. THE STATE'S CONTRACTOR WILL BE REQUIRED TO PROVIDE MOT, TMA, AND SIGNAGE, IN ACCORDANCE WITH DEMUTCD TA-4A FOR THE HAZMAT SOIL TESTING TO BE PERFORMED. ALL WORK SHALL BE PERFORMED IN ACCORDINANCE WITH THE CMMP AND HASP. ANY SOIL DEEMED TO BE CONTAMINATED BASED ON TESTING PERFORMED SHALL BE HANDLED AND DISPOSED OF PER THE SPECIFICATION IN THE CONTRACT DOCUMENTS FOR ITEM 202560 CONTAMINATED MATERIAL.

SECTION 800

20. THE CONTRACTOR SHALL ONLY EXCAVATE AN AREA FOR SIDEWALK CONSTRUCTION THAT CAN BE BACKFILLED WITH APPROVED PEDESTRIAN MATERIAL AT THE END OF EACH WORK DAY. OTHER BARE SOIL WITHIN THE PROPOSED SIDEWALK LIMITS SHALL BE COVERED WITHIN THREE (3) CALENDAR DAYS TO PREVENT EROSION. PAYMENT AND PLACEMENT AND/OR REMOVAL OF MATERIAL WILL BE INCIDENTAL TO ITEM 801000 - MAINTENANCE OF TRAFFIC.

SECTION 900

21. THIS PROJECT IS COVERED UNDER AN NPDES GENERAL PERMIT FOR CONSTRUCTION. UNDER THE GENERAL PERMIT, COMPLIANCE WITH DELDOT'S APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS WILL CONSTITUTE COMPLIANCE WITH THE NPDES INDUSTRIAL PERMITTING REQUIREMENTS FOR THIS CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NOI IS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S STORMWATER SECTION. A COPY OF THE GENERAL PERMIT OR THE NOI CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

PROJECT NOTES (CONT.)

SECTION 900 (CONTINUED)

22. PROVIDE ALL DNREC REQUIRED POST CONSTRUCTION VERIFICATION DOCUMENTATION FOR STORMWATER BEST MANAGEMENT PRACTICES (BMP) TO THE ENGINEER AT THE TIME OF SUBSTANTIAL COMPLETION.

MISCELLANEOUS

23. CONNECT THE PROPOSED PIPE TO THE EXISTING DRAINAGE INLET IN ACCORDANCE WITH STANDARD SPECIFICATIONS SECTION 602.3.B.9 AND AS DIRECTED BY THE ENGINEER. ALL COSTS TO CONNECT TO THE EXISTING INLET ARE INCIDENTAL TO THE PIPE BEING INSTALLED.

24. WHERE EXISTING UTILITY POLES INTERRUPT THE PEDESTRIAN ACCESS ROUTE, SIDEWALK SHALL BE ROUTED AROUND THE UTILITY POLE, MAINTAINING A 5-FOOT PEDESTRIAN ACCESS ROUTE WIDTH.

25. MILLINGS ARE NOT AN ACCEPTATBLE SUBSTITUTION FOR GABC IN THE PAVEMENT BOX.

26. EXISTING RIGHT OF WAY IS SHOWN FOR INFORMATIONAL PURPOSE ONLY. THE RIGHT OF WAY INFORMATION SHOWN IN THE PLANS WAS CREATED BY PLOTTING THE EXISTING RIGHT OF WAY CENTERLINE FROM HISTORICAL PLANS:

   CONTRACT NO. 14
   CONTRACT NO. 82
   CONTRACT NO. 218
   CONTRACT NO. 209A
   CONTRACT NO. 300
   CONTRACT NO. 299
   CONTRACT NO. 851
   CONTRACT NO. 849
   CONTRACT NO. 1317
   CONTRACT NO. I-1
   CONTRACT NO. 65-11-003
   CONTRACT NO. 72-080-01
   CONTRACT NO. 84-107-03
   CONTRACT NO. 87-061-07
   CONTRACT NO. 85-061-19
   CONTRACT NO. 89-041-01
   CONTRACT NO. T200800708 MICROFILM NO. 2987
   MICROFILM NO. 12648
   CONTRACT NO. 84-001-03
   CONTRACT NO. 217A
   MICROFILM NO. 12051
   INSTRUMENT NO. 20051012-0104561

   THE SECONDARY ROADWAY ALIGNMENTS AND CORNER CUT DATA WERE DERIVED USING THE AFOREMENTIONED HISTORICAL PLANS AND THE METES AND BOUNDES DESCRIPTION RECORDED ON THE CURRENT PROPERTY DEEDS.

27. THE CONTRACTOR SHALL NOTIFY DART FIRST STATE AT DOT_DETOURS@DELAWARE.GOV AT LEAST 14 DAYS PRIOR TO THE START OF ANY DETOURS OR CONSTRUCTION, AND DOT_DTC_PROJECTDEVELOPMENT@DELAWARE.GOV AT SUCH TIME THE FACILITY IS COMPLETED AND OPERABLE FOR TRANSIT OPERATIONS. FOR EMERGENCY DETOUR INFORMATION ONLY, PLEASE CONTACT DTC'S CHIEF SCHEDULER AT 302-576-6019.

28. DART FIRST STATE HAS UPDATED AND REMOVED THEIR BUS STOP LOCATIONS WITHIN THE LIMITS OF THIS PROJECT. THE FOLLOWING SUMMARY DESCRIBES THE PROPOSED CHANGES SHOWN IN THE PLANS.

   ID 2118: RECONSTRUCTION OF TYPE 1 BUS STOP PAD
   ID 2119: RECONSTRUCTION OF TYPE 1 BUS STOP PAD
   ID 2120: RELOCATION OF TYPE 1 BUS STOP PAD 50' SOUTH
   ID 2174: RECONSTRUCTION OF TYPE 2 BUS STOP PAD
   ID 2179: RECONSTRUCTION OF TYPE 2 BUS STOP PAD
   ID 2268: RECONSTRUCTION OF TYPE 2 BUS STOP
   ID 2269: RELOCATION OF TYPE 1 BUS STOP PAD 165' SOUTH
   ID 2272: RECONSTRUCTION OF TYPE 2 BUS STOP PAD
   ID 2288: REMOVE STOP ID 2288
   ID 2289: RELOCATION OF TYPE 2 BUS STOP PAD 650' SOUTH
   ID 2291: CONSTRUCT TYPE 2 BUS STOP PAD
   ID 3644: RECONSTRUCTION OF TYPE 1 BUS STOP PAD
   ID 3945: RELOCATION OF TYPE 2 BUS STOP PAD 55' SOUTH
   NEW STOP ID AND TYPE 1 BUS STOP PAD TO BE ADDED ALONG US 40 AT APPROX. STA 709+50 R
   NEW STOP ID AND TYPE 1 BUS STOP PAD TO BE ADDED ALONG US 13 AT APPROX. STA 412+50 L
   NEW STOP ID AND TYPE 1 BUS STOP PAD TO BE ADDED ALONG US 13 AT APPROX. STA 500+00 R

29. DART SIGNS HAVE BEEN UPDATED TO A NEW DESIGN. THE DELDOT SIGN SHOP DOES NOT FABRICATE THE UPDATED SIGN OR ANY SUPPLEMENTAL PLAQUES TO ALLOW FOR ADDITIONAL ROUTE NUMBERS. ALL REQUESTS FOR FABRICATION OF THESE SIGNS MUST BE MADE THROUGH DART TRANSIT AT (302) 576-6132.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK". ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.

31. EXISTING LIGHTING STANDARDS SHOWN WITHIN PROJECT LIMITS WERE RECENTLY CONSTRUCTED UNDER CONTRACT T201901103. AS-BUILTS WITHIN THE PROJECT LIMITS HAVE NOT YET BEEN SURVEYED WITH THE EXCEPTION OF THOSE WITHIN THE VICINITY OF NEW CASTLE COUNTY AIRPORT.

32. WHERE A PEDESTRIAN CONNECTION IS PROPOSED AND NO CURB TYPE IS CALLED OUT, THE CONTRACTOR SHALL MATCH EXISTING CURB TYPE.

33. PROPOSED BARRIER AND FENCE TREATMENTS SHOWN WITHIN THE MEDIAN OF US 13 AND US 40 WILL BE CONSTRUCTED UNDER CONTRACT T201901104 (US 13 MEDIAN TREATMENTS - US 40 TO I-495); ARE SHOWN FOR REFERENCE ONLY. PROPOSED BARRIER AND FENCE TREATMENTS SHOWN WITHIN THE MEDIAN OF US 13 BETWEEN LLANGOLLEN BOULEVARD AND US 40 WILL BE CONSTRUCTED UNDER THIS PROJECT.

34. ALL TUBULAR MARKERS INSTALLED AT TRIANGULAR CHANNELIZING ISLANDS SHALL BE ORANGE IN COLOR (INCIDENTAL TO ITEM 702000)

35. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE USE AND LOCATION OF TEMPORARY PEDESTRIAN CONNECTIONS AND PATHWAYS.

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MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	NOTES	SECTION
				T201901102			PAI
				COUNTY	DESIGNED BY: O. GREEN		SHEET NO.
				NEW CASTLE	CHECKED BY: P. HORSEY		6

PROJECT NOTES (CONT.)

NORFOLK SOUTHERN RAILROAD RIGHT-OF-WAY COORDINATION

36. *ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS".*

37. *ALL UTILITY INSTALLATIONS OR RELOCATIONS ON NORFOLK SOUTHERN RIGHT-OF-WAY THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, AND FIBER OPTICS PROJECTS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.*

38. *"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.*

39. *IF NS PERSONNEL IS FLAGGING (CONTRACTOR IS NOT DIRECTLY HIRING PROTECTIVE SERVICES) AND PROJECTS WILL EXCEED 30 DAYS OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHALL PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENT ON THE PROJECT.*

40. *THE STATE'S CONTRACTOR WILL NOT BE ALLOWED TO PERFORM ANY WORK ON, OVER, UNDER OR ADJACENT TO THE RAILWAY'S RIGHT-OF-WAY UNTIL:*

    a. *CONTRACTOR OBTAINS INSURANCE MEETING NORFOLK SOUTHERN'S (NS) REQUIREMENTS, INCLUDING RAILROAD PROTECTIVE LIABILITY INSURANCE. SUBMISSIONS ARE MADE VIA NS'S ON-LINE PORTAL.*

    b. *CONTRACTOR SCHEDULES AND HOLDS A PRECONSTRUCTION MEETING WITH NS REPRESENTATIVES.*

    c. *CONTRACTOR SIGNS AND SUBMITS A CONTRACTOR RIGHT OF ENTRY AGREEMENT WITH NS.*

    d. *CONTRACTOR RECEIVES THE EXCECUTED CONTRACTOR RIGHT OF ENTRY AGREEMENT FROM NS AND NS ISSUES A LETTER OF AUTHORIZATION TO PROCEED.*

    e. *AS NEEDED, CONTRACTOR SUBMITS AND OBTAINS APPROVAL FOR NS REQUIRED ENGINEERING DRAWINGS - INCLUDING BUT NOT LIMITED TO SHIELDING, DEMOLITION, STRUCTURE ERECTION, BALLAST PROTECTION, ETC. DELDOT'S RAILROAD SECTION ASSISTS WITH THE ACTUAL SUBMISSION TO NS.*

    f. *CONTRACTOR SCHEDULES AND GETS APPROVAL FOR RAILROAD FLAG PROTECTION (CONTRACTOR WILL HIRE APPROVED THIRD-PARTY VENDOR TO PROVIDE RAILROAD FLAGGING SERVICES PER ITEM 811502)*

PENNONI ASSOCIATES INC. | $FILEAS
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ADDENDA / REVISIONS	

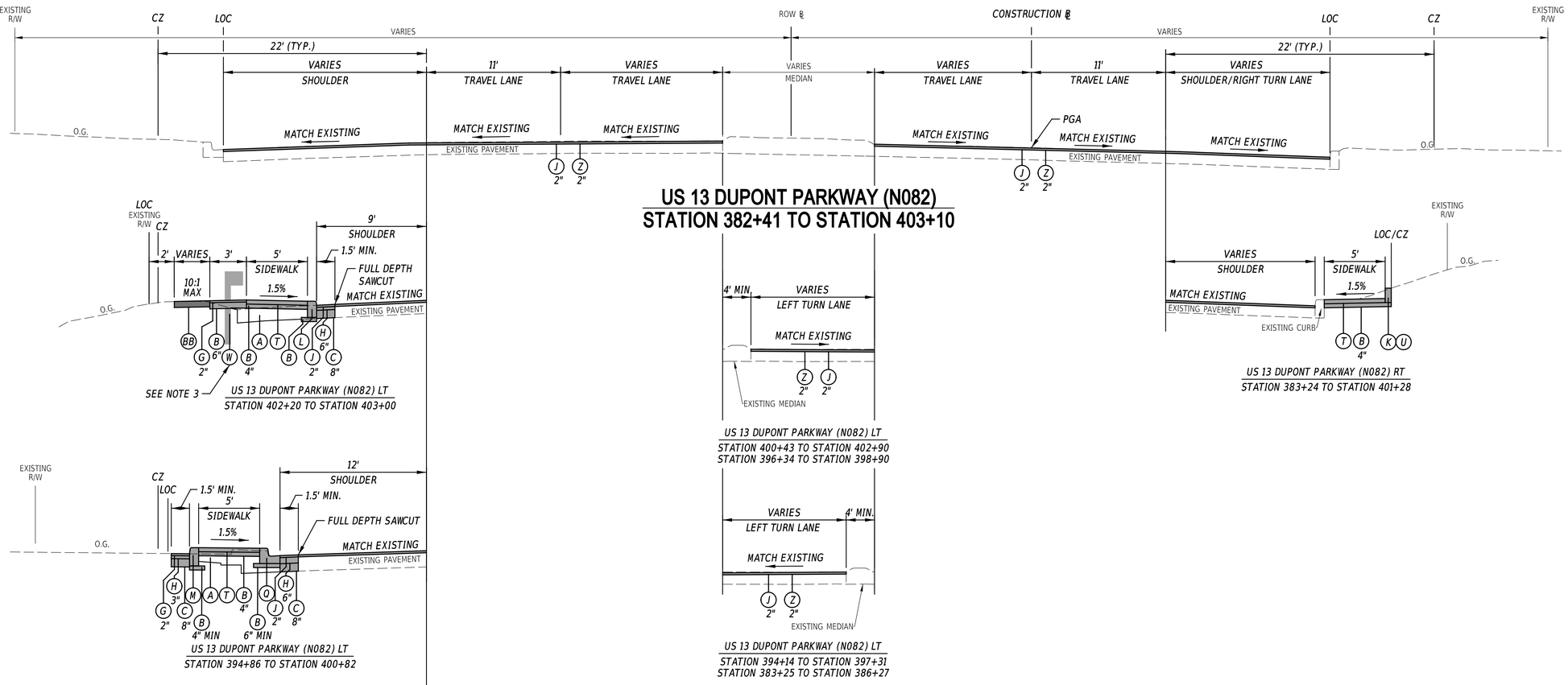
NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

NOTES

SECTION
PAI
SHEET NO.
7



LEGEND

- (A) ITEM 209006 - BORROW, TYPE F
- (B) ITEM 301001 - GABC
- (C) ITEM 301002 - GABC, PATCHING
- (D) ITEM 302002 - DELAWARE NO. 3 STONE
- (E) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (F) ITEM 401016 - SUPERPAVE TYPE B, PG 76-22
- (G) ITEM 401029 - SUPERPAVE TYPE C, PG 64-22 PATCHING
- (H) ITEM 401030 - SUPERPAVE TYPE B, PG 64-22 PATCHING
- (I) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE
- (J) ITEM 401046 - SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)
- (K) ITEM 607010 - MODULAR BLOCK RETAINING WALLS
- (L) ITEM 701011 - P.C.C. CURB, TYPE 1-4
- (M) ITEM 701012 - P.C.C. CURB, TYPE 1-6
- (N) ITEM 701013 - P.C.C. CURB, TYPE 1-8
- (O) ITEM 701014 - P.C.C. CURB, TYPE 2
- (P) ITEM 701017 - I.P.C.C. CURB & GUTTER, TYPE 1-6
- (Q) ITEM 701021 - I.P.C.C. CURB & GUTTER, TYPE 3-4
- (R) ITEM 701022 - I.P.C.C. CURB & GUTTER, TYPE 3-6
- (S) ITEM 701023 - I.P.C.C. CURB & GUTTER, TYPE 3-8
- (T) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (U) ITEM 701500 - P.C.C. CURB, TYPE 1, MODIFIED
- (V) ITEM 709002 - PERFORATED PIPE UNDERDRAINS, 8" (WHERE NOTED ON PLANS)
- (W) ITEM 720021 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (X) ITEM 723015 - CONCRETE MEDIAN BARRIER, 42" F-SHAPE OVER 11" (MIN.) P.C.C. FOOTING
- (Y) ITEM 727000 - CHAIN LINK FENCE
- (Z) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (AA) ITEM 760012 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH
- (BB) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

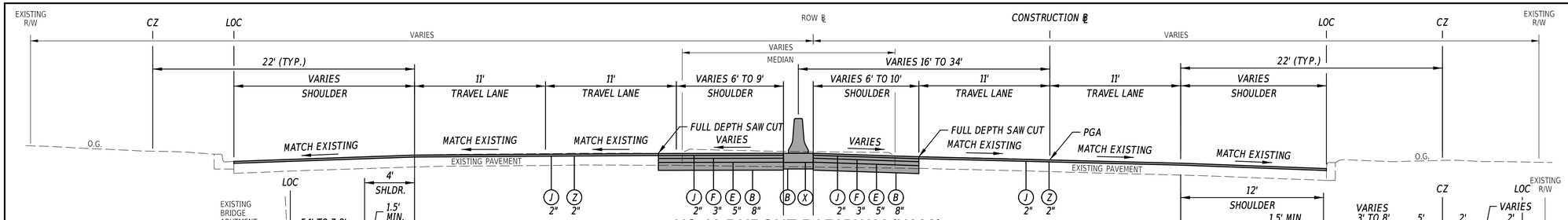
NOTES:

1. EXISTING US 13 (DUPONT PARKWAY) SHOULDER PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - 2" HOT-MIX
   - 9" BITUMINOUS CONCRETE BASE COURSE
2. EXISTING US 13 (DUPONT PARKWAY) PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - VARIABLE DEPTH ASPHALT (AVERAGE DEPTH 8")
   - 8" PCC PAVEMENT
3. REFER TO CONSTRUCTION PLANS FOR LIMITS OF GUARDRAIL.

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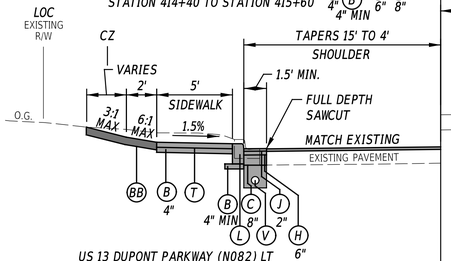
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				T201901102	DESIGNED BY:	O. GREEN		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				8

US 13 DUPONT PARKWAY (N082)
STATION 403+90 TO STATION 425+00

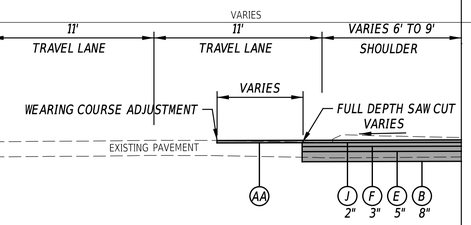


US 13 DUPONT PARKWAY (N082) LT
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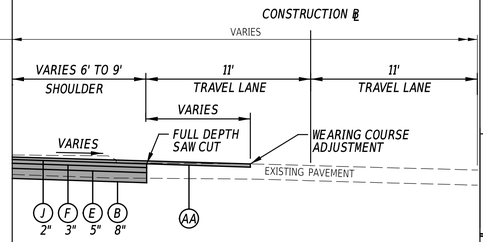
US 13 DUPONT PARKWAY (N082) RT
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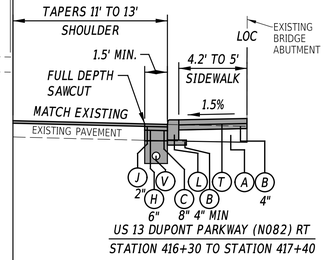
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STATION 412+75 TO STATION 414+40



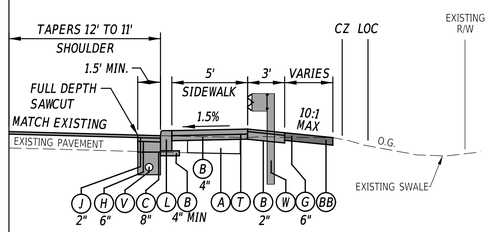
US 13 DUPONT PARKWAY (N082) LT
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STATION 419+50 TO STATION 420+50
STATION 422+00 TO STATION 424+50



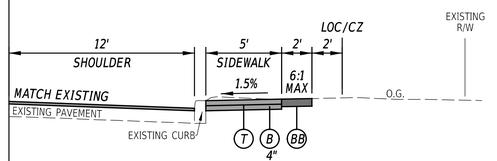
US 13 DUPONT PARKWAY (N082) RT
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STATION 413+50 TO STATION 414+50
STATION 416+50 TO STATION 418+00
STATION 421+50 TO STATION 422+50



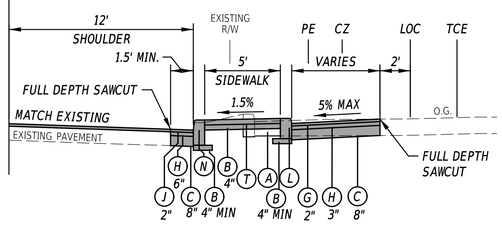
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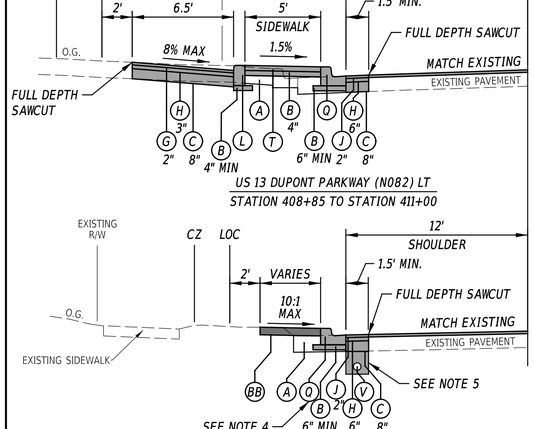
US 13 DUPONT PARKWAY (N082) RT
STATION 417+40 TO STATION 420+85
STATION 411+90 TO STATION 416+30



US 13 DUPONT PARKWAY (N082) RT
STATION 407+85 TO STATION 410+75



US 13 DUPONT PARKWAY (N082) RT
STATION 405+35 TO STATION 407+35



US 13 DUPONT PARKWAY (N082) LT
STATION 408+85 TO STATION 411+00

US 13 DUPONT PARKWAY (N082) LT
STATION 418+65 TO STATION 421+25
STATION 403+90 TO STATION 407+45

LEGEND

- (A) ITEM 209006 - BORROW, TYPE F
- (B) ITEM 301001 - GABC
- (C) ITEM 301002 - GABC, PATCHING
- (D) ITEM 302002 - DELAWARE NO. 3 STONE
- (E) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (F) ITEM 401016 - SUPERPAVE TYPE B, PG 76-22
- (G) ITEM 401029 - SUPERPAVE TYPE C, PG 64-22 PATCHING
- (H) ITEM 401030 - SUPERPAVE TYPE B, PG 64-22 PATCHING
- (I) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE
- (J) ITEM 401046 - SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)
- (K) ITEM 607010 - MODULAR BLOCK RETAINING WALLS
- (L) ITEM 701011 - P.C.C. CURB, TYPE 1-4
- (M) ITEM 701012 - P.C.C. CURB, TYPE 1-6
- (N) ITEM 701013 - P.C.C. CURB, TYPE 1-8
- (O) ITEM 701014 - P.C.C. CURB, TYPE 2
- (P) ITEM 701017 - I.P.C.C. CURB & GUTTER, TYPE 1-6
- (Q) ITEM 701021 - I.P.C.C. CURB & GUTTER, TYPE 3-4
- (R) ITEM 701022 - I.P.C.C. CURB & GUTTER, TYPE 3-6
- (S) ITEM 701023 - I.P.C.C. CURB & GUTTER, TYPE 3-8
- (T) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (U) ITEM 701500 - P.C.C. CURB, TYPE 1, MODIFIED
- (V) ITEM 709002 - PERFORATED PIPE UNDERDRAINS, 8" (WHERE NOTED ON PLANS)
- (W) ITEM 720021 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (X) ITEM 723015 - CONCRETE MEDIAN BARRIER, 42" F-SHAPE OVER 11" (MIN.) P.C.C. FOOTING
- (Y) ITEM 727000 - CHAIN LINK FENCE
- (Z) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (AA) ITEM 760012 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH
- (BB) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

NOTES:

1. PROPOSED DRIVEWAY PAVEMENT DEPTH SHALL BE EQUAL TO OR EXCEED EXISTING PAVEMENT DEPTH.
2. EXISTING US 13 (DUPONT PARKWAY) SHOULDER PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - 2" HOT-MIX
   - 9" BITUMINOUS CONCRETE BASE COURSE
3. EXISTING US 13 (DUPONT PARKWAY) PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - VARIABLE DEPTH ASPHALT (AVERAGE DEPTH 8")
   - 8" PCC PAVEMENT
4. REFER TO CONSTRUCTION PLANS FOR PROPOSED CURB TYPE.
5. NO UNDERDRAIN FROM STATION 403+90 TO STATION 407+45

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRUSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 12:43
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

NOT TO SCALE

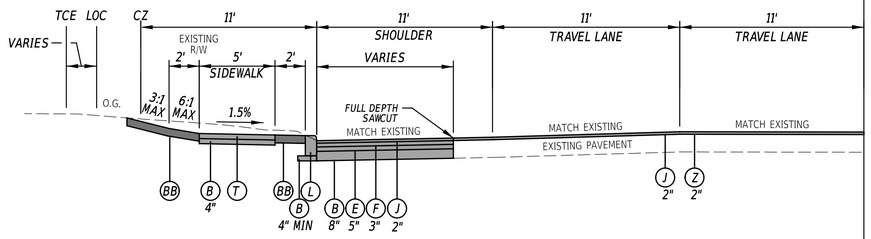
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

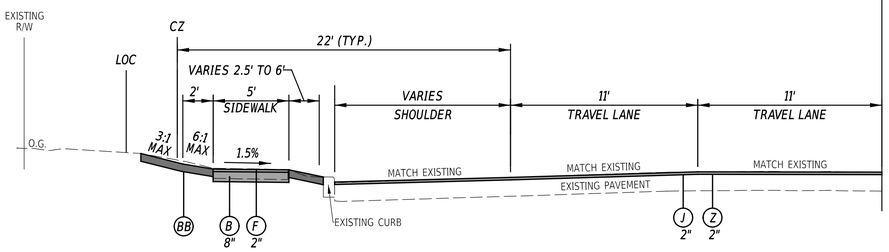
TYPICAL SECTIONS

SECTION
PAI
SHEET NO.
9

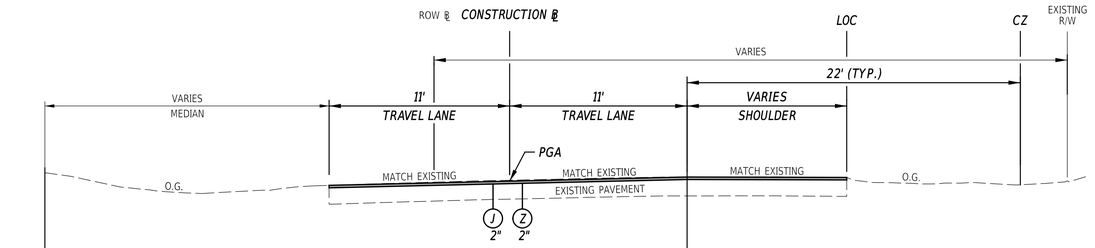
US 40 PULASKI HIGHWAY (N032)
STATION 701+15 TO STATION 719+84

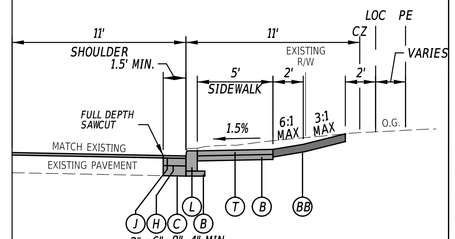


US 40 PULASKI HIGHWAY (N032) LT
STATION 714+09 TO STATION 719+84

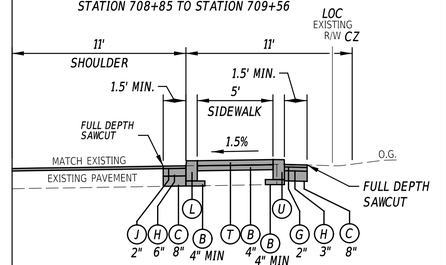


US 40 PULASKI HIGHWAY (N032) LT
STATION 710+33 TO STATION 714+09

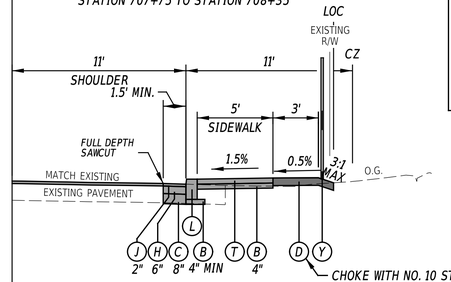




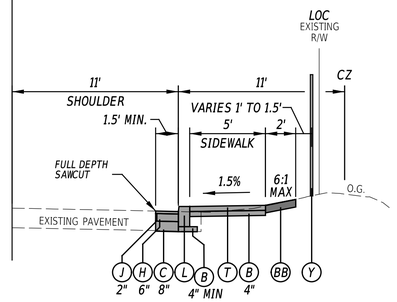
US 40 PULASKI HIGHWAY (N032) RT
STATION 708+85 TO STATION 709+56



US 40 PULASKI HIGHWAY (N032) RT
STATION 707+75 TO STATION 708+35



US 40 PULASKI HIGHWAY (N032) RT
STATION 702+25 TO STATION 707+75



US 40 PULASKI HIGHWAY (N032) RT
STATION 701+15 TO STATION 702+25

LEGEND

- (A) ITEM 209006 - BORROW, TYPE F
- (B) ITEM 301001 - GABC
- (C) ITEM 301002 - GABC, PATCHING
- (D) ITEM 302002 - DELAWARE NO. 3 STONE
- (E) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (F) ITEM 401016 - SUPERPAVE TYPE B, PG 76-22
- (G) ITEM 401029 - SUPERPAVE TYPE C, PG 64-22 PATCHING
- (H) ITEM 401030 - SUPERPAVE TYPE B, PG 64-22 PATCHING
- (I) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE
- (J) ITEM 401046 - SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)
- (K) ITEM 607010 - MODULAR BLOCK RETAINING WALLS
- (L) ITEM 701011 - P.C.C. CURB, TYPE 1-4
- (M) ITEM 701012 - P.C.C. CURB, TYPE 1-6
- (N) ITEM 701013 - P.C.C. CURB, TYPE 1-8
- (O) ITEM 701014 - P.C.C. CURB, TYPE 2
- (P) ITEM 701017 - I.P.C.C. CURB & GUTTER, TYPE 1-6
- (Q) ITEM 701021 - I.P.C.C. CURB & GUTTER, TYPE 3-4
- (R) ITEM 701022 - I.P.C.C. CURB & GUTTER, TYPE 3-6
- (S) ITEM 701023 - I.P.C.C. CURB & GUTTER, TYPE 3-8
- (T) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (U) ITEM 701500 - P.C.C. CURB, TYPE 1, MODIFIED
- (V) ITEM 709002 - PERFORATED PIPE UNDERDRAINS, 8" (WHERE NOTED ON PLANS)
- (W) ITEM 720021 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (X) ITEM 723015 - CONCRETE MEDIAN BARRIER, 42" F-SHAPE OVER 11" (MIN.) P.C.C. FOOTING
- (Y) ITEM 727000 - CHAIN LINK FENCE
- (Z) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (AA) ITEM 760012 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH
- (BB) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

NOTES:

1. PROPOSED DRIVEWAY PAVEMENT DEPTH SHALL BE EQUAL TO OR EXCEED EXISTING PAVEMENT DEPTH.
2. EXISTING US 13 (DUPONT PARKWAY) SHOULDER PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - 2" HOT-MIX
   - 9" BITUMINOUS CONCRETE BASE COURSE
3. EXISTING US 13 (DUPONT PARKWAY) PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - VARIABLE DEPTH ASPHALT (AVERAGE DEPTH 8")
   - 8" PCC PAVEMENT
4. ACCESS FOR GRADING WORK WITHIN RAILROAD RIGHT-OF-WAY IS COVERED UNDER THE RIGHT OT ENTRY AGREEMENT OBTAINED BY DELDOT'S RAILROAD SECTION. THE CONTRACTOR SHALL NOT ENCROACH PAST THE LOC INDICATED ON THE PLANS.

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	$VERSIONS
MICROSTATION VERSION:	$WORKSPACES
MICROSTATION WORKSPACE:	$USERS
PEN TABLE:	$PENTBLSS
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	13-JUN-2024@ 12:43
USER NAME:	$USERS
OFFICE LOCATION:	$OFFICENAMES

ADDENDA / REVISIONS

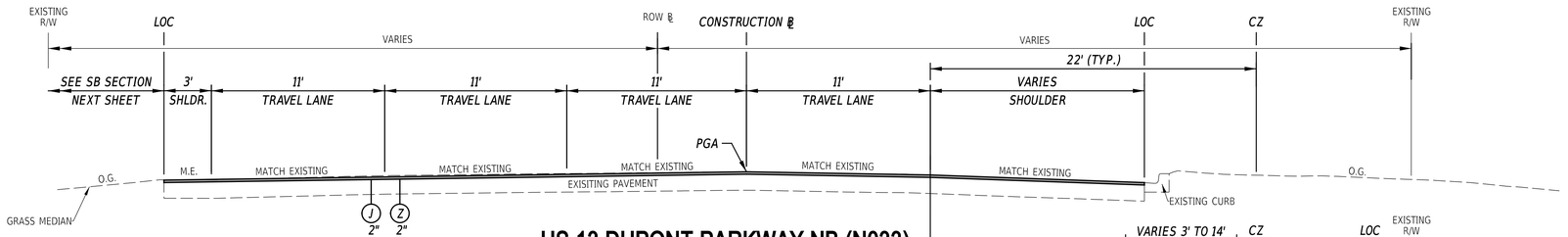
NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

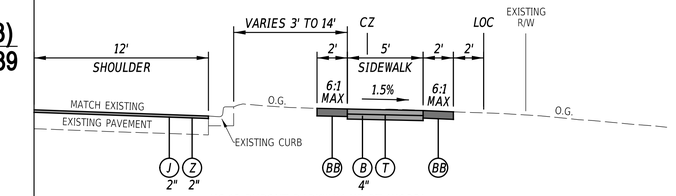
CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

TYPICAL SECTIONS

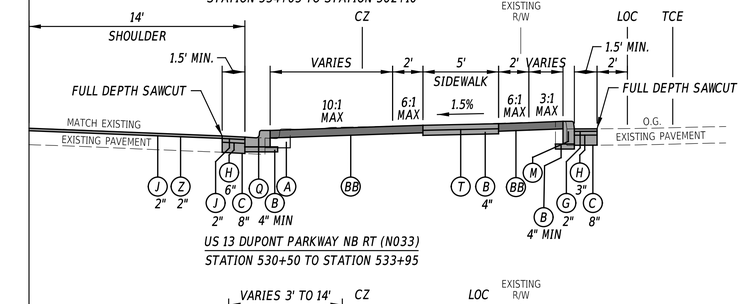
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SHEET NO.	10



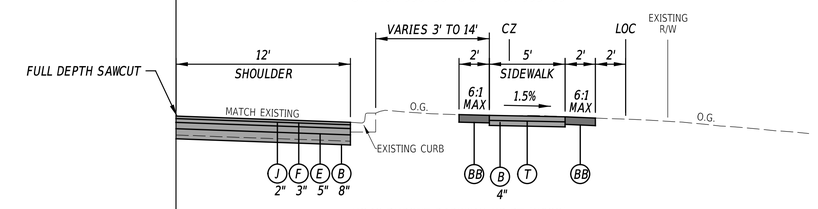
US 13 DUPONT PARKWAY NB (N033)
STATION 425+00 TO STATION 578+39



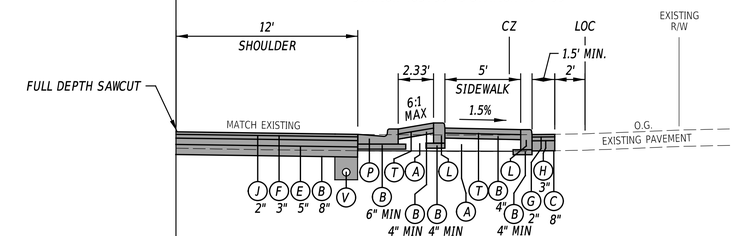
US 13 DUPONT PARKWAY NB RT (N033)
STATION 534+65 TO STATION 562+10



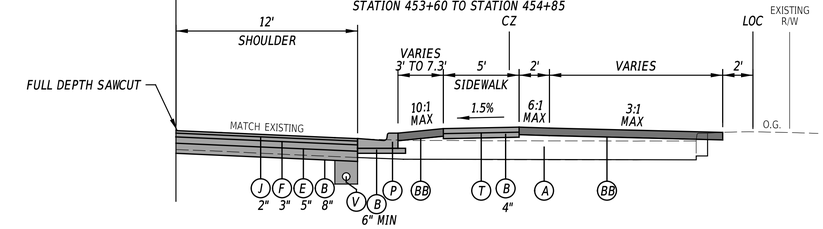
US 13 DUPONT PARKWAY NB RT (N033)
STATION 530+50 TO STATION 533+95



US 13 DUPONT PARKWAY NB RT (N033)
STATION 489+38 TO STATION 517+50
STATION 463+30 TO STATION 464+65



US 13 DUPONT PARKWAY NB RT (N033)
STATION 453+60 TO STATION 454+85



US 13 DUPONT PARKWAY NB RT (N033)
STATION 455+05 TO STATION 457+17
STATION 425+00 TO STATION 453+60

LEGEND

- (A) ITEM 209006 - BORROW, TYPE F
- (B) ITEM 301001 - GABC
- (C) ITEM 301002 - GABC, PATCHING
- (D) ITEM 302002 - DELAWARE NO. 3 STONE
- (E) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (F) ITEM 401016 - SUPERPAVE TYPE B, PG 76-22
- (G) ITEM 401029 - SUPERPAVE TYPE C, PG 64-22 PATCHING
- (H) ITEM 401030 - SUPERPAVE TYPE B, PG 64-22 PATCHING
- (I) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE
- (J) ITEM 401046 - SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)
- (K) ITEM 607010 - MODULAR BLOCK RETAINING WALLS
- (L) ITEM 701011 - P.C.C. CURB, TYPE 1-4
- (M) ITEM 701012 - P.C.C. CURB, TYPE 1-6
- (N) ITEM 701013 - P.C.C. CURB, TYPE 1-8
- (O) ITEM 701014 - P.C.C. CURB, TYPE 2
- (P) ITEM 701017 - I.P.C.C. CURB & GUTTER, TYPE 1-6
- (Q) ITEM 701021 - I.P.C.C. CURB & GUTTER, TYPE 3-4
- (R) ITEM 701022 - I.P.C.C. CURB & GUTTER, TYPE 3-6
- (S) ITEM 701023 - I.P.C.C. CURB & GUTTER, TYPE 3-8
- (T) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (U) ITEM 701500 - P.C.C. CURB, TYPE 1, MODIFIED
- (V) ITEM 709002 - PERFORATED PIPE UNDERDRAINS, 8" (WHERE NOTED ON PLANS)
- (W) ITEM 720021 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (X) ITEM 723015 - CONCRETE MEDIAN BARRIER, 42" F-SHAPE OVER 11" (MIN.) P.C.C. FOOTING
- (Y) ITEM 727000 - CHAIN LINK FENCE
- (Z) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (AA) ITEM 760012 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH
- (BB) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

NOTES:

1. PROPOSED DRIVEWAY PAVEMENT DEPTH SHALL BE EQUAL TO OR EXCEED EXISTING PAVEMENT DEPTH.
2. EXISTING US 13 (DUPONT PARKWAY) SHOULDER PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - 2" HOT-MIX
   - 9" BITUMINOUS CONCRETE BASE COURSE
3. EXISTING US 13 (DUPONT PARKWAY) PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - VARIABLE DEPTH ASPHALT (AVERAGE DEPTH 8")
   - 8" PCC PAVEMENT

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRV$S
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 13-JUN-2024@ 12:43
MICROSTATION WORKSPACE: $WORKSPACE$ | USER NAME: $USER$S | OFFICE LOCATION: $OFFICENAME$S

ADDENDA / REVISIONS	

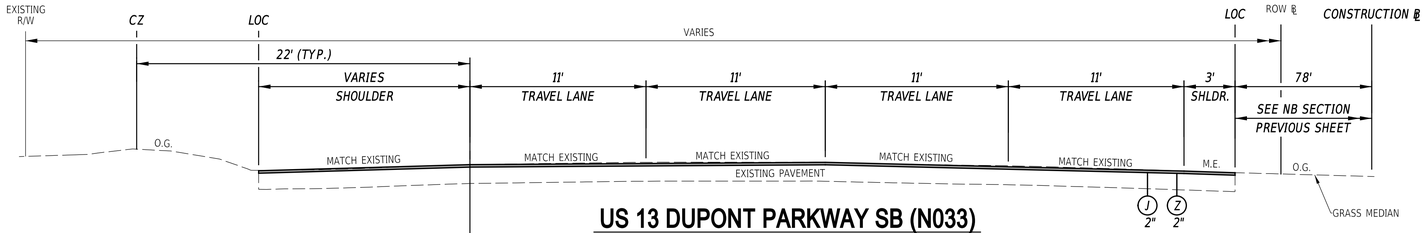
NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

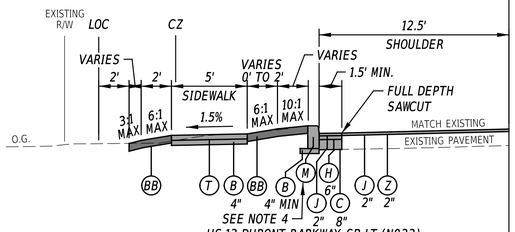
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

TYPICAL SECTIONS

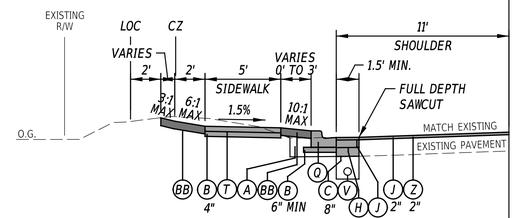
SECTION
PAI
SHEET NO.
11



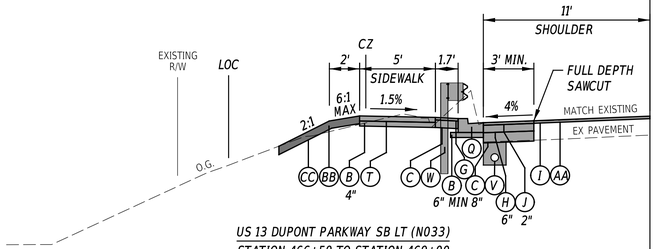
US 13 DUPONT PARKWAY SB (N033)
STATION 425+00 TO STATION 561+50



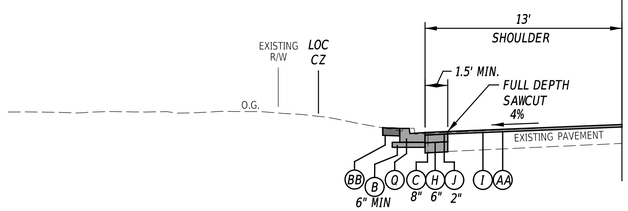
US 13 DUPONT PARKWAY SB LT (N033)
STATION 546+90 TO STATION 561+30



US 13 DUPONT PARKWAY SB LT (N033)
STATION 442+00 TO STATION 469+00
STATION 425+00 TO STATION 437+55



US 13 DUPONT PARKWAY SB LT (N033)
STATION 466+50 TO STATION 469+00



US 13 DUPONT PARKWAY SB LT (N033)
STATION 469+00 TO STATION 472+25
STATION 437+55 TO STATION 442+00

LEGEND

- (A) ITEM 209006 - BORROW, TYPE F
- (B) ITEM 301001 - GABC
- (C) ITEM 301002 - GABC, PATCHING
- (D) ITEM 302002 - DELAWARE NO. 3 STONE
- (E) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (F) ITEM 401016 - SUPERPAVE TYPE B, PG 76-22
- (G) ITEM 401029 - SUPERPAVE TYPE C, PG 64-22 PATCHING
- (H) ITEM 401030 - SUPERPAVE TYPE B, PG 64-22 PATCHING
- (I) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE
- (J) ITEM 401046 - SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)
- (K) ITEM 607010 - MODULAR BLOCK RETAINING WALLS
- (L) ITEM 701011 - P.C.C. CURB, TYPE 1-4
- (M) ITEM 701012 - P.C.C. CURB, TYPE 1-6
- (N) ITEM 701013 - P.C.C. CURB, TYPE 1-8
- (O) ITEM 701014 - P.C.C. CURB, TYPE 2
- (P) ITEM 701017 - I.P.C.C. CURB & GUTTER, TYPE 1-6
- (Q) ITEM 701021 - I.P.C.C. CURB & GUTTER, TYPE 3-4
- (R) ITEM 701022 - I.P.C.C. CURB & GUTTER, TYPE 3-6
- (S) ITEM 701023 - I.P.C.C. CURB & GUTTER, TYPE 3-8
- (T) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (U) ITEM 701500 - P.C.C. CURB, TYPE 1, MODIFIED
- (V) ITEM 709002 - PERFORATED PIPE UNDERDRAINS, 8" (WHERE NOTED ON PLANS)
- (W) ITEM 720021 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (X) ITEM 723015 - CONCRETE MEDIAN BARRIER, 42" F-SHAPE OVER 11" (MIN.) P.C.C. FOOTING
- (Y) ITEM 727000 - CHAIN LINK FENCE
- (Z) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (AA) ITEM 760012 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH
- (BB) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (CC) ITEM 908026 - EROSION CONTROL MULCH

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

NOTES:

1. PROPOSED DRIVEWAY PAVEMENT DEPTH SHALL BE EQUAL TO OR EXCEED EXISTING PAVEMENT DEPTH.
2. EXISTING US 13 (DUPONT PARKWAY) SHOULDER PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - 2" HOT-MIX
   - 9" BITUMINOUS CONCRETE BASE COURSE
3. EXISTING US 13 (DUPONT PARKWAY) PAVEMENT SECTION (PER ARCHIVED CONTRACT 28-007-08):
   - VARIABLE DEPTH ASPHALT (AVERAGE DEPTH 8")
   - 8" PCC PAVEMENT
4. SEE CONSTRUCTION PLANS TO DETERMINE CURB TYPE IF NEEDED.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | PRN TABLE: $PRNTBLSS
MICROSTATION VERSION: $VERSIONS | PLOT DRIVER: $PLTDRVSS
MICROSTATION WORKSPACE: $WORKSPACES | DATE PLOTTED: 13-JUN-2024@ 12:43
USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

Pennoni

ADDENDA / REVISIONS	

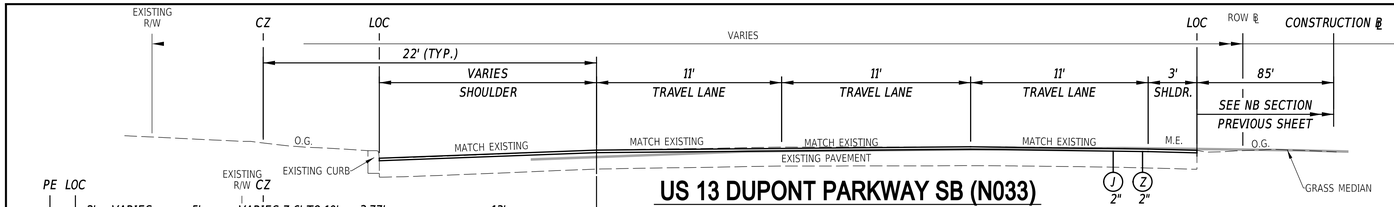
NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

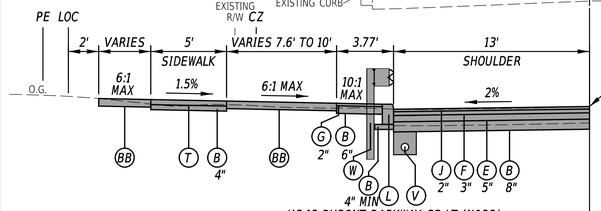
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

TYPICAL SECTIONS

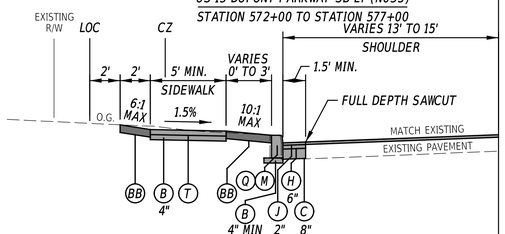
SECTION
PAI
SHEET NO.
12



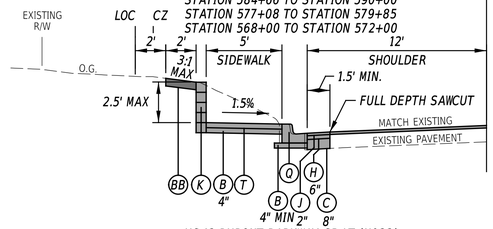
US 13 DUPONT PARKWAY SB (N033)
STATION 561+50 TO STATION 591+33



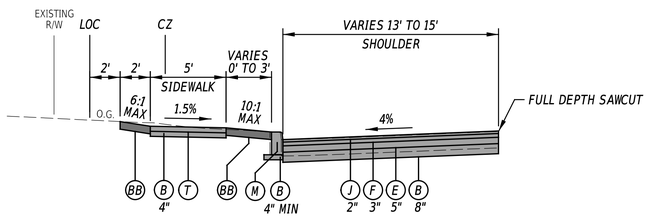
US 13 DUPONT PARKWAY SB LT (N033)
STATION 572+00 TO STATION 577+00



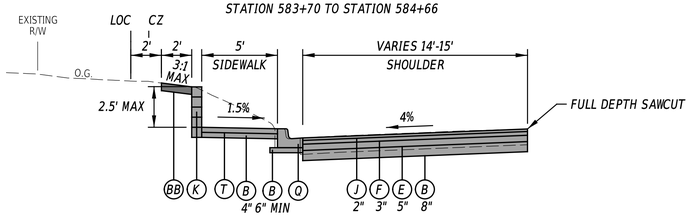
US 13 DUPONT PARKWAY SB LT (N033)
STATION 584+66 TO STATION 590+00
STATION 577+08 TO STATION 579+85
STATION 568+00 TO STATION 572+00



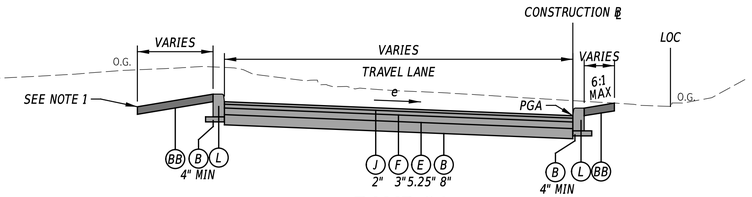
US 13 DUPONT PARKWAY SB LT (N033)
STATION 580+00 TO STATION 581+20
STATION 579+85 TO STATION 582+20



US 13 DUPONT PARKWAY SB LT (N033)
STATION 567+00 TO STATION 568+00
STATION 583+70 TO STATION 584+66

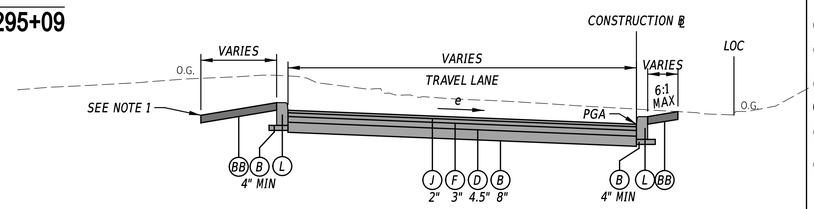


US 13 DUPONT PARKWAY SB LT (N033)
STATION 563+28 TO STATION 565+55

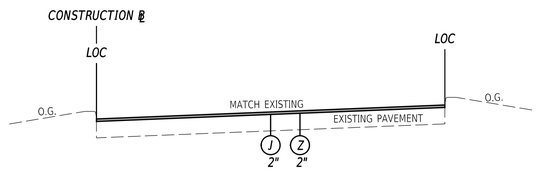


RAMP C1
STATION 293+00 TO STATION 295+09

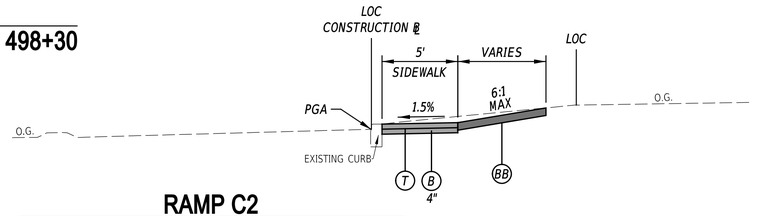
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STATION 495+97 TO STATION 498+30



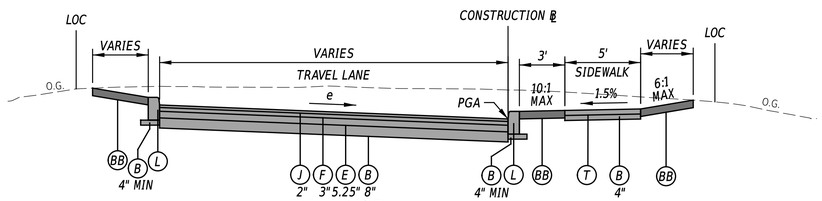
RAMP B2
STATION 400+62 TO STATION 403+20



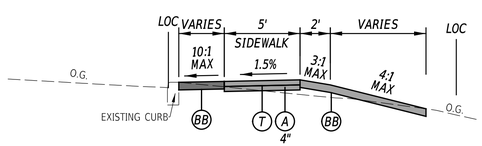
RAMP B1
STATION 498+30 TO STATION 500+00
RAMP B2
STATION 403+24 TO STATION 405+40



RAMP C2
STATION 200+93 TO STATION 208+38



RAMP C2
STATION 208+38 TO STATION 211+10



RAMP D
STATION 398+00 TO STATION 400+60

LEGEND

- (A) ITEM 209006 - BORROW, TYPE F
- (B) ITEM 301001 - GABC
- (C) ITEM 301002 - GABC, PATCHING
- (D) ITEM 302002 - DELAWARE NO. 3 STONE
- (E) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (F) ITEM 401016 - SUPERPAVE TYPE B, PG 76-22
- (G) ITEM 401029 - SUPERPAVE TYPE C, PG 64-22 PATCHING
- (H) ITEM 401030 - SUPERPAVE TYPE B, PG 64-22 PATCHING
- (I) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22, WEDGE
- (J) ITEM 401046 - SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)
- (K) ITEM 607010 - MODULAR BLOCK RETAINING WALLS
- (L) ITEM 70101I - P.C.C. CURB, TYPE 1-4
- (M) ITEM 701012 - P.C.C. CURB, TYPE 1-6
- (N) ITEM 701013 - P.C.C. CURB, TYPE 1-8
- (O) ITEM 701014 - P.C.C. CURB, TYPE 2
- (P) ITEM 701017 - I.P.C.C. CURB & GUTTER, TYPE 1-6
- (Q) ITEM 701021 - I.P.C.C. CURB & GUTTER, TYPE 3-4
- (R) ITEM 701022 - I.P.C.C. CURB & GUTTER, TYPE 3-6
- (S) ITEM 701023 - I.P.C.C. CURB & GUTTER, TYPE 3-8
- (T) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (U) ITEM 701500 - P.C.C. CURB, TYPE 1, MODIFIED
- (V) ITEM 709002 - PERFORATED PIPE UNDERDRAINS, 8" (WHERE NOTED ON PLANS)
- (W) ITEM 720021 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (X) ITEM 723015 - CONCRETE MEDIAN BARRIER, 42" F-SHAPE OVER 11" (MIN.) P.C.C. FOOTING
- (Y) ITEM 727000 - CHAIN LINK FENCE
- (Z) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (AA) ITEM 760012 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH
- (BB) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

NOTES:

1. TOPSOIL TO BE GRADED SO THAT RAMPS CONNECT TO CREATE ISLAND MEDIAN.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRUSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 12:43
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	TYPICAL SECTIONS	SECTION
				T201901102	DESIGNED BY: O. GREEN		PAI
				COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
				NEW CASTLE			13

HISTORICAL ALIGNMENT CONTROL US13

POINT NO.	STATION	OFFSET	NORTHING	EASTING
30001	360+00.00	0.0000	600177.4136	598209.1283
30002	365+00.00	0.0000	600594.5546	598484.7974
30003	370+00.00	0.0000	601011.6955	598760.4664
30004	375+00.00	0.0000	601428.8365	599036.1355
30005	379+72.99	0.0000	601823.4401	599296.9107
30009	10+00.00	0.0000	602251.3782	599591.5972
30010	15+00.00	0.0000	602624.3184	599924.6372
30011	18+82.20	0.0000	602909.3918	600179.2111
30012	20+00.00	0.0000	602997.2586	600257.6772
30013	25+00.00	0.0000	603370.1987	600590.7172
30014	30+00.00	0.0000	603743.1389	600923.7572

CONSTRUCTION ALIGNMENT CONTROL US13

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10001	370+00.00	0.0000	597576.1519	596863.4901
10002	375+00.00	0.0000	598018.9411	597095.7351
10017	430+00.00	0.0000	602680.2937	599982.6680
10018	435+00.00	0.0000	603053.2339	600315.7080
10019	440+00.00	0.0000	603426.1740	600648.7480
10020	445+00.00	0.0000	603799.1142	600981.7880

HISTORICAL ALIGNMENT CONTROL US40

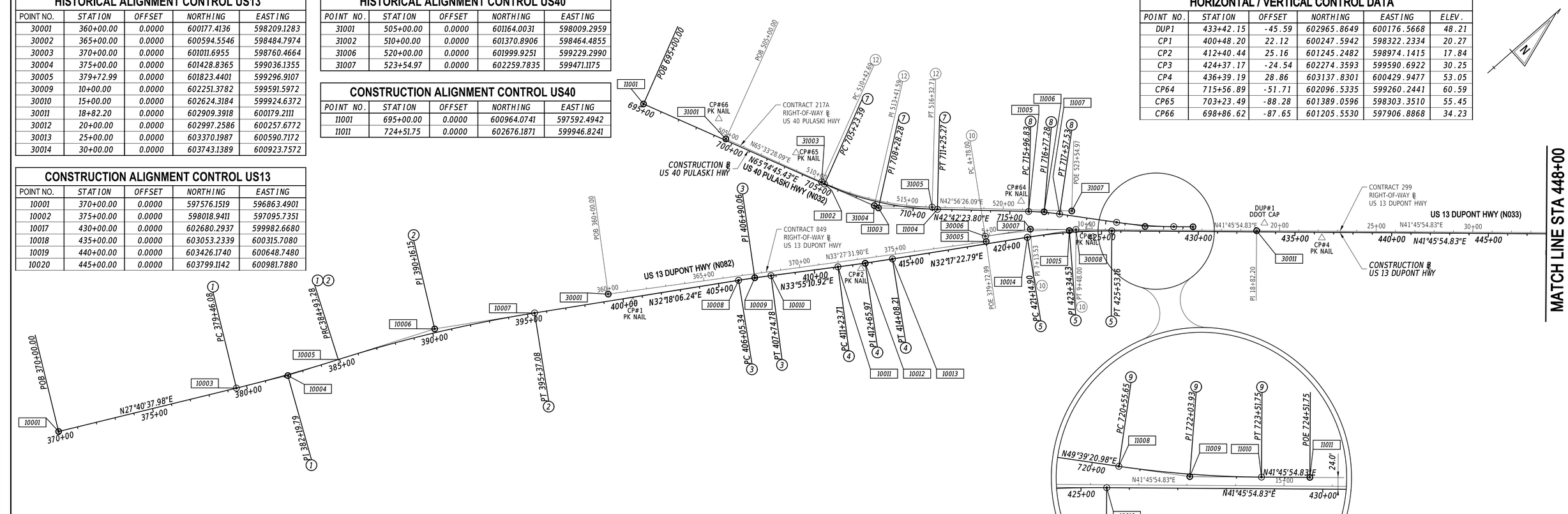
POINT NO.	STATION	OFFSET	NORTHING	EASTING
31001	505+00.00	0.0000	601164.0031	598009.2959
31002	510+00.00	0.0000	601370.8906	598464.4855
31006	520+00.00	0.0000	601999.9251	599229.2990
31007	523+54.97	0.0000	602259.7835	599471.1175

CONSTRUCTION ALIGNMENT CONTROL US40

POINT NO.	STATION	OFFSET	NORTHING	EASTING
11001	695+00.00	0.0000	600964.0741	597592.4942
11011	724+51.75	0.0000	602676.1871	599946.8241

HORIZONTAL / VERTICAL CONTROL DATA

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEV.
DUP1	433+42.15	-45.59	602965.8649	600176.5668	48.21
CP1	400+48.20	22.12	600247.5942	598322.2334	20.27
CP2	412+40.44	25.16	601245.2482	598974.1415	17.84
CP3	424+37.17	-24.54	602274.3593	599590.6922	30.25
CP4	436+39.19	28.86	603137.8301	600429.9477	53.05
CP64	715+56.89	-51.71	602096.5335	599260.2441	60.59
CP65	703+23.49	-88.28	601389.0596	598303.3510	55.45
CP66	698+86.62	-87.65	601205.5530	597906.8868	34.23



CIRCULAR CURVE NO. (1)

Element: Circular		STATION	NORTHING	EASTING
PC	(10003)	379+46.08	598413.9837	597302.9367
PI	(10004)	382+19.79	598656.3726	597430.0708
CC	(12006)		602129.9031	590218.3095
PRC	(10005)	384+93.28	598906.8839	597540.3411

Radius:	8000.00'
Delta:	3°55'08.52" Left
Degree of Curvature (Arc):	0°42'58.31"
Length:	547.20'
Tangent:	273.71'
Chord:	547.09'
Middle Ordinate:	4.68'
External:	4.68'
Tangent Direction:	N 27°40'37.98" E
Radial Direction:	S 62°19'22.02" E
Chord Direction:	N 25°43'03.72" E
Radial Direction:	S 66°14'30.54" E
Tangent Direction:	N 23°45'29.46" E

CIRCULAR CURVE NO. (2)

Element: Circular		STATION	NORTHING	EASTING
PRC	(10005)	384+93.28	598906.8839	597540.3411
PI	(10006)	390+16.15	599385.4380	597750.9916
CC	(12008)		596086.7420	603947.1188
PT	(10007)	395+37.08	599827.3873	598030.3990

Radius:	7000.00'
Delta:	8°32'36.78" Right
Degree of Curvature (Arc):	0°49'06.64"
Length:	1043.79'
Tangent:	522.86'
Chord:	1042.82'
Middle Ordinate:	19.45'
External:	19.50'
Tangent Direction:	N 23°45'29.46" E
Radial Direction:	S 66°14'30.54" E
Chord Direction:	N 28°01'47.85" E
Radial Direction:	S 57°41'53.76" E
Tangent Direction:	N 32°18'06.24" E

CIRCULAR CURVE NO. (3)

Element: Circular		STATION	NORTHING	EASTING
PC	(10008)	406+05.34	600730.3345	598601.2568
PI	(10009)	406+90.06	600801.9456	598646.5305
CC	(12011)		597524.0671	603672.7308
PT	(10010)	407+74.78	600872.2499	598693.8081

Radius:	6000.00'
Delta:	1°37'04.69" Right
Degree of Curvature (Arc):	0°57'17.75"
Length:	169.43'
Tangent:	84.72'
Chord:	169.43'
Middle Ordinate:	0.6'
External:	0.6'
Tangent Direction:	N 32°18'06.24" E
Radial Direction:	S 57°41'53.76" E
Chord Direction:	N 33°06'38.58" E
Radial Direction:	S 56°04'49.08" E
Tangent Direction:	N 33°55'10.92" E

CIRCULAR CURVE NO. (4)

Element: Circular		STATION	NORTHING	EASTING
PC	(10011)	411+23.71	601161.8057	598888.5260
PI	(10012)	412+65.97	601279.8536	598967.9099
CC	(12014)		606742.1104	590590.3215
PT	(10013)	414+08.21	601400.1120	599043.9037

Radius:	10000.00'
Delta:	1°37'48.14" Left
Degree of Curvature (Arc):	0°34'22.65"
Length:	284.50'
Tangent:	142.26'
Chord:	284.49'
Middle Ordinate:	1.01'
External:	1.01'
Tangent Direction:	N 33°55'10.92" E
Radial Direction:	S 56°04'49.08" E
Chord Direction:	N 33°06'16.86" E
Radial Direction:	S 57°42'37.21" E
Tangent Direction:	N 32°17'22.79" E

CIRCULAR CURVE NO. (5)

Element: Circular		STATION	NORTHING	EASTING
PC	(10014)	421+14.90	601997.5204	599421.4188
PI	(10015)	423+34.53	602183.1857	599538.7446
CC	(12017)		600581.8908	601661.6181
PT	(10016)	425+53.16	602347.0027	599685.0352

Radius:	2650.00'
Delta:	9°28'32.05" Right
Degree of Curvature (Arc):	2°09'43.58"
Length:	438.26'
Tangent:	219.63'
Chord:	437.76'
Middle Ordinate:	9.05'
External:	9.09'
Tangent Direction:	N 32°17'22.79" E
Radial Direction:	S 57°42'37.21" E
Chord Direction:	N 37°01'38.81" E
Radial Direction:	S 48°14'05.17" E
Tangent Direction:	N 41°45'54.83" E

CIRCULAR CURVE NO. (7)

Element: Circular		STATION	NORTHING	EASTING
PC	(11002)	705+23.39	601392.5934	598521.8516
PI	(11003)	708+28.28	601520.2548	598798.7191
CC	(12005)		602782.0072	597881.2041
PT	(11004)	711+25.27	601744.2931	599005.5037

Radius:	1530.00'
Delta:	22°32'21.63" Left
Degree of Curvature (Arc):	3°44'41.36"
Length:	601.88'
Tangent:	304.88'
Chord:	598.01'
Middle Ordinate:	29.50'
External:	30.08'
Tangent Direction:	N 65°14'45.43" E
Radial Direction:	S 24°45'14.57" E
Chord Direction:	N 53°58'34.62" E
Radial Direction:	S 47°17'36.20" E
Tangent Direction:	N 42°42'23.80" E

CIRCULAR CURVE NO. (8)

Element: Circular		STATION	NORTHING	EASTING
PC	(11005)	715+96.83	602090.8096	599325.3339
PI	(11006)	716+77.28	602149.9280	599379.8994
CC	(12008)		601192.1357	600298.9921
PT	(11007)	717+57.53	602202.0102	599441.2168

Radius:	1325.00'
Delta:	6°56'57.18" Right
Degree of Curvature (Arc):	4°19'27.16"
Length:	160.70'
Tangent:	80.45'
Chord:	160.61'
Middle Ordinate:	2.44'
External:	2.44'
Tangent Direction:	N 42°42'23.80" E
Radial Direction:	S 47°17'36.20" E
Chord Direction:	N 46°10'52.39" E
Radial Direction:	S 40°20'39.02" E
Tangent Direction:	N 49°39'20.98" E

CIRCULAR CURVE NO. (9)

Element: Circular		STATION	NORTHING	EASTING
PC	(11008)	720+55.65	602395.0067	599668.4351
PI	(11009)	722+03.93	602490.9999	599781.4496
CC	(12012)		604033.6711	598276.5733
PT	(11010)	723+51.75	602601.5991	599880.2161

Radius:	2150.00'
Delta:	7°53'26.15" Left
Degree of Curvature (Arc):	2°39'53.71"
Length:	296.09'
Tangent:	148.28'
Chord:	295.86'
Middle Ordinate:	5.10'
External:	5.11'
Tangent Direction:	N 49°39'20.98" E
Radial Direction:	S 40°20'39.02" E
Chord Direction:	N 45°42'37.91" E
Radial Direction:	S 48°14'05.17" E
Tangent Direction:	N 41°45'54.83" E

CIRCULAR CURVE NO. (10)

Element: Circular		STATION	NORTHING	EASTING
PC	(30006)	4+78.00	601837.8628	599274.1445
PI	(30007)	7+13.53	602036.8228	599400.1885
CC	(30009)		600300.7445	601700.4790
PT	(30008)	9+48.00	602212.5918	599556.9604

Radius:	2872.25'
Delta:	9°22'32.05" Right
Degree of Curvature (Arc):	1°59'41.29"
Length:	470.00'
Tangent:	235.53'
Chord:	469.47'
Middle Ordinate:	9.61'
External:	9.64'
Tangent Direction:	N 32°21'17.48" E
Radial Direction:	S 57°38'42.52" E
Chord Direction:	N 37°02'33.48" E
Radial Direction:	S 48°16'10.51" E
Tangent Direction:	N 41°43'49.49" E

CIRCULAR CURVE NO. (12)

Element: Circular		STATION	NORTHING	EASTING
PC	(31003)	510+42.69	601388.5557	598503.3519
PI	(31004)	513+41.59	601512.2325	598775.4630
CC	(31006)		602749.2744	597884.8937
PT	(31005)	516+32.71	601731.0444	598979.0845

Radius:	1494.67'
Delta:	22°37'02" Left
Degree of Curvature (Arc):	3°50'00.00"
Length:	590.01'
Tangent:	298.90'
Chord:	586.19'
Middle Ordinate:	29.02'
External:	29.59'
Tangent Direction:	N 65°33'28.09" E
Radial Direction:	S 24°26'31.91" E
Chord Direction:	N 54°14'57.09" E
Radial Direction:	S 47°03'33.91" E
Tangent Direction:	N 42°56'26.09" E

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83/2011).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ADDENDA / REVISIONS

SCALE 0 250 500 750 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

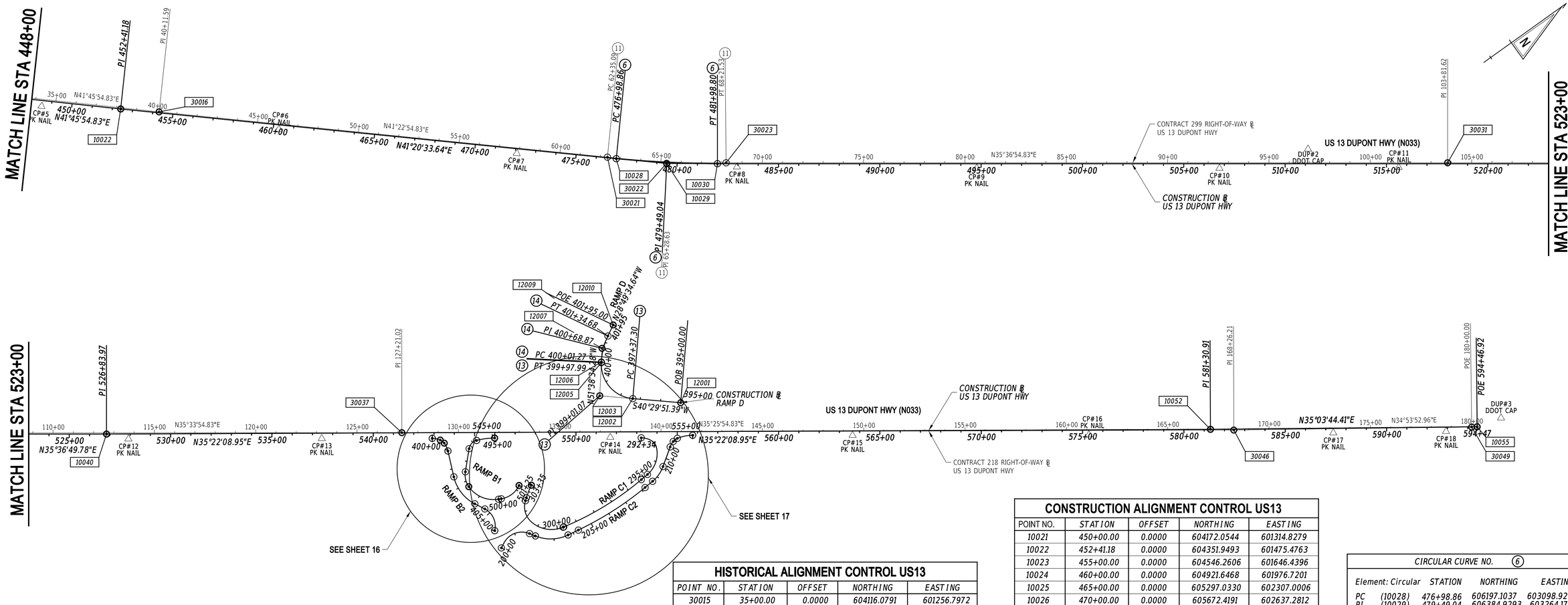
CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN
		CHECKED BY:	P. HORSEY

HORIZONTAL AND VERTICAL CONTROL

SECTION: PAI
SHEET NO.: 14

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS | $OFFICENAMES
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS | $OFFICE LOCATION:
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 06:12 | $USERS
MICROSTATION WORKSPACES: $WORKSPACES | USER NAME: $USERS

Pennoni



CONSTRUCTION ALIGNMENT CONTROL US13

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10021	450+00.00	0.0000	604172.0544	601314.8279
10022	452+41.18	0.0000	604351.9493	601475.4763
10023	455+00.00	0.0000	604546.2606	601646.4396
10024	460+00.00	0.0000	604921.6468	601976.7201
10025	465+00.00	0.0000	605297.0330	602307.0006
10026	470+00.00	0.0000	605672.4191	602637.2812
10027	475+00.00	0.0000	606047.8053	602967.5617
10031	485+00.00	0.0000	606833.1798	603585.2571
10032	490+00.00	0.0000	607239.6599	603876.4167
10033	495+00.00	0.0000	607646.1401	604167.5763
10034	500+00.00	0.0000	608052.6202	604458.7359
10035	505+00.00	0.0000	608459.1003	604749.8955
10036	510+00.00	0.0000	608865.5804	605041.0551
10037	515+00.00	0.0000	609272.0605	605332.2147
10038	520+00.00	0.0000	609678.5407	605623.3743
10039	525+00.00	0.0000	610085.0208	605914.5339
10040	526+83.97	0.0000	610234.5820	606021.6638
10041	530+00.00	0.0000	610492.2844	606204.5947
10042	535+00.00	0.0000	610900.0042	606494.0158
10043	540+00.00	0.0000	611307.7240	606783.4369
10044	545+00.00	0.0000	611715.4438	607072.8581
10045	550+00.00	0.0000	612123.1635	607362.2792
10046	555+00.00	0.0000	612530.8833	607651.7003
10047	560+00.00	0.0000	612938.6031	607941.1214
10048	565+00.00	0.0000	613346.3229	608230.5425
10049	570+00.00	0.0000	613754.0426	608519.9637
10050	575+00.00	0.0000	614161.7624	608809.3848
10051	580+00.00	0.0000	614569.4822	609098.8059
10052	581+30.91	0.0000	614676.2282	609174.5799
10053	585+00.00	0.0000	614978.3417	609386.6123
10054	590+00.00	0.0000	615387.6055	609673.8459
10055	594+46.92	0.0000	615753.4180	609930.5842

HISTORICAL ALIGNMENT CONTROL US13

POINT NO.	STATION	OFFSET	NORTHING	EASTING
30015	35+00.00	0.0000	604116.0791	601256.7972
30016	40+11.59	0.0000	604497.6662	601597.5590
30017	45+00.00	0.0000	604864.1278	601920.4326
30018	50+00.00	0.0000	605239.2877	602250.9700
30019	55+00.00	0.0000	605614.4477	602581.5074
30020	60+00.00	0.0000	605989.6077	602912.0449
30024	70+00.00	0.0000	606770.9551	603534.7909
30025	75+00.00	0.0000	607177.4281	603825.9605
30026	80+00.00	0.0000	607583.9011	604117.1300
30027	85+00.00	0.0000	607990.3741	604408.2996
30028	90+00.00	0.0000	608396.8471	604699.4691
30029	95+00.00	0.0000	608803.3200	604990.6387
30030	100+00.00	0.0000	609209.7930	605281.8083
30031	103+81.62	0.0000	609520.0332	605504.0431
30032	105+00.00	0.0000	609616.3261	605572.8938
30033	110+00.00	0.0000	610023.0531	605863.7085
30034	115+00.00	0.0000	610429.7800	606154.5233
30035	120+00.00	0.0000	610836.5069	606445.3380
30036	125+00.00	0.0000	611243.2339	606736.1527
30037	127+21.02	0.0000	611423.0233	606864.7044
30038	130+00.00	0.0000	611650.3378	607026.4389
30039	135+00.00	0.0000	612057.7404	607316.3063
30040	140+00.00	0.0000	612465.1429	607606.1738
30041	145+00.00	0.0000	612872.5455	607896.0412
30042	150+00.00	0.0000	613279.9481	608185.9087
30043	155+00.00	0.0000	613687.3507	608475.7761
30044	160+00.00	0.0000	614094.7533	608765.6436
30045	165+00.00	0.0000	614502.1559	609055.5110
30046	168+26.21	0.0000	614767.9548	609244.6273
30047	170+00.00	0.0000	614910.4910	609344.0547
30048	175+00.00	0.0000	615320.5767	609630.1136
30049	180+00.00	0.0000	615730.6624	609916.1726

CONSTRUCTION ALIGNMENT CONTROL RAMP D

POINT NO.	STATION	OFFSET	NORTHING	EASTING
12001	395+00.00	0.0000	612627.8884	607545.7202
12010	401+95.00	0.0000	612580.5892	607039.5811

HORIZONTAL / VERTICAL CONTROL DATA

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEV.
DUP2	511+12.80	-72.23	608999.3399	605048.0174	67.09
DUP3	-	-	615874.6110	609963.7279	62.74
CP5	448+51.73	28.71	604042.3443	601237.4804	60.59
CP6	460+27.10	22.29	604927.2712	602011.3584	55.45
CP7	472+08.13	23.49	605813.1561	602792.3978	34.23
CP8	482+95.22	15.81	606657.4999	603478.8605	65.28
CP9	494+78.73	22.27	607615.8813	604173.2941	67.42
CP10	506+75.97	22.42	608589.1027	604870.5905	66.91
CP11	515+60.14	18.29	609310.3068	605382.1023	70.87
CP12	527+91.73	25.05	610307.9534	606104.4716	70.54
CP13	537+45.82	26.56	611085.0834	606657.9678	71.95
CP14	551+69.49	26.75	612245.8902	607482.2044	71.88
CP15	563+65.03	22.61	613223.1755	608170.8518	61.52
CP16	575+31.04	24.39	614172.9560	608847.2356	58.03
CP17	587+36.81	23.35	615158.7649	609541.7708	67.70
CP18	592+93.26	21.28	615615.4205	609859.7279	64.72

CIRCULAR CURVE NO. (13)

Element: Circular	STATION	NORTHING	EASTING
PC (12002)	397+37.30	612447.4370	607391.6132
PI (12003)	399+01.07	612322.9048	607285.2616
CC (12004)		612557.8378	607262.3396
PT (12005)	399+97.99	612424.5310	607156.8441
Radius:			170.00 '
Delta:			87°51'34.33" Right
Degree of Curvature (Arc):			33°42'12.24"
Length:			260.68'
Tangent:			163.76'
Chord:			235.88'
Middle Ordinate:			47.57'
External:			66.05'
Tangent Direction:			S 40°29'51.39" W
Radial Direction:			N 49°30'08.61" W
Chord Direction:			S 84°25'38.55" W
Radial Direction:			N 38°21'25.72" E
Tangent Direction:			N 51°38'34.28" W

CIRCULAR CURVE NO. (14)

Element: Circular	STATION	NORTHING	EASTING
PC (12006)	400+01.27	612426.5708	607154.2665
PI (12007)	400+68.87	612468.5197	607101.2588
CC (12008)		612689.2637	607362.1546
PT (12009)	401+34.68	612527.7415	607068.6659
Radius:			335.00'
Delta:			22°48'59.65" Right
Degree of Curvature (Arc):			17°06'11.58"
Length:			133.41
Tangent:			67.60
Chord:			132.53
Middle Ordinate:			6.62
External:			6.75
Tangent Direction:			N 51°38'34.28" W
Radial Direction:			N 38°21'25.72" E
Chord Direction:			N 40°14'04.46" W
Radial Direction:			N 61°10'25.36" E
Tangent Direction:			N 28°49'34.64" W

CIRCULAR CURVE NO. (6)

Element: Circular	STATION	NORTHING	EASTING
PC (10028)	476+98.86	606197.1037	603098.9207
PI (10029)	479+49.04	606384.9293	603264.1776
CC (12031)		609499.9088	599345.0589
PT (10030)	481+98.80	606588.3128	603409.8601
Radius:			5000.00'
Delta:			5°43'43.84" Left
Degree of Curvature (Arc):			1°08'45.30"
Length:			499.94'
Tangent:			250.18'
Chord:			499.73'
Middle Ordinate:			6.25'
External:			6.25'
Tangent Direction:			N 41°20'33.63" E
Radial Direction:			S 48°39'26.37" E
Chord Direction:			N 38°28'41.70" E
Radial Direction:			S 54°23'10.22" E
Tangent Direction:			N 35°36'49.78" E

CIRCULAR CURVE NO. (11)

Element: Circular	STATION	NORTHING	EASTING
PC (30021)	62+35.09	606165.9993	603067.4560
PI (30022)	65+28.63	606385.5887	603262.2512
CC (30024)		609587.1269	599210.8760
PT (30023)	68+21.53	606625.8700	603430.8618
Radius:			5155.32'
Delta:			6°31'03.64" Left
Degree of Curvature (Arc):			1°06'41.01"
Length:			586.44'
Tangent:			293.54'
Chord:			586.13'
Middle Ordinate:			8.34'
External:			8.35'
Tangent Direction:			N 41°34'33.11" E
Radial Direction:			S 48°25'26.89" E
Chord Direction:			N 38°19'01.28" E
Radial Direction:			S 54°56'30.54" E
Tangent Direction:			N 35°03'29.46" E

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83/2011).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ADDENDA / REVISIONS

SCALE 0 250 500 750 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102	DESIGNED BY:	O. GREEN	PAI
COUNTY	CHECKED BY:	P. HORSEY	SHEET NO.
NEW CASTLE	HORIZONTAL AND VERTICAL CONTROL		15

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$ | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS | MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:12 | MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES

CONSTRUCTION ALIGNMENT CONTROL RAMP B1

POINT NO.	STATION	OFFSET	NORTHING	EASTING
14020	501+25.00	0.0000	611741.4593	607413.4747

CIRCULAR CURVE NO. (15)

Element: Circular	STATION	NORTHING	EASTING
PC (13001)	400+00.00	611528.7158	606974.9590
PI (13002)	400+20.54	611545.3690	606986.9824
CC (13003)		611470.1792	607056.0360
PCC (13004)	400+40.52	611555.9346	607004.5966
Radius:			100.00'
Delta:			23°12'51.30" Right
Degree of Curvature (Arc):			57°17'44.81"
Length:			40.52
Tangent:			20.54
Chord:			40.24
Middle Ordinate:			2.04
External:			2.09
Tangent Direction:			N 35°49'43.70" E
Radial Direction:			S 54°10'16.30" E
Chord Direction:			N 47°26'09.35" E
Radial Direction:			S 30°57'25.00" E
Tangent Direction:			N 59°02'35.00" E

CIRCULAR CURVE NO. (16)

Element: Circular	STATION	NORTHING	EASTING
PCC (13004)	400+40.52	611555.9346	607004.5966
PI (13005)	400+53.48	611562.6050	607015.7168
CC (13006)		611513.0569	607030.3163
PCC (13007)	400+65.89	611563.0301	607028.6772
Radius:			50.00'
Delta:			29°04'42.17" Right
Degree of Curvature (Arc):			114°35'29.61"
Length:			25.38
Tangent:			12.97
Chord:			25.10
Middle Ordinate:			1.60
External:			1.65
Tangent Direction:			N 59°02'35.00" E
Radial Direction:			S 30°57'25.00" E
Chord Direction:			N 73°34'56.08" E
Radial Direction:			S 1°52'42.83" E
Tangent Direction:			N 88°07'17.17" E

CIRCULAR CURVE NO. (17)

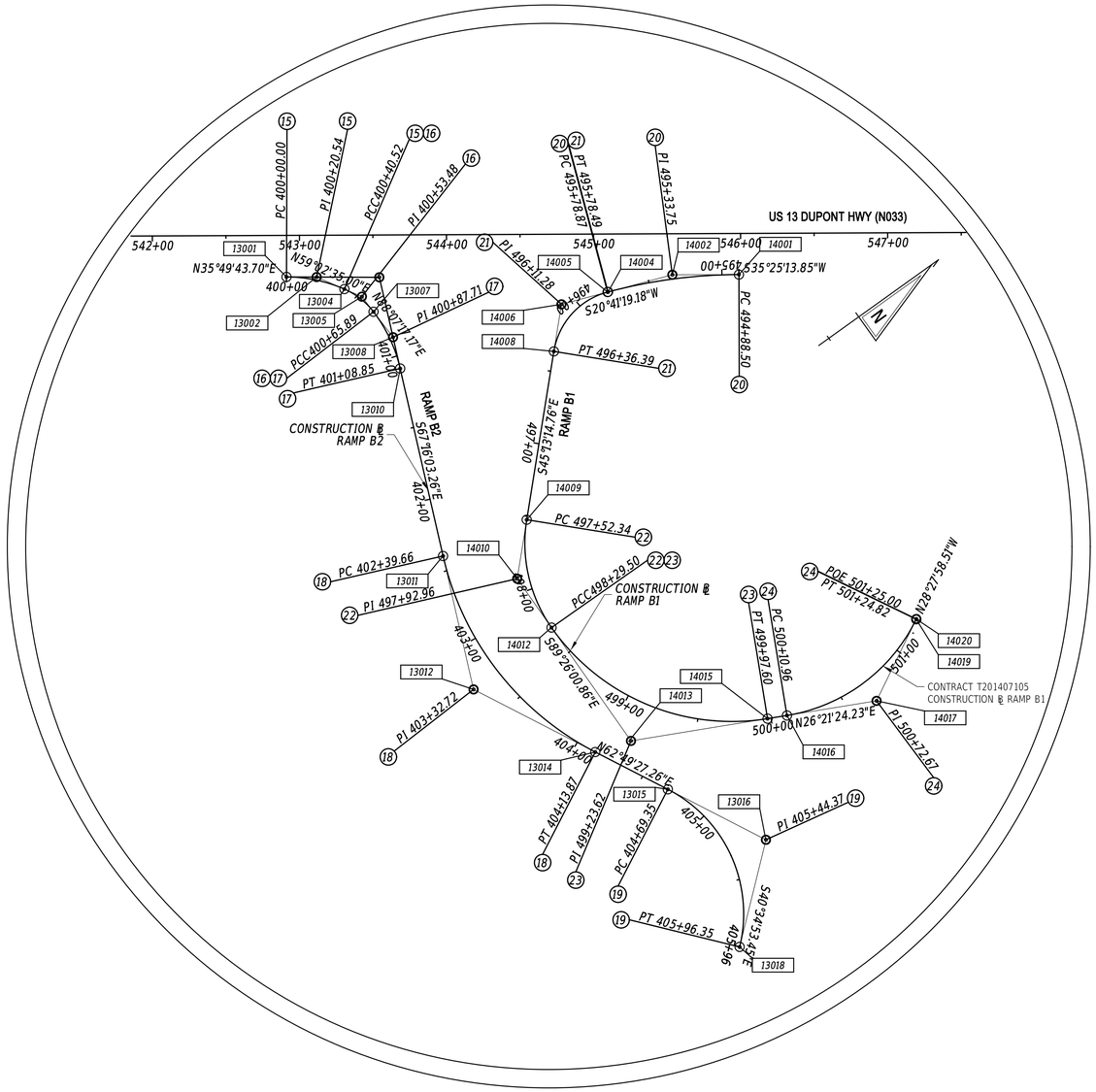
Element: Circular	STATION	NORTHING	EASTING
PCC (13007)	400+65.89	611563.0301	607028.6772
PI (13008)	400+87.71	611563.7451	607050.4791
CC (13009)		611463.0838	607031.9554
PT (13010)	401+08.85	611555.3158	607070.5982
Radius:			100.00'
Delta:			24°36'39.57" Right
Degree of Curvature (Arc):			57°17'44.81"
Length:			42.95
Tangent:			21.81
Chord:			42.62
Middle Ordinate:			2.30
External:			2.35
Tangent Direction:			N 88°07'17.17" E
Radial Direction:			S 1°52'42.83" E
Chord Direction:			S 79°34'23.05" E
Radial Direction:			S 22°43'56.74" W
Tangent Direction:			S 67°16'03.26" E

CIRCULAR CURVE NO. (18)

Element: Circular	STATION	NORTHING	EASTING
PC (13011)	402+39.66	611504.7675	607191.2458
PI (13012)	403+32.72	611468.8040	607277.0829
CC (13013)		611689.2314	607268.5314
PT (13014)	404+13.87	611511.3095	607359.8757
Radius:			200.00'
Delta:			49°54'29.48" Left
Degree of Curvature (Arc):			28°38'52.40"
Length:			174.21
Tangent:			93.07
Chord:			168.76
Middle Ordinate:			18.67
External:			20.59
Tangent Direction:			S 67°16'03.26" E
Radial Direction:			S 22°43'56.74" W
Chord Direction:			N 87°46'42.00" E
Radial Direction:			S 27°10'32.74" E
Tangent Direction:			N 62°49'27.26" E

CIRCULAR CURVE NO. (19)

Element: Circular	STATION	NORTHING	EASTING
PCC (13015)	404+69.35	611536.6505	607409.2353
PI (13016)	405+44.37	611570.9131	607475.9726
CC (13017)		611452.1375	607452.6238
PT (13018)	405+96.35	611513.9378	607524.7745
Radius:			95.00'
Delta:			76°35'39.29" Right
Degree of Curvature (Arc):			60°18'40.85"
Length:			127.00
Tangent:			75.02
Chord:			117.75
Middle Ordinate:			20.44
External:			26.05
Tangent Direction:			N 62°49'27.26" E
Radial Direction:			S 27°10'32.74" E
Chord Direction:			S 78°52'43.10" E
Radial Direction:			S 49°25'06.55" W
Tangent Direction:			S 40°34'53.45" E



DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

CIRCULAR CURVE NO. (20)

Element: Circular	STATION	NORTHING	EASTING
PC (14001)	494+88.50	611779.7762	607152.7906
PI (14002)	495+33.75	611742.9047	607126.5676
CC (14003)		611576.9256	607438.0127
PT (14004)	495+78.49	611700.5770	607110.5828
Radius:			350.00'
Delta:			14°43'54.67" Left
Degree of Curvature (Arc):			16°22'12.80"
Length:			89.99
Tangent:			45.25
Chord:			89.74
Middle Ordinate:			2.89
External:			2.91
Tangent Direction:			S 35°25'13.85" W
Radial Direction:			N 54°34'46.15" W
Chord Direction:			S 28°03'16.52" W
Radial Direction:			N 69°18'40.82" W
Tangent Direction:			S 20°41'19.18" W

CIRCULAR CURVE NO. (21)

Element: Circular	STATION	NORTHING	EASTING
PC (14005)	495+78.87	611700.2228	607110.4491
PI (14006)	496+11.28	611669.8989	607098.9975
CC (14007)		611682.5583	607157.2248
PT (14008)	496+36.39	611647.0670	607122.0059
Radius:			50.00'
Delta:			65°54'33.94" Left
Degree of Curvature (Arc):			114°35'29.61"
Length:			57.52
Tangent:			32.41
Chord:			54.40
Middle Ordinate:			8.04
External:			9.59
Tangent Direction:			S 20°41'19.18" W
Radial Direction:			N 69°18'40.82" W
Chord Direction:			S 12°15'57.79" E
Radial Direction:			S 44°46'45.24" W
Tangent Direction:			S 45°13'14.76" E

CIRCULAR CURVE NO. (22)

Element: Circular	STATION	NORTHING	EASTING
PC (14009)	497+52.34	611565.3949	607204.3099
PI (14010)	497+92.96	611536.7839	607233.1422
CC (14011)		611636.3775	607274.7476
PCC (14012)	498+29.50	611536.3824	607273.7590
Radius:			100.00'
Delta:			44°12'46.11" Left
Degree of Curvature (Arc):			57°17'44.81"
Length:			77.17
Tangent:			40.62
Chord:			75.27
Middle Ordinate:			7.35
External:			7.93
Tangent Direction:			S 45°13'14.76" E
Radial Direction:			S 44°46'45.24" W
Chord Direction:			S 67°19'37.81" E
Radial Direction:			S 0°33'59.14" W
Tangent Direction:			S 89°26'00.86" E

CIRCULAR CURVE NO. (23)

Element: Circular	STATION	NORTHING	EASTING
PCC (14012)	498+29.50	611536.3824	607273.7590
PI (14013)	499+23.62	611535.4520	607367.8669
CC (14014)		611686.3750	607275.2419
PT (14015)	499+97.60	611619.7812	607409.6490
Radius:			150.00'
Delta:			64°12'34.91" Left
Degree of Curvature (Arc):			38°11'49.87"
Length:			168.10
Tangent:			94.11
Chord:			159.44
Middle Ordinate:			22.94
External:			27.08
Tangent Direction:			S 89°26'00.86" E
Radial Direction:			S 0°33'59.14" W
Chord Direction:			N 58°27'41.68" E
Radial Direction:			S 63°38'35.77" E
Tangent Direction:			N 26°21'24.23" E

CIRCULAR CURVE NO. (24)

Element: Circular	STATION	NORTHING	EASTING
PC (14016)	500+10.96	611631.7483	607415.5782
PI (14017)	500+72.67	611687.0470	607442.9767
CC (14018)		611684.5794	607308.9486
PT (14019)	501+24.82	611741.2997	607413.5613
Radius:			119.00'
Delta:			54°49'22.74" Left
Degree of Curvature (Arc):			48°08'51.77"
Length:			113.86
Tangent:			61.71
Chord:			109.57
Middle Ordinate:			13.36
External:			15.05
Tangent Direction:			N 26°21'24.23" E
Radial Direction:			S 63°38'35.77" E
Chord Direction:			N 1°03'17.14" W
Radial Direction:			N 61°32'01.49" E
Tangent Direction:			N 28°27'58.51" W

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 14:04
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		SCALE 0 50 100 150 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	HORIZONTAL AND VERTICAL CONTROL	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 16
					CHECKED BY: P. HORSEY		

CONSTRUCTION ALIGNMENT CONTROL RAMP C1

POINT NO.	STATION	OFFSET	NORTHING	EASTING
15026	303+35.00	0.0000	611791.7961	607447.6105

CONSTRUCTION ALIGNMENT CONTROL RAMP C2

POINT NO.	STATION	OFFSET	NORTHING	EASTING
16001	200+00.00	0.0000	611491.1447	607613.2349

CIRCULAR CURVE NO. 25

Element: Circular	STATION	NORTHING	EASTING
PC (15001)	292+33.75	612368.5170	607572.9714
PI (15002)	292+62.76	612391.9602	607590.0590
CC (15003)		612309.6141	607653.7826
PCC (15004)	292+90.22	612402.6193	607617.0396
Radius:			100.00'
Delta:			32°21'16.76" Right
Degree of Curvature (Arc):			57°17'44.81"
Length:			56.47
Tangent:			29.01
Chord:			55.72
Middle Ordinate:			3.96
External:			4.12
Tangent Direction:			N 36°05'17.29" E
Radial Direction:			S 53°54'42.71" E
Chord Direction:			N 52°15'55.67" E
Radial Direction:			S 21°33'25.95" E
Tangent Direction:			N 68°26'34.05" E

CIRCULAR CURVE NO. 26

Element: Circular	STATION	NORTHING	EASTING
PCC (15004)	292+90.22	612402.6193	607617.0396
PI (15005)	293+10.23	612409.9707	607635.6479
CC (15006)		612356.1167	607635.4111
PCC (15007)	293+28.28	612402.4559	607654.1908
Radius:			50.00'
Delta:			43°37'05.81" Right
Degree of Curvature (Arc):			114°35'29.61"
Length:			38.06
Tangent:			20.01
Chord:			37.15
Middle Ordinate:			3.58
External:			3.85
Tangent Direction:			N 68°26'34.05" E
Radial Direction:			S 21°33'25.95" E
Chord Direction:			S 88°44'53.04" E
Radial Direction:			S 22°03'39.86" W
Tangent Direction:			S 67°56'20.14" E

CIRCULAR CURVE NO. 27

Element: Circular	STATION	NORTHING	EASTING
PCC (15007)	293+28.28	612402.4559	607654.1908
PI (15008)	294+11.45	61231.2192	607731.2677
CC (15009)		612277.3401	607603.4855
PT (15010)	294+77.36	600088.3292	607738.0375
Radius:			135.00'
Delta:			63°16'11.40" Right
Degree of Curvature (Arc):			42°26'28.75"
Length:			149.08
Tangent:			83.17
Chord:			141.62
Middle Ordinate:			20.06
External:			23.56
Tangent Direction:			S 67°56'20.14" E
Radial Direction:			S 22°03'39.86" W
Chord Direction:			S 36°18'14.44" E
Radial Direction:			S 85°19'51.26" W
Tangent Direction:			S 4°40'08.74" E

CIRCULAR CURVE NO. 28

Element: Circular	STATION	NORTHING	EASTING
PC (15011)	295+16.85	612248.9728	607741.2518
PI (15012)	297+43.96	612022.6165	607759.7388
CC (15013)		612130.9415	606296.0637
PT (15014)	299+67.41	611801.4478	607708.1310
Radius:			1450.00'
Delta:			17°48'12.79" Right
Degree of Curvature (Arc):			3°57'05.16"
Length:			450.56
Tangent:			227.11
Chord:			448.75
Middle Ordinate:			17.47
External:			17.68
Tangent Direction:			S 4°40'08.74" E
Radial Direction:			S 85°19'51.26" W
Chord Direction:			S 4°13'57.66" W
Radial Direction:			N 76°51'55.95" W
Tangent Direction:			S 13°08'04.05" W

CIRCULAR CURVE NO. 29

Element: Circular	STATION	NORTHING	EASTING
PC (15015)	299+70.75	611798.1897	607707.3707
PI (15016)	300+63.68	611707.6913	607686.2537
CC (15017)		611832.2752	607561.2948
PCC (15018)	301+37.15	611686.3024	607595.8191
Radius:			150.00'
Delta:			63°33'32.13" Right
Degree of Curvature (Arc):			38°11'49.87"
Length:			166.40
Tangent:			92.93
Chord:			158.00
Middle Ordinate:			22.49
External:			26.45
Tangent Direction:			S 13°08'04.05" W
Radial Direction:			N 76°51'55.95" W
Chord Direction:			S 44°54'50.12" W
Radial Direction:			N 13°18'23.82" W
Tangent Direction:			S 76°41'36.18" W

CIRCULAR CURVE NO. 30

Element: Circular	STATION	NORTHING	EASTING
PCC (15018)	301+37.15	611686.3024	607595.8191
PI (15019)	302+02.39	611671.2860	607532.3279
CC (15020)		611783.6176	607572.8029
PT (15021)	302+52.77	611723.3477	607493.0061
Radius:			100.00'
Delta:			66°14'35.33" Right
Degree of Curvature (Arc):			57°17'44.81"
Length:			115.62
Tangent:			65.24
Chord:			109.28
Middle Ordinate:			16.25
External:			19.40
Tangent Direction:			S 76°41'36.18" W
Radial Direction:			N 13°18'23.82" W
Chord Direction:			N 70°11'06.15" W
Radial Direction:			N 52°56'11.51" E
Tangent Direction:			N 37°03'48.49" W

CIRCULAR CURVE NO. 31

Element: Circular	STATION	NORTHING	EASTING
PC (15022)	302+68.40	611735.8272	607483.5804
PI (15023)	303+01.48	611762.2186	607463.6472
CC (15024)		612001.0149	607834.6865
PT (15025)	303+34.43	611791.2932	607447.8832
Radius:			440.00'
Delta:			8°35'50.15" Right
Degree of Curvature (Arc):			13°01'18.37"
Length:			66.02
Tangent:			33.07
Chord:			65.96
Middle Ordinate:			1.24
External:			1.24
Tangent Direction:			N 37°03'48.49" W
Radial Direction:			N 52°56'11.51" E
Chord Direction:			N 32°45'53.42" W
Radial Direction:			N 61°32'01.66" E
Tangent Direction:			N 28°27'58.34" W

CIRCULAR CURVE NO. 32

Element: Circular	STATION	NORTHING	EASTING
PC (16002)	200+26.65	611514.8305	607601.0240
PI (16003)	201+18.28	611596.2764	607559.0359
CC (16004)		611560.6531	607689.9076
PT (16005)	201+75.00	611645.2041	607636.5118
Radius:			100.00'
Delta:			84°59'57.59" Right
Degree of Curvature (Arc):			57°17'44.81"
Length:			148.35
Tangent:			91.63
Chord:			135.12
Middle Ordinate:			26.27
External:			35.63
Tangent Direction:			N 27°16'21.57" W
Radial Direction:			N 62°43'38.43" E
Chord Direction:			N 15°13'37.22" E
Radial Direction:			S 32°16'23.99" E
Tangent Direction:			N 57°43'36.01" E

CIRCULAR CURVE NO. 33

Element: Circular	STATION	NORTHING	EASTING
PC (16006)	202+06.11	611661.8168	607662.8175
PI (16007)	202+94.44	611708.9822	607737.5027
CC (16008)		611830.9189	607556.0257
PT (16009)	203+72.47	611795.9533	607752.9455
Radius:			200.00'
Delta:			47°39'28.94" Left
Degree of Curvature (Arc):			28°38'52.40"
Length:			166.36
Tangent:			88.33
Chord:			161.60
Middle Ordinate:			17.05
External:			18.64
Tangent Direction:			N 57°43'36.01" E
Radial Direction:			S 32°16'23.99" E
Chord Direction:			N 33°53'51.55" E
Radial Direction:			S 79°55'52.92" E
Tangent Direction:			N 10°04'07.08" E

CIRCULAR CURVE NO. 34

Element: Circular	STATION	NORTHING	EASTING
PC (16010)	204+28.55	611851.1649	607762.7490
PI (16011)	206+25.30	612044.8929	607797.1478
CC (16012)		612130.8893	606187.3905
PT (16013)	208+20.10	612241.1832	607783.5845
Radius:			1600.00'
Delta:			14°01'16.96" Left
Degree of Curvature (Arc):			3°34'51.55"
Length:			391.55
Tangent:			196.76
Chord:			390.57
Middle Ordinate:			11.96
External:			12.05
Tangent Direction:			N 10°04'07.08" E
Radial Direction:			S 79°55'52.92" E
Chord Direction:			N 3°03'28.60" E
Radial Direction:			N 86°02'50.12" E
Tangent Direction:			N 3°57'09.88" W

CIRCULAR CURVE NO. 35

Element: Circular	STATION	NORTHING	EASTING
PC (16014)	208+68.28	612289.2494	607780.2633
PI (16015)	209+14.44	612335.3020	607777.0811
CC (16016)		612277.5307	607610.6676
PT (16017)	209+58.43	612373.4200	607751.0430
Radius:			170.00'
Delta:			30°23'02.24" Left
Degree of Curvature (Arc):			33°42'12.24"
Length:			90.15
Tangent:			46.16
Chord:			89.10
Middle Ordinate:			5.94
External:			6.16
Tangent Direction:			N 3°57'09.88" W
Radial Direction:			N 86°02'50.12" E
Chord Direction:			N 19°08'41.00" W
Radial Direction:			N 55°39'47.88" E
Tangent Direction:			N 34°20'12.12" W

CIRCULAR CURVE NO. 36

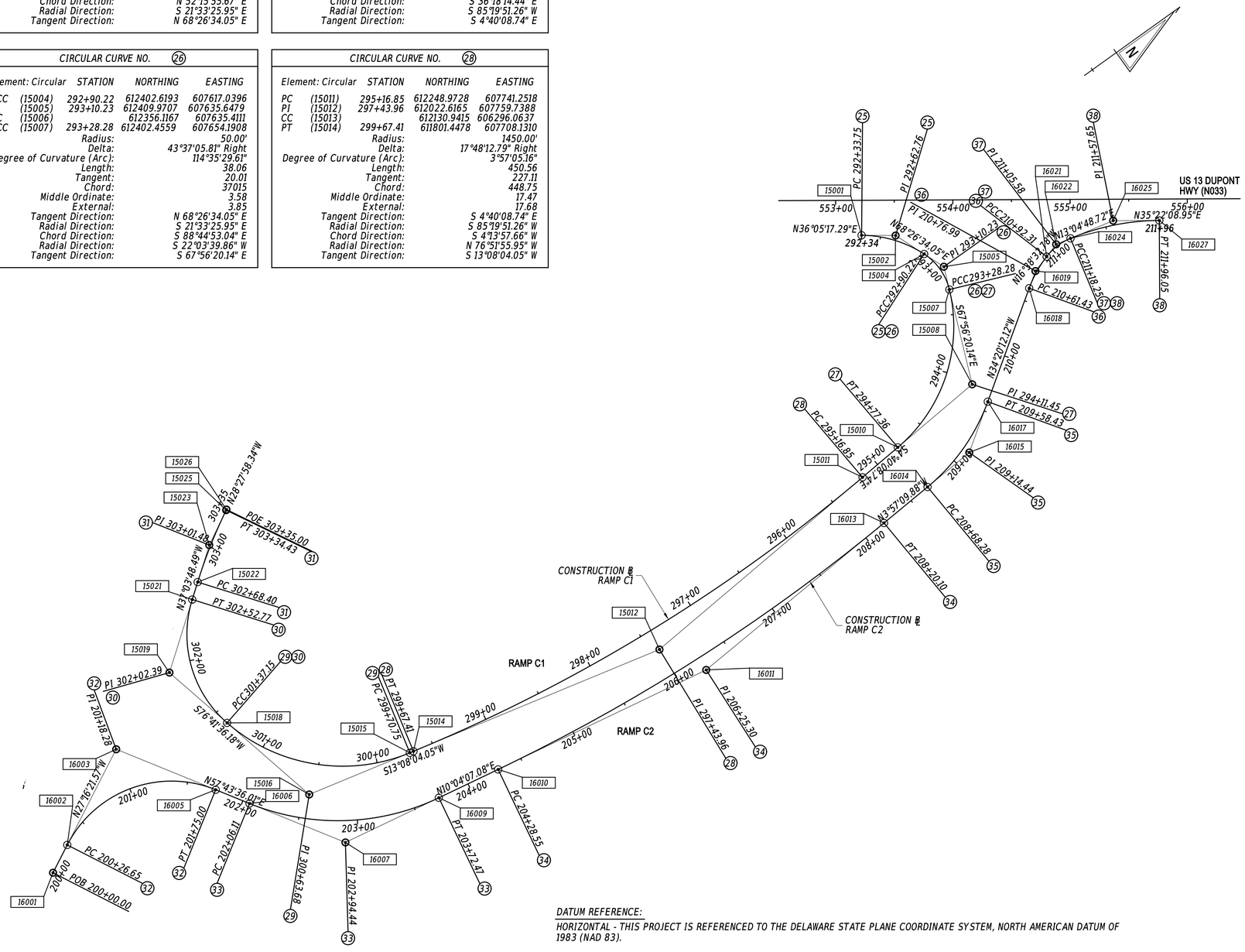
Element: Circular	STATION	NORTHING	EASTING
PC (16018)	210+61.43	621458.4705	607392.9456
PI (16019)	210+76.99	612471.3231	607684.1661
CC (16020)		612514.8730	607775.5194
PCC (16021)	210+92.31	612486.2362	607679.7083
Radius:			100.00'
Delta:			17°41'39.33" Right
Degree of Curvature (Arc):			57°17'44.81"
Length:			30.88
Tangent:			15.57
Chord:			30.76
Middle Ordinate:			1.19
External:			1.20
Tangent Direction:			N 34°20'12.12" W
Radial Direction:			N 55°39'47.88" E
Chord Direction:			N 25°29'22.45" W
Radial Direction:			N 73°21'27.22" E
Tangent Direction:			N 16°38'32.78" W

CIRCULAR CURVE NO. 37

Element: Circular	STATION	NORTHING	EASTING
PCC (16021)	210+92.31	612486.2362	607679.7083
PI (16022)	211+05.58	612498.9482	607675.9084
CC (16023)		612500.5561	607727.6138
PT (16024)	211+18.25	612511.8718	607678.9111
Radius:			50.00'
Delta:			29°43'21.50" Right
Degree of Curvature (Arc):			114°35'29.61"
Length:			25.94
Tangent:			13.27
Chord:			25.65
Middle Ordinate:			1.67
External:			1.73
Tangent Direction:			N 16°38'32.78" W
Radial Direction:			N 73°21'27.22" E
Chord Direction:			N 1°46'52.03" W
Radial Direction:			S 76°55'11.28" E
Tangent Direction:			N 13°04'48.72" E

CIRCULAR CURVE NO. 38

Element: Circular	STATION	NORTHING	EASTING
PCC (16024)	211+18.25	612511.8718	607678.9111
PI (16025)	211+57.65	612550.2492	607687.8278
CC (16026)		612466.6089	607873.7220
PT (16027)	211+96.05	612582.3773	607710.6340
Radius:			200.00'
Delta:			22°17'20.23" Right
Degree of Curvature (Arc):			28°38'52.40"
Length:			77.80
Tangent:			39.40
Chord:			77.31
Middle Ordinate:			3.77
External:			3.84
Tangent Direction:			N 13°04'48.72" E
Radial Direction:			S 76°55'11.28" E
Chord Direction:			N 24°13'28.84" E
Radial Direction:			S 54°37'51.05" E
Tangent Direction:			N 35°22'08.95" E



DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

PENNONI ASSOCIATES INC.	PRN TABLE: $PRNTBLS
FILE NAME: SFILEAS	PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024 @ 06:12
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 50 100 150 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT T201901102	BRIDGE NO. N/A		SECTION PAI
COUNTY NEW CASTLE	DESIGNED BY: O. GREEN	HORIZONTAL AND VERTICAL CONTROL	SHEET NO. 17
	CHECKED BY: P. HORSEY		

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0010+	PCC CURB, TYPE 1-4	41.50'
0011	MODULAR BLOCK RETAINING WALLS	353.50'

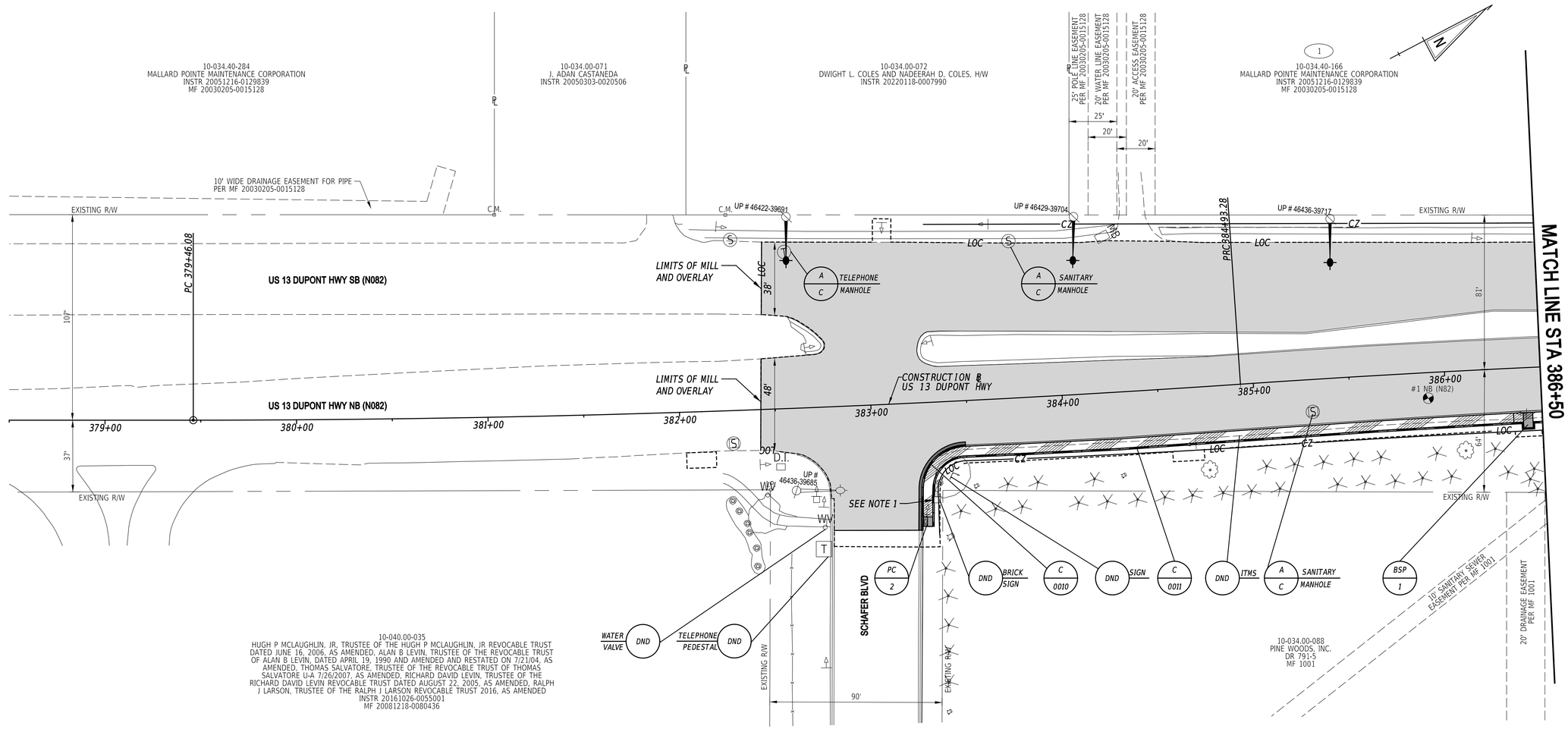
ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#1 NB(N82)	385+90.84	13.32' RT	10" HMA OVER 4+" CRUSHER RUN

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS



NOTES:

1. *INSTALL MODULAR BLOCK RETAINING WALL WITHOUT IMPACTING EXISTING PRIVATE SIGN. MINIMUM WIDTH OF PROPOSED SIDEWALK IS 48".*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-01
SECTION
PAI
SHEET NO.
18

RIPRAP SCHEDULE

NO.	TYPE	AREA (SY)
1	R-6	15
2	R-6	15

*ALL CONCRETE UNDER RIPRAP CHANNELS TO BE REMOVED PRIOR TO PLACING RIPRAP. THE CONCRETE REMOVAL SHALL BE PAID FOR UNDER ITEM 211001.

CURB SCHEDULE

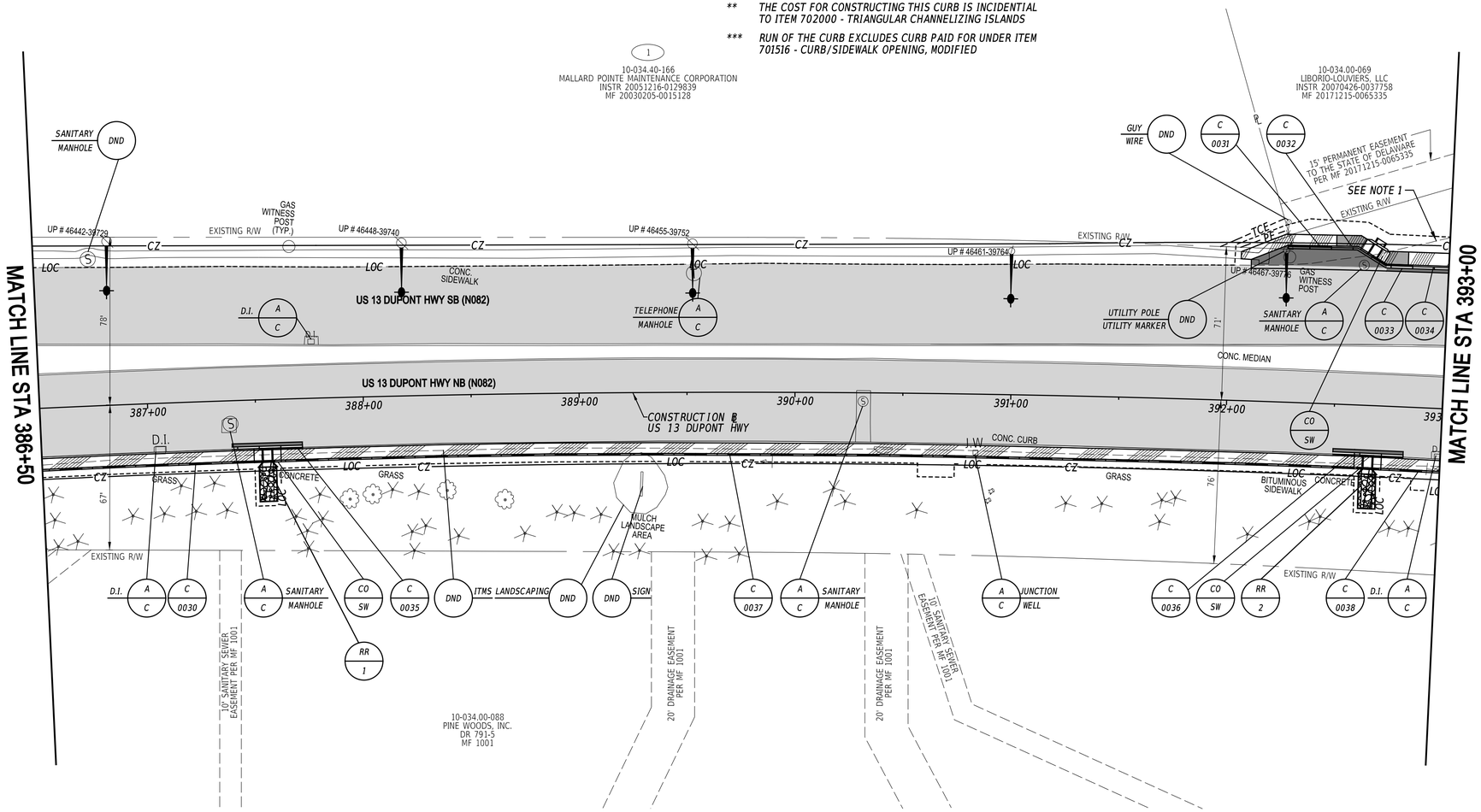
NO.	ITEM DESCRIPTION / TYPE	LENGTH
0030	MODULAR BLOCK RETAINING WALLS	98.50'
0031	I.PCC CURB AND GUTTER, TYPE 3-4	23.00'
0032*	I.PCC CURB AND GUTTER, TYPE 3-8	13.50'
0033*	I.PCC CURB AND GUTTER, TYPE 3-8	10.00'
0034	I.PCC CURB AND GUTTER, TYPE 3-4	19.00'
0035***	I.PCC CURB AND GUTTER, TYPE 3-8	20.00'
0036***	I.PCC CURB AND GUTTER, TYPE 3-8	20.00'
0037	MODULAR BLOCK RETAINING WALLS	497.00'
0038	MODULAR BLOCK RETAINING WALLS	27.50'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

*** RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701516 - CURB/SIDEWALK OPENING, MODIFIED



NOTES:

1. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.
2. CONTRACTOR SHALL INSTALL CURB/SIDEWALK OPENING IN ACCORDANCE WITH STANDARD DETAIL C-5 (2020).

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRV55
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUN-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-02

SECTION
PAI
SHEET NO.
19

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0051	I.PCC CURB AND GUTTER, TYPE 3-4	25.50'
0052+	PCC CURB, TYPE 1-6	81.50'
0053+	PCC CURB, TYPE 1-6	164.00'
0054+	PCC CURB, TYPE 1-6	N/A
0055*	I.PCC CURB AND GUTTER, TYPE 3-8	20.00'
0056	MODULAR BLOCK RETAINING WALLS	44.00'
0057**	PCC CURB, TYPE 2	61.00'
0058**	PCC CURB, TYPE 2	60.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0059	MODULAR BLOCK RETAINING WALLS	223.50'
0060+	I.PCC CURB AND GUTTER, TYPE 3-4	634.50'
0061+	I.PCC CURB AND GUTTER, TYPE 3-8	4.00'
0062***	I.PCC CURB AND GUTTER, TYPE 3-8	20.00'
0063***	I.PCC CURB AND GUTTER, TYPE 3-8	20.00'
0064	MODULAR BLOCK RETAINING WALLS	225.00'
0065	MODULAR BLOCK RETAINING WALLS	231.50'
0066+	PCC CURB, TYPE 1-2	5.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

*** RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701516 - CURB/SIDEWALK OPENING, MODIFIED

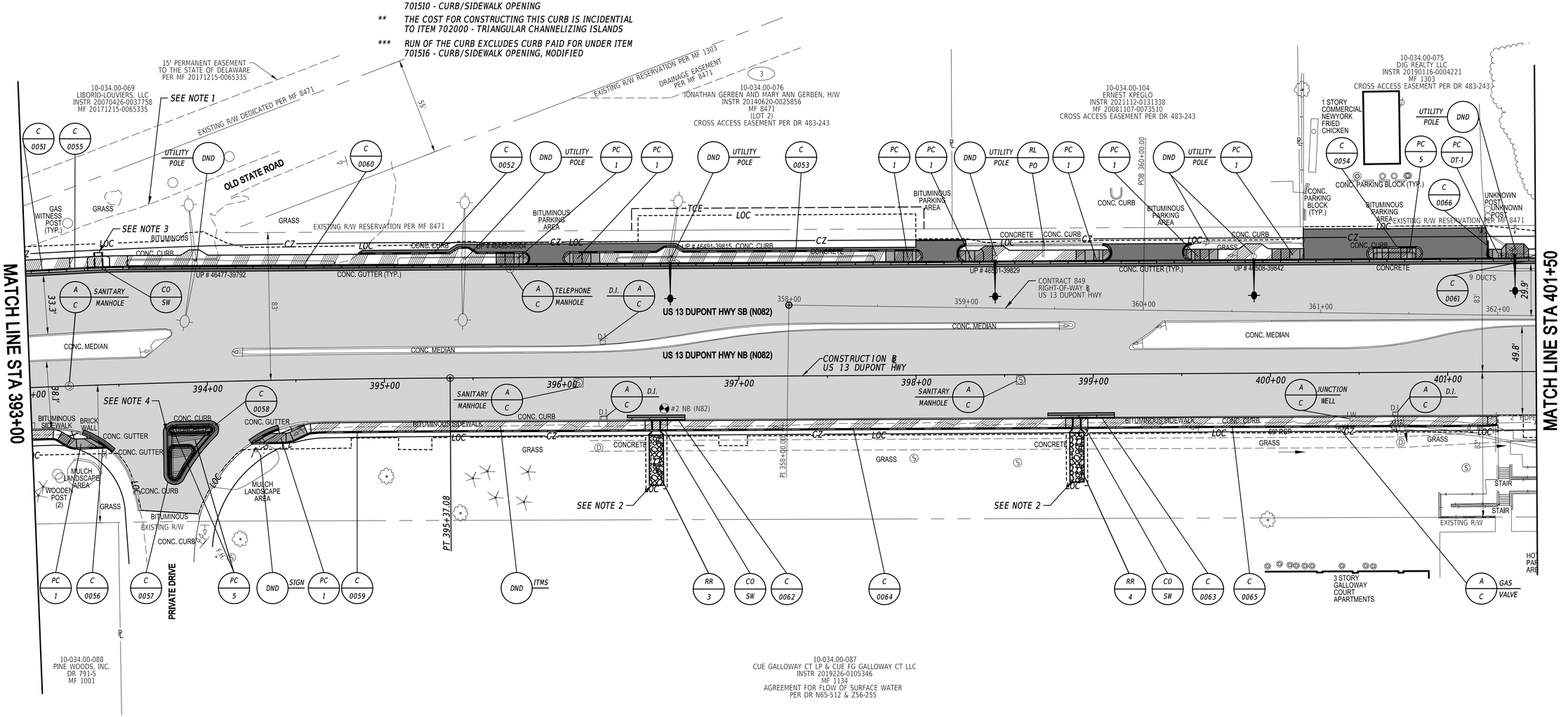
ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#2 NB(N82)	396+57.85	17.99' RT	9.75" HMA OVER 4+" CRUSHER RUN

RIPRAP SCHEDULE

NO.	TYPE	AREA (SY)
3	R-6	26
4	R-6	25

*ALL CONCRETE UNDER RIPRAP CHANNELS TO BE REMOVED PRIOR TO PLACING RIPRAP. THE CONCRETE REMOVAL SHALL BE PAID FOR UNDER ITEM 211001.



NOTES:

1. *OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.*
2. *SEE SHEET 105. WORK TO BE PAID FOR UNDER ITEM 908513 - LEVEL SPREADER.*
3. *CONTRACTOR SHALL INSTALL CURB/SIDEWALK OPENING IN ACCORDANCE WITH STANDARD DETAIL C-5 (2020).*
4. *TUBULAR MARKERS ON TRIANGULAR CHANNELIZING ISLAND SHOULD BE ORANGE WITH WHITE BANDS.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 25-JUL-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-03
SECTION: PAI
SHEET NO.: 20

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0100*	I.PCC CURB AND GUTTER, TYPE 3-8	19.50'
0101+	I.PCC CURB AND GUTTER, TYPE 3-2	93.50'
0102+	I.PCC CURB AND GUTTER, TYPE 3-6	37.50'
0103+	I.PCC CURB AND GUTTER, TYPE 3-4	345.50'
0104+	PCC CURB, TYPE 1-4	19.00'
0105+	I.PCC CURB AND GUTTER, TYPE 3-4	135.50'
0106+	PCC CURB, TYPE 1-4	31.50'
0107+	PCC CURB, TYPE 1-4	5.50'
0108+	PCC CURB, TYPE 1-6	28.00'
0109+	PCC CURB, TYPE 1-4	34.00'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0110+	PCC CURB, TYPE 1-8	144.00'
0111+	PCC CURB, TYPE 1-4	105.50'
0112+	PCC CURB, TYPE 1-8	44.50'
0113	PCC CURB, TYPE 1-6	34.00'
0114	PCC CURB, TYPE 2	15.00'
0115*	PCC CURB, TYPE 1-8	20.50'
0116	PCC CURB, TYPE 1-2	71.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#3 NB(N82)	406+78.35	18.83' RT	9" HMA OVER 4+" CRUSHER RUN

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5107	18" RCP	IV	57.00	0.964	14.00	13.47

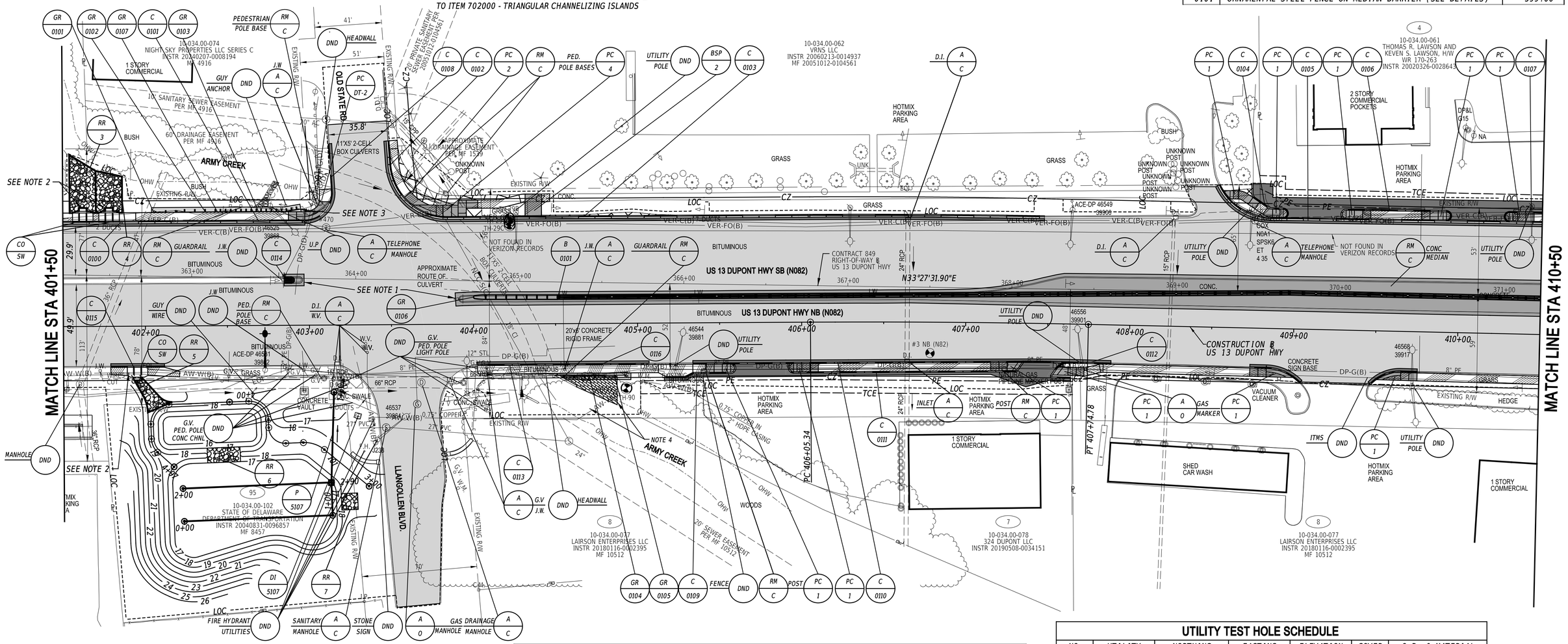
RIPRAP SCHEDULE

NO.	TYPE	AREA (SY)
3	R-4	52
4	R-4	40
5	R-4	20
6	R-4	60
7	R-4	34

*ALL CONCRETE UNDER RIPRAP CHANNELS TO BE REMOVED PRIOR TO PLACING RIPRAP. THE CONCRETE REMOVAL SHALL BE PAID FOR UNDER ITEM 211001.

BARRIER SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0101	ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER (SEE DETAILS)	599.00'



DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
5107+	403+12.80	95.97	34" x 24"	N/A	17.50	14.00

\+ OUTLET STRUCTURE - SEE SWM SHEETS 99-101
TO BE PAID UNDER ITEM 910006 - OUTLET STRUCTURE

DELDOT SWM FACILITY SCHEDULE

NO.	TYPE / DESCRIPTION	LOCATION
1104+	BIORETENTION	STA. 401+75 RT. TO STA. 403+30 RT.

\+ SWM FACILITY - SEE SWM SHEETS 99-101

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
0101	END ANCHORAGE 31	402+05.16	-69.17	15.00
0102**	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	402+19.29	-69.17	25.00
0103	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 2-27	402+69.29	-69.17	25.00
0104	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31, STEEP SLOPE	404+49.42	31.32	30.13
0105	END ANCHORAGE 31	404+79.55	31.57	15.00
0106	PERMANENT IMPACT ATTENUATOR, TYPE 5	404+00.00	-16.47	*
0107	TYPE 1-27 TO TYPE 1-31 TRANSITION SECTION	402+44.29	-16.47	**
0108	GALVANIZED TRANSITION SECTION, THRIE BEAM	402+90.00	-17.00	***

* LENGTH SHALL MEET APPROVED MANUFACTURER'S PRODUCT SPECIFICATIONS

** RUN OF GUARDRAIL SHALL BE IN ACCORDANCE WITH DELDOT CONSTRUCTION DETAIL NO. B-7 ON SHEET NO. 1.

*** RUN OF GUARDRAIL SHALL BE IN ACCORDANCE WITH DELDOT CONSTRUCTION DETAIL NO. B-13 ON SHEET NO. 6.

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-29	VER-C	600608.82	598450.79	17.99	1.91	SEE NOTE ON FORM
TH-29B	VER-C	600609.87	598448.70	17.98	1.85	4.2' CONC. DUCT
TH-29C	VER-C	600607.99	598452.50	18.13	1.91	4.2' CONC. DUCT
TH-90	AW-W	600614.30	598574.61	17.07	4.88	2.5" HDPE SLEEVE

NOTES:

1. CONTRACTOR SHALL TAPER MEDIAN NOSE IN ACCORDANCE WITH STANDARD DETAIL C-1 (2020).
2. CONTRACTOR SHALL INSTALL CURB/SIDEWALK OPENING IN ACCORDANCE WITH STANDARD DETAIL C-5 (2020).
3. TRANSITION TO EXISTING GUARDRAIL PER DELDOT STANDARD CONSTRUCTION DETAIL B-7.
4. SEE SHEET 105 FOR SLOPE STABILIZATION PLAN.

PEN TABLE: $PENTABLES
PLOT DRIVER: $PLTDRVDS
DATE PLOTTED: 25-JUL-2024 @ 12:29
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-04
SECTION PAI
SHEET NO. 21

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0212+	PCC CURB, TYPE 1-4	46.50'
0213	PCC CURB, TYPE 1-2	125.00'
0214	PCC CURB, TYPE 1-4	211.00'
0215	PCC CURB, TYPE 1-2	125.00'
0216	PCC CURB, TYPE 1-4	21.50'
0217+	I.PCC CURB AND GUTTER, TYPE 3-4	18.00'
0218*	I.PCC CURB AND GUTTER, TYPE 3-8	57.00'
0219	PCC CURB, TYPE 1-4	214.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0201+	PCC CURB, TYPE 1-6	45.00'
0203+	I.PCC CURB AND GUTTER, TYPE 3-4	21.50'
0204+	PCC CURB, TYPE 1-4	373.50'
0207	PCC CURB, TYPE 1-4	256.50'
0208	PCC CURB, TYPE 1, MODIFIED	70.50'
0209+	PCC CURB, TYPE 1-6	75.00'
0210**	PCC CURB, TYPE 2	66.00'
0211	PCC CURB, TYPE 1-4	96.50'

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
0201	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	413+08.42	29.00	50.00
0202	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	413+58.28	29.00	250.00
0203	GUARDRAIL TO BARRIER CONNECTION, APPROACH TYPE 3-31	416+07.94	27.67	25.00
0204	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	418+78.65	24.00	50.00
0205	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	419+28.65	24.00	21.50

BARRIER SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0201	ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER(ON SHEET 108)	410.50'
0202	BIFURCATED CONCRETE BARRIER WALL	72.50'
0203	BIFURCATED CONCRETE BARRIER WALL	85.00'
0204	BIFURCATED CONCRETE BARRIER WALL	87.00'
0205	BIFURCATED CONCRETE BARRIER WALL	73.00'
0206	CONCRETE MEDIAN BARRIER, 42" F-SHAPE	223.00'
0207	CONCRETE ROADSIDE BARRIER, 36" TYPE 2	84.50'
0208	CONCRETE ROADSIDE BARRIER, 36" TYPE 2	120.00'
0209	CONCRETE ROADSIDE BARRIER, 42" TYPE 2	25.00'
0210	CONCRETE ROADSIDE BARRIER, 42" TYPE 2	25.00'
0211	CONCRETE ROADSIDE BARRIER, 42" TYPE 2	25.00'
0212	CONCRETE ROADSIDE BARRIER, 42" TYPE 2	25.00'

RIPRAP SCHEDULE

NO.	TYPE	AREA (SY)
5	R-5	12
6	R-5	16
7	R-5	16

ROADWAY CORE SCHEDULE

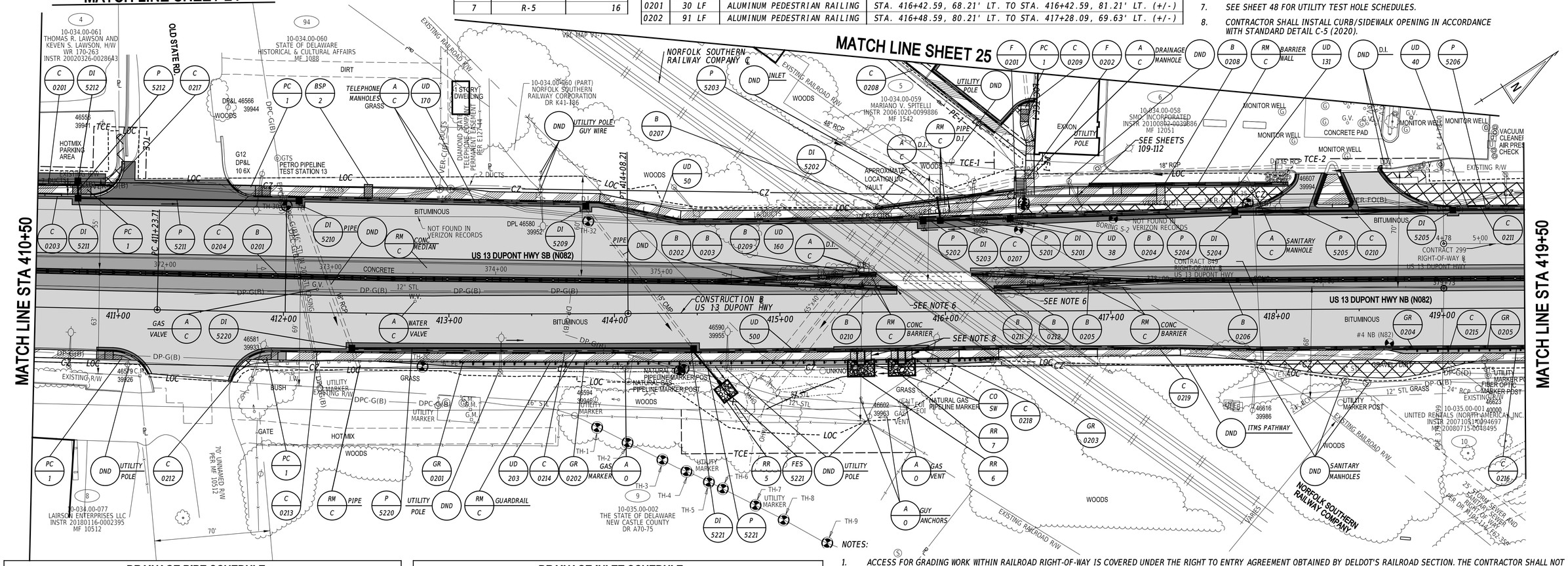
NO.	STATION	OFFSET	DESCRIPTION
#4 NB(N82)	418+68.13	20.80' RT	14" HMA OVER 4+" CRUSHER RUN

FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
0201	30 LF	ALUMINUM PEDESTRIAN RAILING	STA. 416+42.59, 68.21' LT. TO STA. 416+42.59, 81.21' LT. (+/-)
0202	91 LF	ALUMINUM PEDESTRIAN RAILING	STA. 416+48.59, 80.21' LT. TO STA. 417+28.09, 69.63' LT. (+/-)

NOTES (CONTINUED):

7. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.
8. CONTRACTOR SHALL INSTALL CURB/SIDEWALK OPENING IN ACCORDANCE WITH STANDARD DETAIL C-5 (2020).



DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5201	18" RCP	IV	38.50	0.005	10.60	10.40
5202	15" RCP	IV	5.40	0.019	10.50	10.40
5203	21" RCP	IV	12.20	0.008	10.30	10.20
5204	18" RCP	IV	131.80	0.005	11.38	10.70
5205	15" RCP	IV	128.50	0.011	12.96	11.58
5206	15" RCP	IV	167.40	0.016	15.85	13.16
5211	15" RCP	IV	127.70	0.015	17.50	15.64
5212	15" RCP	IV	6.40	0.016	17.80	17.70
5220	18" RCP	IV	203.30	0.014	13.00	10.10
5221	18" RCP	IV	22.00	0.017	9.88	9.50

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
5201	416+39.44	*	48" X 30"	4	**	10.60
5202	415+86.74	*	72" X 24"	1	**	10.50
5203	415+97.08	*	48" X 30"	4	**	10.30
5204	417+75.13	*	48" X 30"	4	**	11.38
5205	419+07.02	*	34" X 24"	4	**	12.96
5209	413+82.86	*	48" X 30"	4	**	12.81
5210	412+08.48	*	72" X 24"	4	**	15.29
5211	410+74.34	*	72" X 24"	4	**	17.50
5212	410+74.04	*	34" X 24"	1	**	17.80
5220	412+41.52	*	48" X 30"	4	**	13.00
5221	414+47.71	*	72" X 48"	4	**	9.88

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
5221	18" RCP	0.5907	NO

NOTES:

1. ACCESS FOR GRADING WORK WITHIN RAILROAD RIGHT-OF-WAY IS COVERED UNDER THE RIGHT TO ENTRY AGREEMENT OBTAINED BY DELDOT'S RAILROAD SECTION. THE CONTRACTOR SHALL NOT ENCROACH PAST THE LOC INDICATED ON THE PLANS.
2. ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS".
3. ALL UTILITY INSTALLATIONS OR RELOCATIONS ON NORFOLK SOUTHERN RIGHT-OF WAY THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, AND FIBER OPTICS PROJECTS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.
4. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.
5. IF NS PERSONNEL IS FLAGGING (CONTRACTOR IS NOT DIRECTLY HIRING PROTECTIVE SERVICES) AND PROJECTS WILL EXCEED 30 DAYS OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHALL PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCT ON THE PROJECT.
6. BARRIER (0207, 0209, 0210, 0211, 0212) SHALL BE FLUSH WITH EXISTING BRIDGE ABUTMENT AND PIER.

PENNONI ASSOCIATES INC. | FILE NAME: | MICROSTATION VERSION: | MICROSTATION WORKSPACE:
PEN TABLE: $PENTABLES | PLOT DRIVER: SPLTDRV35 | DATE PLOTTED: 25-JUL-2024 @ 12:29 | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	O. GREEN
NEW CASTLE	CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-05
SECTION: PAI
SHEET NO.: 22

ROADWAY CORE SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
#18 EB	695+42.15	18.10' RT	6" HMA OVER 6+" FILL

FENCE SCHEDULE			
NO.	QTY.	DESCRIPTION	NOTES
1	472 LF	CHAIN LINK FENCE, 8 FT. HIGH (ITEM 727000)	STA. 695+28.20, 28.57' RT. TO STA. 700+00.00, 28.96' RT. (+/-)

NOTES:

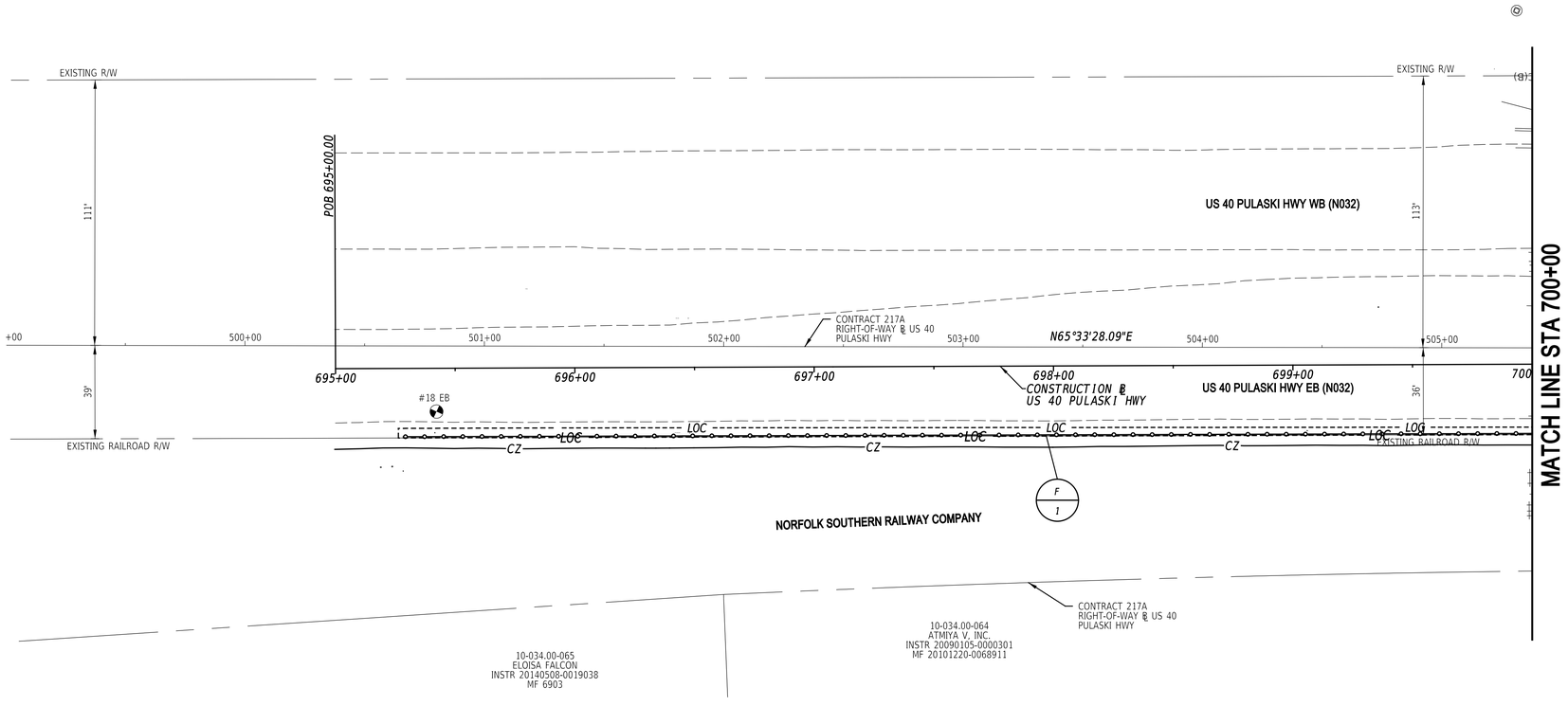
1. ACCESS FOR GRADING WORK WITHIN RAILROAD RIGHT-OF-WAY IS COVERED UNDER THE RIGHT TO ENTRY AGREEMENT OBTAINED BY DELDOT'S RAILROAD SECTION. THE CONTRACTOR SHALL NOT ENCROACH PAST THE LOC INDICATED ON THE PLANS.

2. ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS".

3. ALL UTILITY INSTALLATIONS OR RELOCATIONS ON NORFOLK SOUTHERN RIGHT-OF WAY THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, AND FIBER OPTICS PROJECTS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED

4. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

5. IF NS PERSONNEL IS FLAGGING (CONTRACTOR IS NOT DIRECTLY HIRING PROTECTIVE SERVICES) AND PROJECTS WILL EXCEED 30 DAYS OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHALL PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCT ON THE PROJECT.



PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 25-JUL-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-06
SECTION
PAI
SHEET NO.
23

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0304+	PCC CURB, TYPE 1-4	585.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#19 EB	700+57.08	18.85' RT	8.75" HMA OVER 4+" FILL
#20 EB	703+65.61	20.22' RT	9" HMA OVER 4+" FILL

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5403	RCP, 15"	IV	151.20	0.015	29.92	27.65
5404	RCP, 15"	IV	250.80	0.010	32.62	30.12

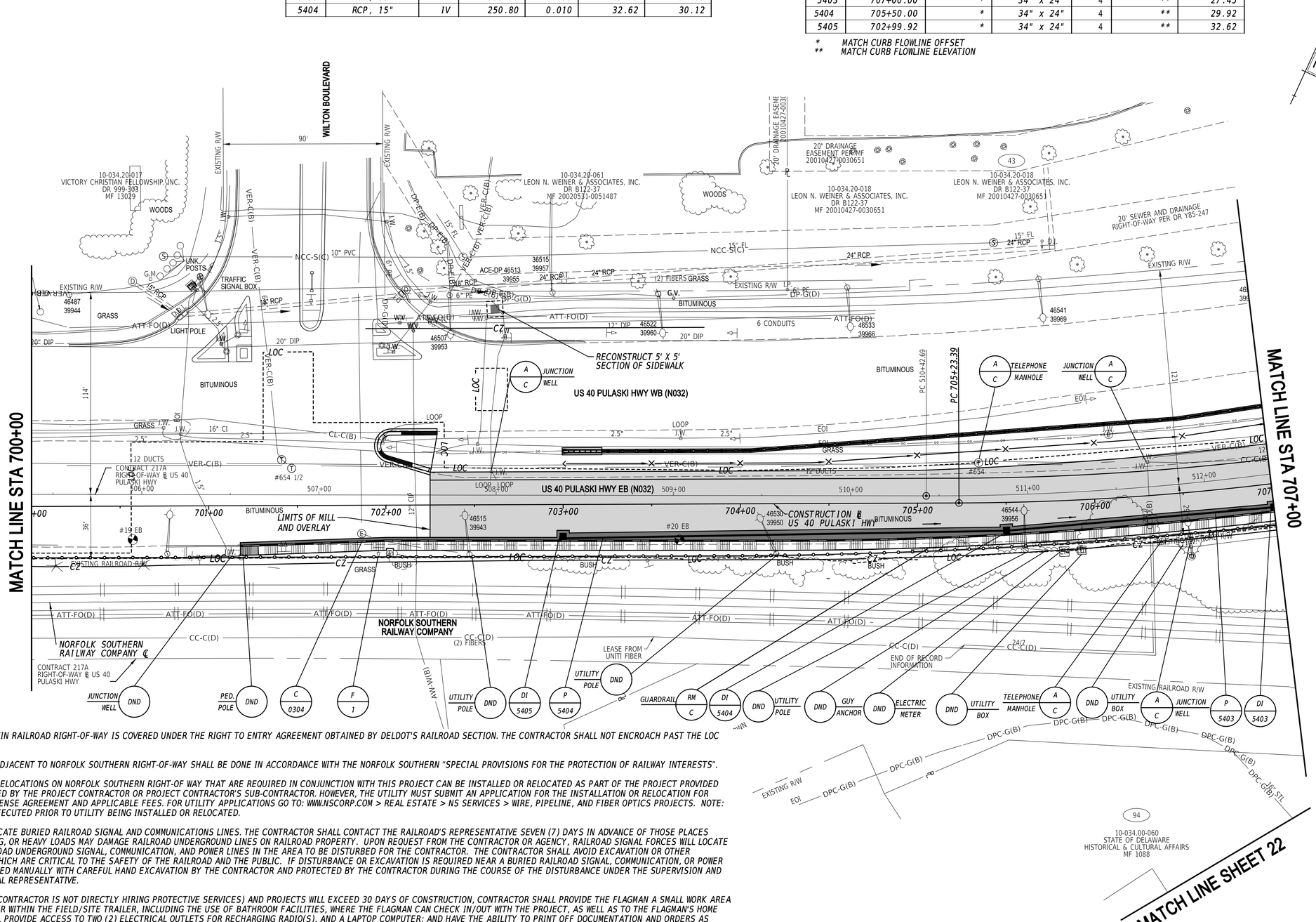
FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
1	703 LF	CHAIN LINK FENCE, 8 FT. HIGH (ITEM 727000)	STA. 700+00.00, 28.96' RT. TO STA. 707+00.00, 23.19' RT. (+/-)

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
5403	707+00.00	*	34" x 24"	4	**	27.45
5404	705+50.00	*	34" x 24"	4	**	29.92
5405	702+99.92	*	34" x 24"	4	**	32.62

* MATCH CURB FLOWLINE OFFSET
** MATCH CURB FLOWLINE ELEVATION



NOTES:

1. ACCESS FOR GRADING WORK WITHIN RAILROAD RIGHT-OF-WAY IS COVERED UNDER THE RIGHT TO ENTRY AGREEMENT OBTAINED BY DELDOT'S RAILROAD SECTION. THE CONTRACTOR SHALL NOT ENCROACH PAST THE LOC INDICATED ON THE PLANS.
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3. ALL UTILITY INSTALLATIONS OR RELOCATIONS ON NORFOLK SOUTHERN RIGHT-OF WAY THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, AND FIBER OPTICS PROJECTS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.
4. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.
5. IF NS PERSONNEL IS FLAGGING (CONTRACTOR IS NOT DIRECTLY HIRING PROTECTIVE SERVICES) AND PROJECTS WILL EXCEED 30 DAYS OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHALL PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCT ON THE PROJECT.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRV55
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUN-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

	CP-07
SECTION	PAI
SHEET NO.	24

NOTES:

1. 4 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.

2. ACCESS FOR GRADING WORK WITHIN RAILROAD RIGHT-OF-WAY IS COVERED UNDER THE RIGHT TO ENTRY AGREEMENT OBTAINED BY DELDOT'S RAILROAD SECTION. THE CONTRACTOR SHALL NOT ENCROACH PAST THE LOC INDICATED ON THE PLANS.

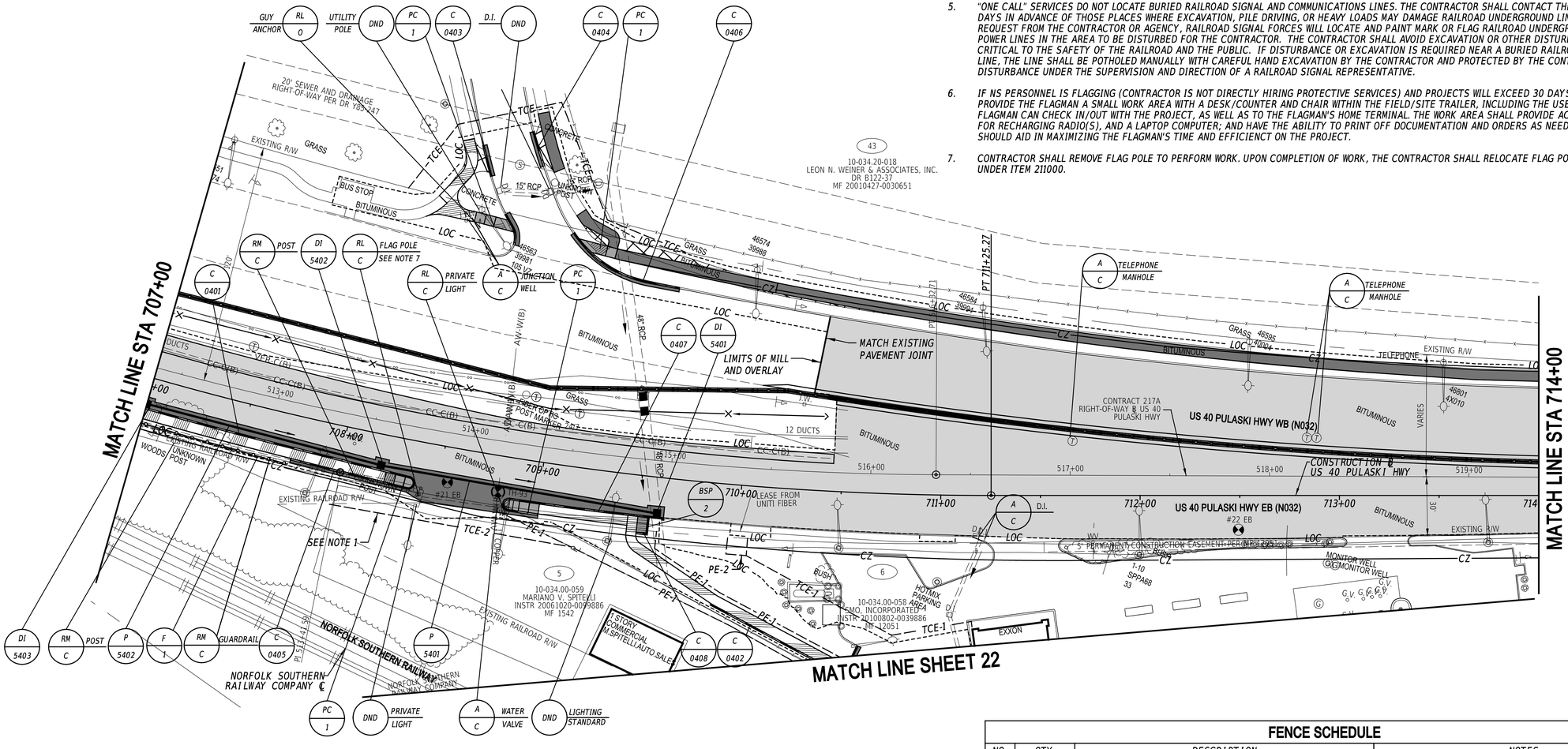
3. ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS".

4. ALL UTILITY INSTALLATIONS OR RELOCATIONS ON NORFOLK SOUTHERN RIGHT-OF WAY THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, AND FIBER OPTICS PROJECTS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

5. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

6. IF NS PERSONNEL IS FLAGGING (CONTRACTOR IS NOT DIRECTLY HIRING PROTECTIVE SERVICES) AND PROJECTS WILL EXCEED 30 DAYS OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHALL PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCY ON THE PROJECT.

7. CONTRACTOR SHALL REMOVE FLAG POLE TO PERFORM WORK. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL RELOCATE FLAG POLE IN ORIGINAL LOCATION AND. PAYMENT UNDER ITEM 211000.



FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
1	76 LF	CHAIN LINK FENCE, 8 FT. HIGH (ITEM 727000)	STA. 707+00.00, 23.19' RT. TO STA. 707+74.55, 24.84' RT. (+/-)

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0401+	PCC CURB, TYPE 1-4	125.00'
0402	PCC CURB, TYPE 1, MODIFIED	59.00'
0403	PCC CURB, TYPE 1-6	16.00'
0404	PCC CURB, TYPE 1-6	18.50'
0405+	PCC CURB, TYPE 1, MODIFIED	48.50'
0406+	PCC CURB, TYPE 1-6	45.00'
0407+	PCC CURB, TYPE 1-4	63.00'
0408	PCC CURB, TYPE 1-4	14.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#21 EB	708+54.15	17.59' RT	3.75" HMA OVER 4+" LARGE STONE
#22 EB	712+49.34	17.21' RT	4.75" HMA OVER 4+" LARGE STONE

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-93	AW-W	601563.74	598836.39	28.58	4.08	1" COPPER

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5401	15" RCP	IV	140.20	0.014	25.44	23.44
5402	15" RCP	IV	121.20	0.015	27.45	25.64

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
5401+	709+59.28	*	72" x 48"	4	**	19.10
5402	708+20.17	*	48" x 30"	4	**	25.44

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

\+ TO BE CONSTRUCTED AS DOGHOUSE INLET BOX

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55 | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRV55 | MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUN-2024 @ 12:29 | MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	
COUNTY	NEW CASTLE	
BRIDGE NO.	N/A	
DESIGNED BY:	O. GREEN	
CHECKED BY:	P. HORSEY	

CONSTRUCTION PLAN

CP-08

SECTION	PAI
SHEET NO.	25

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0501	PCC CURB, TYPE 1-4	86.50'
0502	PCC CURB, TYPE 1-4	21.00'
0503	I.PCC CURB AND GUTTER, TYPE 1-4	47.50'
0504+	I.PCC CURB AND GUTTER, TYPE 1-4	223.50'
0505**	PCC CURB, TYPE 1-4	117.50'
0506+*	I.PCC CURB AND GUTTER, TYPE 1-4	207.50'
0507+	PCC CURB, TYPE 1-6	23.50'
0508+*	I.PCC CURB AND GUTTER, TYPE 1-4	101.50'
0509+*	PCC CURB, TYPE 1-6	91.50'
0510	PCC CURB, TYPE 1-4	186.50'
0511	PCC CURB, TYPE 1-4	190.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0512+	PCC CURB, TYPE 1-6	22.00'
0513+	PCC CURB, TYPE 1-6	38.00'
0514	PCC CURB, TYPE 1-6	42.00'
0515+	PCC CURB, TYPE 1-4	113.00'
0516+	PCC CURB, TYPE 1-4	23.50'
0517+	PCC CURB, TYPE 1-4	20.00'
0518+	PCC CURB, TYPE 1-4	183.00'
0519+	PCC CURB, TYPE 1-6	16.00'
0520	PCC CURB, TYPE 2	606.00'
0521*	PCC CURB, TYPE 1-2	58.00'
0522+*	PCC CURB, TYPE 1-4	32.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
0501	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	419+50.00	24.00	126.28
0502	END ANCHORAGE 31	420+76.28	24.00	15.00
0503	PERMANENT IMPACT ATTENUATOR, TYPE 5	718+79.70	38.90	**

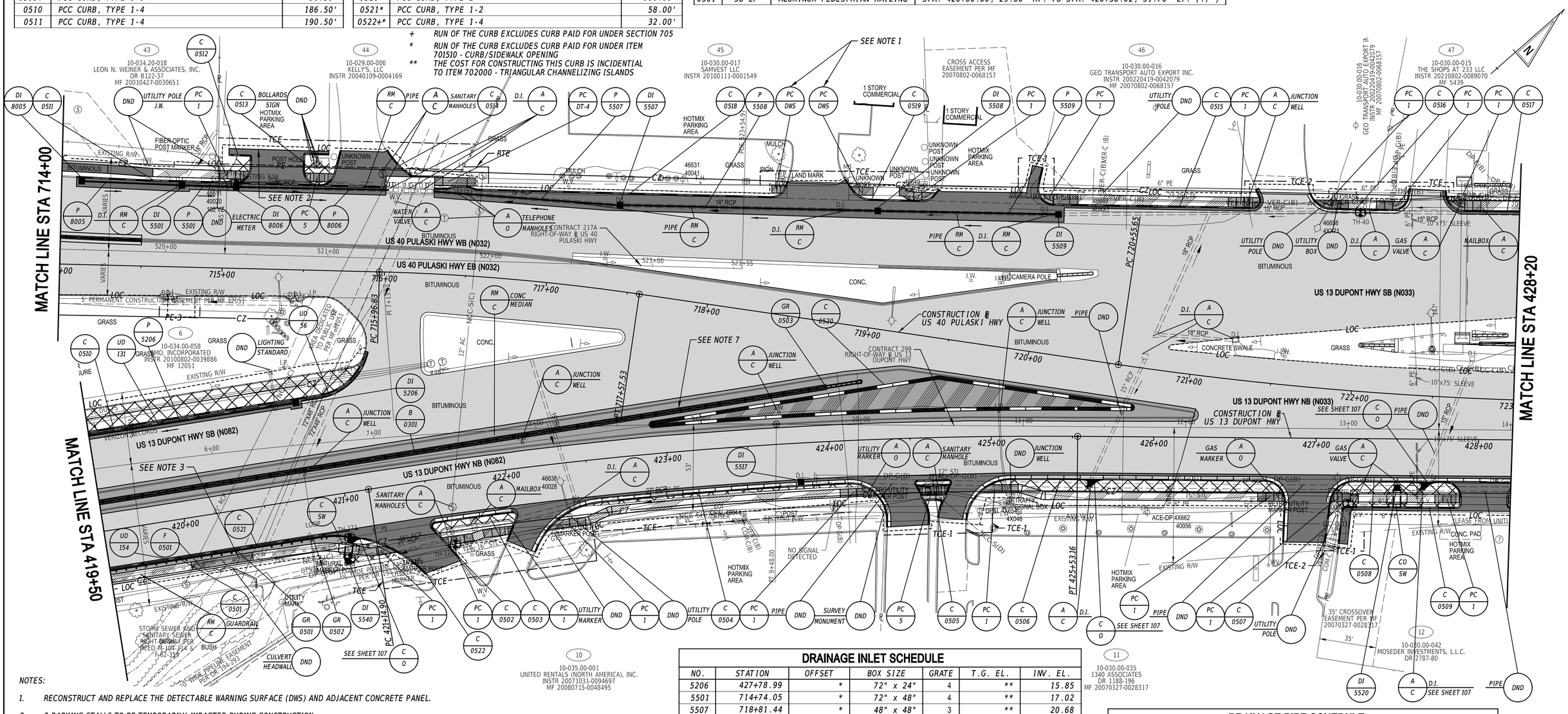
** LENGTH SHALL MEET APPROVED MANUFACTURER'S PRODUCT SPECIFICATIONS

BARRIER SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0301	ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER (SEE DETAILS)	453.00'

FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
0501	38 LF	ALUMINUM PEDESTRIAN RAILING	STA. 420+00.00, 29.00' RT. TO STA. 420+38.02, 31.70' LT. (+/-)


MATCH LINE STA 714+00
MATCH LINE STA 419+50
MATCH LINE STA 428+20
US 40 PULASKI HWY WB (N032)
US 40 PULASKI HWY EB (N032)
US 13 DUPONT HWY SB (N082)
US 13 DUPONT HWY NB (N082)
US 13 DUPONT HWY SB (N033)
US 13 DUPONT HWY NB (N033)
CONSTRUCTION @ US 40 PULASKI HWY
CONSTRUCTION @ US 13 DUPONT HWY
SEE NOTE 1
SEE NOTE 2
SEE NOTE 3
SEE NOTE 7
SEE SHEET 107
SEE SHEET 102
10-034.20-018 LEON N. WEINER & ASSOCIATES, INC. DR B122-37 MF 20010427-0030651
10-029.00-006 KELLY'S, LLC INSTR 20040109-0004169
10-030.00-017 SAMVEST LLC INSTR 20100111-0001549
10-030.00-016 GEO TRANSPORT AUTO EXPORT INC. INSTR 20022041900-0068157 MF 20070802-0068157
10-030.00-015 THE SHOPS AT 233 LLC INSTR 20210802-0089070 MF 5439
10-034.00-058 GRASSMO, INCORPORATED INSTR 20100802-0039886 MF 12051
10-035.00-001 UNITED RENTALS (NORTH AMERICA), INC. INSTR 20071031-0094697 MF 20080715-0048495
10-030.00-035 1340 ASSOCIATES DR 1188-196 MF 20070327-0028317
10-030.00-042 MOSEDER INVESTMENTS, L.L.C. DR 2787-80
CROSS ACCESS EASEMENT PER MF 20070802-0068157
CONTRACT 217A RIGHT-OF-WAY @ US 40 PULASKI HWY
CONTRACT 299 RIGHT-OF-WAY @ US 13 DUPONT HWY
5' PERMANENT CONSTRUCTION EASEMENT PER MF 12051
35' CROSSOVER EASEMENT PER MF 20070327-0028317
10" MOE PIPELINE EASEMENT PER DR 194-297
1 STORY COMMERCIAL
HOTMIX PARKING AREA
CONCRETE SWALE
CONC. PAD
TRAFFIC SIGNAL BOX
NO SIGNAL DETECTED
PC 715+96.83
PT 717+57.53
PC 720+55.65
PT 425+53.16
PC 421+14.24
PI 714+12.29
PI 715+07.53
PI 717+53.53
PI 718+79.70
PI 719+95.36
PI 721+81.64
PI 423+81.64
PI 422+95.57
PI 424+12.29
PI 425+50.00
PI 427+78.99
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PI 543+88.00
PI 543+96.00
PI 544+04.00
PI 544+12.00
PI 544+20.00
PI 544+28.00
PI 544+36.00
PI 544+44.00
PI 544+52.00
PI 544+60.00
PI 544+68.00
PI 544+76.00
PI 544+84.00
PI 544+92.00
PI 545+00.00
PI 545+08.00
PI 545+16.00
PI 545+24.00
PI 545+32.00
PI 545+40.00
PI 545+48.00
PI 545+56.00
PI 545+64.00
PI 545+72.00
PI 545+80.00
PI 545+88.00
PI 545+96.00
PI 546+04.00
PI 546+12.00
PI 546+20.00
PI 546+28.00
PI 546+36.00
PI 546+44.00
PI 546+52.00
PI 546+60.00
PI 546+68.00
PI 546+76.00
PI 546+84.00
PI 546+92.00
PI 547+00.00
PI 547+08.00
PI

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0601+	PCC CURB, TYPE 1-6	51.00'
0602+*	I.PCC CURB AND GUTTER, TYPE 1-4	166.00'
0603	PCC CURB, TYPE 1-6	11.00'
0604+	PCC CURB, TYPE 1-6	24.50'
0605**	PCC CURB, TYPE 2	30.00'
0606**	PCC CURB, TYPE 2	70.00'
0607**	PCC CURB, TYPE 2	20.50'
0608	PCC CURB, TYPE 1-6	20.50'
0609+	PCC CURB, TYPE 2	44.50'
0610	PCC CURB, TYPE 2	46.50'
0611+*	I.PCC CURB AND GUTTER, TYPE 1-4	546.00'
0612+	PCC CURB, TYPE 1-8	10.00'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0613	PCC CURB, TYPE 1-6	122.00'
0614+	PCC CURB, TYPE 1-6	27.50'
0615+	PCC CURB, TYPE 1-6	18.50'
0617+	PCC CURB, TYPE 1-6	23.50'
0618+*	PCC CURB, TYPE 1-6	19.00'
0619+*	PCC CURB, TYPE 1-6	45.00'
0620+	PCC CURB, TYPE 1-6	44.50'
0621+	PCC CURB, TYPE 1-4	34.00'
0622+	PCC CURB, TYPE 1-4	19.00'
0623+	PCC CURB, TYPE 1-4	13.00'
0624	PCC CURB, TYPE 1-6	16.50'
0625+	PCC CURB, TYPE 1-4	28.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0626+	I.PCC CURB AND GUTTER, TYPE 3-4	311.00'
0627+	PCC CURB, TYPE 1-4	20.00'
0628+	PCC CURB, TYPE 1-6	7.00'
0629+	I.PCC CURB AND GUTTER, TYPE 3-4	206.00'
0630+	PCC CURB, TYPE 1-6	125.00'
0631+	PCC CURB, TYPE 1-6	N/A
0632+	PCC CURB, TYPE 1-6	14.00'
0633+	PCC CURB, TYPE 1-6	7.00'
0634	PCC CURB, TYPE 1-6	23.50'
0635	PCC CURB, TYPE 1-6	17.50'

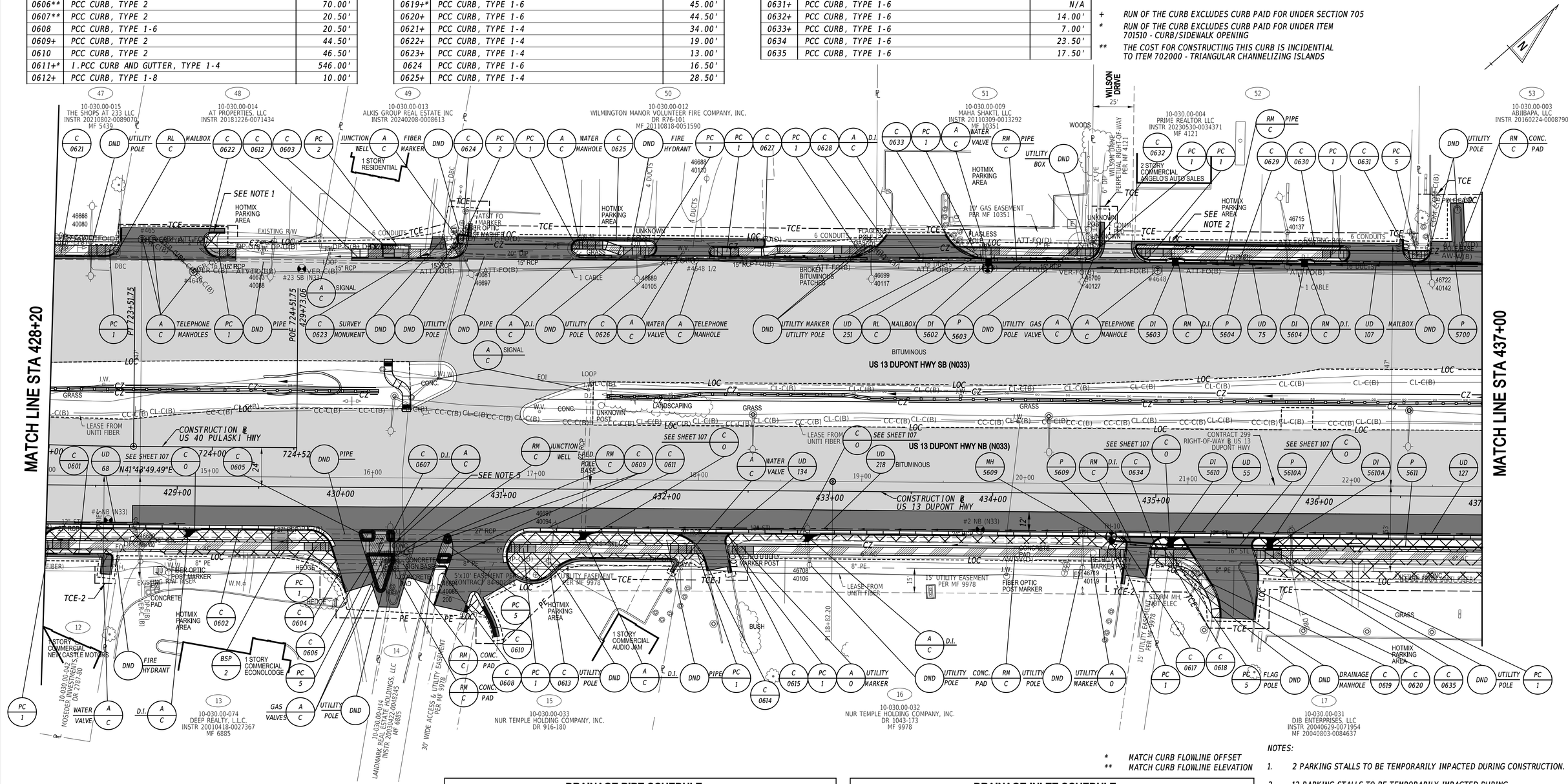
ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#1 NB (N33)	428+65.99	21.26' RT	2.75" HMA OVER DIRTY FILL
#2 NB (N33)	433+92.44	20.78' RT	6" HMA OVER DIRTY FILL
#23 SB (N33)	429+79.25	135.05' LT	12" HMA OVER 4+" CRUSHER RUN

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS



* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INVERT EL.
5609	434+73.19	29.34	48" x 48" BOX	50.38	46.32

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5603	15" RCP	IV	111.60	0.008	47.40	46.50
5604	15" RCP	IV	76.40	0.007	48.03	47.50
5609	24" RCP	IV	32.10	0.024	47.35	46.59
5610A	24" RCP	IV	56.90	0.014	48.24	47.45
5611	24" RCP	IV	155.20	0.009	49.80	48.34
5700	15" RCP	IV	276.50	0.011	51.30	48.23

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
5602	433+96.32	*	34" x 24"	4	**	46.50
5603	435+10.92	*	34" x 24"	4	**	47.40
5604	435+89.97	*	34" x 24"	4	**	48.03
5610	435+09.22	*	72" x 48"	2	**	47.35
5610A	435+70.13	*	48" x 48"	2	**	48.24

NOTES:

1. 2 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
2. 12 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
3. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.
4. REFER TO THE CONSTRUCTION DETAIL SHEET FOR THE SIZE AND CONSTRUCTION OF PROPOSED CURB OPENING SHOWN ON THIS SHEET.
5. TUBULAR MARKERS ON TRIANGULAR CHANNELIZING ISLAND SHOULD BE ORANGE WITH WHITE BANDS.

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN
		CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-10

SECTION PAI

SHEET NO. 27

PENNONI ASSOCIATES INC. | PEN TABLE: $PNTBLS | FILE NAME: SFILEAS | MICROSTATION VERSION: SVERSIONS | MICROSTATION WORKSPACE: SWORKSPACES | PLOT DRIVER: $PLTDRVSS | DATE PLOTTED: 25-JUL-2024 @ 12:29 | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0701+	PCC CURB, TYPE 1-6	101.00'
0702	I.PCC CURB AND GUTTER, TYPE 3-4	103.50'
0704+	I.PCC CURB AND GUTTER, TYPE 3-4	263.50'
0705+	PCC CURB, TYPE 1-6	22.00'
0706+	PCC CURB, TYPE 1-6	51.50'
0707	PCC CURB, TYPE 1-6	20.50'
0708+	I.PCC CURB AND GUTTER, TYPE 3-4	88.50'
0709+	PCC CURB, TYPE 1-6	30.50'
0710+*	I.PCC CURB AND GUTTER, TYPE 1-4	256.50'
0711+	PCC CURB, TYPE 1-6	45.00'
0712+	PCC CURB, TYPE 1-6	67.00'
0713**	PCC CURB, TYPE 2	83.00'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0714**	PCC CURB, TYPE 1-4	29.50'
0715+	PCC CURB, TYPE 1-6	73.00'
0716+	PCC CURB, TYPE 1-6	53.50'
0717	PCC CURB, TYPE 2	101.00'
0718	I.PCC CURB AND GUTTER, TYPE 1-4	56.50'
0719	PCC CURB, TYPE 1-6	68.00'
0720+	PCC CURB, TYPE 1-6	40.50'
0721+	PCC CURB, TYPE 1-6	28.00'
0722+	PCC CURB, TYPE 1-6	42.00'
0723+	PCC CURB, TYPE 1-6	64.50'
0724+*	I.PCC CURB AND GUTTER, TYPE 1-4	478.50'
0725+	PCC CURB, TYPE 1-6	22.00'
0726+	PCC CURB, TYPE 1-6	10.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0727++	PCC CURB, TYPE 1-6	8.50'
0728++	PCC CURB, TYPE 1-6	8.50'
0729	I.PCC CURB AND GUTTER, TYPE 3-6	14.00'
0730	I.PCC CURB AND GUTTER, TYPE 3-6	11.50'
0731	I.PCC CURB AND GUTTER, TYPE 3-6	10.50'
0732+	I.PCC CURB AND GUTTER, TYPE 3-6	9.00'
0733	PCC CURB, TYPE 1-6	12.50'
0734	MODULAR BLOCK RETAINING WALLS	63.00'
0735	I.PCC CURB AND GUTTER, TYPE 3-4	293.00'
0736	MODULAR BLOCK RETAINING WALLS	59.50'
0737	PCC CURB, TYPE 1-6	27.00'
0738	PCC CURB, TYPE 1-6	46.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

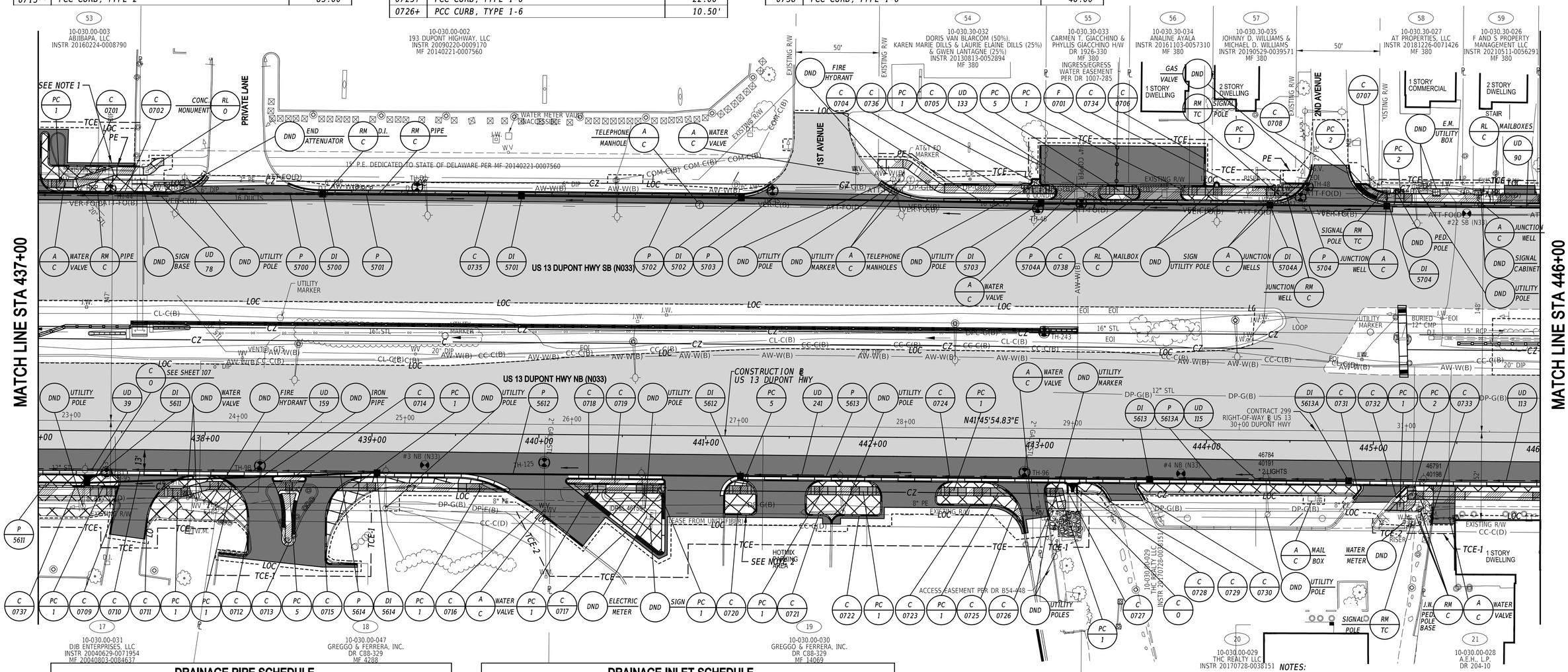
* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

++ RUN OF THE CURB INCIDENTAL TO ITEM 701032 - CURB OPENING, 4' OPENING

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#3 NB (N33)	439+35.11	22.07' RT	8" HMA OVER DIRTY FILL AND STONE
#4 NB (N33)	443+94.02	19.06' RT	6.75" HMA OVER 4+" FILL
#22 SB (N33)	445+54.78	136.88' LT	10" HMA OVER 4+" CRUSHER RUN



DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5612	18" RCP	IV	211.70	0.010	53.50	51.40
5613	18" RCP	IV	240.10	0.005	55.00	53.70
5613A	15" RCP	IV	115.90	0.008	56.12	55.20
5614	24" RCP	IV	170.00	0.005	50.90	50.00
5701	15" RCP	IV	116.30	0.009	52.57	51.50
5702	15" RCP	IV	129.00	0.011	54.15	52.77
5703	15" RCP	IV	176.70	0.005	55.05	54.25
5704	15" RCP	IV	67.30	0.005	56.34	56.00
5704A	15" RCP	IV	134.40	0.005	55.82	55.15

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
5611	437+29.34	*	72" x 48"	2	**	49.80
5612	441+20.95	*	72" x 48"	4	**	53.50
5613	443+66.04	*	48" x 30"	4	**	55.00
5613A	444+85.38	*	34" x 24"	4	**	56.12
5614	439+03.21	*	72" x 48"	4	**	50.90
5700	438+69.27	*	34" x 24"	4	**	51.30
5701	439+88.36	*	34" x 24"	4	**	52.57
5702	441+20.12	*	34" x 24"	4	**	54.15
5703	442+99.62	*	34" x 24"	4	**	55.05
5704	445+06.89	*	34" x 24"	4	**	56.34
5704A	444+36.86	*	34" x 24"	4	**	55.82

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

NOTES:

1. 4 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION. ONE ADDITIONAL STALL TO BE PERMANENTLY ADDED.
2. 1 PARKING STALL TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
3. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.
4. REFER TO THE CONSTRUCTION DETAIL SHEET FOR THE SIZE AND CONSTRUCTION OF PROPOSED CURB OPENING SHOWN ON THIS SHEET.

FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
0701	23.25 LF	CHAINLINK FENCE, 4 FT. HIGH (ITEM 727000)	STA. 443+44.82, 152.42' LT. (+/-)

PENNONI ASSOCIATES INC. | SFILEAS
FILE NAME: | $VERSIONS
MICROSTATION VERSION: | $VERSIONS
MICROSTATION WORKSPACE: | $WORKSPACES
PEN TABLE: $PENTBL55
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 25-JUN-2024 @ 12:29
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN
		CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-11
SECTION PAI
SHEET NO. 28

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0801+	I.PCC CURB AND GUTTER, TYPE 3-4	146.50'
0802+	PCC CURB, TYPE 1-6	40.00'
0803+	PCC CURB, TYPE 1-4	24.00'
0804+	PCC CURB, TYPE 1-6	52.50'
0805+	I.PCC CURB AND GUTTER, TYPE 3-4	306.00'
0806+	PCC CURB, TYPE 1-6	32.00'
0807+	I.PCC CURB AND GUTTER, TYPE 3-4	320.50'
0808+	PCC CURB, TYPE 1-6	22.00'
0809+	I.PCC CURB AND GUTTER, TYPE 1-4	57.00'
0810+	PCC CURB, TYPE 1-6	19.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0811+	PCC CURB, TYPE 1-6	28.00'
0812+	PCC CURB, TYPE 1-6	65.00'
0813+	PCC CURB, TYPE 1-6	38.00'
0814**	PCC CURB, TYPE 2	41.50'
0816	PCC CURB, TYPE 1-6	13.50'
0817**	PCC CURB, TYPE 1-6	41.00'
0818+	PCC CURB, TYPE 1-6	45.50'
0819+	I.PCC CURB AND GUTTER, TYPE 1-4	588.50'
0820+	PCC CURB, TYPE 1-6	55.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0821+	PCC CURB, TYPE 1-6	22.00'
0822+	PCC CURB, TYPE 1-6	10.50'
0823	PCC CURB, TYPE 1-4	121.50'
0824+	PCC CURB, TYPE 1-4	70.50'
0825	PCC CURB, TYPE 1-6	17.50'
0826	PCC CURB, TYPE 1-6	6.50'
0827	PCC CURB, TYPE 1-6	18.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

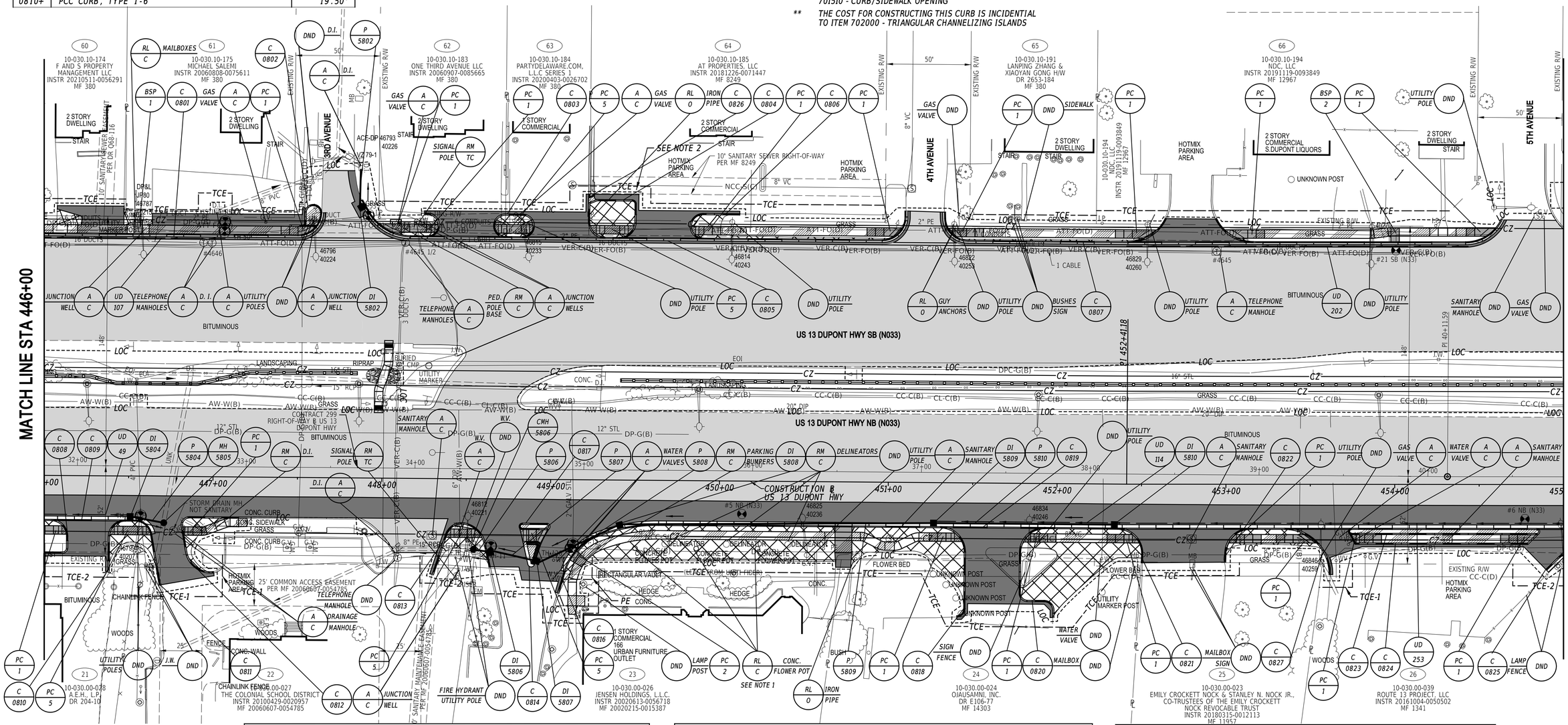
** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#5 NB (N33)	450+13.44	19.51' RT	4.75" HMA OVER 4+" DIRTY FILL
#6 NB (N33)	454+74.54	21.40' RT	6" HMA OVER 4+" DIRTY FILL
#21 SB (N33)	454+00.62	138.52' LT	15.5" HMA OVER 3+" CRUSHER RUN

CONVERT EXISTING D.I. TO MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INVERT EL.
5806	448+54.53	41.72	MATCH EXIST.	60.03	56.72



DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
5802	15" RCP	IV	19.10	0.017	55.57	55.25
5804	15" RCP	IV	15.20	0.012	55.54	55.36
5806	15" RCP	IV	7.30	0.033	57.16	56.92
5807	15" RCP	IV	25.80	0.011	57.65	57.36
5808	15" RCP	IV	50.60	0.008	58.15	57.75
5809	15" RCP	IV	180.70	0.004	59.00	58.25
5810	15" RCP	IV	103.10	0.008	59.95	59.10

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. ELEV.	INV. ELEV.
5802	447+88.44	*	72" x 48"	4	**	55.57
5804	446+51.10	*	48" x 30"	4	**	55.54
5806	448+62.70	*	34" x 24"	1	**	57.16
5807	448+90.16	*	48" x 30"	1	**	57.65
5808	449+41.63	*	48" x 30"	4	**	58.15
5809	451+27.01	*	72" x 24"	4	**	59.00
5810	452+34.12	*	34" x 24"	4	**	59.95

MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. ELEV.	INVERT EL.
5805	446+71.01	27.49	48" x 30" BOX	59.76	55.71

NOTES:

1. CONCRETE FLOWER POTS ARE TO BE RELOCATED OUTSIDE OF THE RIGHT-OF-WAY AND CLEAR ZONE. PAYMENT INCIDENTAL TO ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
2. 1 PARKING STALL TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
3. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.

PENNONI ASSOCIATES INC. 5FILES
FILE NAME: =$PDNTBLSS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PDNTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 25-JUL-2024 @ 12:29
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN
		CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-12

SECTION PAI

SHEET NO. 29

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0901+	PCC CURB, TYPE 1-4	83.00'
0902+	PCC CURB, TYPE 1-4	6.00'
0903+	PCC CURB, TYPE 1-8	96.00'
0904+	PCC CURB, TYPE 1-6	21.00'
0905	PCC CURB, TYPE 1-6	32.00'
0908	PCC CURB, TYPE 1-6	20.00'
0909+	PCC CURB, TYPE 1-6	54.00'
0910+	PCC CURB, TYPE 1-2	30.00'
0911+	PCC CURB, TYPE 1-2	22.00'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
0912+	I.PCC CURB AND GUTTER, TYPE 3-4	668.00'
0913+	I.PCC CURB AND GUTTER, TYPE 3-2	28.00'
0915	PCC CURB, TYPE 1-6	95.50'
0916+	PCC CURB, TYPE 1-6	25.50'
0917+	PCC CURB, TYPE 1-6	36.50'
0918+	PCC CURB, TYPE 1-6	32.00'
0919+	I.PCC CURB AND GUTTER, TYPE 1-4	87.00'
0920+	I.PCC CURB AND GUTTER, TYPE 3-4	89.00'
0921	MODULAR BLOCK RETAINING WALLS	17.00'
0922	PCC CURB, TYPE 1-6	15.00'
0923	PCC CURB, TYPE 1, MODIFIED	48.00'

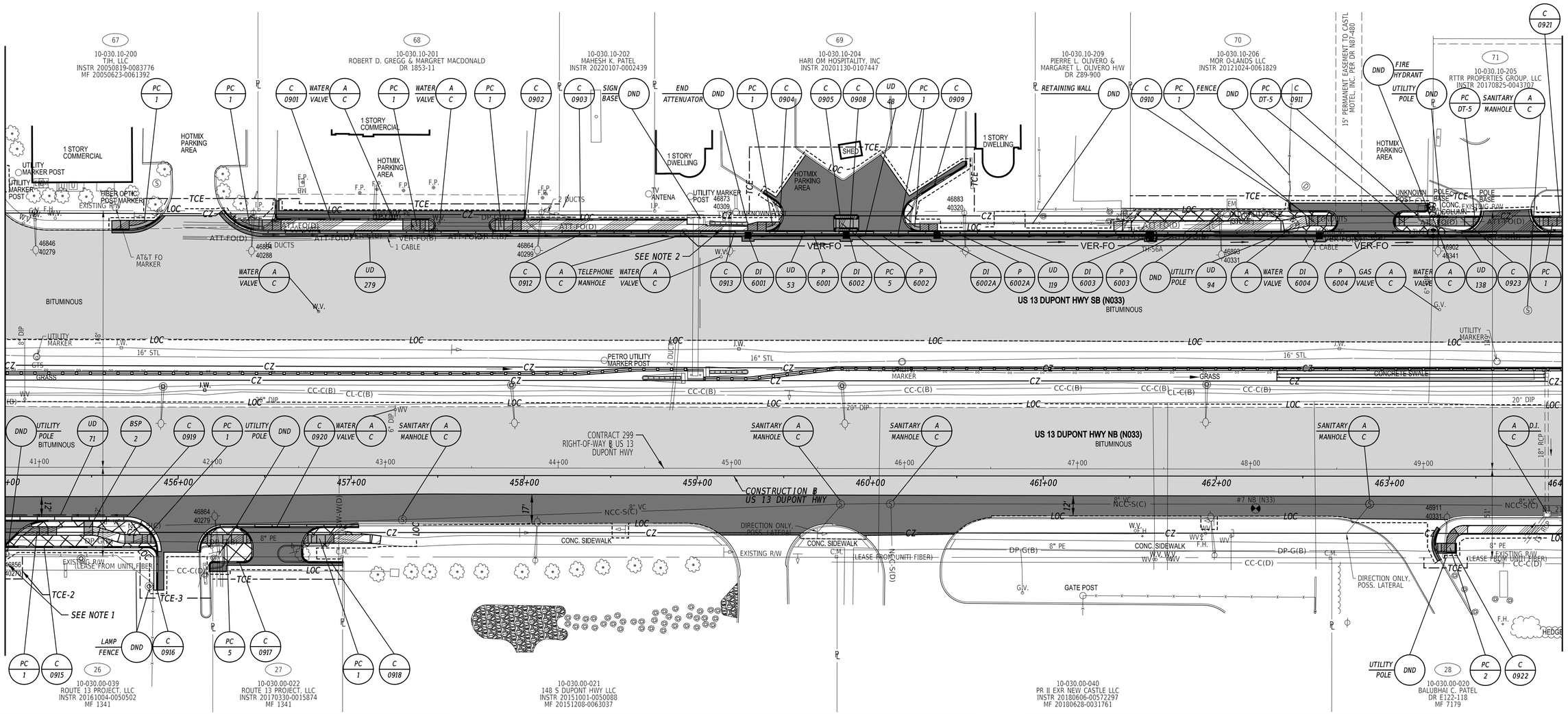
\+ *RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705*

* *RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING*

** *THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS*

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#7 NB (N33)	462+22.79	18.69' RT	6.75" HMA OVER 10" MILLINGS AND FILL



UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-56	VER-C	605135.48	601979.41	49.94	3.05	SEE NOTE ON FORM
TH-56A	VER-C	605134.81	601980.38	49.90	3.18	SEE NOTE ON FORM
TH-F	AW-W	605258.63	602086.10	41.40	2.13	7" CAST IRON

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
6001	459+29.26	*	72" x 24"	4	**	53.84
6002	459+85.96	*	34" x 24"	4	**	52.40
6002A	460+38.45	*	34" x 24"	4	**	50.34
6003	461+61.90	*	34" x 24"	4	**	45.36
6004	462+59.56	*	34" x 24"	4	**	40.41

* *MATCH CURB FLOWLINE OFFSET*

** *MATCH CURB FLOWLINE ELEVATION*

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
6001	15" RCP	IV	56.50	0.022	53.84	52.60
6002	15" RCP	IV	52.90	0.035	52.40	50.54
6002A	15" RCP	IV	120.70	0.039	50.34	45.61
6003	15" RCP	IV	94.80	0.050	45.36	40.60
6004	15" RCP	IV	170.40	0.051	40.41	31.65

NOTES:

1. *1 PARKING STALL TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.*
2. *PROPOSED SIDEWALK WIDTH VARIES FROM 2.8' TO 2.5' WITHIN LIMITS OF THE EXISTING IMPACT ATTENUATOR.*

PENNONI ASSOCIATES INC. | 5FILES
FILE NAME: | PEN TABLE: $PENTBLSS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN
		CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-13 | SECTION | PAI | SHEET NO. | 30

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1001	I.PCC CURB AND GUTTER, TYPE 3-4	97.00'
1002	PCC CURB, TYPE 1-6	10.50'
1003	I.PCC CURB AND GUTTER, TYPE 3-4	47.50'
1004	PCC CURB, TYPE 1-6	58.50'
1005	PCC CURB, TYPE 1-6	51.00'
1006	I.PCC CURB AND GUTTER, TYPE 3-4	132.50'
1007+	I.PCC CURB AND GUTTER, TYPE 3-2	63.00'
1008	PCC CURB, TYPE 2	65.50'
1009**	PCC CURB, TYPE 2	74.50'
1010**	PCC CURB, TYPE 2	105.50'
1011**	PCC CURB, TYPE 2	81.00'
1012	MODULAR BLOCK RETAINING WALLS	105.00'
1013	MODULAR BLOCK RETAINING WALLS	61.25'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1014+	I.PCC CURB AND GUTTER, TYPE 3-2	144.50'
1015**	PCC CURB, TYPE 2	46.50'
1016	I.PCC CURB AND GUTTER, TYPE 3-4	203.00'
1018	PCC CURB, TYPE 2	46.50'
1019+	I.PCC CURB AND GUTTER, TYPE 3-2	63.50'
1020+	I.PCC CURB AND GUTTER, TYPE 3-8	35.50'
1021+	I.PCC CURB AND GUTTER, TYPE 3-6	5.50'
1022	MODULAR BLOCK RETAINING WALLS	50.00'
1023	MODULAR BLOCK RETAINING WALLS	24.50'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
1001	106 LF	ALUMINUM PEDESTRIAN RAILING	STA. 467+12.00, 152.34' LT. TO STA. 468+17.00, 152.34' LT. (+/-)
1002	66 LF	ALUMINUM PEDESTRIAN RAILING	STA. 467+48.63, 47.79' RT. TO STA. 468+04.98, 35.29' RT. (+/-)

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#8 NB (N33)	467+89.17	17.32' RT	5.75" HMA OVER 4+" DIRTY CRUSHER RUN
#20 SB (N33)	470+60.66	136.79' LT	13.5" HMA OVER 4+" CRUSHER RUN

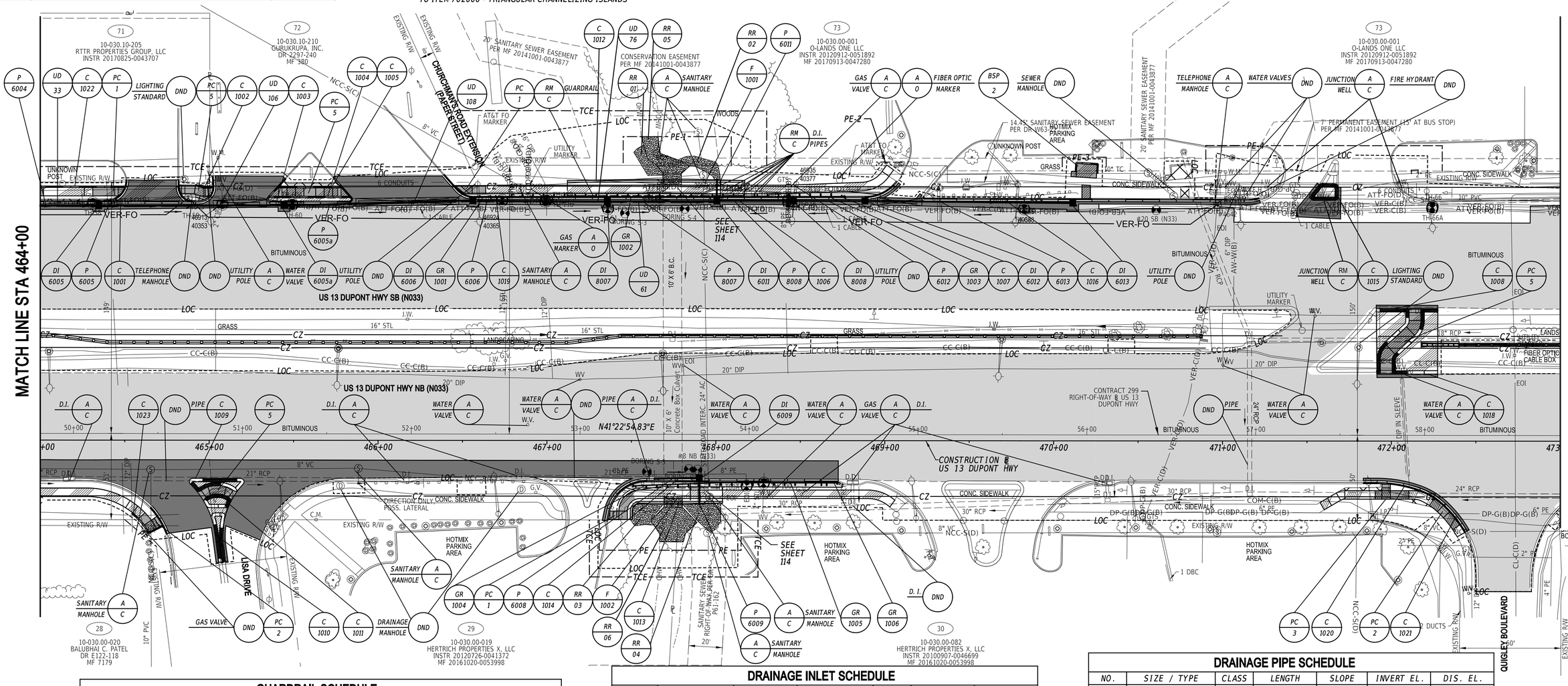
NOTES:

1. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.

RIPRAP SCHEDULE

NO.	TYPE	AREA (SY)
RR-01	R-6*	13.40
RR-02	R-6*	17.30
RR-03	R-6*	19.01
RR-04	R-6*	26.70
RR-05	R-6*	38.78
RR-06	R-6*	50.69

* R-6 RIPRAP TO BE CHOKED WITH NO. 57 STONE



GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1001	END ANCHORAGE 31	466+59.22	-144.14	15.00
1002	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	466+74.22	-144.15	151.50
1003	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	468+24.47	-144.26	50.00
1004	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	467+52.57	27.29	50.00
1005	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	468+02.51	24.75	56.90
1006	END ANCHORAGE 31	468+59.40	24.85	15.00

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
6005	464+34.47	*	72" x 48"	4	**	31.41
6005A	465+44.23	*	72" x 48"	4	**	27.90
6006	466+56.25	*	72" x 48"	4	**	23.91
6009	467+90.12	*	72" x 48"	4	**	18.50
6011	468+00.48	*	72" x 48"	1	**	20.70
6012	468+88.15	*	34" x 24"	4	**	23.14
6013	470+11.20	*	72" x 24"	4	**	24.57
8007	467+35.71	*	48" x 48"	4	**	22.40
8008	468+45.75	*	34" x 24"	4	**	22.50

* MATCH CURB FLOWLINE OFFSET ** MATCH CURB FLOWLINE ELEVATION

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
6005	18" RCP	IV	104.60	0.032	31.41	28.10
6005A	18" RCP	IV	106.10	0.036	27.90	24.11
6006	24" RCP	IV	74.60	0.018	23.91	22.60
6008	21" RCP	IV	24.40	0.014	MATCH EX.	20.60
6009	21" RCP	IV	13.40	0.019	18.50	18.25
6011	24" RCP	IV	11.00	0.018	20.70	20.50
6012	15" RCP	IV	39.40	0.011	23.14	22.70
6013	15" RCP	IV	118.80	0.010	24.57	23.34
8007	24" RCP	IV	59.80	0.013	22.40	21.60
8008	15" RCP	IV	40.90	0.012	22.50	22.00

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRVSS$
MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 25-JUL-2024 @ 12:29
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	1-664
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-14
SECTION PAI
SHEET NO. 31

ROADWAY CORE SCHEDULE

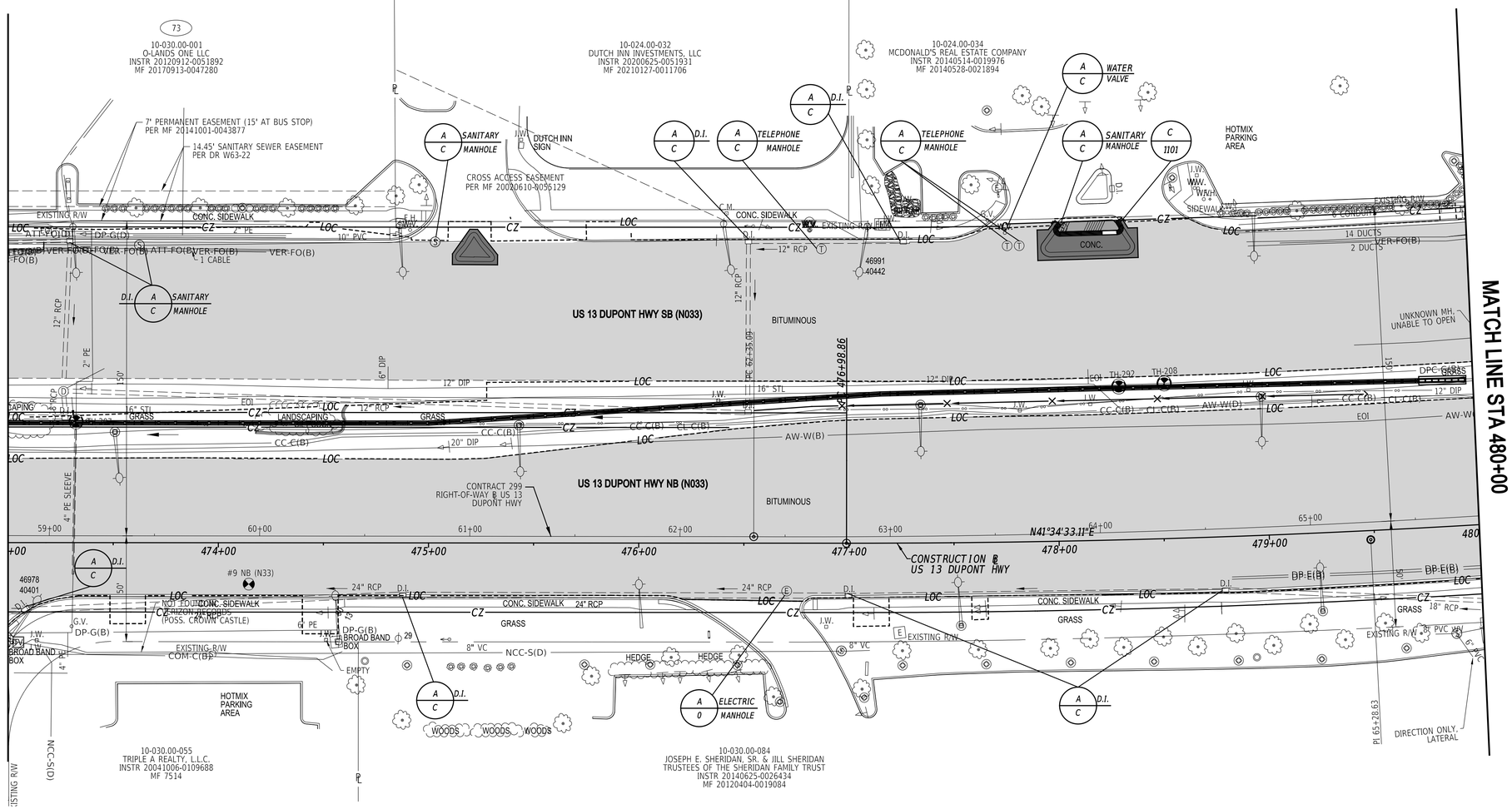
NO.	STATION	OFFSET	DESCRIPTION
#9 NB (N33)	474+14.51	19.68' RT	11.25" HMA OVER 6+" FILL

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1101	PCC CURB, TYPE 2	45.50'

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-207	DP-G	605959.95	602813.53	37.53	2.99	2.5" POLYETHYLENE
TH-208	DPC-G	606360.81	603141.51	55.81	4.79	18" WRAPPED STEEL
TH-292	DELDOT	606343.62	603128.37	54.99	1.45	3.5" STEEL



PENNONI ASSOCIATES INC. | PRN TABLE: $PRNTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 25-JUL-2024 @ 12:20
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-15
SECTION
PAI
SHEET NO.
32

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
100+	1.PCC CURB AND GUTTER, TYPE 3-8	150.00'
200**	PCC CURB, TYPE 2	137.50'
201**	PCC CURB, TYPE 2	107.00'
300**	PCC CURB, TYPE 2	56.50'
301**	PCC CURB, TYPE 2	52.00'
302**	PCC CURB, TYPE 1-6	26.50'
303**	PCC CURB, TYPE 1-6	24.50'
400**	PCC CURB, TYPE 2	23.50'
401**	PCC CURB, TYPE 2	24.50'
402**	PCC CURB, TYPE 2	41.50'
1201+	1.PCC CURB AND GUTTER, TYPE 3-6	39.50'
1202	PCC CURB, TYPE 1-6	18.00'
1213	PCC CURB, TYPE 2	22.50'
1214+	1.PCC CURB AND GUTTER, TYPE 3-6	64.50'
1215+	PCC CURB, TYPE 1-6	52.50'

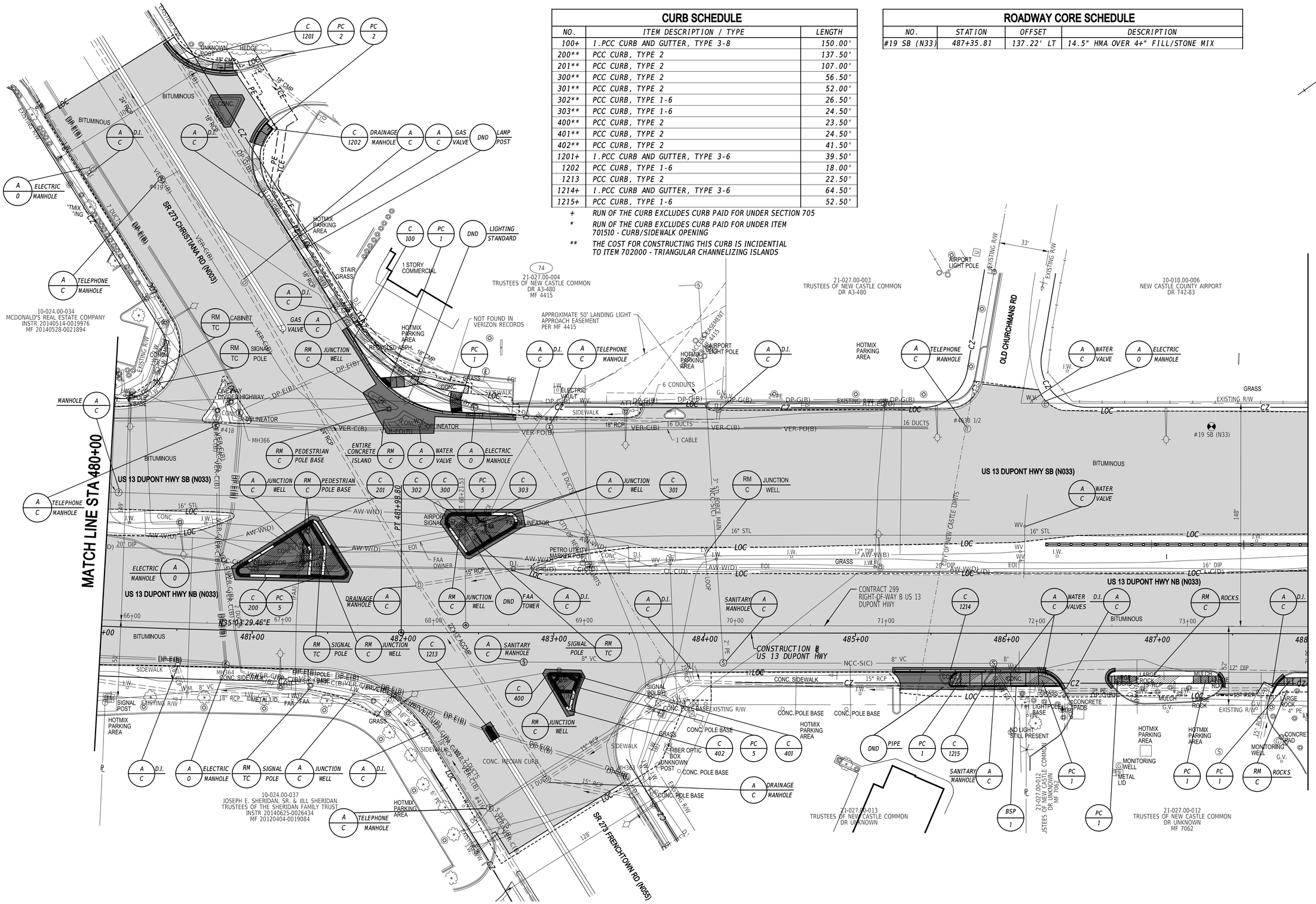
\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#19 SB (N33)	487+35.81	137.22' LT	14.5" HMA OVER 4+" FILL/STONE MIX



PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
FILE NAME: $FILES$ | PLOT DRIVER: $PLTDRVS$
MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 25-JUL-2024 @ 12:30
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN (PAI) D. HOLLEY (WRA)
		CHECKED BY:	P. HORSEY (PAI) T. OLIVER (WRA)

CONSTRUCTION PLAN

CP-16 | SECTION | PAI / WRA | SHEET NO. | 33

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1301	1.PCC CURB AND GUTTER, TYPE 3-6	166.50'
1302**	PCC CURB, TYPE 2	58.50'
1303**	PCC CURB, TYPE 2	55.50'

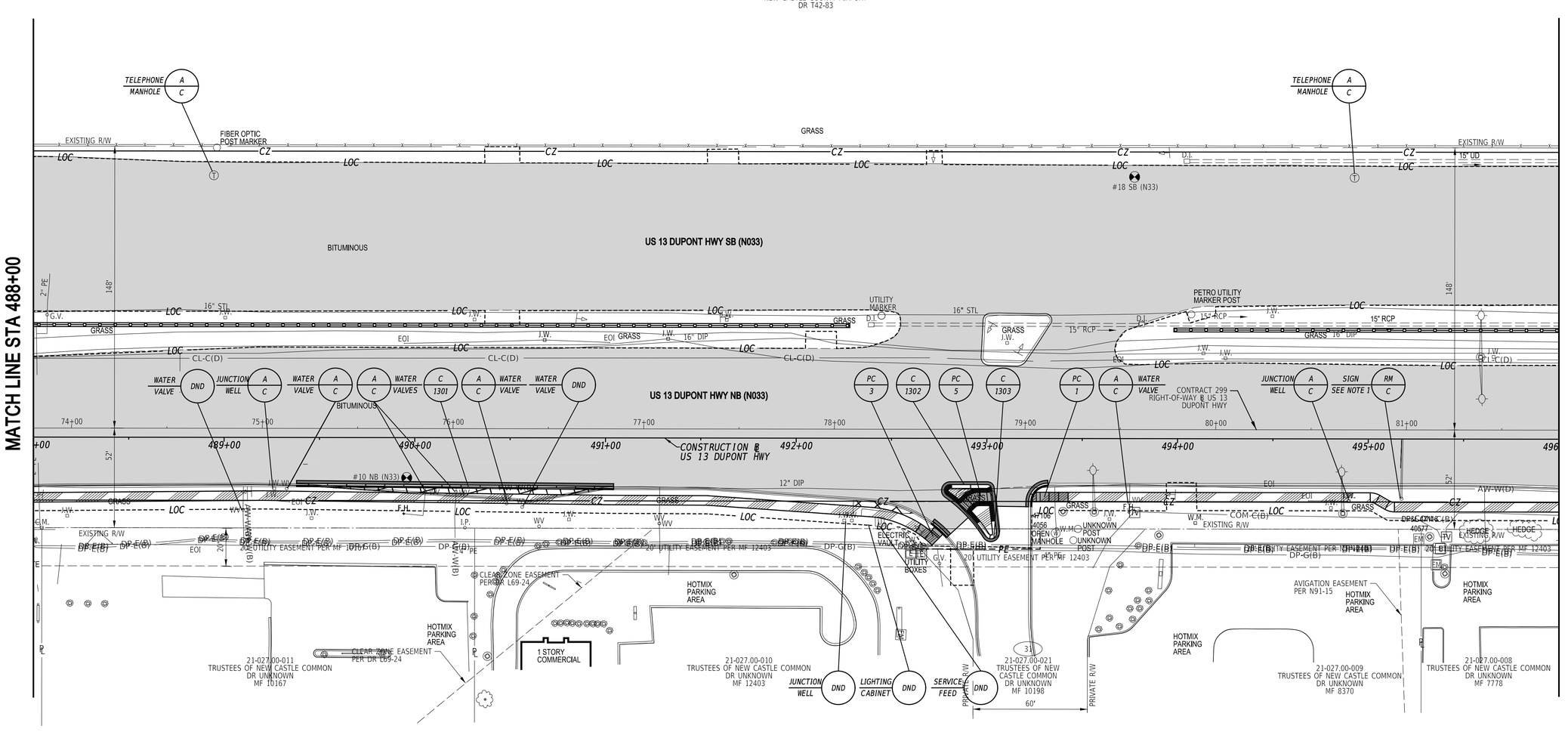
\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#10 NB (N33)	489+99.28	19.87' RT	3.75" HMA OVER 7.25" PCC OVER 6+" FILL
#18 SB (N33)	493+77.28	137.21' LT	10" HMA OVER 5+" FILL/STONE MIX



NOTES:

1. AFTER THE INSTALLATION OF A NEW GROUND-MOUNTED SIGN (AS SHOWN ON SS-17), THE CONTRACTOR SHALL REMOVE THE EXISTING CANTILEVER SIGN SC1155 AND THE SIGN FOUNDATION 1 FOOT BELOW GRADE. REMOVAL OF OVERHEAD SIGN PAID FOR UNDER ITEM 822009. REMOVAL OF SIGN STRUCTURE INCIDENTAL TO ITEM 211000 AND FOUNDATION PAID FOR UNDER ITEM 834501

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $PLTDRIVSS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRIVSS
DATE PLOTTED: 25-JUL-2024 @ 12:30
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	CONSTRUCTION PLAN
T201901102	DESIGNED BY:	O. GREEN	
COUNTY	CHECKED BY:	P. HORSEY	
NEW CASTLE			

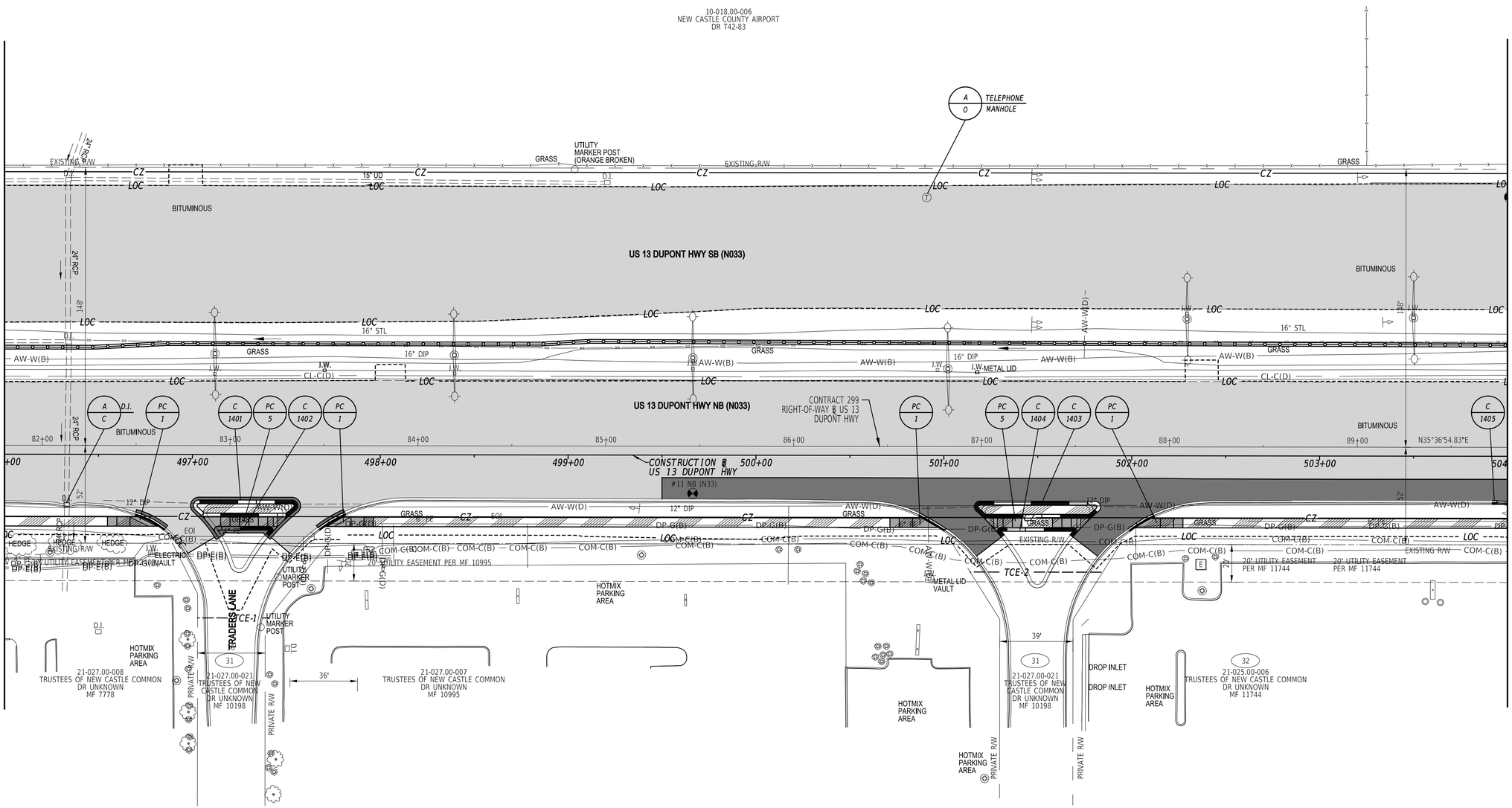
CP-17
SECTION
PAI
SHEET NO.
34

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1401	PCC CURB, TYPE 2	120.50'
1402	PCC CURB, TYPE 2	41.00'
1403	PCC CURB, TYPE 2	144.00'
1404	PCC CURB, TYPE 2	52.00'
1405	I.PCC CURB AND GUTTER, TYPE 3-6	8.50'

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#11 NB (N33)	499+63.32	19.04' RT	6" HMA OVER 4+" DIRTY CRUSHER RUN



PENNONI ASSOCIATES INC. | PRN TABLE: $PRNTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:20
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-18
SECTION PAI
SHEET NO. 35

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1501	1.PCC CURB AND GUTTER, TYPE 3-6	194.50'
1502	PCC CURB, TYPE 2	66.50'
1503	PCC CURB, TYPE 2	48.50'

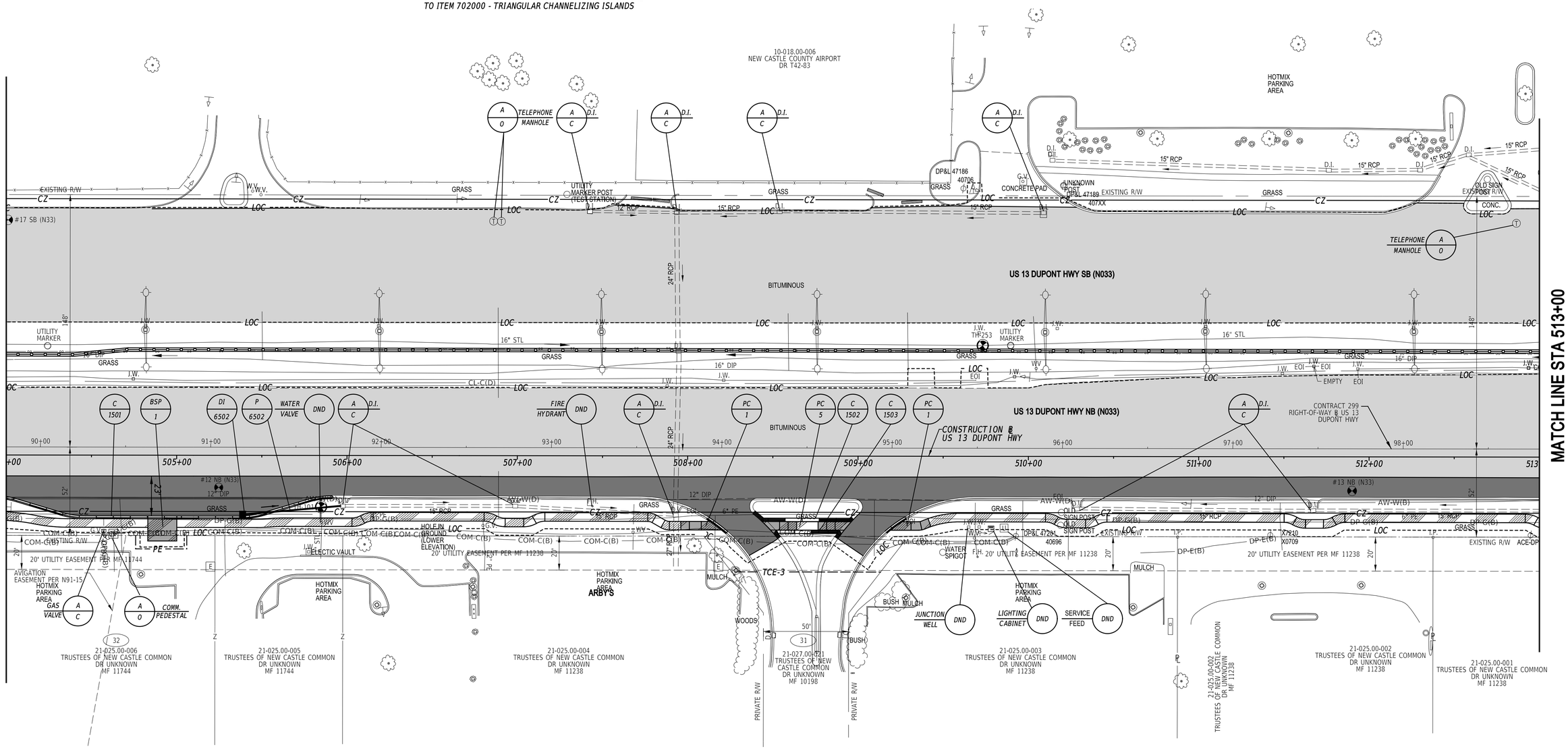
\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#12 NB (N33)	505+26.76	18.62' RT	4.5" HMA OVER 4+" DIRTY CRUSHER RUN
#13 NB (N33)	511+89.58	18.89' RT	4.75" HMA OVER 4+" DIRTY CRUSHER RUN
#17 SB (N33)	504+00.87	138.00' LT	4.25" HMA OVER 4+" CRUSHER RUN



UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-101	AW-W	608510.48	604823.83	67.47	5.02	1.5" GALV STEEL
TH-253	DPC-G	608881.61	604972.53	66.40	4.96	18" WRAPPED STEEL

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
6502	505+38.82	*	48" x 30"	1	**	63.80

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
6502	15" RCP	IV	55.50	0.002	63.80	63.68

PENNONI ASSOCIATES INC. 5FILES
FILE NAME: PLOT DRIVER: $PLTDRVS$
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACES$
PRN TABLE: $PRNTBLS$
DATE PLOTTED: 25-JUL-2024 @ 12:20
USER NAME: $USERS$ OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	O. GREEN
		CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-19
SECTION PAI
SHEET NO. 36

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#14 NB (N33)	519+47.80	19.89' RT	4.5" HMA OVER 4+" DIRTY CRUSHER RUN
#16 SB (N33)	514+27.55	137.66' LT	10" HMA OVER 3+" BIG STONE

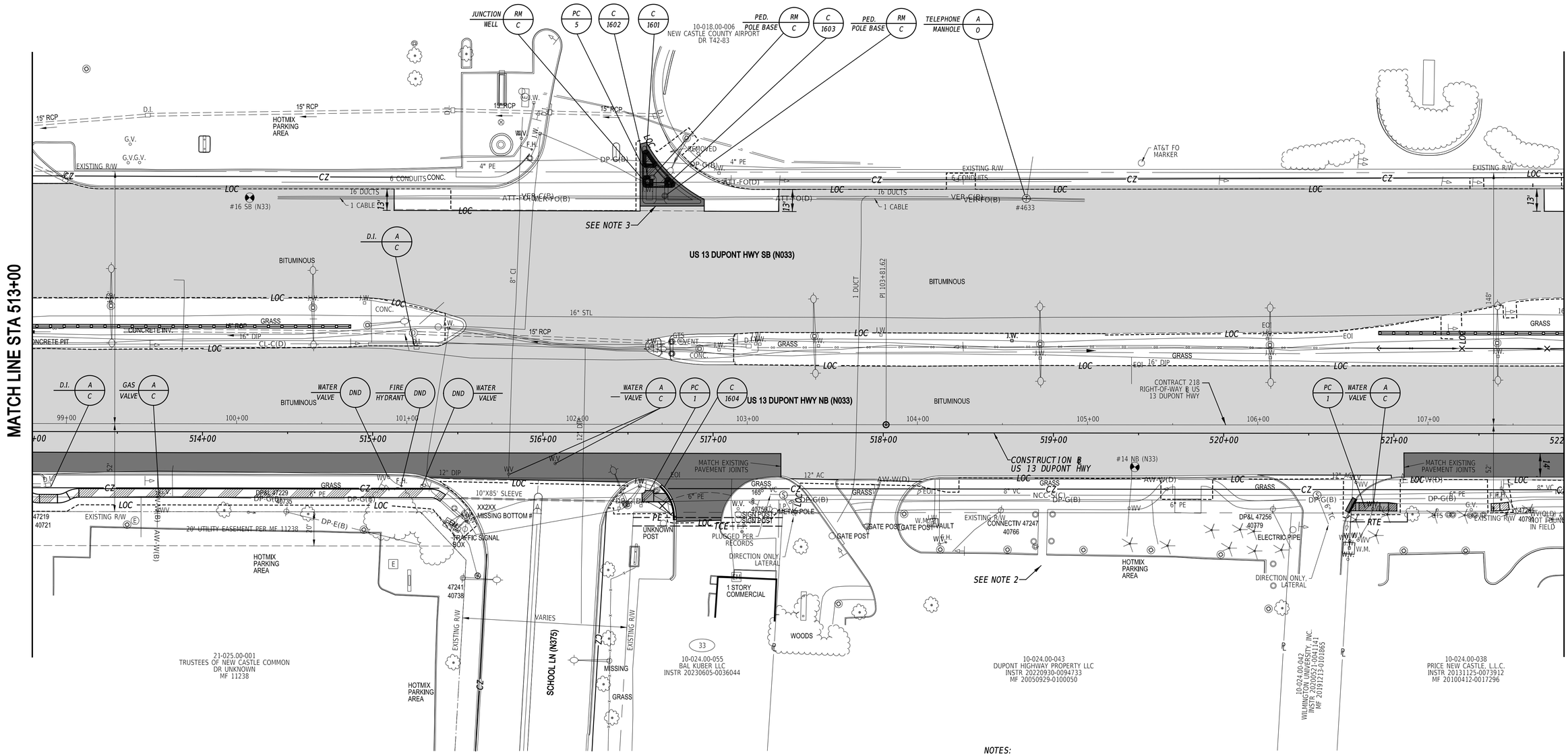
CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1601**	PCC CURB, TYPE 2	30.50'
1602**	PCC CURB, TYPE 2	19.50'
1603**	PCC CURB, TYPE 2	19.50'
1604+	I.PCC CURB AND GUTTER, TYPE 3-8	8.50'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR COSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS



NOTES:

1. WHERE A RIGHT TO ENTRY (RTE) LINE IS DESIGNATED ON THE PLANS, IT INDICATES LOCATIONS WHERE THE DEPARTMENT ALREADY HAS THE RIGHT UNDER DELAWARE CODE TO ENTER ONTO PRIVATE PROPERTY TO MAINTAIN, REPAIR OR RECONSTRUCT FACILITIES USED BY THE PUBLIC AND MAINTAINED AT PUBLIC EXPENSE.
2. CONSTRUCTION FOR DEVELOPMENT PROJECT SMO #1406 WAS RECENTLY COMPLETED. THE CONTRACTOR SHALL CONSTRUCT THE PEDESTRIAN FACILITIES AT STATION 516+65 (R) AND AT STATION 520+75(R) AS SHOWN ON THIS SHEET TO TIE INTO THE NEW PEDESTRIAN FACILITIES CONSTRUCTED AS PART OF THE DEVELOPMENT PROJECT.
3. PROPOSED ISLAND WORK OUTSIDE EXISTING RIGHT-OF-WAY TO BE PERFORMING UNDER EXISTING TRAFFIC SIGNAL INSTALLATION AND MAINTENANCE AGREEMENT BETWEEN THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION AND DRBA, AS NOTED ON EXISTING SIGNAL PLAN PERMIT NO. N-008P.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:20
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-20

SECTION
PAI
SHEET NO.
37

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1701+	1.PCC CURB AND GUTTER, TYPE 3-4	74.50'
1702	PCC CURB, TYPE 1-6	38.00'
1703	1.PCC CURB AND GUTTER, TYPE 3-6	31.00'
1704	MODULAR BLOCK RETAINING WALLS	13.00'

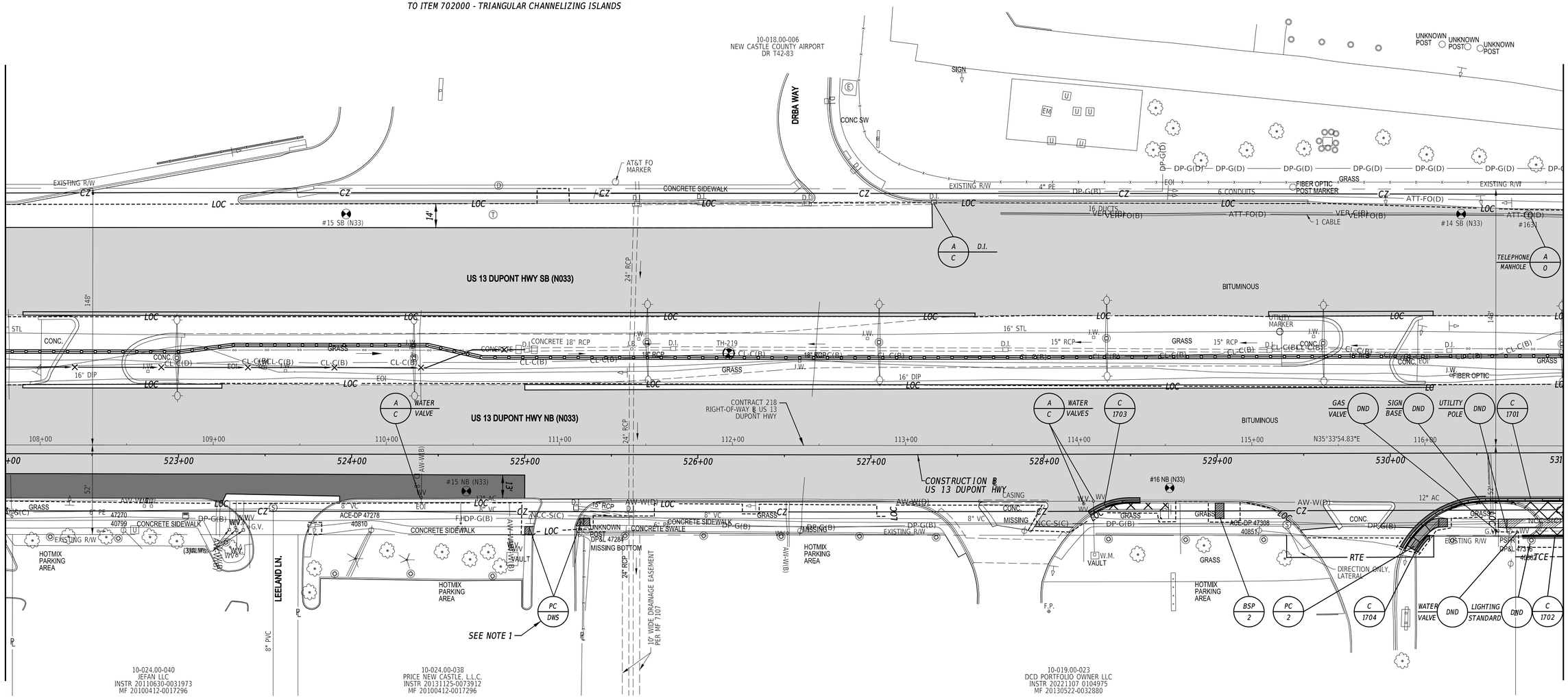
\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#15 NB (N33)	524+64.24	19.41' RT	6" HMA OVER 4+" FILL
#16 NB (N33)	528+69.49	20.14' RT	9" HMA OVER 4+" FILL
#14 SB (N33)	530+41.36	138.03' LT	19" HMA OVER 6+" CLAY
#15 SB (N33)	523+96.62	138.73' LT	10.5" HMA OVER 4+" DIRTY FILL



UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-219	CL-C	610214.84	605935.44	70.05	2.15	(2) 1.5" PE

NOTES:

1. *WHERE A RIGHT TO ENTRY (RTE) LINE IS DESIGNATED ON THE PLANS, IT INDICATES LOCATIONS WHERE THE DEPARTMENT ALREADYHAS THE RIGHT UNDER DELAWARE CODE TO ENTER ONTO PRIVATE PROPERTY TO MAINTAIN, REPAIR OR RECONSTRUCT FACILITIES USED BY THE PUBLIC AND MAINTAINED AT PUBLIC EXPENSE.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:20
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-21

SECTION	PAI
SHEET NO.	38

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1801+	1.PCC CURB AND GUTTER, TYPE 3-4	288.50'
1802	PCC CURB, TYPE 1-6	312.00'
1803+	PCC CURB, TYPE 1-6	18.00'
1804+	PCC CURB, TYPE 1-6	31.50'
1805**	PCC CURB, TYPE 2	60.50'
1806**	PCC CURB, TYPE 2	39.50'
1807	MODULAR BLOCK RETAINING WALLS	29.00'
1808+	PCC CURB, TYPE 1-6	9.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

UTILITY TEST HOLE SCHEDULE

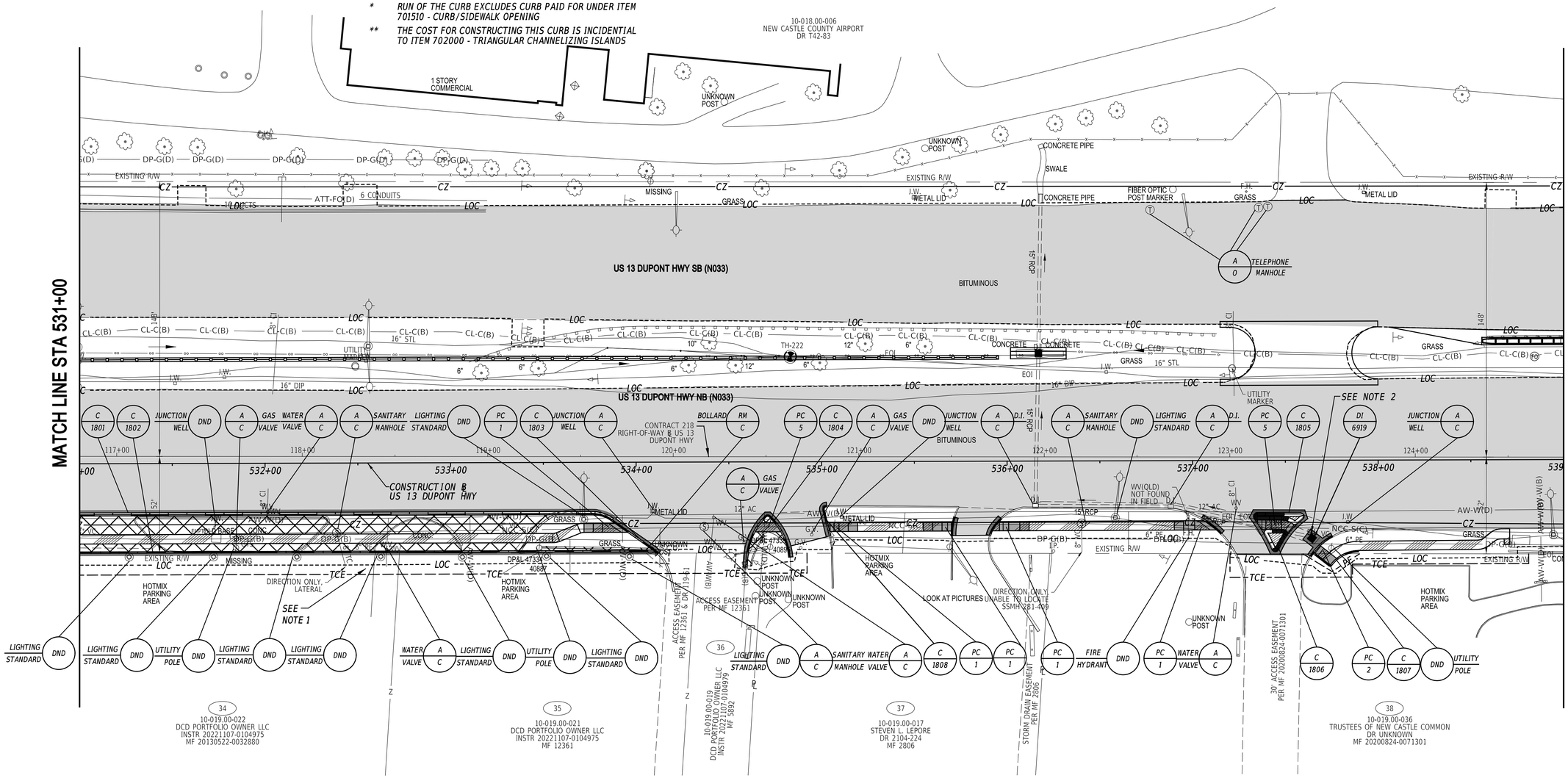
NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-222	DPC-G	610919.17	606438.14	70.10	3.88	18" WRAPPED STEEL

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
6919	537+64.22	*	34" x 24"	7	**	MATCH EX.

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION



NOTES:

1. 26 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
2. PROPOSED DRAINAGE INLET IS LOCATED IN THE NEW PEDESTRIAN ACCESS ROUTE. TYPE 7 GRATE SHALL BE PLACED ACCORDING TO SECTION 3.1.5.3 OF THE DELDOT PEDESTRIAN ACCESSIBILITY STANDARDS MANUAL (LATEST EDITION).

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$ | FILE NAME: $FILEAS$ | MICROSTATION VERSION: $VERSIONS$ | MICROSTATION WORKSPACE: $WORKSPACES$ | PLOT DRIVER: $PLTDRIVS$ | DATE PLOTTED: 25-JUL-2024 @ 12:30 | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO. N/A
T201901102	DESIGNED BY: O. GREEN
COUNTY	CHECKED BY: P. HORSEY
NEW CASTLE	

CONSTRUCTION PLAN

CP-22
SECTION PAI
SHEET NO. 39

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1901	PCC CURB, TYPE 1-4	129.00'
1902**	PCC CURB, TYPE 2	74.50'
1903**	PCC CURB, TYPE 2	45.00'
1904	MODULAR BLOCK RETAINING WALLS	29.00'
1905+	PCC CURB, TYPE 1-4	215.00'
1906+	PCC CURB, TYPE 1-4	321.00'
1907+	PCC CURB, TYPE 1-4	405.00'
1908	MODULAR BLOCK RETAINING WALLS	85.00'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1909+	PCC CURB, TYPE 1-6	73.50'
1910+	PCC CURB, TYPE 1-6	62.00'
1911+	PCC CURB, TYPE 1-6	30.50'
1912	PCC CURB, TYPE 1-6	11.00'
1913	PCC CURB, TYPE 1-6	11.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

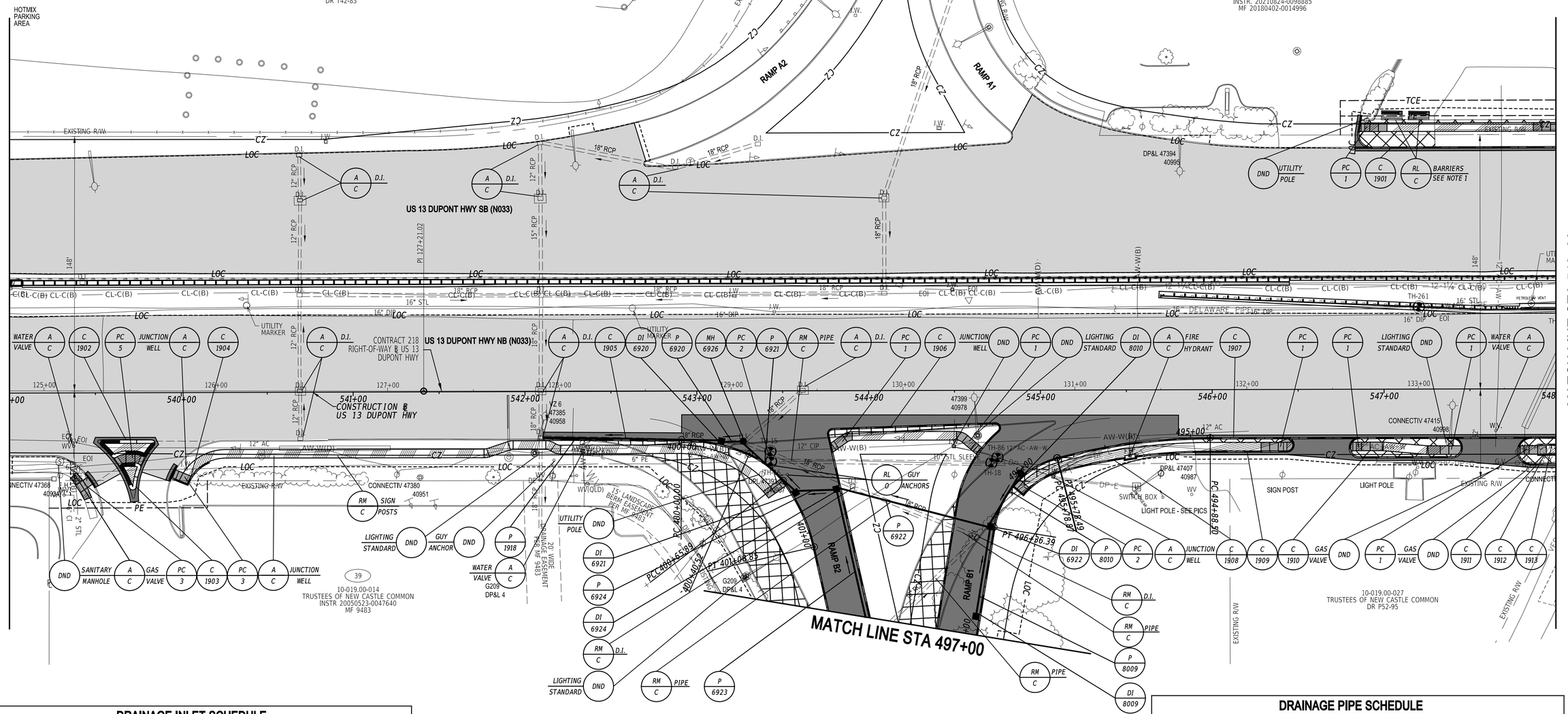
** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INVERT EL.
6926	400+34.67	-5.61	48" x 48" BOX	75.87	71.28

NOTES:

1. CONTRACTOR SHALL REMOVE BARRIERS TO PERFORM WORK. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPLACE IN LOCATION AS NOTED ON THIS PLAN. PAYMENT UNDER 211000.



DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
6920	400+22.91	*	48" x 48"	4	**	71.13
6921	400+75.67	*	48" x 30"	4	**	71.48
6922	496+36.37	*	72" x 48"	1	**	72.02
6924	400+84.74	*	48" x 48"	4	**	71.58
8009	496+89.32	*	34" x 24"	4	**	73.00
8010	496+01.53	*	48" x 30"	4	**	72.81

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-15	AW-W	611566.87	607010.52	76.70	6.35	13" CAST IRON
TH-16	DP-G	611563.80	607015.50	76.87	5.69	7" POLYETHYLENE
TH-86	DELDOT	611672.37	607090.21	77.62	2.23	2.5" STEEL
TH-261	DPC-G	611922.85	607161.44	76.78	4.16	18" WRAPPED STEEL
TH-18	DP-G	611667.68	607090.68	77.65	4.28	10" STEEL CASING

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
1918	18" RCP	IV	102.00	0.021	71.13	69.02
6920	18" RCP	IV	9.00	0.017	71.28	71.13
6921	18" RCP	IV	39.80	0.005	71.48	71.28
6922	18" RCP	IV	88.60	0.005	72.02	71.58
6923	18" RCP	IV	86.40	0.015	73.05	71.75
6924	18" RCP	IV	20.10	0.005	71.58	71.48
8009	15" RCP	V	48.70	0.011	73.00	72.46
8010	18" RCP	V	31.00	0.011	72.81	72.46

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-23

SECTION PAI

SHEET NO. 40

PENNONI ASSOCIATES INC. — FILE NAME: S:\FILES\ — MICROSTATION VERSION: S:\VERSIONS\ — MICROSTATION WORKSPACE: S:\WORKSPACES\
PEN TABLE: $PENTBLS$ — PLOT DRIVER: $PLTDRVSS$ — DATE PLOTTED: 25-JUL-2024 @ 12:30 — USER NAME: $USERS$ — OFFICE LOCATION: $OFFICENAMES$

Pennoni

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2001+	PCC CURB, TYPE 1-4	73.00'
2002	PCC CURB, TYPE 1-6	142.00'
2003	PCC CURB, TYPE 1-6	146.00'
2004+	PCC CURB, TYPE 1-6	22.50'
2005+	PCC CURB, TYPE 1-2	36.00'
2006+	PCC CURB, TYPE 1-6	27.00'
2007	PCC CURB, TYPE 1, MODIFIED	120.00'
2008+	PCC CURB, TYPE 1-2	25.00'

CONVERT EXISTING D.I. TO MANHOLE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INVERT EL.
7203	555+82.03	20.31	MATCH EX.	66.94	59.71

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
7020	15" RCP	IV	31.20	0.026	63.87	63.07

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2009+	PCC CURB, TYPE 1-4	213.50'
2010+	PCC CURB, TYPE 1-4	150.50'
2011+	PCC CURB, TYPE 1-4	184.00'
2012+	PCC CURB, TYPE 1-4	168.00'
2013+	PCC CURB, TYPE 1-4	211.50'
2014	PCC CURB, TYPE 1-4	25.50'
2015	PCC CURB, TYPE 1-6	106.50'
2016	PCC CURB, TYPE 1-6	100.50'

NOTES:

1. 13 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION. PARKING BUMPERS TO BE PERMANENTLY REMOVED.
2. 4 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
3. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2017+	PCC CURB, TYPE 1-6	13.50'
2018	PCC CURB, TYPE 1, MODIFIED	73.50'
2019+	PCC CURB, TYPE 1-4	269.00'
2021	PCC CURB, TYPE 1-2	24.00'
2022+	PCC CURB, TYPE 1-2	26.50'
2023	PCC CURB, TYPE 1-6	4.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

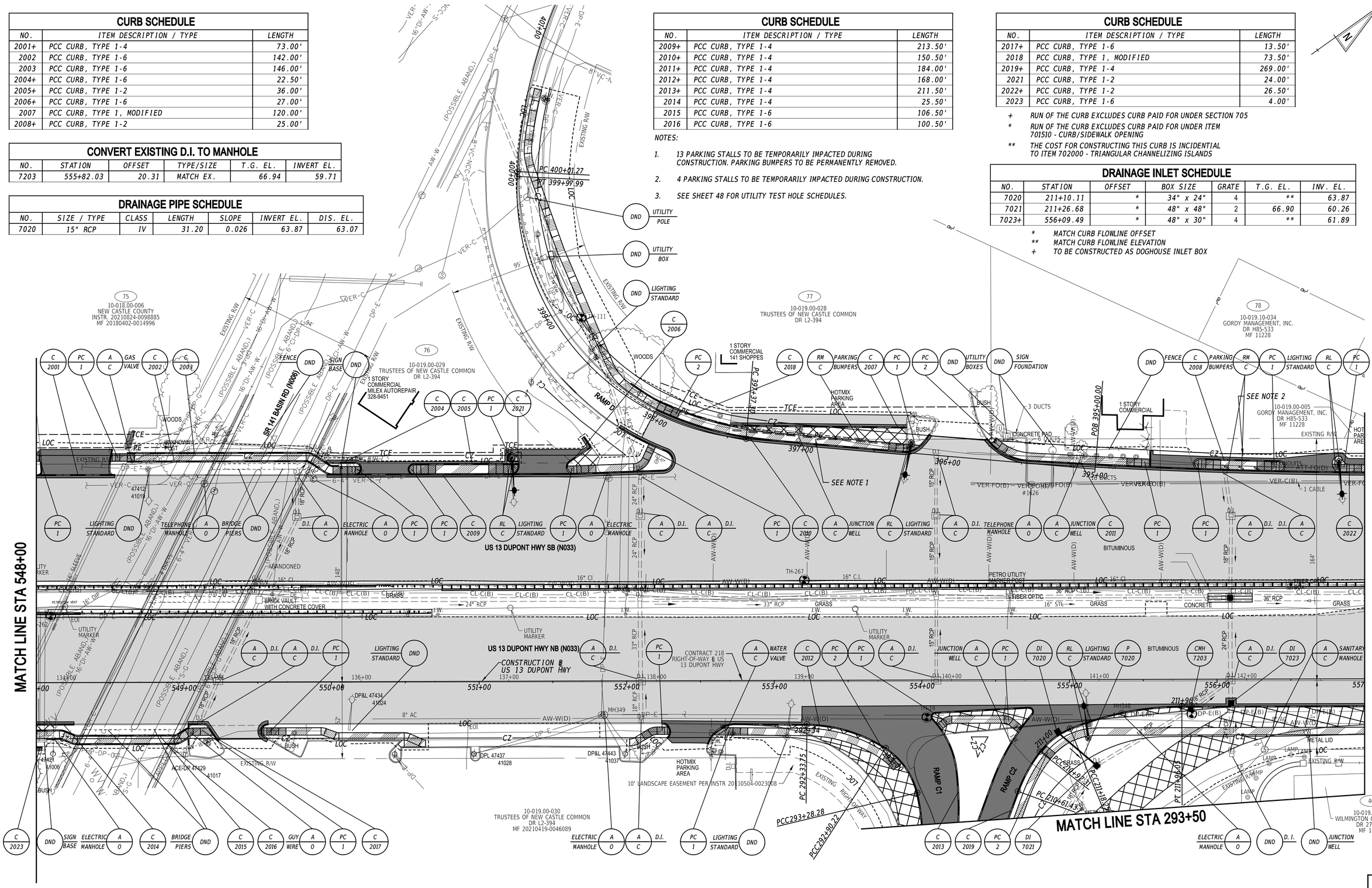
DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7020	211+10.11	*	34" x 24"	4	**	63.87
7021	211+26.68	*	48" x 48"	2	66.90	60.26
7023+	556+09.49	*	48" x 30"	4	**	61.89

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

\+ TO BE CONSTRUCTED AS DOGHOUSE INLET BOX



PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$ | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRV$$ | MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 25-JUN-2024 @ 12:30 | MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAME$

Pennoni

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-24
SECTION
PAI
SHEET NO.
41

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2102+	PCC CURB, TYPE 1-4	63.00'
2103	PCC CURB, TYPE 1-6	82.00'
2104+	PCC CURB, TYPE 1-6	28.50'
2105+	PCC CURB, TYPE 2	50.00'
2106+	PCC CURB, TYPE 1-6	42.00'
2107+	PCC CURB, TYPE 2	26.00'
2108+	I.PCC CURB AND GUTTER, TYPE 3-6	59.00'
2109+	PCC CURB, TYPE 1-6	63.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2110+	PCC CURB, TYPE 1-2	N/A
2111+	PCC CURB, TYPE 1-8	N/A
2112	MODULAR BLOCK RETAINING WALLS	66.00'
2113	MODULAR BLOCK RETAINING WALLS	120.50'
2114	PCC CURB, TYPE 1-8	24.00'
2115	I.PCC CURB AND GUTTER, TYPE 3-2	11.50'
2116+	PCC CURB, TYPE 1-2	73.50'
2117+	PCC CURB, TYPE 1-4	148.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2118+	PCC CURB, TYPE 1-4	9.50'
2119	PCC CURB, TYPE 1-8	23.50'
2120+	PCC CURB, TYPE 1-4	47.00'
2121	PCC CURB, TYPE 1-2	226.00'

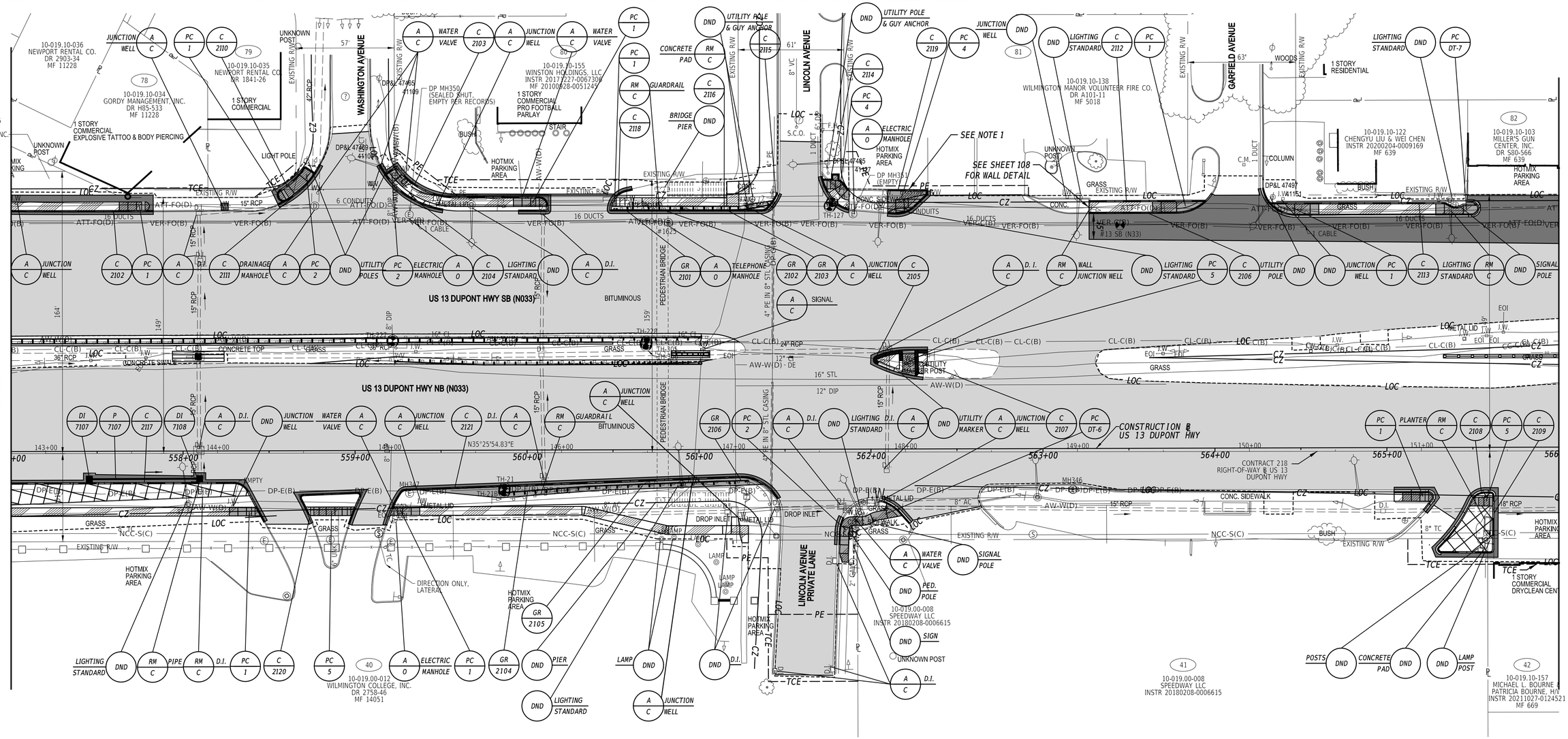
\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#13 SB (N33)	563+45.22	129.88' LT	5.25" HMA OVER DIRT AND LARGE ROCKS



GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
2101	END ANCHORAGE 31	560+51.72	-139.30	15.00
2102	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	560+66.71	-139.21	24.05
2103	GUARDRAIL END TREATMENT, TYPE 2-31, TEST LEVEL 3	560+90.77	-139.10	50.00
2104	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	559+86.10	24.68	50.00
2105	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	560+35.94	21.00	76.56
2106	END ANCHORAGE 31	561+12.46	18.44	15.00

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7107	557+45.44	*	34" x 24"	4	**	63.83
7108	558+09.58	*	34" x 24"	4	**	62.75

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
7107	15" RCP	V	61.40	0.014	63.83	62.95

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

NOTES:

1. 1 PARKING STALL TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
2. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.

PENNONI ASSOCIATES INC. | PEN TABLE: SPEUTRISS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:20
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-25

SECTION	PAI
SHEET NO.	42

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2201+	PCC CURB, TYPE 1-6	175.50'
2203+	PCC CURB, TYPE 1-6	25.00'
2204+	I.PCC CURB AND GUTTER, TYPE 3-4	150.00'
2205+	I.PCC CURB AND GUTTER, TYPE 3-4	9.00'
2206+	I.PCC CURB AND GUTTER, TYPE 3-4	26.50'
2207+	PCC CURB, TYPE 1-4	86.50'
2208+	PCC CURB, TYPE 2	58.00'
2209+	PCC CURB, TYPE 1-6	N/A

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2210+	I.PCC CURB AND GUTTER, TYPE 3-4	N/A
2211+	PCC CURB, TYPE 2	74.00'
2213+	I.PCC CURB AND GUTTER, TYPE 3-6	17.00'
2214+	I.PCC CURB AND GUTTER, TYPE 3-6	31.00'
2215+	I.PCC CURB AND GUTTER, TYPE 3-6	19.50'
2216+	I.PCC CURB AND GUTTER, TYPE 3-6	10.00'
2217+	I.PCC CURB AND GUTTER, TYPE 3-6	52.00'
2218+	PCC CURB, TYPE 1-6	19.50'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2219+	PCC CURB, TYPE 1-6	N/A
2220	PCC CURB, TYPE 1-8	13.50'
2221+	I.PCC CURB AND GUTTER, TYPE 3-6	20.00'
2223	PCC CURB, TYPE 1-8	22.00'
2224	PCC CURB, TYPE 1-4	239.00'
2225+	PCC CURB, TYPE 1-2	60.50'
2226	PCC CURB, TYPE 1-6	12.00'

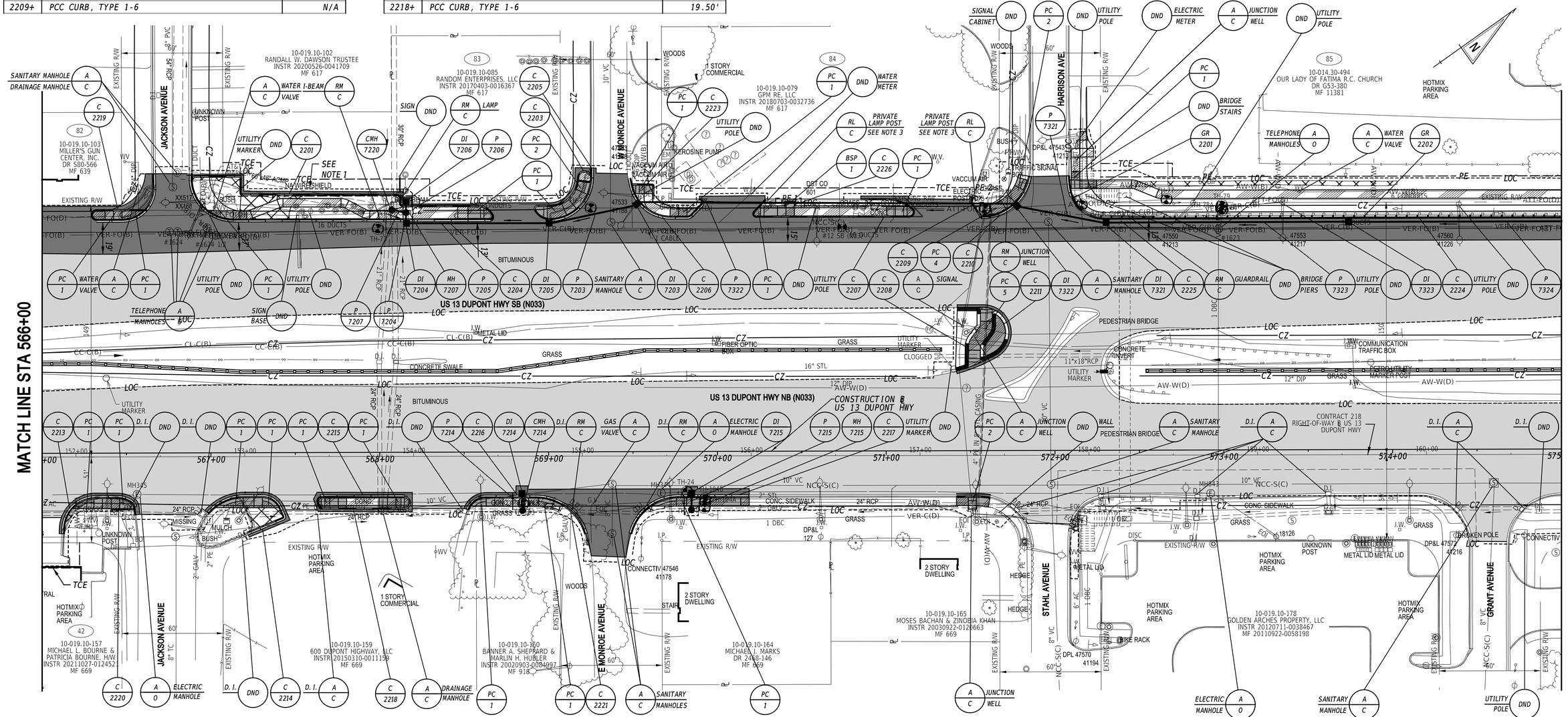
ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#12 SB (N33)	570+74.24	132.87' LT	7" HMA OVER 3+" SELECT BORROW

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS



DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7203	569+52.55	*	72"x 24"	4	**	50.60
7204	568+16.24	*	72"x 48"	4	**	49.73
7205	569+00.71	*	48"x 48"	4	**	50.23
7206	568+15.86	*	34"x 24"	1	**	50.60
7214	568+84.15	*	34"x 24"	1	**	53.10
7215	569+84.72	*	34"x 24"	1	**	53.94
7321	572+30.73	*	48"x 48"	4	**	52.20
7322	571+77.98	*	72"x 24"	4	**	51.90
7323	573+74.19	*	48"x 48"	4	**	53.10

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
2201	END ANCHORAGE 31	572+10.78	-149.37	15.00
2202	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	572+20.95	-138.81	290.94

MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INVERT EL.
7207	568+15.95	142.07	48" X 48" BOX	55.50	49.61
7215+	569+84.52	34.50	48" X 48" BOX	57.41	53.70

CONVERT EXISTING D.I. TO MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INVERT EL.
7214	568+84.41	34.73	MATCH EXIST.	***	****
7220	568+07.57	143.70	MATCH EXIST.	***	****

*** MATCH EXISTING T.G. EL.

**** MATCH EXISTING INVERT EL.

\+ TO BE CONSTRUCTED AS DOGHOUSE MANHOLE

NOTES:

1. APPROXIMATELY 4 PARKING STALLS TO BE TEMPORARILY IMPACTED.
2. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.
3. CONTRACTOR TO TEMPORARILY REMOVE PRIVATE LAMP POST PRIOR TO WORK IN AREA. UPON COMPLETION OF WORK, CONTRACTOR SHALL REINSTALL PRIVATE LAMP POST TO ORIGINAL LOCATION. THE COST FOR REMOVING AND REINSTALLING PRIVATE LAMP POST IS INCIDENTAL TO ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
7203	24" RCP	IV	50.70	0.005	50.60	50.33
7204	24" RCP	IV	2.80	0.007	49.73	49.71
7205	24" RCP	IV	79.70	0.005	50.23	49.83
7206	15" RCP	IV	1.70	0.059	50.60	50.50
7207	24" RCP	IV	4.10	0.005	49.61	49.59
7214	15" RCP	IV	8.90	0.011	53.10	53.00
7215	15" RCP	V	8.00	0.005	53.94	53.90
7321	24" RCP	IV	51.70	0.004	52.20	52.00
7322	24" RCP	IV	220.90	0.005	51.90	50.70
7323	24" RCP	IV	139.30	0.006	53.10	52.30
7324	24" RCP	IV	180.90	0.005	54.10	53.20

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$ | FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRIVSS$ | MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 25-JUL-2024 @ 12:30 | MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-26
SECTION
PAI
SHEET NO.
43

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2300	PCC CURB, TYPE 1-4	144.50'
2301+	PCC CURB, TYPE 1-6	11.00'
2302	PCC CURB, TYPE 1-4	144.50'
2304+	I.PCC CURB AND GUTTER, TYPE 3-4	38.00'
2305+	I.PCC CURB AND GUTTER, TYPE 3-4	101.50'
2306+	I.PCC CURB AND GUTTER, TYPE 3-4	19.00'
2307	PCC CURB, TYPE 1-6	9.00'
2308+	PCC CURB, TYPE 1-6	49.00'
2309	PCC CURB, TYPE 1, MODIFIED	41.50'
2310	PCC CURB, TYPE 1-4	26.00'

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2311	MODULAR BLOCK RETAINING WALLS	70.00'
2312	MODULAR BLOCK RETAINING WALLS	119.50'
2313	MODULAR BLOCK RETAINING WALLS	66.50'
2314+	I.PCC CURB AND GUTTER, TYPE 3-4	5.00'
2315+	PCC CURB, TYPE 1-2	71.50'
2316+	PCC CURB, TYPE 2	83.00'
2317	PCC CURB, TYPE 2	19.00'
2318+	PCC CURB, TYPE 1-8	5.00'
2319+	PCC CURB, TYPE 1-4	11.00'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

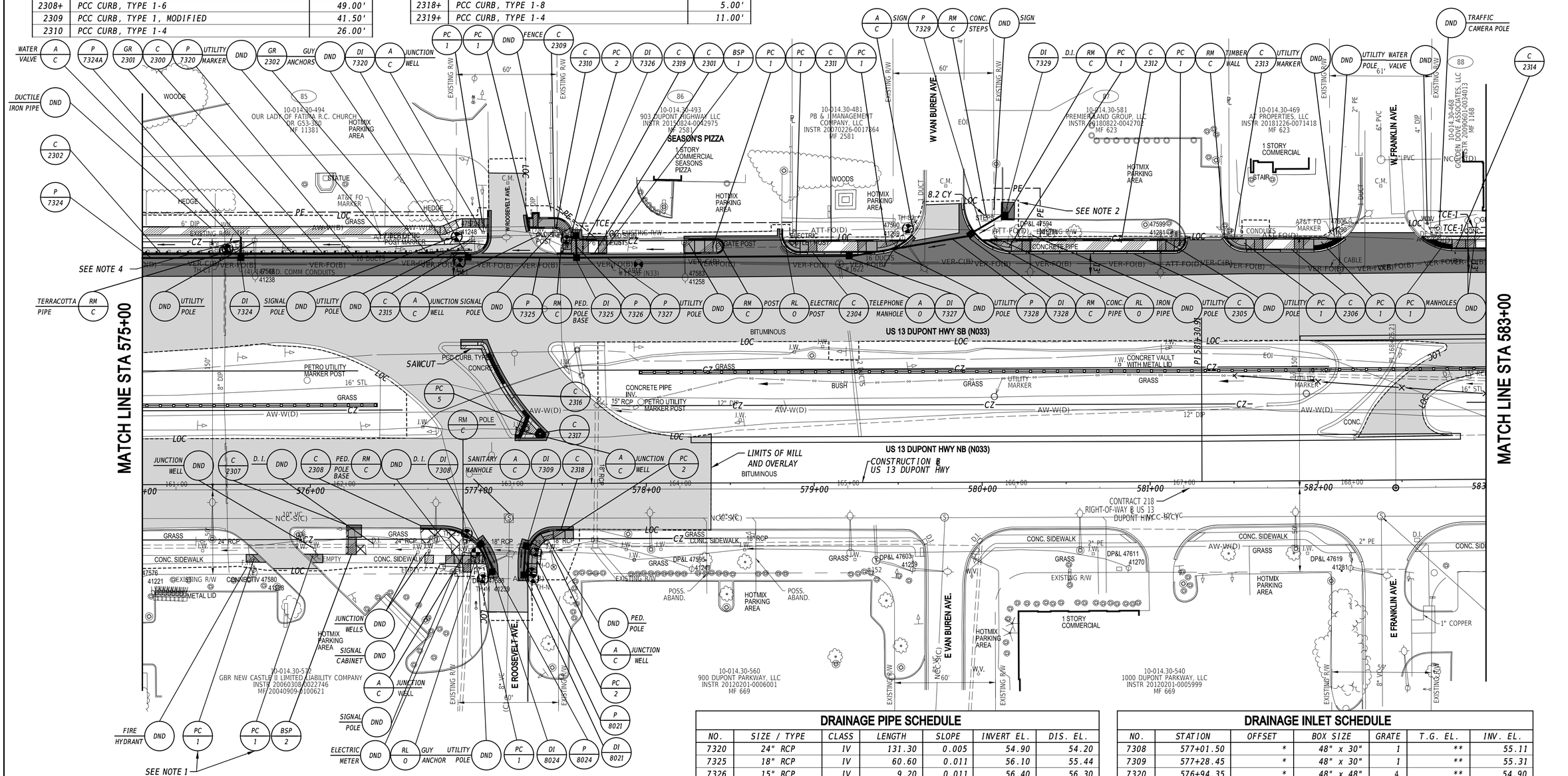
** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
2301	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	575+00.00	-137.00	144.19
2302	GUARDRAIL END TREATMENT,TYPE 1-31,TEST LEVEL 3	576+44.79	-137.00	50.00

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#11 SB (N33)	577+95.73	130.34' LT	5.5" HMA OVER 3+" BIG STONE



DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
7320	24" RCP	IV	131.30	0.005	54.90	54.20
7325	18" RCP	IV	60.60	0.011	56.10	55.44
7326	15" RCP	IV	9.20	0.011	56.40	56.30
7327	18" RCP	IV	158.30	0.011	57.90	56.15
7328	15" RCP	IV	71.10	0.010	58.80	58.10
7329	15" RCP	IV	19.80	0.012	59.24	59.00
8021	15" RCP	IV	13.10	0.027	55.67	55.31
8024	15" RCP	IV	13.60	0.004	55.17	55.11
7324A	6" PVC	HPDE	10.00	0.109	56.86	55.77

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7308	577+01.50	*	48" x 30"	1	**	55.11
7309	577+28.45	*	48" x 30"	1	**	55.31
7320	576+94.35	*	48" x 48"	4	**	54.90
7324	575+59.07	*	48" x 48"	4	**	54.10
7325	577+58.97	*	48" x 30"	4	**	56.10
7326	577+58.58	*	34" x 24"	1	**	56.40
7327	579+21.21	*	48" x 30"	4	**	57.90
7328	579+93.57	*	72" x 24"	1	**	58.80
7329	580+14.11	*	48" x 48"	1	**	59.24
8021	577+27.01	*	48" x 30"	4	**	55.67
8024	577+08.09	*	48" x 30"	4	**	55.17

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION

NOTES:

1. ONLY TO RECONSTRUCT AND REPLACE THE DETECTABLE WARNING SURFACE (DWS) AND ADJACENT CONCRETE PANEL.
2. 4 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.
3. SEE SHEET 48 FOR UTILITY TEST HOLE SCHEDULES.
4. AT PARCEL 85, INSTALL PROPOSED FLEXIBLE COUPLING (ITEM 701511) TO CONNECT PROPOSED PIPE ID P/7324A AND EXISTING UNDERGROUND 6 INCH INSIDE DIAMETER CLAY/TERRACOTTA PIPE. PROPOSED FLEXIBLE COUPLING (ITEM 701511) SHALL CONFORM TO THE REQUIREMENTS IN THE SPECIAL PROVISION.

PENNONI ASSOCIATES INC. | FILE NAME: | MICROSTATION VERSION: | MICROSTATION WORKSPACES:
$FILEAS | $VERSIONS | SWORKSPACES
PEN TABLE: $PENTBLSS | PLOT DRIVER: $PLTDRVSS | DATE PLOTTED: 25-JUL-2024 @ 12:30 | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-27
SECTION PAI
SHEET NO. 44

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2401+	I.PCC CURB AND GUTTER, TYPE 3-4	52.50'
2402+	I.PCC CURB AND GUTTER, TYPE 3-6	10.50'
2403+	PCC CURB, TYPE 1-4	28.00'
2404+	I.PCC CURB AND GUTTER, TYPE 3-6	192.00'
2405+	PCC CURB, TYPE 1-6	12.50'
2406+	PCC CURB, TYPE 1-2	32.50'
2407+	PCC CURB, TYPE 1-4	77.50'
2408+	I.PCC CURB AND GUTTER, TYPE 3-4	108.50'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705

* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2409+	I.PCC CURB AND GUTTER, TYPE 3-6	36.50'
2410	MODULAR BLOCK RETAINING WALLS	18.00'
2411	PCC CURB, TYPE 1-8	22.50'

DRAINAGE PIPE SCHEDULE

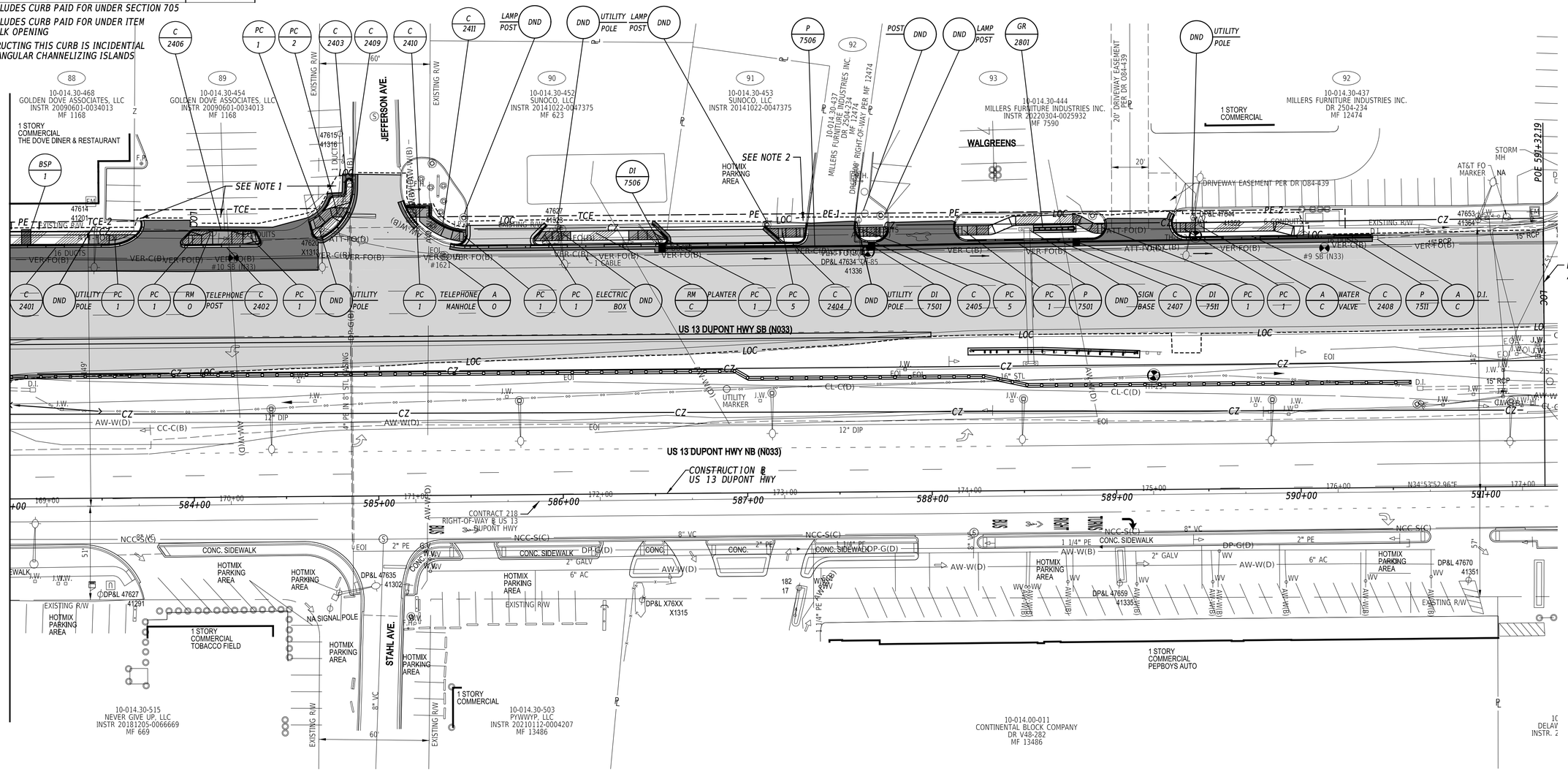
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
7501	15" RCP	IV	108.10	0.010	63.82	62.74
7506	15" RCP	IV	109.50	0.008	64.90	64.02
7511	15" RCP	IV	159.50	0.010	62.54	60.95

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7501	587+68.24	*	34" x 24"	4	**	63.82
7506	586+54.71	*	72" x 24"	4	**	64.90
7511	588+79.23	*	34" x 24"	4	**	62.54

* MATCH CURB FLOWLINE OFFSET

** MATCH CURB FLOWLINE ELEVATION



ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
#9 SB (N33)	590+13.69	130.04' LT	7.75" HMA OVER 3+" BIG STONE
#10 SB (N33)	584+22.30	129.63' LT	6.25" HMA OVER 6+" DIRTY FILL

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-85	VER-C	615271.17	609433.04	67.43	3.42	12" CONC. DUCT
TH-113	DP-G	615420.49	609529.19	67.13	2.91	1.5" WRAPPED STEEL
TH-234	DPC-G	615358.12	609577.58	65.64	4.88	18" WRAPPED STEEL

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
2801	PERMANENT IMPACT ATTENUATOR, TYPE 5	588+56.06	-141.00	24.00

NOTES:

1. *5 PARKING STALLS TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.*
2. *1 PARKING STALL TO BE TEMPORARILY IMPACTED DURING CONSTRUCTION.*

PENNONI ASSOCIATES INC. | 5FILEAS
FILE NAME: | PLOT TABLE: $PENTBL$S
MICROSTATION VERSION: | PLOT DRIVER: $PLTDRVS$
MICROSTATION WORKSPACE: $WORKSPACES$ | DATE PLOTTED: 25-JUL-2024 @ 12:30
USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

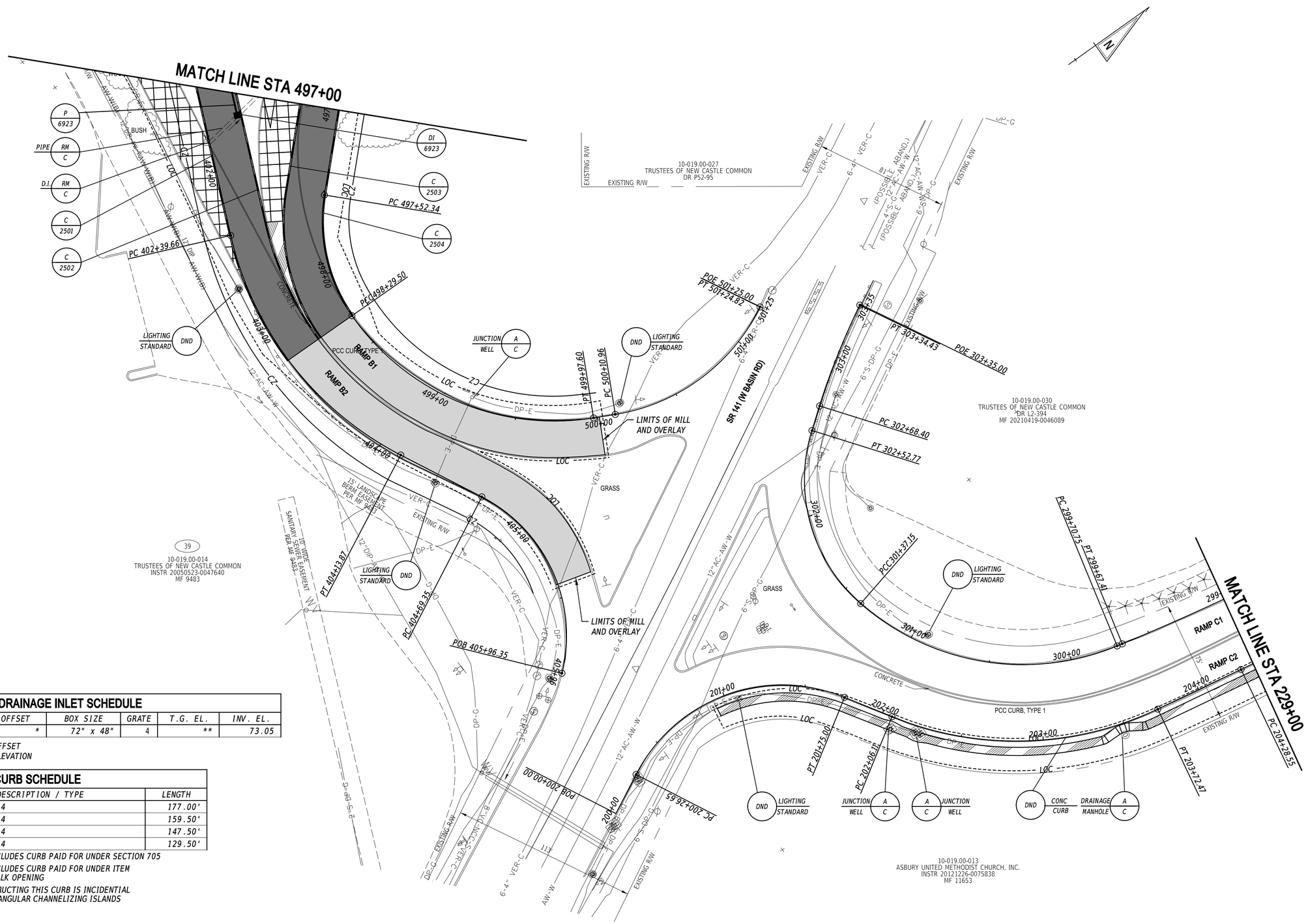
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	
COUNTY	NEW CASTLE	
BRIDGE NO.	N/A	
DESIGNED BY:	O. GREEN	
CHECKED BY:	P. HORSEY	

CONSTRUCTION PLAN

CP-28	
SECTION	PAI
SHEET NO.	45



DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
6923	401+69.28	*	72" x 48"	4	**	73.05

* MATCH CURB FLOWLINE OFFSET
** MATCH CURB FLOWLINE ELEVATION

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
2501	PCC CURB, TYPE 1-4	177.00'
2502	PCC CURB, TYPE 1-4	159.50'
2503	PCC CURB, TYPE 1-4	147.50'
2504	PCC CURB, TYPE 1-4	129.50'

\+ RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER SECTION 705
* RUN OF THE CURB EXCLUDES CURB PAID FOR UNDER ITEM 701510 - CURB/SIDEWALK OPENING
** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTIAL TO ITEM 702000 - TRIANGULAR CHANNELIZING ISLANDS

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTABLE
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:30
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

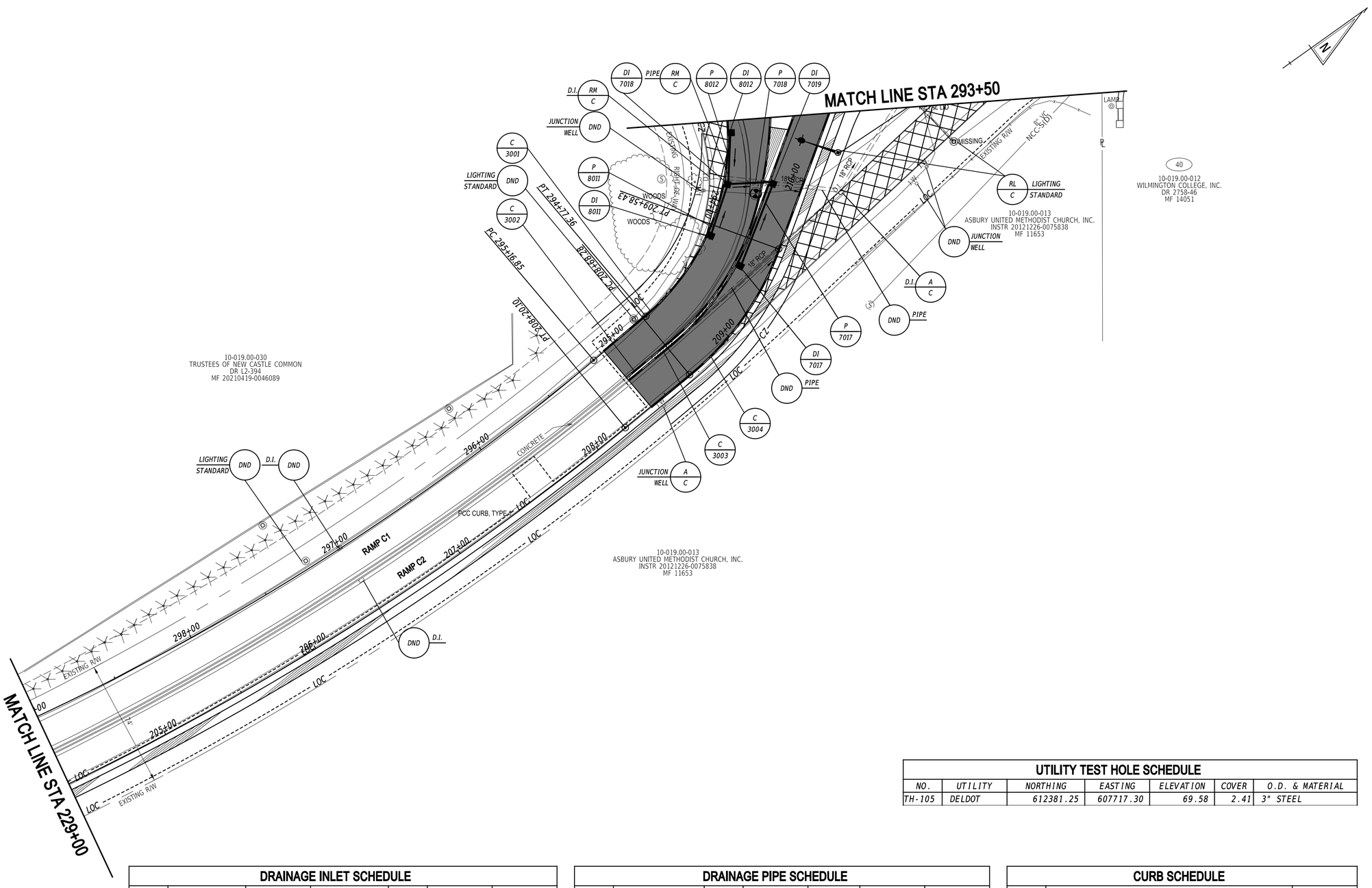
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-29
SECTION: PAI
SHEET NO.: 46



UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-105	DELDOT	612381.25	607717.30	69.58	2.41	3" STEEL

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7017	209+39.76	*	48" x 30"	4	**	63.80
7018	293+86.60	*	72" x 48"	1	**	63.67
7019	209+92.77	*	48" x 30"	4	**	63.35
8011	294+17.46	*	34" x 24"	4	**	64.00
8012	293+57.01	*	34" x 24"	4	**	64.00

* MATCH CURB FLOWLINE OFFSET
** MATCH CURB FLOWLINE ELEVATION

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INVERT EL.	DIS. EL.
7017	15" RCP	IV	47.10	0.008	63.80	63.40
7018	15" RCP	IV	23.40	0.005	63.67	63.55
8011	15" RCP	IV	30.50	0.004	64.00	63.87
8012	15" RCP	IV	24.40	0.005	64.00	63.87

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
3001	PCC CURB, TYPE 1-4	159.00'
3002	PCC CURB, TYPE 1-4	179.00'
3003	PCC CURB, TYPE 1-4	187.00'
3004	PCC CURB, TYPE 1-4	203.00'

PENNONI ASSOCIATES INC. | STYLES: | PEN TABLE: $PENTBLS$
FILE NAME: | PLOT DRIVER: $PLTDRV$S
MICROSTATION VERSION: | DATE PLOTTED: 25-JUL-2024 @ 12:30
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USER$ | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-30
SECTION PAI
SHEET NO. 47

UTILITY TEST HOLE SCHEDULE (CP-05)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-1	DPC-G	601347.25	599091.81	18.53	4.81	W/STEEL
TH-2	DPC-G	601357.79	599109.43	18.30	4.95	W/STEEL
TH-2C	DP-G	601278.29	599003.85	16.86	4.34	9" PE / 3" HDPE
TH-3	DPC-G	601369.89	599129.60	18.02	8.45	W/STEEL
TH-4	DPC-G	601378.34	599143.29	17.57	12.30	W/STEEL
TH-5	DPC-G	601386.31	599156.04	11.85	5.96	W/STEEL
TH-6	DPC-G	601391.22	599163.96	9.80	7.78	W/STEEL
TH-7	DPC-G	601402.51	599183.07	14.22	10.84	W/STEEL
TH-8	DPC-G	601411.97	599199.71	15.30	8.54	W/STEEL
TH-9	DPC-G	601426.65	599225.64	14.88	5.57	W/STEEL
TH-30	DPC-G	601261.61	598877.74	18.89	6.51	SEE NOTE ON FORM
TH-32	VER-FO	601409.97	598984.00	15.67	7.28	SEE NOTE ON FORM
TH-34	N/A	601637.85	599116.09	14.07	N/A	NO UTILITY FOUND
TH-34A	VER-C	601636.74	599117.92	14.13	2.40	SEE NOTE ON FORM
TH-35	VER-FO	601751.60	599189.59	15.49	4.24	SEE NOTE ON FORM
TH-92	DP-G	601407.72	599089.96	13.27	6.71	SEE NOTE ON FORM
TH-92A	DP-G	601410.48	599089.98	13.45	7.16	SEE NOTE ON FORM

UTILITY TEST HOLE SCHEDULE (CP-09)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-40	AW-W	602568.70	599696.58	37.36	2.92	20" DUCTILE IRON
TH-120	DELDOT	602015.55	599481.98	21.60	2.92	3.5" STEEL
TH-121	DP-G	601969.32	599436.06	19.57	6.40	SEE NOTE ON FORM
TH-122	ITMS	601960.94	599445.78	20.05	1.60	3.5" STEEL
TH-A	AW-W	602060.47	599226.19	20.73	4.34	SEE NOTE ON FORM
TH-B	AW-W	602444.86	599826.01	36.76	2.54	7" CAST IRON

UTILITY TEST HOLE SCHEDULE (CP-10)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-10	DP-G	603015.64	600317.04	50.44	4.85	13" STEEL
TH-41	VER-C	603067.13	600143.67	49.45	3.28	8" CLAY DUCT

UTILITY TEST HOLE SCHEDULE (CP-11)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-9B	DPC-G	603288.20	600552.52	55.56	6.17	18" WRAPPED STEEL
TH-44	AW-W	603330.49	600368.90	54.23	3.30	7" DUCTILE IRON
TH-45	AW-W	603627.69	600631.51	57.36	3.49	7" DUCTILE IRON
TH-46	VER-C	603740.13	600744.38	58.18	3.25	12" CLAY DUCT
TH-47	DELDOT	603862.85	600843.13	59.03	2.14	(2) 4.5" STEEL
TH-48	DP-G	603870.27	600841.27	59.19	4.00	2.5" POLYETHYLENE
TH-95	DP-G	603216.39	600495.08	54.27	5.47	13" STEEL
TH-96	AW-W	603629.81	600857.86	58.07	4.98	2.5" GALV STEEL
TH-125	AW-W	603417.47	600663.51	56.61	4.75	2.5" GALV STEEL
TH-243	DPC-G	603694.12	600802.48	57.97	5.82	18" WRAPPED STEEL
TH-D	AW-W	603469.20	600489.35	56.32	4.48	7" DUCTILE IRON
TH-E	AW-W	603761.71	600759.18	58.33	3.63	0.75" COPPER

UTILITY TEST HOLE SCHEDULE (CP-12)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-11	DP-G	604044.90	601254.46	60.41	3.58	9" POLYETHYLENE
TH-12	AW-W	604082.15	601285.63	60.89	4.00	2.5" GALV STEEL
TH-50	DELDOT	604049.40	601010.33	59.98	2.63	4.5" PVC
TH-52	DP-G	604053.39	601006.30	59.84	2.55	2.5" POLYETHYLENE
TH-53	DELDOT	604119.66	601059.55	60.21	2.03	4.5" PVC
TH-97	DELDOT	603900.77	601104.17	59.88	3.28	4.5" PVC
TH-126	DP-G	604079.47	601286.63	60.79	3.32	9" PE

UTILITY TEST HOLE SCHEDULE (CP-14)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-58	VER-FO	605338.03	602155.91	36.01	3.39	12" CLAY DUCT
TH-59	AW-W	605395.21	602207.14	32.83	4.82	2.5" CAST IRON
TH-60	ATT-FO	605425.91	602234.83	31.24	5.22	(2) 9" CLAY DUCTS
TH-60A	VER-FO	605426.42	602234.28	31.20	2.77	36" CONC. DUCT
TH-61	VER-C	605564.99	602359.80	26.84	3.59	12" CLAY DUCT
TH-63	DP-G	605648.81	602426.16	26.29	2.43	1/8" GAS TRACER
TH-63A	DP-G	605647.44	602427.71	26.41	3.23	8" PVC
TH-64	VER-FO	605749.92	602522.59	27.59	3.95	SEE NOTE ON FORM
TH-66	VER-FO	605932.47	602681.19	34.95	3.41	SEE NOTE ON FORM
TH-66A	VER-FO	605931.59	602681.93	34.94	3.41	SEE NOTE ON FORM
TH-100	AW-W	605526.95	602542.83	27.42	5.37	2.5" STEEL
TH-100A	DP-G	605518.21	602537.42	27.11	4.27	9" POLYETHYLENE
TH-108	N/A	605521.12	602314.81	27.82	N/A	NO UTILITY FOUND
TH-109	AW-W	605541.42	602331.92	27.13	8.76	SEE NOTE ON FORM
TH-110	DPC-G	605539.95	602332.02	27.32	4.48	8.5" POLYETHYLENE

UTILITY TEST HOLE SCHEDULE (CP-24)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-19	N/A	612437.41	607616.31	68.87	N/A	NO UTILITY FOUND
TH-102	DP-E	612584.86	607718.75	67.75	4.34	22" CONC. DUCT
TH-111	DELDOT	612404.29	607260.00	73.42	2.13	5" POLYETHYLENE
TH-262	AW-W	611994.38	607215.44	76.77	4.09	18" CAST IRON
TH-267	AW-W	612423.90	607492.45	69.61	4.57	CAST IRON

UTILITY TEST HOLE SCHEDULE (CP-25)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-21	DP-E	612914.91	607951.81	65.49	4.16	20" CONC. DUCT
TH-21B	DP-E	612913.82	607953.06	65.64	4.16	20" CONC. DUCT
TH-71	DELDOT	613166.76	607926.98	63.01	1.91	2.5" STEEL
TH-127	N/A	613164.34	607928.02	63.12	N/A	NO UTILITY FOUND
TH-227	AW-W	612911.84	607844.15	65.12	5.34	9" DUCTILE IRON
TH-228	CL-C	613031.63	607930.39	64.80	2.06	(2) 2" STEEL
TH-305	CL-C	613031.04	607930.98	64.78	2.01	(2) 1.5" PE
TH-306	ITMS	613030.47	607931.57	65.10	1.80	2" STEEL

UTILITY TEST HOLE SCHEDULE (CP-26)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-24	DP-E	613725.54	608529.12	56.55	3.65	20" CONC. DUCT
TH-73	VER-C	613667.19	608295.63	55.99	4.85	18" CONC. DUCT
TH-74	N/A	613776.84	608358.91	55.37	N/A	NO UTILITY FOUND
TH-75	DELDOT	613966.42	608495.03	57.14	2.15	(2) 3" STEEL
TH-76	VER-C	614014.61	608526.46	56.65	2.52	4.5" CONC. DUCT
TH-77	N/A	614057.34	608553.13	56.56	N/A	NO UTILITY FOUND
TH-78	VER-C	614080.72	608577.26	57.28	2.71	NO UTILITY FOUND
TH-78A	VER-FO	614080.71	608576.02	57.13	3.65	4.5" PVC
TH-79	N/A	614081.92	608574.97	56.98	N/A	NO UTILITY FOUND
TH-103	DP-G	613642.88	608478.23	56.91	4.35	2.5" POLYETHYLENE
TH-104	N/A	613728.51	608542.68	57.36	N/A	NO UTILITY FOUND
TH-104A	AW-W	613730.59	608540.24	56.97	4.95	2.5" GALV STEEL
TH-104B	DP-G	613731.77	608538.60	56.93	3.71	2.5" POLYETHYLENE

UTILITY TEST HOLE SCHEDULE (CP-27)

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-25	DELDOT	614302.00	608945.34	58.42	4.13	2.75" STEEL
TH-26	DELDOT	614299.97	608957.53	58.92	2.09	2.5" STEEL
TH-27	DELDOT	614329.18	608978.39	58.93	1.99	2.5" STEEL
TH-80	N/A	614399.91	608797.94	59.13	N/A	NO UTILITY FOUND
TH-81	VER-C	614392.46	608811.58	58.78	3.52	18" CLAY DUCT
TH-82	N/A	614621.26	608950.25	63.91	N/A	NO UTILITY FOUND
TH-128	N/A	614452.02	608837.51	59.79	N/A	NO UTILITY FOUND
TH-C	AW-W	614284.64	608724.53	58.03	3.53	SEE NOTE ON FORM
TH-C1	AW-W	614282.77	608724.55	57.76	11.01	SEE NOTE ON FORM
TH-M	AW-W	614294.08	608972.85	59.19	3.62	7" ASBESTOS CEMENT
TH-N	AW-W	614318.72	608990.21	59.23	3.88	SEE NOTE ON FORM
TH-O	AW-W	614320.12	608986.36	58.98	3.76	7" ASBESTOS CEMENT

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRUSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:20
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

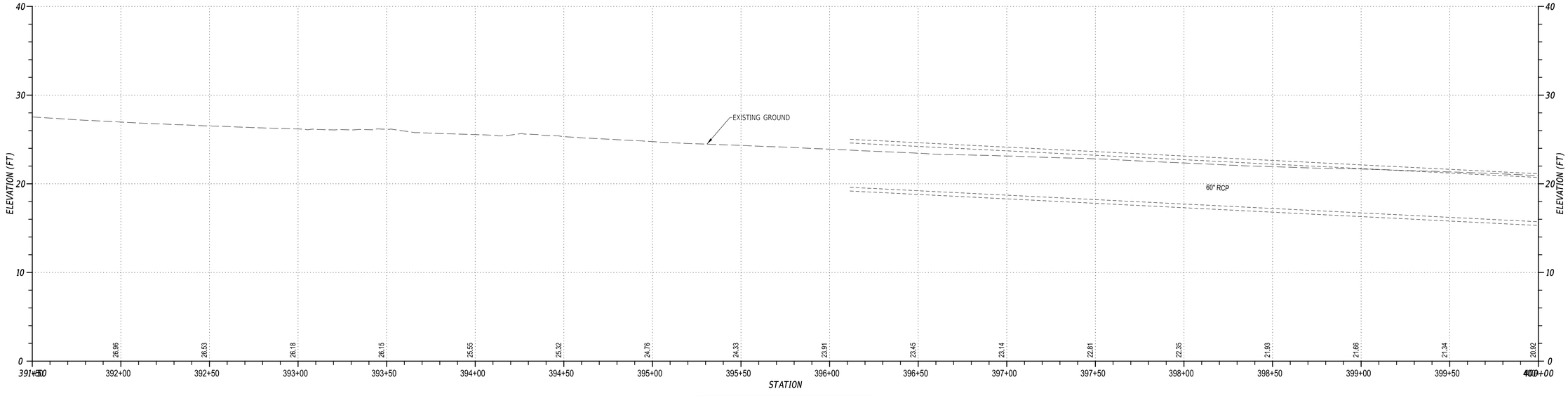
ADDENDA / REVISIONS

NOT TO SCALE

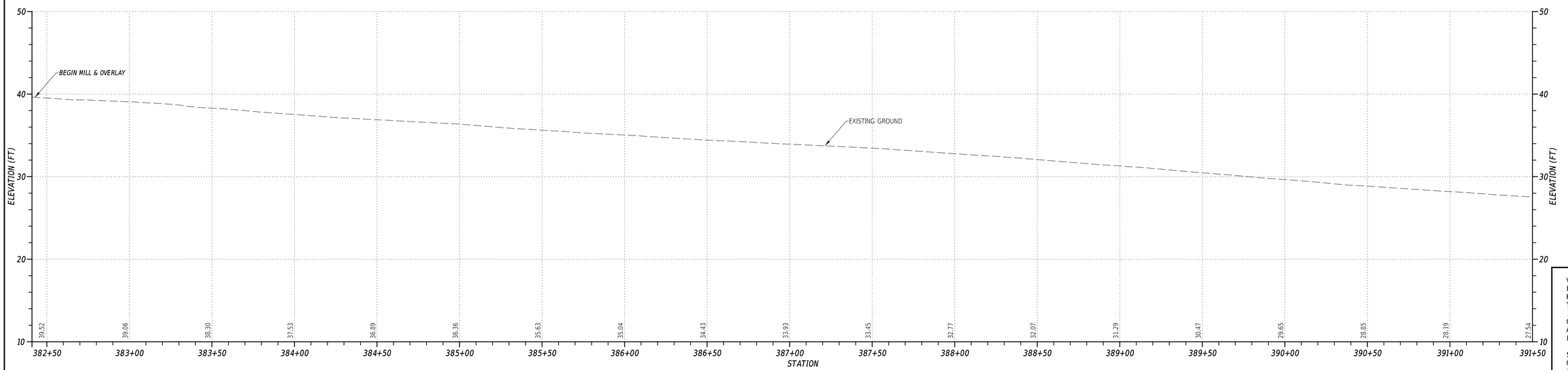
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT T201901102	BRIDGE NO. N/A	SECTION PAI
COUNTY NEW CASTLE	DESIGNED BY: O. GREEN	SHEET NO. 48
	CHECKED BY: P. HORSEY	

CONSTRUCTION PLAN



US 13 DUPONT HWY (N082)



US 13 DUPONT HWY (N082)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED ON PROFILE IS BASED OFF A COMBINATION OF INFORMATION OBTAINED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC.		PEN TABLE:	$PENTBLSS
FILE NAME:	$FILEAS	PLOT DRIVER:	$PLTDRVSS
MICROSTATION VERSION:	$VERSIONS	DATE PLOTTED:	13-JUN-2024@ 06:14
MICROSTATION WORKSPACE:	$WORKSPACES	USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

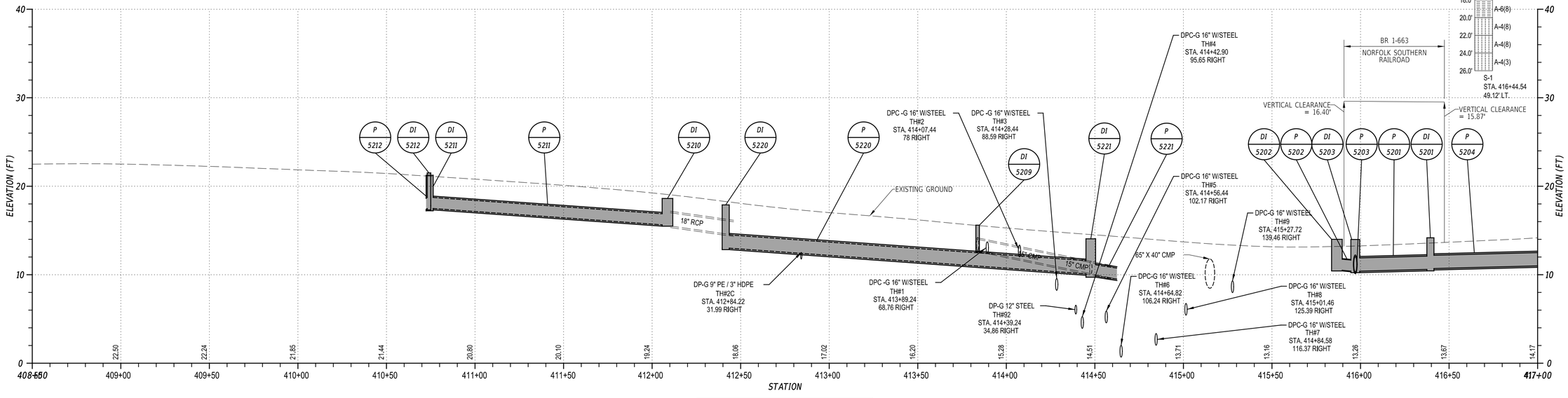
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

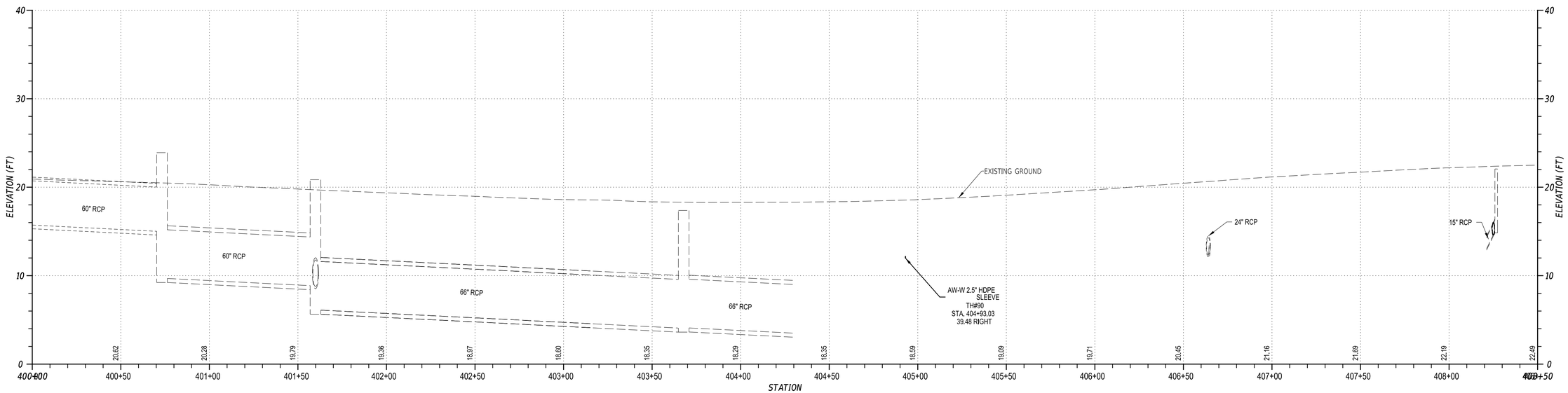
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
49



US 13 DUPONT HWY (N082)



US 13 DUPONT HWY (N082)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED ON PROFILE IS BASED OFF A COMBINATION OF INFORMATION OBTAINED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024# 06:14
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

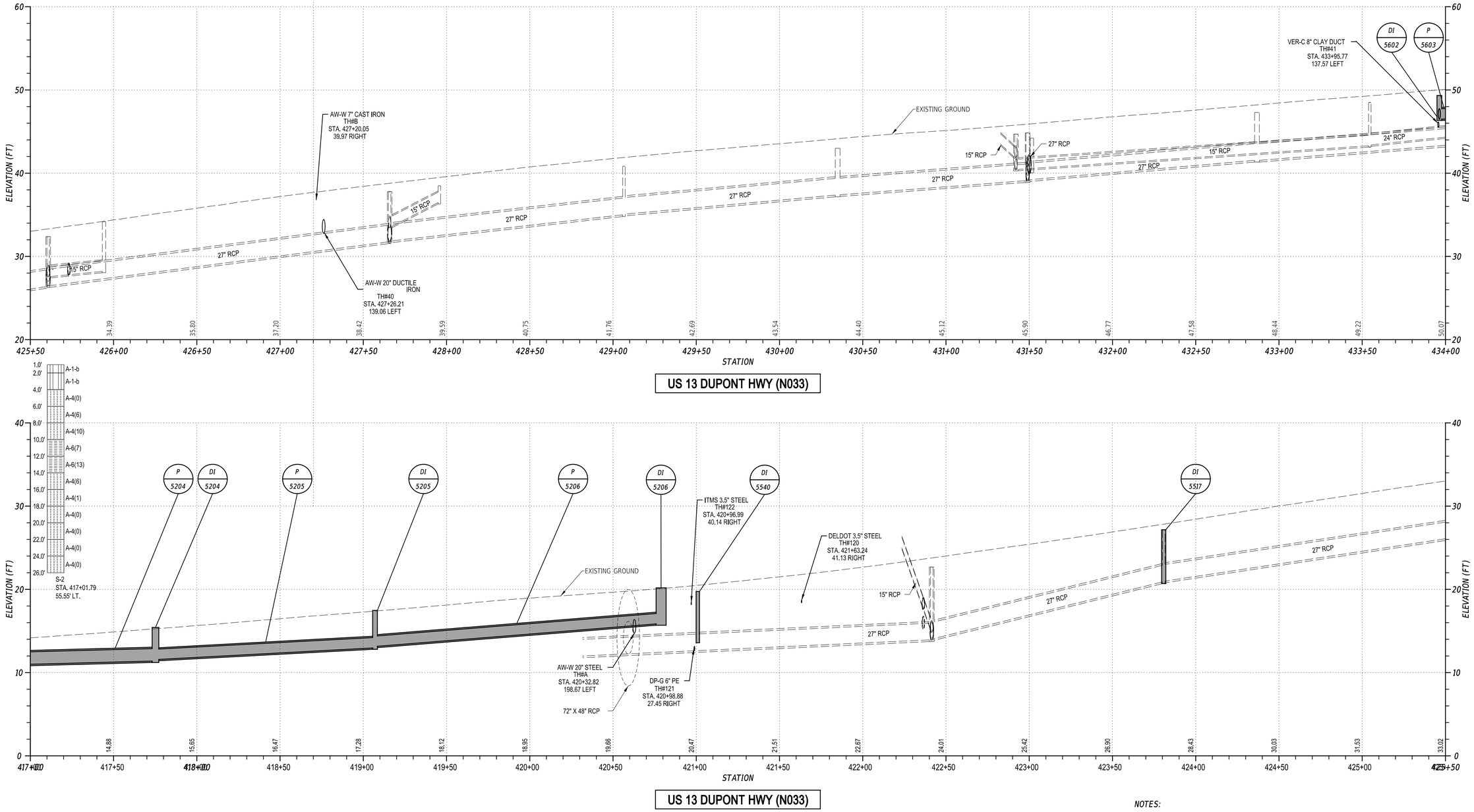
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
50



NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRIS$
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USER$ OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

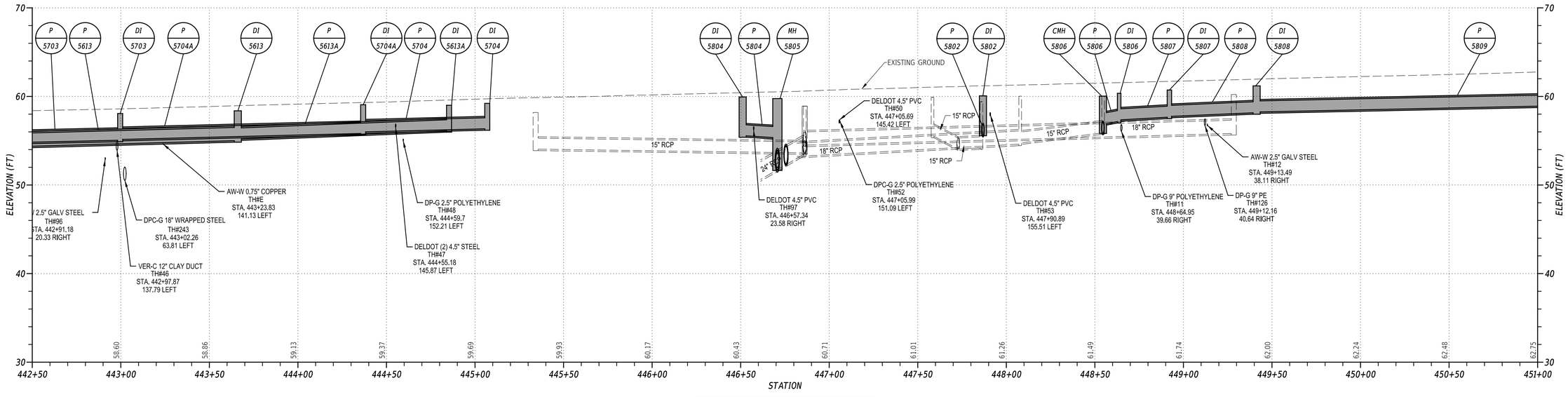
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

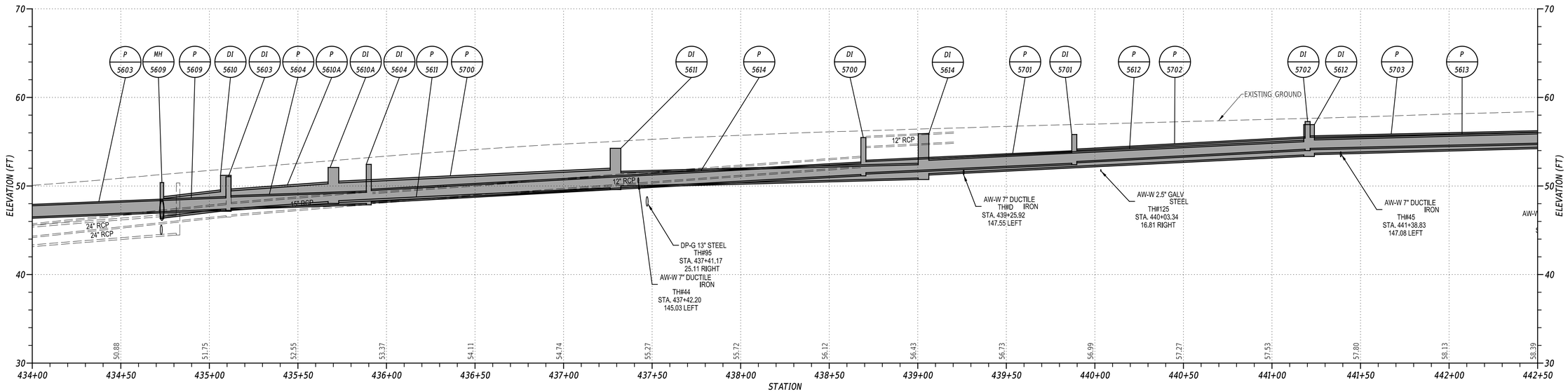
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
51



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

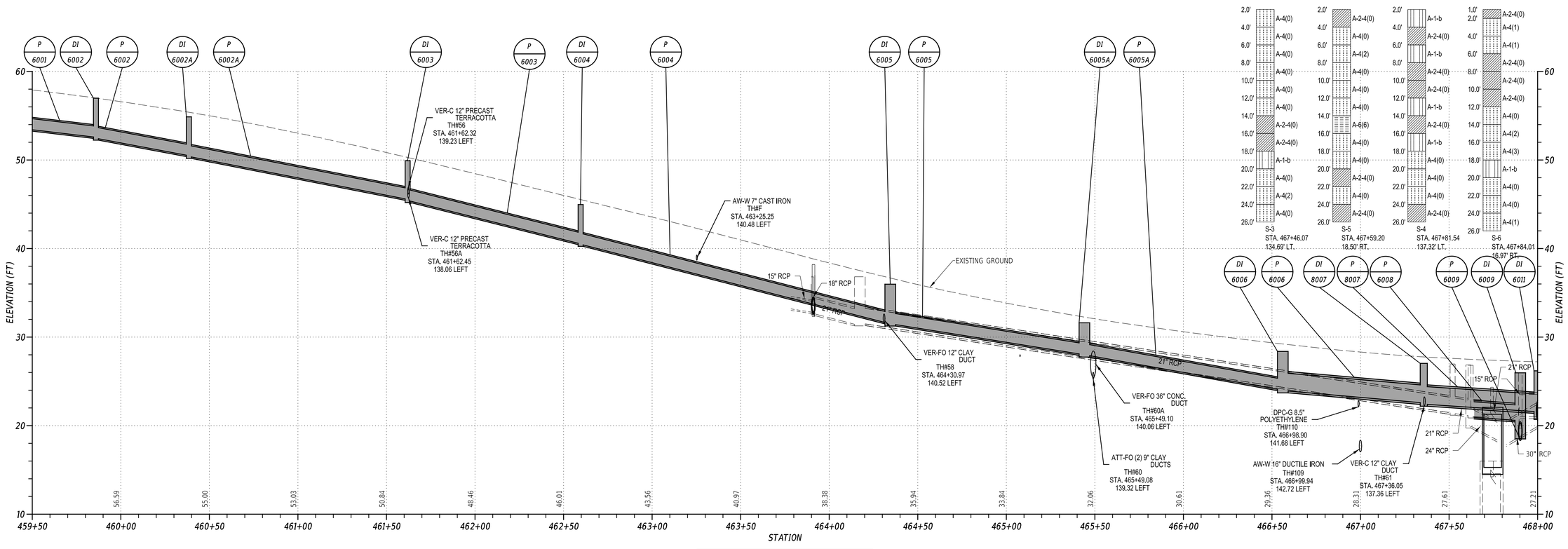
NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

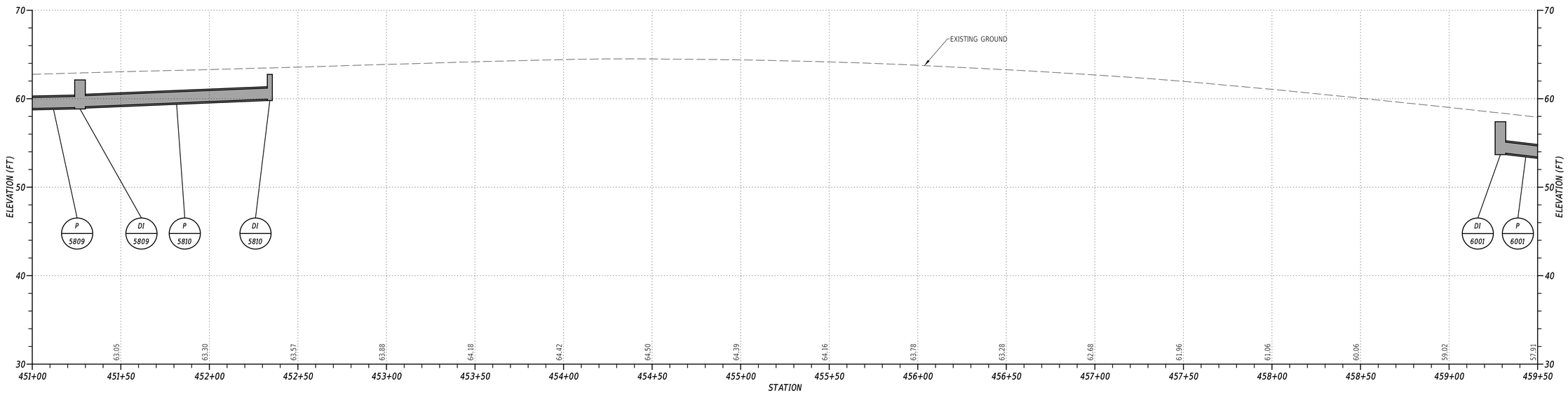
VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:14
MICROSTATION WORKSPACES: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PROFILES	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 52
					CHECKED BY: P. HORSEY		



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

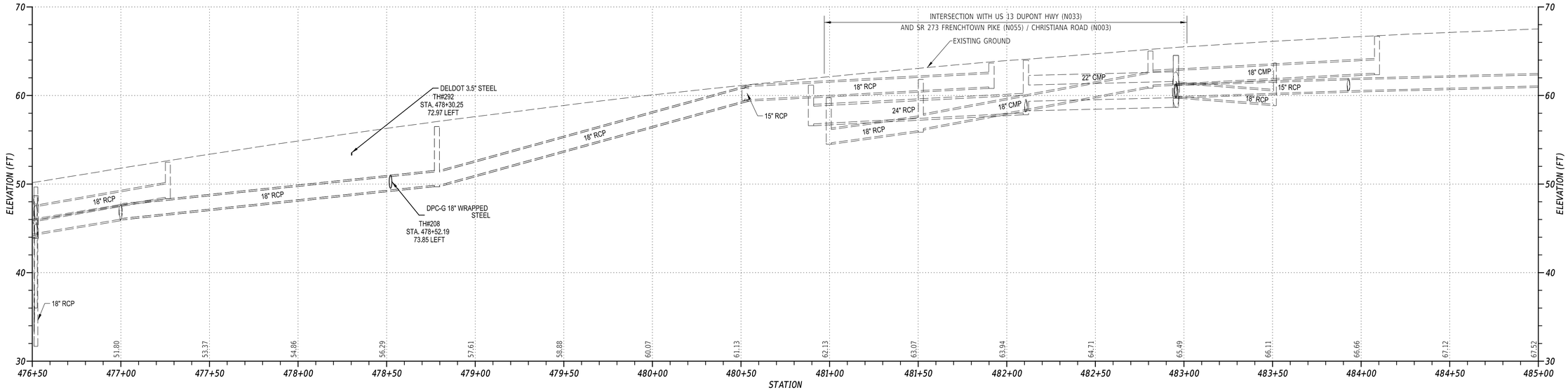
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

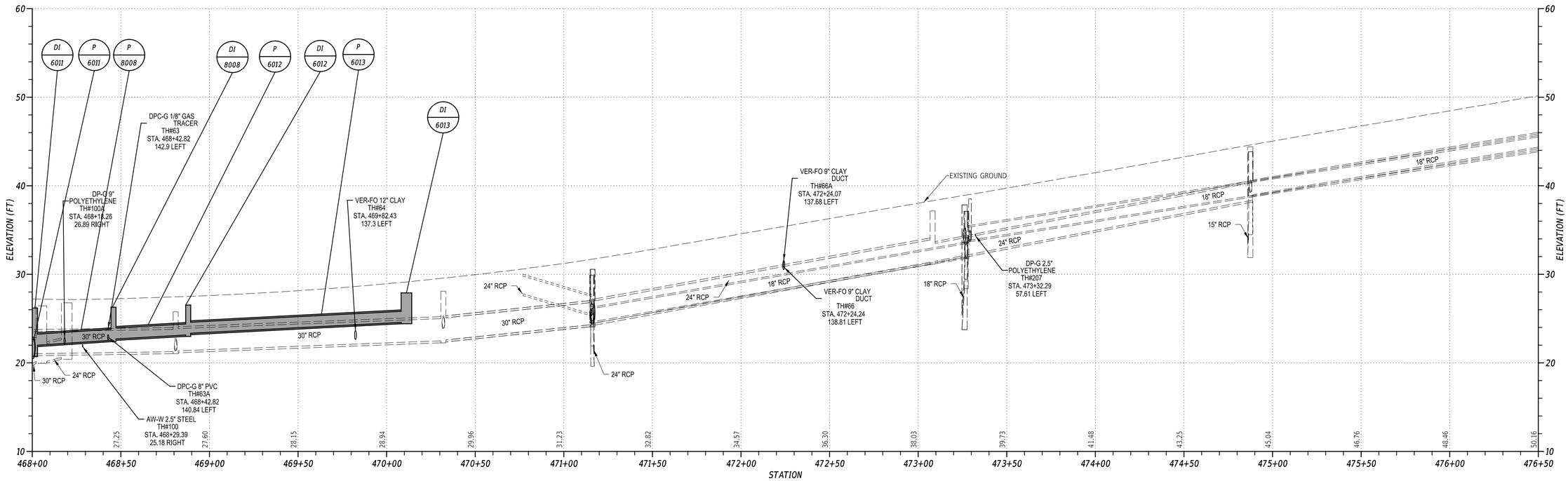
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
53



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERNS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

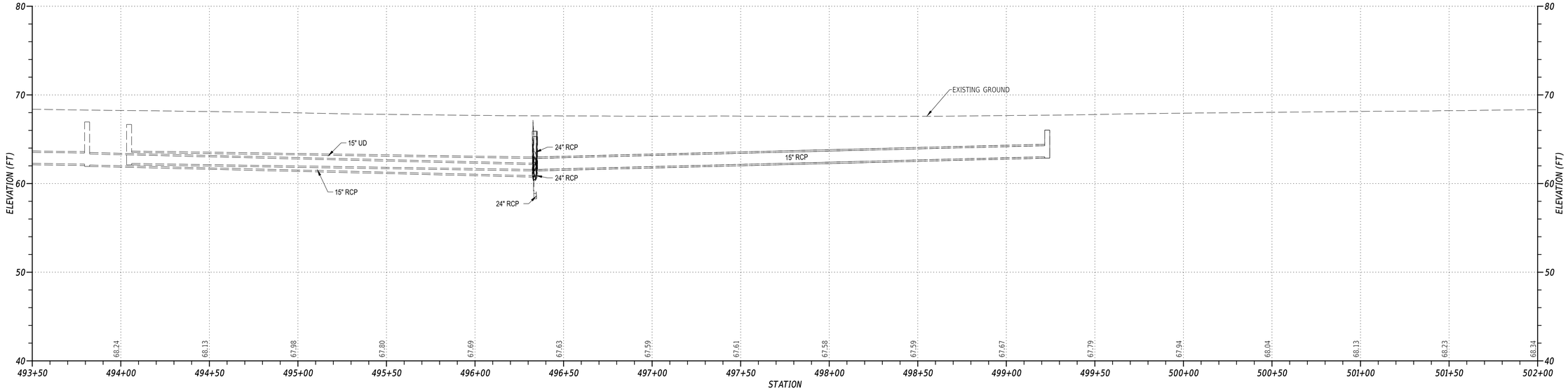
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

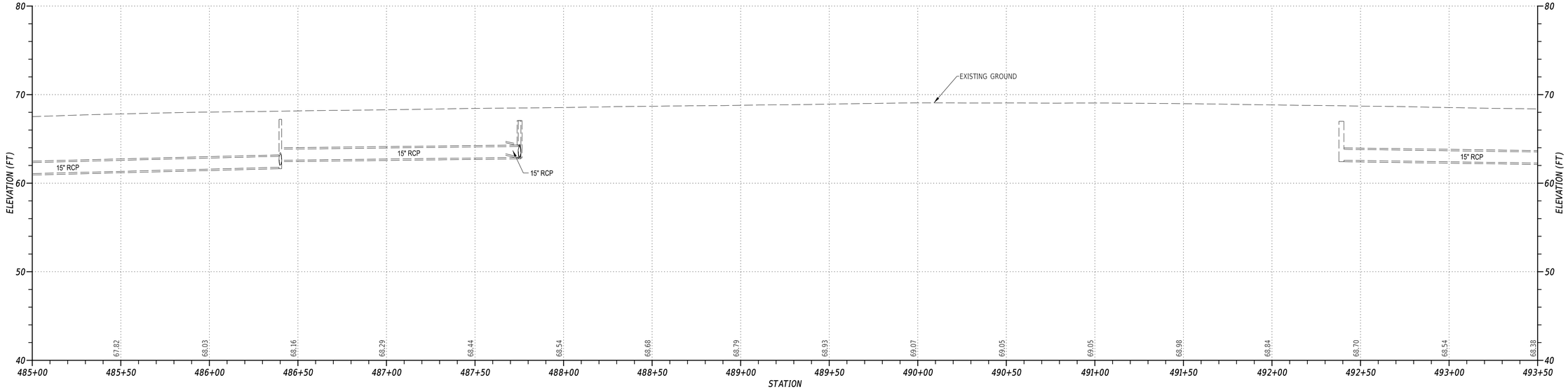
CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	O. GREEN
NEW CASTLE	CHECKED BY:	P. HORSEY

PROFILES

SECTION
PAI
SHEET NO.
54



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

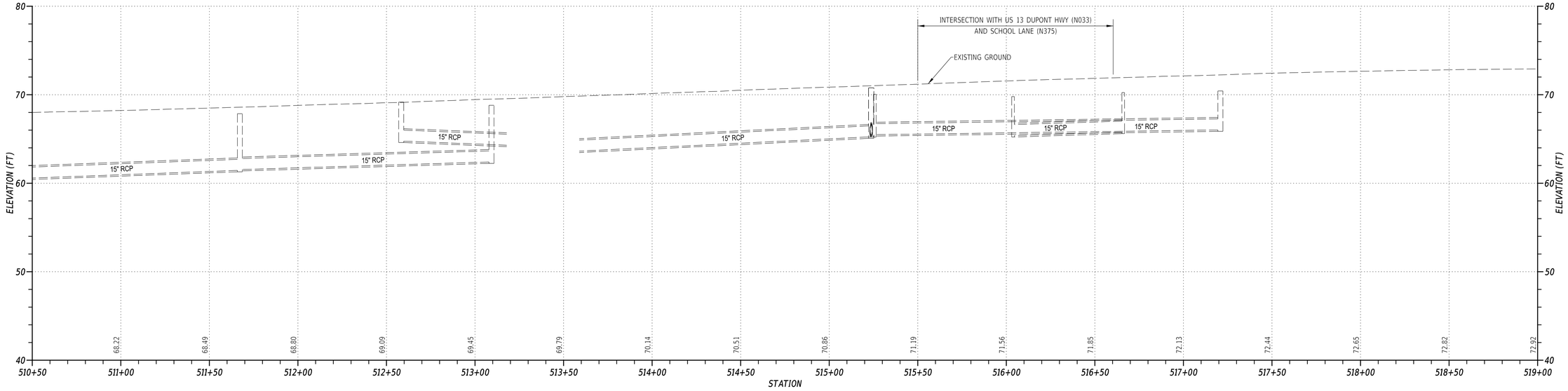
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

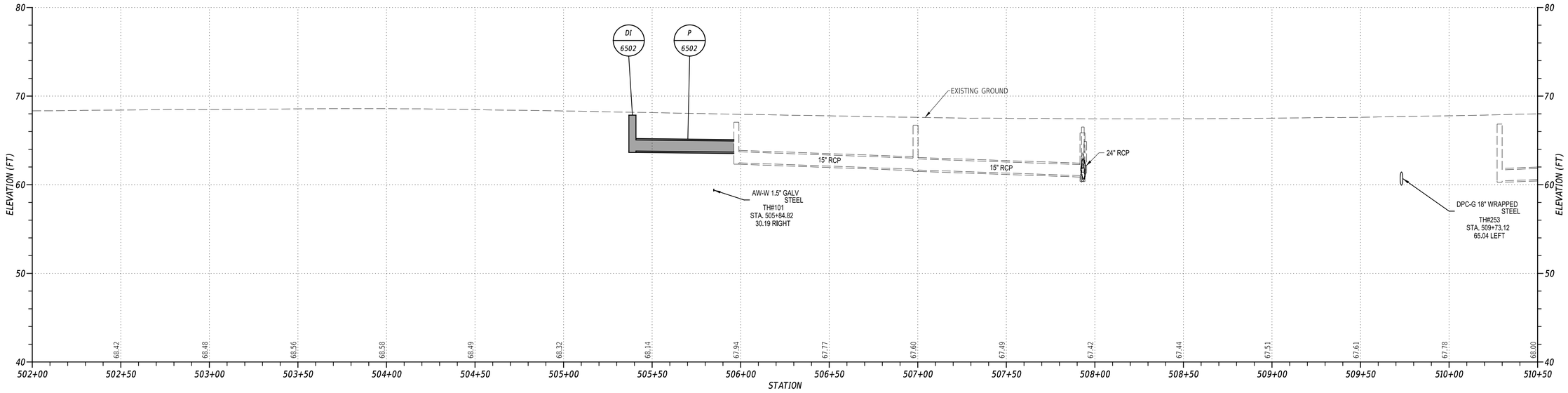
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
55



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

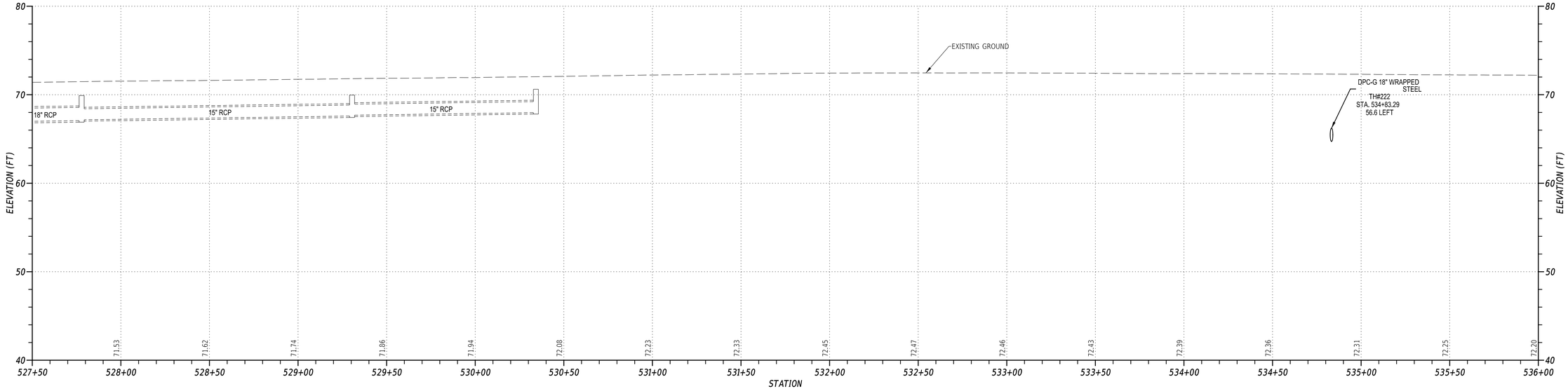
1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET 18 12 6 0

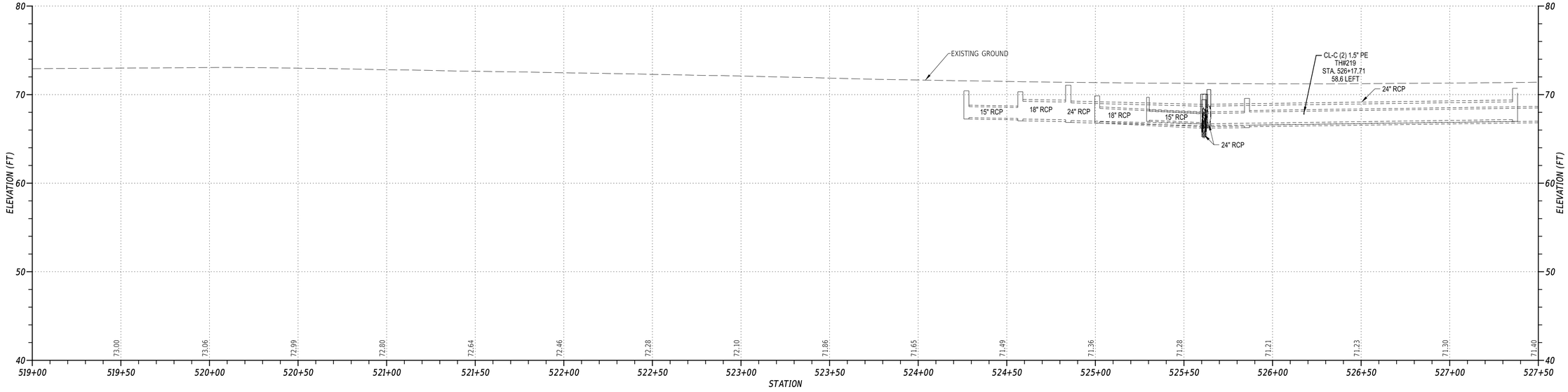
PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024# 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PROFILES	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 56
					CHECKED BY: P. HORSEY		



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $VERSIONS
MICROSTATION VERSION: $WORKSPACES
MICROSTATION WORKSPACE:
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:14
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

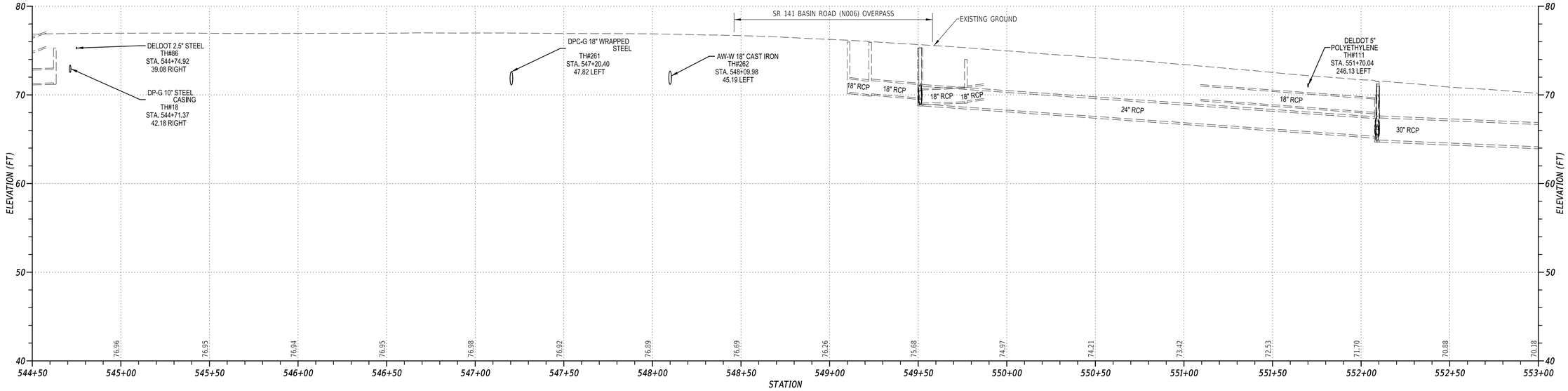
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

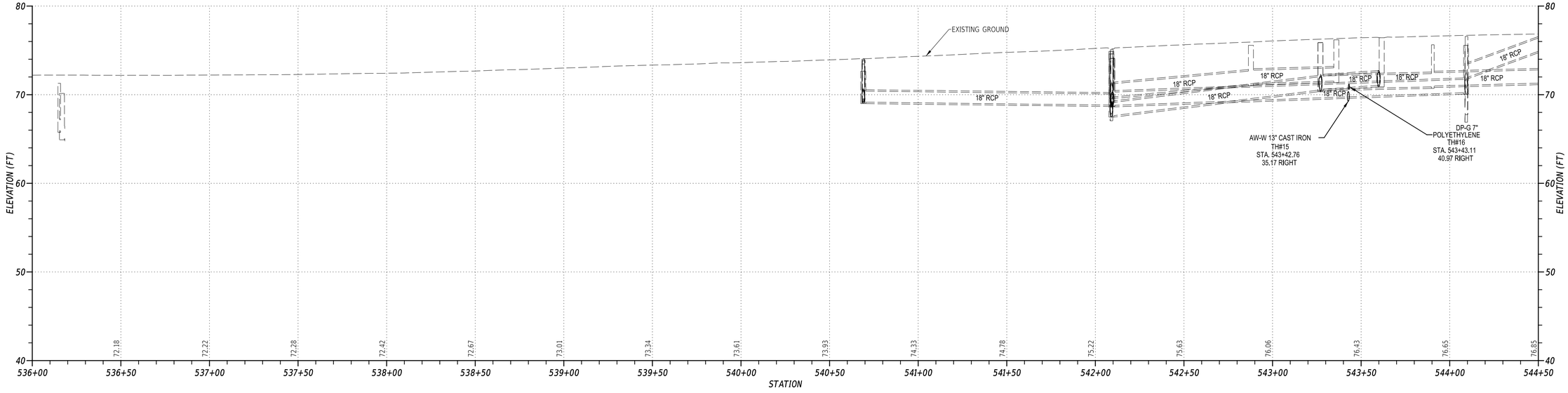
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION: PAI
SHEET NO.: 57



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

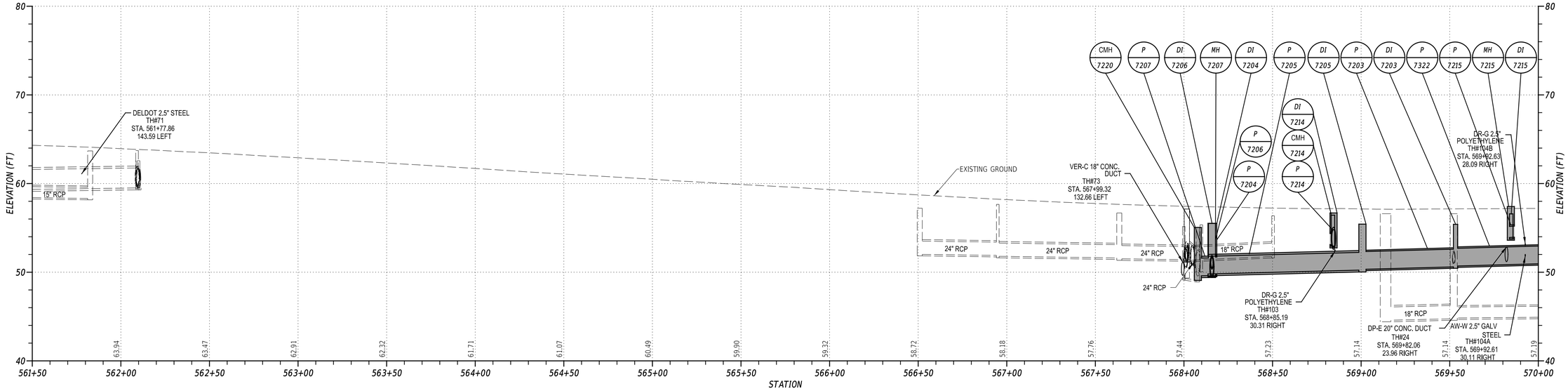
1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

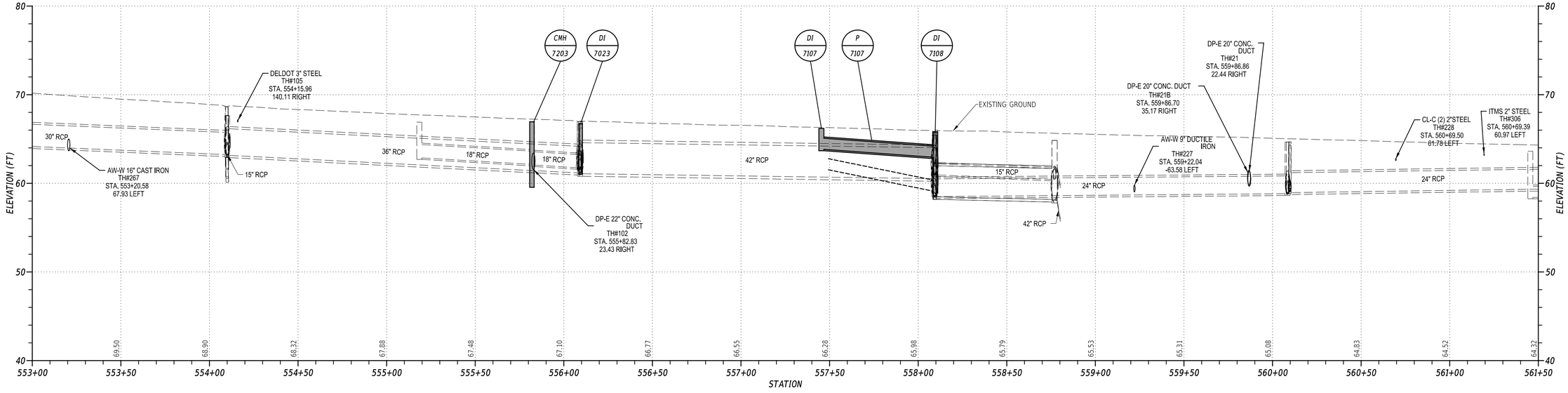
PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PROFILES	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 58
					CHECKED BY: P. HORSEY		



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024# 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

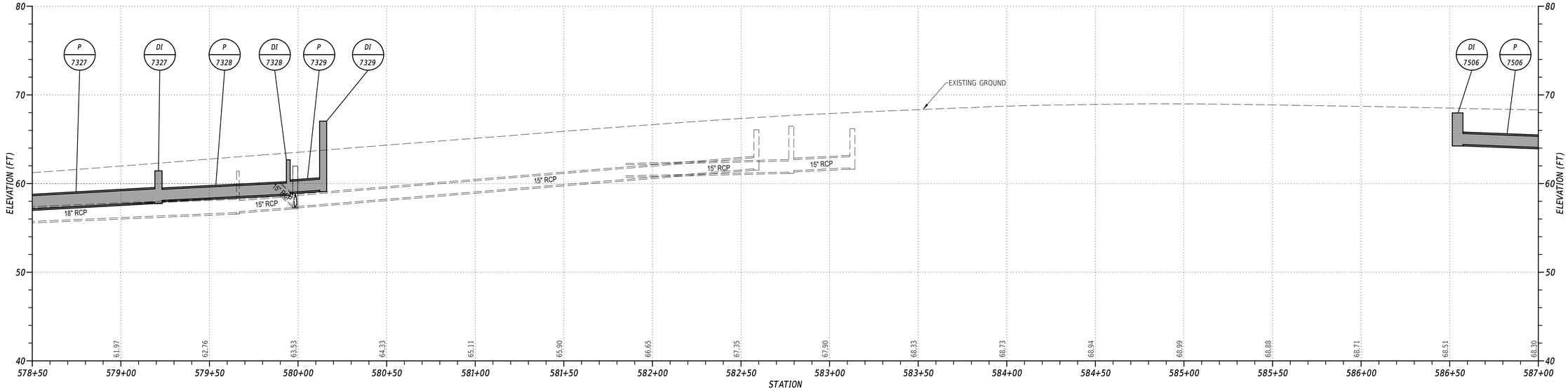
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

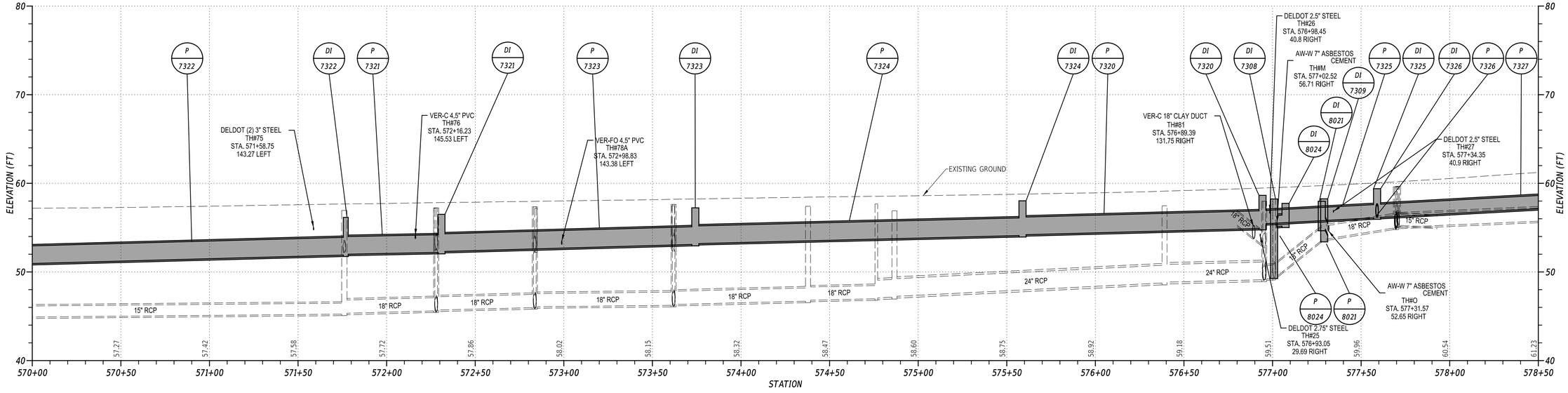
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
59



US 13 DUPONT HWY (N033)



US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACES: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024@ 06:14
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

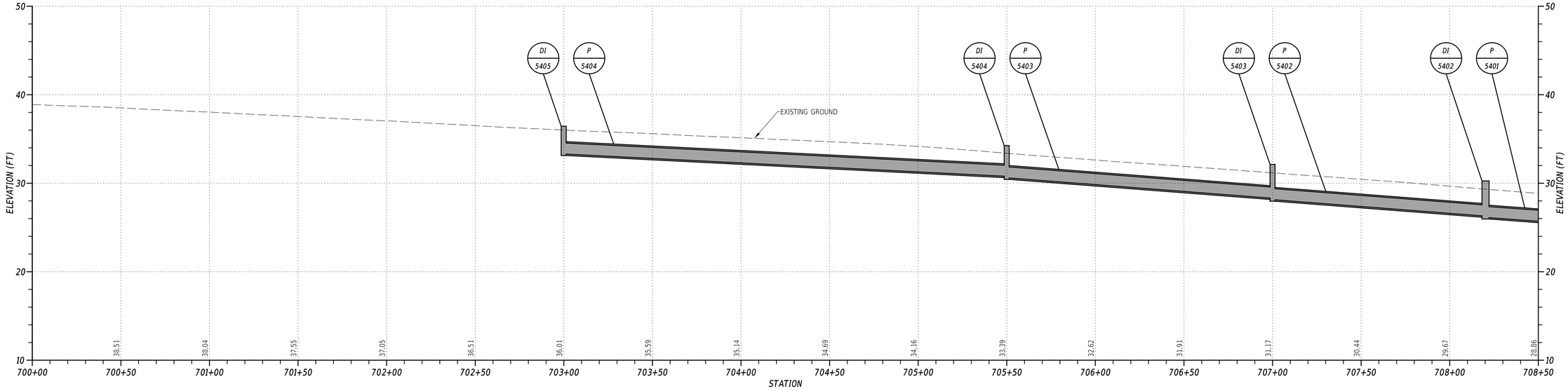
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

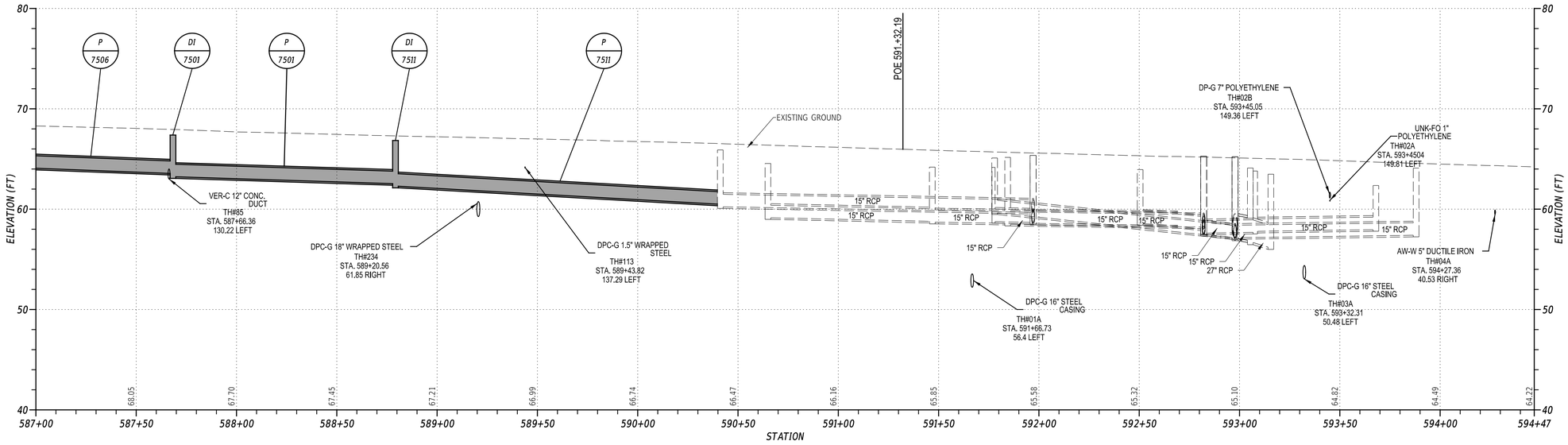
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
60



US 40 PULASKI HWY (N032)



US 13 DUPONT HWY (N033)

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:14
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

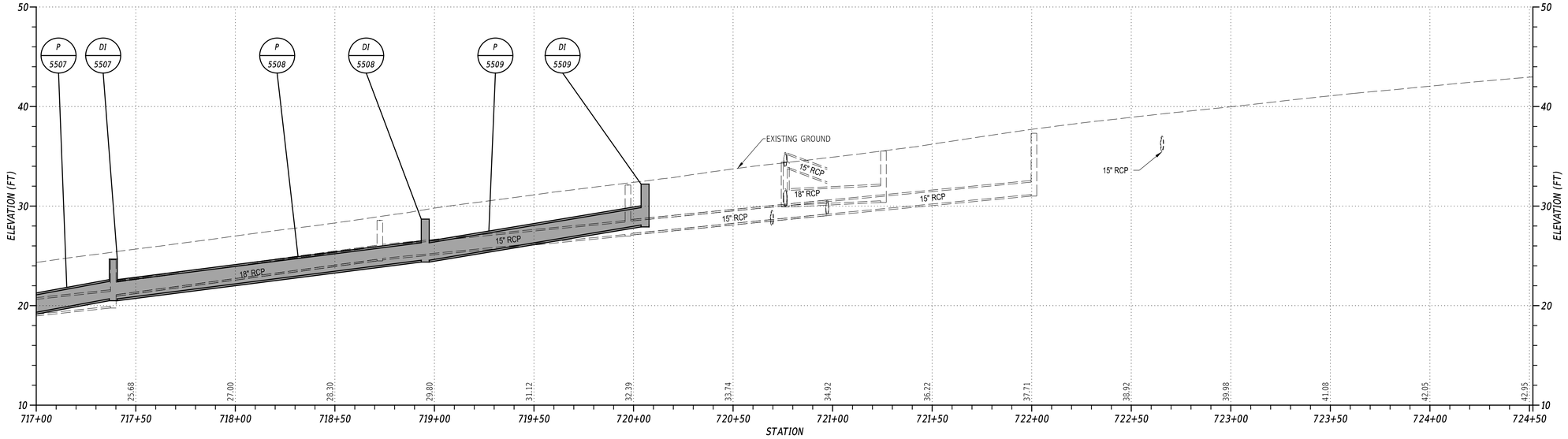
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

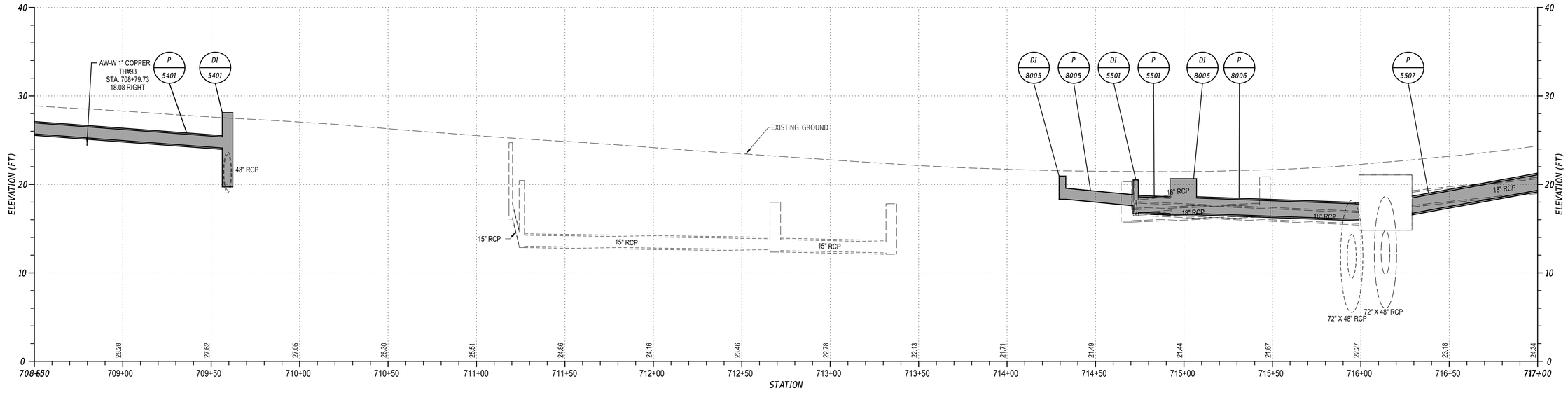
CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

PROFILES

SECTION	PAI
SHEET NO.	61



US 40 PULASKI HWY (N032)



US 40 PULASKI HWY (N032)

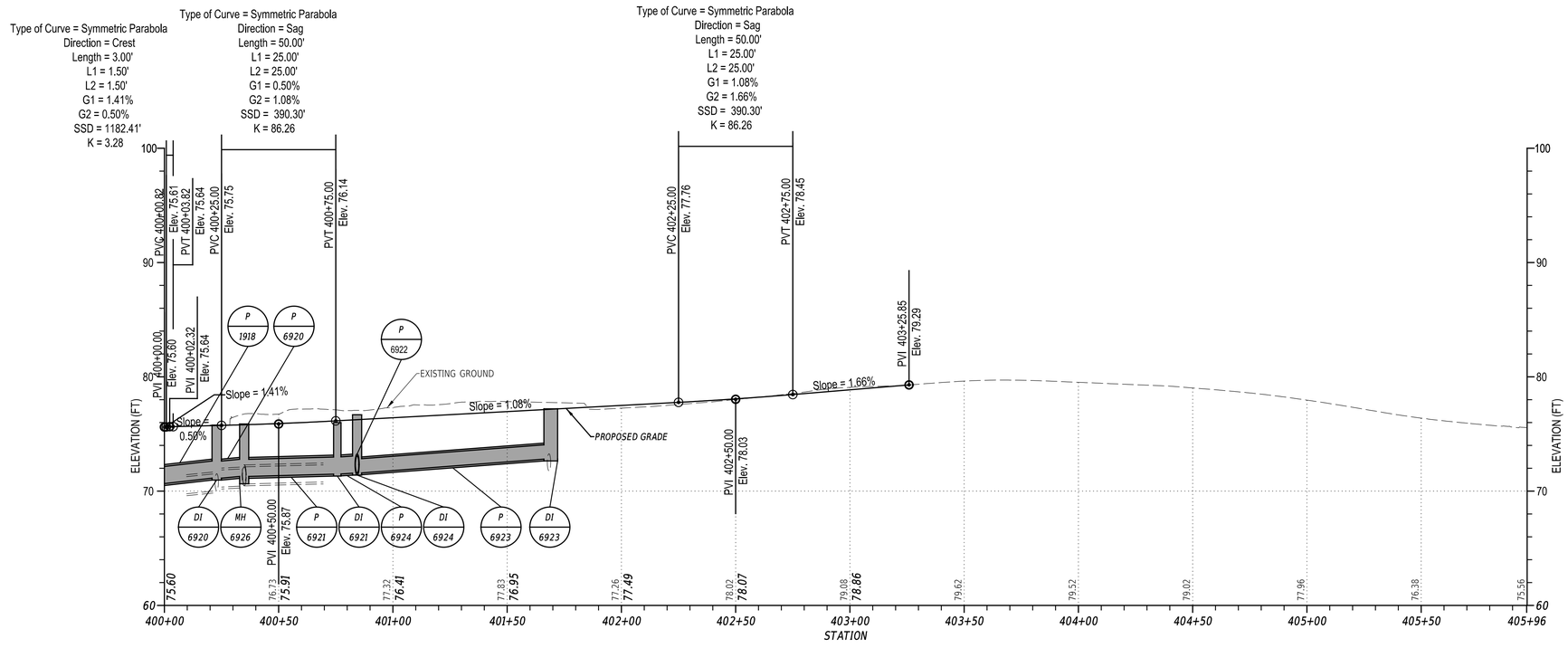
NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

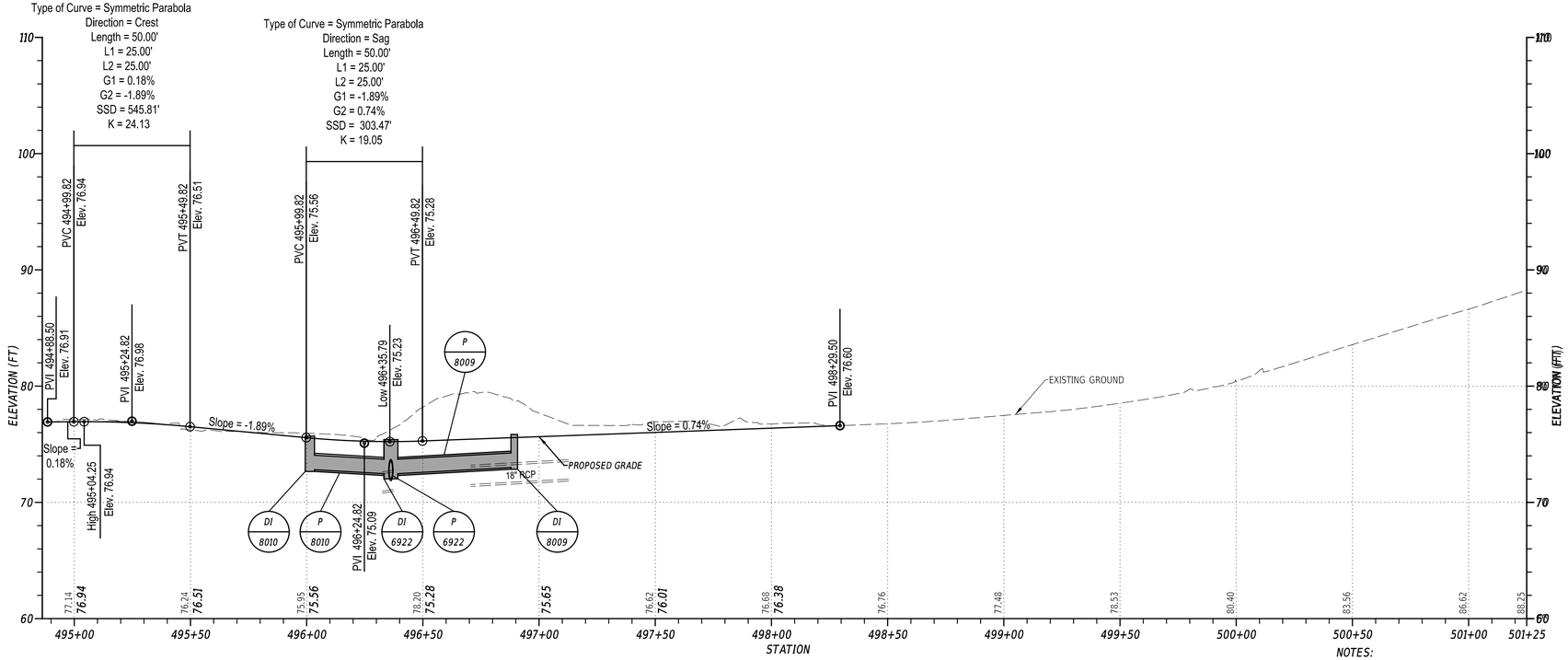
VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024# 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PROFILES	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 62
					CHECKED BY: P. HORSEY		



Ramp B2



Ramp B1

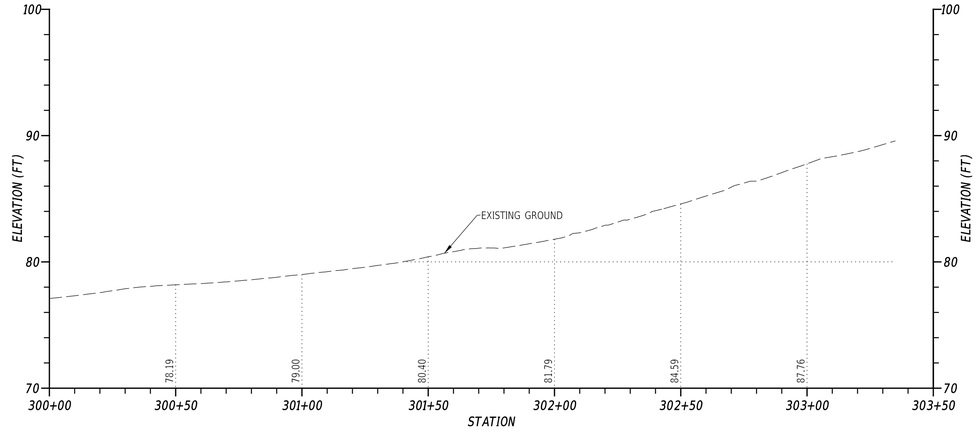
NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

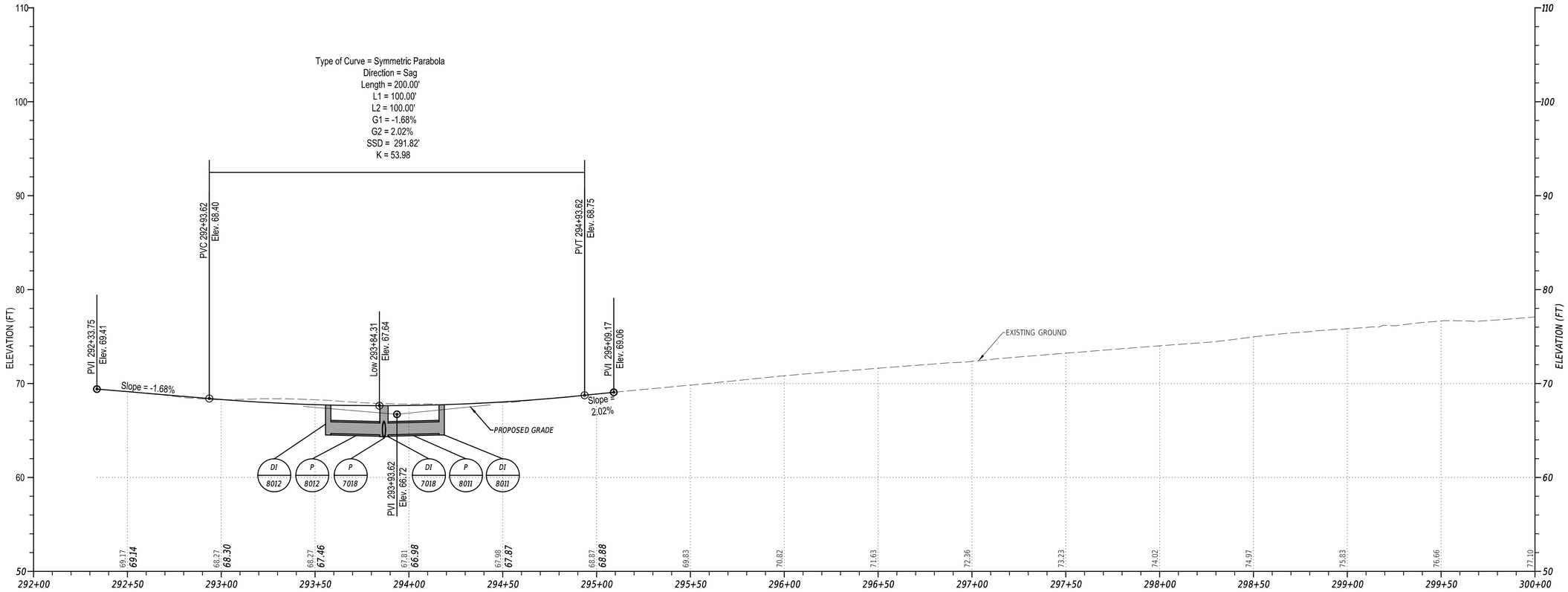
VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLAS
PLOT DRIVER: $PLTDRVAS
DATE PLOTTED: 13-JUN-2024 @ 06:14
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PROFILES	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 63
					CHECKED BY: P. HORSEY		



Ramp C1



Ramp C1

NOTES:

1. EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.

VERTICAL SCALE FEET 0 6 12 18

PENNONI ASSOCIATES INC. | PEN_TABLE: $PENTABLES
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS			

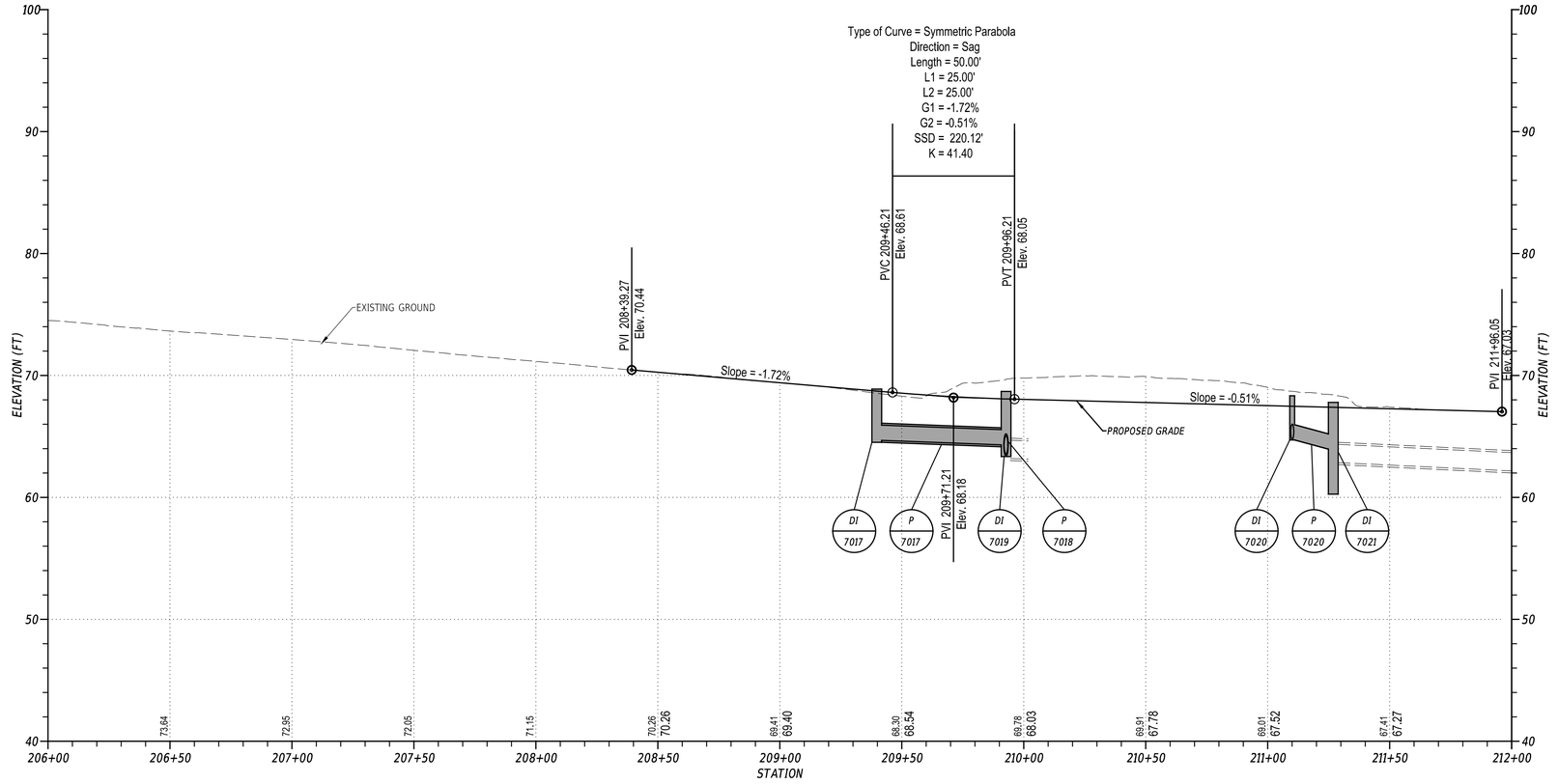
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

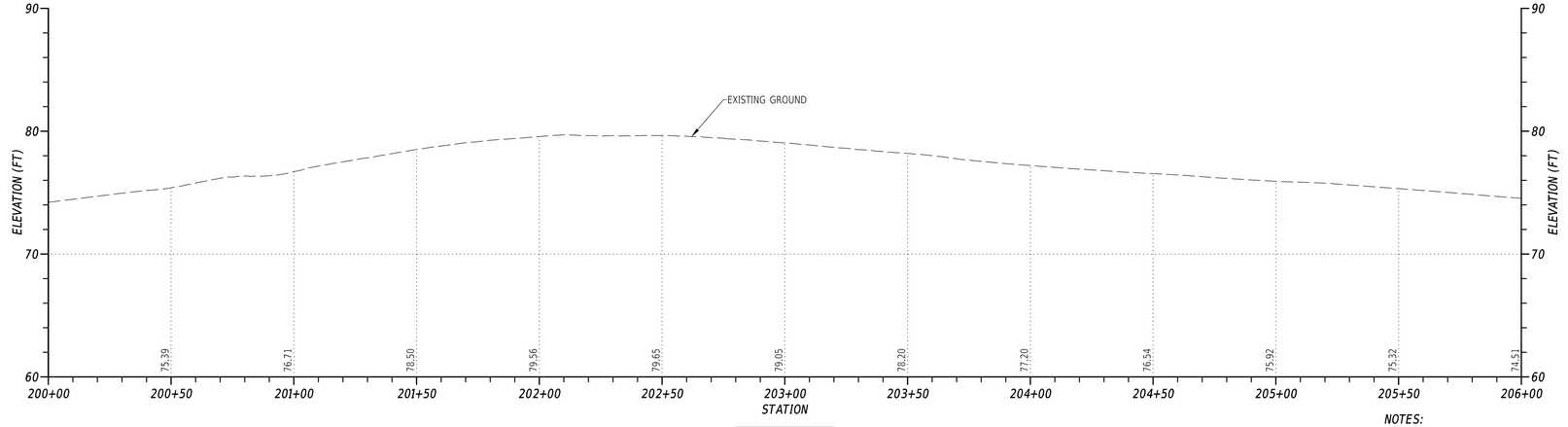
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PROFILES

SECTION
PAI
SHEET NO.
64



Ramp C2



Ramp C2

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

VERTICAL SCALE FEET: 18, 12, 6, 0

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:14
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

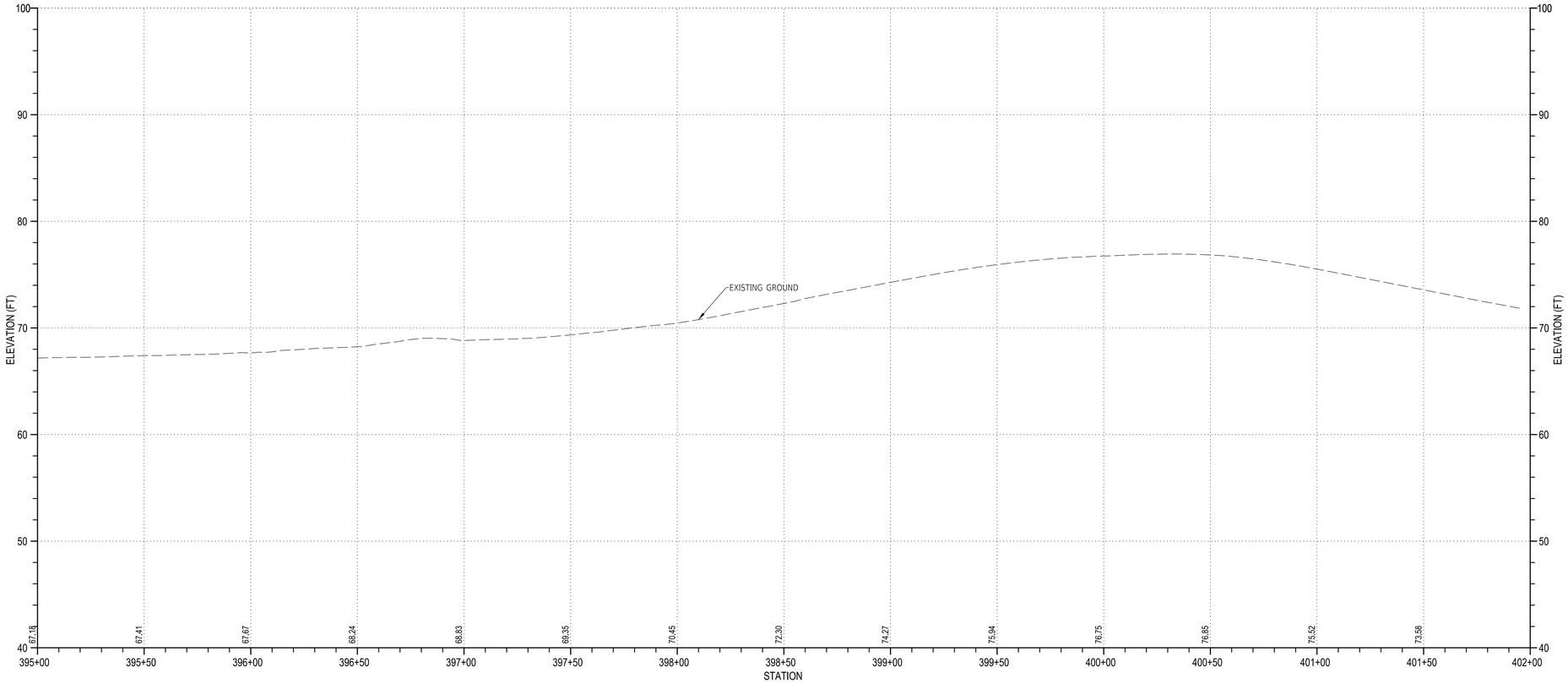
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

PROFILES

SECTION	PAI
SHEET NO.	65



Ramp D

NOTES:

1. *EXISTING DRAINAGE DISPLAYED IS BASED OFF A COMBINATION OF INFORMATION OBRAINTED FROM SURVEY AND INFORMATION OBTAINED FROM AS-BUILT CONSTRUCTION PLANS.*

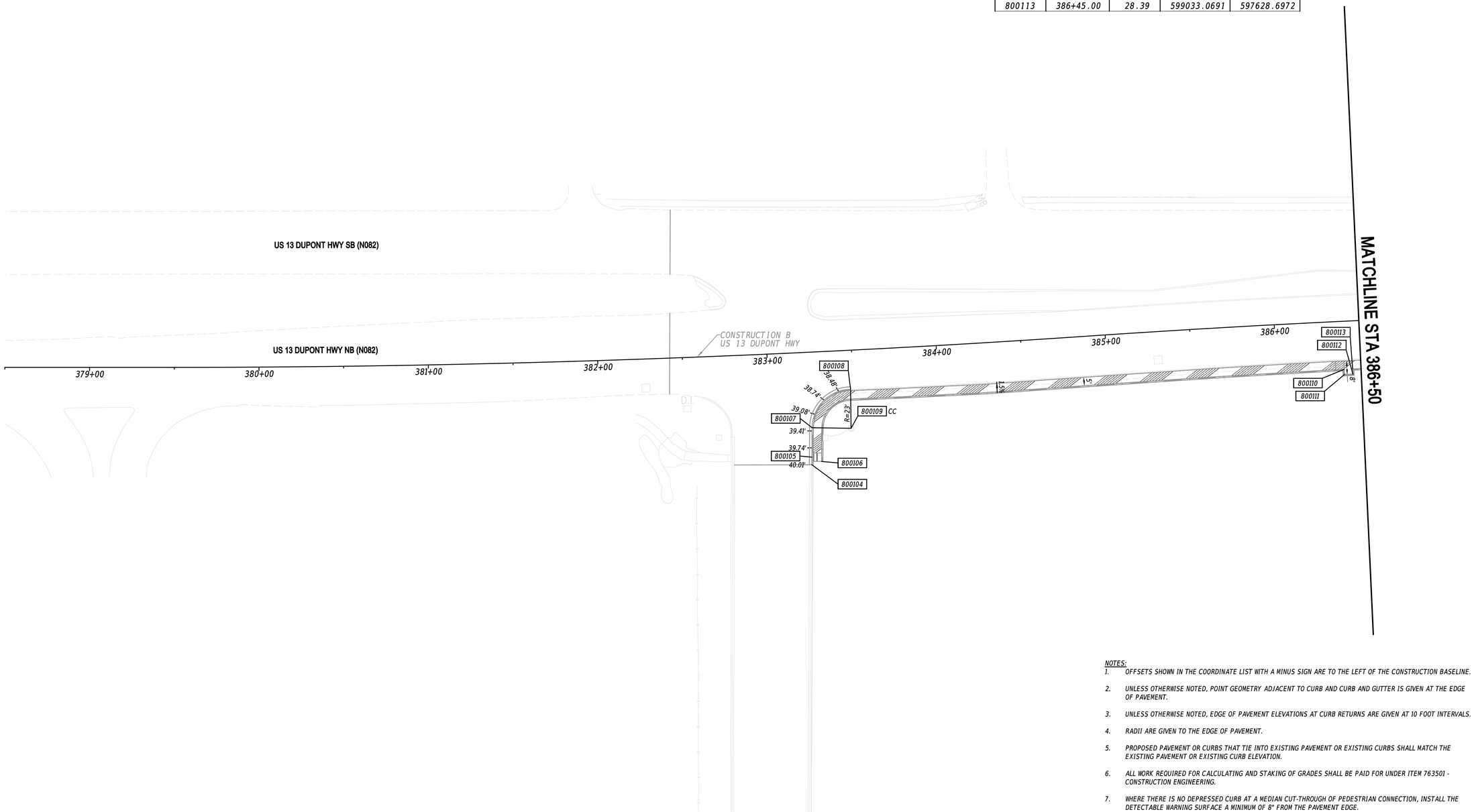
VERTICAL SCALE FEET: 0, 6, 12, 18

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:14
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PROFILES	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: O. GREEN		SHEET NO. 66
					CHECKED BY: P. HORSEY		

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800104	383+23.41	66.49	598724.0704	597530.5312
800105	383+23.65	62.00	598726.1879	597526.5586
800106	383+29.21	64.78	598730.0966	597531.4455
800107	383+24.58	44.63	598734.3695	597511.2091
800108	383+48.25	23.10	598764.9862	597501.6817
800109	383+47.41	46.09	598754.5779	597522.1919
800110	386+39.98	28.39	599028.5363	597626.5869
800111	386+40.02	31.41	599027.3032	597629.3366
800112	386+45.00	31.44	599031.7837	597631.4538
800113	386+45.00	28.39	599033.0691	597628.6972



NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTABLES
PLOT DRIVER: $PLOTDRVSS
DATE PLOTTED: 25-JUL-2024 @ 12:31
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

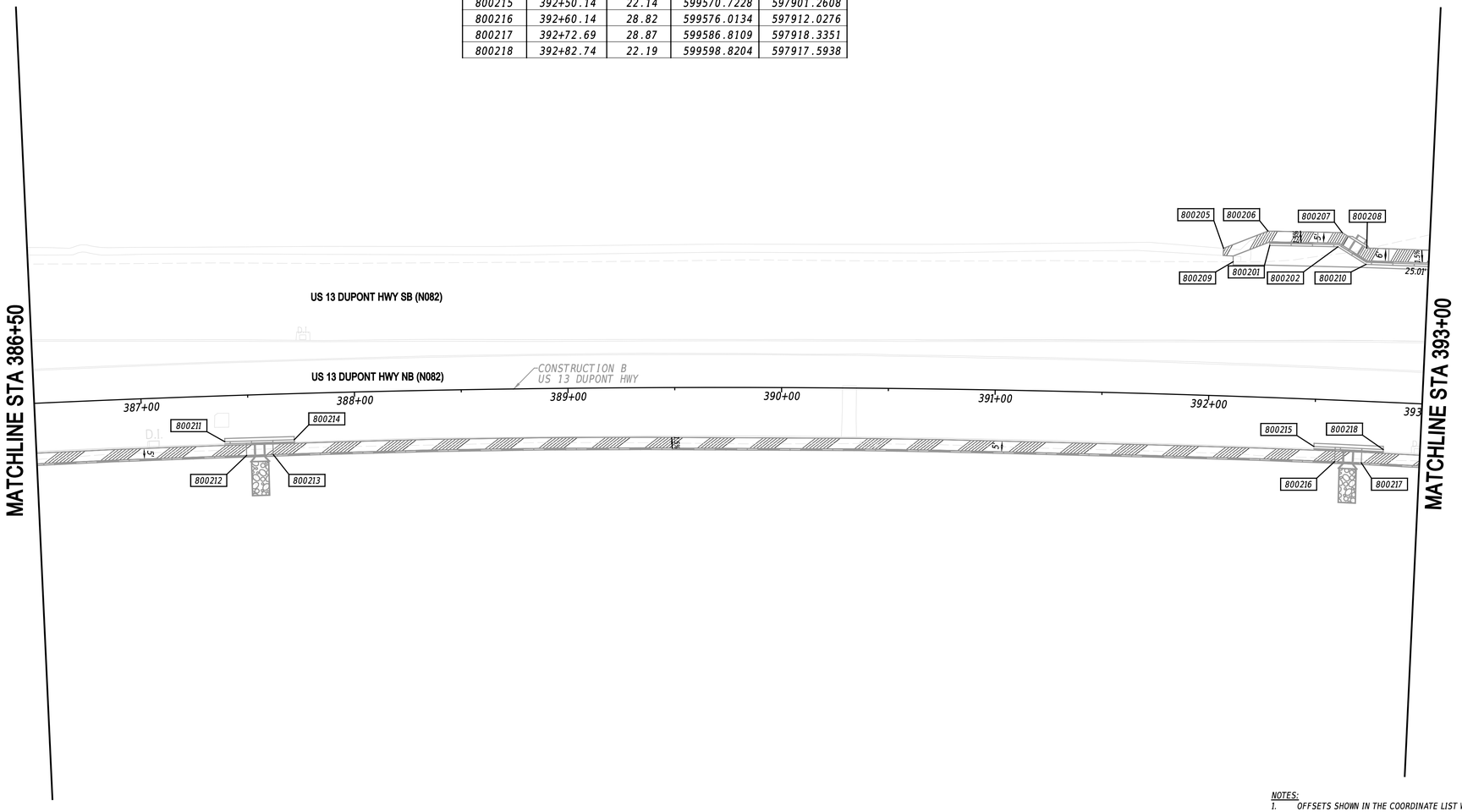
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-01
SECTION
PAI
SHEET NO.
67

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800201	392+26.01	-71.17	599596.1794	597808.2815
800202	392+57.62	-71.76	599624.1582	597823.6796
800205	392+04.67	-69.06	599576.3990	597799.4485
800206	392+24.93	-77.82	599598.5270	597801.9647
800207	392+59.31	-78.47	599628.9868	597818.7274
800208	392+71.00	-71.74	599635.8438	597830.4738
800209	392+09.30	-62.93	599577.4381	597807.0895
800210	392+70.99	-64.08	599631.9871	597837.0909
800211	387+38.60	21.52	599120.2717	597662.4696
800212	387+48.61	28.28	599126.3149	597672.8901
800213	387+61.16	28.26	599137.5662	597678.3362
800214	387+71.20	21.58	599149.4817	597676.7182
800215	392+50.14	22.14	599570.7228	597901.2608
800216	392+60.14	28.82	599576.0134	597912.0276
800217	392+72.69	28.87	599586.8109	597918.3351
800218	392+82.74	22.19	599598.8204	597917.5938



NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-02	
SECTION	PAI
SHEET NO.	68

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800305	393+34.79	-65.91	599688.4623	597868.0799
800306	393+57.81	-65.82	599708.3871	597880.0391
800307	393+86.76	-71.78	599736.5301	597889.9603
800308	394+86.17	-70.35	599821.4227	597943.6148
800309	395+37.37	-70.14	599865.1202	597971.2672
800310	395+76.51	-70.14	599898.1971	597992.1840
800311	395+78.62	-67.45	599898.5419	597995.5896
800312	395+81.72	-67.18	599901.0184	597997.4741
800313	396+06.92	-70.13	599923.9008	598008.4480
800314	396+04.91	-67.28	599920.6800	598009.7807
800315	396+01.93	-67.21	599918.1196	598008.2514
800316	396+53.92	-70.13	599963.6228	598033.5608
800317	397+98.35	-70.13	600085.7029	598110.7419
800318	398+00.35	-67.40	600085.9337	598114.1134
800319	398+03.32	-67.26	600088.3752	598115.8230
800320	397+98.34	-64.17	600082.5098	598115.7767
800321	398+28.42	-70.17	600111.1361	598126.7768
800322	398+24.52	-67.09	600106.2034	598127.2942

COORDINATE LIST

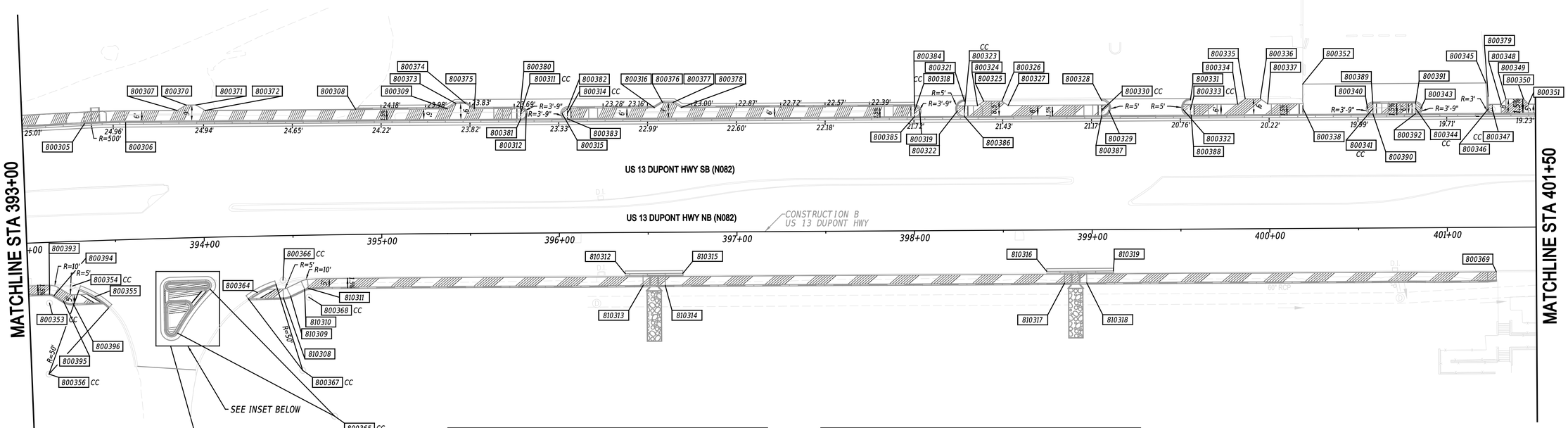
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800323	398+28.40	-67.22	600109.5536	598129.2569
800324	398+35.85	-70.17	600117.4241	598130.7522
800325	398+39.38	-72.64	600121.7265	598130.5500
800326	398+49.59	-72.62	600130.3437	598136.0187
800327	398+53.09	-70.17	600131.9945	598139.9638
800328	399+05.73	-70.17	600176.4838	598168.0908
800329	399+10.62	-67.25	600179.0606	598173.1754
800330	399+05.74	-67.18	600174.8973	598170.6157
800331	399+55.76	-70.17	600218.7714	598194.8259
800332	399+50.91	-67.20	600213.0896	598194.7473
800333	399+55.76	-67.27	600217.2256	598197.2721
800334	399+82.35	-70.17	600241.2462	598209.0348
800335	399+86.60	-73.14	600246.4263	598208.7914
800336	399+95.08	-73.11	600253.5862	598213.3478
800337	399+99.26	-70.19	600255.5558	598218.0549
800338	400+19.30	-67.10	600270.8386	598231.3761
800339	400+58.48	-70.16	600305.5969	598249.7213
800340	400+55.48	-67.26	600301.5068	598250.5676
800341	400+58.47	-64.17	600302.3863	598254.7862

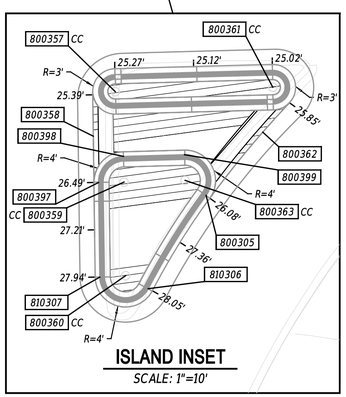
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800342	400+82.47	-70.17	600325.8781	598262.5405
800343	400+85.49	-67.21	600326.8457	598266.6452
800344	400+82.47	-67.34	600324.3634	598264.9277
800345	401+22.17	-81.25	600365.3541	598274.3835
800346	401+22.72	-66.47	600357.9236	598287.1715
800347	401+25.72	-66.50	600360.4749	598288.7514
800348	401+30.72	-69.17	600366.1272	598289.1687
800349	401+33.38	-72.17	600369.9747	598288.0520
800350	401+43.30	-72.17	600378.3635	598293.3555
800351	401+45.96	-69.17	600379.0045	598297.3100
800352	400+19.04	-81.25	600278.1814	598219.2715
800353	393+11.55	34.17	599617.5355	597942.4275
800354	393+24.96	25.00	599633.6947	597941.3100
800355	393+37.48	31.46	599641.1392	597953.2184
800356	393+09.73	74.08	599595.7513	597975.9229
800357	393+79.47	27.02	599679.3123	597970.8472
800358	393+76.36	32.97	599673.5912	597974.3459
800359	393+80.20	39.08	599673.7207	597981.5543
800360	393+79.07	53.37	599665.4021	597993.2217

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800361	394+00.35	26.98	599697.1396	597981.5529
800362	393+98.79	32.99	599692.7030	597985.8823
800363	393+88.39	39.00	599680.7428	597985.6862
800364	394+29.25	31.68	599719.2956	598000.5190
800365	394+71.91	102.08	599718.4041	598082.6167
800366	394+43.89	25.00	599735.2128	598002.4333
800367	394+54.14	76.02	599717.1639	598051.2243
800368	394+58.33	34.91	599742.2720	598018.4051
800369	401+27.41	25.05	600312.9824	598367.0312
800370	393+91.79	-74.69	599742.3858	597890.0971
800371	393+97.29	-74.58	599747.0803	597893.0650
800372	394+02.35	-71.37	599749.7956	597898.4557
800373	395+42.19	-73.14	599870.7953	597971.3058
800374	395+47.69	-73.14	599875.4417	597974.2449
800375	395+52.48	-70.14	599877.8949	597979.3435
800376	396+58.53	-73.02	599969.0688	598033.5811
800377	396+64.43	-73.02	599974.0504	598036.7306
800378	396+69.04	-70.13	599976.4045	598041.6417
800379	401+23.41	-73.80	600362.4221	598281.3389





COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800380	395+78.37	-70.17	599899.7905	597993.1599
800381	395+78.62	-64.17	599896.7917	597998.3578
800382	396+05.27	-70.18	599922.5298	598007.5263
800383	396+04.94	-64.16	599919.0342	598012.4269
800384	398+00.33	-70.18	600087.4036	598111.7574
800385	398+00.34	-64.14	600084.1884	598116.8687
800386	398+28.44	-64.16	600107.9526	598131.8647
800387	399+05.72	-64.17	600173.2723	598173.1589
800388	399+56.14	-64.16	600215.8865	598200.1052
800389	400+58.46	-70.18	600305.5921	598249.6964
800390	400+58.47	-64.17	600302.3855	598254.7857
800391	400+82.48	-70.18	600325.8887	598262.5319
800392	400+82.48	-64.17	600322.6779	598267.6125
800393	393+11.78	29.16	599620.2701	597938.2237
800394	393+14.33	30.02	599622.0234	597940.2592
800395	393+19.45	33.35	599624.7244	597945.7095
800396	393+24.95	35.00	599628.6012	597949.9118
800397	393+76.85	38.91	599670.9580	597979.6935
800398	393+80.29	35.61	599675.5911	597978.6277

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800399	393+88.39	35.61	599682.4954	597982.7796
810305	393+91.11	41.04	599682.0028	597988.8319
810306	393+83.09	53.16	599668.9264	597995.1004
810307	393+76.69	51.44	599664.3610	597990.3506
810308	394+43.87	34.99	599729.9755	598010.9379
810309	394+48.07	34.09	599734.0053	598012.3535
810310	394+56.09	30.41	599742.7305	598013.4102
810311	394+58.15	29.91	599744.7475	598014.0586
810312	396+36.94	23.16	599899.4272	598103.3390
810313	396+46.95	29.89	599904.2832	598114.3797
810314	396+59.45	29.88	599914.8540	598121.0511
810315	396+69.44	23.13	599926.9090	598120.6883
810316	398+74.29	23.27	600099.9802	598230.2721
810317	398+84.31	29.93	600104.8904	598241.2494
810318	398+96.81	29.92	600115.4615	598247.9205
810319	399+11.79	23.25	600131.6900	598250.2906

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-03
SECTION: PAI
SHEET NO.: 69

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800404	402+95.37	-69.17	600505.2978	598377.1536
800405	401+78.78	24.31	600356.7994	598393.8593
800406	402+97.53	-80.50	600513.1751	598368.7265
800407	403+14.50	-81.57	600528.0886	598376.8868
800408	402+92.53	-62.50	600499.3260	598381.2665
800409	402+97.53	-63.50	600504.0907	598383.0957
800410	403+47.60	-124.18	600578.8410	598358.5601
800411	403+47.47	-111.90	600572.1663	598368.8746
800412	403+48.47	-97.51	600565.3204	598381.5712
800413	403+60.77	-72.83	600562.5279	598409.0075
800414	403+84.38	-64.00	600577.7712	598429.0862
800415	403+84.38	-100.00	600597.0080	598398.6580
800416	404+14.97	-85.66	600615.1927	598427.1246
800417	404+31.77	-64.09	600617.8781	598454.3301
800418	404+36.78	-64.00	600622.0614	598457.0872
800419	404+46.87	-79.14	600638.6815	598449.6817

COORDINATE LIST

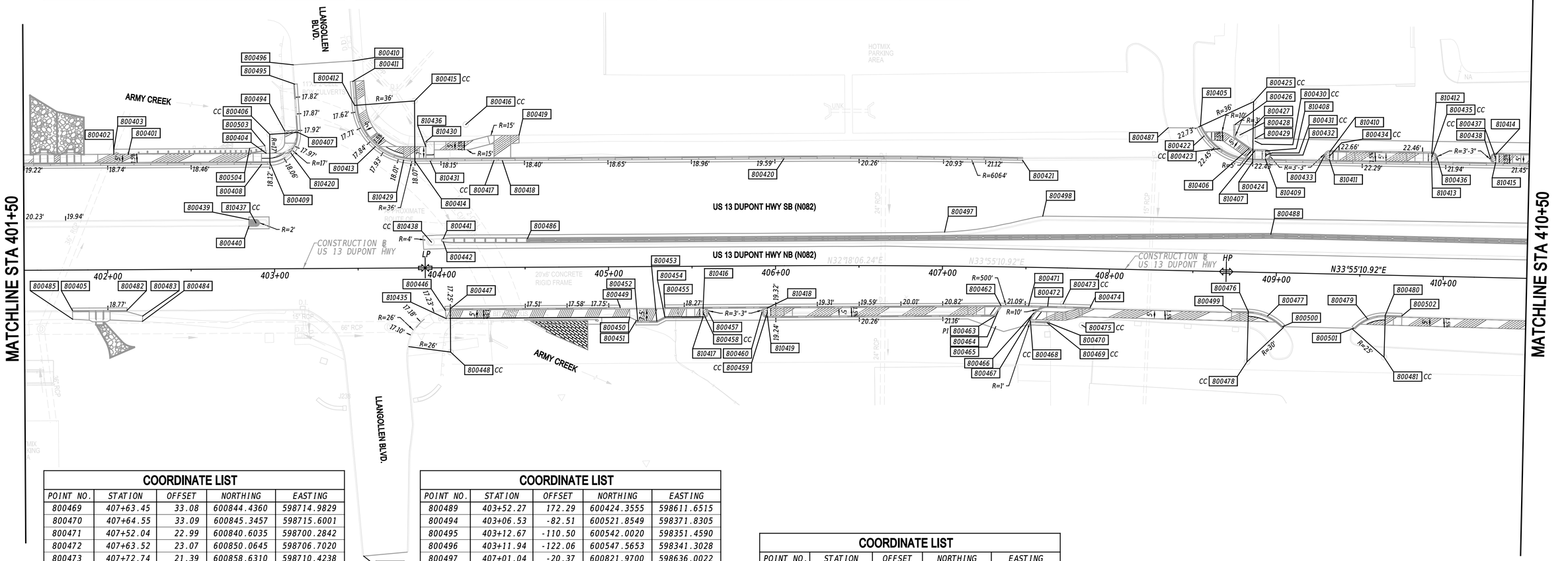
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800420	406+05.34	-64.00	600764.5347	598547.1610
800421	407+46.87	-64.00	600884.5207	598625.0138
800422	408+54.95	-80.90	600983.9266	598671.4122
800423	408+64.38	-73.48	600987.6132	598682.8382
800424	408+84.34	-66.05	601000.0306	598700.1360
800425	408+84.08	-102.05	601019.9034	598670.1181
800426	408+73.22	-88.09	601003.0991	598675.6435
800427	408+85.40	-88.16	601013.2435	598682.3778
800428	408+76.38	-82.05	601002.3531	598682.4231
800429	408+85.45	-79.98	601008.7252	598689.2020
800430	408+85.47	-78.48	601007.8971	598690.4528
800431	408+91.97	-70.32	601008.7395	598700.8561
800432	408+95.18	-70.34	601011.4138	598702.6268
800433	409+27.18	-70.57	601038.0961	598720.2918
800434	409+30.39	-70.59	601040.7715	598722.0644
800435	409+91.47	-71.03	601091.7086	598755.7884

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800436	409+94.68	-71.06	601094.3856	598757.5608
800437	410+29.89	-71.31	601123.7448	598776.9994
800438	410+26.68	-71.29	601121.0675	598775.2264
800439	402+84.71	-29.60	600475.1415	598404.9002
800440	402+84.71	-25.50	600472.9443	598408.3618
800441	404+01.14	-17.50	600567.0880	598477.3456
800442	404+01.11	-15.42	600565.9468	598479.0886
800446	404+02.08	25.43	600544.9334	598514.1324
800447	404+05.11	24.50	600547.9953	598514.9646
800448	404+05.11	50.50	600534.1012	598536.9409
800449	405+06.86	24.50	600633.9982	598569.3384
800450	405+12.50	30.25	600635.6918	598577.2105
800451	405+16.46	32.23	600637.9887	598581.0046
800452	405+17.35	32.67	600638.4987	598581.8471
800453	405+28.71	32.66	600648.1073	598587.9085
800454	405+33.51	30.25	600653.4545	598588.4404

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800455	405+33.51	24.50	600656.5271	598583.5802
800456	405+61.22	24.50	600679.9478	598598.3855
800457	405+59.71	27.75	600676.9364	598600.3283
800458	405+56.46	27.75	600674.1899	598598.5908
800459	405+94.97	27.75	600706.7352	598619.1688
800460	405+91.72	27.75	600703.9879	598617.4307
800461	405+90.22	24.50	600704.4584	598613.8831
800462	407+35.33	23.10	600826.6823	598691.1550
800463	407+31.71	29.68	600820.0410	598694.6464
800464	407+33.67	26.82	600823.2505	598693.3479
800465	407+32.47	24.50	600817.2748	598700.2091
800466	407+55.13	27.46	600840.6853	598705.7115
800467	407+53.77	29.45	600838.4541	598706.6142
800468	407+53.24	32.00	600836.5982	598708.4452



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800469	407+63.45	33.08	600844.4360	598714.9829
800470	407+64.55	33.09	600845.3457	598715.6001
800471	407+52.04	22.99	600840.6035	598700.2842
800472	407+63.52	23.07	600850.0645	598706.7020
800473	407+72.74	21.39	600858.6310	598710.4238
800474	407+89.02	23.22	600871.1154	598721.0273
800475	407+84.27	33.95	600861.1862	598727.2760
800476	408+83.76	23.70	600949.4626	598774.2907
800477	408+95.29	26.07	600957.7084	598782.6878
800478	408+83.61	53.70	600932.5963	598799.1017
800479	409+55.18	26.36	601007.2438	598816.3579
800480	409+65.77	24.09	601017.3009	598820.3804
800481	409+65.60	49.09	601003.2091	598841.0315
800482	402+11.44	24.38	600384.3643	598411.3700
800483	402+20.82	27.79	600390.4692	598419.2644
800484	402+20.63	31.02	600388.5832	598421.8907
800485	401+78.88	29.47	600354.1169	598398.2733
800486	404+51.52	-17.17	600609.4929	598504.5419
800487	408+33.35	-85.31	600968.4665	598655.7000
800488	408+96.17	-23.00	600985.8224	598742.4626

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800489	403+52.27	172.29	600424.3555	598611.6515
800494	403+06.53	-82.51	600521.8549	598371.8305
800495	403+12.67	-110.50	600542.0020	598351.4590
800496	403+11.94	-122.06	600547.5653	598341.3028
800497	407+01.04	-20.37	600821.9700	598636.0022
800498	407+59.48	-30.74	600876.6384	598659.7356
800499	408+73.76	23.65	600941.1927	598768.6685
800500	409+04.53	32.20	600961.9560	598792.9364
800501	409+47.17	32.20	600997.3374	598816.7294
800502	409+75.77	24.16	601025.5622	598826.0181
800503	402+94.61	-73.71	600507.0773	598372.9012
800504	402+85.46	-72.17	600498.5163	598369.3180
810405	408+52.61	-86.74	600985.2396	598665.2626
810406	408+81.85	-73.96	601002.3704	598692.1853
810407	408+85.51	-72.71	601004.7129	598695.2597
810408	408+91.99	-72.78	601010.1262	598698.8232
810409	408+91.97	-67.75	601007.3116	598702.9856
810410	409+30.36	-73.05	601042.1261	598720.0109
810411	409+30.40	-68.06	601039.3697	598724.1716
810412	409+91.46	-73.50	601093.0741	598753.7371

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
810413	409+91.44	-68.47	601090.2572	598757.8946
810414	410+29.87	-73.75	601125.0854	598774.9571
810415	410+29.84	-68.78	601122.2872	598779.0671
810416	405+56.47	25.25	600675.5324	598596.4843
810417	405+56.45	30.29	600672.8192	598600.7312
810418	405+94.84	25.24	600707.9719	598616.9830
810419	405+94.93	30.24	600705.3783	598621.2543
810420	403+10.20	-69.17	600517.8290	598385.0771
810429	403+77.67	-64.63	600572.4360	598424.9669
810430	403+91.02	-75.65	600589.6046	598422.7855
810431	403+93.52	-64.00	600585.4969	598433.9705
810435	404+02.61	30.40	600542.7290	598518.6203
810436	403+91.02	-72.63	600587.9888	598425.3412
810437	402+89.02	-27.55	600477.6841	598408.9362
810438	403+94.05	-15.37	600559.9560	598475.3535

NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

GG-04

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

GRADES AND GEOMETRICS

SECTION	PAI
SHEET NO.	70

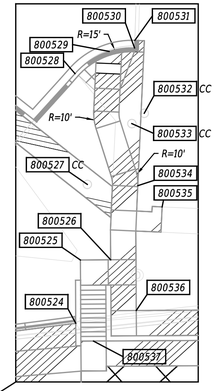
PENNONI ASSOCIATES INC. | PEN_TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERFN | OFFICE LOCATION: $OFFICENAMES

Pennoni

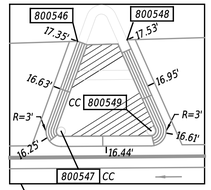
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800505	410+82.49	-87.60	601176.4808	598792.8256
800509	410+82.22	-74.89	601169.1671	598803.2255
800511	411+01.85	-89.20	601193.4385	598802.3040
800512	410+82.07	-67.47	601164.8990	598809.2946
800513	411+64.40	-79.37	601239.6393	598845.1174
800514	410+94.61	-72.01	601177.8406	598812.5280
800515	411+81.87	-89.37	601259.5998	598846.3920
800516	411+70.23	-73.04	601240.9407	598853.5939
800517	411+81.83	-69.37	601248.5046	598863.0322
800519	413+24.72	-73.86	601369.7001	598936.8999
800520	413+14.71	-75.02	601361.9753	598930.5495

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800521	413+91.70	-72.58	601425.0403	598973.7847
800522	414+40.00	-56.25	601457.0361	599013.3354
800523	415+64.49	-56.25	601562.2742	599079.8376
800524	416+42.09	-72.68	601636.6503	599107.4044
800525	416+43.09	-85.21	601644.1921	599097.3417
800526	416+49.09	-85.21	601649.2630	599100.5460
800527	416+44.55	-100.17	601653.4156	599085.4805
800528	416+42.24	-122.12	601663.1911	599065.6932
800529	416+49.02	-126.48	601671.2490	599065.6295
800530	416+54.06	-127.13	601675.8596	599067.7679
800531	416+54.14	-128.63	601676.7246	599066.5426
800532	416+55.90	-114.18	601670.4969	599079.7007

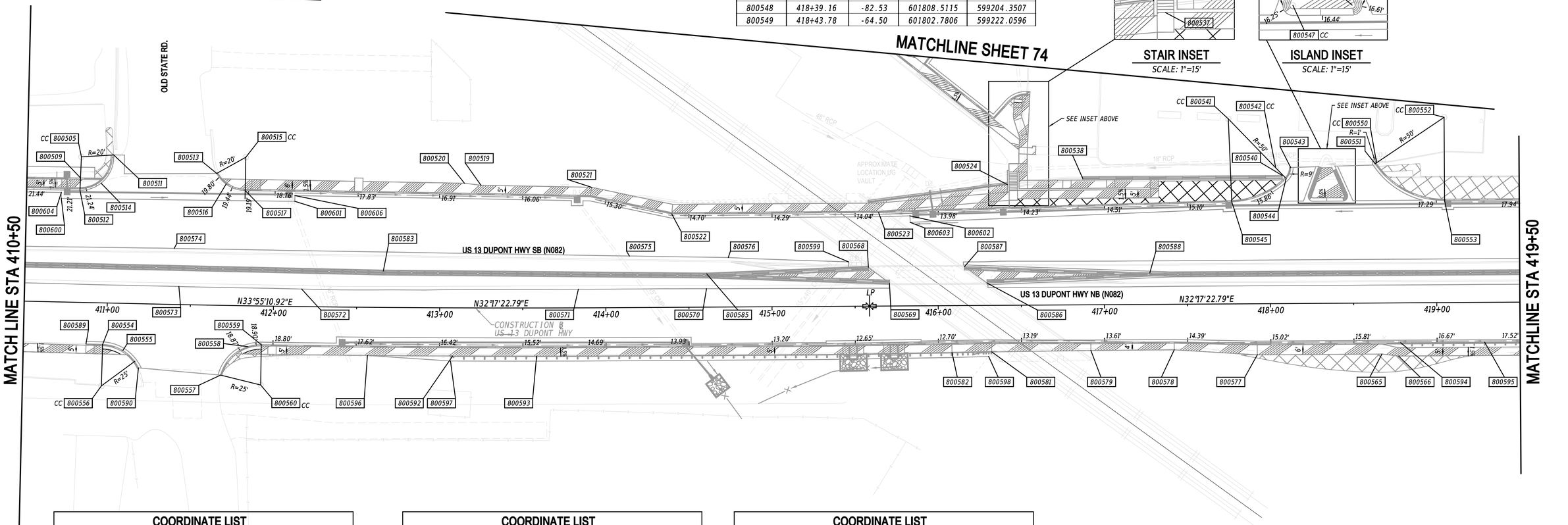
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800533	416+53.45	-112.14	601667.3343	599080.1096
800534	416+54.54	-99.66	601661.5857	599091.2467
800535	416+59.34	-95.62	601663.4852	599097.2263
800536	416+54.09	-75.13	601648.1045	599111.7419
800537	416+45.59	-69.13	601637.7138	599112.2733
800538	416+87.43	-77.13	601677.3574	599127.8639
800540	418+07.42	-77.13	601778.7957	599191.9626
800541	417+75.23	-111.40	601769.8823	599145.7953
800542	418+03.62	-81.72	601778.0329	599186.0454
800543	418+12.55	-81.90	601785.6772	599190.6674
800544	418+09.79	-75.27	601779.8059	599194.8006
800545	417+77.01	-61.43	601744.6939	599188.9863
800546	418+29.36	-82.30	601800.1008	599199.3106
800547	418+25.99	-64.50	601787.7425	599212.5567
800548	418+39.16	-82.53	601808.5115	599204.3507
800549	418+43.78	-64.50	601802.7806	599222.0596



STAIR INSET
SCALE: 1"=15'



ISLAND INSET
SCALE: 1"=15'



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800550	418+64.24	-84.39	601830.7065	599216.1789
800551	418+63.41	-83.84	601829.7067	599216.2016
800552	419+05.06	-111.50	601879.6938	599215.0649
800553	419+05.06	-61.50	601852.9838	599257.3328
800554	410+97.74	24.99	601126.3070	598894.7694
800555	411+10.04	28.32	601134.6539	598904.4002
800556	410+97.57	49.99	601112.2124	598915.4174
800557	411+68.92	42.00	601176.0941	598948.6243
800558	411+85.02	24.57	601199.1986	598943.0560
800559	411+93.02	23.25	601206.6092	598946.3831
800560	411+93.06	47.53	601193.2379	598966.6528
800565	418+66.81	30.75	601771.3696	599314.8844
800566	418+76.81	32.00	601779.1554	599321.2831
800568	415+58.11	-23.46	601539.3665	599104.1507
800569	415+70.73	-13.59	601544.7596	599119.2330
800570	414+60.65	-11.11	601450.3813	599062.5236
800571	413+83.49	-11.20	601385.2337	599021.2200
800572	412+16.82	-10.56	601245.1214	598931.3043
800573	411+42.87	-10.86	601183.7563	598890.1835

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800574	411+39.55	-33.75	601193.7469	598869.3157
800575	414+14.38	-31.07	601421.9277	599020.9380
800576	414+73.85	-29.79	601471.5160	599053.7833
800577	417+91.82	30.75	601707.9772	599274.8254
800578	417+41.84	27.45	601667.4875	599245.3405
800579	416+91.68	27.50	601625.0572	599218.5870
800581	416+32.02	28.00	601574.3546	599187.1334
800582	416+08.10	28.24	601554.0067	599174.5582
800583	412+65.97	-22.00	601292.4278	598948.6388
800585	414+60.81	-20.00	601455.2658	599055.0977
800586	416+29.51	-13.44	601594.3682	599150.7604
800587	416+15.94	-23.45	601588.2444	599135.0514
800588	417+27.43	-19.00	601680.1189	599198.3707
800589	410+87.74	24.92	601118.0446	598889.1308
800590	411+19.61	38.65	601136.8332	598918.3034
800592	413+07.92	29.00	601299.8677	599014.2658
800593	413+58.28	29.00	601342.3544	599041.5625
800594	418+78.15	24.00	601784.5564	599315.2326
800595	419+28.65	24.00	601827.2468	599342.2096

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800596	412+56.80	29.00	601256.8716	598986.3322
800597	413+06.65	32.00	601297.1700	599016.0943
800598	416+30.12	30.77	601571.2731	599188.4632
800599	415+46.21	-26.70	601531.0310	599095.0519
800600	410+70.92	-62.35	601152.7873	598807.3269
800601	412+12.03	-63.28	601270.1559	598884.6622
800602	415+83.36	-54.27	601577.1638	599091.5915
800603	415+83.47	-50.27	601575.1303	599095.0315
800604	410+70.87	-65.88	601154.7170	598804.3690
800606	412+12.03	-66.77	601272.0748	598881.7510

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

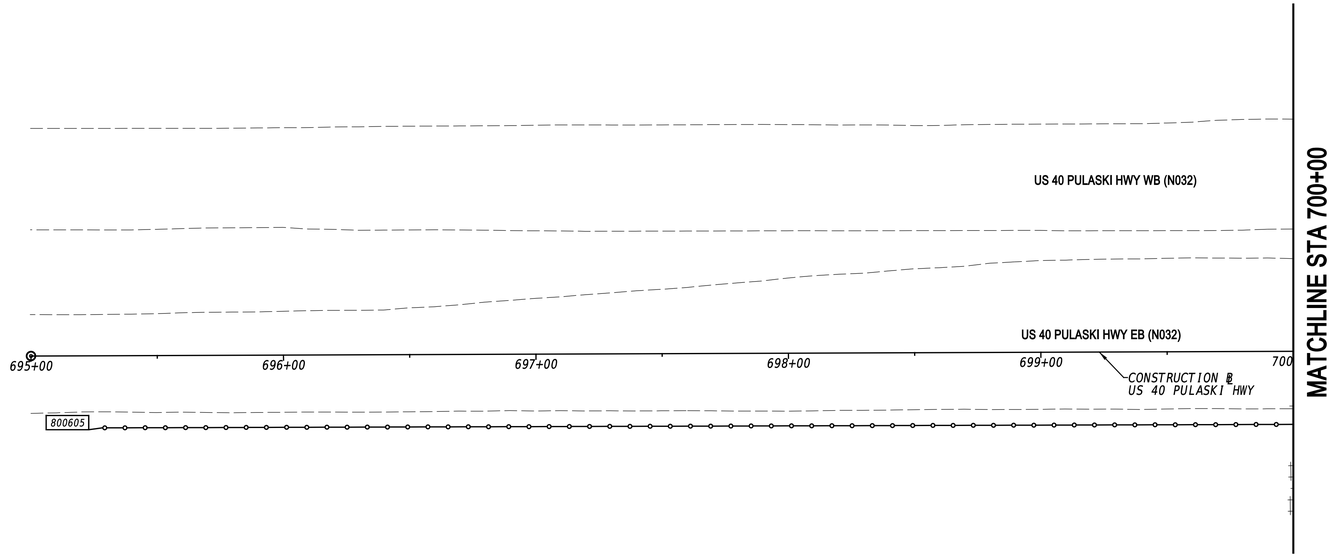
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	O. GREEN
NEW CASTLE	CHECKED BY:	P. HORSEY

GRADES AND GEOMETRICS

GG-05
SECTION
PAI
SHEET NO.
71

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800605	695+28.20	28.57	600949.9377	597630.0659



NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTABLE$
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVDS
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

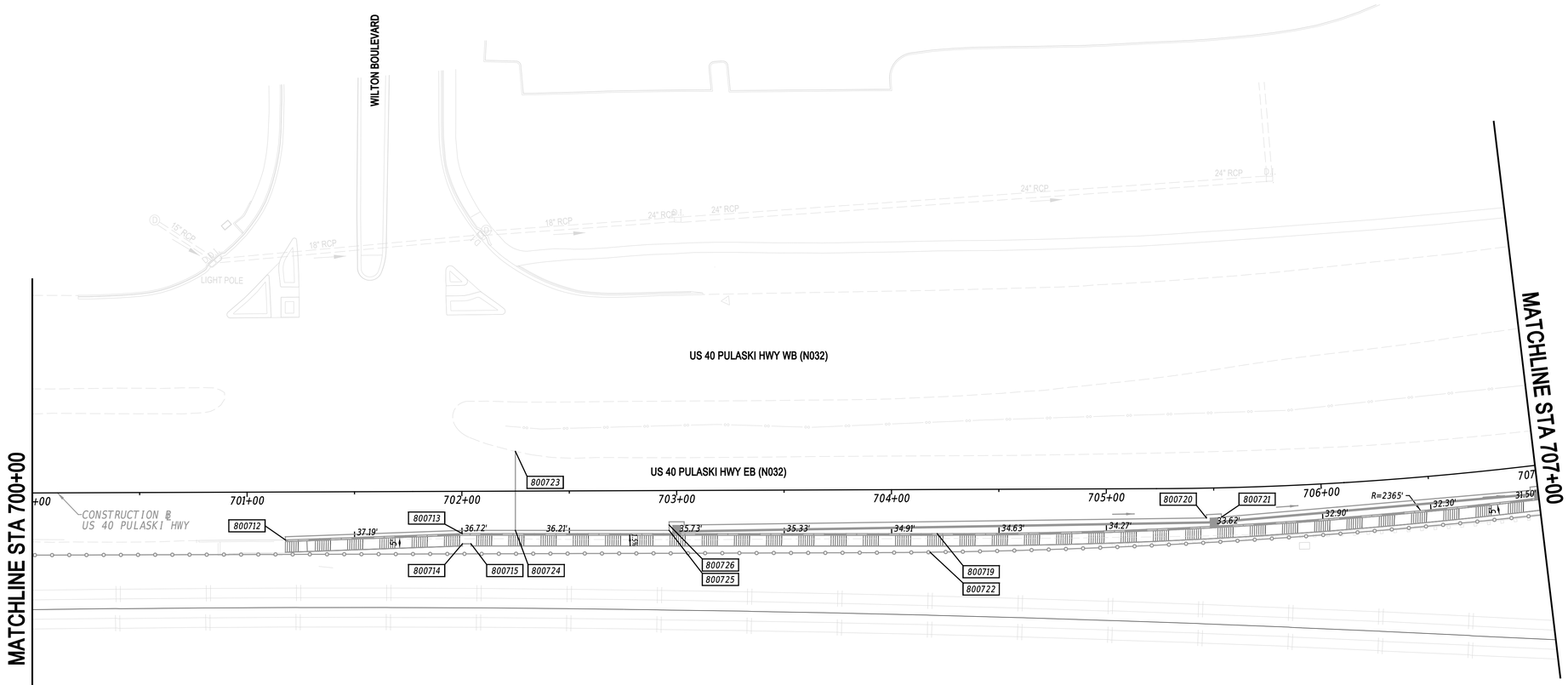
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

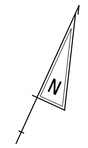
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

	GG-06
SECTION	PAI
SHEET NO.	72

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800712	701+17.78	22.35	601202.4549	598162.8722
800713	702+00.14	19.70	601239.3499	598236.5462
800714	702+00.14	24.45	601235.0363	598238.5352
800715	702+04.14	24.46	601236.6972	598242.1741
800719	704+21.24	20.55	601331.1577	598437.6931
800720	705+46.40	13.88	601389.8674	598548.6719
800721	705+53.33	13.65	601393.1170	598554.8719
800722	704+17.86	29.16	601321.9228	598438.2251
800723	702+25.00	-18.50	601284.4490	598243.1301
800724	702+24.86	18.29	601250.9768	598258.4076
800725	702+96.42	18.57	601280.6918	598323.5119
800726	702+96.42	16.07	601282.9621	598322.4651





NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

MATCHLINE SHEET 71

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

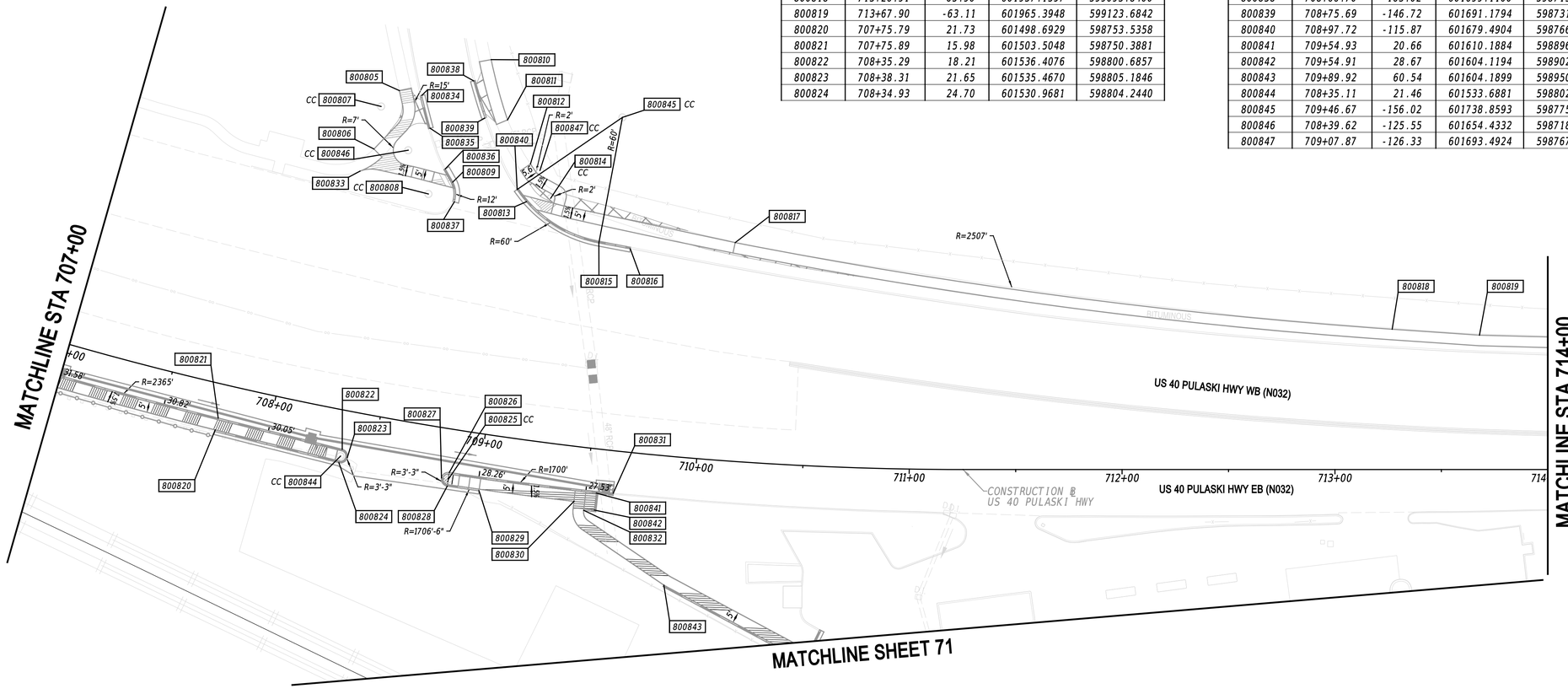
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-07
SECTION
PAI
SHEET NO.
73

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800805	708+29.33	-152.28	601670.3946	598695.1002
800806	708+22.31	-123.03	601642.9872	598707.1654
800807	708+21.62	-143.27	601659.0150	598694.7795
800808	708+53.75	-107.06	601647.4715	598740.0364
800809	708+64.87	-114.56	601659.6877	598743.6870
800810	708+73.92	-174.26	601711.9358	598713.6560
800811	708+87.49	-147.53	601698.4092	598739.7081
800812	709+02.59	-128.68	601692.2736	598762.2085
800813	709+03.34	-110.89	601678.8783	598773.9363
800814	709+15.27	-114.08	601688.3313	598780.4897
800815	709+42.26	-96.15	601690.7265	598811.2680
800816	709+58.22	-95.09	601699.6820	598823.3012
800817	710+10.41	-102.56	601737.9124	598854.5696
800818	713+26.91	-65.90	601937.1597	599093.8400
800819	713+67.90	-63.11	601965.3948	599123.6842
800820	707+75.79	21.73	601498.6929	598753.5358
800821	707+75.89	15.98	601503.5048	598750.3881
800822	708+35.29	18.21	601536.4076	598800.6857
800823	708+38.31	21.65	601535.4670	598805.1846
800824	708+34.93	24.70	601530.9681	598804.2440

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800825	708+86.11	23.55	601563.4451	598844.8491
800826	708+86.08	20.30	601565.9787	598842.8136
800827	708+82.91	23.37	601561.5757	598842.1906
800828	708+86.13	26.80	601560.9115	598846.8846
800829	709+00.94	26.69	601570.3970	598858.5850
800830	709+45.08	25.71	601599.8374	598892.4995
800831	709+62.74	19.89	601615.9663	598902.2352
800832	709+50.00	29.41	601600.2897	598898.7084
800833	708+17.56	-111.54	601631.1122	598710.3471
800834	708+41.26	-151.99	601676.5449	598703.9233
800835	708+48.61	-137.58	601668.9885	598717.8826
800836	708+59.98	-120.05	601661.3062	598736.7615
800837	708+67.35	-105.49	601653.9079	598751.0444
800838	708+66.70	-163.02	601699.1100	598715.4551
800839	708+75.69	-146.72	601691.1794	598731.8261
800840	708+97.72	-115.87	601679.4904	598766.7664
800841	709+54.93	20.66	601610.1884	598896.7829
800842	709+54.91	28.67	601604.1194	598902.0084
800843	709+89.92	60.54	601604.1899	598950.1101
800844	708+35.11	21.46	601533.6881	598802.4648
800845	709+46.67	-156.02	601738.8593	598775.4457
800846	708+39.62	-125.55	601654.4332	598718.5002
800847	709+07.87	-126.33	601693.4924	598767.4540



NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$
FILE NAME: $FILE$ | PLOT DRIVER: $PLTDRV$
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACE$ | USER NAME: $USER$ | OFFICE LOCATION: $OFFICENAME$

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-08
SECTION: PAI
SHEET NO.: 74

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800905	714+28.17	-61.49	602008.5748	599165.7593
800906	714+45.87	-52.46	602015.4611	599184.3944
800907	714+55.99	-60.17	602028.1221	599185.5983
800908	715+02.49	-73.61	602071.4131	599207.2601
800909	715+02.48	-70.03	602068.9705	599209.8817
800910	715+16.44	-69.86	602079.1189	599219.4812
800911	715+16.41	-62.13	602073.8538	599225.1321
800912	715+15.19	-57.39	602069.7378	599227.7893
800913	715+06.36	-52.18	602059.7205	599225.6317
800914	715+06.41	-62.18	602066.5374	599218.3152
800915	715+48.45	-71.89	602104.0234	599239.6939
800916	715+48.41	-61.98	602097.2665	599246.9461
800917	715+49.59	-57.23	602094.9066	599251.2395
800918	715+58.41	-61.93	602104.5829	599253.7629
800919	715+58.36	-51.93	602097.7661	599261.0794

COORDINATE LIST

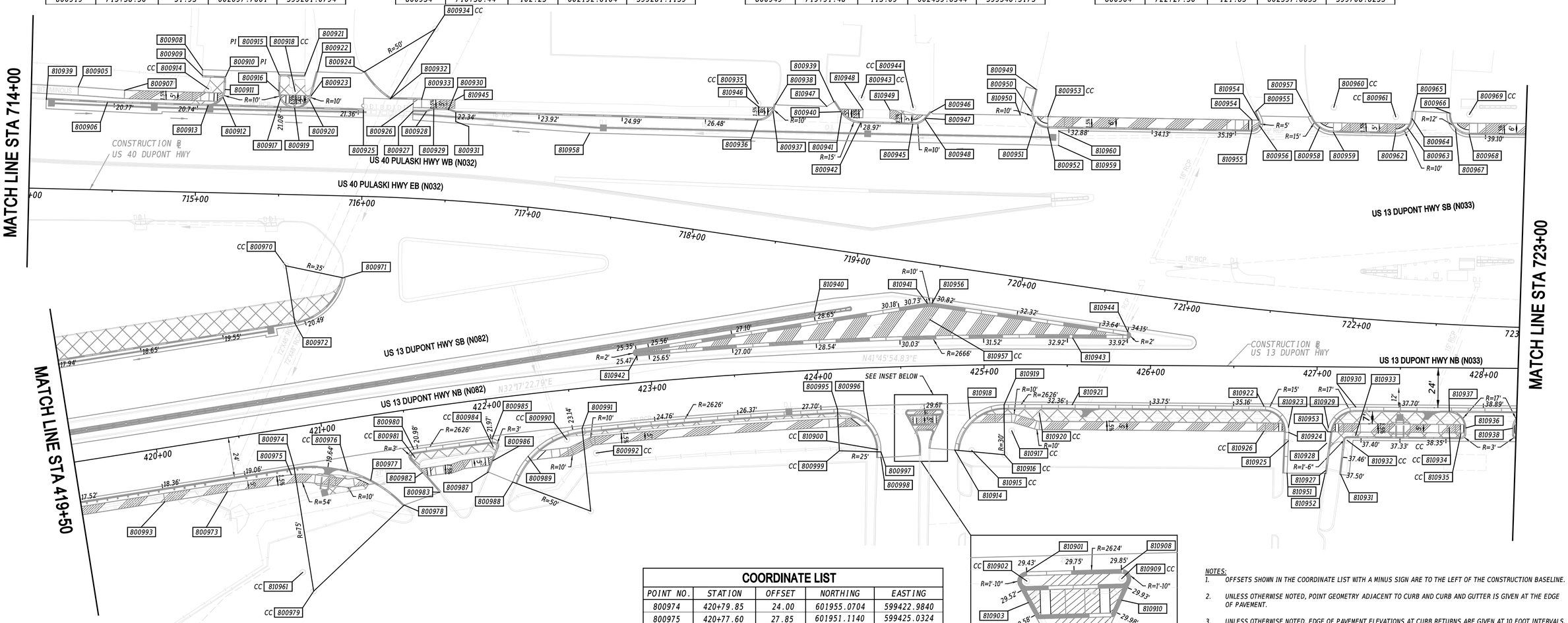
POINT NO.	STATION	OFFSET	NORTHING	EASTING
800920	715+67.19	-57.14	602107.7833	599263.2370
800921	715+63.94	-71.82	602115.3558	599250.2525
800922	715+71.58	-73.98	602122.4330	599253.8454
800923	715+68.13	-59.60	602110.1467	599262.0722
800924	715+99.33	-74.69	602143.4089	599272.2471
800925	715+99.51	-51.74	602127.9490	599289.2014
800926	716+28.12	-56.87	602153.0945	599305.9546
800927	716+28.18	-52.09	602149.8201	599309.4371
800928	716+35.85	-52.30	602155.6743	599314.8488
800929	716+40.13	-53.93	602159.9963	599316.8035
800930	716+48.52	-54.23	602166.4131	599322.7393
800931	716+52.91	-52.91	602168.6997	599326.8997
800932	716+14.78	-59.00	602144.5229	599294.7893
800933	716+32.85	-59.54	602158.5011	599307.4814
800934	716+38.44	-102.25	602192.6164	599281.1139

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800935	718+27.77	-80.30	602308.6809	599442.7659
800936	718+28.97	-70.37	602301.8903	599450.1067
800937	718+37.19	-76.93	602312.2070	599452.1237
800938	718+38.00	-81.43	602316.1686	599449.8276
800939	718+72.55	-87.99	602343.5357	599471.9130
800940	718+77.33	-82.66	602342.5640	599479.0117
800941	718+78.13	-81.84	602342.4523	599480.1484
800942	718+90.30	-77.78	602347.2395	599492.0572
800943	718+88.50	-92.67	602357.4254	599481.0461
800944	719+20.12	-91.45	602376.9628	599505.9304
800945	719+21.32	-81.52	602370.1721	599513.2712
800946	719+31.14	-90.24	602383.1804	599515.1128
800947	719+28.61	-86.17	602378.4397	599515.8208
800948	719+28.25	-85.63	602377.7953	599515.8957
800949	719+91.48	-113.09	602439.6544	599546.3173

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800950	719+90.69	-99.43	602428.7268	599554.5528
800951	719+94.10	-93.42	602426.3627	599561.0449
800952	720+01.84	-91.15	602429.6391	599568.4115
800953	720+00.98	-97.84	602434.1805	599563.4207
800954	721+26.21	-112.55	602524.8967	599645.8122
800955	721+28.03	-117.97	602530.0753	599643.4422
800956	721+31.66	-110.20	602526.6428	599651.2187
800957	721+62.83	-118.53	602552.8005	599667.2124
800958	721+69.19	-112.10	602552.2480	599676.0057
800959	721+78.24	-110.13	602556.7280	599683.5923
800960	721+77.13	-125.09	602566.8346	599672.5082
800961	722+16.98	-122.40	602591.0441	599701.3491
800962	722+17.53	-112.41	602584.3064	599708.7385
800963	722+25.14	-116.03	602591.9491	599711.3081
800964	722+27.56	-121.85	602597.6853	599708.8253

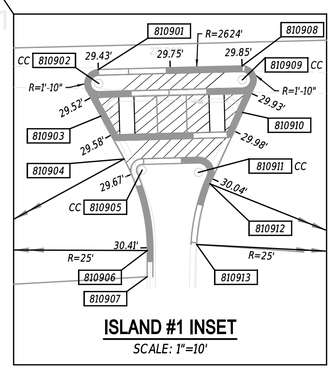


COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800965	722+27.85	-126.51	602601.1787	599705.7220
800966	722+51.73	-122.35	602614.2253	599724.5203
800967	722+55.42	-117.34	602613.2083	599730.5308
800968	722+64.24	-114.45	602617.1769	599738.4207
800969	722+63.71	-126.44	602625.1606	599729.4619
800970	420+93.91	-96.50	602031.3230	599328.6266
800971	421+26.23	-84.01	602052.2706	599356.6658
800972	420+93.91	-61.50	602012.6260	599358.2141
800973	420+38.00	32.01	601915.4142	599407.3943

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800974	420+79.85	24.00	601955.0704	599422.9840
800975	420+77.60	27.85	601951.1140	599425.0324
800976	421+11.48	30.80	601978.1784	599445.6260
800977	421+24.31	38.48	601984.7921	599458.9121
800978	421+42.21	56.34	601989.9476	599483.4420
800979	420+79.85	99.00	601915.0054	599486.3859
800980	421+52.90	24.00	602016.3898	599462.0525
800981	421+52.90	29.00	602013.6570	599466.2388
800982	421+56.06	38.67	602010.9851	599476.0392
800983	421+64.94	51.77	602011.0902	599491.7773
800984	422+00.83	29.00	602053.1236	599492.4899
800985	422+00.83	24.00	602055.9285	599488.3512
800986	421+99.66	37.16	602047.5897	599498.5913
800987	421+95.98	43.61	602040.9734	599501.9060



NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-31 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

GRADES AND GEOMETRICS

GG-09	
SECTION	PAI
SHEET NO.	75

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801005	428+54.65	-150.20	602671.9261	599773.8161
801006	428+54.66	-140.21	602665.2730	599781.2818
801007	428+64.72	-157.26	602684.1432	599775.2617
801008	428+64.65	-150.10	602679.3139	599780.5556
801009	428+61.68	-143.10	602672.4426	599783.8028
801010	429+14.78	-150.08	602716.6962	599813.9596
801011	429+17.71	-143.01	602714.1710	599821.1846
801012	429+24.78	-140.08	602717.4942	599828.0792
801013	429+34.78	-140.08	602724.9530	599834.7400
801014	429+19.78	-150.76	602720.8793	599816.7820
801015	429+27.85	-155.76	602730.2308	599818.4294
801016	429+24.78	-150.08	602724.1550	599820.6204
801017	430+28.41	-140.50	602795.0683	599896.7934
801018	430+66.77	-150.70	602830.4763	599914.7412
801019	430+66.53	-140.70	602823.6381	599922.0377
801020	430+78.12	-162.24	602846.6220	599913.6924
801021	430+76.98	-151.97	602838.9314	599920.5906
801022	430+76.71	-149.59	602837.1534	599922.1853

COORDINATE LIST

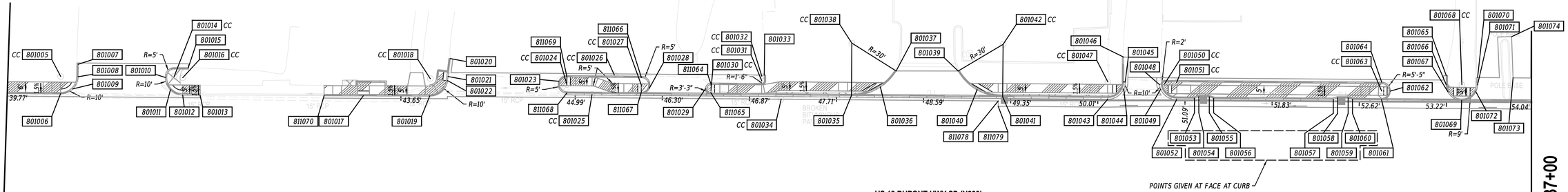
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801023	431+40.52	-149.75	602884.8517	599964.5713
801024	431+45.21	-148.00	602887.1796	599968.9963
801025	431+59.65	-142.25	602894.1201	599982.9033
801026	431+72.37	-153.67	602911.2177	599982.8653
801027	431+87.90	-147.99	602919.0154	599997.4453
801028	431+92.55	-146.17	602921.2696	600001.8970
801029	432+24.77	-146.17	602945.3045	600023.3604
801030	432+27.98	-146.21	602947.7251	600025.4662
801031	432+57.03	-150.92	602972.5265	600041.3017
801032	432+57.03	-153.67	602974.3580	600039.2504
801033	432+58.41	-154.25	602975.7785	600039.7368
801034	432+68.24	-140.50	602973.9549	600056.5428
801035	433+08.55	-143.00	603005.6877	600081.5289
801036	433+25.14	-148.00	603021.3871	600088.8452
801037	433+34.09	-157.25	603034.2226	600087.9075
801038	433+08.55	-173.00	603025.6701	600059.1525
801039	433+69.69	-157.49	603060.9396	600111.4468
801040	433+80.63	-146.87	603062.0262	600126.6492

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801041	433+95.37	-143.00	603070.4427	600139.3559
801042	433+95.37	-173.00	603090.4250	600116.9795
801043	434+55.65	-142.00	603114.7352	600180.2504
801044	434+64.83	-148.03	603125.5988	600181.8655
801045	434+65.65	-152.00	603128.8548	600179.4524
801046	434+64.65	-166.22	603137.5777	600168.1831
801047	434+55.65	-152.00	603121.3960	600172.7916
801048	434+85.23	-150.69	603142.5915	600193.4751
801049	434+85.98	-148.00	603141.3579	600195.9805
801050	434+88.21	-151.08	603145.0716	600195.1631
801051	434+95.15	-152.00	603150.8583	600199.1017
801052	434+95.15	-142.00	603144.1975	600206.5605
801053	435+05.42	-143.00	603152.5253	600212.6566
801054	435+07.92	-143.83	603154.9466	600213.7009
801055	435+13.92	-143.83	603159.4219	600217.6974
801056	435+16.42	-143.00	603160.7323	600219.9856

COORDINATE LIST

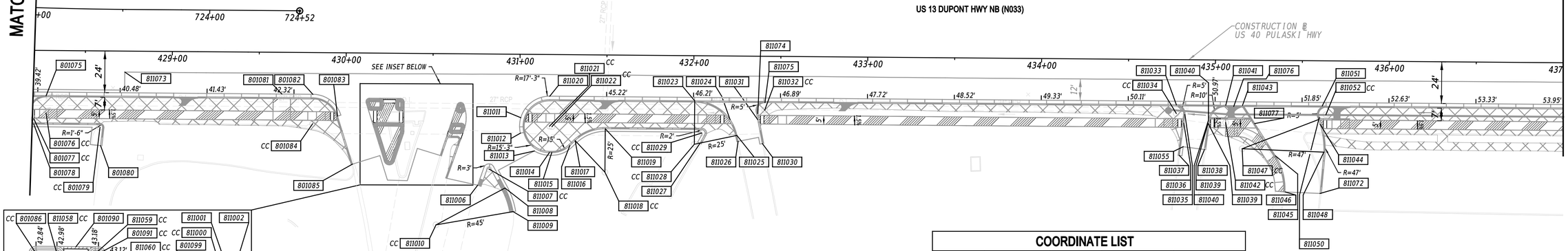
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801057	435+85.12	-143.00	603211.9716	600265.7429
801058	435+87.62	-143.83	603214.3913	600266.7865
801059	435+93.62	-143.83	603218.8666	600270.7830
801060	435+96.12	-143.00	603220.1762	600273.0697
801061	436+12.79	-143.00	603232.6098	600284.1730
801062	436+17.83	-148.00	603239.7005	600283.8017
801063	436+12.79	-148.04	603235.9679	600280.4125
801064	436+12.79	-153.08	603239.3247	600276.6508
801065	436+49.83	-157.14	603269.6549	600298.3012
801066	436+49.83	-152.00	603266.2331	600302.1328
801067	436+50.77	-148.00	603264.2683	600305.7410
801068	436+58.83	-152.00	603272.9461	600308.1275
801069	436+58.83	-143.00	603266.9513	600314.8405
801070	436+67.83	-156.18	603282.4437	600311.0039
801071	436+67.83	-152.00	603279.6590	600314.1223
801072	436+66.89	-148.00	603276.2952	600316.4812

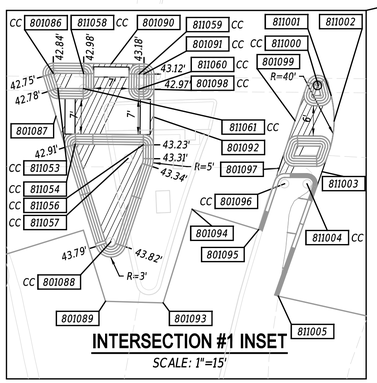


US 13 DUPONT HWY SB (N033)

MATCHLINE STA 723+00

MATCHLINE STA 437+00





COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811048	435+62.76	52.60	603065.0137	600396.7440
811050	435+59.94	32.82	603076.0813	600380.1084
811051	435+63.76	26.69	603083.0126	600378.0815
811070	430+05.91	-140.35	602778.1905	599881.922
811074	432+37.07	33.01	602835.1282	600165.1971
811075	432+41.01	26.73	602842.2486	600163.1381
811076	435+10.74	26.68	603043.4783	600342.7599
811077	435+18.94	31.70	603046.2481	600351.9715

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801073	436+88.18	-156.18	603297.6221	600324.5584
801074	436+87.15	-179.74	603312.5497	600306.3019
801075	428+27.62	26.00	602534.4040	599887.2449
801076	428+27.62	36.00	602527.7432	599894.7037
801077	428+20.62	39.50	602520.1908	599892.6517
801078	428+20.62	42.50	602518.1925	599894.8894
801079	428+58.73	44.00	602545.6171	599921.3909
801080	428+59.15	54.57	602538.8905	599929.5570
801081	429+63.19	24.00	602636.8497	599976.0487
801082	429+81.00	24.00	602650.1382	599987.9155
801083	429+95.30	36.44	602652.5125	600006.7195
801084	429+81.00	41.00	602638.8148	600000.5955
801085	430+04.11	64.04	602640.6999	600033.1729
801086	430+13.59	28.00	602671.7820	600012.6065

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801087	430+14.21	36.52	602666.5705	600019.3751
801088	430+25.28	61.31	602658.3129	600045.2348
801089	430+24.32	73.08	602649.7519	600053.3741
801090	430+27.36	26.00	602683.3810	600020.2831
801091	430+37.15	28.00	602689.3524	600028.2970
801092	430+36.49	36.50	602683.2026	600034.1973
801093	430+35.75	73.30	602658.1325	600061.1529
801094	430+41.32	54.70	602674.6817	600050.9919
801095	430+54.53	58.66	602681.8950	600062.7401
801096	430+59.61	49.50	602691.7817	600059.2915
801097	430+58.50	46.43	602693.0028	600056.2646
801098	430+40.03	33.22	602688.0238	600034.1089
801099	430+61.56	37.00	602701.5675	600051.2715
811000	430+65.95	30.00	602709.4992	600048.9698
811001	430+68.67	31.94	602710.2433	600052.2294
811002	430+69.31	37.00	602707.3489	600056.4344

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-31 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$ | FILE NAME: $FILEAS$ | MICROSTATION VERSION: $VERSIONS$ | MICROSTATION WORKSPACE: $WORKSPACES$ | PLOT DRIVER: $PLTDRVSS$ | DATE PLOTTED: $25-JUL-2024 @ 12:31$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

GRADES AND GEOMETRICS

SECTION	PAI
SHEET NO.	76

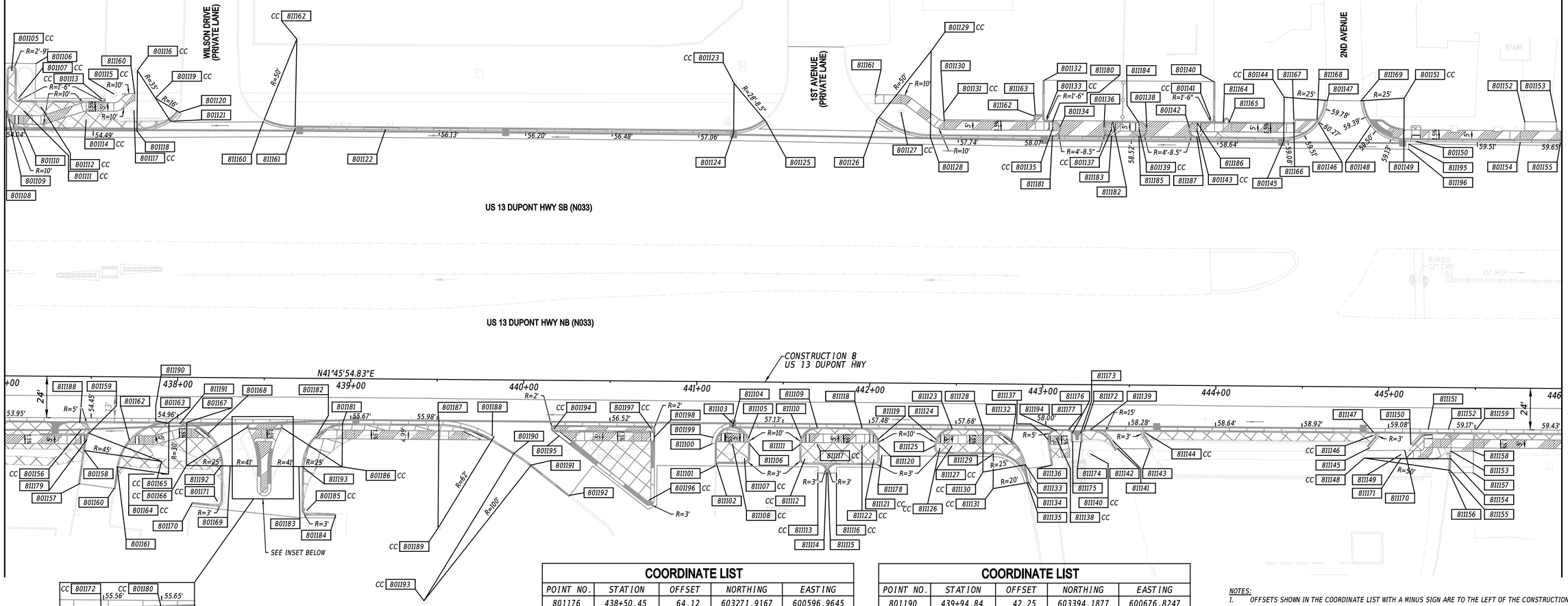
GG-10

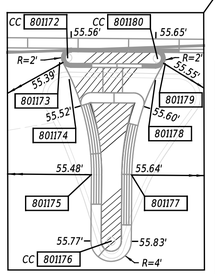
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801105	437+02.58	-176.34	603321.7938	600319.1103
801106	437+16.67	-180.59	603335.1322	600325.3237
801107	437+06.83	-160.58	603314.4655	600333.6972
801108	436+99.83	-152.86	603304.0993	600334.7976
801109	437+01.17	-148.00	603301.8621	600339.3127
801110	437+09.83	-143.00	603304.9912	600348.8105
801111	437+09.83	-153.00	603311.6520	600341.3517
801112	437+19.72	-155.50	603320.6927	600346.0734
801113	437+54.75	-160.58	603350.2065	600365.6144
801114	437+45.90	-148.33	603335.4473	600368.8578
801115	437+61.77	-163.33	603357.2756	600368.2402
801116	437+75.30	-177.00	603376.4730	600367.0608
801117	437+73.47	-153.86	603359.6943	600383.1001
801118	437+75.30	-142.00	603353.1602	600393.1667
801119	437+85.79	-161.16	603373.7455	600385.8641

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801120	437+99.63	-153.12	603378.7152	600401.0727
801121	437+94.63	-147.82	603371.4488	600401.6984
801122	439+18.85	-143.98	603461.5542	600487.3037
801123	441+20.15	-172.46	603630.6622	600600.1467
801124	441+20.12	-143.75	603611.5146	600621.5375
801125	441+38.70	-150.54	603629.9003	600628.8454
801126	442+03.19	-152.53	603679.3330	600670.3200
801127	442+16.79	-156.52	603692.1294	600676.3991
801128	442+33.89	-142.00	603695.2143	600698.6251
801129	442+33.89	-192.00	603728.5183	600661.3310
801130	442+41.84	-151.67	603707.5769	600696.7049
801131	442+41.84	-156.67	603710.9073	600692.9755
801132	442+99.45	-175.67	603766.5369	600717.1801
801133	443+00.95	-153.92	603753.1685	600734.4021
801134	443+08.93	-149.17	603755.9571	600743.2590
801135	443+04.45	-147.71	603751.6460	600741.3661

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801136	443+34.14	-149.17	603774.7598	600760.0518
801137	443+38.62	-147.71	603777.1276	600764.1214
801138	443+58.91	-149.17	603793.2356	600776.5511
801139	443+54.43	-147.71	603788.9253	600774.6569
801140	443+97.37	-175.67	603839.5757	600782.4046
801141	443+95.87	-153.92	603823.9696	600797.6284
801142	443+83.37	-149.17	603811.4824	600792.8453
801143	443+87.85	-147.71	603813.8501	600796.9151
801144	444+38.14	-167.00	603864.2127	600816.0252
801145	444+38.14	-142.00	603847.5607	600834.6722
801146	444+58.27	-152.17	603869.3426	600840.4932
801147	444+63.09	-165.30	603881.6868	600833.9040
801148	444+88.23	-151.11	603890.9820	600861.2373
801149	445+07.52	-142.00	603899.3099	600880.8849
801150	445+14.53	-142.00	603904.5383	600885.5539

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801151	445+07.52	-167.00	603915.9619	600862.2379
801152	445+77.29	-154.00	603959.3418	600918.4057
801153	445+95.53	-154.00	603972.9420	600930.5508
801154	445+74.79	-142.00	603949.4841	600925.6910
801155	445+98.03	-142.00	603966.8137	600941.1665
801156	437+44.30	31.00	603214.8020	600501.5518
801157	437+43.90	61.93	603193.9056	600524.3613
801158	437+46.46	42.76	603208.5803	600511.7589
801159	437+48.97	32.77	603217.1116	600505.9864
801160	437+63.73	64.57	603206.9358	600539.5341
801161	437+65.40	52.04	603216.5229	600531.3009
801162	437+72.33	36.50	603232.0473	600524.3308
801163	437+95.13	26.00	603256.0505	600531.6838
801164	437+95.13	56.00	603236.0681	600554.0602
801165	437+91.06	48.69	603237.8982	600545.8978





COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801166	438+05.45	51.00	603247.0933	600557.2024
801167	438+05.45	26.00	603263.7453	600538.5553
801168	438+17.99	32.25	603268.9326	600551.5670
801169	438+30.45	51.00	603265.7403	600573.8544
801170	438+08.81	72.95	603234.9759	600575.8105
801171	438+23.45	71.37	603246.9497	600584.3868
801172	438+41.55	27.88	603289.4257	600564.0020
801173	438+39.98	28.89	603287.5744	600563.7047
801174	438+41.90	32.23	603286.7838	600567.4817
801175	438+46.45	51.00	603277.6744	600584.5116

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801176	438+50.45	64.12	603271.9167	600596.9645
801177	438+54.45	51.00	603283.6415	600589.8403
801178	438+58.98	32.27	603299.4929	600578.8868
801179	438+60.90	28.93	603303.1461	600577.6741
801180	438+59.35	27.88	603302.6964	600575.8529
801181	438+95.45	26.00	603330.8746	600598.5025
801182	438+80.91	32.25	603315.8695	600593.4822
801183	438+70.45	51.00	603295.5755	600600.4976
801184	438+91.91	79.03	603292.9162	600635.6994
801185	438+75.45	76.04	603282.6302	600622.5019
801186	438+95.45	51.00	603314.2226	600617.1496
801187	439+51.16	24.00	603373.7561	600634.1148
801188	439+82.06	32.25	603391.3101	600660.8516
801189	439+51.16	86.00	603332.4591	600680.3594

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801190	439+94.84	42.25	603394.1877	600676.8247
801191	440+04.75	49.03	603397.0533	600688.4834
801192	440+27.07	66.39	603402.1430	600716.3027
801193	439+43.36	127.98	603298.6861	600706.4802
801194	440+17.97	27.85	603421.0292	600681.4945
801195	440+20.58	32.20	603420.0772	600686.4747
801196	440+72.95	68.79	603434.7645	600748.6506
801197	440+74.13	27.82	603462.9378	600718.8752
801198	440+75.95	32.14	603461.4192	600723.3064
801199	441+09.55	32.25	603486.4045	600745.7732
811100	441+08.95	36.00	603483.4593	600748.1695
811101	441+10.95	48.75	603476.4585	600759.0116
811102	441+11.70	47.25	603478.0170	600758.3923
811103	441+20.95	24.00	603500.4028	600747.2119

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-31 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

PENNONI ASSOCIATES INC. | PRN TABLE: $PRNTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVQS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-11

SECTION	PAI
SHEET NO.	77

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801205	446+06.53	-159.78	603984.9953	600933.5695
801206	446+06.44	-157.78	603983.5965	600935.0017
801207	446+21.02	-153.67	603991.7344	600947.7795
801208	446+46.09	-159.78	604014.5071	600959.9238
801209	446+18.52	-142.00	603982.0988	600954.8163
801210	446+48.52	-142.00	604004.4752	600974.7987
801211	446+54.45	-142.00	604008.8980	600978.7483
801212	447+44.16	-148.67	604080.2487	601033.5273
801213	447+58.17	-156.76	604096.0901	601036.8226
801214	447+49.16	-157.00	604089.5312	601030.6443
801215	447+51.66	-150.92	604087.3417	601036.8449
801216	447+49.16	-142.00	604079.5400	601041.8325
801217	447+59.53	-146.17	604090.0538	601045.6351
801218	447+64.16	-156.83	604100.6038	601040.7635
801219	447+89.91	-156.82	604119.8088	601057.9222
801220	448+02.41	-145.16	604121.3581	601074.9460
801221	448+15.80	-142.00	604129.2456	601086.2201

COORDINATE LIST

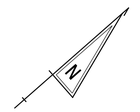
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801222	448+25.97	-143.00	604137.4981	601092.2491
801223	448+25.97	-150.00	604142.1607	601087.0279
801224	448+15.80	-172.00	604149.2280	601063.8437
801225	448+23.97	-157.00	604145.3315	601080.4746
801226	448+25.97	-157.00	604146.8232	601081.8067
801227	448+32.73	-148.17	604145.9785	601092.8951
801228	448+82.16	-157.00	604188.7321	601119.2319
801229	448+71.97	-157.00	604181.1338	601112.4464
801230	448+65.21	-148.17	604170.2112	601114.5344
801231	448+71.97	-143.00	604171.8086	601122.8887
801232	448+71.97	-150.00	604176.4712	601117.6676
801233	448+82.16	-150.00	604184.0696	601124.4530
801234	448+82.16	-143.00	604179.4070	601129.6742
801235	448+88.91	-148.17	604187.8874	601130.3203
801236	449+21.16	-169.16	604225.9222	601136.1377
801237	449+21.16	-166.71	604224.2872	601137.9686
801238	449+21.16	-164.02	604222.4949	601139.9757

COORDINATE LIST

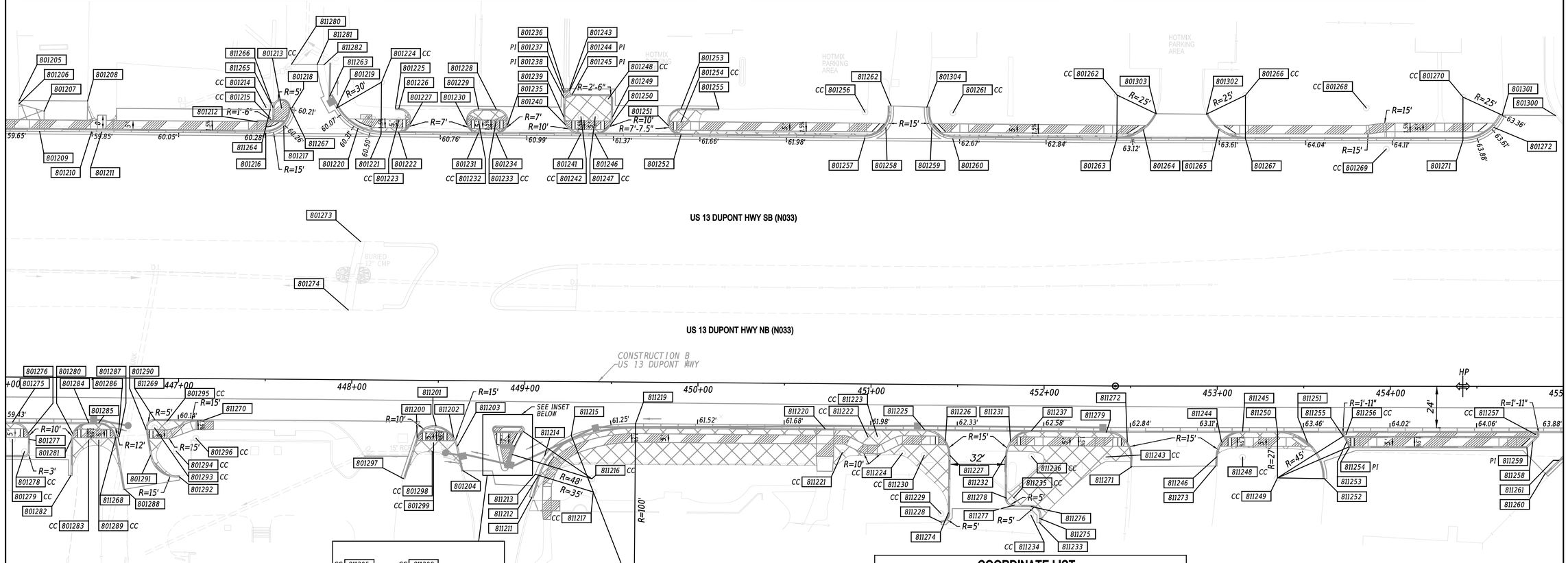
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801239	449+21.16	-153.00	604215.1572	601148.1925
801240	449+22.39	-148.18	604212.8714	601152.6075
801241	449+31.16	-143.00	604215.9552	601162.3121
801242	449+31.16	-153.00	604222.6160	601154.8533
801243	449+24.57	-169.16	604228.4707	601138.4135
801244	449+24.57	-168.09	604227.7539	601139.2162
801245	449+26.07	-166.00	604227.4834	601141.7710
801246	449+39.42	-143.00	604222.1167	601167.8144
801247	449+39.42	-153.00	604228.7775	601160.3556
801248	449+46.92	-163.50	604241.3654	601157.5195
801249	449+49.42	-153.00	604236.2363	601167.0164
801250	449+48.18	-148.19	604232.1090	601169.7844
801251	449+81.82	-148.17	604257.1888	601192.2072
801252	449+89.04	-143.00	604259.1310	601200.8686
801253	449+89.04	-158.25	604269.2887	601189.4940
801254	449+89.04	-150.63	604264.2099	601195.1813
801255	450+10.77	-158.25	604285.4914	601203.9632

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801256	450+95.26	-157.00	604347.6833	601261.1772
801257	450+95.26	-142.00	604337.6921	601272.3654
801258	451+07.39	-148.17	604350.8421	601275.8408
801259	451+33.93	-148.17	604370.6391	601293.5197
801260	451+46.05	-142.00	604375.5741	601306.1944
801261	451+46.05	-157.00	604385.5653	601295.0062
801262	452+42.09	-168.00	604463.6042	601349.9482
801263	452+41.91	-143.00	604446.9563	601368.5989
801264	452+57.17	-148.05	604461.7457	601374.8790
801265	453+00.94	-148.17	604494.6883	601403.7117
801266	453+16.16	-168.00	604519.2160	601398.8750
801267	453+16.16	-143.00	604502.7020	601417.6443
801268	453+86.02	-160.67	604566.8213	601450.5278
801269	453+97.61	-137.00	604559.8857	601475.9486
801270	454+41.84	-167.00	604612.9088	601482.6418
801271	454+41.84	-142.00	604596.3948	601501.4111
801272	454+59.69	-149.50	604614.7530	601507.5737



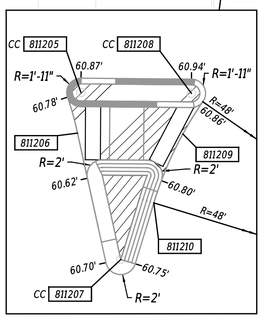
MATCHLINE STA 446+00



MATCHLINE STA 455+00

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801273	448+04.48	-79.86	604079.4127	601125.0357
801274	447+97.65	-40.32	604047.9853	601149.9761
801275	446+04.26	26.00	603859.5579	601070.6230
801276	446+13.53	32.25	603862.3082	601081.4628
801277	446+14.26	36.00	603860.3559	601084.7426
801278	446+11.26	43.00	603853.4557	601087.9655
801279	446+04.26	36.00	603852.8971	601078.0818
801280	446+38.99	32.24	603881.3058	601098.4143
801281	446+38.26	36.00	603878.2570	601100.7285
801282	446+38.26	56.55	603864.5700	601116.0553
801283	446+48.26	36.00	603885.7158	601107.3893
801284	446+48.26	26.00	603892.3766	601099.9305
801285	446+54.12	26.00	603896.7497	601103.8357



CHANNELIZING ISLAND

SCALE: 1"=15'

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801286	446+65.52	32.26	603901.0845	601116.1004
801287	446+65.93	33.89	603900.3063	601117.5876
801288	446+69.33	64.29	603882.5931	601142.5331
801289	446+54.12	36.00	603890.0889	601111.2945
801290	446+81.42	29.63	603914.6988	601124.7271
801291	446+84.11	44.65	603906.6971	601137.7213
801292	447+00.90	56.88	603911.0792	601158.0272
801293	446+86.35	28.75	603918.9555	601127.3527
801294	446+98.87	42.01	603919.4689	601145.5876
801295	446+93.53	24.75	603926.9817	601129.1574

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801296	447+10.30	34.50	603932.9898	601147.5945
801297	448+30.30	56.82	604007.6333	601244.1745
801298	448+46.82	41.00	604030.4883	601243.3764
801299	448+47.53	36.00	604034.3492	601240.1207
801300	454+95.31	-156.39	604646.0425	601525.9329
801301	454+64.58	-156.61	604623.1189	601505.4618
801302	452+93.68	-157.06	604495.1132	601392.2374
801303	452+64.68	-157.28	604473.4771	601372.9161
801304	451+30.95	-160.19	604376.4204	601282.5694
811200	448+38.01	32.93	604029.2964	601231.4911
811201	448+48.89	26.14	604041.9333	601233.6804
811202	448+59.00	32.25	604045.4037	601244.9670
811203	448+61.44	37.66	604043.6197	601250.6266
811204	448+64.71	52.01	604036.5082	601263.5066

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-31 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

PENNONI ASSOCIATES INC. | PRN TABLE: $PRNTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVDS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-12

SECTION	PAI
SHEET NO.	78

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801305	455+71.61	-166.59	604710.0618	601568.6727
801306	455+71.59	-141.59	604693.5349	601587.4307
801307	455+83.92	-144.83	604704.9321	601593.1407
801308	456+34.19	-144.17	604742.2384	601626.8445
801309	456+49.44	-140.00	604750.9372	601640.0480
801310	456+49.44	-170.00	604770.7540	601617.5248
801311	457+50.26	-148.69	604832.3687	601700.1179
801312	456+58.20	-148.92	604763.4049	601639.1409
801313	457+44.76	-144.65	604825.5706	601699.5208
801314	457+47.81	-144.67	604827.8734	601701.5192
801315	457+80.35	-144.77	604852.3734	601722.9364
801316	457+83.18	-144.78	604854.5016	601724.7974
801317	457+98.45	-148.92	604868.6974	601731.7817
801318	458+00.71	-152.94	604873.0505	601730.2578
801319	458+94.02	-148.41	604940.1136	601795.2903
801320	459+62.48	-185.31	605015.8853	601812.8099
801321	460+05.84	-185.45	605048.5309	601841.3453
801322	459+80.04	-149.59	605005.4694	601851.2266
801323	459+92.04	-149.57	605014.4689	601859.1644
801324	459+45.49	-160.98	604987.0606	601819.8503

COORDINATE LIST

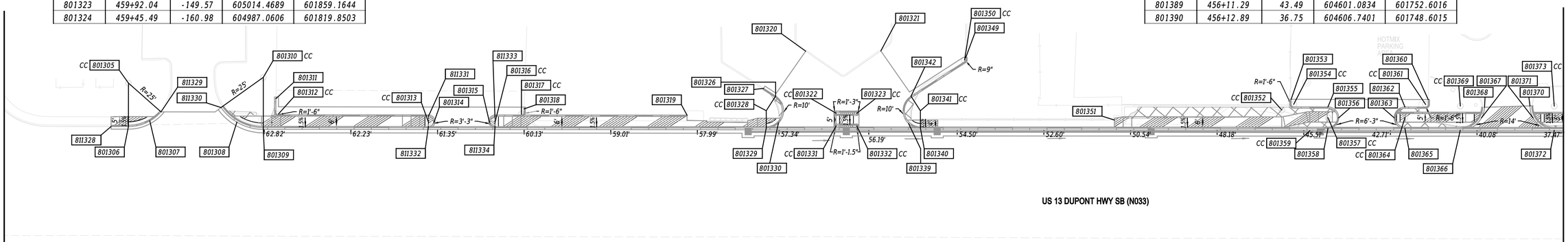
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801325	460+22.43	-161.82	605045.3781	601870.0424
801326	459+45.15	-159.42	604985.7732	601820.8033
801327	459+38.20	-163.88	604983.4984	601812.8626
801328	459+39.75	-151.00	604976.1597	601823.5566
801329	459+39.75	-141.00	604969.5541	601831.0644
801330	459+46.80	-143.90	604976.7582	601833.5387
801331	459+80.06	-142.17	605000.5857	601856.8084
801332	459+92.04	-142.16	605009.5697	601864.7325
801339	460+21.90	-143.68	605032.9948	601883.3122
801340	460+28.71	-141.00	605036.3396	601889.8250
801341	460+28.71	-151.00	605042.9452	601882.3173
801342	460+23.29	-159.40	605044.4287	601872.4280
801349	460+54.89	-181.80	605082.9456	601876.4927
801350	460+54.15	-180.19	605081.3314	601877.2052
801351	461+40.71	-146.77	605124.2362	601959.4812
801352	462+37.30	-151.67	605199.9890	602019.6031

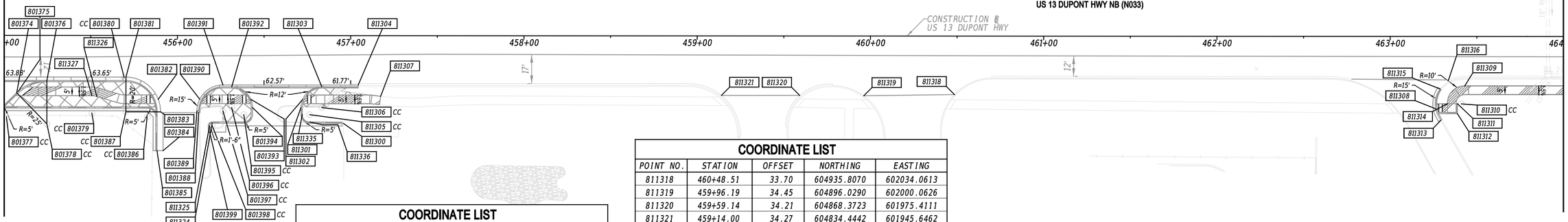
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801353	462+42.72	-157.79	605208.1031	602018.5820
801354	462+44.22	-154.92	605207.3292	602021.7323
801355	462+63.97	-153.42	605221.1698	602035.9079
801356	462+70.18	-147.17	605221.7023	602044.7011
801357	462+63.97	-147.21	605217.0688	602040.5690
801358	462+63.97	-141.00	605212.9679	602045.2300
801359	462+53.51	-139.67	605204.2351	602039.3225
801360	463+21.81	-157.74	605267.4519	602070.8717
801361	463+20.31	-154.92	605264.4615	602071.9998
801362	463+08.39	-153.42	605254.5167	602065.2478
801363	463+02.18	-147.17	605245.7268	602065.8397
801364	463+08.39	-147.21	605250.4157	602069.9089
801365	463+08.39	-141.00	605246.3147	602074.5700
801366	463+40.34	-140.00	605269.6425	602096.4267
801367	463+52.57	-147.17	605283.5570	602099.1235
801368	463+54.33	-153.25	605288.8965	602095.7203
801369	463+40.35	-154.00	605278.8971	602085.9218
801370	463+80.58	-154.11	605309.1733	602112.4102

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801371	463+82.36	-147.17	605305.9219	602118.8011
801372	463+94.57	-140.00	605310.3605	602132.2521
801373	463+94.57	-154.00	605319.6084	602121.7413
801374	455+07.25	33.07	604529.8635	601676.0565
801375	455+08.14	32.25	604531.0657	601676.0261
801376	455+24.67	26.00	604547.6089	601682.2568
801377	455+01.30	46.87	604516.2780	601682.4834
801378	455+24.67	51.00	604531.0949	601701.0261
801379	455+50.62	44.75	604554.7016	601713.4716
801380	455+69.29	24.25	604582.2595	601710.4129
801381	455+70.29	24.00	604583.1756	601710.8860
801382	455+88.93	36.75	604588.7476	601732.7710
801383	455+90.29	44.01	604584.9708	601739.1229
801384	455+91.77	66.37	604571.3161	601756.8900
801385	455+88.27	66.37	604568.6900	601754.5763
801386	455+82.53	46.92	604577.2299	601736.1855
801387	455+70.29	44.00	604569.9644	601725.9015
801388	456+12.28	44.53	604601.1435	601754.0450
801389	456+11.29	43.49	604601.0834	601752.6016
801390	456+12.89	36.75	604606.7401	601748.6015





COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801391	456+26.29	28.50	604622.2466	601751.2561
801392	456+31.34	29.50	604625.3829	601755.3476
801393	456+42.36	36.75	604628.8673	601768.0699
801394	456+43.34	41.51	604626.4600	601772.2897
801395	456+38.34	45.54	604620.0388	601772.0145
801396	456+31.34	41.50	604617.4562	601764.3568
801397	456+26.29	43.50	604612.3382	601762.5177
801398	456+20.06	52.03	604602.0324	601764.8128
801399	456+18.68	55.69	604598.5788	601766.6480
811301	456+71.34	41.49	604647.4925	601790.7731
811302	456+72.32	36.75	604651.3631	601787.8594
811303	456+83.34	29.50	604664.4231	601789.6967

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811304	457+04.32	28.50	604680.8332	601802.8031
811305	456+76.34	45.57	604648.5509	601797.1353
811306	456+83.34	41.50	604656.4964	601798.7060
811307	457+17.29	35.00	604686.2742	601816.2514
811308	463+26.39	41.74	605139.1206	602223.6552
811309	463+43.08	28.46	605160.4229	602224.7088
811310	463+41.10	38.83	605152.0906	602231.1904
811311	463+38.82	38.75	605150.4276	602229.6191
811312	463+38.83	44.51	605146.6266	602233.9543
811313	463+29.24	48.32	605136.9108	602230.4814
811314	463+33.07	38.77	605146.0954	602225.8372
811315	463+28.80	30.25	605148.5141	602216.6230
811316	463+33.70	25.06	605155.6224	602215.9669
811317	462+77.93	24.62	605114.0501	602178.7951

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811318	460+48.51	33.70	604935.8070	602034.0613
811319	459+96.19	34.45	604896.0290	602000.0626
811320	459+59.14	34.21	604868.3723	601975.4111
811321	459+14.00	34.27	604834.4442	601945.6462
811322	456+43.35	45.72	604623.6817	601775.4544
811323	456+38.45	50.56	604616.8102	601775.8535
811324	456+20.08	50.53	604603.0312	601763.6986
811325	456+18.56	52.06	604600.8811	601763.8402
811326	455+53.49	35.17	604563.1860	601708.1786
811327	455+50.62	34.75	604561.3073	601705.9639
811328	455+61.59	-141.59	604686.0305	601580.8189
811329	455+90.38	-150.08	604713.2492	601593.4686
811330	456+25.02	-152.58	604740.9095	601614.4746
811331	457+44.75	-147.68	604827.5610	601697.2363
811332	457+44.74	-141.67	604823.5868	601701.7374
811333	457+83.15	-147.67	604856.3927	601722.6094
811334	457+83.19	-141.67	604852.4568	601727.1445
811335	456+72.10	45.48	604645.4241	601794.2709
811336	456+76.47	49.81	604645.8456	601800.4099

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | STYLES
TILE NAME: | $VERSIONS
MICROSTATION VERSION: | $WORKSPACES
MICROSTATION WORKSPACE: |
PEN TABLE: $PENTABLES
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 25-JUL-2024 @ 12:31
USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT T201901102	BRIDGE NO. N/A	GRADES AND GEOMETRICS
COUNTY NEW CASTLE	DESIGNED BY: O. GREEN	
	CHECKED BY: P. HORSEY	

GG-13

SECTION	PAI
SHEET NO.	79

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801405	464+38.23	-154.00	605352.3838	602150.5785
801406	464+38.23	-140.00	605343.1348	602161.0884
801407	464+50.45	-147.17	605357.0437	602163.7802
801408	464+52.23	-153.88	605362.8120	602159.9194
801409	464+80.59	-148.44	605380.5134	602182.7324
801410	464+80.47	-149.90	605381.3836	602181.5591
801411	464+90.46	-140.00	605382.3524	602195.5936
801412	464+91.80	-150.73	605390.4463	602188.4193
801413	464+90.46	-150.00	605388.9580	602188.0859
801414	464+93.76	-150.00	605391.4326	602190.2632
801415	465+03.31	-147.02	605396.6353	602198.8040
801416	465+03.74	-150.66	605399.3592	602196.3599
801417	465+03.35	-156.51	605402.9317	602191.7151
801418	464+93.76	-140.00	605384.8270	602197.7709
801419	465+44.79	-155.16	605433.1513	602220.0969
801420	465+37.36	-147.00	605422.1846	602221.3160
801421	465+35.86	-142.75	605418.2492	602223.5142
801422	465+73.97	-155.51	605455.2903	602239.1113
801423	465+81.55	-147.00	605455.3623	602250.5071
801424	465+83.00	-142.75	605453.6385	602254.6512

COORDINATE LIST

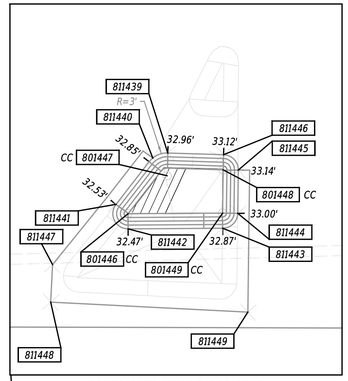
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801427	466+45.50	-147.87	605503.9528	602292.0941
801428	466+56.74	-157.81	605518.9528	602292.0622
801429	466+56.79	-142.81	605509.0786	602303.3538
801430	468+42.75	-146.30	605650.9978	602423.5698
801431	468+86.78	-148.05	605685.2107	602451.3440
801432	468+88.16	-142.98	605682.8997	602456.0545
801433	469+08.03	-152.74	605704.2633	602461.8523
801434	469+05.12	-160.41	605707.1473	602454.1754
801435	468+88.21	-167.98	605699.4527	602437.3196
801436	469+23.49	-144.05	605710.1376	602478.5917
801437	470+19.14	-141.81	605780.4657	602543.4608
801438	470+10.20	-156.50	605783.4503	602526.5236
801439	470+13.67	-164.30	605791.2158	602522.9603
801440	470+25.65	-163.57	605799.7255	602531.4212
801441	470+25.17	-155.59	605794.0947	602537.0923
801442	471+06.59	-129.59	605838.0409	602610.3987
801443	471+15.67	-141.56	605852.7740	602607.4113
801444	471+21.90	-142.49	605858.0603	602610.8273
801445	471+15.73	-162.56	605866.6863	602591.6807
801446	471+44.70	-138.17	605872.3207	602629.1300

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801447	471+48.69	-142.70	605878.3139	602628.3673
801448	470+71.68	-206.48	605862.6266	602529.6056
801449	471+66.70	-142.84	605891.9256	602640.1553
801450	471+66.65	-138.30	605888.8881	602643.5288
801455	472+82.09	-129.18	605969.5342	602726.6308
801456	471+91.01	-78.51	605867.6896	602704.5115
801457	472+13.93	-78.45	605884.8516	602719.6913
801458	472+27.43	-78.42	605894.9638	602728.6356
801459	472+17.44	-71.50	605882.8941	602727.2310
801460	472+13.67	-62.65	605874.2173	602731.3899
801461	472+05.38	-47.96	605858.2981	602736.9413
801462	472+05.44	-71.38	605873.8041	602719.3970
801463	471+97.15	-56.69	605857.8849	602724.9484
801464	471+93.38	-47.92	605849.2633	602729.0438
801465	471+91.41	-39.60	605842.2822	602733.9913
801466	471+96.92	-39.62	605846.4274	602737.6146
801467	472+27.32	-39.71	605869.3211	602757.6265
801468	464+28.42	28.39	605224.5424	602281.0317
801469	464+66.45	39.14	605245.9919	602314.2270
801470	464+72.19	46.86	605245.2023	602323.8138

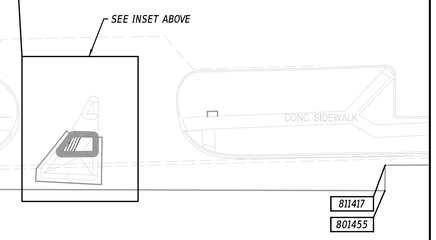
COORDINATE LIST

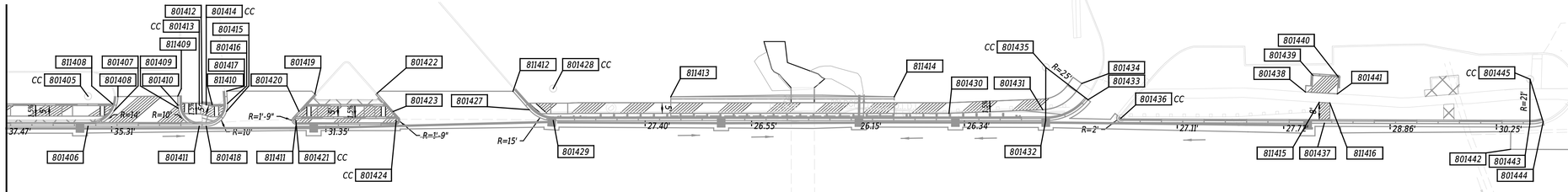
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801471	464+76.19	55.11	605242.7522	602332.6494
801472	464+29.39	72.70	605195.9969	602314.9348
801473	464+53.82	61.65	605221.6441	602322.7822
801474	464+90.30	24.59	605273.5101	602319.0511
801475	464+94.92	33.16	605271.3112	602328.5427
801476	464+98.90	40.00	605269.7815	602336.3021
801477	465+00.22	43.00	605268.7921	602339.4275
801478	465+04.13	41.97	605272.4102	602341.2354
801479	465+03.78	45.50	605269.8153	602343.6576
801480	465+03.39	55.04	605263.2202	602350.5636
801481	465+05.70	72.38	605253.4996	602365.1040
801482	465+18.66	24.65	605294.7611	602337.8297
801483	465+14.80	32.97	605286.3700	602341.5289
801484	465+11.25	40.00	605279.0569	602344.4630
801485	465+10.17	43.00	605276.2668	602346.0041
801486	465+05.64	41.97	605273.5448	602342.2380
801487	465+07.52	45.00	605272.9516	602345.7511
801488	465+08.43	62.64	605261.9894	602359.5983
801489	465+09.66	71.85	605256.8255	602367.3264



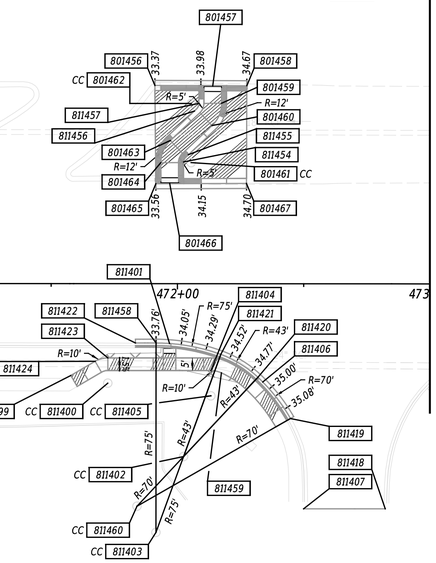
CHANNELIZING ISLAND

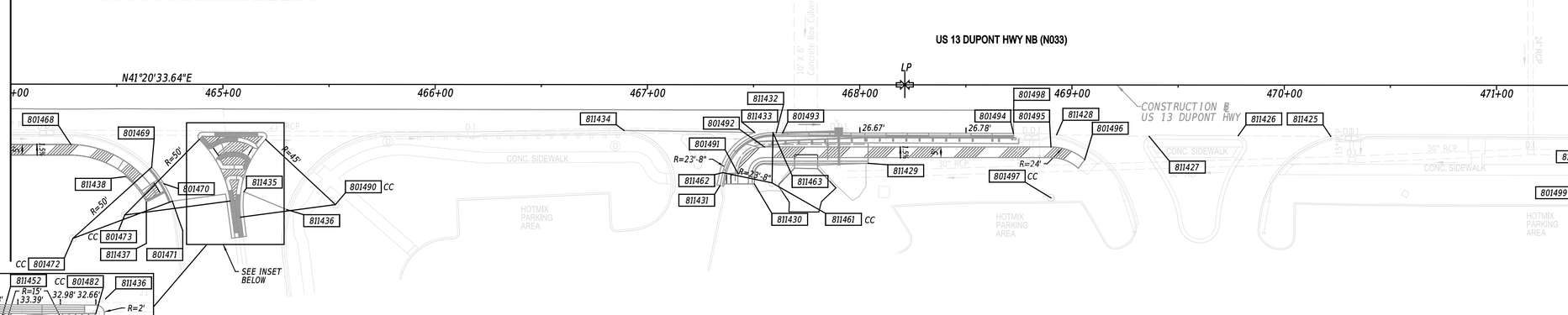
SCALE: 1"=10'

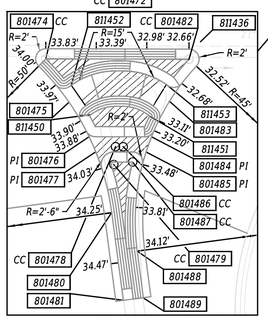




US 13 DUPONT HWY SB (N033)







CHANNELIZING ISLAND

SCALE: 1"=15'

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801490	465+53.04	56.69	605299.4051	602384.5997
801491	467+42.63	41.79	605451.5862	602498.6468
801492	467+55.12	29.35	605469.1816	602497.5570
801493	467+63.74	22.64	605480.0826	602498.2138
801494	468+72.47	22.87	605561.5684	602570.2113
801495	468+90.12	29.25	605570.6025	602586.6546
801496	469+06.00	35.24	605578.5699	602601.6491
801497	468+90.14	53.25	605554.7627	602604.6852
801498	468+72.51	11.92	605568.8327	602562.0185
801499	471+57.79	36.39	605766.8424	602768.8290
811400	471+72.45	39.40	605775.8680	602780.7773
811401	471+96.90	23.69	605804.5985	602785.1326

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811402	472+02.50	68.43	605779.2524	602822.4215
811403	471+91.56	98.50	605751.1744	602837.7716
811404	472+13.28	34.40	605809.8182	602803.9883
811405	472+13.28	44.40	605803.2126	602811.4960
811406	472+33.83	38.92	605822.2601	602820.9642
811407	472+50.03	89.14	605801.2544	602869.3689
811408	464+49.77	-150.42	605358.6849	602160.8944
811409	464+80.42	-154.16	605384.1648	602178.3301
811410	464+96.50	-150.17	605393.6055	602191.9450
811411	465+35.86	-140.00	605416.4327	602225.5789
811412	466+37.88	-156.51	605503.9283	602280.5761
811413	467+12.00	-154.01	605557.9319	602331.4130

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811414	468+17.00	-154.09	605636.8128	602400.7147
811415	470+16.67	-151.60	605785.0747	602534.4757
811416	470+21.67	-151.31	605788.6344	602537.9981
811417	472+82.15	-139.27	605976.2496	602719.1013
811418	472+82.39	89.11	605825.5679	602890.7133
811419	472+44.80	53.37	605820.9559	602839.0578
811420	472+31.90	37.05	605822.0527	602818.2823
811421	472+17.21	28.02	605816.9822	602801.7947
811422	471+83.40	23.50	605794.5893	602776.0727
811423	471+72.45	29.40	605782.4736	602773.2695
811424	471+67.41	30.77	605777.7819	602770.9621
811425	470+21.97	24.19	605672.9326	602669.9578

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	1-664
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

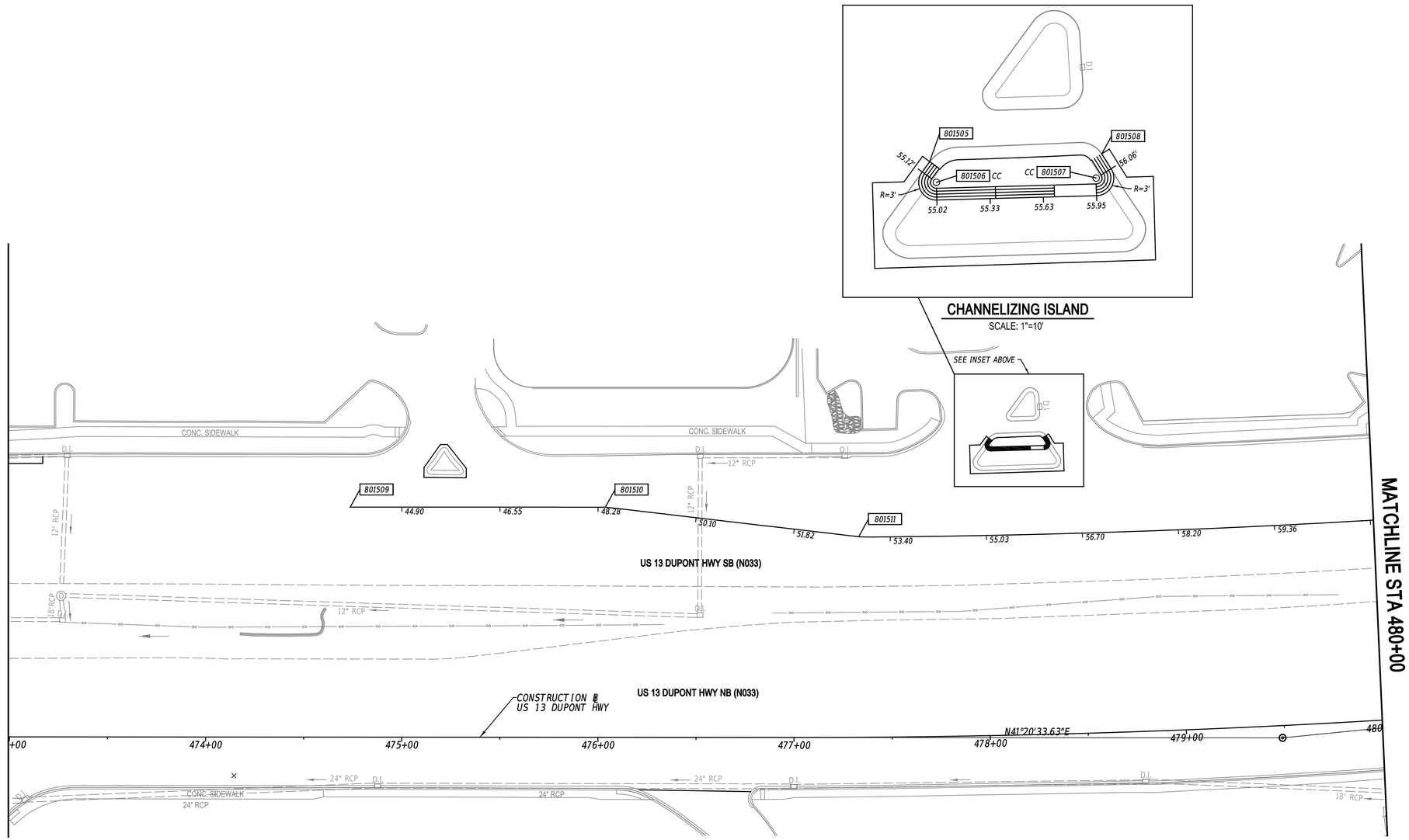
GRADES AND GEOMETRICS

GG-14

SECTION
PAI
SHEET NO.
80

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

Pennoni



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801505	478+02.25	-151.69	606373.2500	603050.4743
801506	478+03.34	-148.14	606371.7743	603053.8736
801507	478+31.33	-148.25	606392.6523	603071.2419
801508	478+32.43	-152.35	606396.0969	603068.7722
801509	474+73.65	-117.31	606105.5124	602862.0883
801510	476+03.65	-117.36	606203.1469	602947.9224
801511	477+36.36	-102.18	606292.2663	603046.3714

NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

PENNONI ASSOCIATES INC.
FILE NAME: ...\GG015.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF-PLTCFG
DATE PLOTTED: 7/25/2024 @ 12:31:56 PM
USER NAME: ogreen OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-15
SECTION
PAI
SHEET NO.
81

COORDINATE LIST

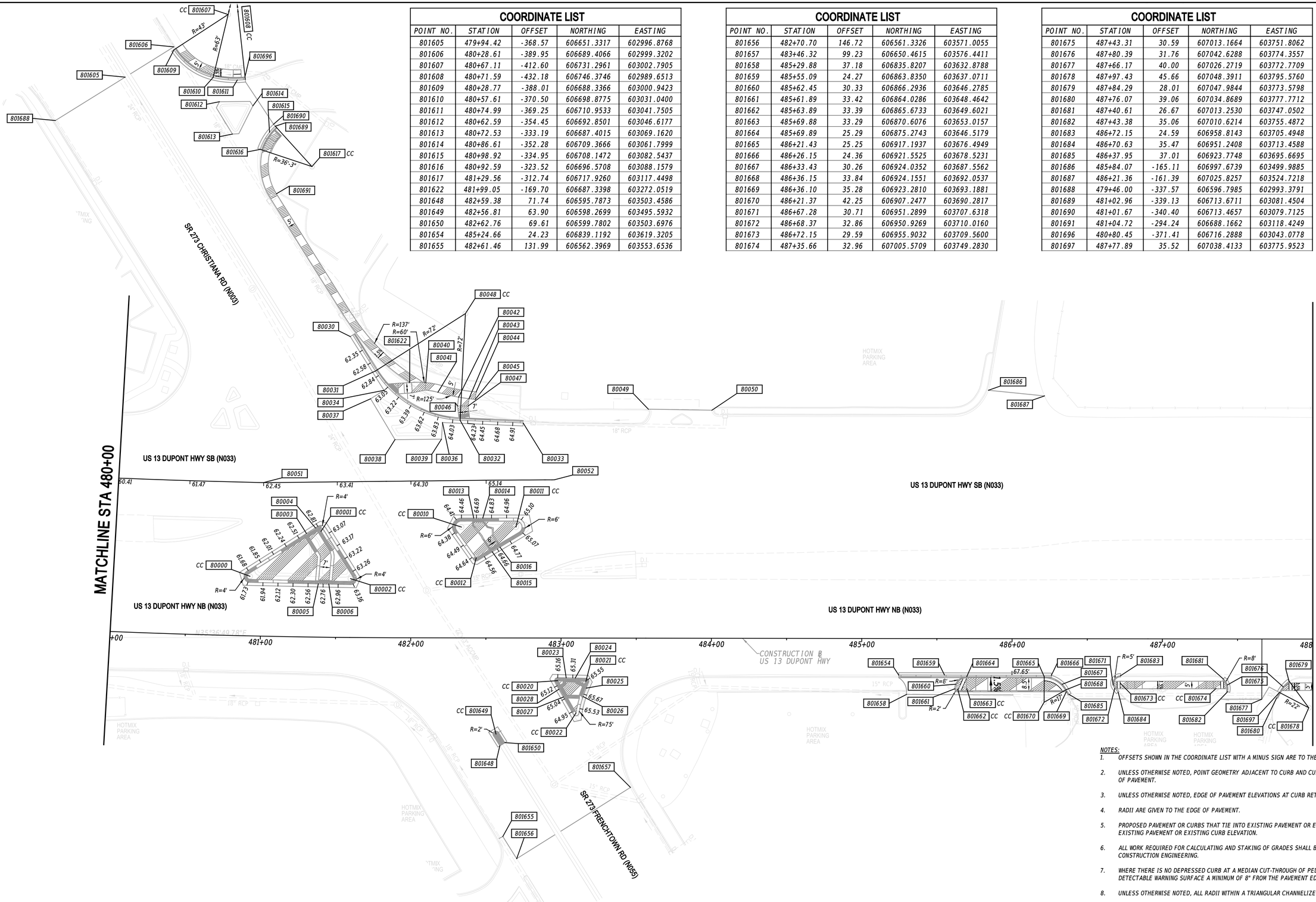
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801605	479+94.42	-368.57	606651.3317	602996.8768
801606	480+28.61	-389.95	606689.4066	602999.3202
801607	480+67.11	-412.60	606731.2961	603002.7905
801608	480+71.59	-432.18	606746.3746	602989.6513
801609	480+28.77	-388.01	606688.3366	603000.9423
801610	480+57.61	-370.50	606698.8775	603031.0400
801611	480+74.99	-369.25	606710.9533	603041.7505
801612	480+62.59	-354.45	606692.8501	603046.6177
801613	480+72.53	-333.19	606687.4015	603069.1620
801614	480+86.61	-352.28	606709.3666	603061.7999
801615	480+98.92	-334.95	606708.1472	603082.5437
801616	480+92.59	-323.52	606696.5708	603088.1579
801617	481+29.56	-312.74	606717.9260	603117.4498
801622	481+99.05	-169.70	606687.3398	603272.0519
801648	482+59.38	71.74	606595.7873	603503.4586
801649	482+56.81	63.90	606598.2699	603495.5932
801650	482+62.76	69.61	606599.7802	603503.6976
801654	485+24.66	24.23	606839.1192	603619.3205
801655	482+61.46	131.99	606562.3969	603553.6536

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801656	482+70.70	146.72	606561.3326	603571.0055
801657	483+46.32	99.23	606650.4615	603576.4411
801658	485+29.88	37.18	606835.8207	603632.8788
801659	485+55.09	24.27	606863.8350	603637.0711
801660	485+62.45	30.33	606866.2936	603646.2785
801661	485+61.89	33.42	606864.0286	603648.4642
801662	485+63.89	33.39	606865.6733	603649.6021
801663	485+69.88	33.29	606870.6076	603653.0157
801664	485+69.89	25.29	606875.2743	603646.5179
801665	486+21.43	25.25	606917.1937	603676.4949
801666	486+26.15	24.36	606921.5525	603678.5231
801667	486+33.43	30.26	606924.0352	603687.5562
801668	486+36.15	33.84	606924.1551	603692.0537
801669	486+36.10	35.28	606923.2810	603693.1881
801670	486+21.37	42.25	606907.2477	603690.2817
801671	486+67.28	30.71	606951.2899	603707.6318
801672	486+68.37	32.86	606950.9269	603710.0160
801673	486+72.15	29.59	606955.9032	603709.5600
801674	487+35.66	32.96	607005.5709	603749.2830

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801675	487+43.31	30.59	607013.1664	603751.8062
801676	487+80.39	31.76	607042.6288	603774.3557
801677	487+66.17	40.00	607026.2719	603772.7709
801678	487+97.43	45.66	607048.3911	603795.5760
801679	487+84.29	28.01	607047.9844	603773.5798
801680	487+76.07	39.06	607034.8689	603777.7712
801681	487+40.61	26.67	607013.2530	603747.0502
801682	487+43.38	35.06	607010.6214	603755.4872
801683	486+72.15	24.59	606958.8143	603705.4948
801684	486+70.63	35.47	606951.2408	603713.4588
801685	486+37.95	37.01	606923.7748	603695.6695
801686	485+84.07	-165.11	606997.6739	603499.9885
801687	486+21.36	-161.39	607025.8257	603524.7218
801688	479+46.00	-337.57	606596.7985	602993.3791
801689	481+02.96	-339.13	606713.6711	603081.4504
801690	481+01.67	-340.40	606713.4657	603079.7125
801691	481+04.72	-294.24	606688.1662	603118.4249
801696	480+80.45	-371.41	606716.2888	603043.0778
801697	487+77.89	35.52	607038.4133	603775.9523



NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-32 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:31
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN (PAI) D. HOLLEY (WRA)
COUNTY	CHECKED BY:	P. HORSEY (PAI) T. OLIVER (WRA)
NEW CASTLE		

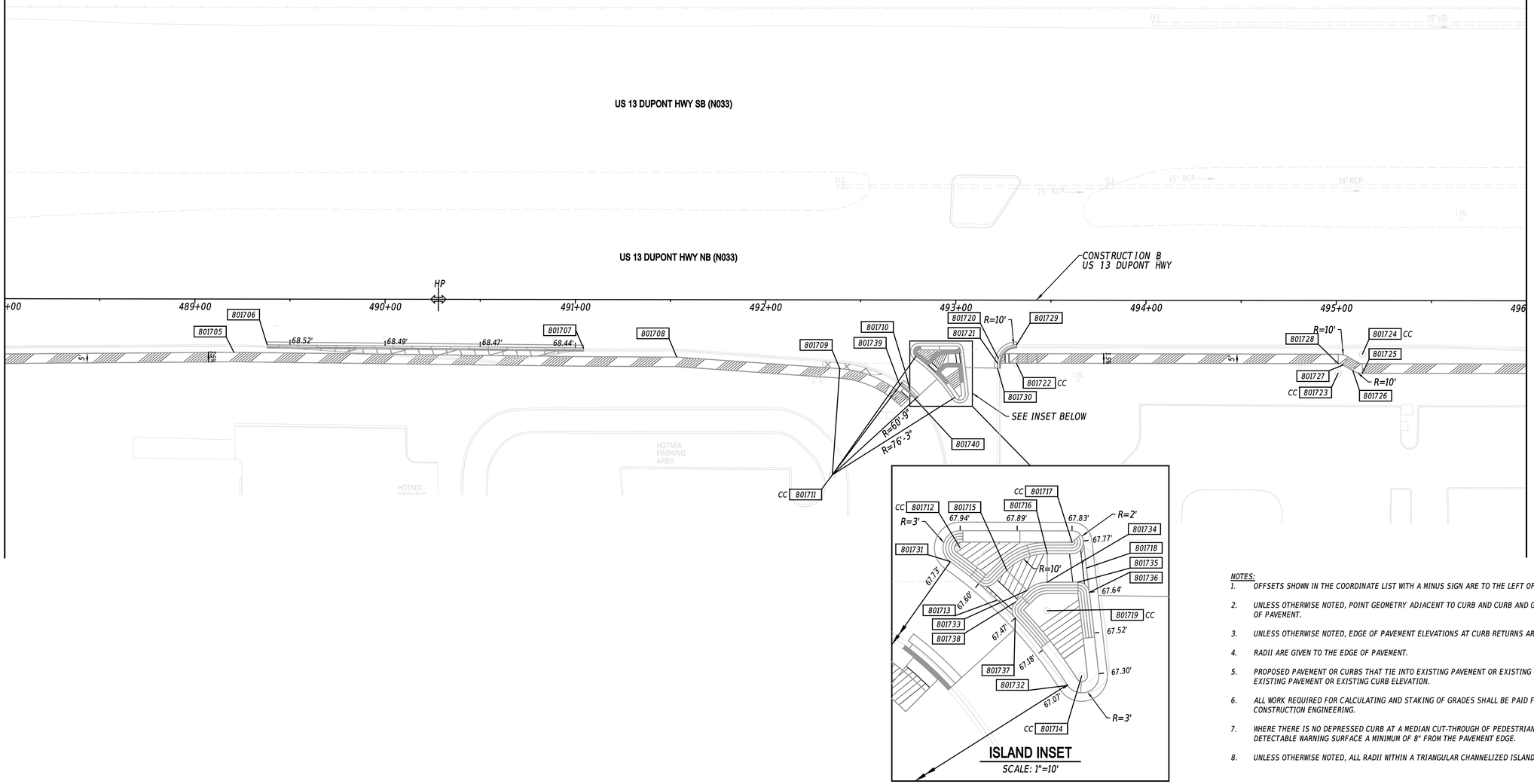
GRADES AND GEOMETRICS

GG-16 | SECTION | PAI / WRA | SHEET NO. 82

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801705	489+20.51	28.01	607158.7220	603852.8983
801706	489+38.01	24.03	607175.2719	603859.8581
801707	491+04.29	25.47	607309.6124	603957.8536
801708	491+53.31	30.23	607346.6965	603990.2659
801709	492+39.09	36.16	607412.9703	604045.0384
801710	492+75.97	47.03	607436.6196	604075.3541
801711	492+35.22	92.03	607377.2954	604088.2044
801712	492+80.76	27.23	607452.0502	604062.0441
801713	492+87.28	36.38	607452.0202	604073.2831
801714	493+02.11	49.62	607456.3691	604092.6749
801715	492+88.96	31.16	607456.4293	604070.0181
801716	492+96.04	28.23	607463.8881	604071.7540
801717	493+00.37	26.23	607468.5752	604072.6514
801718	493+02.91	30.73	607468.0210	604077.7898
801719	492+96.04	38.23	607458.0647	604079.8835
801720	493+22.39	30.67	607483.8906	604089.0859
801721	493+22.01	33.29	607482.0545	604090.9879

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801722	493+32.01	33.42	607490.1039	604096.9214
801723	495+01.09	38.20	607624.7780	604199.2668
801724	495+13.77	28.20	607640.9093	604198.5235
801725	495+13.77	38.20	607635.0846	604206.6521
801726	495+08.77	36.86	607631.8007	604202.6508
801727	495+03.59	33.87	607629.3323	604197.2032
801728	495+01.09	33.20	607627.6903	604195.2025
801729	493+32.01	23.42	607495.9284	604088.7927
801730	493+21.97	35.79	607480.5713	604093.0004
801731	492+78.94	29.61	607449.1805	604062.9207
801732	492+99.65	51.33	607453.3684	604092.6374
801733	492+92.50	34.70	607457.2470	604074.9508
801734	492+96.04	33.23	607460.9764	604075.8188
801735	493+01.43	33.23	607465.3575	604078.9570
801736	493+03.41	34.99	607465.9449	604081.5476
801737	492+90.44	39.52	607452.7667	604077.6766
801738	492+90.50	36.69	607454.4609	604075.4121

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801739	492+70.70	44.89	607433.5904	604070.5456
801740	492+78.73	52.12	607435.9044	604081.1013



ISLAND INSET
SCALE: 1"=10'

NOTES:
1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | PEN TABLE: $PRNTBLS$
MICROSTATION VERSION: $VERSION$ | PLOT DRIVER: $PLTDRVSS
MICROSTATION WORKSPACE: $WORKSPACES$ | DATE PLOTTED: 25-JUL-2024 @ 12:32
USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

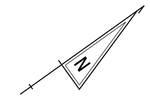
	GG-17
SECTION	PAI
SHEET NO.	83

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801805	496+81.28	35.74	607772.7039	604302.1961
801806	496+58.71	72.34	607733.0419	604318.8070
801807	496+60.58	76.00	607732.4283	604322.8690
801808	497+03.56	27.24	607795.7648	604308.2578
801809	497+07.68	35.74	607794.1665	604317.5664
801810	497+13.22	43.24	607794.2978	604326.8888
801811	497+13.66	40.24	607796.4019	604324.7054
801812	497+53.16	27.24	607836.0853	604337.1406
801813	497+48.01	35.74	607826.9522	604341.0563
801814	497+40.98	43.24	607816.8670	604343.0610
801815	498+17.38	107.76	607841.4079	604440.0030
801816	498+09.86	95.48	607842.4388	604425.6349
801817	497+71.48	35.75	607846.0218	604354.7253
801818	500+96.26	35.81	608110.0259	604543.8997

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801819	500+04.77	186.20	607948.0725	604612.8839
801820	500+44.98	112.39	608023.7418	604576.3036
801821	501+19.28	27.25	608133.7199	604550.3458
801822	501+23.82	35.75	608132.4614	604559.8977
801823	501+30.63	43.37	608133.5647	604570.0641
801824	501+30.65	40.25	608135.3983	604567.5393
801825	501+80.49	27.25	608183.4823	604585.9922
801826	501+75.64	35.74	608174.5931	604590.0667
801827	501+68.80	43.32	608164.6207	604592.2468
801828	502+46.37	106.43	608190.9361	604688.7222
801829	502+36.09	86.68	608194.0818	604666.6832
801830	502+02.38	35.84	608196.2793	604605.7228
801831	503+91.96	23.67	608357.4851	604706.2208
801832	503+95.87	38.36	608352.1076	604720.4410

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801833	496+81.28	35.74	607772.7039	604302.1961
801834	496+58.71	72.34	607733.0419	604318.8070
801835	496+60.58	76.00	607732.4283	604322.8690
801836	497+03.56	27.24	607795.7648	604308.2578
801837	497+07.68	35.74	607794.1665	604317.5664
801838	497+13.22	43.24	607794.2978	604326.8888
801839	497+13.66	40.24	607796.4019	604324.7054
801840	497+53.16	27.24	607836.0853	604337.1406
801841	497+48.01	35.74	607826.9522	604341.0563
801842	497+40.98	43.24	607816.8670	604343.0610
801843	498+17.38	107.76	607841.4079	604440.0030
801844	498+09.86	95.48	607842.4388	604425.6349
801845	497+71.48	35.75	607846.0218	604354.7253
801846	500+96.26	35.81	608110.0259	604543.8997
801847	499+50.00	12.01	608004.9771	604439.3835

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801848	496+69.56	32.46	607765.0834	604292.6991
801849	496+84.82	40.30	607772.9274	604307.9655
801850	497+68.01	40.30	607840.5530	604356.4026
801851	497+81.69	32.24	607856.3710	604357.8237



MATCHLINE STA 496+00

MATCHLINE STA 504+00

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

SEE INSET BELOW

SEE INSET BELOW

LP

HP

CONSTRUCTION @ US 13 DUPONT HWY

+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504

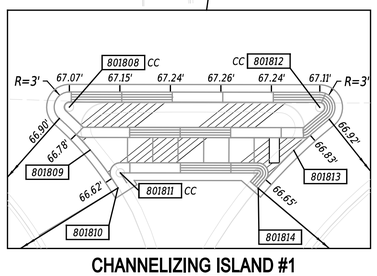
801849 801805 801848 801850 801817 801851 801847 801834 801818 801835 801830 801836 801837 801831 801832 801833

R=43' R=62' R=70' R=100' R=110' R=176' R=100' R=67' R=50'

CC 801806 CC 801807 801816 CC 801815 CC CC 801820 CC 801019 801829 CC 801828 CC

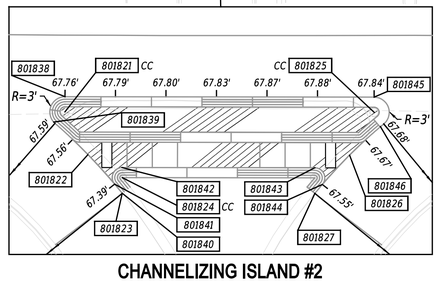
11' 13'

24" RCP 15" UD



CHANNELIZING ISLAND #1

SCALE: 1"=15'



CHANNELIZING ISLAND #2

SCALE: 1"=15'

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
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8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | SFILEAS
FILE NAME: | PEN TABLE: $PENTBLSS
MICROSTATION VERSION: $VERSIONS | PLOT DRIVER: $PLTDRVSS
MICROSTATION WORKSPACE: $WORKSPACES | DATE PLOTTED: 25-JUL-2024 @ 12:32
USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	O. GREEN
NEW CASTLE	CHECKED BY:	P. HORSEY

GRADES AND GEOMETRICS

GG-18
SECTION
PAI
SHEET NO.
84

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801905	504+06.33	25.78	608367.9373	604716.3015
801906	504+32.27	33.56	608384.4952	604737.7351
801907	504+16.43	40.39	608367.6351	604734.0676
801908	504+36.02	42.33	608382.4374	604747.0554
801909	504+46.64	35.67	608394.9474	604747.8157
801910	504+46.64	-14.33	608424.0634	604707.1677
801911	504+91.64	37.33	608430.5601	604775.3750
801912	505+36.64	35.67	608468.1138	604800.2245
801913	505+47.25	42.33	608472.8596	604811.8243
801914	505+55.62	42.00	608479.8582	604816.4264
801915	505+51.00	33.56	608481.0219	604806.8766
801916	505+36.64	-14.33	608497.2298	604759.5765
801917	505+76.94	25.78	608506.6437	604815.6562
801918	505+91.31	23.66	608519.5558	604822.3027
801919	505+63.61	36.68	608489.4500	604816.7552
801920	505+91.31	73.67	608490.4358	604862.9564
801921	507+76.62	43.42	608658.6983	604946.2822

COORDINATE LIST

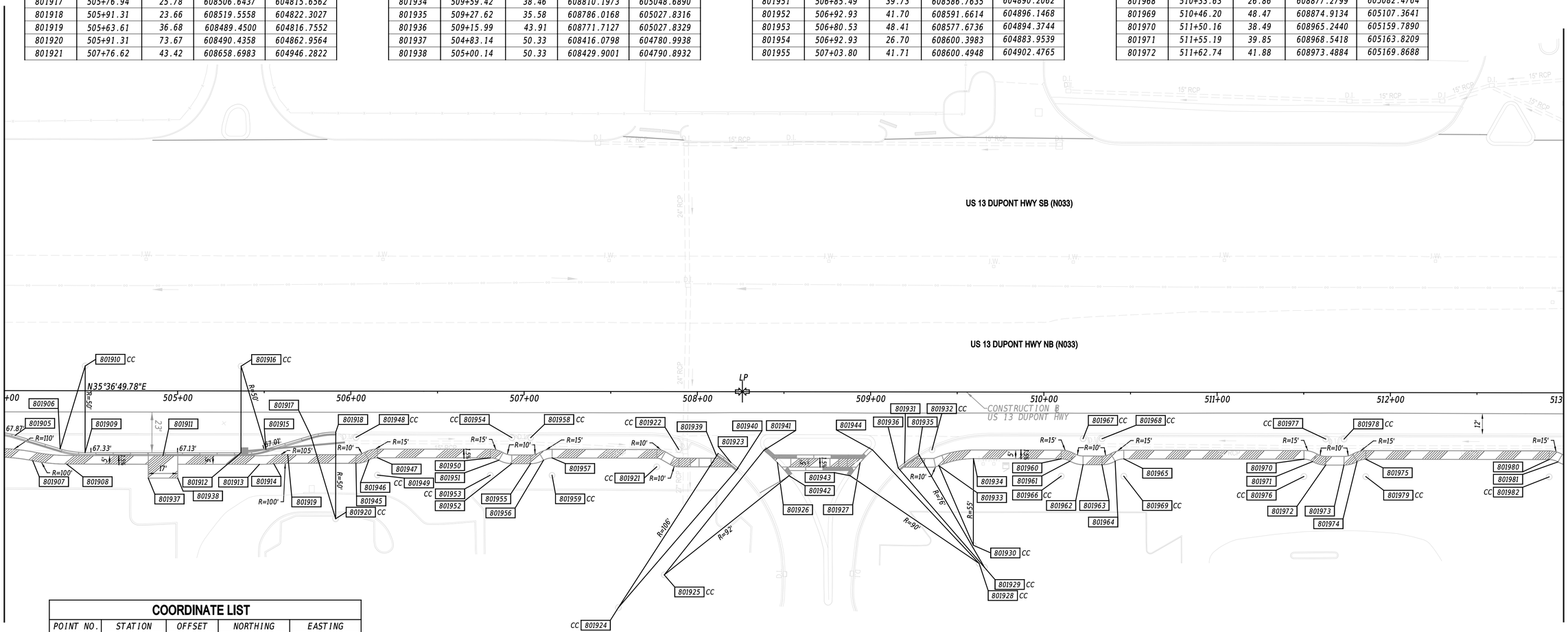
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801922	507+89.31	33.43	608674.8295	604945.5389
801923	508+19.46	40.94	608694.9630	604969.2073
801924	507+54.57	124.75	608593.4132	604999.5547
801925	507+81.04	105.78	608625.9766	604999.5396
801926	508+46.26	40.89	608716.7832	604984.7692
801927	508+93.98	40.94	608755.5469	605012.6016
801928	509+62.80	98.93	608777.7285	605099.8216
801929	509+65.87	101.25	608778.8715	605103.4950
801930	509+59.41	88.46	608781.0742	605089.3319
801931	509+19.64	40.93	608776.4164	605027.5346
801932	509+35.49	33.43	608793.6723	605030.6694
801933	509+39.48	42.60	608791.5736	605040.4467
801934	509+59.42	38.46	608810.1973	605048.6890
801935	509+27.62	35.58	608786.0168	605027.8316
801936	509+15.99	43.91	608771.7127	605027.8329
801937	504+83.14	50.33	608416.0798	604780.9938
801938	505+00.14	50.33	608429.9001	604790.8932

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801939	508+11.18	37.09	608690.4817	604961.2504
801940	508+22.45	45.51	608694.7429	604974.6617
801941	508+38.41	33.85	608714.5036	604974.4798
801942	508+52.99	48.45	608717.8526	604994.8293
801943	508+88.27	48.45	608746.5348	605015.3843
801944	509+01.07	33.48	608765.6581	605010.6665
801945	506+03.00	41.69	608518.5561	604843.7626
801946	506+10.44	39.71	608525.7560	604846.4908
801947	506+15.40	38.40	608530.5559	604848.3095
801948	506+03.00	26.69	608527.2931	604831.5697
801949	506+15.40	48.40	608524.7312	604856.4381
801950	506+80.53	38.41	608583.4982	604886.2458
801951	506+85.49	39.73	608586.7635	604890.2062
801952	506+92.93	41.70	608591.6614	604896.1468
801953	506+80.53	48.41	608577.6736	604894.3744
801954	506+92.93	26.70	608600.3983	604883.9539
801955	507+03.80	41.71	608600.4948	604902.4765

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801956	507+11.24	39.73	608607.6947	604905.2046
801957	507+16.20	38.41	608612.4945	604907.0234
801958	507+03.80	26.71	608609.2317	604890.2836
801959	507+16.20	48.41	608606.6699	604915.1520
801960	510+10.10	38.47	608851.3941	605078.2089
801961	510+15.13	39.82	608854.6918	605082.2408
801962	510+22.67	41.86	608859.6384	605088.2886
801963	510+33.63	41.86	608868.5430	605094.6693
801964	510+41.17	39.83	608875.8600	605097.4090
801965	510+46.20	38.47	608880.7381	605099.2356
801966	510+10.10	48.47	608845.5695	605086.3375
801967	510+22.68	26.86	608868.3753	605076.0957
801968	510+33.63	26.86	608877.2799	605082.4764
801969	510+46.20	48.47	608874.9134	605107.3641
801970	511+50.16	38.49	608965.2440	605159.7890
801971	511+55.19	39.85	608968.5418	605163.8209
801972	511+62.74	41.88	608973.4884	605169.8688



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801973	511+73.29	41.89	608982.0706	605176.0185
801974	511+80.84	39.85	608989.3877	605178.7582
801975	511+85.87	38.50	608994.2657	605180.5847
801976	511+50.16	48.49	608959.4194	605167.9176
801977	511+62.74	26.88	608982.2253	605157.6759
801978	511+73.30	26.89	608990.8075	605163.8256
801979	511+85.87	48.50	608988.4411	605188.7133
801980	512+91.74	38.51	609080.3297	605242.2546
801981	512+96.77	39.87	609083.6274	605246.2865
801982	512+91.74	48.51	609074.5051	605250.3832

NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:32
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

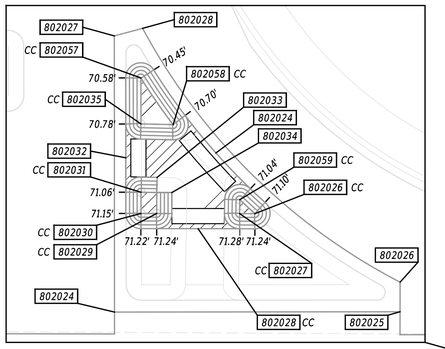
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-19

SECTION	SHEET NO.
PAI	85

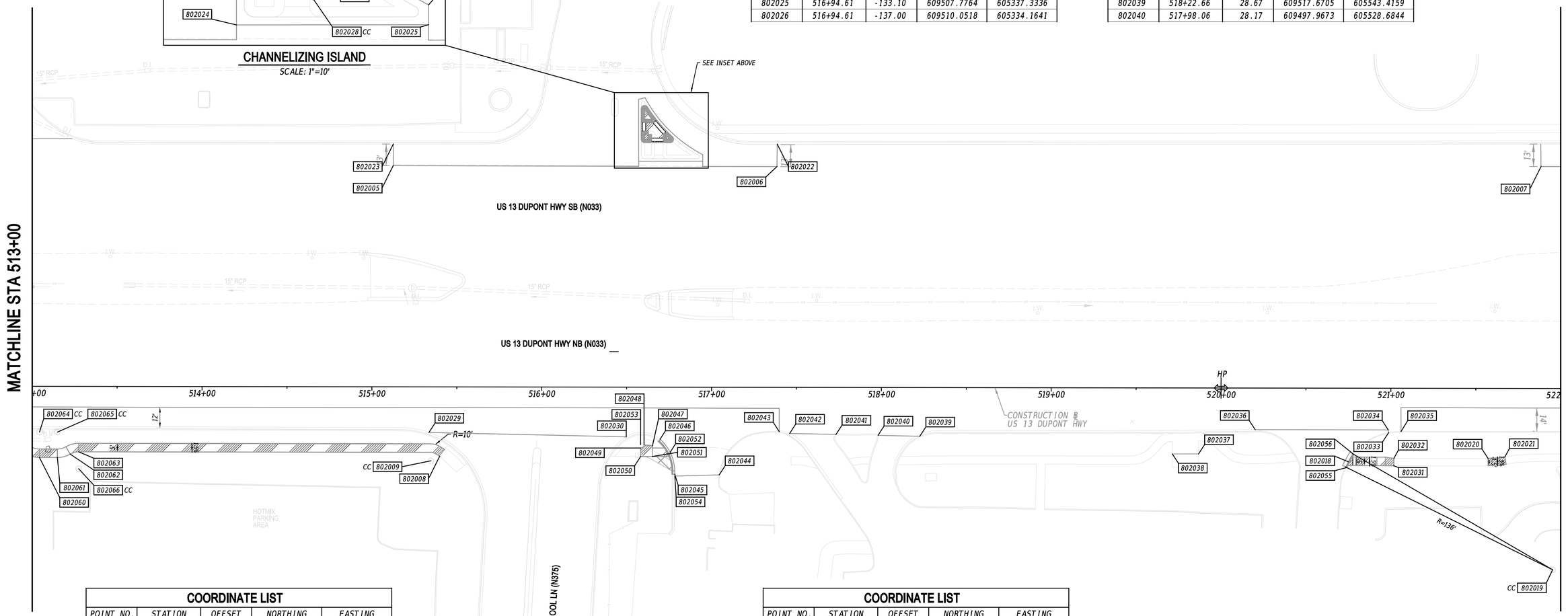


CHANNELIZING ISLAND

SCALE: 1"=10'

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802005	515+12.39	-130.27	609357.9878	605233.5239
802006	517+38.35	-130.03	609541.5442	605365.3013
802007	521+88.24	-130.70	609907.6803	605626.7361
802008	515+39.97	40.88	609280.7496	605388.7287
802009	515+34.78	43.56	609274.9720	605387.8783
802018	520+75.01	43.34	609714.2816	605702.2831
802019	521+95.40	106.78	609775.2110	605823.9666
802020	521+57.25	41.17	609782.3986	605748.4136
802021	521+67.19	40.30	609790.9946	605753.4959
802022	517+38.46	-143.28	609549.3538	605354.5987
802023	515+12.42	-142.96	609365.4046	605223.2246
802024	516+56.92	-133.01	609477.0835	605315.4580
802025	516+94.61	-133.10	609507.7764	605337.3336
802026	516+94.61	-137.00	609510.0518	605334.1641

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802027	516+56.83	-169.47	609498.2419	605285.7713
802028	516+60.58	-170.47	609501.8702	605287.1349
802029	515+33.65	26.83	609283.7935	605373.6183
802030	516+49.81	29.25	609376.8165	605443.2303
802031	521+01.81	45.67	609734.7162	605719.7849
802032	521+01.83	41.29	609737.2817	605716.2433
802033	520+98.69	26.16	609743.5378	605702.1081
802034	520+98.47	24.53	609744.3097	605700.6536
802035	521+06.02	25.44	609749.9174	605705.7953
802036	520+20.13	24.49	609680.6440	605655.0099
802037	519+86.82	38.84	609645.2045	605647.2754
802038	519+71.39	38.87	609632.6477	605638.3182
802039	518+22.66	28.67	609517.6705	605543.4159
802040	517+98.06	28.17	609497.9673	605528.6844



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802041	517+73.32	27.67	609478.1475	605513.8658
802042	517+46.05	27.11	609456.2992	605497.5305
802043	517+39.90	26.06	609451.9156	605493.1045
802044	517+04.59	51.61	609408.3300	605493.3022
802045	516+78.41	51.25	609387.2572	605477.7765
802046	516+69.69	30.68	609392.1483	605455.9667
802047	516+65.28	34.42	609386.3826	605456.4421
802048	516+60.30	34.00	609382.5788	605453.1969
802049	516+58.31	35.83	609379.8996	605453.5297
802050	516+58.31	40.83	609376.9880	605457.5945
802051	516+65.17	40.83	609382.5606	605461.5861
802052	516+75.68	38.33	609392.5610	605465.6742
802053	516+58.30	33.83	609381.0573	605451.8988
802054	516+78.44	52.30	609386.6657	605478.6433

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802055	520+74.17	46.72	609711.6297	605704.5449
802056	520+78.27	39.05	609719.4335	605700.6973
802057	516+60.34	-163.92	609497.8693	605292.3245
802058	516+64.61	-157.76	609497.7515	605299.8200
802059	516+73.44	-147.87	609499.1711	605313.0003
802060	513+04.32	41.91	609088.5740	605252.3344
802061	513+14.86	41.91	609097.1467	605258.4772
802062	513+22.41	39.88	609104.4637	605261.2170
802063	513+27.44	38.52	609109.3418	605263.0435
802064	513+04.32	26.91	609097.3109	605240.1415
802065	513+14.87	26.91	609105.8836	605246.2843
802066	513+27.43	48.52	609103.5172	605271.1721

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. — STYLES:
FILE NAME: — PLOT TABLE: $PENTBL55 — PLOT DRIVER: $PLTDRV55 — DATE PLOTTED: 25-JUL-2024 @ 12:32 — USER NAME: $USER$ — OFFICE LOCATION: $OFFICENAME$
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACE$

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-20
SECTION: PAI
SHEET NO.: 86

COORDINATE LIST

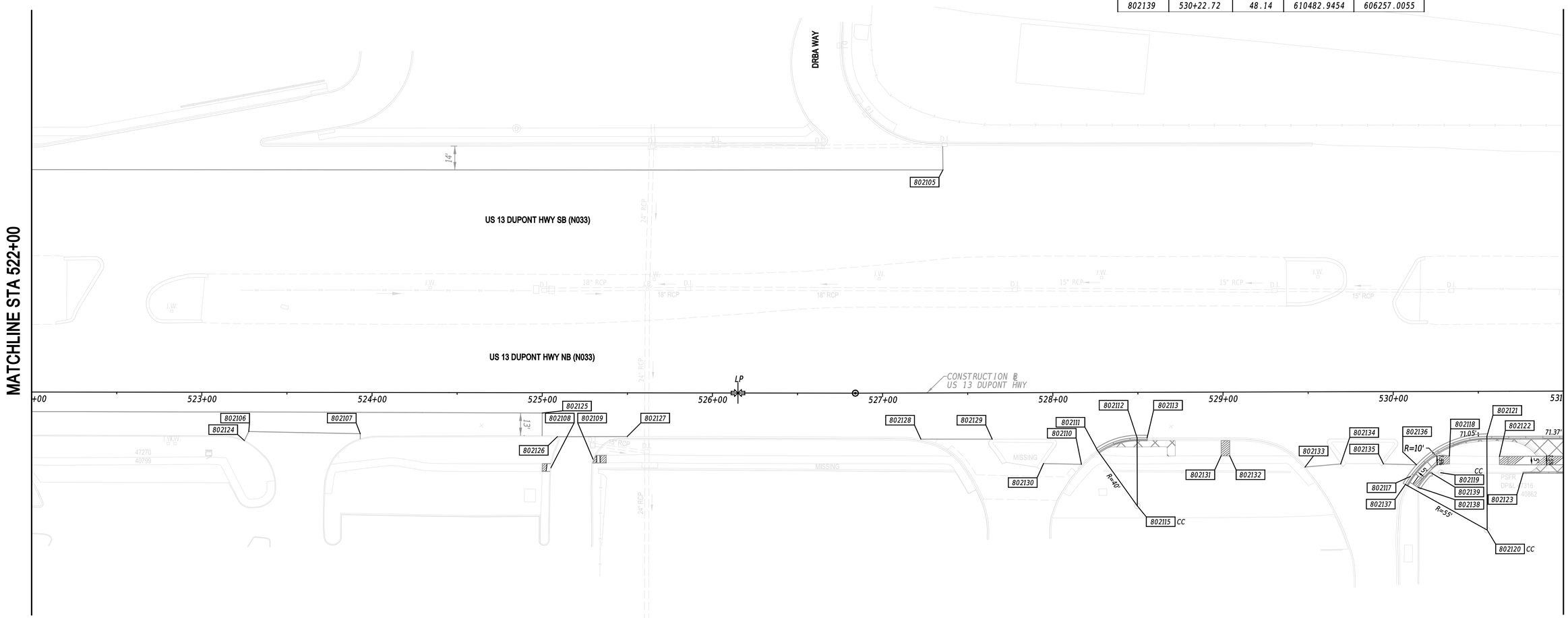
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802105	527+35.83	-131.06	610352.7351	605944.8084
802106	523+27.60	23.06	609931.4418	605832.8868
802107	523+93.13	24.25	609984.0164	605872.0113
802108	525+05.16	44.09	610063.5418	605953.3809
802109	525+29.89	39.03	610086.5894	605963.6714
802110	528+16.69	42.20	610318.3793	606132.8939
802111	528+26.23	34.18	610330.7993	606131.8796
802112	528+49.45	26.75	610354.0345	606139.2619
802113	528+55.32	26.75	610358.8231	606142.6612
802115	528+49.45	66.75	610330.8808	606171.8795

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802117	530+09.98	49.87	610471.5533	606251.0334
802118	530+32.95	37.81	610497.2636	606254.4967
802119	530+27.81	47.74	610487.3283	606259.6166
802120	530+54.97	81.50	610489.9329	606302.8715
802121	530+54.97	26.50	610521.7692	606258.0224
802122	530+62.32	38.25	610520.9654	606271.8612
802123	530+76.15	48.25	610526.4537	606288.0223
802124	523+25.04	28.34	609926.2826	605835.6956
802125	525+00.00	11.93	610078.0761	605924.2292
802126	525+08.91	25.83	610077.2248	605940.7251

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802127	525+49.97	25.64	610110.7141	605964.4823
802128	527+22.40	27.14	610250.2119	606066.0409
802129	527+64.31	27.25	610284.3215	606090.3910
802130	527+94.42	41.71	610300.5039	606119.6129
802131	528+98.81	37.43	610388.1042	606176.5453
802132	529+03.81	37.45	610392.1691	606179.4567
802133	529+48.05	44.18	610424.3500	606210.5536
802134	529+69.04	42.41	610442.4843	606221.2572
802135	529+94.14	42.51	610462.9052	606235.8668
802136	530+13.59	43.03	610478.4599	606247.5487
802137	530+07.00	54.59	610466.3915	606253.1643
802138	530+14.54	56.40	610471.4971	606259.0047
802139	530+22.72	48.14	610482.9454	606257.0055



NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLA$
PLOT DRIVER: $PLTDRV$
DATE PLOTTED: 25-JUL-2024 @ 12:32
USER NAME: $USER$
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-21

SECTION PAI

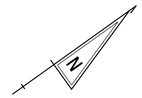
SHEET NO. 87

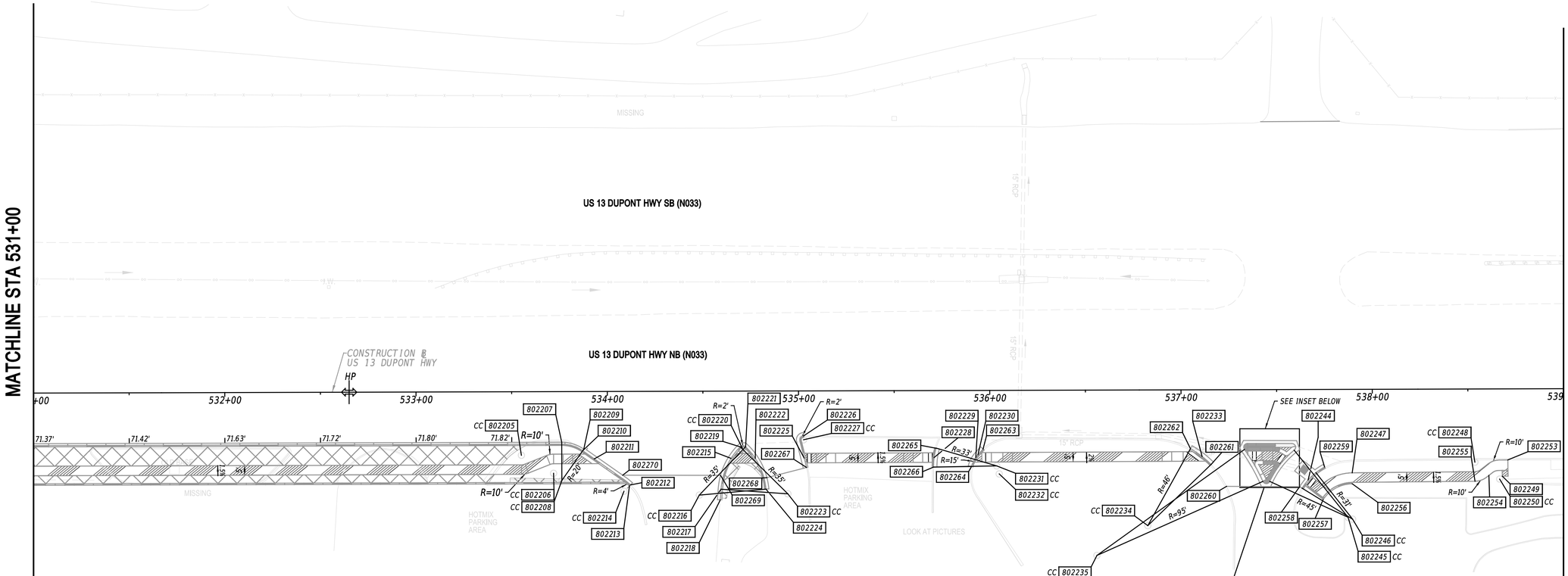
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802205	533+55.01	33.25	610762.5264	606437.2023
802206	533+71.81	42.75	610770.7304	606454.6761
802207	533+76.12	26.50	610783.6447	606443.9155
802208	533+76.12	46.50	610772.0679	606460.2243
802209	533+87.63	30.15	610790.9239	606453.5592
802210	533+87.09	30.92	610790.0399	606453.8717
802211	533+93.14	35.25	610792.4600	606460.9034
802212	534+12.00	48.94	610799.9214	606482.9856
802213	534+11.44	49.45	610799.1689	606483.0743
802214	534+08.60	52.25	610795.2278	606483.7159
802215	534+64.63	35.22	610850.7762	606502.2582
802216	534+47.97	54.36	610826.1097	606508.2261
802217	534+59.36	51.30	610837.1696	606512.3282
802218	534+58.96	56.87	610833.6171	606516.6375
802219	534+69.43	29.17	610858.1898	606500.1072

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802220	534+70.85	30.58	610858.5319	606502.0778
802221	534+72.24	29.14	610860.4968	606501.7051
802222	534+77.26	35.20	610861.0845	606509.5537
802223	534+94.27	53.83	610864.1760	606534.5915
802224	534+82.84	51.36	610856.2837	606525.9610
802225	535+02.87	35.17	610881.9894	606524.3604
802226	535+02.57	23.57	610888.4551	606514.7245
802227	535+02.56	25.57	610887.2905	606516.3505
802228	535+70.82	35.07	610937.4585	606563.6051
802229	535+92.59	35.04	610955.2293	606576.1828
802230	535+93.72	33.64	610956.9573	606575.6952
802231	536+03.52	39.54	610961.5312	606586.1774
802232	536+04.81	43.73	610960.1592	606590.3495
802233	537+10.92	34.87	611051.8094	606644.5354
802234	536+82.43	70.99	611007.6726	606657.5046

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802235	536+55.80	86.54	610976.9556	606654.7628
802236	537+34.72	30.14	611073.9551	606654.4548
802237	537+35.37	34.64	611071.8818	606658.5070
802238	537+44.48	47.24	611072.0179	606674.0546
802239	537+47.85	32.18	611083.4814	606663.7248
802240	537+53.86	34.20	611087.2141	606668.8510
802241	537+47.83	42.18	611077.6809	606671.8707
802242	537+53.42	37.16	611085.1426	606671.0104
802243	537+57.83	30.22	611092.7593	606667.9000
802244	537+66.35	47.38	611089.7684	606686.8244
802245	537+87.15	66.95	611095.3997	606714.8258
802246	537+89.54	67.95	611096.7681	606717.0239
802247	537+89.37	43.70	611110.6719	606697.1556
802248	538+53.56	38.27	611166.1541	606729.8792
802249	538+67.87	45.68	611173.5358	606744.1990

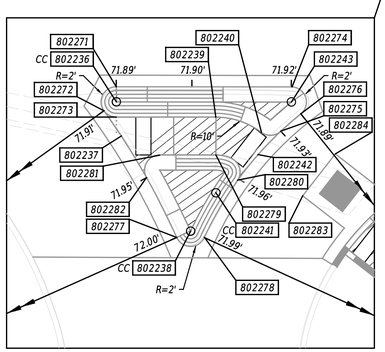
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802250	538+66.50	47.19	611171.5502	606744.6403
802251	537+42.07	-140.18	611178.5418	606519.8237
802252	537+83.20	-140.30	611212.1491	606543.5430
802253	538+70.79	37.16	611180.8502	606738.9430
802254	538+60.85	45.26	611168.0587	606739.7974
802255	538+53.61	48.27	611160.4093	606738.0645
802256	537+89.41	49.46	611107.3730	606701.8681
802257	537+74.17	57.62	611090.2227	606699.7000
802258	537+61.88	50.88	611084.1031	606687.0931
802259	537+74.98	40.59	611100.7377	606686.2791
802260	537+23.69	50.58	611053.1348	606664.7425
802261	537+15.60	39.12	611053.1684	606650.7127
802262	537+04.85	30.83	611049.2055	606637.7306
802263	535+96.42	30.67	610960.8713	606574.8400
802264	535+90.31	39.91	610950.5469	606578.8341





COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802265	535+71.88	30.14	610941.1723	606560.2059
802266	535+70.52	40.07	610934.3193	606567.5088
802267	535+04.09	40.09	610880.1334	606529.0773
802268	534+83.34	45.36	610860.1640	606521.3619
802269	534+59.10	44.07	610841.1445	606506.2754
802270	534+07.95	43.85	610799.5598	606476.4885
802271	537+34.72	28.14	611075.1184	606652.8279
802272	537+33.09	31.30	611071.9554	606654.4616
802273	537+34.68	32.14	611072.7648	606656.0631
802274	537+57.95	28.22	611094.0080	606666.3398
802275	537+56.43	34.07	611089.3886	606670.2290
802276	537+59.09	31.78	611092.8796	606669.9037
802277	537+42.65	48.05	611070.0600	606673.6575
802278	537+46.31	48.06	611073.0343	606675.7777
802279	537+47.86	37.18	611080.5987	606667.8103

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802280	537+50.74	40.50	611081.0206	606672.1832
802281	537+40.39	37.16	611074.5167	606663.4618
802282	537+38.69	40.14	611071.4120	606664.9098
802283	537+59.31	42.60	611086.7985	606678.8501
802284	537+63.62	37.08	611093.5064	606676.8489



ISLAND INSET

SCALE: 1"=10'

NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

PENNONI ASSOCIATES INC. — PEN TABLE: $PENTBLS
FILE NAME: S:\FILES — PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: SV8RSIONS — DATE PLOTTED: 25-JUL-2024 @ 12:32
MICROSTATION WORKSPACE: S:\WORKSPACES — USER NAME: $USER$ — OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-22	
SECTION	PAI
SHEET NO.	88

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802304	539+84.04	30.83	611276.8667	606799.3400
802305	546+85.64	-152.43	611955.0522	607056.0149
802306	546+85.15	-149.46	611952.9413	607058.1527
802307	546+83.56	-140.20	611946.2770	607064.7898
802308	546+93.04	-140.18	611954.0003	607070.2949
802309	546+93.06	-148.20	611958.6550	607063.7601
802310	539+38.57	46.22	611230.8812	606785.5693
802311	539+47.38	50.62	611235.5135	606794.2610
802312	539+17.36	72.26	611198.5072	606794.5256
802313	539+15.75	73.70	611196.3614	606794.7711
802314	539+47.58	60.73	611229.8253	606802.6127
802315	539+54.70	29.39	611253.7758	606781.1848
802316	539+62.12	37.52	611255.1149	606792.1070
802317	539+62.13	40.57	611253.3611	606794.6033
802318	539+67.65	45.85	611254.8052	606802.1023
802319	539+71.55	54.53	611252.9600	606811.4322
802320	539+67.71	35.85	611260.6429	606793.9830
802321	539+72.89	35.87	611264.8520	606796.9926
802322	539+72.86	45.87	611259.0435	606805.1327
802323	539+76.70	36.63	611267.5169	606799.8222
802324	539+77.93	39.85	611266.6598	606803.1562
802325	539+82.56	29.49	611276.4321	606797.3843

COORDINATE LIST

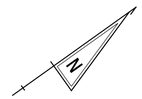
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802326	539+94.41	46.72	611276.1214	606818.3008
802327	540+16.30	59.26	611286.7124	606841.1943
802328	540+25.69	62.42	611292.5424	606849.2095
802329	540+16.05	40.17	611297.5587	606825.4840
802330	540+25.73	33.17	611309.5063	606825.3812
802331	541+76.10	28.38	611434.8995	606908.5141
802332	541+93.03	38.57	611442.8005	606926.6181
802333	542+12.05	38.59	611458.2951	606937.6491
802334	542+10.59	27.61	611463.4635	606927.8477
802335	542+20.56	26.24	611472.3856	606932.5051
802336	542+91.18	13.68	611537.2447	606963.1388
802337	542+91.06	28.26	611528.7124	606974.9566
802338	543+30.42	36.67	611555.9346	607004.5966
802339	543+10.34	82.46	611513.0536	607030.3139
802340	542+70.54	112.72	611463.0805	607031.9529
802341	542+90.26	128.25	611470.1759	607056.0336
802342	543+50.14	52.19	611563.0300	607028.6747
802343	543+68.11	90.85	611555.3124	607070.5958
802344	543+77.83	33.61	611596.3654	607029.5430
802345	543+76.04	25.63	611599.5262	607021.9988

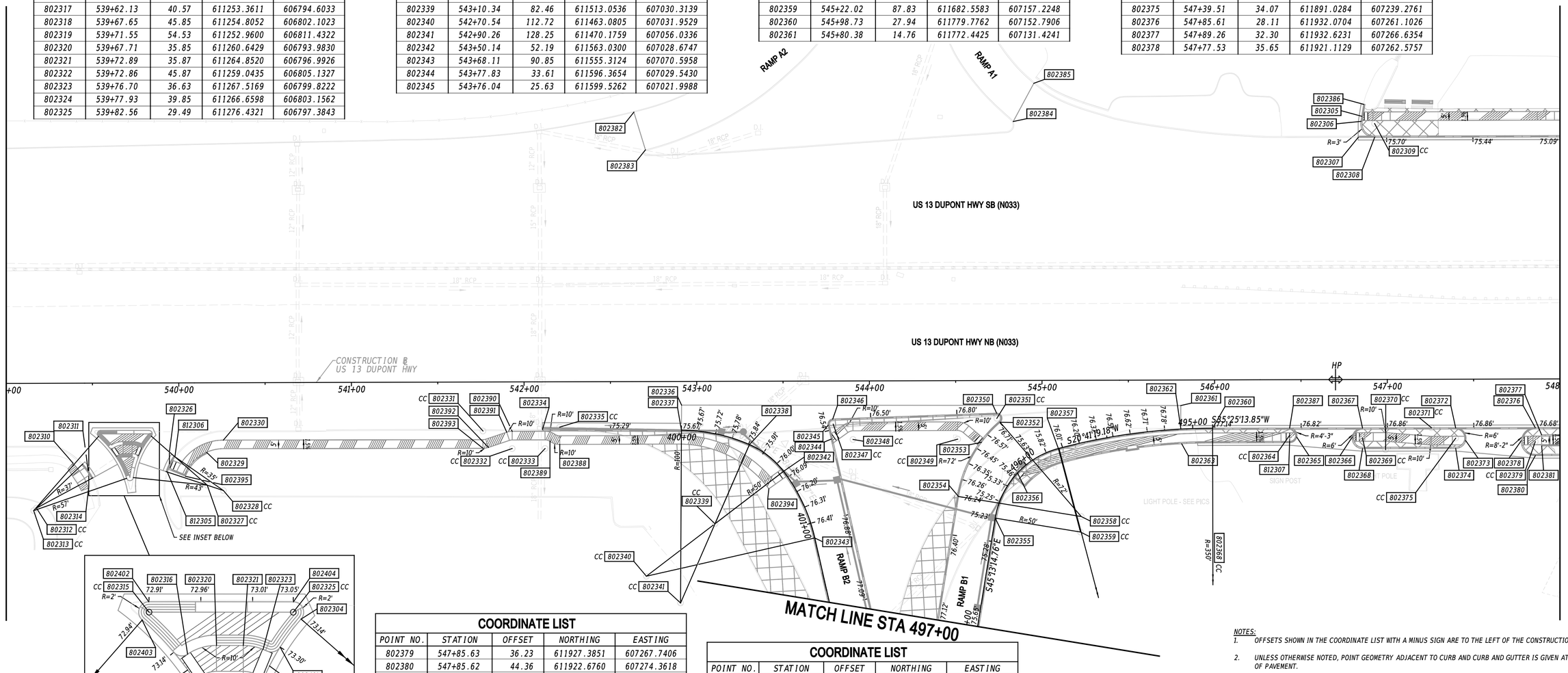
COORDINATE LIST

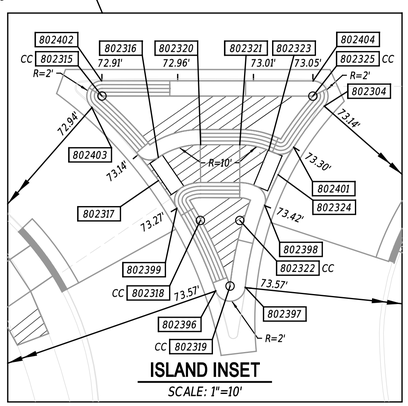
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802346	543+78.73	21.98	611603.8323	607020.5834
802347	543+78.97	24.97	611602.2931	607023.1606
802348	543+90.42	33.88	611606.4766	607037.0499
802349	544+51.06	33.88	611655.9261	607072.1517
802350	544+73.64	18.87	611683.0284	607072.9885
802351	544+73.77	21.87	611681.4005	607075.5102
802352	544+75.69	24.15	611681.6443	607078.4788
802353	544+64.82	35.76	611666.0597	607081.6527
802354	544+51.46	67.09	611637.0279	607099.4697
802355	544+72.66	79.68	611647.0330	607122.0059
802356	544+85.65	53.52	611672.7598	607108.1943
802357	545+09.34	39.47	611700.2111	607110.4447
802358	545+22.49	78.86	611688.1354	607150.1849
802359	545+22.02	87.83	611682.5583	607157.2248
802360	545+98.73	27.94	611779.7762	607152.7906
802361	545+80.38	14.76	611772.4425	607131.4241

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802362	545+80.35	28.41	611764.5188	607142.5321
802363	545+80.79	36.90	611759.9630	607149.7081
802364	546+43.33	32.23	611813.6631	607182.1063
802365	546+47.46	33.24	611816.4498	607185.3152
802366	546+79.63	33.26	611842.6627	607203.9581
802367	546+85.58	28.03	611850.5507	607203.1384
802368	545+98.41	377.94	611576.9256	607438.0127
802369	546+85.58	34.02	611847.0792	607208.0194
802370	546+98.90	40.68	611854.0920	607221.1594
802371	547+25.50	28.02	611883.1025	607226.2375
802372	547+39.51	28.07	611894.5059	607234.3866
802373	547+45.32	35.54	611894.9184	607243.8443
802374	547+39.50	40.07	611887.5493	607244.1690
802375	547+39.51	34.07	611891.0284	607239.2761
802376	547+85.61	28.11	611932.0704	607261.1026
802377	547+89.26	32.30	611932.6231	607266.6354
802378	547+77.53	35.65	611921.1129	607262.5757







ISLAND INSET

SCALE: 1"=10'

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802379	547+85.63	36.23	611927.3851	607267.7406
802380	547+85.62	44.36	611922.6760	607274.3618
802381	547+89.32	38.80	611928.9069	607271.9682
802382	542+64.04	-156.00	611613.3365	606809.0630
802383	542+70.70	-134.16	611606.1189	606830.7247
802384	544+83.75	-149.99	611789.0088	606941.1421
802385	544+95.74	-172.08	611811.5814	606930.0726
802386	546+86.77	-159.36	611959.9889	607051.0150
802387	546+43.33	27.98	611816.1263	607178.6429
802388	542+20.56	36.24	611466.5974	606940.6594
802389	542+14.88	34.48	611462.9920	606935.9344
802390	541+93.04	28.57	611448.6002	606918.4717
802391	541+89.88	29.08	611445.7264	606917.0557
802392	541+79.25	37.87	611431.9736	606918.0765

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802393	541+76.09	38.38	611429.0999	606916.6605
802394	543+41.62	62.33	611550.2157	607032.0119
802395	540+03.70	54.10	611279.4265	606829.6997
802396	539+69.64	55.13	611251.0528	606810.8213
802397	539+73.55	54.68	611254.5017	606812.7147
802398	539+76.15	43.86	611262.8838	606805.3999
802399	539+64.55	44.24	611253.2077	606798.9935
802400	539+59.36	36.99	611253.1725	606790.0753
802401	539+79.93	36.32	611270.3346	606801.4386
802402	539+54.65	27.39	611254.8902	606779.5255
802403	539+53.34	30.86	611251.8129	606781.5883
802404	539+82.59	27.49	611277.6174	606795.7720

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | $PENTBLSS
MICROSTATION VERSION: | $VERSIONS
MICROSTATION WORKSPACE: | $WORKSPACES
PEN TABLE: | $PENTBLSS
PLOT DRIVER: | $PLTDRVSS
DATE PLOTTED: | 25-JUL-2024 @ 12:32
USER NAME: | $USERS
OFFICE LOCATION: | $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-23
SECTION
PAI
SHEET NO.
89

COORDINATE LIST

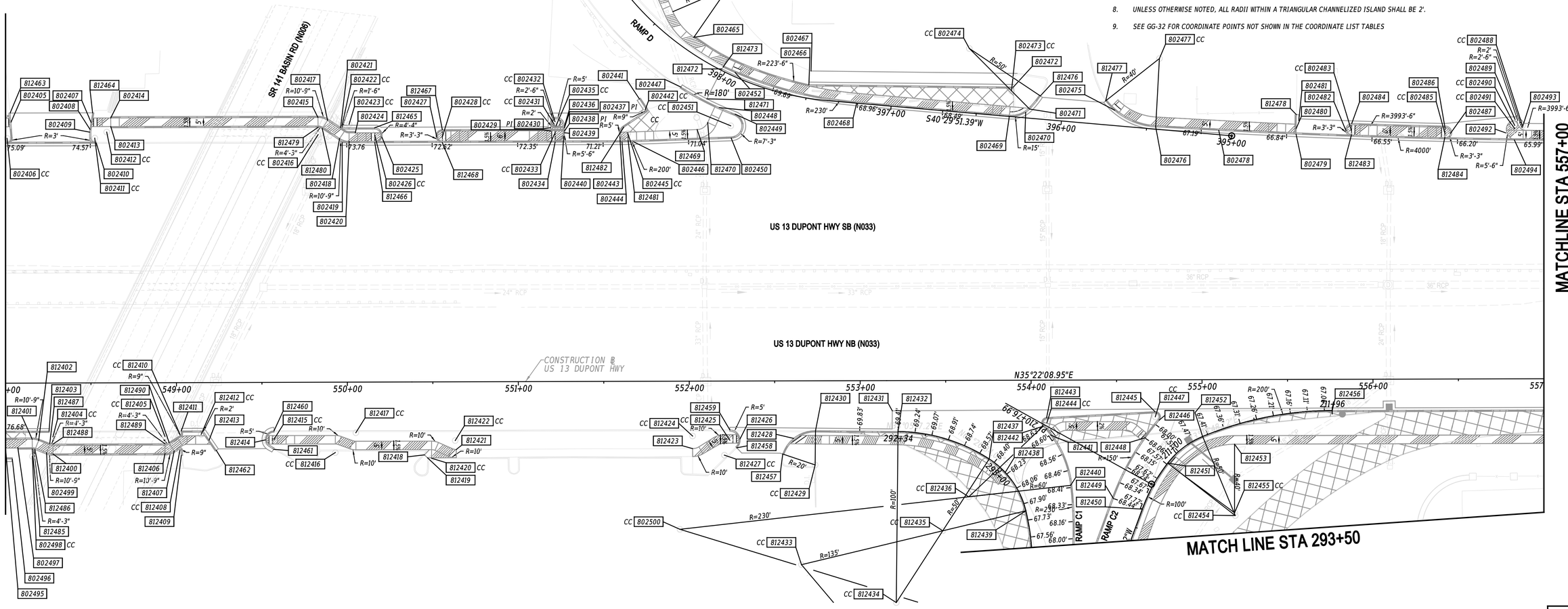
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802405	548+03.67	-152.57	612051.3767	607124.2226
802406	548+01.32	-143.13	612044.0012	607130.5644
802407	548+50.46	-152.35	612089.4154	607151.4859
802408	548+49.77	-148.31	612086.5070	607154.3816
802409	548+49.62	-146.62	612085.4094	607155.6781
802410	548+53.55	-140.10	612084.8388	607163.2615
802411	548+52.62	-143.10	612085.8213	607160.2794
802412	548+59.62	-146.62	612093.5627	607161.4681
802413	548+61.99	-149.85	612097.3605	607160.1981
802414	548+61.99	-154.85	612100.2566	607156.1222
802415	549+83.24	-154.79	612199.0945	607226.3509
802416	549+83.30	-144.79	612193.3562	607234.5409
802417	549+88.85	-153.11	612202.6966	607230.9693
802418	549+95.87	-142.42	612202.2331	607243.7542
802419	549+97.34	-139.99	612202.0272	607246.5878
802420	550+01.42	-140.74	612205.7833	607248.3353
802421	549+96.50	-148.91	612206.5058	607238.8296
802422	549+97.34	-150.16	612207.9068	607238.2938
802423	550+01.42	-150.74	612211.5733	607240.1820
802424	550+05.02	-145.74	612211.6183	607246.3465
802425	550+20.59	-143.23	612222.8637	607257.3987
802426	550+16.39	-144.32	612220.0699	607254.0861
802427	550+52.73	-143.23	612249.0663	607276.0064
802428	550+55.98	-143.23	612251.7161	607277.8881
802429	551+19.37	-146.47	612305.2800	607311.9402
802430	551+19.37	-148.47	612306.4380	607310.3096
802431	551+21.37	-150.46	612309.2266	607309.8369
802432	551+21.87	-151.97	612310.5062	607308.8987

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802433	551+21.93	-146.72	612307.5130	607313.2182
802434	551+21.94	-139.96	612303.6185	607318.7326
802435	551+22.45	-149.47	612309.5301	607311.2719
802436	551+27.45	-149.47	612313.6065	607314.1672
802437	551+27.45	-148.46	612313.0244	607314.9869
802438	551+27.44	-146.46	612311.8663	607316.6175
802439	551+27.44	-145.46	612311.2871	607317.4331
802440	551+26.96	-143.21	612309.5921	607318.9886
802441	551+71.30	-165.08	612358.4001	607326.8222
802442	551+74.65	-158.69	612357.4388	607333.9751
802443	551+59.83	-143.08	612336.3193	607338.1252
802444	551+61.08	-139.96	612335.5248	607341.3908
802445	551+64.46	-144.98	612341.1915	607339.2483
802446	551+67.86	-140.07	612341.1224	607345.2248
802447	551+95.62	-171.96	612382.2214	607335.2870
802448	552+18.01	-159.90	612393.4908	607358.0828
802449	552+27.33	-156.00	612398.8411	607366.6567
802450	552+24.96	-142.00	612388.7977	607376.7071
802451	552+24.71	-149.24	612392.7931	607370.6548
802452	552+27.37	-180.36	612412.9678	607346.8220
802453	551+43.64	-400.37	612472.0480	607118.9490
802456	551+71.57	-359.76	612471.3157	607168.2298
802457	551+58.61	-292.23	612421.6562	607215.7988

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802464	552+23.26	-229.76	612438.2148	607304.1526
802465	552+03.25	-201.01	612405.2559	607316.0184
802466	552+70.50	-173.15	612443.9656	607377.6612
802467	552+71.77	-181.14	612449.6281	607371.8792
802468	552+98.37	-162.26	612460.3922	607402.6770
802469	553+87.69	-154.24	612528.5814	607460.9111
802470	553+97.26	-156.65	612537.7849	607464.4915
802471	553+99.58	-158.52	612540.7556	607464.3060
802472	553+90.10	-171.43	612540.5018	607448.2961
802473	553+89.03	-169.18	612538.3226	607449.5046
802474	553+64.41	-194.06	612532.6458	607414.9681
802475	554+49.29	-157.71	612580.8228	607493.7484
802476	554+73.31	-147.90	612594.7309	607515.6453



PEN TABLE: $PENTBLSS
PLOT DRIVER: SPLTDRVSS
DATE PLOTTED: 25-JUL-2024 @ 12:22
USER NAME: SUSERS OFFICE LOCATION: $OFFICENAMES

PENNONI ASSOCIATES INC. SFILEAS
FILE NAME: SVERSIONS
MICROSTATION VERSION: SWORKSPACES
MICROSTATION WORKSPACE:

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-24

SECTION
PAI
SHEET NO.
90

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-32 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802506	557+36.77	-139.20	612804.5273	607675.2432
802507	557+80.79	-142.46	612842.3173	607698.0644
802508	557+78.30	-142.40	612840.2482	607696.6771
802509	558+51.90	-151.04	612905.2683	607732.2313
802511	558+55.76	-142.92	612903.7146	607741.0914
802512	558+58.77	-148.75	612909.5348	607738.0754
802513	558+35.67	-188.69	612913.8278	607692.1347
802514	558+75.53	-158.38	612928.7871	607739.9243
802515	558+71.41	-164.34	612928.8752	607732.6827
802516	558+87.20	-184.15	612953.2153	607725.6591
802517	559+24.73	-165.39	612972.9614	607762.6876
802518	559+19.99	-157.55	612964.5568	607766.3335

COORDINATE LIST

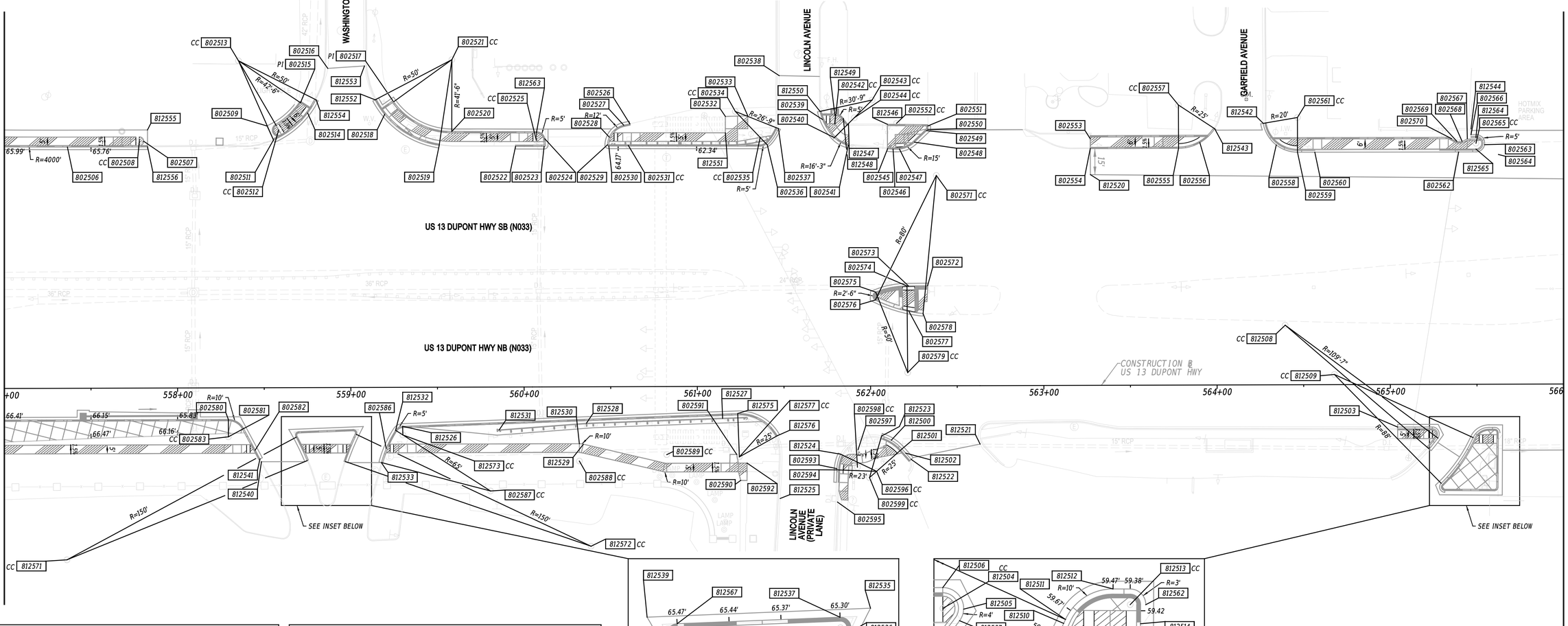
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802519	559+51.38	-139.56	612979.7401	607799.1781
802520	559+58.68	-147.50	612990.2849	607796.9296
802521	559+58.87	-188.99	613014.4583	607763.1969
802522	559+95.47	-138.83	613015.2701	607825.2917
802523	560+11.96	-138.76	613028.6737	607834.8969
802524	560+12.40	-143.16	613031.5808	607831.5651
802525	560+07.48	-142.28	613027.0581	607829.4332
802526	560+61.45	-151.67	613076.5050	607853.0143
802527	560+57.92	-150.88	613073.1696	607851.6160
802528	560+49.57	-144.02	613062.3896	607852.3728
802529	560+48.55	-139.64	613059.0243	607855.3587
802530	560+49.30	-138.86	613059.1823	607856.4266

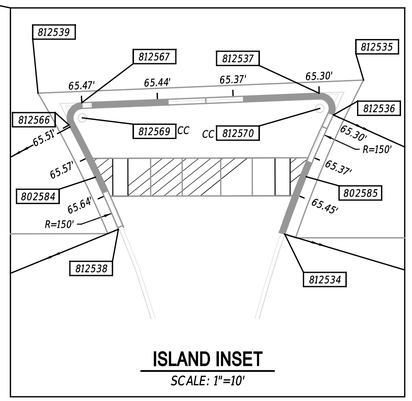
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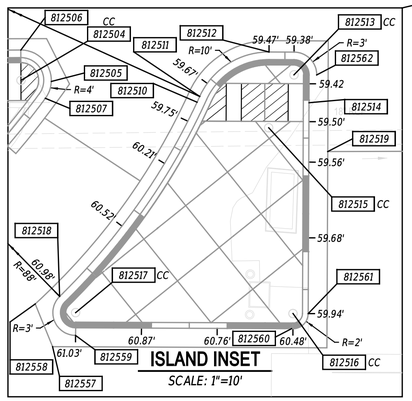
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802531	560+60.54	-139.17	613068.5300	607862.6828
802532	561+16.61	-155.77	613123.8618	607881.5960
802533	561+29.55	-156.12	613134.6146	607888.8071
802534	561+22.37	-158.64	613130.2145	607882.5946
802535	561+36.66	-143.57	613133.1441	607903.1507
802536	561+40.79	-139.23	613134.0018	607909.0891
802537	561+47.22	-148.69	613144.7147	607905.0901
802538	561+47.74	-179.23	613162.8227	607880.4857
802539	561+72.68	-153.84	613168.4611	607915.6297
802540	561+79.49	-143.35	613167.9431	607928.1281
802541	561+87.51	-138.92	613171.9189	607936.3782
802542	561+79.80	-151.34	613172.8186	607921.7887

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802543	562+01.34	-164.99	613198.2835	607923.1256
802544	561+91.04	-154.78	613183.9767	607925.4845
802545	562+10.23	-136.85	613189.2490	607951.2167
802546	562+13.33	-136.57	613191.6144	607953.2446
802547	562+17.04	-136.62	613194.6701	607955.3450
802548	562+25.70	-140.61	613204.0408	607957.1028
802549	562+32.73	-147.23	613213.6004	607955.7753
802550	562+33.47	-147.93	613214.6077	607955.6354
802551	562+33.50	-149.95	613215.8081	607954.0018
802552	562+15.42	-151.54	613201.9776	607942.2454
802553	563+27.19	-143.31	613288.3621	608013.6556
802554	563+27.19	-136.56	613284.4533	608019.1586







COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802555	563+78.14	-136.60	613326.0250	608048.6167
802556	563+90.47	-139.86	613337.9612	608053.0917
802557	563+78.12	-161.60	613340.4792	608028.2188
802558	564+34.56	-138.37	613373.0529	608079.8287
802559	564+46.77	-134.19	613380.5899	608090.3102
802560	564+56.77	-134.17	613388.7387	608096.1122
802561	564+46.80	-154.19	613392.1902	608074.0180
802562	565+39.83	-134.05	613456.3989	608144.2846
802563	565+54.76	-138.20	613470.9728	608149.5502
802564	565+62.78	-132.53	613474.2324	608158.8159
802565	565+49.83	-139.04	613467.4407	608146.0113
802566	565+46.95	-144.04	613467.9826	608140.2593
802567	565+44.85	-141.72	613464.9269	608140.9403
802568	565+41.80	-140.20	613461.5570	608140.4138

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802569	565+38.81	-140.20	613459.1194	608138.6839
802570	565+35.79	-141.71	613457.5370	608135.7044
802571	562+38.27	-121.35	613203.1399	607980.0827
802572	562+33.06	-57.71	613162.0593	608028.9652
802573	562+22.05	-57.66	613153.0493	608022.6397
802574	562+21.18	-57.65	613152.3350	608022.1383
802575	562+03.09	-54.16	613135.5623	608014.5112
802576	562+02.90	-49.60	613132.7652	608018.1275
802577	562+22.26	-42.97	613144.7179	608034.7350
802578	562+30.40	-41.74	613150.6418	608040.4479
802579	562+21.44	-7.65	613123.6058	608063.0605
802580	558+29.24	18.25	612788.7957	607857.1608
802581	558+38.07	23.55	612792.9261	607866.5870
802582	558+44.70	35.99	612791.1326	607880.5745

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-32 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

PENNONI ASSOCIATES INC. | FILE NAME: | MICROSTATION VERSION: | MICROSTATION WORKSPACE:
STYLES | SVERSIONS | SWORKSPACES

PEN TABLE: $PENTBL$S
PLOT DRIVER: $PLTDRV$S
DATE PLOTTED: 25-JUL-2024 @ 12:32
USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

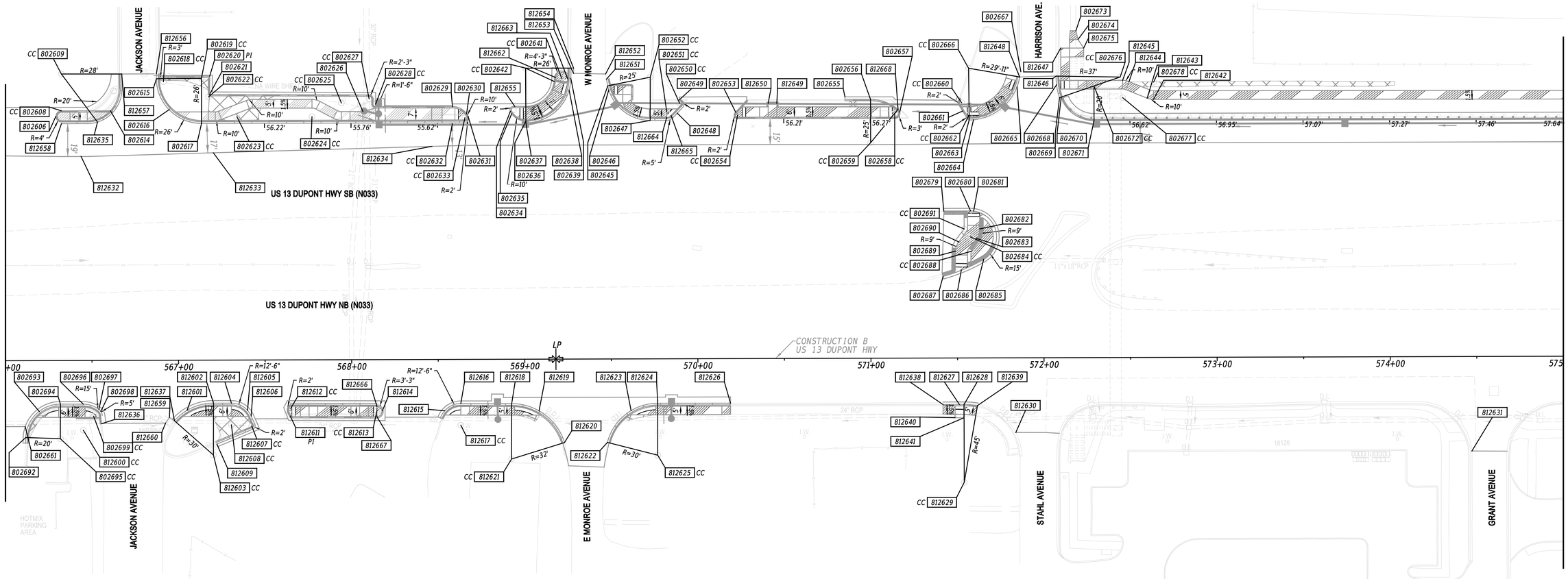
GG-25	
SECTION	PAI
SHEET NO.	91

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802606	566+29.46	-141.08	613533.5512	608190.4357
802608	566+32.72	-144.32	613538.0882	608189.6803
802609	566+32.77	-165.61	613550.4532	608172.3489
802614	566+61.05	-144.30	613561.1704	608206.0988
802615	566+87.66	-162.73	613593.5436	608206.4710
802616	566+94.93	-144.80	613589.0897	608225.3041
802617	567+13.63	-136.83	613599.7308	608242.6284
802618	566+91.73	-161.05	613595.8908	608210.1988
802619	567+13.66	-162.83	613614.8011	608221.4415
802620	567+18.42	-164.14	613619.4460	608223.1285
802621	567+18.36	-153.52	613613.2462	608231.7529
802622	567+17.78	-152.19	613612.0060	608232.5013
802623	567+34.10	-140.64	613618.6257	608251.3718
802624	567+77.46	-140.49	613653.8980	608276.5919

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802625	567+94.47	-148.43	613672.3645	608279.9610
802626	568+06.90	-143.39	613679.5781	608291.2655
802627	568+10.52	-150.72	613686.7729	608287.3804
802628	568+14.26	-147.73	613688.0997	608291.9848
802629	568+58.64	-146.19	613723.3902	608318.9278
802630	568+66.82	-141.93	613727.5937	608327.1370
802631	568+67.62	-140.56	613727.4573	608328.7236
802632	568+58.63	-136.19	613717.5939	608327.0766
802633	568+65.82	-139.68	613725.4846	608328.3942
802634	568+92.06	-143.28	613748.9606	608340.6462
802635	568+92.87	-141.91	613748.8242	608342.2346
802636	569+01.04	-137.65	613753.0262	608350.4410
802637	569+01.05	-136.65	613752.4481	608351.2570
802638	569+26.07	-155.51	613783.7711	608350.3642

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802639	569+27.07	-162.15	613788.4280	608345.5230
802641	569+21.82	-162.25	613784.2059	608342.4027
802642	569+00.95	-168.23	613770.6514	608325.4530
802645	569+48.41	-157.87	613803.3541	608361.3656
802646	569+48.99	-155.54	613802.4865	608363.6028
802647	569+72.86	-137.82	613811.6894	608391.8691
802648	569+88.49	-141.96	613826.8301	608397.5463
802649	569+89.83	-149.74	613832.4238	608391.9734
802650	569+89.84	-147.74	613831.2763	608393.6115
802651	569+82.41	-142.80	613822.3553	608393.3326
802652	569+72.91	-162.82	613826.2021	608371.5128
802653	570+22.22	-142.47	613854.6338	608416.6521
802654	570+23.33	-140.72	613854.5180	608418.7188
802655	570+85.42	-151.10	613911.1566	608446.1923

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802656	571+01.21	-151.06	613924.0145	608455.3695
802657	571+17.05	-142.28	613931.8433	608471.6946
802658	571+14.14	-141.53	613929.0418	608470.6215
802659	571+00.14	-124.56	613907.8027	608476.3574
802660	571+52.77	-147.51	613964.0065	608488.1050
802661	571+53.36	-142.70	613961.7042	608492.3725
802662	571+57.08	-140.45	613963.4307	608496.3652
802663	571+57.10	-137.53	613961.7593	608498.7555
802664	571+59.61	-137.65	613963.8713	608500.1043
802665	571+84.80	-156.67	613995.4206	608499.1813
802666	571+56.89	-167.45	613978.9027	608474.2380
802667	571+87.06	-165.40	614002.3177	608493.3627
802668	572+07.68	-157.75	614014.7081	608511.5425
802669	572+09.37	-150.28	614011.7582	608518.6158



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802670	572+10.32	-150.60	614012.7158	608518.9039
802671	572+29.27	-137.00	614020.2963	608540.9571
802672	572+29.27	-157.00	614031.8731	608524.6483
802673	572+18.92	-188.92	614041.9167	608492.6321
802674	572+20.16	-183.92	614040.0275	608497.4258
802675	572+23.39	-178.91	614039.7677	608503.3812
802676	572+44.42	-162.12	614047.1987	608529.2444
802677	572+45.82	-150.17	614041.4221	608539.7987
802678	572+63.73	-159.14	614061.2126	608542.8551
802679	571+42.32	-84.95	613919.2700	608533.0730
802680	571+57.78	-84.95	613931.8782	608542.0202
802681	571+59.54	-84.85	613933.2546	608543.1242
802682	571+63.02	-74.52	613930.1130	608553.5600
802683	571+61.16	-69.06	613925.4339	608556.9367
802684	571+57.78	-69.95	613923.1973	608554.2530

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802685	571+65.27	-56.96	613921.7805	608569.1860
802686	571+52.33	-50.69	613907.6047	608566.8032
802687	571+41.77	-47.16	613896.9455	608563.5737
802688	571+57.99	-61.64	613918.5501	608561.1496
802689	571+48.99	-61.78	613911.2924	608555.8275
802690	571+50.85	-67.12	613915.9010	608552.5483
802691	571+54.02	-74.54	613922.7847	608548.3354
802692	566+11.60	44.44	613411.6020	608331.3782
802693	566+19.38	29.36	613426.6751	608323.5841
802694	566+31.67	25.20	613439.1054	608327.3108
802695	566+31.58	45.20	613427.4573	608343.5688
802696	566+44.90	25.26	613449.8599	608335.0160
802697	566+53.90	28.31	613455.4323	608342.7075
802698	566+55.01	29.47	613455.6620	608344.2986
802699	566+50.88	32.29	613450.6628	608344.2081

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
812600	566+44.84	40.26	613441.1238	608347.2095
812601	567+04.90	29.03	613496.5976	608372.8183
812602	567+20.10	24.88	613511.4013	608378.2347
812603	567+19.97	54.88	613493.9291	608402.6217
812604	567+30.46	24.92	613519.8247	608384.2697
812605	567+39.76	29.13	613524.9717	608393.0830
812606	567+41.85	32.40	613524.7865	608396.9580
812607	567+42.16	38.06	613521.7546	608401.7528
812608	567+30.41	37.42	613512.5446	608394.4309
812609	567+22.00	48.59	613499.2265	608398.6678
812610	567+63.04	29.23	613543.8908	608406.6377
812611	567+63.52	29.70	613544.0112	608407.3002
812612	567+65.30	29.68	613545.4806	608408.3096
812613	568+14.50	29.79	613585.5333	608436.8816
812614	568+17.43	29.73	613587.9586	608438.5266

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.
9. SEE GG-32 FOR COORDINATE POINTS NOT SHOWN IN THE COORDINATE LIST TABLES

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRV55
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUN-2024 @ 12:32
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-26 | SECTION PAI | SHEET NO. 92

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802700	575+96.34	41.71	614216.1742	608899.1652
802701	576+01.37	46.77	614217.3485	608906.1951
802702	576+04.07	50.35	614217.4807	608910.6876
802703	577+29.00	57.87	614315.0018	608989.1258
802704	576+77.72	-148.29	614392.5176	608791.3356
802705	576+77.74	-158.29	614398.3227	608783.1930
802706	576+90.94	-147.76	614402.9914	608799.4168
802707	576+96.56	-147.00	614407.1388	608803.2951
802708	576+96.56	-137.00	614401.3504	608811.4495
802709	577+06.56	-146.90	614415.2325	608809.1681
802710	577+06.65	-155.23	614420.1272	608802.4226
802711	577+29.43	-155.18	614438.6760	608815.6467
802712	577+45.90	-147.65	614447.7468	608831.3245
802713	577+78.68	-163.80	614483.8260	608837.1285
802714	577+53.35	-136.46	614447.3474	608844.7607

COORDINATE LIST

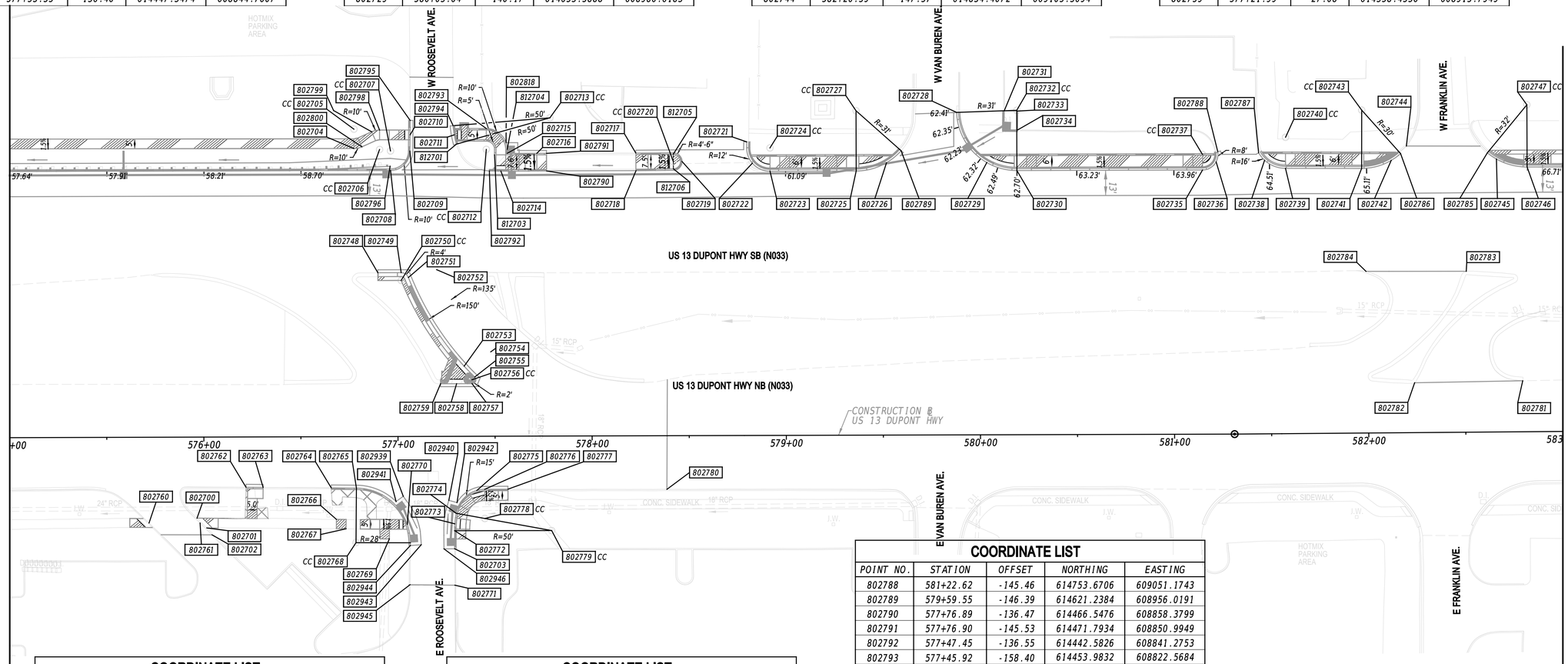
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802715	577+56.65	-145.57	614455.3046	608839.2394
802716	577+71.90	-145.54	614467.7230	608848.0930
802717	578+22.91	-145.50	614509.2962	608877.6548
802718	578+22.96	-136.49	614504.1232	608885.0243
802719	578+46.70	-141.14	614526.1755	608894.9767
802720	578+42.20	-141.11	614522.4852	608892.3922
802721	578+80.05	-151.17	614559.1779	608906.1060
802722	578+82.90	-140.17	614555.1312	608916.7279
802723	578+91.99	-136.00	614560.1322	608925.3876
802724	578+91.99	-148.00	614567.0783	608915.6023
802725	579+36.39	-136.00	614596.3379	608951.0883
802726	579+52.01	-140.22	614611.5123	608956.6857
802727	579+36.39	-167.00	614614.2820	608925.8097
802728	579+88.18	-165.99	614655.9309	608956.6098
802729	580+03.64	-140.17	614653.5888	608986.6183

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802730	580+19.17	-136.00	614663.8352	608999.0015
802731	580+12.71	-166.72	614676.3526	608970.2096
802732	580+19.17	-167.00	614681.7793	608973.7229
802733	580+19.71	-166.61	614681.9974	608974.3568
802734	580+19.55	-156.86	614676.2234	608982.2156
802735	581+14.76	-136.00	614741.7822	609054.3324
802736	581+21.78	-140.17	614749.9199	609054.9992
802737	581+14.76	-144.00	614746.4129	609047.8089
802738	581+47.50	-140.85	614770.7240	609068.8244
802739	581+58.23	-136.58	614777.0579	609078.4792
802740	581+58.38	-152.58	614786.3677	609065.4667
802741	581+97.46	-136.23	614808.9605	609101.3039
802742	582+12.75	-140.26	614823.7896	609106.7901
802743	581+97.73	-166.23	614826.4164	609076.9053
802744	582+20.59	-147.57	614834.4072	609105.3094

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802745	582+66.91	-140.49	614868.2596	609137.7158
802746	582+82.68	-136.27	614878.7424	609150.2330
802747	582+82.80	-168.27	614897.2224	609124.1085
802748	576+89.85	-84.33	614365.3922	608850.5113
802749	577+01.86	-84.33	614375.1864	608857.4637
802750	577+01.86	-80.33	614372.8710	608860.7255
802751	577+05.58	-81.82	614376.7593	608861.6640
802752	577+20.14	-85.83	614390.9540	608866.8169
802753	577+34.19	-36.14	614373.6448	608915.4756
802754	577+47.88	-43.46	614389.0541	608917.4263
802755	577+39.60	-30.51	614374.8038	608923.2023
802756	577+38.20	-29.08	614372.8340	608923.5488
802757	577+38.20	-27.08	614371.6763	608925.1797
802758	577+30.24	-27.08	614365.1880	608920.5739
802759	577+21.99	-27.08	614358.4556	608915.7949



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802760	575+71.64	44.17	614194.6167	608886.8702
802761	575+97.93	44.23	614216.0175	608902.1404
802762	576+21.64	25.90	614245.9607	608900.9194
802763	576+30.43	25.99	614253.0773	608906.0802
802764	576+65.54	26.35	614281.4925	608926.6951
802765	576+78.51	26.49	614291.9947	608934.3137
802766	576+68.16	42.57	614274.2414	608941.4374
802767	576+73.10	47.42	614275.4672	608948.2475
802768	576+78.22	54.49	614275.5504	608956.9760
802769	576+95.39	52.68	614290.6005	608965.4427
802770	577+04.65	45.26	614302.4492	608964.7511
802771	577+29.07	76.63	614304.2021	609004.4657
802772	577+29.02	48.55	614320.4097	608981.5369
802773	577+29.15	45.03	614322.5497	608978.7469

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802774	577+29.84	39.60	614326.2625	608974.7157
802775	577+40.50	27.88	614341.7352	608971.3295
802776	577+44.55	27.31	614345.3696	608973.2104
802777	577+56.55	27.28	614355.1729	608980.1310
802778	577+44.59	42.31	614336.7224	608985.4671
802779	577+79.02	48.64	614361.1287	609010.5536
802780	578+38.40	27.57	614421.7472	609027.7493
802781	582+79.51	-26.26	614812.9547	609238.4521
802782	582+23.85	-25.65	614767.0370	609206.9764
802783	582+50.88	-82.83	614822.0186	609175.7023
802784	581+99.25	-83.22	614779.9756	609145.7262
802785	582+62.27	-143.72	614866.3150	609132.3992
802786	582+17.55	-143.71	614829.7076	609106.7242
802787	581+44.45	-144.70	614770.4426	609063.9210

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802788	581+22.62	-145.46	614753.6706	609051.1743
802789	579+59.55	-146.39	614621.2384	608956.0191
802790	577+76.89	-136.47	614466.5476	608858.3799
802791	577+76.90	-145.53	614471.7934	608850.9949
802792	577+47.45	-136.55	614442.5826	608841.2753
802793	577+45.92	-158.40	614453.9832	608822.5684
802794	577+28.83	-159.90	614440.9218	608811.4532
802795	577+06.73	-162.70	614424.5162	608796.3740
802796	576+96.29	-139.07	614402.3254	608809.6052
802797	576+44.58	-137.00	614358.9631	608781.3607
802798	576+90.96	-157.76	614408.7965	608791.2742
802799	576+86.85	-156.89	614404.9438	608789.6092
802800	576+81.82	-149.16	614396.3703	608793.0006
802818	577+56.08	-151.11	614458.0437	608834.3958
802939	577+02.62	30.79	614309.1592	608951.7774
802940	577+26.07	32.91	614327.0575	608967.0769
802941	576+98.89	33.44	614304.5889	608951.7788
802942	577+30.27	34.13	614329.7757	608970.5007
802943	577+11.81	55.72	614302.2280	608977.4295
802944	577+06.21	56.11	614297.4322	608974.5009
802945	577+06.00	76.31	614285.5716	608990.8469
802946	577+23.52	57.88	614310.5267	608985.9672

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC. — PEN TABLE: $PANTBL$
FILE NAME: $PLTDRV$ — PLOT DRIVER:
MICROSTATION VERSION: $VERSION$ — DATE PLOTTED: 25-JUL-2024 @ 12:32
MICROSTATION WORKSPACE: $WORKSPACES$ — USER NAME: $USERS$ — OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-27
SECTION PAI
SHEET NO. 93

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802801	584+88.56	-174.40	615069.1619	609237.2865
802802	583+98.96	-150.21	614981.9319	609205.6153
802803	583+98.94	-146.73	614979.9148	609208.4568
802804	585+13.31	-159.43	615080.8255	609263.7582
802805	583+54.92	-136.01	614937.7222	609191.9457
802806	583+70.15	-141.11	614953.1205	609196.5160
802807	583+73.77	-146.52	614959.1848	609194.1666
802808	583+73.69	-150.35	614961.3256	609190.9879
802809	583+55.01	-161.01	614952.1578	609171.5346
802810	583+64.10	-149.07	614952.7364	609186.5234
802811	583+67.00	-148.30	614954.6709	609188.8164
802812	583+94.44	-139.83	614972.2680	609211.5164
802813	583+95.87	-138.43	614972.6264	609213.4840
802814	584+00.58	-143.20	614979.2294	609212.2812
802815	584+35.17	-138.48	615004.8294	609236.0189

COORDINATE LIST

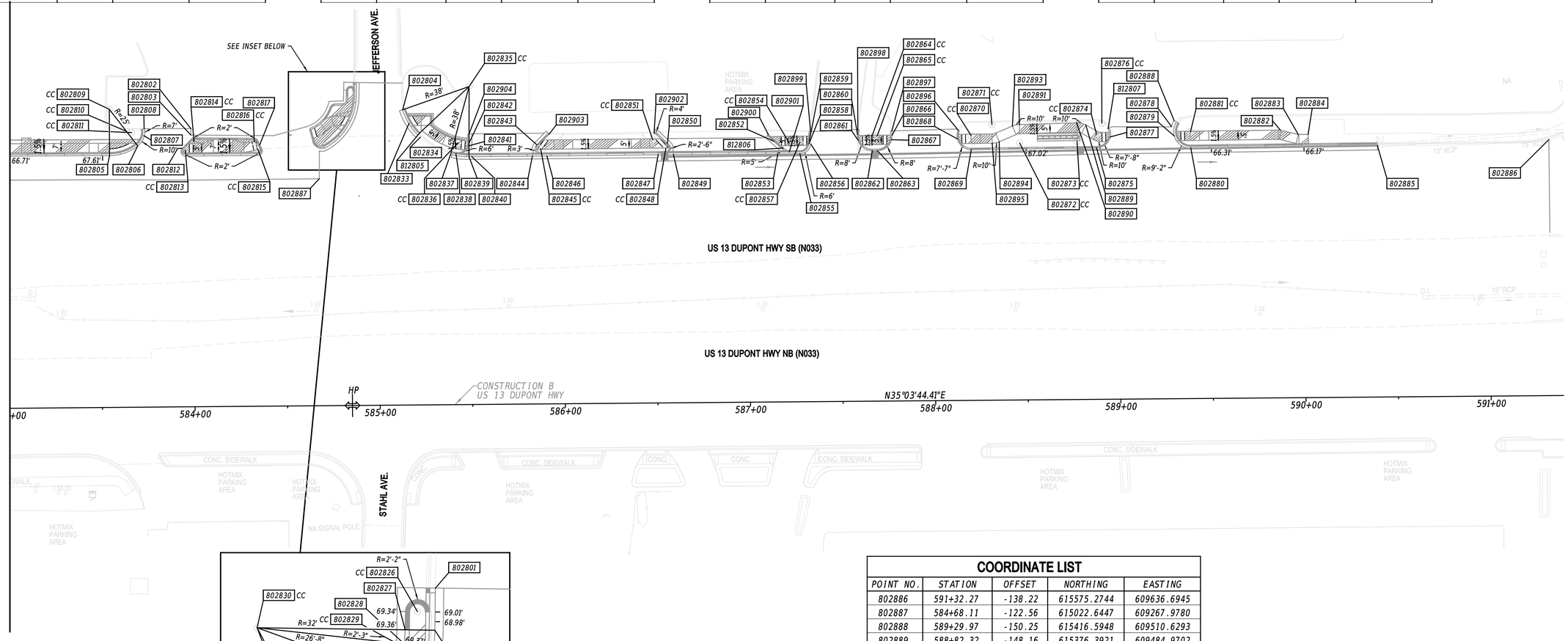
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802816	584+33.12	-142.73	615005.5930	609231.3628
802817	584+36.07	-141.23	615007.1406	609234.2842
802819	584+62.97	-149.68	615034.0194	609242.8193
802820	584+63.82	-146.49	615032.8803	609245.9261
802821	584+71.05	-139.06	615034.5279	609256.1542
802822	584+68.76	-143.51	615035.2068	609251.2004
802823	584+76.92	-147.38	615044.1111	609252.7200
802824	584+85.24	-153.65	615054.5214	609252.3684
802825	584+88.39	-166.80	615064.6614	609243.4075
802826	584+85.30	-170.17	615064.0617	609238.8774
802827	584+83.06	-166.92	615060.3645	609240.2482
802828	584+82.88	-164.38	615058.7585	609242.2269
802829	584+81.39	-164.56	615057.6403	609241.2271
802830	584+56.40	-167.51	615038.8802	609224.4515
802831	584+74.22	-160.92	615049.6845	609240.0806

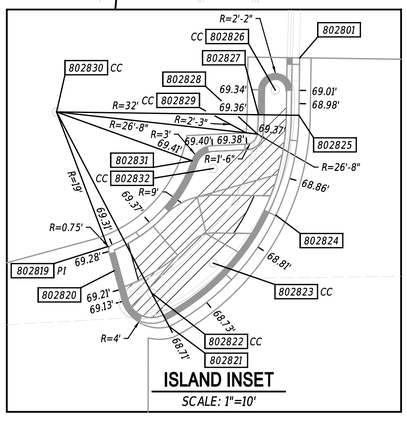
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802832	584+77.03	-159.88	615051.3904	609242.5484
802833	585+16.83	-152.13	615079.5112	609271.7624
802834	585+22.85	-144.53	615080.0691	609281.4358
802835	585+49.39	-171.72	615117.4175	609274.4290
802836	585+43.17	-141.35	615094.8809	609295.7147
802837	585+39.11	-135.14	615087.9862	609298.4664
802838	585+41.97	-135.47	615090.5189	609299.8345
802839	585+49.06	-133.72	615095.3194	609305.3429
802840	585+50.64	-133.71	615096.6017	609306.2596
802841	585+48.94	-139.70	615098.6574	609300.3771
802842	585+49.17	-141.32	615099.7768	609299.1832
802843	585+85.68	-139.99	615128.8940	609321.2509
802844	585+83.28	-133.81	615123.3774	609324.9212
802845	585+87.76	-137.83	615129.3565	609324.2154
802846	585+91.11	-133.84	615129.8054	609329.4059

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802847	586+51.21	-134.00	615179.0946	609363.7937
802848	586+55.42	-137.52	615184.5518	609363.3334
802849	586+59.47	-134.03	615185.8662	609368.5109
802850	586+56.26	-140.19	615186.7787	609361.6305
802851	586+48.18	-142.51	615181.4988	609355.0919
802852	587+13.62	-140.84	615234.1025	609394.0474
802853	587+15.79	-133.94	615231.9213	609400.9435
802854	587+22.04	-139.93	615240.4793	609399.6297
802855	587+27.74	-133.93	615241.6882	609407.8190
802856	587+33.69	-139.12	615249.5465	609406.9879
802857	587+27.75	-139.93	615245.1425	609402.9131
802858	587+32.72	-139.30	615248.8498	609406.2838
802859	587+32.93	-140.92	615249.9542	609405.0749
802860	587+58.89	-144.20	615273.0891	609417.3086
802861	587+59.17	-141.05	615271.5045	609420.0416





COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802862	587+66.87	-135.30	615274.5110	609429.1746
802863	587+69.60	-135.31	615276.7507	609430.7337
802864	587+66.84	-143.30	615279.0814	609422.6087
802865	587+69.57	-143.31	615281.3211	609424.1678
802866	587+77.57	-143.43	615287.9365	609428.6663
802867	587+77.26	-141.09	615286.3365	609430.4004
802868	588+12.91	-141.23	615315.5990	609450.7698
802869	588+20.32	-135.43	615318.3340	609459.7769
802870	588+20.28	-143.01	615322.6560	609453.5458
802871	588+31.59	-148.80	615335.2421	609455.3051
802872	588+46.48	-138.73	615341.6381	609472.0953
802873	588+77.48	-139.41	615367.4056	609489.3568

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802874	588+87.94	-143.47	615378.3020	609492.0410
802875	588+87.99	-135.80	615373.9325	609498.3407
802876	588+90.94	-149.11	615383.9922	609489.1415
802877	588+95.39	-141.64	615383.3433	609497.8172
802878	589+28.52	-146.98	615413.5274	609512.4742
802879	589+30.04	-141.85	615411.8243	609517.5474
802880	589+38.90	-135.19	615415.2492	609528.0903
802881	589+38.85	-144.35	615420.4807	609520.5631
802882	589+87.30	-144.59	615460.2689	609548.2026
802883	589+96.99	-142.13	615466.7895	609555.7843
802884	590+02.33	-142.12	615471.1550	609558.8489
802885	590+39.70	-135.65	615498.0272	609585.6219

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802886	591+32.27	-138.22	615575.2744	609636.6945
802887	584+68.11	-122.56	615022.6447	609267.9780
802888	589+29.97	-150.25	615416.5948	609510.6293
802889	588+82.32	-148.16	615376.3921	609484.9702
802890	588+77.42	-149.41	615373.1021	609481.1380
802891	588+46.42	-148.73	615347.3347	609463.8765
802892	588+42.65	-147.97	615343.8103	609462.3341
802893	588+42.65	-147.97	615343.8103	609462.3341
802894	588+35.42	-139.56	615333.0699	609465.0663
802895	588+31.63	-138.80	615329.5290	609463.5124
802896	588+13.30	-145.98	615318.6500	609447.1069
802897	587+77.53	-145.88	615289.3127	609426.6425
802898	587+59.16	-146.55	615274.6557	609415.5374
802899	587+33.63	-146.07	615253.4818	609401.2623
802900	587+10.78	-144.44	615233.8445	609389.4683
802901	587+22.04	-134.93	615237.5998	609403.7182
802902	586+49.10	-145.63	615184.0428	609353.0658
802903	585+92.43	-145.65	615137.6664	609320.4944
802904	585+49.19	-146.17	615102.5810	609295.2250

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8' FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PEN TABLE: $PENTBL$
PLOT DRIVER: $PLTDRV$
DATE PLOTTED: 25-JUL-2024 @ 12:32
USER NAME: $USER$ OFFICE LOCATION: $OFFICENAME$
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACE$

ADDENDA / REVISIONS

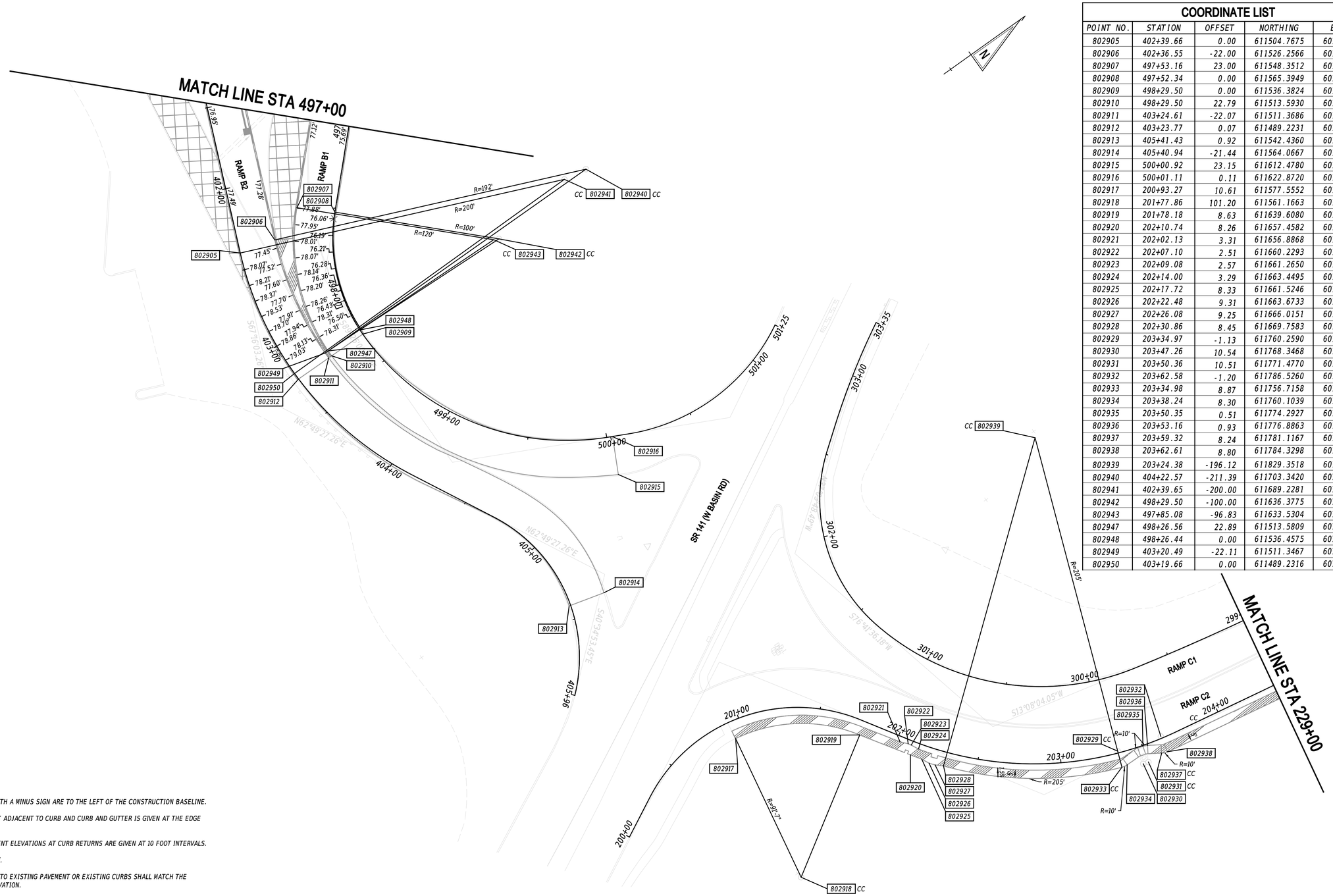
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-28
SECTION PAI
SHEET NO. 94



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802905	402+39.66	0.00	611504.7675	607191.2458
802906	402+36.55	-22.00	611526.2566	607196.8774
802907	497+53.16	23.00	611548.3512	607188.8324
802908	497+52.34	0.00	611565.3949	607204.3099
802909	498+29.50	0.00	611536.3824	607273.7590
802910	498+29.50	22.79	611513.5930	607273.5337
802911	403+24.61	-22.07	611511.3686	607273.5117
802912	403+23.77	0.07	611489.2231	607273.2928
802913	405+41.43	0.92	611542.4360	607479.0231
802914	405+40.94	-21.44	611564.0667	607484.7162
802915	500+00.92	23.15	611612.4780	607431.8689
802916	500+01.11	0.11	611622.8720	607411.3079
802917	200+93.27	10.61	611577.5552	607602.1348
802918	201+77.86	101.20	611561.1663	607692.9674
802919	201+78.18	8.63	611639.6080	607643.8045
802920	202+10.74	8.26	611657.4582	607671.2744
802921	202+02.13	3.31	611656.8868	607661.2190
802922	202+07.10	2.51	611660.2293	607665.0068
802923	202+09.08	2.57	611661.2650	607666.7195
802924	202+14.00	3.29	611663.4495	607671.2693
802925	202+17.72	8.33	611661.5246	607677.2957
802926	202+22.48	9.31	611663.6733	607681.8850
802927	202+26.08	9.25	611666.0151	607684.8326
802928	202+30.86	8.45	611669.7583	607688.2372
802929	203+34.97	-1.13	611760.2590	607741.9204
802930	203+47.26	10.54	611768.3468	607757.0477
802931	203+50.36	10.51	611771.4770	607757.9662
802932	203+62.58	-1.20	611786.5260	607749.8105
802933	203+34.98	8.87	611756.7158	607751.2716
802934	203+38.24	8.30	611760.1039	607751.9192
802935	203+50.35	0.51	611774.2927	607748.3708
802936	203+53.16	0.93	611776.8863	607749.5555
802937	203+59.32	8.24	611781.1167	607758.2212
802938	203+62.61	8.80	611784.3298	607759.5664
802939	203+24.38	-196.12	611829.3518	607559.5713
802940	404+22.57	-211.39	611703.3420	607271.0715
802941	402+39.65	-200.00	611689.2281	607268.5290
802942	498+29.50	-100.00	611636.3775	607274.7476
802943	497+85.08	-96.83	611633.5304	607273.3577
802947	498+26.56	22.89	611513.5809	607269.9212
802948	498+26.44	0.00	611536.4575	607270.6976
802949	403+20.49	-22.11	611511.3467	607269.8546
802950	403+19.66	0.00	611489.2316	607269.1860

NOTES:

1. *OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.*
2. *UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.*
3. *UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.*
4. *RADII ARE GIVEN TO THE EDGE OF PAVEMENT.*
5. *PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.*
6. *ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.*
7. *WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.*
8. *UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.*

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 25-JUL-2024 @ 12:22
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

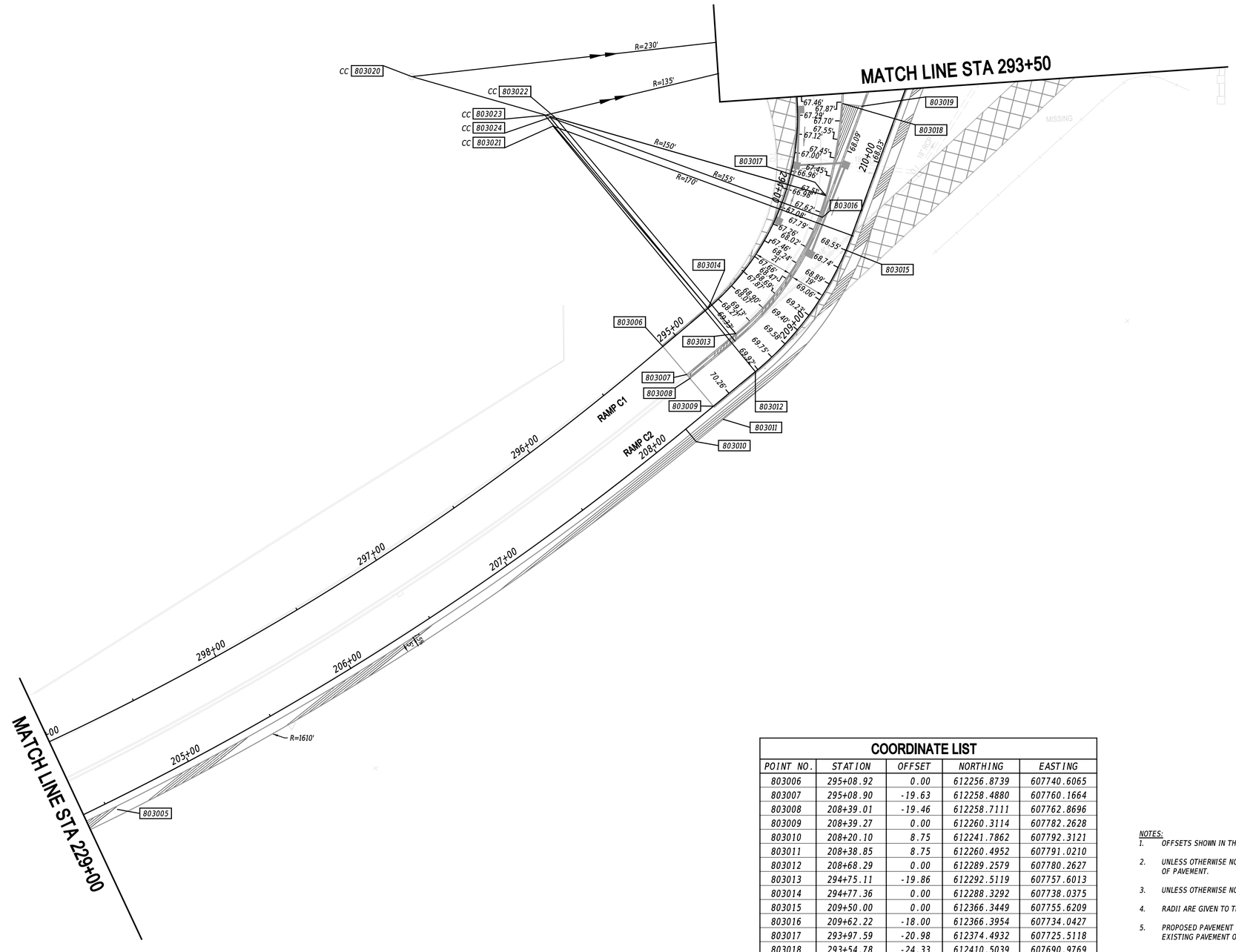
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-29	
SECTION	PAI
SHEET NO.	95



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
803006	295+08.92	0.00	612256.8739	607740.6065
803007	295+08.90	-19.63	612258.4880	607760.1664
803008	208+39.01	-19.46	612258.7111	607762.8696
803009	208+39.27	0.00	612260.3114	607782.2628
803010	208+20.10	8.75	612241.7862	607792.3121
803011	208+38.85	8.75	612260.4952	607791.0210
803012	208+68.29	0.00	612289.2579	607780.2627
803013	294+75.11	-19.86	612292.5119	607757.6013
803014	294+77.36	0.00	612288.3292	607738.0375
803015	209+50.00	0.00	612366.3449	607755.6209
803016	209+62.22	-18.00	612366.3954	607734.0427
803017	293+97.59	-20.98	612374.4932	607725.5118
803018	293+54.78	-24.33	612410.5039	607690.9769
803019	210+25.12	-18.75	612417.9168	607697.9406
803020	295+18.55	196.66	612231.4978	607545.3666
803021	208+68.28	-170.00	612277.5307	607610.6676
803022	293+92.63	129.02	612281.2353	607608.0258
803023	294+77.36	135.00	612277.3401	607603.4855
803024	209+62.22	-173.00	612278.9669	607606.0535

NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATION.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. WHERE THERE IS NO DEPRESSED CURB AT A MEDIAN CUT-THROUGH OF PEDESTRIAN CONNECTION, INSTALL THE DETECTABLE WARNING SURFACE A MINIMUM OF 8" FROM THE PAVEMENT EDGE.
8. UNLESS OTHERWISE NOTED, ALL RADII WITHIN A TRIANGULAR CHANNELIZED ISLAND SHALL BE 2'.

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 25-JUL-2024 @ 12:22
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-30	
SECTION	PAI
SHEET NO.	96

COORDINATE LIST (GG-09)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
800988	422+10.02	51.35	602048.0298	599516.0572
800989	422+21.19	37.11	602065.1445	599510.5416
800990	422+45.81	29.73	602089.3127	599518.3741
800991	422+55.67	24.00	602100.5906	599519.3233
800992	422+62.69	39.67	602097.1666	599536.1113
800993	420+00.00	32.00	601883.2935	599387.0902
800995	424+10.90	24.00	602223.3990	599611.9043
800996	424+29.62	32.12	602232.7226	599629.8531
800997	424+36.32	50.70	602226.0948	599648.4255
800998	424+36.13	54.08	602223.8144	599650.9259
800999	424+10.90	49.00	602207.7716	599631.4179
810900	424+34.31	49.16	602225.5413	599645.9814
810901	424+53.89	26.00	602255.1616	599640.3450
810902	424+53.88	27.83	602253.9849	599641.7514
810903	424+54.03	32.15	602251.3450	599645.1741
810904	424+57.00	37.89	602249.9340	599651.4586
810905	424+59.37	39.42	602250.7564	599654.1336
810906	424+59.77	50.06	602244.2536	599662.5601
810907	424+59.66	53.51	602241.9647	599665.1435
810908	424+73.06	26.00	602269.7418	599652.5043
810909	424+73.07	27.83	602268.5632	599653.9090
810910	424+73.17	31.81	602266.0839	599657.0254
810911	424+66.92	39.92	602256.1440	599659.2768
810912	424+68.41	41.48	602256.2756	599661.4094
810913	424+66.43	49.44	602249.6746	599666.2703
810914	424+81.46	50.78	602260.0964	599676.7839
810915	424+91.85	51.20	602267.5986	599683.6982
810916	425+11.89	54.00	602280.6694	599698.6185
810917	425+16.40	39.67	602293.4064	599690.6909
810918	424+91.03	32.11	602279.3652	599668.6469
810919	425+11.89	24.00	602300.3009	599675.9336
810920	425+33.21	29.00	602312.9193	599693.5782
810921	425+53.16	24.00	602331.0168	599702.9363
810922	426+68.33	24.00	602416.9204	599779.6492
810923	426+83.12	36.50	602419.6261	599798.8242
810924	426+83.32	39.54	602417.7511	599801.2243
810925	426+83.15	44.62	602414.2423	599804.9047
810926	426+68.33	39.00	602406.9292	599790.8374
810927	427+05.57	62.26	602419.2119	599832.9909
810928	427+06.17	45.85	602430.5918	599821.1567
810929	427+07.04	36.50	602437.4705	599814.7595
810930	427+23.44	24.00	602458.0242	599816.3554
810931	427+14.73	64.55	602424.5268	599840.8026
810932	427+18.41	44.00	602440.9552	599827.9266
810933	427+23.44	41.00	602446.7008	599829.0354
810934	427+79.62	36.00	602491.9410	599862.7319
810935	427+86.62	39.50	602494.8308	599870.0050
810936	427+89.62	36.00	602499.3998	599869.3927
810937	427+79.62	26.00	602498.6018	599855.2731
810938	428+17.62	36.00	602520.2844	599888.0429
810940	423+99.89	-34.51	602251.2567	599559.2822
810941	424+66.82	-37.67	602305.8438	599599.6915
810942	422+92.66	-15.99	602153.9249	599508.4308
810943	425+53.16	-16.00	602357.6600	599673.1011
810944	425+86.24	-19.98	602384.9883	599692.1682
810945	716+51.97	-60.37	602173.2922	599320.9434
810946	718+28.50	-78.32	602307.6435	599444.6022
810947	718+68.75	-84.59	602338.4801	599471.2209
810948	718+90.46	-85.95	602353.5729	599486.8872
810949	719+06.50	-88.03	602365.5472	599497.7653
810950	719+84.41	-96.37	602422.3332	599551.7474
810951	426+82.52	64.00	602400.8632	599818.9379
810952	427+05.34	64.00	602417.8857	599834.1392
810953	427+06.58	38.82	602435.5747	599816.1821
800966	427+78.24	-152.92	602616.7458	599720.8956
810954	426+63.59	-147.71	602527.7586	599648.4211
810955	426+59.69	-141.74	602520.8752	599650.2707
810956	424+69.81	-37.6	602308.1200	599601.6874
810957	424+68.14	-27.76	602300.5070	599608.1439
810958	717+31.11	-48.37	602220.9404	599389.2043
810959	720+09.76	-81.69	602427.5569	599580.5755
810960	720+08.70	-90.53	602433.6036	599574.0389
810961	420+75.15	86.79	601917.5511	599473.5559

COORDINATE LIST (GG-10)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811003	430+67.01	47.04	602698.9438	600062.3838
811004	430+64.05	49.50	602695.0961	600062.2513
811005	430+58.53	71.78	602676.1411	600075.1925
811006	430+76.25	75.59	602686.8162	600089.8415
811007	430+82.65	66.25	602697.8119	600087.1340
811008	430+91.96	77.09	602697.5347	600101.4173
811009	430+96.73	90.63	602692.0697	600114.6979
811010	430+52.44	98.62	602653.7210	600091.1527
811011	431+00.71	36.51	602731.0962	600076.9777
811012	431+00.56	45.43	602725.0395	600083.5323
811013	431+08.67	55.61	602724.3074	600096.5242
811014	431+17.30	56.50	602730.1482	600102.9381
811015	431+18.68	56.50	602731.1831	600103.8622
811016	431+29.06	52.33	602741.7055	600107.6646
811017	431+32.06	49.45	602745.8541	600107.5176
811018	431+49.36	67.50	602746.7395	600132.5019
811019	431+49.36	42.50	602763.3915	600113.8549
811020	431+17.30	24.00	602751.7958	600078.6970
811021	431+17.30	41.25	602740.3059	600091.5634
811022	431+18.68	41.50	602741.1743	600092.6740
811023	432+00.65	26.00	602812.6374	600135.7107
811024	432+21.09	36.61	602820.8191	600157.2371
811025	432+25.08	45.70	602817.7383	600166.6789
811026	432+25.83	49.13	602816.0103	600169.7297
811027	432+03.88	50.48	602798.7354	600156.1202
811028	432+00.65	51.00	602795.9855	600154.3577
811029	432+04.87	44.50	602803.4599	600152.3179
811030	432+39.80	50.31	602825.6443	600179.9215
811031	432+36.98	36.48	602832.7582	600167.7256
811032	432+40.97	31.00	602839.3805	600166.2960
811033	434+77.70	26.00	603019.2813	600320.2460
811034	434+77.70	31.00	603015.9509	600323.9755
811035	434+82.66	31.63	603019.2346	600327.7460
811036	434+82.04	36.50	603015.5307	600330.9718
811037	434+79.68	55.23	603001.2940	600343.3707
811038	434+94.04	51.66	603014.3753	600350.2668
811039	434+96.01	36.50	603025.9434	600340.2750
811040	434+96.24	34.71	603027.3113	600339.0934
811041	435+06.16	26.00	603040.5088	600339.2025
811042	435+06.16	36.00	603033.8480	600346.6613
811043	435+15.77	26.00	603047.6816	600345.6079
811044	435+60.48	36.50	603074.0332	600383.2204
811045	433+34.95	54.99	603042.6743	600380.0024
811046	435+40.77	75.71	603033.2171	600399.3379
811047	435+15.77	51.00	603031.0296	600364.2549
811052	435+63.77	31.00	603080.1535	600381.3091
811053	430+14.55	31.00	602670.4984	600015.4823
811054	430+18.06	42.00	602665.7916	600026.0268
811055	434+81.84	50.14	603006.2920	600341.0070
811056	430+31.56	42.00	602675.8599	600035.0179
811057	430+28.56	44.76	602671.7870	600035.0748
811058	430+19.62	28.00	602676.2749	600016.6187
811059	430+30.62	28.00	602684.4796	600023.9456
811060	430+30.62	31.00	602682.4814	600026.1833
811061	430+19.62	31.00	602674.2767	600018.8564
811064	432+27.98	-148.67	602949.3664	600023.6360
811065	432+27.98	-143.67	602946.0360	600027.3654
811066	431+87.89	-152.25	602921.8481	599994.2569
811067	431+87.89	-143.75	602916.1863	600000.5976
811068	431+45.20	-143.00	602883.8483	599972.7235
811069	431+45.21	-152.25	602890.0161	599965.8252
811070	430+07.16	-140.39	602779.1483	599882.7264
811071	429+19.85	-155.01	602723.7645	599813.6602
811072	435+60.79	76.39	603047.6927	600413.1720
811073	428+72.77	12.08	602577.3479	599906.9312
811074	432+37.07	33.01	602835.1282	600165.1971
811075	432+41.01	26.73	602842.2486	600163.1381
811076	435+10.74	26.68	603043.4783	600342.7599
811077	435+23.00	36.50	603046.0777	600358.2550
811078	433+92.85	-140.50	603066.8924	600139.5411
811079	433+92.87	-137.40	603064.8509	600141.8653

COORDINATE LIST (GG-11)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811104	441+20.95	26.00	603499.0736	600748.7063
811105	441+30.23	32.25	603501.8240	600759.5456
811106	441+30.95	36.00	603499.8716	600762.8259
811107	441+27.95	44.25	603492.1388	600766.9811
811108	441+20.95	36.00	603492.4128	600756.1651
811109	441+69.86	26.00	603535.5476	600781.2780
811110	441+60.58	32.25	603524.4670	600779.7666
811111	441+59.86	36.00	603521.4280	600782.0760
811112	441+62.86	44.25	603518.1705	600790.2278
811113	441+70.39	52.25	603518.4633	600801.2149
811114	441+75.39	52.27	603522.1805	600804.5610
811115	441+76.15	52.27	603522.7445	600805.0606
811116	441+81.14	52.25	603526.4816	600808.3753
811117	441+69.86	36.00	603528.8868	600788.7368
811118	441+95.79	26.00	603554.8923	600798.5530
811119	442+05.17	32.52	603557.5402	600809.6652
811120	442+05.79	36.00	603555.6903	600812.6726
811121	442+02.79	44.25	603547.9575	600816.8279
811122	441+95.79	36.00	603548.2315	600806.0118
811123	442+47.79	26.00	603593.6780	600833.1892
811124	442+38.52	32.25	603582.5974	600831.6778
811125	442+37.79	36.00	603579.5584	600833.9872
811126	442+40.79	37.50	603580.7970	600837.1042
811127	442+47.79	36.00	603587.0172	600840.6480
811128	442+65.75	26.00	603607.0725	600845.1506
811129	442+71.77	40.50	603601.9070	600859.9778
811130	442+65.75	51.00	603590.4205	600863.7976
811131	442+71.77	60.50	603588.5854	600874.8954
811132	442+82.29	32.25	603615.2438	600860.8301
811133	442+90.36	46.58	603611.7163	600876.8930
811134	442+92.20	56.83	603606.2608	600885.7646
811135	442+91.46	56.97	603605.6220	600885.3718
811136	443+05.32	46.75	603622.7668	600886.9849
811137	443+03.12	31.72	603631.1363	600874.3134
811138	443+08.07	31.00	603635.3084	600877.0691
811139	443+27.96	26.00	603653.4780	600886.5912
811140	443+27.96	40.00	603644.1528	600897.0335
811141	443+40.89	32.40	603658.8617	600899.9748
811142	443+43.52	36.87	603657.8449	600905.0597
811143	443+62.23	36.73	603671.8916	600917.4163
811144	443+60.21	28.00	603676.2000	600909.5637
811145	444+89.10	35.24	603767.5090	601000.8079
811146	444+91.15	28.00	603773.8628	600996.7777
811147	444+91.15	26.00	603775.1950	600995.2860
811148	444+86.19	41.13	603761.4226	601003.2687
811149	445+07.59	39.00	603778.7986	601015.9329
811150	445+13.00	32.90	603786.8927	601014.9868
811151	445+23.02	24.00	603800.2949	601015.0191
811152	445+34.65	24.00	603808.9728	601022.7685
811153	445+36.19	36.75	603801.6301	601033.3054
811154	445+36.19	41.11	603798.7256	601036.5523
811155	445+35.75	47.76	603793.9685	601041.2242
811156	445+35.57	49.15	603792.9063	601042.1351
811157	445+49.20	49.14	603803.0771	601051.2100
811158	445+49.19	36.75	603811.3266	601041.9643
811159	445+50.73	24.00	603820.9690	601033.4813
811160	437+73.83	-163.87	603366.6301	600375.8692
811161	442+01.79	-166.52	603687.6023	600658.9504
811162	442+93.70	-155.03	603748.4978	600728.7425
811163	442+94.43	-155.79	603749.5510	600728.6568
811164	444+03.08	-152.42	603828.3494	600803.5476
811165	444+06.59	-152.42	603830.9648	600805.8834
811166	444+43.84	-152.42	603858.7475	600830.6964
811167	444+43.84	-154.42	603860.0796	600829.2049
811168	444+57.29	-154.42	603870.1147	600838.1659
811169	444+82.58	-165.30	603896.2279	600846.8897
811170	445+09.49	36.46	603781.9109	601015.3046
811171	445+07.13	41.47	603776.8093	601017.4715
811172	443+24.16	26.00	603650.6403	600884.0586
811173	443+22.16	27.91	603647.8743	600884.1511
811174	443+22.33	33.12	603644.5346	600888.1508
811175	443+17.55	33.02	603641.0372	600884.8904
811176	443+17.39	27.85	603644.3617	600880.9276
811177	443+15.38	25.99	603644.0973	600878.2063
811178	442+07.29	42.00	603552.8126	600818.1470
811179	437+47.75	36.49	603213.7171	600507.9468

COORDINATE LIST (GG-12)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811205	448+83.41	26.00	604067.7730	601256.5616
811206	448+83.00	33.25	604062.6407	601261.6920
811207	448+88.85	49.88	604055.9227	601277.9972
811208	448+97.99	27.87	604077.4010	601267.6733
811209	448+96.91	33.25	604073.0124	601270.9660
811210	448+93.15	42.38	604064.1272	601275.2712
811211	449+04.60	67.15	604056.1667	601301.3671
811212	449+08.40	54.27	604067.5856	601294.2909
811213	449+06.49	53.70	604066.5369	601292.5965
811214	449+11.80	42.96	604077.6532	601288.1278
811215	449+27.08	31.12	604096.9331	601289.4700
811216	449+39.18	56.00	604089.3891	601316.0859
811217	449+40.05	63.63	604084.9569	601322.3573
811218	449+40.05	63.63	604084.9569	601322.3573
811219	449+64.14	24.00	604129.3236	601308.8456
811220	450+73.67	26.00	604209.6832	601383.2890
811221	450+83.73	39.75	604208.0287	601400.2462
811222	450+98.31	30.25	604225.2302	601402.8707
811223	451+03.92	30.25	604229.4168	601406.6094
811224	451+18.44	39.75	604233.9229	601423.3701
811225	451+31.03	26.00	604252.4668	601421.4953
811226	451+43.21	32.25	604257.3906	601434.2777
811227	451+46.03	41.00	604253.6638	601442.6747
811228	451+41.24	79.48	604224.4688	601468.1871
811229	451+41.03	74.48	604227.6339	601464.3165
811230	451+31.03	41.00	604242.4756	601432.6835
811231	451+80.84	32.25	604285.4556	601459.3400
811232	451+78.03	41.00	604277.5319	601463.9893
811233	451+97.99	79.35	604266.8803	601505.8924
811234	451+92.99	75.00	604266.0481	601499.3178
811235	451+83.03	65.00	604265.2754	601485.2208
811236	451+93.03	41.00	604288.7201	601473.9805
811237	451+93.03	26.00	604298.7113	601462.7923
811243	452+36.12	41.00	604320.8604	601502.6821
811244	453+02.52	32.25	604376.6928	601540.2024
811245	453+14.70	26.00	604389.9683	601543.5580
811246	452+99.70	40.89	604368.8717	601544.8284
811247	452+99.66	46.93	604364.8464	601549.3359
811248	453+14.70	41.00	604380.0599	601554.8196
811249	453+34.87	53.00	604387.2779	601577.1538
811250	453+34.87	26.00	604405.1130	601556.8829
811251	453+52.15	32.25	604413.9543	601572.9861
811252	453+61.87	53.40	604407.2850	601595.2843
811253	453+74.80	32.25	604430.9631	601587.9517
811254	453+76.33	35.50	604429.9631	601591.4007
811255	453+72.86	28.88	604431.7325	601584.1383
811256	453+74.45	27.88	604433.5846	601584.4308
811257	454+84.07	27.88	604515.8897	601656.8464
811258	454+82.26	32.25	604511.6385	601658.9333
811259	454+78.91	35.50	604506.9796	601659.1631
811260	454+89.54	50.27	604505.2034	601677.2725
811261	454+97.30	42.73	604516.0093	601676.7397
811262	451+10.22	-160.71	604361.3105	601268.3773
811263	447+85.91	-163.78	604121.4589	601050.0681
811264	447+51.67	-155.68	604090.5239	601033.3035
811265	447+51.68	-159.68	604093.1976	601030.3280
811266	447+53.17	-156.93	604092.4791	601033.3729
811267	447+63.17	-156.81	604099.8554	601040.1163
811268	446+63.96	34.25	603898.5997	601116.5448
811269	446+86.29	23.75	603922.2458	601123.5916
811270	447+15.30	23.75	603943.8796	601142.9067
811271	452+50.63	46.57	604328.2758	601516.6780
811272	452+48.06	32.30	604335.7760	601504.2708
811273	452+99.17	46.16	604364.9961	601548.4326
811274	451+45.25	74.07	604231.0611	601466.8259
811275	451+97.99	76.78	604268.5900	601503.9781
811276	451+93.17	70.02	604269.4966	601495.7144
811277	451+83.38	69.21	604262.7311	601488.5977
811278	451+78.80	65.22	604261.9764	601482.5749
811279	452+36.11	26.72	604330.3681	601492.0280
811280	447+63.73	-181.90	604116.9823	601021.7756
811281	447+78.55	-181.90	604128.0362	601031.6469
811282	447+82.56	-181.90	604131.0275	601034.3182

COORDINATE LIST (GG-11)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811180	443+04.44	-151.67	603754.2705	600738.4037
811181	443+04.41	-143.68	603748.9249	600744.3402
811182	443+39.22	-151.75	603780.2634	600761.5098
811183	443+38.63	-143.7	603774.4644	600767.1233
811184	443+54.23	-151.67	603791.4149	600771.5694
811185	443+54.40	-143.68	603786.2149	600777.6351
811186	443+88.08	-151.67	603816.6584	600794.1065
811187	443+87.87	-143.71	603811.2019	600799.9130
811188	437+43.62	26.67	603217.1767	600497.8721
811189	437+65.79	54.76	603215.0088	600533.5864
811190	437+94.40	26.66	603255.0650	600531.6893
811191	438+01.45	26.72	603260.2831	600536.4316
811192	438+25.68	50.88	603262.2577	600570.5898
811193	438+73.20	51.75	603297.1234	600602.8897
811194	443+08.09	26.72	603638.1786	600873.8907
811195	445+10.38	-140.50	603900.4375	600883.9077
811196	445+10.37	-137.49	603898.4276	600886.1392

COORDINATE LIST (GG-13)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811331	457+44.75	-147.68	604827.5610	601697.2363
811332	457+44.74	-141.67	604823.5868	601701.7374
811333	457+83.15	-147.67	604856.3927	601722.6094
811334	457+83.19	-141.67	604852.4568	601727.1445
811335	456+72.10	45.48	604645.4241	601794.2709
811336	456+76.47	49.81	604645.8456	601800.4099

COORDINATE LIST (GG-14)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
811426	469+78.32	23.90	605640.3513	602640.9029
811427	469+36.38	24.24	605608.6437	602613.4513
811428	468+92.80	23.50	605576.4126	602584.1102
811429	468+04.00	37.04	605500.7970	602535.6183
811430	467+50.38	46.78	605454.1086	602507.5181
811431	467+34.28	47.61	605441.4769	602497.4987
811432	467+60.65	22.62	605477.7775	602496.1613
811433	467+50.56	22.48	605470.3024	602489.3882
811434	466+89.01	21.60	605424.6677	602448.0708
811435	465+09.96	50.68	605271.0305	602351.6280
811436	465+30.16	59.08	605280.6495	602371.2835
811437	464+63.97	55.56	605233.2781	602324.9118
811438	464+54.12	43.54	605233.8243	602309.3807
811439	471+59.22	-152.51	605892.6960	602627.9565
811440	471+57.24	-151.84	605890.7735	602627.1511
811441	471+52.39	-145.71	605883.0838	602628.5464
811442	471+53.99	-142.49	605882.1506	602632.0214
811443	471+66.48	-142.58	605891.5883	602640.2063
811444	471+68.46	-144.56	605894.3850	602640.0336
811445	471+68.53	-150.26	605898.2040	602635.7921
811446	471+66.59	-152.29	605898.0843	602632.9914
811447	471+44.02	-137.76	605871.5422	602628.9861
811448	471+43.77	-132.81	605868.0839	602632.5436
811449	471+69.81	-131.51	605886.7782	602650.7165
811450	464+99.18	35.65	605272.8712	602333.2202
811451	465+10.89	35.94	605281.4635	602341.1788
811452	464+95.41	29.80	605273.9024	602326.3426
811453	465+14.20	29.66	605288.1022	602338.6430
811454	472+02.43	-48.19	605856.2305	602734.8135
811455	472+04.31	-51.10	605859.5660	602733.8748
811456	472+06.70	-68.40	605872.7870	602722.4682
811457	472+08.45	-71.45	605876.1157	602721.3288
811458	471+91.56	23.50	605800.7165	602781.4637
811459	472+17.45	35.31	605812.3485	602807.4296
811460	471+84.04	88.13	605752.3778	602825.0205
811461	467+58.73	46.28	605460.7093	602512.6548
811462	467+35.56	41.46	605446.5024	602493.7267
811463	467+59.16	22.62	605476.6625	602495.1732

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUN-2024 @ 12:32
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-31	
SECTION	PAI
SHEET NO.	97

COORDINATE LIST (GG-16)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
80000	480+92.20	-39.60	606526.0631	603315.1695
80001	481+39.42	-70.29	606581.8544	603318.3458
80002	481+59.57	-39.15	606579.5635	603355.2444
80003	481+29.64	-68.77	606573.1888	603313.8531
80004	481+35.58	-72.60	606580.1779	603314.2454
80005	481+38.04	-35.38	606560.0846	603345.6677
80006	481+45.10	-35.32	606565.7018	603349.8699
80010	482+33.67	-73.68	606659.5694	603370.2650
80011	482+69.94	-73.70	606689.0709	603391.3716
80012	482+43.47	-53.12	606655.5694	603392.6885
80013	482+41.84	-79.69	606669.7083	603370.1414
80014	482+47.84	-79.69	606674.5881	603373.6325
80015	482+54.17	-57.22	606666.6550	603395.5871
80016	482+59.32	-60.32	606672.6362	603396.0684
80020	482+97.79	28.32	606652.3000	603490.5307
80021	483+16.57	28.74	606667.3194	603501.8035
80022	483+10.03	49.75	606649.7755	603515.0775
80023	483+03.45	26.45	606657.9950	603492.3045
80024	483+09.45	26.58	606662.7938	603495.9061
80025	483+16.73	33.30	606664.7983	603505.6021
80026	483+14.68	38.88	606659.8862	603508.9500
80027	483+01.69	39.18	606649.1481	603501.6281
80028	482+98.71	33.97	606649.7619	603495.6596
80030	481+59.64	-201.12	606674.9631	603224.3495
80031	481+75.46	-177.26	606673.2720	603252.6045
80032	482+32.66	-144.66	606700.0804	603311.9705
80033	482+74.57	-142.94	606733.1519	603337.7800
80034	481+81.44	-164.45	606670.4448	603266.3670
80036	482+20.93	-143.15	606689.6630	603306.3775
80037	481+72.26	-158.79	606659.9295	603265.7494
80038	481+89.12	-131.74	606657.3724	603297.2677
80039	482+20.28	-132.10	606682.6989	603314.9765
80040	482+09.79	-169.68	606696.0561	603278.3150
80041	482+17.86	-163.25	606698.8738	603288.2397
80042	482+31.61	-160.03	606708.1822	603298.8723
80043	482+38.54	-159.02	606713.2250	603303.7310
80044	482+43.30	-163.51	606719.7085	603302.8522
80045	482+42.69	-158.55	606716.3172	603306.5270
80046	482+30.92	-154.14	606704.1887	603303.2535
80047	482+37.97	-154.15	606709.9254	603307.3511
80048	482+36.11	-215.57	606744.1755	603256.3406
80049	483+57.88	-152.21	606806.2757	603378.7621
80050	484+00.13	-151.59	606840.2603	603403.8651
80051	483+57.88	-152.21	606806.2757	603378.7621
80052	484+00.13	-151.59	606840.2603	603403.8651

COORDINATE LIST (GG-23)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
812305	539+93.22	51.51	611272.3750	606821.5146
812306	539+97.66	42.76	611281.0620	606816.9459
812307	546+43.34	35.76	611811.6352	607184.9882

COORDINATE LIST (GG-24)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802477	554+75.60	-187.84	612619.7173	607484.4094
802478	555+10.20	-145.78	612623.5896	607538.7301
802479	555+55.42	-143.44	612659.1066	607566.8128
802480	555+55.51	-146.81	612661.1275	607564.1190
802481	555+57.06	-151.37	612665.0373	607561.2942
802482	555+84.61	-145.45	612684.0700	607582.0652
802483	555+87.85	-145.33	612686.6468	607584.0458
802484	555+87.99	-149.56	612689.2067	607580.6796
802485	556+42.47	-143.63	612730.1975	607617.0472
802486	556+42.60	-147.89	612732.7722	607613.6438
802487	556+45.72	-143.55	612732.8010	607618.9925
802488	556+87.88	-148.03	612769.7736	607639.7392
802489	556+83.57	-151.61	612768.3301	607634.3312
802490	556+83.38	-148.11	612766.1484	607637.0737
802491	556+83.33	-146.34	612765.0869	607638.4854
802492	556+78.05	-143.82	612759.3257	607637.4858
802493	556+87.84	-147.02	612769.1571	607640.5453
802494	556+83.15	-139.60	612761.0341	607643.8816
802495	547+99.92	37.96	611938.0408	607277.4191
802496	548+03.87	44.38	611937.5418	607284.9344
802497	548+07.13	37.90	611943.9552	607281.5406
802498	548+15.60	42.82	611948.0107	607290.4609
802499	548+23.93	40.76	611955.9926	607293.5956
802500	295+18.55	196.66	612231.4978	607545.3666
812400	548+27.63	41.47	611958.6011	607296.3197
812401	548+15.51	32.82	611953.7273	607282.2560
812402	548+19.31	33.53	611956.4076	607285.0303
812403	548+25.41	28.15	611964.5029	607284.1687
812404	548+27.63	31.47	611964.3900	607288.1657
812405	548+93.19	31.47	612017.8504	607326.1195
812406	548+93.19	41.47	612012.0631	607334.2736
812407	548+98.54	39.93	612017.3150	607336.1051
812408	549+01.91	39.57	612020.2708	607337.7662
812409	549+02.72	42.62	612019.1686	607340.7252
812410	549+01.98	30.33	612025.6796	607330.2708
812411	549+02.76	28.22	612027.5331	607329.0058
812412	549+14.36	30.26	612035.8142	607337.3859
812413	549+19.04	33.61	612037.6892	607342.8176
812414	549+51.97	33.60	612064.5480	607361.8812
812415	549+56.97	33.36	612068.7626	607364.5714
812416	549+92.84	41.14	612093.5128	607391.6802
812417	550+04.89	29.56	612110.0385	607389.2135
812418	550+44.96	42.64	612135.1478	607423.0718
812419	550+46.76	44.35	612135.6210	607425.5132
812420	550+49.14	44.60	612137.4193	607427.0890
812421	550+63.55	39.56	612152.0862	607431.3268
812422	550+62.98	34.32	612154.6581	607426.7191
812423	552+01.88	39.45	612264.9472	607511.2995
812424	552+01.88	32.07	612269.2211	607505.2903
812425	552+23.66	34.58	612285.5324	607519.9384
812426	552+29.62	33.83	612290.8185	607522.7769
812427	552+20.45	43.32	612277.8460	607525.2094
812428	552+60.97	33.62	612316.5086	607540.7511
812429	552+73.53	49.18	612317.7449	607560.7129
812430	552+73.78	29.18	612329.5255	607544.5506
812431	553+18.73	17.68	612372.8369	607561.1913
812432	553+22.03	29.79	612368.5170	607572.9714
812433	552+65.34	107.45	612277.3401	607603.4855
812434	553+20.77	129.78	612309.6141	607653.7826
812435	553+48.06	87.88	612356.1167	607635.4111
812436	553+63.31	68.07	612380.0181	607628.0813
812437	553+75.34	45.98	612402.6183	607617.0399
812438	553+84.72	53.88	612405.6916	607628.9054
812439	553+96.72	76.37	612402.4559	607654.1908
812440	554+22.95	61.53	612432.4370	607657.2747
812441	554+11.30	32.06	612439.9971	607626.4948
812442	554+07.00	26.94	612439.4488	607619.8358
812443	554+09.03	21.89	612444.0286	607616.8910
812444	554+09.18	24.89	612442.4203	607619.4235
812445	554+72.43	18.62	612497.6251	607650.9293
812446	554+74.86	23.57	612496.7402	607656.3730
812447	554+72.59	21.62	612496.0165	607653.4616
812448	554+66.80	33.83	612484.2266	607660.0684
812449	554+47.94	69.31	612448.3175	607678.0824
812450	554+64.83	75.55	612458.4705	607692.9456
812451	554+79.81	48.68	612486.2367	607679.7101
812452	555+00.25	33.19	612511.8715	607678.9122

COORDINATE LIST (GG-24 CONT.)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
812453	555+18.93	37.77	612524.4574	607693.4569
812454	555+19.21	79.46	612500.5561	607727.6138
812455	555+18.93	77.77	612501.2995	607726.0715
812456	555+76.10	18.25	612582.3773	607710.6340
812457	552+54.59	42.75	612306.0238	607544.5074
812458	552+27.68	39.04	612286.2264	607525.9018
812459	552+23.67	28.58	612289.0094	607515.0486
812460	549+56.97	28.36	612071.6601	607360.4966
812461	549+56.80	39.15	612065.2781	607369.1949
812462	549+23.18	39.63	612037.5821	607350.1259
812463	548+03.13	-157.90	612054.0310	607119.5629
812464	548+51.41	-157.88	612093.3896	607147.5289
812465	550+16.40	-148.65	612222.5790	607250.5529
812466	550+16.43	-139.99	612217.5885	607257.6386
812467	550+55.98	-147.48	612254.1768	607274.4230
812468	550+55.93	-139.98	612249.7956	607280.5120
812469	552+05.05	-147.08	612375.5017	607361.0348
812470	552+11.23	-151.18	612382.9185	607361.2673
812471	552+10.79	-165.03	612390.5743	607349.7160
812472	552+19.70	-182.49	612407.9511	607340.6451
812473	552+20.30	-183.54	612409.0491	607340.1318
812474	551+36.81	-363.82	612445.3185	607144.7974
812475	551+37.96	-350.03	612438.2730	607156.7030
812476	554+05.90	-166.17	612550.3400	607461.7326
812477	554+44.11	-163.17	612579.7617	607486.2934
812478	555+55.62	-154.82	612665.8577	607557.6528
812479	549+83.29	-149.01	612195.7959	607231.0983
812480	549+85.69	-148.33	612197.3560	607233.0456
812481	551+64.66	-140.73	612338.8913	607342.8361
812482	551+62.10	-148.54	612341.3290	607334.9827
812483	555+87.80	-142.74	612685.1062	607586.1304
812484	556+42.41	-141.08	612728.6718	607619.0931
812485	548+15.54	38.56	611950.4332	607286.9484
812486	548+17.14	38.91	611951.5255	607288.1602
812487	548+25.82	35.33	611960.6815	607290.2651
812488	548+27.63	35.71	611961.9365	607291.6283
812489	548+93.18	35.71	612015.3857	607329.5650
812490	548+95.60	35.01	612017.7684	607330.3944

COORDINATE LIST (GG-25)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802583	558+29.24	28.26	612783.0037	607865.3254
802584	558+71.66	35.27	612813.5348	607895.5888
802585	558+99.51	35.28	612836.2353	607911.7213
802586	559+20.30	35.30	612853.1786	607923.7674
802587	559+80.44	59.95	612887.9553	607978.6817
802588	560+31.79	42.84	612939.7287	607994.4515
802589	560+82.20	39.27	612982.9048	608020.7255
802590	561+24.83	54.28	613008.9761	608057.6460
802591	561+22.58	39.28	613015.8233	608044.1105
802592	561+28.59	44.29	613017.8283	608051.6680
802593	561+80.42	47.65	613058.1420	608084.4117
802594	561+80.38	48.36	613057.7002	608084.9676
802595	561+80.69	66.89	613047.2246	608100.2542
802596	562+03.36	49.25	613075.9250	608098.9982
802597	561+92.62	36.86	613074.3376	608082.6746
802598	561+92.29	46.86	613068.2762	608090.6351
802599	561+99.22	52.89	613070.4419	608099.5627
812500	562+11.85	31.31	613093.2315	608089.2848
812501	562+18.00	36.39	613095.3081	608096.9798
812502	562+20.13	38.81	613095.6413	608100.1877
812503	565+04.13	24.58	613335.4585	608252.9778
812504	565+24.14	28.58	613349.4595	608267.8218
812505	565+28.13	28.75	613352.6221	608270.2708
812506	565+24.14	24.58	613351.7749	608264.5600
812507	565+27.35	30.97	613350.6964	608271.6257
812508	564+39.39	-34.40	613316.8108	608167.4131
812509	564+67.72	-5.88	613323.4049	608207.0649
812510	565+47.37	31.54	613366.6969	608283.6795
812511	565+47.73	30.77	613367.4287	608283.2614
812512	565+56.89	24.94	613378.2775	608283.8069
812513	565+60.18	27.96	613379.2133	608288.1789
812514	565+62.16	31.64	613378.6923	608292.3230
812515	565+56.82	34.94	613372.4314	608291.9201
812516	565+59.96	59.47	613360.7898	608313.7470
812517	565+31.26	59.27	613337.5017	608296.9664

COORDINATE LIST (GG-25)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
812518	565+29.16	57.12	613337.0369	608294.0026
812519	565+64.61	38.11	613376.9512	608299.0157
812520	563+27.20	-121.56	613275.7808	608031.3974
812521	562+63.12	33.73	613133.6348	608120.9312
812522	562+23.29	42.41	613096.1361	608104.9506
812523	562+06.23	28.89	613090.0465	608084.0495
812524	561+82.62	39.32	613064.7606	608078.8896
812525	561+47.63	64.77	613021.4979	608079.3900
812526	559+29.78	22.52	612868.3087	607918.8413
812527	561+14.55	18.37	613021.3818	608022.4042
812528	560+35.94	21.00	612955.7527	607979.0516
812529	560+34.07	33.10	612947.2282	607987.8366
812530	560+31.79	32.84	612945.5200	607986.2992
812531	559+85.58	24.72	612912.5328	607952.9312
812532	559+25.75	24.82	612863.6938	607918.3794
812533	559+17.58	43.40	612846.2740	607928.8052
812534	558+96.65	42.84	612829.5297	607916.2367
812535	559+07.11	22.55	612849.8092	607905.7399
812536	559+03.12	27.13	612843.9033	607907.1669
812537	559+01.25	24.26	612844.0301	607903.7451
812538	558+74.68	42.14	612812.0160	607902.9413
812539	558+64.13	24.14	612813.8326	607882.1563
812540	558+48.25	42.69	612790.1484	607888.0967
812541	558+47.43	41.12	612790.3934	607886.3400
812542	564+27.07	-150.88	613374.1924	608065.2956
812543	563+99.01	-147.87	613349.5637	608051.5098
812544	565+46.96	-147.32	613469.8872	608137.5910
812545	562+88.01	-147.65	613258.9229	607987.4328
812546	562+10.14	-150.95	613197.3335	607939.6720
812547	561+87.69	-151.24	613179.1945	607926.4338
812548	561+84.68	-154.41	613178.5712	607922.1114
812549	561+79.80	-156.34	613175.7128	607917.7115
812550	561+71.27	-158.54	613170.0347	607910.9778
812551	561+16.58	-146.30	613118.3521	607889.3036
812552	559+14.50	-165.94	612964.9345	607756.3127
812553	559+08.38	-185.48	612971.2546	607736.8450
812554	558+80.44	-166.00	612937.1970	607736.5461
812555	557+83.05	-148.92	612847.8938	607694.1108
812556	557+78.70	-139.14	612838.6860	607699.5611
812557	565+28.21	63.75	613332.4242	608298.8543
812558	565+25.93	58.10	613333.8383	608292.9334
812559	565+31.23	62.27	613335.7476	608299.4003
812560	565+59.76	61.47	613359.4703	608315.2640
812561	565+61.96	59.42	613362.4504	608314.8569
812562	565+63.18	27.98	613381.6468	608289.9334
812563	560+07.50	-146.54	613029.5417	607825.9659
812564	565+49.82	-142.36	613469.3504	608143.2894
812565	565+49.84	-135.70	613465.5108	608148.7377
812566	558+68.33	28.60	612814.6800	607888.2313
812567	558+69.89	25.43	612817.7907	607886.5445
812568	558+69.89	25.43	612817.7907	607886.5445
812569	558+69.97	27.43	612816.6942	607888.2171
812570	559+01.32	26.26	612842.9336	607905.4178
812571	557+35.86	98.97	612665.9228	607868.9298
812572	560+38.37	92.00	612916.6342	608038.3547
812573	559+29.96	27.52	612865.5600	607923.0180
812574	558+57.35	-151.27	612909.8385	607735.1980
812575	561+23.24	15.70	613030.0130	608025.2602
812576	561+46.01	28.60	613041.1106	608048.9581
812577	561+24.12	40.68	613016.2695	608046.1436

COORDINATE LIST (GG-26)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
812615	568+53.63	29.67	613617.5133	608459.4322
812616	568+63.00	25.51	613627.5639	608461.4600
812617	568+62.95	38.00	613620.2838	608471.6212
812618	568+92.36	25.63	613651.4277	608478.5573
812619	569+08.17	29.89	613661.8561	608491.1833
812620	569+22.80	48.22	613663.1796	608514.5958
812621	568+92.22	57.63	613632.7907	608504.5701
812622	569+47.60	48.22	613683.4046	608528.9526
812623	569+61.33	29.89	613705.2049	608521.9554
812624	569+76.71	25.68	613720.1825	608527.4210
812625	569+76.66	55.68	613702.7793	608551.8572
812626	570+18.77	25.75	613754.4465	608551.8234
812627	571+51.04	26.88	613861.6488	608629.3121
812628	571+53.70	26.88	613863.8189	608630.8522
812629	571+53.71	71.88	613837.7750	608667.5498
812630	571+83.58	43.14	613878.7684	608661.4071
812631	574+47.01	54.61	614086.9373	608823.2454
812632	566+43.98	-117.94	613532.0032	608217.7115
812633	567+20.45	-119.81	613595.4419	608260.4514
812634	568+46.75	-123.19	613700.3838	608330.8041
812635	566+53.54	-137.76	613551.2679	608207.0880
812636	566+55.39	36.60	613451.8526	608350.3311
812637	566+97.51	34.99	613487.1274	608373.4029
812638	571+41.59	26.88	613853.9367	608623.8389
812639	571+61.46	27.55	613869.7558	608635.8918
812640	571+48.47	34.52	613855.1260	608634.0497
812641	571+53.46	34.66	613859.1206	608637.0575
812642	572+63.71	-149.14	614055.4075	608550.9976
812643	572+60.00	-149.86	614052.7987	608548.2593
812644	572+49.55	-159.45	614049.8360	608534.3946
812645	572+45.84	-160.17	614047.2272	608531.6562
812646	572+07.43	-162.77	614017.4039	608507.3067
812647	572+10.15	-178.94	614028.9824	608495.6920
812648	571+86.37	-162.34	613999.9852	608495.4639
812649	570+46.03	-147.42	613876.9142	608426.3961
812650	570+41.04	-147.43	613872.8459	608423.4956
812651	569+47.63	-161.71	613804.9435	608357.7869
812652	569+47.20	-164.73	613806.3375	608355.0698
812653	569+28.62	-165.13	613791.4216	608343.9960
812654	569+28.68	-168.13	613793.2089	608341.5776
812655	568+94.67	-146.15	613752.7499	608339.8134
812656	566+87.65	-165.53	613595.1580	608204.1786
812657	566+67.64	-165.53	613578.8365	608192.5989
812658	566+32.70	-136.91	613533.7822	608195.7188
812659	566+94.63	33.04	613485.9067	608370.1492
812660	566+92.40	36.31	613482.1904	608371.5206
812661	566+11.29	38.11	613415.0146	608326.0351
812662	569+18.19	-162.81	613781.5768	608339.8494
812663	569+25.30	-161.92	613786.8555	608344.6909
812664	569+82.41	-139.48	613820.4378	608396.0398
812665	569+84.94	-140.63	613823.1620	608396.5668
812666	568+14.54	26.98	613587.1939	608434.6081
812667	568+14.51	32.97	613583.6980	608439.4815
812668	571+16.05	-143.85	613931.9381	608469.8393

COORDINATE LIST (GG-27)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
812701	577+30.51	-150.40	614436.7900	608820.1696
812703	577+50.15	-144.83	614449.5776	608836.0776
812704	577+56.65	-147.65	614456.5069	608837.5468
812705	578+42.17	-144.89	614524.6513	608889.3044
812706	578+42.23	-137.34	614520.3299	608895.4848

COORDINATE LIST (GG-28)

POINT NO.	STATION	OFFSET	NORTHING	EASTING
812805	585+22.64	-147.00	615081.3211	609279.2906
812806	587+18.81	-137.10	615236.1998	609400.0876
812807	588+94.30	-146.11	615385.0276	609493.5297

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:22
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS

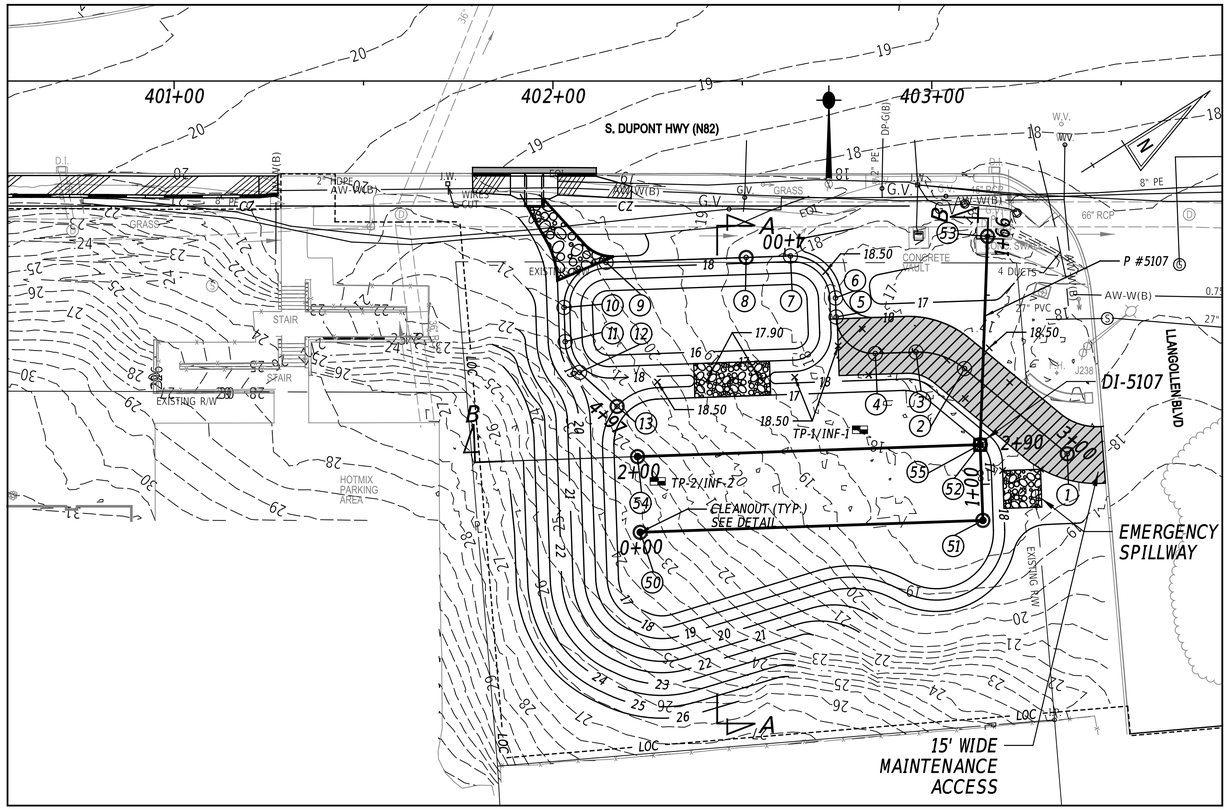
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	O. GREEN
NEW CASTLE	CHECKED BY:	P. HORSEY

GRADES AND GEOMETRICS

GG-32
SECTION
PAI / WRA
SHEET NO.
98



BIORETENTION AREA - BMP 1104

PLAN VIEW

1" = 20'

BMP 1104 EMBANKMENT BASELINE			
POINT NO.	*STATION*	*NORTHING*	*EASTING*
1	*3+00.00*	*600449.9075*	*598540.3747*
2	*3+35.23*	*600438.9960*	*598506.8721*
3	*3+49.05*	*600430.5156*	*598496.3511*
4	*3+59.80*	*600421.2322*	*598490.9268*
5	*3+75.51*	*600417.6431*	*598477.2477*
6	*3+80.53*	*600420.1773*	*598472.9107*
7	*3+98.60*	*600416.0498*	*598457.1798*
8	*4+10.30*	*600405.9450*	*598451.2755*
9	*4+47.30*	*600374.0017*	*598432.6106*
10	*4+65.36*	*600358.2708*	*598436.7381*
11	*4+74.38*	*600353.7187*	*598444.5287*
12	*4+83.60*	*600352.5712*	*598453.4219*
13	*4+96.96*	*600356.1642*	*598466.2954*

BMP 1104 SPILLWAY BASELINE			
POINT NO.	*STATION*	*NORTHING*	*EASTING*
50	*0+00.00*	*600343.5513*	*598497.6557*
51	*0+90.50*	*600421.6898*	*598543.3129*
52	*1+10.50*	*600431.7798*	*598526.0447*
53	*1+65.50*	*600462.7872*	*598480.6124*
54	*2+00.00*	*600353.6413*	*598480.3875*
55	*2+90.50*	*600431.7798*	*598526.0447*

SEQUENCE OF CONSTRUCTON (BIORETENTION)

NOTIFY A CCR A MINIMUM OF TWO WORKING DAYS IN ADVANCE OF ANY CONSTRUCTION SO THAT THE REQUIRED FACILITY CONSTRUCTION CHECKLIST CAN BE COMPLETED.

1. *INSTALL STABILIZED CONSTRUCTION ENTRANCE(S) AS NEEDED AND APPROVED BY THE ENGINEER.*
2. *CLEAR AND GRUB FOR INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS.*
3. *INSTALL PERIMETER SEDIMENT CONTROLS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS.*
4. *CLEAR AND GRUB REMAINING AREA AND CONSTRUCT BIORETENTION OUTLET AND OUTFALL (ITEM #910006) AS SHOWN ON THE PLANS. DEWATER AS NEEDED IN ACCORDANCE WITH DEWATERING PRACTICES AS SHOWN IN SECTION 900 OF THE STANDARD SPECIFICATIONS. ALL EXCAVATIONS SHALL BE PERFORMED FROM THE SIDES OF THE FACILITY TO PREVENT COMPACTION OF UNDERLYING SOILS.*
5. *SCARIFY THE BOTTOM OF THE BIORETENTION AREA (ITEM #910010) TO A DEPTH OF 6 TO 12 INCHES. IF CLAY IS ENCOUNTERED NEAR BOTTOM ELEVATION OVER EXCAVATE AREA TO REMOVE CLAY STRATUM WITHIN BASIN FOOTPRINT. INSTALL GEOTEXTILE ON SIDES OF THE FACILITY. PLACE UNDERDRAIN STONE AND INSTALL UNDERDRAINS. PLACE BIOSOIL MEDIA (ITEM #910011) IN 12 INCH LIFTS AND SPRAY WITH WATER TO ACCELERATE SETTLEMENT. PLACE SURFACE COVER MATERIAL.*
6. *ALL DISTURBED AREAS OUTSIDE OF THE FOOTPRINT AREA SHALL BE SEEDED WITH ITEM #908015, PERMANENT GRASS SEEDING - STORMWATER AND MULCHED WITH ITEM #908020, EROSION CONTROL BLANKET MULCH.*
7. *AFTER ALL SURROUNDING AREAS DRAINING TO THE FACILITY HAVE SUFFICIENT VEGETATION, AS APPROVED BY THE STORMWATER ENGINEER, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED.*

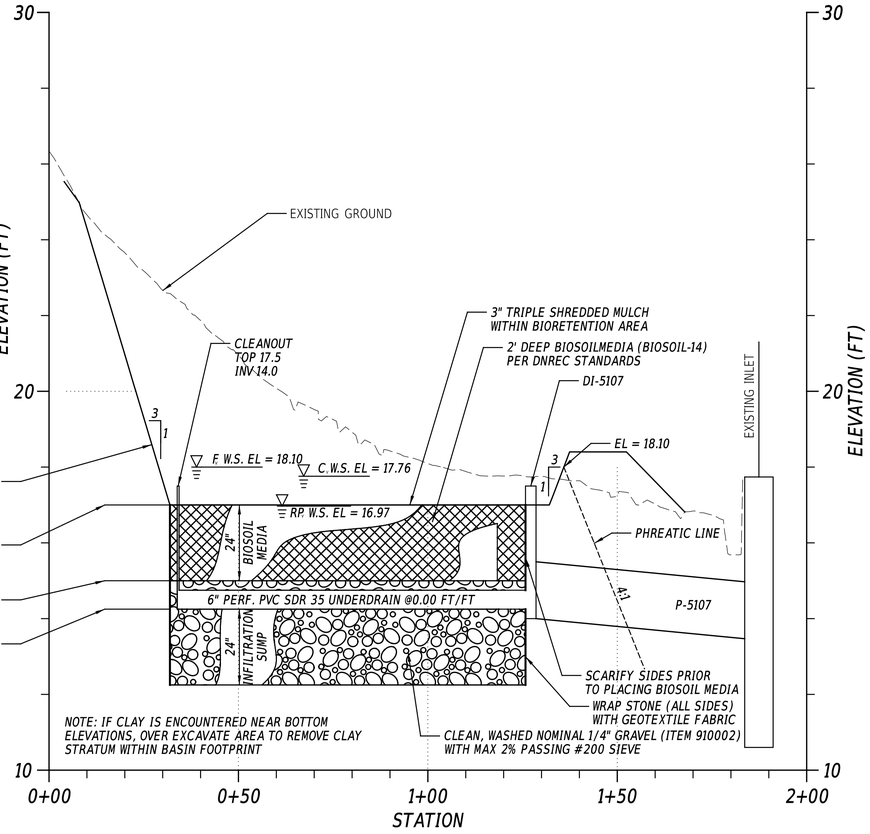
NOTES

AS-BUILT DRAWINGS SHALL BE COMPLETED BY THE CONTRACTOR AND CERTIFIED BY A DELAWARE PLS BEFORE THE DELDOT INITIAL INSPECTION DATE. THESE DRAWINGS SHALL BE SENT TO THE STORMWATER ENGINEER FOR VERIFICATION. AS-BUILT DRAWINGS WILL INCLUDE, BUT NOT LIMITED TO:

1. *GENERAL TOPOGRAPHY OF THE WHOLE FACILITY AT 1-FOOT CONTOURS INCLUDING FOREBAYS AND TOP/TOE OF ANY EMBANKMENT.*
2. *INVERTS OF ALL PIPES AND SWALES THAT INFLOW TO THE POND.*
3. *OUTLINE OF ALL RIPRAP AND OBTAIN SPOT ELEVATIONS ON TOP OF THE RIPRAP.*
4. *OUTLET STRUCTURE (OR WEIR WALL) INVERTS OF ANY AND ALL ORIFICES/WEIRS, TOP OF STRUCTURE, OUTLET PIPE, ETC.*
5. *PRIMARY OUTFLOW PIPE OR CHANNEL. FOR A PIPE OUTFALL, INVERTS AT THE ENTRANCE AND EXIT. FOR A PRIMARY OUTFLOW CHANNEL/SWALE, SHOW AT MINIMUM THREE (3) CROSS SECTIONS EQUAL DISTANCE APART AT 50' DOWNSTREAM ALONG WITH THE SLOPE.*

PENNONI ASSOCIATES INC. | PRS TABLE: pennoni-ddot.tbl
FILE NAME: ...SW001.dgn | PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 7/5/2024 @ 12:33:48 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: ogreen OFFICE LOCATION: Newark, Delaware

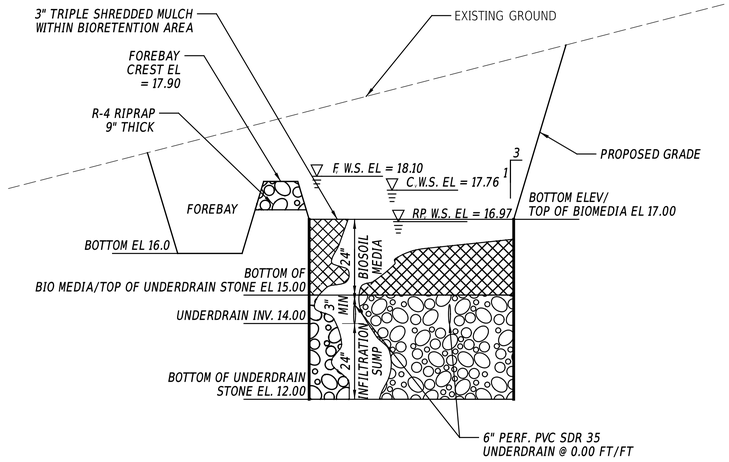
ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	STORMWATER MANAGEMENT PLAN	SECTION
				T201901102	DESIGNED BY:	O. GREEN		PAI
				COUNTY				SHEET NO.
				NEW CASTLE	CHECKED BY:	S. ANDERSON		99



BMP - SECTION

SECTION B-B

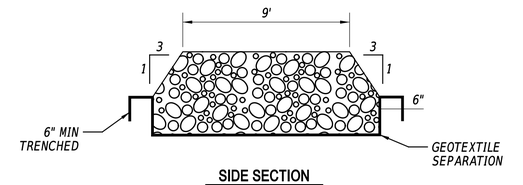
HORIZ. 1" = 20'
VERT. 1" = 2'



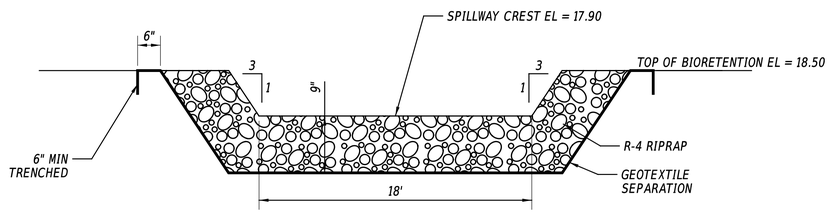
BMP - SECTION

SECTION A-A

HORIZ. 1" = 20'
VERT. 1" = 2'



SIDE SECTION



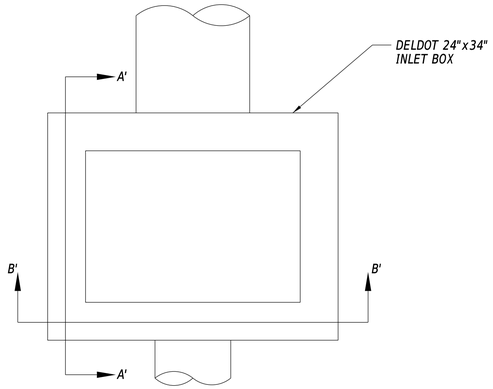
FRONT SECTION

BMP - FOREBAY SPILLWAY DETAIL

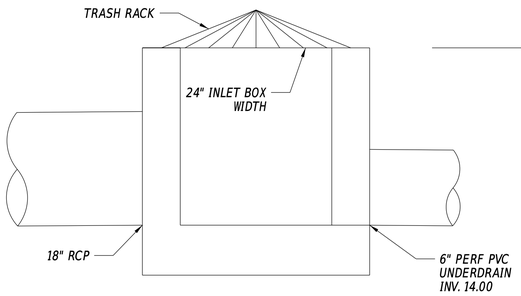
HORIZ. 1" = 5'
VERT. 1" = 1'

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:33
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	STORMWATER MANAGEMENT PLAN	SECTION
				T201901102	DESIGNED BY: O. GREEN		PAI
				COUNTY	CHECKED BY: S. ANDERSON		SHEET NO.
				NEW CASTLE			100

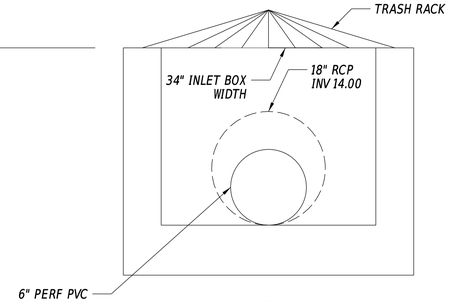


PLAN VIEW



SECTION A-A

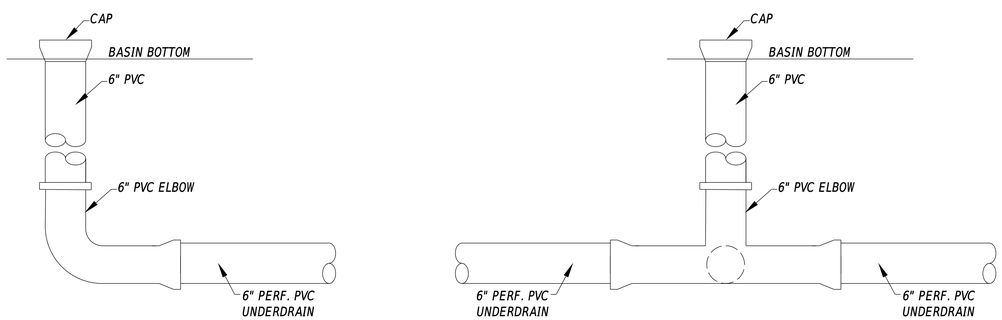
TOP EL = 17.50



SECTION B-B

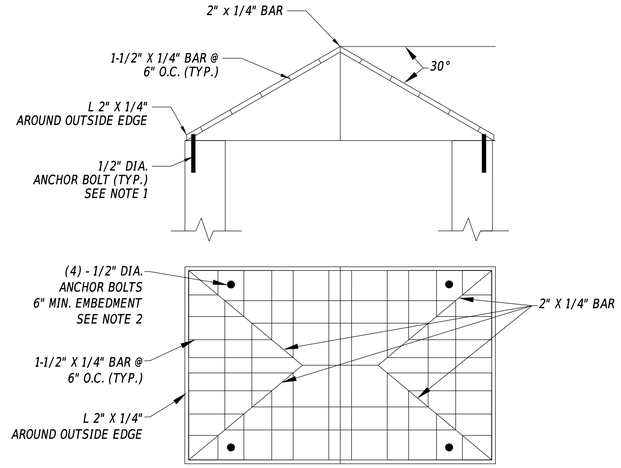
BMP 1104 - OUTLET STRUCTURE

NOT TO SCALE



CLEANOUT DETAIL

NOT TO SCALE



NOTES:

1. ANCHOR BOLTS TO BE STAINLESS STEEL ONLY.
2. TRASH RACK BARS TO BE ALUMINUM ONLY.

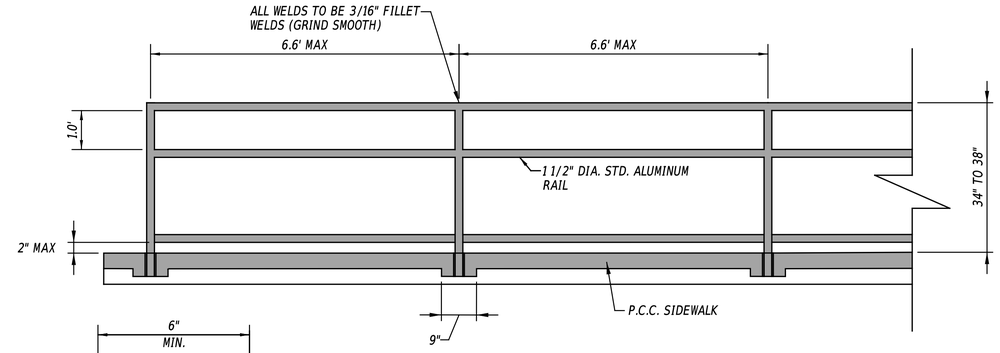
OVERFLOW TRASH RACK DETAIL

NOT TO SCALE

PENNONI ASSOCIATES INC.	
FILE NAME:	$FILEAS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PRS TABLE:	$PRSTBLSS
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	25-JUL-2024 @ 12:33
USER NAME:	$USERS
OFFICE LOCATION:	$OFFICENAME

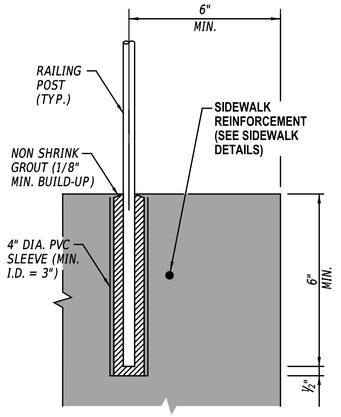
ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	STORMWATER MANAGEMENT PLAN	SECTION
				T201901102	DESIGNED BY:	O. GREEN		PAI
				COUNTY				SHEET NO.
				NEW CASTLE	CHECKED BY:	S. ANDERSON		101

NOTES:
1.) ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE PEDESTRIAN SAFETY RAILING SHALL BE INCLUDED UNDER ITEM 626010 - ALUMINUM PEDESTRIAN RAILING.



TYPICAL SAFETY RAILING DETAIL

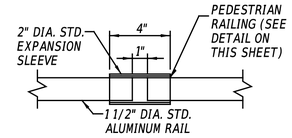
NOT TO SCALE



NOTES:
1. CONTRACTOR HAS THE OPTION TO CORE THE CONCRETE SIDEWALK FOR INSTALLATION OF RAILING POSTS.
2. RAILING SHALL BE FABRICATED WITH 1 ½" DIAMETER POSTS AND RAILS. ALL MATERIAL SHALL BE SCHEDULE 40 ALUMINUM PIPE.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL DETAIL ALL CONNECTIONS, WELDS, MATERIALS, DIMENSIONS, CALL OUTS, AND FINISHES.

RAILING ANCHORAGE DETAIL

NOT TO SCALE

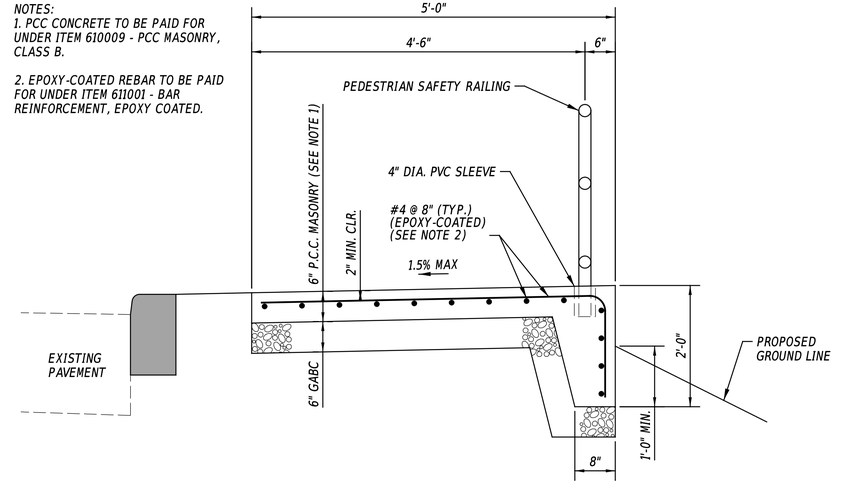


NOTES:
1. EXPANSION JOINTS SHALL BE LOCATED EVERY 20' ALONG THE TOP, MIDDLE, AND BOTTOM RAILS

PEDESTRIAN RAILING EXPANSION JOINT

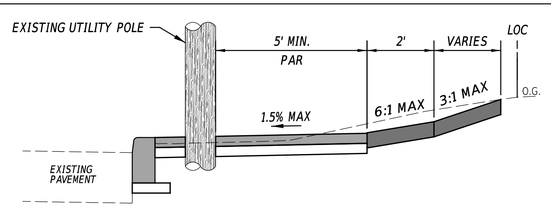
NOT TO SCALE

NOTES:
1. PCC CONCRETE TO BE PAID FOR UNDER ITEM 610009 - PCC MASONRY, CLASS B.
2. EPOXY-COATED REBAR TO BE PAID FOR UNDER ITEM 611001 - BAR REINFORCEMENT, EPOXY COATED.



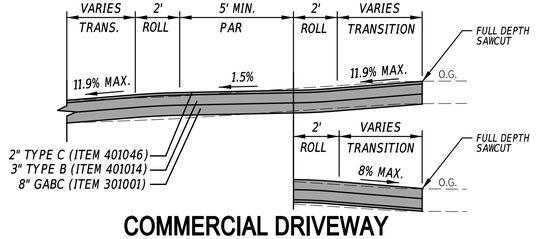
SIDEWALK WITH TOEWALL DETAIL

STA 420+00 TO 420+38 RT
NOT TO SCALE



UTILITY POLE BUMPOUT DETAIL

NOT TO SCALE



COMMERCIAL DRIVEWAY RECONSTRUCTION DETAIL

NOT TO SCALE

ADDENDA / REVISIONS	

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

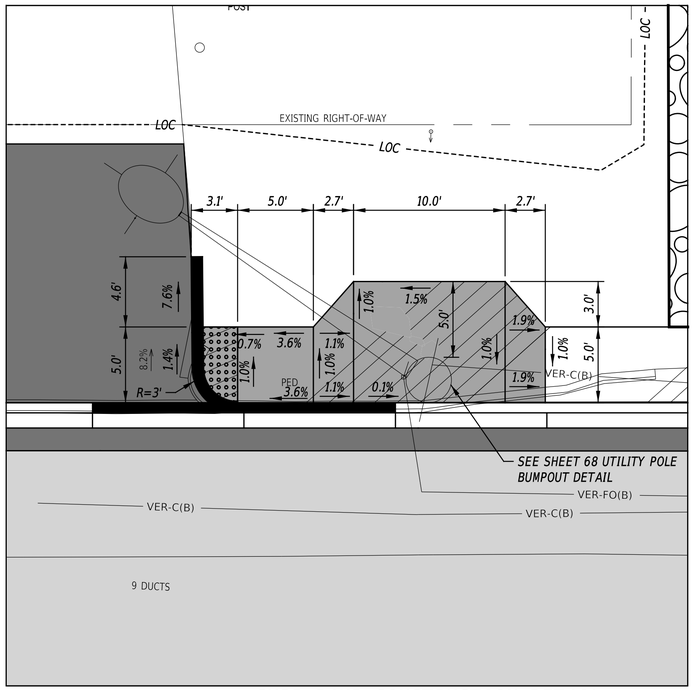
CONTRACT		BRIDGE NO.	N/A
T201901102		DESIGNED BY:	O. GREEN
COUNTY		CHECKED BY:	P. HORSEY
NEW CASTLE			

CONSTRUCTION DETAILS

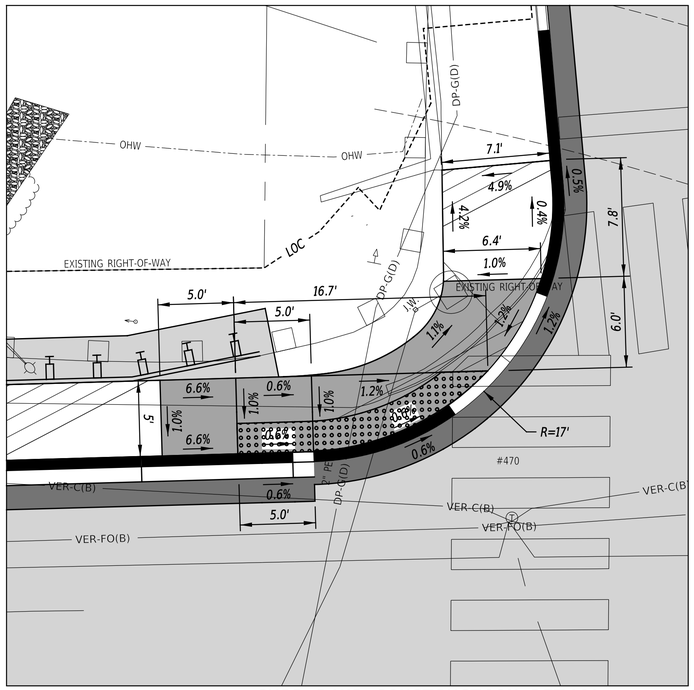
SECTION
PAI
SHEET NO.
102

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:34
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

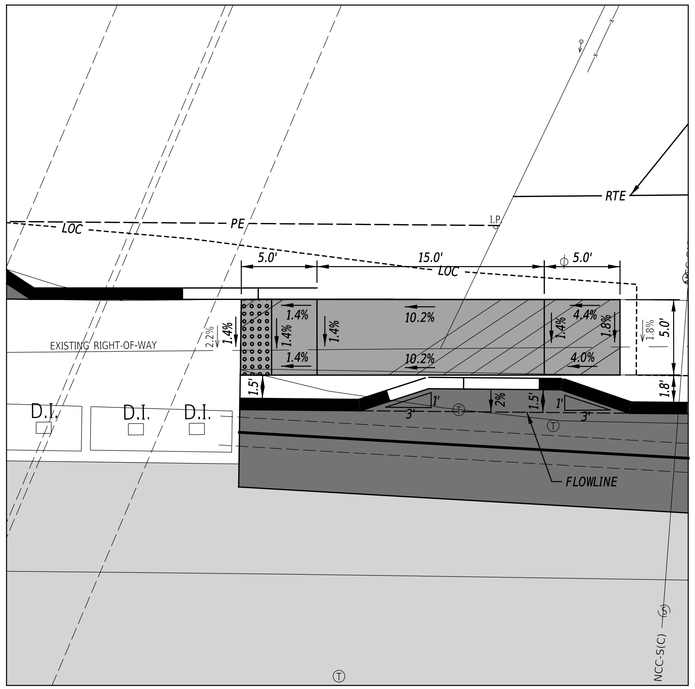
Pennoni



PC / DT-1 **CURB RAMP CONSTRUCTION DETAIL**
STA 401+30 L



PC / DT-2 **CURB RAMP CONSTRUCTION DETAIL**
STA 403+00 L



PC / DT-4 **CURB RAMP CONSTRUCTION DETAIL**
STA 716+25 L

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 25-JUL-2024 @ 12:34
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

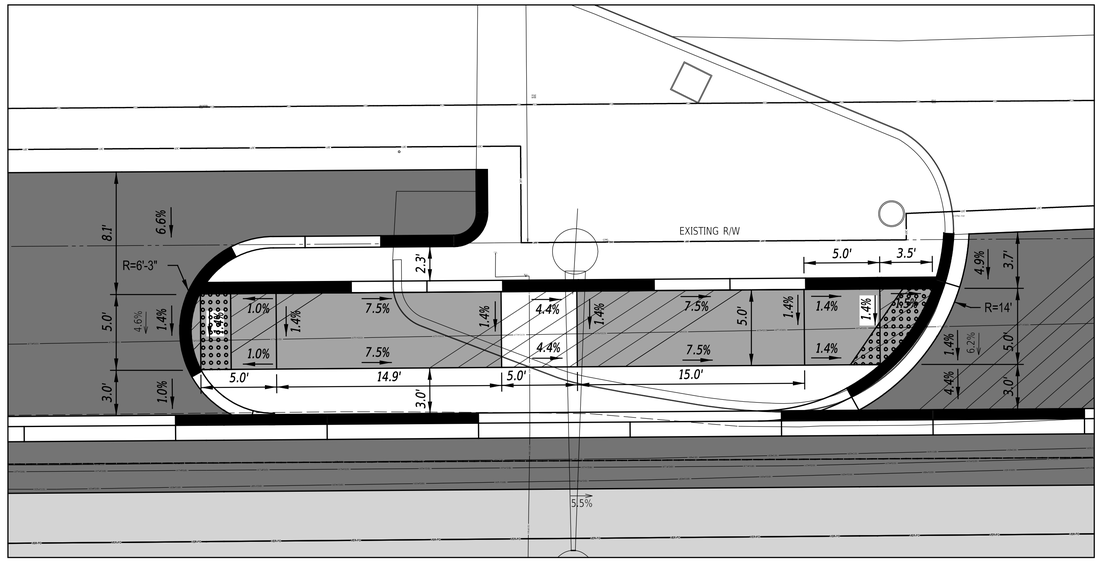
ADDENDA / REVISIONS

SCALE
0 5 10 15
FEET

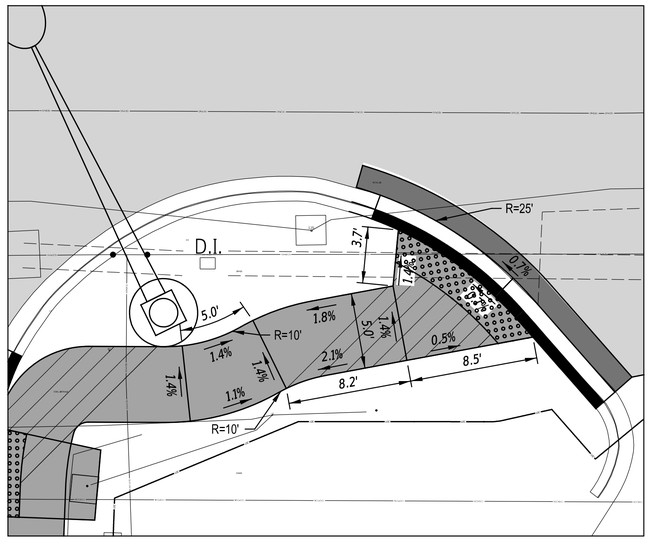
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102	DESIGNED BY:	O. GREEN	PAI
COUNTY	CHECKED BY:	P. HORSEY	SHEET NO.
NEW CASTLE			103

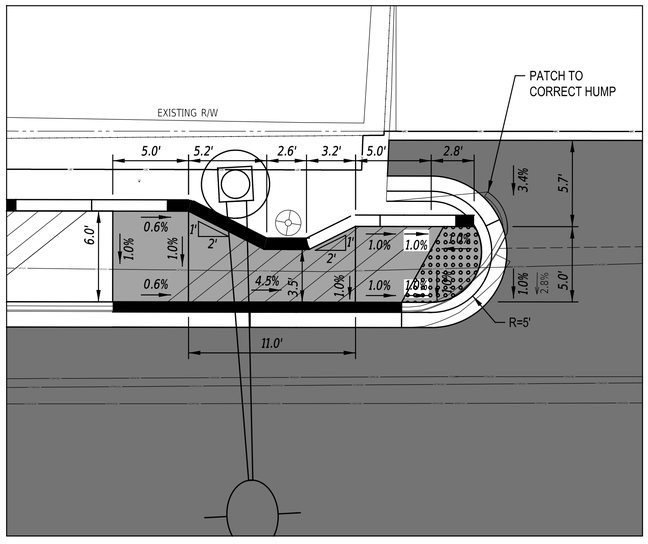
CONSTRUCTION DETAILS



PC DT-5 CURB RAMP CONSTRUCTION DETAIL
STA 463+30 L



PC DT-6 CURB RAMP CONSTRUCTION DETAIL
STA 562+10 R



PC DT-7 CURB RAMP CONSTRUCTION DETAIL
STA 565+50 L

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:34
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

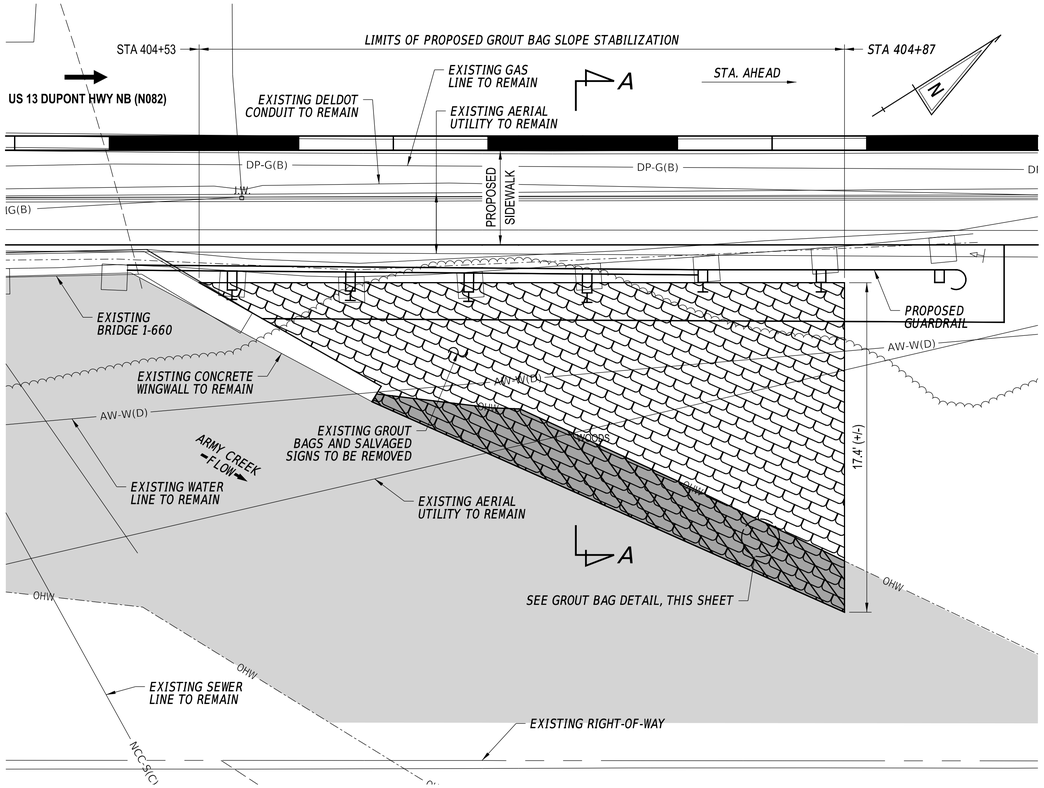
Pennoni

ADDENDA / REVISIONS	

SCALE
0 5 10 15
FEET

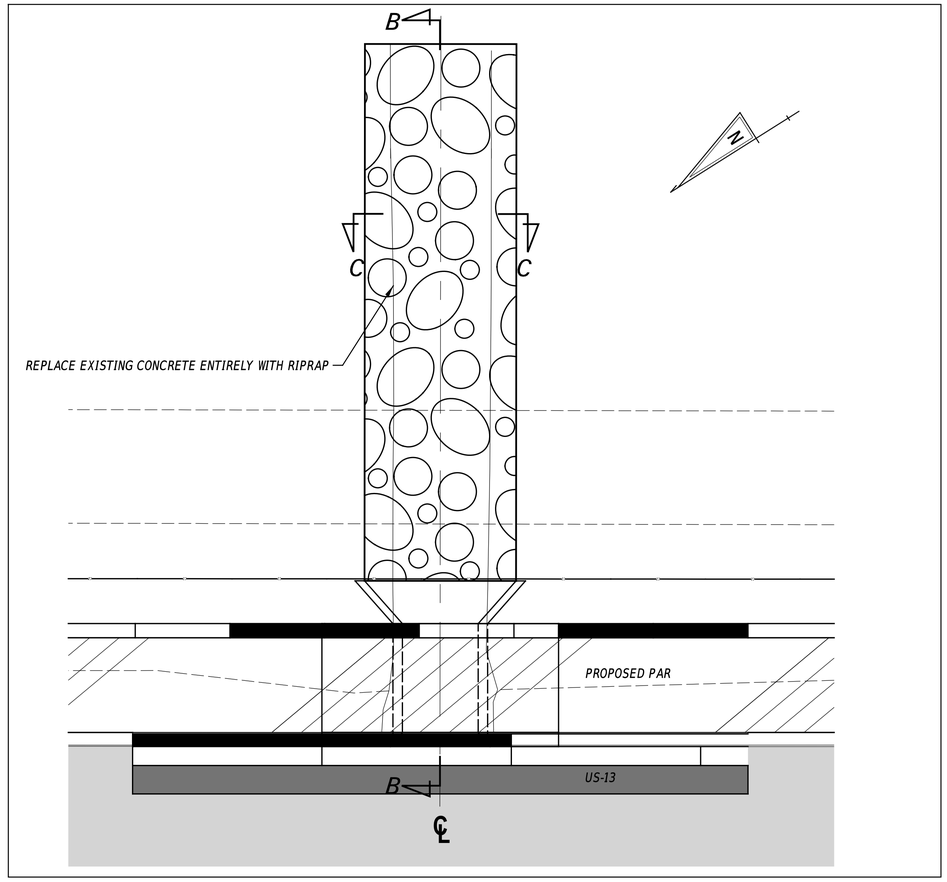
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	CONSTRUCTION DETAILS	SECTION
T201901102	DESIGNED BY:	O. GREEN		PAI
COUNTY				SHEET NO.
NEW CASTLE	CHECKED BY:	P. HORSEY		104



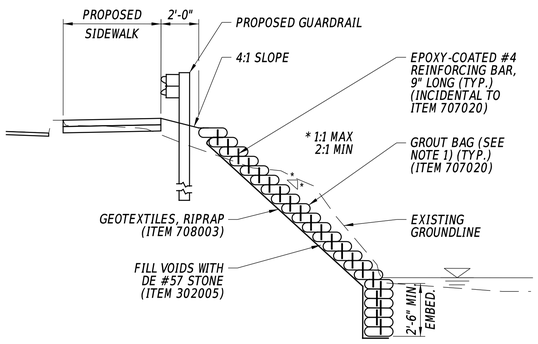
SLOPE STABILIZATION PLAN

1/4" = 1'-0"



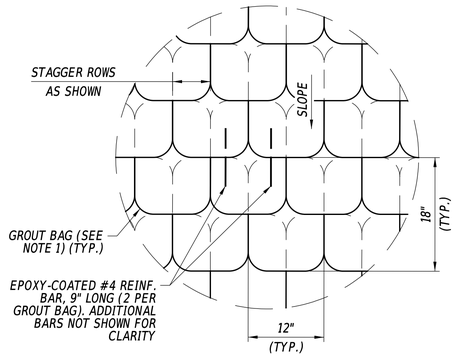
RIPRAP CHUTE DETAIL STA 387+55 R, STA 392+65 R, STA 396+50 R & 389+90 R

NTS



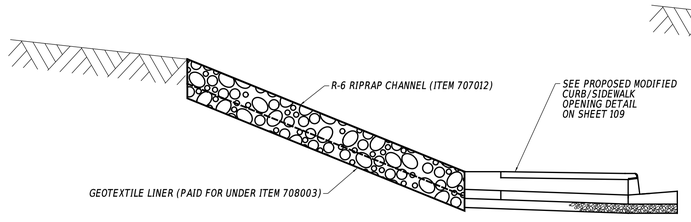
SECTION A-A

1/4" = 1'-0"



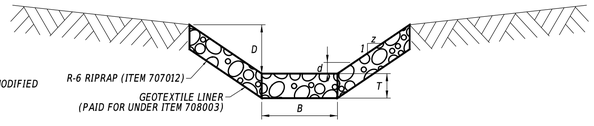
GROUT BAG DETAIL

1" = 1'-0"



SECTION B-B

NTS



	CHUTE 1	CHUTE 2	CHUTE 3	CHUTE 4
B	4'	4'	4'	4'
d	0.23'	0.07'	0.17'	0.21'
D	1.0'	1.0'	1.0'	1.0'
T	3.0'	3.0'	3.0'	3.0'
Z	2	2	2	2

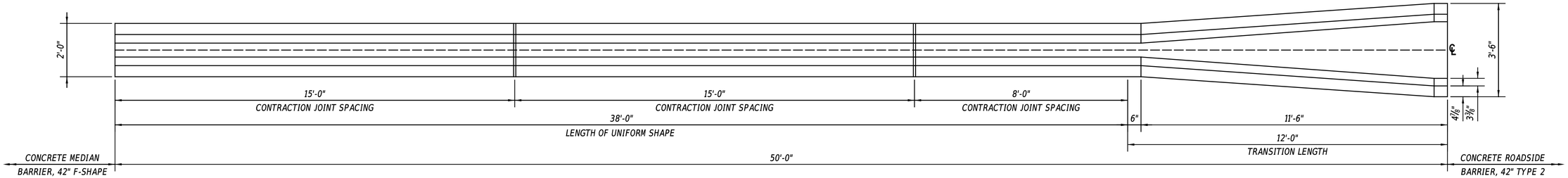
SECTION C-C

NTS

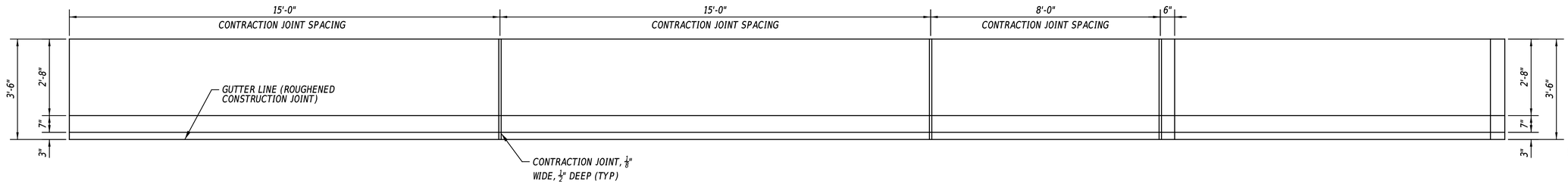
NOTES:
1. *USE 90LB POLYPROPYLENE BAGS (6" X 12" X 18") PER SECTION 1030.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRV55
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:34
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

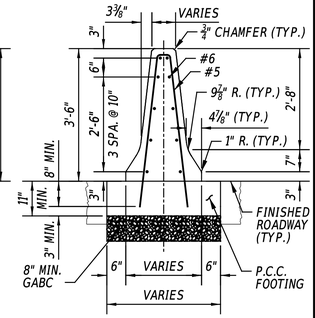
ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	T201901102	BRIDGE NO.	N/A	CONSTRUCTION DETAILS	SECTION	PAI
				COUNTY	NEW CASTLE	DESIGNED BY:	A. MANZELLA		SHEET NO.	105
						CHECKED BY:	P. HORSEY			



PLAN VIEW



ELEVATION VIEW

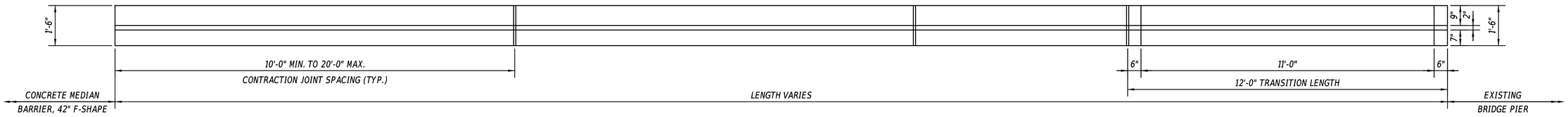


SECTION VIEW

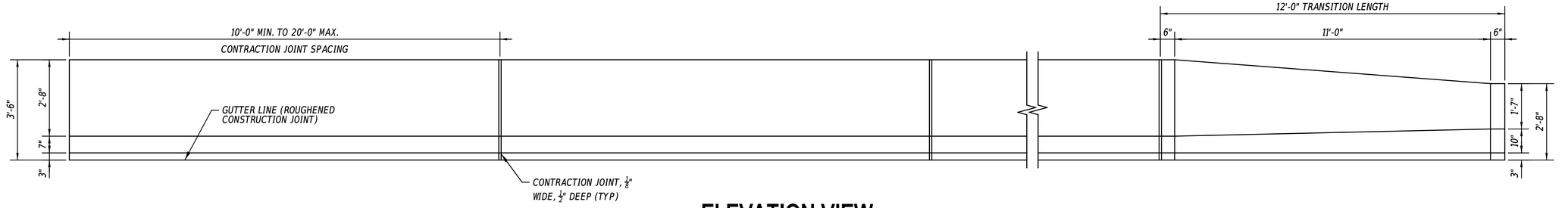
½" = 1'-0"

BIFURCATED CONCRETE BARRIER WALL DETAIL

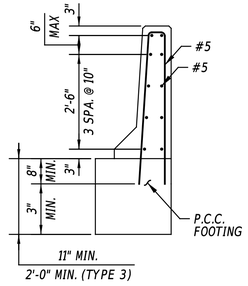
½" = 1'-0"



PLAN VIEW



ELEVATION VIEW



SECTION VIEW

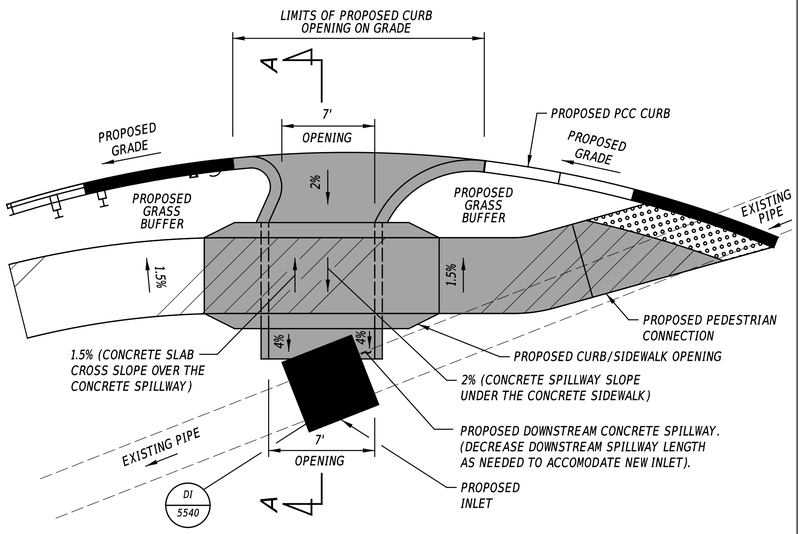
½" = 1'-0"

CONCRETE ROADSIDE BARRIER, VARYING HEIGHT TYPE 2 DETAIL

½" = 1'-0"

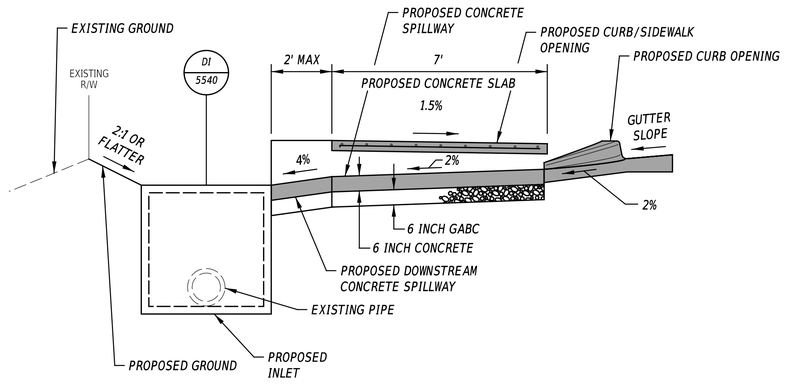
ADDENDA / REVISIONS		SCALE AS SHOWN	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SECTION
				T201901102			PAI
				COUNTY	DESIGNED BY: M. SHEARON		SHEET NO.
				NEW CASTLE	CHECKED BY: A. MANZELLA		106

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:34
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES



CURB OPENING TYPICAL APPLICATION			
STATION	OFFSET	DRAINAGE INLET ID.	CURB OPENING WIDTH (FT.)
421+00	RIGHT	5540	7'

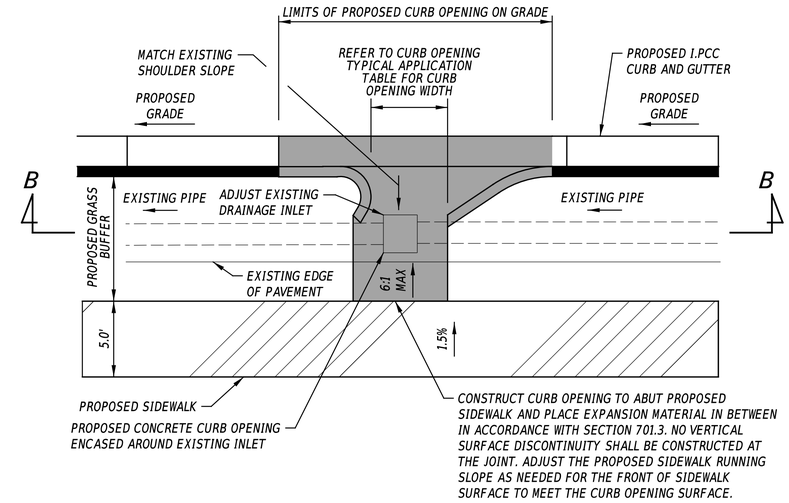
PLAN VIEW



SECTION A-A

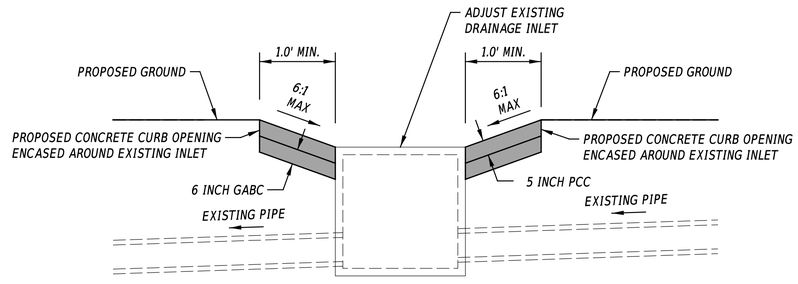
CURB OPENING AND SIDEWALK OPENING DETAIL AT PROPOSED INLET

NTS



CURB OPENING TYPICAL APPLICATION		
STATION	OFFSET	CURB OPENING WIDTH (FT.)
425+61	RIGHT	4'
427+66	RIGHT	4'
429+07	RIGHT	4'
431+49	RIGHT	7'
432+87	RIGHT	6'

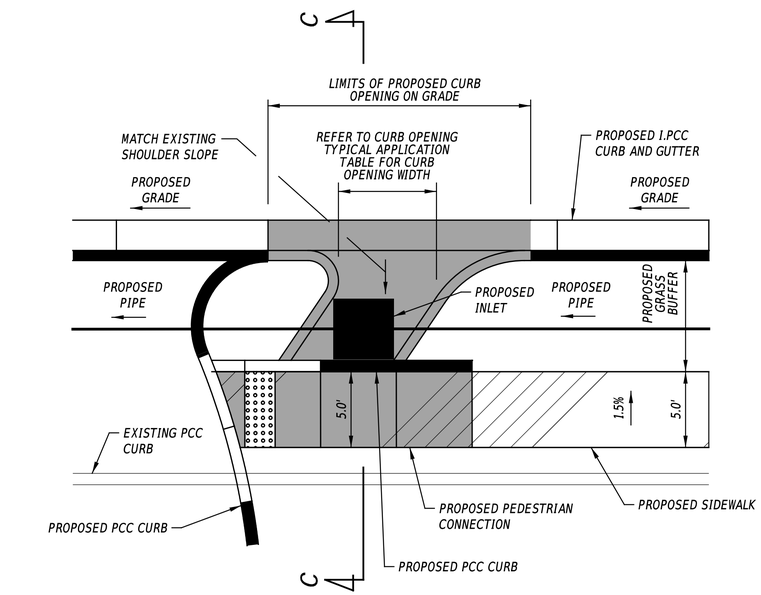
PLAN VIEW



SECTION B-B

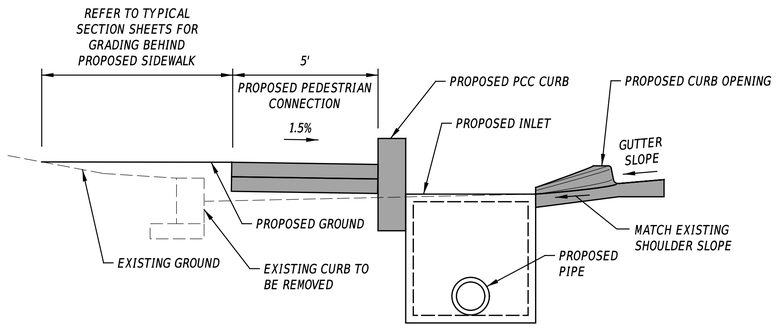
TYPICAL CURB OPENING DETAIL AT EXISTING INLET

NTS



CURB OPENING TYPICAL APPLICATION			
STATION	OFFSET	DRAINAGE INLET ID.	CURB OPENING WIDTH (FT.)
435+09	RIGHT	5610	7'
435+70	RIGHT	5610A	5'
437+30	RIGHT	5611	6'

PLAN VIEW



SECTION C-C

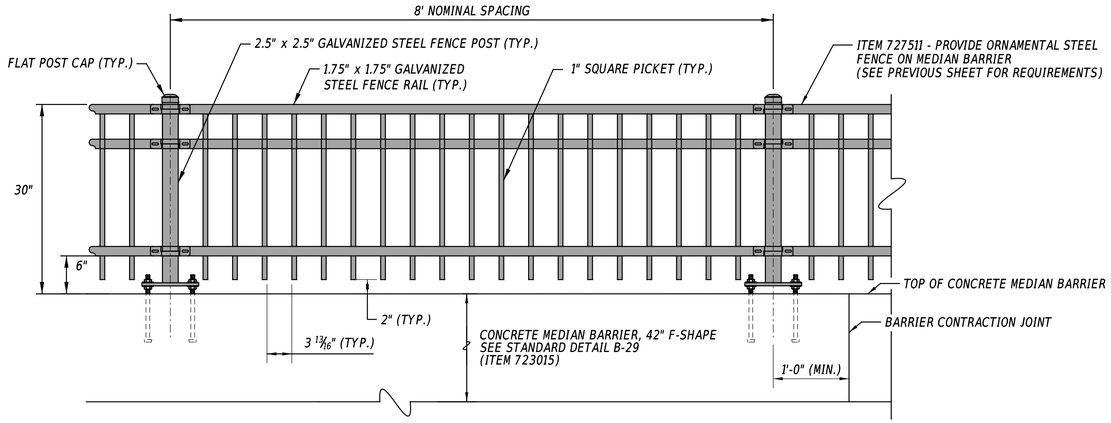
TYPICAL CURB OPENING DETAIL AT PROPOSED INLET

NTS

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 25-JUL-2024 @ 12:34
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

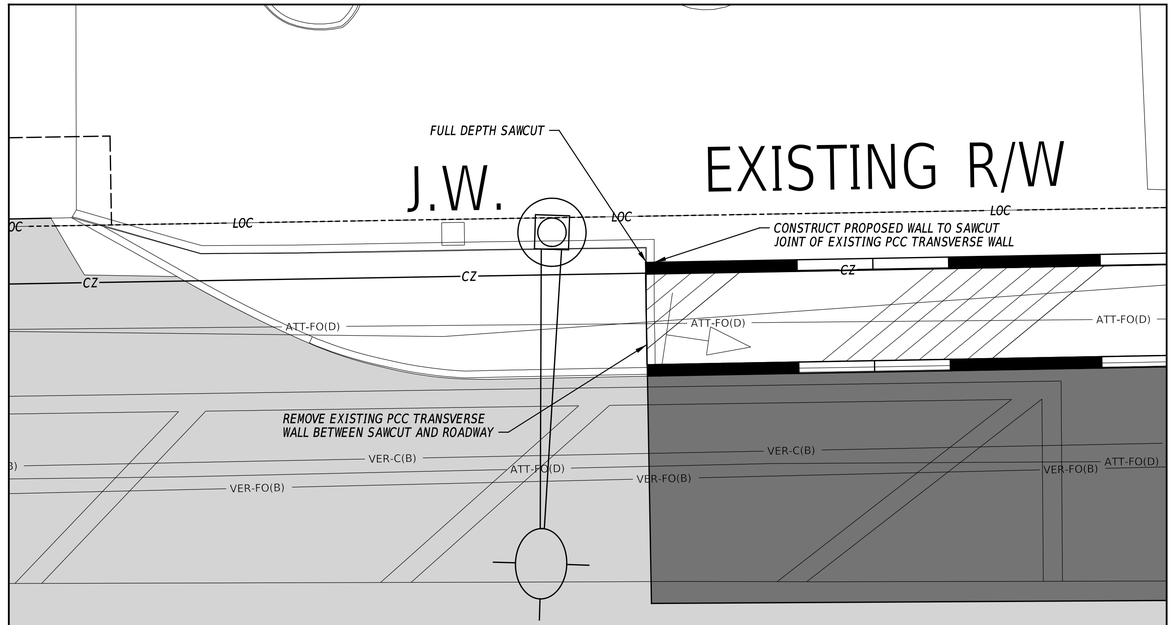
Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: A. MORJANA		SHEET NO. 107
					CHECKED BY: O. GREEN		



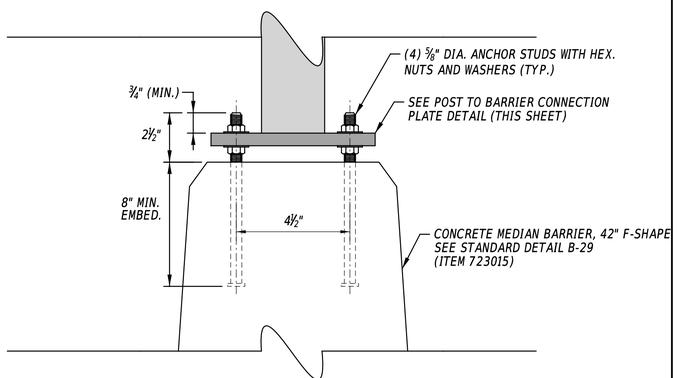
ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER - ELEVATION

NOT TO SCALE



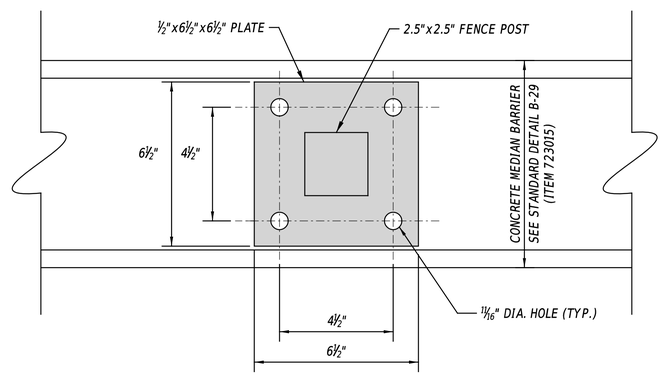
TRANVERSE WALL REMOVAL STA 563+27 LT

1" = 5'



POST TO BARRIER CONNECTION

NOT TO SCALE



POST TO BARRIER CONNECTION PLATE

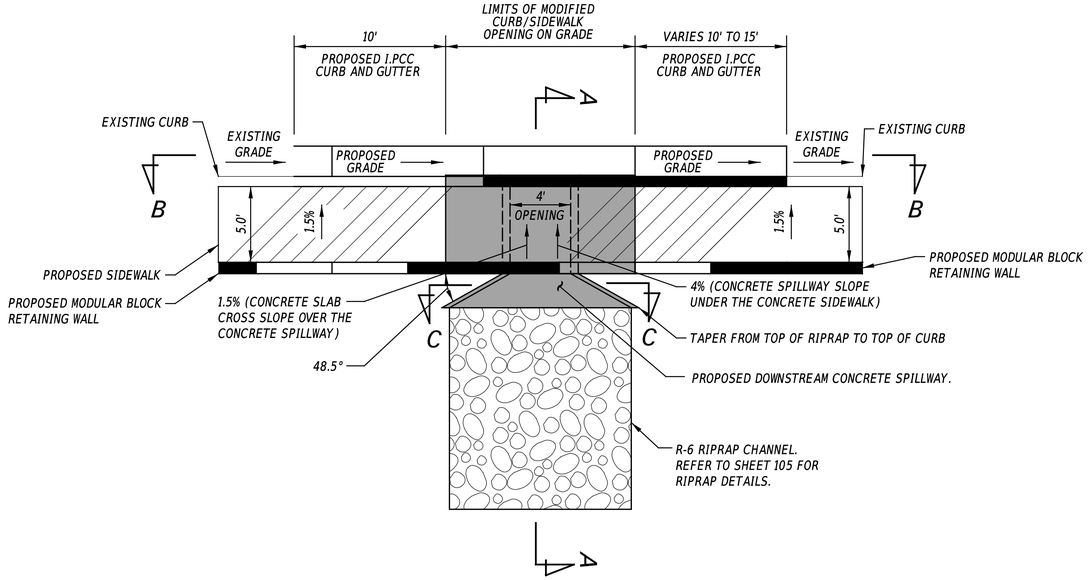
NOT TO SCALE

NOTES:

1. *POST SPACING TO BE DETERMINED BY THE CONTRACTOR AND INCLUDED IN THE WORKING DRAWINGS. EACH POST MUST BE A MINIMUM OF 1'-0" FROM ANY BARRIER JOINT.*
2. *STEEL FENCE POST SPACING SHALL BE 8'. STEEL FENCE POST SPACING MAY VARY DUE TO EXISTING UNDERGROUND UTILITIES ENCOUNTERED IN THE FIELD.*
3. *CONTRACTOR SHALL COORDINATE WITH ENGINEER ON LOCATIONS THAT REQUIRE LESS THAN 8' POST SPACING PRIOR TO FABRICATING FENCE.*
4. *WORKING DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR REVIEW.*
5. *IF TAPER EXISTS AT END OF BARRIER, PLACE POST 6" FROM TOP OF TAPER.*
6. *ALL POSTS SHALL BE PLUMB.*
7. *ITEMS REQUIRED TO PROVIDE AND INSTALL ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER SHALL BE PAID UNDER ITEMS PROVIDE ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER (727511) & INSTALL ORNAMENTAL STEEL FENCE ON MEDIAN BARRIER (727512). REFER TO SPECIAL PROVISION.*

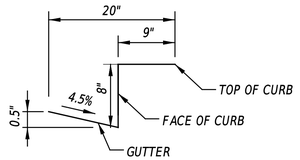
PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PRT TABLE: $PRINTSLS
PLOT DRIVER: $PLTDRVDS
DATE PLOTTED: 25-JUL-2024 @ 12:34
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SECTION
				T201901102	DESIGNED BY: O. GREEN		PAI
				COUNTY			SHEET NO.
				NEW CASTLE	CHECKED BY: P. HORSEY		108

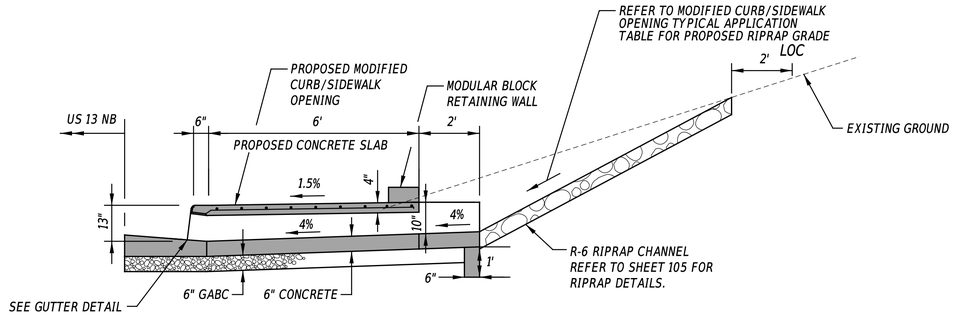


MODIFIED CURB/SIDEWALK OPENING TYPICAL APPLICATION				
CHUTE NO.	STATION	OFFSET	CURB OPENING WIDTH (FT.)	PROPOSED RIPRAP GRADE
CHUTE 1	387+55	RIGHT	4'	4:1
CHUTE 2	392+66	RIGHT	4'	1.2:1
CHUTE 3	396+53	RIGHT	4'	3:1
CHUTE 4	398+90	RIGHT	4'	3:1

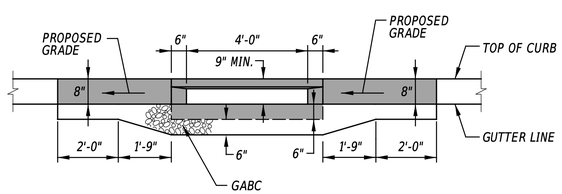
PLAN VIEW



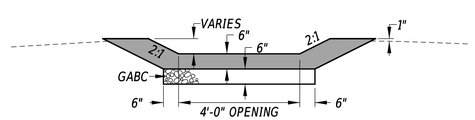
GUTTER DETAIL



SECTION A-A



SECTION B-B



SECTION C-C

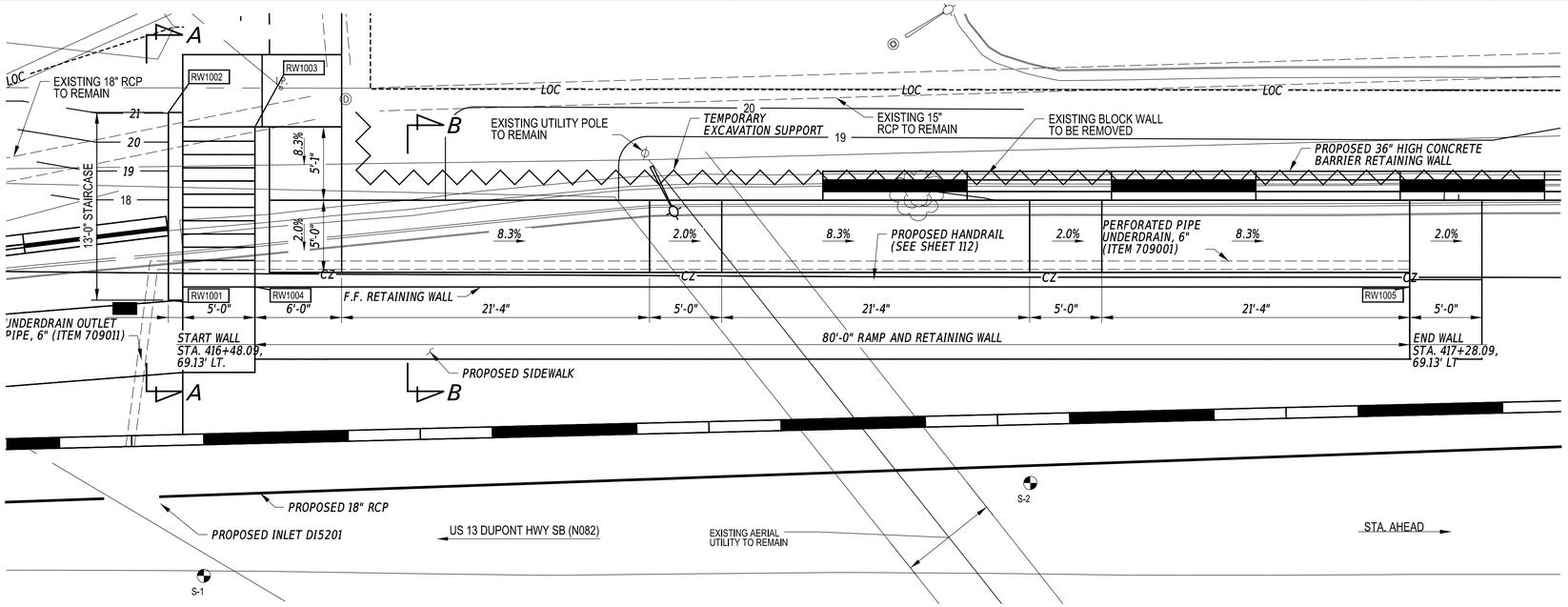
TYPICAL MODIFIED CURB/SIDEWALK OPENING DETAIL ADJACENT TO PROPOSED RIPRAP

NTS

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 25-JUL-2024 @ 12:34
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

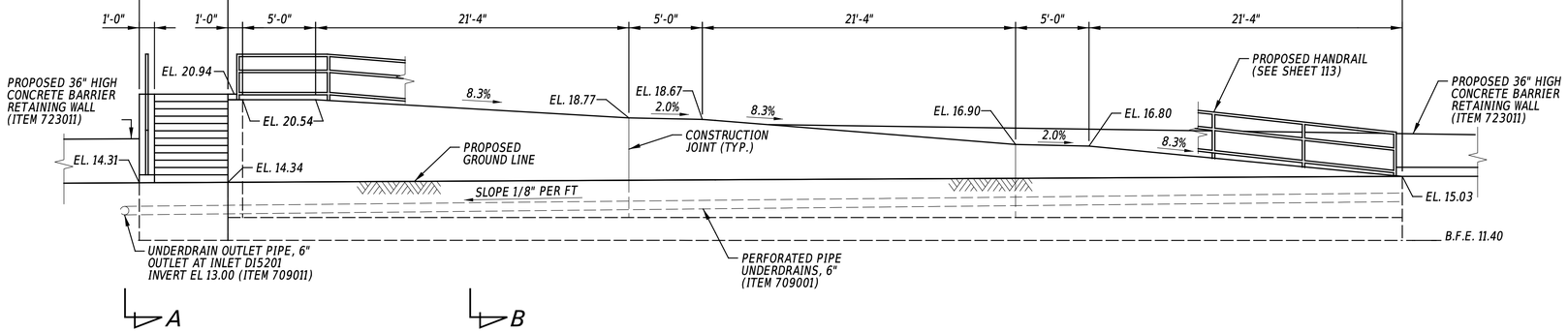
Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT			CONSTRUCTION DETAILS	SECTION
				T201901102	BRIDGE NO.	N/A		PAI
				COUNTY	DESIGNED BY:	A. MORJANA		SHEET NO.
				NEW CASTLE	CHECKED BY:	O. GREEN		109



PLAN

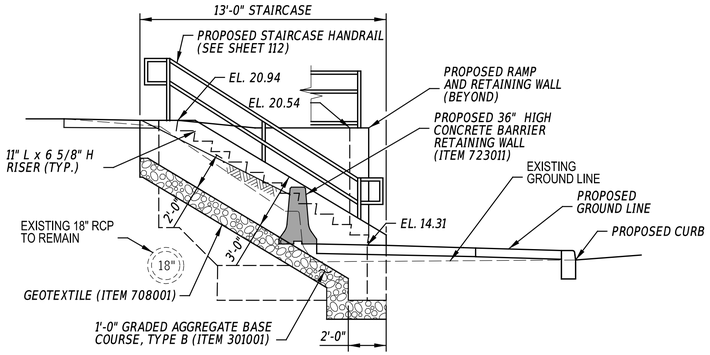
1" = 5'-0"



ELEVATION

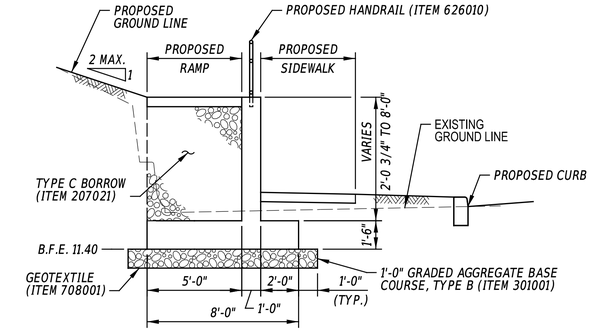
1" = 5'-0"

CONSTRUCTION WORKING POINTS				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
RW1001	416+42.09	-68.21	601634.27	599111.18
RW1002	416+42.09	-81.21	601641.21	599100.19
RW1003	416+48.09	-80.21	601645.75	599104.24
RW1004	416+48.09	-69.13	601639.83	599113.61
RW1005	417+28.09	-69.13	601707.46	599156.34



SECTION A-A

1/4" = 1'-0"



NOTE: REINFORCEMENT NOT SHOWN FOR CLARITY. SEE PLAN SHEETS 111, 112, & 113 FOR DETAILS.

SECTION B-B

1/4" = 1'-0"

PEDESTRIAN RAMP RETAINING WALL NOTES:

1. PORTLAND CEMENT CONCRETE (ITEM 610000):
   USE PORTLAND CEMENT CONCRETE FOR CAST-IN-PLACE ELEMENTS AS FOLLOWS:
   (f'c = 28-DAY COMPRESSIVE STRENGTH)
   CLASS A - RETAINING WALL AND STAIRCASE (f'c = 4.5 ksi)
   A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO DELDOT WITH APPROVAL OF THE BRIDGE DESIGN ENGINEER.
   -CHAMFER ALL EXPOSED EDGES ¾" X ¾" UNLESS OTHERWISE NOTED.
2. BAR REINFORCEMENT (ITEM 611001):
   -REINFORCING STEEL SHALL CONFORM TO AASHTO M31 (ASTM A615), GRADE 60.
   -REINFORCING STEEL SHALL HAVE A 3" CLEAR COVER IF CAST AGAINST EARTH OR A 2" CLEAR COVER ELSEWHERE, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
   -UNLESS NOTED OTHERWISE, REINFORCING STEEL SHALL BE PROTECTED WITH FUSION BONDED EPOXY. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO AASHTO M284 (D3963).
   -ANY FIELD CUTTING OR FIELD BENDING MUST BE APPROVED BY THE ENGINEER. PAYMENT SHALL BE INCIDENTAL TO THE BAR REINFORCEMENT ITEM.
   -GALVANIZED REINFORCING STEEL MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL AT NO ADDITIONAL COST TO DELDOT WITH APPROVAL OF THE BRIDGE DESIGN ENGINEER.
   -WELDING OF REINFORCEMENT DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED.
3. CONCRETE SEALER (ITEM 613001):
   -SILICONE ACRYLIC SEALER SHALL BE APPLIED TO THE EXPOSED CONCRETE SURFACES OF THE RETAINING WALL. DO NOT APPLY SEALER TO SIDEWALK OR STAIRCASE RISERS.
4. ALUMINUM PEDESTRIAN RAILING (ITEM 626010):
   -SEE TYPICAL HANDRAIL DETAIL ON PLAN SHEET 77.
5. FOUNDATION (ITEM 301001):
   -PLACE RETAINING WALL FOUNDATION ON A 1-FOOT MINIMUM BED OF GRADED AGGREGATE BASE COURSE, TYPE B. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED MORE THAN 1-FOOT BELOW THE FOUNDATION, REMOVE THE UNSUITABLE MATERIAL AND REPLACE WITH GRADED AGGREGATE BASE COURSE, TYPE B.
6. TEMPORARY EXCAVATION SUPPORT:
   SUBMIT WORKING DRAWINGS AND CONSTRUCT THE TEMPORARY EXCAVATION SUPPORT SYSTEM IN ACCORDANCE WITH SECTION 604 OF THE DELDOT STANDARD SPECIFICATIONS. PAYMENT FOR TEMPORARY EXCAVATION SUPPORT SHALL BE INCLUDED UNDER ITEM 604003 - SHORING.
7. ABBREVIATIONS:
   - B.F.E. = BOTTOM OF FOOTING ELEVATION
   - BOT. = BOTTOM
   - E.F. = EACH FACE
   - F.F. = FRONT FACE
   - T.F.E. = TOP OF FOOTING ELEVATION

ADDENDA / REVISIONS	

SCALE AS NOTED

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

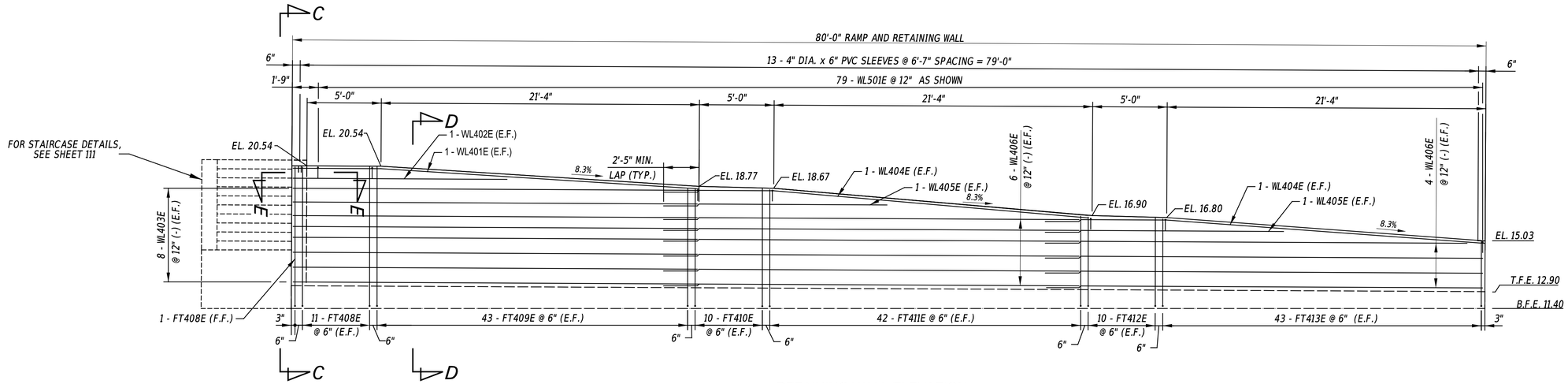
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	D. KENNEDY
COUNTY	CHECKED BY:	A. MANZELLA
NEW CASTLE		

PEDESTRIAN RAMP PLAN AND ELEVATION

SECTION
PAI
SHEET NO.
110

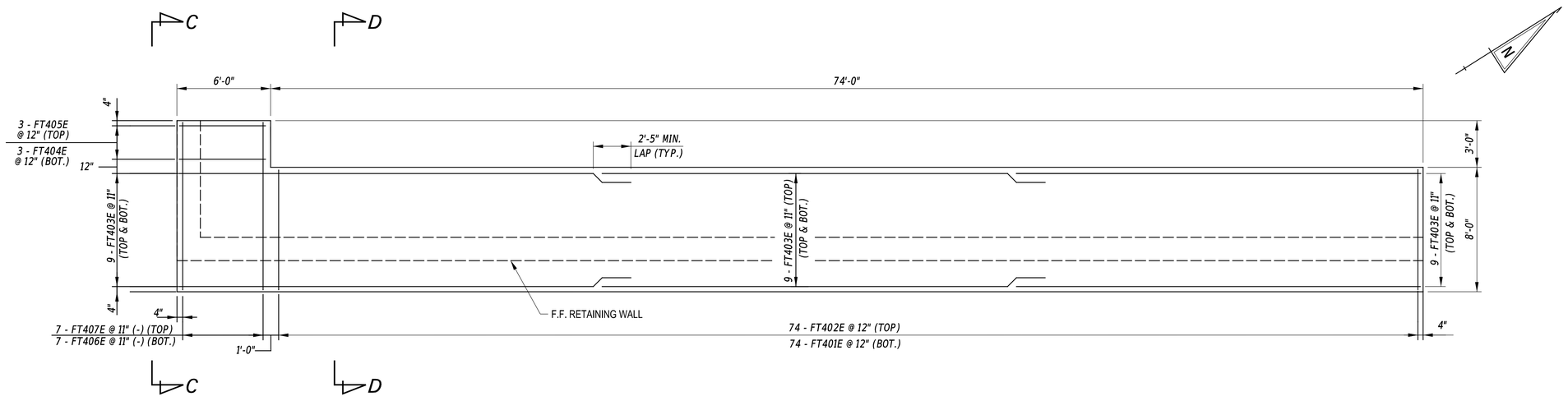
PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 14:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni



RETAINING WALL ELEVATION

SCALE: 1/4" = 1'-0"



RETAINING WALL FOOTING PLAN

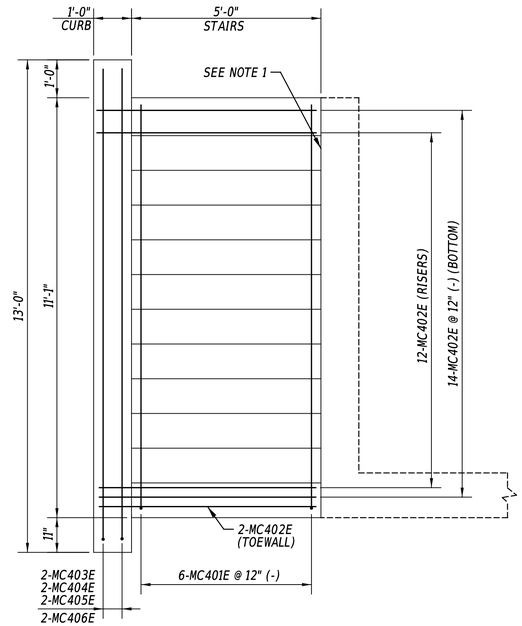
SCALE: 1/4" = 1'-0"

NOTES:

1. FOR SECTIONS C-C, D-D, AND E-E, SEE SHEET 112.

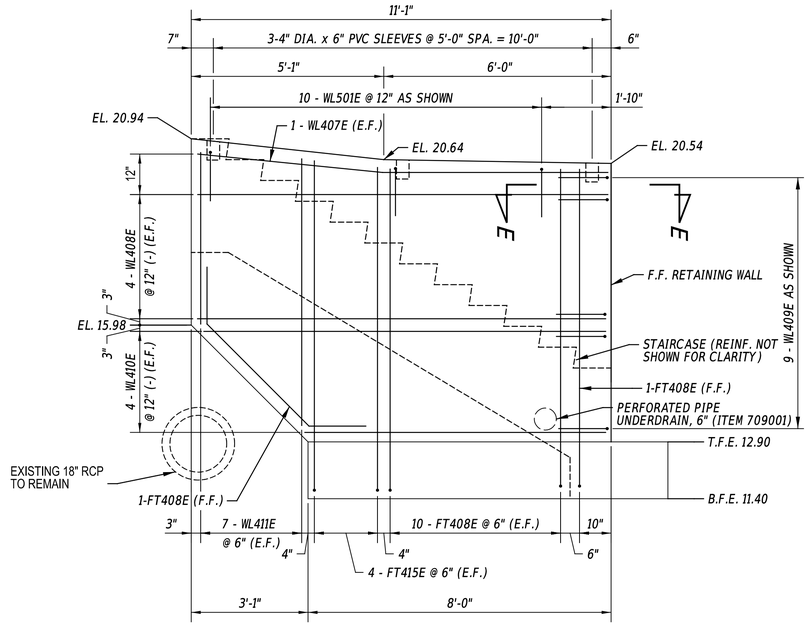
PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 14:23
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PEDESTRIAN RAMP WALL ELEVATION AND FOOTING PLAN	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: D. KENNEDY		SHEET NO. 111
					CHECKED BY: A. MANZELLA		



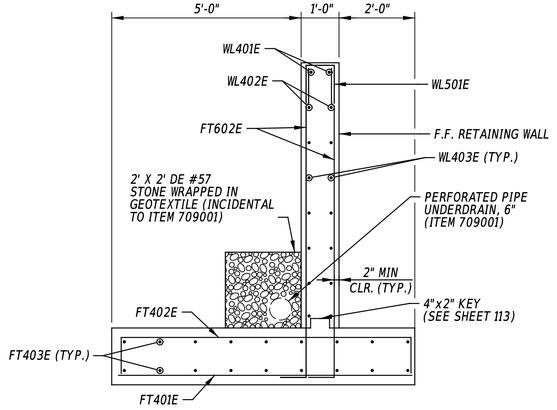
STAIRCASE PLAN

1/2" = 1'-0"



VIEW C-C

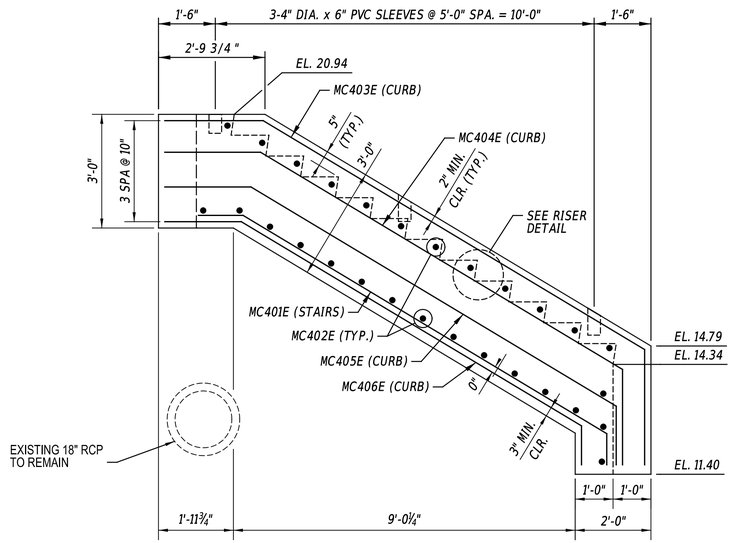
1/2" = 1'-0"



SECTION D-D

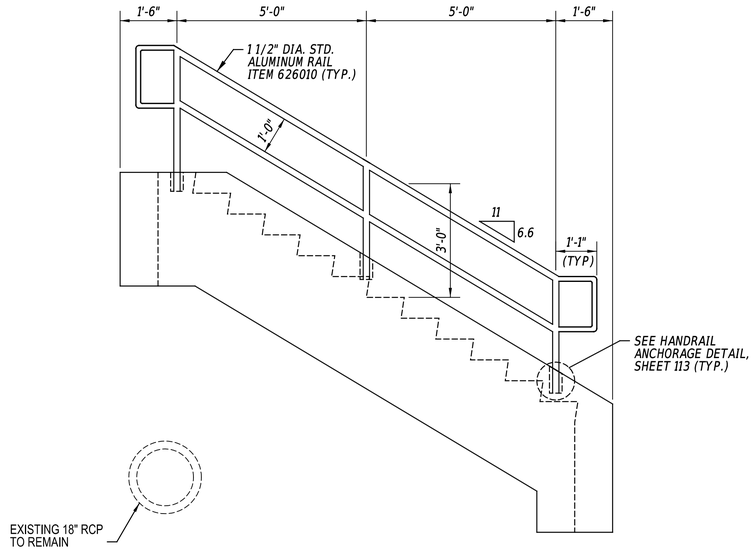
1/2" = 1'-0"

NOTES:
1. SEAL JOINT BETWEEN STAIRCASE AND RETAINING WALL WITH SILICONE CAULKING COMPOUND.



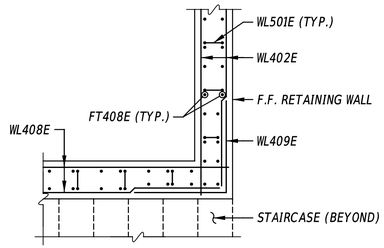
STAIRCASE ELEVATION

1/2" = 1'-0"



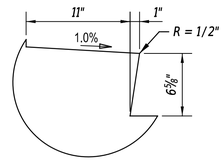
STAIRCASE HANDRAIL DETAIL

1/2" = 1'-0"



SECTION E-E

1/2" = 1'-0"



RISER DETAIL

1 1/2" = 1'-0"

PENNONI ASSOCIATES INC.	SFILEAS
FILE NAME:	SPLTDRVXS
MICROSTATION VERSION:	SVERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PRN TABLE:	SPRNTBLSS
PLOT DRIVER:	SPLTDRVXS
DATE PLOTTED:	$DATES @ $TIMES
USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PEDESTRIAN RAMP SECTIONS AND DETAILS	SECTION
				T201901102	DESIGNED BY:	D. KENNEDY		PAI
				COUNTY	CHECKED BY:	A. MANZELLA		SHEET NO.
				NEW CASTLE				112

① ANY MARK NUMBER WITH SUFFIX 'E' DENOTES EPOXY COATED REINFORCING STEEL.

② ALL MARK 'LOCATION PREFIXES' SHALL CONSIST OF TWO LETTERS AND ARE AS FOLLOWS: AB = ABUTMENT, AS = APPROACH SLAB, BC = BOX CULVERT, BW = BACKWALL, CL = COLUMN, DK = DECK, DL = DOWEL, FT = FOOTING, HW = HEADWALL, MS = MISC. BARS, PA = PARAPET, PR = PIER, SC = SHEET PILE CAP, SL = SLAB, TW = TOEWALL, WL = WALL (UNIQUE LOCATION), WW = WINGWALL

SPECIFICATIONS					BENDING DIMENSIONS (FEET-INCHES /QUARTER INCH)										
QTY.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F / R	G	H	J	K	O
STAIRS															
6	4	12-10 3	**MC401E**	14		1-0 1	11-3 0	0-7 2				0-10 2		0-6 2	12-5 2
28	4	5-8 0	MC402E	STR		5-8 0									
2	4	17-4 3	MC403E	14		2-7 1	11-9 0	3-0 2				2-7 1		2-2 3	15-6 2
2	4	16-0 3	MC404E	14		2-6 2	10-10 1	2-8 0				2-3 2		2-2 0	14-4 3
2	4	15-0 1	MC405E	14		2-3 1	11-1 3	1-7 1				1-4 2		1-11 2	13-11 0
2	4	13-6 1	MC406E	14		2-0 1	10-5 3	1-0 1				0-10 2		1-2 3	12-8 3
FOOTING															
74	4	7-8 0	FT401E	STR		7-8 0									
74	4	9-10 0	FT402E	17		1-1 0	7-8 0	1-1 0							
54	4	28-2 0	FT403E	STR		28-2 0									
3	4	5-8 0	FT404E	STR		5-8 0									
3	4	7-10 0	FT405E	17		1-1 0	5-8 0	1-1 0							
7	4	10-8 0	FT406E	STR		10-8 0									
7	4	12-10 0	FT407E	17		1-1 0	10-8 0	1-1 0							
44	4	9-8 0	FT408E	2	1-0 0	8-8 0					0-0 0				
86*	4	9-7 0	FT409E	2	1-0 0	8-7 0					0-0 0				
		TO	*2 SETS			TO									
		7-10 3	OF 43			6-10 3									
20	4	7-9 2	FT410E	2	1-0 0	6-9 2					0-0 0				
84*	4	7-8 2	FT411E	2	1-0 0	6-8 2					0-0 0				
		TO	*2 SETS			TO									
		6-0 1	OF 42			5-0 1									
20	4	5-11 0	FT412E	2	1-0 0	4-11 0					0-0 0				
86*	4	5-10 0	FT413E	2	1-0 0	4-10 0					0-0 0				
		TO	*2 SETS			TO									
		4-1 2	OF 43			3-1 2									
8*	4	9-8 2	FT414E	2	1-0 0	8-8 2					0-0 0				
		TO	*2 SETS			TO									
		9-10 0	OF 4		1-0 0	8-10 0									

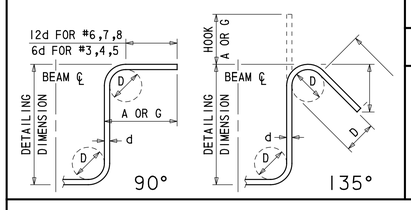
SPECIFICATIONS					BENDING DIMENSIONS (FEET-INCHES /QUARTER INCH)										
QTY.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F / R	G	H	J	K	O
WALL															
2	4	27-1 0	WL401E	6	0-0 0	5-8 0	21-5 0	0-0 0			0-0 0	1-9 2		21-4 0	27-0 0
1	4	16-4 0	WL402E	STR		16-4 0									
8	4	27-2 0	WL403E	STR		27-2 0									
4	4	28-10 0	WL404E	6	0-0 0	7-5 0	21-5 0	0-0 0			0-0 0	1-9 2		21-4 0	28-9 0
4	4	17-11 0	WL405E	STR		17-11 0									
20	4	28-9 0	WL406E	STR		28-9 0									
2	4	10-9 0	WL407E	6	0-0 0	0-0 0	4-11 0	5-10 0			0-0 0	0-4 3		4-11 0	10-9 0
8	4	10-9 0	WL408E	STR		10-9 0									
9	4	4-10 0	WL409E	17		2-5 0	2-5 0	0-0 0							
8	4	10-6 0	WL410E	STR		10-6 0									
		TO	*2 SETS												
		7-8 0	OF 4			7-8 0									
14	4	7-2 1	WL411E	STR		7-2 1									
		TO	*2 SETS												
		4-7 2	OF 7			4-7 2									
2	4	8-11 2	WL412E	14		2-5 0	4-1 2	2-5 0				1-8 2		1-8 2	7-6 2
89	5	6-10 2	WL501E	17		3-1 1	0-8 0	3-1 1							

SPECIFICATIONS					BENDING DIMENSIONS (FEET-INCHES /QUARTER INCH)										
QTY.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F / R	G	H	J	K	O

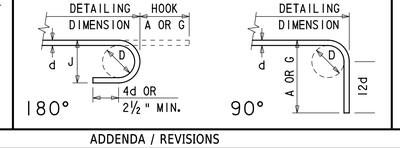
ASTM STANDARD ENGLISH REINFORCING BARS				RECOMMENDED END HOOKS, APPLICABLE TO ALL GRADES				STIRRUP AND TIE HOOKS, APPLICABLE TO ALL GRADES			
	NOMINAL DIMENSIONS				180° HOOKS		90° HOOKS		90° HOOK	135° HOOK	
BAR SIZE	DIAMETER (INCHES)	AREA (INCHES²)	WEIGHT (LBS./FT.)	D	A OR G	J	A OR G	D	A OR G	A OR G	A OR G
3	0.375	0.110	0.376	2¼″	5″	3″	6″	1½″	4″	4″	2½″
4	0.500	0.200	0.668	3″	6″	4″	8″	2″	4½″	4½″	3″
5	0.625	0.310	1.043	3¾″	7″	5″	10″	2½″	6″	5½″	3¾″
6	0.750	0.440	1.502	4½″	8″	6″	1-0″	4½″	1-0″	8″	4½″
7	0.875	0.600	2.044	5¼″	10″	7″	1-2″	5¼″	1-2″	9″	5¼″
8	1.000	0.790	2.670	6″	11″	8″	1-4″	6″	1-4″	10½″	6″
9	1.128	1.000	3.400	9½″	1-3″	11¾″	1-7″				
10	1.270	1.270	4.303	10¾″	1-5″	1-1¼″	1-10″				
11	1.410	1.560	5.313	1-0″	1-7″	1-2¾″	2-0″				
14	1.693	2.250	7.650	1-6¼″	2-3″	1-9¾″	2-7″				
18	2.257	4.000	13.600	2-0″	3-0″	2-4½″	3-5″				

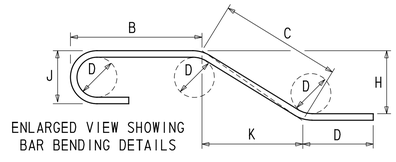
NOTES:
1. FIGURES SHOWN IN CIRCLES REPRESENT BAR BEND TYPES.
2. STANDARD BAR BENDS INCLUDE ONLY THOSE TYPES BELOW, INDICATED AS SUCH.
3. ALL DIMENSIONS OUT-TO-OUT, EXCEPT "A" AND "G" ON STD. 180° AND 135° HOOKS.
4. "J" DIMENSIONS ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD 'ACI' HOOKS ARE TO BE USED.
5. WHERE "J" IS NOT SHOWN, "J" WILL BE KEPT EQUAL TO OR LESS THAN "H" ON TYPES 3, 5 AND 22. WHERE "J" CAN EXCEED "H", IT SHALL BE SHOWN.
6. "H" DIMENSIONS OF STIRRUPS TO BE SHOWN AS NEEDED TO FIT WITHIN THE CONCRETE.
7. UNLESS OTHERWISE NOTED, DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR (EXCEPT FOR BEND TYPES 11 AND 13).
8. WHERE SLOPE DIFFERS FROM 45° OFFSET, "H" AND "K" MUST BE SHOWN.
9. WHERE BARS ARE TO BE BENT MORE ACCURATELY THAN STANDARD BENDING TOLERANCES, BENDING DIMENSIONS REQUIRING CLOSER FABRICATION SHOULD HAVE LIMITS INDICATED.
10. FOR RECOMMENDED DIAMETER "D", OF BENDS, HOOKS, ETC., REFER TO TABLE ABOVE, 'CRSI' OR 'ACI' TABLES WHERE APPLICABLE AND REQUIRED.
11. TYPE S1-S6, S11, T1-T3 AND T6-T9 APPLICABLE TO BAR SIZES #3 THROUGH #8.

STIRRUP AND TIE HOOKS

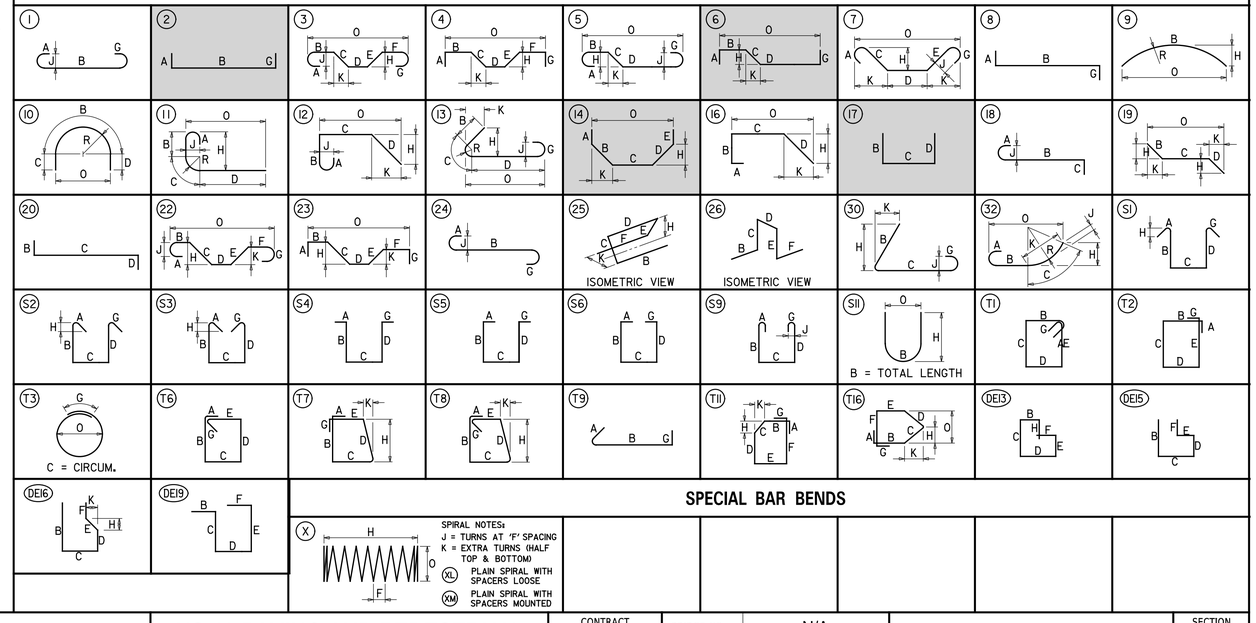


180° AND 90° END HOOKS





STANDARD BAR BENDS



SPECIAL BAR BENDS

SPIRAL NOTES:
J = TURNS AT 'F' SPACING
K = EXTRA TURNS (HALF TOP & BOTTOM)
XL PLAIN SPIRAL WITH SPACERS LOOSE
XM PLAIN SPIRAL WITH SPACERS MOUNTED

ADDENDA / REVISIONS

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

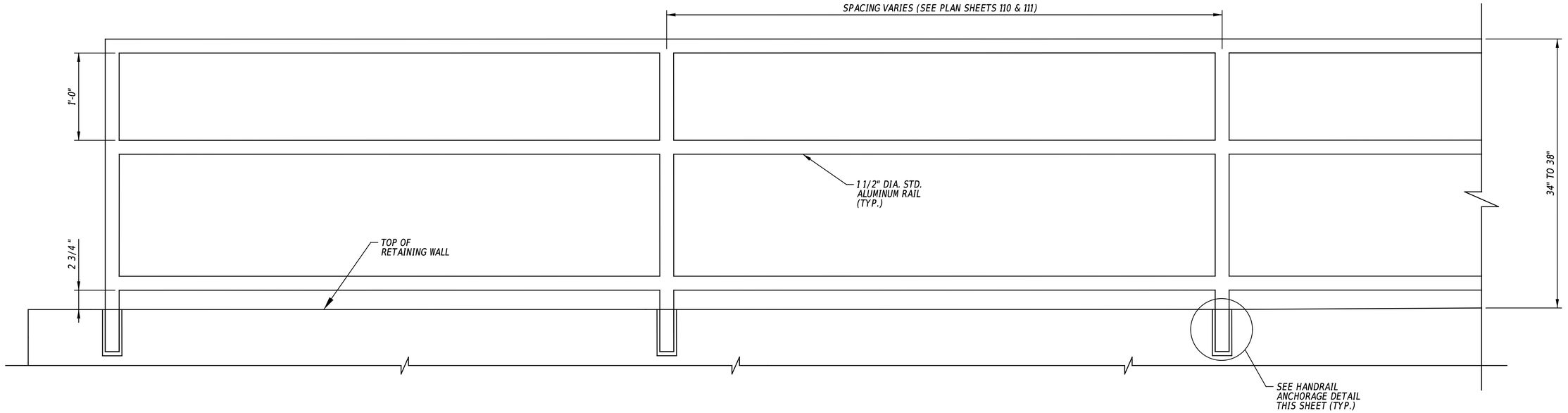
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	D. KENNEDY
COUNTY	CHECKED BY:	A. MANZELLA
NEW CASTLE		

PEDESTRIAN RAMP BAR SCHEDULE

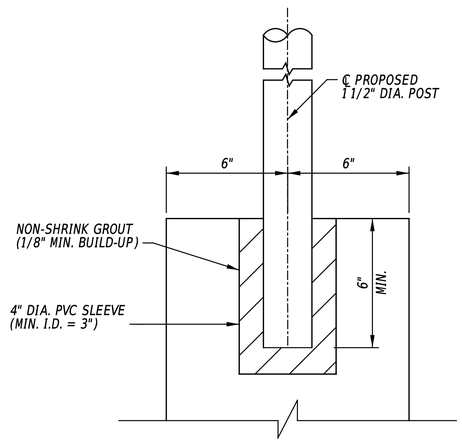
SECTION
PAI
SHEET NO.
113

PENNONI ASSOCIATES INC. | FILE NAME: $FILEAS | MICROSTATION VERSION: $VERSIONS | MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLS | PLOT DRIVER: $PLTDRVSS | DATE PLOTTED: 13-JUN-2024 @ 06:16 | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

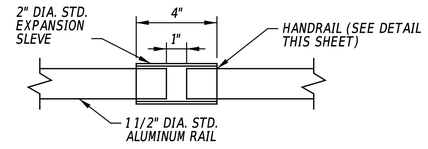
Pennoni



HANDRAIL DETAIL
NOT TO SCALE

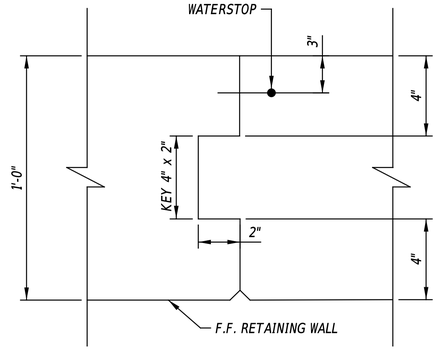


HANDRAIL ANCHORAGE DETAIL
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS SHALL BE LOCATED EVERY 20' ALONG THE TOP, MIDDLE, AND BOTTOM RAILS

HANDRAIL EXPANSION JOINT
NOT TO SCALE

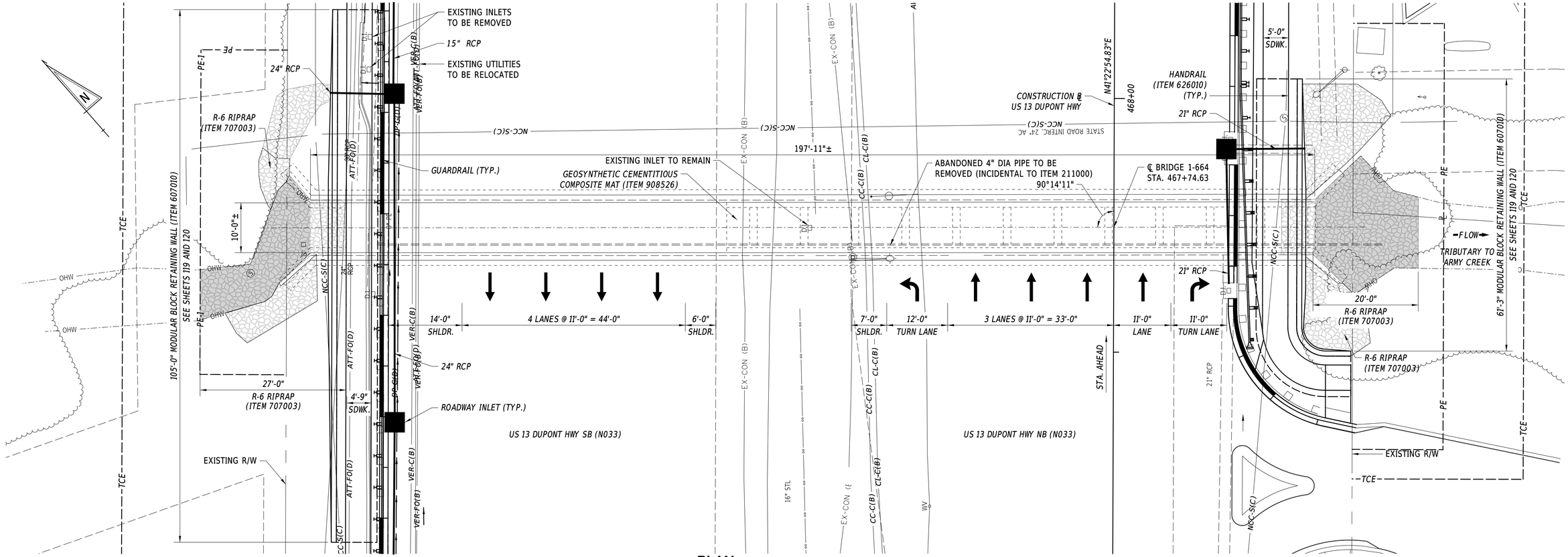


CONSTRUCTION JOINT DETAIL
NOT TO SCALE

HANDRAIL NOTES:
1. CONTRACTOR HAS THE OPTION TO CORE THE RETAINING WALL FOR INSTALLATION OF RAILING POSTS.
2. RAILING SHALL BE FABRICATED WITH 1 ½" DIAMETER POSTS AND RAILS. ALL MATERIAL SHALL BE SCHEDULE 40 ALUMINUM PIPE.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL DETAIL ALL CONNECTIONS, WELDS, MATERIALS, DIMENSIONS, CALL OUTS, AND FINISHES.
4. ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE HANDRAILS SHALL BE INCLUDED UNDER ITEM 626010 - ALUMINUM PEDESTRIAN RAILING.

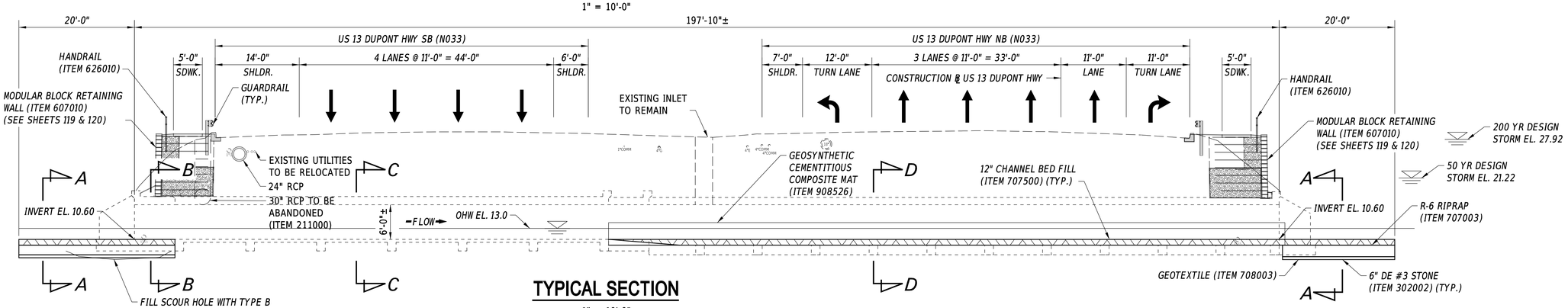
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MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PEDESTRIAN RAMP MISCELLANEOUS DETAILS	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: D. KENNEDY		SHEET NO. 114
					CHECKED BY: A. MANZELLA		



PLAN

1" = 10'-0"



TYPICAL SECTION

1" = 10'-0"

BRIDGE 1-664 NOTES:

1. *DESIGN SPECIFICATIONS:*
   (A) DELDOT BRIDGE DESIGN MANUAL, 2022 EDITION.
   (B) AASHTO LRFD BRIDGE SPECIFICATIONS, 2017, 8TH EDITION, CUSTOMARY U.S. UNITS.
   (C) PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH THE DELDOT STANDARD SPECIFICATIONS, JUNE 2022.

2. *EXISTING CONDITIONS:*
   ALL EXISTING DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, GEOMETRY, AND ELEVATIONS AS NECESSARY PRIOR TO ORDERING ANY MATERIALS AND COMMENCING CONSTRUCTION TO ENSURE PROPER FIT OF THE PROPOSED CONSTRUCTION.

3. *CONTINGENT QUANTITIES:*
   THESE CONTRACT DRAWINGS HAVE BEEN PREPARED BASED ON ORIGINAL CONTRACT PLANS AND FIELD INSPECTION NOTES TAKEN IN DECEMBER 2022. ACTUAL CONDITIONS MAY REQUIRE MODIFICATION IN CONSTRUCTION DETAILS AND WORK QUANTITIES. ALL DIMENSIONS AND DETAILS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS. SEE SHEET 116 FOR PAY ITEM CONTINGENCY PERCENTAGES.

4. *HYDRAULIC DATA:*

DRAINAGE AREA:	*1.0 SQ. MILES*	*DESIGN FREQUENCY:*	*50 YEARS*
DESIGN DISCHARGE:	*637 CFS*	*100-YEAR DISCHARGE:*	*805 CFS*
EXISTING (DESIGN STORM) WSE:	*21.22 FT*	*PROPOSED (DESIGN STORM) WSE:*	*21.22 FT*
EXISTING (DESIGN STORM) VELOCITY:	*10.61 FPS*	*PROPOSED (DESIGN STORM) VELOCITY:*	*10.61 FPS*
EXISTING 100-YEAR WSE:	*24.83 FT*	*PROPOSED 100-YEAR WSE:*	*24.83 FT*
EXISTING 100-YEAR VELOCITY:	*13.41 FPS*	*PROPOSED 100-YEAR VELOCITY:*	*13.41 FPS*
EXISTING WATERWAY OPENING:	*600.0 SQ. FT*	*PROPOSED WATERWAY OPENING:*	*600.0 SQ. FT*

5. *SCOUR ANALYSIS:*
   SCOUR DESIGN FREQUENCY: 200-YEAR
   SCOUR DESIGN FLOOD DISCHARGE: 1006 CFS
   SCOUR DESIGN FLOOD VELOCITY: 14.73 FPS
   DESIGN WATER SURFACE ELEVATION: 27.92 FT

   THE STRUCTURE HAS BEEN ANALYZED FOR THE EFFECTS OF SCOUR IN ACCORDANCE WITH THE HEC-14 - HYDRAULIC DESIGN OF ENERGY DISSIPATORS FOR CULVERTS AND CHANNELS.

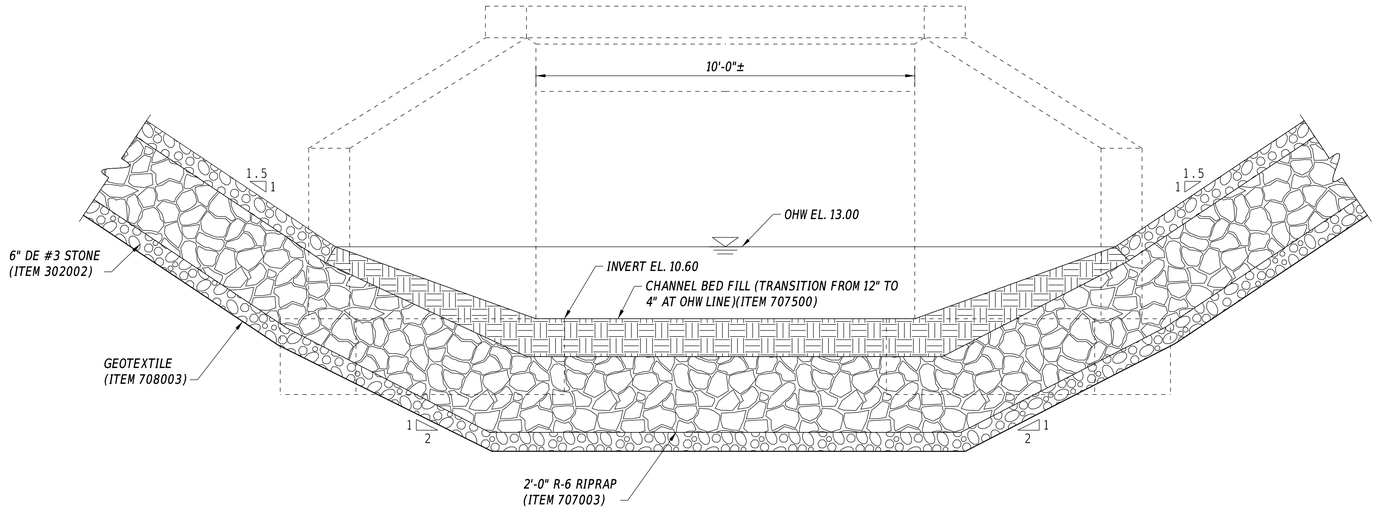
6. *FOR SECTIONS A-A, B-B, C-C, AND D-D, SEE SHEET 116.*

BRIDGE 1-664 INDEX OF SHEETS

SHEET DESCRIPTION	SHEET NO.
PLAN AND TYPICAL SECTION	115
CULVERT TYPICAL SECTIONS	116
CONCRETE REPAIR DETAILS	117-118
MODULAR BLOCK WALL DETAILS	119-120

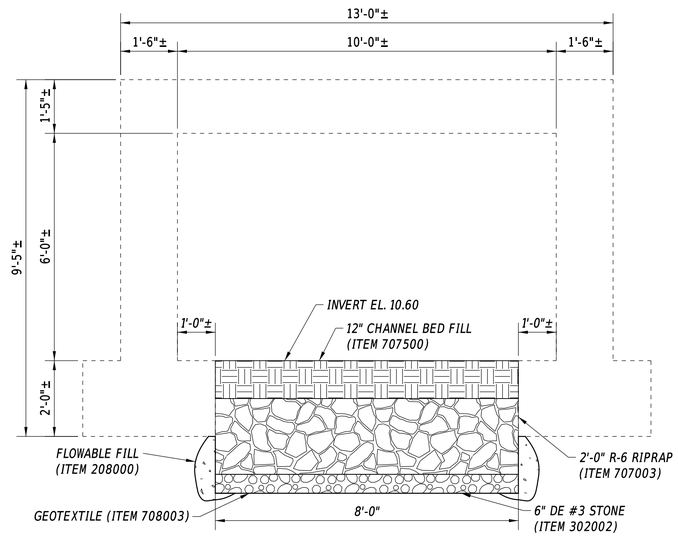
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MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME$

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				T201901102	DESIGNED BY: K. WILSON		PAI
				COUNTY	CHECKED BY: A. MANZELLA		SHEET NO.
				NEW CASTLE			115



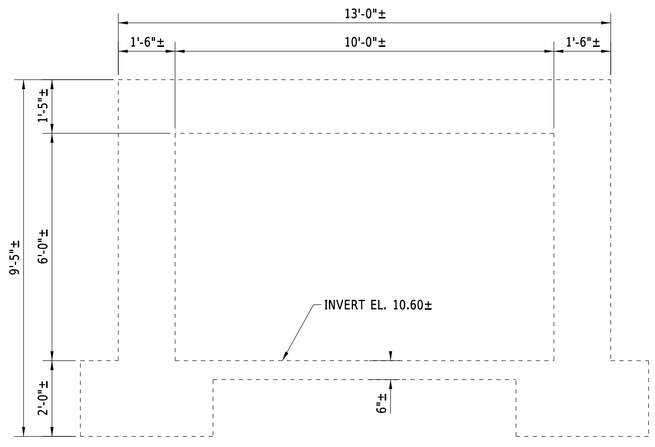
SECTION A-A

1/2" = 1'-0"



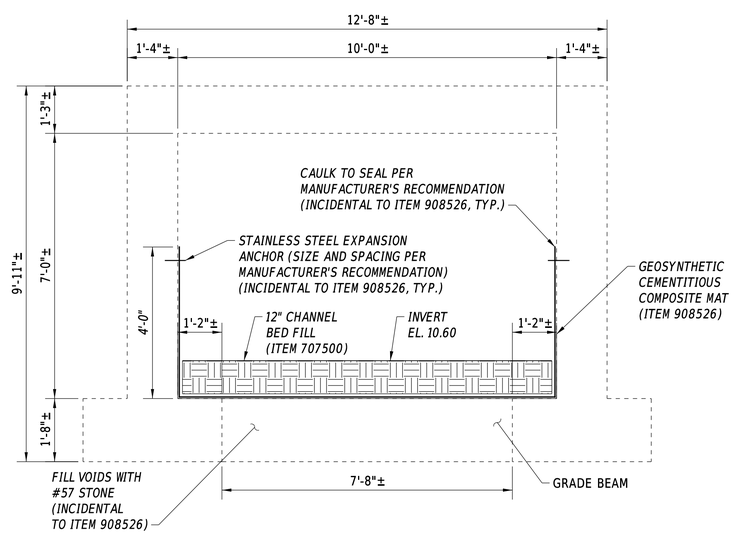
SECTION B-B

1/2" = 1'-0"



SECTION C-C

1/2" = 1'-0"



SECTION D-D

1/2" = 1'-0"

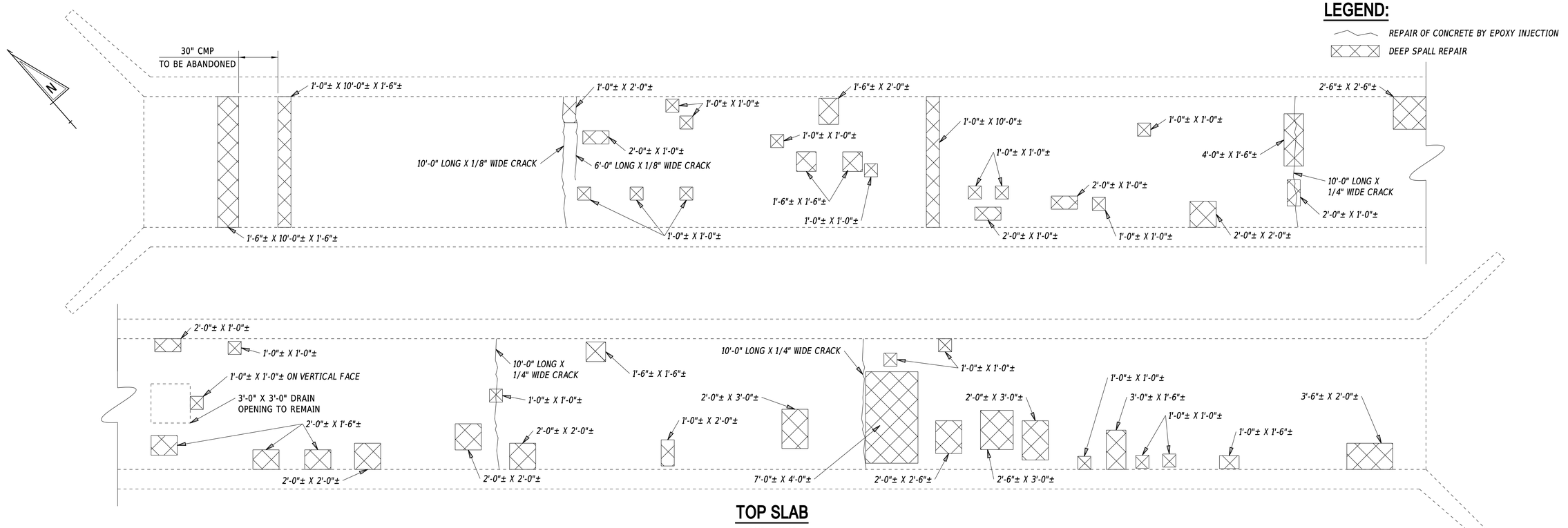
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ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	1-664	BRIDGE 1-664 CULVERT TYPICAL SECTIONS	SECTION
				T201901102	DESIGNED BY:	K. WILSON		PAI
				COUNTY				SHEET NO.
				NEW CASTLE	CHECKED BY:	A. MANZELLA		116

LEGEND:

REPAIR OF CONCRETE BY EPOXY INJECTION

DEEP SPALL REPAIR

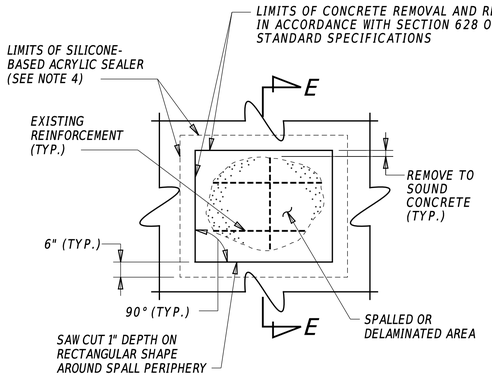


TOP SLAB

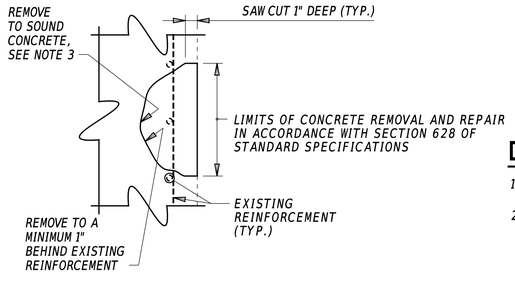
1/4" = 1'-0"

BR 1-664 REPAIR QUANTITIES			
ITEM No.	ITEM DESCRIPTION	UNIT	QTY.
628001	REPAIR OF CONCRETE STRUCTURES BY EPOXY INJECTION	LF	140
628041	DEEP SPALL REPAIR	CF	110
613001	SILICONE-BASED ACRYLIC CONCRETE SEALER	SF	707

NOTE: QUANTITIES SHOWN ARE TOTAL FOR BRIDGE 1-664.



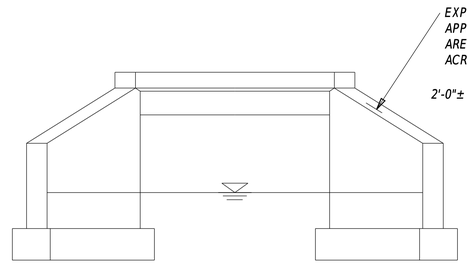
ELEVATION



SECTION E-E

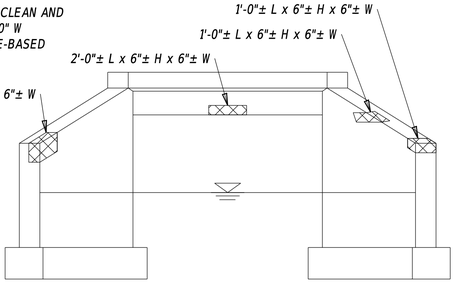
DEEP SPALL REPAIR

NOT TO SCALE



WEST ELEVATION

1/4" = 1'-0"



EAST ELEVATION

1/4" = 1'-0"

DEEP SPALL REPAIR NOTES:

1. DEEP SPALL REPAIRS ARE DEFINED AS PATCHES THAT EXTEND BELOW THE TOP MAT OF REINFORCEMENT. DELAMINATED CONCRETE HAS BEEN ASSUMED AS DEEP SPALL REPAIRS.
2. ALL WORK INVOLVING METHODS OF CONCRETE REMOVAL; CLEANING OF CONCRETE SURFACE AND EXISTING REINFORCEMENT; REPAIRING OR REPLACING DAMAGED REINFORCEMENT AS RESULT OF CONSTRUCTION ACTIVITIES OR SECTION LOSS; PRESENCE OF CONTRACTION OR EXPANSION JOINTS; SURFACE PREPARATION; AND CONCRETE PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 628.3.4 OF THE STANDARD SPECIFICATIONS. PAYMENT INCIDENTAL TO 628041 - DEEP SPALL REPAIR.
3. IF DEPTH OF REPAIR EXTENDS MORE THAN 6" BEYOND SURFACE OF CONCRETE, CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER IMMEDIATELY.
4. PLACE SILICONE-BASED ACRYLIC SEALER AT ALL DEEP SPALL REPAIR LOCATIONS TO THE LIMITS INDICATED AFTER REPAIRS ARE COMPLETED. PAYMENT WILL BE MADE UNDER ITEM 613001 - SILICONE-BASED ACRYLIC CONCRETE SEALER.

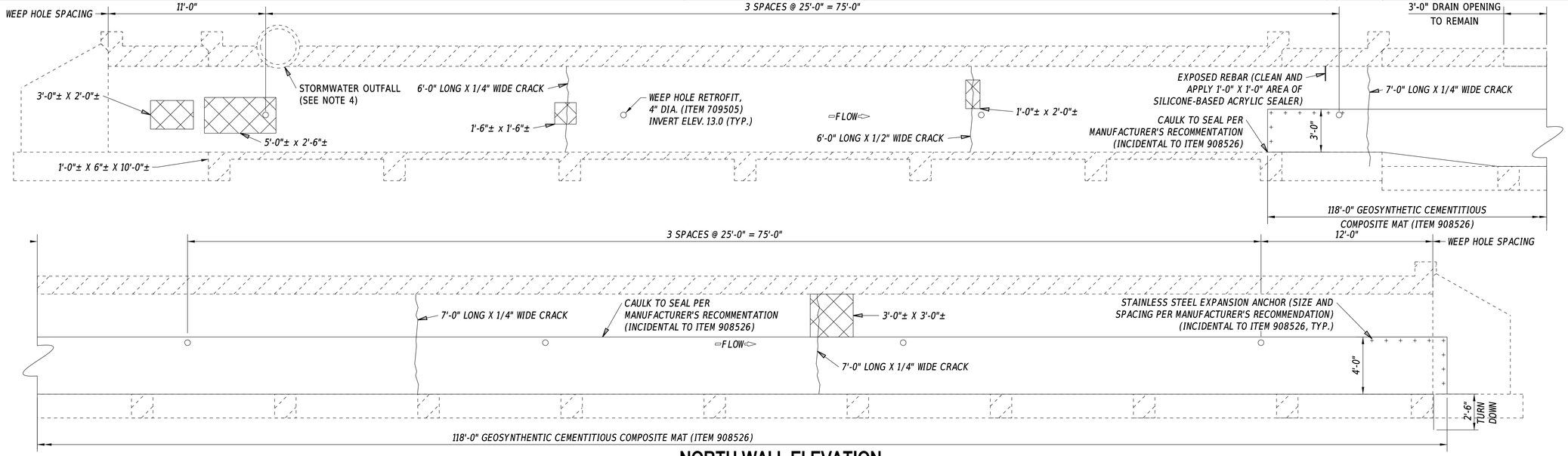
NOTES:

1. THE LOCATION AND QUANTITIES OF THE REPAIRS SHOWN ON THIS DRAWING ARE BASED ON INSPECTION FIELD NOTES AND ARE APPROXIMATE AND REQUIRE VERIFICATION. PRIOR TO STARTING EACH REPAIR, THE LIMITS SHALL BE VERIFIED BY THE CONTRACTOR IN THE PRESENCE OF THE ENGINEER. PAYMENT FOR VERIFICATION OF THE REPAIR LIMITS IS INCIDENTAL TO THE RESPECTIVE REPAIR ITEM.

2. WHERE CRACKS AND SPALLS/DELAMINATIONS EXIST CONCURRENTLY, COMPLETE THE SPALL REPAIR COMPLETELY REMOVING THE ASSOCIATED CRACK. IF THE CRACK EXTENDS LESS THAN 1'-0" BEYOND THE LIMITS OF THE SPALL REPAIR, EXTEND THE LIMITS OF THE SPALL REPAIR TO ENCOMPASS THE CRACK. IF THE CRACK EXTENDS DEEPER THAN THE LIMITS OF CONCRETE REMOVAL, THE CONTRACTOR SHALL REMOVE ADDITIONAL CONCRETE UNTIL THE CRACK IS FULLY REMOVED. IF THE DEPTH OF REMOVAL REACHES MORE THAN 6" FROM THE ORIGINAL FACE OF CONCRETE, ALL WORK ON THE REPAIR SHALL STOP IMMEDIATELY. IF THE CRACK EXTENDS MORE THAN 1'-0" BEYOND THE LMITS OF THE SPALL REPAIR INTO SOUND CONCRETE THE CRACK SHALL BE REPAIRED BY EPOXY INJECTION BEYOND THE LIMITS OF THE SPALL REPAIR AND PAID FOR UNDER ITEM 628001 - REPAIR OF CONCRETE STRUCTURES BY EPOXY INJECTION. PAYMENT FOR CRACK REMOVAL LOCATED WITHIN SPALL REPAIRS WILL BE CONSIDERED INCIDENTAL TO ITEM 628041 - DEEP SPALL REPAIR.

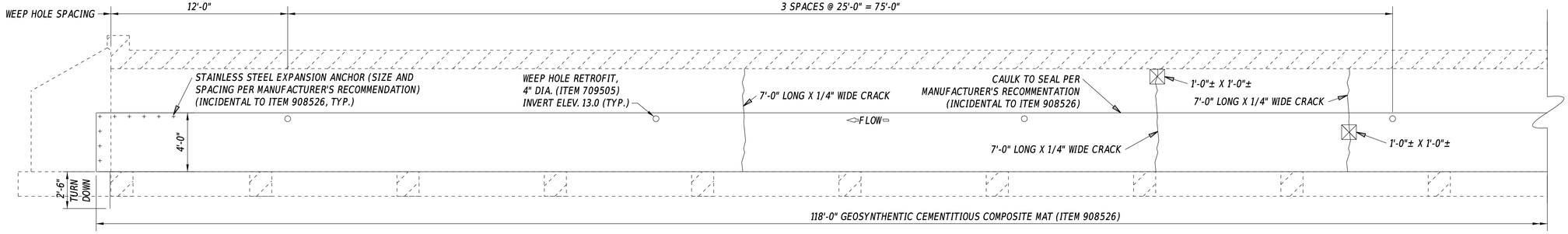
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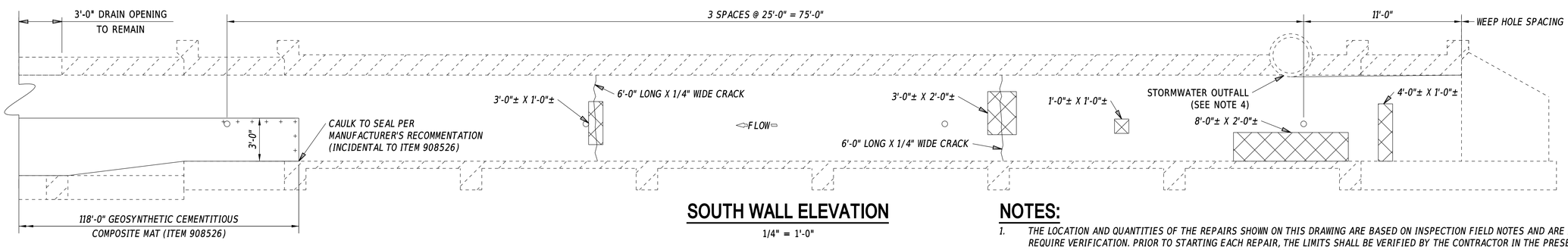
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				T201901102	DESIGNED BY: K. WILSON		PAI
				COUNTY	CHECKED BY: A. MANZELLA		SHEET NO.
				NEW CASTLE			117



NORTH WALL ELEVATION

1/4" = 1'-0"





SOUTH WALL ELEVATION

1/4" = 1'-0"

LEGEND:

REPAIR OF CONCRETE BY EPOXY INJECTION

DEEP SPALL REPAIR

NOTES:

1. THE LOCATION AND QUANTITIES OF THE REPAIRS SHOWN ON THIS DRAWING ARE BASED ON INSPECTION FIELD NOTES AND ARE APPROXIMATE AND REQUIRE VERIFICATION. PRIOR TO STARTING EACH REPAIR, THE LIMITS SHALL BE VERIFIED BY THE CONTRACTOR IN THE PRESENCE OF THE ENGINEER. PAYMENT FOR VERIFICATION OF THE REPAIR LIMITS IS INCIDENTAL TO THE RESPECTIVE REPAIR ITEM.

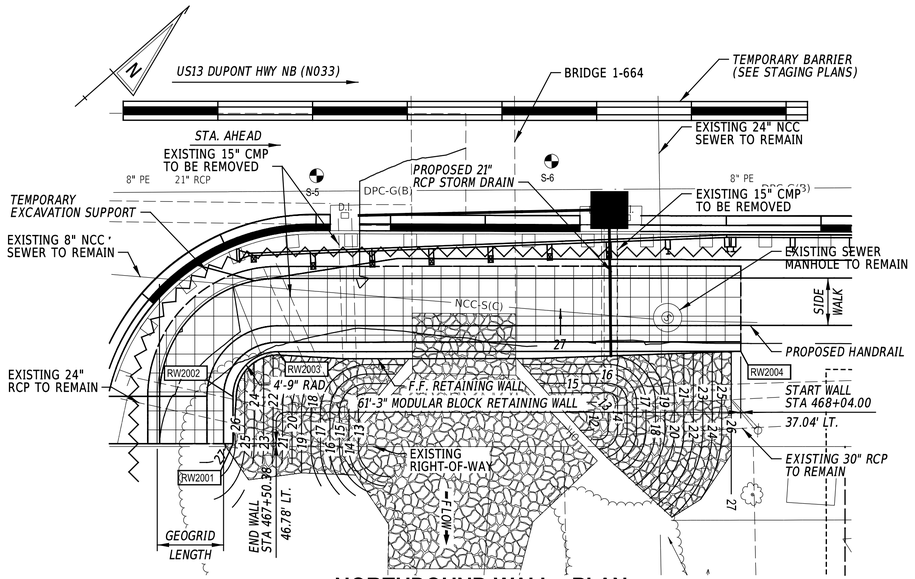
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3. FOR CONCRETE REPAIR DETAILS AND CONCRETE REPAIR QUANTITIES TABLE, SEE SHEET 117.

4. PLUG EXISTING STORMWATER OUTFALLS IN ACCORDANCE WITH DELDOT STANDARD CONSTRUCTION DETAIL NO. D-10. (INCIDENTAL TO ITEM 211000 FOR DRAIN PIPE REMOVAL).

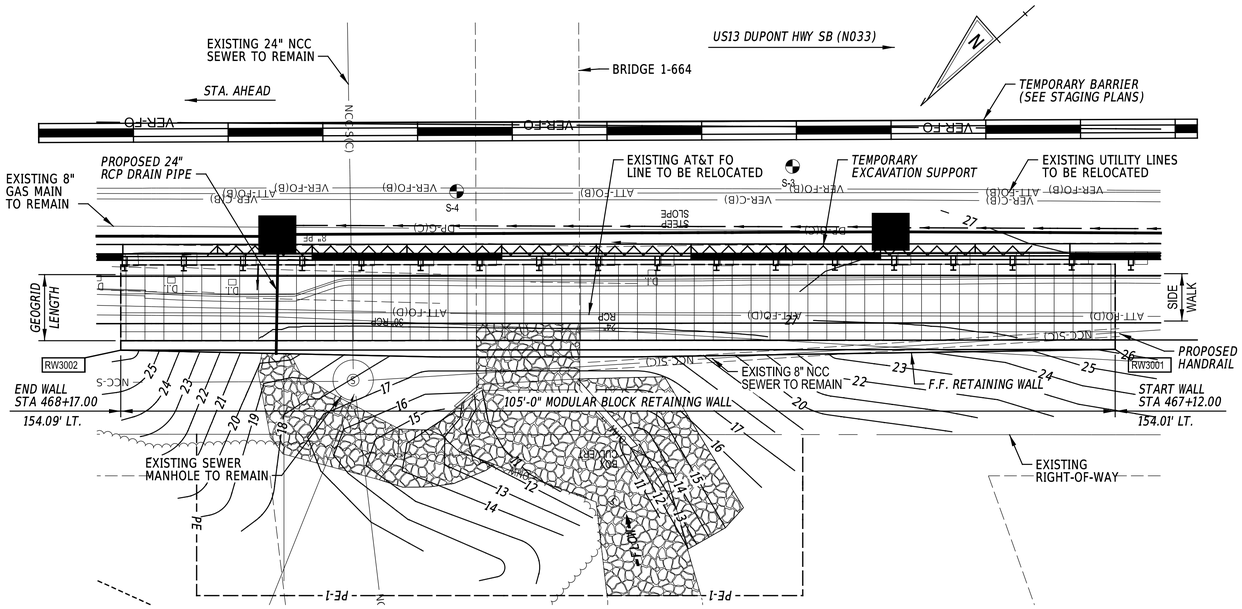
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ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	1-664	BRIDGE 1-664 CONCRETE REPAIR DETAILS	SECTION
				T201901102	DESIGNED BY:	K. WILSON		PAI
				COUNTY				SHEET NO.
				NEW CASTLE	CHECKED BY:	A. MANZELLA		118



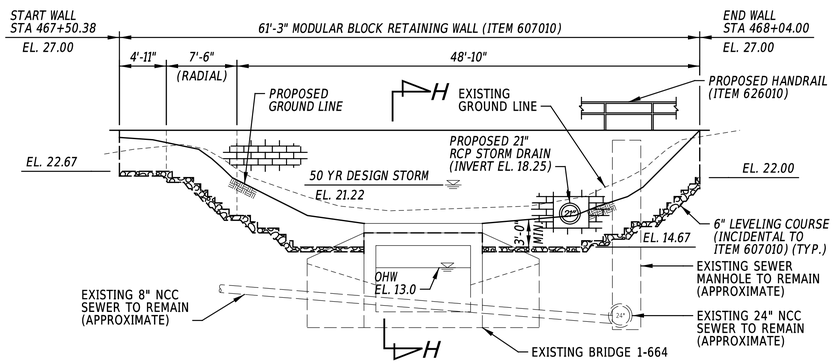
NORTHBOUND WALL - PLAN

(STA. 467+50.38 TO STA. 468+04.00)
1/8" = 1'-0"



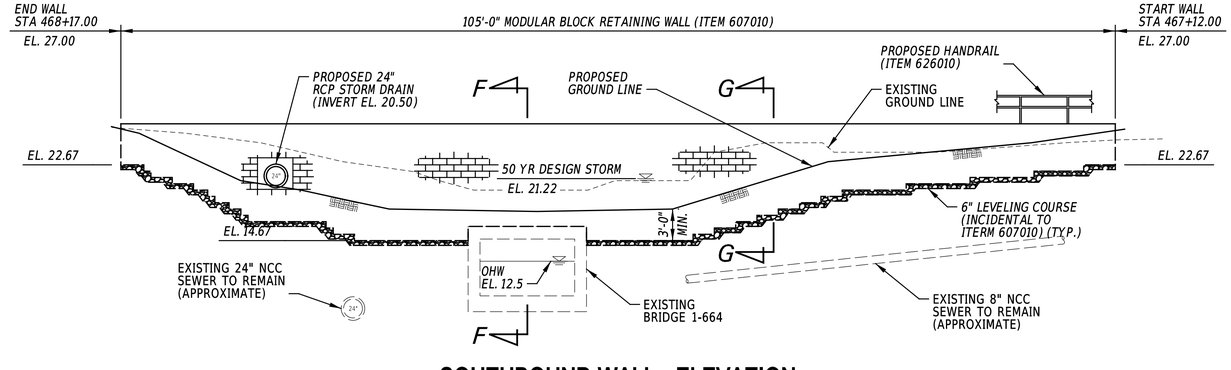
SOUTHBOUND WALL - PLAN

(STA. 467+12.00 TO STA. 468+17.00)
1/8" = 1'-0"



NORTHBOUND WALL - DEVELOPED ELEVATION

1/8" = 1'-0"



NOTES:
1. *FOR SECTIONS F-F, G-G, AND H-H, SEE SHEET 120.*
2. *FOR DETAILS OF HANDRAIL AND PIPE COLLAR AT STORM DRAIN OPENINGS, SEE SHEET 120.*

SOUTHBOUND WALL - ELEVATION

1/8" = 1'-0"

MODULAR BLOCK RETAINING WALL NOTES:

1. *DESIGN CRITERIA:*
   DELDOT BRIDGE DESIGN MANUAL (2022 EDITION) AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (8TH EDITION). INCLUDE UNFACTORED LIVE LOAD SURCHARGE OF 75 PSF.
2. *CONCRETE:*
   ALL CONCRETE PROPERTIES SHALL BE IN ACCORDANCE WITH SECTION 812 OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

   CLASS A - PIPE AND UTILITY COLLARS (f'c = 4,500 PSI).

   ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE.
3. *REINFORCING STEEL:*
   ALL REINFORCING STEEL SHALL BE AASHTO M 31 (ASTM A 615), GRADE 60 AND SHALL BE PROTECTED WITH FUSION BONDED EPOXY, CONFORMING TO AASHTO M 284 (ASTM A 775).

   MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE 2" UNLESS NOTED OTHERWISE.
4. *ARCHITECTURAL FINISH:*
   THE ARCHITECTURAL FINISH OF COMPONENTS OF THE WALLS AT BRIDGE 1-664 SHALL BE CONSISTENT WITH OTHER MODULAR BLOCK RETAINING WALLS IN THIS CONTRACT.
5. *GEOGRID REINFORCING:*
   MINIMUM GEOGRID REINFORCING LENGTH IS 9 FEET MEASURED FROM FRONT OF WALL BASED ON EXTERNAL AND GLOBAL STABILITY. LENGTH MAY BE INCREASED AS REQUIRED BY WALL DESIGN. GEOGRID REINFORCING SHALL BE LOCATED TO CLEAR ANY OBSTRUCTIONS WITH 2" MINIMUM CLEARANCE AND A MAXIMUM 15 DEGREE SKEW.
6. *LEVELING PAD:*
   THE LEVELING PAD STEPS MAY BE LOCATED AT THE DISCRETION OF THE PROPRIETARY WALL MANUFACTURER PROVIDED THAT THE MINIMUM EMBEDMENT IS MAINTAINED AND END ELEVATIONS ARE ACHIEVED IN ACCORDANCE WITH THE SPECIFIED DESIGN CRITERIA. STEP LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
7. *BACKFILL AND FOUNDATION SOILS:*
   MODULAR BLOCK RETAINING WALL BACKFILL SHALL CONSIST OF GRANULAR BACKFILL AND MEET THE REQUIREMENTS OF THE WALL DESIGN. FOR ADDITIONAL REQUIREMENTS OF MODULAR BLOCK RETAINING WALL BACKFILL AND FOUNDATION SOILS, SEE THE SOIL PROPERTIES TABLE ON THIS SHEET. WHEN UNSUITABLE STRATA IS ENCOUNTERED IN THE EXISTING SOIL AT THE LEVEL OF THE PROPOSED WALL FOUNDATION, THE UNSUITABLE MATERIAL SHALL BE REMOVED BY UNDERCUT EXCAVATION AS SPECIFIED IN SECTION 202 OF THE DELDOT STANDARD SPECIFICATIONS. REPLACE THE UNDERCUT SOIL WITH TYPE A BORROW TO THE ELEVATION OF THE PROPOSED WALL FOUNDATION. THE ENGINEER SHALL SPECIFY THE LIMITS OF REMOVAL FOR NECESSARY UNDERCUT EXCAVATIONS. PAYMENT FOR UNDERCUTTING SHALL BE INCLUDED UNDER ITEM 207000 - STRUCTURAL EXCAVATION AND BACKFILL.
8. *INTERNAL STABILITY:*
   THE INTERNAL STABILITY OF THE MODULAR BLOCK RETAINING WALL SHALL BE DESIGNED BY THE PROPRIETARY WALL MANUFACTURER USING THE SOIL PROPERTIES PROVIDED AT EACH MODULAR BLOCK RETAINING WALL LOCATION. THE INTERNAL STABILITY CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF DELAWARE AS INDICATED IN THE PROJECT SPECIFICATIONS.
9. *SERVICE LIFE:*
   ALL MODULAR BLOCK RETAINING WALL COMPONENTS SHALL BE DESIGNED FOR A MINIMUM SERVICE LIFE OF 100 YEARS.
10. *WALL SYSTEM:*
    ONLY ONE MODULAR BLOCK RETAINING WALL SYSTEM SHALL BE USED ON THIS PROJECT.
11. *TEMPORARY EXCAVATION SUPPORT:*
    TEMPORARY EXCAVATION SUPPORT IS REQUIRED TO ALLOW FOR MAINTENANCE OF TRAFFIC ON US13 DURING CONSTRUCTION. THE LIMIT OF THE TEMPORARY EXCAVATION SUPPORT OF THE EXCAVATION SHALL BE THE FULL HEIGHT WHERE CUT EXCAVATIONS CANNOT BE MADE WITHIN THE WORK ZONE PROVIDED IN THE CONSTRUCTION STAGING PLANS. THE TEMPORARY EXCAVATION SUPPORT SYSTEM SHALL BE DESIGNED TO RESIST THE FULL HORIZONTAL EARTH PRESSURE AND HORIZONTAL SOIL PRESSURE DUE TO SURCHARGE OF SOIL AND LIVE LOADS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF DELAWARE. SUBMIT WORKING DRAWINGS AND CONSTRUCT THE TEMPORARY EXCAVATION SUPPORT SYSTEM IN ACCORDANCE WITH SECTION 604 OF THE DELDOT STANDARD SPECIFICATIONS. PAYMENT FOR CONSTRUCTION OF THE TEMPORARY EXCAVATION SUPPORT WILL BE MADE UNDER ITEM 604003 - SHORING. SEE THE SOIL PROPERTIES TABLE FOR ADDITIONAL DESIGN PARAMETERS.
12. *PAYMENT:*
    PAYMENT FOR MODULAR BLOCK RETAINING WALLS INCLUDING MATERIALS, EXCAVATION, LEVELING PAD, BACKFILL, LABOR, AND INCIDENTALS TO THE MODULAR BLOCK WALL CONSTRUCTION SHALL BE INCLUDED UNDER ITEM 607010.

CONSTRUCTION WORKING POINTS

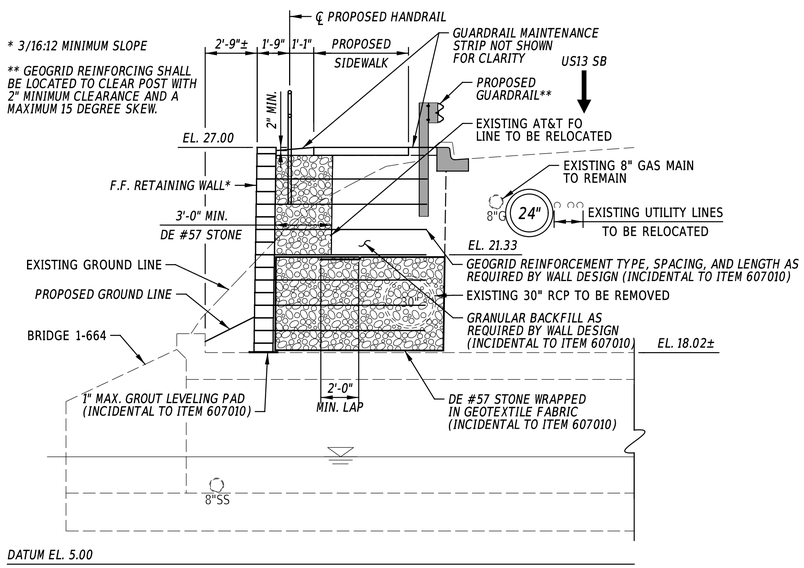
POINT NO.	STATION	*OFFSET*	*NORTHING*	*EASTING*
RW2001	467+50.38	46.78	605454.11	602507.52
RW2002	467+50.38	41.83	605457.38	602503.79
RW2003	467+55.12	37.08	605464.08	602503.36
RW2004	468+04.00	37.04	605500.80	602535.62
RW3001	467+12.00	-154.01	605557.93	602331.41
RW3002	468+17.00	-154.09	605636.81	602400.71

SOIL PROPERTIES TABLE

SOIL TYPE	UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	BRG CAPACITY (PSF)	ACTIVE EARTH PRESSURE COEFF.
DE #57 STONE	120	34 (MIN.)	N/A	0.25
RETAINED SOIL	105	28	N/A	0.32
FOUNDATION ABOVE EL. 17.5	105	28	2,000	N/A
FOUNDATION BELOW EL. 17.5	120	32	3,000	N/A

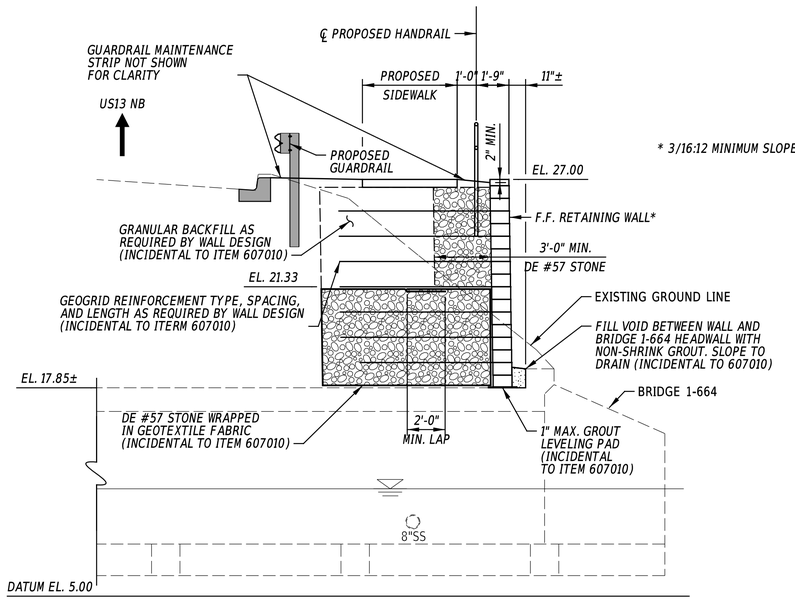
PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:16
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. 1-664	BRIDGE 1-664 MODULAR BLOCK WALL DETAILS	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: D. KENNEDY		SHEET NO. 119
					CHECKED BY: A. MANZELLA		



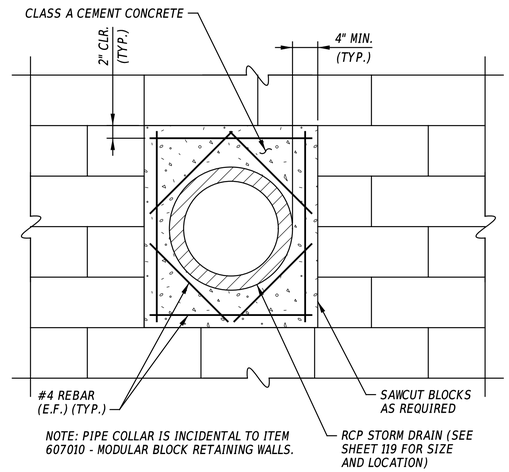
SECTION F-F

1/4" = 1'-0"



SECTION H-H

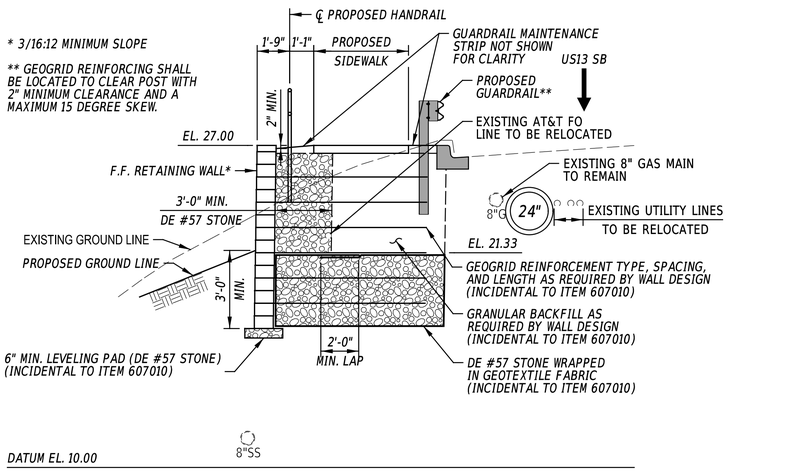
1/4" = 1'-0"



NOTE: PIPE COLLAR IS INCIDENTAL TO ITEM 607010 - MODULAR BLOCK RETAINING WALLS.

PIPE COLLAR DETAIL

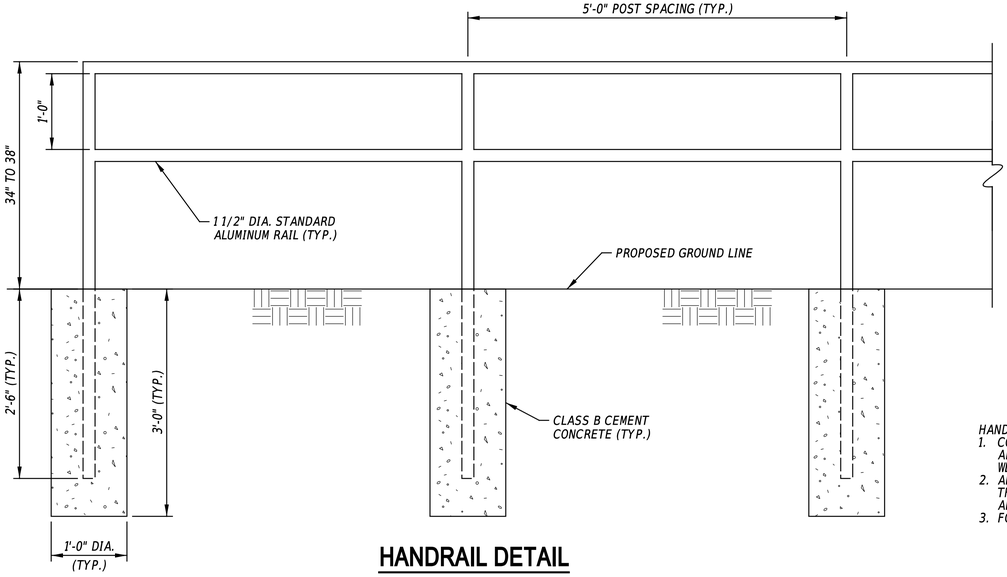
1" = 1'-0"



SECTION G-G

1/4" = 1'-0"

(SOUTHBOUND WALL SHOWN, NORTHBOUND WALL SIMILAR)



HANDRAIL DETAIL

1" = 1'-0"

HANDRAIL NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL DETAIL ALL CONNECTIONS, WELDS, MATERIALS, DIMENSIONS, CALL OUTS, AND FINISHES.
2. ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE HANDRAILS SHALL BE INCLUDED UNDER ITEM 626010 - ALUMINUM PEDESTRIAN RAILING.
3. FOR HANDRAIL EXPANSION JOINT DETAIL, SEE SHEET 114.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | PEN TABLE: $PENTBLS | PLOT DRIVER: $PLTDRVS | DATE PLOTTED: 13-JUN-2024@ 06:16 | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES

ADDENDA / REVISIONS

SCALE AS NOTED

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	1-664
T201901102	DESIGNED BY:	D. KENNEDY
COUNTY	CHECKED BY:	A. MANZELLA
NEW CASTLE		

BRIDGE 1-664 MODULAR BLOCK WALL DETAILS

SECTION	
PAI	
SHEET NO.	
120	

BORING S-1

Depth (ft.)	Water Level	No.	Sample Depth	Blows/6"	Sample Description	AASHTO Class.	Remarks
		1	1.0'	14 8	Moist medium dense brown fine gravel w/ some coarse to fine sand and silt.	A-1-a	
			2.0'		10" RECOVERY		
2.5		2	2.0'	9 3 3 5	Moist loose brown fine gravel w/some fine to coarse sand and silt.	A-1-b	
			4.0'		17" RECOVERY		
		3	4.0'	3 3 7 4	Wet stiff brown fine gravelly silt w/trace fine to coarse sand.	A-4(2)	
5			6.0'		22" RECOVERY		
		4	6.0'	7 9 11 12	Wet very stiff brown clayey silt w/some fine gravel, trace of fine to coarse sand.	A-4(6)	
7.5			8.0'		14" RECOVERY		
		5	8.0'	4 7 9	Wet stiff brown fine gravelly silty clay w/ trace fine to coarse sand.	A-6(7)	
10			10.0'		22" RECOVERY		
		6	10.0'	6 6 8	Wet stiff brown silty clay w/trace fine to coarse sand and fine gravel.	A-6(16)	
			12.0'		24" RECOVERY		
12.5		7	12.0'	13 12 12 13	Wet very stiff brown silty clay w/trace fine to coarse sand and fine gravel.	A-6(10)	
			14.0'		24" RECOVERY		
		8	14.0'	3 5 6 8	Wet stiff brown silty clay w/some fine gravel, trace of fine sand.	A-6(9)	
15			16.0'		22" RECOVERY		
		9	16.0'	7 9 14 9	Wet very stiff brown silty clay w/trace fine gravel and fine sand.	A-6(14)	
17.5			18.0'		24" RECOVERY		
		10	18.0'	4 4 5 6	Wet stiff gray silty clay w/some fine gravel, trace of fine to coarse sand.	A-6(8)	
20			20.0'		24" RECOVERY		
		11	20.0'	3 3 5 5	Wet firm brown clayey silt w/trace coarse to fine sand.	A-4(8)	
			22.0'		24" RECOVERY		
22.5		12	22.0'	4 6 7 7	Wet stiff brown clayey silt w/some fine sand, trace of coarse sand.	A-4(8)	
			24.0'		24" RECOVERY		
		13	24.0'	7 6 13 14	Wet very stiff gray clayey silt w/some fine sand.	A-4(3)	
25			26.0'		24" RECOVERY		
					End Boring		
27.5							
30							
32.5							
35							

BORING S-2

Depth (ft.)	Water Level	No.	Sample Depth	Blows/6"	Sample Description	AASHTO Class.	Remarks
		1	1.0'	4 5	Moist loose brown silty fine gravelly fine to coarse sand w/some clay.	A-1-b	
			2.0'		12" RECOVERY		
2.5		2	2.0'	10 5 7 17	No Recovery		
			4.0'		NR" RECOVERY		
		3	4.0'	5 5 4 6	Wet stiff brown fine sandy silt w/some fine gravel and clay, trace of coarse sand.	A-4(0)	
5			6.0'		10" RECOVERY		
		4	6.0'	4 7 7 9	Wet stiff brown clayey silt w/some fine sand.	A-4(6)	
7.5			8.0'		14" RECOVERY		
		5	8.0'	4 5 5 7	Wet stiff brown clayey silt w/trace fine to coarse sand.	A-4(10)	
10			10.0'		20" RECOVERY		
		6	10.0'	4 6 6 8	Wet stiff brown silty clay w/some fine sand and fine gravel, trace of coarse sand.	A-6(7)	
			12.0'		12" RECOVERY		
12.5		7	12.0'	7 5 7 9	Wet stiff brown silty clay w/trace fine to coarse sand.	A-6(13)	
			14.0'		24" RECOVERY		
		8	14.0'	2 4 4 5	Wet firm brown clayey silt w/some fine sand, trace of coarse sand.	A-4(6)	
15			16.0'		4" RECOVERY		
	■	9	16.0'	5 5 6 6	Wet stiff brown silt w/trace fine to coarse sand and clay.	A-4(1)	
17.5			18.0'		24" RECOVERY		
		10	18.0'	3 8 8 4	Wet stiff gray silt w/some fine sand, trace of coarse sand, fine gravel and clay.	A-4(0)	
20			20.0'		24" RECOVERY		
		11	20.0'	7 7 6 7	Wet stiff gray fine sandy silt w/some clay, trace of coarse sand and fine gravel.	A-4(0)	
			22.0'		22" RECOVERY		
22.5		12	22.0'	7 8 7 6	Wet stiff gray fine sandy silt w/some clay, trace of coarse sand.	A-4(0)	
			24.0'		24" RECOVERY		
		13	24.0'	7 7 10 14	Wet very stiff gray clayey fine sandy silt w/ trace coarse sand.	A-4(0)	
25			26.0'		24" RECOVERY		
					End Boring		
27.5							
30							
32.5							
35							

BORING S-3

Depth (ft.)	Water Level	No.	Sample Depth	Blows/6"	Sample Description	AASHTO Class.	Remarks
2.5		1	2.0'	2 2 3	Moist firm brown clayey coarse sandy silt w/ some fine sand and fine gravel.	A-4(0)	
			4.0'		22" RECOVERY		
		2	4.0'	2 2 2	Wet firm brown fine to coarse sandy silt.	A-4(0)	
5			6.0'		2" RECOVERY		
		3	6.0'	3 4 4 2	No Recovery		
7.5			8.0'		NR" RECOVERY		
		4	8.0'	2 3 3 4	Wet firm brown coarse sandy fine gravelly silt w/some clay and fine sand.	A-4(0)	
10			10.0'		15" RECOVERY		
		5	10.0'	3 3 2 2	Wet firm brown silt w/some coarse to fine sand, fine gravel and clay.	A-4(0)	
			12.0'		10" RECOVERY		
12.5		6	12.0'	15 20 15 20	Wet hard brown silt w/some coarse to fine sand and clay, trace of fine gravel.	A-4(0)	
			14.0'		24" RECOVERY		
		7	14.0'	16 11 10 14	Wet medium dense brown silty coarse sand and fine gravel w/some fine sand.	A-2-4(0)	
15			16.0'		18" RECOVERY		
	■	8	16.0'	14 6 8 8	Wet medium dense brown silty coarse sand and fine gravel w/some fine sand.	A-2-4(0)	
17.5			18.0'		22" RECOVERY		
		9	18.0'	7 9 8 8	Wet medium dense gray coarse sandy fine gravel w/some fine sand, trace of silt and clay.	A-1-b	
20			20.0'		24" RECOVERY		
		10	20.0'	6 7 8 14	Wet stiff brown fine sandy silt w/trace coarse sand.	A-4(0)	
			22.0'		24" RECOVERY		
22.5		11	22.0'	14 16 15 15	Wet hard brown clayey fine sandy silt w/trace coarse sand and fine gravel.	A-4(2)	
			24.0'		23" RECOVERY		
		12	24.0'	12 10 11 4	Wet very stiff brown fine sandy silt w/ some fine gravel, trace of coarse sand.	A-4(0)	
25			26.0'		24" RECOVERY		
					End Boring		
27.5							
30							
32.5							
35							
37.5							

KEY TO SYMBOLS

Symbol Description

Strata symbols

- Well graded gravels and sands
- Silty soils
- Plastic clays
- Poorly graded, silty or clayey sands and gravel

Notes:

1. Exploratory borings were drilled using a 3 1/4 - inch diameter hollow stem auger.
2. These logs are subject to the limitations, conclusions, and recommendations in this report.
3. All blow counts are uncorrected.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | PEN TABLE: $PENTBLSS
MICROSTATION VERSION: $VERSIONS | PLOT DRIVER: $PLTDRVSS
MICROSTATION WORKSPACE: $WORKSPACES | DATE PLOTTED: 13-JUN-2024@ 14:04
USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	BORING LOGS	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: D. KENNEDY		SHEET NO. 121
					CHECKED BY: A. MANZELLA		

BORING S-4

Depth (ft.)	Water Level	No.	Sample Depth	Blows/6"	Sample Description	AASHTO Class.	Remarks
2.5		1	2.0'	5 4 3	Moist loose brown silty coarse sand w/some fine sand and fine gravel.	A-2-4(0)	
			4.0'		11" RECOVERY		
		2	4.0'	1 WH WH WH	Wet soft brown silt w/some fine to coarse sand and fine gravel, trace of clay.	A-4(0)	
5			6.0'		24" RECOVERY		
		3	6.0'	WH WH 1 1	Wet soft brown clayey silt w/some fine to coarse sand, trace of fine gravel.	A-4(2)	
7.5			8.0'		24" RECOVERY		
		4	8.0'	WH WH WH 3	Wet soft brown coarse sandy silt w/some fine sand, fine gravel and clay.	A-4(0)	
10			10.0'		17" RECOVERY		
		5	10.0'	WH 6 10 12	Wet firm brown clayey fine gravelly silt w/ some coarse to fine sand.	A-4(0)	
			12.0'		10" RECOVERY		
12.5		6	12.0'	4 4 2 2	Wet firm brown fine clayey silt w/some fine to coarse sand and clay.	A-4(0)	
			14.0'		10" RECOVERY		
15	■	7	14.0'	1 2 2 1	Wet soft brown clay w/some coarse to fine sand, fine gravel and silt.	A-6(6)	
			16.0'		12" RECOVERY		
		8	16.0'	4 6 6 6	Wet stiff brown fine to coarse sandy silt w/ some fine gravel, trace of clay.	A-4(0)	
17.5			18.0'		15" RECOVERY		
		9	18.0'	10 12 14 14	Wet very stiff brown fine gravelly silt w/ some fine to coarse sand, trace of organic matter.	A-4(0)	
20			20.0'		24" RECOVERY		
		10	20.0'	15 30 21 23	Wet very dense brown silty coarse sand and fine gravel w/some fine sand, trace of organic matter.	A-2-4(0)	
			22.0'		24" RECOVERY		
22.5		11	22.0'	7 6 6 5	Wet stiff brown fine sandy silt w/some fine gravel, trace of coarse sand and clay.	A-4(0)	
			24.0'		18" RECOVERY		
		12	24.0'	7 6 6 6	Wet medium dense brown silty fine sand w/ trace coarse sand and fine gravel.	A-2-4(0)	
25			26.0'		14" RECOVERY		
					End Boring		
27.5							
30							
32.5							
35							
37.5							

BORING S-5

Depth (ft.)	Water Level	No.	Sample Depth	Blows/6"	Sample Description	AASHTO Class.	Remarks
2.5		1	2.0'	7 8 12 14	Moist medium dense brown silty coarse sand and fine gravel w/some fine sand, trace of clay.	A-1-b	
			4.0'		19" RECOVERY		
		2	4.0'	7 9 10 11	Moist medium dense brown silty coarse to fine sand w/trace fine gravel.	A-2-4(0)	
5			6.0'		20" RECOVERY		
		3	6.0'	7 10 7 10	Moist medium dense brown coarse sand and fine gravel w/some fine sand and silt.	A-1-b	
7.5			8.0'		19" RECOVERY		
		4	8.0'	7 6 4 4	Moist loose brown silty coarse sand and fine gravel w/some fine sand.	A-2-4(0)	
10			10.0'		19" RECOVERY		
		5	10.0'	10 7 8 5	Moist medium dense brown silty coarse sand and fine gravel w/some fine sand.	A-2-4(0)	
			12.0'		19" RECOVERY		
12.5		6	12.0'	4 1 3 5	Moist loose brown coarse sand and fine gravel w/some fine sand and silt.	A-1-b	
			14.0'		14" RECOVERY		
15		7	14.0'	10 4 4 3	Moist loose brown silty coarse sandy fine gravel w/some fine sand and clay.	A-2-4(0)	
			16.0'		19" RECOVERY		
		8	16.0'	1 1 1 2	Wet very loose brown coarse sand and fine gravel w/some fine sand and silt.	A-1-b	
17.5			18.0'		10" RECOVERY		
	■	9	18.0'	4 3 3 3	Wet firm brown fine sandy silt w/some coarse sand and fine gravel.	A-4(0)	
20			20.0'		20" RECOVERY		
		10	20.0'	4 3 3 4	Wet firm gray silt w/some fine to coarse sand, fine gravel and clay.	A-4(0)	
			22.0'		20" RECOVERY		
22.5		11	22.0'	7 7 R 10	Wet stiff brown fine sandy silt w/some coarse sand, trace of fine gravel.	A-4(0)	
			24.0'		20" RECOVERY		
		12	24.0'	7 7 7 7	Wet medium dense brown silty fine sand w/ trace coarse sand and silt.	A-2-4(0)	
25			26.0'		24" RECOVERY		
					End Boring		
27.5							
30							
32.5							
35							
37.5							

BORING S-6

Depth (ft.)	Water Level	No.	Sample Depth	Blows/6"	Sample Description	AASHTO Class.	Remarks
		1	1.0'	6 6	Moist medium dense brown silty fine gravel w/some coarse to fine sand and clay.	A-2-4(0)	
			2.0'		10" RECOVERY		
2.5		2	2.0'	7 4 4 4	Wet firm brown silt w/some fine to coarse sand and clay, trace of fine gravel.	A-4(1)	
			4.0'		15" RECOVERY		
		3	4.0'	1 1 1 3	Wet soft brown clayey silt w/some fine to coarse sand and fine gravel.	A-4(1)	
5			6.0'		14" RECOVERY		
		4	6.0'	6 5 5 5	Wet loose brown silty fine gravel w/some coarse to fine sand.	A-2-4(0)	
7.5			8.0'		14" RECOVERY		
		5	8.0'	6 3 4 4	Wet loose brown clayey fine gravel w/some coarse to fine sand and silt.	A-2-4(0)	
10			10.0'		18" RECOVERY		
		6	10.0'	3 2 3 3	Wet loose brown silty coarse sand and fine gravel w/some fine sand and clay.	A-2-4(0)	
			12.0'		10" RECOVERY		
12.5		7	12.0'	4 5 6 4	Wet stiff brown coarse sandy fine gravelly silt w/some fine sand, trace of clay.	A-4(0)	
			14.0'		14" RECOVERY		
15		8	14.0'	1 2 2 2	Wet soft brown silt w/some fine gravel and clay, trace of coarse to fine sand.	A-4(2)	
			16.0'		24" RECOVERY		
		9	16.0'	3 R 3 3	Saturated stiff brown silt w/some clay, trace of fine to coarse sand.	A-4(3)	
17.5	■		18.0'		24" RECOVERY		
		10	18.0'	14 12 6 4	Saturated medium dense brown coarse sandy fine gravel w/some fine sand and silt.	A-1-b	
20			20.0'		15" RECOVERY		
		11	20.0'	3 3 3 9	Saturated firm brown silt w/some fine sand, trace of fine gravel and clay.	A-4(0)	
			22.0'		15" RECOVERY		
22.5		12	22.0'	13 10 10 11	Saturated very stiff brown silt w/some fine sand.	A-4(0)	
			24.0'		20" RECOVERY		
		13	24.0'	12 10 12 18	Saturated very stiff brown silt w/some fine sand, trace of clay.	A-4(1)	
25			26.0'		24" RECOVERY		
					End Boring		
27.5							
30							
32.5							
35							

KEY TO SYMBOLS

Symbol Description

Strata symbols

Well graded gravels and sands

Silty soils

Plastic clays

Poorly graded, silty or clayey sands and gravel

Notes:

1. Exploratory borings were drilled using a 3 1/4 - inch diameter hollow stem auger.
2. These logs are subject to the limitations, conclusions, and recommendations in this report.
3. All blow counts are uncorrected.

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | $PLTDRIVSS
MICROSTATION VERSION: | $VERSIONS
MICROSTATION WORKSPACE: | $WORKSPACES
PEN TABLE: | $PENTBLSS
PLOT DRIVER: | $PLTDRIVSS
DATE PLOTTED: | 13-JUN-2024@ 14:04
USER NAME: | $USERS OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	BORING LOGS	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: D. KENNEDY		SHEET NO. 122
					CHECKED BY: A. MANZELLA		

TEST PIT LOG

Test Pit TP-1

PAGE 1 OF 1

NORTHING 600407.066
EASTING 598505.777

CLIENT Delaware Department of Transportation
PROJECT NAME Contract T201901102 - US13, SWM Improvements
PROJECT NUMBER DEDOT20027
PROJECT LOCATION New Castle County, Delaware
DATE STARTED 11/29/21 **COMPLETED** 11/29/21
GROUND ELEVATION 18.0' +/- NAVD88
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Rubber Tire Backhoe
▽ **DURING EXCAVATION** 5.0' / Elev 13.0'
OPERATOR / HELPER Mike
AT END OF EXCAVATION Not Measured
LOGGED BY S. Corcoran **CHECKED BY** J. Kelley
AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	Depth	Elev.	REMARKS
0.0							
			T	TOPSOIL: Dark brown to black fine sand, some silt, trace organic root matter	1.2	16.8	Moist
			A	Tan to gray CLAY, some fine sand	2.5	15.5	Moist
2.5			B	Orange fine to medium SAND, some to little silty clay	3.0	15.0	Moist
			A	Tan to gray CLAY, some fine to medium to coarse sand, trace fine gravel	5.0	13.0	Moist
	S-1						
5.0 ▽							Sidewall Cave-In Wet
	S-2		B	Orange medium to fine SAND, little to some silty clay, trace fine gravel	7.1	10.9	
7.5			A	Red to gray CLAY, little fine sand	8.3	9.7	
				Test Pit terminated at 8.3 feet.			

NOTES:
Ground surface elevations estimated from a drafted, untitled, undated survey drawing sheet of the project site, prepared by Pennoni Associates, Inc.

TEST PIT LOG

Test Pit TP-2

PAGE 1 OF 1

NORTHING 600354.65
EASTING 598488.762

CLIENT Delaware Department of Transportation
PROJECT NAME Contract T201901102 - US13, SWM Improvements
PROJECT NUMBER DEDOT20027
PROJECT LOCATION New Castle County, Delaware
DATE STARTED 11/29/21 **COMPLETED** 11/29/21
GROUND ELEVATION 22.0' +/- NAVD88
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Rubber Tire Backhoe
DURING EXCAVATION Not Encountered
OPERATOR / HELPER Mike
AT END OF EXCAVATION Not Encountered
LOGGED BY S. Corcoran **CHECKED BY** J. Kelley
AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	Depth	Elev.	REMARKS
0.0							
			T	TOPSOIL: Dark brown to black fine sand, some silt, trace organic root matter	1.0	21.0	
			A	Tan to orange CLAY, some to and fine sand	3.5	18.5	
2.5							
	S-1			Orange medium to fine SAND, little to some silty clay, little fine gravel			
5.0			B		6.0	14.0	
	S-2			Orange fine SAND, little silt			Moist
7.5							Moist
	S-3		A	Red to maroon to gray CLAY, trace fine to medium sand	8.0	14.0	
10.0					11.0	11.0	
				Test Pit terminated at 11.0 feet.			

NOTES:
Ground surface elevations estimated from a drafted, untitled, undated survey drawing sheet of the project site, prepared by Pennoni Associates, Inc.

KEY TO SYMBOLS

Symbol Description

Strata symbols

Well graded gravels and sands

Silty soils

Plastic clays

Poorly graded, silty or clayey sands and gravel

Notes:

1. Exploratory borings were drilled using a 3 1/4 - inch diameter hollow stem auger.
2. These logs are subject to the limitations, conclusions, and recommendations in this report.
3. All blow counts are uncorrected.

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni-ddot.tbl
FILE NAME: ...\BO003.dgn	PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 6/13/2024 @ 2:04:56 PM
MICROSTATION WORKSPACE: DELDOT-v8i-OPENROADS	USER NAME: ogreen OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	BORING LOGS	SECTION
				T201901102	DESIGNED BY:	O. GREEN		PAI
				COUNTY	CHECKED BY:	S. ANDERSON		SHEET NO.
				NEW CASTLE				123

ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

   A. THE PURPOSE OF THIS SHEET IS TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR THE AGENCY PERMIT REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.

   B. IF A DEPARTURE FROM THE APPROVED PLANS (WHICH WOULD AFFECT ANY NATURAL AND/OR CULTURAL RESOURCES) IS NECESSARY, CONTACT THE ENVIRONMENTAL STUDIES SECTION AT (302-760-2264 OR DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV) TO ALLOW FOR COORDINATION WITH THE APPROPRIATE RESOURCE AGENCIES AND APPROVAL.

   C. USE OF THIS SHEET DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.

2. NATURAL RESOURCE ISSUES:

   A. PERMIT REQUIREMENTS/APPROVALS *:
   U.S. ARMY CORPS OF ENGINEERS (COE): NWP #3 A AND C, NO PCN REQUIRED
   DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): CONSISTENT WITH DELAWARE CODE CHAPTER 72, SECTION 7217, SPECIAL EXEMPTION (B)
   DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): ISSUED
   NCC DEPT. OF LAND USE (NCC): N/A
   CITY OF WILMINGTON (COW): N/A
   US COAST GUARD (USCG): N/A

   * THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING AND/OR OBTAINING THESE APPROVALS.
   ** THE CONTRACTOR MUST ENSURE THAT THESE PERMITS/APPROVALS ARE IN THEIR POSSESSION PRIOR TO BEGINNING CONSTRUCTION IN THE PERMITTED AREA(S) AND ENSURE THEY ARE DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.

   B. CONSTRUCTION RESTRICTIONS:
   FISHERIES - NONE
   ENDANGERED SPECIES - NONE
   MIGRATORY BIRDS - NONE

3. CULTURAL RESOURCE ISSUES:

   A. BASED ON CURRENT COORDINATION, THE PROJECT IS CLEAR FOR CULTURAL RESOURCES AND EXEMPT FROM SHPO REVIEW UNDER STIPULATION III OF DELDOT'S PROGRAMMATIC AGREEMENT WITH FEDERAL HIGHWAYS ADMINISTRATION (FHWA) AND DELAWARE STATE HISTORIC PRESERVATION OFFICE (SHPO). AS A RESULT, DELDOT CULTURAL RESOURCE STAFF HAVE ISSUED A FINDING OF NO HISTORIC PROPERTIES AFFECTED FOR THIS PROJECT. THERE ARE NO CULTURAL RESOURCE CONCERNS AS LONG AS THE PROJECT SCOPE IS NOT MODIFIED AND ALL STAGING AND STOCKPILING REMAIN WITHIN THE EXISTING ROADWAY FOOTPRINT. SHOULD IT BE NECESSARY TO ADD ADDITIONAL ACCESS LOCATIONS, OTHER STOCKPILING/STAGING AREAS, OR OTHERWISE ALTER THE SCOPE OF THE PROJECT, DELDOT ENVIRONMENTAL STUDIES STAFF WILL NEED TO BE CONTACTED AT DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV OR (302) 760-2093 TO REVIEW THESE CHANGES FOR POTENTIAL CULTURAL RESOURCES CONCERNS.

   B. ANY STAGING AND STOCKPILE AREA(S) OUTSIDE THE PROJECT'S LOC THAT INDIVIDUALLY OR CUMULATIVELY ARE LARGER THAN 10,000 SQUARE FEET MUST BE APPROVED BY DELDOT'S ARCHAEOLOGIST. SUBMIT ALL STAGING AND STOCKPILE AREAS OUTSIDE THE PROJECT'S LOC FOR APPROVAL TO DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV. WITHIN 30 DAYS, DELDOT WILL:

   A. APPROVE THE USE OF THE PROPOSED STAGING AND STOCKPILE AREA(S),
   B. REJECT THE REQUEST, OR
   C. PERFORM AN ARCHAEOLOGICAL SURVEY TO DETERMINE WHETHER TO APPROVE OR REJECT THE REQUEST, WHICH MAY TAKE UP TO 3 MONTHS.

   IF AN ARCHAEOLOGICAL SURVEY IS NECESSARY, DELDOT OR A CONSULTANT ON ITS BEHALF WILL UNDERTAKE THE SURVEY.

4. STREAM RESTORATION AND RIPRAP TREATMENT:

   A. FOLLOW THE SPECIAL PROVISION FOR ITEM 707500 - CHANNEL BED FILL IN REGARDS TO THE SALVAGING OF ON-SITE NATURAL STREAM BOTTOM MATERIAL OR THE FURNISHING OF OFFSITE MATERIAL. IF SUFFICIENT SOURCES FOR CHANNEL BED FILL DO NOT EXIST ON-SITE, ANY NEW MATERIAL MUST CONFORM TO THE REQUIREMENTS OF ITEM 707500 - CHANNEL BED FILL. RECESS ALL RIPRAP IN THE CHANNEL BOTTOM (I.E. BELOW THE WATER LINE) ONE FOOT BELOW STREAM BED ELEVATION AND CHOKE WITH BORROW TYPE 'B' SO THAT ALL OF THE VOIDS IN THE RIPRAP ARE FILLED WITH SPECIFIED MATERIAL. PAYMENT UNDER ITEM 209002 - BORROW, TYPE B. COVER THE RIPRAP WITH A MINIMUM OF 12" CHANNEL BED FILL. MATCH THE FINAL CHANNEL ELEVATIONS WITH EXISTING ELEVATIONS AT THE UPSTREAM AND DOWNSTREAM PROJECT LIMITS. THROUGH THE STRUCTURE, ELEVATIONS WILL BE AS NOTED ON THE PLANS. PAYMENT UNDER ITEM 707500 - CHANNEL BED FILL.

   B. RESTORE OTHER AREAS OF THE CHANNEL BOTTOM AFFECTED BY CONSTRUCTION (INCLUDING, BUT NOT LIMITED TO, THE LOCATION OF SUMP PITS, STABILIZED OUTFALLS, TEMPORARY PIPES AND/OR SANDBAG DIKES AND DIVERSIONS) TO EXISTING CONDITIONS. FILL ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES WITH CHANNEL BED FILL. PAYMENT UNDER ITEM 707500 - CHANNEL BED FILL.

   C. WHEN ALL EROSION AND SEDIMENT CONTROL MEASURES ARE REMOVED AND THE STREAM RETURNS TO ITS NATURAL FLOW CONDITIONS, THE FLOW MUST REMAIN ABOVE GROUND AND ABOVE THE RIPRAP (I.E. THE FLOW CANNOT BE "LOST" IN THE RIPRAP OR BENEATH THE STRUCTURE). IF THIS IS NOT ACHIEVED, THE CONTRACTOR WILL BE REQUIRED TO TAKE CORRECTIVE ACTION AT THE CONTRACTOR'S EXPENSE.

   D. CHOKE ALL RIPRAP ON THE STREAM BANK, OUTSIDE THE CHANNEL BED, WITH DELAWARE #57 STONE. PLACE JUST ENOUGH CHOKE MATERIAL TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP, AND THEN FINISH FILLING THE VOIDS WITH TOPSOIL SO THAT THE RIPRAP PEAKS ARE BARELY VISIBLE. PLACE AN ADDITIONAL 6-INCH TOPSOIL LAYER ON TOP OF THE RIPRAP. SLOPE SEEDING WILL BE DONE WITH ITEM 908019 - STREAMBANK SEED MIX, SEEDING. FOLLOWING THE SEEDING OPERATION, INSTALL ITEM 908020 - EROSION CONTROL BLANKET (ECB) MULCH, OR OTHER BLANKET AS SHOWN ON THE PLANS. ECB AT TOE OF SLOPE CAN BE EITHER TRENCHED IN OR STAPLED AT 6" ON CENTER. COMPLETE ALL WORK, STARTING WITH THE INITIAL CHOKING WITH TOPSOIL THROUGH THE SEEDING AND MULCHING PRIOR TO ANY RAIN EVENT. DELAWARE #57 STONE IS INCIDENTAL TO THE RIPRAP ITEM. ALL OTHER ITEMS WILL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

   E. THE TOPSOIL/SEED/MULCH CAN BE PLACED BEFORE OR AFTER THE REMOVAL OF THE STREAM DIVERSION. IF THE PLACEMENT OCCURS AFTER STREAM DIVERSION REMOVAL, USE A TURBIDITY CURTAIN TO MINIMIZE IN-STREAM SEDIMENTATION. PAYMENT WILL BE INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.

ENVIRONMENTAL COMPLIANCE NOTES

5. PROTECTION OF RESOURCES:

   A. USE SILT FENCE OR CONSTRUCTION SAFETY FENCE ALONG THE LIMITS OF CONSTRUCTION IN ALL AREAS WHERE WATER WETLANDS ARE BEING IMPACTED (AS SHOWN ON ENVIRONMENTAL COMPLIANCE SHEETS), AND ALSO IN ANY AREA WHERE WATER/WETLANDS EXIST WITHIN 20 FEET OF THE LIMIT OF CONSTRUCTION (AS SHOWN ON CONSTRUCTION PLAN SHEETS). ANY CONTRACTOR ACCESS BEYOND THE LIMIT OF CONSTRUCTION IS STRICTLY PROHIBITED.

   B. USE SANDBAGS OR COMPOST FILTER LOG (CFL) TO SECURE SILT FENCE AT AREAS ADJACENT TO WOODED UPLANDS/ ALL WETLANDS IN LIEU OF TRENCHING UNLESS PROPER EROSION AND SEDIMENT CONTROL CANNOT BE MAINTAINED. REMOVE SANDBAGS AND CFLS (AND CONTENTS) IN THEIR ENTIRETY WHEN NO LONGER NEEDED. SANDBAGS/CFLS USED TO SECURE THE SILT FENCE IS INCIDENTAL TO ITEM 905001 - SILT FENCE. THE ENVIRONMENTAL STUDIES SECTION (302-760-2259 OR DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV) CAN PROVIDE FURTHER GUIDANCE REGARDING THIS METHOD OF INSTALLATION.

   C. CLEARLY MARK ALL TREES TO BE REMOVED WITH PAINT PRIOR TO THE EROSION AND SEDIMENT CONTROL MEETING.

ORIGINAL SHEET PREPARED BY PENNONI ON 4-30-2021. SHEET LAST UPDATED ON 5-8-2023.

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION	IMPACT/LOSS
1-O-01	GROUT BAGS	63.91	0.0015	31.96	DNREC / USACE	LOSS
3-O-01	RIPRAP	1652.22	0.0379	826.11	DNREC / USACE	IMPACT
3-O-02	RIPRAP	349.06	0.0080	174.53	DNREC / USACE	IMPACT
TOTAL IMPACTS		2065.19	0.0474	1032.60	DNREC / USACE	

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
1-OT-01	WORK AREA / E&S CONTROLS	885.37	0.0203	N/A	DNREC / USACE
1-OT-02	WORK AREA / E&S CONTROLS	89.33	0.0021	N/A	DNREC / USACE
2-OT-01	WORK AREA / E&S CONTROLS	310.85	0.0071	N/A	DNREC / USACE
3-OT-01	WORK AREA / E&S CONTROLS	198.27	0.0046	N/A	DNREC / USACE
3-OT-02	WORK AREA / E&S CONTROLS	103.89	0.0024	N/A	DNREC / USACE
3-OT-03	WORK AREA / E&S CONTROLS	815.67	0.0187	N/A	DNREC / USACE
TOTAL IMPACTS		2403.38	0.0552	N/A	DNREC / USACE

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 14:11
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

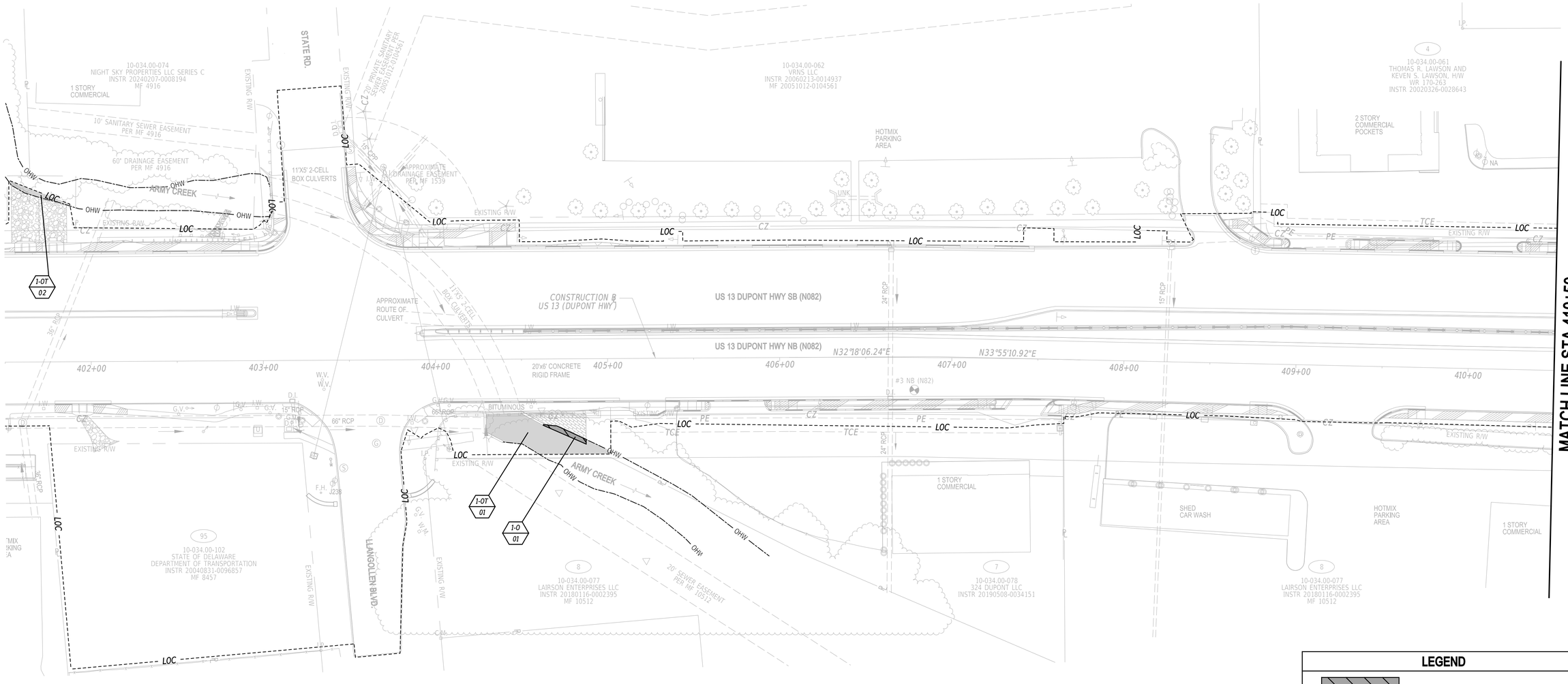
NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

ENVIRONMENTAL COMPLIANCE PLAN

SECTION
PAI
SHEET NO.
124



PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION	IMPACT/LOSS
1-O-01	GROUT BAGS	63.91	0.0015	31.96	DNREC / USACE	LOSS
TOTAL PERMANENT OPEN WATER IMPACTS		63.91	0.0015	31.96	DNREC / USACE	

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
1-OT-01	WORK AREA / E&S CONTROLS	885.37	0.0203	N/A	DNREC / USACE
1-OT-02	WORK AREA / E&S CONTROLS	89.33	0.0021	N/A	DNREC / USACE
TOTAL TEMPORARY OPEN WATER IMPACTS		974.70	0.0224	N/A	DNREC / USACE

LEGEND

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- LOC — LIMIT OF CONSTRUCTION
- OHW — ORDINARY HIGH WATER
- XX / YX — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER
- O = OPEN WATER IMPACT
- T = TEMPORARY IMPACT
- W = WETLAND IMPACT

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

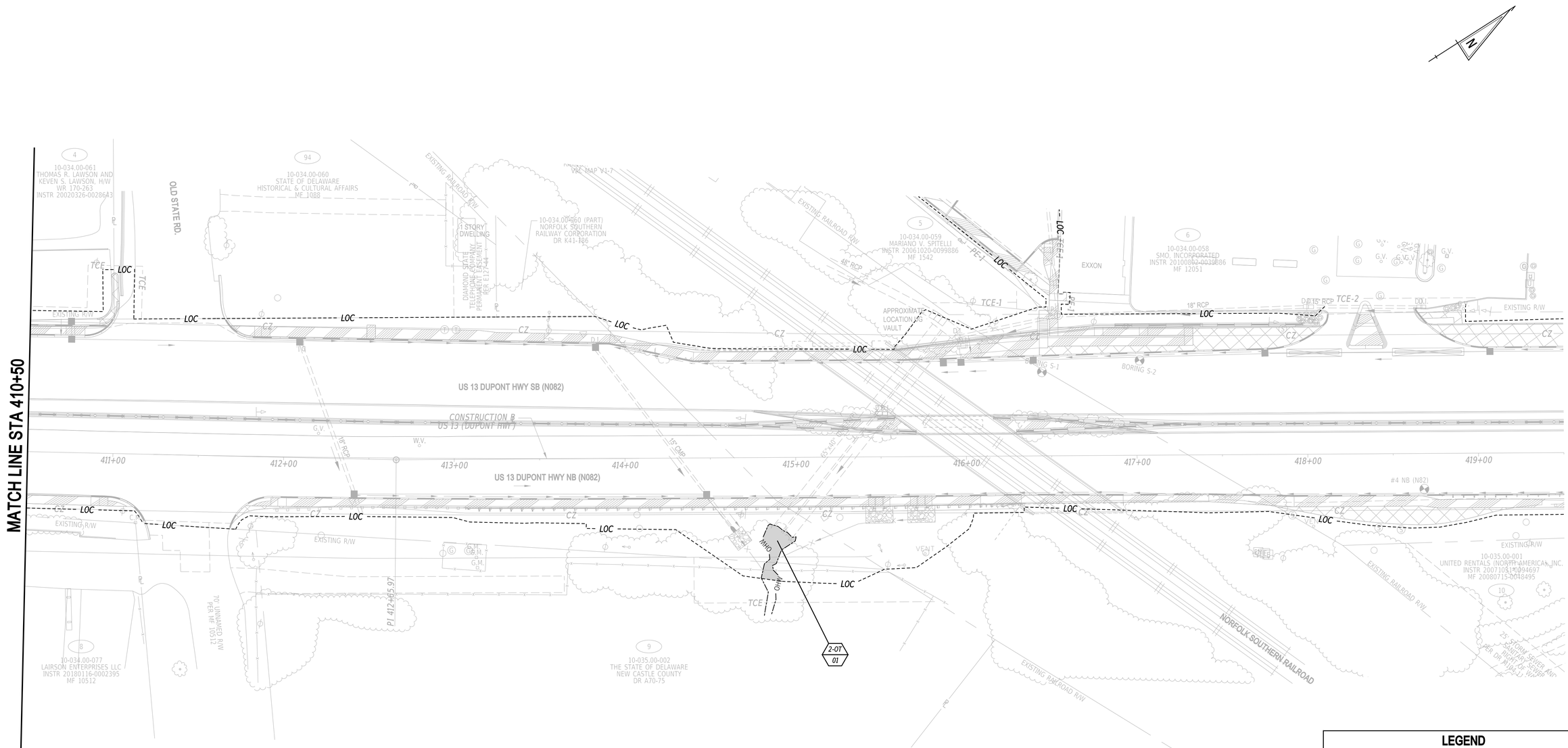
CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

ENVIRONMENTAL COMPLIANCE PLAN

SECTION	PAI
SHEET NO.	125

PENNONI ASSOCIATES INC. $FILEAS
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MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
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PLOT DRIVER: $PLTDRIVERS
DATE PLOTTED: 13-JUN-2024@ 14:11
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

Pennoni



LEGEND

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- LOC — LOC — LIMIT OF CONSTRUCTION
- OHW — OHW — ORDINARY HIGH WATER
- XX / YX — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT
T = TEMPORARY IMPACT
W = WETLAND IMPACT

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-OT-01	WORK AREA / E&S CONTROLS	310.85	0.0071	N/A	DNREC / USACE
TOTAL TEMPORARY OPEN WATER IMPACTS		310.85	0.0071	N/A	DNREC / USACE

PENNONI ASSOCIATES INC. | PEN TABLE: $PRINTTBLS$
FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRVDS$
MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 13-JUN-2024@ 14:11
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

ADDENDA / REVISIONS

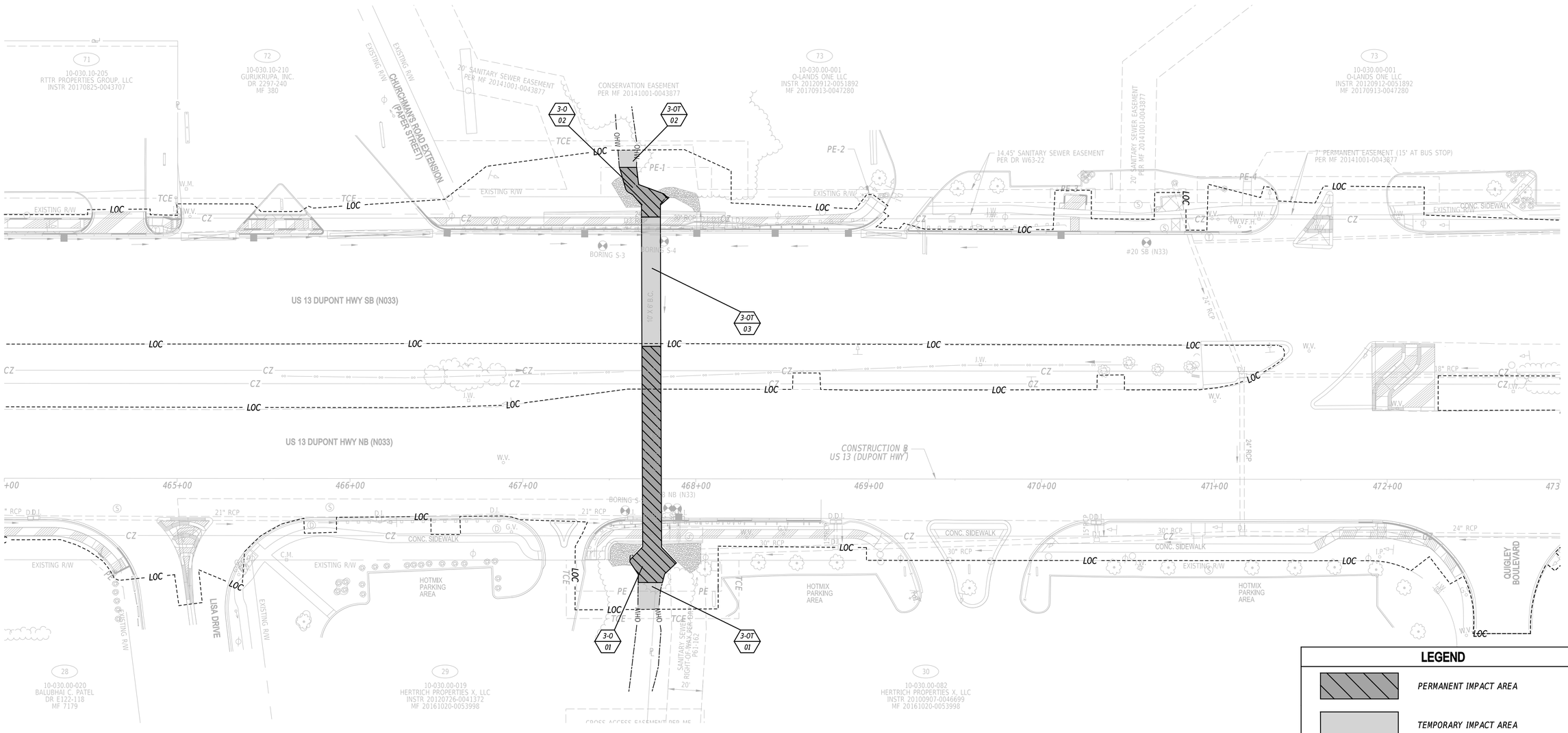
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	O. GREEN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

ENVIRONMENTAL COMPLIANCE PLAN

SECTION: PAI
SHEET NO.: 126



PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION	IMPACT/LOSS
3-O-01	RIPRAP	1652.22	0.0379	826.11	DNREC / USACE	IMPACT
3-O-02	RIPRAP	349.06	0.0080	174.53	DNREC / USACE	IMPACT
TOTAL PERMANENT OPEN WATER IMPACTS		2001.28	0.0459	1000.64	DNREC / USACE	

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
3-OT-01	WORK AREA / E&S CONTROLS	198.27	0.0046	N/A	DNREC / USACE
3-OT-02	WORK AREA / E&S CONTROLS	103.89	0.0024	N/A	DNREC / USACE
3-OT-03	WORK AREA / E&S CONTROLS	815.67	0.0187	N/A	DNREC / USACE
TOTAL TEMPORARY OPEN WATER IMPACTS		1117.83	0.0257	N/A	DNREC / USACE

LEGEND

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- LOC — LIMIT OF CONSTRUCTION
- OHW — ORDINARY HIGH WATER
- XX / YX — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER
- O = OPEN WATER IMPACT
- T = TEMPORARY IMPACT
- W = WETLAND IMPACT

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	1-664
DESIGNED BY:	O. GREEN
CHECKED BY:	P. HORSEY

ENVIRONMENTAL COMPLIANCE PLAN

SECTION: PAI
SHEET NO.: 127

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$
FILE NAME: $FILE$ | PLOT DRIVER: $PLTDRV$
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: 13-JUN-2024@ 14:11
MICROSTATION WORKSPACE: $WORKSPACE$ | USER NAME: $USER$ | OFFICE LOCATION: $OFFICENAME$

GENERAL MOT NOTES

1. ALL MAINTENANCE OF TRAFFIC ACTIVITIES SHALL CONFORM TO SECTION 801 OF THE DELDOT "STANDARD SPECIFICATIONS", DATED JUNE 2021.

2. AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR REQUIREMENT FOR THIS PROJECT.

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ASTSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
(X)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT AND THAT PERSON'S SOLE RESPONSIBILIY SHALL BE THE MANAGEMENT AND SUPERVISION OF THE PROJECT'S TEMPORARY TRAFFIC CONTROL ACTIVITIES. THIS PERSON SHALL NOT HAVE ANY OTHER ROLE ON THE PROJECT. RESPONSIBILITIES AND REQUIREMENTS OF THE ATSSA SUPERVISOR ARE DEFINED IN SECTION 812 OF THE STANDARD SPECIFICATIONS. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 801000.

3. THIS PROJECT IS CONSIDERED A SIGNIFICANT PROJECT AS DEFINED BY DELDOT'S WORK ZONE MOBILITY PROCEDURES AND GUIDELINES. A TYPE B TRANSPORTATION MANAGEMENT PLAN (TMP) HAS BEEN PREPARED AND IS AVAILABLE FOR VIEWING BY CONTACTING THE DEPARTMENT'S SAFETY PROGRAMS MANAGER AT (302)659-4060. ALL MONITORING REQUIREMENTS OF THE TMP SHALL BE CONDUCTED BY DELDOT FORCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MODIFICATIONS TO THE TMP SHALL BE COMPLETED BY THE CONTRACTOR IF CHANGES TO THE TIME RESTRICTIONS OR THE TRAFFIC CONTROL PLAN ARE DESIRED. THE MODIFIED TMP SHALL BE PREPARED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF DELAWARE.

4. ACCEPTABLE MATERIALS FOR TEMPORARY PEDESTRIAN PATHS SHALL INCLUDE CONCRETE, HOT-MIX, COMPACTED ASPHALT MILLINGS, GRADED AGGREGATE BASE COURSE OR PLYWOOD WALKWAY STRUCTURE. PLYWOOD WALKWAY STRUCTURES SHALL ALSO INCLUDE DETECTABLE EDGING AND RAILINGS IN ACCORDANCE WITH ADA GUIDELINES AND THE DELAWARE MUTCD. TEMPORARY PEDESTRIAN PATHS SHALL BE INCIDENTAL TO ITEM 801000 UNLESS OTHERWISE SPECIFIED IN THE PLANS.

5. THE USE OF MILLINGS AND GRADED AGGREGATE BASE COURSE (GABC) IN THE TRAVEL WAY, TEMPORARY TRAVEL WAY, HIGH VOLUME ENTRANCES AND ACCESS RAMP FOR THE PURPOSE OF PROVIDING A TEMPORARY ROADWAY SURFACE, POTHOLE REPAIR, TAPEREDEDGE FOR UTILITIES, BUTT JOINTS, AND LONGITUDINAL DROP-OFFS (MILLING AND PAVING OPERATIONS) IS PROHIBITED UNLESS IT IS OTHERWISE DESIGNATED TO BE USED IN THE CONTRACT PLANS. USE COLD PATCH, BITUMINOUS CONCRETE, BITUMINOUS CONCRETE WEDGE, OR TAPER MILL, AS NOTED IN THE CONTRACT DOCUMENTS OR APPROVED BY THE ENGINEER. PAYMENT FOR COLD PATCH, BITUMINOUS CONCRETE OR BITUMINOUS CONCRETE WEDGE SHALL BE PAID AS NOTED IN THE CONTRACT DOCUMENTS. TAPER MILL BITUMINOUS CONCRETE SHALL BE PAID UNDER THE BITUMINOUS CONCRETE MILLING ITEM. MILLINGS OR GABC SHALL BE USED AT THE FOLLOWING LOCATIONS WHERE ACCESS TO A BUSINESS, RESIDENCE, OR EDGE DROP OFF NEEDS TO BE MAINTAINED UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER TO USE BITUMINOUS CONCRETE OR COLD PATCH. ALL MILLINGS AND GABC WILL BE ROLLED AND COMPACTED TO HELP PREVENT THE MATERIAL FROM UNRAVELLING:

   a. DRIVEWAYS
   b. ENTRANCES
   c. LOW VOLUME ACCESS RAMPS (IDENTIFIED IN THE CONTRACT DOCUMENTS)
   d. EDGE DROP-OFFS ADJACENT TO LIVE ROADWAY(LANES AND SHOULDER) AND THE PROPOSED ROAD CONSTRUCTION
   e. EDGE OF ROADWAY DROP-OFF

   GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED FOR ROADWAY WEDGE/FILLET BETWEEN TRAVEL LANES AND PAVEMENT BOX, EDGE OF TRAVELWAY, DRIVEWAY OR ENTRANCE ACCESS SHALL BE INCIDENTAL TO ITEM NO. 801000 - MAINTENANCE OF TRAFFIC. THE BASE COURSE MATERIAL SHALL BE PLACED AT NO GREATER THAN THE SLOPE SPECIFIED IN TABLE 6G-1 AND SHALL BE COMPACTED. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE PAY ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR MILLINGS OR GABC TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM. VERTICAL DIFFERENCES SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

6. PRIOR TO THE INITIATION OF ANY MAINTENANCE OF TRAFFIC SCHEME, THE CONTRACTOR SHALL COORDINATE WITH ANY ADJACENT CONTRACTORS TO ENSURE COHESION BETWEEN MAINTENANCE OF TRAFFIC SCHEMES.

7. THE FOLLOWING CONSIDERATIONS SHALL BE TAKEN INTO ACCOUNT WHEN ADDRESSING ACCESSIBLE PEDESTRIAN MAINTENANCE OF TRAFFIC:
   a. ALL PEDESTRIANS, INCLUDING PERSONS WITH DISABILITIES, SHALL BE PROVIDED WITH A REASONABLY SAFE, CONVENIENT AND ACCESSIBLE PATH THAT REPLICATES AS MUCH AS PRACTICABLE THE EXISTING PEDESTRIAN FACILITIES.
   b. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.
   c. PROVIDE PEDESTRIAN ACCESS THROUGH OR AROUND THE WORK ZONE. IF A DETOUR IS CHOSEN THE CONTRACTOR MUST SUBMIT THE DETOUR ROUTE TO THE ENGINEER FOR REVIEW AND APPROVAL. THE DETOUR ROUTE MUST MEET OR EXCEED THE CURRENT CONDITIONS.
   d. WORK SHOULD BE PHASED SO THAT ALL AREAS OF AN INTERSECTION/SIDEWALK PATH ARE NOT UNDER CONSTRUCTION AT THE SAME TIME UNLESS A CLEAR PATH IS PROVIDED AND IDENTIFIED.
   e. TRAFFIC CONTROL DEVICES AND OTHER CONSTRUCTION MATERIALS AND FEATURES SHALL NOT INTRUDE INTO THE USABLE WIDTH OF THE SIDEWALK, TEMPORARY PATHWAY OR OTHER PEDESTRIAN FACILITY.
   f. SIGNS AND OTHER DEVICES MOUNTED LOWER THAN 7 FT ABOVE THE TEMPORARY PEDESTRIAN PATHWAY SHALL NOT PROJECT MORE THAN 4 IN. INTO ACCESSIBLE PEDESTRIAN ROUTE.
   g. A SMOOTH, CONTINUOUS HARD SURFACE SHALL BE PROVIDED THROUGHOUT THE ENTIRE LENGTH AND WIDTH OF THE PEDESTRIAN ROUTE THROUGHOUT CONSTRUCTION. THERE SHALL BE NO CURBS OR VERTICAL ELEVATION CHANGES GREATER THAN ¼ IN. IN GRADE OR TERRAIN THAT COULD CAUSE TRIPPING OR BE A BARRIER TO WHEELCHAIR USE. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.

8. THE CONTRACTOR SHALL PROVIDE ONE TRAFFIC OFFICER FOR ANY OPERATION WHERE AN EXISTING SIGNALIZED INTERSECTION IS PLACED IN FLASH MODE. THE TRAFFIC OFFICER IS THE ONLY INDIVIDUAL THAT CAN PLACE A TRAFFIC SIGNAL IN FLASH MODE, AND THE TRAFFIC OFFICER SHALL STAY ON LOCATION UNTIL THE SIGNAL IS PLACED BACK IN STOP-AND-GO OPERATION IN ACCORDANCE WITH DELDOT'S TEMPORARY TRAFFIC CONTROL WITHIN INTERSECTIONS MEMORANDUM (WWW.MUTCD.DELDOT.GOV).

9. THE CONTRACTOR SHALL HOLD WEEKLY MAINTENANCE OF TRAFFIC/CONSTRUCTION PHASING MEETING WITH THE ENGINEER AND DISTRICT SAFETY OFFICER. MEETING WILL DISCUSS PLANS FOR UPCOMING WEEK AND REQUIREMENTS FOR PEDESTRIAN MAINTENANCE OF TRAFFIC.

10. ALL NECESSARY SIGNS, PAVEMENT MARKINGS AND ROADSIDE APPURTENANCES SHALL BE INSTALLED PRIOR TO THE OPENING/REOPENING OF A ROADWAY OR RAMP. A WALKTHROUGH WITH THE ENGINEER, TRAFFIC SAFETY, TRAFFIC CONSTRUCTION AND OTHER PERSONNEL SHALL OCCUR NO LESS THAN 48 HOURS PRIOR TO THE OPENING/REOPENING OF ANY ROAD OR RAMP.

11. FISHEYE DETECTION ZONES TO BE UTILIZED WHEN EXISTING LOOP DETECTORS ARE IMPACTED DURING CONSTRUCTION, UNTIL PROPOSED LOOP DETECTORS ARE INSTALLED AND ACTIVE.

12. ALL COMMERICAL ENTRANCES SHALL BE OPEN DURING BUSINESS HOURS.

13. MESSAGE BOARDS SHALL BE PLACED 10 DAYS IN ADVANCE OF THE WORK AND REMAIN IN PLACE FOR 5 DAYS AFTER THE START OF THE WORK. LOCATIONS OF MESSAGE BOARDS AND MESSAGES DISPLAYED SHALL BE REVIEWED AND APPROVED BY THE DISTRICT SAFETY OFFICER.

14. THE FOLLOWING MATRICES PROVIDE TIME RESTRICTIONS FOR LANE CLOSURES:

SR 273 EB and WB Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	1	1	1	1	1	1														1	1	1	1	1
Monday	1	1	1	1	1	1														1	1	1	1	1
Tuesday	1	1	1	1	1	1														1	1	1	1	1
Wednesd	1	1	1	1	1	1														1	1	1	1	1
Thursday	1	1	1	1	1	1														1	1	1	1	1
Friday	1	1	1	1	1	1														1	1	1	1	1
Saturday	1	1	1	1	1	1														1	1	1	1	1

	All Lane Open
1	One Lane Closure Permitted

US 40 EB, WB, and Side Streets Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	1	1	1	1	1	1	1	1	1	1										1	1	1	1	1
Monday	1	1	1	1	1	1	1			1	1	1	1	1	1					1	1	1	1	1
Tuesday	1	1	1	1	1	1	1			1	1	1	1	1	1					1	1	1	1	1
Wednesday	1	1	1	1	1	1	1			1	1	1	1	1	1					1	1	1	1	1
Thursday	1	1	1	1	1	1	1			1	1	1	1	1	1					1	1	1	1	1
Friday	1	1	1	1	1	1	1			1	1	1	1	1	1					1	1	1	1	1
Saturday	1	1	1	1	1	1	1	1	1	1										1	1	1	1	1

	All Lane Open
1	One Lane Closure Permitted

US 13 NB, SB and Side Streets
Allowable Lane Closure Hours (Through & Turn Lanes)
(2 lanes/direction from Llangollen Blvd to Station 440+00)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	1	1	1	1	1	1	1	1	1													1	1	1
Monday	1	1	1	1	1	1																1	1	1
Tuesday	1	1	1	1	1	1																1	1	1
Wednesday	1	1	1	1	1	1																1	1	1
Thursday	1	1	1	1	1	1																1	1	1
Friday	1	1	1	1	1	1																1	1	1
Saturday	1	1	1	1	1	1	1	1	1													1	1	1

	All Lane Open
1	One Lane Closure Permitted

US 13 and Side Streets (4 lanes/direction from Station 440+00 to 552+00 Lincoln Ave)

Northbound Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	3	3	3	3	3	3	3	3	2	2	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Monday	3	3	3	3	3	2	1			1	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Tuesday	3	3	3	3	3	2	1			1	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Wednesday	3	3	3	3	3	2	1			1	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Thursday	3	3	3	3	3	2	1			1	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Friday	3	3	3	3	3	2	1			1	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Saturday	3	3	3	3	3	3	3	3	2	2	1	1	1	1	1	1	1	1	1	2	2	2	3	3

Southbound Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	3	3	3	3	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1	2	2	2	3	3
Monday	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1				1	2	2	3	3
Tuesday	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1				1	2	2	3	3
Wednesday	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1				1	2	2	3	3
Thursday	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1				1	2	2	3	3
Friday	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1				1	2	2	3	3
Saturday	3	3	3	3	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1	2	2	2	3	3

	All Lane Open
1	One Lane Closure Permitted
2	Two Lane Closure Permitted
3	Three Lane Closure Permitted

US 13 and Side Streets (3 lanes/direction from Station 552+00 Lincoln Ave - Station 594+47 Boulden Blvd)

Northbound Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	2	2	2	2	2	2	2	2	1	1	1									1	1	1	2	2
Monday	2	2	2	2	2	2	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Tuesday	2	2	2	2	2	2	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Wednesday	2	2	2	2	2	2	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Thursday	2	2	2	2	2	2	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Friday	2	2	2	2	2	2	1			1	1									1	1	1	1	2
Saturday	2	2	2	2	2	2	2	2	1	1	1	1									1	1	2	2

Southbound Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00AM	01:00AM	02:00AM	03:00AM	04:00AM	05:00AM	06:00AM	07:00AM	08:00AM	09:00AM	10:00AM	11:00AM	12:00PM	01:00PM	02:00PM	03:00PM	04:00PM	05:00PM	06:00PM	07:00PM	08:00PM	09:00PM	10:00PM	11:00PM
Sunday	2	2	2	2	2	2	2	2	1	1	1	1									1	1	2	2
Monday	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1					1	1	1	2	2
Tuesday	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1					1	1	1	2	2
Wednesday	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1					1	1	1	2	2
Thursday	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1					1	1	1	2	2
Friday	2	2	2	2	2	2	1	1	1	1	1	1								1	1	1	2	2
Saturday	2	2	2	2	2	2	2	2	1	1	1	1									1	1	2	2

	All Lane Open
1	One Lane Closure Permitted
2	Two Lane Closure Permitted

CONSTRUCTION PHASING & M.O.T

	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
CSF XXX	CONSTRUCTION SAFETY FENCE / LENGTH
CSF	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
PHASE	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

PENNONI ASSOCIATES INC. — S:\FILES
FILE NAME: — PLOT DRIVER: SPLTDRV55
MICROSTATION VERSION: — DATE PLOTTED: 13-JUN-2024 @ 06:17
MICROSTATION WORKSPACE: — USER NAME: SUSERS — OFFICE LOCATION: $OFFICENAMES
PEN TABLE: SPENTBL55

ADDENDA / REVISIONS

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL NOTES

SECTION	PAI
SHEET NO.	128

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. PLAN APPROVAL IS VALID FOR A FIVE YEAR PERIOD BEGINNING ON THE DATE OF THE STORMWATER ENGINEER'S SIGNATURE. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE FIVE YEARS, NOTIFY THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION. ANY DEVIATIONS TO THE SWPPP NEED APPROVAL FROM THE ENGINEER.

Steven Sisson — 7/16/2024

DELDOT STORMWATER ENGINEER — DATE

"I, CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THESE PLANS MEET THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS AND THAT ALL CLEARING, GRADING, AND CONSTRUCTION WILL BE ACCOMPLISHED PURSUANT TO THE PLAN."

AMOUNT OF DISTURBED AREA FOR THE PROJECT	21.181 AC
ADDED IMPERVIOUS FOR THE PROJECT	42,244.66 SF
HUC-10 WATERSHED	ARMY CREEK - DELAWARE RIVER BROAD DUKE CANAL - DELAWARE RIVER LOWER CHRISTINA RIVER

2. ASSIGN A RESPONSIBLE PERSON TO BE ON SITE DURING ALL EARTH DISTURBING ACTIVITIES AND BE AN ACTIVE DNREC BLUE CARD HOLDER AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS (DSSR). BE FAMILIAR WITH AND COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT.

3. FILE AS A CO-PERMITTEE IN ACCORDANCE WITH SECTION 901 OF THE STANDARD SPECIFICATIONS. POSTING AND MAINTENANCE OF THE NOI PERMIT COVERAGE IS INCIDENTAL TO THE CONTRACT.

4. REVISIONS TO THE SWPPP OR ENVIRONMENTAL COMPLIANCE PLAN SHEET(S) SHALL BE APPROVED PRIOR TO INITIATION IN THE FIELD. THE ENGINEER IS RESPONSIBLE FOR APPROVING ALL REDLINES AND REVISIONS TO THE SWPPP.

5. IMPLEMENTING AND MAINTAINING POLLUTION PREVENTION DEVICES AND PRACTICES IS REQUIRED UNDER THE DELAWARE CONSTRUCTION GENERAL PERMIT AND THE DSSR AND ARE INCIDENTAL TO THE CONTRACT.

6. A SOIL STOCKPILE, AS DESCRIBE IN DELDOT STANDARD SPECIFICATIONS AND DEFINED IN THE DELAWARE EROSION & SEDIMENT CONTROL HANDBOOK, IS ANY LOCATION WITHIN THE LIMITS OF CONSTRUCTION WHERE A TEMPORARY DEPOSIT OF EXCAVATED SOIL IS BEING RESERVED FOR FUTURE USE. A SOIL STOCKPILE SHALL BE LOCATED A MINIMUM OF 50 FEET FROM A STORM DRAIN INLET, OPEN CHANNEL, WETLAND, OR WATERBODY. A REQUEST MAY BE MADE TO THE ENGINEER TO PERMIT LOCATING A SOIL STOCKPILE LESS THAN 50 FEET FROM A STORM DRAIN INLET OR OPEN CHANNEL. UPON APPROVAL, IF ANY PART OF A SOIL STOCKPILE IS LESS THAN 50 FEET FROM A STORM DRAIN INLET OR OPEN CHANNEL, INSTALL A SUPER SILT FENCE PERIMETER TO PROTECT THE SOIL STOCKPILE. THE SUPER SILT FENCE MUST BE CONSTRUCTED IN ACCORDANCE WITH 905.3.B.3 OF THE STANDARD SPECIFICATIONS. THE COST FOR INSTALLATION AND MAINTENANCE OF THE STOCKPILE SUPER SILT FENCE IS INCIDENTAL TO THE CONTRACT.

7. PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF FROM LEAVING THE SITE. CHECK PERIMETER CONTROLS DAILY AND ADJUST OR REPAIR TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. REMOVE ACCUMULATED SEDIMENT BEFORE IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE ENGINEER.

8. ANY SEDIMENT LADEN DISCHARGE LEAVING THE LIMIT OF CONSTRUCTION SHALL IMMEDIATELY BE ADDRESSED THROUGH BEST AVAILABLE TECHNOLOGIES TO CONTROL ANY FURTHER SEDIMENT LADEN DISCHARGE. REMEDIATION MAY INCLUDE STANDARD E&S PRACTICES OR OTHER METHODS AS APPROVED BY THE ENGINEER.

9. ALL TEMPORARY CONCENTRATED FLOW AREAS INCLUDING CHANNEL SIDE SLOPES SHALL HAVE EROSION CONTROL BLANKET MULCH AS DIRECTED BY THE ENGINEER. INSTALL WITHIN SEVEN CALENDAR DAYS UPON CONSTRUCTION INITIATION. A TEMPORARY CONCENTRATED FLOW AREA MAY INCLUDE DITCHES, SWALES, BERMS, CONCENTRATED RUNOFF AREAS, ETC.

10. FOR ANY PERMANENT STORMWATER MANAGEMENT FACILITY, FOLLOW THAT FACILITY'S SEQUENCE OF CONSTRUCTION AS NOTED ON THE STORMWATER MANAGEMENT SHEETS.

11. NO MORE THAN 20 ACRES MAY BE DISTURBED AT ANY TIME. DISTURBANCE OF A SECOND 20 ACRE SECTION MAY NOT PROCEED UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE FIRST 20 ACRE SECTION IS ACCOMPLISHED AS APPROVED BY THE ENGINEER.

12. MAINTAIN POSITIVE DRAINAGE IN EXISTING AND PROPOSED DRAINAGE SYSTEMS BY EXECUTING CONSTRUCTION, CLEANING EXISTING DRAINAGE SYSTEMS, AND PROPERLY DISPOSING OF SEDIMENT THROUGHOUT THE DURATION OF THE PROJECT.

EROSION & SEDIMENT CONTROL

CFL	COMPOST FILTER LOG
CFL	COMPOST FILTER LOG / LENGTH
DWBAG	DEWATERING BAG
DWB	DEWATERING BASIN
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
SCD	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE / LENGTH
SF	SILT FENCE
RSF	REINFORCED SILT FENCE / LENGTH
RSF	REINFORCED SILT FENCE
SSF	SUPER SILT FENCE / LENGTH
SSF	SUPER SILT FENCE
SP	SUMP PIT
ST	SEDIMENT TRAP / NUMBER
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN
T	TURBIDITY CURTAIN / LENGTH
T	TURBIDITY CURTAIN

PENNONI ASSOCIATES INC. — PEN TABLE: $PENTBLS
FILE NAME: $FILEAS — PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSIONS — DATE PLOTTED: 13-JUN-2024@ 06:17
MICROSTATION WORKSPACE: $WORKSPACES — USER NAME: $USERS — OFFICE LOCATION: $OFFICENAMES

Pennoni

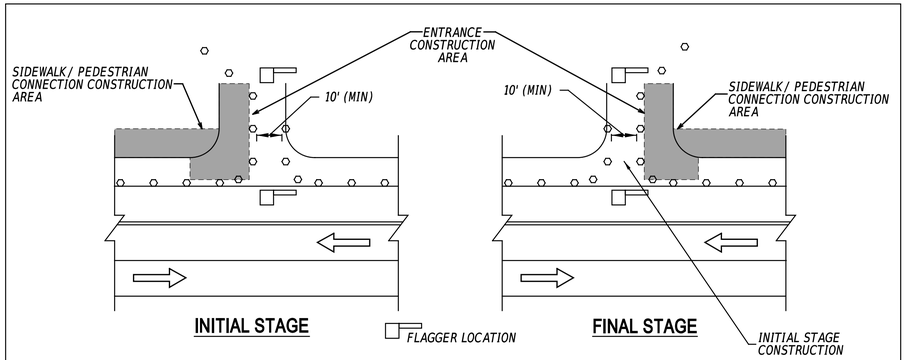
ADDENDA / REVISIONS	

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL NOTES

SECTION	
	PAI
SHEET NO.	
	129

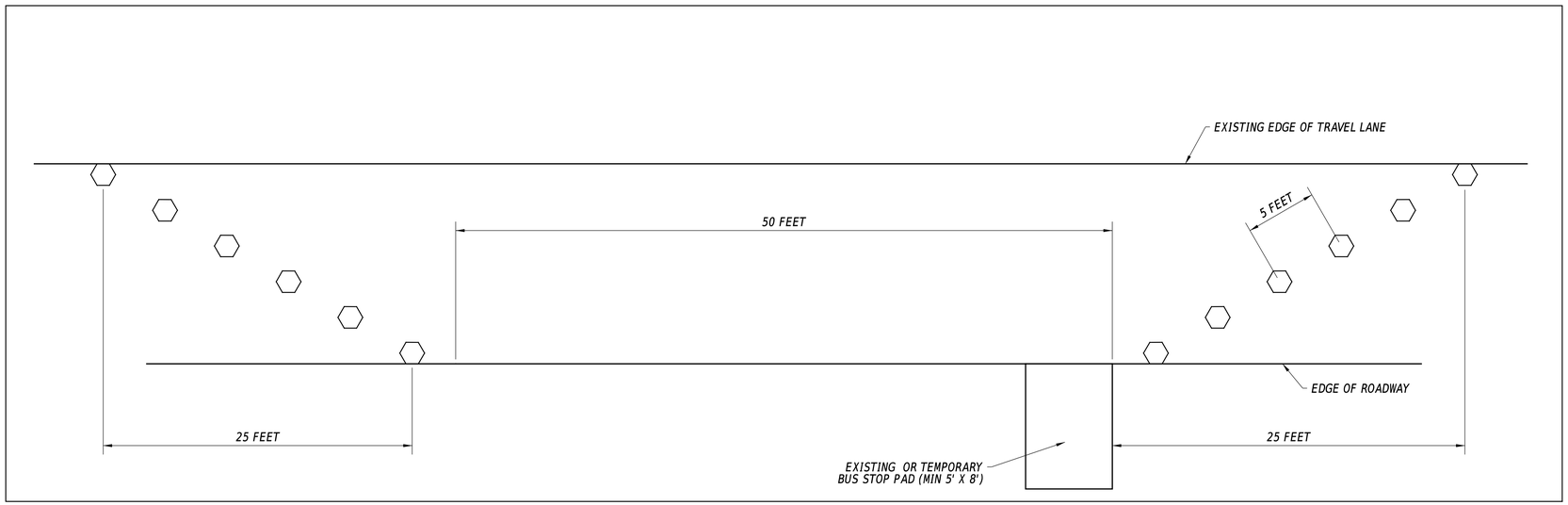


NOTES:

1. *THIS DETAIL PROVIDES THE PROPER TRAFFIC CONTROL DEVICES AT DRIVEWAYS AND ENTRANCES THAT ARE TO BE BUILT IN HALF-SECTION UNDER FLAGGER CONTROL. APPLICATION OF THIS DETAIL SHALL BE AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER, TRAFFIC CONTROL DEVICES AT ENTRANCES SHALL BE RESET TO MAIN PHASE AT END OF EACH WORKING DAY.*
2. *CHANNELIZATION THROUGH ENTRANCE AREA SHALL BE ACCOMPLISHED WITH DRUMS PLACED AT 10 FEET BETWEEN THE EDGES OF THE DRUMS IMMEDIATELY ADJACENT TO THE TRAVELED WAY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DRUM LAYOUT SHALL ACCOMMODATE LARGEST DESIGN VEHICLE EXPECTED TO USE THE ENTRANCE.*
3. *TRAFFIC CONTROL DEVICES ALONG MAINLINE ROADWAY SHALL BE PLACED AS OUTINED IN PHASE SPECIFIC MOT NOTES.*

TYPICAL DRIVEWAY / ENTRANCE RECONSTRUCTION

NOT TO SCALE



TEMPORARY DART BUS STOP PULL-OFF

NOT TO SCALE

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:17
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

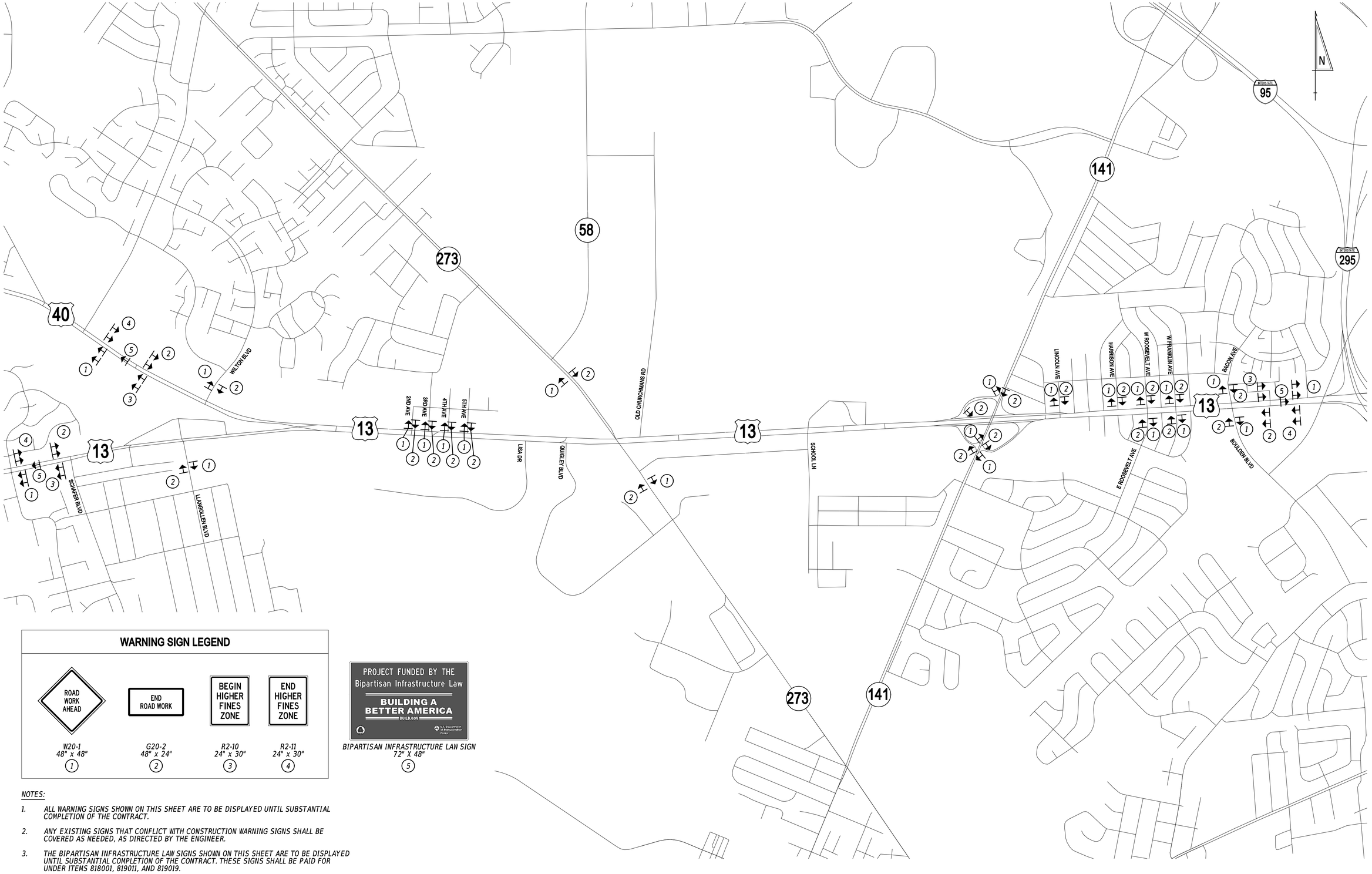
ADDENDA / REVISIONS

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL NOTES

SECTION
PAI
SHEET NO.
130



WARNING SIGN LEGEND

ROAD WORK AHEAD	END ROAD WORK	BEGIN HIGHER FINES ZONE	END HIGHER FINES ZONE
W20-1 48" x 48" (1)	G20-2 48" x 24" (2)	R2-10 24" x 30" (3)	R2-11 24" x 30" (4)

PROJECT FUNDED BY THE Bipartisan Infrastructure Law
BUILDING A BETTER AMERICA
BUILD.GOV

BIPARTISAN INFRASTRUCTURE LAW SIGN 72" X 48" (5)

NOTES:

1. *ALL WARNING SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED UNTIL SUBSTANTIAL COMPLETION OF THE CONTRACT.*
2. *ANY EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION WARNING SIGNS SHALL BE COVERED AS NEEDED, AS DIRECTED BY THE ENGINEER.*
3. *THE BIPARTISAN INFRASTRUCTURE LAW SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED UNTIL SUBSTANTIAL COMPLETION OF THE CONTRACT. THESE SIGNS SHALL BE PAID FOR UNDER ITEMS 818001, 819011, AND 819019.*

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:17
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

PERMANENT WARNING SIGN SHEET

SECTION	
PAI	
SHEET NO.	
131	

SEQUENCE OF CONSTRUCTION

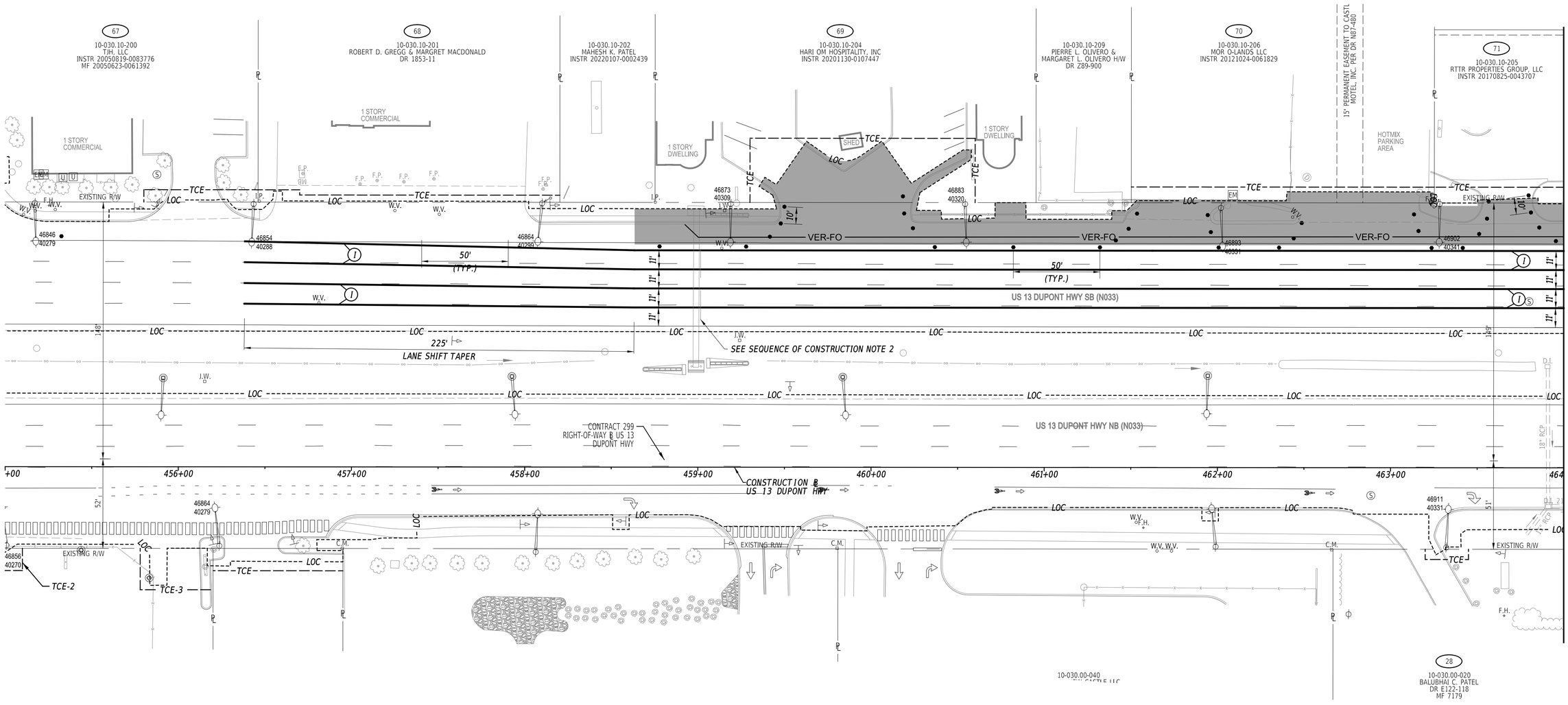
PHASE 1A SOUTHBOUND US 13 VERIZON DUCT BANK RELOCATION

(1) *MILL, OVERLAY, AND RE-INSTALL EXISTING STRIPING FOR THE PROJECT CORRIDOR, EXCEPT IN THE LIMITS SHOWN ON PHASE 1A PLANS. INSTALL STRIPING AS SHOWN ON PHASE 1A PLANS TO SHIFT SOUTHBOUND US 13 TRAFFIC FOR VERIZON TO PERFORM THEIR DUCT BANK RELOCATION FROM APPROXIMATE STATION 459+00 TO 471+00. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *CONTRACTOR TO SHIFT THE OVERHEAD SIGNS AT STATION 459+00 ALONG US 13 SOUTHBOUND TO ALIGN WITH THE SHIFTED TRAVEL LANES. THESE OVERHEAD SIGNS SHALL BE SHIFTED BACK UPON PLACEMENT OF FINAL PAVEMENT MARKINGS AT THE END OF THE CONTRACT. SHIFTING OF OVERHEAD SIGNS TO BE PAID FOR UNDER ITEM 822003.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(1)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	3048 LF



MATCH LINE STA 464+00

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$ | PLOT DRIVER: $PLTDRV$$ | DATE PLOTTED: 13-JUN-2024 @ 06:17 | USER NAME: $USER$$ | OFFICE LOCATION: $OFFICENAME$$
FILE NAME: $FILEAS$$
MICROSTATION VERSION: $VERSIONS$$
MICROSTATION WORKSPACE: $WORKSPACES$$

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1A	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 132
					CHECKED BY: P. HORSEY		

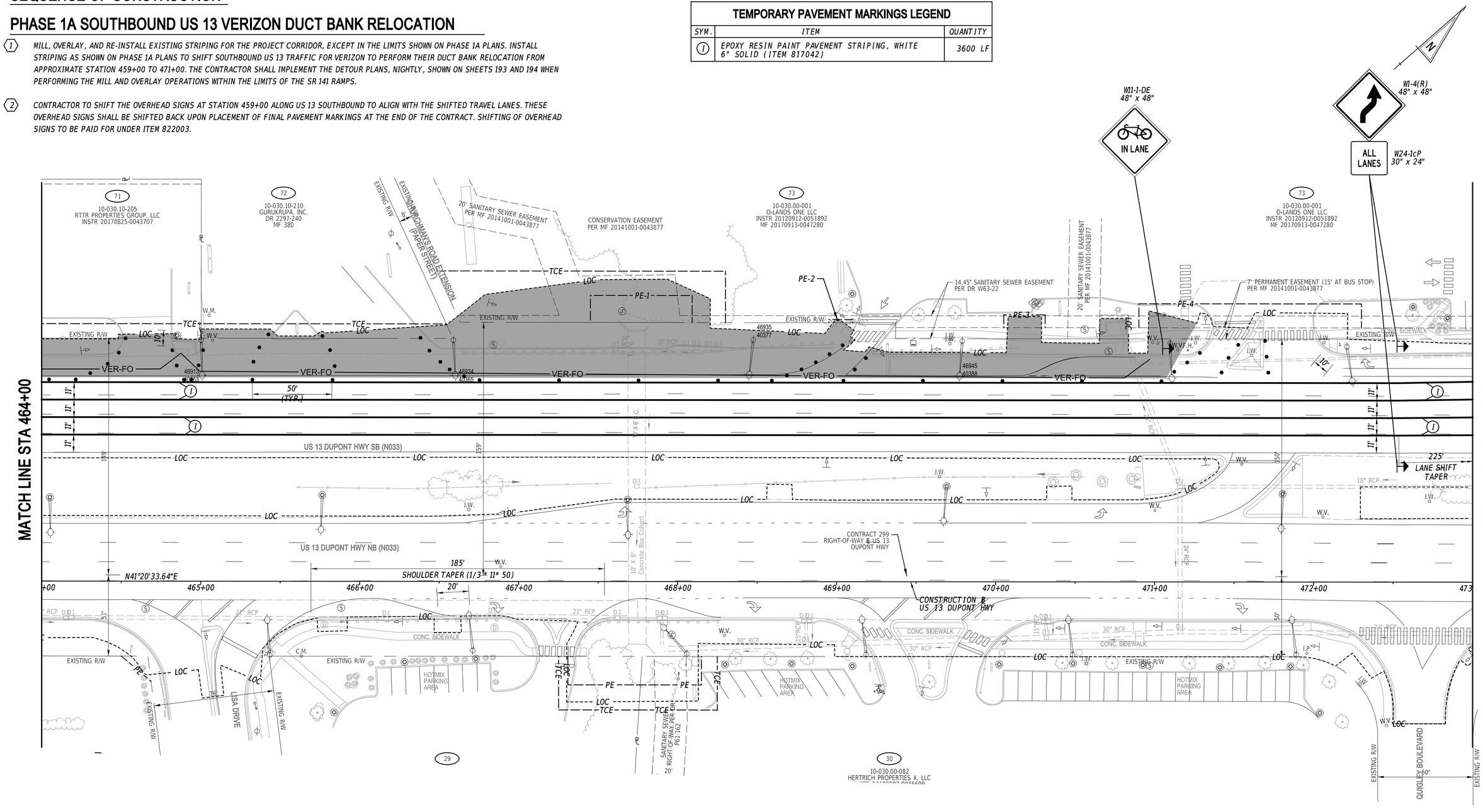
SEQUENCE OF CONSTRUCTION

PHASE 1A SOUTHBOUND US 13 VERIZON DUCT BANK RELOCATION

(1) *MILL, OVERLAY, AND RE-INSTALL EXISTING STRIPING FOR THE PROJECT CORRIDOR, EXCEPT IN THE LIMITS SHOWN ON PHASE 1A PLANS. INSTALL STRIPING AS SHOWN ON PHASE 1A PLANS TO SHIFT SOUTHBOUND US 13 TRAFFIC FOR VERIZON TO PERFORM THEIR DUCT BANK RELOCATION FROM APPROXIMATE STATION 459+00 TO 471+00. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *CONTRACTOR TO SHIFT THE OVERHEAD SIGNS AT STATION 459+00 ALONG US 13 SOUTHBOUND TO ALIGN WITH THE SHIFTED TRAVEL LANES. THESE OVERHEAD SIGNS SHALL BE SHIFTED BACK UPON PLACEMENT OF FINAL PAVEMENT MARKINGS AT THE END OF THE CONTRACT. SHIFTING OF OVERHEAD SIGNS TO BE PAID FOR UNDER ITEM 822003.*

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(1)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	3600 LF



PENNONI ASSOCIATES INC.	
FILE NAME:	$FILEAS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTABLES
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	13-JUN-2024@ 06:17
USER NAME:	$USERS$
OFFICE LOCATION:	$OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	1-664
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1A

SECTION
PAI
SHEET NO.
133

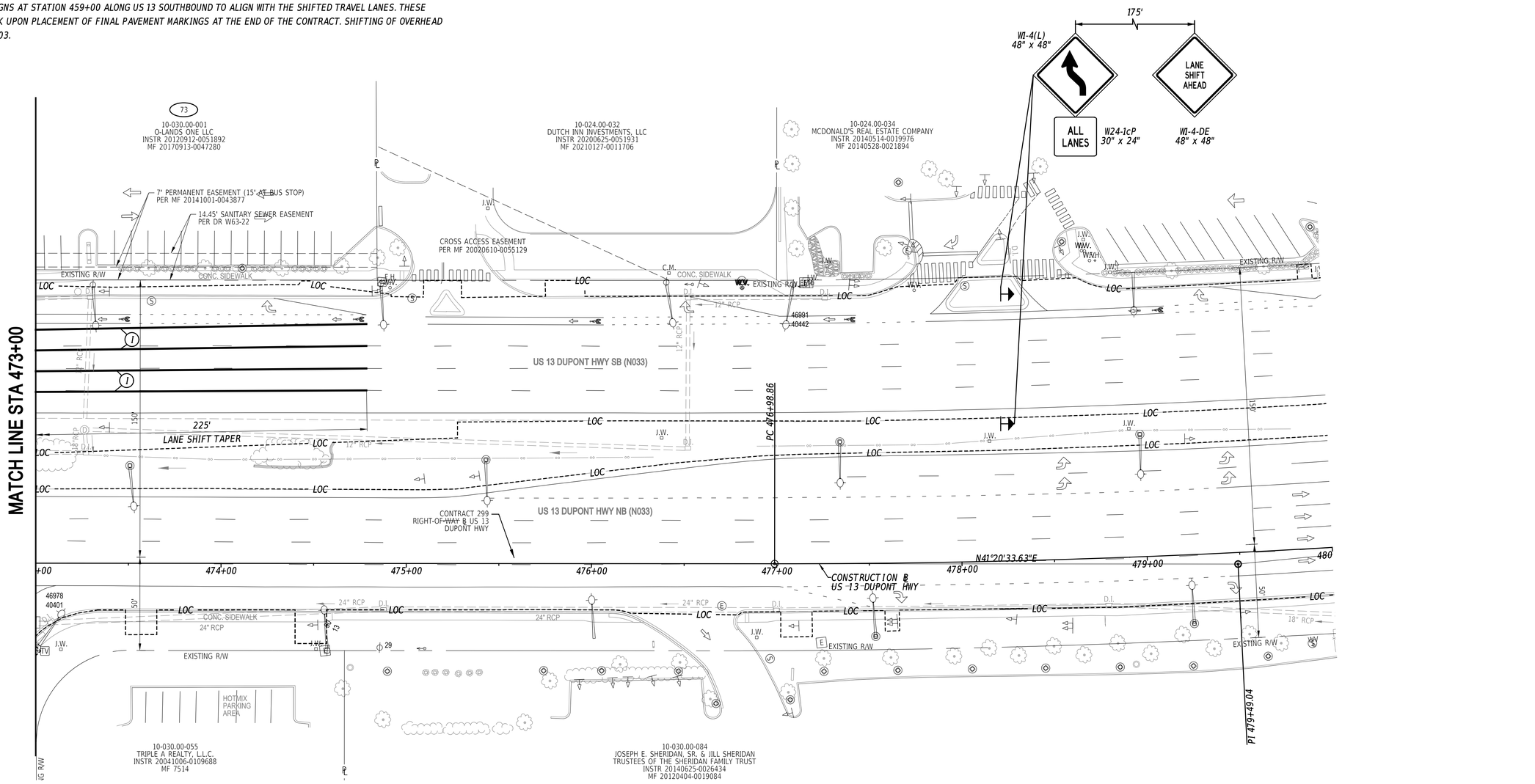
SEQUENCE OF CONSTRUCTION

PHASE 1A SOUTHBOUND US 13 VERIZON DUCT BANK RELOCATION

(1) *MILL, OVERLAY, AND RE-INSTALL EXISTING STRIPING FOR THE PROJECT CORRIDOR, EXCEPT IN THE LIMITS SHOWN ON PHASE 1A PLANS. INSTALL STRIPING AS SHOWN ON PHASE 1A PLANS TO SHIFT SOUTHBOUND US 13 TRAFFIC FOR VERIZON TO PERFORM THEIR DUCT BANK RELOCATION FROM APPROXIMATE STATION 459+00 TO 471+00. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *CONTRACTOR TO SHIFT THE OVERHEAD SIGNS AT STATION 459+00 ALONG US 13 SOUTHBOUND TO ALIGN WITH THE SHIFTED TRAVEL LANES. THESE OVERHEAD SIGNS SHALL BE SHIFTED BACK UPON PLACEMENT OF FINAL PAVEMENT MARKINGS AT THE END OF THE CONTRACT. SHIFTING OF OVERHEAD SIGNS TO BE PAID FOR UNDER ITEM 822003.*

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(1)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	714 LF



PENNONI ASSOCIATES INC. | SFILEAS
FILE NAME: | SVERSIONS
MICROSTATION VERSION: | SWORKSPACES
MICROSTATION WORKSPACE:
PEN TABLE: SPENTBLSS
PLOT DRIVER: SPLTDRVSS
DATE PLOTTED: 13-JUN-2024@ 06:17
USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

Pennoni

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

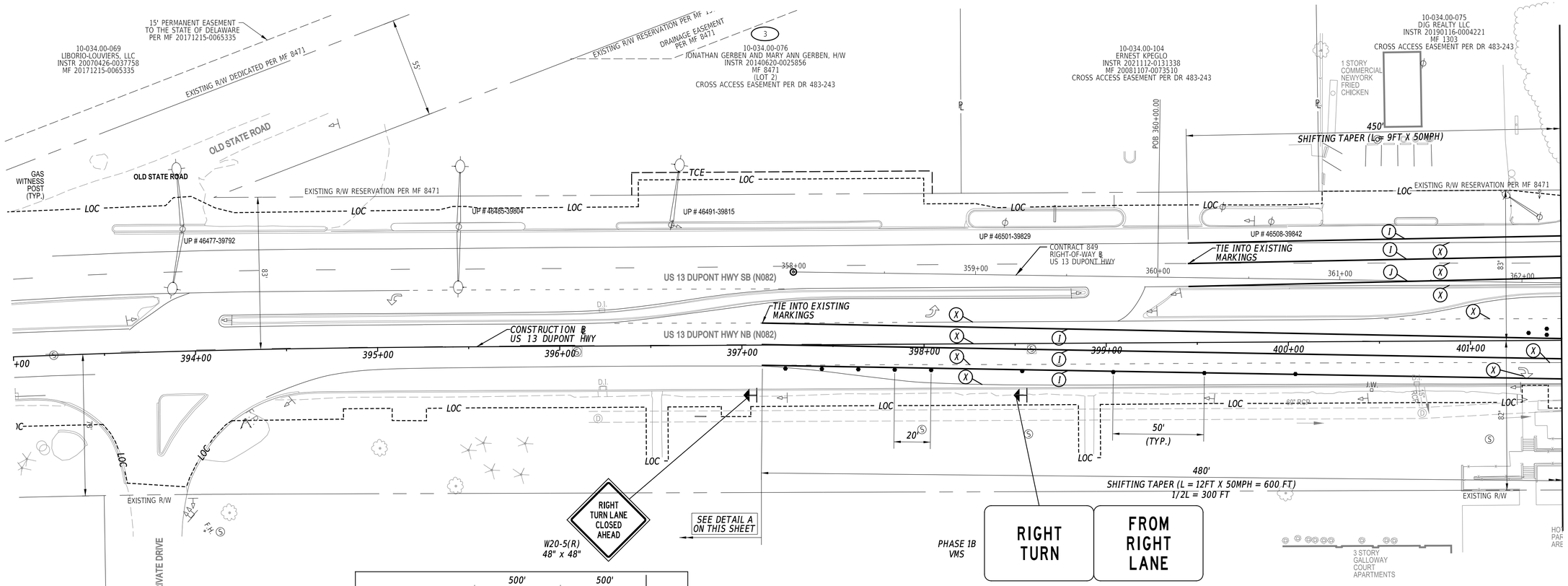
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1A

SECTION
PAI
SHEET NO.
134

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1794 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	204 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1392 SF

* EPOXY STRIPING FOR PHASE 1B SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 1B AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.



SEQUENCE OF CONSTRUCTION

PHASE 1B: US 13 (LLANGOLLEN BOULEVARD TO US 13/US 40 SPLIT) MEDIAN TREATMENT INSTALLATION

1. SHIFT THE US 13 NORTHBOUND AND SOUTHBOUND TRAVEL LANES AS SHOWN ON THE PHASE 1B PLANS. SHIFT THE SIGNAL HEADS ALONG THE MAST ARMS TO ALIGN WITH THE SHIFTED TRAVEL LANES. INSTALL TEMPORARY CONCRETE SAFETY BARRIER, PINNED AND TEMPORARY SIGNING AND STRIPING AS SHOWN ON THE PLANS.
2. REMOVE THE EXISTING CURBED CONCRETE MEDIAN FROM STATION 403+91 TO STATION 426+25.
3. INSTALL A CONCRETE BARRIER WITH FENCE FROM STATION 404+51 TO STATION 424+00.
4. PAVE THE AREA OF THE EXISTING CURBED CONCRETE MEDIAN WITH BITUMINOUS PAVEMENT.
5. FOLLOWING THE COMPLETION OF PHASE 1B, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

NOTES:

1. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.
2. FOLLOWING COMPLETION OF PHASE 1B, THE CONTRACTOR SHALL RE-INSTALL THE EXISTING RIGHT-TURN ARROW ALONG NORTHBOUND US 13.
3. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 60 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 1B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 1B IS NOT COMPLETED BY 60 CALENDAR DAYS.

PENNONI ASSOCIATES INC. | PEN_TABLE: $PENTABLES
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVDS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:17
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1B

SECTION
PAI
SHEET NO.
135

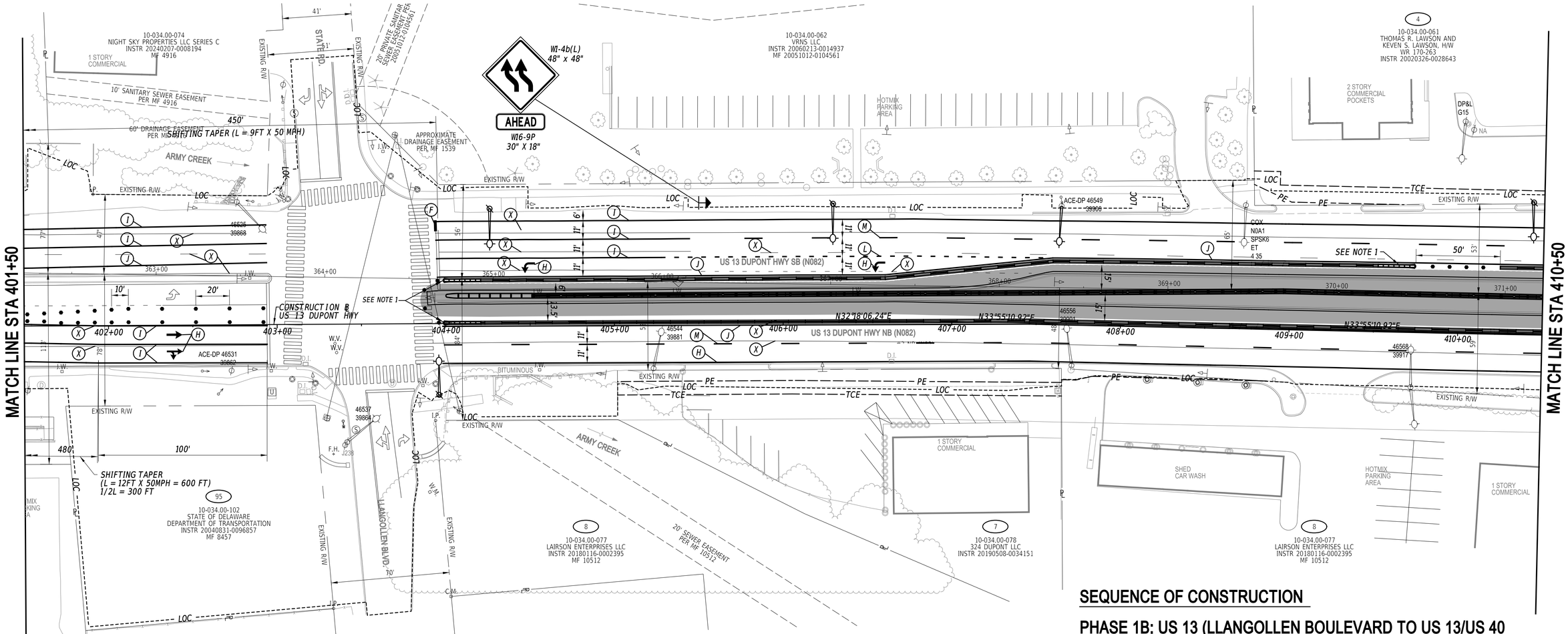
TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	7 SF
H	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	64 SF
I	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	2327 LF
J	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1453 LF

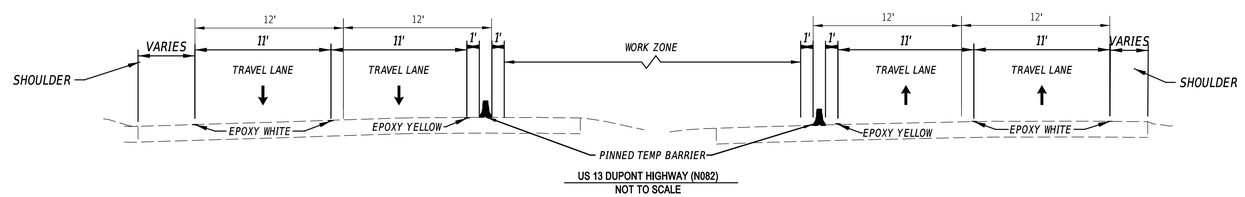
TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
L	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	54 LF
M	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	289 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	2786 SF

* EPOXY STRIPING FOR PHASE 1B SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 1B AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.

NOTES:

1. TEMPORARY IMPACT ATTENTUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).
2. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 60 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 1B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 1B IS NOT COMPLETED BY 60 CALENDAR DAYS.





SEQUENCE OF CONSTRUCTION

PHASE 1B: US 13 (LLANGOLLEN BOULEVARD TO US 13/US 40 SPLIT) MEDIAN TREATMENT INSTALLATION

1. SHIFT THE US 13 NORTHBOUND AND SOUTHBOUND TRAVEL LANES AS SHOWN ON THE PHASE 1B PLANS. SHIFT THE SIGNAL HEADS ALONG THE MAST ARMS TO ALIGN WITH THE SHIFTED TRAVEL LANES. INSTALL TEMPORARY CONCRETE SAFETY BARRIER, PINNED AND TEMPORARY SIGNING AND STRIPING AS SHOWN ON THE PLANS.
2. REMOVE THE EXISTING CURBED CONCRETE MEDIAN FROM STATION 403+91 TO STATION 426+25.
3. INSTALL A CONCRETE BARRIER WITH FENCE FROM STATION 404+51 TO STATION 424+00.
4. PAVE THE AREA OF THE EXISTING CURBED CONCRETE MEDIAN WITH BITUMINOUS PAVEMENT.
5. FOLLOWING THE COMPLETION OF PHASE 1B, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBL55
FILE NAME: SFILEAS | PLOT DRAWER: SPLTDRV55
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:17
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

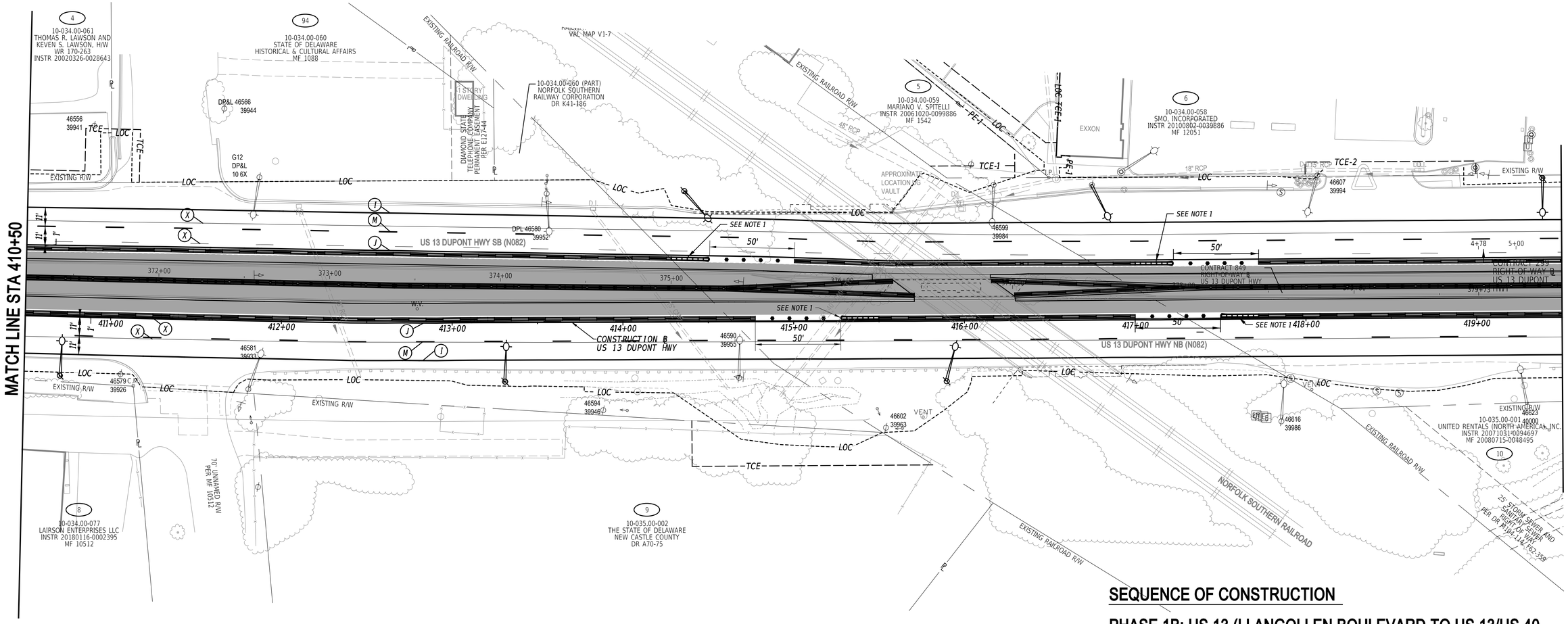
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1B

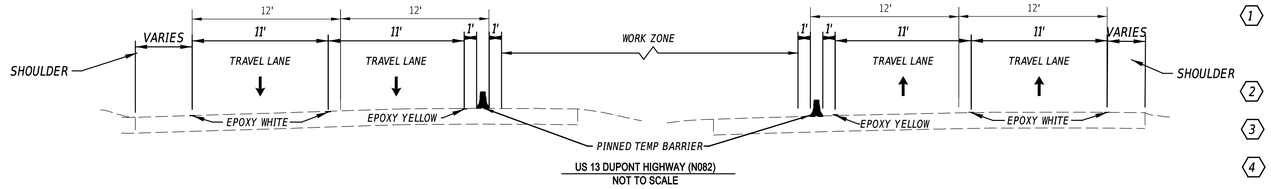
SECTION
PAI
SHEET NO.
136

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1800 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1800 LF
(M)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	450 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	2625 SF

* EPOXY STRIPING FOR PHASE 1B SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 1B AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.





NOTES:

1. TEMPORARY IMPACT ATTENTUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).
2. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 60 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 1B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 1B IS NOT COMPLETED BY 60 CALENDAR DAYS.

SEQUENCE OF CONSTRUCTION

PHASE 1B: US 13 (LLANGOLLEN BOULEVARD TO US 13/US 40 SPLIT) MEDIAN TREATMENT INSTALLATION

1. SHIFT THE US 13 NORTHBOUND AND SOUTHBOUND TRAVEL LANES AS SHOWN ON THE PHASE 1B PLANS. SHIFT THE SIGNAL HEADS ALONG THE MAST ARMS TO ALIGN WITH THE SHIFTED TRAVEL LANES. INSTALL TEMPORARY CONCRETE SAFETY BARRIER, PINNED AND TEMPORARY SIGNING AND STRIPING AS SHOWN ON THE PLANS.
2. REMOVE THE EXISTING CURBED CONCRETE MEDIAN FROM STATION 403+91 TO STATION 426+25.
3. INSTALL A CONCRETE BARRIER WITH FENCE FROM STATION 404+51 TO STATION 424+00.
4. PAVE THE AREA OF THE EXISTING CURBED CONCRETE MEDIAN WITH BITUMINOUS PAVEMENT.
5. FOLLOWING THE COMPLETION OF PHASE 1B, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:17
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

Pennoni

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1B	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 137
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION

PHASE 1B: US 13 (LLANGOLLEN BOULEVARD TO US 13/US 40 SPLIT) MEDIAN TREATMENT INSTALLATION

1. SHIFT THE US 13 NORTHBOUND AND SOUTHBOUND TRAVEL LANES AS SHOWN ON THE PHASE 1B PLANS. SHIFT THE SIGNAL HEADS ALONG THE MAST ARMS TO ALIGN WITH THE SHIFTED TRAVEL LANES. INSTALL TEMPORARY CONCRETE SAFETY BARRIER, PINNED AND TEMPORARY SIGNING AND STRIPING AS SHOWN ON THE PLANS.
2. REMOVE THE EXISTING CURBED CONCRETE MEDIAN FROM STATION 403+91 TO STATION 426+25.
3. INSTALL A CONCRETE BARRIER WITH FENCE FROM STATION 404+51 TO STATION 424+00.
4. PAVE THE AREA OF THE EXISTING CURBED CONCRETE MEDIAN WITH BITUMINOUS PAVEMENT.
5. FOLLOWING THE COMPLETION OF PHASE 1B, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

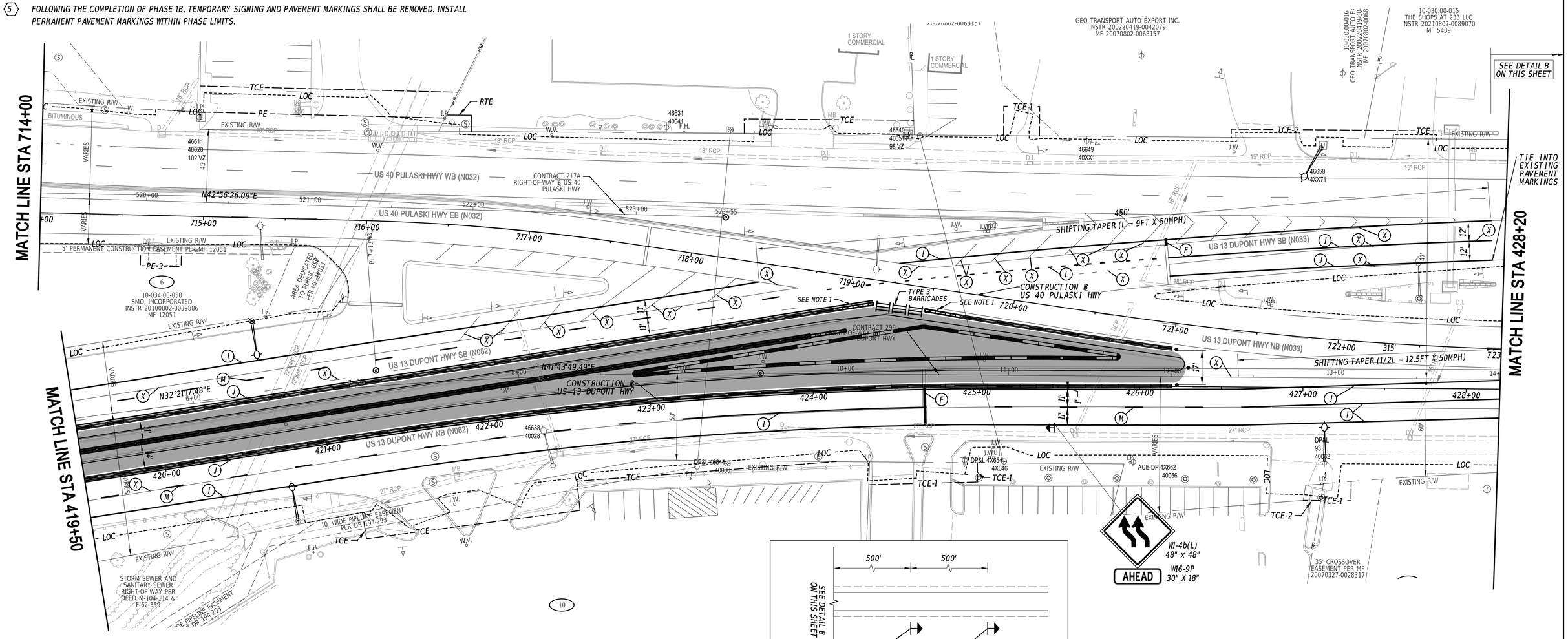
TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	33 SF
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1985 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1637 LF

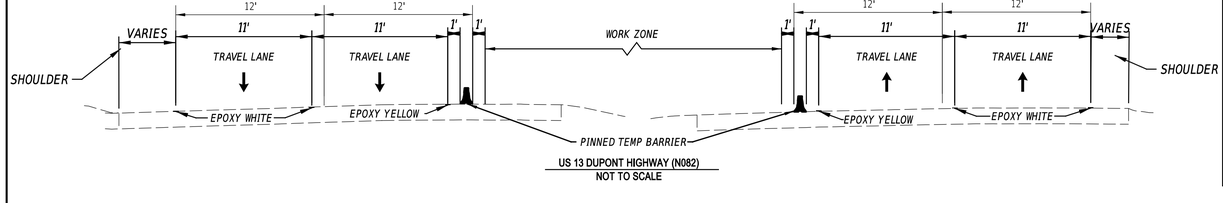
TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(L)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	53 LF
(M)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	248 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	2834 SF

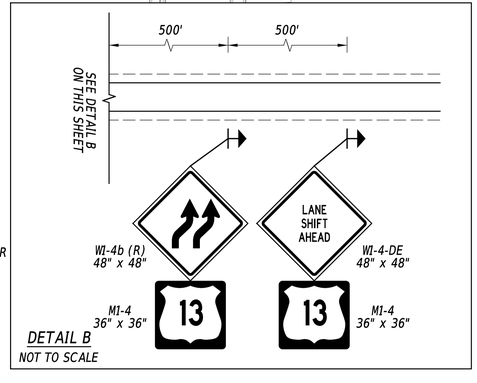
* EPOXY STRIPING FOR PHASE 1B SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 1B AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.

NOTES:

1. TEMPORARY IMPACT ATTENTUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).
2. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 60 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 1B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 1B IS NOT COMPLETED BY 60 CALENDAR DAYS.







PENNONI ASSOCIATES INC. | PEN TABLE: SPRINTBLSS | FILE NAME: SITLEAS | PLOT DRIVER: SPLTDRVSS | MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:17 | MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

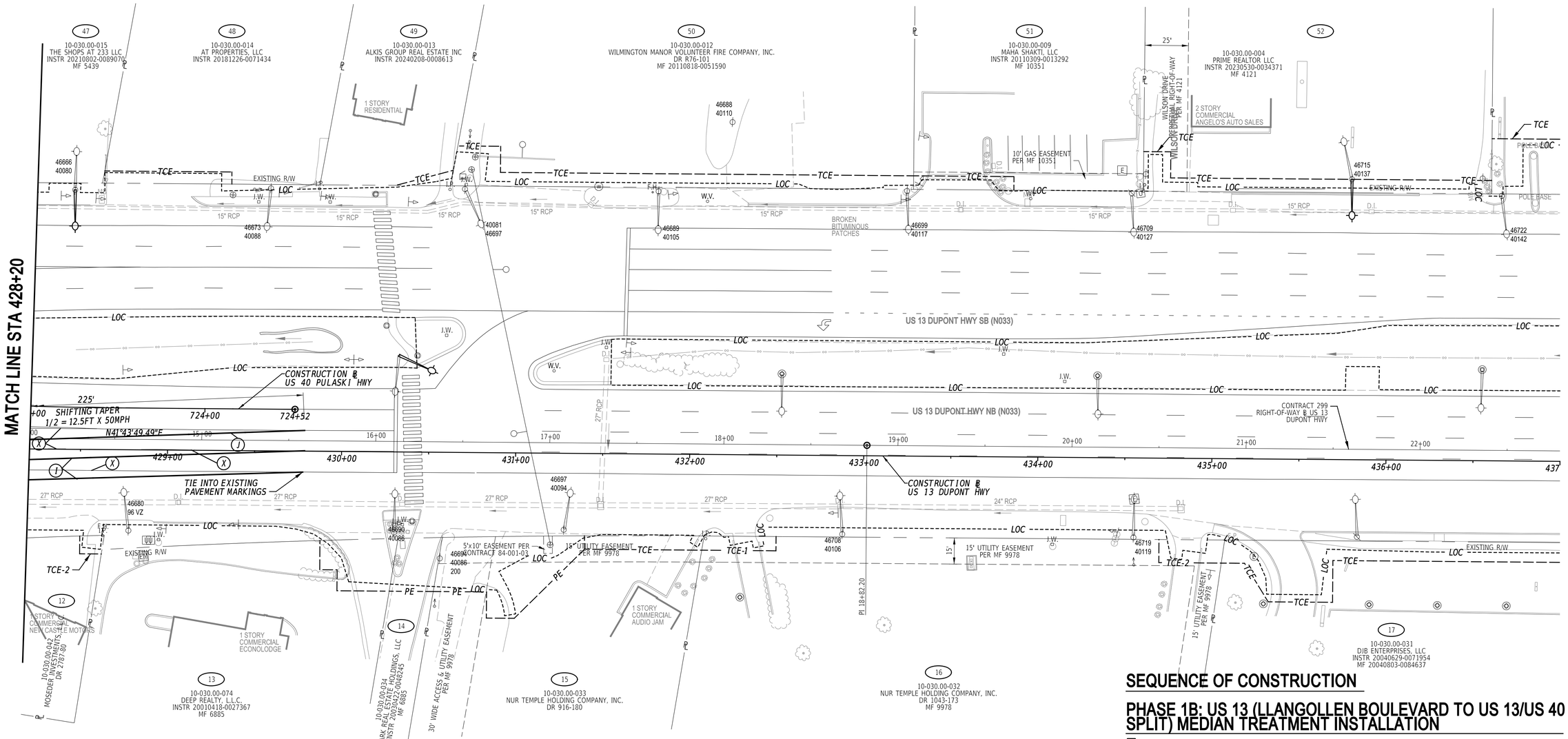
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1A

SECTION: PAI
SHEET NO.: 138

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	315 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	158 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	241 SF

* EPOXY STRIPING FOR PHASE 1B SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 1B AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.



SEQUENCE OF CONSTRUCTION

PHASE 1B: US 13 (LLANGOLLEN BOULEVARD TO US 13/US 40 SPLIT) MEDIAN TREATMENT INSTALLATION

1. SHIFT THE US 13 NORTHBOUND AND SOUTHBOUND TRAVEL LANES AS SHOWN ON THE PHASE 1B PLANS. SHIFT THE SIGNAL HEADS ALONG THE MAST ARMS TO ALIGN WITH THE SHIFTED TRAVEL LANES. INSTALL TEMPORARY CONCRETE SAFETY BARRIER, PINNED AND TEMPORARY SIGNING AND STRIPING AS SHOWN ON THE PLANS.
2. REMOVE THE EXISTING CURBED CONCRETE MEDIAN FROM STATION 403+91 TO STATION 426+25.
3. INSTALL A CONCRETE BARRIER WITH FENCE FROM STATION 404+51 TO STATION 424+00.
4. PAVE THE AREA OF THE EXISTING CURBED CONCRETE MEDIAN WITH BITUMINOUS PAVEMENT.
5. FOLLOWING THE COMPLETION OF PHASE 1B, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

NOTES:

1. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 60 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 1B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 1B IS NOT COMPLETED BY 60 CALENDAR DAYS.

PENNONI ASSOCIATES INC. | PEN TABLE: SPEXTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:17
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAME

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

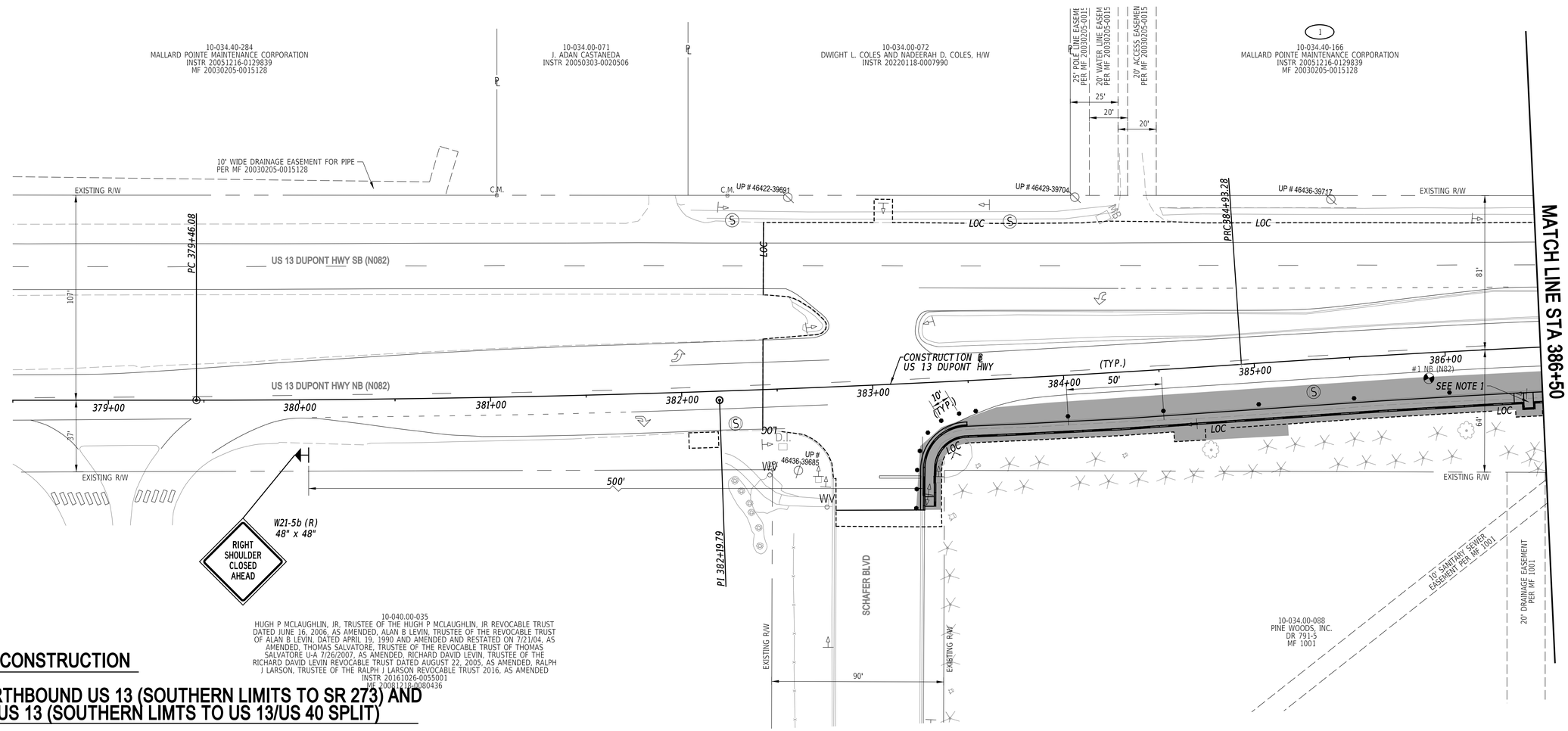
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1B

SECTION: PAI
SHEET NO.: 139

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 3223) AT STATION 401+50(R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 3644) AT STATION 386+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 3644, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP ID 3223, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*
3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*
4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*
5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*
6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*
7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*
8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*
9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*
10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACES: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024@ 06:17
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

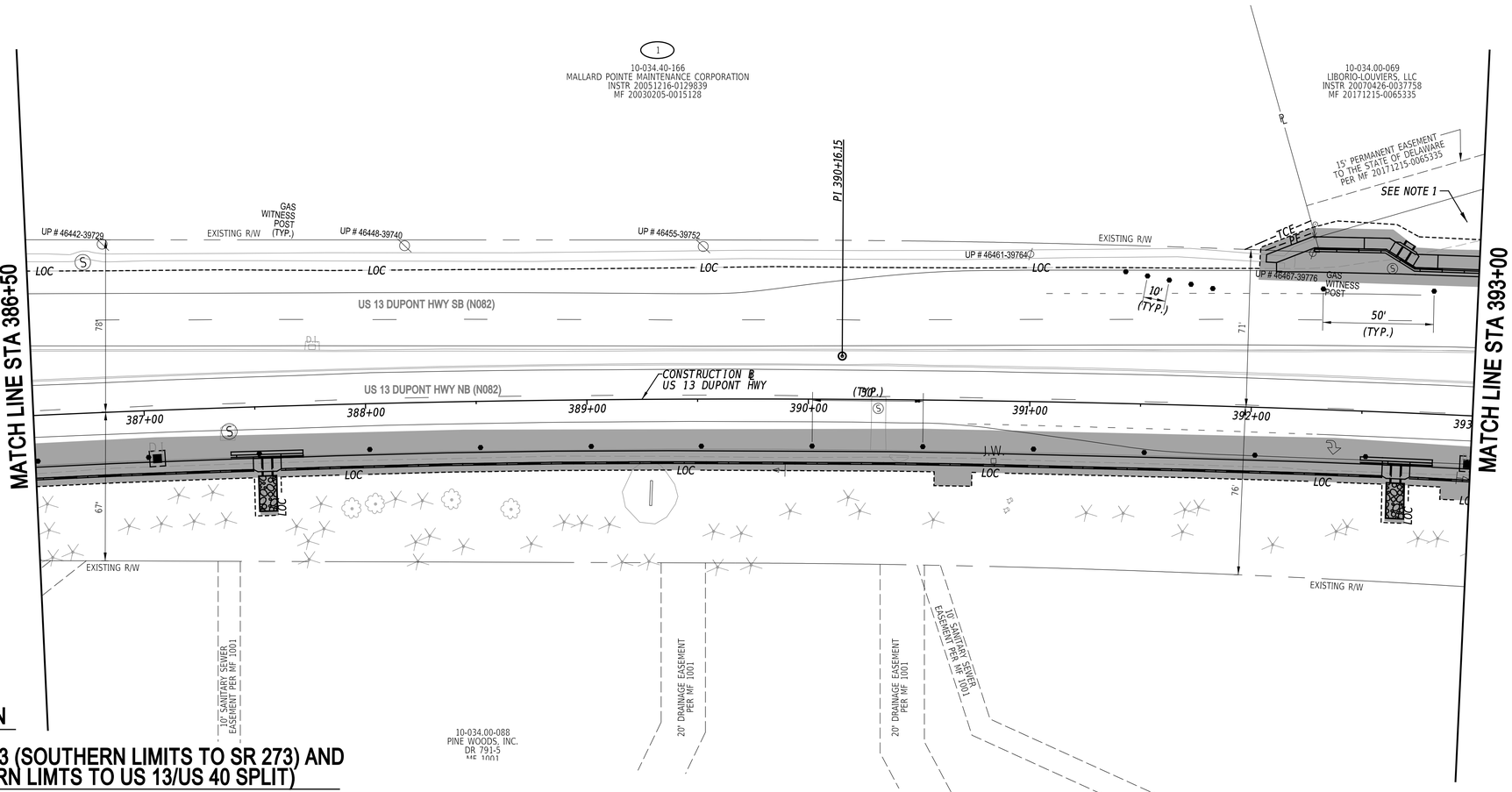
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SECTION
PAI
SHEET NO.
140

NOTES:

1. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.
2. UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.
3. CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.
4. REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.
5. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.
6. SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.
7. CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.
8. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.
9. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.
10. FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024# 06:17
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

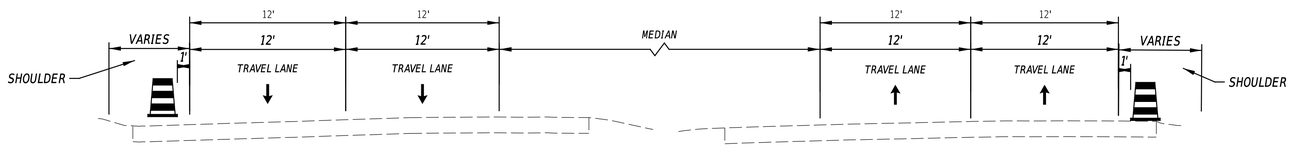
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SECTION
PAI
SHEET NO.
141

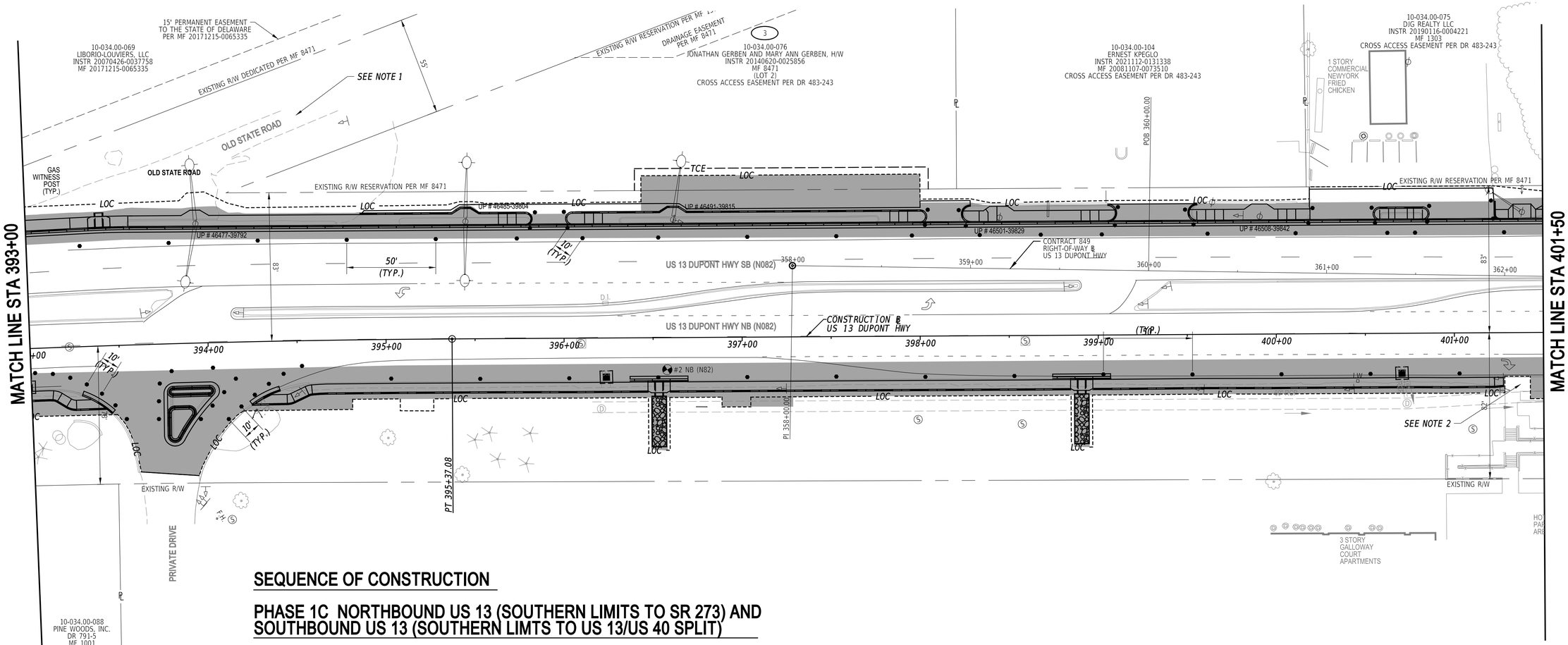
NOTES

1. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.

2. THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 3223) AT STATION 401+50(R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 3644) AT STATION 386+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 3644, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP ID 3223, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.



US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.

2. UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.

3. CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.

4. REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.

5. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.

6. SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.

7. CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.

8. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.

9. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.

10. FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

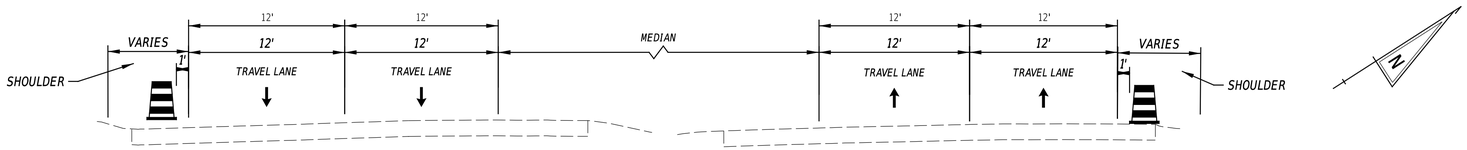
SECTION
PAI
SHEET NO.
142

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	SPLTDRVXS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PRS TABLE:	$PENTBLSS
PLOT DRIVER:	SPLTDRVXS
DATE PLOTTED:	13-JUN-2024@ 06:17
USER NAME:	$USERN$ OFFICE LOCATION: $OFFICENAMES

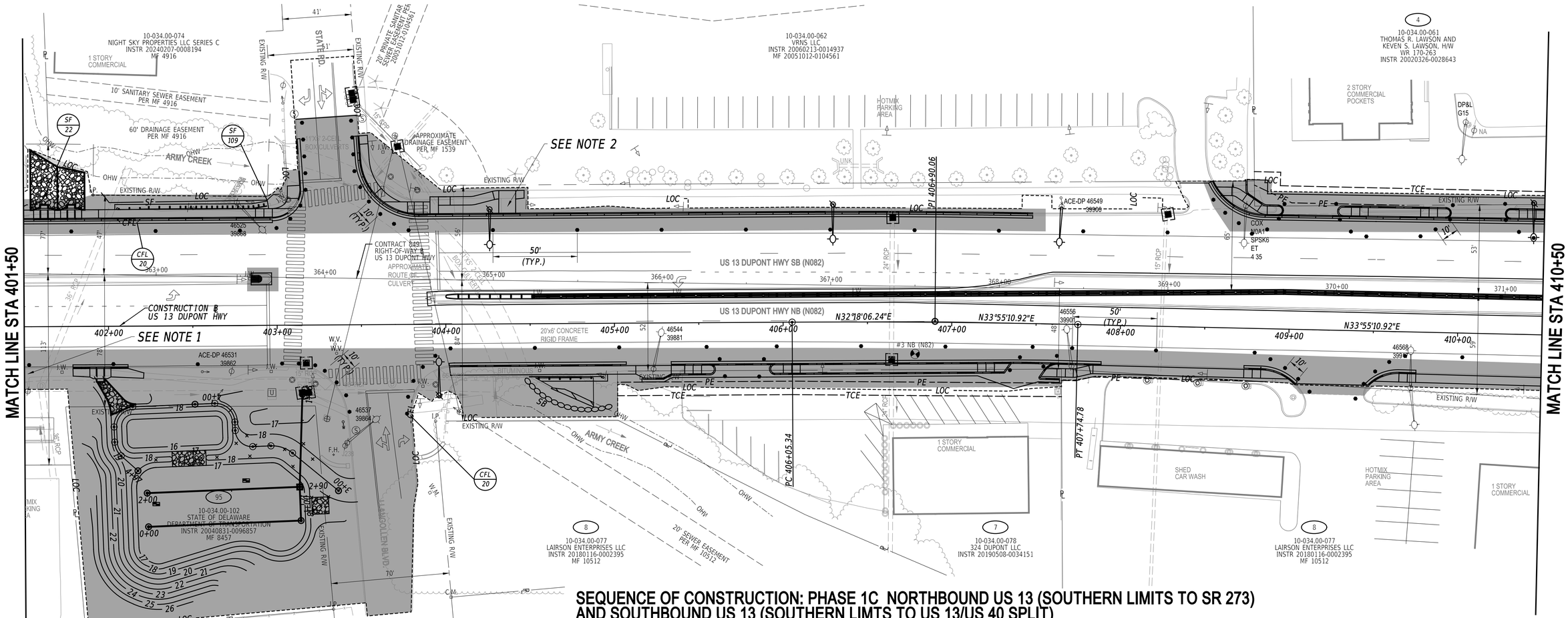
NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 3223) AT STATION 401+50(R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 3644) AT STATION 386+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 3644, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP ID 3223, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*

2. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2272) AT STATION 404+40 (R) DURING THE CONSTRUCTION OF NEW BUS STOP AT STATION 412+50 (R). THE CONTRACTOR SHALL BE PERMITTED TO CLOSE AND RECONSTRUCT BUS STOP ID 2272 ONCE THE NEW BUS STOP ID IS CONSTRUCTED AND OPERATIONAL. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE



SEQUENCE OF CONSTRUCTION: PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*

3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*

4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*

5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*

6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*

7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*

8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*

9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*

10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*

PENNONI ASSOCIATES INC.
FILE NAME: SFILEAS
MICROSTATION VERSION: SVERSIONS
MICROSTATION WORKSPACE: SWORKSPACES
PEN TABLE: SPENTBLSS
PLOT DRIVER: SPLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:17
USER NAME: SUSERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

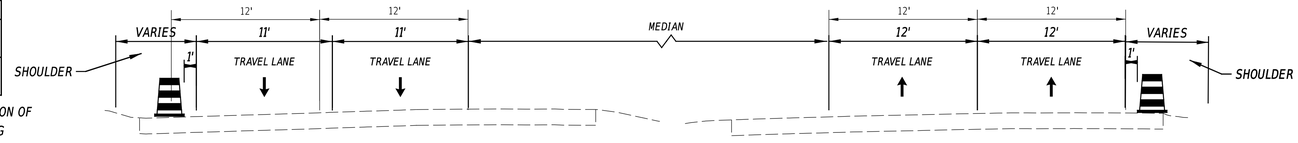
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SECTION
PAI
SHEET NO.
143

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(1)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1202 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	813 SF

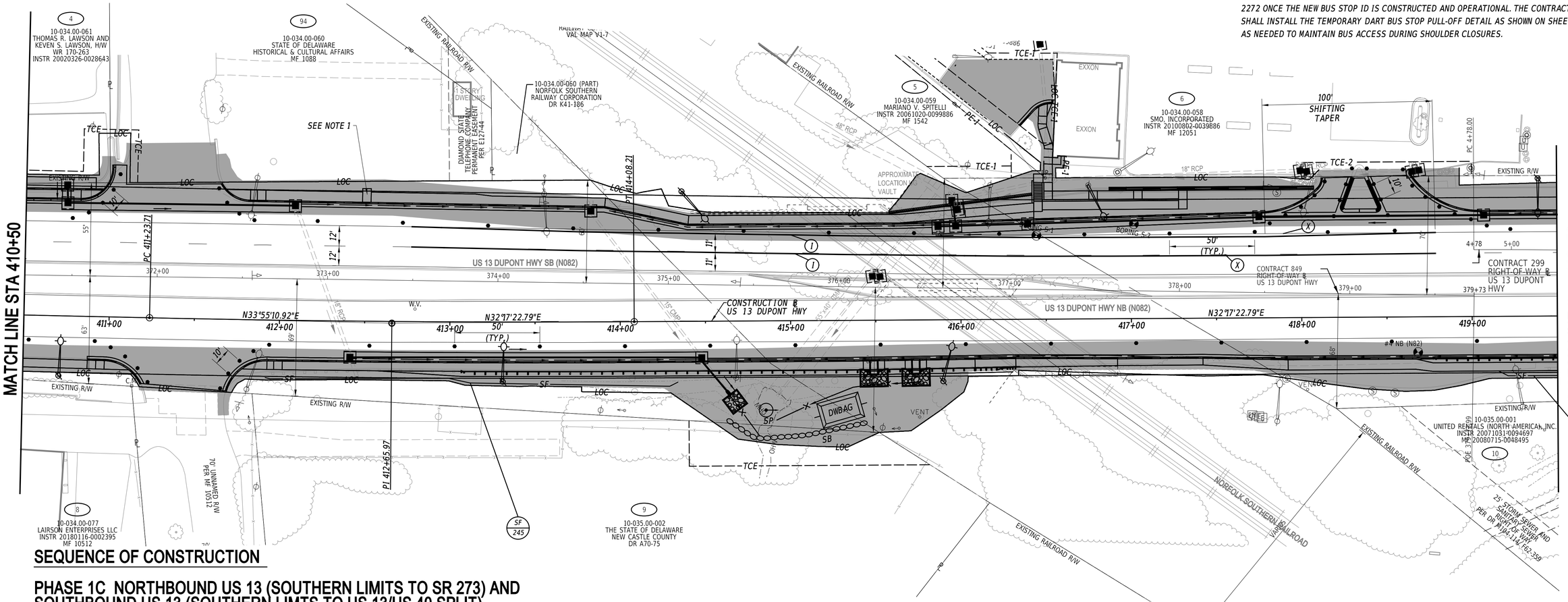
* EPOXY STRIPING FOR PHASE 1C SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 1C AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.



US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE

NOTES

1. THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2272) AT STATION 404+40 (R) DURING THE CONSTRUCTION OF NEW BUS STOP AT STATION 412+50 (R). THE CONTRACTOR SHALL BE PERMITTED TO CLOSE AND RECONSTRUCT BUS STOP ID 2272 ONCE THE NEW BUS STOP ID IS CONSTRUCTED AND OPERATIONAL. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

(1) PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.

(2) UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 472+50. REFER TO STORMWATER MANAGEMENT PLAN ON SHEET XX FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.

(3) UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.

(4) SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.

(5) UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.

(6) UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.

(7) UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN, AS WELL AS THE MEDIAN CURB AT APPROXIMATE STATION 401+00 TO 402+00.

(8) FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

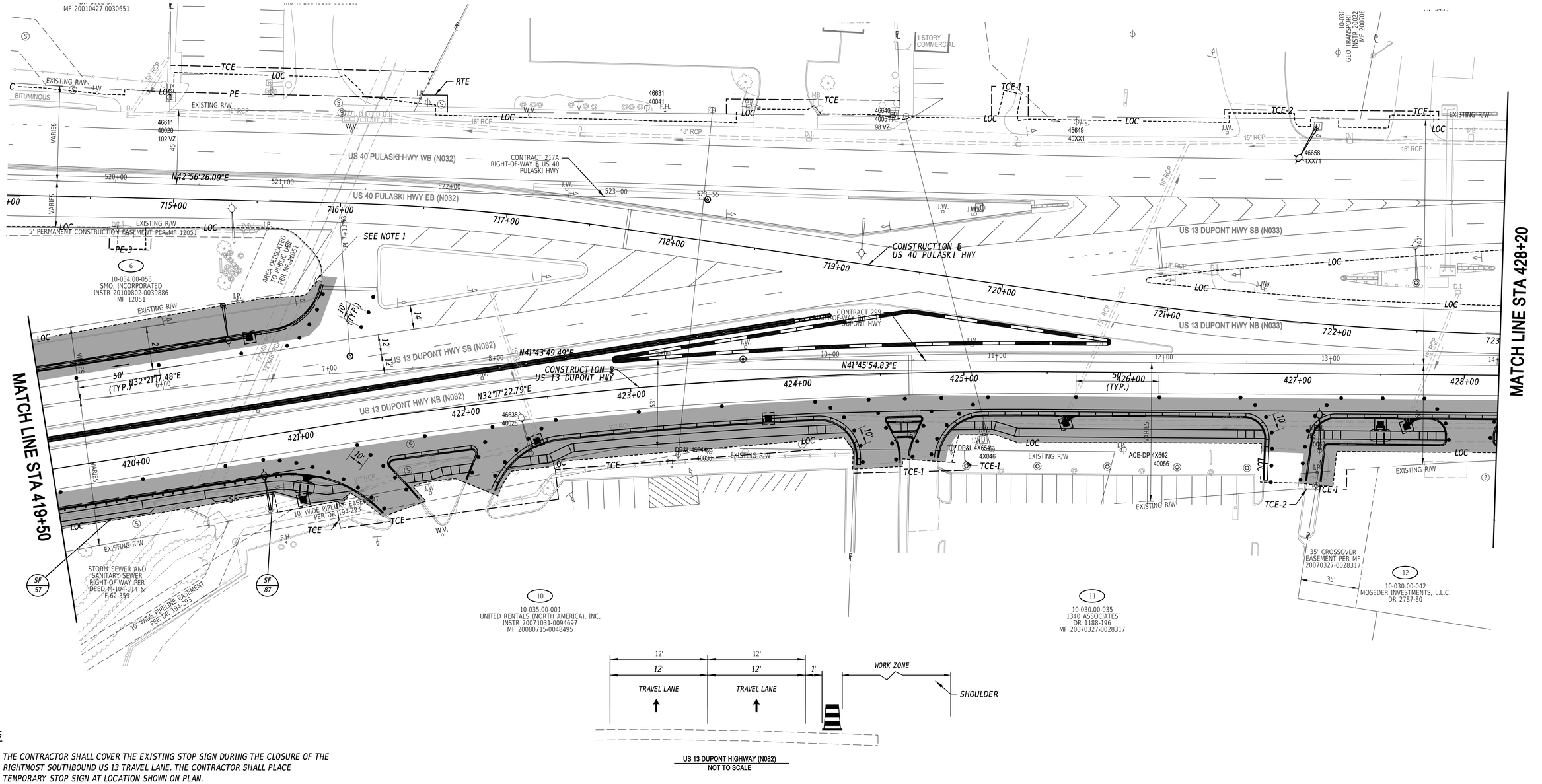
PENNONI ASSOCIATES INC. | STYLES
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MICROSTATION VERSION: SV8ROSIONS | DATE PLOTTED: 13-JUN-2024@ 06:17
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES
PEN TABLE: SPENTBLSS

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 144
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.
2. UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.
3. CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.
4. REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.
5. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.
6. SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.
7. CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.
8. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.
9. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.
10. FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.



NOTES

1. THE CONTRACTOR SHALL COVER THE EXISTING STOP SIGN DURING THE CLOSURE OF THE RIGHTMOST SOUTHBOUND US 13 TRAVEL LANE. THE CONTRACTOR SHALL PLACE TEMPORARY STOP SIGN AT LOCATION SHOWN ON PLAN.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:17
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

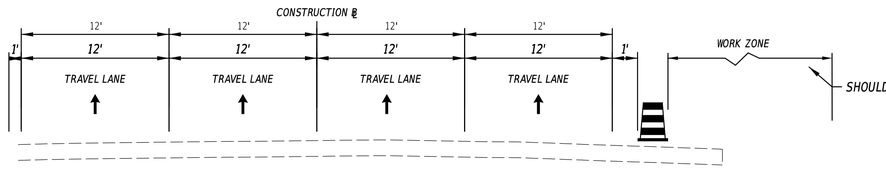
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

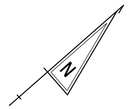
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SECTION
PAI
SHEET NO.
145

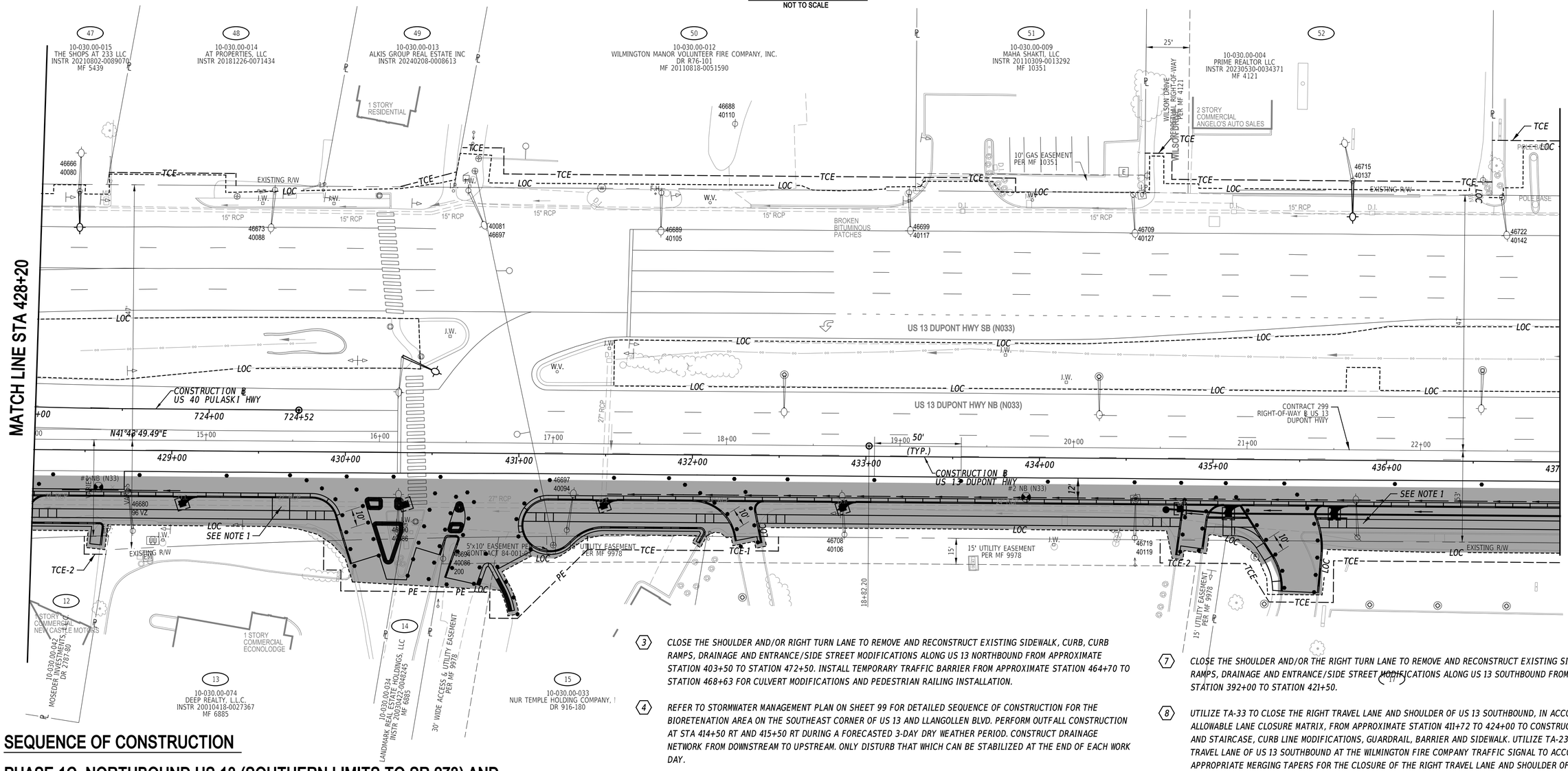
NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2289) AT STATION 436+00(R) DURING THE CONSTRUCTION OF ITS RELOCATION AT STATION 429+60 (R). FOLLOWING THE CONSTRUCTION OF THE RELOCATED BUS STOP PAD FOR ID 2289, THE ORIGINAL BUS STOP LOCATION IS PERMITTED TO BE PERMANENTLY CLOSED. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*





US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*
3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*
4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*
5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*
6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*
7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*
8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*
9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*
10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	$VERSIONS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTBLSS
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	13-JUN-2024@ 06:38
USER NAME:	$USERS
OFFICE LOCATION:	$OFFICENAM

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

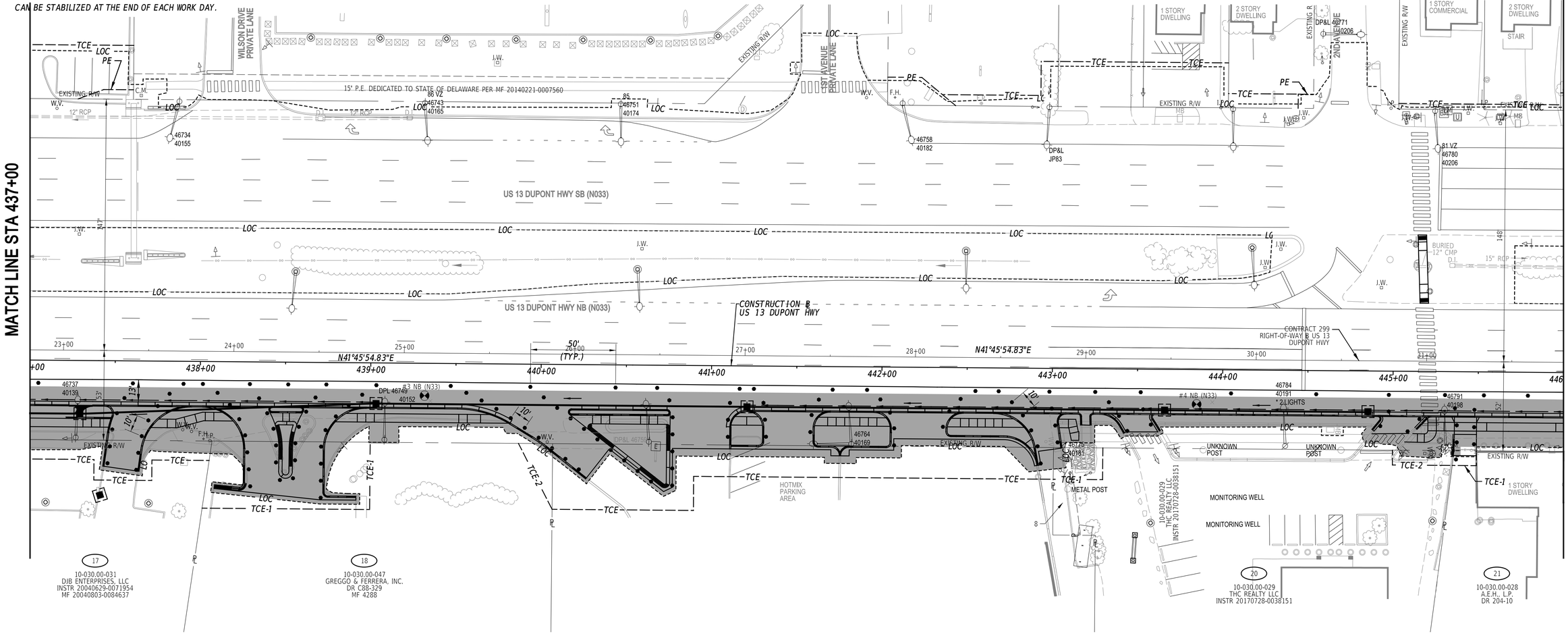
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

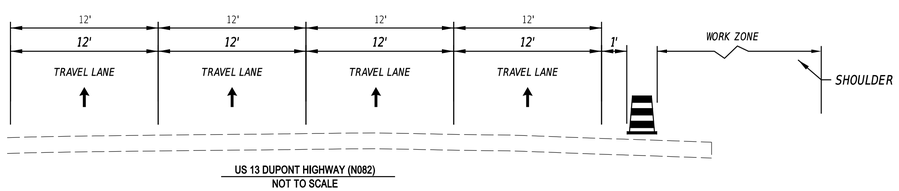
SECTION
PAI
SHEET NO.
146

SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*
3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*
4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*
5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*
6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*
7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*
8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*
9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*
10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*





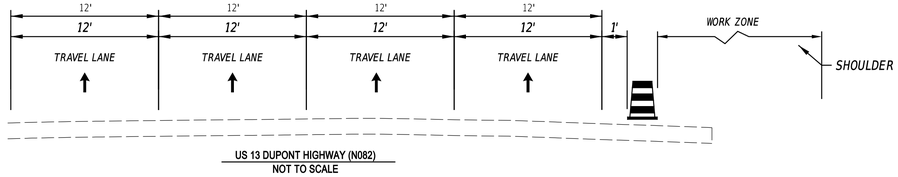
NOT TO SCALE

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 147
					CHECKED BY: P. HORSEY		

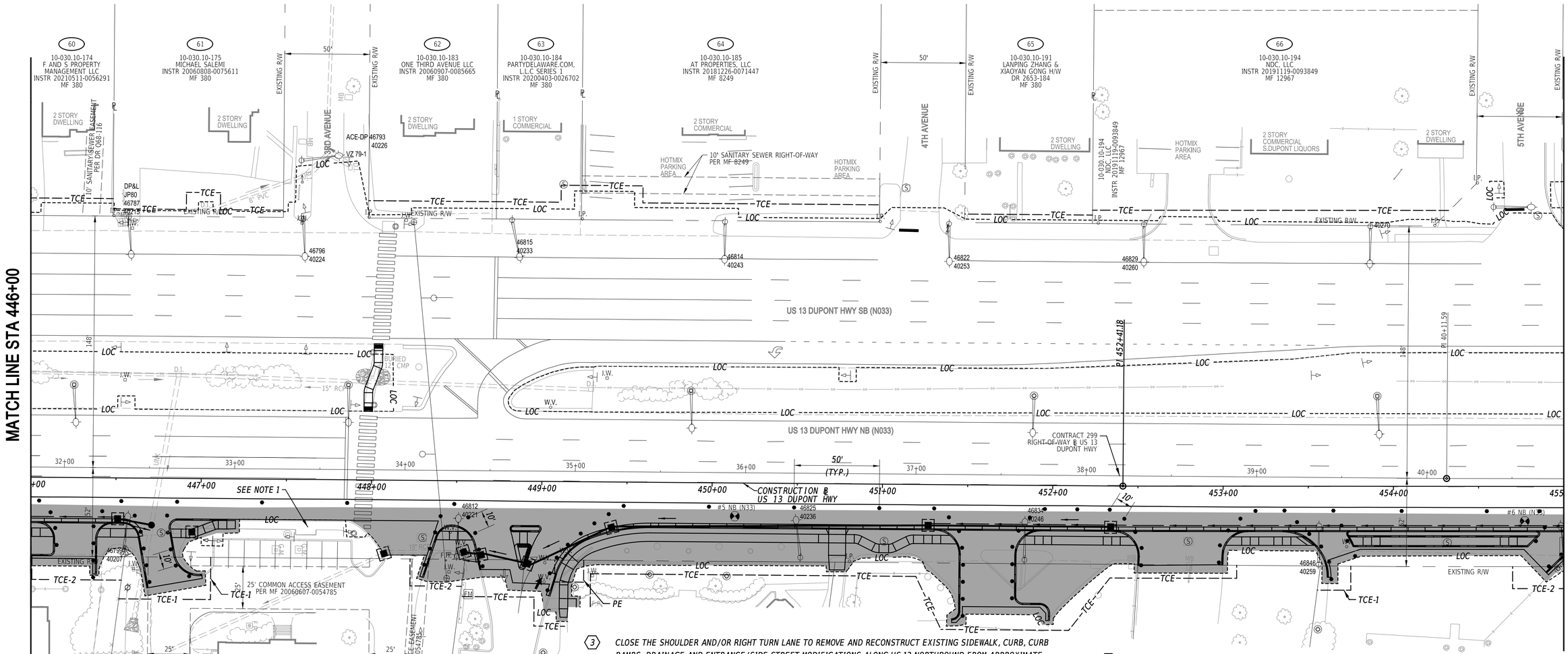
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MICROSTATION VERSION: $VERSIONS$$ | MICROSTATION WORKSPACE: $WORKSPACES$$

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2290) AT STATION 447+60(R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2291) AT STATION 455+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2291, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP ID 2290, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*
3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*
4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*
5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*
6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*
7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*
8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*
9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*
10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTABLES
FILE NAME: STILEAS | PLOT DRIVER: SPLTDRVS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:18
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

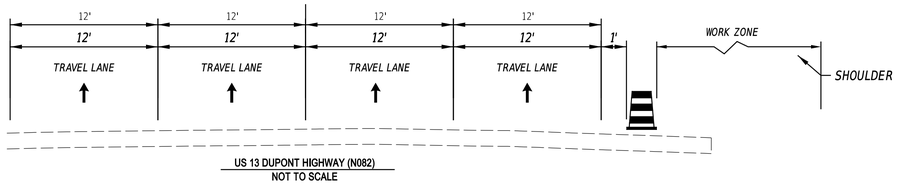
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

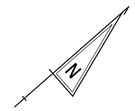
SECTION	PAI
SHEET NO.	148

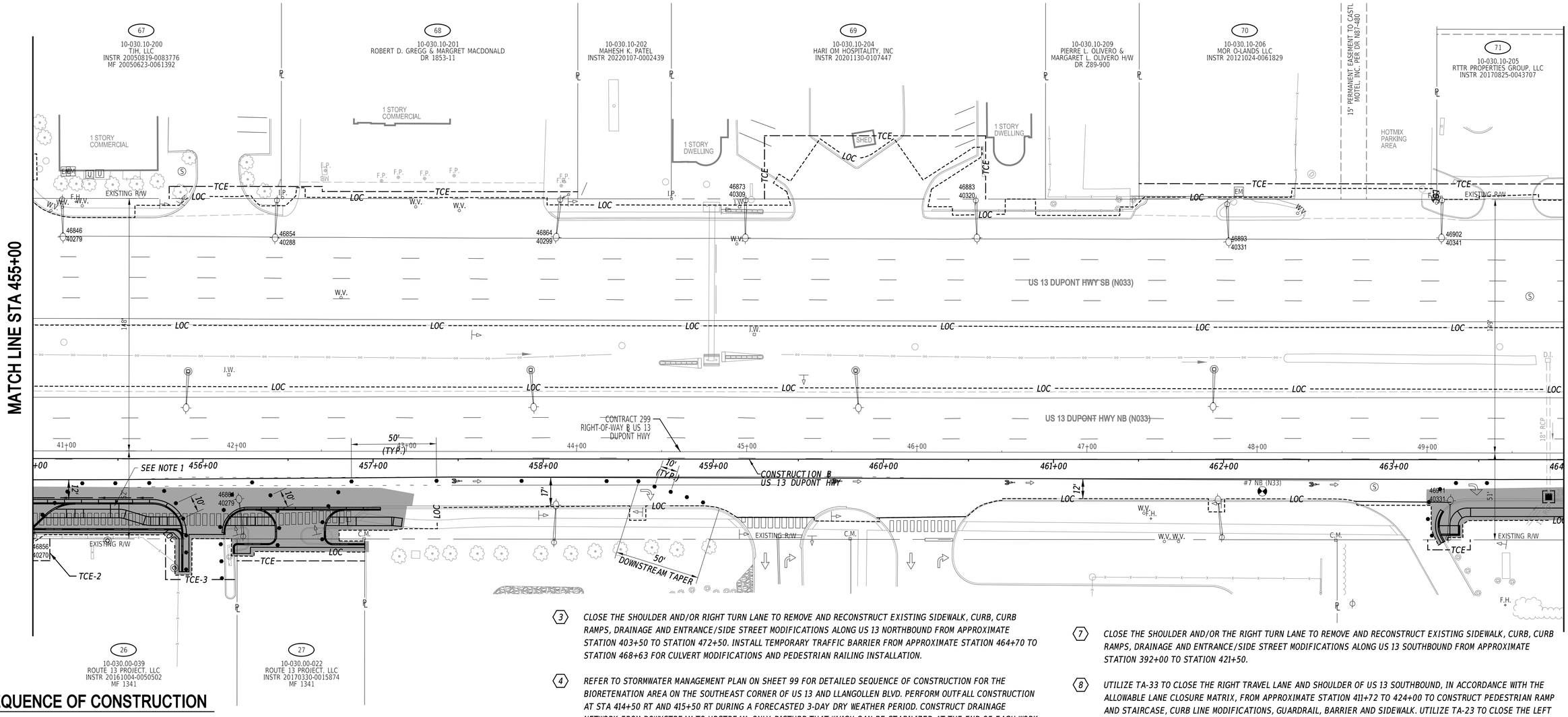
NOTES

1. THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2290) AT STATION 447+60(R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2291) AT STATION 455+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2291, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP ID 2290, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.



US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE





SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.
2. UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.
3. CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.
4. REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.
5. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.
6. SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.
7. CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.
8. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.
9. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.
10. FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SECTION
PAI
SHEET NO.
149

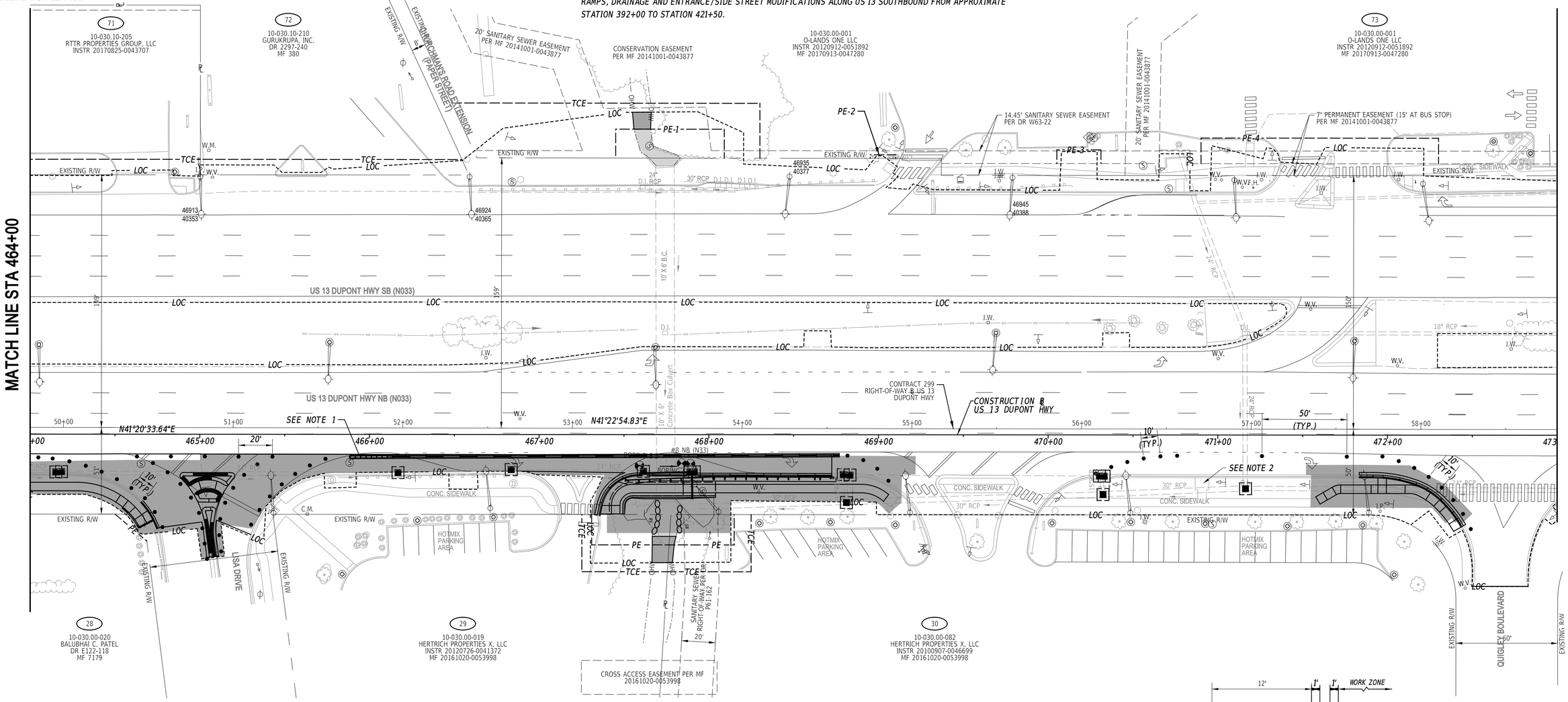
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PLOT DRIVER: $PLTDRVR$
DATE PLOTTED: 13-JUN-2024@ 06:18
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

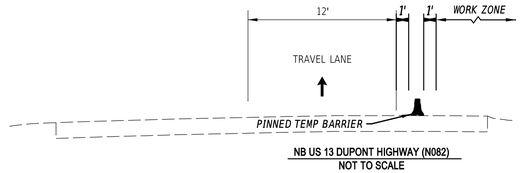
PENNONI ASSOCIATES INC. $FILEAS
FILE NAME:
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES

SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*
3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*
4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*
5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*
6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*
7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*
8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*
9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*
10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*





NB US 13 DUPONT HIGHWAY (N082)
NOT TO SCALE

NOTES

1. *TEMPORARY IMPACT ATTENTUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).*
2. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2293) AT STATION 470+90 (R) DURING CONSTRUCTION. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*

PENNONI ASSOCIATES INC. | PRS TABLE: SPENTRIES
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVXS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:18
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

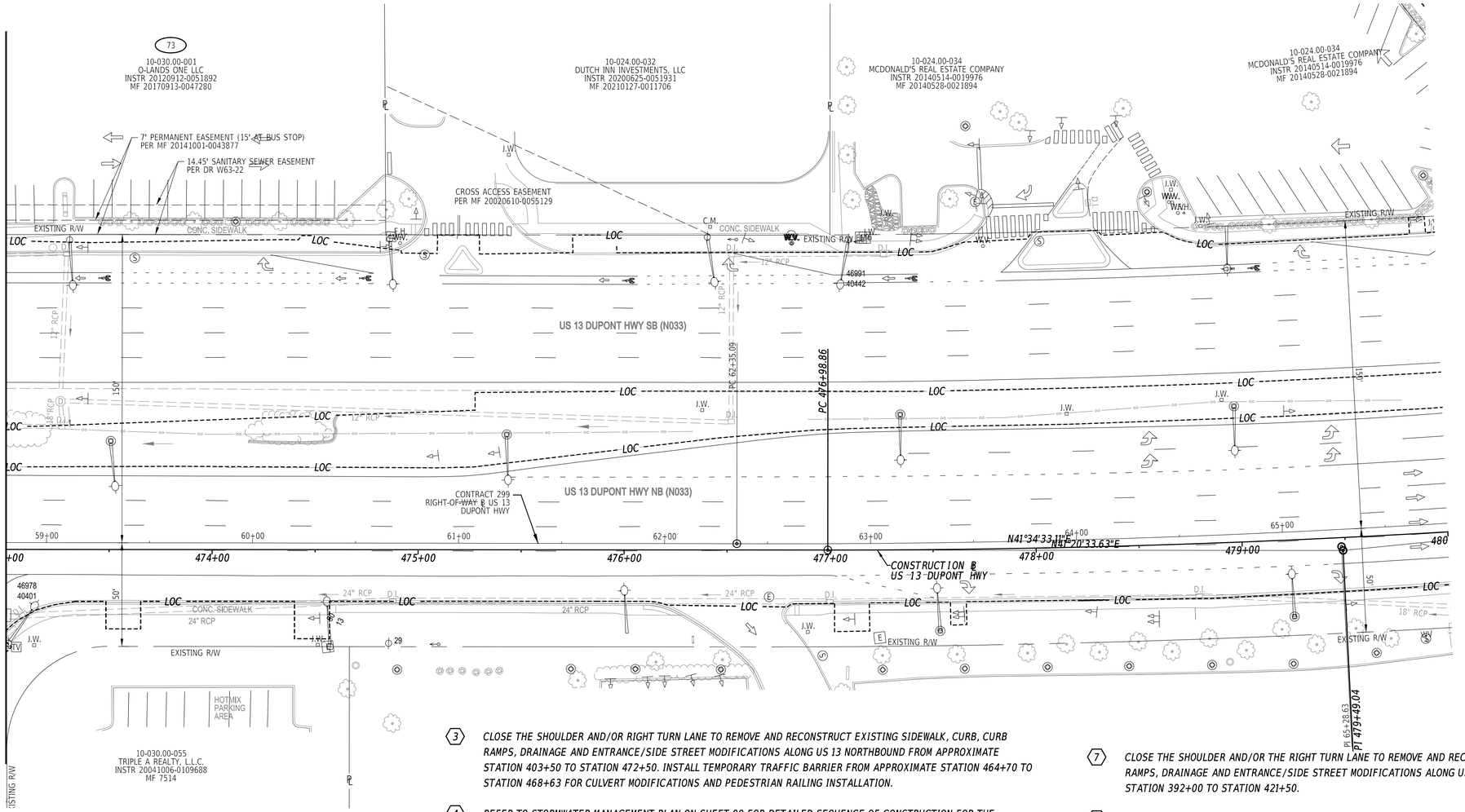
SCALE
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	1-664
T201901102		
COUNTY	DESIGNED BY:	Z. BRANDER
NEW CASTLE	CHECKED BY:	P. HORSEY

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SECTION
PAI
SHEET NO.
150



SEQUENCE OF CONSTRUCTION

PHASE 1C NORTHBOUND US 13 (SOUTHERN LIMITS TO SR 273) AND SOUTHBOUND US 13 (SOUTHERN LIMTS TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN PHASE 1C.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 383+00 TO STATION 403+50.*
3. *CLOSE THE SHOULDER AND/OR RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 403+50 TO STATION 472+50. INSTALL TEMPORARY TRAFFIC BARRIER FROM APPROXIMATE STATION 464+70 TO STATION 468+63 FOR CULVERT MODIFICATIONS AND PEDESTRIAN RAILING INSTALLATION.*
4. *REFER TO STORMWATER MANAGEMENT PLAN ON SHEET 99 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR THE BIORETENATION AREA ON THE SOUTHEAST CORNER OF US 13 AND LLANGOLLEN BLVD. PERFORM OUTFALL CONSTRUCTION AT STA 414+50 RT AND 415+50 RT DURING A FORECASTED 3-DAY DRY WEATHER PERIOD. CONSTRUCT DRAINAGE NETWORK FROM DOWNSTREAM TO UPSTREAM. ONLY DISTURB THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORK DAY.*
5. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 423+75 TO STATION 471+50.*
6. *SHIFT THE SOUTHBOUND THROUGH LANES FROM STATION 412+78 TO 418+79 TO ACCOMMODATE THE WORK ZONE. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN FOR THE DURATION OF PHASE 1C. TWO SOUTHBOUND LANES SHALL BE MAINTAINED DURING NON-ALLOWABLE LANE CLOSURE HOURS.*
7. *CLOSE THE SHOULDER AND/OR THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 392+00 TO STATION 421+50.*
8. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, FROM APPROXIMATE STATION 411+72 TO 424+00 TO CONSTRUCT PEDESTRIAN RAMP AND STAIRCASE, CURB LINE MODIFICATIONS, GUARDRAIL, BARRIER AND SIDEWALK. UTILIZE TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT THE WILMINGTON FIRE COMPANY TRAFFIC SIGNAL TO ACCOMMODATE APPROPRIATE MERGING TAPERS FOR THE CLOSURE OF THE RIGHT TRAVEL LANE AND SHOULDER OF US 13 SOUTHBOUND AS DESCRIBED ABOVE.*
9. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT LLANGOLLEN BLVD, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION PER THE PLAN.*
10. *FOLLOWING THE COMPLETION OF PHASE 1C, TEMPORARY SIGNING AND PAVEMENT MARKINGS SHALL BE REMOVED. INSTALL PERMANENT PAVEMENT MARKINGS WITHIN PHASE LIMITS.*

PENNONI ASSOCIATES INC.	
FILE NAME:	$FILEAS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PRO. TABLE:	$PENTBLSS
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	13-JUN-2024 @ 06:18
USER NAME:	$USERS OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

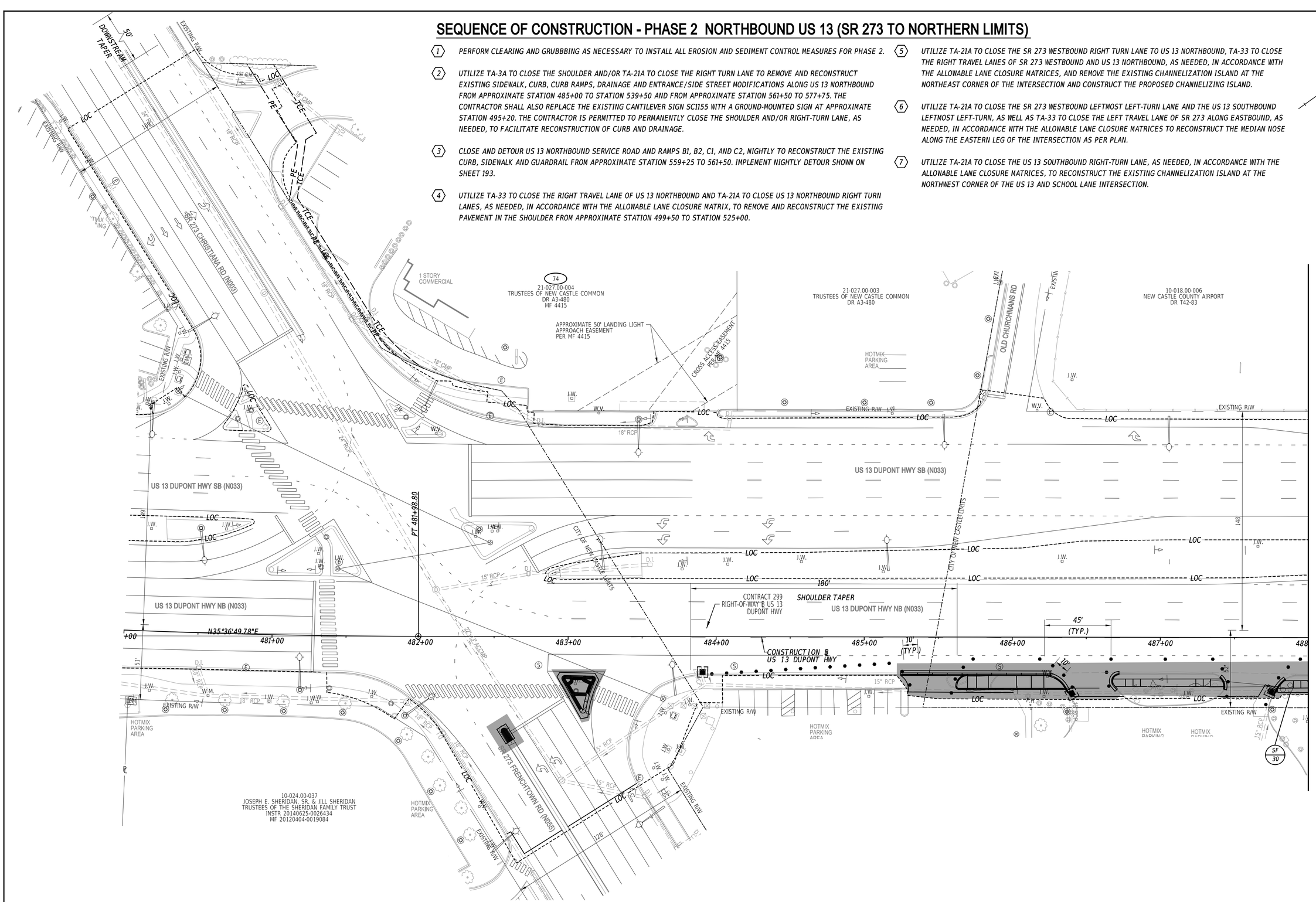
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102	DESIGNED BY:	Z. BRANDER	PAI
COUNTY	CHECKED BY:	P. HORSEY	SHEET NO.
NEW CASTLE			151

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1C

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.
2. UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.
3. CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.
4. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.
5. UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.
6. UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.
7. UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.



PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024# 06:38
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
152

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

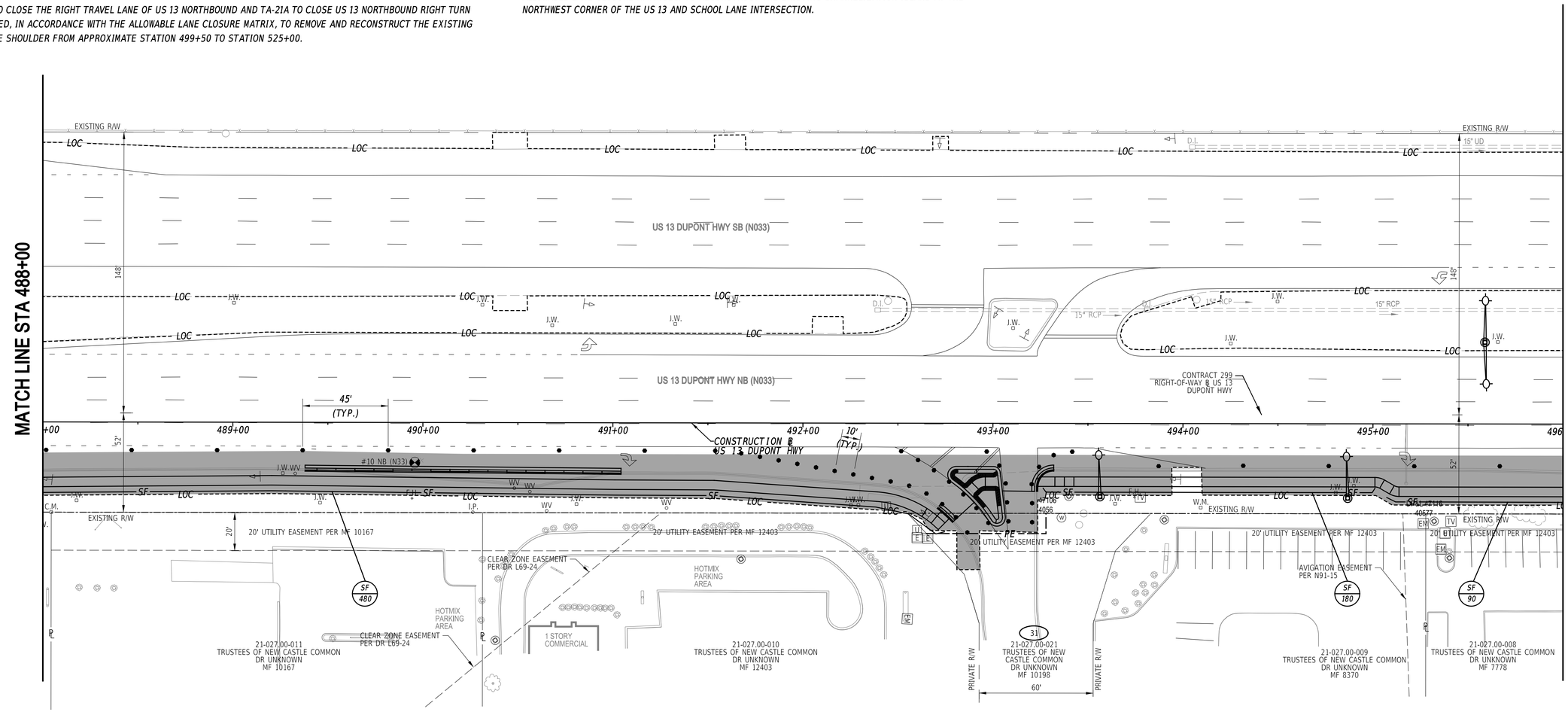
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

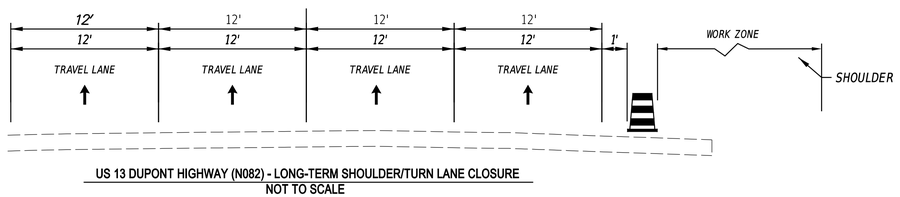
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

PENNONI ASSOCIATES INC: SFILEAS
FILE NAME: PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS
MICROSTATION WORKSPACE: SWORKSPACES
PEN TABLE: SPENTBLSS
DATE PLOTTED: 13-JUN-2024@ 06:18
USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
153

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

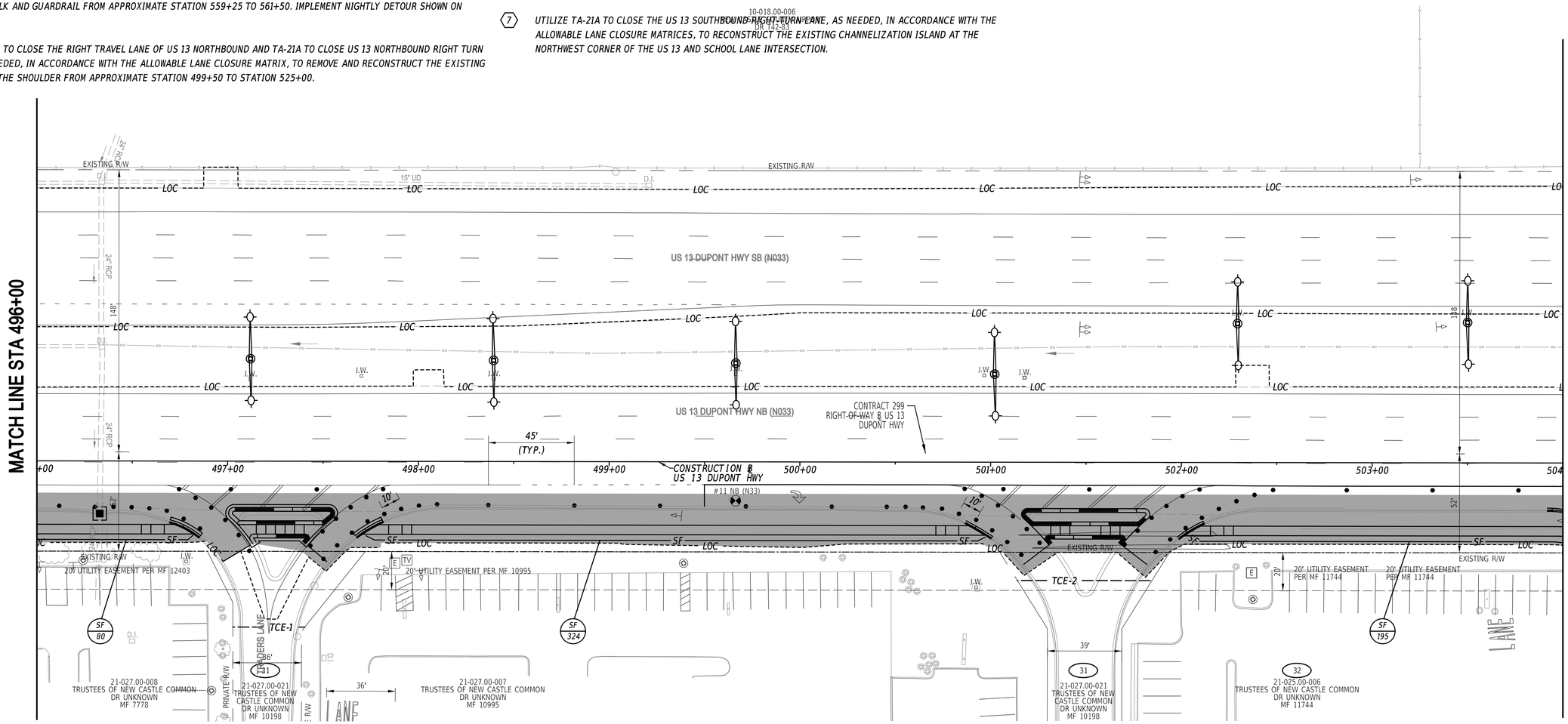
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

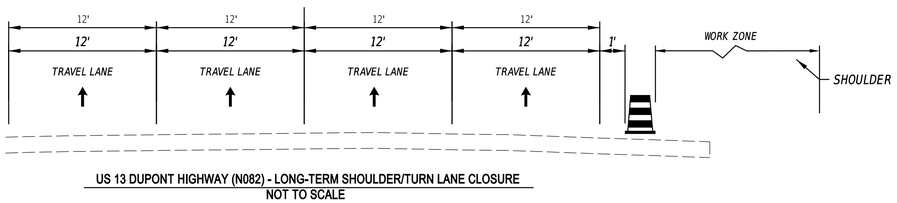
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*





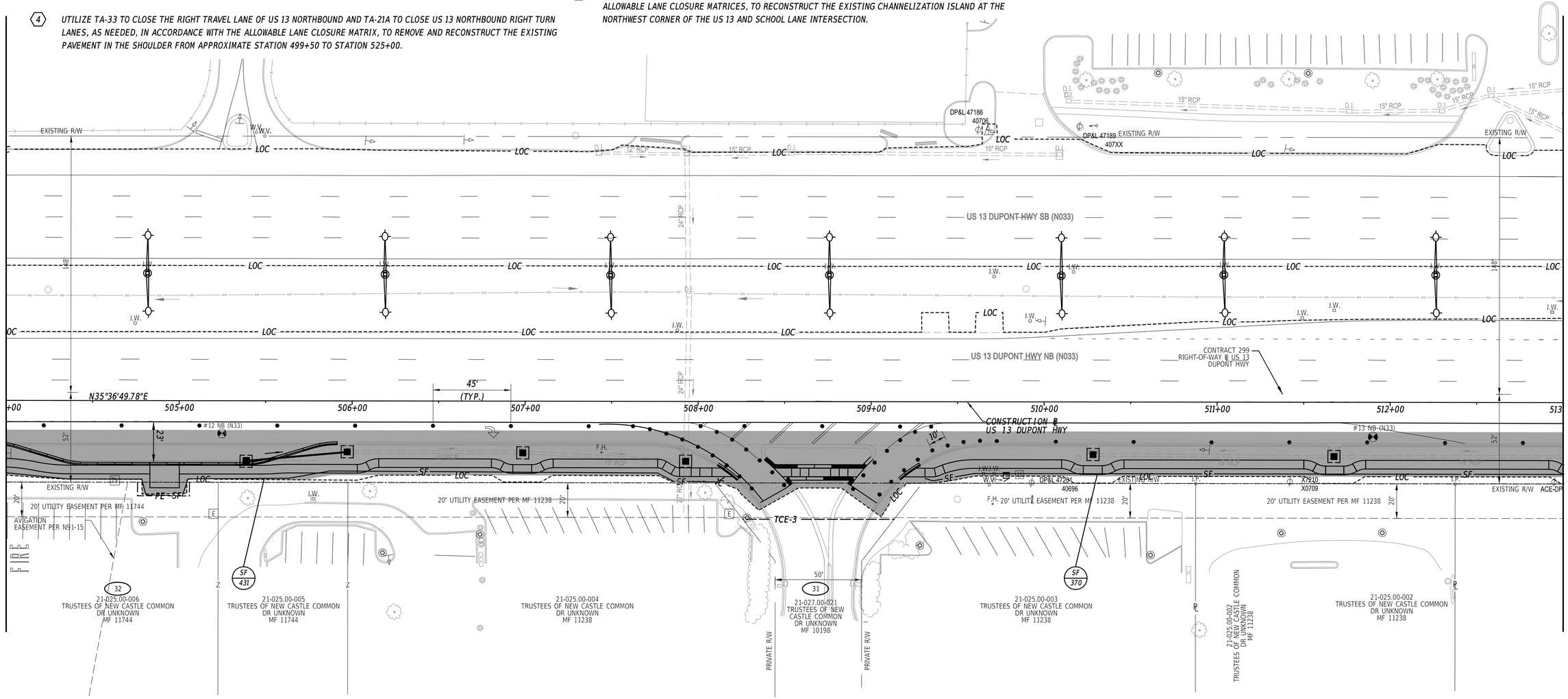
US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

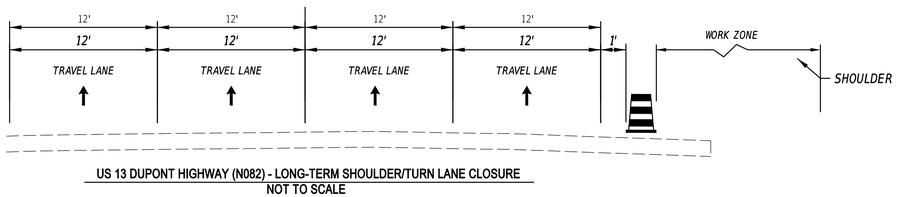
PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:18
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERNS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 154
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*
5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*
6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*
7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTBLSS
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	13-JUN-2024@ 06:18
USER NAME:	$USERSS
OFFICE LOCATION:	$OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
155

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SCI155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

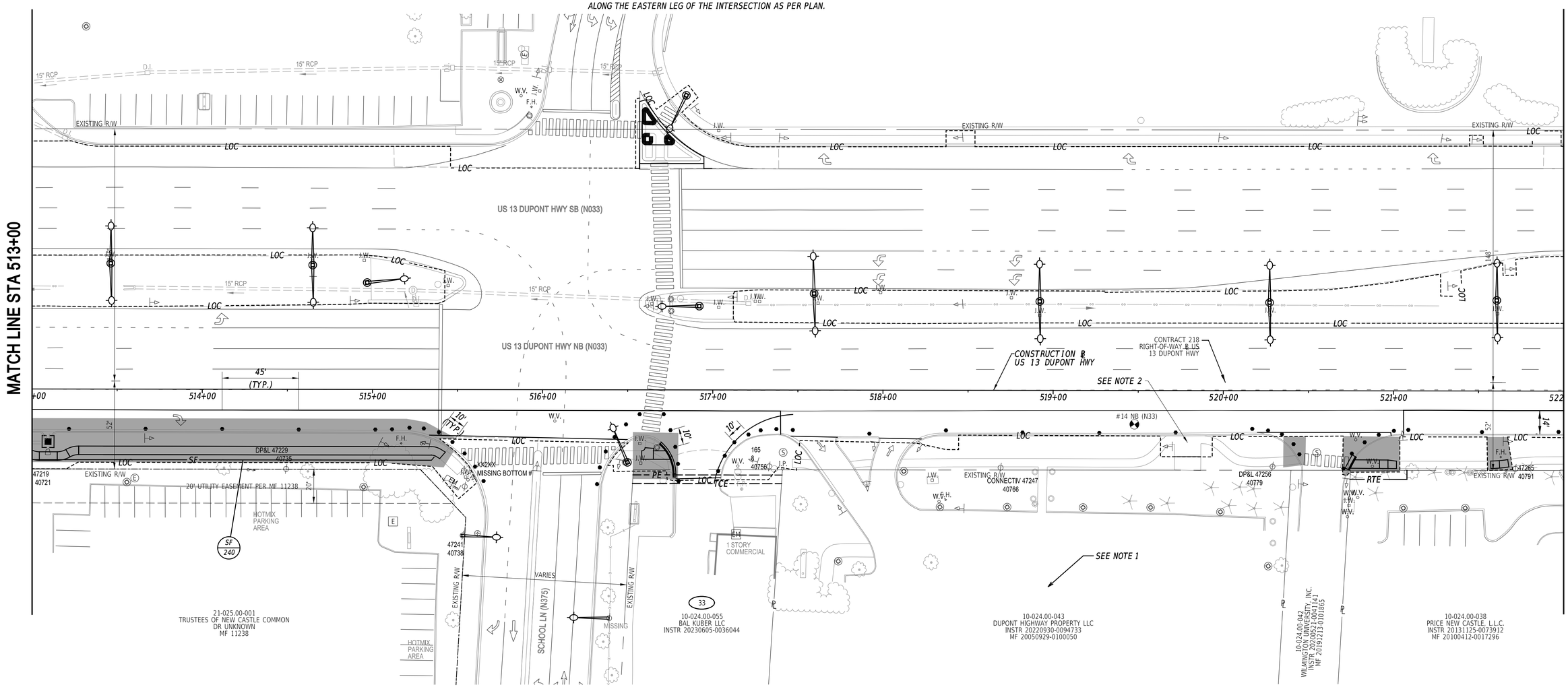
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

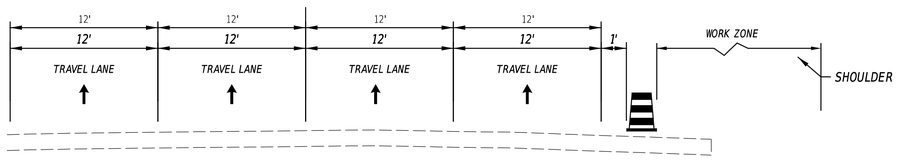
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

NOTES

1. *CONSTRUCTION FOR DEVELOPMENT PROJECT SMO #1406 WAS RECENTLY COMPLETED. THE CONTRACTOR SHALL CONSTRUCT THE PEDESTRIAN FACILITIES AT STATION 516+65(R) AND AT STATION 520+75(R) AS SHOWN ON THIS SHEET TO TIE INTO THE NEW PEDESTRIAN FACILTIES CONSTRUCTED AS PART OF THE DEVELOPMENT PROJECT.*

2. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2173) AT STATION 519+75 (R) AND EXISTING BUS STOP (ID 2175) AT STATION 538+75 (R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2174) AT STATION 529+00 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2174, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2173 AND 2175, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*

PENNONI ASSOCIATES INC:	SFILEAS
FILE NAME:	PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION:	SVERSIONS
MICROSTATION WORKSPACE:	SWORKSPACES
PEN TABLE:	SPENTBLSS
DATE PLOTTED:	13-JUN-2024@ 06:18
USER NAME:	SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
156

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

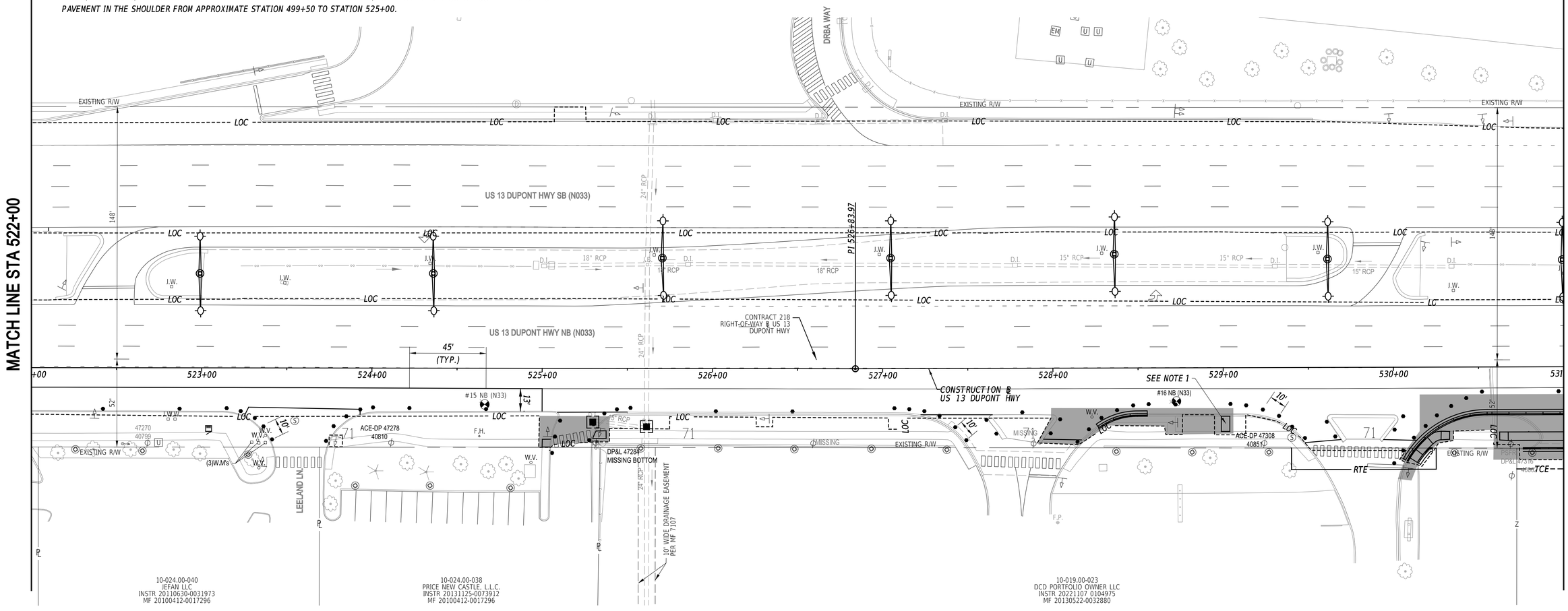
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

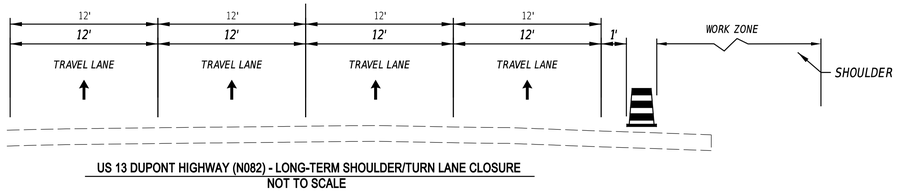
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2173) AT STATION 519+75 (R) AND EXISTING BUS STOP (ID 2175) AT STATION 538+75 (R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2174) AT STATION 529+00 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2174, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2173 AND 2175, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	$PLTDRVSS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTBLSS
PLOT DRIVER:	$PLTDRVSS
DATE PLOTTED:	13-JUN-2024@ 06:38
USER NAME:	$USERS
OFFICE LOCATION:	$OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION	PAI
SHEET NO.	157

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SCI155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

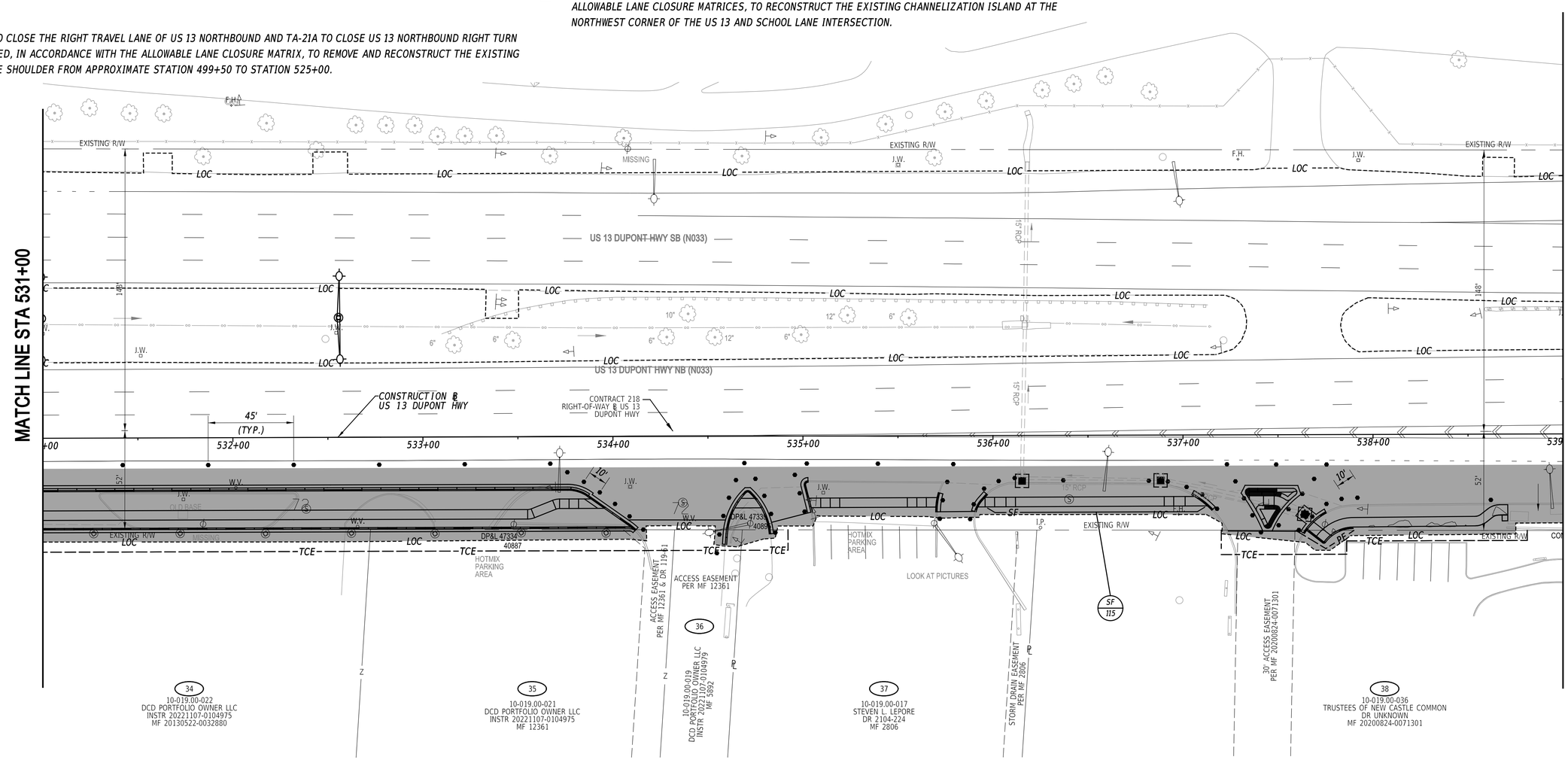
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

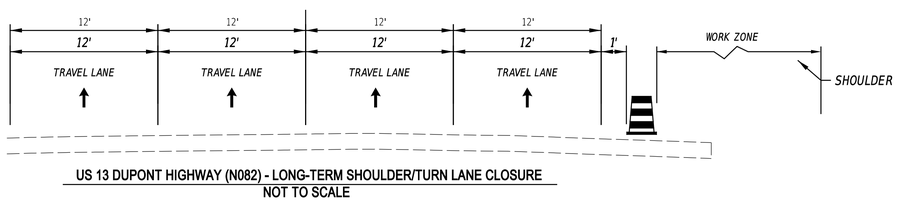
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2173) AT STATION 519+75 (R) AND EXISTING BUS STOP (ID 2175) AT STATION 538+75 (R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2174) AT STATION 529+00 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2174, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2173 AND 2175, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*

PENNONI ASSOCIATES INC.		PEN TABLE:	SPRINTBLS
FILE NAME:	SFILEAS	PLOT DRIVER:	SPLTDRVS
MICROSTATION VERSION:	SVERSIONS	DATE PLOTTED:	13-JUN-2024 @ 06:38
MICROSTATION WORKSPACE:	SWORKSPACES	USER NAME:	SUSERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
158

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.

2. UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SCI155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.

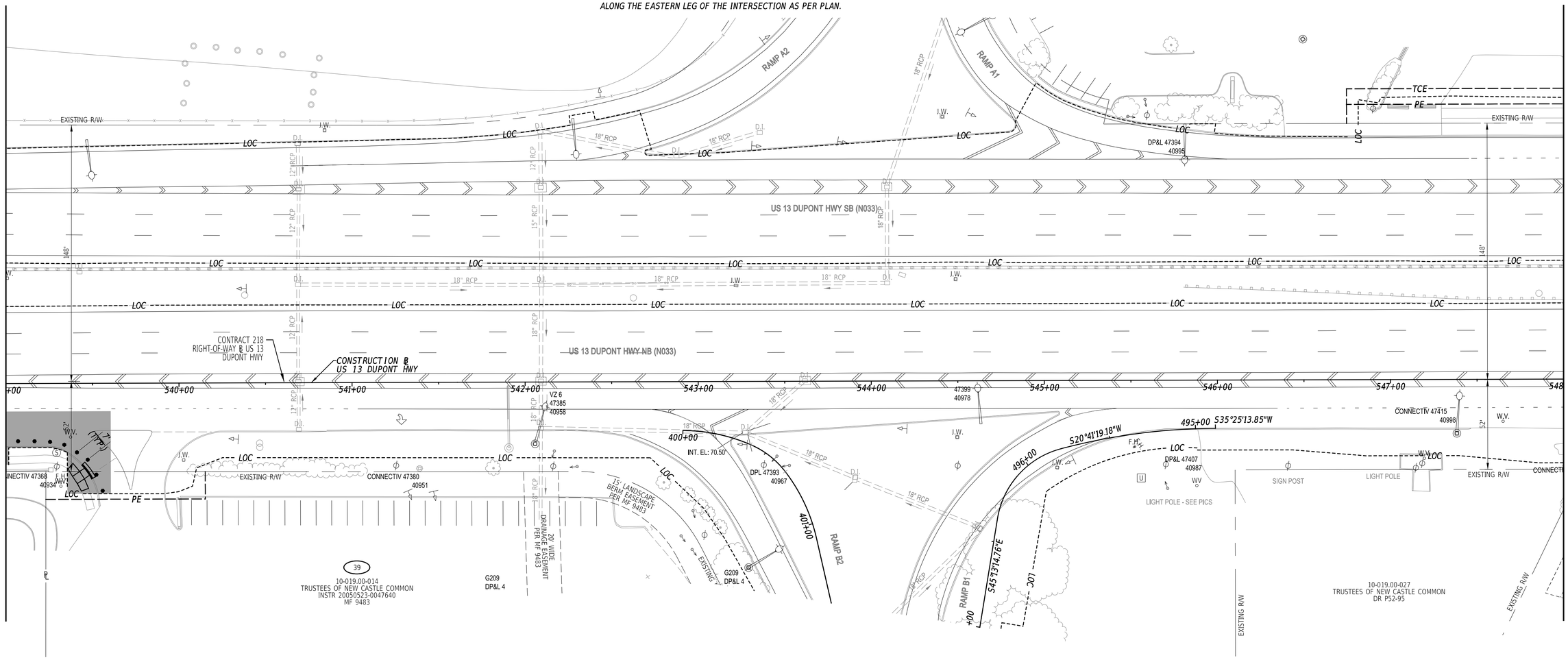
3. CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.

4. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.

5. UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.

6. UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.

7. UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.



PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRAWER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024 @ 06:18
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 159
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

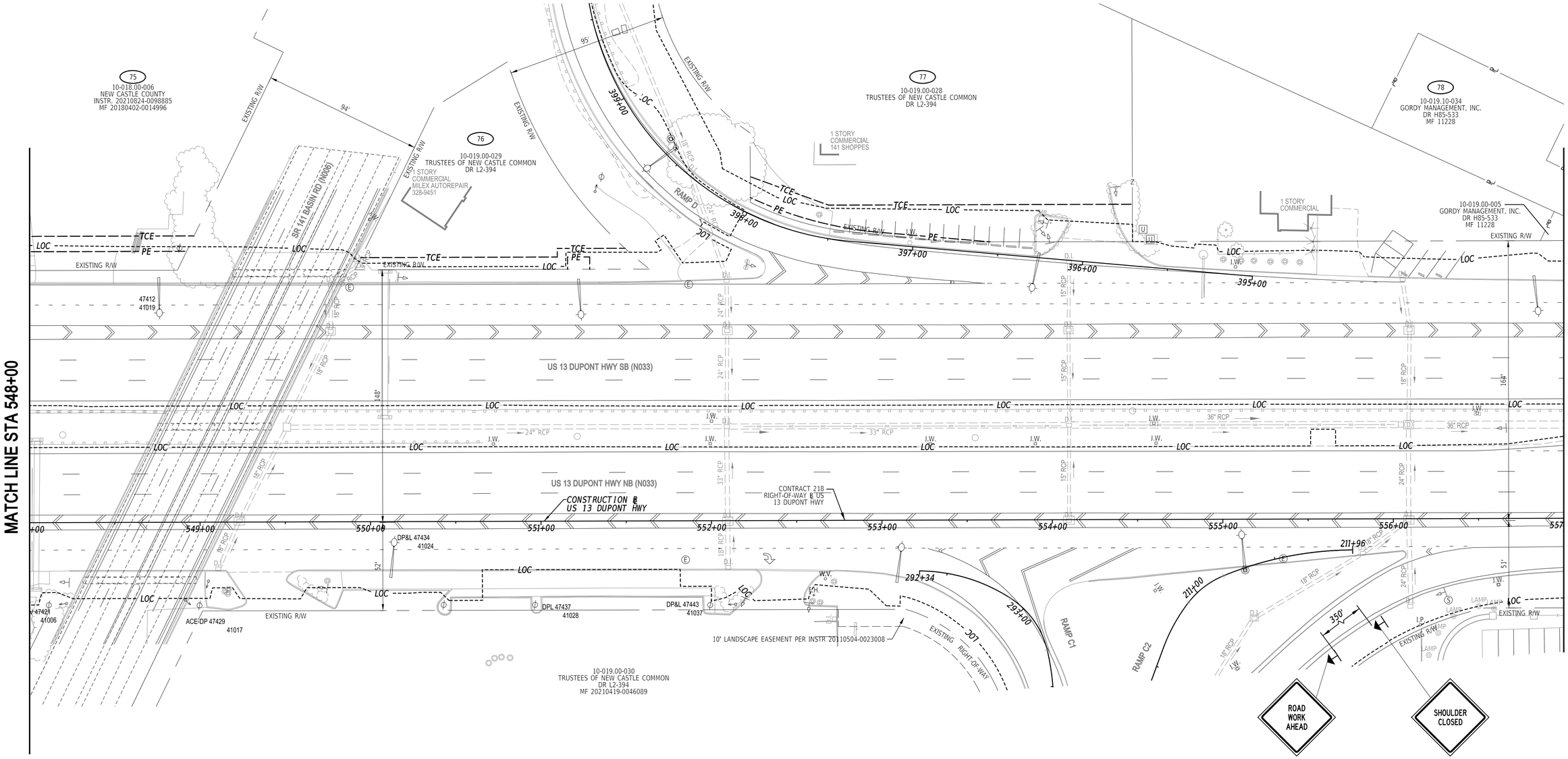
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*



PENNONI ASSOCIATES INC.	PEN TABLE: SPENTRIS$
FILE NAME: $FILEAS	PLOT DRIVER: SPLTDRV$$
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:18
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USER$ OFFICE LOCATION: $OFFICENAME

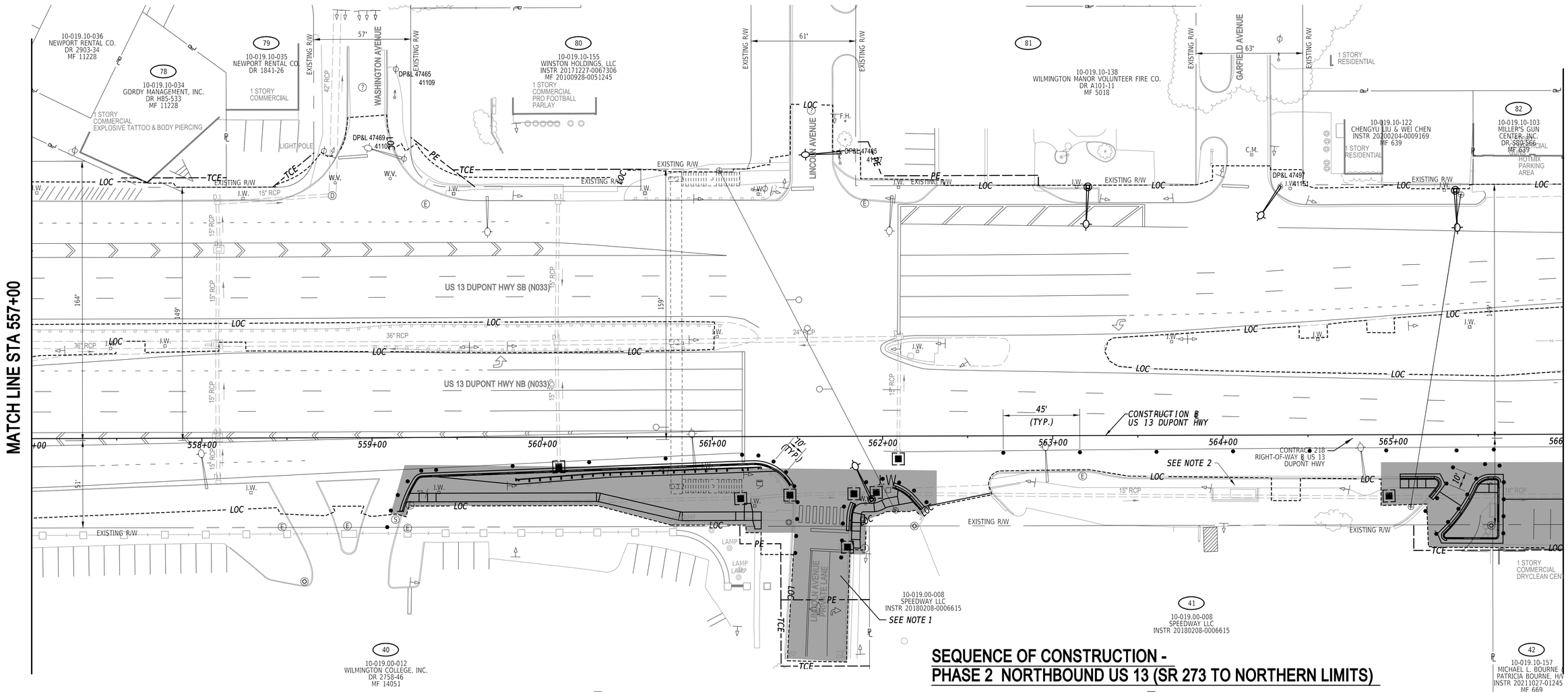
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ADDENDA / REVISIONS		SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2	SECTION
		0 30 60 90		T201901102			PAI
		FEET		COUNTY	DESIGNED BY: Z. BRANDER		SHEET NO.
				NEW CASTLE	CHECKED BY: P. HORSEY		160

NOTES

1. *THE CONTRACTOR IS PERMITTED TO PERFORM CONSTRUCTION ACTIVITIES ALONG LINCOLN AVENUE DURING THE HOURS OF 6PM TO 8AM ONLY. CONSTRUCTION DURING THE DAY (8AM TO 6PM) IS PROHIBITED.*

2. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2176) AT STATION 564+00 (R) AND EXISTING BUS STOP (ID 2180) AT STATION 572+60 (R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2179) AT STATION 576+25 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2179, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2176 AND 2180, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*

2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*

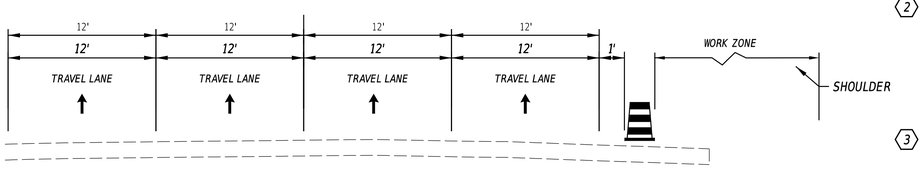
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*

4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*

5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*

6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*



US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

PENNONI ASSOCIATES INC.	PEN TABLE: SPENTBSS
FILE NAME: SFILEAS	PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS	DATE PLOTTED: 13-JUN-2024 @ 06:18
MICROSTATION WORKSPACE: SWORKSPACES	USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

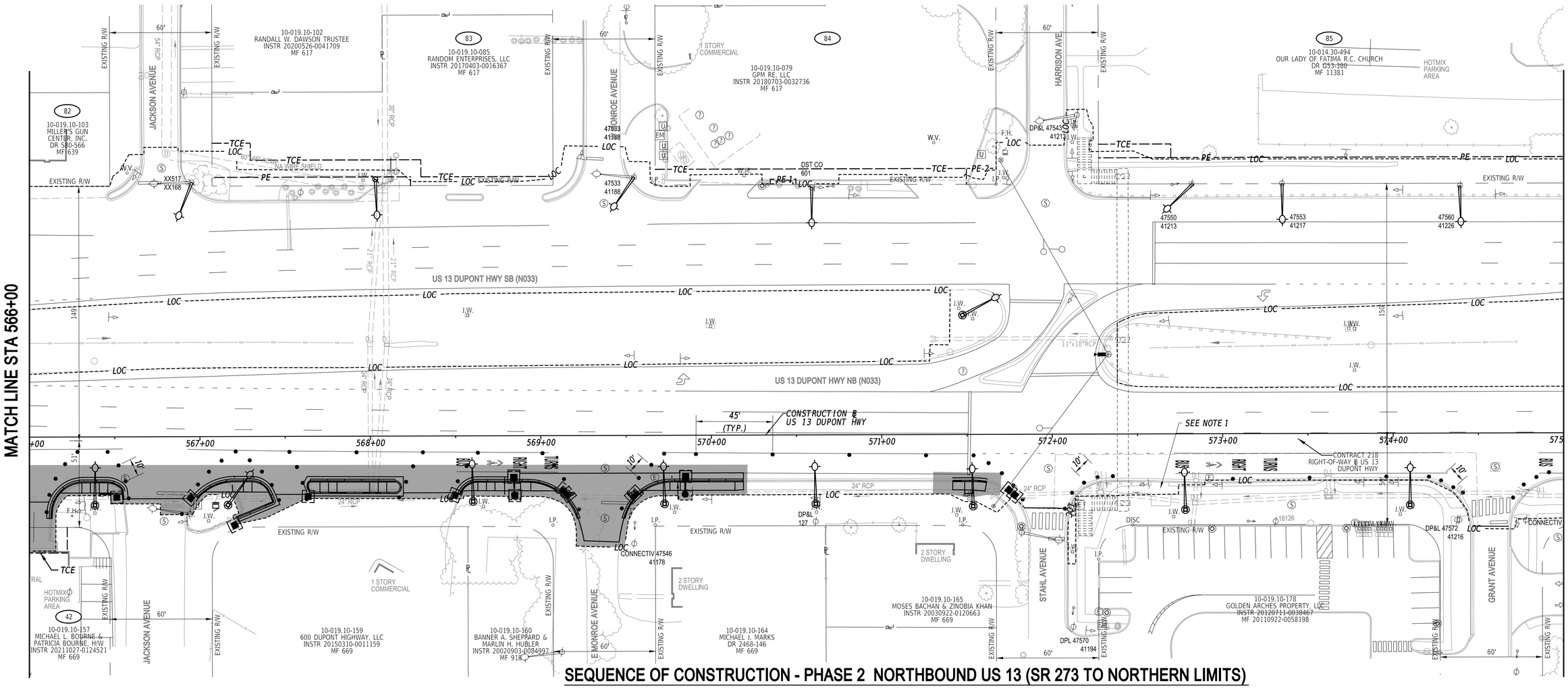
CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

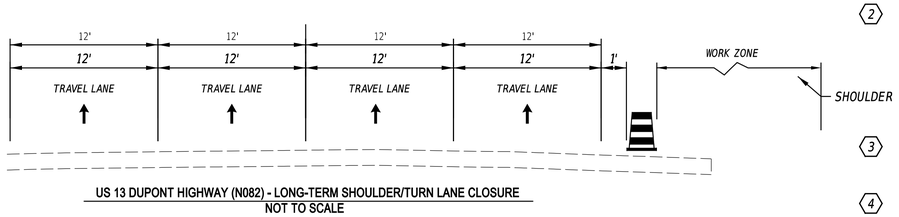
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
161

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2176) AT STATION 564+00 (R) AND EXISTING BUS STOP (ID 2180) AT STATION 572+60 (R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2179) AT STATION 576+25 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2179, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2176 AND 2180, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*
5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*
6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*
7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024 @ 06:18
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

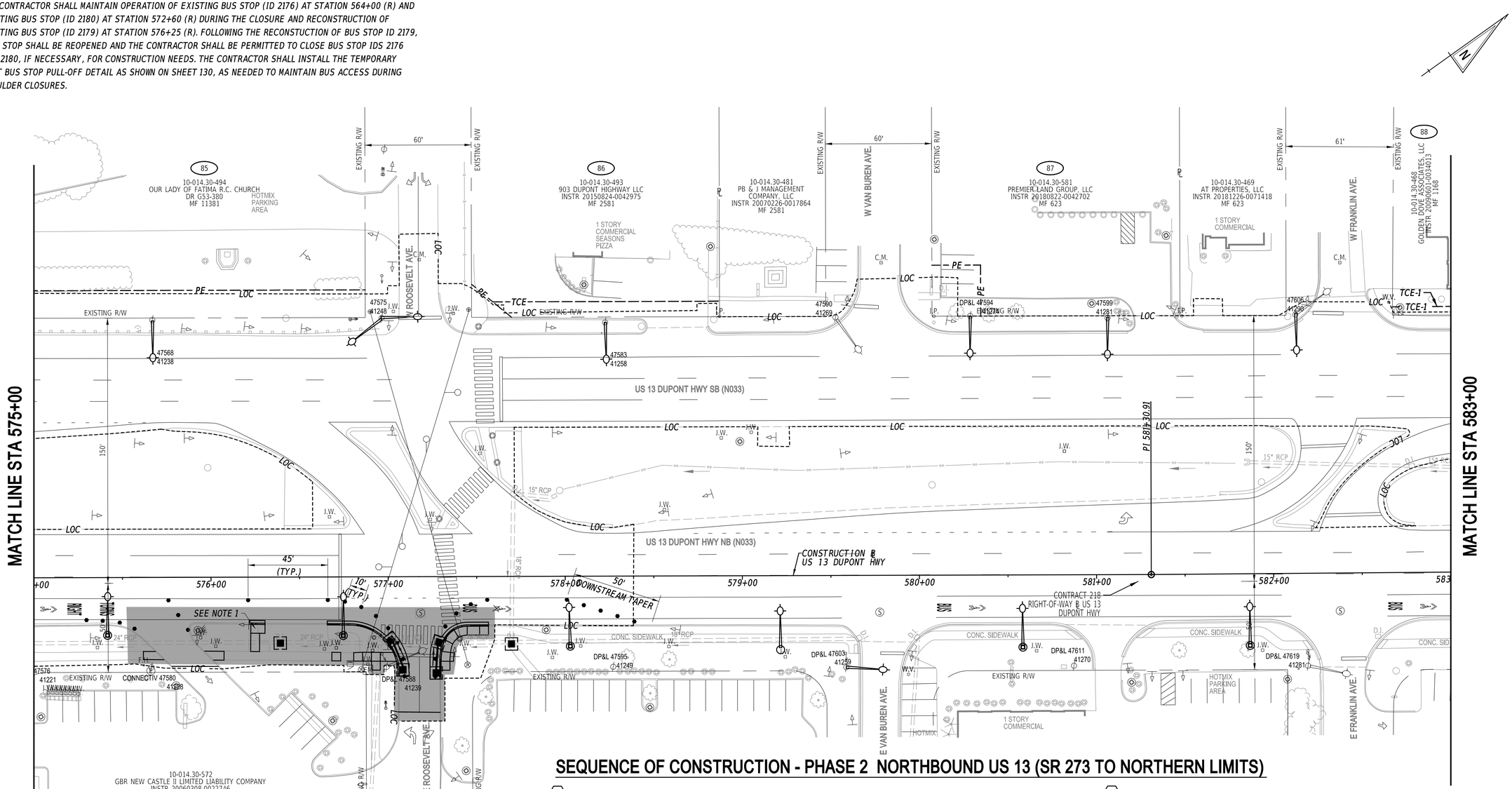
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

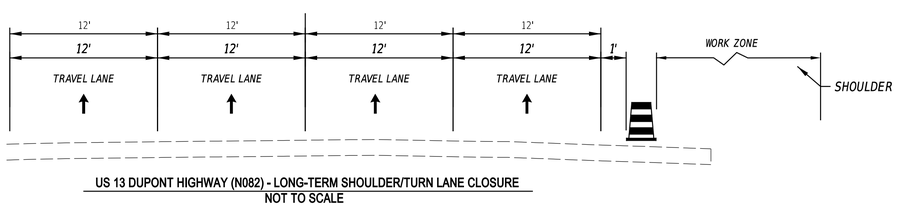
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
162

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2176) AT STATION 564+00 (R) AND EXISTING BUS STOP (ID 2180) AT STATION 572+60 (R) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2179) AT STATION 576+25 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2179, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2176 AND 2180, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SCI155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*
5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*
6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*
7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*

PENNONI ASSOCIATES INC.	
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MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTBLSS
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ADDENDA / REVISIONS

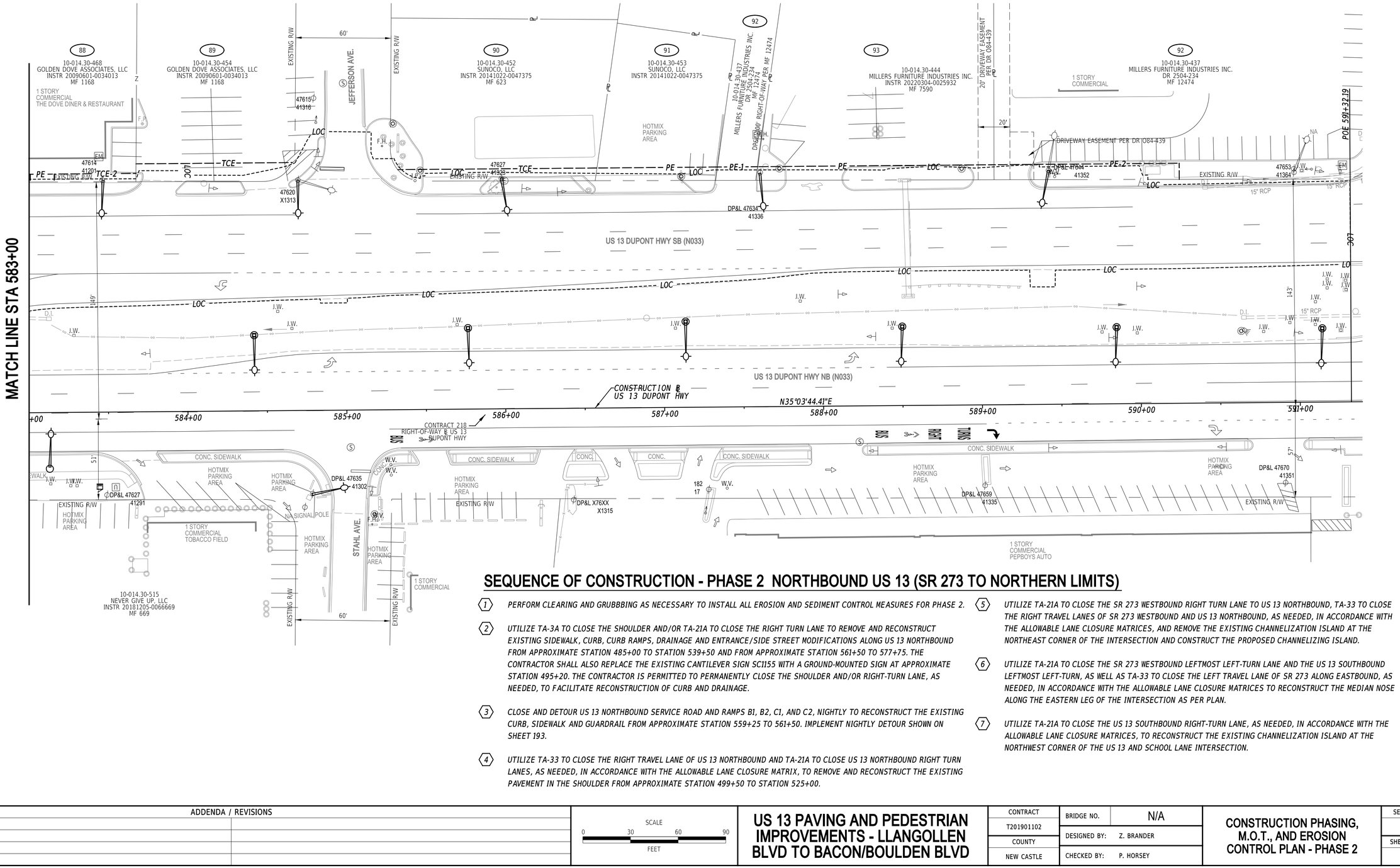
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION	PAI
SHEET NO.	163



SEQUENCE OF CONSTRUCTION - PHASE 2 NORTHBOUND US 13 (SR 273 TO NORTHERN LIMITS)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.*
2. *UTILIZE TA-3A TO CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 485+00 TO STATION 539+50 AND FROM APPROXIMATE STATION 561+50 TO 577+75. THE CONTRACTOR SHALL ALSO REPLACE THE EXISTING CANTILEVER SIGN SC1155 WITH A GROUND-MOUNTED SIGN AT APPROXIMATE STATION 495+20. THE CONTRACTOR IS PERMITTED TO PERMANENTLY CLOSE THE SHOULDER AND/OR RIGHT-TURN LANE, AS NEEDED, TO FACILITATE RECONSTRUCTION OF CURB AND DRAINAGE.*
3. *CLOSE AND DETOUR US 13 NORTHBOUND SERVICE ROAD AND RAMPS B1, B2, C1, AND C2, NIGHTLY TO RECONSTRUCT THE EXISTING CURB, SIDEWALK AND GUARDRAIL FROM APPROXIMATE STATION 559+25 TO 561+50. IMPLEMENT NIGHTLY DETOUR SHOWN ON SHEET 193.*
4. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 NORTHBOUND AND TA-21A TO CLOSE US 13 NORTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 499+50 TO STATION 525+00.*
5. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND RIGHT TURN LANE TO US 13 NORTHBOUND, TA-33 TO CLOSE THE RIGHT TRAVEL LANES OF SR 273 WESTBOUND AND US 13 NORTHBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHEAST CORNER OF THE INTERSECTION AND CONSTRUCT THE PROPOSED CHANNELIZING ISLAND.*
6. *UTILIZE TA-21A TO CLOSE THE SR 273 WESTBOUND LEFTMOST LEFT-TURN LANE AND THE US 13 SOUTHBOUND LEFTMOST LEFT-TURN, AS WELL AS TA-33 TO CLOSE THE LEFT TRAVEL LANE OF SR 273 ALONG EASTBOUND, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES TO RECONSTRUCT THE MEDIAN NOSE ALONG THE EASTERN LEG OF THE INTERSECTION AS PER PLAN.*
7. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, TO RECONSTRUCT THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE US 13 AND SCHOOL LANE INTERSECTION.*

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:19
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

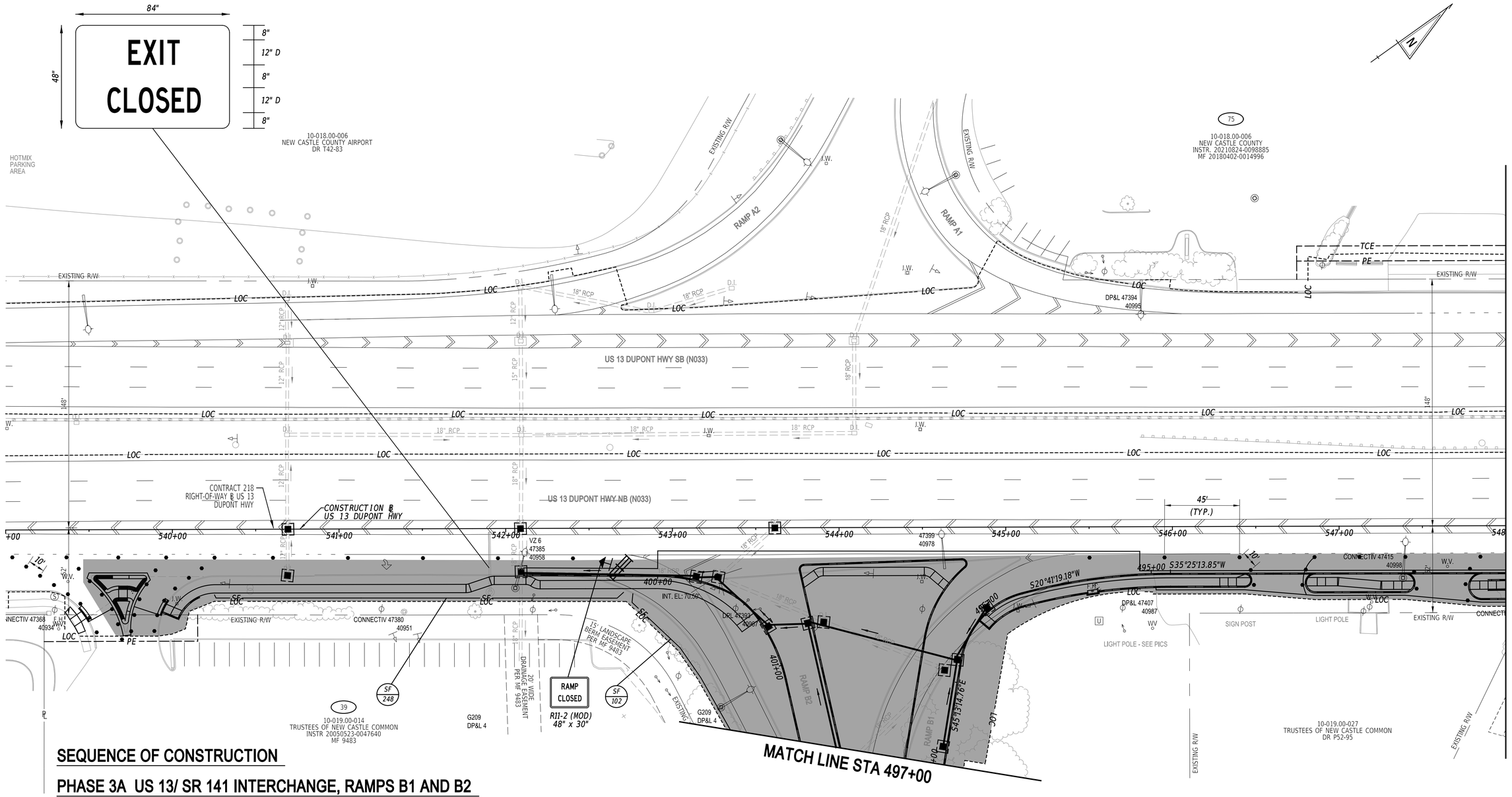
SCALE
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

SECTION
PAI
SHEET NO.
164



SEQUENCE OF CONSTRUCTION

PHASE 3A US 13/ SR 141 INTERCHANGE, RAMPS B1 AND B2

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3A.*
2. *IMPLEMENT DETOUR PLAN ON SHEET 190 TO CLOSE RAMPS B1 AND B2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FROM US 13 NB TO SR 141 SOUTH, LOCATED AT APPROXIMATE STATION 541+90, AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 SB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.*
3. *WHILE THE RAMPS ARE CLOSED, RECONSTRUCT THE RAMPS AS SHOWN ON THE PLANS.*
4. *CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 539+00 TO STATION 550+75.*

NOTES

1. *CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3A. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3A IS NOT COMPLETED BY 45 CALENDAR DAYS.*

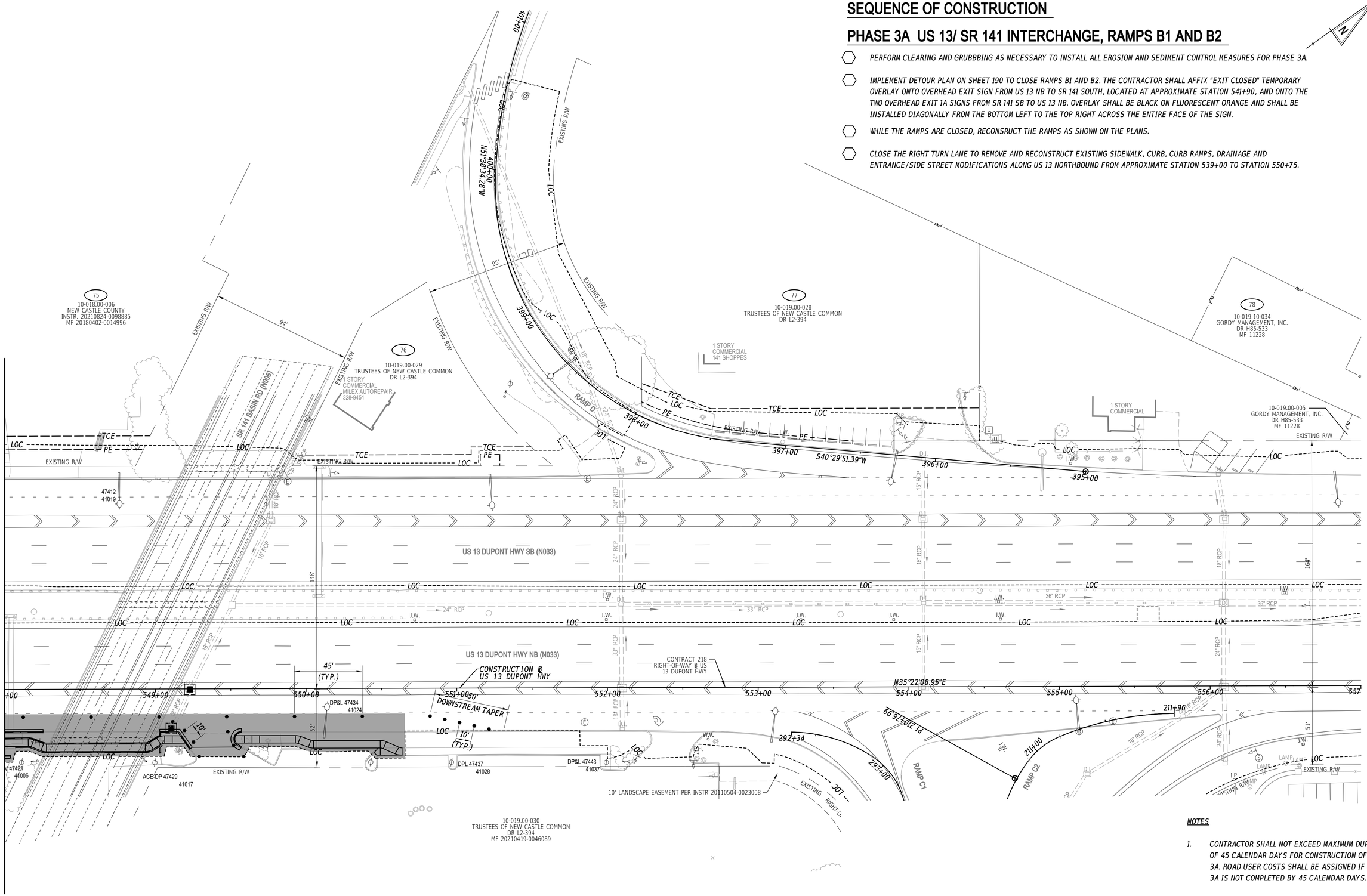
PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBLS
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MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: SUSERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3A	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 165
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION

PHASE 3A US 13/ SR 141 INTERCHANGE, RAMPS B1 AND B2

- PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3A.
- IMPLEMENT DETOUR PLAN ON SHEET 190 TO CLOSE RAMPS B1 AND B2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FROM US 13 NB TO SR 141 SOUTH, LOCATED AT APPROXIMATE STATION 541+90, AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 SB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.
- WHILE THE RAMPS ARE CLOSED, RECONSRUCT THE RAMPS AS SHOWN ON THE PLANS.
- CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 539+00 TO STATION 550+75.



NOTES

1. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3A. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3A IS NOT COMPLETED BY 45 CALENDAR DAYS.

PENNONI ASSOCIATES INC.	PEN TABLE: SPENTRY.SS
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MICROSTATION VERSION: SVERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:19
MICROSTATION WORKSPACE: SWORKSPACES	USER NAME: SUSERS OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

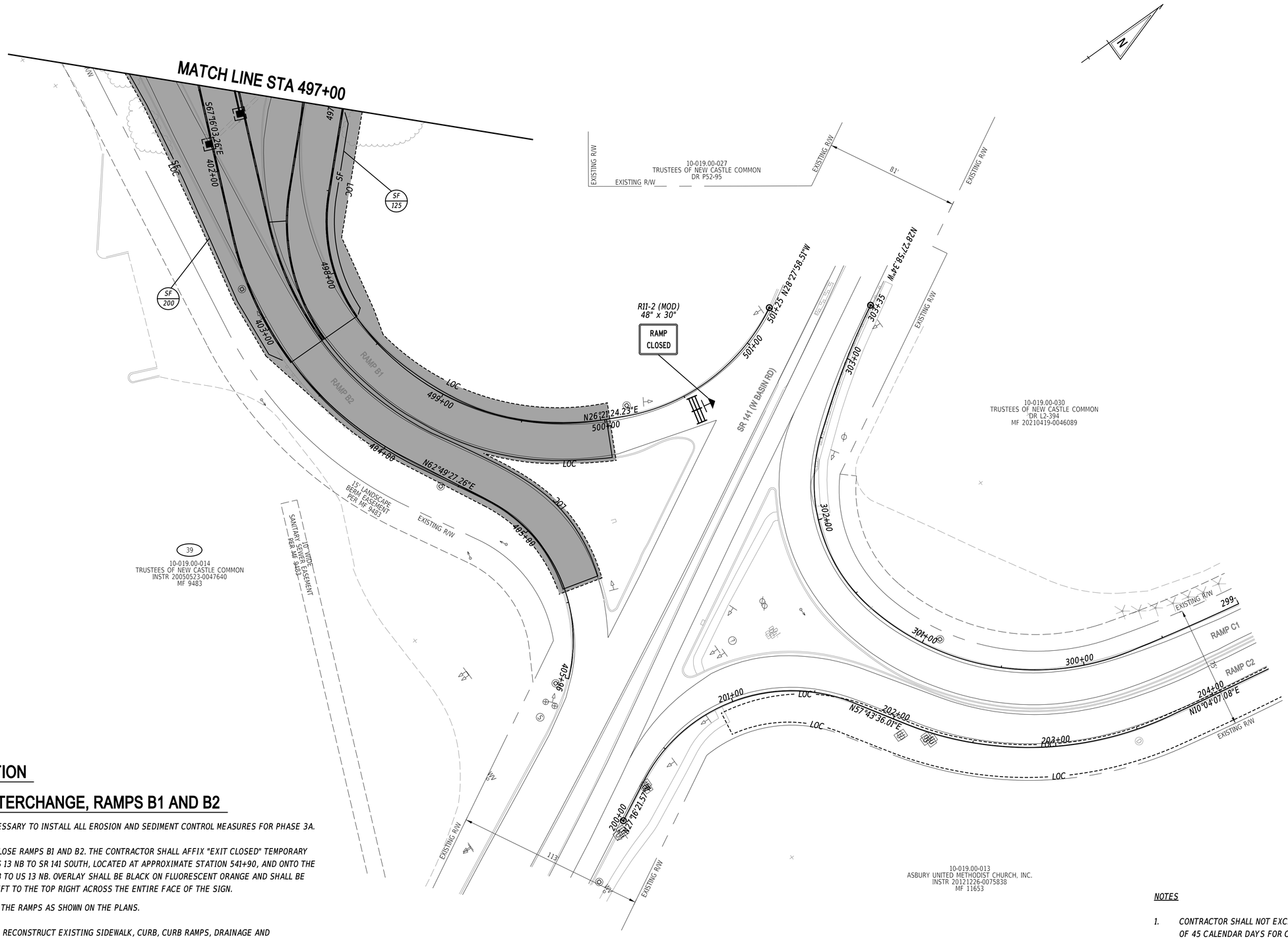
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT T201901102	BRIDGE NO.	N/A
COUNTY NEW CASTLE	DESIGNED BY:	Z. BRANDER
	CHECKED BY:	P. HORSEY

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3A

SECTION
PAI
SHEET NO.
166



SEQUENCE OF CONSTRUCTION

PHASE 3A US 13/ SR 141 INTERCHANGE, RAMPS B1 AND B2

- *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3A.*
- *IMPLEMENT DETOUR PLAN ON SHEET 190 TO CLOSE RAMPS B1 AND B2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FROM US 13 NB TO SR 141 SOUTH, LOCATED AT APPROXIMATE STATION 541+90, AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 SB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.*
- *WHILE THE RAMPS ARE CLOSED, RECONSRUCT THE RAMPS AS SHOWN ON THE PLANS.*
- *CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 NORTHBOUND FROM APPROXIMATE STATION 539+00 TO STATION 550+75.*

NOTES

1. *CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3A. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3A IS NOT COMPLETED BY 45 CALENDAR DAYS.*

PENNONI ASSOCIATES INC.		PRJ TABLE:	SPENTBL55
FILE NAME:	SFILE45	PLOT DRIVER:	SPLTDRV55
MICROSTATION VERSION:	SVERSIONS	DATE PLOTTED:	13-JUN-2024@ 06:19
MICROSTATION WORKSPACE:	SWORKSPACES	USER NAME:	SUSER45 OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3A

SECTION
PAI
SHEET NO.
167

SEQUENCE OF CONSTRUCTION

PHASE 3B US 13/ SR 141 INTERCHANGE, RAMPS C1 AND C2

1. PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3B.
2. IMPLEMENT DETOUR PLANS ON SHEET 191 TO CLOSE RAMPS C1 AND C2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FOR SR 141 NORTH, LOCATED AT APPROXIMATE STATION 548+00 AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 NB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.
3. UTILIZE TA-33 TO CLOSE THE AUXILIARY LANE ON SR 141 NORTHBOUND.
4. WHILE THE RAMPS ARE CLOSED, RECONSRUCT THE RAMPS AS SHOWN ON THE PLANS.

84"
48"
EXIT CLOSED
8"
12" D
8"
12" D
8"

75
10-018.00-006
NEW CASTLE COUNTY
INSTR. 20210824-0098885
MF 20180402-0014996

76
10-019.00-029
TRUSTEES OF NEW CASTLE COMMON
DR L2-394
1 STORY COMMERCIAL
MILEX AUTOREPAIR
328-9451

77
10-019.00-028
TRUSTEES OF NEW CASTLE COMMON
DR L2-394
1 STORY COMMERCIAL
141 SHOPPES

78
10-019.10-034
GORDY MANAGEMENT, INC.
DR H85-533
MF 11228

10-019.00-005
GORDY MANAGEMENT, INC.
DR H85-533
MF 11228
1 STORY COMMERCIAL

SR 141 BASIN RD (N006)
US 13 DUPONT HWY SB (N033)
US 13 DUPONT HWY NB (N033)
RAMP D
RAMP C1
RAMP C2
EXISTING R/W
LOC
TCE
PE
401+00
400+00
399+00
398+00
397+00
396+00
395+00
549+00
550+00
551+00
552+00
553+00
554+00
555+00
556+00
293+34
292+34
211+96
211+00
95'
94'
180'
45' (TYP.)
10' (TYP.)
SHOULDER TAPER
CONSTRUCTION @ US 13 DUPONT HWY
CONTRACT 218 RIGHT-OF-WAY @ US 13 DUPONT HWY
10' LANDSCAPE EASEMENT PER INSTR 20110504-0023008
RAMP CLOSED
R11-2 (MOD) 48" x 30"
ACE DP 47429
DP&L 47434 41024
DP&L 47437 41028
DP&L 47443 41037
47412 41019
18" RCP
24" RCP
33" RCP
15" RCP
36" RCP

MATCH LINE STA 557+00

MATCH LINE STA 293+50

NOTES

1. CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3B IS NOT COMPLETED BY 45 CALENDAR DAYS.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRIS$
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:19
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: $OFFICENAME$

Pennoni

ADDENDA / REVISIONS	

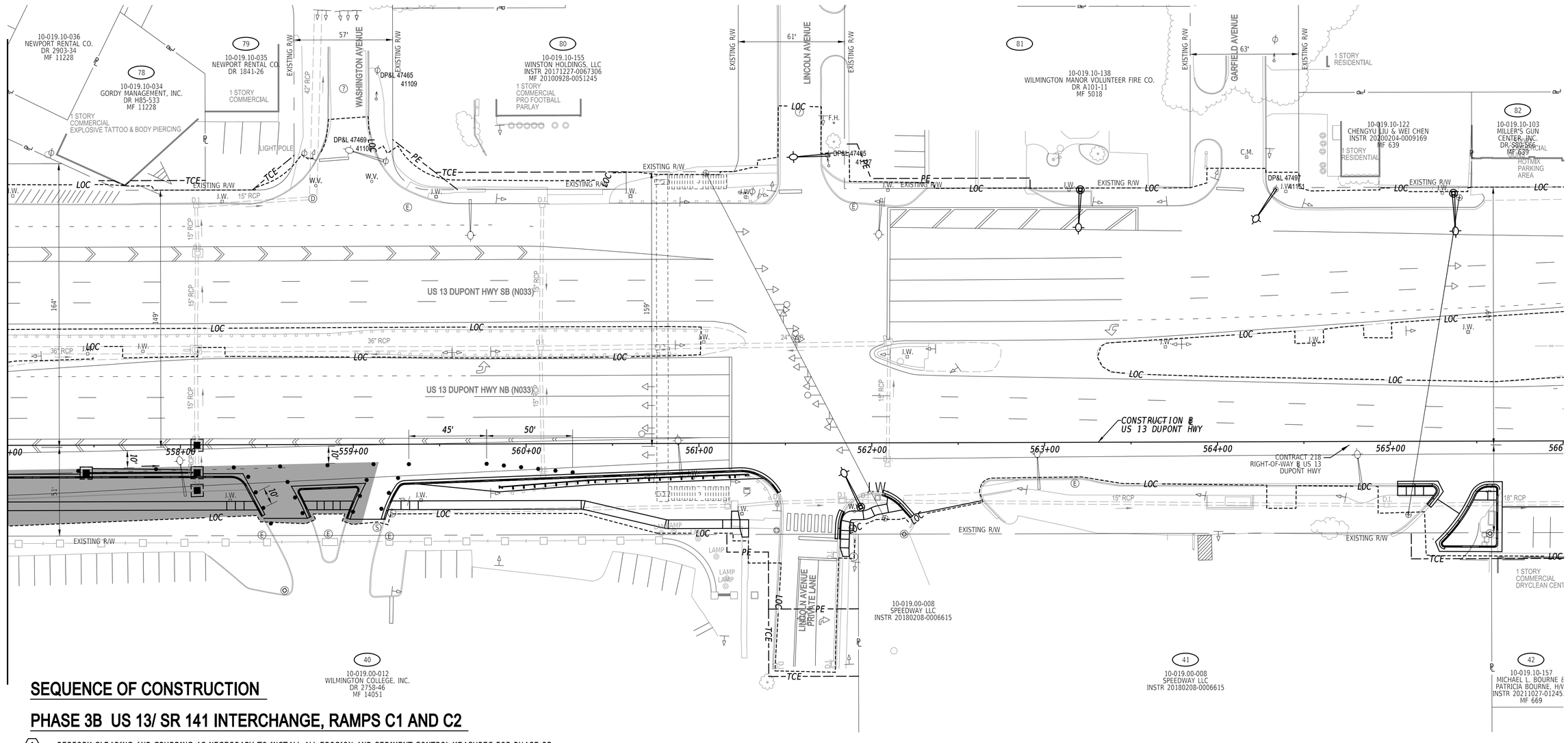
SCALE
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3B

SECTION
PAI
SHEET NO.
168



SEQUENCE OF CONSTRUCTION

PHASE 3B US 13/ SR 141 INTERCHANGE, RAMPS C1 AND C2

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3B.*
2. *IMPLEMENT DETOUR PLANS ON SHEET 191 TO CLOSE RAMPS C1 AND C2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FOR SR 141 NORTH, LOCATED AT APPROXIMATE STATION 548+00 AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 NB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.*
3. *UTILIZE TA-33 TO CLOSE THE AUXILIARY LANE ON SR 141 NORTHBOUND.*
4. *WHILE THE RAMPS ARE CLOSED, RECONSTRUCT THE RAMPS AS SHOWN ON THE PLANS.*

NOTES

1. *CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3B IS NOT COMPLETED BY 45 CALENDAR DAYS.*

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

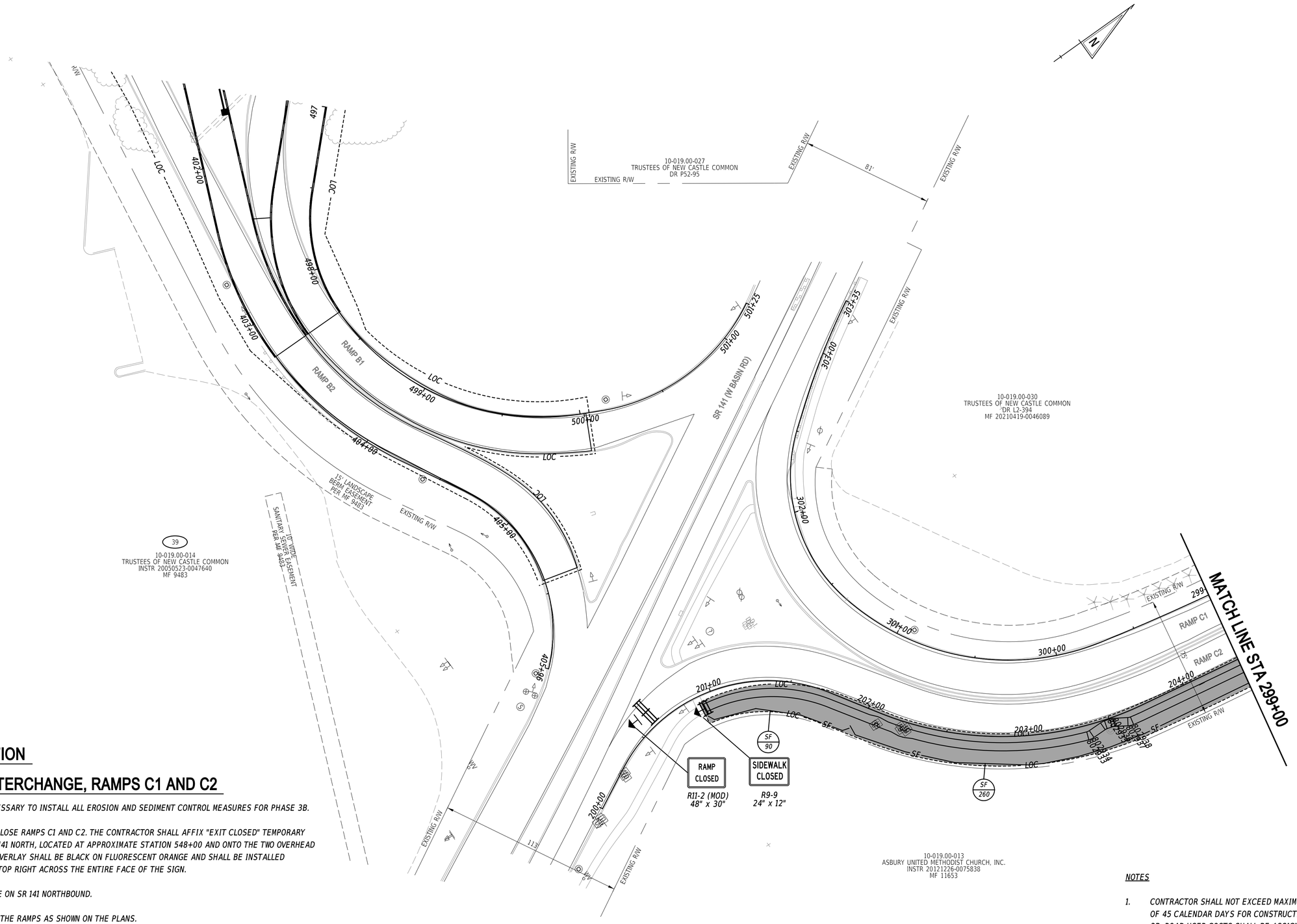
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102			PAI
COUNTY	DESIGNED BY:	Z. BRANDER	SHEET NO.
NEW CASTLE	CHECKED BY:	P. HORSEY	169

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3B

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:19
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

Pennoni



SEQUENCE OF CONSTRUCTION

PHASE 3B US 13/ SR 141 INTERCHANGE, RAMPS C1 AND C2

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3B.*
2. *IMPLEMENT DETOUR PLANS ON SHEET 191 TO CLOSE RAMPS C1 AND C2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FOR SR 141 NORTH, LOCATED AT APPROXIMATE STATION 548+00 AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 NB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.*
3. *UTILIZE TA-33 TO CLOSE THE AUXILIARY LANE ON SR 141 NORTHBOUND.*
4. *WHILE THE RAMPS ARE CLOSED, RECONSRUCT THE RAMPS AS SHOWN ON THE PLANS.*

NOTES

1. *CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3B IS NOT COMPLETED BY 45 CALENDAR DAYS.*

PENNONI ASSOCIATES INC.
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MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTABLES
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:19
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

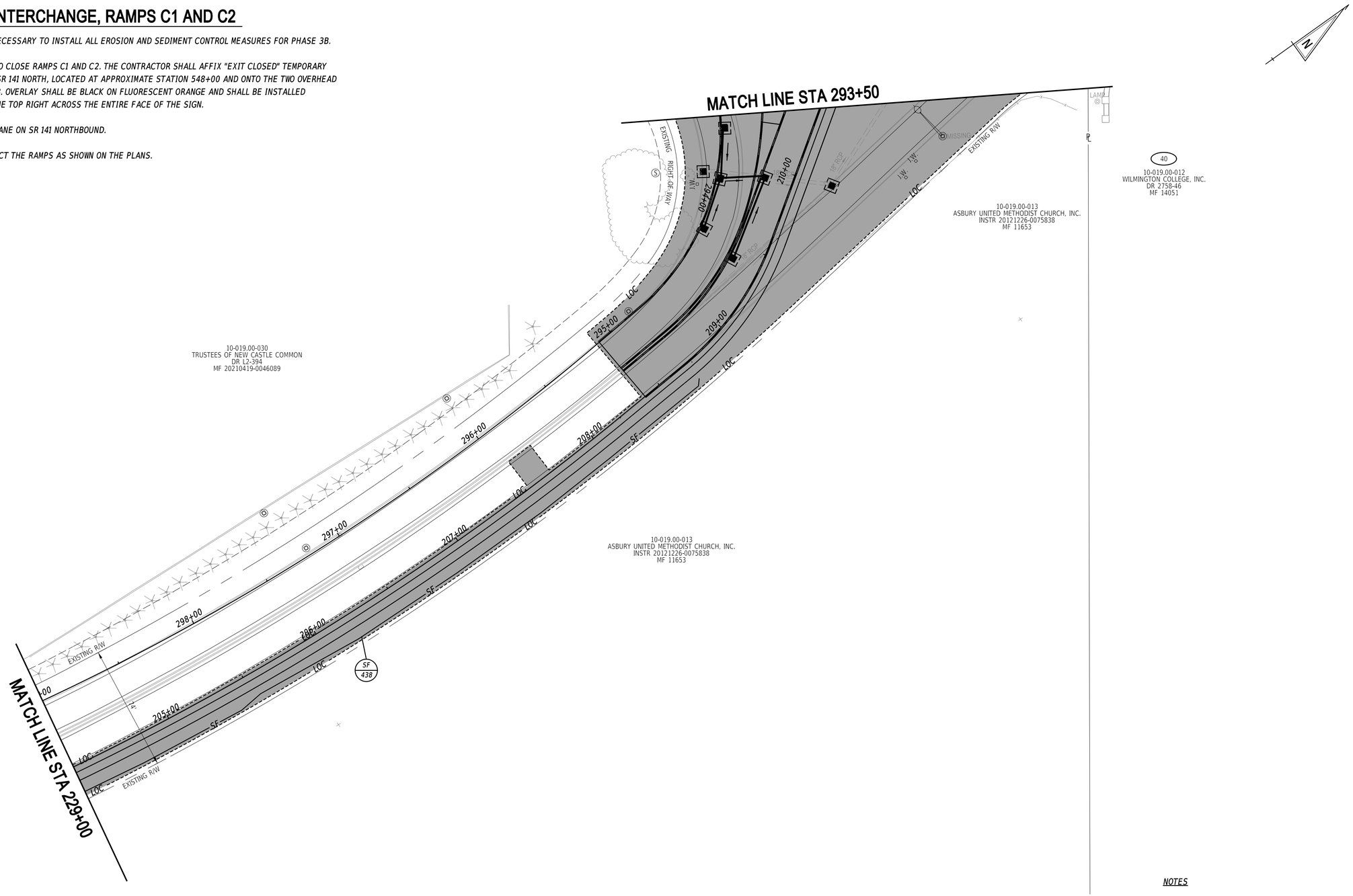
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3B

SECTION
PAI
SHEET NO.
170

SEQUENCE OF CONSTRUCTION

PHASE 3B US 13/ SR 141 INTERCHANGE, RAMPS C1 AND C2

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3B.*
2. *IMPLEMENT DETOUR PLANS ON SHEET 191 TO CLOSE RAMPS C1 AND C2. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FOR SR 141 NORTH, LOCATED AT APPROXIMATE STATION 548+00 AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 NB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.*
3. *UTILIZE TA-33 TO CLOSE THE AUXILIARY LANE ON SR 141 NORTHBOUND.*
4. *WHILE THE RAMPS ARE CLOSED, RECONSRUCT THE RAMPS AS SHOWN ON THE PLANS.*



NOTES

1. *CONTRACTOR SHALL NOT EXCEED MAXIMUM DURATION OF 45 CALENDAR DAYS FOR CONSTRUCTION OF PHASE 3B. ROAD USER COSTS SHALL BE ASSIGNED IF PHASE 3B IS NOT COMPLETED BY 45 CALENDAR DAYS.*

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLS$
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:19
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

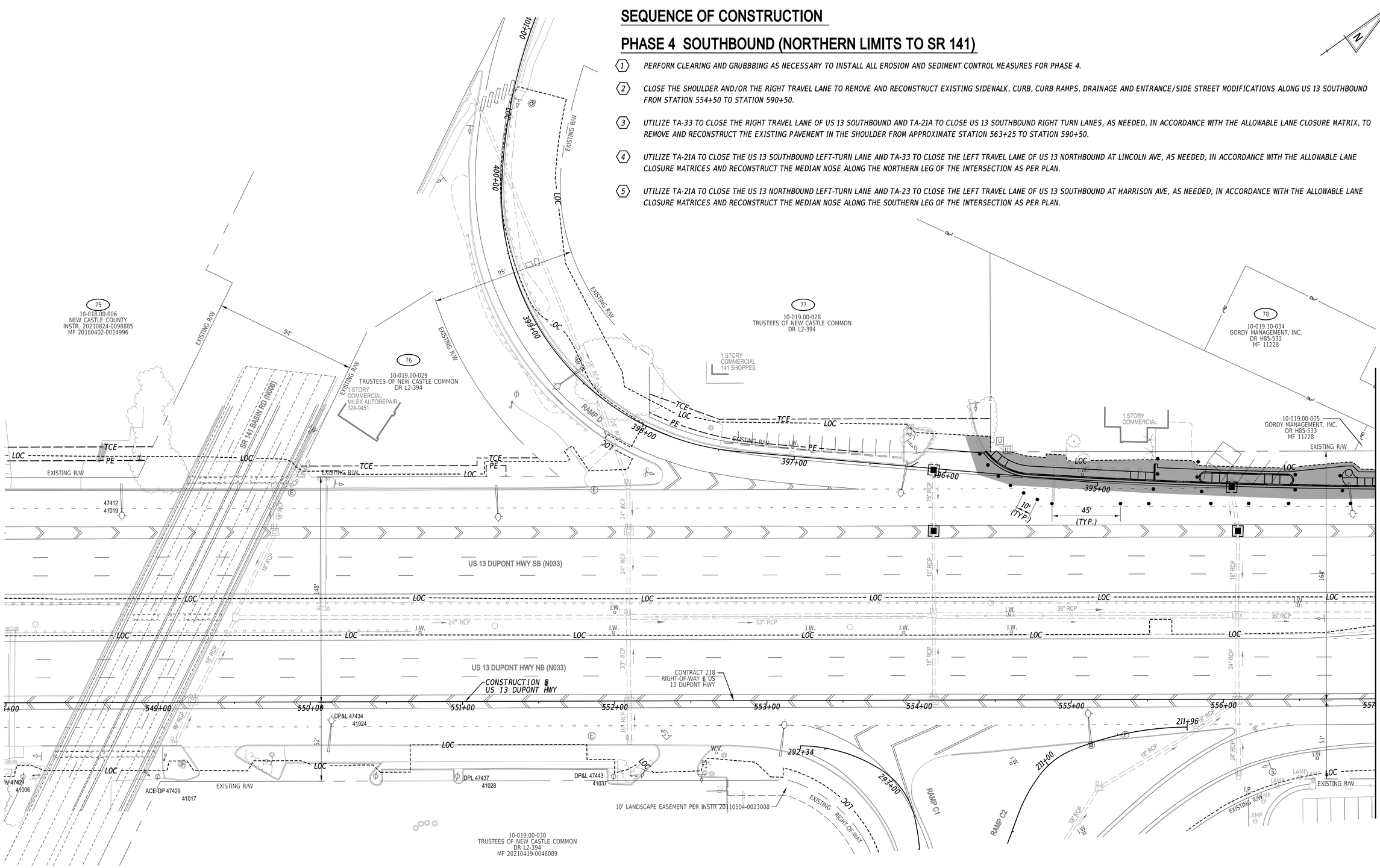
CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102	DESIGNED BY:	Z. BRANDER	PAI
COUNTY	CHECKED BY:	P. HORSEY	SHEET NO.
NEW CASTLE			171

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 3B

SEQUENCE OF CONSTRUCTION

PHASE 4 SOUTHBOUND (NORTHERN LIMITS TO SR 141)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 4.*
2. *CLOSE THE SHOULDER AND/OR THE RIGHT TRAVEL LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM STATION 554+50 TO STATION 590+50.*
3. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 SOUTHBOUND AND TA-21A TO CLOSE US 13 SOUTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 563+25 TO STATION 590+50.*
4. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 NORTHBOUND AT LINCOLN AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE NORTHERN LEG OF THE INTERSECTION AS PER PLAN.*
5. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT HARRISON AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION AS PER PLAN.*



PENNONI ASSOCIATES INC:	SFILEAS
FILE NAME:	
MICROSTATION VERSION:	SVERSIONS
MICROSTATION WORKSPACE:	SWORKSPACES
PEN TABLE:	SPENTABLES
PLOT DRIVER:	SPLTDRVSS
DATE PLOTTED:	13-JUN-2024 @ 06:19
USER NAME:	SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

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FEET

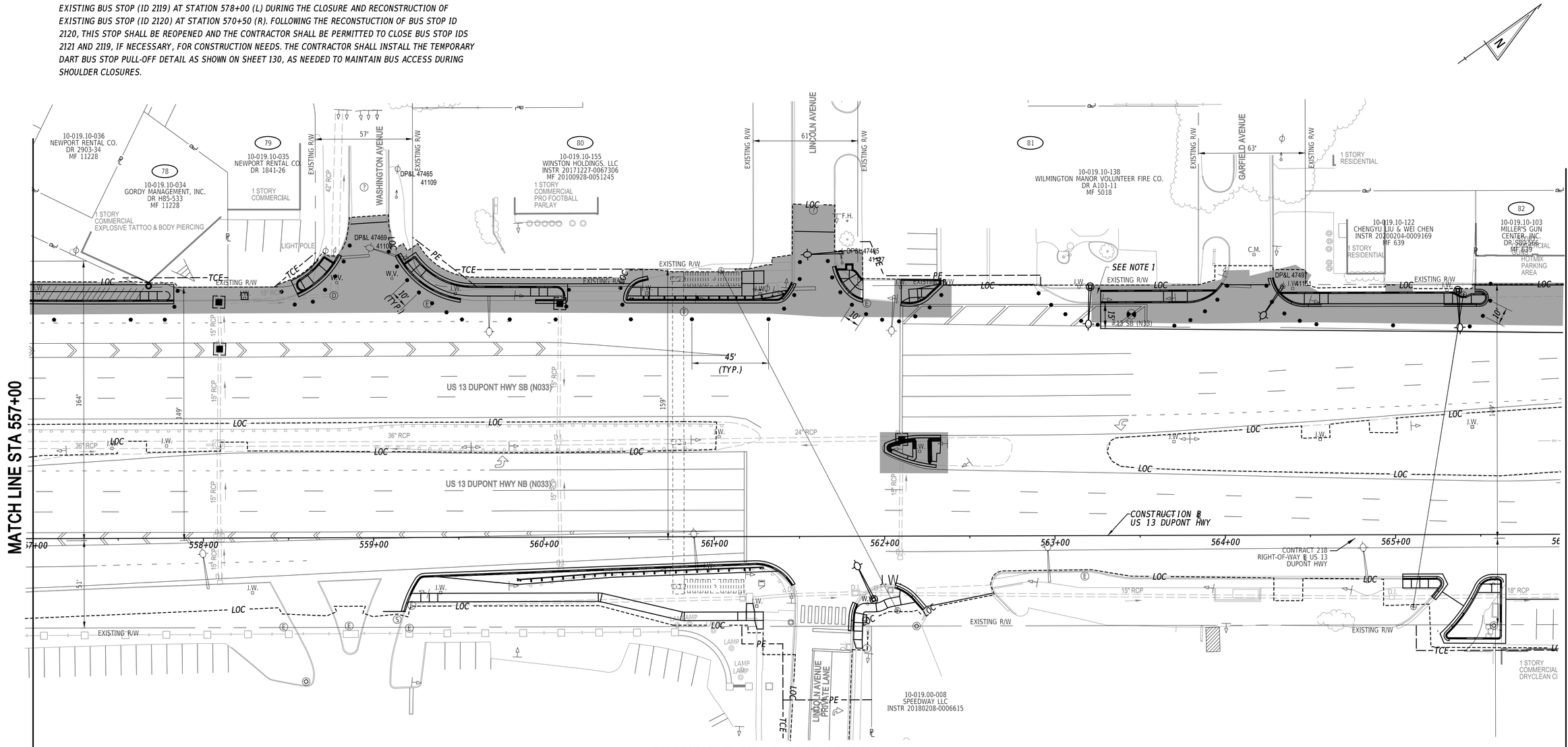
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

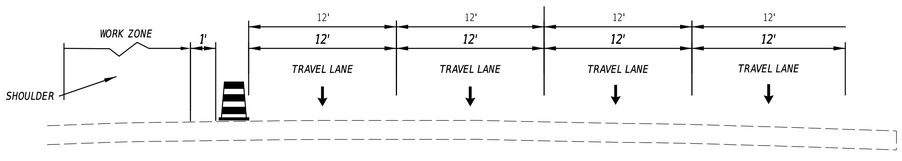
CONTRACT	BRIDGE NO.	N/A	SECTION
T201901102	DESIGNED BY:	Z. BRANDER	PAI
COUNTY	CHECKED BY:	P. HORSEY	SHEET NO.
NEW CASTLE			172

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4

NOTES

1. THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2121) AT STATION 563+25 (L) AND EXISTING BUS STOP (ID 2119) AT STATION 578+00 (L) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2120) AT STATION 570+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2120, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2121 AND 2119, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

SEQUENCE OF CONSTRUCTION

PHASE 4 SOUTHBOUND (NORTHERN LIMITS TO SR 141)

1. PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 4.
2. CLOSE THE SHOULDER AND/OR THE RIGHT TRAVEL LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM STATION 554+50 TO STATION 590+50.
3. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 SOUTHBOUND AND TA-21A TO CLOSE US 13 SOUTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 563+25 TO STATION 590+50.
4. UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 NORTHBOUND AT LINCOLN AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE NORTHERN LEG OF THE INTERSECTION AS PER PLAN.
5. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT HARRISON AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION AS PER PLAN.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SN_TDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:19
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

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US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

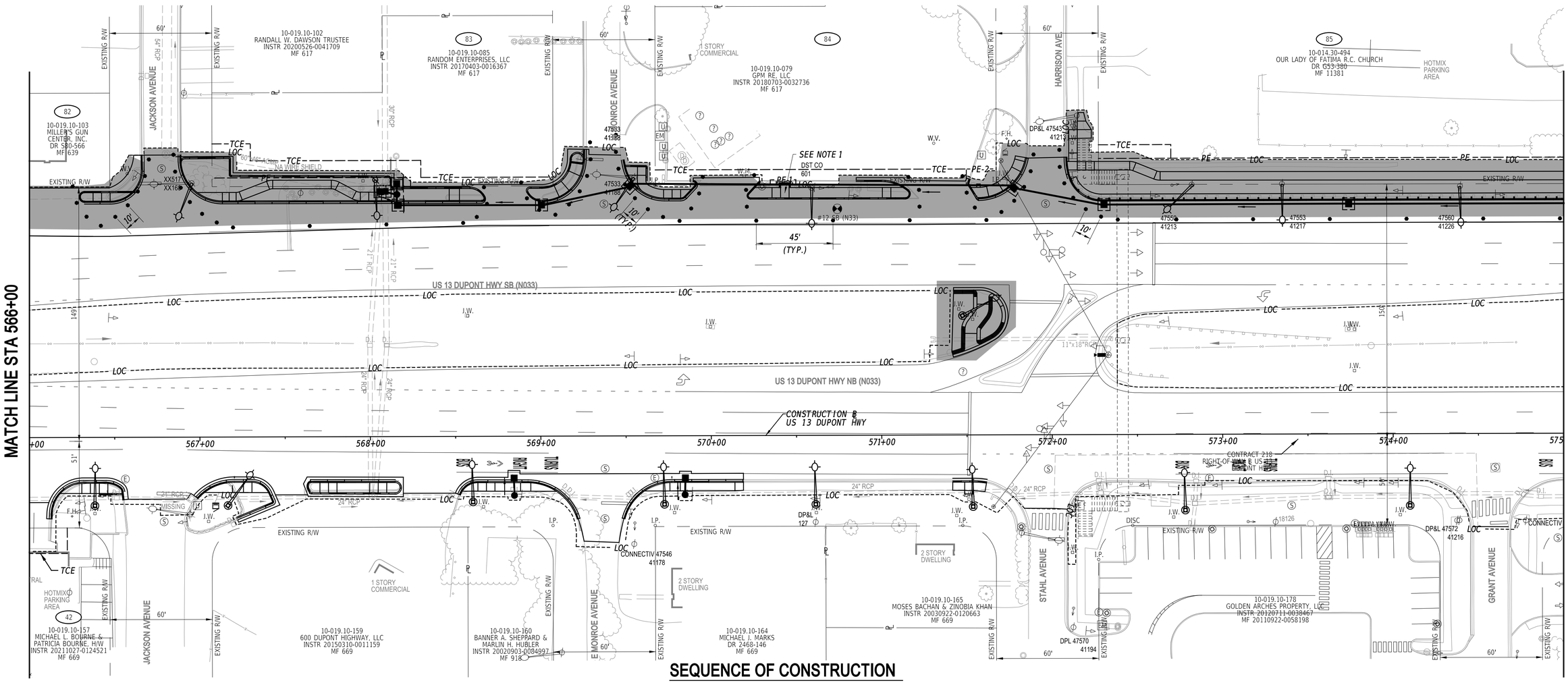
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

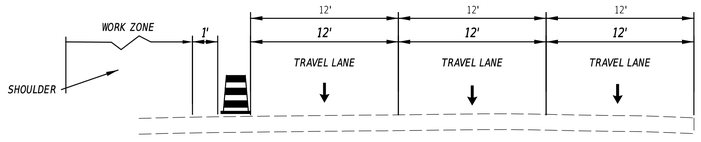
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4

SECTION
PAI
SHEET NO.
173

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2121) AT STATION 563+25 (L) AND EXISTING BUS STOP (ID 2119) AT STATION 578+00 (L) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2120) AT STATION 570+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2120, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2121 AND 2119, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

SEQUENCE OF CONSTRUCTION

PHASE 4 SOUTHBOUND (NORTHERN LIMITS TO SR 141)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 4.*
2. *CLOSE THE SHOULDER AND/OR THE RIGHT TRAVEL LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM STATION 554+50 TO STATION 590+50.*
3. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 SOUTHBOUND AND TA-21A TO CLOSE US 13 SOUTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 563+25 TO STATION 590+50.*
4. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 NORTHBOUND AT LINCOLN AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE NORTHERN LEG OF THE INTERSECTION AS PER PLAN.*
5. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT HARRISON AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION AS PER PLAN.*

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	PLOT TABLE: $PRINTBLS
MICROSTATION VERSION:	PLOT DRIVER: $PLTDRVSS
MICROSTATION WORKSPACE:	DATE PLOTTED: 13-JUN-2024 @ 06:19
	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

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US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

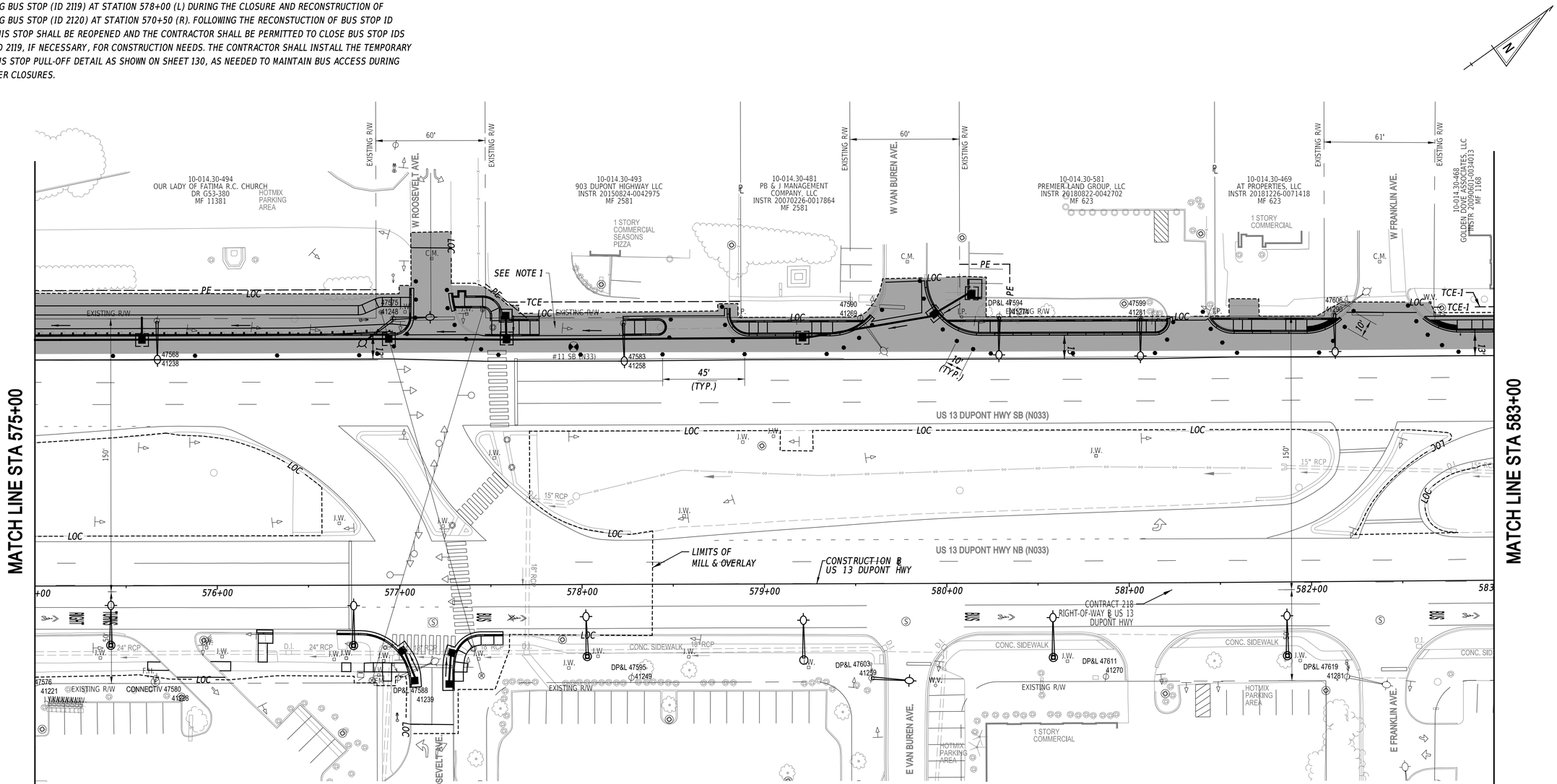
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

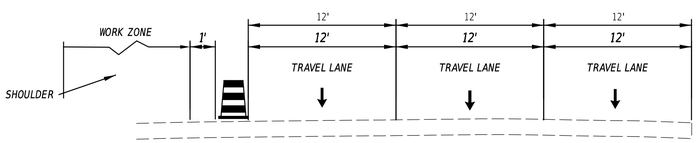
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4

SECTION
PAI
SHEET NO.
174

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2121) AT STATION 563+25 (L) AND EXISTING BUS STOP (ID 2119) AT STATION 578+00 (L) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2120) AT STATION 570+50 (R). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2120, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP IDS 2121 AND 2119, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

SEQUENCE OF CONSTRUCTION

PHASE 4 SOUTHBOUND (NORTHERN LIMITS TO SR 141)

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 4.*
2. *CLOSE THE SHOULDER AND/OR THE RIGHT TRAVEL LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM STATION 554+50 TO STATION 590+50.*
3. *UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 SOUTHBOUND AND TA-21A TO CLOSE US 13 SOUTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 563+25 TO STATION 590+50.*
4. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 NORTHBOUND AT LINCOLN AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE NORTHERN LEG OF THE INTERSECTION AS PER PLAN.*
5. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT HARRISON AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION AS PER PLAN.*

PENNONI ASSOCIATES INC.
FILE NAME: SFILEAS
MICROSTATION VERSION: SVERSIONS
MICROSTATION WORKSPACE: SWORKSPACES
PEN TABLE: SPENTBLSS
PLOT DRIVER: SPLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:19
USER NAME: SUSERS
OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS	

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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

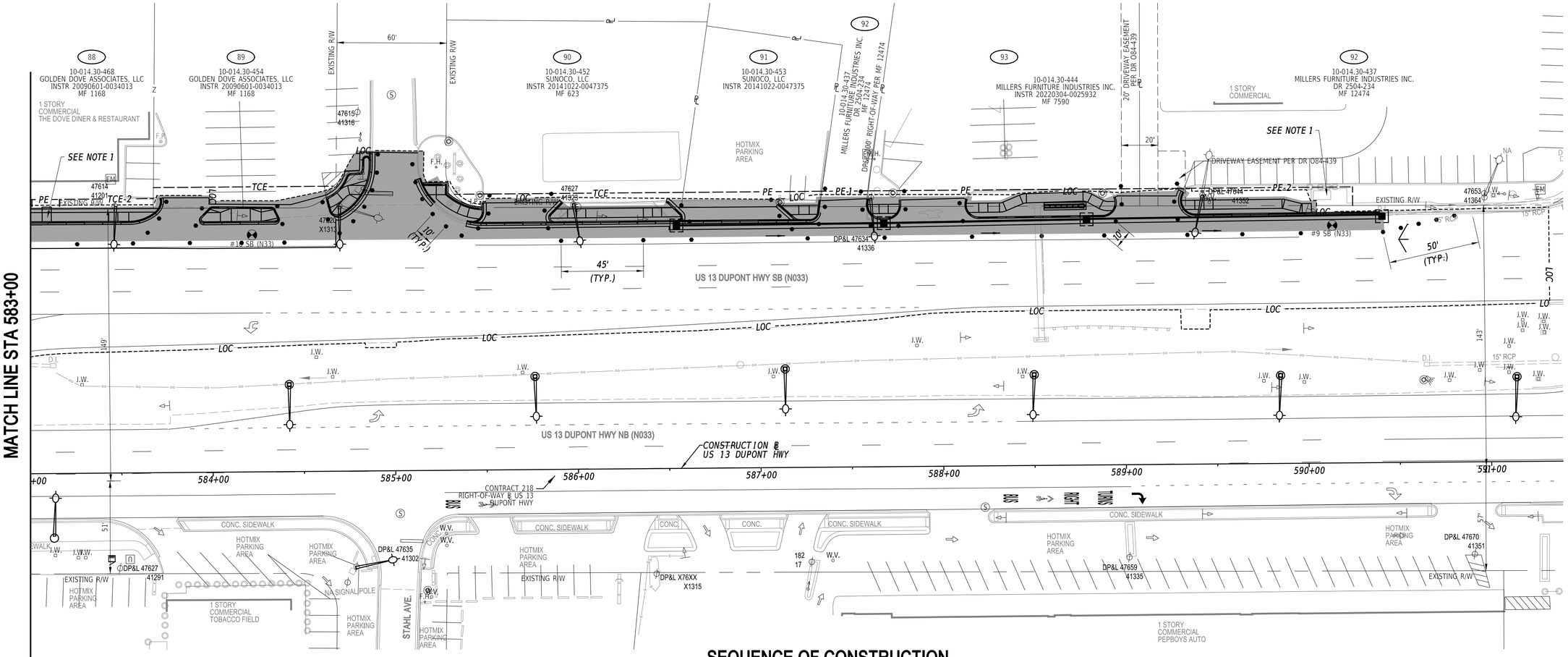
CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

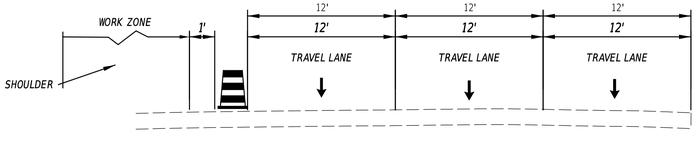
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4

SECTION
PAI
SHEET NO.
175

NOTES

1. THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2117) AT STATION 590+15 (L) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2118) AT STATION 583+10 (L). FOLLOWING THE RECONSTUCTION OF BUS STOP ID 2118, THIS STOP SHALL BE REOPENED AND THE CONTRACTOR SHALL BE PERMITTED TO CLOSE BUS STOP ID 2117, IF NECESSARY, FOR CONSTRUCTION NEEDS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.





US 13 DUPONT HIGHWAY (N082) - LONG-TERM SHOULDER/TURN LANE CLOSURE
NOT TO SCALE

SEQUENCE OF CONSTRUCTION

PHASE 4 SOUTHBOUND (NORTHERN LIMITS TO SR 141)

1. PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 4.
2. CLOSE THE SHOULDER AND/OR THE RIGHT TRAVEL LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM STATION 554+50 TO STATION 590+50.
3. UTILIZE TA-33 TO CLOSE THE RIGHT TRAVEL LANE OF US 13 SOUTHBOUND AND TA-21A TO CLOSE US 13 SOUTHBOUND RIGHT TURN LANES, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX, TO REMOVE AND RECONSTRUCT THE EXISTING PAVEMENT IN THE SHOULDER FROM APPROXIMATE STATION 563+25 TO STATION 590+50.
4. UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE LEFT TRAVEL LANE OF US 13 NORTHBOUND AT LINCOLN AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE NORTHERN LEG OF THE INTERSECTION AS PER PLAN.
5. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-23 TO CLOSE THE LEFT TRAVEL LANE OF US 13 SOUTHBOUND AT HARRISON AVE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES AND RECONSTRUCT THE MEDIAN NOSE ALONG THE SOUTHERN LEG OF THE INTERSECTION AS PER PLAN.

PENNONI ASSOCIATES INC. | STLEAS
FILE NAME: | PLOT DRIVER: | SPLOTDRVSS
MICROSTATION VERSION: | SVERSIONS | DATE PLOTTED: | 13-JUN-2024@ 06:19
MICROSTATION WORKSPACE: | SWORKSPACES | USER NAME: | SUSERS | OFFICE LOCATION: | SOFFICENAMES
PEN TABLE: | SPENTBLSS

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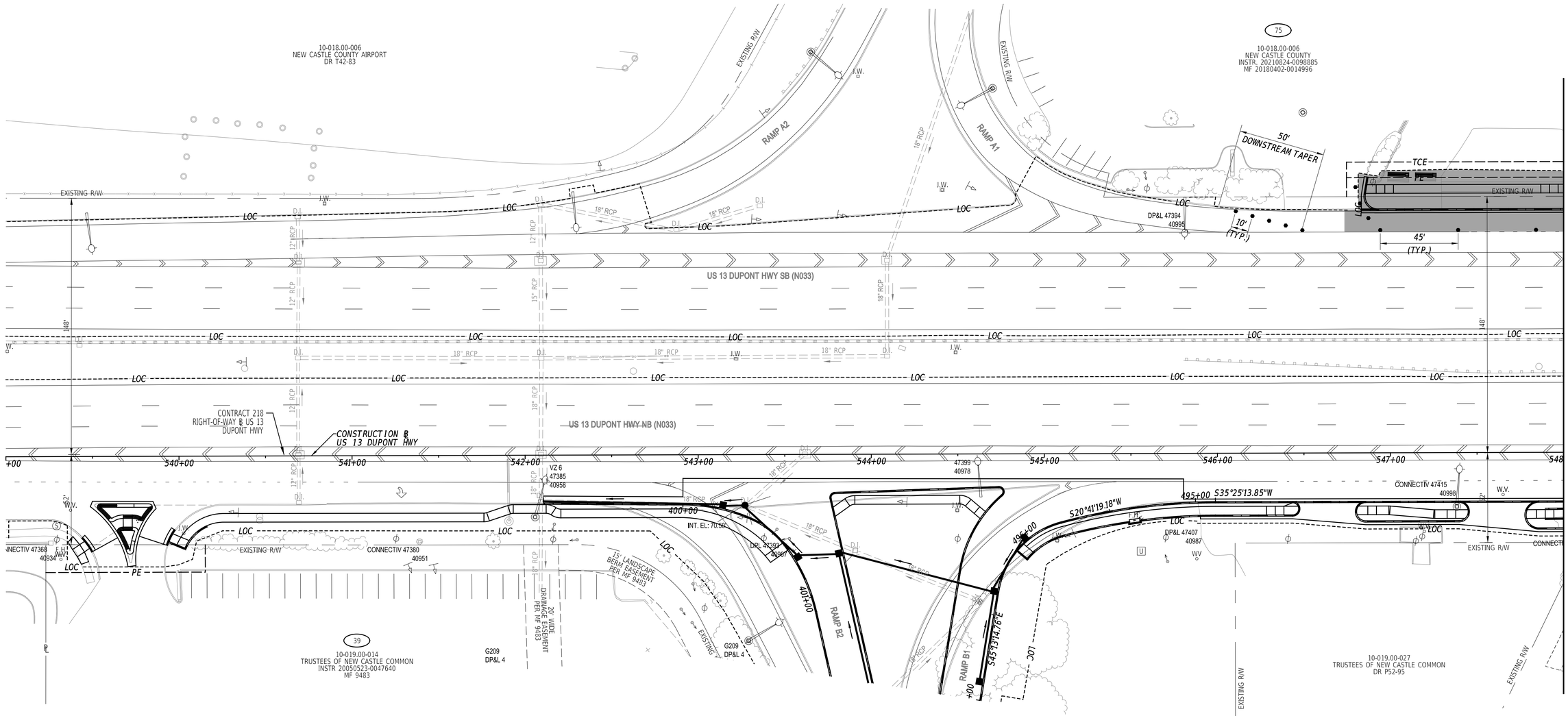
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US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4

SECTION	PAI
SHEET NO.	176



SEQUENCE OF CONSTRUCTION

PHASE 5 US 13/ SR 141 INTERCHANGE, RAMP D

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 5.*
2. *IMPLEMENT DETOUR PLAN ON SHEET 192 TO CLOSE RAMP D NIGHTLY FROM 7PM TO 7AM.*
3. *WHILE THE RAMPS ARE CLOSED, CONSTRUCT SIDEWALK AND PEDESTRIAN CONNECTIONS AS SHOWN ON THE PLANS.*
4. *CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 546+50 TO STATION 554+25.*

PENNONI ASSOCIATES INC.	$FILEAS
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MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTABLES
PLOT DRIVER:	$PLTDRVRS
DATE PLOTTED:	13-JUN-2024@ 06:19
USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	O. GREEN
NEW CASTLE	CHECKED BY:	P. HORSEY

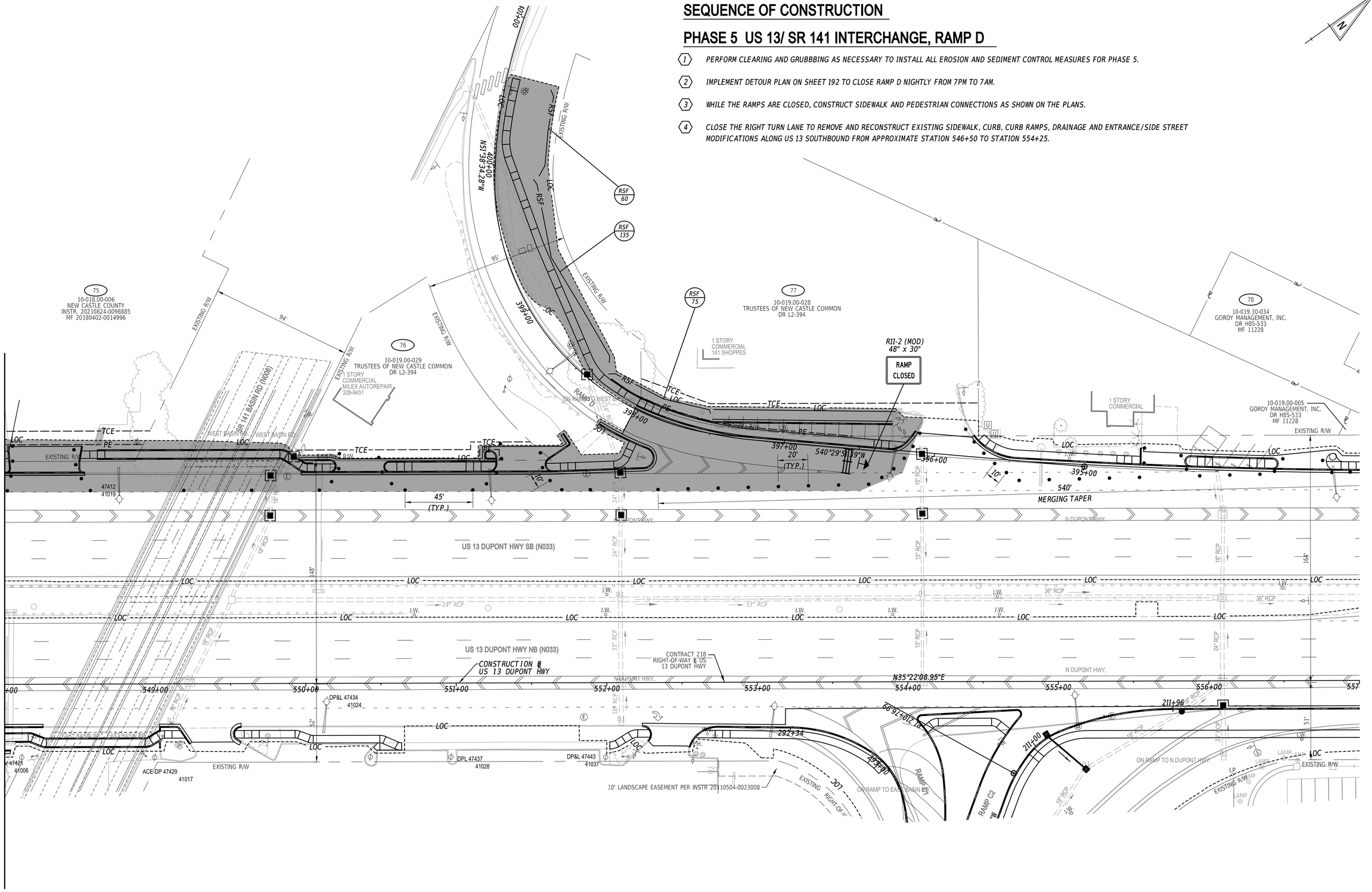
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 5

SECTION
PAI
SHEET NO.
177

SEQUENCE OF CONSTRUCTION

PHASE 5 US 13/ SR 141 INTERCHANGE, RAMP D

1. *PERFORM CLEARING AND GRUBBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 5.*
2. *IMPLEMENT DETOUR PLAN ON SHEET 192 TO CLOSE RAMP D NIGHTLY FROM 7PM TO 7AM.*
3. *WHILE THE RAMPS ARE CLOSED, CONSTRUCT SIDEWALK AND PEDESTRIAN CONNECTIONS AS SHOWN ON THE PLANS.*
4. *CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 546+50 TO STATION 554+25.*



PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRAWER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:19
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 5	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 178
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

1. PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.

2. CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.

3. INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.

4. THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.

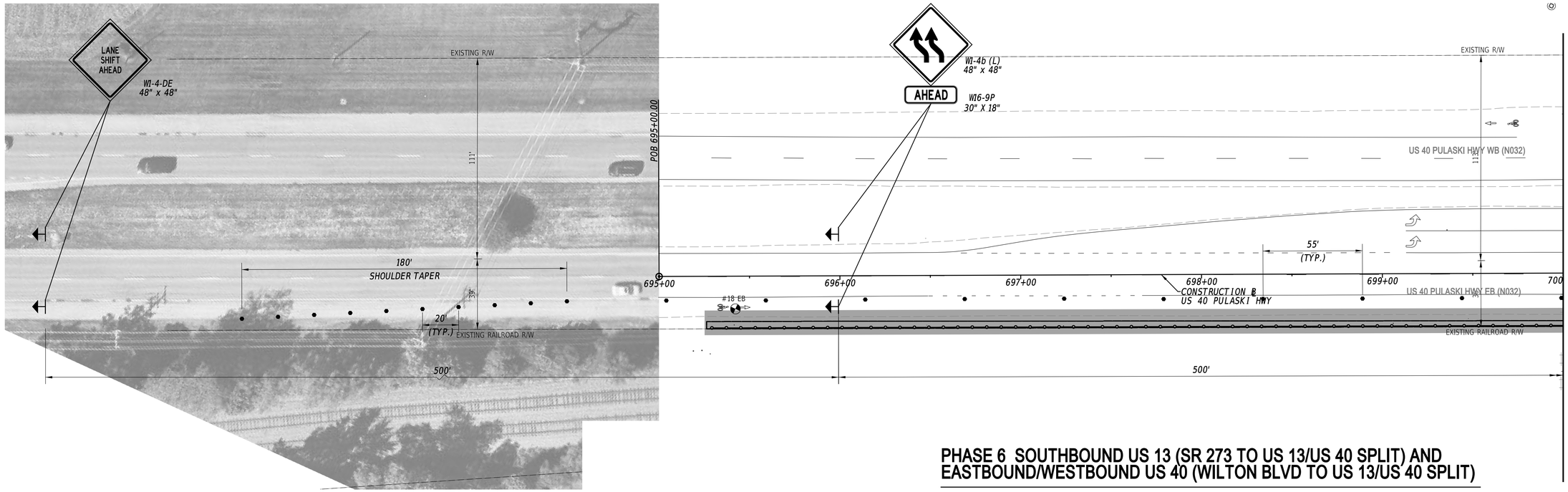
5. UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER AT BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:

   A. INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).
   B. INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.
   C. STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.
   D. CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.
   E. INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.
   F. COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.

6. CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.

7. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.

8. UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

9. UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.

10. UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.

PHASE 7 MILL AND OVERLAY

1. MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.

2. REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: $FILEAS | PLOT DRAWER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:19
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION
PAI
SHEET NO.
179

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

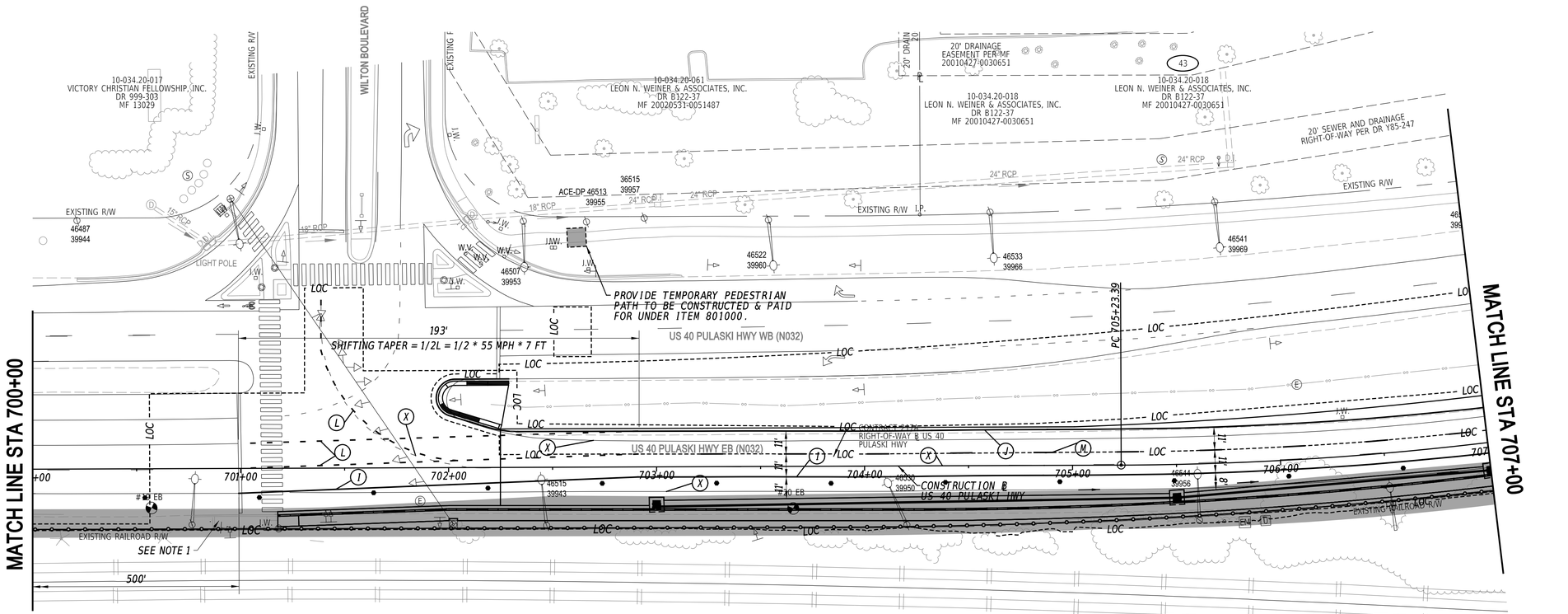
NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 4074) AT STATION 700+90 (R) FOR THE DURATION OF THE CONTRACT. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	604 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	465 LF
(L)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	127 LF
(M)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	450 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	603 SF

* *EPOXY STRIPING FOR PHASE 6 SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 6 AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.*



SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER AT BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- *A INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
- *B INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- *C STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*
- *D CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*
- *E INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
- *F COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBLS5
FILE NAME: STILE4S | PLOT DRIVER: SPLTDRV5
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:19
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION	PAI
SHEET NO.	180

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

1. PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.

2. CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.

3. INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.

4. THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.

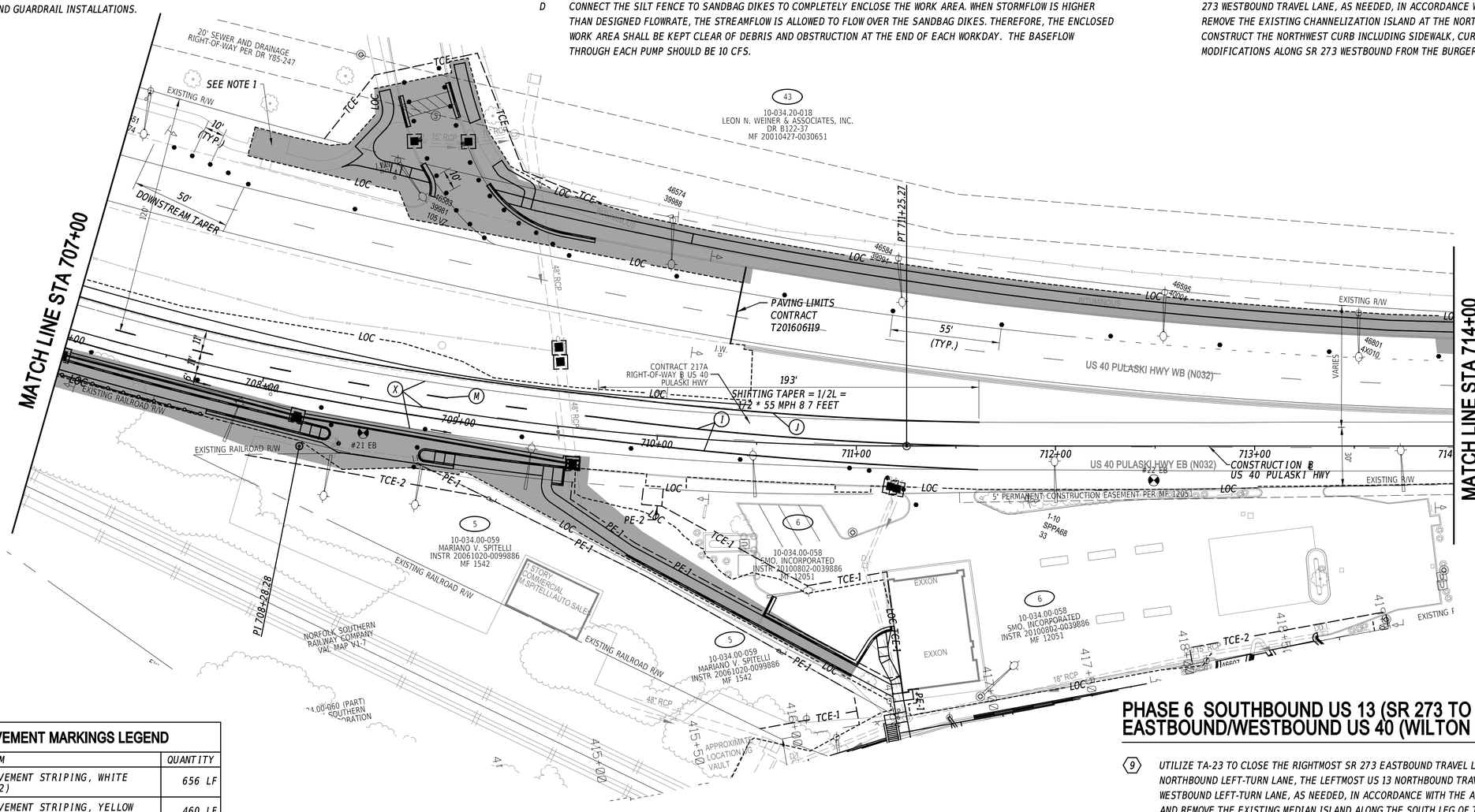
5. UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER AT BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:

   A. INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).
   B. INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.
   C. STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.
   D. CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.
   E. INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.
   F. COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.

6. CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.

7. UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.

8. UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.



NOTES

1. THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 4073) AT STATION 707+75 (L) FOR THE DURATION OF THE CONTRACT. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	656 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	460 LF
(M)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	67 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	473 SF

* EPOXY STRIPING FOR PHASE 6 SHALL BE REMOVED FOLLOWING THE COMPLETION OF PHASE 6 AND NEW EPOXY STRIPING SHALL BE INSTALLED TO MATCH EXISTING CONDITIONS.

PHASE 7 MILL AND OVERLAY

1. MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.

2. REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

9. UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.

10. UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:20
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 181
					CHECKED BY: P. HORSEY		

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

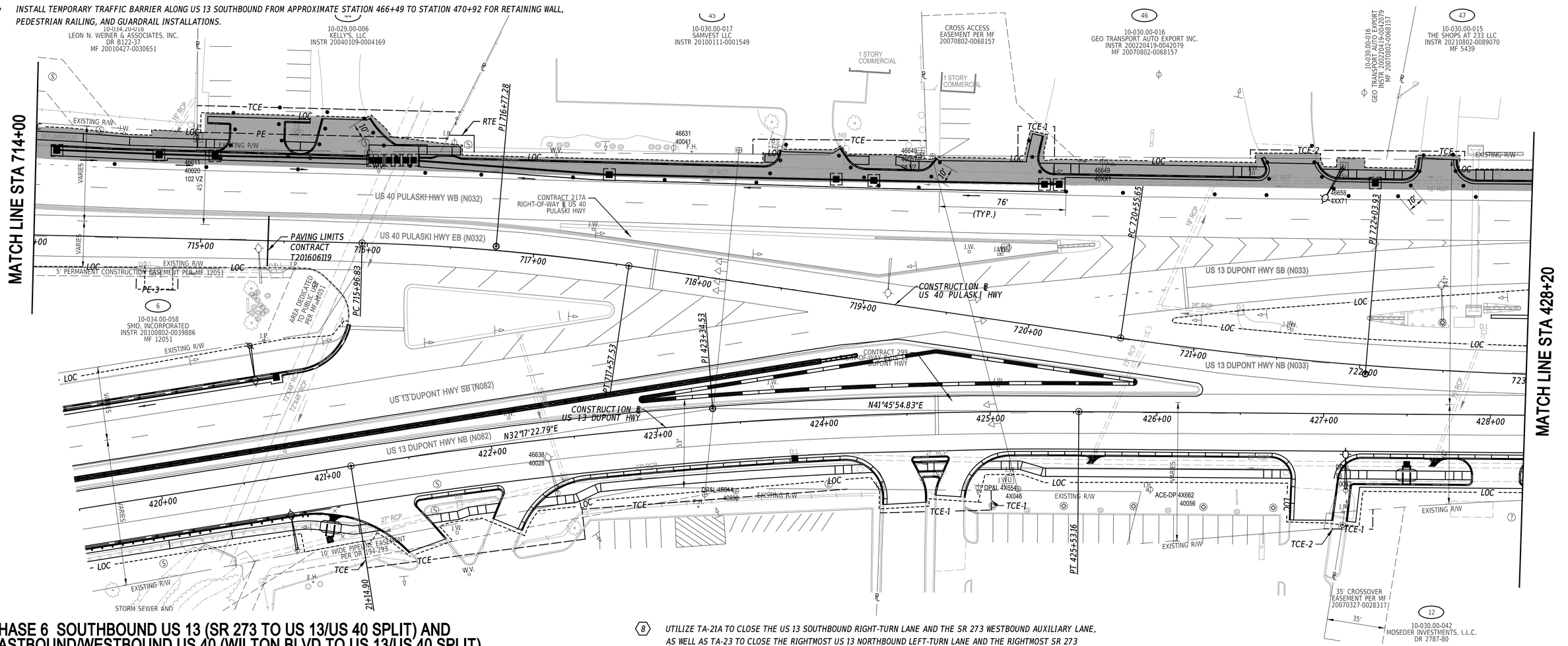
(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER AT BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- *A INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
- *B INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- *C STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*
- *D CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

- *E INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
- *F COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PENNONI ASSOCIATES INC.	PEN TABLE: SPENTRUSS
FILE NAME: $FILEAS	PLOT DRAWER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:20
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION
PAI
SHEET NO.
182

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

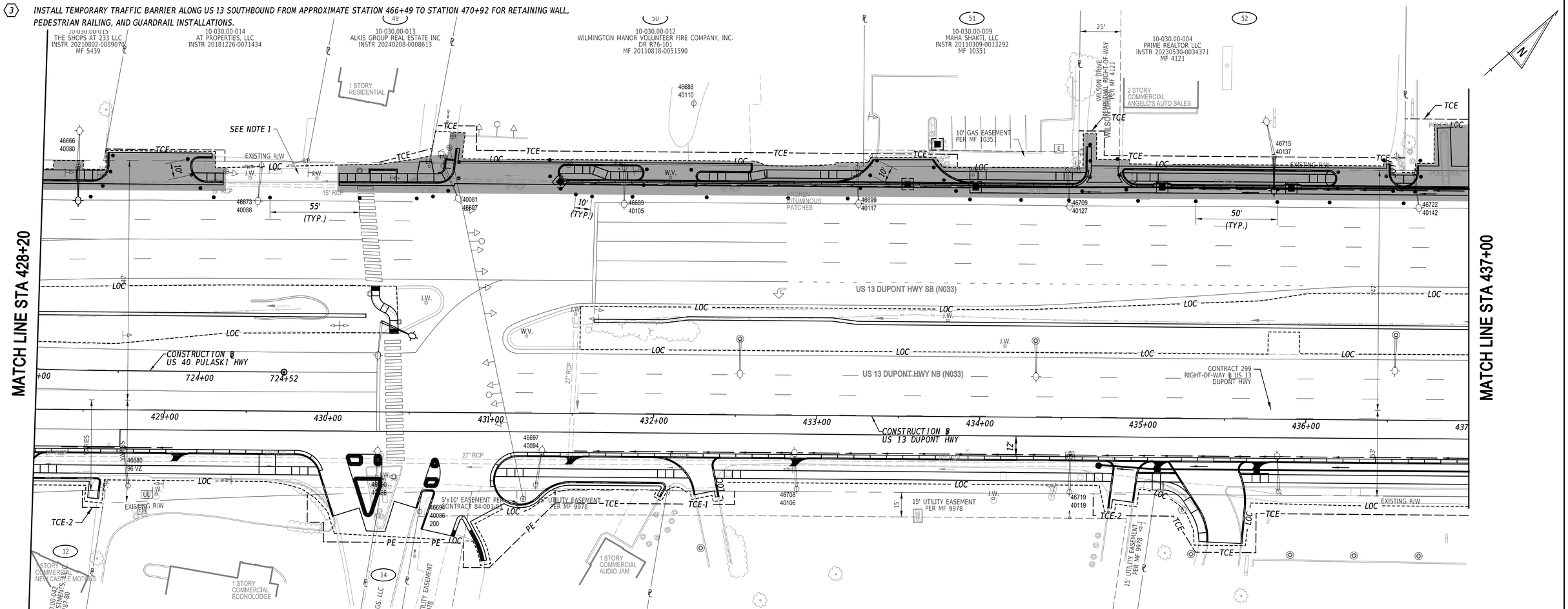
(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER AT BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- *A INSTALL STABILIZED CONSTRUCTION ENTRANCE.*
- *B INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).B.INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- *C. STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*

NOTES

1. *THE CONTRACTOR IS PERMITTED TO CLOSE EXISTING BUS STOP (ID 2270) AT STATION 429+75 (L) FOR THE DURATION OF THE CONTRACT, IF NECESSAY. IF STOP IS TO REMAIN OPEN, THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

- *D CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*
- *E INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
- *F COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PENNONI ASSOCIATES INC.	
FILE NAME:	$FILEAS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTABLES
PLOT DRIVER:	$PLOTDRIVERS
DATE PLOTTED:	13-JUN-2024@ 06:20
USER NAME:	$USERNAME
OFFICE LOCATION:	$OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION	PAI
SHEET NO.	183

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

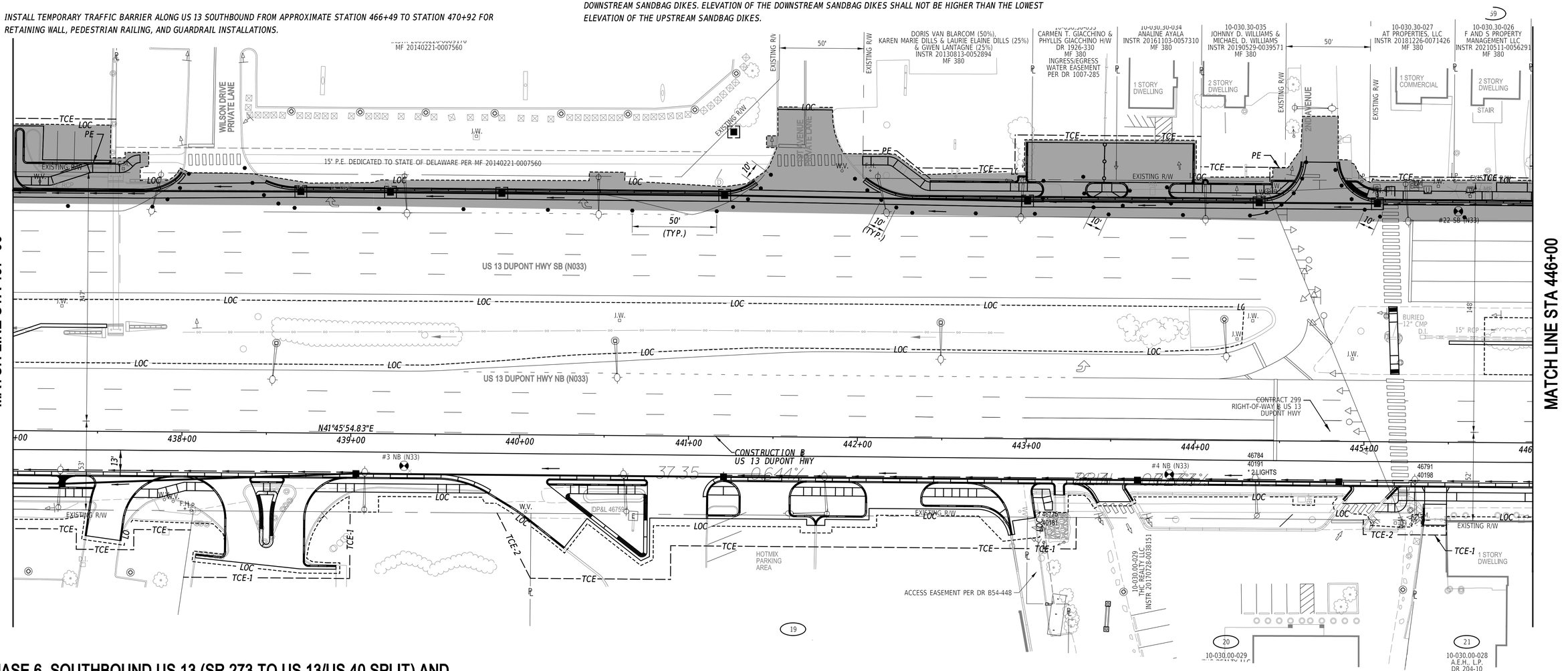
(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER AT BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- A *INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
- B *INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- C *STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*
- D *CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*
- E *INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
- F *COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION
PAI
SHEET NO.
184

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SN.TDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:20
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

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SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

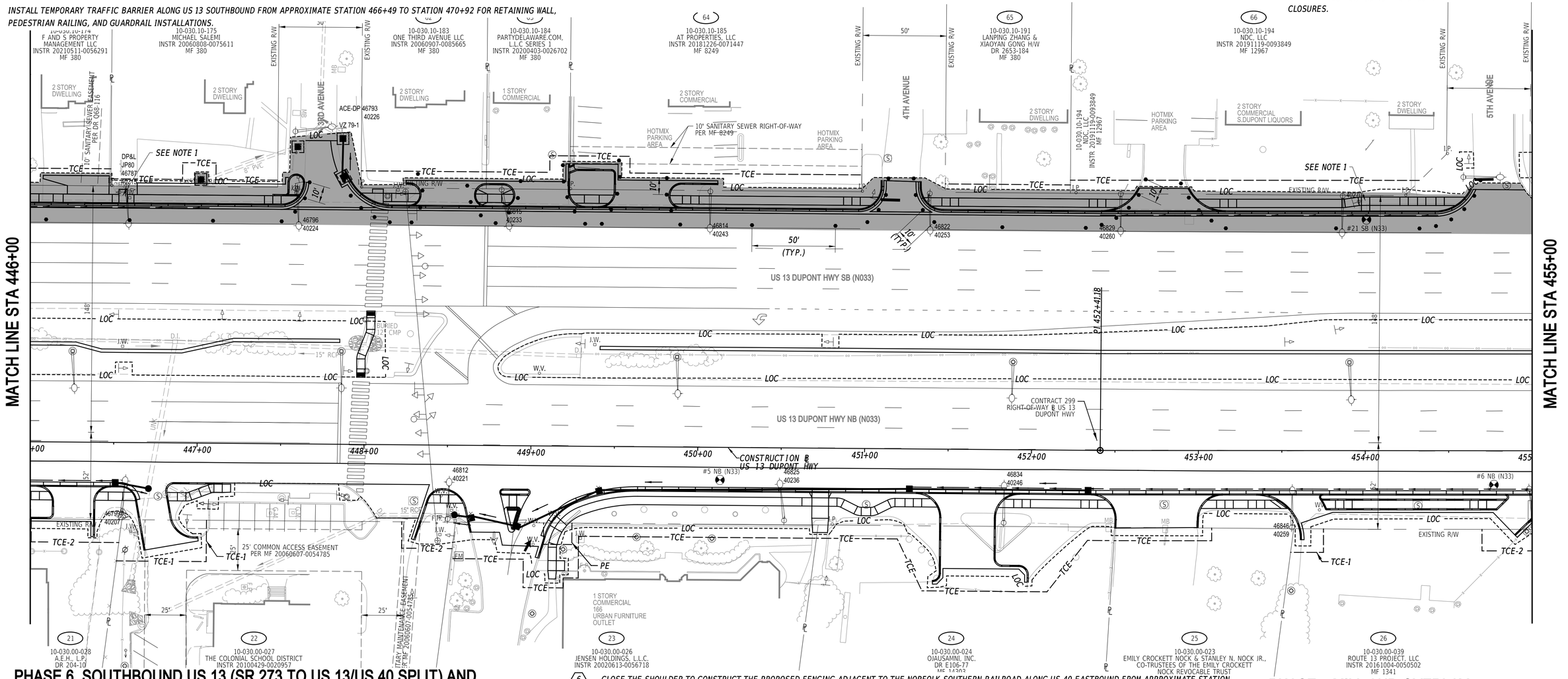
(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- *A INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
- *B INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- *C STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*

NOTES

1. *THE CONTRACTOR SHALL MAINTAIN OPERATION OF EXISTING BUS STOP (ID 2268) AT STATION 454+00 (L) DURING THE CLOSURE AND RECONSTRUCTION OF EXISTING BUS STOP (ID 2269) AT STATION 446+60 (L). THE CONTRACTOR SHALL BE PERMITTED TO CLOSE AND RECONSTRUCT BUS STOP ID 2268 ONCE BUS STOP ID 2269 IS RECONSTRUCTED AND OPERATIONAL. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

D. CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.

E. INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.

F. COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024 @ 06:20
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION
PAI
SHEET NO.
185

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

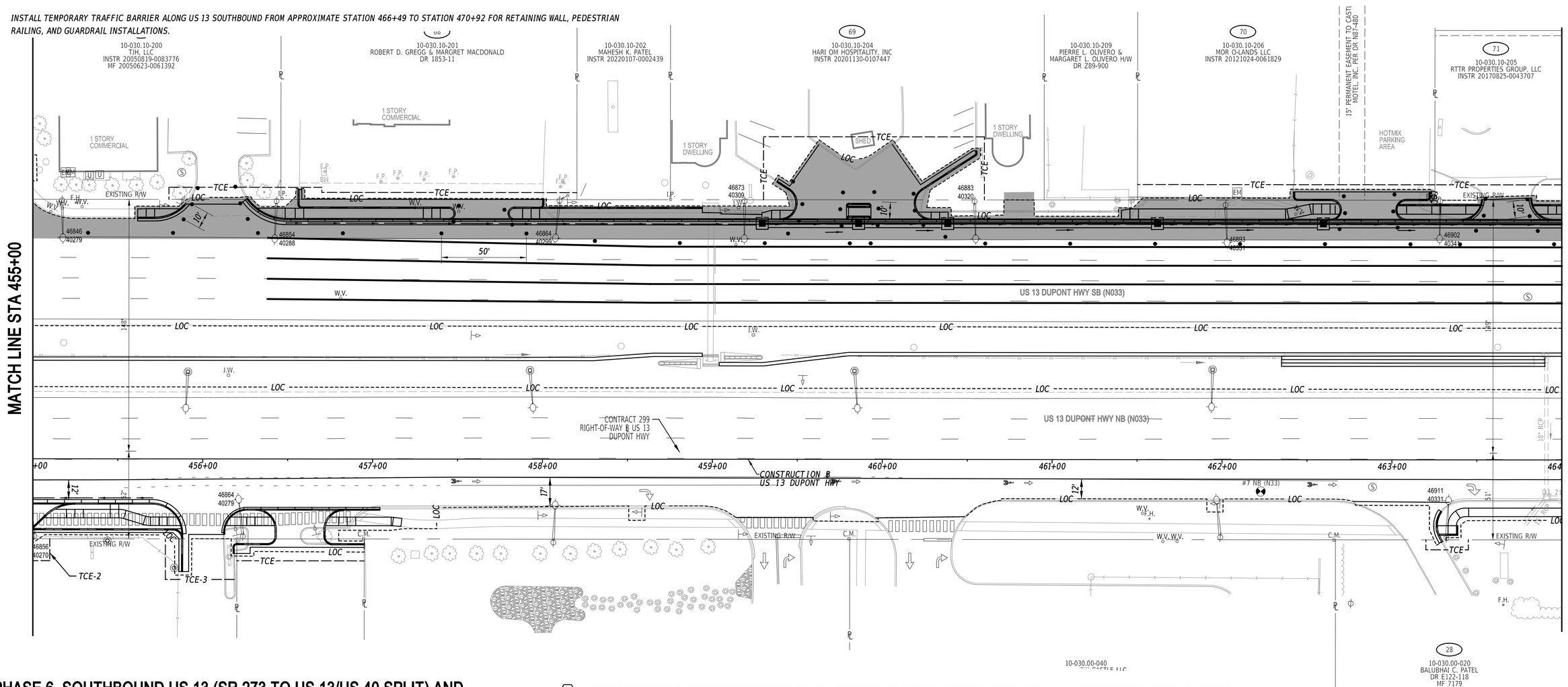
(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- *A INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
- *B INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- *C STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

- *D. CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*
- *E. INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
- *F. COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:20
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION	PAI
SHEET NO.	186

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

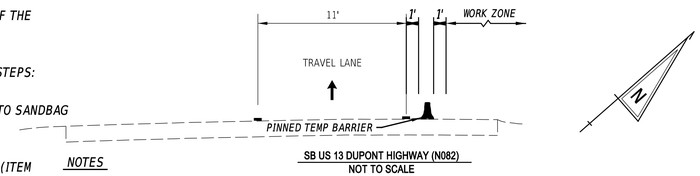
2. *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

3. *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

4. *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*

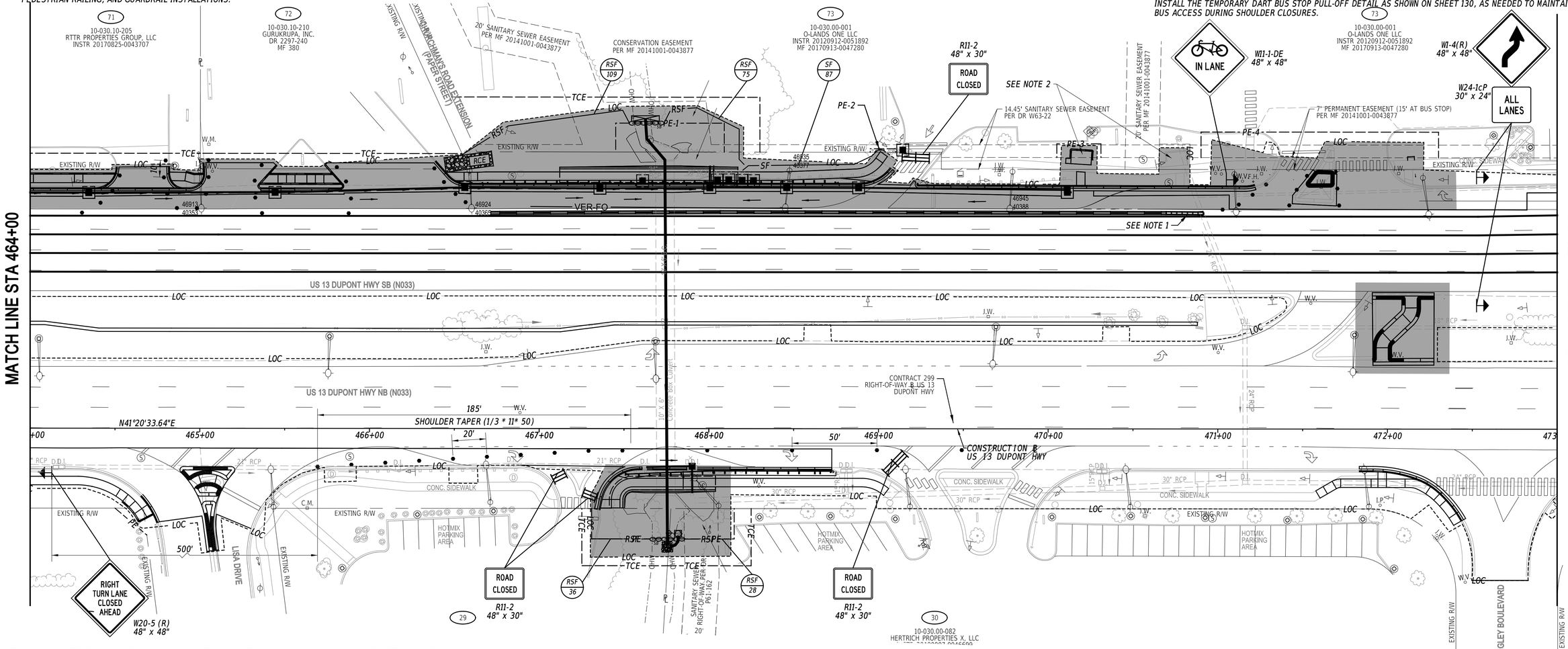
5. *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

   A. *INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
   B. *INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
   C. *STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 707002). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*



NOTES

1. *TEMPORARY IMPACT ATTENTUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).*
2. *WHEN THE TEMPORARY BARRIER IS IN PLACE IN FRONT OF THE EXISTING BUS STOP (ID 3945) AT STATION 470+75 (L), THIS STOP LOCATION SHALL BE CLOSED AND THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY BUS STOP PAD AND INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130. AT APPROXIMATE STATION 472+50 (L), FOLLOWING THE REMOVAL OF THE TEMPORARY BARRIER, THE CONTRACTOR SHALL RE-OPEN THE EXISTING BUS STOP (ID 3945) AT STATION 470+75(L) DURING THE CONSTRUCTION OF ITS RELOCATION AT STATION 470+20 (L). FOLLOWING THE CONSTRUCTION OF THE RELOCATED BUS STOP PAD FOR ID 2289, THE ORIGINAL BUS STOP LOCATION IS PERMITTED TO BE PERMANENTLY CLOSED. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DART BUS STOP PULL-OFF DETAIL AS SHOWN ON SHEET 130, AS NEEDED TO MAINTAIN BUS ACCESS DURING SHOULDER CLOSURES.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

D. *CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*

E. *INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*

F. *COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*

6. *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

7. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

8. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

9. *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

10. *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

1. *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

2. *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PENNONI ASSOCIATES INC. | PRN TABLE: SPENTBLS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVXS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:20
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	1-664
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION: PAI
SHEET NO.: 187

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

(1) *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*

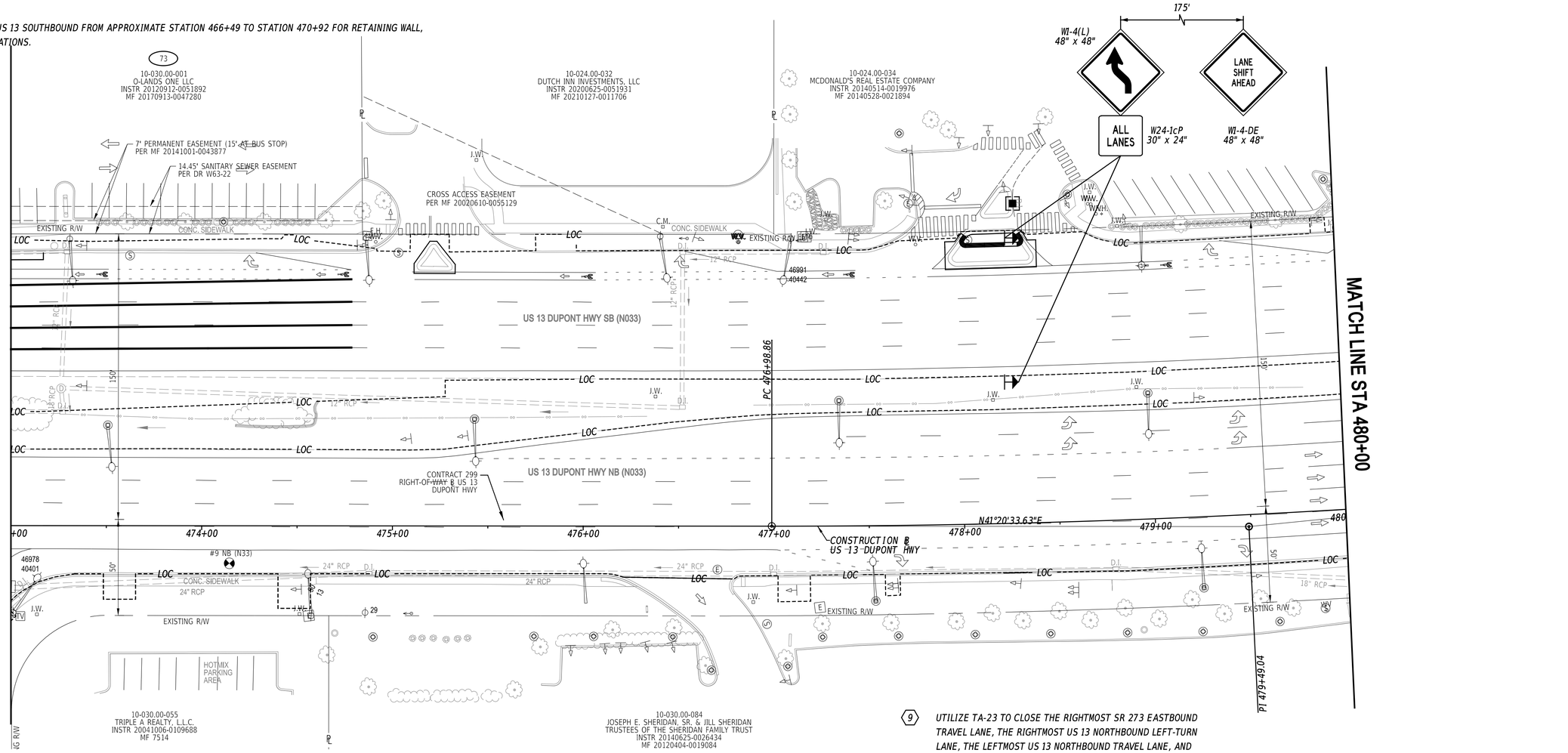
(2) *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*

(3) *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*

(4) *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75..*

(5) *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*

- *A INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
- *B INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
- *C STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*



PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

- *D CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*
- *E INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
- *F COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*

(6) *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*

(7) *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*

(8) *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*

(9) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

(10) *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PHASE 7 MILL AND OVERLAY

(1) *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*

(2) *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PENNONI ASSOCIATES INC. | PRO. TABLE: SPENTRIES
FILE NAME: SFILES | PLOT DRIVER: SPLTDRVXS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:20
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

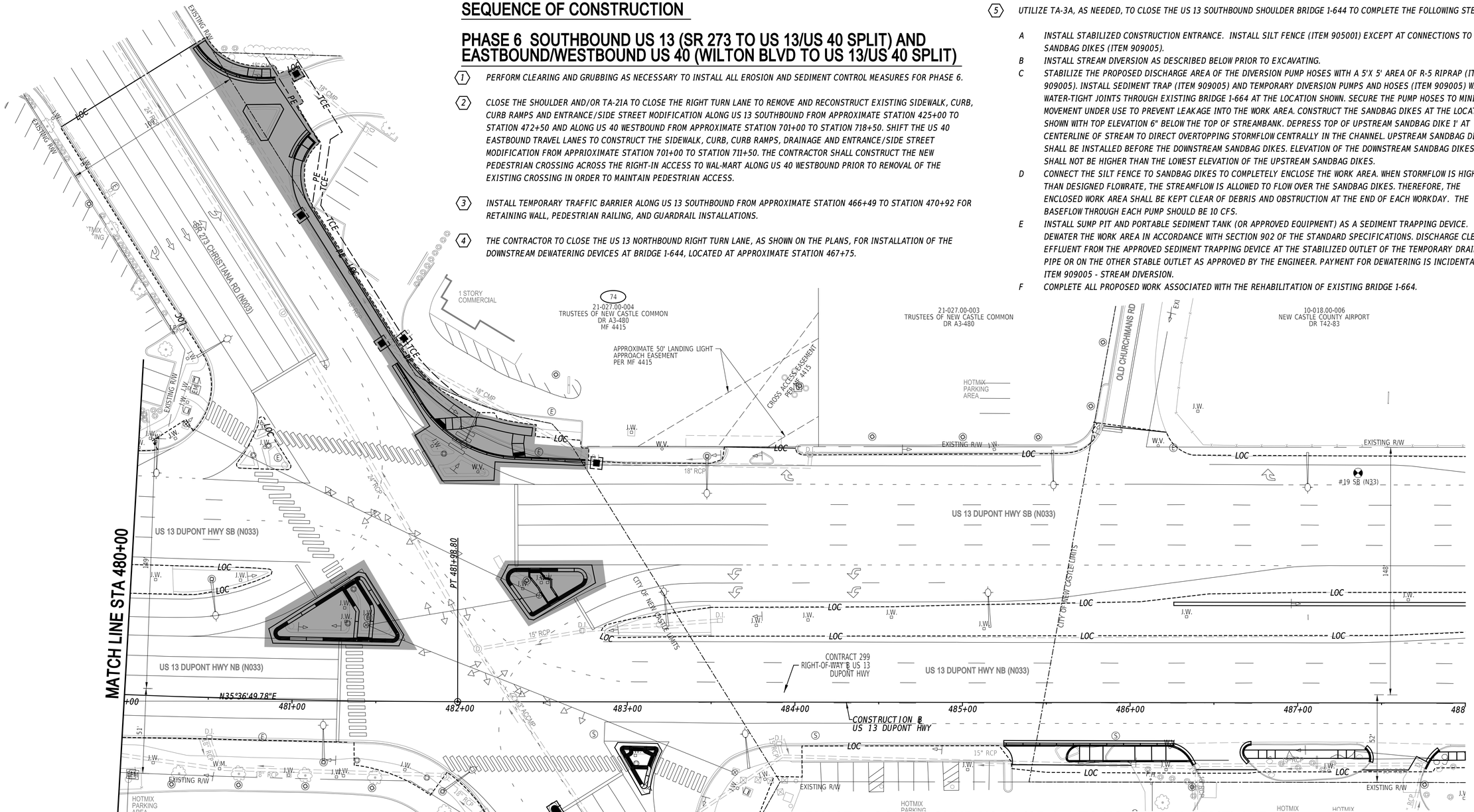
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

SECTION
PAI
SHEET NO.
188

SEQUENCE OF CONSTRUCTION

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

1. *PERFORM CLEARING AND GRUBBING AS NECESSARY TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 6.*
2. *CLOSE THE SHOULDER AND/OR TA-21A TO CLOSE THE RIGHT TURN LANE TO REMOVE AND RECONSTRUCT EXISTING SIDEWALK, CURB, CURB RAMPS AND ENTRANCE/SIDE STREET MODIFICATION ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 425+00 TO STATION 472+50 AND ALONG US 40 WESTBOUND FROM APPROXIMATE STATION 701+00 TO STATION 718+50. SHIFT THE US 40 EASTBOUND TRAVEL LANES TO CONSTRUCT THE SIDEWALK, CURB, CURB RAMPS, DRAINAGE AND ENTRANCE/SIDE STREET MODIFICATION FROM APPRIOXIMATE STATION 701+00 TO STATION 711+50. THE CONTRACTOR SHALL CONSTRUCT THE NEW PEDESTRIAN CROSSING ACROSS THE RIGHT-IN ACCESS TO WAL-MART ALONG US 40 WESTBOUND PRIOR TO REMOVAL OF THE EXISTING CROSSING IN ORDER TO MAINTAIN PEDESTRIAN ACCESS.*
3. *INSTALL TEMPORARY TRAFFIC BARRIER ALONG US 13 SOUTHBOUND FROM APPROXIMATE STATION 466+49 TO STATION 470+92 FOR RETAINING WALL, PEDESTRIAN RAILING, AND GUARDRAIL INSTALLATIONS.*
4. *THE CONTRACTOR TO CLOSE THE US 13 NORTHBOUND RIGHT TURN LANE, AS SHOWN ON THE PLANS, FOR INSTALLATION OF THE DOWNSTREAM DEWATERING DEVICES AT BRIDGE 1-644, LOCATED AT APPROXIMATE STATION 467+75.*
5. *UTILIZE TA-3A, AS NEEDED, TO CLOSE THE US 13 SOUTHBOUND SHOULDER BRIDGE 1-644 TO COMPLETE THE FOLLOWING STEPS:*
   - A *INSTALL STABILIZED CONSTRUCTION ENTRANCE. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).*
   - B *INSTALL STREAM DIVERSION AS DESCRIBED BELOW PRIOR TO EXCAVATING.*
   - C *STABILIZE THE PROPOSED DISCHARGE AREA OF THE DIVERSION PUMP HOSES WITH A 5'X 5' AREA OF R-5 RIPRAP (ITEM 909005). INSTALL SEDIMENT TRAP (ITEM 909005) AND TEMPORARY DIVERSION PUMPS AND HOSES (ITEM 909005) WITH WATER-TIGHT JOINTS THROUGH EXISTING BRIDGE 1-664 AT THE LOCATION SHOWN. SECURE THE PUMP HOSES TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. CONSTRUCT THE SANDBAG DIKES AT THE LOCATIONS SHOWN WITH TOP ELEVATION 6" BELOW THE TOP OF STREAMBANK. DEPRESS TOP OF UPSTREAM SANDBAG DIKE 1' AT CENTERLINE OF STREAM TO DIRECT OVERTOPPING STORMFLOW CENTRALLY IN THE CHANNEL. UPSTREAM SANDBAG DIKES SHALL BE INSTALLED BEFORE THE DOWNSTREAM SANDBAG DIKES. ELEVATION OF THE DOWNSTREAM SANDBAG DIKES SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKES.*
   - D *CONNECT THE SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. WHEN STORMFLOW IS HIGHER THAN DESIGNED FLOWRATE, THE STREAMFLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKES. THEREFORE, THE ENCLOSED WORK AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTION AT THE END OF EACH WORKDAY. THE BASEFLOW THROUGH EACH PUMP SHOULD BE 10 CFS.*
   - E *INSTALL SUMP PIT AND PORTABLE SEDIMENT TANK (OR APPROVED EQUIPMENT) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE TEMPORARY DRAINAGE PIPE OR ON THE OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER. PAYMENT FOR DEWATERING IS INCIDENTAL TO ITEM 909005 - STREAM DIVERSION.*
   - F *COMPLETE ALL PROPOSED WORK ASSOCIATED WITH THE REHABILITATION OF EXISTING BRIDGE 1-664.*



PHASE 7 MILL AND OVERLAY

10-024.00-037
JOSEPH E. SHERIDAN, SR. & JILL SHERIDAN
TRUSTEES OF THE SHERIDAN FAMILY TRUST
INSTR 20140625-0026434
MF 20120404-0019084

1. *MILL, OVERLAY, AND INSTALL PERMANENT SIGNING AND PAVEMENT MARKINGS WITHIN PROJECT LIMITS. THE CONTRACTOR SHALL IMPLEMENT THE DETOUR PLANS, NIGHTLY, SHOWN ON SHEETS 193 AND 194 WHEN PERFORMING THE MILL AND OVERLAY OPERATIONS WITHIN THE LIMITS OF THE SR 141 RAMPS.*
2. *REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATIVE STABILIZATION OF ALL DISTURBED AREAS OR AS NEEDED TO CONSTRUCT SUBSEQUENT PHASES WITH CONCURRENCE FROM DELDOT'S STORMWATER ENGINEER.*

PHASE 6 SOUTHBOUND US 13 (SR 273 TO US 13/US 40 SPLIT) AND EASTBOUND/WESTBOUND US 40 (WILTON BLVD TO US 13/US 40 SPLIT)

6. *CLOSE THE SHOULDER TO CONSTRUCT THE PROPOSED FENCING ADJACENT TO THE NORFOLK SOUTHERN RAILROAD ALONG US 40 EASTBOUND FROM APPROXIMATE STATION 695+25 TO STATION 701+00.*
7. *UTILIZE TA-21A TO CLOSE THE US 13 NORTHBOUND LEFT-TURN LANE AND TA-33 TO CLOSE THE US 13 SOUTHBOUND LEFT TRAVEL LANE AT QUIGLEY BLVD, DURING ALLOWABLE LANE CLOSURE MATRICES, AND CONSTRUCT THE PEDESTRIAN REFUGE ALONG THE NORTHERN LEG OF THE INTERSECTION.*
8. *UTILIZE TA-21A TO CLOSE THE US 13 SOUTHBOUND RIGHT-TURN LANE AND THE SR 273 WESTBOUND AUXILIARY LANE, AS WELL AS TA-23 TO CLOSE THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE AND THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING CHANNELIZATION ISLAND AT THE NORTHWEST CORNER OF THE INTERSECTION AND CONSTRUCT THE NORTHWEST CURB INCLUDING SIDEWALK, CURB RAMPS, AND ENTRANCE/SIDE STREET MODIFICATIONS ALONG SR 273 WESTBOUND FROM THE BURGER KING ACCESS TO US 13.*
9. *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 EASTBOUND TRAVEL LANE, THE RIGHTMOST US 13 NORTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 NORTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 WESTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE SOUTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*
10. *UTILIZE TA-23 TO CLOSE THE RIGHTMOST SR 273 WESTBOUND TRAVEL LANE, THE RIGHTMOST US 13 SOUTHBOUND LEFT-TURN LANE, THE LEFTMOST US 13 SOUTHBOUND TRAVEL LANE, AND THE LEFTMOST SR 273 EASTBOUND LEFT-TURN LANE, AS NEEDED, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRICES, AND REMOVE THE EXISTING MEDIAN ISLAND ALONG THE NORTH LEG OF THE INTERSECTION AND RECONSTRUCT THE PROPOSED MEDIAN ISLAND.*

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBLSS | FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS | MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 0620 | MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

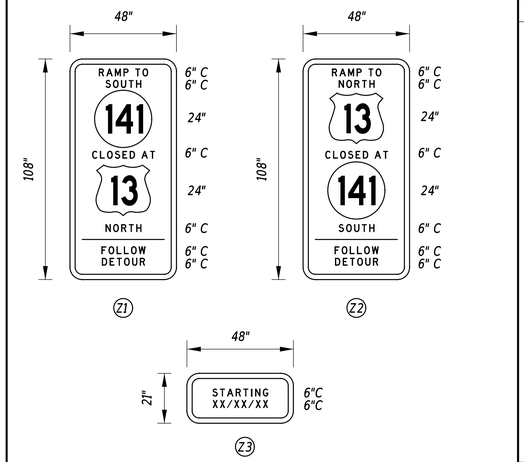
ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6
	COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER	SECTION PAI
		CHECKED BY: P. HORSEY	SHEET NO. 189

PORTABLE CHANGEABLE MESSAGE SIGNS

SPECIAL SIGNS



1. *DISPLAY (Z1) AND (Z2) SIGNS, ALONG WITH THE (Z3) PLAQUE, FOR 10 DAYS PRIOR TO THE IMPLEMENTATION OF THE DETOUR. (Z3) PLAQUE TO COMPLETELY COVER "FOLLOW DETOUR" LEGEND ON (Z1) AND (Z2) SIGNS. UPON IMPLEMENTATION OF THE DETOUR, REMOVE (Z3) PLAQUE FROM (Z1) AND (Z2) SIGNS AND RELOCATE (Z1) AND (Z2) SIGNS TO A LOCATION OUTSIDE OF THE CLOSURE AREA.*
2. *ALL SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON A RETROREFLECTIVE, PRISMATIC, FLUORESCENT ORANGE BACKGROUND. ROUTE SYMBOL SHALL HAVE A BLACK LEGEND ON A WHITE BACKGROUND.*

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

Teresa Lord — 7/2/2024
THIS SEAL ONLY APPLIES TO THIS DETOUR SHEET — DATE

TERESA W. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

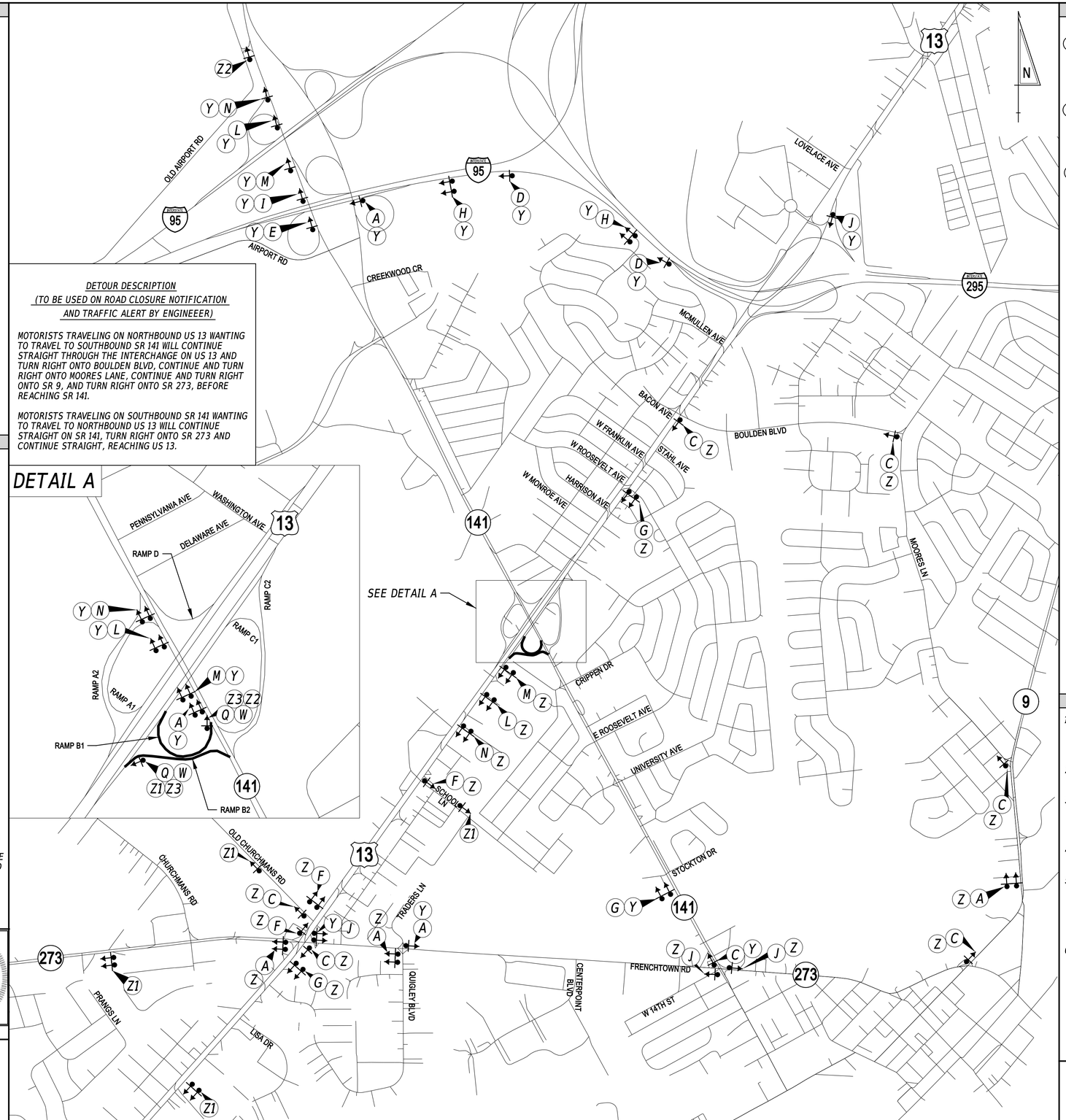
Zach Barber — 7/2/2024
QA/QC REVIEWER — DATE

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

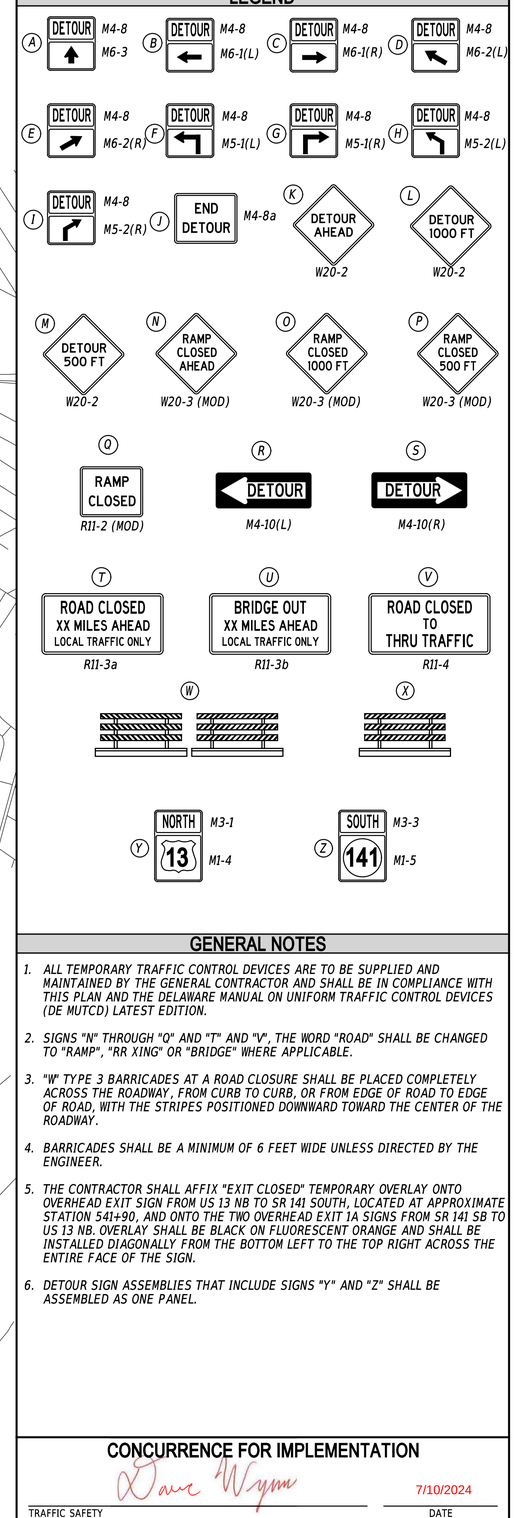
DETOUR DESCRIPTION
(TO BE USED ON ROAD CLOSURE NOTIFICATION AND TRAFFIC ALERT BY ENGINEEER)

MOTORISTS TRAVELING ON NORTHBOUND US 13 WANTING TO TRAVEL TO SOUTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE ON US 13 AND TURN RIGHT ONTO BOULDEN BLVD, CONTINUE AND TURN RIGHT ONTO MOORES LANE, CONTINUE AND TURN RIGHT ONTO SR 9, AND TURN RIGHT ONTO SR 273, BEFORE REACHING SR 141.

MOTORISTS TRAVELING ON SOUTHBOUND SR 141 WANTING TO TRAVEL TO NORTHBOUND US 13 WILL CONTINUE STRAIGHT ON SR 141, TURN RIGHT ONTO SR 273 AND CONTINUE STRAIGHT, REACHING US 13.



LEGEND



GENERAL NOTES

1. *ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.*
2. *SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.*
3. *"W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.*
4. *BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.*
5. *THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FROM US 13 NB TO SR 141 SOUTH, LOCATED AT APPROXIMATE STATION 541+90, AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 SB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.*
6. *DETOUR SIGN ASSEMBLIES THAT INCLUDE SIGNS "Y" AND "Z" SHALL BE ASSEMBLED AS ONE PANEL.*

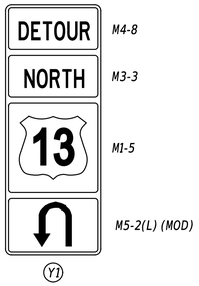
CONCURRENCE FOR IMPLEMENTATION

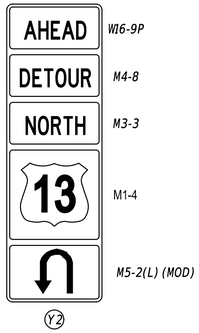
Dave Wynn — 7/10/2024
TRAFFIC SAFETY — DATE

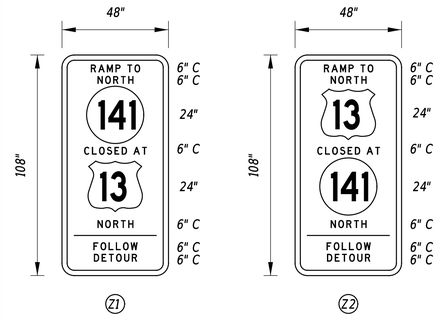
ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	PERMIT NO. N/A	DETOUR PLAN - VEHICULAR RAMP B1: SR 141 SB TO US 13 NB RAMP B2: US 13 NB TO SR 141 SB	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		SHEET NO. 190
					CHECKED BY: P. HORSEY		

PORTABLE CHANGEABLE MESSAGE SIGNS

SPECIAL SIGNS







1. DISPLAY (Z1) AND (Z2) SIGNS, ALONG WITH THE (Z3) PLAQUE, FOR 10 DAYS PRIOR TO THE IMPLEMENTATION OF THE DETOUR. (Z3) PLAQUE TO COMPLETELY COVER "FOLLOW DETOUR" LEGEND ON (Z1) AND (Z2) SIGNS. UPON IMPLEMENTATION OF THE DETOUR, REMOVE (Z3) PLAQUE FROM (Z1) AND (Z2) SIGNS AND RELOCATE (Z1) AND (Z2) SIGNS TO A LOCATION OUTSIDE OF THE CLOSURE AREA.
2. ALL SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON A RETROREFLECTIVE, PRISMATIC, FLUORESCENT ORANGE BACKGROUND. ROUTE SYMBOL SHALL HAVE A BLACK LEGEND ON A WHITE BACKGROUND.

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

Teresa Lord — 7/2/2024
THIS SEAL ONLY APPLIES TO THIS DETOUR SHEET — DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

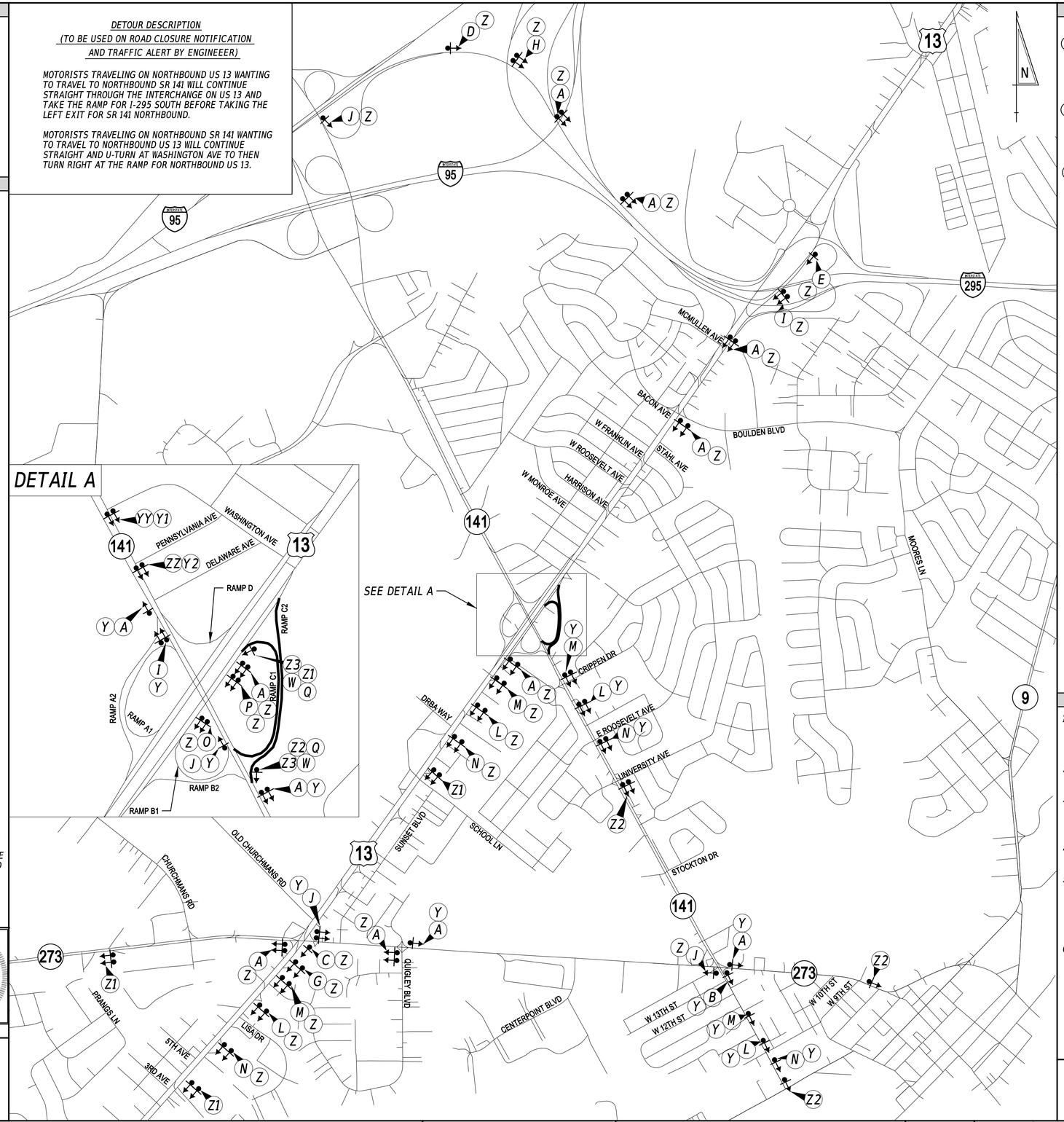
Zach Barber — 7/2/2024
QA/QC REVIEWER — DATE

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

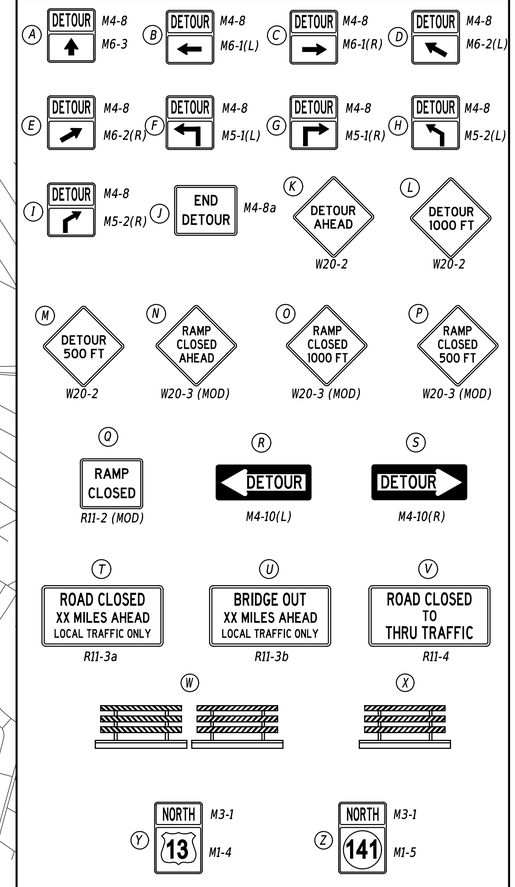
DETOUR DESCRIPTION
(TO BE USED ON ROAD CLOSURE NOTIFICATION AND TRAFFIC ALERT BY ENGINEEER)

MOTORISTS TRAVELING ON NORTHBOUND US 13 WANTING TO TRAVEL TO NORTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE ON US 13 AND TAKE THE RAMP FOR I-295 SOUTH BEFORE TAKING THE LEFT EXIT FOR SR 141 NORTHBOUND.

MOTORISTS TRAVELING ON NORTHBOUND SR 141 WANTING TO TRAVEL TO NORTHBOUND US 13 WILL CONTINUE STRAIGHT AND U-TURN AT WASHINGTON AVE TO THEN TURN RIGHT AT THE RAMP FOR NORTHBOUND US 13.



LEGEND



GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
2. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
3. "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
4. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL AFFIX "EXIT CLOSED" TEMPORARY OVERLAY ONTO OVERHEAD EXIT SIGN FOR SR 141 NORTH, LOCATED AT APPROXIMATE STATION 548+00, AND ONTO THE TWO OVERHEAD EXIT 1A SIGNS FROM SR 141 NB TO US 13 NB. OVERLAY SHALL BE BLACK ON FLUORESCENT ORANGE AND SHALL BE INSTALLED DIAGONALLY FROM THE BOTTOM LEFT TO THE TOP RIGHT ACROSS THE ENTIRE FACE OF THE SIGN.
6. DETOUR SIGN ASSEMBLIES THAT INCLUDE SIGNS "Y" AND "Z" SHALL BE ASSEMBLED AS ONE PANEL.

CONCURRENCE FOR IMPLEMENTATION

Dave Wynn — 7/10/2024
TRAFFIC SAFETY — DATE

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	PERMIT NO.	N/A	DETOUR PLAN - VEHICULAR RAMP C1: US 13 NB TO SR 141 NB RAMP C2: SR 141 NB TO US 13 NB	SECTION
				T201901102				PAI
				COUNTY	DESIGNED BY:	T. LORD		SHEET NO.
				NEW CASTLE	CHECKED BY:	P. HORSEY		191

PORTABLE CHANGEABLE MESSAGE SIGNS

PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

RAMP TO SR 141 N TO CLOSE	XPM-XAM STARTING XX/XX/XX

DURING DETOUR
(DISPLAY FOR DURATION OF DETOUR)

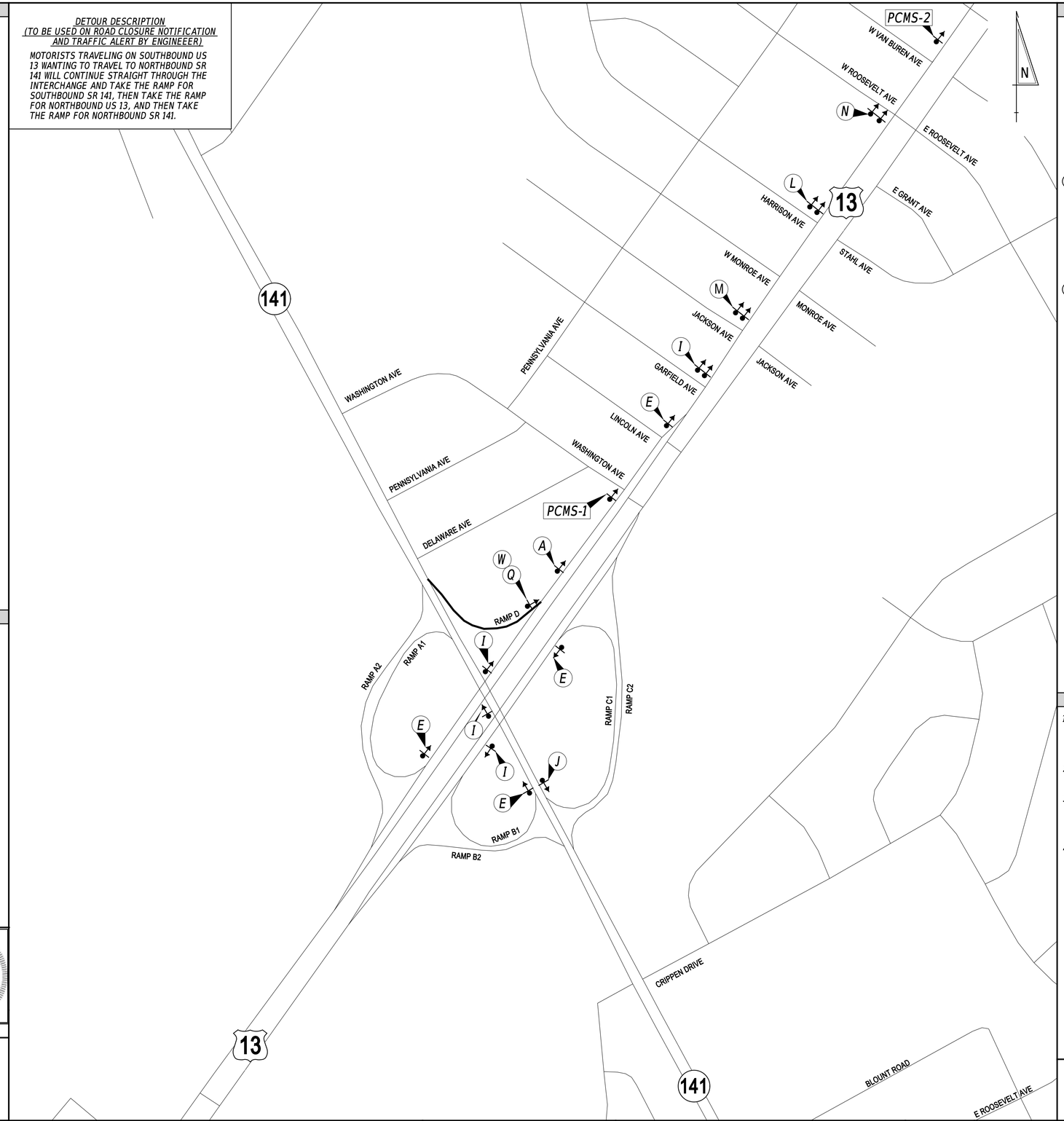
PCMS-2

RAMP TO SR 141 N CLOSED	FOLLOW DETOUR

SPECIAL SIGNS

DETOUR DESCRIPTION
(TO BE USED ON ROAD CLOSURE NOTIFICATION AND TRAFFIC ALERT BY ENGINEEER)

MOTORISTS TRAVELING ON SOUTHBOUND US 13 WANTING TO TRAVEL TO NORTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE AND TAKE THE RAMP FOR SOUTHBOUND SR 141, THEN TAKE THE RAMP FOR NORTHBOUND US 13, AND THEN TAKE THE RAMP FOR NORTHBOUND SR 141.



LEGEND

A: DETOUR / NORTH / 141 / ↑ — M4-8 / M3-1 / M1-4 / M6-3	B: DETOUR / NORTH / 141 / ← — M4-8 / M3-1 / M1-4 / M6-1(L)	C: DETOUR / NORTH / 141 / → — M4-8 / M3-1 / M1-4 / M6-1(R)	D: DETOUR / NORTH / 141 / ↖ — M4-8 / M3-1 / M1-4 / M6-2(L)
E: DETOUR / NORTH / 141 / ↗ — M4-8 / M3-1 / M1-4 / M6-2(R)	F: DETOUR / NORTH / 141 / ↰ — M4-8 / M3-1 / M1-4 / M5-1(L)	G: DETOUR / NORTH / 141 / ↱ — M4-8 / M3-1 / M1-4 / M5-1(R)	H: DETOUR / NORTH / 141 / ↖ — M4-8 / M3-1 / M1-4 / M5-2(L)
I: DETOUR / NORTH / 141 / ↱ — M4-8 / M3-1 / M1-4 / M5-2(R)	J: END DETOUR / NORTH / 141 — M4-8a / M3-1 / M1-4	K: DETOUR AHEAD — W20-2	L: DETOUR 1000 FT — W20-2
M: DETOUR 500 FT — W20-2	N: RAMP CLOSED AHEAD — W20-3 (MOD)	O: RAMP CLOSED 1000 FT — W20-3 (MOD)	P: RAMP CLOSED 500 FT — W20-3 (MOD)
Q: RAMP CLOSED — R11-2 (MOD)	R: DETOUR — M4-10(L)	S: DETOUR — M4-10(R)	
T: ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY — R11-3a	U: BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY — R11-3b	V: ROAD CLOSED TO THRU TRAFFIC — R11-4	
W	X		

GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
2. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
3. "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
4. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

CONCURRENCE FOR IMPLEMENTATION

TRAFFIC SAFETY — Dave Wynn — DATE 7/10/2024

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Lord — 7/2/2024
THIS SEAL ONLY APPLIES TO THIS DETOUR SHEET — DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER — SEAL

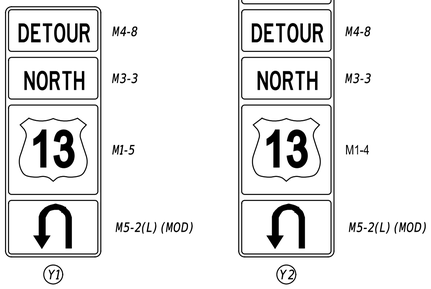
Zach Baker — 7/2/2024
QA/QC REVIEWER — DATE

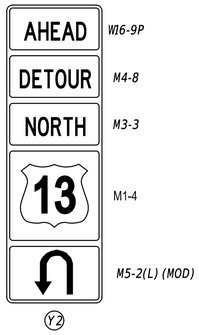
"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

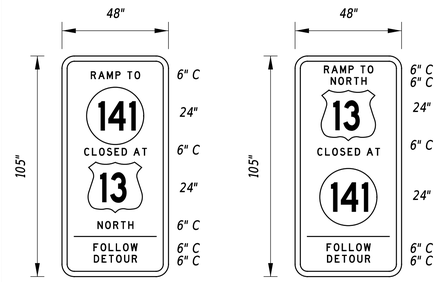
ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	T201901102	PERMIT NO.	N/A	DETOUR PLAN - VEHICULAR RAMP D US 13 SB TO SR 141 NB	SECTION	PAI
				COUNTY	NEW CASTLE	DESIGNED BY:	T. LORD		SHEET NO.	192
						CHECKED BY:	P. HORSEY			

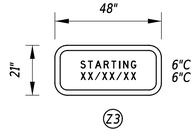
PORTABLE CHANGEABLE MESSAGE SIGNS

SPECIAL SIGNS









1. DISPLAY (Z1) AND (Z2) SIGNS, ALONG WITH THE (Z3) PLAQUE, FOR 10 DAYS PRIOR TO THE IMPLEMENTATION OF THE DETOUR. (Z3) PLAQUE TO COMPLETELY COVER "FOLLOW DETOUR" LEGEND ON (Z1) AND (Z2) SIGNS. UPON IMPLEMENTATION OF THE DETOUR, REMOVE (Z3) PLAQUE FROM (Z1) AND (Z2) SIGNS AND RELOCATE (Z1) AND (Z2) SIGNS TO A LOCATION OUTSIDE OF THE CLOSURE AREA.
2. ALL SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON A RETROREFLECTIVE, PRISMATIC, FLUORESCENT ORANGE BACKGROUND. ROUTE SYMBOL SHALL HAVE A BLACK LEGEND ON A WHITE BACKGROUND.

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

Teresa Lord — 7/2/2024
THIS SEAL ONLY APPLIES TO THIS DETOUR SHEET — DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

Dawn C. Shea — 7/2/2024
QA/QC REVIEWER — DATE

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

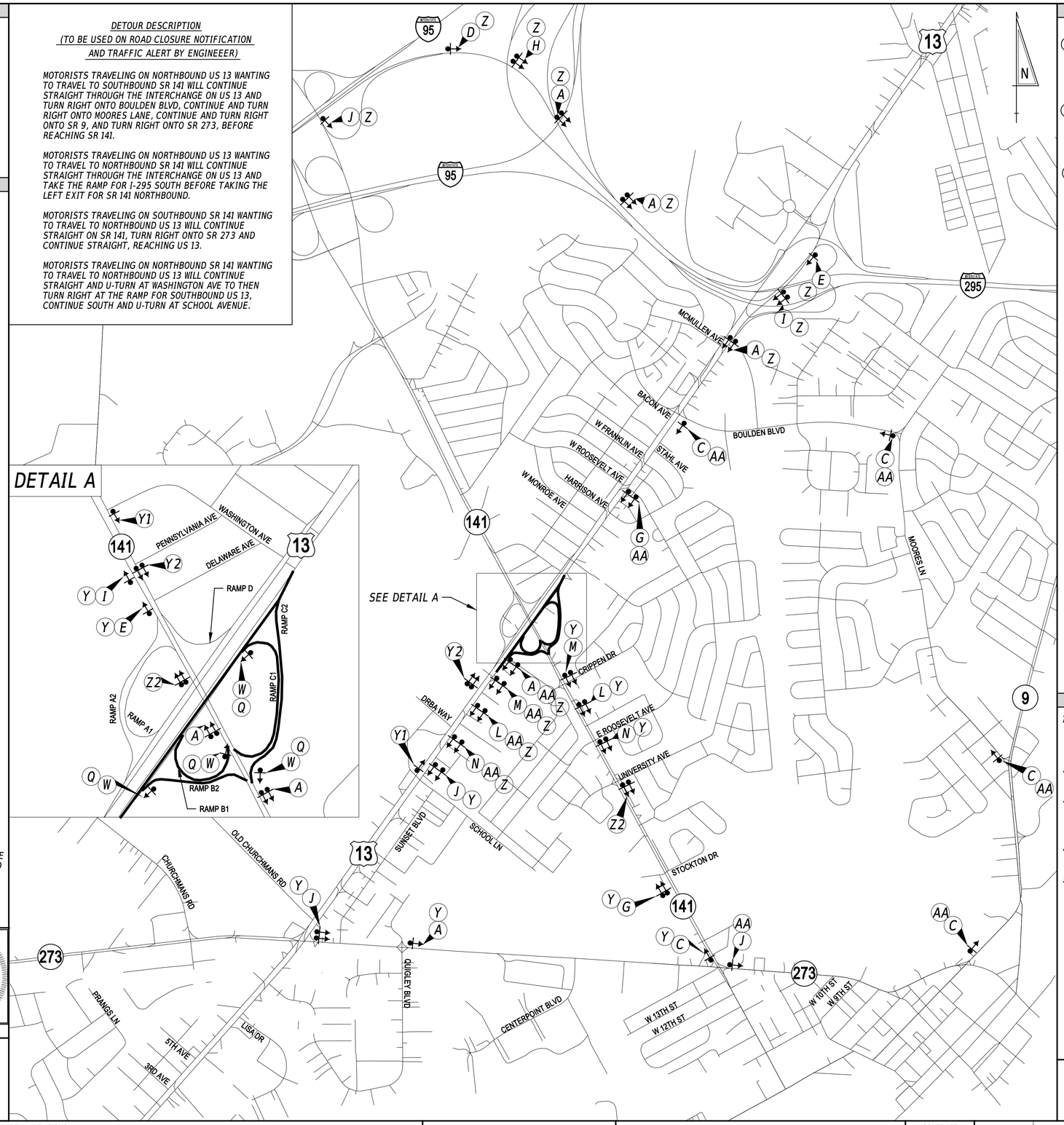
DETOUR DESCRIPTION
(TO BE USED ON ROAD CLOSURE NOTIFICATION AND TRAFFIC ALERT BY ENGINEEER)

MOTORISTS TRAVELING ON NORTHBOUND US 13 WANTING TO TRAVEL TO SOUTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE ON US 13 AND TURN RIGHT ONTO BOULDEN BLVD, CONTINUE AND TURN RIGHT ONTO MOORES LANE, CONTINUE AND TURN RIGHT ONTO SR 9, AND TURN RIGHT ONTO SR 273, BEFORE REACHING SR 141.

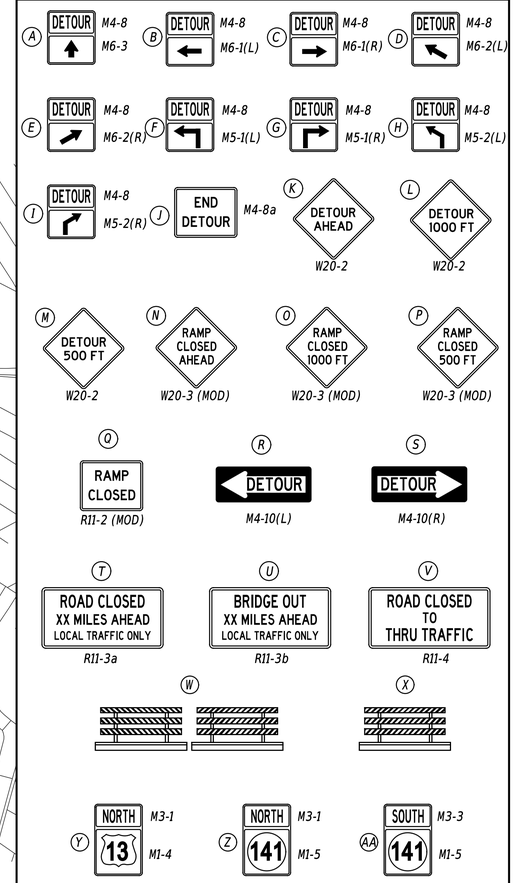
MOTORISTS TRAVELING ON NORTHBOUND US 13 WANTING TO TRAVEL TO NORTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE ON US 13 AND TAKE THE RAMP FOR I-295 SOUTH BEFORE TAKING THE LEFT EXIT FOR SR 141 NORTHBOUND.

MOTORISTS TRAVELING ON SOUTHBOUND SR 141 WANTING TO TRAVEL TO NORTHBOUND US 13 WILL CONTINUE STRAIGHT ON SR 141, TURN RIGHT ONTO SR 273 AND CONTINUE STRAIGHT, REACHING US 13.

MOTORISTS TRAVELING ON NORTHBOUND SR 141 WANTING TO TRAVEL TO NORTHBOUND US 13 WILL CONTINUE STRAIGHT AND U-TURN AT WASHINGTON AVE TO THEN TURN RIGHT AT THE RAMP FOR SOUTHBOUND US 13, CONTINUE SOUTH AND U-TURN AT SCHOOL AVENUE.



LEGEND



GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
2. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
3. "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
4. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.
5. DETOUR SIGN ASSEMBLIES THAT INCLUDE SIGNS "Y", "Z", AND "AA" SHALL BE ASSEMBLED AS ONE PANEL.

CONCURRENCE FOR IMPLEMENTATION

Dave Wynn — 7/10/2024
TRAFFIC SAFETY — DATE

ADDENDA / REVISIONS

NOT TO SCALE

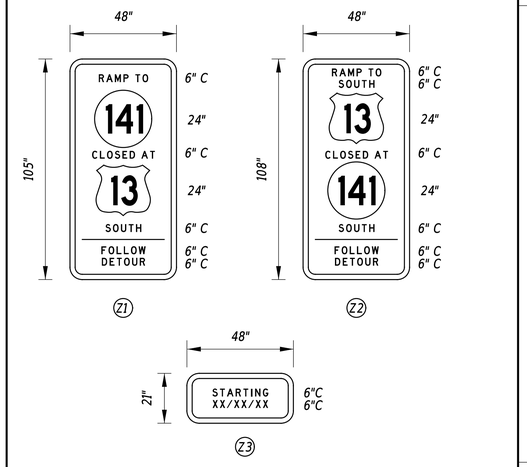
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	PERMIT NO.	N/A	SECTION
T201901102	DESIGNED BY:	Z. BRANDER	PAI
COUNTY	CHECKED BY:	T. LORD	SHEET NO.
NEW CASTLE			193

DETOUR PLAN - VEHICULAR
US 13 AND SR 141 INTERCHANGE
RAMPS B1, B2, C1, AND C2
NB SERVICE ROAD

PORTABLE CHANGEABLE MESSAGE SIGNS

SPECIAL SIGNS



1. DISPLAY (Z1) AND (Z2) SIGNS, ALONG WITH THE (Z3) PLAQUE, FOR 10 DAYS PRIOR TO THE IMPLEMENTATION OF THE DETOUR. (Z3) PLAQUE TO COMPLETELY COVER "FOLLOW DETOUR" LEGEND ON (Z1) AND (Z2) SIGNS. UPON IMPLEMENTATION OF THE DETOUR, REMOVE (Z3) PLAQUE FROM (Z1) AND (Z2) SIGNS AND RELOCATE (Z1) AND (Z2) SIGNS TO A LOCATION OUTSIDE OF THE CLOSURE AREA.
2. ALL SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON A RETROREFLECTIVE, PRISMATIC, FLUORESCENT ORANGE BACKGROUND. ROUTE SYMBOL SHALL HAVE A BLACK LEGEND ON A WHITE BACKGROUND.

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

Teresa Lord — 7/2/2024
THIS SEAL ONLY APPLIES TO THIS DETOUR SHEET — DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

Dave Wynn — 7/2/2024
QA/QC REVIEWER — DATE

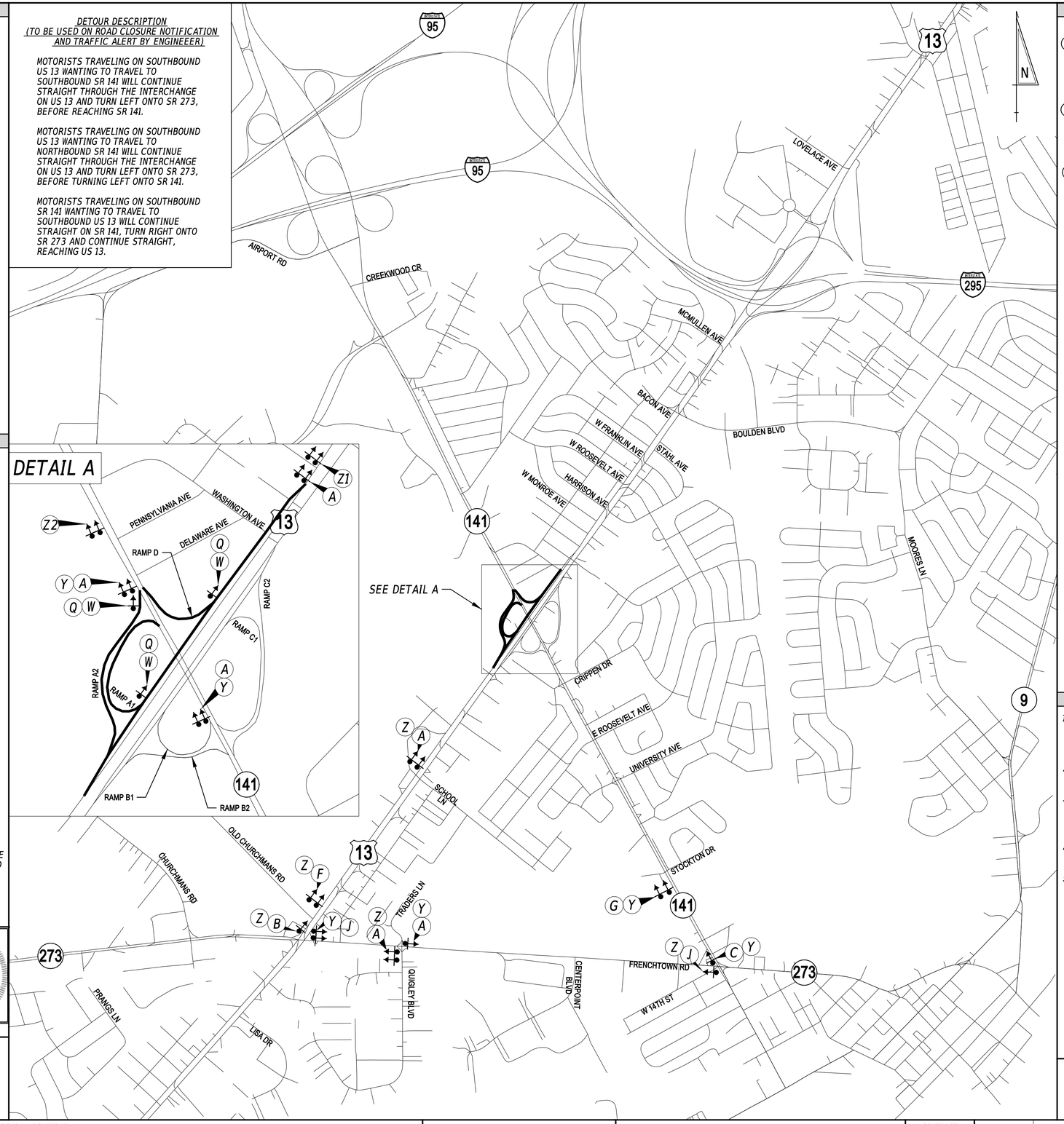
"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

DETOUR DESCRIPTION
(TO BE USED ON ROAD CLOSURE NOTIFICATION AND TRAFFIC ALERT BY ENGINEEER)

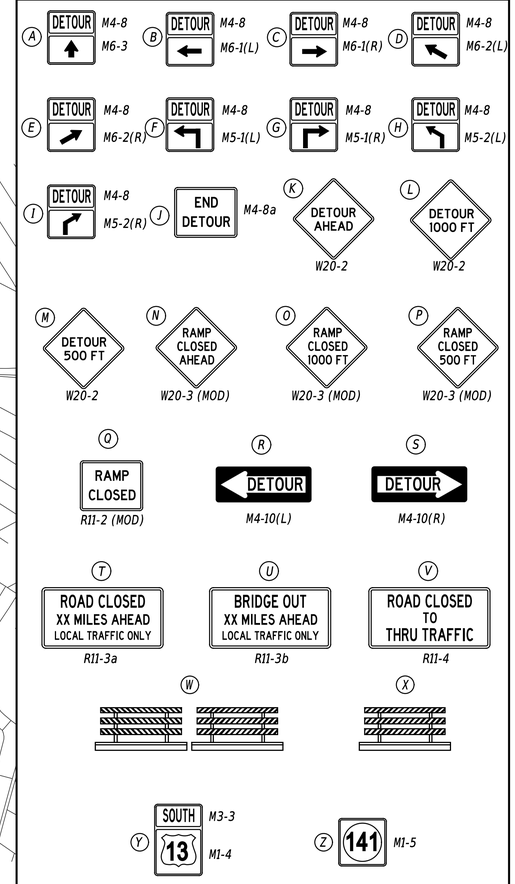
MOTORISTS TRAVELING ON SOUTHBOUND US 13 WANTING TO TRAVEL TO SOUTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE ON US 13 AND TURN LEFT ONTO SR 273, BEFORE REACHING SR 141.

MOTORISTS TRAVELING ON SOUTHBOUND US 13 WANTING TO TRAVEL TO NORTHBOUND SR 141 WILL CONTINUE STRAIGHT THROUGH THE INTERCHANGE ON US 13 AND TURN LEFT ONTO SR 273, BEFORE TURNING LEFT ONTO SR 141.

MOTORISTS TRAVELING ON SOUTHBOUND SR 141 WANTING TO TRAVEL TO SOUTHBOUND US 13 WILL CONTINUE STRAIGHT ON SR 141, TURN RIGHT ONTO SR 273 AND CONTINUE STRAIGHT, REACHING US 13.



LEGEND



GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
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4. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.
5. DETOUR SIGN ASSEMBLIES THAT INCLUDE SIGNS "Y" SHALL BE ASSEMBLED AS ONE PANEL.

CONCURRENCE FOR IMPLEMENTATION

Dave Wynn — 7/10/2024
TRAFFIC SAFETY — DATE

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	PERMIT NO.	N/A	DETOUR PLAN - VEHICULAR US 13 AND SR 141 INTERCHANGE RAMPS A1, A2, AND D SB SERVICE ROAD	SECTION
				T201901102	DESIGNED BY:	Z. BRANDER		PAI
				COUNTY	CHECKED BY:	T. LORD		SHEET NO.
				NEW CASTLE				194

PROJECT LIGHTING NOTES:

1. CONDUIT RUNS ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL LOCATE THE EXISTING SERVICE RUNS IN A MANNER THAT AVOIDS CONFLICTS WITH ALL EXISTING AND PROPOSED FEATURES AS FIELD CONDITIONS DICTATE AND AS APPROVED BY THE ENGINEER.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO WORK.

3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND SUPERINTENDENT ON THE LOCATIONS OF ALL CONDUIT, JUNCTION WELLS AND POLE BASES TO ELIMINATE CONSTRUCTION CONFLICTS.

4. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE PROPOSED WORK WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

5. ALL JUNCTION WELL LIDS AND FRAMES SHALL BE BONDED TO THE GROUND WIRE PRESENT IN EACH JUNCTION WELL.

6. COLOR CODING SHALL BE PROVIDED THROUGHOUT THE ENTIRE NETWORK FOR SERVICE, FEEDER, BRANCH, AND CONTROL CONDUCTORS. EACH PHASE SHALL BE AN INDEPENDENT COLOR. CONDUCTORS SHALL HAVE FACTORY IMPREGNATED COLOR THROUGHOUT THEIR ENTIRE LENGTH.

7. ALL FUSED CONNECTIONS SHALL BE MADE IN THE POLE BASE. SPLICES IN JUNCTION BOXES OR PULL BOXES SHALL NOT BE FUSED.

8. ALL CONDUITS SHALL BE BONDED IN A CONTINUOUS RUN FROM THE SOURCE BY A COPPER GROUNDING CONDUCTOR WITH SIZE AS NOTED ON PLANS. 10 FEET OF ADDITIONAL SLACK FOR EACH GROUND WIRE IN EACH JUNCTION WELL SHALL BE PROVIDED AND NEATLY COILED.

9. ALL NORTHING AND EASTING INFORMATION SHOWN FOR THE PROPOSED LIGHTING STANDARDS IS TO THE CENTER OF THE PROPOSED POLE BASE.

10. ALL PROPOSED ROADWAY LIGHTING CONDUITS (SERVICE RUNS) SHALL BE RIGID POLYVINYL CHLORIDE SCHEDULE 80 WHEN INSTALLED BY TRENCHING AND SCHEDULE 80 HDPE WHEN INSTALLED BY BORING, UNLESS OTHERWISE NOTED ON THE PLANS.

11. SPLICES FOR ALL ROADWAY LIGHTING ELECTRICAL CABLES SHALL BE COMPLETED USING APPROVED SPLICE KITS OR METHODS APPROVED BY THE ENGINEER AND SHALL BE INCIDENTAL TO THE SUPPLY AND INSTALLATION OF THE VARIOUS ROADWAY LIGHTING ELECTRICAL CABLES.

12. ALL PROPOSED LIGHTING STANDARDS SHALL BE INSTALLED WITH BREAKAWAY TRANSFORMER BASES WHETHER PROTECTED BY TRAFFIC BARRIER OR UNPROTECTED.

13. (1) ¾" DIAMETER BY 10' LONG GROUND ROD SHALL BE INSTALLED AT EACH LIGHTING STANDARD POLE BASE. (1) 3/4" DIAMETER BY 10' LONG GROUND ROD SHALL BE INSTALLED IN THE JUNCTION WELL CLOSEST TO THE LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE AND THE COPPER GROUNDING CONDUCTORS FOR EACH RUN OF CIRCUITS SHALL BE CONNECTED TO THE GROUND ROD. (1) 3/4" DIAMETER BY 10' LONG GROUND ROD SHALL BE INSTALLED AT THE LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE WHICH SHALL BE BONDED TO THE GROUND ROD IN THE JUNCTION WELL CLOSEST TO THE LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE. (1) 3/4" DIAMETER BY 10' LONG GROUND ROD SHALL BE INSTALLED AT THE ELECTRIC SERVICE PEDESTAL. GROUND RODS SHALL BE SEPARATED BY A MINIMUM OF 6 FEET.

14. IF ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE OWNER OF THE UTILITY IMMEDIATELY. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE UNDER THE DIRECTION OF THE UTILITY OWNER. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR BACKFILL AN EXCAVATION OF AN IMPACTED UTILITY WITHOUT PERMISSION FROM THE UTILITY OWNER.

15. SEE UTILITY STATEMENT FOR DELMARVA POWER ELECTRIC COORDINATION REQUIREMENTS FOR PROPOSED LEASED LIGHTING AND SERVICE FEEDS.

16. PHOTOELECTRIC CONTROL FOR PROPOSED DELDOT LIGHTING STANDARDS SHALL BE AT THE PROPOSED LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE.

17. ALL LED ROADWAY LUMINAIRES, INCLUDING DELDOT LIGHT STANDARDS AND LEASED LIGHTS FURNISHED AND INSTALLED BY DELMARVA POWER, SHALL BE TYPE 3 DISTRIBUTION WITH FULL CUTOFF OPTICS AND INSTALLED PERPENDICULAR TO THE TRAVELED WAY UNLESS OTHERWISE NOTED. SEE SPECIFICATION FOR ITEM 850521 - LUMINAIRE (LED), 250 WATTS, HPS EQUIVALENT.

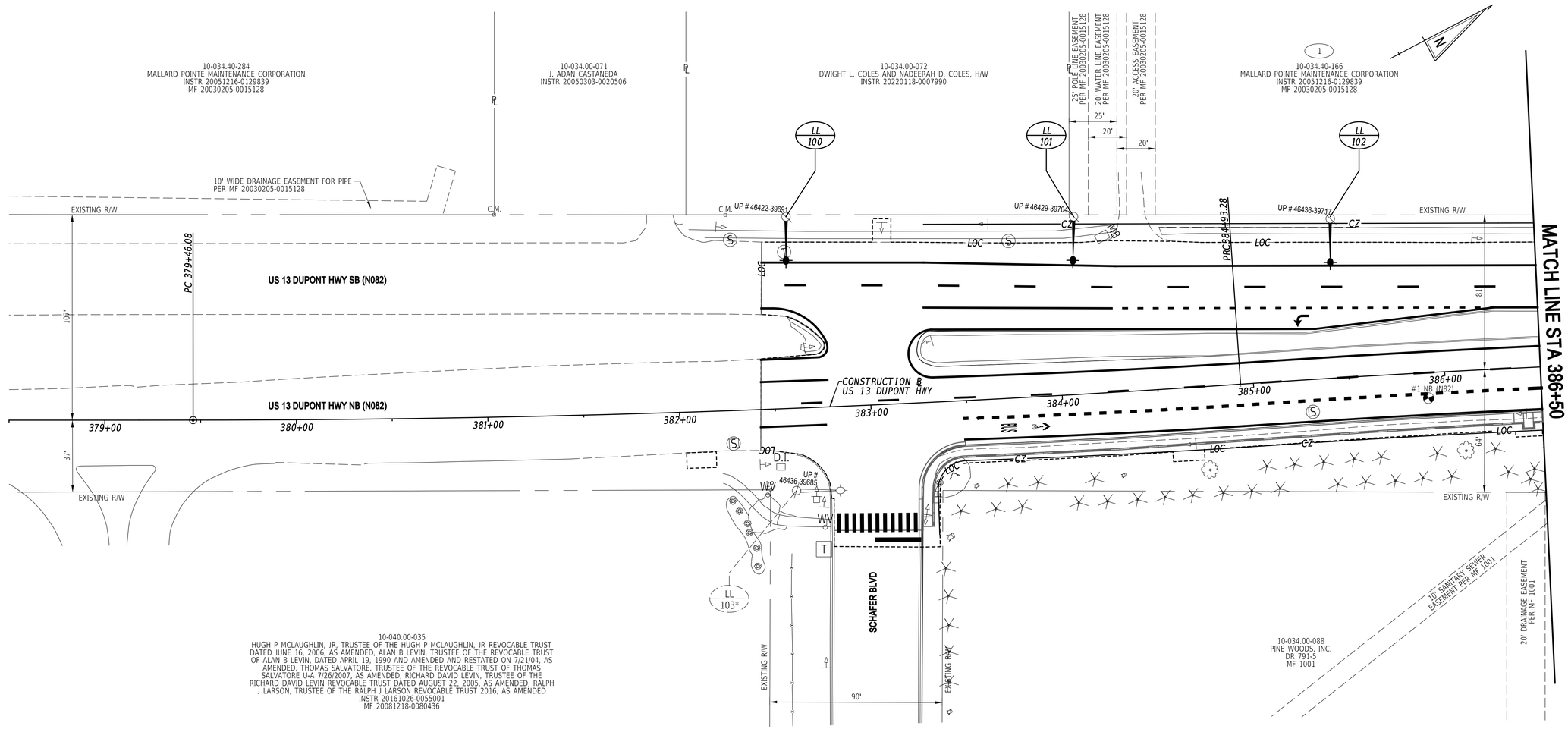
LIGHTING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	– EXISTING ROADWAY LIGHT
	– PROPOSED ROADWAY LIGHT
	– POLE BASE, TYPE 6 (EXISTING AND PROPOSED)
	– UTILITY POLE (EXISTING AND PROPOSED)
	– PROPOSED JUNCTION WELL
	– PROPOSED LIGHTING CONTROL CENTER
P	– PROPOSED ELECTRIC SERVICE PEDESTAL
LL X / LL X	– LEASED LIGHT IDENTIFIER (EXISTING TO BE RETROFIT AND PROPOSED)
LS X / LS X	– DELDOT LIGHTING STANDARD IDENTIFIER (EXISTING TO BE RETROFIT AND PROPOSED)
EX PL	– EXISTING PRIVATE LIGHT TO REMAIN IDENTIFIER
SR X / SR X	– SERVICE RUN IDENTIFIER (EXISITING AND PROPOSED)
JW X / JW X	– JUNCTION WELL IDENTIFIER (TYPE) (EXISTING AND PROPOSED)
CA X	– PROPOSED LIGHTING CABINET BASE IDENTIFIER (TYPE)
LC X	– LIGHTING CONTROL CENTER IDENTIFIER
PB X	– POLE BASE IDENTIFIER (TYPE)
RM C	– REMOVE BY CONTRACTOR
RM O	– REMOVE BY OTHERS
DP-E-OH	– PROPOSED DELMARVA POWER ELECTRIC OVERHEAD LINE

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME:
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024@ 08:21
USER NAME: $USERNAME OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	LIGHTING PLAN	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 195
					CHECKED BY: P. HORSEY		



LEASED LIGHTING SCHEDULE

NO.	POLE NO.	HEIGHT	ARM	LAMP
100	46422-39691	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
101	46429-39704	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
102	46436-39717	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
103*	46436-39685	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K

*DELMARVA POWER TO RETROFIT EXISTING HPS LUMINAIRE WITH LED LUMINAIRE

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBLSS
FILE NAME: SFILEAS | PLOT DRAWER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:21
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

Pennoni

ADDENDA / REVISIONS	

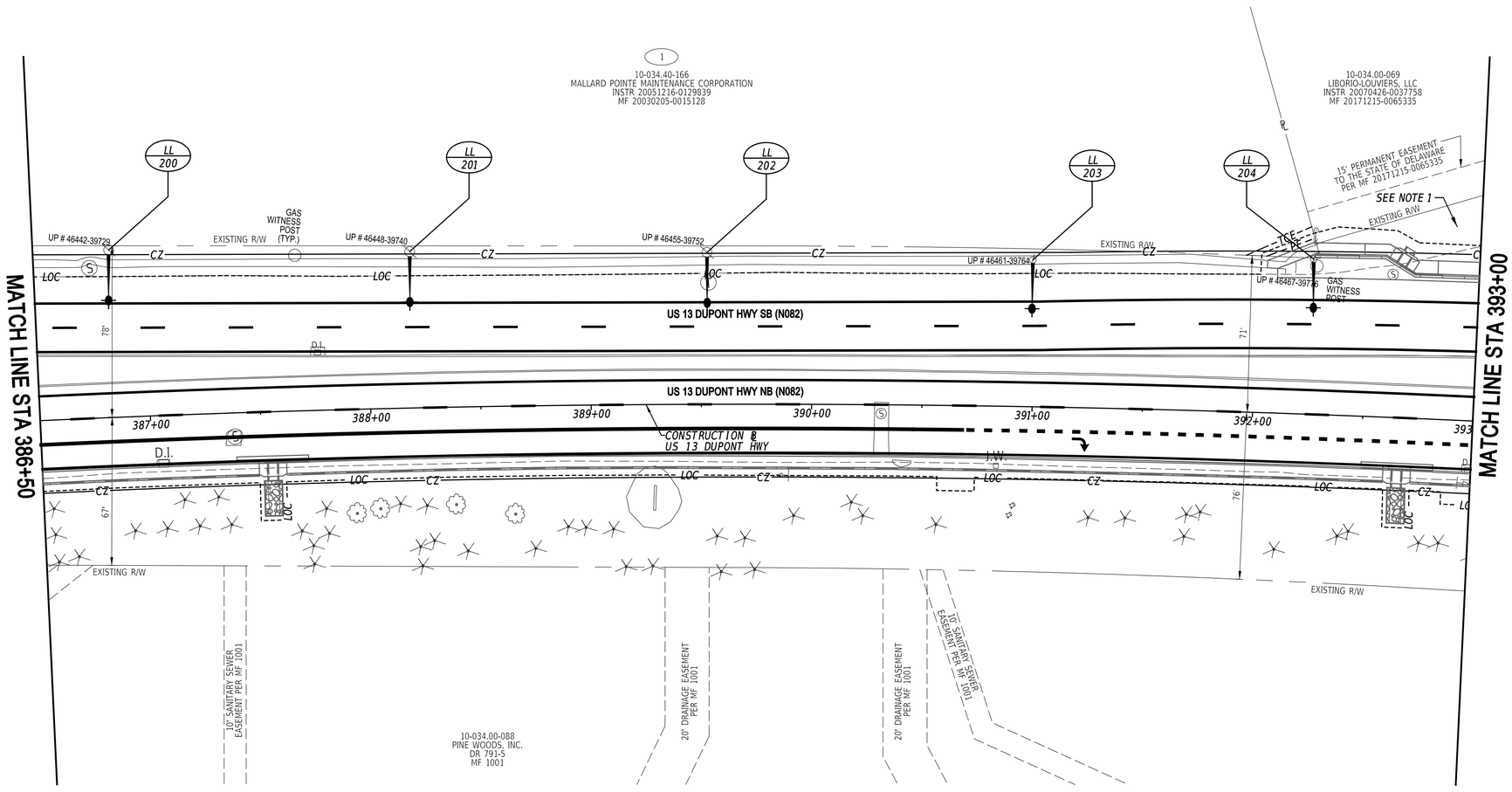
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LIGHTING PLAN

LI-01
SECTION
PAI
SHEET NO.
196



LEASED LIGHTING SCHEDULE

NO.	POLE NO.	HEIGHT	ARM	LAMP
200	46442-39729	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
201	46448-39740	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
202	46455-39752	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
203	46461-39764	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
204	46467-39776	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K

NOTES:

1. *OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.*

PENNONI ASSOCIATES INC.	$FILEAS
FILE NAME:	$VERSIONS
MICROSTATION VERSION:	$WORKSPACES
MICROSTATION WORKSPACE:	$OFFICENAMES
PEN TABLE:	$PENTABLSS
PLOT DRIVER:	$PLTDRVSS
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OFFICE LOCATION:	

ADDENDA / REVISIONS

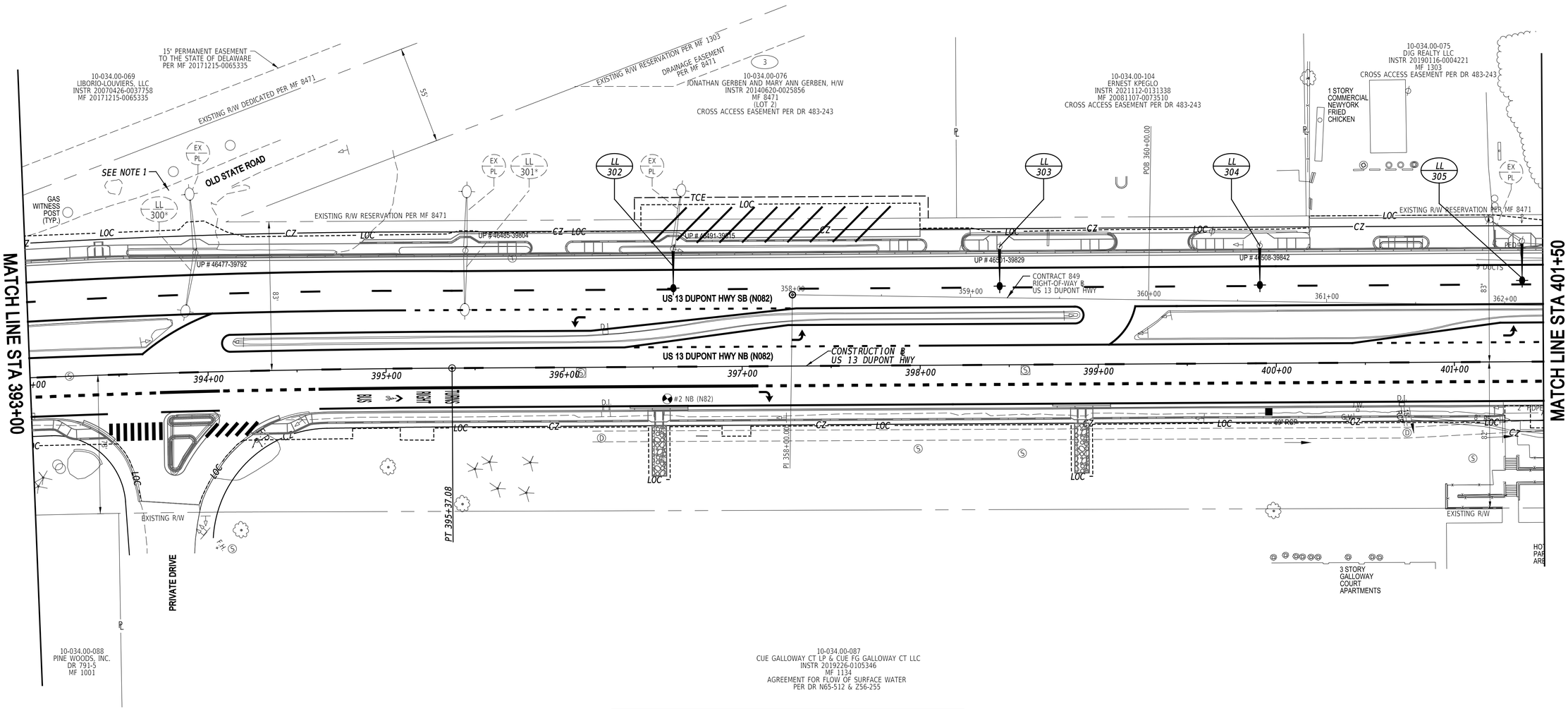
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FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LIGHTING PLAN

	LI-02
SECTION	PAI
SHEET NO.	197



LEASED LIGHTING SCHEDULE

NO.	POLE NO.	HEIGHT	ARM	LAMP
300*	46477-39792	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
301*	46485-39804	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
302	46491-39815	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
303	46501-39829	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
304	46508-39842	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K
305	46516-39854	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K

*DELMARVA POWER TO RETROFIT EXISTING HPS LUMINAIRE WITH LED LUMINAIRE

NOTES:

1. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRS$
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:21
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: SUSERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

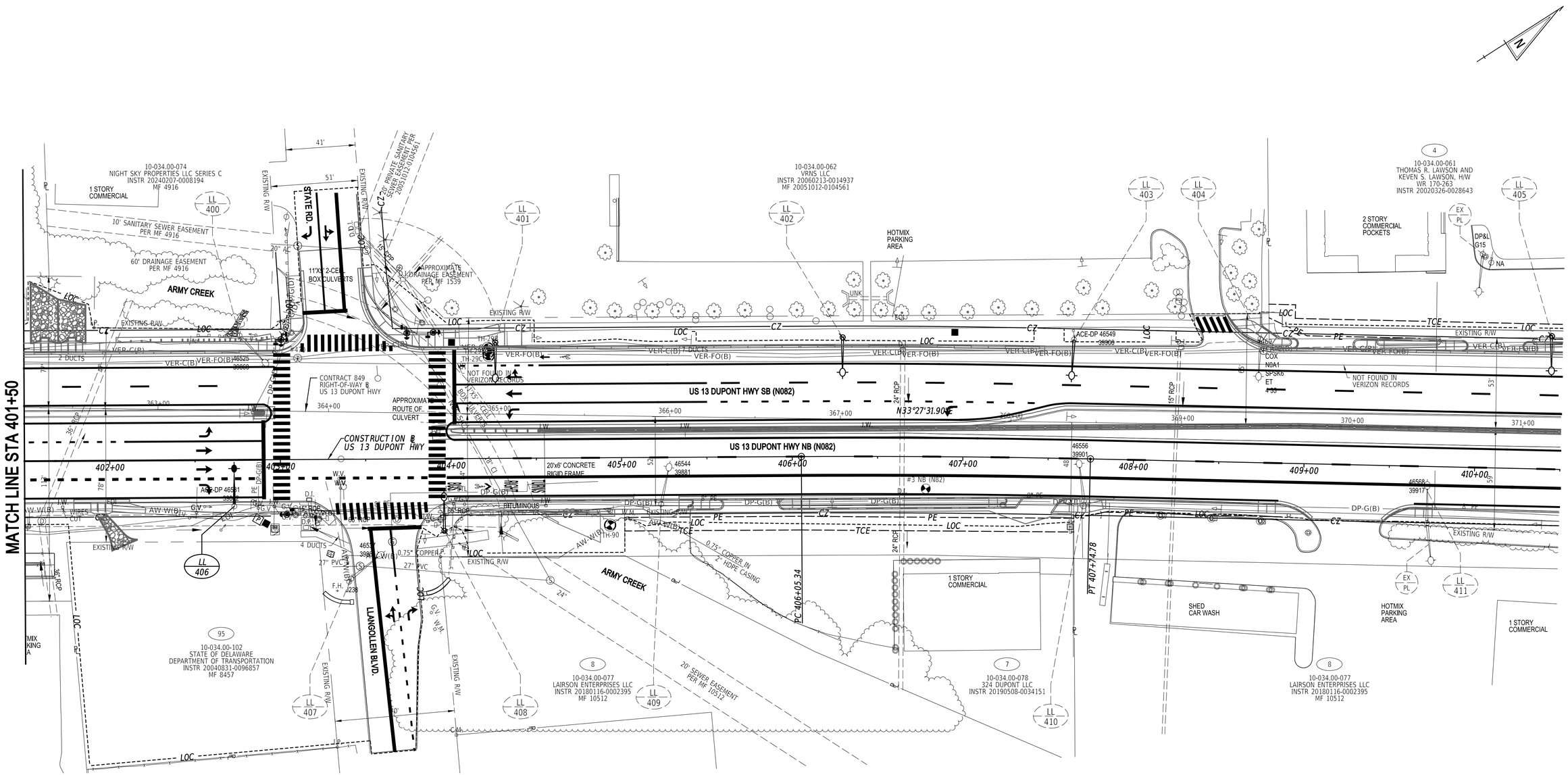
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LIGHTING PLAN

LI-03
SECTION: PAI
SHEET NO.: 198



LEASED LIGHTING SCHEDULE

NO.	POLE NO.	HEIGHT	ARM	LAMP
406	46531-39862	25'	12'	ATB2_40BLEDE10_XXXXX_R3_4K_5K

ADDENDA / REVISIONS

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A	LIGHTING PLAN
T201901102	DESIGNED BY:	Z. BRANDER	
COUNTY	CHECKED BY:	P. HORSEY	
NEW CASTLE			

LI-04
SECTION
PAI
SHEET NO.
199

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTABLES
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 13-JUN-2024 @ 06:21
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

Pennoni

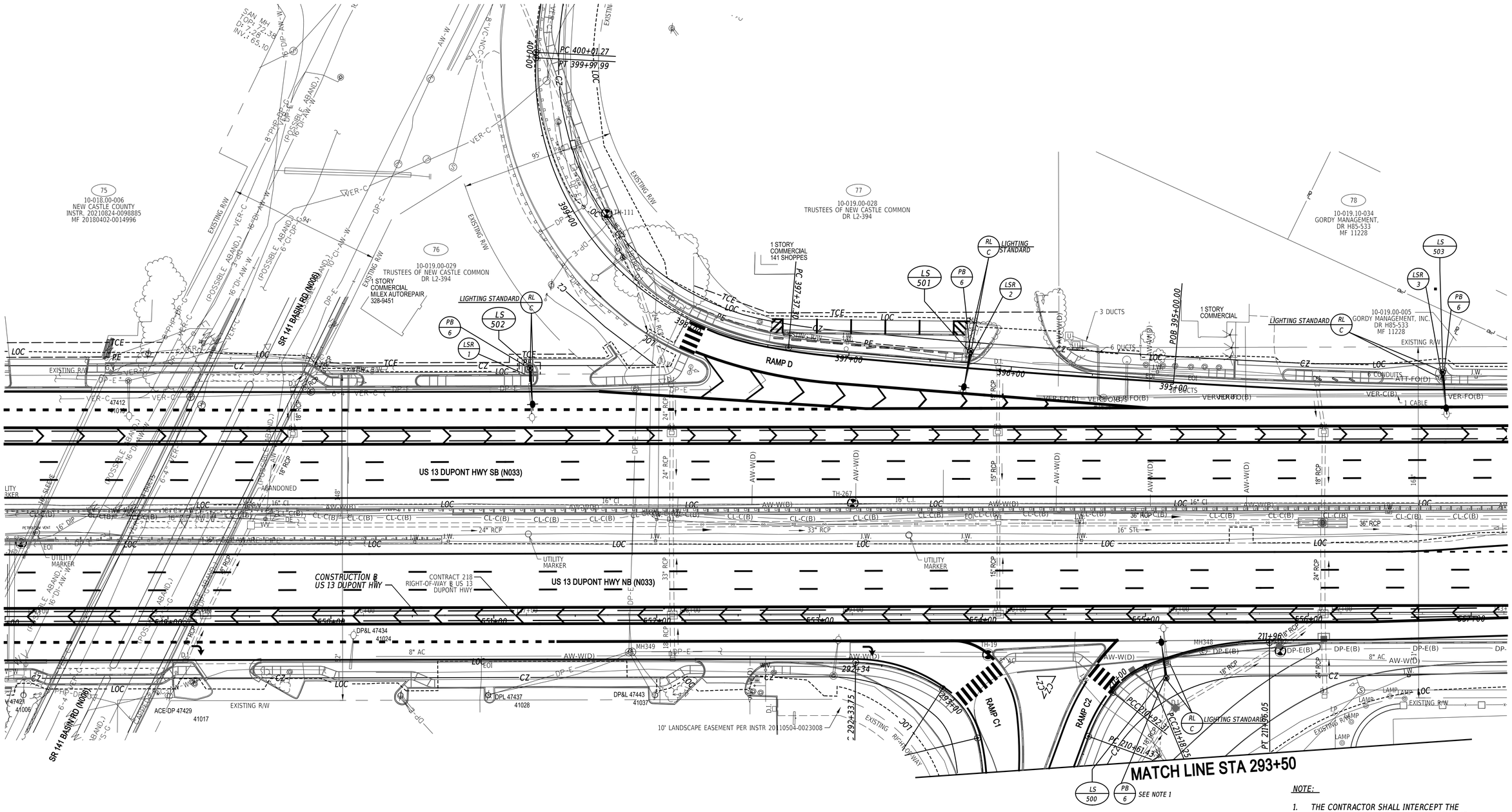
LIGHTING SERVICE SCHEDULE

SERVICE RUN	SIZE	LENGTH	INSTALL METHOD	DESCRIPTION
1	3" PVC	8'	T	(2)#6, (1)#6 GROUND
2	3" PVC	5'	T	(2)#6, (1)#6 GROUND
3	3" PVC	5'	T	(2)#6, (1)#6 GROUND

* DENOTES EXISTING SERVICE RUN.
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

LIGHTING STANDARD SCHEDULE

NO.	CKT NO.	STATION	OFFSET	NORTHING	EASTING	HEIGHT	ARM	LIGHT STANDARD
500		211+27.72	10.73	612518.1210	607691.6002	30'	15'	ATB2_60BLEDE70_XXXXX_R4_4K_5K
501		396+25.68	7.20	612536.9992	607458.6264	30'	15'	ATB2_60BLEDE70_XXXXX_R4_4K_5K
502		551+22.75	-151.45	612310.9233	607309.8270	30'	15'	ATB2_60BLEDE70_XXXXX_R4_4K_5K
503		556+82.98	-147.45	612765.4406	607637.3777	30'	15'	ATB2_60BLEDE70_XXXXX_R4_4K_5K



PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024 @ 06:21
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LIGHTING PLAN

LI-24	
SECTION	PAI
SHEET NO.	200

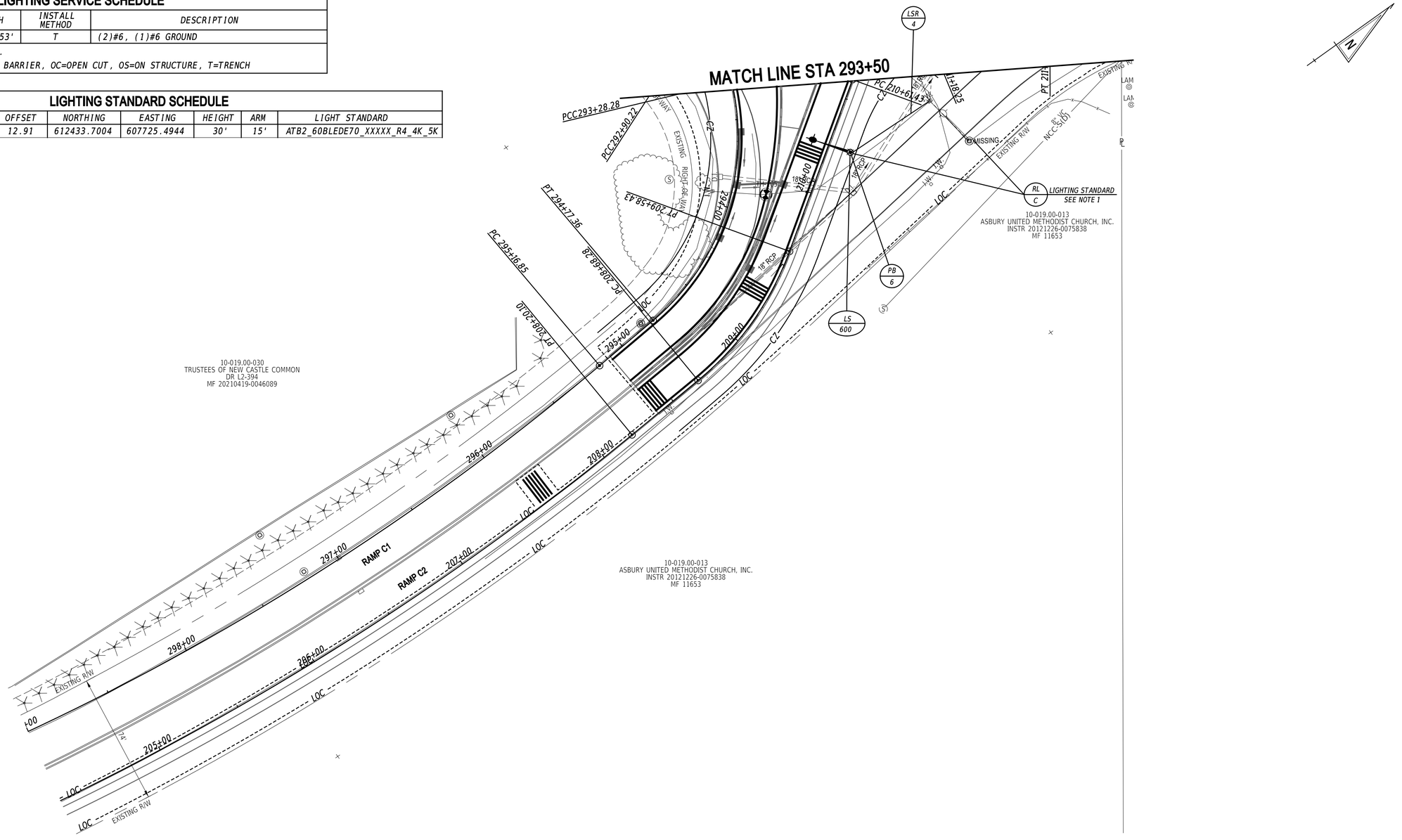
LIGHTING SERVICE SCHEDULE

SERVICE RUN	SIZE	LENGTH	INSTALL METHOD	DESCRIPTION
4	3" PVC	53'	T	(2)#6, (1)#6 GROUND

* DENOTES EXISTING SERVICE RUN.
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

LIGHTING STANDARD SCHEDULE

NO.	CKT NO.	STATION	OFFSET	NORTHING	EASTING	HEIGHT	ARM	LIGHT STANDARD
601		210+22.61	12.91	612433.7004	607725.4944	30'	15'	ATB2_60BLEDE70_XXXXX_R4_4K_5K



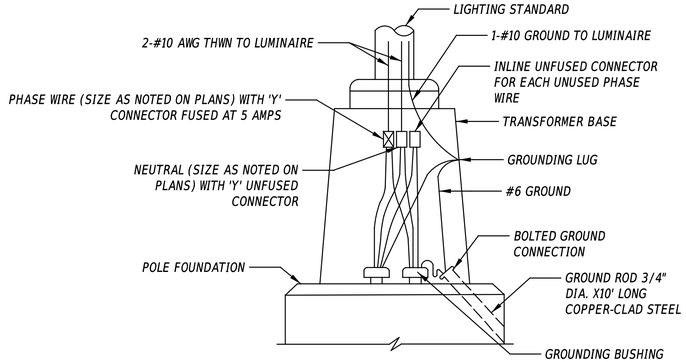
NOTE:

1. *THE CONTRACTOR SHALL RETROFIT THE EXISTING LUMINAIRE WITH 250-WATT EQUIVALENT LED LUMINAIRE. WORK PAID UNDER ITEMS 850011 AND 850521. THE CONTRACTOR SHALL REMOVE THE EXISTING POLE BASE. THE EXISTING CONDUIT SHALL BE ABANDONED.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS | MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:21 | MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

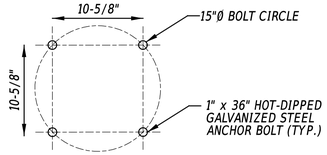
Pennoni

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	LIGHTING PLAN	LI-30 SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 201
					CHECKED BY: P. HORSEY		



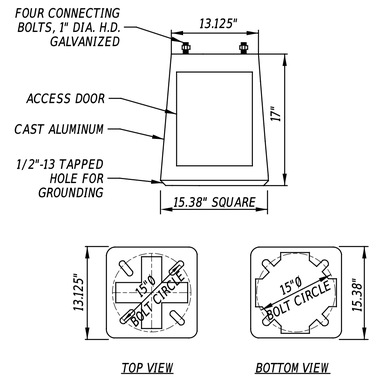
TYPICAL LUMINAIRE CONNECTION 120/240V SERVICE

N.T.S.



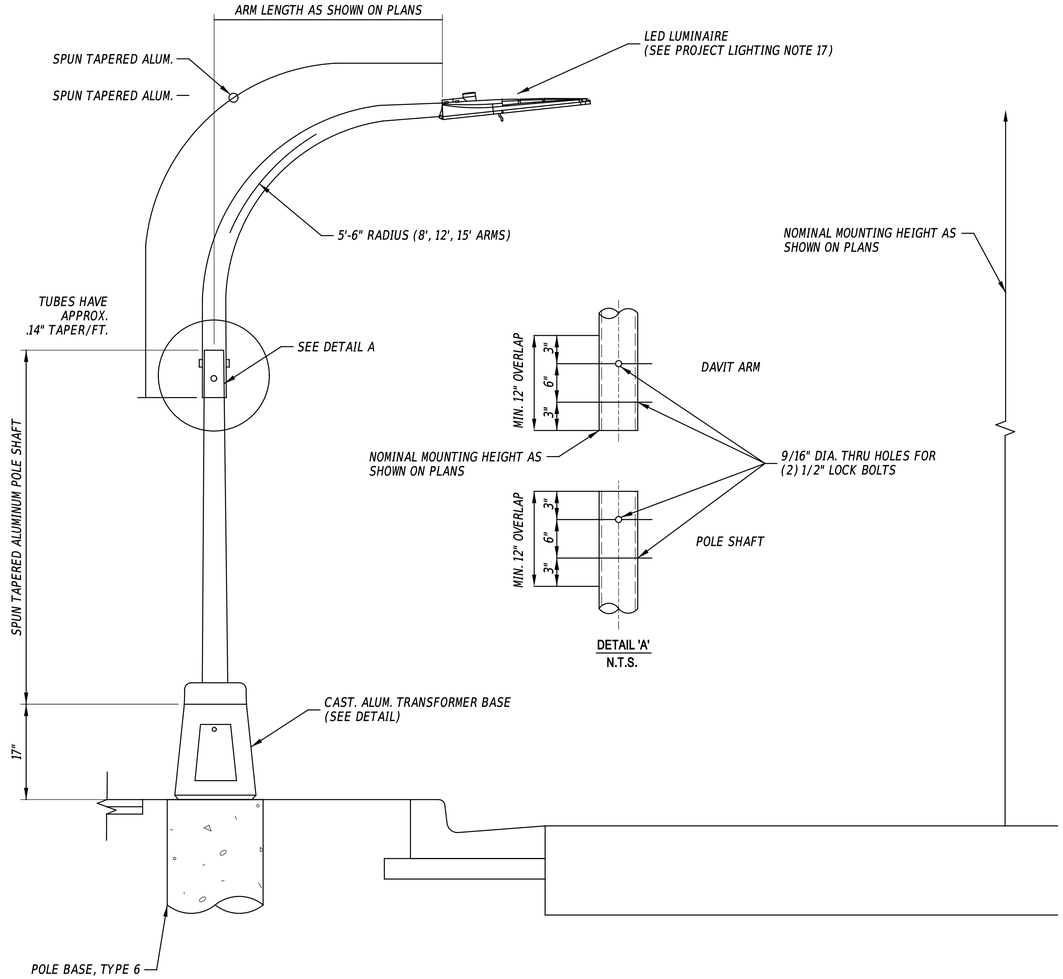
FOUNDATION ANCHOR BOLT CIRCLE DETAIL

N.T.S.



TRANSFORMER BASE DETAIL

N.T.S.



ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM

N.T.S.

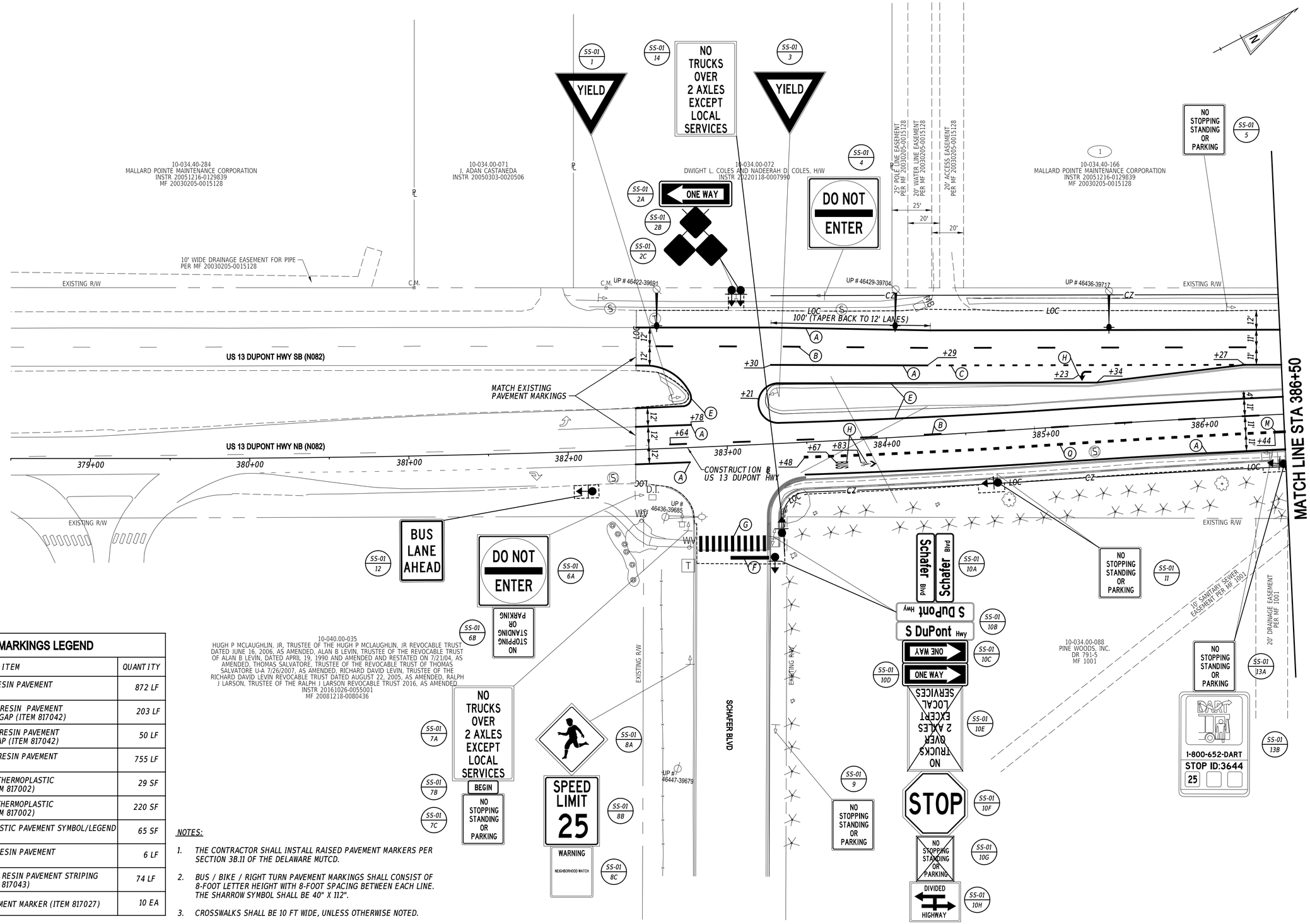
NOTES:

1. ALL DELDOT LIGHTING STANDARDS SHALL BE INSTALLED ON A POLE BASE, TYPE 6. THE HEIGHT OF THE POLE BASE SHALL BE EXTENDED AS REQUIRED TO MAINTAIN A MINIMUM EMBEDMENT OF 6'-0" BELOW GRADE AS SHOWN IN STD. T-5 (2017).
2. PHOTOCELL DETAIL FOR INFORMATIONAL PURPOSES ONLY. PHOTOCELL TO BE INSTALLED WITHIN THE LIGHTING CABINET.

PENNONI ASSOCIATES INC. | STYLES
FILE NAME: | PRJ TABLE: $PRNTBLS
MICROSTATION VERSION: $VERSIONS | PLOT DRIVER: $PLTDRVS
MICROSTATION WORKSPACE: $WORKSPACES | DATE PLOTTED: 13-JUN-2024@ 06:21
USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	LIGHTING DETAILS	SECTION
				T201901102	DESIGNED BY:	Z. BRANDER		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				202



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	872 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	203 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	50 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	755 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	29 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	220 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	65 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	6 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	74 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	10 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
3. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS | MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:10 | MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

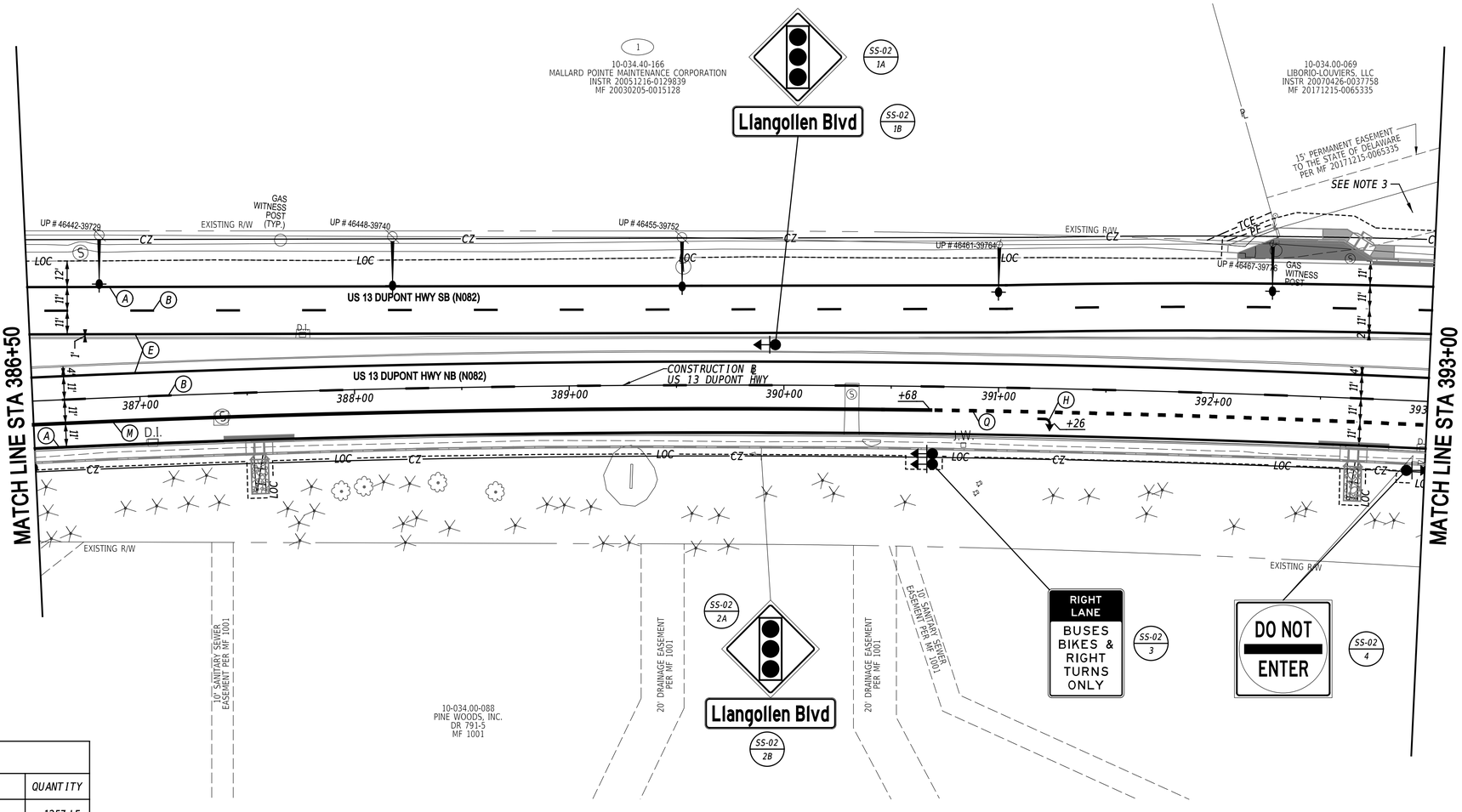
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-01
SECTION
PAI
SHEET NO.
203



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1257 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	325 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1300 LF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	16 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	461 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	58 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	16 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
3. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.
4. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PENNONI ASSOCIATES INC.
FILE NAME: $FILEAS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 16-JUL-2024 @ 13:10
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

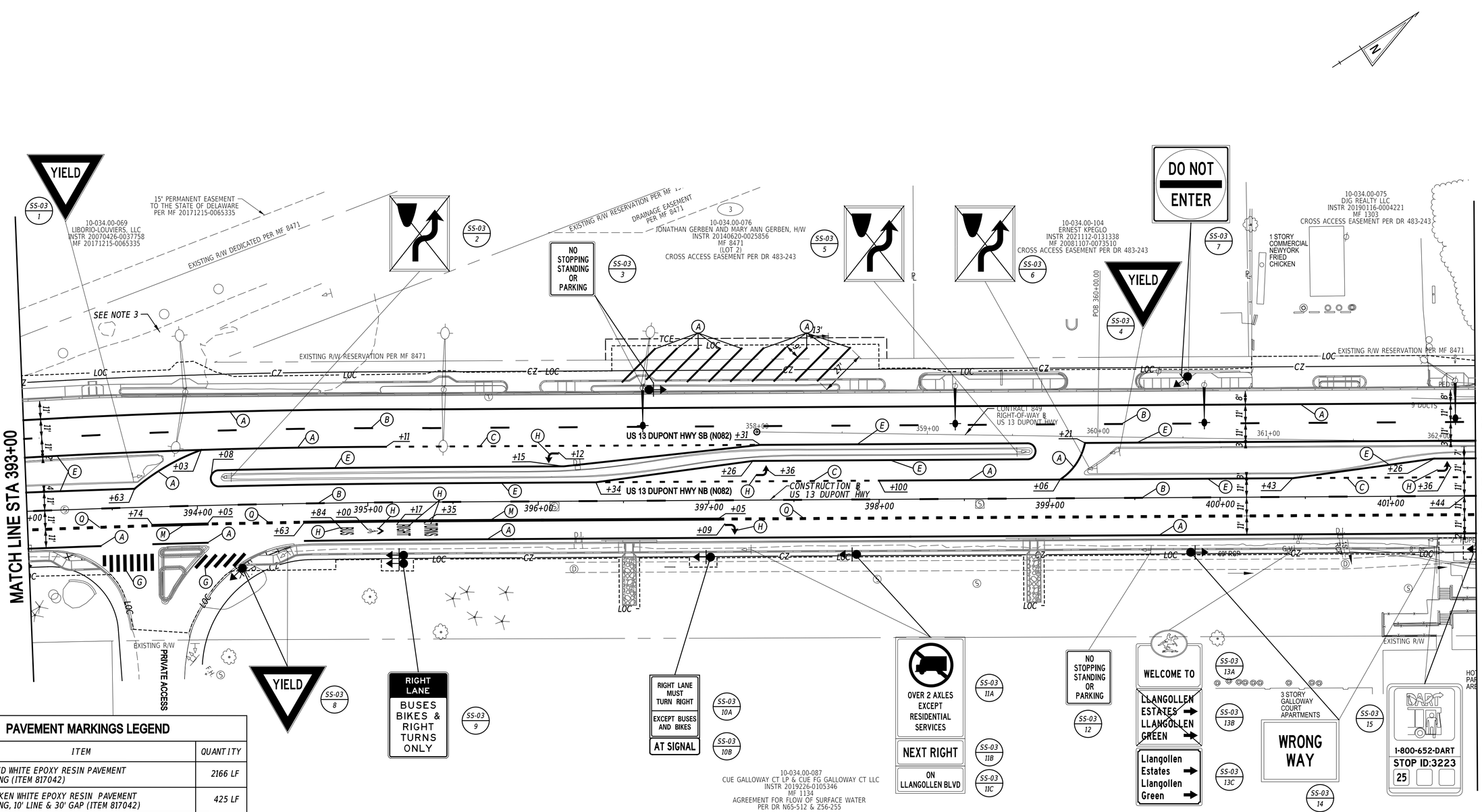
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT T201901102	BRIDGE NO.	N/A
COUNTY NEW CASTLE	DESIGNED BY:	T. LORD
	CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-02
SECTION
PAI
SHEET NO.
204



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2166 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	425 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	123 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1621 LF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	260 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	165 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	274 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	144 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	21 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
3. OLD STATE ROAD REMOVED BY OTHERS VIA CONTRACT 07-04-NCC PRIOR TO THIS CONTRACT.
4. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:10
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	T. LORD
		CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-03	
SECTION	PAI
SHEET NO.	205

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,069 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	324 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	103 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,609 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	184 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,540 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	293 SF
K	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (ITEM 817015)	1 EACH
O	6" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	400 LF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	651 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	55 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	24 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.*
3. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
4. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

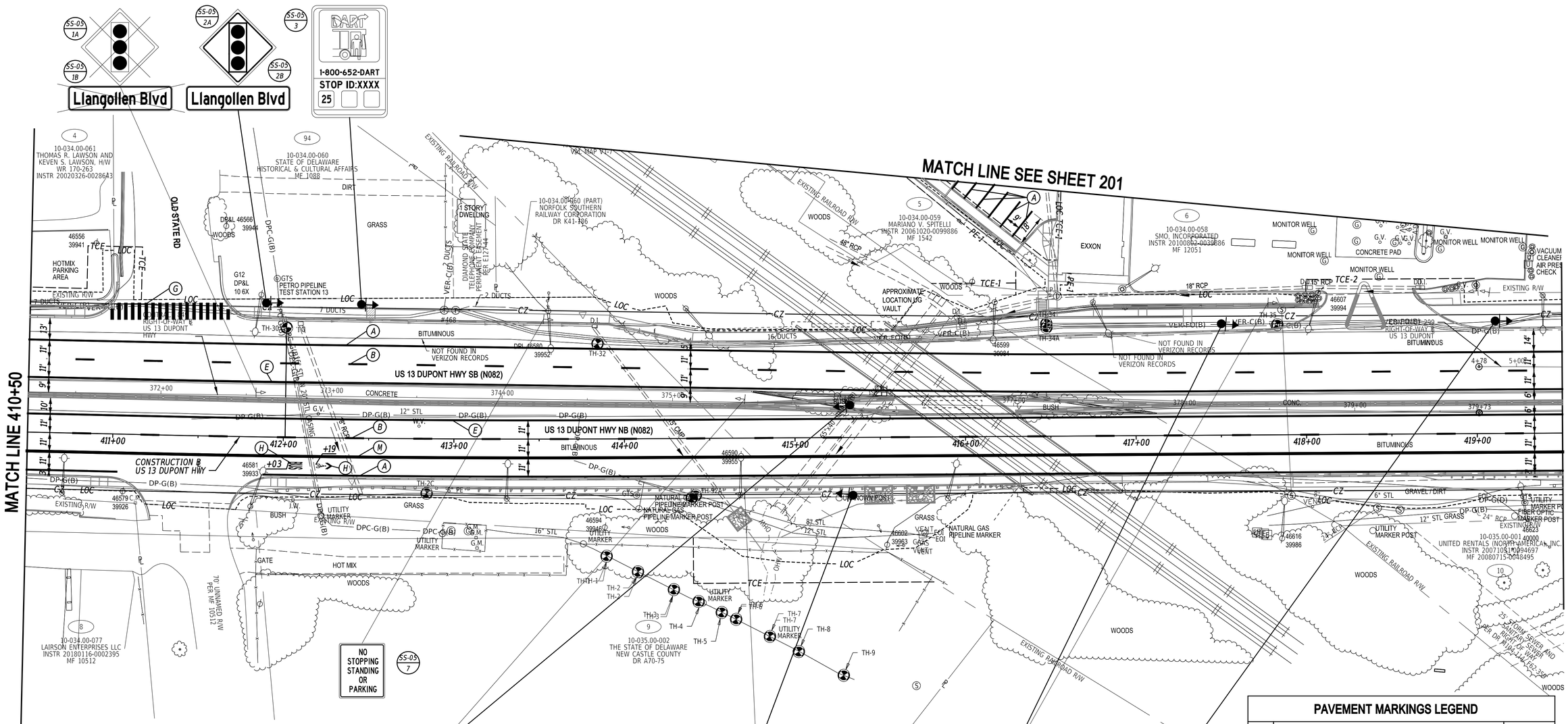
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-04 | SECTION PAI | SHEET NO. 206

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$ | FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRVSS$ | MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 16-JUL-2024 @ 13:10 | MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,800 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	450 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,800 LF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	360 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	50 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	900 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	23 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

PEN TABLE: $PENTABLE$
PLOT DRIVER: $PLTDRVDS$
DATE PLOTTED: 16-JUL-2024 @ 13:10
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES
PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $VERSIONS
MICROSTATION VERSION: $WORKSPACES
MICROSTATION WORKSPACE:

ADDENDA / REVISIONS

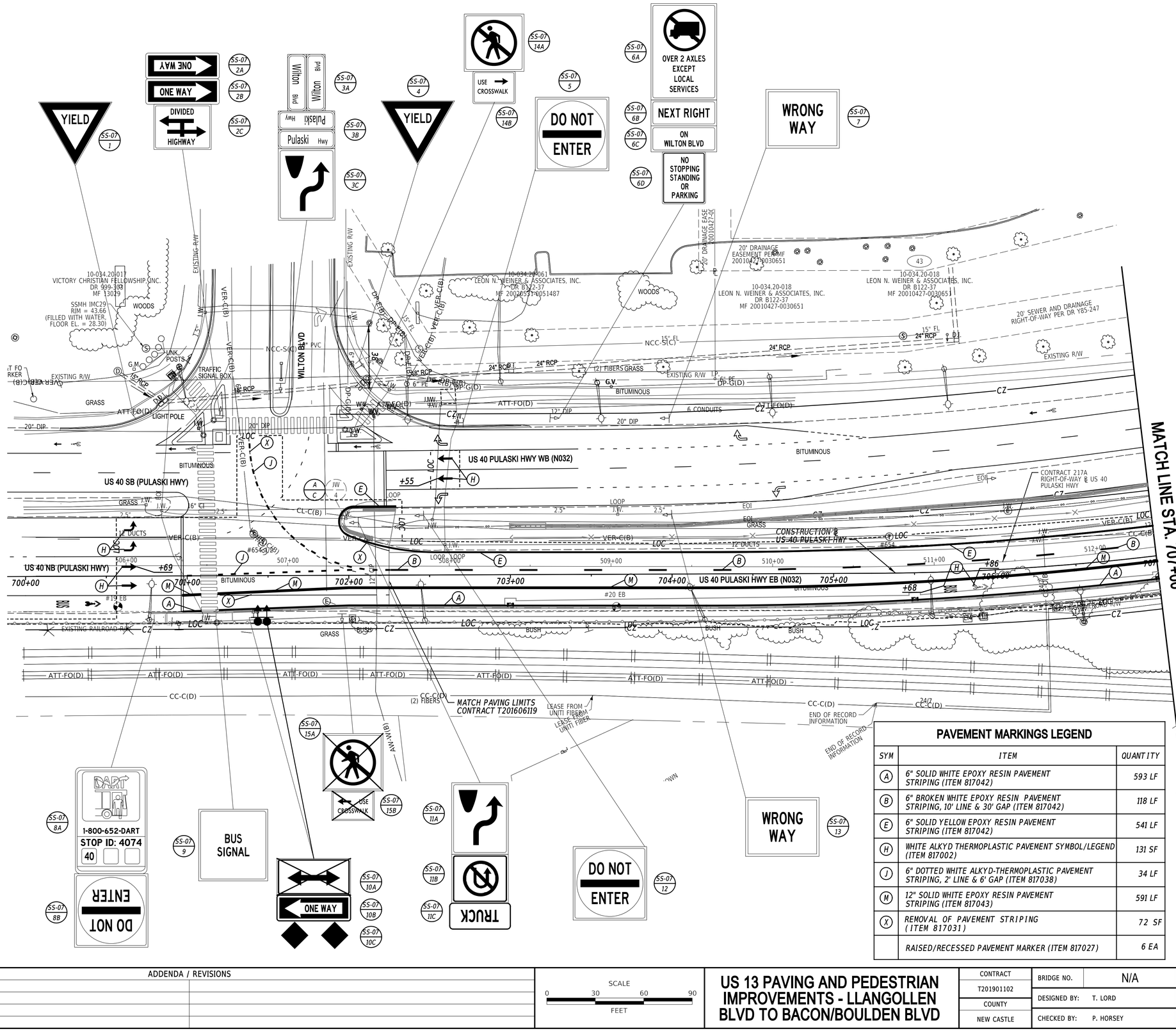
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-05	
SECTION	PAI
SHEET NO.	207



PENNONI ASSOCIATES INC.		PEN TABLE:	SPEUTRSS
FILE NAME:	SFILEAS	PLOT DRIVER:	SPLTDRVSS
MICROSTATION VERSION:	SVERSIONS	DATE PLOTTED:	16-JUL-2024 @ 13:10
MICROSTATION WORKSPACE:	SWORKSPACES	USER NAME:	SUSERS OFFICE LOCATION: SOFFICENAMES

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	593 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	118 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	541 LF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	131 SF
J	6" DOTTED WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817038)	34 LF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	591 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	72 SF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	6 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. THE TRAFFIC CONTRACTOR SHALL RENEW ALL SIGNAL HEADS, EXCEPT FOR THE RECENTLY INSTALLED BUS SIGNAL (SIGNAL HEAD NO. 11 PER N514 SIGNAL PERMIT PLAN). THE TRAFFIC CONTRACTOR SHALL ALSO RENEW ALL SIGNAL WIRING.
3. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
4. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

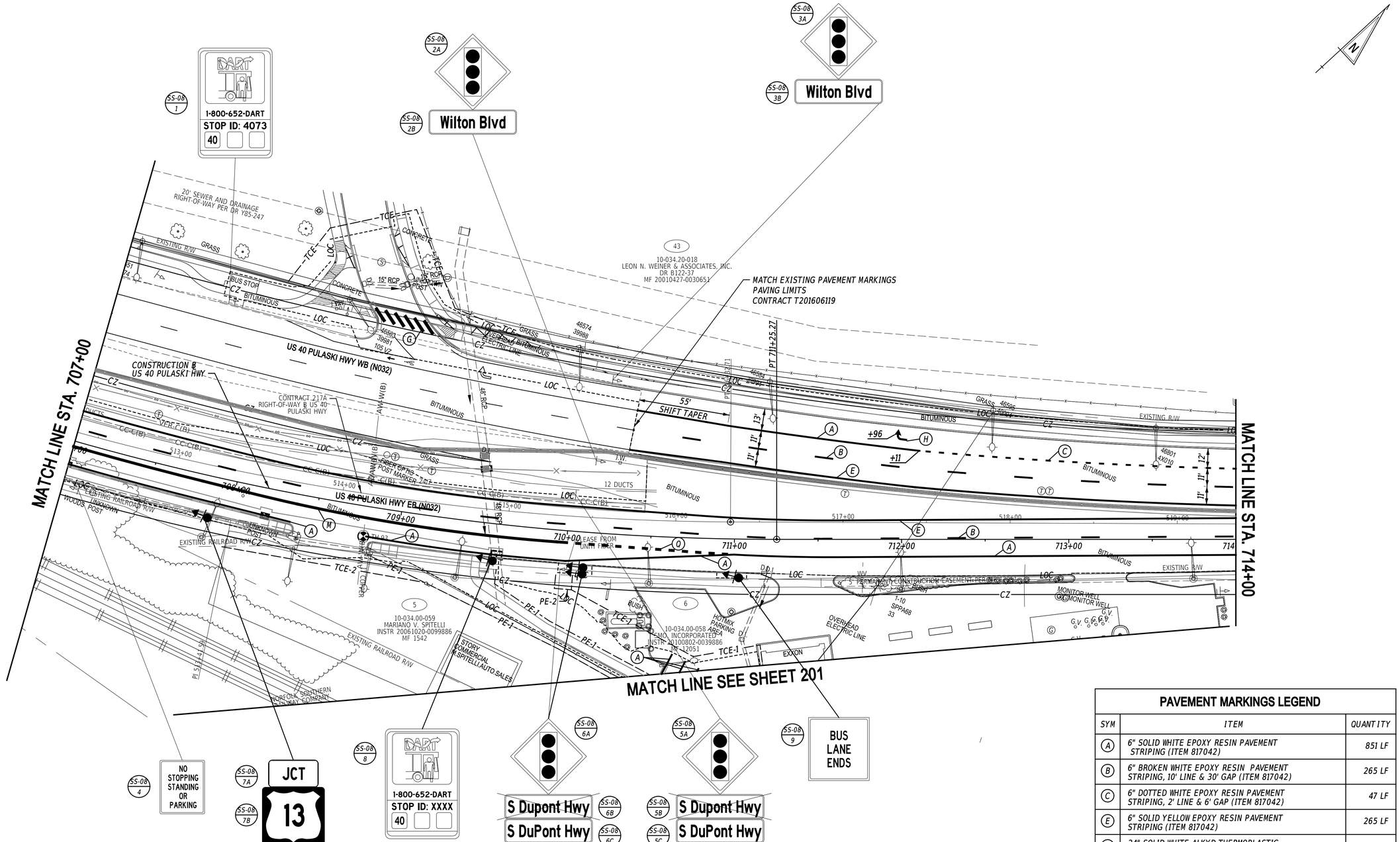
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-07	
SECTION	PAI
SHEET NO.	208

Pennoni



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	851 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	265 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	47 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	265 LF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	120 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	16 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	300 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	25 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	15 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SECTION	SS-08
	PAI
SHEET NO.	209

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTABLE
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVDS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:10
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

Pennoni

CONDUIT RUN SCHEDULE					
CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
1	1	4.0" HDPE	130'	B	INSTALL [PROPOSED FIBER]
2	1	4.0" PVC	339'	T	INSTALL [PROPOSED FIBER]

MATCH LINE STA. 714+00

MATCH LINE STA. 419+50

MATCH LINE STA. 428+20

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,747 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	668 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	16 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	3,068 LF
F	16" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	148 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	280 SF

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
J	6" DOTTED WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817038)	111 LF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	2,176 LF
N	12" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817006)	650 SF
P	12" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	112 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	42 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.*
3. *THE TRAFFIC CONTRACTOR SHALL RENEW ALL SIGNAL HEADS AND WIRING (REFER TO SIGNAL PERMIT PLAN NO. 184).*
4. *THE CONTRACTOR SHALL REPLACE THE EXISTING TYPE 1 JUNCTION WELL WITH A TYPE 7 JUNCTION WELL.*

NOTES (CONT.):

5. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
6. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	
T201901102	
COUNTY	
NEW CASTLE	

BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-09	
SECTION	
PAI	
SHEET NO.	
210	

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:10
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,300 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	716 LF
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	81 LF
(D)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 2' GAP (ITEM 817042)	17 LF

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.*
3. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
4. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

N

MATCH LINE STA. 428+20

MATCH LINE STA. 437+00

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

CONSTRUCTION B
US 13 DUPONT HWY

CONSTRUCTION B
US 40 PULASKI HWY

CONTRACT 299
RIGHT-OF-WAY & US 13
DUPONT HWY

WRONG WAY

BUS LANE ENDS

BUS SIGNAL

DART BUSES WAIT HERE FOR NEXT LIGHT CYCLE

1-800-652-DART
STOP ID:2270
25 40

STOP HERE ON RED

NO STOPPING STANDING OR PARKING

DO NOT BLOCK INTERSECTION

LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP

1 STORY RESIDENTIAL

2 STORY COMMERCIAL ANGELO'S AUTO SALES

HOTMIX PARKING AREA

10' GAS EASEMENT PER MF 10351

WOODS

6" DIP WILSON CREEK PERPENDICULAR TO RIGHT OF WAY PER MF 4121

25'

47 10-030.00-015 THE SHOPS AT 233 LLC INSTR 20210802-0089070 MF 5439

48 10-030.00-014 AT PROPERTIES, LLC INSTR 20181226-0071434

49 10-030.00-013 ALKIS GROUP REAL ESTATE INC INSTR 20240208-0008613

50 10-030.00-012 WILMINGTON MANOR VOLUNTEER FIRE COMPANY, INC. DR R76-101 MF 20110818-0051590

51 10-030.00-009 MAHA SHAKTI, LLC INSTR 20110309-0013292 MF 10351

52 10-030.00-004 PRIME REALTOR LLC INSTR 20230530-0034371 MF 4121

12 10-030.00-042 INVESTMENTS DR 2797-180

13 10-030.00-074 DEEP REALTY, L.L.C. INSTR 20010418-0027367 MF 6885

14 10-030.00-034 JHJDMARK REAL ESTATE HOLDINGS, LLC INSTR 20030422-0002455 MF 6885

15 10-030.00-033 NUR TEMPLE HOLDING COMPANY, INC. DR 916-180

16 10-030.00-032 NUR TEMPLE HOLDING COMPANY, INC. DR 1043-173 MF 9978

1 STORY COMMERCIAL NEW CASTLE MOTORS

1 STORY COMMERCIAL ECONOLODGE

1 STORY COMMERCIAL AUDIO JAM

DELAWARE FIRE DEATHS
LAST YEAR XX THIS YEAR X
WITHOUT SMOKING DETECTOR X
WITH SMOKE DETECTOR X
WORKING SMOKE DETECTORS SAVE LIVES

NO STOPPING STANDING OR PARKING

ADOPT-A-HIGHWAY
SACHE SOCIAL CLUB

WRONG WAY

ONE WAY

DO NOT ENTER

BEGIN
TRUCKS KEEP RIGHT
EXCEPT LEFT TURNS

RIGHT LANE
BUSES BIKES & RIGHT TURNS ONLY

SPEED LIMIT 50

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,634 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	183 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,020 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	336 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	2,064 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2" LINE & 6' GAP (ITEM 817043)	191 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	53 EA

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRIVSS | MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:10 | MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

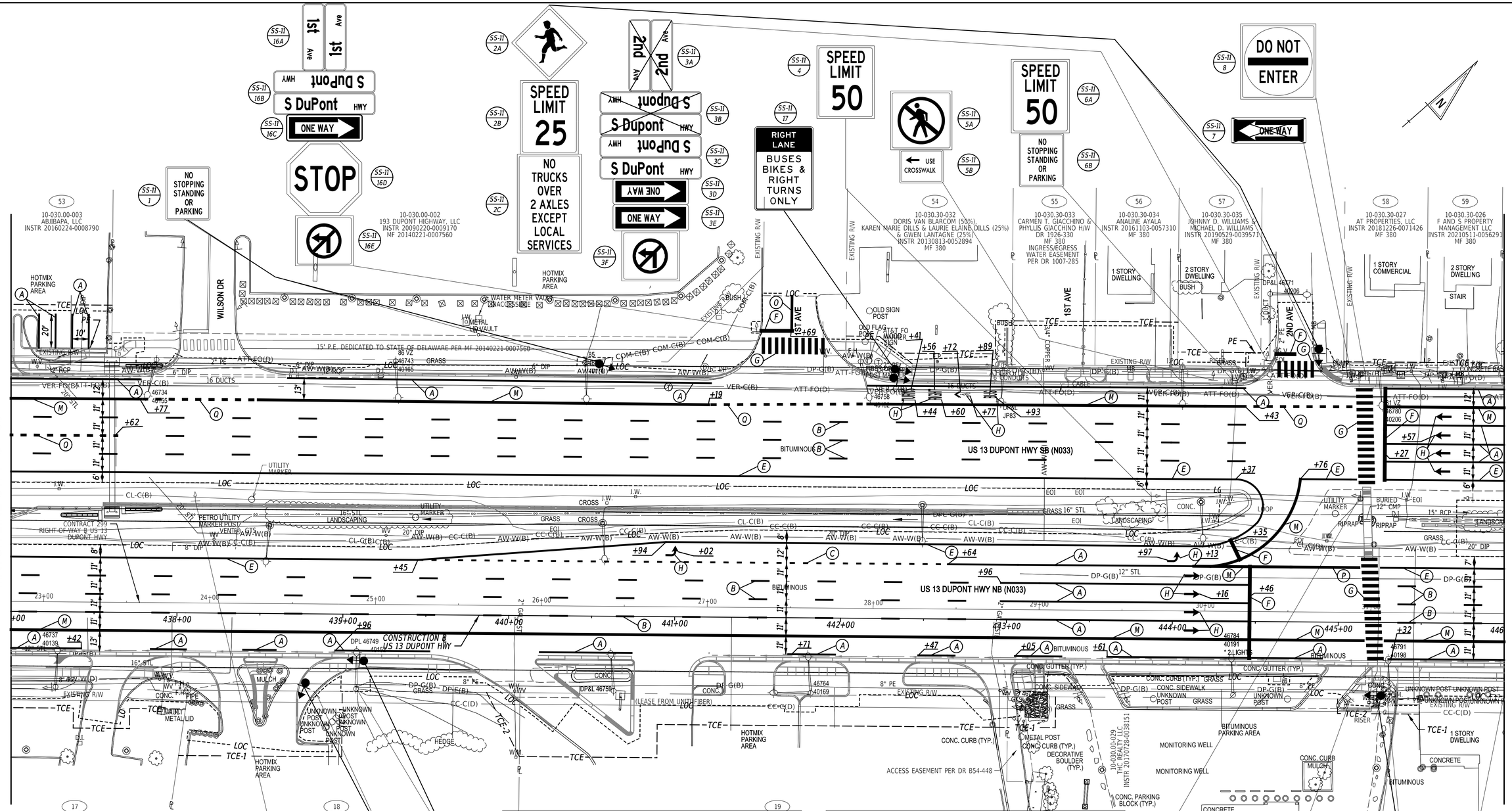
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-10	
SECTION	PAI
SHEET NO.	211


MATCH LINE STA. 437+00
MATCH LINE STA. 446+00
WILSON DR
1ST AVE
2ND AVE
US 13 DUPONT HWY SB (N033)
US 13 DUPONT HWY NB (N033)
CONSTRUCTION @ US 13 DUPONT HWY
SPEED LIMIT 25
SPEED LIMIT 50
SPEED LIMIT 50
NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES
RIGHT LANE BUSES BIKES & RIGHT TURNS ONLY
NO STOPPING STANDING OR PARKING
NO STOPPING STANDING OR PARKING
USE CROSSWALK
ONE WAY
ONE WAY
ONE WAY
STOP
DO NOT ENTER
TURNING VEHICLES TO
1st Ave
2nd Ave
S DuPont HWY
HOTMIX PARKING AREA
HOTMIX PARKING AREA
HOTMIX PARKING AREA
BITUMINOUS PARKING AREA
EXISTING R/W
LOC
TCE
TCE-1
TCE-2
53
10-030.00-003
ABJJBAPA, LLC
INSTR 20160224-0008790
54
10-030.30-032
DORIS VAN BLARCOM (50%),
KAREN MARIE DILLS & LAURIE ELAINE DILLS (25%)
& GWEN LANTAGNE (25%)
INSTR 20130813-0052894
MF 380
55
10-030.30-033
CARMEN T. GIACCHINO &
PHYLLIS GIACCHINO H/W
DR 1926-330
MF 380
INGRESS/EGRESS
WATER EASEMENT
PER DR 1007-285
56
10-030.30-034
ANALINE AYALA
INSTR 20161103-0057310
MF 380
57
10-030.30-035
JOHNNY D. WILLIAMS &
MICHAEL D. WILLIAMS
INSTR 20190529-0039571
MF 380
58
10-030.30-027
AT PROPERTIES, LLC
INSTR 20181226-0071426
MF 380
59
10-030.30-026
F AND S PROPERTY
MANAGEMENT LLC
INSTR 20210511-0056291
MF 380
10-030.00-002
193 DUPONT HIGHWAY, LLC
INSTR 20090220-0009170
MF 20140221-0007560
17
10-030.00-031
DJB ENTERPRISES, LLC
INSTR 20040629-0071954
MF 20040803-0084637
18
10-030.00-047
GREGGO & FERRERA, INC.
DR C88-329
MF 4288
19
20
10-030.00-029
THC REALTY LLC
INSTR 20170728-0038151
21
10-030.00-028
A.E.H., L.P.
DR 204-10
10-030.00-029
THC REALTY LLC
INSTR 20170728-0038151
1 STORY DWELLING
2 STORY DWELLING
1 STORY COMMERCIAL
2 STORY DWELLING
BUSH
STAIR
MONITORING WELL
MONITORING WELL
CONC. CURB MULCH
CONCRETE
CONCRETE
BITUMINOUS
CONC. PARKING BLOCK (TYP.)
CONC. CURB (TYP.)
CONC. SIDEWALK
CONC. GUTTER (TYP.)
DECORATIVE BOULDER (TYP.)
ACCESS EASEMENT PER DR B54-448
METAL POST
CONC. CURB (TYP.)
CONC. SIDEWALK
CONC. GUTTER (TYP.)
CONC. CURB (TYP.)
GRASS
UNKNOWN POST
UNKNOWN POST
UNKNOWN POST

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,348 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	972 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	91 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,660 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	173 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,520 LF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	336 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	1,537 LF
P	12" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	127 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	80 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	73 EA

MATCH LINE STA. 446+00

MATCH LINE STA. 455+00

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

CONSTRUCTION 8
US 13 DUPONT HWY

CONTRACT 29
NEW CASTLE WAY & US 13
DUPONT HWY.

WRONG WAY

ONE WAY

STOP

DO NOT ENTER

RIGHT LANE
BUSES BIKES & RIGHT TURNS ONLY

NO STOPPING STANDING OR PARKING

1-800-652-DART
STOP ID:2269
25 40

1-800-652-DART
STOP ID:2290
25 40

1-800-652-DART
STOP ID:2268
25 40

NO TRUCKS OVER 5000 LBS EXCEPT LOCAL SERVICES

DEPT OF ELECTIONS WAREHOUSE

S DuPont Hwy

Third Ave

Fourth Ave

Fifth Ave

5TH ST

RTE 13

60 10-030.10-174 F AND S PROPERTY MANAGEMENT LLC INSTR 20210511-0056291 MF 380

61 10-030.10-175 MICHAEL SALEMI INSTR 20060808-0075611 MF 380

62 10-030.10-183 ONE THIRD AVENUE LLC INSTR 20060907-0085665 MF 380

63 10-030.10-184 PARTYDELAWARE.COM, LLC SERIES 1 INSTR 20200403-0026702 MF 380

64 10-030.10-185 AT PROPERTIES, LLC INSTR 20181226-0071447 MF 8249

66 10-030.10-194 NDC, LLC INSTR 20191119-0093849 MF 12967

22 10-030.00-027 THE COLONIAL SCHOOL DISTRICT INSTR 20100429-0020957 MF 20060607-0054785

23 10-030.00-026 JENSEN HOLDINGS, L.L.C. INSTR 20020613-0056718 MF 20020215-0015387

24 10-030.00-024 OIAUSAMNI, INC. DR E106-77 MF 14303

25 10-030.00-023 EMILY CROCKETT NOCK & STANLEY N. NOCK JR., CO-TRUSTEES OF THE EMILY CROCKETT NOCK REVOCABLE TRUST INSTR 20180315-0012113

26 10-030.00-039 ROUTE 13 PROJECT, LLC INSTR 20161004-0050502 MF 1341

2 STORY DWELLING

2 STORY COMMERCIAL

1 STORY COMMERCIAL

2 STORY COMMERCIAL S.DUPONT LIQUORS

1 STORY COMMERCIAL 166 URBAN FURNITURE OUTLET

NO STOPPING STANDING OR PARKING

HOTMIX PARKING AREA

25' COMMON ACCESS EASEMENT PER MF 20060607-0054785

10' SANITARY SEWER RIGHT-OF-WAY PER MF 8249

SANITARY MAINTENANCE EASEMENT PER MF 20060607-0054785

EXISTING R/W

UNKNOWN POST

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
3. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL55
FILE NAME: SFILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUN-2024 @ 13:11
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-12
SECTION
PAI
SHEET NO.
213

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

MATCH LINE STA. 455+00

MATCH LINE STA. 464+00

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

CONSTRUCTION @ US 13 DUPONT HWY

CONTRACT 299 RIGHT-OF-WAY @ US 13 DUPONT HWY

67 — 10-030.10-200 TJH, LLC INSTR 20050819-0083776 MF 20050623-0061392

68 — 10-030.10-201 ROBERT D. GREGG & MARGRET MACDONALD DR 1853-11

10-030.10-202 MAHESH K. PATEL INSTR 20220107-0002439

69 — 10-030.10-204 HARI OM HOSPITALITY, INC INSTR 20201130-0107447

10-030.10-209 PIERRE L. OLIVERO & MARGARET L. OLIVERO H/W DR 289-900

70 — 10-030.10-206 MOR O-LANDS LLC INSTR 20121024-0061829

71 — 10-030.10-205 RTTR PROPERTIES GROUP, LLC INSTR 20170825-0043707

15' PERMANENT EASEMENT TO CASTLE MOTEL INC. PER DR N87-480

26 — 10-030.00-039 ROUTE 13 PROJECT, LLC INSTR 20161004-0050502 MF 1341

27 — 10-030.00-022 ROUTE 13 PROJECT, LLC INSTR 20170330-0015874 MF 1341

10-030.00-021 148 S DUPONT HWY LLC INSTR 20151001-0050028 MF 20151208-0063037

10-030.00-040 PREMIER A-2 NC DE, LLC INSTR 20180606-0026997 MF 20180628-0031761

1-800-652-DART STOP ID:2291 25 40 — SS-13 1A

NO PARKING ANY TIME — SS-13 1B

NO STOPPING STANDING OR PARKING — SS-13 1C

END TRUCKS KEEP RIGHT EXCEPT LEFT TURNS — SS-13 2A, 2B

END TRUCKS KEEP RIGHT EXCEPT LEFT TURNS — SS-13 3A, 3B

NO STOPPING STANDING OR PARKING — SS-13 4

RIGHT LANE BUSES BIKES & RIGHT TURNS ONLY — SS-13 15

NO PARKING ANY TIME — SS-13 5

NO STOPPING STANDING OR PARKING — SS-13 6

NO PARKING ANY TIME — SS-13 7

RIGHT LANE BUSES BIKES & RIGHT TURNS ONLY — SS-13 8A

NO STOPPING STANDING OR PARKING — SS-13 8B

WRONG WAY — SS-13 9

SPEED LIMIT 50 — SS-13 10

DO NOT ENTER — SS-13 11

RIGHT TURN YIELD TO BIKES — SS-13 12

Dept of Elections Warehouse — SS-13 13A

SS-13 13B

Lisa Dr — SS-13 13C

Lisa Dr — SS-13 13D

RIGHT LANE BUSES BIKES & RIGHT TURNS ONLY — SS-13 14

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,451 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,350 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,800 LF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	300 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	382 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	1,065 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	184 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	68 EA

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

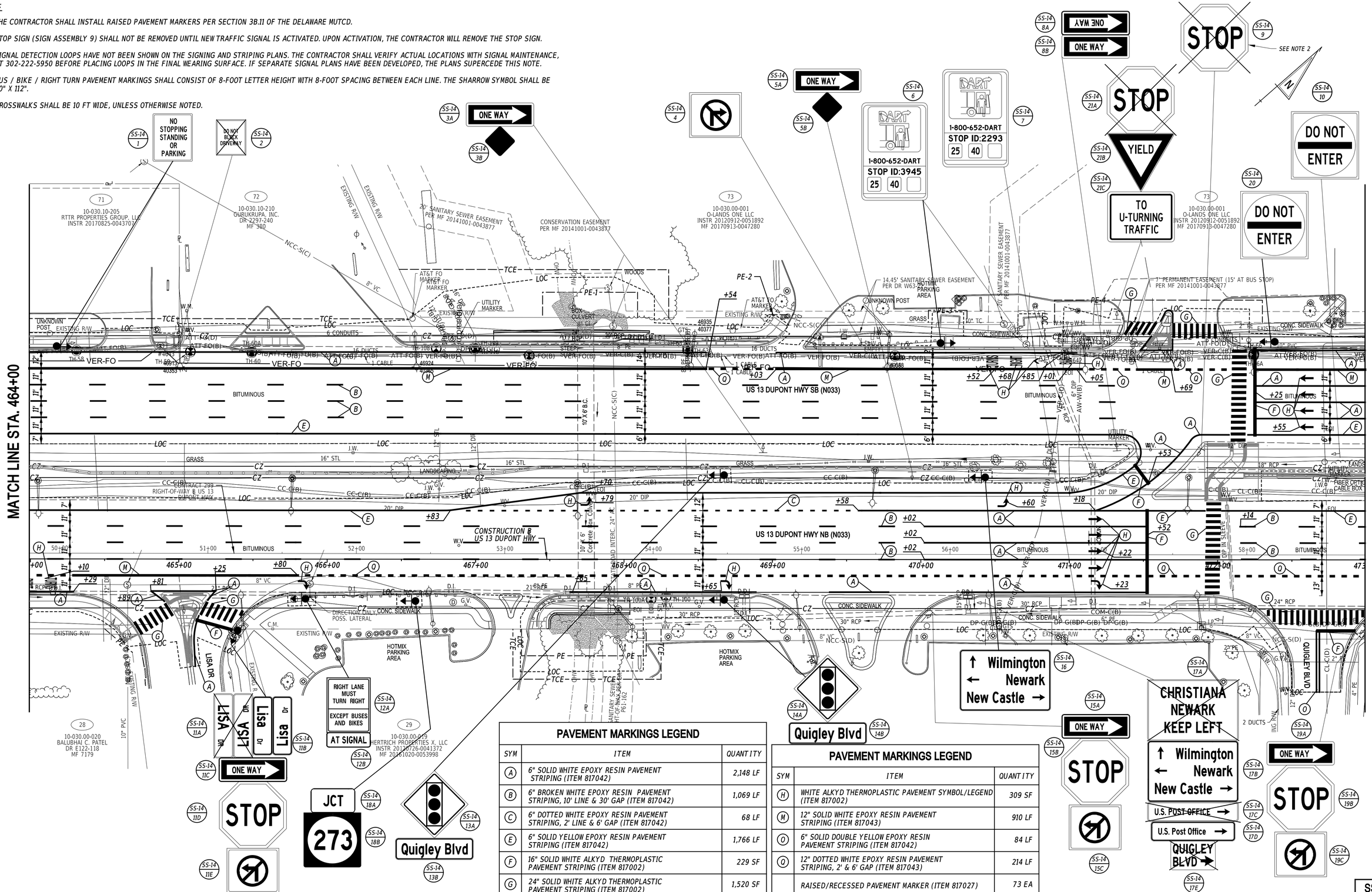
SECTION	SS-13
	PAI
SHEET NO.	214

PENNONI ASSOCIATES INC. — SFILEAS
FILE NAME: — SVERSIONS
MICROSTATION VERSION: — SWORKSPACES
MICROSTATION WORKSPACE: — SOFFICENAMES
PEN TABLE: — $PENTBLSS
PLOT DRIVER: — $PLTDRVSS
DATE PLOTTED: — 16-JUL-2024 @ 13:11
USER NAME: — $USERS
OFFICE LOCATION: — $OFFICENAME

Pennoni

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. STOP SIGN (SIGN ASSEMBLY 9) SHALL NOT BE REMOVED UNTIL NEW TRAFFIC SIGNAL IS ACTIVATED. UPON ACTIVATION, THE CONTRACTOR WILL REMOVE THE STOP SIGN.
3. SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.
4. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
5. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,148 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,069 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	68 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,766 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	229 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,520 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	309 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	910 LF
O	6" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	84 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' & 6' GAP (ITEM 817043)	214 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	73 EA

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-14 | SECTION: PAI | SHEET NO.: 215

PENNONI ASSOCIATES INC. | FILE NAME: SFILEAS | MICROSTATION VERSION: SVERSIONS | MICROSTATION WORKSPACE: SWORKSPACES
PRN TABLE: $PRNTBLS | PLOT DRIVER: $PLTDRVSS | DATE PLOTTED: 16-JUL-2024 @ 13:11 | USER NAME: SUSERS | OFFICE LOCATION: $OFFICENAMES

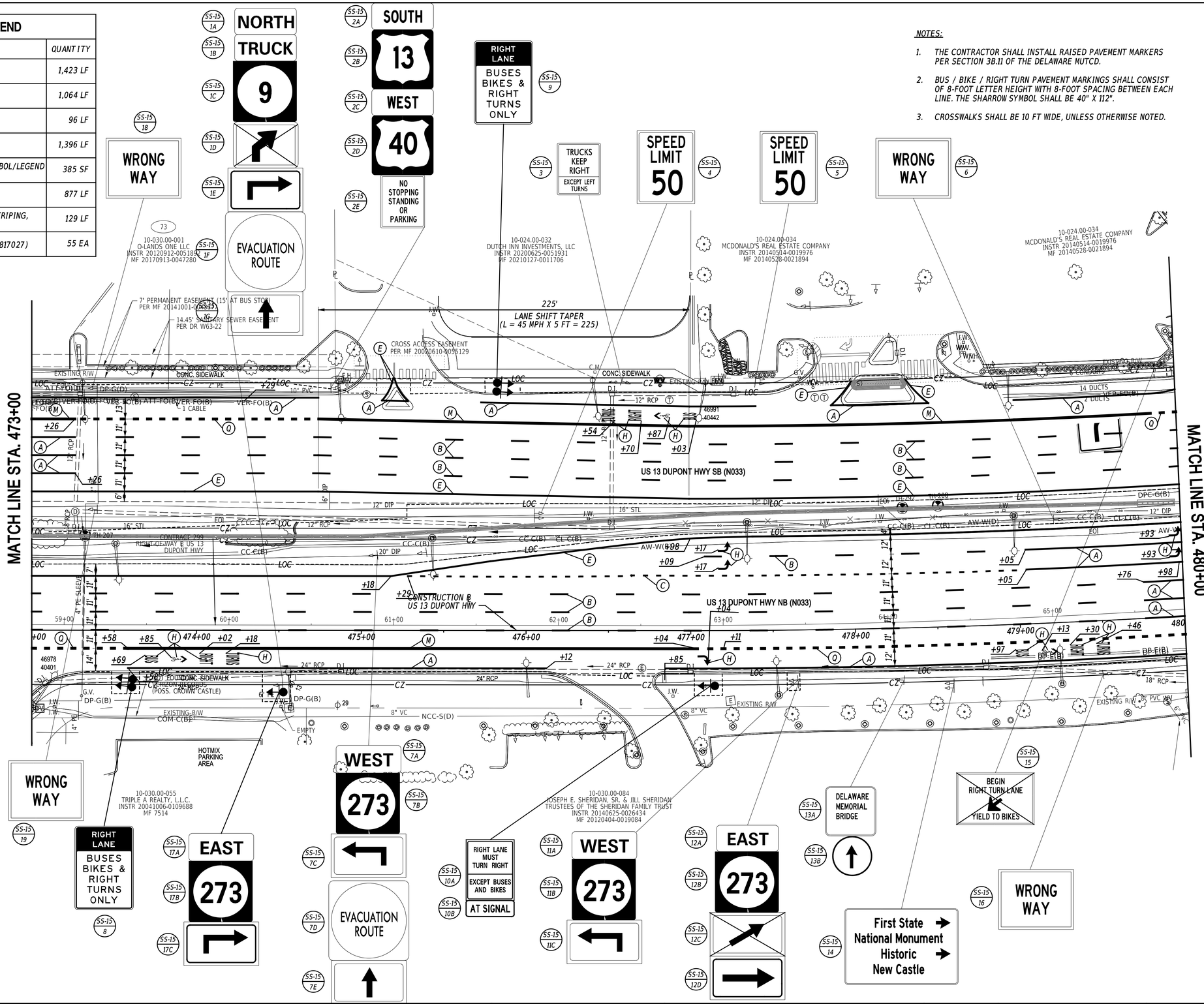
Pennoni

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,423 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,064 LF
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	96 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,396 LF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	385 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	877 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817043)	129 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	55 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*



PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
FILE NAME: SFILEAS | PLOT DRIVER: $PLTDRVS$
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

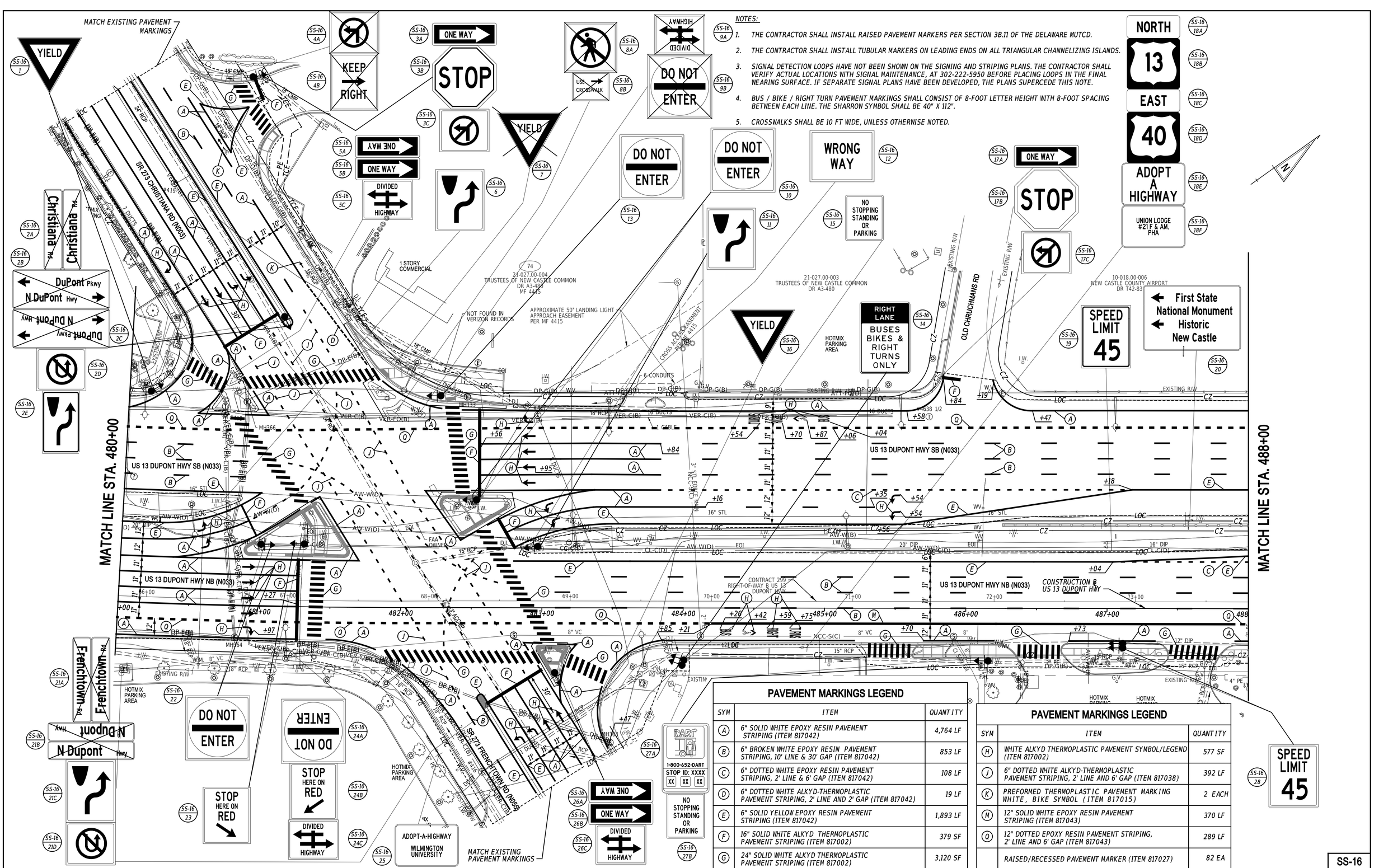
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-15
SECTION
PAI
SHEET NO.
216



NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. THE CONTRACTOR SHALL INSTALL TUBULAR MARKERS ON LEADING ENDS ON ALL TRIANGULAR CHANNELIZING ISLANDS.
3. SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.
4. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
5. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	4,764 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	853 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	108 LF
D	6" DOTTED WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING, 2' LINE AND 2' GAP (ITEM 817042)	19 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,893 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	379 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	3,120 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	577 SF
J	6" DOTTED WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING, 2' LINE AND 6' GAP (ITEM 817038)	392 LF
K	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (ITEM 817015)	2 EACH
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	370 LF
Q	12" DOTTED EPOXY RESIN PAVEMENT STRIPING, 2' LINE AND 6' GAP (ITEM 817043)	289 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	82 EA

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-16 | SECTION | PAI | SHEET NO. | 217

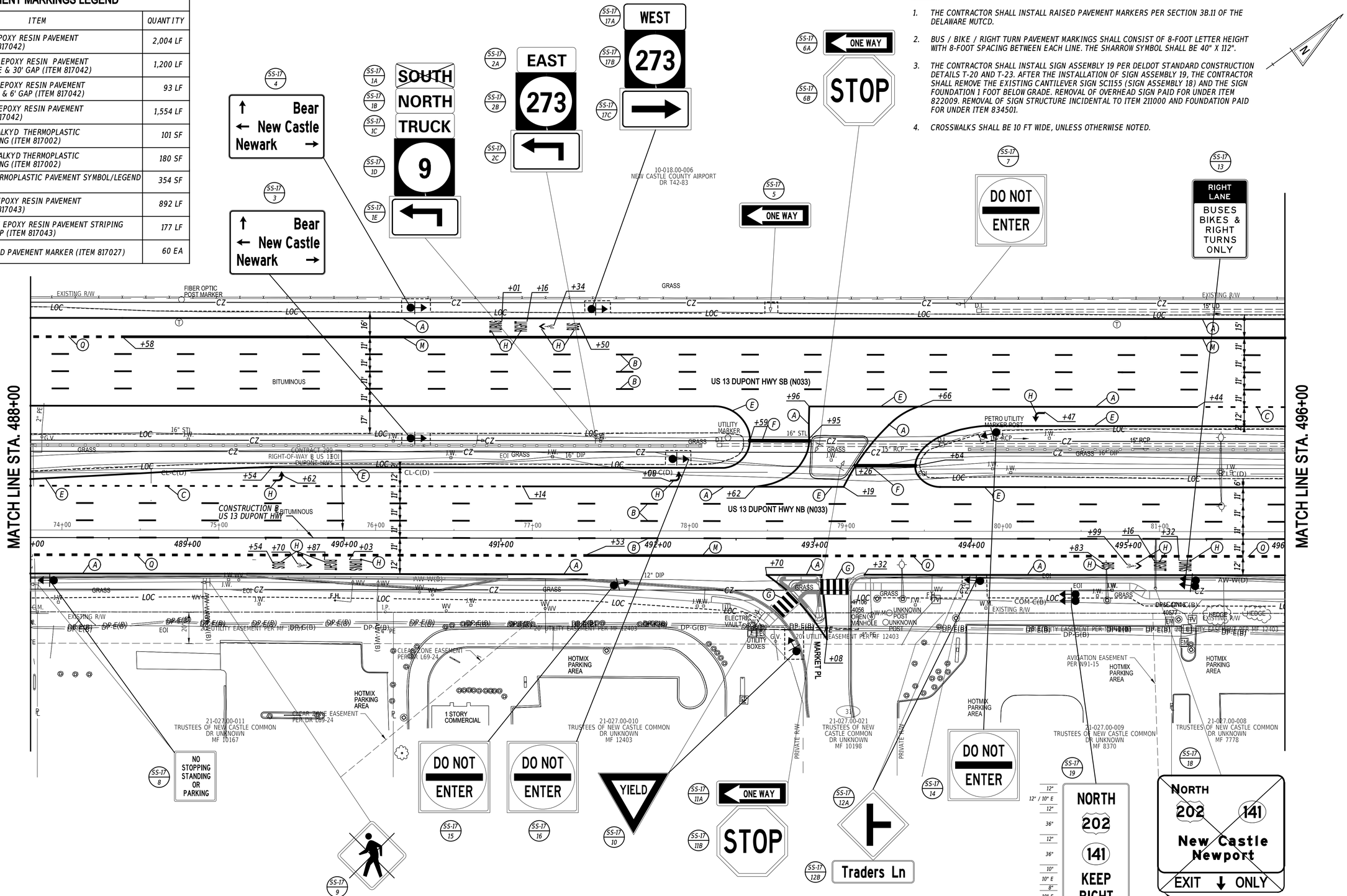
PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: SFILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,004 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,200 LF
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	93 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,554 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	101 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	180 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	354 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	892 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	177 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	60 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
3. THE CONTRACTOR SHALL INSTALL SIGN ASSEMBLY 19 PER DELDOT STANDARD CONSTRUCTION DETAILS T-20 AND T-23. AFTER THE INSTALLATION OF SIGN ASSEMBLY 19, THE CONTRACTOR SHALL REMOVE THE EXISTING CANTILEVER SIGN SC1155 (SIGN ASSEMBLY 18) AND THE SIGN FOUNDATION 1 FOOT BELOW GRADE. REMOVAL OF OVERHEAD SIGN PAID FOR UNDER ITEM 822009. REMOVAL OF SIGN STRUCTURE INCIDENTAL TO ITEM 211000 AND FOUNDATION PAID FOR UNDER ITEM 834501.
4. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

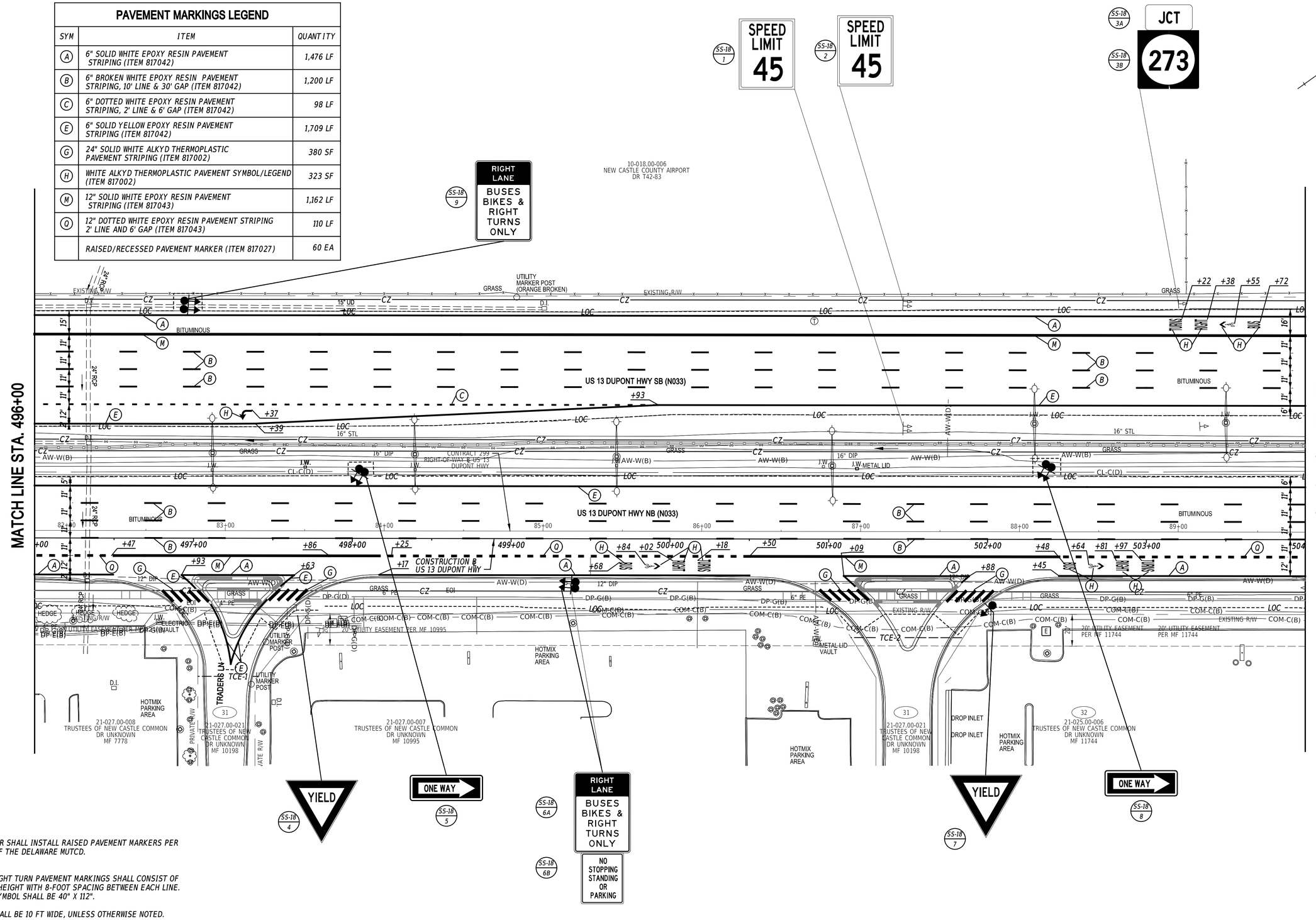


ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	SIGNING, STRIPING AND CONDUIT PLAN	SS-17
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		SECTION PAI
					CHECKED BY: P. HORSEY		SHEET NO. 218

PENNONI ASSOCIATES INC. | FILE NAME: | MICROSTATION VERSION: | MICROSTATION WORKSPACE: | PEN TABLE: | PLOT DRIVER: | DATE PLOTTED: | USER NAME: | $FILEAS | $VERSIONS | $WORKSPACES | $PRINTBLS | $PLTDRVSS | 16-JUL-2024 @ 13:11 | $USERS | OFFICE LOCATION: $OFFICENAMES

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,476 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,200 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	98 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,709 LF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	380 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	323 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	1,162 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	110 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	60 EA



NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS | FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS | MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 # 13:11 | MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-18	
SECTION	PAI
SHEET NO.	219

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
3. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,675 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,350 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	84 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,800 LF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	200 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	236 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	1,025 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	178 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	68 EA

MATCH LINE STA. 504+00

MATCH LINE STA. 513+00

LOT C

NO STOPPING STANDING OR PARKING

STOP

LOT C

10-018.00-006
NEW CASTLE COUNTY AIRPORT
DR T42-83

ONE WAY

RIGHT LANE
BUSES BIKES & RIGHT TURNS ONLY

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

CONSTRUCTION @ US 13 DUPONT HWY

CONTRACT 299 RIGHT-OF-WAY @ US 13 DUPONT HWY

TCE-3

21-025.00-006 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 11744

21-025.00-005 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 11744

21-025.00-004 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 11238

21-027.00-021 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 10198

21-025.00-003 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 11238

21-025.00-002 OF NEW CASTLE COMMON DR UNKNOWN MF 11238

21-025.00-002 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 11238

20' UTILITY EASEMENT PER MF 11744

20' UTILITY EASEMENT PER MF 11238

AVIGATION EASEMENT PER N91-15

HOTMIX PARKING AREA

I-800-652-DART

STOP ID:XXXX

YIELD

School Ln

School Ln

NEW CASTLE AIRPORT

NO STOPPING STANDING OR PARKING

PENNONI ASSOCIATES INC. — FILE NAME: — MICROSTATION VERSION: — MICROSTATION WORKSPACE:
PRN TABLE: $PENTBLSS — PLOT DRIVER: $PLTDRVSS — DATE PLOTTED: 16-JUL-2024 # 13:11 — USER NAME: $USERS — OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-19	
SECTION	PAI
SHEET NO.	220

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,756LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	804 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	107 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,616 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	199 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	780 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	398 SF
J	6" DOTTED WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING, 2' LINE AND 6' GAP (ITEM 817038)	119 LF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	852 LF
Q	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	356 LF
R	6" DOTTED YELLOW ALKYD-THERMOPLASTIC PAVEMENT STRIPING, 2' LINE AND 6' GAP (ITEM 817038)	29 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	77 EA

MATCH LINE STA. 513+00

MATCH LINE STA. 522+00

WRONG WAY

DART 1-800-652-DART STOP ID:4004 40

DO NOT ENTER

RIGHT LANE MUST TURN RIGHT

YIELD

SCHOOL LN

School

NORTH DUPONT HWY

N DuPont Hwy

ONE WAY

DIVIDED HIGHWAY

School Ln

Airport Parking

RIGHT LANE MUST TURN RIGHT

HOTMIX PARKING AREA

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

CONSTRUCTION @ US 13 DUPONT HWY

SCHOOL LN (N375)

LIMIT OF PAVING

10-018.00-006 DELAWARE RIVER & BAY AUTHORITY

AT&T FO MARKER

#4633

11-025.00-001 TRUSTEES OF NEW CASTLE COMMON DR UNKNOWN MF 11238

10-024.00-055 BAL KUBER LLC INSTR 20230605-0036044

10-024.00-043 DUPONT HIGHWAY PROPERTY LLC INSTR 20220930-0094733 MF 20050929-0100050

10-024.00-042 WILMINGTON UNIVERSITY, INC. INSTR 20200521-0041141 MF 20191213-0101865

10-024.00-038 PRICE NEW CASTLE, L.L.C. INSTR 20131125-0073912 MF 20100412-0017296

SEE NOTE 4

IN MEMORY OF MICHAEL NEWTON SMITH DELAWARE FIRE DEPT

STOP

NO STOPPING STANDING OR PARKING

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.
3. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
4. CONSTRUCTION FOR DEVELOPMENT PROJECT SMO #1406 WAS RECENTLY COMPLETED. THE CONTRACTOR SHALL CONSTRUCT THE PEDESTRIAN FACILITIES AT STATION 516+65(R) AND AT STATION 520+75(R) AS SHOWN ON THIS SHEET TO TIE INTO THE NEW PEDESTRIAN FACILTIES CONSTRUCTED AS PART OF THE DEVELOPMENT PROJECT.
5. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PENNONI ASSOCIATES INC. | PEN TABLE: SPEUTRISS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102		
COUNTY	DESIGNED BY:	T. LORD
NEW CASTLE	CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-20
SECTION
PAI
SHEET NO.
221

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,383 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	1,125 LF
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	68 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,800 LF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	236 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	1,530 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	293 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	74 EA

MATCH LINE STA. 522+00

MATCH LINE STA. 531+00

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

RIGHT LANE
BUSES BIKES & RIGHT TURNS ONLY
SS-21 14

SS-21 1

SS-21 2

Wilmington Airport
Passenger Drop Off →
↑ Airport Parking

10-018.00-006
NEW CASTLE COUNTY AIRPORT
DR 142-83

CONSTRUCTION B
US 13 DUPONT HWY

CONCRETE SIDEWALK

AT&T FO MARKER

EXISTING R/W

HOTMIX PARKING AREA

10-024.00-040
JEFAN LLC
INSTR 20110630-0031973
MF 20100412-0017296

10-024.00-038
PRICE NEW CASTLE, L.L.C.
INSTR 20131125-0073912
MF 20100412-0017296

10-019.00-023
DCD PORTFOLIO OWNER LLC
INSTR 20221107 0104975
MF 20130522-0032880

RIGHT LANE
BUSES BIKES & RIGHT TURNS ONLY
SS-21 8

10' WIDE DRAINAGE EASEMENT PER MF 2107

DO NOT ENTER
ONE WAY
STOP

DART
1-800-652-DART
STOP ID:2174
13 25 40

JCT
202
141

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS
FILE NAME: SFILEAS | PLOT DRIVER: $PLTDRVS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

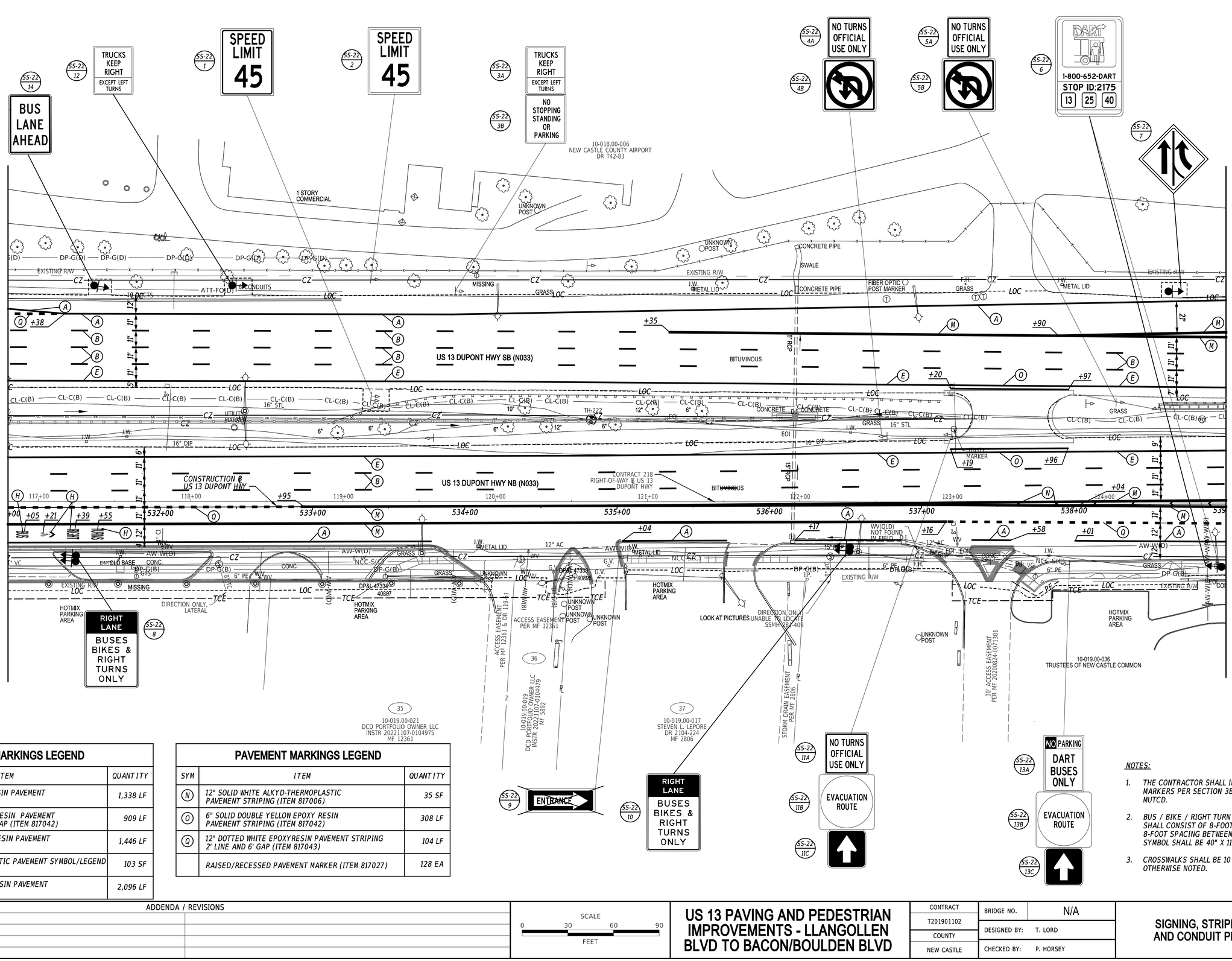
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-21
SECTION
PAI
SHEET NO.
222



PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,338 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	909 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,446 LF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	103 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	2,096 LF

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
N	12" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817006)	35 SF
O	6" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	308 LF
Q	12" DOTTED WHITE EPOXYRESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	104 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	128 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

PENNONI ASSOCIATES INC. | SFILEAS
FILE NAME: | SPLTDRVSS
MICROSTATION VERSION: | SVERSIONS
MICROSTATION WORKSPACE: | SWORKSPACES
PEN TABLE: | SPENTBLSS
PLOT DRIVER: | SPLTDRVSS
DATE PLOTTED: | 16-JUL-2024 @ 13:11
USER NAME: | SUSERS OFFICE LOCATION: | SOFFICENAMES

ADDENDA / REVISIONS

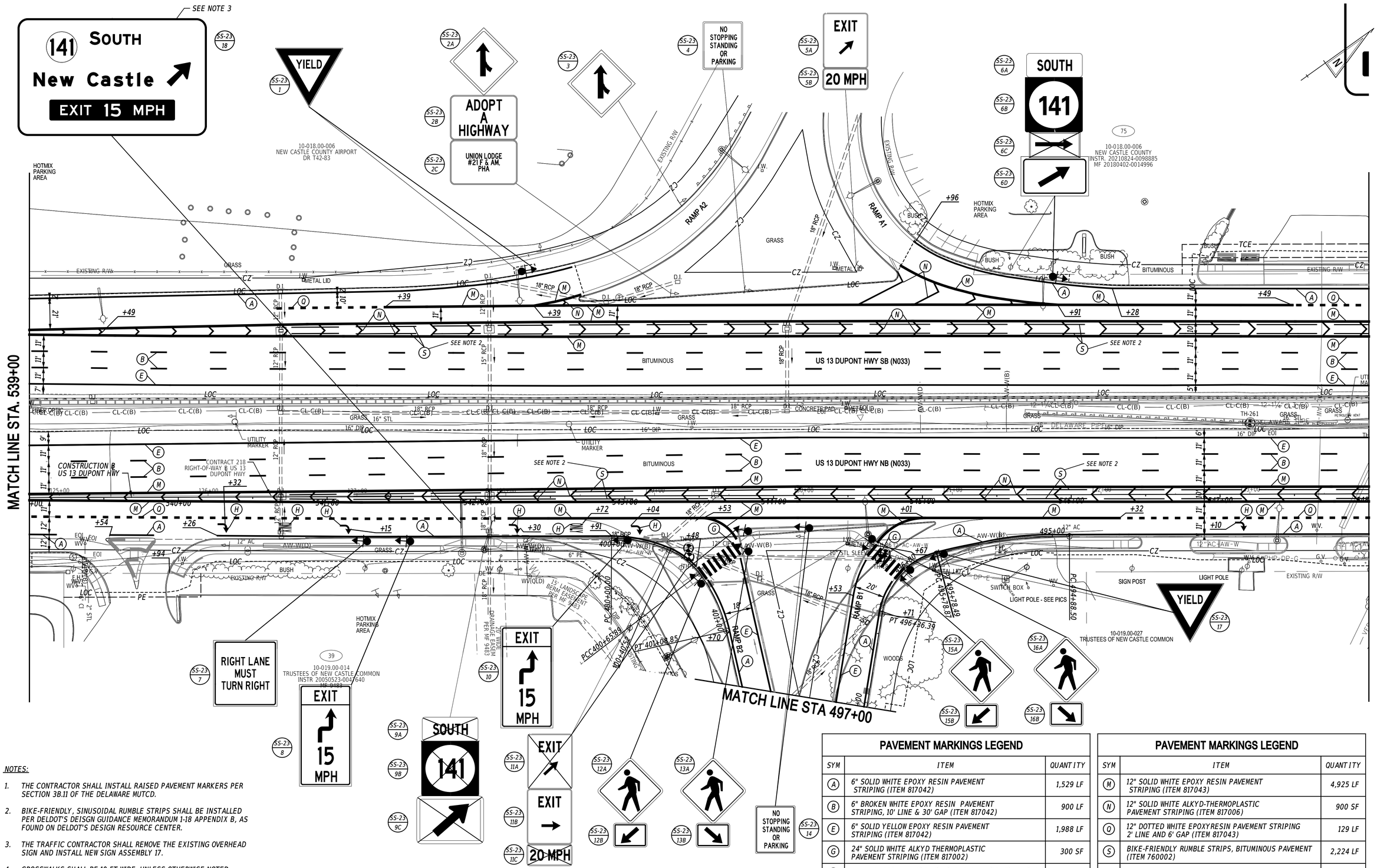
SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	T. LORD
		CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SECTION	SS-22
SHEET NO.	PAI
	223



NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BIKE-FRIENDLY, SINUSOIDAL RUMBLE STRIPS SHALL BE INSTALLED PER DELDOT'S DEISGN GUIDANCE MEMORANDUM 1-18 APPENDIX B, AS FOUND ON DELDOT'S DESIGN RESOURCE CENTER.*
3. *THE TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING OVERHEAD SIGN AND INSTALL NEW SIGN ASSEMBLY 17.*
4. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,529 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	900 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,988 LF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	300 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	124 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	4,925 LF
(N)	12" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817006)	900 SF
(Q)	12" DOTTED WHITE EPOXYRESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	129 LF
(S)	BIKE-FRIENDLY RUMBLE STRIPS, BITUMINOUS PAVEMENT (ITEM 760002)	2,224 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	313 EA

PENNONI ASSOCIATES INC. — 5FILEAS
FILE NAME: — $PLOTDRIVER:
MICROSTATION VERSION: — $VERSIONS
MICROSTATION WORKSPACE: — $WORKSPACES
PEN TABLE: — $PENTBLS
PLOT DRIVER: — $PLOTDRIVER
DATE PLOTTED: — 16-JUL-2024 @ 13:11
USER NAME: — $USERS
OFFICE LOCATION: — $OFFICENAMES

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-23	
SECTION	PAI
SHEET NO.	224

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. THE CONTRACTOR SHALL INTERCEPT THE EXISTING LIGHTING SERVICE RUN WITH THE PROPOSED POLE BASE, TYPE 6.
3. BIKE-FRIENDLY, SINUSOIDAL RUMBLE STRIPS SHALL BE INSTALLED PER DELDOT'S DESIGN GUIDANCE MEMORANDUM 1-18 APPENDIX B, AS FOUND ON DELDOT'S DESIGN RESOURCE CENTER.
4. THE TRAFFIC CONTRACTOR SHALL REMOVE THE RIGHTMOST EXISTING OVERHEAD SIGN AND INSTALL NEW SIGN ASSEMBLY 19.
5. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,763 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	900 LF
C	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	13 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,985 LF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	360 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	31 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	4,802 LF
N	12" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817006)	1,190 SF
Q	12" DOTTED WHITE EPOXYRESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	215 LF
S	BIKE-FRIENDLY RUMBLE STRIPS, BITUMINOUS PAVEMENT (ITEM 76002)	2,736 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	317 EA

NORTH NORTH
202 141
Newport
RAMP SPEED 15

NORTH 141 202

EXIT 20 MPH

NORTH 202 141

ONE WAY

STOP

EMERGENCY SIGNAL AHEAD

EMERGENCY SIGNAL AHEAD

EXIT 15 MPH

RAMP 15 MPH

EXIT

NO STOPPING STANDING OR PARKING

YIELD

NO MERGE AREA

MATCH LINE STA. 548+00

MATCH LINE STA 293+50

MATCH LINE STA. 557+00

SR 141 BASIN RD (N008)

US 13 DUPONT HWY SB (N033)

US 13 DUPONT HWY NB (N033)

TH-111

TH-267

RAMP D

RAMP C1

RAMP C2

CONSTRUCTION @ US 13 DUPONT HWY

CONTRACT 218 RIGHT-OF-WAY @ US 13 DUPONT HWY

SEE NOTE 3

75 10-018.00-006 NEW CASTLE COUNTY INSTR. 20210824-0098885 MF 20180402-0014996

76 10-019.00-029 TRUSTEES OF NEW CASTLE COMMON DR L2-394

77 10-019.00-028 TRUSTEES OF NEW CASTLE COMMON DR L2-394

10-019.00-005 GORDY MANAGEMENT, INC. DR H85-533 MF 11228

1 STORY COMMERCIAL MILEX AUTOREPAIR 328-9451

1 STORY COMMERCIAL 141 SHOPPES

1 STORY COMMERCIAL

HOTMIX PARKING AREA

10' LANDSCAPE EASEMENT PER INSTR 20110504-0023008

LIGHTING STANDARD

3 DUCTS

5 DUCTS

6 CONDUITS ATT-FO(D)

1 CABLE

CONCRETE PAD

PETRO UTILITY MARKER POST

UTILITY MARKER

BRICK VAULT WITH CONCRETE COVER

WOODS

BUSH

GRASS

CONCRETE

BITUMINOUS

8" AC

METAL LID

EXISTING R/W

EXISTING RIGHT-OF-WAY

ABANDONED

PENNONI ASSOCIATES INC.	PEN TABLE: SPEUTRS35
FILE NAME: SRLEAS	PLOT DRIVER: SPLTDRV35
MICROSTATION VERSION: SVERSIONS	DATE PLOTTED: 16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE: SWORKSPACES	USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

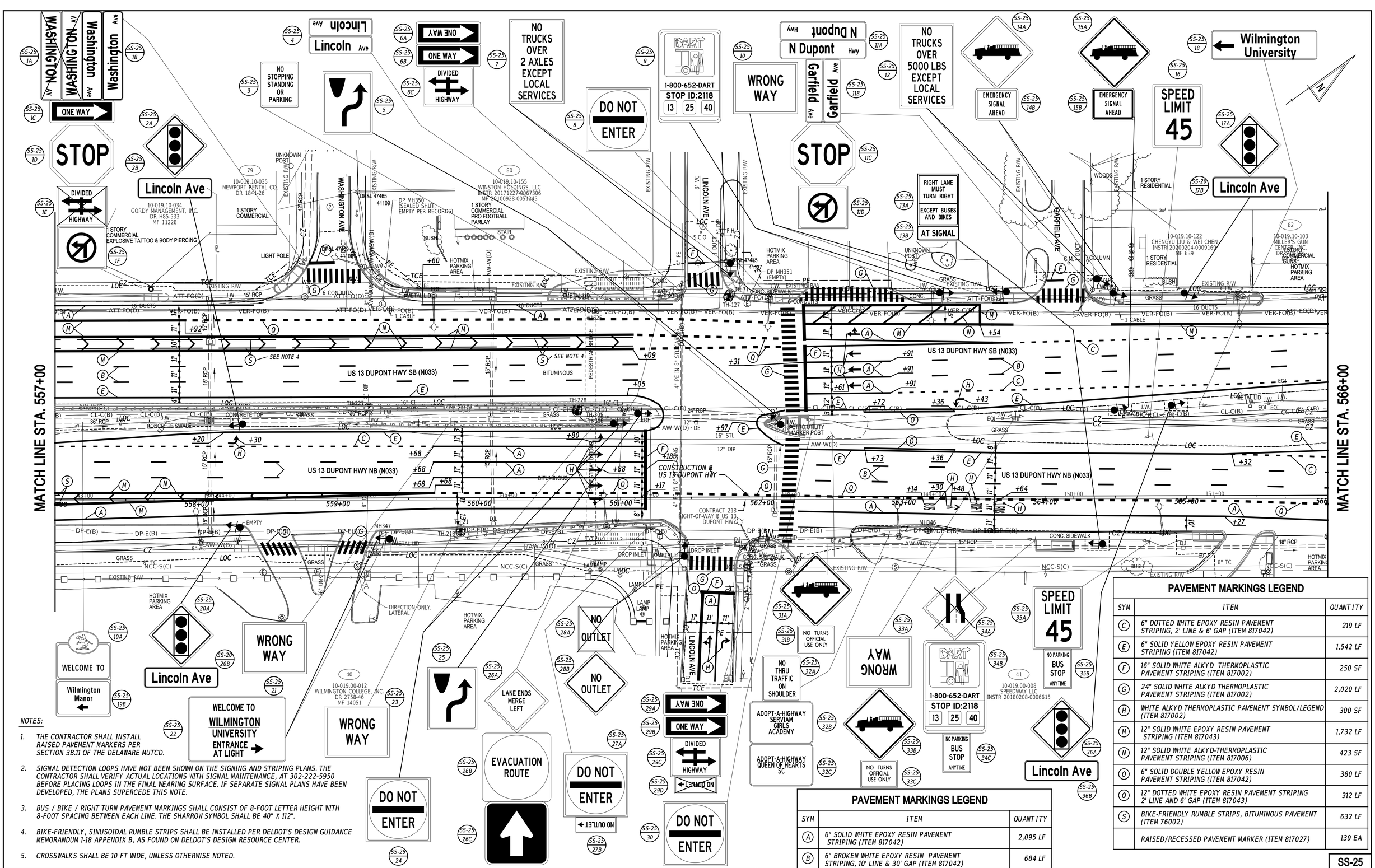
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	T. LORD
		CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-24	
SECTION	PAI
SHEET NO.	225



NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.
3. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
4. BIKE-FRIENDLY, SINUSOIDAL RUMBLE STRIPS SHALL BE INSTALLED PER DELDOT'S DESIGN GUIDANCE MEMORANDUM 1-18 APPENDIX B, AS FOUND ON DELDOT'S DESIGN RESOURCE CENTER.
5. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	219 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,542 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	250 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	2,020 LF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	300 SF
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	1,732 LF
(N)	12" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817006)	423 SF
(O)	6" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	380 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	312 LF
(S)	BIKE-FRIENDLY RUMBLE STRIPS, BITUMINOUS PAVEMENT (ITEM 76002)	632 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	139 EA

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,095 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	684 LF

ADDENDA / REVISIONS		

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-25
SECTION
PAI
SHEET NO.
226

PENN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 16-JUL-2024 @ 13:11
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME:
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACES: $WORKSPACES

Pennoni

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	2,236 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	645 LF
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	182 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,738 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	197 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,640 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	619 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	866 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	226 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	47 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.
3. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
4. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

PENNONI ASSOCIATES INC. | SFILES
FILE NAME: | SPLTDRVSS
MICROSTATION VERSION: | SVERSIONS
MICROSTATION WORKSPACE: | SWORKSPACES
PEN TABLE: | SPENTBLSS
PLOT DRIVER: | SPLTDRVSS
DATE PLOTTED: | 16-JUL-2024 @ 13:11
USER NAME: | SUSERS | OFFICE LOCATION: | $OFFICENAMES

ADDENDA / REVISIONS

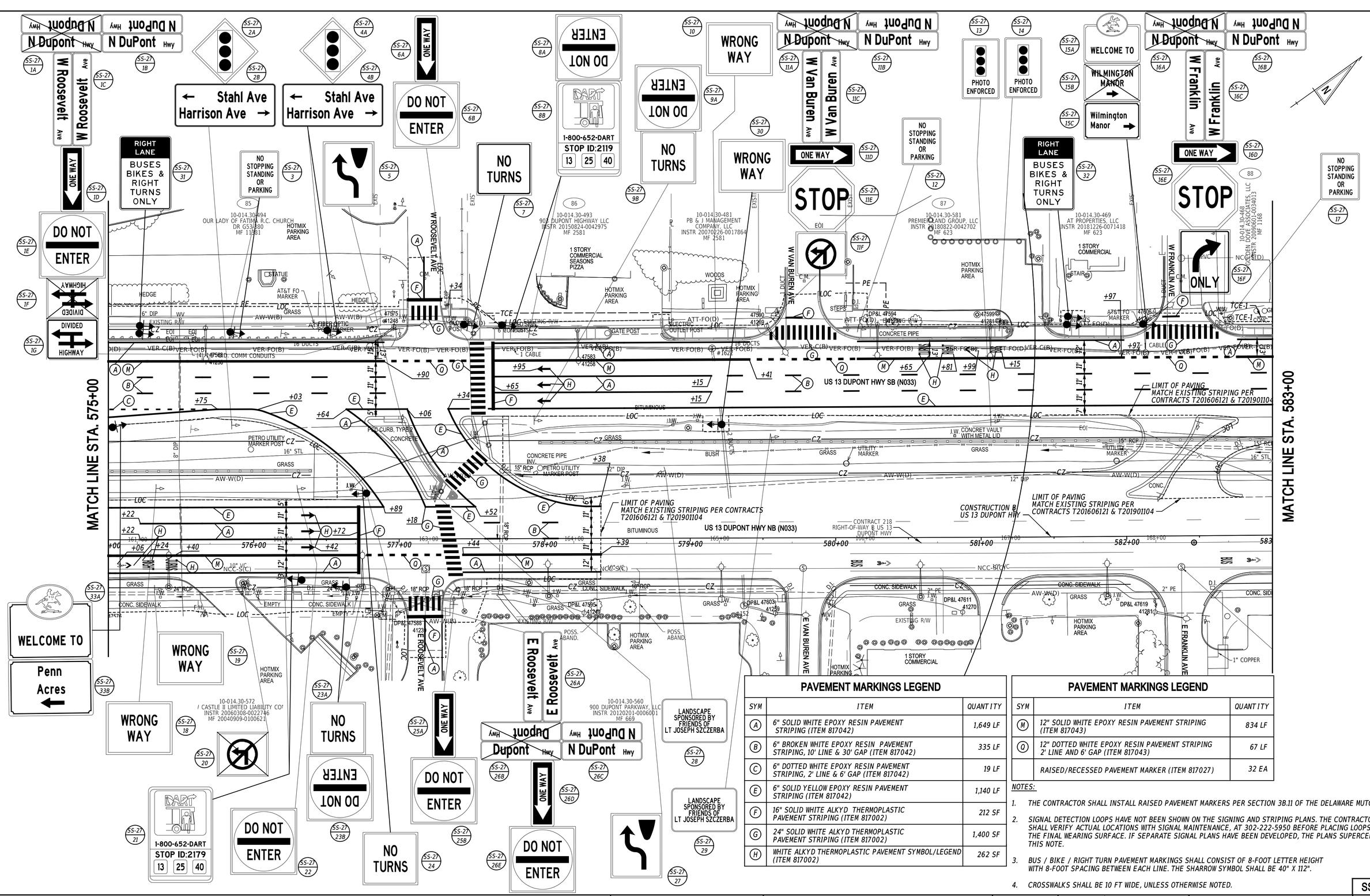
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US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-26	
SECTION	PAI
SHEET NO.	227



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,649 LF
(B)	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	335 LF
(C)	6" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817042)	19 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	1,140 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	212 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,400 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	262 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(M)	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	834 LF
(Q)	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	67 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	32 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.
2. SIGNAL DETECTION LOOPS HAVE NOT BEEN SHOWN ON THE SIGNING AND STRIPING PLANS. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS WITH SIGNAL MAINTENANCE, AT 302-222-5950 BEFORE PLACING LOOPS IN THE FINAL WEARING SURFACE. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERCEDE THIS NOTE.
3. BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".
4. CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

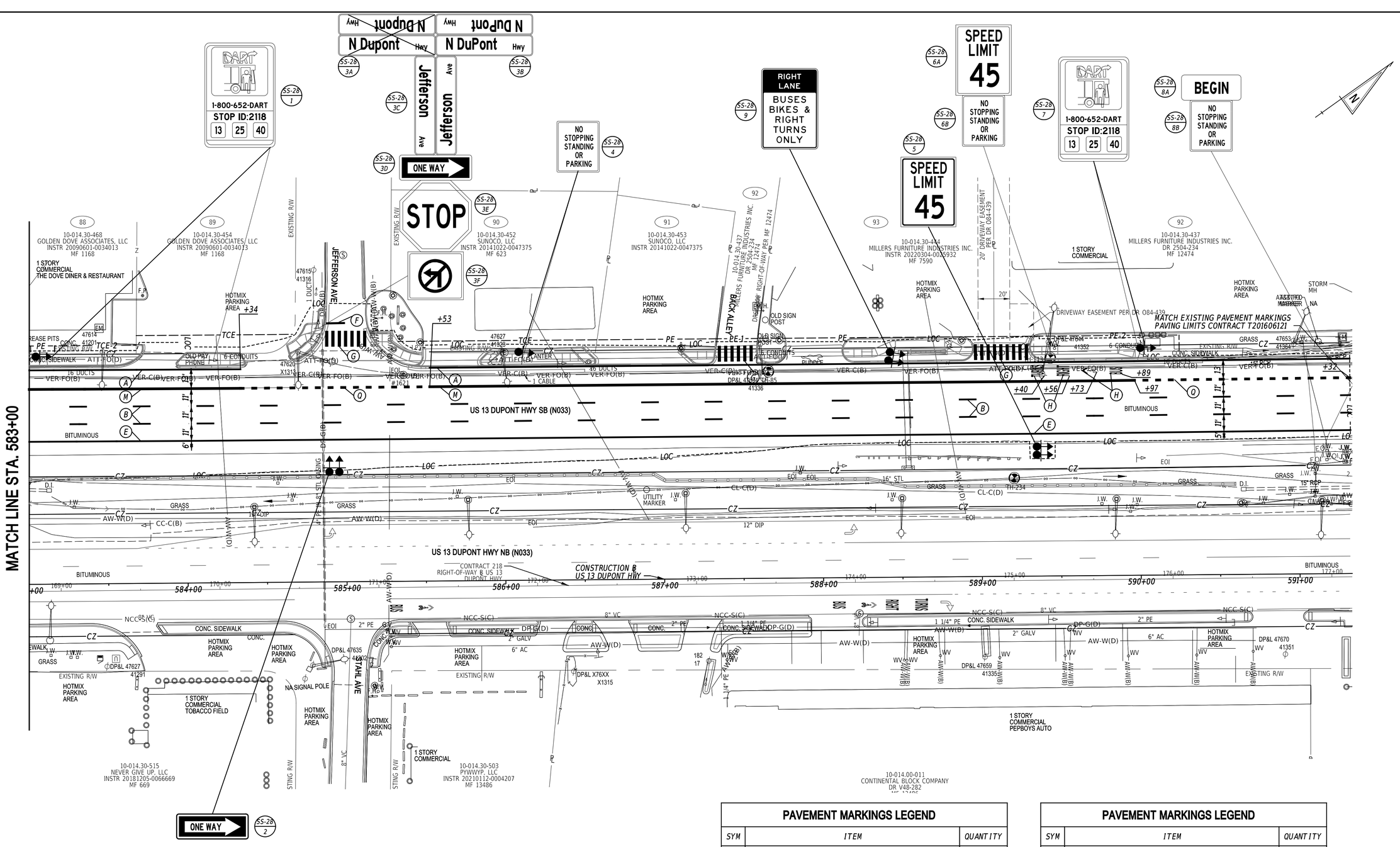
CONTRACT	T201901102
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	T. LORD
CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

SS-27	
SECTION	PAI
SHEET NO.	228

PENNONI ASSOCIATES INC. | FILE NAME: | MICROSTATION VERSION: | MICROSTATION WORKSPACE:
SFILEAS | SVERSIONS | SWORKSPACES
PEN TABLE: SPENTBLSS | PLOT DRIVER: SPLTDRVSS | DATE PLOTTED: 16-JUL-2024 @ 13:11 | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

Pennoni



PENNONI ASSOCIATES INC.		PRN TABLE:	$PENTBLSS
FILE NAME:	$FILEAS	PLOT DRIVER:	$PLTDRVSS
MICROSTATION VERSION:	$VERSIONS	DATE PLOTTED:	16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE:	$WORKSPACES	USER NAME:	$USERS
		OFFICE LOCATION:	$OFFICENAME

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *BUS / BIKE / RIGHT TURN PAVEMENT MARKINGS SHALL CONSIST OF 8-FOOT LETTER HEIGHT WITH 8-FOOT SPACING BETWEEN EACH LINE. THE SHARROW SYMBOL SHALL BE 40" X 112".*
3. *CROSSWALKS SHALL BE 10 FT WIDE, UNLESS OTHERWISE NOTED.*

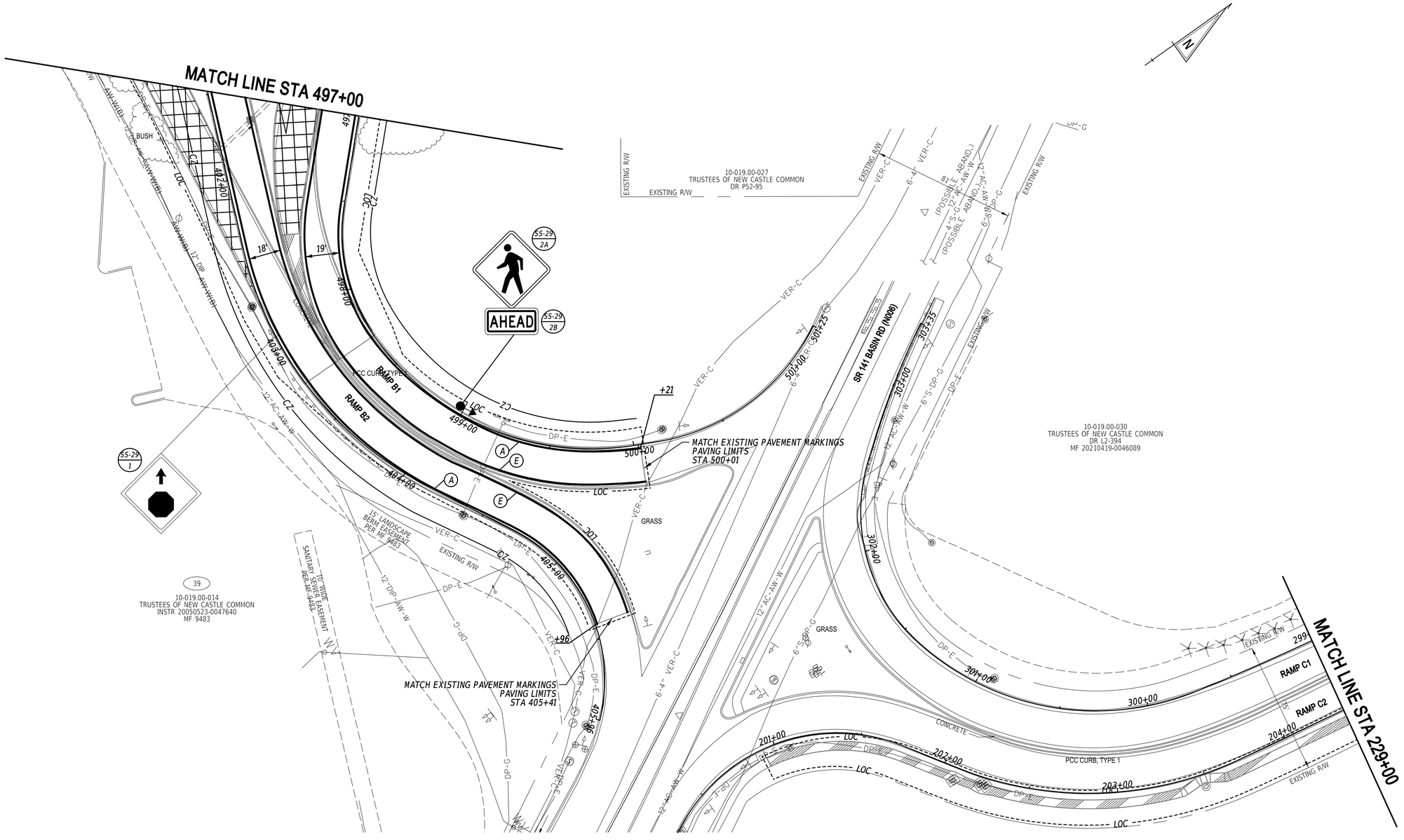
PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	712 LF
B	6" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817042)	414 LF
E	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	832 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	16 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	440 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	103 SF
M	12" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817043)	577 LF
O	12" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING 2' LINE AND 6' GAP (ITEM 817043)	64 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	44 EA

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	SIGNING, STRIPING AND CONDUIT PLAN	SS-28 SECTION PAI SHEET NO. 229
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		
					CHECKED BY: P. HORSEY		



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	696 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	722 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	18 EA

NOTES:

1. THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRIVS$
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

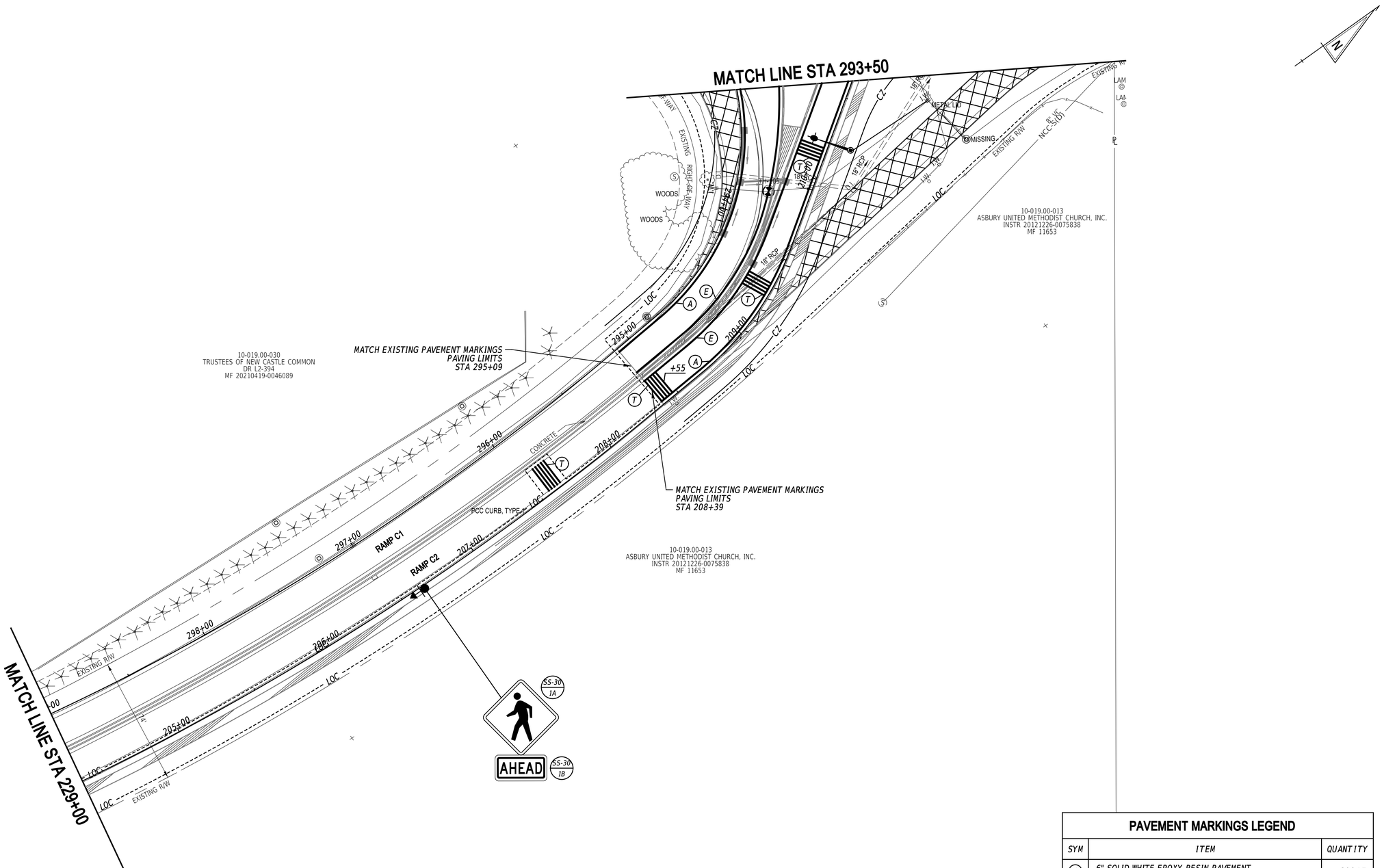
SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-29
SECTION
PAI
SHEET NO.
230



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	6" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	396 LF
(E)	6" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817042)	399 LF
(T)	4" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817037)	299 LF
	6" SOLID WHITE ALKYD-THERMOPLASTIC PAVEMENT STRIPING (ITEM 817038)	299 LF
	RAISED/RECESSED PAVEMENT MARKER (ITEM 817027)	10 EA

NOTES:

1. *THE CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER SECTION 3B.11 OF THE DELAWARE MUTCD.*
2. *THE CONTRACTOR SHALL INSTALL THE 4" LINES (ITE 817037) ON TOP OF THE 6" NON-BEADED LINES (ITEM 817038).*

PENNONI ASSOCIATES INC.		PEN TABLE:	$PENTBLSS
FILE NAME:	$FILEAS	PLOT DRIVER:	$PLTDRVSS
MICROSTATION VERSION:	$VERSIONS	DATE PLOTTED:	16-JUL-2024 @ 13:11
MICROSTATION WORKSPACE:	$WORKSPACES	USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-30
SECTION
PAI
SHEET NO.
231

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 SUPPLY OF FLAT SHEET ALUMINUN, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 SUPPLY OF FLAT SHEET ALUMINUN, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-01	1	R1-2(48)	1	YIELD	48	48				REMAIN																
SS-01	2A	R6-1_L(54)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 54x18	54	18	6.8						RENEW	6.8	6.8	SOIL	2									
SS-01	2B	OM4-3	1	END OF ROAD OBJECT MARKER	18	18				REMOVE	1															
SS-01	2C	OM4-3	2	END OF ROAD OBJECT MARKER	18	18	4.5						ADD TO ASSEMBLY		4.5											
SS-01	3	R1-2(48)	1	YIELD	48	48				REMAIN																
SS-01	4	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-01	5	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-01	6A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-01	6B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-01	7A	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36				REMAIN																
SS-01	7B	R7-202aP-DE	1	BEGIN (plaque - red)	12	6				REMAIN																
SS-01	7C	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-01	8A	W21-1-DE	1	WATCH CHILDREN (Symbol)	30	30				REMAIN																
SS-01	8B	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24	30				REMAIN																
SS-01	8C	N/A	1	WARNING NEIGHBORHOOD WATCH	20	24				REMAIN																
SS-01	9	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-01	10A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														Schafer Blvd (Highway C, Text Size 8"/6")
SS-01	10B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 7"/5", Narrow Kearning)
SS-01	10C	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1	1								
SS-01	10D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1														
SS-01	10E	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36				REMOVE	1															
SS-01	10F	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1														
SS-01	10G	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMOVE	1															
SS-01	10H	R6-3a(36)	1	DIVIDED HIGHWAY CROSSING (T - Intersection) - 36x30	36	30	7.5			RENEW	1	1														
SS-01	11	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-01	12	R3-12f(30)	1	BUS LANE AHEAD - 30x42	30	42	8.8			NEW		1				SOIL	1									
SS-01	13A	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-01	13B	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1														STOP ID: 3644 ROUTE 25
SS-01	14	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36	6.0			NEW		1				SOIL	1									
SS-02	1A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				EX. CONCRETE	1		1							
SS-02	1B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	36	9	2.3			ADD TO ASSEMBLY		1														Llangollen Blvd (Highway C, Text Size 4", Narrow Kearning)
SS-02	2A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMAIN																
SS-02	2B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	36	9	2.3			ADD TO ASSEMBLY		1														Llangollen Blvd (Highway C, Text Size 4", Narrow Kearning)
SS-02	3	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-02	4	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1				SOIL	1									
SS-03	1	R1-2(48)	1	YIELD	48	48				REMAIN																
SS-03	2	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMOVE	1															
SS-03	3	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				NEW CONCRETE	1									
SS-03	4	R1-2(48)	1	YIELD	48	48				REMAIN																
SS-03	5	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMOVE	1															
SS-03	6	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMOVE	1															
SS-03	7	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1				SOIL	1									
SS-03	8	R1-2(48)	1	YIELD	48	48		6.9		RENEW	1	1				SOIL	1									
SS-03	9	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-03	10A	N/A	1	RIGHT LANE MUST TURN RIGHT EXCEPT BUSES AND BIKES	36	42	10.5			NEW		1				SOIL	1									
SS-03	10B	R10-31P	1	AT SIGNAL (plaque)	24	9	1.5			ADD TO ASSEMBLY		1														
SS-03	11A	N/A	1	NO TRUCKS OVER 2 AXLES EXCEPT RESIDENTIAL SERVICES	24	36				REPOSITION	1	1				SOIL	1									
SS-03	11B	N/A	1	"NEXT RIGHT"	24	12				REPOSITION	1	1														NEXT RIGHT
SS-03	11C	N/A	1	"ON LLANGOLLEN BLVD"	24	12				REPOSITION	1	1														ON LLANGOLLEN BLVD
SS-03	12	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-03	13A	D3-2-DE1	1	WELCOME TO	36	32				REMAIN																
SS-03	13B	D3-2-DE3	1	DEVELOPMENT NAME	36	32				REMOVE	1															LLANGOLLEN ESTATES --> LLANGOLLEN GREEN -->
SS-03	13C	D3-2-DE3	1	DEVELOPMENT NAME	36	32	8.0			ADD TO ASSEMBLY		1														Llangollen Estates --> Llangollen Green -->
SS-03	14	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		RENEW	1	1				SOIL	1									
SS-03	15	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 3223 ROUTE 25 (SIGN 18 ON SS-03 TO BE RELOCATED TO SIGN 8 ON SS-04)
SS-04	1A	R2-1-50(30)	1	SPEED LIMIT (50 MPH - 30x36)	30	36				REMOVE	1															
SS-04	1B	R7-202aP-DE	1	BEGIN (plaque - red)	12	6				REMAIN																
SS-04	1C	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-04	2	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMAIN																
SS-04	3	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMAIN																
PAGE TOTALS							137	41	0		24	28		7	46		20	1	1	0		0	0	0	0	

PENNONI ASSOCIATES INC. | FILE NAME: | MICROSTATION VERSION: | MICROSTATION WORKSPACE:
$FILEAS | $VERSION$ | $WORKSPACES

PEN TABLE: $PRINTSTLS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 30-JUL-2024 @ 13:50
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS	

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PERMANENT SIGN SCHEDULE

SECTION
PAI
SHEET NO.
232

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12" SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE X1 SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL										
SS-04	4	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36				REMAIN																
SS-04	5A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REPOSITION	1	1				SOIL	1									
SS-04	5B	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1														STOP ID: 2272 ROUTE 25
SS-04	6	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		RENEW	1	1														
SS-04	7A	N/A	1	NO TRUCKS OVER 2 AXLES EXCEPT RESIDENTIAL SERVICES	24	36				REPOSITION	1	1				SOIL	1									
SS-04	7B	N/A	1	"NEXT LEFT"	24	12				REPOSITION	1	1														NEXT LEFT
SS-04	7C	N/A	1	"ON LLANGOLLEN BLVD"	24	12				REPOSITION	1	1														ON LLANGOLLEN BLVD
SS-04	8	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 3223 ROUTE 25 (SIGN 18 ON SS-03 TO BE RELOCATED TO SIGN 8 ON SS-04)
SS-04	9	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-04	10A	D3-1(9)	2	STREET NAME (1 Line)	36	9				REMOVE	2															LLANGOLLEN BLVD
SS-04	10B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			NEW		2				SOIL	2									Llangollen Blvd (Highway B, Text Size 7"/5", Narrow Kearning)
SS-04	10C	D3-1(9)	2	STREET NAME (1 Line)	36	9				REMOVE	2															S DUPONT HWY
SS-04	10D	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 7"/5", Narrow Kearning)
SS-04	10E	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36				REMOVE	1															
SS-04	10F	N/A	1	NO TRUCKS OVER 2 AXLES EXCEPT RESIDENTIAL SERVICES	24	36	6.0			ADD TO ASSEMBLY		1				SOIL										
SS-04	11	N/A	1	NO TRUCKS OVER 2 AXLES EXCEPT RESIDENTIAL SERVICES	24	36				REMOVE	1					SOIL										Remove from utility pole
SS-04	12	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMAIN																
SS-04	13A	R3-4(36)	1	U - TURN PROHIBITION (Symbol) - 36x36	36	36				REMOVE	1															
SS-04	13B	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMOVE	1															
SS-04	14	R2-1-50(48)	1	SPEED LIMIT (50 MPH - 48x60)	48	60	20.0						RENEW	20.0	20.0	SOIL	2									
SS-04	15	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-04	16	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-04	17	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-04	18	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-05	1A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMOVE	1															
SS-05	1B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	36	9				REMOVE	1															
SS-05	2A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-05	2B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	36	9	2.3			ADD TO ASSEMBLY		1														Llangollen Blvd (Highway C, Text Size 4")
SS-05	3	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				NEW		1				SOIL	1									STOP ID: XXXX ROUTES 25 FURNISHED BY DART
SS-05	4A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			RENEW	1	1				NEW CONCRETE	1									
SS-05	4B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9			ADD TO ASSEMBLY		1														Pulaski Hwy (Highway C, Text Size 4")
SS-05	5A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMAIN																
SS-05	5B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9			ADD TO ASSEMBLY		1														Pulaski Hwy (Highway C, Text Size 4")
SS-05	6	R2-1-50(30)	1	SPEED LIMIT (50 MPH - 30x36)	30	36	7.5			NEW		1				SOIL	1									
SS-05	7	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-05	8	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-07	1	R1-2(48)	1	YIELD	48	48				REMAIN																
SS-07	2A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12				REMAIN																
SS-07	2B	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
SS-07	2C	R6-3a(30)	1	DIVIDED HIGHWAY CROSSING (T - Intersection) - 30x24	30	24				REMAIN																
SS-07	3A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	42	18				REMAIN																Wilton Blvd
SS-07	3B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Pulaski Hwy
SS-07	3C	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMAIN																
SS-07	4	R1-2(48)	1	YIELD	48	48				REMAIN																
SS-07	5	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-07	6A	N/A	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36				REMAIN																
SS-07	6B	N/A	1	"NEXT RIGHT"	24	12				REMAIN																NEXT RIGHT
SS-07	6C	N/A	1	"ON WILTON BLVD"	24	12				REMAIN																ON WILTON BLVD
SS-07	6D	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-07	7	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-07	8A	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 4074 ROUTE 40
SS-07	8B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-07	9	N/A	1	BUS SIGNAL	24	30				REMAIN																(Attached to Pole)
SS-07	10A	W1-7(48)	1	TWO DIRECTIONAL LARGE ARROW - 48x24	48	24							REMOVE	8.0												
SS-07	10B	R6-1_L(54)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 54x18	54	18	6.8						ADD TO ASSEMBLY		6.8											
SS-07	10C	OM4-3	2	END OF ROAD OBJECT MARKER	18	18							REPOSITION	4.5	4.5	SOIL	2									
SS-07	11A	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMAIN																
SS-07	11B	R3-4(36)	1	U - TURN PROHIBITION (Symbol) - 36x36	36	36				REMAIN																
SS-07	11C	M4-4(24)	1	TRUCK - 24x12	24	12				REMAIN																
SS-07	12	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
				PAGE TOTALS			109	9	0		20	21		33	49		17	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $PLTDRVR$S
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBL$S
PLOT DRIVER: $PLTDRVR$S
DATE PLOTTED: 30-JUL-2024 @ 13:50
USER NAME: $USER$ OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY:	T. LORD		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				233

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822590 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF.) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-07	13	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-07	14A	R9-3(18)	1	NO PEDESTRIAN CROSSING (Symbol) - 18x18	18	18				REMAIN																
SS-07	14B	R9-3bP_R	1	USE CROSSWALK --> (plaque)	18	12				REMAIN																
SS-07	15A	R9-3(18)	1	NO PEDESTRIAN CROSSING (Symbol) - 18x18	18	18				REMOVE	1															
SS-07	15B	R9-3bP_L	1	<-- USE CROSSWALK (plaque)	18	12				REMOVE	1															
SS-08	1	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 4073 ROUTE 40
SS-08	2A	W3-3(48)	1	SIGNAL AHEAD (Symbol) - 48x48	48	48							REMAIN													
SS-08	2B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9						ADD TO ASSEMBLY		1.9											Wilton Blvd (Highway C, 4")
SS-08	3A	W3-3(48)	1	SIGNAL AHEAD (Symbol) - 48x48	48	48							REMAIN													
SS-08	3B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9						ADD TO ASSEMBLY		1.9											Wilton Blvd (Highway C, 4")
SS-08	4	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-08	5A	W3-3(48)	1	SIGNAL AHEAD (Symbol) - 48x48	48	48							REMAIN													
SS-08	5B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	42	9							REMOVE	2.6												S Dupont Hwy
SS-08	5C	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	42	9	2.6						ADD TO ASSEMBLY		2.6											S DuPont Hwy (Highway C, 4")
SS-08	6A	W3-3(48)	1	SIGNAL AHEAD (Symbol) - 48x48	48	48							REPOSITION	16.0	16.0	SOIL	2									
SS-08	6B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	42	9							REMOVE	2.6												S Dupont Hwy
SS-08	6C	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	42	9	2.6						ADD TO ASSEMBLY		2.6											S DuPont Hwy (Highway C, 4")
SS-08	7A	M2-1(21)	1	JUNCTION - 21x15	21	15	2.2			NEW		1				SOIL	1									
SS-08	7B	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														US 13
SS-08	8	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				NEW		1				SOIL	1									STOP ID: XXXX ROUTE 40 FURNISHED BY DART Contact: Bill Williamson Email:william.williamson@delaware.gov
SS-08	9	N/A	1	BUS LANE ENDS	30	42	8.8			NEW		1				SOIL	1									
SS-09	1A	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12				REMAIN																
SS-09	1B	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																US 13
SS-09	1C	M3-2(24)	1	CARDINAL DIRECTION - EAST - 24x12	24	12	2.0			ADD TO ASSEMBLY		1														
SS-09	1D	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														US 40
SS-09	1E	M6-3(21)	1	DIRECTIONAL ARROW (Up) - 21x15	21	15				REMAIN																
SS-09	1F	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-09	2A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12	2.0			NEW		1				SOIL	1									
SS-09	2B	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														US 13
SS-09	2C	M6-1_R(21)	1	DIRECTIONAL ARROW (Right) - 21x15	21	15	2.2			ADD TO ASSEMBLY		1														
SS-09	3A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12	2.0			RENEW	1	1				SOIL	1									
SS-09	3B	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24	4.0			RENEW	1	1														US 13
SS-09	3C	R7-202aP-DE	1	BEGIN (plaque - red)	12	6	0.5			RENEW	1	1														
SS-09	3D	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1														
SS-09	4A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-09	4B	R1-1(36)	1	STOP	36	36				REMAIN																
SS-09	4C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-09	5	D2-3	1	DISTANCE (3 Line)	60	42							REMAIN													Middletown 21 Smyrna 28 Dover 39
SS-09	6	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1				EX. CONCRETE	1		1							
SS-09	7	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-09	8	R4-8(24)	1	KEEP LEFT (Symbol) - 24x30	24	30				REMAIN																
SS-09	9	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-09	10	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-09	11A	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-09	11B	D14-3-DE	1	ADOPT A HIGHWAY	24	18				REPOSITION	1	1														5ACRE SOCIAL CLUB
SS-09	11C	D14-3-DE	1	ADOPT A HIGHWAY	24	18				REPOSITION	1	1														A.B.A.T.E. OF DE
SS-09	12	R2-1-55(30)	1	SPEED LIMIT (55 MPH - 30x36)	30	36				REMOVE	1															
SS-09	13	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMAIN																
SS-09	14	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-09	15	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-09	16	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-09	17	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5		2									
SS-09	18A	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-09	18B	D14-3-DE	1	ADOPT A HIGHWAY	24	18	3.0			RENEW	1	1														SUAKIM TEMPLE #60 AE.AONMS
SS-09	19A	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMOVE	1															
SS-09	19B	EM-1-DE	1	EVACUATION ROUTE	24	24	4.0			RENEW	1	1				SOIL	1									
SS-09	19C	M6-3(21)	1	DIRECTIONAL ARROW (Up) - 21x15	21	15	2.2			RENEW	1	1														
SS-09	20A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-09	20B	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1				SOIL	1									
SS-09	20C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
PAGE TOTALS							91	16	0		17	27		21	43		15	0	1	0		0	0	0	0	

PENNONI ASSOCIATES INC. — PEN TABLE: $PENTABLE$
FILE NAME: $FILEAS$ — PLOT DRIVER: $PLTDRVDS$
MICROSTATION VERSION: $VERSION$ — DATE PLOTTED: 30-JUL-2024 @ 13:50
MICROSTATION WORKSPACE: $WORKSPACES — USER NAME: $USERS — OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		SHEET NO. 234
					CHECKED BY: P. HORSEY		

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-09	21	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-09	22	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		NEW		1				SOIL	1									
SS-10	1	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-10	2	N/A	1	BUS SIGNAL	24	30				REMAIN																
SS-10	3A	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2270 ROUTE 25 & 40
SS-10	3B	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60				REMAIN																
SS-10	4	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-10	5	R10-6(24)	1	STOP HERE ON RED (Straight Arrow) - 24x36	24	36				REMAIN						SOIL										Right Downward Diagonal Arrow
SS-10	6	R10-6(24)	1	STOP HERE ON RED (Straight Arrow) - 24x36	24	36	6.0			NEW		1				SOIL	1									Left Downward Diagonal Arrow
SS-10	7A	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-10	7B	R10-7	1	DO NOT BLOCK INTERSECTION	24	30				REMAIN																
SS-10	8	R10-27	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP	30	36				REMAIN																
SS-10	9	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL										
SS-10	10	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-10	11A	D14-3-DE	1	ADOPT A HIGHWAY	24	18				REMAIN																SACRE SOCIAL CLUB
SS-10	11B	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-10	12	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				NEW		1				SOIL	1									STOP ID: 2289 ROUTE 25 & 40 FURNISHED BY DART
SS-10	13A	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18	6.8			RENEW	1	1				NEW CONCRETE	1									
SS-10	13B	R6-1_L(54)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 54x18	54	18	6.8			RENEW	1	1														
SS-10	13C	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1														
SS-10	14A	R3-1B(24)	1	COMBINATION U-TURN AND LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-10	14B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-10	15	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-10	16A	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-10	16C	R5-1(36)	1	DO NOT ENTER - 36x36	36	36							REMAIN													
SS-10	17A	M4-14(24)	1	BEGIN - 24x12	24	12				REMAIN																
SS-10	17B	R4-3-DE	1	TRUCK KEEP RIGHT EXCEPT LEFT TURNS	30	36				REMAIN																
SS-10	17C	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-10	18	N/A	1	DELAWARE FIRE DEATHS									REMAIN													DELAWARE FIRE DEATHS LAST YEAR XX THIS YEAR XX WITHOUT SMOKING DETECTOR X WITH SMOKE DETECTOR X WORKING SMOKE DETECTORS SAVE LIVES
SS-10	19A	R2-1-50(36)	1	SPEED LIMIT (50 MPH - 36x48)	36	48	12.0						RENEW	12.0	12.0	SOIL	2									
SS-10	19B	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMOVE	1															
SS-10	20	R2-1-50(36)	1	SPEED LIMIT (50 MPH - 36x48)	36	48							REMAIN													
SS-10	21	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-10	22	N/A	1	BUS LANE ENDS	30	42	8.8			NEW		1				SOIL	1									
SS-11	1	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-11	2A	W21-11-DE	1	WATCH CHILDREN (Symbol)	30	30		6.3		RENEW	1	1				SOIL	1									
SS-11	2B	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24	30	5.0			RENEW	1	1														
SS-11	2C	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36	6.0			RENEW	1	1														
SS-11	3A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	36	18				REMOVE	2															2nd Ave. (Highway C, Text Size 8"/6")
SS-11	3B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															S Dupont Hwy
SS-11	3C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 8"/6")
SS-11	3D	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12				REMAIN																
SS-11	3E	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
SS-11	3F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-11	4	R2-1-50(36)	1	SPEED LIMIT (50 MPH - 36x48)	36	48							REMAIN													
SS-11	5A	R9-3(24)	1	NO PEDESTRIAN CROSSING (Symbol) - 24x24	24	24				REMAIN																
SS-11	5B	R9-3bP_L	1	<-- USE CROSSWALK (plaque)	18	12				REMAIN																
SS-11	6A	R2-1-50(36)	1	SPEED LIMIT (50 MPH - 36x48)	36	48				REMAIN																
SS-11	6B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-11	7	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12				REMOVE	1															
SS-11	8	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-11	9	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-11	10A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-11	10B	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1				SOIL	1									
SS-11	10C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-11	11	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-11	12	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-11	13A	R1-1(36)	1	STOP	36	36				REMAIN																
SS-11	13B	R10-15	1	TURNING VEHICLES YIELD TO PEDS	30	30	6.3			ADD TO ASSEMBLY		1														Right Arrow
SS-11	13C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
				PAGE TOTALS			135	31	0		17	20		12	65		18	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
FILE NAME: $FILES$ | PLOT DRIVER: $PLTDRVS$
MICROSTATION VERSION: $VERSION$ | DATE PLOTTED: $30-JUL-2024 @ 13:50$
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY:	T. LORD		PAI
				COUNTY				SHEET NO.
				NEW CASTLE	CHECKED BY:	P. HORSEY		235

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-11	14	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-11	15	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-11	16A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	36	18	9.0			NEW		2				SOIL	2									1st Ave (Highway C, Text Size 8"/6")
SS-11	16B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 8"/6")
SS-11	16C	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-11	16D	R1-1(36)	1	STOP	36	36				REMAIN																
SS-11	16E	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-11	17	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-12	1	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		NEW		1				SOIL	1									
SS-12	2	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-12	3A	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-12	3B	R7-201P_B	1	TOW AWAY ZONE (plaque - black)	12	6				REMAIN																
SS-12	4A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	36	18				REMOVE	2															Third Ave (Highway C, Text Size 8"/6")
SS-12	4B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															S Dupont Hwy
SS-12	4C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 8"/6")
SS-12	4D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1				NEW CONCRETE	1									
SS-12	4E	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1														
SS-12	4F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			RENEW	1	1														
SS-12	5	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-12	6	D4-3-OE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2269 ROUTE 25 & 40
SS-12	7A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-12	7B	R3-1B(24)	1	COMBINATION U-TURN AND LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-12	8	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-12	9A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	36	18	9.0			RENEW	2	2				SOIL	1									Fourth Ave (Highway C, Text Size 8"/6")
SS-12	9B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															S Dupont Hwy
SS-12	9C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 8"/6")
SS-12	9D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1														
SS-12	9E	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1														
SS-12	9F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-12	10	D4-3-OE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2268 ROUTES 25, 40, & 47
SS-12	11A	D3-1(9)	2	STREET NAME (1 Line)	30	9				REMOVE	2															5TH AV
SS-12	11B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	30	18	7.5			NEW		2				SOIL	1									Fifth Ave (Highway C, Text Size 8"/6")
SS-12	11C	D3-1(9)	2	STREET NAME (1 Line)	30	9				REMOVE	2															RTE 13
SS-12	11D	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														S DuPont Hwy (Highway B, Text Size 8"/6")
SS-12	11E	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36				REMOVE	1															
SS-12	11F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-12	11G	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-12	11H	R1-1(36)	1	STOP	36	36				REMAIN																
SS-12	12	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36	6.0			NEW		1				SOIL	1									
SS-12	13	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMOVE	1															
SS-12	14A	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMOVE	1															
SS-12	14B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-12	15	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2290 ROUTE 25 & 40
SS-12	16	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-12	17	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-12	18A	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-12	18B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36							REMAIN													
SS-12	19	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-12	20	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-12	21	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMOVE	1															
SS-12	22	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-12	23	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-12	24A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMAIN																
SS-12	24B	N/A	1	DEPT OF ELECTIONS WAREHOUSE						REMAIN																
SS-12	25	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-13	1A	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2291 ROUTES 25 & 40
SS-13	1B	N/A	1	NO PARKING ANYTIME						REMOVE	1															
SS-13	1C	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			ADD TO ASSEMBLY		1														
SS-13	2A	R3-9dP	1	END (plaque)	30	12	2.5			NEW		1				SOIL	1									
SS-13	2B	R4-3-DE	1	TRUCK KEEP RIGHT EXCEPT LEFT TURNS	30	36	7.5			ADD TO ASSEMBLY		1														
				PAGE TOTALS			181	24	0		28	35		0	53		21	0	0	0		0	0	0	0	

ADDENDA / REVISIONS	

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PERMANENT SIGN SCHEDULE

SECTION
PAI
SHEET NO.
236

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $PLOTDRIVER$
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTABLES$
PLOT DRIVER: $PLOTDRIVER$
DATE PLOTTED: 30-JUL-2024 @ 13:50
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

Pennoni

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETOREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETOREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-13	3A	R3-9dP	1	END (plaque)	30	12				REMAIN																
SS-13	3B	R4-3-DE	1	TRUCK KEEP RIGHT EXCEPT LEFT TURNS	30	36				REMAIN																
SS-13	4	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-13	5	N/A	1	NO PARKING ANYTIME						REMOVE	1															
SS-13	6	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			ADD TO ASSEMBLY		1														
SS-13	7	N/A	1	NO PARKING ANYTIME						REMOVE	1															
SS-13	8A	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-13	8B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			ADD TO ASSEMBLY		1														
SS-13	9	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-13	10	R2-1-50(30)	1	SPEED LIMIT (50 MPH - 30x36)	30	36				REMOVE	1															
SS-13	11	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-13	12	N/A	1	RIGHT TURN YIELD TO BIKES	36	30				REMOVE	1															
SS-13	13A	D1-3	1	DESTINATION (3 Line)	42	42				REMOVE	1															DEPT OF ELECTIONS --> WAREHOUSE
SS-13	13B	W2-2_R(30)	1	SIDE ROAD (Perpendicular - Right) - 30x30	30	30	6.3			ADD TO ASSEMBLY		1														
SS-13	13C	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9				REMOVE	1															Lisa Dr -->
SS-13	13D	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9	1.5			ADD TO ASSEMBLY		1														Lisa Dr (Highway C, Text Size: 4")
SS-13	14	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-13	15	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-14	1	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-14	2	R10-7-DE	1	DO NOT BLOCK DRIVEWAY	24	30				REMOVE	1															
SS-14	3A	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-14	3B	OM4-3	2	END OF ROAD OBJECT MARKER	18	18							REMAIN													
SS-14	4	R3-1(24)	1	RIGHT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-14	5A	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-14	5B	OM4-3	2	END OF ROAD OBJECT MARKER	18	18							REMAIN													
SS-14	6	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 3945 ROUTES 25 & 40
SS-14	7	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2293 ROUTES 25 & 40
SS-14	8A	R6-1_L(54)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 54x18	54	18							REMAIN													
SS-14	8B	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18							REMAIN													
SS-14	9	R1-1(36)	1	STOP	36	36				REMOVE	1															Sign to be removed upon activation of new traffic signal.
SS-14	10	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-14	11A	D3-1(9)	2	STREET NAME (1 Line)	24	9				REMOVE	2															LISA DR
SS-14	11B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	24	18	6.0			ADD TO ASSEMBLY		2														Lisa Dr (Highway C, Text Size 8"/6")
SS-14	11C	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-14	11D	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1				SOIL	1									
SS-14	11E	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-14	12A		1							NEW		1				SOIL	1									
SS-14	12B	R10-3iP	1	AT SIGNAL (plaque)	24	9	1.5			ADD TO ASSEMBLY		1														
SS-14	13A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-14	13B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9			ADD TO ASSEMBLY		1														Quigley Blvd (Highway C, Text Size 4")
SS-14	14A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-14	14B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9			ADD TO ASSEMBLY		1														Quigley Blvd (Highway C, Text Size 4")
SS-14	15A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-14	15B	R1-1(36)	1	STOP	36	36				REMAIN																
SS-14	15C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-14	16	D1-3	1	DESTINATION (3 Line)	72	42	21.0						NEW		21.0		2									↑ Wilmington ← Newark New Castle → (Highway D, Text Size 6")
SS-14	17A	N/A	1	DESTINATION	72	42							REMOVE	21.0												CHRISTIANA NEWARK KEEP LEFT
SS-14	17B	D1-3	1	DESTINATION (3 Line)	72	42	21.0						ADD TO ASSEMBLY		21.0											↑ Wilmington ← Newark New Castle → (Highway D, Text Size 6")
SS-14	17C	D1-1	1	DESTINATION (1 Line)	72	18							REMOVE	9.0												U.S. POST OFFICE -->
SS-14	17D	D1-1	1	DESTINATION (1 Line)	72	18	9.0						ADD TO ASSEMBLY		9.0											U.S. Post Office --> (Highway D, Text Size 6")
SS-14	17E	D1-2	1	DESTINATION (2 Line)	72	30							REMOVE	15.0												QUIGLEY BLVD -->
SS-14	18A	M2-1(21)	1	JUNCTION - 21x15	21	15	2.2			NEW		1				SOIL	1									
SS-14	18B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0			ADD TO ASSEMBLY		1														Route 273
SS-14	19A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
SS-14	19B	R1-1(36)	1	STOP	36	36				REMAIN																
SS-14	19C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-14	20	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1				SOIL	1									
SS-14	21A	R1-1(36)	1	STOP	36	36				REMOVE	1															
SS-14	21B	R1-2(36)	1	YIELD	36	36		3.9		ADD TO ASSEMBLY		1														
SS-14	21C	R1-2aP-DE(24)	1	TO U-TURNING TRAFFIC (plaque)	24	18		3.0		ADD TO ASSEMBLY		1														
PAGE TOTALS							170	23	0		14	25		45	104		16	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. SFILEAS
FILE NAME: SPLOTDRVSS
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTABLES
PLOT DRIVER: $PLOTDRVSS
DATE PLOTTED: 30-JUL-2024 @ 13:50
USER NAME: $USERS
OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY:	T. LORD		PAI
				COUNTY				SHEET NO.
				NEW CASTLE	CHECKED BY:	P. HORSEY		237

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IX, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-15	1A	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12				REMAIN																
SS-15	1B	M4-4(24)	1	TRUCK - 24x12	24	12				REMAIN																
SS-15	1C	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																Route 9
SS-15	1D	M5-2_R	1	ADVANCE TURN ARROW (Right - 45)	21	15				REMOVE	1															
SS-15	1E	M5-1_R	1	ADVANCE TURN ARROW (Right - 90)	21	15	2.2			ADD TO ASSEMBLY		1														
SS-15	1F	EM-1-DE	1	EVACUATION ROUTE	24	24				REMAIN																
SS-15	1G	M6-3(B)	1	DIRECTIONAL ARROW (Up) - 12x9	12	9				REMAIN																
SS-15	2A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12				REMAIN																
SS-15	2B	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																Route 13
SS-15	2C	M3-4(24)	1	CARDINAL DIRECTION - WEST - 24x12	24	12				REMAIN																
SS-15	2D	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																Route 40
SS-15	2E	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-15	3	R4-3-DE	1	TRUCK KEEP RIGHT EXCEPT LEFT TURNS	30	36				REMAIN																
SS-15	4	R2-1-50(36)	1	SPEED LIMIT (50 MPH - 36x48)	36	48							REMAIN													
SS-15	5	R2-1-50(36)	1	SPEED LIMIT (50 MPH - 36x48)	36	48							REMAIN													
SS-15	6	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-15	7A	M3-4(24)	1	CARDINAL DIRECTION - WEST - 24x12	24	12				REMAIN																
SS-15	7B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																Route 273
SS-15	7C	M5-1_L	1	ADVANCE TURN ARROW (Left - 90)	21	15				REMAIN																
SS-15	7D	EM-1-DE	1	EVACUATION ROUTE	24	24				REMAIN																
SS-15	7E	M6-3(B)	1	DIRECTIONAL ARROW (Up) - 12x9	12	9				REMAIN																
SS-15	8	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-15	9	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-15	10A	N/A	1	RIGHT LANE MUST TURN EXCEPT BUSES AND BIKES	36	42	10.5			NEW		1				SOIL	1									
SS-15	10B	R10-31P	1	AT SIGNAL (plaque)	24	9	1.5			ADD TO ASSEMBLY		1														
SS-15	11A	M3-4(24)	1	CARDINAL DIRECTION - WEST - 24x12	24	12				REMAIN																
SS-15	11B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																
SS-15	11C	M5-1_L	1	ADVANCE TURN ARROW (Left - 90)	21	15				REMAIN																Route 273
SS-15	12A	M3-2(24)	1	CARDINAL DIRECTION - EAST - 24x12	24	12				REMAIN																
SS-15	12B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																
SS-15	12C	M6-2_R(21)	1	DIRECTIONAL ARROW (Right - upward 45) - 21x15	21	15				REMOVE	1															Route 273
SS-15	12D	M6-1_R(21)	1	DIRECTIONAL ARROW (Right) - 21x15	21	15	2.2			ADD TO ASSEMBLY		1														
SS-15	13A	N/A	1	DELAWARE MEMORIAL BRIDGE						REMAIN																
SS-15	13B	N/A	1	DIRECTIONAL ARROW (Up) - Circular plaque						REMAIN																
SS-15	14	N/A	1	DESTINATION (BROWN BACKGROUND, WHITE BORDER)									REMAIN													First State --> National Monument Historic -->New Castle
SS-15	15	R4-4	1	BEGIN RIGHT TURN LANE YIELD TO BIKES	36	30				REMOVE	1															
SS-15	16	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-15	17A	M3-2(24)	1	CARDINAL DIRECTION - EAST - 24x12	24	12	2.0			NEW		1				SOIL	1									
SS-15	17B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0			ADD TO ASSEMBLY		1														Route 273
SS-15	17C	M5-1_R	1	ADVANCE TURN ARROW (Right - 90)	21	15	2.2			ADD TO ASSEMBLY		1														
SS-15	18	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-15	19	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-16	1	R1-2(48)	1	YIELD	48	48		6.9		RENEW	1	1				NEW CONCRETE	1									
SS-16	2A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															Christiana Rd
SS-16	2B	D1-2	1	DESTINATION (2 Line)	48	30				REMOVE	1															<-- DuPont Pkwy N DuPont Hwy -->
SS-16	2C	D1-2	1	DESTINATION (2 Line)	48	30				REMOVE	1															DuPont Pkwy -->N DuPont Hwy <-- N DuPont Hwy
SS-16	2D	R3-4(24)	1	U - TURN PROHIBITION (Symbol) - 24x24	24	24				REPOSITION	1	1				SOIL	1									
SS-16	2E	R4-7c	1	NARROW KEEP RIGHT	18	30				REPOSITION	1	1														
SS-16	3A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-16	3B	R1-1(36)	1	STOP	36	36		7.5		NEW		1				SOIL	1									
SS-16	3C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-16	4A	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMOVE	1															
SS-16	4B	R4-7a(24)	1	KEEP RIGHT (Arrow) - 24x30	24	30				REMOVE	1															
SS-16	5A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-16	5B	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1														
SS-16	5C	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24	5.0			RENEW	1	1														
SS-16	6	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18				REMAIN																
SS-16	7	R1-2(36)	1	YIELD	36	36				REMOVE	1															
SS-16	8A	R9-3(18)	1	NO PEDESTRIAN CROSSING (Symbol) - 18x18	18	18				REMOVE	1															
SS-16	8B	R9-3bP_R	1	USE CROSSWALK --> (plaque)	18	12				REMOVE	1															
PAGE TOTALS							79	14	0		18	16		0	35		10	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES

PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 30-JUL-2024 @ 13:50
USER NAME: $USERFN OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		SHEET NO. 238
					CHECKED BY: P. HORSEY		

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-16	9A	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMOVE	1															
SS-16	9B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMOVE	1															
SS-16	10	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1					NEW CONCRETE	1								
SS-16	11	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18	1.5			RENEW	1	1					NEW CONCRETE	1								
SS-16	12	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-16	13	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1					NEW CONCRETE	1								
SS-16	14	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-16	15	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-16	16	R1-2(36)	1	YIELD	36	36				REMAIN																
SS-16	17A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
SS-16	17B	R1-1(36)	1	STOP	36	36				REMAIN																
SS-16	17C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-16	18A	M3-2(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12				REMAIN																
SS-16	18B	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																Route 13
SS-16	18C	M3-2(24)	1	CARDINAL DIRECTION - EAST - 24x12	24	12				REMAIN																
SS-16	18D	M1-4(24)	1	US ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																Route 40
SS-16	18E	N/A	1	ADOPT A HIGHWAY						REMAIN																
SS-16	18F	N/A	1	ADOPT A HIGHWAY						REMAIN																UNION LODGE #21 F & AM PHA
SS-16	19	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-16	20	N/A	1	DESTINATION (BROWN BACKGROUND, WHITE BORDER)									REMAIN													First State --> National Monument Historic --> New Castle
SS-16	21A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															Frenchtown Rd
SS-16	21B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-16	21D	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18				REMAIN																
SS-16	21E	R3-4(24)	1	U - TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-16	22	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1					NEW CONCRETE	1								
SS-16	23	R10-6(24)	1	STOP HERE ON RED (Straight Arrow) - 24x36	24	36	6.0			RENEW	1	1					NEW CONCRETE	1								Right Downward Diagonal Arrow
SS-16	24A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-16	24B	R10-6(24)	1	STOP HERE ON RED (Straight Arrow) - 24x36	24	36				REMAIN																Left Downward Diagonal Arrow
SS-16	24C	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMAIN																
SS-16	25	D14-3-DE	1	ADOPT A HIGHWAY	24	18				REMAIN																WILMINGTON UNIVERSITY
SS-16	26A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1					NEW CONCRETE	1								
SS-16	26B	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1														
SS-16	26C	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24	5.0			RENEW	1	1														
SS-16	27A	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				ADD TO ASSEMBLY		1														STOP ID: XXXX ROUTE XX FURNISHED BY: DART Contact: Bill Williamson Email:william.williamson@delaware.gov
SS-16	27B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1					SOIL	1								
SS-16	28	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48	12.0						RENEW	12.0	12.0	SOIL	2									
SS-17	1A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12				REMOVE	1															
SS-17	1B	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12	2.0			ADD TO ASSEMBLY		1														
SS-17	1C	M4-4(24)	1	TRUCK - 24x12	24	12				REMAIN																
SS-17	1D	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24	24	24				REMAIN																Route 9
SS-17	1E	M5-1_L(B)	1	ADVANCE TURN ARROW (Left - 90)	12	9				REMAIN																
SS-17	2A	M3-2(24)	1	CARDINAL DIRECTION - EAST - 24x12	24	12				REMAIN																
SS-17	2B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																Route 273
SS-17	2C	M5-1_L(B)	1	ADVANCE TURN ARROW (Left - 90)	12	9	0.8			ADD TO ASSEMBLY		1														
SS-17	3	D1-3	1	DESTINATION (3 Line)	72	42	21.0						NEW		21.0	SOIL	2									↑ Bear ← New Castle Newark → (Highway D, Text Size 6")
SS-17	4	D1-3	1	DESTINATION (3 Line)	72	42	21.0						NEW		21.0	SOIL	2									↑ Bear ← New Castle Newark → (Highway D, Text Size 6")
SS-17	5	R6-1_L(54)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 54x18	54	18	6.8						RENEW	6.8	6.8		2									
SS-17	6A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1						1								
SS-17	6B	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1														
SS-17	7	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-17	8	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1					SOIL									
SS-17	9	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36				REMOVE	1															
SS-17	10	R1-2(48)	1	YIELD	48	48		6.9		RENEW	1	1					SOIL	1								
SS-17	11A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-17	11B	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1					SOIL	1								
SS-17	12A	W2-4(30)	1	"T" (Symbol) - 30x30	30	30	6.3			RENEW	1	1					SOIL	1								
SS-17	12B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9	1.5			RENEW	1	1														Traders Ln (Highway C, Text Size 4")
SS-17	13	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-17	14	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1				SOIL	1									
SS-17	15	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1				SOIL	1									
PAGE TOTALS							138	67	0		23	23		19	96		25	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | $VERSIONS
MICROSTATION VERSION: | $WORKSPACES
MICROSTATION WORKSPACE: | $OFFICENAMES
PEN_TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 30-JUL-2024 @ 13:50
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY:	T. LORD		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				239

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-17	16	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1				SOIL	1									
SS-17	17A	M3-4(24)	1	CARDINAL DIRECTION - WEST - 24x12	24	12	2.0			NEW		1				SOIL	1									
SS-17	17B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0			ADD TO ASSEMBLY		1														Route 273
SS-17	17C	M6-1_R(21)	1	DIRECTIONAL ARROW (Right) - 21x15	21	15	2.2			ADD TO ASSEMBLY		1														
SS-18	1	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-18	2	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-18	3A	M2-1(21)	1	JUNCTION - 21x15	21	15				REMAIN																
SS-18	3B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																Route 273
SS-18	4	R1-2(36)	1	YIELD	36	36		3.9		NEW		1				SOIL	1									
SS-18	5	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18	6.8						NEW		6.8	SOIL	2									
SS-18	6A	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-18	6B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1														
SS-18	7	R1-2(36)	1	YIELD	36	36		3.9		NEW		1				SOIL	1									
SS-18	8	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18	6.8						NEW		6.8	SOIL	2									
SS-18	9	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-19	1	N/A	1	LOT C						REMAIN																
SS-19	2	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-19	3A	R1-1(36)	1	STOP	36	36				REMAIN																
SS-19	3B	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-19	4	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-19	5	N/A	1	LOT C						REMAIN																
SS-19	6	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-19	7	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				NEW		1				SOIL	1									STOP ID: XXXX ROUTE 40 FURNISHED BY DART Contact: Bill Williamson Email:william.williamson@delaware.gov
SS-19	8	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-19	9	R1-2(36)	1	YIELD	36	36		3.9		NEW		1				SOIL	1									
SS-19	10A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-19	10B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9	1.5			ADD TO ASSEMBLY		1														School Ln (Highway C, Text Size 4")
SS-19	11A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-19	11B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9	1.5			ADD TO ASSEMBLY		1														School Ln (Highway C, Text Size 4")
SS-19	12A	N/A	1	NEW CASTLE AIRPORT						REMAIN																
SS-19	12B	N/A	1	LEFT ARROW - CIRCULAR PLAQUE						REMAIN																
SS-19	12C	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-19	13	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18	6.8						NEW		6.8	SOIL	2									
SS-20	1	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-20	2	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30	5.0			NEW		1				EX. CONCRETE	1		1							
SS-20	3	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30				REMAIN																
SS-20	4	R1-2(36)	1	YIELD	36	36				REMAIN																
SS-20	5	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		ADD TO ASSEMBLY		1														Sign Missing from Post (4/6/2023)
SS-20	6	R3-7_R(36)	1	RIGHT LANE MUST TURN RIGHT - 36"x36"	36	36				REMAIN																
SS-20	7A	D3-1(9)	2	STREET NAME (1 Line)	24	9				REMOVE	2															SCHOOL LN
SS-20	7B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	36	18	9.0			ADD TO ASSEMBLY		2														School Ln (Highway C, Text Size 8"/6")
SS-20	7C	D3-1(9)	2	STREET NAME (1 Line)	24	9				REMOVE	2															NORTH DUPONT HWY
SS-20	7D	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-20	7E	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-20	7F	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1														
SS-20	7G	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24	5.0			RENEW	1	1														
SS-20	8	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		NEW		1				SOIL	1									
SS-20	9	R3-7_R(36)	1	RIGHT LANE MUST TURN RIGHT - 36"x36"	36	36				REMAIN																
SS-20	10	D1-2	1	DESTINATION (2 Line)	48	30				REMAIN																Airport Parking →
SS-20	11A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMAIN																
SS-20	11B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	26	9	1.6			ADD TO ASSEMBLY		1														School Ln (Highway C, Text Size 4")
SS-20	12A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMAIN																
SS-20	12B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	26	9	1.6			ADD TO ASSEMBLY		1														School Ln (Highway C, Text Size 4")
SS-20	13	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2173 ROUTES 13, 25, & 40
SS-20	14	R3-7_R(36)	1	RIGHT LANE MUST TURN RIGHT - 36"x36"	36	36	9.0			RENEW	1	1				SOIL	1									
SS-20	15	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-20	16	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-20	17	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-20	18	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18				REMAIN																
PAGE TOTALS							171	38	0		9	26		0	90		26	0	1	0		0	0	0	0	

PENNONI ASSOCIATES INC. | PEN TABLE: $PRINTBLS$
FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRVSS$
MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 30-JUL-2024 @ 13:51
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY:	T. LORD		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				240

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-20	19	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-20	20	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1									
SS-20	21	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60							NEW		17.5.0	SOIL	2									
SS-20	22	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-20	23	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2173 ROUTES 13, 25, & 40
SS-20	24A	R1-1(36)	1	STOP	36	36				REMAIN																
SS-20	24B	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-20	25	N/A	1	IN MEMORY						REMAIN																IN MEMORY OF MICHAEL NEWTON SMITH DELAWARE FIRE DEPT
SS-20	26	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-21	1	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36				REMAIN																
SS-21	2	D1-3	1	DESTINATION (3 Line)	72	42				REMAIN																Wilmington Airport Passenger Drop Off→ ↑ Airport Parking
SS-21	3	R6-1_L(54)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 54x18	54	18							REMAIN													
SS-21	4A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-21	4B	R1-1(36)	1	STOP	36	36				REMAIN																
SS-21	4C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMAIN																
SS-21	5	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-21	6A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMOVE	1															
SS-21	6B	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1														
SS-21	6C	R1-1(36)	1	STOP	36	36				REMAIN																
SS-21	6D	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-21	7	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		NEW		1				SOIL	1									
SS-21	8	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-21	9	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36				REMOVE	1															
SS-21	10A	M2-1(21)	1	JUNCTION - 21x15	21	15				REMAIN																
SS-21	10B	M1-4(30)	1	US ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																Route 202
SS-21	10C	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMAIN																Route 141
SS-21	10D	M5-2_R	1	ADVANCE TURN ARROW (Right - 45)	21	15				REMOVE	1															
SS-21	11	R1-1(36)	1	STOP	36	36				REMAIN																
SS-21	12	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				RENEW	1	1				SOIL	1									STOP ID: 2174 ROUTES 13, 25, & 40
SS-21	13	R1-1(36)	1	STOP	36	36				REMAIN																
SS-21	14	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-22	1	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-22	2	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-22	3A	R4-3-DE	1	TRUCK KEEP RIGHT EXCEPT LEFT TURNS	30	36				REMAIN																
SS-22	3B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-22	4A	R3-3-DE(24)	1	NO TURNS OFFICIAL USE ONLY - 24"x24"	24	24				REMAIN																
SS-22	4B	R3-18(36)	1	COMBINATION U-TURN AND LEFT TURN PROHIBITION (Symbol) - 36x36	36	36				REMAIN						SOIL										
SS-22	5A	R3-3-DE(24)	1	NO TURNS OFFICIAL USE ONLY - 24"x24"	24	24				REMAIN																
SS-22	5B	R3-18(36)	1	COMBINATION U-TURN AND LEFT TURN PROHIBITION (Symbol) - 36x36	36	36				REMAIN																
SS-22	6	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2175 ROUTES 13, 25, & 40
SS-22	7	W4-3_R(36)	1	ADDED LANE (Right) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-22	8	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-22	9	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMOVE	1															"ENTRANCE" not "ONE WAY"
SS-22	10	R3-11b-DE(42)	1	RIGHT LANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-22	11A	R3-3-DE(24)	1	NO TURNS OFFICIAL USE ONLY - 24"x24"	24	24				REMAIN																
SS-22	11B	EM-1-DE	1	EVACUATION ROUTE	24	24				REMAIN																
SS-22	11C	M6-3(B)	1	DIRECTIONAL ARROW (Up) - 12x9	12	9				REMAIN																
SS-22	12	R4-3-DE	1	TRUCK KEEP RIGHT EXCEPT LEFT TURNS	30	36	7.5			NEW		1				SOIL	1									
SS-22	13A	R7-107-DE(18)	1	NO PARKING (Blank) - 18"x24"	18	24				REMAIN																DART BUSES ONLY
SS-22	13B	EM-1-DE	1	EVACUATION ROUTE	24	24				REMAIN																
SS-22	13C	M6-3(B)	1	DIRECTIONAL ARROW (Up) - 12x9	12	9				REMAIN																
SS-22	14	R3-12f(30)	1	BUS LANE AHEAD - 30x42	30	42	8.8			NEW		1				SOIL	1									
SS-23	1	R1-2(48)	1	YIELD	48	48		6.9		RENEW	1	1				SOIL	1									
SS-23	2A	W4-1_R(36)	1	MERGE (Right) - 36x36	36	36				REMAIN																
SS-23	2B	N/A	1	ADOPT A HIGHWAY						REMAIN																UNION LODGE #21 F & AM PHA
PAGE TOTALS							124	16	0		9	12		0	263		21	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. $FILEAS
FILE NAME: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS
MICROSTATION WORKSPACE: $WORKSPACES
PEN TABLE: $PENTBLSS
PLOT DRIVER: $PLTDRVSS
DATE PLOTTED: 30-JUL-2024 @ 13:51
USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY: T. LORD		PAI
				COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
				NEW CASTLE			241

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-23	2C	N/A	1	UNION LODGE						REMAIN																
SS-23	3	W4-1_R(36)	1	MERGE (Right) - 36x36	36	36				REMAIN																
SS-23	4	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-23	5A	E5-1	1	EXIT GORE (No Number)	72	60							REMAIN													
SS-23	5B	E13-1P	1	EXIT GORE ADVISORY SPEED (plaque)	72	24							REMAIN													20 MPH
SS-23	6A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12	2.0			RENEW	1	1				SOIL	1								
SS-23	6B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0			RENEW	1	1													Route 141
SS-23	6C	M6-1_R(21)	1	DIRECTIONAL ARROW (Right) - 21x15	21	15				REMOVE	1														
SS-23	6D	M6-2_R(21)	1	DIRECTIONAL ARROW (Right - upward 45) - 21x15	21	15	2.2			ADD TO ASSEMBLY		1													
SS-23	7	R3-7_R(36)	1	RIGHT LANE MUST TURN RIGHT - 36"x36"	36	36	9.0			NEW		1				SOIL	1								
SS-23	8	W13-6_FY(24)	1	COMBINATION HORIZONTAL ALIGNMENT/ADVISORY EXIT SPEED - 24x42 (Fluorescent Yellow)	24	42		7.0		NEW		1				SOIL	1								
SS-23	9A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12				REMOVE	1														
SS-23	9B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMOVE	1														Route 141
SS-23	9C	M6-2_R(21)	1	DIRECTIONAL ARROW (Right - upward 45) - 21x15	21	15				REMOVE	1														
SS-23	10	W13-7_FY(24)	1	COMBINATION HORIZONTAL ALIGNMENT/ADVISORY RAMP SPEED - 24x42 (Fluorescent Yellow)	24	42		7.0		NEW		1				SOIL	1								15 MPH
SS-23	11A	E5-1	1	EXIT GORE (No Number)	72	60				REMOVE	1					SOIL									
SS-23	11B	E5-1	1	EXIT GORE (No Number)	72	60	30.0			ADD TO ASSEMBLY		1													Horizontal Arrow (Right)
SS-23	11C	E13-1P	1	EXIT GORE ADVISORY SPEED (plaque)	72	24				REMOVE	1														20 MPH
SS-23	12A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-23	12B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-23	13A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-23	13B	W16-7P_R(24)	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-23	14	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1								
SS-23	15A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-23	15B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-23	16A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-23	16B	W16-7P_R(24)	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-23	17	R1-2(48)	1	YIELD	48	48		6.9		RENEW	1	1				SOIL	1								
SS-23	18	N/A	1	OVERHEAD EXIT SIGN WITH RAMP ADVISORY SPEED	222	138												RENEW (OVERHEAD)				212.8				141 SOUTH New Castle ↗ EXIT 15 MPH Installation & Removal of Sign to be paid for under Items 818003, 822002, & 822009
SS-24	1A	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12				REMOVE	1														
SS-24	1B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMOVE	1														Route 141
SS-24	1C	M1-4(30)	1	US ROUTE (3 - Digit Sign) - 30x24	30	24				REMOVE	1														Route 202
SS-24	1D	M6-2_R(21)	1	DIRECTIONAL ARROW (Right - upward 45) - 21x15	21	15				REMOVE	1														
SS-24	2A	E5-1	1	EXIT GORE (No Number)	72	60	30.0			RENEW	1	1				SOIL	1								
SS-24	2B	E13-1P	1	EXIT GORE ADVISORY SPEED (plaque)	72	24				RENEW	1	1													20 MPH
SS-24	3A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-24	3B	W16-7P_R(24)	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-24	4A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-24	4B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-24	5A	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12				REMOVE	1														
SS-24	5B	M1-4(30)	1	US ROUTE (3 - Digit Sign) - 30x24	30	24				REMOVE	1														Route 202
SS-24	5C	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24				REMOVE	1														Route 141
SS-24	5D	M5-2_R	1	ADVANCE TURN ARROW (Right - 45)	21	15				REMOVE	1														
SS-24	6A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			ADD TO ASSEMBLY		1													
SS-24	6B	R1-1(36)	1	STOP	36	36		7.5		RENEW	1	1				SOIL	1								
SS-24	6C	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1													
SS-24	7	W13-6_FY(24)	1	COMBINATION HORIZONTAL ALIGNMENT/ADVISORY EXIT SPEED - 24x42 (Fluorescent Yellow)	24	42		7.0		NEW		1				SOIL	1								
SS-24	8	W13-7_FY(24)	1	COMBINATION HORIZONTAL ALIGNMENT/ADVISORY RAMP SPEED - 24x42 (Fluorescent Yellow)	24	42		7.0		NEW		1				SOIL	1								15 MPH
SS-24	9	E5-1	1	EXIT GORE (No Number)	72	60	30.0			NEW		1				SOIL	1								Right Horizontal Arrow
SS-24	10A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-24	10B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-24	11A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-24	11B	W16-7P_R(24)	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-24	12A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-24	12B	W16-7P_R(24)	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-24	13A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-24	13B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1													
SS-24	14	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5			RENEW	1	1				SOIL	1								
SS-24	15A	R1-2(36)	1	YIELD	36	36		3.9		RENEW	1	1				SOIL	1								
SS-24	15B	W4-5P(18)	1	NO MERGE AREA (plaque) - 18x24	18	24	3.0			ADD TO ASSEMBLY		1													
				PAGE TOTALS			231	46	0		23	40		0	0		23	0	0	0		213	0	0	0	

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
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MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 30-JUL-2024 @ 13:51
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ OFFICE LOCATION: $OFFICENAMES$

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY: T. LORD		PAI
				COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
				NEW CASTLE			242

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-24	16A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			RENEW	1	1				SOIL	1									
SS-24	16B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0			RENEW	1	1														
SS-24	17A	W11-8(36)	1	EMERGENCY VEHICLE (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-24	17B	W11-12P	1	EMERGENCY SIGNAL AHEAD (plaque)	36	36	9.0			ADD TO ASSEMBLY		1														
SS-24	18A	W11-8(36)	1	EMERGENCY VEHICLE (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-24	18B	W11-12P	1	EMERGENCY SIGNAL AHEAD (plaque)	36	36	9.0			ADD TO ASSEMBLY		1														
SS-24	19	N/A	1	OVERHEAD EXIT SIGN WITH RAMP ADVISORY SPEED	210	162														RENEW (OVERHEAD)	236.3		1.0	236.3	NORTH 202 NORTH 141 Newport ↗ RAMP SPEED 15 Installation & Removal of Sign to be paid for under Items 818003, 822002, & 822009
SS-24	20A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36				REMAIN																
SS-24	20B	W16-7P_R(24)	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12				REMAIN																
SS-25	1A	D3-1(9)	2	STREET NAME (1 Line)	30	9				REMOVE	2															WASHINGTON AV
SS-25	1B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0						ADD TO ASSEMBLY		12.0											Washington Ave (Highway B, Text Size 6.5"/4.5")
SS-25	1C	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0						ADD TO ASSEMBLY		3.0											
SS-25	1D	R1-1(36)	1	STOP	36	36							REMAIN													
SS-25	1E	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24							REMOVE	5.0												
SS-25	1F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0						ADD TO ASSEMBLY		4.0											
SS-25	2A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-25	2B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	48	9	3.0			ADD TO ASSEMBLY		1														Lincoln Ave (Highway C, Text Size 4")
SS-25	3	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-25	4	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Lincoln Ave (Highway B, Text Size 8"/6")
SS-25	5	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30	5.0			RENEW	1	1				NEW CONCRETE	1									
SS-25	6A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-25	6B	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1														
SS-25	6C	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMAIN																
SS-25	7	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36	6.0			RENEW	1	1				SOIL	1									
SS-25	8	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-25	9	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2121 ROUTES 13, 25 &40
SS-25	10	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		RENEW	1	1				SOIL	1									
SS-25	11A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																N Dupont Hwy
SS-25	11B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Garfield Ave
SS-25	11C	R1-1(36)	1	STOP	36	36				REMAIN																
SS-25	11D	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-25	12	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36	6.0			RENEW	1	1				SOIL	1									
SS-25	13A	N/A	1	RIGHT LANE MUST TURN RIGHT EXCEPT BUSES AND BIKES	36	42	10.5			NEW		1				SOIL	1									
SS-25	13B	R10-31P	1	AT SIGNAL (plaque)	24	9	1.5			ADD TO ASSEMBLY		1														
SS-25	14A	W11-8(36)	1	EMERGENCY VEHICLE (Symbol) - 36x36	36	36	9.0			RENEW	1	1				SOIL	1									
SS-25	14B	W11-12P	1	EMERGENCY SIGNAL AHEAD (plaque)	36	36	9.0			ADD TO ASSEMBLY		1														
SS-25	15A	W11-8(36)	1	EMERGENCY VEHICLE (Symbol) - 36x36	36	36	9.0			RENEW	1	1				SOIL	1									
SS-25	15B	W11-12P	1	EMERGENCY SIGNAL AHEAD (plaque)	36	36	9.0			ADD TO ASSEMBLY		1														
SS-25	16	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-25	17A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-25	17B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	38	9	2.4			ADD TO ASSEMBLY		1														Lincoln Ave (Highway C, Text Size 4")
SS-25	18	D1-2	1	DESTINATION (2 Line)	60	30							REMAIN													<-- Wilmington University (Highway D, Text Size 6")
SS-25	19A	D3-2-DE1	1	WELCOME TO	36	32				REMAIN																<-- Wilmington University
SS-25	19B	D3-2-DE2	1	DEVELOPMENT NAME	36	24				REMAIN																Wilmington Manor <---
SS-25	20A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-25	20B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	38	9	2.4			ADD TO ASSEMBLY		1														Lincoln Ave (Highway C, Text Size 4")
SS-25	21	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-25	22	N/A	1	ENTRANCE - WILMINGTION UNIVERSITY	48	24							REPOSITION	8.0	8.0	SOIL	2									WELCOME TO WILMINGTON UNIVERSITY ENTRANCE AT LIGHT -->
SS-25	23	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-25	24	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1				SOIL	1									
SS-25	25	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24	30	5.0			NEW		1				SOIL	1									
SS-25	26A	W9-2_L(36)	1	LANE ENDS MERGE LEFT - 36x36	36	36				REMAIN																
SS-25	26B	EM-1-DE	1	EVACUATION ROUTE	24	24				REMAIN																
SS-25	26C	M6-3(B)	1	DIRECTIONAL ARROW (Up) - 12x9	12	9				REMAIN																
SS-25	27A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-25	27B	W14-2a_R	1	NO OUTLET (Arrow right)	36	8				REMAIN																
SS-25	28A	N/A	1	NO OUTLET						REMOVE	1															
SS-25	28B	W14-2(30)	1	NO OUTLET - 30x30	30	30	6.3			NEW		1				SOIL	1									
SS-25	29A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12				REMAIN																
SS-25	29B	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
				PAGE TOTALS			187	18	0		15	29		13	27		20	0	0	0		236	0	1	236	

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MICROSTATION WORKSPACE: — $VERSIONS
PRN. TABLE: — $WORKSPACES
PLOT DRIVER: — $PLOTTED: 30-JUL-2024 @ 13:51
DATE PLOTTED: — $USERS
USER NAME: — $OFFICENAMES
OFFICE LOCATION:

ADDENDA / REVISIONS

NOT TO SCALE

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	BRIDGE NO.	N/A
T201901102	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PERMANENT SIGN SCHEDULE

SECTION: PAI
SHEET NO.: 243

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6' (EACH)	ITEM 819017 4" HOLE, >6' (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-25	29C	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMAIN																
SS-25	29D	W14-2a_R	1	NO OUTLET (Arrow right)	36	8				REMOVE	1															
SS-25	30	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-25	31A	W11-8(36)	1	EMERGENCY VEHICLE (Symbol) - 36x36	36	36				REMAIN																
SS-25	31B	R3-3-DE(24)	1	NO TURNS OFFICIAL USE ONLY - 24"x24"	24	24				REMAIN																
SS-25	32A	N/A	1	NO THRU TRAFFIC ON SHOULDER						REMAIN																
SS-25	32B	D14-3-DE	1	ADOPT A HIGHWAY	24	18				REMAIN																SERVTAM GIRLS ACADEMY
SS-25	32C	D14-3-DE	1	ADOPT A HIGHWAY	24	18				REMAIN																QUEEN OF HEARTS SC
SS-25	33A	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-25	33B	W11-8(36)	1	EMERGENCY VEHICLE (Symbol) - 36x36	36	36				REMAIN																
SS-25	33C	R3-3-DE(24)	1	NO TURNS OFFICIAL USE ONLY - 24"x24"	24	24				REMAIN																
SS-25	34A	W4-2_R(36)	1	LANE ENDS (Right) - 36x36	36	36				REMOVE	1															
SS-25	34B	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2176 ROUTES 13, 25 & 40
SS-25	34C	N/A	1	BUS STOP NO PARKING ANYTIME						REMAIN																
SS-25	35A	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48				REMAIN																
SS-25	35B	N/A	1	BUS STOP NO PARKING ANYTIME						REMAIN																
SS-25	36A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-25	36B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9			ADD TO ASSEMBLY		1														Lincoln Ave (Highway C, Text Size 4")
SS-26	1	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36	6.0			NEW		1				SOIL	1									
SS-26	2		1							NEW		1				SOIL	1									
SS-26	3	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-26	4	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2120 ROUTES 13, 25 & 40
SS-26	5A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-26	5B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-26	5C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																W Jackson Ave
SS-26	5D	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36				REMOVE	1															
SS-26	5E	R1-1(36)	1	STOP	36	36				REMAIN																
SS-26	6A	R10-27	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP	30	36				REPOSITION	1	1				SOIL	1									
SS-26	6B	R10-5(30)	1	LEFT ON GREEN ARROW ONLY - 30x36	30	36				REPOSITION	1	1														
SS-26	6C	R10-20aP	1	MON - FRI, XAM-XAM, XPM-XPM (plaque)	24	24				REPOSITION	1	1														7AM-9AM 4PM-6PM
SS-26	7A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12				REMAIN																
SS-26	7B	R7-202aP-DE	1	BEGIN (plaque - red)	12	6				REMAIN																
SS-26	7C	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-26	7D	R8-3hP(24)	1	TIME OF DAY (plaque) - 24x18	24	18				REMAIN																MON - FRI 7:00 AM - 3:30 PM
SS-26	8	R5-1(30)	1	DO NOT ENTER - 30x30	30	30		6.3		RENEW	1	1				SOIL	1									
SS-26	9A	W21-1I-DE	1	WATCH CHILDREN (Symbol)	30	30				REMAIN																
SS-26	9B	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24	30				REMAIN																
SS-26	10A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-26	10B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-26	10C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																W Harrison Ave
SS-26	10D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-26	10E	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-26	11A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		RENEW	1	1				SOIL	1									
SS-26	11B	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24	3.0			RENEW	1	1														
SS-26	12	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-26	13	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-26	15	N/A	1	NO TRAFFIC ON SHOULDER EMERGENCY USE ONLY						REMOVE	1															
SS-26	16A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																W Monroe Ave
SS-26	16B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-26	16C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-26	16D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
SS-26	16E	R1-1(36)	1	STOP	36	36				REMAIN																
SS-26	16F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-26	17A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Monroe Ave
SS-26	17B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															DuPont Hwy
SS-26	17C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-26	17D	W14-2a_R	1	NO OUTLET (Arrow right)	36	8				REMAIN																
SS-26	17E	R1-1(36)	1	STOP	36	36				REMAIN																
SS-26	17F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-26	18	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
				PAGE TOTALS			79	15	0		20	22		0	0		8	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTABLES
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 30-JUL-2024 @ 13:51
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		SHEET NO. 244
					CHECKED BY: P. HORSEY		

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-26	19A	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-26	19B	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-26	20	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-26	21A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-26	21B	N/A	1	NO THRU TRAFFIC ON SHOULDER						REMOVE	1															
SS-26	21C	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-26	22A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Stahl Ave
SS-26	22B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															DuPont Hwy
SS-26	22C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-26	22D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12				REMAIN																
SS-26	22E	R3-5_R	1	MANDATORY MOVEMENT LANE CONTROL - Right	30	36				REMAIN																
SS-26	23A	R10-27	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP	30	36				REMAIN																
SS-26	23B	R10-5(30)	1	LEFT ON GREEN ARROW ONLY - 30x36	30	36				REMAIN																
SS-26	23C	R10-20aP	1	MON - FRI, XAM-XAM, XPM-XPM (plaque)	24	24				REMAIN																7AM-9AM 4PM-6PM
SS-26	24	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2180 ROUTES 13, 25 & 40
SS-26	25	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-26	26	W11-1(30)	1	BICYCLE (Symbol) - 30x30	30	30				REMOVE	1															
SS-26	27	N/A	1	RED LIGHT PHOTO INFORCED						REMAIN																
SS-26	28	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-26	29	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-26	30	R3-11b-DE(42)	1	RIGHTLANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-26	31A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Grant Ave
SS-26	31B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															DuPont Hwy
SS-26	31C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-26	31D	R1-1(36)	1	STOP	36	36				REMAIN																
SS-26	31E	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-27	1A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-27	1B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-27	1C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																W Roosevelt Ave
SS-27	1D	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1								
SS-27	1E	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	1F	R6-3(30)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 30x24	30	24				REMOVE	1															
SS-27	1G	R6-3a(30)	1	DIVIDED HIGHWAY CROSSING (T - Intersection) - 30x24	30	24	5.0			ADD TO ASSEMBLY		1														
SS-27	2A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36				REMAIN																
SS-27	2B	W16-8aP	1	ADVANCE STREET NAME (2 - line plaque)	42	18	5.3			ADD TO ASSEMBLY		1														← Stahl Ave Harrison Ave → (Highway C, Text Size 4")
SS-27	3	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24	3.0			RENEW	1	1				SOIL	1								
SS-27	4A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0			RENEW	1	1				SOIL	1								
SS-27	4B	W16-8aP	1	ADVANCE STREET NAME (2 - line plaque)	42	18	5.3			ADD TO ASSEMBLY		1														← Stahl Ave Harrison Ave → (Highway C, Text Size 4")
SS-27	5	R4-8(24)	1	KEEP LEFT (Symbol) - 24x30	24	30				REMAIN																
SS-27	6A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1								
SS-27	6B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	7	R3-3(36)	1	NO TURNS - 36x36	36	36	9.0			NEW		1				SOIL	1								
SS-27	8A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	8B	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REMAIN																STOP ID: 2119 ROUTES 13, 25, & 40
SS-27	9A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	9B	R3-3(36)	1	NO TURNS - 36x36	36	36				REMAIN																
SS-27	10	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-27	11A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-27	11B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-27	11C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																W Van Buren Ave
SS-27	11D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1								
SS-27	11E	R1-1(36)	1	STOP	36	36				REMAIN																
SS-27	11F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-27	12	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-27	13	R10-18a	1	TRAFFIC SIGNAL PHOTO ENFORCED	30	42				REMAIN																
SS-27	14	R10-18a	1	TRAFFIC SIGNAL PHOTO ENFORCED	30	42				REMAIN																
SS-27	15A	D3-2-DE1	1	WELCOME TO	36	32	8.0			RENEW	1	1				SOIL	1								
SS-27	15B	D3-2-DE2	1	DEVELOPMENT NAME	36	24				REMOVE	1															WILMINGTON MANOR →
SS-27	15C	D3-2-DE2	1	DEVELOPMENT NAME	36	24	6.0			ADD TO ASSEMBLY		1														Wilmington Manor →
SS-27	16A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
PAGE TOTALS							133	0	0		20	21		0	18		9	0	0	0		0	0	0	0	

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLS$
FILE NAME: $FILEAS$ | PLOT DRIVER: $PLTDRVS$
MICROSTATION VERSION: $VERSIONS$ | DATE PLOTTED: 30-JUL-2024 @ 13:51
MICROSTATION WORKSPACE: $WORKSPACES$ | USER NAME: $USERS$ | OFFICE LOCATION: $OFFICENAMES$

Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: T. LORD		SHEET NO. 245
					CHECKED BY: P. HORSEY		

PERMANENT SIGN SCHEDULE - ROADWAY

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 / ITEM 818001 FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 / ITEM 818003 FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	X15 / ITEM 819512 SIGN POST REFLECTIVE PANEL (EA)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 / ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	X17 / ITEM 819023 15' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 822500 INSTALL OVERHEAD SIGN (SF) ON SIGNAL POLES TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM, EXCEPT FOR PILOT PROJECTS	REMARKS
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL											
SS-27	16B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-27	16C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																W Franklin Ave
SS-27	16D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-27	16E	R1-1(36)	1	STOP	36	36				REMAIN																
SS-27	16F	R3-5_R	1	MANDATORY MOVEMENT LANE CONTROL - Right	30	36	7.5			ADD TO ASSEMBLY		1														
SS-27	17	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-27	18	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-27	19	R5-1a(42)	1	WRONG WAY - 42x30	42	30				REMAIN																
SS-27	20	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24				REMOVE	1															
SS-27	21	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2179 ROUTES 13, 25, & 40
SS-27	22	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	23A	R3-3(36)	1	NO TURNS - 36x36	36	36	9.0			RENEW	1	1				SOIL	1									
SS-27	23B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		9.0		ADD TO ASSEMBLY		1														
SS-27	24	R3-3(36)	1	NO TURNS - 36x36	36	36	9.0			NEW		1				EX. CONCRETE	1		1							
SS-27	25A	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-27	25B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	26A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																E Roosevelt Ave
SS-27	26B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-27	26C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-27	26D	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-27	26E	R5-1(36)	1	DO NOT ENTER - 36x36	36	36				REMAIN																
SS-27	27	R4-8(24)	1	KEEP LEFT (Symbol) - 24x30	24	30				REMAIN																
SS-27	28	N/A	1	LANDSCAPE SPONSOR						REMAIN																LANDSCAPE SPONSORED BY FRIENDS OF LT JOSEPH SZCZERBA
SS-27	29	N/A	1	LANDSCAPE SPONSOR						REMAIN																LANDSCAPE SPONSORED BY FRIENDS OF LT JOSEPH SZCZERBA
SS-27	30	R5-1a(42)	1	WRONG WAY - 42x30	42	30		8.8		NEW		1				SOIL	1									
SS-27	31	R3-11b-DE(42)	1	RIGHTLANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-27	32	R3-11b-DE(42)	1	RIGHTLANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-27	33A	D3-2-DE1	1	WELCOME TO	36	32	8.0			NEW		1				SOIL	1									
SS-27	33B	D3-2-DE2	1	DEVELOPMENT NAME	36	24	6.0			ADD TO ASSEMBLY		1														Penn Acres <---
SS-28	1	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				NEW CONCRETE	1									STOP ID: 2118 ROUTES 13, 25,& 40
SS-28	2	R6-1_R(54)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 54x18	54	18	6.8						NEW		6.8	SOIL	2									
SS-28	3A	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMOVE	2															N Dupont Hwy
SS-28	3B	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18	12.0			ADD TO ASSEMBLY		2														N DuPont Hwy (Highway B, Text Size 8"/6")
SS-28	3C	D3-1(18)	2	STREET NAME (1 Line) Posted speed > 40 MPH	48	18				REMAIN																Jefferson Ave
SS-28	3D	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0			RENEW	1	1				SOIL	1									
SS-28	3E	R1-1(36)	1	STOP	36	36				REMAIN																
SS-28	3F	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24	24	24	4.0			ADD TO ASSEMBLY		1														
SS-28	4	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24	3.0			RENEW	1	1				SOIL	1									
SS-28	5	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48	12.0						NEW		12.0	SOIL	2									
SS-28	6A	R2-1-45(36)	1	SPEED LIMIT (45 MPH - 36x48)	36	48							REMAIN													
SS-28	6B	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24				REMAIN																
SS-28	7	D4-3-DE	1	BUS STOP (REQUESTS FOR FABRICATION THRU DART TRANSIT AT 302-576-6132)	12	18				REPOSITION	1	1				SOIL	1									STOP ID: 2117 ROUTES 13, 25 & 40
SS-28	8A	R7-202aP-DE	1	BEGIN (plaque - red)	12	6				REMAIN																
SS-28	8B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18				REMAIN																
SS-28	9	R3-11b-DE(42)	1	RIGHTLANE - BUSES BIKES RIGHT TURNS ONLY - 42x60	42	60	17.5						NEW		17.5	SOIL	2									
SS-29	1	W3-1(30)	1	STOP AHEAD (Symbol) - 30x30	30	30				REMAIN																
SS-29	2A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				SOIL	1									
SS-29	2B	W16-9P(24)	1	AHEAD (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1														
SS-30	1A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0			NEW		1				EX. CONCRETE	1		1							
SS-30	1B	W16-9P(24)	1	AHEAD (plaque) - 24x12	24	12	2.0			ADD TO ASSEMBLY		1														
Quigley	S-1	R3-4(36)	1	U - TURN PROHIBITION (Symbol) - 36x36	36	36															NEW (OVERHEAD)	9.0			9.0	
Quigley	S-2	D3-1(18)	1	STREET NAME (OVERHEAD) - 1 LINE	84	18															NEW (OVERHEAD)	10.5			10.5	Quigley Blvd → (Highway C, Text Size 12"/9")
SR 273	S-1	D3-1a(18)	1	STREET NAME + ROUTE SHIELD (OVERHEAD) - 1 LINE	114	18															NEW (OVERHEAD)	14.3			14.3	273 Frenchtown Rd (See SG Plan for additiona detail)
SR 273	S-2	D3-1a(18)	1	STREET NAME + ROUTE SHIELD (OVERHEAD) - 1 LINE	108	18															NEW (OVERHEAD)	13.5			13.5	273 Christiana Rd (See SG Plan for additiona detail)
SR 273	S-3	M1-4(36)	1	US ROUTE (2 - Digit Sign) - 36x36	36	36															NEW (OVERHEAD)	9.0			9.0	US 40
SR 273	S-4	M1-4(36)	1	US ROUTE (2 - Digit Sign) - 36x36	36	36															NEW (OVERHEAD)	9.0			9.0	US 30
Lincoln	S-1	W11-12-DE(60)	1	FIRE SIGNAL STOP ON FLASHING RED - 60x48	60	48															REMOVE (OVERHEAD)			1.0		
Lincoln	S-2	W11-12-DE(60)	1	FIRE SIGNAL STOP ON FLASHING RED - 60x48	60	48															NEW (OVERHEAD)	20.0			20.0	
Lincoln	S-3A	R10-27	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP	30	36	7.5			ADD TO ASSEMBLY		1														Add to Sign Assembly 25 on SS-25
Lincoln	S-3B	R10-5(30)	1	LEFT ON GREEN ARROW ONLY - 30x36	30	36	7.5			ADD TO ASSEMBLY		1														Add to Sign Assembly 25 on SS-25
Lincoln	S-3C	R10-20aP	1	MON - FRI, XAM-XAM, XPM-XPM (plaque)	24	24	4.0			ADD TO ASSEMBLY		1														Add to Sign Assembly 25 on SS-25 7AM-9AM 4PM-6PM
Lincoln	S-4A	R10-27	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP	30	36	7.5			ADD TO ASSEMBLY		1														Add to Sign Assembly 30 on SS-25
Lincoln	S-4B	R10-5(30)	1	LEFT ON GREEN ARROW ONLY - 30x36	30	36	7.5			ADD TO ASSEMBLY		1														Add to Sign Assembly 30 on SS-25
Lincoln	S-4C	R10-20aP	1	MON - FRI, XAM-XAM, XPM-XPM (plaque)	24	24	4.0			ADD TO ASSEMBLY		1														Add to Sign Assembly 30 on SS-25 7AM-9AM 4PM-6PM
				PAGE TOTALS			226	18	0		14	32		0	71		24	0	2	0		85	0	1	85	
				JOB TOTALS			2190	378	0		271	377		149	957		273	1	5	0		534	0	2	322	

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | $PLOTDRIVER$S
MICROSTATION VERSION: | $VERSIONS
MICROSTATION WORKSPACE: | $WORKSPACES
PEN TABLE: | $PENTBLS$
PLOT DRIVER: | $PLOTDRIVER$S
DATE PLOTTED: | 30-JUL-2024 @ 13:51
USER NAME: | $USERS
OFFICE LOCATION: | $OFFICENAMES

ADDENDA / REVISIONS		NOT TO SCALE	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201901102	DESIGNED BY:	T. LORD		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				246

ADDITIONAL GENERAL SIGNAL NOTES

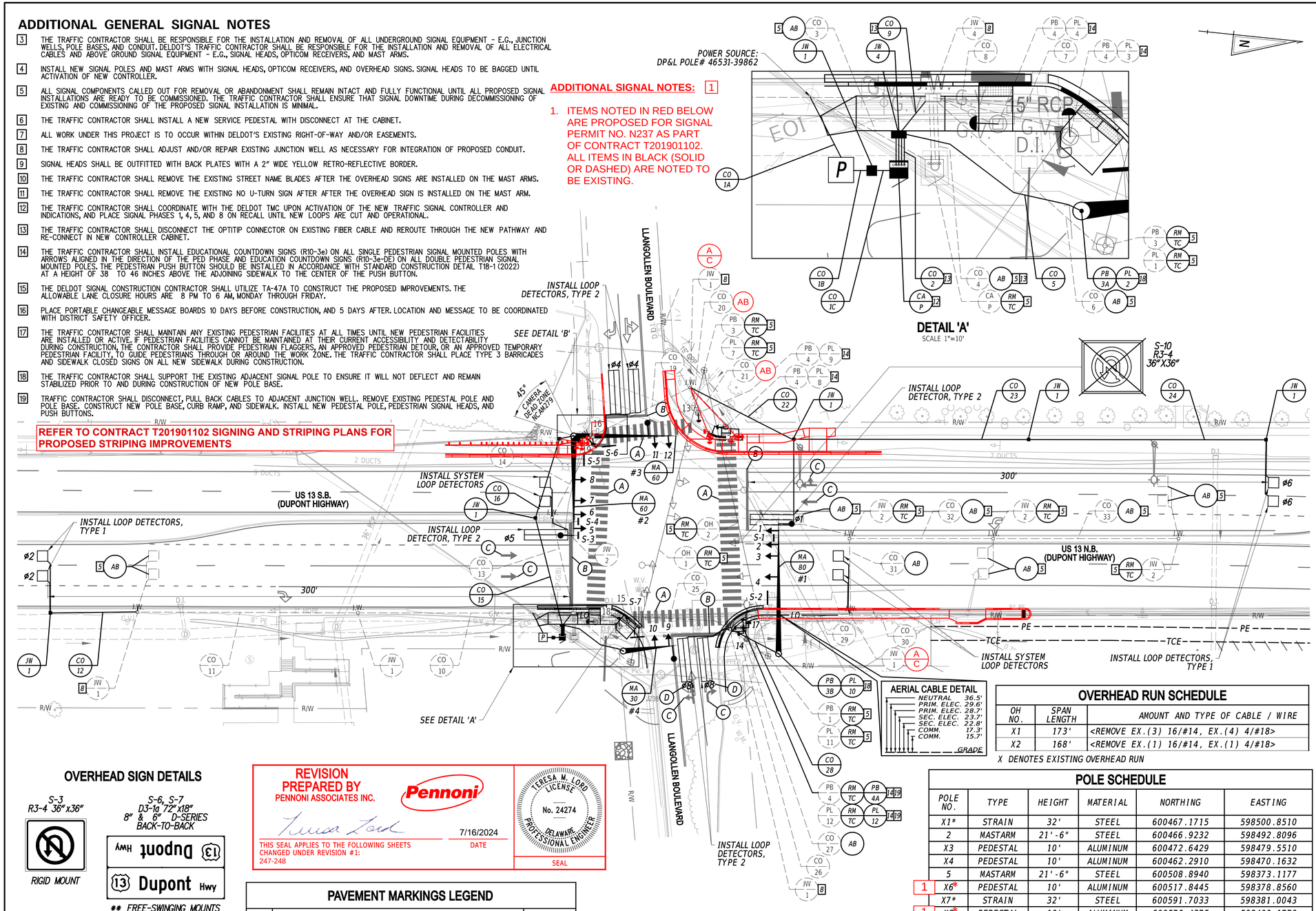
3. THE TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL UNDERGROUND SIGNAL EQUIPMENT - E.G., JUNCTION WELLS, POLE BASES, AND CONDUIT. DELDOT'S TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL ELECTRICAL CABLES AND ABOVE GROUND SIGNAL EQUIPMENT - E.G., SIGNAL HEADS, OPTICOM RECEIVERS, AND MAST ARMS.
4. INSTALL NEW SIGNAL POLES AND MAST ARMS WITH SIGNAL HEADS, OPTICOM RECEIVERS, AND OVERHEAD SIGNS. SIGNAL HEADS TO BE BAGGED UNTIL ACTIVATION OF NEW CONTROLLER.
5. ALL SIGNAL COMPONENTS CALLED OUT FOR REMOVAL OR ABANDONMENT SHALL REMAIN INTACT AND FULLY FUNCTIONAL UNTIL ALL PROPOSED SIGNAL INSTALLATIONS ARE READY TO BE COMMISSIONED. THE TRAFFIC CONTRACTOR SHALL ENSURE THAT SIGNAL DOWNTIME DURING DECOMMISSIONING OF EXISTING AND COMMISSIONING OF THE PROPOSED SIGNAL INSTALLATION IS MINIMAL.
6. THE TRAFFIC CONTRACTOR SHALL INSTALL A NEW SERVICE PEDESTAL WITH DISCONNECT AT THE CABINET.
7. ALL WORK UNDER THIS PROJECT IS TO OCCUR WITHIN DELDOT'S EXISTING RIGHT-OF-WAY AND/OR EASEMENTS.
8. THE TRAFFIC CONTRACTOR SHALL ADJUST AND/OR REPAIR EXISTING JUNCTION WELL AS NECESSARY FOR INTEGRATION OF PROPOSED CONDUIT.
9. SIGNAL HEADS SHALL BE OUTFITTED WITH BACK PLATES WITH A 2" WIDE YELLOW RETRO-REFLECTIVE BORDER.
10. THE TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING STREET NAME BLADES AFTER THE OVERHEAD SIGNS ARE INSTALLED ON THE MAST ARMS.
11. THE TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING NO U-TURN SIGN AFTER AFTER THE OVERHEAD SIGN IS INSTALLED ON THE MAST ARM.
12. THE TRAFFIC CONTRACTOR SHALL COORDINATE WITH THE DELDOT TMC UPON ACTIVATION OF THE NEW TRAFFIC SIGNAL CONTROLLER AND INDICATIONS, AND PLACE SIGNAL PHASES 1, 4, 5, AND 8 ON RECALL UNTIL NEW LOOPS ARE CUT AND OPERATIONAL.
13. THE TRAFFIC CONTRACTOR SHALL DISCONNECT THE OPTITIP CONNECTOR ON EXISTING FIBER CABLE AND REROUTE THROUGH THE NEW PATHWAY AND RE-CONNECT IN NEW CONTROLLER CABINET.
14. THE TRAFFIC CONTRACTOR SHALL INSTALL EDUCATIONAL COUNTDOWN SIGNS (R10-3e) ON ALL SINGLE PEDESTRIAN SIGNAL MOUNTED POLES WITH ARROWS ALIGNED IN THE DIRECTION OF THE PED PHASE AND EDUCATION COUNTDOWN SIGNS (R10-3e-DE) ON ALL DOUBLE PEDESTRIAN SIGNAL MOUNTED POLES. THE PEDESTRIAN PUSH BUTTON SHOULD BE INSTALLED IN ACCORDANCE WITH STANDARD CONSTRUCTION DETAIL T18-1 (2022) AT A HEIGHT OF 38" TO 46 INCHES ABOVE THE ADJOINING SIDEWALK TO THE CENTER OF THE PUSH BUTTON.
15. THE DELDOT SIGNAL CONSTRUCTION CONTRACTOR SHALL UTILIZE TA-47A TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE ALLOWABLE LANE CLOSURE HOURS ARE 8 PM TO 6 AM, MONDAY THROUGH FRIDAY.
16. PLACE PORTABLE CHANGEABLE MESSAGE BOARDS 10 DAYS BEFORE CONSTRUCTION, AND 5 DAYS AFTER. LOCATION AND MESSAGE TO BE COORDINATED WITH DISTRICT SAFETY OFFICER.
17. THE TRAFFIC CONTRACTOR SHALL MAINTAIN ANY EXISTING PEDESTRIAN FACILITIES AT ALL TIMES UNTIL NEW PEDESTRIAN FACILITIES ARE INSTALLED OR ACTIVE. IF PEDESTRIAN FACILITIES CANNOT BE MAINTAINED AT THEIR CURRENT ACCESSIBILITY AND DETECTABILITY DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE PEDESTRIAN FLAGGERS, AN APPROVED PEDESTRIAN DETOUR, OR AN APPROVED TEMPORARY PEDESTRIAN FACILITY, TO GUIDE PEDESTRIANS THROUGH OR AROUND THE WORK ZONE. THE TRAFFIC CONTRACTOR SHALL PLACE TYPE 3 BARRICADES AND SIDEWALK CLOSED SIGNS ON ALL NEW SIDEWALK DURING CONSTRUCTION.
18. THE TRAFFIC CONTRACTOR SHALL SUPPORT THE EXISTING ADJACENT SIGNAL POLE TO ENSURE IT WILL NOT DEFLECT AND REMAIN STABILIZED PRIOR TO AND DURING CONSTRUCTION OF NEW POLE BASE.
19. TRAFFIC CONTRACTOR SHALL DISCONNECT, PULL BACK CABLES TO ADJACENT JUNCTION WELL. REMOVE EXISTING PEDESTAL POLE AND POLE BASE. CONSTRUCT NEW POLE BASE, CURB RAMP, AND SIDEWALK. INSTALL NEW PEDESTAL POLE, PEDESTRIAN SIGNAL HEADS, AND PUSH BUTTONS.

REFER TO CONTRACT T201901102 SIGNING AND STRIPING PLANS FOR PROPOSED STRIPING IMPROVEMENTS

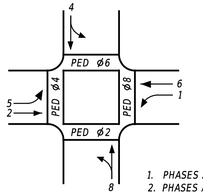
POWER SOURCE:
DP&L POLE# 46531-39862

ADDITIONAL SIGNAL NOTES: [1]

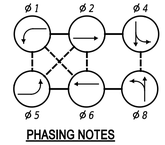
1. ITEMS NOTED IN RED BELOW ARE PROPOSED FOR SIGNAL PERMIT NO. N237 AS PART OF CONTRACT T201901102. ALL ITEMS IN BLACK (SOLID OR DASHED) ARE NOTED TO BE EXISTING.



SIGNAL PHASING



NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



EXISTING SIGNAL HEADS TO REMAIN



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY	R/W	R/W
SERVICE PEDESTAL	P	P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

OVERHEAD SIGN DETAILS

S-3
R3-4 36"x36"

RIGID MOUNT

S-6, S-7
D3-1d 72"x18"
8" & 6" D-SERIES
BACK-TO-BACK

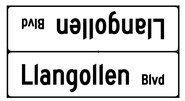
** FREE-SWINGING MOUNTS

S-1, S-4
R10-27 30"x36"



RIGID MOUNT

S-2, S-5
D3-1 84"x18"
8" & 6" D-SERIES
BACK-TO-BACK



** FREE-SWINGING MOUNTS

REVISION PREPARED BY

PENNONI ASSOCIATES INC.

Pennoni

7/16/2024
DATE

THIS SEAL APPLIES TO THE FOLLOWING SHEETS CHANGED UNDER REVISION #1:
247-248

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM 817002)	1,530 SF
B	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	195 SF
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND (ITEM 817002)	110 SF
D	REMOVAL OF PAVEMENT STRIPING (817031)	40 SF

MAST ARM SCHEDULE

MA NO.	LENGTH OF ARM	NO. OF SIGNAL HEADS	NO. OF OPTICOM RECEIVERS	NO. OF VEHICULAR DETECTORS	S.F. OF SIGNING	ARM MOUNT HEIGHT
1	80'	4	1	--	18	20'-0"
2	60'	4	1	--	27	20'-0"
3	60'	2	1	--	9	20'-0"
4	30'	2	1	--	9	20'-0"

OVERHEAD RUN SCHEDULE

OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
X1	173'	<REMOVE EX.(3) 16/#14, EX.(4) 4/#18>
X2	168'	<REMOVE EX.(1) 16/#14, EX.(1) 4/#18>

X DENOTES EXISTING OVERHEAD RUN

POLE SCHEDULE

	POLE NO.	TYPE	HEIGHT	MATERIAL	NORTHING	EASTING
	X1*	STRAIN	32'	STEEL	600467.1715	598500.8510
	2	MASTARM	21'-6"	STEEL	600466.9232	598492.8096
	X3	PEDESTAL	10'	ALUMINUM	600472.6429	598479.5510
	X4	PEDESTAL	10'	ALUMINUM	600462.2910	598470.1632
	5	MASTARM	21'-6"	STEEL	600508.8940	598373.1177
1	X6*	PEDESTAL	10'	ALUMINUM	600517.8445	598378.8560
	X7*	STRAIN	32'	STEEL	600591.7033	598381.0043
1	X8*	PEDESTAL	10'	ALUMINUM	600576.4375	598400.1779
1	X9*	PEDESTAL	10'	ALUMINUM	600585.4722	598415.4306
	10	MASTARM	21'-6"	STEEL	600541.5459	598541.8262
	X11*	STRAIN	32'	STEEL	600535.7377	598539.7065
	12	PEDESTAL	10'	ALUMINUM	600532.3918	598518.3703
	13	PEDESTAL	10'	ALUMINUM	600510.5138	598379.0036
	14	PEDESTAL	10'	ALUMINUM	600574.6723	598415.6103
	15	PEDESTAL	10'	ALUMINUM	600587.9264	598423.5681

X DENOTES EXISTING POLE
* DENOTES POLE TO BE REMOVED

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY

5/28/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WM" SECTION DESIGNATION.

JOHN L. RECTANUS LICENSE No. 19575 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

6/7/2024
DATE

ADDENDA / REVISIONS

1 NW AND SW QUADRANT RECONSTRUCTION - P. HORSEY, 6/11/2024

SCALE
0 30 60 90
FEET

FY25 INTERSECTION IMPROVEMENTS

CONTRACT	T202409203	PERMIT NO.	N237 - NCAM279
COUNTY	NEW CASTLE	DESIGNED BY:	J. WIGGINS
		CHECKED BY:	J. VARGAS

SIGNAL PLAN
U.S. 13 (DUPONT HIGHWAY) @ LLANGOLLEN BOULEVARD

SECTION: WM
SHEET NO.: 247

LAST REVISED: 9/11/2018
$DATES
$TIMES
$FILES

CONDUIT RUN SCHEDULE

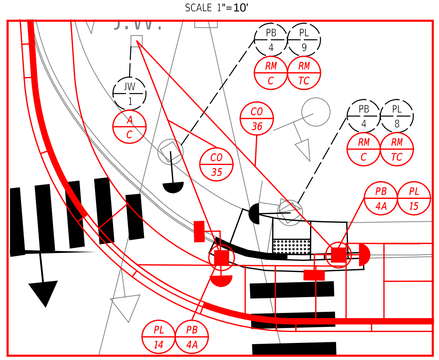
CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE	
1A	1	2"-RGS	45'	T	[NEW (3) #8 THHN CABLES - LINE SIDE]	
1B	1	2"-RGS	5'	T	[NEW (1) 2/#8 U.F. W/GROUND - LOAD SIDE]	
1C	1	2"-RGS	5'	T	[NEW (1) 2/#8 U.F. W/GROUND - LOAD SIDE]	
2	4	4"-PVC	10'	T	[NEW(4) 9/#14, (8) 5/#14, (14) 2/#14, (4) 4/#18, (3) 1/#6 GND, (1) CAT5E] {REROUTE EX. COMM. CABLE} REMOVE [(4)5/#14]; NEW [(4)5/#14]	1
X3	1	1.5"	25'	---	<REMOVE EX.(1) 2/#8 U.F. W/GROUND> ABANDON	
X4	3	2.5"	15'	---	{REROUTE EX. COMM. CABLE} <REMOVE EX.(2) 16/#14, EX.(6) 9/#14, EX.(12) 4/#18> ABANDON	
5	1	3"-PVC	35'	T	[NEW (1) 9/#14, (1) 4/#18, (1) 1/#6 GND]	
X7	1	2.5"	22'	---	<REMOVE EX.(1) 9/#14> [NEW (1) 5/#14, (1) 1/#6 GND]	
X6	1	2.5"	41'	---	<REMOVE EX.(3) 16/#14, EX.(4) 4/#18, EX.(1) 1/#6 GND> ABANDON	
X8	1	2.5"	12'	---	<REMOVE EX.(1) 9/#14> [NEW (1) 5/#14, (1) 1/#6 GND]	
9	1	4"-PVC	10'	T	[NEW (1) 9/#14, (8) 5/#14, (14) 2/#14, (1) 4/#18, (1) 1/#6 GND] {REROUTE EX. COMM. CABLE} REMOVE [(4)5/#14]; NEW [(2)5/#14]	1
X10	1	1.5"	124'	---	<REMOVE EX.(1) 4/#18> [NEW (2) 2/#14, (1) 1/#6 GND]	
X11	1	1.5"	126'	---	<REMOVE EX.(1) 4/#18> [NEW (2) 2/#14, (1) 1/#6 GND]	
12	1	4"-PVC	49'	T	[NEW (2) 2/#14, (1) 1/#6 GND]	
X13	1	2.5"	51'	---	<REMOVE EX.(3) 9/#14, EX.(3) 4/#18> REMOVE [(4)5/#14]; NEW [(2)5/#14] [NEW (4) 5/#14, (8) 2/#14, (1) 1/#6 GND]	1
X14	1	2.5"	51'	---	<REMOVE EX.(3) 9/#14, EX.(1) 4/#18> REMOVE [(4)5/#14]; NEW [(2)5/#14] [NEW (4) 5/#14, (5) 2/#14, (1) 1/#6 GND]	1
15	1	4"-PVC	65'	B	[NEW (2) 9/#14, (2) 4/#18, (1) 1/#6 GND, (1) CAT5E] NEW [(2)5/#14]	1
16	1	4"-PVC	47'	B	[NEW (2) 9/#14, (2) 4/#18, (1) 1/#6 GND, (1) CAT5E] NEW [(2)5/#14]	1
17	1	3"-PVC	8'	T	[NEW (2) 9/#14, (2) 4/#18, (1) 1/#6 GND, (1) CAT5E]	
X18	1	2.5"	6'	---	<REMOVE EX.(1) 9/#14> [NEW (2) 5/#14, (1) 1/#6 GND] REMOVE [(2)5/#14, (1) 1/#6 GND]; ABANDON	1
X19	1	2.5"	69'	---	<REMOVE EX.(2) 9/#14> REMOVE [(2)5/#14]; NEW [(2)5/#14] [NEW (2) 5/#14, (3) 2/#14, (1) 1/#6 GND]	1
X20	1	2.5"	14'	---	<REMOVE EX.(1) 9/#14> [NEW (1) 5/#14, (1) 1/#6 GND] REMOVE [(1)5/#14, (1) 1/#6 GND]; ABANDON	1
X21	1	2.5"	29'	---	<REMOVE EX.(1) 9/#14> [NEW (1) 5/#14, (1) 1/#6 GND] REMOVE [(1)5/#14, (1) 1/#6 GND]; ABANDON	1
22	1	4"-PVC	55'	T	[NEW (3) 2/#14, (1) 1/#6 GND]	
23	1	4"-PVC	145'	T	[NEW (2) 2/#14, (1) 1/#6 GND]	
24	1	4"-PVC	150'	T	[NEW (2) 2/#14, (1) 1/#6 GND]	
X25	1	2.5"	88'	---	<REMOVE EX.(1) 9/#14, EX.(4) 4/#18> [NEW (1) 9/#14, (2) 5/#14, (4) 2/#14, (1) 4/#18, (1) 1/#6 GND]	
X26	1	2.5"	12'	---	<REMOVE EX.(1) 9/#14> [NEW (2) 5/#14, (1) 1/#6 GND]	
X27	1	2.5"	29'	---	<EMPTY> ABANDON	
28	1	3"-PVC	30'	T	[NEW (1) 9/#14, (1) 4/#18, (1) 1/#6 GND]	
X29	1	2.5"	71'	---	EX. COMM. CABLE <REMOVE EX.(3) 4/#18> [NEW (2) 2/#14, (1) 1/#6 GND]	
X30	1	UNK	UNK	---	EX. COMM. CABLE	
X31	1	2.5"	43'	---	<REMOVE EX.(3) 4/#18> ABANDON	
X32	1	1.5"	82'	---	<REMOVE EX.(2) 4/#18> ABANDON	
X33	1	1.5"	107	---	<REMOVE EX.(1) 4/#18> ABANDON	

X DENOTES EXISTING CONDUIT RUN.
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

1	34	1	2.5"-PVC	13'	T	[NEW (2) 5/#14, (1) 1/#6 GND]
	35	1	2.5"-PVC	31'	T	[NEW (1) 5/#14, (1) 1/#6 GND]
	36	1	2.5"-PVC	39'	T	[NEW (1) 5/#14, (1) 1/#6 GND]

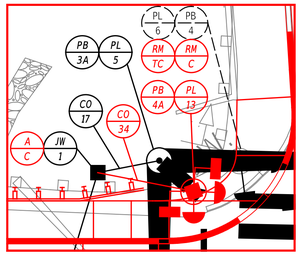
NORTHWEST QUADRANT DETAIL

SCALE 1"=10'



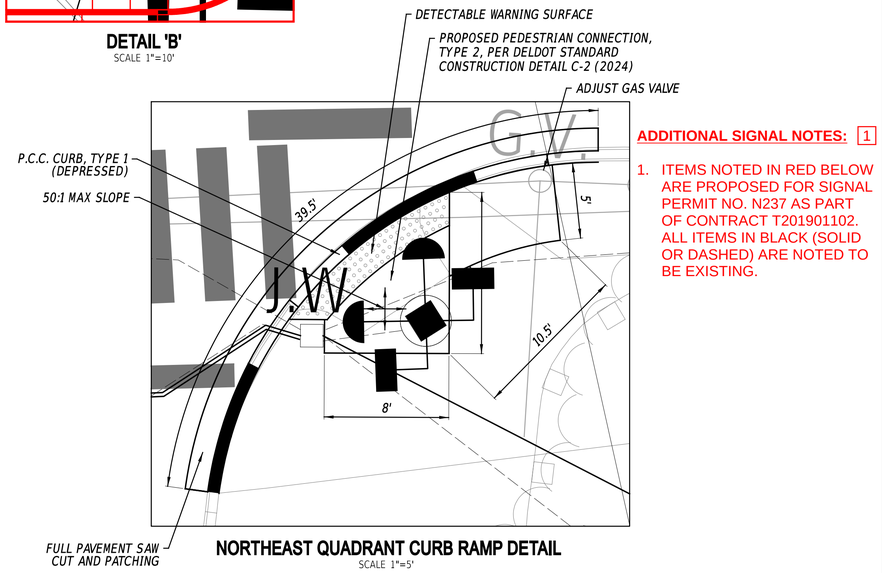
DETAIL 'B'

SCALE 1"=10'



NORTHEAST QUADRANT CURB RAMP DETAIL

SCALE 1"=5'

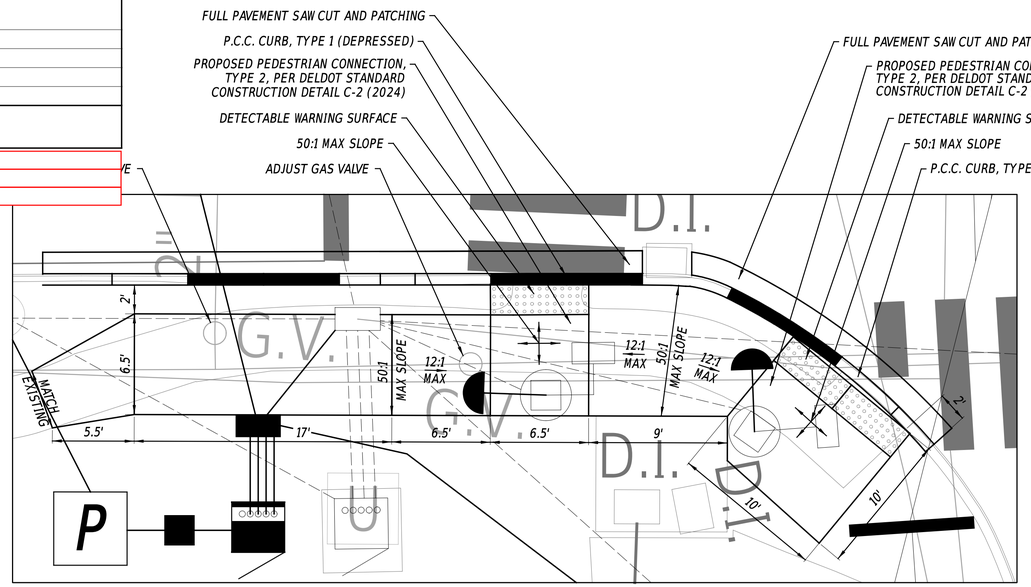


ADDITIONAL SIGNAL NOTES: 1

1. ITEMS NOTED IN RED BELOW ARE PROPOSED FOR SIGNAL PERMIT NO. N237 AS PART OF CONTRACT T201901102. ALL ITEMS IN BLACK (SOLID OR DASHED) ARE NOTED TO BE EXISTING.

SOUTHEAST QUADRANT CURB RAMP DETAIL

SCALE 1"=5'



REVISION PREPARED BY
PENNONI ASSOCIATES INC.

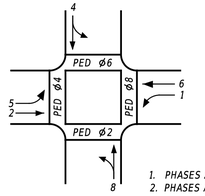
Pennoni

THIS SEAL APPLIES TO THE FOLLOWING SHEETS CHANGED UNDER REVISION #1:
247-248

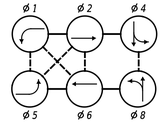
7/16/2024
DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

SIGNAL PHASING



NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



EXISTING SIGNAL HEADS TO REMAIN
13,15,16,18,19,20

LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1	⬚	▭
LOOP DETECTOR, TYPE 2	▭	▬
LUMINAIRE	——○	——✦
MAST ARM	➢	➤
MICROWAVE DETECTION	◀	◀
OPTICOM RECEIVER	—○	—●
OVERHEAD SIGNING	⊣	⊣
PEDESTRIAN POLE/BASE	⊚	⊛
PEDESTRIAN PUSHBUTTON	—▯	—▮
PEDESTRIAN SIGNAL HEAD	▭	▬
RIGHT-OF-WAY	———	——R/W——
SERVICE PEDESTAL	Ⓟ	Ⓟ
SIGNAL CABINET	▯	▮
SIGNAL HEAD	—▷	—▶
SIGNAL POLE/BASE	⊗	⊙
CCTV CAMERA	▭	■
SPAN WIRE	—— XX ——	——◇——
UTILITY POLE	⊘	⊘
VIDEO DETECTION	◀	◀

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY

WM

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WM" SECTION DESIGNATION.

5/28/2024
DATE

JOHN L. RECTANUS LICENSE No. 19575 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

6/7/2024
DATE

ADDENDA / REVISIONS		SCALE AS NOTED	FY25 INTERSECTION IMPROVEMENTS	CONTRACT	PERMIT NO.	N237 - NCAM279	SIGNAL PLAN U.S. 13 (DUPONT HIGHWAY) @ LLANGOLLEN BOULEVARD	SECTION
1	NW AND SW QUADRANT RECONSTRUCTION - P. HORSEY, 6/11/2024			T202409203	DESIGNED BY:	J. WIGGINS		WM
				COUNTY	CHECKED BY:	J. VARGAS		SHEET NO.
				NEW CASTLE				248

LAST REVISED: 9/11/2018
$DATE$
$TIME$
$FILE$

POLE SCHEDULE

POLE*	POLE TYPE	HEIGHT	NORTHING	EASTING
1*	PEDESTAL	14'	602730.713	599830.817
2**	PEDESTAL	10'	602792.636	599884.573
3*	STRAIN	28'	602843.261	599910.311
4*	MAST	21'	602849.574	599906.346
5*	PEDESTAL	10'	602747.456	599945.434
6*	PEDESTAL	10'	602749.458	599970.131
7**	PEDESTAL	10'	602684.297	600039.469
8*	STRAIN	28'	602734.939	600102.040
9	PEDESTAL	10'	602703.571	600054.533
10	PEDESTAL	10'	602681.013	600026.609
11	PEDESTAL	10'	602803.181	599894.287

* EXISTING TO REMAIN
** EXISTING TO BE REMOVED

OVERHEAD RUN SCHEDULE

OH*	LENGTH	AMOUNT AND TYPE OF CABLE/ WIRE
*1	220'	REMOVE [(1)16/#14, (2)4/#18], INSTALL[(2)16/#14,(2)4/#18]

*DENOTES EXISTING SPAN WIRES TO BE RENEWED

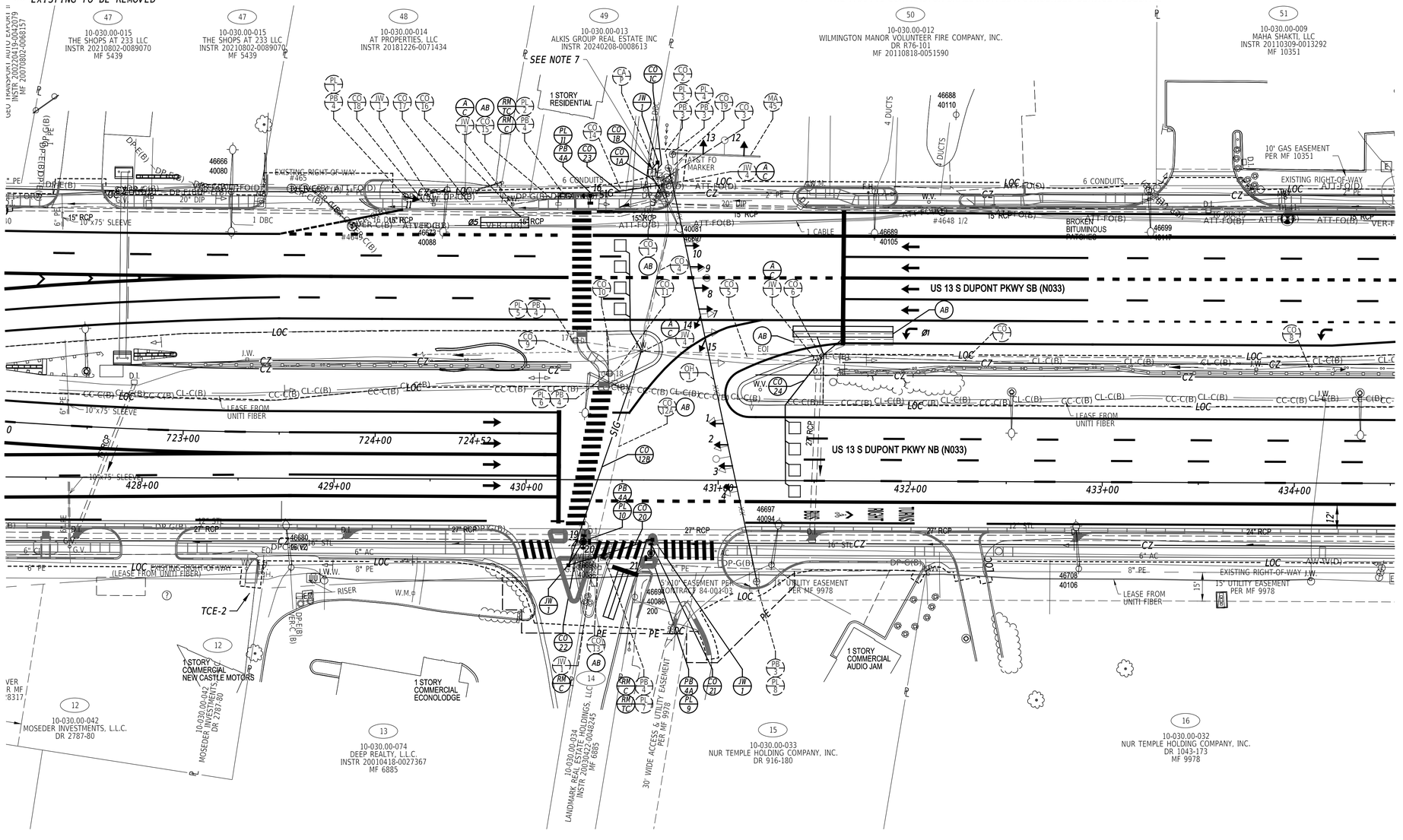
MAST ARM SCHEDULE

MA NO.	LENGTH OF ARM	NO. OF HEADS	S.F. OF SIGNING
*1	45'	2	0.0

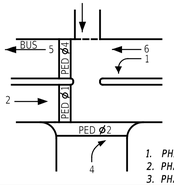
*DENOTES EXISTING

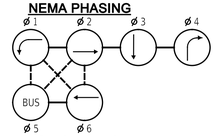
ADDITIONAL SIGNAL NOTES

3. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/11 = R10-3e-DE2R (RIGHT ARROW)
   PL/10 = R10-3e-DE3
   PL/9 = R10-3eR (RIGHT ARROW)
4. POWER SOURCE: DELMARVA POLE #40081-46697
5. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.
6. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.
7. THE TRAFFIC CONTRACTOR SHALL INSTALL A CONDENSED SERVICE PEDESTAL.



SIGNAL PHASING

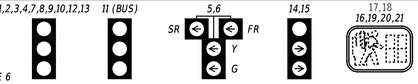




PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
3. PHASE 3 ONLY OPERATES DURING FIREHOUSE PREEMPTION.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)
OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
PL X	EXISTING POLE IDENTIFIER (# OF POLE)
PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
RM C	REMOVE BY CONTRACTOR
RM O	REMOVE BY OTHERS
RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY	R/W	R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

6/14/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE *PAI* SECTION DESIGNATION.

TERESA M. LOID LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

7/16/2024
DATE

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	PERMIT NO.	N319
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNAL PLAN
US 13 (DUPONT HWY)
WILMINGTON MANOR VOLUNTEER FIRE CO. #32

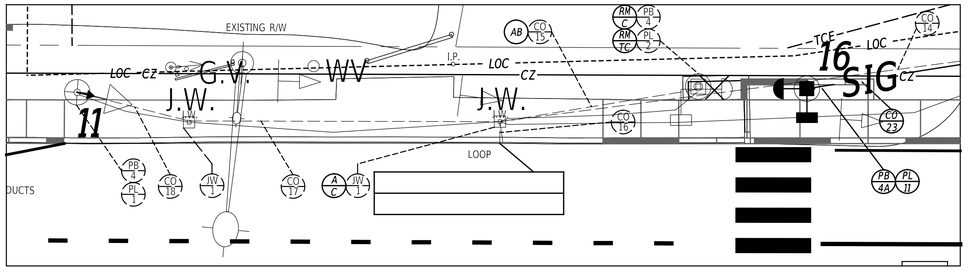
SECTION
PAI
SHEET NO.
249

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBLSS | FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS | MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:28 | MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

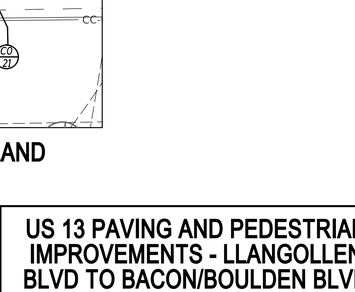
CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	2.0" GALV.	7'	-	REMOVE [(1)2/#8 U.F. w/G] ; ABANDON
1A	1	2.0" GALV.	9'	T	INSTALL [(3)#8 THHN STRANDED COPPER - LINE SIDE]
1B	1	2.0" GALV.	3'	T	INSTALL [(1)2/#8 U.F. w/G] - LOAD SIDE]
1C	1	2.0" GALV.	4'	T	INSTALL [(1)2/#8 U.F. w/G] - LOAD SIDE]
*2	1	2.5" PVC	6'	-	REMOVE [(1)16/#14, (1)4/#18], INSTALL [(2)16/#14, (2)4/#18, (1)#6 GND]
*3	3	2.5" HDPE	4'	-	REMOVE [(1)4/#18, (6)9/#14, (2)4/#18], EX.[FIBER], INSTALL [(1)5/#14, (1)4/#14, (12)2/#14, (2)#6 GND]
*4	2	2.5" HDPE	87'	-	REMOVE [(1)4/#18, (3)9/#14], EX.[FIBER], INSTALL [(5)5/#14, (11)2/#14, (1)#6 GND]
*5	1	2.5" HDPE	92'	-	REMOVE [(1)4/#18], INSTALL [(6)2/#14, (1)#6 GND]
*6	1	1.5" GALV.	5'	-	REMOVE [(1)4/#18], INSTALL [(2)2/#14, (1)#6 GND]
*7	1	UNK	321'	-	EX.[FIBER]
*8	1	UNK	UNK	-	EX.[FIBER]
*9	1	UNK	UNK	-	EX.[FIBER]
*10	1	2.5" PVC	35'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*11	1	2.5" PVC	20'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*12A	1	4.0" HDPE	111'	-	REMOVE [(1)9/#14]; ABANDON
12B	1	4.0" HDPE	118'	B	INSTALL [(3)5/#14, (1)2/#14), (1)#6 GND]
*13	1	2.5" PVC	6'	-	REMOVE [(1)9/#14]; ABANDON
*14	1	4.0" PVC	79'	-	REMOVE [(1)4/#18, (2)9/#14], INSTALL [(1)2/#14, (1)4/#14, (1)#6 GND]
*15	1	2.5" PVC	27'	-	REMOVE [(1)9/#14] ; ABANDON
*16	1	1.0" GALV.	3'	-	REMOVE [(1)4/#18], INSTALL [(1)2/#14, (1)#6 GND]
*17	1	4.0" PVC	41'	-	REMOVE [(1)9/#14], INSTALL [(1)4/#14, (1)#6 GND]
*18	1	2.5" PVC	16'	-	REMOVE [(1)9/#14], INSTALL [(1)4/#14, (1)#6 GND]
*19	1	3.0" PVC	20'	-	REMOVE [(1)9/#14, (1)4/#18], INSTALL [(1)4/#18, (1)4/#14, (1)#6 GND]
20	1	4.0" HDPE	47'	B	INSTALL [(1)5/#14, (1)2/#14, (1)#6 GND]
21	1	2.5" PVC	8'	T	INSTALL [(1)5/#14, (1)#6 GND]
22	1	2.5" PVC	15'	T	INSTALL [(1)5/#14, (1)#6 GND]
23	1	2.5" PVC	36'	T	INSTALL [(1)5/#14, (1)#6 GND]
24	1	1.5" GALV.	27'	T	INSTALL [(4)1/#14]

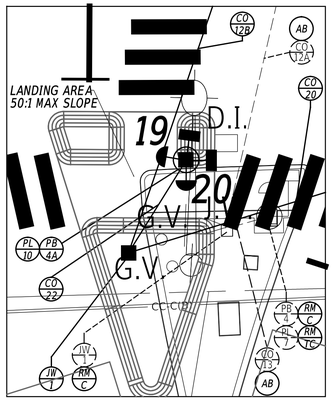
*DENOTES EXISTING B = BORE, T = TRENCH, O = OPEN CUT



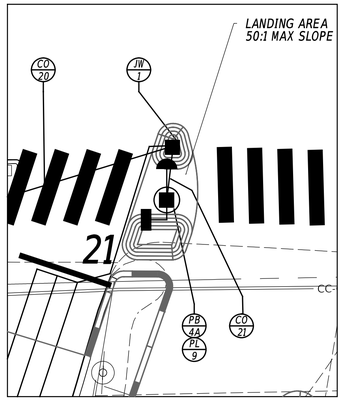
SOUTHEAST BUS QUEUE JUMP
SCALE 1"=10"



SOUTHWEST CORNER
SCALE 1"=10"



SOUTHEAST ISLAND
SCALE 1"=10"

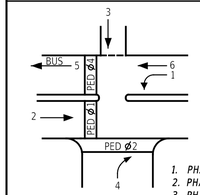


NORTHEAST ISLAND
SCALE 1"=10"

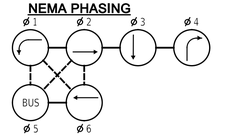
ADDITIONAL SIGNAL NOTES

3. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/11 = R10-3e-DE2R (RIGHT ARROW)
   PL/10 = R10-3e-DE3
   PL/9 = R10-3eR (RIGHT ARROW)
4. POWER SOURCE: DELMARVA POLE #40081-46697
5. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.
6. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.

SIGNAL PHASING

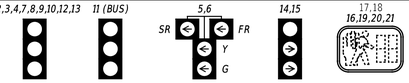


NEMA PHASING



PHASING NOTES
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
3. PHASE 3 ONLY OPERATES DURING FIREHOUSE PREEMPTION.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Ford — 6/14/2024 (DATE)

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. FORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER — SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 7/16/2024 DATE

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT T201901102	PERMIT NO. N319	SIGNAL PLAN US 13 (DUPONT HWY) WILMINGTON MANOR VOLUNTEER FIRE CO. #32	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 250
					CHECKED BY: P. HORSEY		

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
1	1	2.0"-RGS	27'	T	(3) #8 THHN- LINE SIDE
2	1	2.0"-RGS	13'	T	(1) 2/#8 U.F. W/GROUND - LOAD SIDE
*3	3	4.0"	3'	-	EX. (3) 4/#18 - TO REMAIN, <REMOVE EX. (2) 16/#14, EX. (7) 9/#14, EX. (4) 4/#18>, [NEW (2) 16/#14, (3) 9/#14, (12) 5/#14, (5) 4/#18, (1) #6 GROUND, CCTV CABLES, (1) 2/#8 U.F. W/GROUND - LOAD SIDE]
*4	1	2.5"	94'	-	EX. (1) 4/#18 - TO REMAIN, <REMOVE EX. (1) 16/#14, EX. (4) 9/#14, EX. (1) 4/#18>, [NEW (4) 5/#14, (1) #6 GROUND]
*5	1	2.5"	98'	-	EX. (1) 4/#18 - TO REMAIN, <REMOVE EX. (1) 16/#14, EX. (4) 9/#14, EX. (1) 4/#18>, [NEW (4) 5/#14, (1) #6 GROUND]
*6	1	2.5"	60'	-	EX. (1) 4/#18 - TO REMAIN, <REMOVE EX. (1) 16/#14, EX. (4) 9/#14, EX. (1) 4/#18>, [NEW (4) 5/#14, (1) #6 GROUND]
7	1	2.5"-PVC	16'	T	EX. (1) 5/#14, (1) #6 GROUND
*8	1	2.5"	81'	-	EX. (1) 4/#18, <REMOVE EX. (2) 9/#14>, [NEW (3) 5/#14, (1) #6 GROUND]
9	1	4.0"-HDPE	121'	B	(1) 5/#14, (1) #6 GROUND
10	1	4.0"-HDPE	43'	B	(1) 5/#14, (1) #6 GROUND
*11	1	4.0"	46'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*12	1	2.5"	21'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*13	1	2.5"	49'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*14	1	2.5"	41'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
15	1	3.0"-PVC	35'	T	(1) 9/#14, (1) 4/#18, (1) #6 GROUND
16	1	3.0"-PVC	28'	T	(1) 16/#14, (1) 4/#18, (1) #6 GROUND
17	1	4.0"-HDPE	54'	B	(1) 16/#14, (1) 9/#14, (2) 4/#18, (1) #6 GROUND
18	1	4.0"-PVC	222'	T	(1) 16/#14, (1) 9/#14, (2) 4/#18, (1) #6 GROUND
19	1	4.0"-HDPE	67'	B	(2) 16/#14, (3) 9/#14, (1) 5/#14, (5) 4/#18, CCTV CABLES, (1) #6 GROUND
*20	1	4.0"	52'	-	EX. (1) 12 CT. SM FIBER, EX. (2) 4/#18 - TO REMAIN, <REMOVE EX. (1) 16/#14, EX. (3) 9/#14, EX. (2) 4/#18>, [NEW (5) 5/#14]
*21	1	4.0"	68'	-	EX. (2) 4/#18, EX. (1) 12 CT. SM FIBER, <REMOVE EX. (2) 9/#14>, [NEW (3) 5/#14]
22	1	2.5"-PVC	17'	T	(1) 5/#14, (1) #6 GROUND
*23	1	2.5"	72'	-	EX. (1) 4/#18, EX. (1) 12 CT. SM FIBER, <REMOVE EX. (2) 9/#14>, [NEW (2) 5/#14]

*DENOTES EXISTING CONDUIT RUN.
**ALL CABLES ARE NEW UNLESS NOTED OTHERWISE
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
*24	1	4.0"	13'	-	<REMOVE EX. (2) 9/#14>, [NEW (2) 5/#14, (1) #6 GROUND]
*25	1	4.0"	68'	-	<REMOVE EX. (2) 9/#14>, [NEW (2) 5/#14, (1) #6 GROUND]
*26	1	2.5"	31'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*27	1	2.5"	28'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
28	1	4.0"-PVC	55'	T	(1) 16/#14, (2) 9/#14, (1) 5/#14, (3) 4/#18, CCTV CABLES, (1) #6 GROUND
29	1	3.0"-PVC	5'	T	(1) 9/#14, (1) 4/#18, (1) #6 GROUND
30	1	3.0"-PVC	22'	T	(1) 16/#14, (1) 9/#14, (2) 4/#18, CCTV CABLES, (1) #6 GROUND
31	1	4.0"-HDPE	87'	B	(1) 5/#14, (1) #6 GROUND
32	1	2.5"-PVC	4'	T	(1) 5/#14, (1) #6 GROUND
*33	1	4.0"	XX'	-	EX. FIBER OPTIC CABLES
*34	1	4.0"	XX'	-	EX. FIBER OPTIC CABLES
35	1	2.5"-PVC	12'	T	(1) 5/#14, (1) #6 GROUND
*36	1	2.5"	6'	-	<REMOVE EX. (2) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
37	1	2.5"-PVC	4'	T	(1) 5/#14, (1) #6 GROUND

*DENOTES EXISTING CONDUIT RUN.
**ALL CABLES ARE NEW UNLESS NOTED OTHERWISE
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

PROPOSED OVERHEAD SIGNING

S-1
R3-2 (36"x36")

S-2*
D3-1 (60"x18")
8" & 6" D-SERIES
BACK-TO-BACK
FREE-SWINGING MOUNTS
2nd Ave | 2nd Ave

S-3
R3-2 (36"x36")

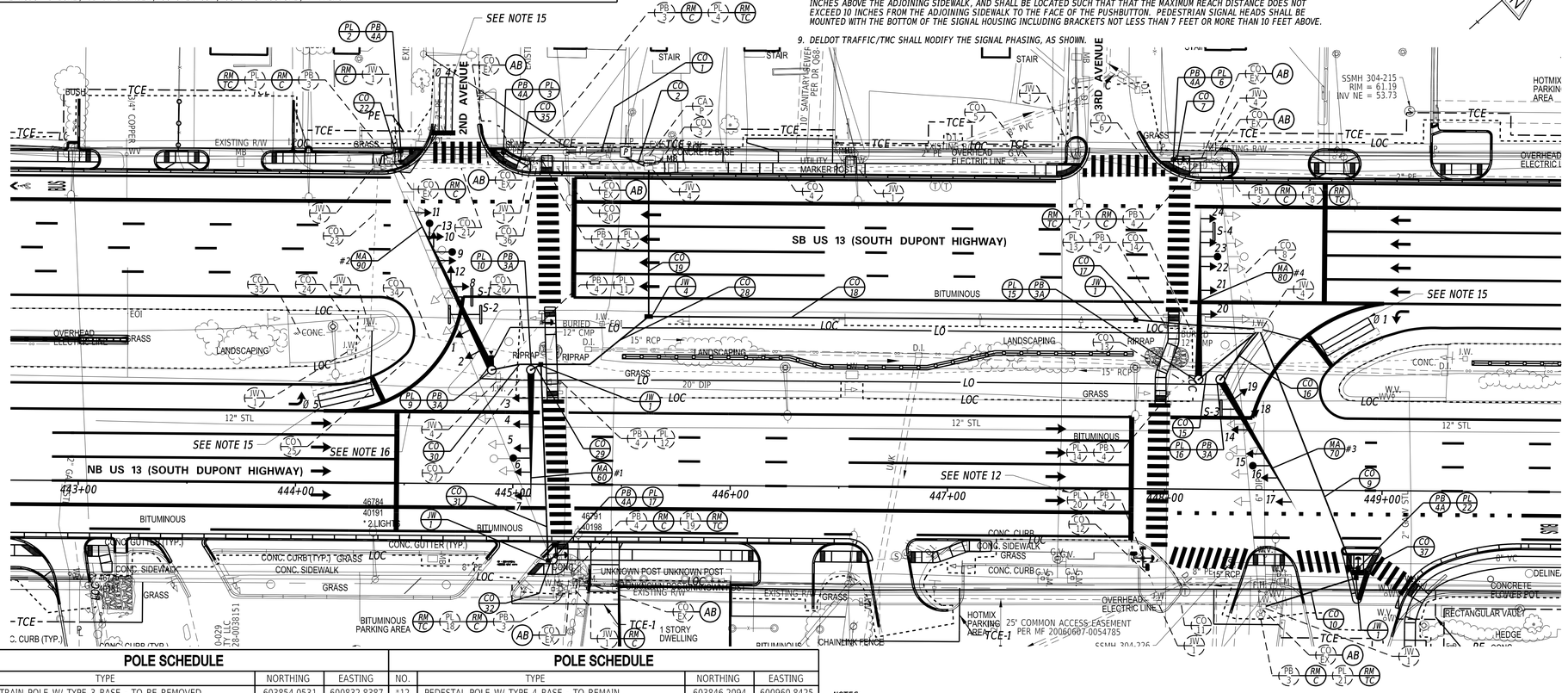
S-4
D3-1 (60"x18")
8" & 6" D-SERIES
3rd Ave

NOTES:

3. PROPOSED LOOP DETECTION:
   TYPE #2 - 6' x 25' - TO BE INSTALLED ON US 13 LEFT TURN MOVEMENTS.
   TYPE #2 - 6' x 25' - TO BE INSTALLED ON 2ND AVENUE RIGHT TURN MOVEMENT.
4. ALL PROPOSED SIGNAL POLES ARE DELDOT MAST ARMS.
5. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNTDOWN DISPLAYS.
   PL,3,4,&7 = R10-3eL (LEFT ARROW); PL2,11,12,13,14,17&22 = R10-3eR (RIGHT ARROW); PL20 = R10-3e-DE (NO ARROW)
6. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE PEDESTRIAN CONNECTION WHEN POSSIBLE. WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON ADJACENT TO A LEVEL ALL-WEATHER SURFACE, THE SURFACE SHOULD BE AS LEVEL AS FEASIBLE. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE ADJOINING SIDEWALK, AND SHALL BE LOCATED SUCH THAT THAT THE MAXIMUM REACH DISTANCE DOES NOT EXCEED 10 INCHES FROM THE ADJOINING SIDEWALK TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE.
7. DELDOT TRAFFIC/TMC SHALL MODIFY THE SIGNAL PHASING, AS SHOWN.

MAST ARM SCHEDULE

MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	# OPTICOM RECEIVERS	SF OF SIGNING	ARM MOUNT HEIGHT
1	21'-6"	60 FT	5	1	0 SF	18'-0"
2	21'-6"	90 FT	8	2	16.5 SF	18'-0"
3	21'-6"	70 FT	6	1	0 SF	18'-0"
4	21'-6"	80 FT	5	1	16.5 SF	18'-0"



POLE SCHEDULE

NO.	TYPE	NORTHING	EASTING
*1	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	603854.0531	600832.8387
2	10' PEDESTAL POLE W/ TYPE 4A BASE	603861.4665	600832.7945
3	10' PEDESTAL POLE W/ TYPE 4A BASE	603896.6208	600864.3881
*4	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	603904.0035	600874.1460
*5	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	603908.1467	600878.6184
6	10' PEDESTAL POLE W/ TYPE 4A BASE	604126.0236	601070.4155
*7	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	604131.8030	601079.0876
*8	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	604141.1721	601085.0175
9	90' MAST ARM & CCTV W/ TYPE 3A BASE	603826.5057	600936.0025
10	60' MAST ARM W/ TYPE 3A BASE	603840.0361	600947.8757
*11	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	603858.2469	600934.7844

* DENOTES EXISTING

POLE SCHEDULE

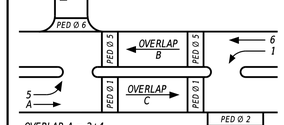
NO.	TYPE	NORTHING	EASTING
*12	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	603846.2094	600960.8425
*13	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	604072.9305	601125.8487
*14	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	604053.1332	601149.5576
15	80' MAST ARM W/ TYPE 3A BASE	604067.8202	601154.1074
16	70' MAST ARM W/ TYPE 3A BASE	604075.3364	601160.6993
17	10' PEDESTAL POLE W/ TYPE 4A BASE	603792.2476	601019.5670
*18	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	603784.6487	601033.3825
*19	PEDESTAL POLE W/ TYPE 4 BASE - TO BE REMOVED	603792.9015	601030.5264
*20	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	603994.2952	601198.8427
*21	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	604017.9740	601254.0298
22	10' PEDESTAL POLE W/ TYPE 4A BASE	604065.6413	601267.7471

* DENOTES EXISTING

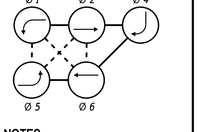
NOTES:

10. DELDOT'S TRAFFIC CONTRACTOR SHALL DEACTIVATE THE EXISTING POWER FEED AFTER THE PROPOSED METERED POWER FEED IS ACTIVATED.
11. DELDOT'S TRAFFIC CONTRACTOR SHALL REPLACE THE EXISTING PEDESTRIAN PUSHBUTTONS WITH LED NON-LATCHING PUSHBUTTONS.
12. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND REPLACE THEM WITH PROPOSED 2-WAY PEDESTRIAN HEADS AND PUSHBUTTONS, AS SHOWN.
13. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL UNDERGROUND SIGNAL EQUIPMENT - E.G., JUNCTION WELLS, POLE BASES, LOOP DETECTORS AND CONDUIT AND ASSOCIATED MAINTENANCE OF TRAFFIC. DELDOT'S TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL ELECTRICAL CABLES AND ABOVE GROUND SIGNAL EQUIPMENT - E.G., HEADS, POLES, OPTICOM RECEIVERS, SPAN WIRE, SERVICE PEDESTAL, MAST ARMS, AND OVERHEAD SIGNS, AND ASSOCIATED MAINTENANCE OF TRAFFIC.
15. THE CONTRACTOR SHALL SPLICE THE PROPOSED LOOP DETECTOR TO THE EXISTING 4/#18 'HOME RUN' CABLE.
16. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL THE PROPOSED CCTV CAMERA ON PROPOSED PL #9.

SIGNAL PHASING



NEMA PHASING



OVERLAP A = 2+4
OVERLAP B = 6
OVERLAP C = 2+4

PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM

* ALL EXISTING SIGNAL HEADS SHALL BE REMOVED



LEGEND

AB	ABANDON
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)
OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
PL X	EXISTING POLE IDENTIFIER (# OF POLE)
PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
RM C	REMOVE BY CONTRACTOR
RM O	REMOVE BY OTHERS
RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1	⬚	▭
LOOP DETECTOR, TYPE 2	⬚	▬
LUMINAIRE	——◇——	——●——
MAST ARM	——▷	——▶
MICROWAVE DETECTION	——◀	——◀
OPTICOM RECEIVER	——○	——●
OVERHEAD SIGNING	—⊣	—⊣
PEDESTRIAN POLE/BASE	⊙	⊗
PEDESTRIAN PUSHBUTTON	——▷	——▶
PEDESTRIAN SIGNAL HEAD	——⊐	——⊐
RIGHT-OF-WAY	———	——R/W——
SERVICE PEDESTAL	P	P
ADDITIONAL DISCONNECT SWITCH	D	D
SIGNAL CABINET	▭	■
SIGNAL HEAD	—▷	—▶
SIGNAL POLE/BASE	⊗	⊙
CCTV CAMERA	▭	■
SPAN WIRE	——XX——	——◇——
UTILITY POLE	⊘	●
VIDEO DETECTION	⊏	◀

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY

WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

THIS SEAL APPLIES TO THIS SHEET ONLY. 6.13.2024 DATE

MATTHEW J.A. BUCKLEY — No. 16224 — PROFESSIONAL ENGINEER — SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING 6/13/2024 DATE

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS, LLANGOLLEN BOULEVARD TO BACON/BOULDEN BOULEVARD

CONTRACT	PERMIT NO.	N525, N537, NCAM287
T201901102	DESIGNED BY:	D. CARSON
COUNTY	CHECKED BY:	M. BUCKLEY
NEW CASTLE		

SIGNAL PLAN US 13 (SOUTH DUPONT HIGHWAY) @ 2ND AVENUE / 3RD AVENUE

SECTION	
WRA	
SHEET NO.	
251	

LAST REVISED: 9/11/2018
6/12/2024
1:59:18 PM
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ADDITIONAL SIGNAL NOTES

3. *PER TRAFFIC STUDY NOTE #4 ON THE COMMERICAL ENTRANCE PLAN FOR THE REDEVELOPMENT OF THE DUTCH MOTOR INN, "THE DEVELOPMENT SHALL ENTER INTO AN AGREEMENT WITH DELDOT TO FUND AN EQUITABLE PORTION OF THE PEDESTRIAN IMPROVEMENTS PLANNED AS PART OF THE FUTURE US 13, US 40 TO MEMORIAL DRIVE PEDESTRIAN IMPROVEMENTS (CONTRACT #T201601102) PROJECT. THE DEVELOPER SHALL COORDINATE WITH DELDOT ON THE IMPLEMENTATION AND EQUITABLE COST SHARING ON THE IMPROVEMENTS DURING THE PLAN REVIEW PROCESS." IT IS NOTED THAT THE RECORD PLAN INCORRECTLY REFERENCED DELDOT'S PROJECT ALONG THE SITE FRONTAGE. DELDOT'S PROJECT ALONG THE SITE FRONTAGE IS CONTRACT T201901102.*

4. *THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.*
   PL/5, PL/6= R10-3e-DE2L (LEFT ARROW)
   PL/4= R10-3e-DE2R (RIGHT ARROW)
   PL/8= R10-3e-DE3
   PL/7 = R10-3eL (LEFT ARROW)

5. *THE CONTRACTOR SHALL REMOVE THE STOP SIGN UPON ACTIVATION OF NEW TRAFFIC SIGNAL. PCMS SHALL BE PLACED 10 DAYS PRIOR TO AND 5 DAYS AFTER THE TRAFFIC PATTERN CHANGE TO INFORM PUBLIC OF ANTICIPATED SIGNAL CONSTRUCTION AND NEW TRAFFIC PATTERN CHANGE NOTIFICATIONS. PCMS LOCATION AND MESSAGE TO BE COORDINATED WITH TRAFFIC SAFETY OFFICER.*

6. *APPROXIMATE PRIMARY, SECONDARY AND COMMUNICATIONS AERIAL UTILITY HEIGHT ARE AS FOLLOWS:*
   PRIMARY: 40'
   SECONDARY: 29'
   COMMUNICATIONS: 22'

7. *DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES WITH A 2" RETROREFLECTIVE YELLOW STRIP ON ALL SIGNAL HEADS.*

R1-1 (36"x36") SEE SS-14

STOP

R1-2 (36"x36") SEE SS-14

YIELD

R1-2aP-DE (24"x18") SEE SS-14

TO U-TURNING TRAFFIC

R1-1 (36"x36") SEE SS-14 TO BE REMOVED UPON SIGNAL ACTIVATION (SEE NOTE 5)

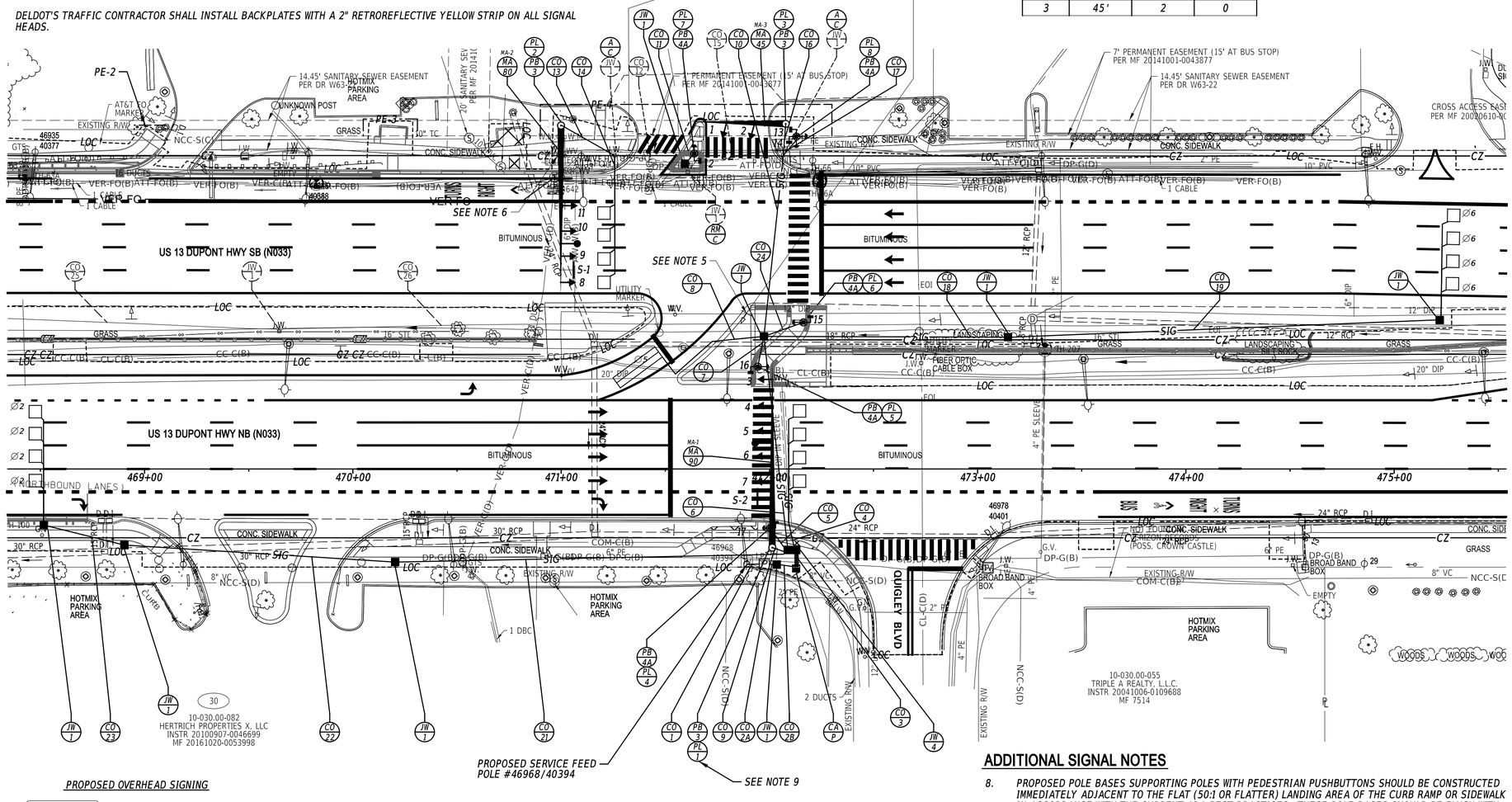
STOP

SIGNAL POLE SCHEDULE

NO.	POLE TYPE	HEIGHT	NORTHING	EASTING
1	MAST ARM	21.5'	605798.688	602798.643
2	MAST ARM	21.5'	605856.355	602579.538
3	MAST ARM	21.5'	605937.900	602650.187
4	PEDESTAL	10'	605805.148	602790.198
5	PEDESTAL	10'	605850.845	602728.839
6	PEDESTAL	10'	605881.312	602727.359
7	PEDESTAL	10'	605895.494	602631.905
8	PEDESTAL	10'	605937.708	602658.185

MAST ARM SCHEDULE

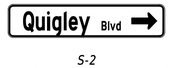
MA NO.	LENGTH OF ARM	NO. OF HEADS	S.F. OF SIGNING
1	90'	6	10.5
2	80'	5	9
3	45'	2	0



PROPOSED OVERHEAD SIGNING



S-1
R3-18
36"x36"



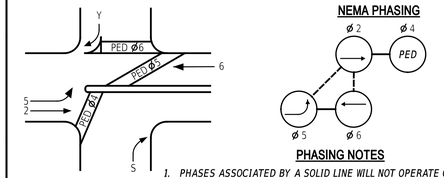
S-2
D3-1 (FREE-SWINGING MOUNT)
84"x18"

ADDITIONAL SIGNAL NOTES

8. *PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.*

9. *PRIOR TO INSTALLATION OF POLE BASE FOR SIGNAL POLE 1, THE TRAFFIC CONTRACTOR SHALL ENSURE THAT DELMARVA POWER BE CONTACTED AND BE ON-SITE DUE TO THE PROXIMITY TO THE EXISTING GAS MAIN.*

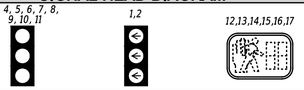
SIGNAL PHASING



PHASING NOTES

1. *PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.*
2. *PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.*

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		*R/W*
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE		XX
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

6/14/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

7/16/2024
DATE

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	PERMIT NO.	N933	SECTION
T201901102	DESIGNED BY: Z. BRANDER		PAI
COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
NEW CASTLE			252

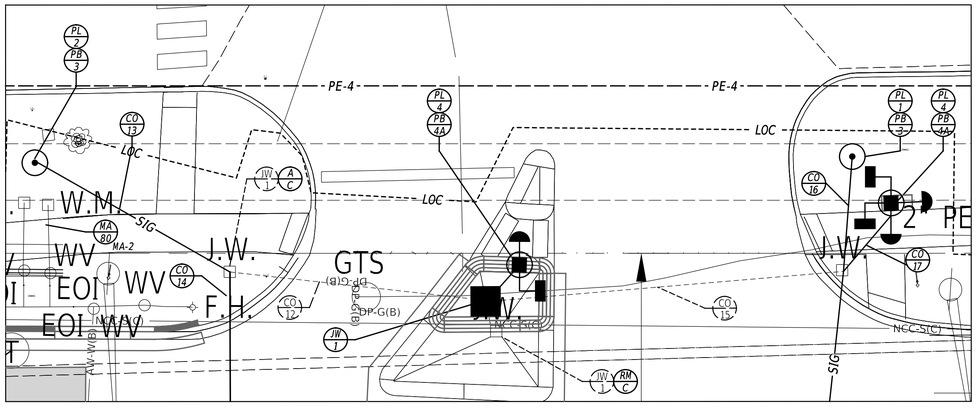
SIGNAL PLAN
S. DUPONT HWY AT QUIGLEY BLVD

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

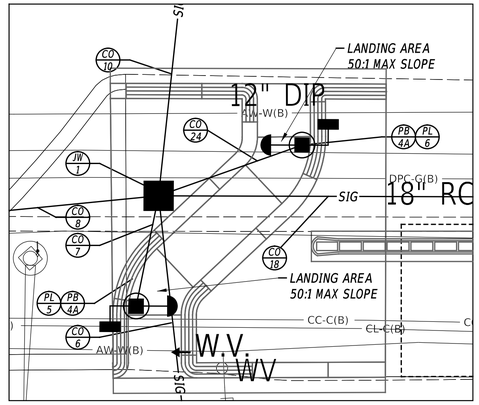
CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
1	1	2.0" GALV.	6'	T	INSTALL [(3)#8 THHN STRANDED COPPER - LINE SIDE]
2A	1	2.0" GALV.	2'	T	INSTALL [(1)2/#8 U.F. w/G - LOAD SIDE]
2B	1	2.0" GALV.	7'	T	INSTALL [(1)2/#8 U.F. w/G - LOAD SIDE]
3	4	4.0" PVC	6'	T	INSTALL [(6)5/#14, (3)9/#14, (3)4/#18, (17)2/#14 (4)#6 GND]
4	2	2.0" GALV.	12'	T	INSTALL [(4)1/#14]
5	1	2.5" PVC	11'	T	INSTALL [(1)5/#14, (1)#6 GND]
6	2	4.0" HDPE	102'	B	INSTALL [(5)5/#14, (2)4/#18, (9)2/#14, (2)9/#14, (2)#6 GND]
7	1	2.5" PVC	15'	T	INSTALL [(1)5/#14, (1)#6 GND]
8	1	1.5" GALV.	25'	T	INSTALL [(1)1/#14]
9	1	3.0" PVC	6'	T	INSTALL [(1)4/#18, (1)9/#14, (1)#6 GND]
10	2	4.0" HDPE	88'	B	INSTALL [(3)5/#14, (2)4/#18, (4)2/#14, (2)9/#14, (2)#6 GND]
11	1	2.5" PVC	4'	T	INSTALL [(1)5/#14, (1)#6 GND]
12*	1	4.0" HDPE	35'	-	INSTALL [(1)4/#18, (4)2/#14, (1)9/#14, (1)#6 GND]
13	1	3.0" PVC	29'	T	INSTALL [(1)4/#18, (1)9/#14, (1)#6 GND]
14	1	1.5" GALV.	6'	T	INSTALL [(4)1/#14]
15*	1	4.0" HDPE	47'	-	INSTALL [(1)5/#14, (1)4/#18, (4)2/#14, (1)9/#14, (1)#6 GND]
16	1	3.0" PVC	16'	T	INSTALL [(1)9/#14, (1)4/#18, (1)#6 GND]
17	1	2.5" PVC	10'	T	INSTALL [(2)5/#14, (1)#6 GND]
18	1	4.0" PVC	115'	T	INSTALL [(4)2/#14, (1)#6 GND]
19	1	4.0" PVC	203'	T	INSTALL [(4)2/#14, (1)#6 GND]
21	1	4.0" PVC	187'	T	INSTALL [(4)2/#14, (1)#6 GND]
22	1	4.0" HDPE	131'	B	INSTALL [(4)2/#14, (1)#6 GND]
23	1	4.0" PVC	40'	T	INSTALL [(4)2/#14, (1)#6 GND]
24	1	2.5" PVC	20'	T	INSTALL [(1)5/#14, (1)#6 GND]
25*	1	UNK	348'	-	EX. [FIBER]
26*	1	UNK	674'	-	EX. [FIBER]

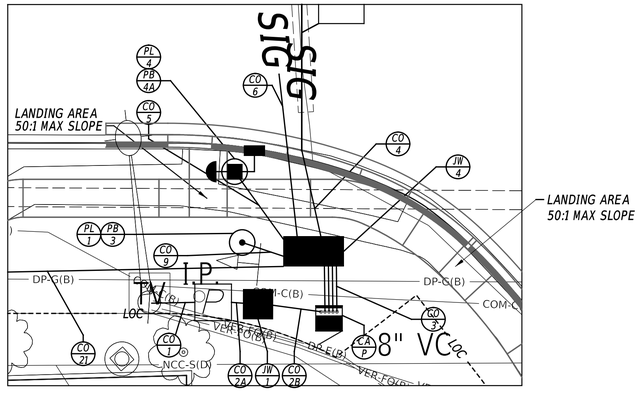
* DENOTES EXISTING



WEST SIDE
SCALE 1"=10"



NORTHERN MEDIAN
SCALE 1"=10"



SOUTHEAST CORNER
SCALE 1"=10"

ADDITIONAL SIGNAL NOTES

3. PER TRAFFIC STUDY NOTE #4 ON THE COMMERICAL ENTRANCE PLAN FOR THE REDEVELOPMENT OF THE DUTCH MOTOR INN, "THE DEVELOPMENT SHALL ENTER INTO AN AGREEMENT WITH DELDOT TO FUND AN EQUITABLE PORTION OF THE PEDESTRIAN IMPROVEMENTS PLANNED AS PART OF THE FUTURE US 13, US 40 TO MEMORIAL DRIVE PEDESTRIAN IMPROVEMENTS (CONTRACT #T201601102) PROJECT. THE DEVELOPER SHALL COORDINATE WITH DELDOT ON THE IMPLEMENTATION AND EQUITABLE COST SHARING ON THE IMPROVEMENTS DURING THE PLAN REVIEW PROCESS." IT IS NOTED THAT THE RECORD PLAN INCORRECTLY REFERENCED DELDOT'S PROJECT ALONG THE SITE FRONTAGE. DELDOT'S PROJECT ALONG THE SITE FRONTAGE IS CONTRACT T201901102.

4. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/5, PL/6= R10-3e-DE2L (LEFT ARROW)
   PL/4= R10-3e-DE2R (RIGHT ARROW)
   PL/8= R10-3e-DE3
   PL/7= R10-3eL (LEFT ARROW)

5. THE TRAFFIC CONTRACTOR SHALL REMOVE THE STOP SIGN UPON ACTIVATION OF NEW TRAFFIC SIGNAL. PCMS SHALL BE PLACED 10 DAYS PRIOR TO AND 5 DAYS AFTER THE TRAFFIC PATTERN CHANGE TO INFORM PUBLIC OF ANTICIPATED SIGNAL CONSTRUCTION AND NEW TRAFFIC PATTERN CHANGE NOTIFICATIONS. PCMS LOCATION AND MESSAGE TO BE COORDINATED WITH TRAFFIC SAFETY OFFICER.

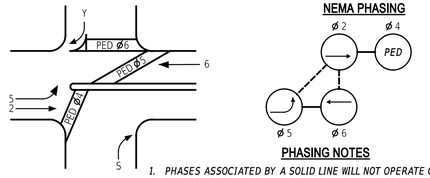
6. APPROXIMATE PRIMARY, SECONDARY AND COMMUNICATIONS AERIAL UTILITY HEIGHT ARE AS FOLLOWS:
   PRIMARY: 40'
   SECONDARY: 29'
   COMMUNICATIONS: 22'

7. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES WITH A 2" RETROREFLECTIVE YELLOW STRIP ON ALL SIGNAL HEADS

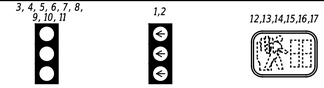
ADDITIONAL SIGNAL NOTES

8. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.

SIGNAL PHASING



SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	*OH #*	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	*PB X*	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	*PL X*	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	I.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
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Pennoni

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Ford — 6/14/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. FORD LICENSED No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

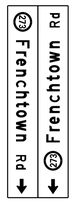
CHIEF OF TRAFFIC ENGINEERING — 7/16/2024 DATE

PENNONI ASSOCIATES INC. | PEN TABLE: SPRINTBLSS
FILE NAME: SITLEAS | PLOT DRIVERS: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:29
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

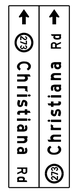
ADDENDA / REVISIONS		SCALE AS NOTED	US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD	CONTRACT	T201901102	PERMIT NO.	N933	SIGNAL PLAN S. DUPONT HWY AT QUIGLEY BLVD	SECTION	PAI
				COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER		SHEET NO.	253
						CHECKED BY:	P. HORSEY			

PROPOSED OVERHEAD SIGNING

S-1
D3-1a (114"x18")
8" & 6" D-SERIES
10" SHIELD



S-2
D3-1a (108"x18")
8" & 6" D-SERIES
10" SHIELD



S-3
M1-4 (36"x36")



S-4
M1-4 (36"x36")



*BACK-TO-BACK
FREE-SWINGING MOUNTS

SR 273 (CHRISTIANA ROAD)

NB US 13 (SOUTH DUPONT HIGHWAY)

SB US 13 (NORTH DUPONT HIGHWAY)

SR 273 (FRENCHTOWN ROAD)

MATCH LINE AA - SEE SHEET 255

INSTALL PEDESTRIAN CONNECTION, TYPE 5
(SEE DETAIL 4 ON SHEET 256)

INSTALL PEDESTRIAN CONNECTION, TYPE 5
(SEE DETAIL 3 ON SHEET 256)

INSTALL PEDESTRIAN CONNECTIONS, TYPE 1
(SEE DETAILS 1 AND T1 ON SHEET 256)

INSTALL PEDESTRIAN CONNECTION, TYPE 5
(SEE DETAIL 2 ON SHEET 256)

INSTALL DISCONNECT SWITCH
(SEE NOTE 19)

SEE NOTE 11
SEE NOTE 12
SEE NOTE 13
SEE NOTE 14
SEE NOTE 16
SEE NOTE 20
SEE NOTE 22
SEE NOTE 23

NCAM073
NBT0030
N183
U.P.S.

ISLAND
SPAN WIRE & SIGNAL HEADS
MEDIAN
GRASS
HOT MIX
EXISTING R/W
LOC
85'

NOTES:

3. PROPOSED WAVETRONIX DETECTION ZONES:
   APPROACH - TO BE INSTALLED FOR US 13 THROUGH MOVEMENTS.
   STOPLINE - TO BE INSTALLED FOR US 13 LEFT TURN AND SR 273 THROUGH AND LEFT TURN MOVEMENTS.
   SYSTEM - TO BE INSTALLED FOR US 13 AND SR 273 RECEIVING LANES.
   ACTUAL SIZE AND DETECTION ZONES TO BE DETERMINED BY DELDOT TMC.
4. ALL PROPOSED SIGNAL POLES ARE DELDOT MAST ARMS.
5. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
6. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
7. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES ON PROPOSED SIGNAL HEADS 2-7 AND 9-22.
8. INSTALL PROPOSED 5/#14 FROM PROPOSED CABINET TO PL/4 USING TEMP CONDUITS T1 AND T2. REMOVE 5/#14 TO JUNCTION WELL, TYPE 4, FOR CONNECTION TO TEMP PEDESTAL POLE PL/T1 USING TEMP CONDUIT T3 AND AGAIN FOR ULTIMATE CONNECTION INTO PL/5 USING CONDUIT 28.
9. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNTDOWN DISPLAYS.
   PL2,3,11,14,17,&19 = R10-3eL (LEFT ARROW); PL5,7,&21 = R10-3eR (RIGHT ARROW); PL12 = R10-3e-DE (NO ARROW)
10. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE PEDESTRIAN CONNECTION WHEN POSSIBLE. WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON ADJACENT TO A LEVEL ALL-WEATHER SURFACE, THE SURFACE SHOULD BE AS LEVEL AS FEASIBLE. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE ADJOINING SIDEWALK, AND SHALL BE LOCATED SUCH THAT THAT THE MAXIMUM REACH DISTANCE DOES NOT EXCEED 10 INCHES FROM THE ADJOINING SIDEWALK TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE.
11. DELDOT TRAFFIC/TMC SHALL MODIFY THE SIGNAL PHASING, AS SHOWN.
12. THE CONTRACTOR SHALL INSTALL PROPOSED CONDUIT 36 SO THAT IT UTILIZES THE EXISTING CONDUIT ENTERING THE CABINET BASE.
13. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CABINET AND DEACTIVATE THE POWER FEED AFTER THE PROPOSED SIGNAL IS ACTIVATED. COORDINATE THE REMOVAL OF THE EXISTING METER WITH DELMARVA POWER. THE CONTRACTOR SHALL REMOVE THE EXISTING CABINET BASE.
14. IF EXISTING CONDUIT 11 CONFLICTS WITH THE INSTALLATION OF THE PROPOSED POLE BASE, TYPE 3A, THE CONTRACTOR SHALL REROUTE THE EXISTING CONDUIT AROUND THE POLE BASE OR TEMPORARILY UTILIZE THE PROPOSED POLE BASE, TYPE 4A, AND PROPOSED CONDUIT 13 WITH THE EXISTING SIGNAL CABINET AND EXISTING 9/#14 CABLE TO MAINTAIN PEDESTRIAN OPERATIONS. COORDINATE WITH DELDOT'S TRAFFIC CONTRACTOR AS NEEDED.

NOTES:

15. THE CONTRACTOR SHALL ADJUST THE EXISTING FAA JUNCTION WELLS TO BE FLUSH WITH THE PROPOSED CUT-THROUGH. FAA SHALL BE ONSITE WHEN THIS WORK IS OCCURRING AND POWER SHALL BE LOCKED OUT IN ACCORDANCE WITH THE FAA RESPRESENTATIVE REQUIREMENTS. PLACE DELAWARE #57 STONE IN THE BOTTOM OF EACH FAA JUNCTION WELL AFTER ADJUSTMENT IS COMPLETE AND GRADE STONE IN ACCORDANCE WITH THE FAA REPRESENTATIVE'S REQUIREMENTS. PATCH/FILL ALL VOIDS IN THE JUNCTION WELLS AROUND THE EXISTING FAA CONDUITS WITH MORTAR.
16. DELDOT'S TRAFFIC CONTRACTOR SHALL REPLACE THE EXISTING PEDESTRIAN PUSHBUTTONS WITH LED NON-LATCHING PUSHBUTTONS.
17. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND REPLACE THEM WITH PROPOSED 2-WAY PEDESTRIAN HEADS AND PUSHBUTTONS, AS SHOWN.
18. PRIOR TO EXCAVATING ISLAND AND PRIOR TO ADJUSTING FAA JUNCTION WELLS, CONTACT LOUIS GALARZA, JR. OF THE FEDERAL AVIATION ADMINISTRATION (302-356-4242). HE SHALL BE CONTACTED 45 DAYS IN ADVANCE OF THE START OF WORK IN EACH ISLAND.
19. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL AN ADDITIONAL PEDESTAL WITH SEPARATE DISCONNECTS FOR THE CCTV/BLUETOOTH CABINET AND THE PROPOSED SIGNAL CABINET.
20. THE CONTRACTOR SHALL REROUTE THE EXISTING LIGHTING CONDUIT AROUND THE PROPOSED POLE BASE, TYPE 3B AS NEEDED.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL UNDERGROUND SIGNAL EQUIPMENT - E.G., JUNCTION WELLS, POLE AND CABINET BASES AND CONDUIT AND ASSOCIATED MAINTENANCE OF TRAFFIC. DELDOT'S TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL ELECTRICAL CABLES AND ABOVE GROUND SIGNAL EQUIPMENT - E.G., HEADS, POLES, OPTICOM RECEIVERS, SPAN WIRE, SERVICE PEDESTAL, MAST ARMS, WAVETRONIX, CCTV CAMERAS AND OVERHEAD SIGNS, AND ASSOCIATED MAINTENANCE OF TRAFFIC.
22. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CCTV CAMERA AND INSTALL A PROPOSED CCTV CAMERA ON THE EXISTING STRAIN POLE.
23. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL A CABINET INTERFACE DEVICE (WAVETRONIX CLICK 656 OR SIMILAR) AND CONFIGURE DETECTION RANGE, DELAY TIME, PRIORITY, CHANNEL ASSIGNMENTS DURING INSTALLATION.

POLE SCHEDULE

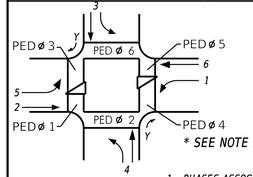
NO.	TYPE	NORTHING	EASTING
*1	STRAIN POLE W/ TYPE 3 BASE - TO REMAIN	606551.0715	603182.2914
*2	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	606573.5515	603219.4373
*3	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	606585.6340	603219.6106
*4	PEDESTAL POLE W/ TYPE 4 BASE - TO BE REMOVED	606666.7537	603284.5317
5	10' PEDESTAL POLE W/ TYPE 4A BASE	606682.7246	603276.2519
6	30' MAST ARM W/ TYPE 3A BASE	606720.3454	603316.2954
7	10' PEDESTAL POLE W/ TYPE 4A BASE	606710.3781	603305.3642
8	10' PEDESTAL POLE W/ TYPE 4A BASE	606673.6326	603378.2164
9	90' MAST ARM W/ TYPE 3A BASE	606678.1894	603387.2378
*10	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	606664.3324	603386.2458
11	10' PEDESTAL POLE W/ TYPE 4A BASE	606666.5286	603389.8257
*12	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	606653.0829	603500.8047
*13	STRAIN POLE & CCTV W/ TYPE 3 BASE - TO REMAIN	606698.0288	603538.5882
*14	PEDESTAL POLE W/ TYPE 4 BASE - TO REMAIN	606545.8723	603436.5038
15	30' MAST ARM W/ TYPE 3A BASE	606528.4914	603411.9332
*16	PEDESTAL POLE W/ TYPE 4 BASE - TO BE REMOVED	606518.2896	603403.5823
17	10' PEDESTAL POLE W/ TYPE 4A BASE	606521.2149	603402.8424
*18	PEDESTAL POLE W/ TYPE 4 BASE - TO BE REMOVED	606562.3811	603334.0183
19	10' PEDESTAL POLE W/ TYPE 4A BASE	606567.3733	603338.0557
*20	STRAIN POLE W/ TYPE 3 BASE - TO BE REMOVED	606570.1898	603341.1088
21	90' MAST ARM W/ TYPE 3A BASE	606571.4758	603325.4991
*22	PEDESTAL POLE W/ TYPE 4 BASE - TO BE REMOVED	606577.3400	603318.9393
23	80' MAST ARM W/ TYPE 3A BASE	606565.4187	603320.3126

* DENOTES EXISTING

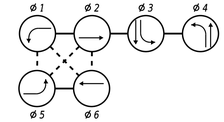
MAST ARM SCHEDULE

MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	# OPTICOM RECEIVERS	SF OF SIGNING	ARM MOUNT HEIGHT
1	21'-6"	30 FT	2	0	0 SF	18'-0"
2	21'-6"	90 FT	4	1	14.25 SF	18'-0"
3	21'-6"	30 FT	2	0	0 SF	18'-0"
4	21'-6"	80 FT	4	1	13.5 SF	18'-0"
5	21'-6"	90 FT	8	2	18.0 SF	18'-0"

SIGNAL PHASING



NEMA PHASING



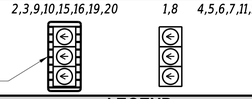
PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM

* ALL EXISTING SIGNAL HEADS SHALL BE REMOVED

2,3,9,10,15,16,19,20 — 1,8 — 4,5,6,7,11,12,13,14,17,18,21,22



BACKPLATES (SEE NOTE 7)

BACKPLATES (SEE NOTE 7)

LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
WAVETRONIX DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL	P	P
ADDITIONAL DISCONNECT SWITCH	D	D
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
WAVETRONIX DETECTION ZONE		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DE.
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PREPARED BY

Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

THIS SEAL APPLIES TO THIS SHEET ONLY.

6.13.2024
DATE

MATTHEW A. BUCKLEY — No. 19224 — PROFESSIONAL ENGINEER

SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

6/13/2024
DATE

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS, LLANGOLLEN BOULEVARD TO BACON/BOULDEN BOULEVARD

CONTRACT	T201901102	PERMIT NO.	N183, NCAM073, NBT0030
COUNTY	NEW CASTLE	DESIGNED BY:	D. CARSON
		CHECKED BY:	M. BUCKLEY

SIGNAL PLAN
US 13 (DUPONT HIGHWAY)
@ SR 273 (CHRISTIANA ROAD / FRENCHTOWN ROAD)

SECTION: WRA
SHEET NO.: 254

LAST REVISED: 9/11/2018
6/12/2024
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CONDUIT RUN SCHEDULE

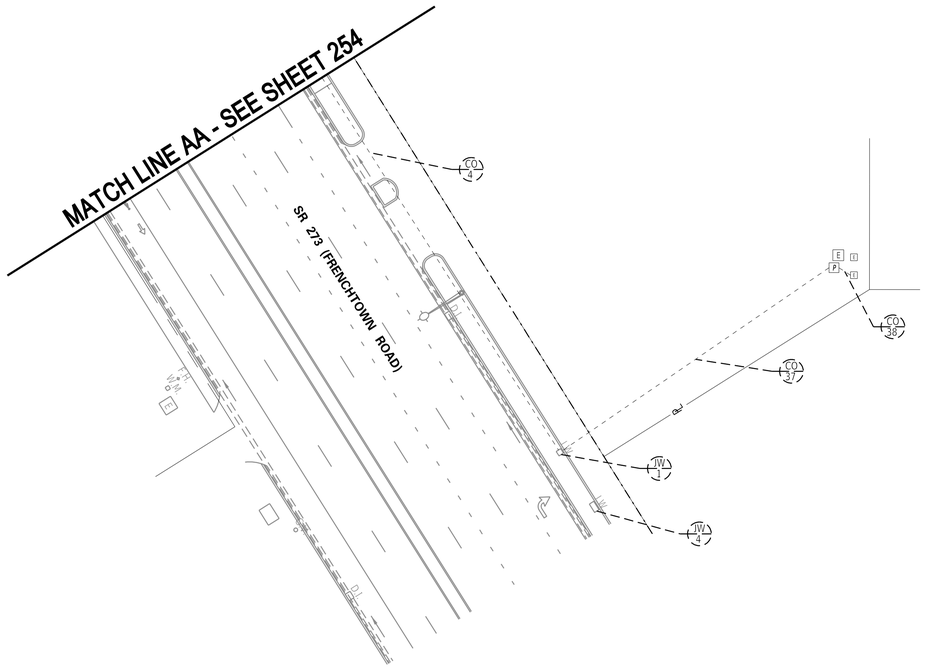
CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
1	4	4.0"-PVC	6'	T	(1) 16/#14, (4) 9/#14, (12) 5/#14, (2) 4/#14, (4) 4/#18, FIBER OPTIC CABLE, (8) WAVETRONIX CABLES, (3) #6 GROUND
2	1	4.0"-PVC	3'	T	(1) 2/#8 U.F. W/GROUND - LOAD SIDE
3	1	4.0"-PVC	5'	T	(1) 2/#8 U.F. W/GROUND - LOAD SIDE
*4	1	2.0"	262'	-	EX. (3) #6 - LOAD SIDE
*5	1	2.5"	10'	-	EX. BLUETOOTH CABLES, EX. CCTV CABLES, [NEW (1) WAVETRONIX CABLE]
*6	1	4.0"	105'	-	EX. FIBER OPTIC CABLES, [NEW FIBER OPTIC CABLE]
7	2	4.0"-HDPE	49'	B	(1) 16/#14, (2) 9/#14, (6) 5/#14, (1) 4/#14, (3) 4/#18, (3) WAVETRONIX CABLES, (2) #6 GROUND
8	1	2.5"-PVC	5'	T	(2) 5/#14, (1) #6 GROUND
9	2	4.0"-HDPE	140'	B	(1) 16/#14, (2) 9/#14, (4) 5/#14, (1) 4/#14, (3) 4/#18, (3) WAVETRONIX CABLES, (2) #6 GROUND
*10	1	2.5"	13'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*11	1	2.5"	28'	ABANDON	<REMOVE EX. (1) 9/#14>
12	1	3.0"-PVC	15'	T	(1) 9/#14, (1) #6 GROUND
13	1	2.5"-PVC	27'	T	(1) 5/#14, (1) #6 GROUND
14	1	4.0"-HDPE	97'	B	(1) 16/#14, (1) 9/#14, (2) 5/#14, (1) 4/#14, (3) 4/#18, (3) WAVETRONIX CABLES, (1) #6 GROUND
15	1	4.0"-HDPE	49'	B	(1) WAVETRONIX CABLE, (1) #6 GROUND
16	1	3.0"-PVC	15'	T	(1) 9/#14, (1) 4/#14, (1) 4/#18, (3) WAVETRONIX CABLES, (1) #6 GROUND
17	1	3.0"-PVC	21'	T	(1) 16/#14, (1) 5/#14, (2) 4/#18, (1) #6 GROUND
18	1	2.5"-PVC	19'	T	(1) 5/#14, (1) #6 GROUND
19	1	4.0"-HDPE	160'	B	(2) 9/#14, (6) 5/#14, (1) 4/#14, (12) 2/#14, (1) 4/#18, (3) WAVETRONIX CABLES, (1) #6 GROUND
20	1	2.0"-RGS	3' / 20'	OC / OS	(1) WAVETRONIX CABLE, (1) #6 GROUND
22	1	3.0"-PVC	9'	T	(1) 9/#14, (1) 4/#14, (1) 4/#18, (3) WAVETRONIX CABLES, (1) #6 GROUND
23	1	2.5"-PVC	18'	T	(1) 5/#14, (1) #6 GROUND
24	1	2.5"-PVC	25'	T	(1) 5/#14, (1) #6 GROUND
25	1	4.0"-HDPE	99'	B	(1) 9/#14, (4) 5/#14, (1) WAVETRONIX CABLE, (1) #6 GROUND
26	1	3.0"-PVC	25'	T	(1) 9/#14, (1) #6 GROUND
27	1	2.5"-PVC	20'	T	(1) 5/#14, (1) #6 GROUND
28	1	2.5"-PVC	18'	T	(1) 5/#14, (1) #6 GROUND
29	1	4.0"-HDPE	132'	B	(2) 5/#14, (1) WAVETRONIX CABLE, (1) #6 GROUND
*30	1	2.5"	2'	-	<REMOVE EX. (2) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*31	1	2.5"	8'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
*33	1	4.0"	6'	-	EX. BLUETOOTH CABLES, EX. CCTV CABLES, [NEW FIBER OPTIC CABLES]
34	1	2.0"-RGS	21'	T	(1) 2/#8 U.F. W/GROUND - LOAD SIDE
35	2	2.0"-RGS	6'	T	EX. (3) #6 - LOAD SIDE, [NEW (1) 2/#8 U.F. W/GROUND - LOAD SIDE]
36	1	2.0"-RGS	35'	T	(1) 2/#8 U.F. W/GROUND - LOAD SIDE
*37	1	2.0"	129'	-	EX. (3) #6 - LOAD SIDE
*38	1	2.0"	6'	-	EX. (3) #6 - LINE SIDE
39	1	4.0"-PVC	6'	T	FIBER OPTIC CABLE, (1) WAVETRONIX CABLE
T1	1	4.0"-HDPE	32'	B	(1) 5/#14, (1) #6 GROUND
*T2	1	2.5"	8'	-	<REMOVE EX. (1) 9/#14>, [NEW (1) 5/#14, (1) #6 GROUND]
T3	1	2.5"-PVC	13'	O	(1) 5/#14, (1) #6 GROUND

SEE NOTE 14

SEE NOTE 8

SEE NOTE 8

* DENOTES EXISTING CONDUIT RUN.
** ALL CABLES ARE NEW UNLESS NOTED OTHERWISE
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH



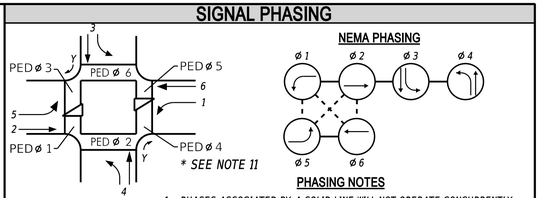
SEQUENCE OF CONSTRUCTION

1. STRIPE LANE SHIFTS ALONG US 13 NORTHBOUND AND SOUTHBOUND.
2. INSTALL SIGNAL AND U.P.S. CABINET.
3. INSTALL MAST ARMS #1 AND #3.
4. DEMO NORTHERN AND SOUTHERN MEDIAN ISLANDS, PUT BACK MILLINGS IN SOUTHERN ISLAND.
5. INSTALL MAST ARMS #2, #4 AND #5.
6. INSTALL TEMPORARY CONDUIT TO TIE INTO PL/4 PED POLE ON NW CORNER ISLAND AND ACTIVATE NEW SIGNAL.
7. REMOVE STRAIN POLES PL/10 AND PL/20 AND EXISTING SPAN WIRES. STRAIN POLES PL/1 AND PL/3 WITH EXISTING CCTV AND PROPOSED WAVETRONIX DETECTORS ARE TO REMAIN.
8. CONSTRUCT NORTHERN AND SOUTHERN MEDIAN ISLANDS.
9. REBUILD NE CORNER ISLAND.
10. INSTALL TEMPORARY PED POLE ON NW CORNER AND ACTIVATE. DURING ALLOWABLE LANE CLOSURE HOURS, REMOVE NW CORNER ISLAND AND EXISTING PED POLE PL/4. DURING NON-WORKING HOURS, DELINEATE ISLAND AREAWITH DRUMS. DURING ALOWABLE LANE CLOSURE HOURS, PATCH PAVEMENT PER PLANS.
11. DURING ALLOWABLE LANE CLOSURE HOURS, CLOSE THE SB RIGHT-TURN LANE AND CONSTRUCT NW CORNER BUMP OUT AND PEDESTRIAN CONNECTIONS. CONSTRUCT AND ACTIVATE PROPOSED PEDESTRIAN SIGNALS ON NW CORNER AND REMOVE TEMPORARY PED POLE. UTILIZE PEDESTRIAN FLAGGERS AS NEEDED TO MAINTAIN PEDESTRIAN CROSSING OF SR 273 DURING ALLOWABLE LANE CLOSURE HOURS. SIGNALIZED PEDESTRIAN CROSSING OF SR 273 FROM NW TO SW CORNERS SHALL REMAIN ACTIVE DURING NON-WORKING HOURS.
12. APPLY CROSSWALK MARKINGS, AS SHOWN AND ACTIVATE NORTH LEG PEDESTRIAN CROSSING.

NOTES:

3. PROPOSED WAVETRONIX DETECTION ZONES:
   APPROACH - TO BE INSTALLED FOR US 13 THROUGH MOVEMENTS.
   STOPLINE - TO BE INSTALLED FOR US 13 LEFT TURN AND SR 273 THROUGH AND LEFT TURN MOVEMENTS.
   SYSTEM - TO BE INSTALLED FOR US 13 AND SR 273 RECEIVING LANES.
   ACTUAL SIZE AND DETECTION ZONES TO BE DETERMINED BY DELDOT TMC.
4. ALL PROPOSED SIGNAL POLES ARE DELDOT MAST ARMS.
5. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
6. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
7. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES ON PROPOSED SIGNAL HEADS 2-7 AND 9-22.
8. INSTALL PROPOSED 5/#14 FROM PROPOSED CABINET TO PL/4 USING TEMP CONDUITS T1 AND T2. REMOVE 5/#14 TO JUNCTION WELL, TYPE 4, FOR CONNECTION TO TEMP PEDESTAL POLE PL/T1 USING TEMP CONDUIT T3 AND AGAIN FOR ULTIMATE CONNECTION INTO PL/5 USING CONDUIT 28.
9. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNTDOWN DISPLAYS.
   PL2,3,11,14,17,&19 = R10-3eL (LEFT ARROW); PL5,7,&21 = R10-3eR (RIGHT ARROW); PL12 = R10-3e-DE (NO ARROW)
10. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE PEDESTRIAN CONNECTION WHEN POSSIBLE. WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON ADJACENT TO A LEVEL ALL-WEATHER SURFACE, THE SURFACE SHOULD BE AS LEVEL AS FEASIBLE. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE ADJOINING SIDEWALK, AND SHALL BE LOCATED SUCH THAT THAT THE MAXIMUM REACH DISTANCE DOES NOT EXCEED 10 INCHES FROM THE ADJOINING SIDEWALK TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE.
11. DELDOT TRAFFIC/TMC SHALL MODIFY THE SIGNAL PHASING, AS SHOWN.
12. THE CONTRACTOR SHALL INSTALL PROPOSED CONDUIT 36 SO THAT IT UTILIZES THE EXISTING CONDUIT ENTERING THE CABINET BASE.
13. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CABINET AND DEACTIVATE THE POWER FEED AFTER THE PROPOSED SIGNAL IS ACTIVATED. COORDINATE THE REMOVAL OF THE EXISTING METER WITH DELMARVA POWER. THE CONTRACTOR SHALL REMOVE THE EXISTING CABINET BASE.
14. IF EXISTING CONDUIT 11 CONFLICTS WITH THE INSTALLATION OF THE PROPOSED POLE BASE, TYPE 3A, THE CONTRACTOR SHALL REROUTE THE EXISTING CONDUIT AROUND THE POLE BASE OR TEMPORARILY UTILIZE THE PROPOSED POLE BASE, TYPE 4A, AND PROPOSED CONDUIT 13 WITH THE EXISTING SIGNAL CABINET AND EXISTING 9/#14 CABLE TO MAINTAIN PEDESTRIAN OPERATIONS. COORDINATE WITH DELDOT'S TRAFFIC CONTRACTOR AS NEEDED.
15. THE CONTRACTOR SHALL ADJUST THE EXISTING FAA JUNCTION WELLS TO BE FLUSH WITH THE PROPOSED CUT-THROUGH. FAA SHALL BE ONSITE WHEN THIS WORK IS OCCURRING AND POWER SHALL BE LOCKED OUT IN ACCORDANCE WITH THE FAA RESPRESENTATIVE REQUIREMENTS. PLACE DELAWARE #57 STONE IN THE BOTTOM OF EACH FAA JUNCTION WELL AFTER ADJUSTMENT IS COMPLETE AND GRADE STONE IN ACCORDANCE WITH THE FAA REPRESENTATIVE'S REQUIREMENTS. PATCH/FILL ALL VOIDS IN THE JUNCTION WELLS AROUND THE EXISTING FAA CONDUITS WITH MORTAR.
16. DELDOT'S TRAFFIC CONTRACTOR SHALL REPLACE THE EXISTING PEDESTRIAN PUSHBUTTONS WITH LED NON-LATCHING PUSHBUTTONS.
17. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND REPLACE THEM WITH PROPOSED 2-WAY PEDESTRIAN HEADS AND PUSHBUTTONS, AS SHOWN.
18. PRIOR TO EXCAVATING ISLAND AND PRIOR TO ADJUSTING FAA JUNCTION WELLS, CONTACT LOUIS GALARZA, JR. OF THE FEDERAL AVIATION ADMINISTRATION (302-356-4242). HE SHALL BE CONTACTED 45 DAYS IN ADVANCE OF THE START OF WORK IN EACH ISLAND.
19. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL AN ADDITIONAL PEDESTAL WITH SEPARATE DISCONNECTS FOR THE CCTV/BLUETOOTH CABINET AND THE PROPOSED SIGNAL CABINET.
20. THE CONTRACTOR SHALL REROUTE THE EXISTING LIGHTING CONDUIT AROUND THE PROPOSED POLE BASE, TYPE 3B AS NEEDED.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL UNDERGROUND SIGNAL EQUIPMENT - E.G., JUNCTION WELLS, POLE AND CABINET BASES AND CONDUIT AND ASSOCIATED MAINTENANCE OF TRAFFIC. DELDOT'S TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL ELECTRICAL CABLES AND ABOVE GROUND SIGNAL EQUIPMENT - E.G., HEADS, POLES, OPTICOM RECEIVERS, SPAN WIRE, SERVICE PEDESTAL, MAST ARMS, WAVETRONIX, CCTV CAMERAS AND OVERHEAD SIGNS, AND ASSOCIATED MAINTENANCE OF TRAFFIC.
22. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CCTV CAMERA AND INSTALL A PROPOSED CCTV CAMERA ON THE EXISTING STRAIN POLE.
23. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL A CABINET INTERFACE DEVICE (WAVETRONIX CLICK 656 OR SIMILAR) AND CONFIGURE DETECTION RANGE, DELAY TIME, PRIORITY, CHANNEL ASSIGNMENTS DURING INSTALLATION.

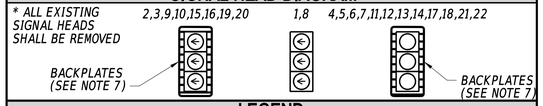
SIGNAL PHASING



PHASING NOTES

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SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	ON #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL #	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL #	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
WAVETRONIX DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL	P	P
ADDITIONAL DISCONNECT SWITCH	D	D
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
WAVETRONIX DETECTION ZONE		

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PREPARED BY

Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

6.13.2024
DATE

THIS SEAL APPLIES TO THIS SHEET ONLY.

STATE OF DELAWARE — MATTHEW J.A. BUCKLEY — No. 16224 — PROFESSIONAL ENGINEER

SEAL

CONCURRENCE FOR INSTALLATION

6/13/2024
DATE

CHIEF OF TRAFFIC ENGINEERING

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS, LLANGOLLEN BOULEVARD TO BACON/BOULDEN BOULEVARD

CONTRACT	T201901102
COUNTY	NEW CASTLE

PERMIT NO.	N183, NCAM073, NBT0030	
DESIGNED BY:	D. CARSON	
CHECKED BY:	M. BUCKLEY	

SIGNAL PLAN
US 13 (DUPONT HIGHWAY) @ SR 273 (CHRISTIANA ROAD / FRENCHTOWN ROAD)

SECTION	WRA
SHEET NO.	255

LAST REVISED: 9/11/2018
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NOTES:

3. PROPOSED WAVETRONIX DETECTION ZONES:
   APPROACH - TO BE INSTALLED FOR US 13 THROUGH MOVEMENTS.
   STOPLINE - TO BE INSTALLED FOR US 13 LEFT TURN AND SR 273 THROUGH AND LEFT TURN MOVEMENTS.
   SYSTEM - TO BE INSTALLED FOR US 13 AND SR 273 RECEIVING LANES.
   ACTUAL SIZE AND DETECTION ZONES TO BE DETERMINED BY DELDOT TMC.

4. ALL PROPOSED SIGNAL POLES ARE DELDOT MAST ARMS.

5. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.

6. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.

7. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES ON PROPOSED SIGNAL HEADS 2-7 AND 9-22.

8. INSTALL PROPOSED 5/#14 FROM PROPOSED CABINET TO PL/4 USING TEMP CONDUITS T1 AND T2. REMOVE 5/#14 TO JUNCTION WELL, TYPE 4, FOR CONNECTION TO TEMP PEDESTAL POLE PL/T1 USING TEMP CONDUIT T3 AND AGAIN FOR ULTIMATE CONNECTION INTO PL/5 USING CONDUIT 28.

9. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNTDOWN DISPLAYS.
   PL2,3,11,14,17,&19 = R10-3eL (LEFT ARROW); PL5,7,&21 = R10-3eR (RIGHT ARROW); PL12 = R10-3e-DE (NO ARROW)

10. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE PEDESTRIAN CONNECTION WHEN POSSIBLE. WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON ADJACENT TO A LEVEL ALL-WEATHER SURFACE, THE SURFACE SHOULD BE AS LEVEL AS FEASIBLE. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE ADJOINING SIDEWALK, AND SHALL BE LOCATED SUCH THAT THAT THE MAXIMUM REACH DISTANCE DOES NOT EXCEED 10 INCHES FROM THE ADJOINING SIDEWALK TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE.

11. DELDOT TRAFFIC/TMC SHALL MODIFY THE SIGNAL PHASING, AS SHOWN.

12. THE CONTRACTOR SHALL INSTALL PROPOSED CONDUIT 36 SO THAT IT UTILIZES THE EXISTING CONDUIT ENTERING THE CABINET BASE.

13. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CABINET AND DEACTIVATE THE POWER FEED AFTER THE PROPOSED SIGNAL IS ACTIVATED. COORDINATE THE REMOVAL OF THE EXISTING METER WITH DELMARVA POWER. THE CONTRACTOR SHALL REMOVE THE EXISTING CABINET BASE.

14. IF EXISTING CONDUIT 11 CONFLICTS WITH THE INSTALLATION OF THE PROPOSED POLE BASE, TYPE 3A, THE CONTRACTOR SHALL REROUTE THE EXISTING CONDUIT AROUND THE POLE BASE OR TEMPORARILY UTILIZE THE PROPOSED POLE BASE, TYPE 4A, AND PROPOSED CONDUIT 13 WITH THE EXISTING SIGNAL CABINET AND EXISTING 9/#14 CABLE TO MAINTAIN PEDESTRIAN OPERATIONS. COORDINATE WITH DELDOT'S TRAFFIC CONTRACTOR AS NEEDED.

15. THE CONTRACTOR SHALL ADJUST THE EXISTING FAA JUNCTION WELLS TO BE FLUSH WITH THE PROPOSED CUT-THROUGH. FAA SHALL BE ONSITE WHEN THIS WORK IS OCCURRING AND POWER SHALL BE LOCKED OUT IN ACCORDANCE WITH THE FAA RESPRESENTATIVE REQUIREMENTS. PLACE DELAWARE #57 STONE IN THE BOTTOM OF EACH FAA JUNCTION WELL AFTER ADJUSTMENT IS COMPLETE AND GRADE STONE IN ACCORDANCE WITH THE FAA REPRESENTATIVE'S REQUIREMENTS. PATCH/FILL ALL VOIDS IN THE JUNCTION WELLS AROUND THE EXISTING FAA CONDUITS WITH MORTAR.

16. DELDOT'S TRAFFIC CONTRACTOR SHALL REPLACE THE EXISTING PEDESTRIAN PUSHBUTTONS WITH LED NON-LATCHING PUSHBUTTONS.

17. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND REPLACE THEM WITH PROPOSED 2-WAY PEDESTRIAN HEADS AND PUSHBUTTONS, AS SHOWN.

18. PRIOR TO EXCAVATING ISLAND AND PRIOR TO ADJUSTING FAA JUNCTION WELLS, CONTACT LOUIS GALARZA, JR. OF THE FEDERAL AVIATION ADMINISTRATION (302-356-4242). HE SHALL BE CONTACTED 45 DAYS IN ADVANCE OF THE START OF WORK IN EACH ISLAND.

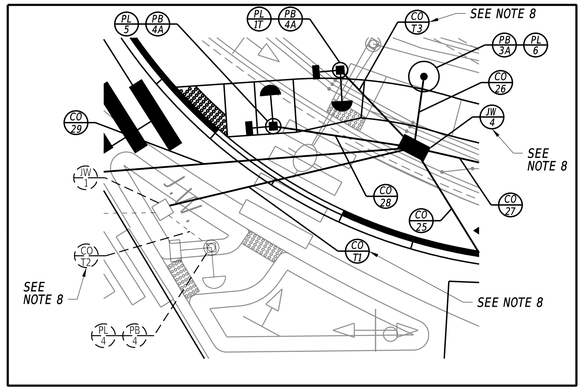
19. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL AN ADDITIONAL PEDESTAL WITH SEPARATE DISCONNECTS FOR THE CCTV/BLUETOOTH CABINET AND THE PROPOSED SIGNAL CABINET.

20. THE CONTRACTOR SHALL REROUTE THE EXISTING LIGHTING CONDUIT AROUND THE PROPOSED POLE BASE, TYPE 3B AS NEEDED.

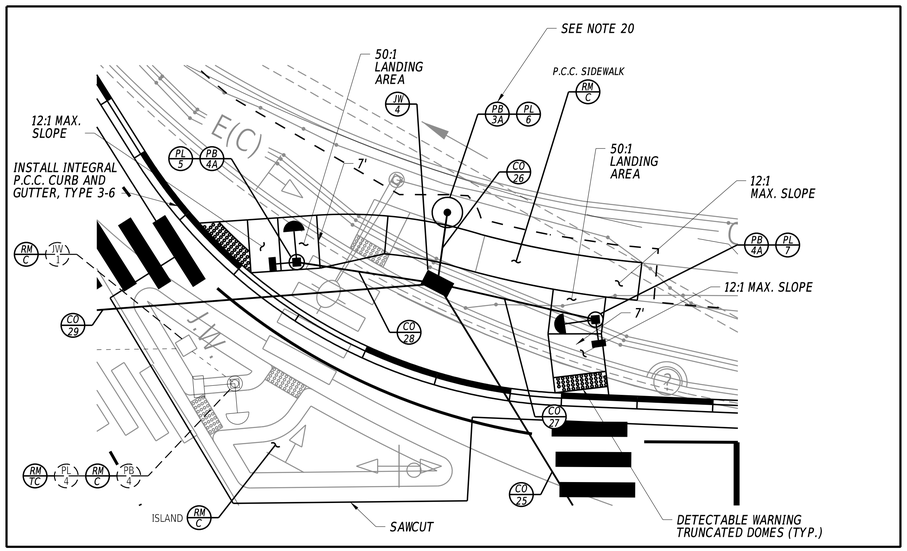
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL UNDERGROUND SIGNAL EQUIPMENT - E.G., JUNCTION WELLS, POLE AND CABINET BASES AND CONDUIT AND ASSOCIATED MAINTENANCE OF TRAFFIC. DELDOT'S TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL ELECTRICAL CABLES AND ABOVE GROUND SIGNAL EQUIPMENT - E.G., HEADS, POLES, OPTICOM RECEIVERS, SPAN WIRE, SERVICE PEDESTAL, MAST ARMS, WAVETRONIX, CCTV CAMERAS AND OVERHEAD SIGNS, AND ASSOCIATED MAINTENANCE OF TRAFFIC.

22. DELDOT'S TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CCTV CAMERA AND INSTALL A PROPOSED CCTV CAMERA ON THE EXISTING STRAIN POLE.

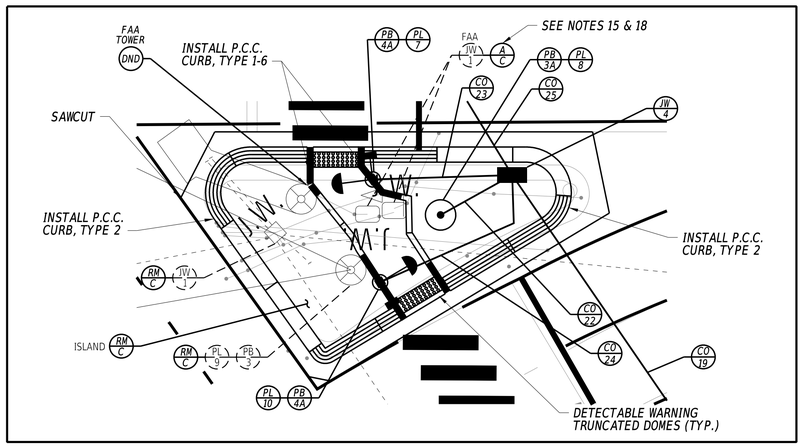
23. DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL A CABINET INTERFACE DEVICE (WAVETRONIX CLICK 656 OR SIMILAR) AND CONFIGURE DETECTION RANGE, DELAY TIME, PRIORITY, CHANNEL ASSIGNMENTS DURING INSTALLATION.



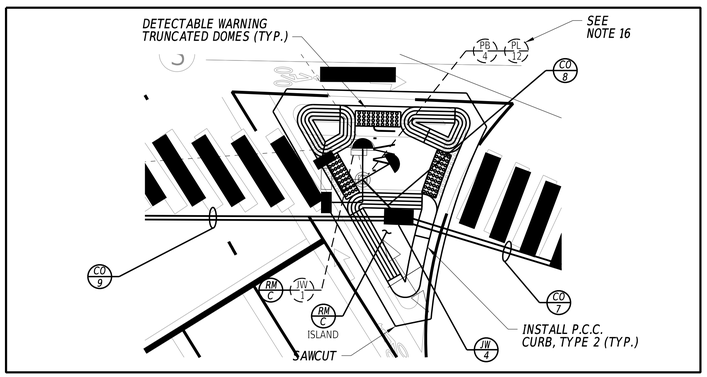
DETAIL T1: TEMPORARY PEDESTRIAN CONNECTIONS



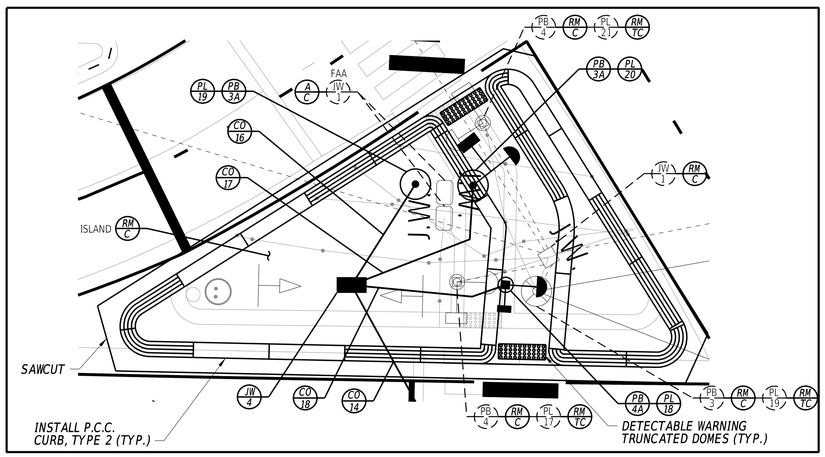
DETAIL 1: INSTALL PEDESTRIAN CONNECTIONS, TYPE 1



DETAIL 2: INSTALL PEDESTRIAN CONNECTION, TYPE 5

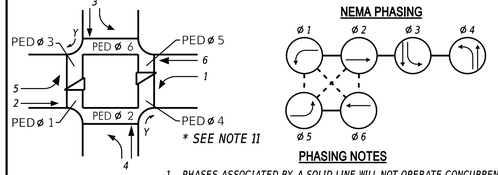


DETAIL 3: INSTALL PEDESTRIAN CONNECTION, TYPE 5



DETAIL 4: INSTALL PEDESTRIAN CONNECTION, TYPE 5

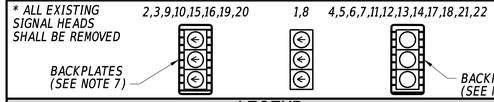
SIGNAL PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
WAVETRONIX DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY	R/W	R/W
SERVICE PEDESTAL	P	P
ADDITIONAL DISCONNECT SWITCH	D	D
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
WAVETRONIX DETECTION ZONE		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY

WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

6.13.2024
DATE

THIS SEAL APPLIES TO THIS SHEET ONLY.

MATTHEW J.A. BUCKLEY No. 16224 PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

6/13/2024
DATE

ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS, LLANGOLLEN BOULEVARD TO BACON/BOULDEN BOULEVARD

CONTRACT	T201901102	PERMIT NO.	N183, NCAM073, NBT0030
COUNTY	NEW CASTLE	DESIGNED BY:	D. CARSON
		CHECKED BY:	M. BUCKLEY

SIGNAL PLAN US 13 (DUPONT HIGHWAY) @ SR 273 (CHRISTIANA ROAD / FRENCHTOWN ROAD)

SECTION	WRA
SHEET NO.	256

LAST REVISED: 9/11/2018
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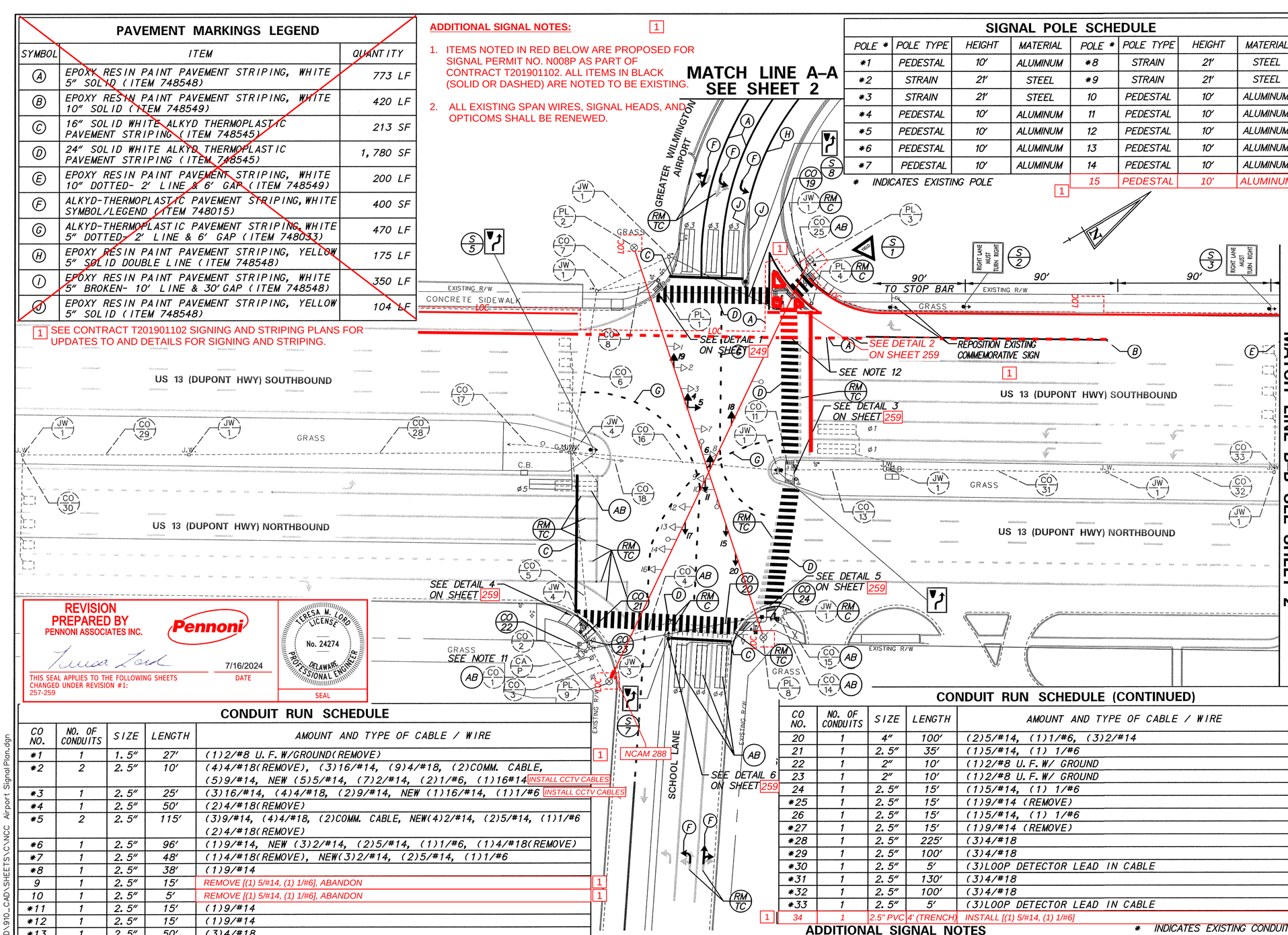
PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	773 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" SOLID (ITEM 748549)	420 LF
(C)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748545)	213 SF
(D)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748545)	1,780 SF
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED- 2' LINE & 6' GAP (ITEM 748549)	200 LF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND (ITEM 748015)	400 SF
(G)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 5" DOTTED- 2' LINE & 6' GAP (ITEM 748033)	470 LF
(H)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	175 LF
(I)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" BROKEN- 10' LINE & 30' GAP (ITEM 748548)	350 LF
(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 748548)	104 LF

1 SEE CONTRACT T201901102 SIGNING AND STRIPING PLANS FOR UPDATES TO AND DETAILS FOR SIGNING AND STRIPING.

ADDITIONAL SIGNAL NOTES: 1

1. ITEMS NOTED IN RED BELOW ARE PROPOSED FOR SIGNAL PERMIT NO. N008P AS PART OF CONTRACT T201901102. ALL ITEMS IN BLACK (SOLID OR DASHED) ARE NOTED TO BE EXISTING.
2. ALL EXISTING SPAN WIRES, SIGNAL HEADS, AND OPTICOMS SHALL BE RENEWED.

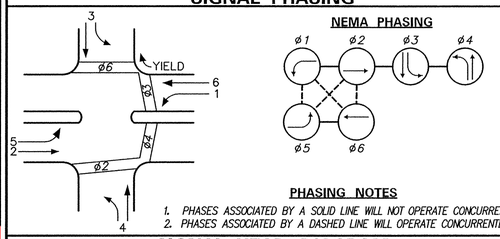


SIGNAL POLE SCHEDULE

POLE #	POLE TYPE	HEIGHT	MATERIAL	POLE #	POLE TYPE	HEIGHT	MATERIAL
#1	PEDESTAL	10'	ALUMINUM	#8	STRAIN	21'	STEEL
#2	STRAIN	21'	STEEL	#9	STRAIN	21'	STEEL
#3	STRAIN	21'	STEEL	10	PEDESTAL	10'	ALUMINUM
#4	PEDESTAL	10'	ALUMINUM	11	PEDESTAL	10'	ALUMINUM
#5	PEDESTAL	10'	ALUMINUM	12	PEDESTAL	10'	ALUMINUM
#6	PEDESTAL	10'	ALUMINUM	13	PEDESTAL	10'	ALUMINUM
#7	PEDESTAL	10'	ALUMINUM	14	PEDESTAL	10'	ALUMINUM
				15	PEDESTAL	10'	ALUMINUM

* INDICATES EXISTING POLE 1

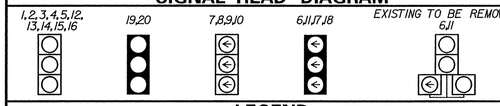
SIGNAL PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH ●	EXISTING OVERHEAD RUN IDENTIFIER (● OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH ●	PROPOSED OVERHEAD RUN IDENTIFIER (● OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO ●	EXISTING CONDUIT RUN IDENTIFIER (● OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO ●	PROPOSED CONDUIT RUN IDENTIFIER (● OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (● OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (● OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

REVISION PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

7/16/2024
DATE

THIS SEAL APPLIES TO THE FOLLOWING SHEETS CHANGED UNDER REVISION #1:
257-259

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
#1	1	1.5"	27'	(1)2/#8 U.F.W/GROUND(REMOVE)
#2	2	2.5"	10'	(4)4/#18(REMOVE), (3)16/#14, (9)4/#18, (2)COMM. CABLE, (5)9/#14, NEW (5)5/#14, (7)2/#14, (2)1/#6, (1)16#14 INSTALL CCTV CABLES
#3	1	2.5"	25'	(3)16/#14, (4)4/#18, (2)9/#14, NEW (1)16/#14, (1)1/#6 INSTALL CCTV CABLES
#4	1	2.5"	50'	(2)4/#18(REMOVE)
#5	2	2.5"	115'	(3)9/#14, (4)4/#18, (2)COMM. CABLE, NEW(4)2/#14, (2)5/#14, (1)1/#6 (2)4/#18(REMOVE)
#6	1	2.5"	96'	(1)9/#14, NEW (3)2/#14, (2)5/#14, (1)1/#6, (1)4/#18(REMOVE)
#7	1	2.5"	48'	(1)4/#18(REMOVE), NEW(3)2/#14, (2)5/#14, (1)1/#6
#8	1	2.5"	38'	(1)9/#14
9	1	2.5"	15'	REMOVE [(1) 5/#14, (1) 1/#6], ABANDON 1
10	1	2.5"	5'	REMOVE [(1) 5/#14, (1) 1/#6], ABANDON 1
#11	1	2.5"	15'	(1)9/#14
#12	1	2.5"	15'	(1)9/#14
#13	1	2.5"	50'	(3)4/#18
#14	1	2.5"	10'	(1)9/#14(REMOVE)
#15	1	2.5"	20'	(1)9/#14(REMOVE)
#16	2	2.5"	132'	(2)9/#14, (3)4/#18
#17	1	UNK	UNK	COMM. CABLE
#18	1	UNK	UNK	COMM. CABLE
19	1	4"	72'	(2)5/#14, (1)1/#6 REMOVE [(1) 5/#14], INSTALL [(1) 5/#14] 1

CONDUIT RUN SCHEDULE (CONTINUED)

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
20	1	4"	100'	(2)5/#14, (1)1/#6, (3)2/#14
21	1	2.5"	35'	(1)5/#14, (1) 1/#6
22	1	2"	10'	(1)2/#8 U.F.W/ GROUND
23	1	2"	10'	(1)2/#8 U.F.W/ GROUND
24	1	2.5"	15'	(1)5/#14, (1) 1/#6
#25	1	2.5"	15'	(1)9/#14 (REMOVE)
26	1	2.5"	15'	(1)5/#14, (1) 1/#6
#27	1	2.5"	15'	(1)9/#14 (REMOVE)
#28	1	2.5"	225'	(3)4/#18
#29	1	2.5"	100'	(3)4/#18
#30	1	2.5"	5'	(3)LOOP DETECTOR LEAD IN CABLE
#31	1	2.5"	130'	(3)4/#18
#32	1	2.5"	100'	(3)4/#18
#33	1	2.5"	5'	(3)LOOP DETECTOR LEAD IN CABLE
34	1	2.5" PVC	4' (TRENCH)	INSTALL [(1) 5/#14, (1) 1/#6] 1

* INDICATES EXISTING CONDUIT

ADDITIONAL SIGNAL NOTES

6. ALL ABANDONED CONDUITS TO HAVE WIRES REMOVED.
7. INSTALL "EDUCATIONAL SIGN FOR COUNT-DOWN PEDESTRIAN SIGNALS" (SYMBOL) R10-3E ABOVE PUSHBUTTON.
8. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNT-DOWN MODULES.
9. ALL CURB RAMPS TO BE MADE ADA COMPLIANT UNDER THIS CONTRACT.
10. PROPERLY BOND AND GROUND ALL PROJECT'S JUNCTION WELLS AND LIDS, WHERE APPLICABLE.
11. EXISTING POWER SERVICE METER TO BE REMOVED FROM CABINET.
12. INSTALL TUBULAR MARKERS ON NOSES OR TRIANGULAR CHANNELIZING ISLAND PER DELDOT STANDARD SPECIFICATIONS.
13. SHIFT AND REALIGN EXISTING SIGNAL HEAD POSITION 4 AND 15 AS INDICATED ON THE PLAN.
14. BE AWARE OF THE EXISTING TRAFFIC SIGNAL INSTALLATION AND MAINTENANCE AGREEMENT BETWEEN THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION AND DRBA AT THE INTERSECTION OF US 13 (DUPONT HWY) AT SCHOOL LANE/ WILMINGTON AIRPORT, RECORDED IN NEW CASTLE COUNTY.

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
3. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS, SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
4. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.
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RECOMMENDED _____ DATE: 7-13-15

RECOMMENDED _____ DATE: 7/14/15

RECOMMENDED _____ DATE: 8/3/15

APPROVED TRAFFIC ENGINEER _____ DATE: 7/23/15

APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 7/23/15

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS
1 NW CORNER ISLAND RECONSTRUCTION - P. HORSEY, 6/7/2024

SCALE 0 30 60 90 FEET

New Castle Airport Terminal Parking Improvements DRBA Contract No. ILG 13-02

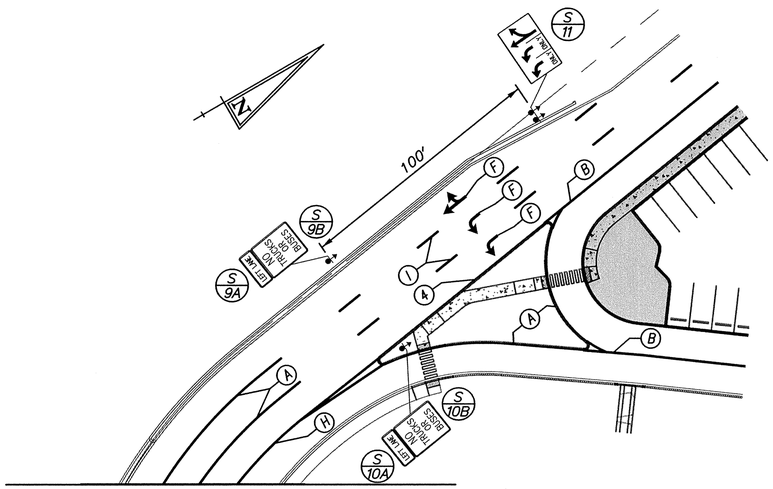
CONTRACT	PERMIT NO.	N008P / NCAM288
--	DESIGNED BY: -	
COUNTY	CHECKED BY: -	
NEW CASTLE		

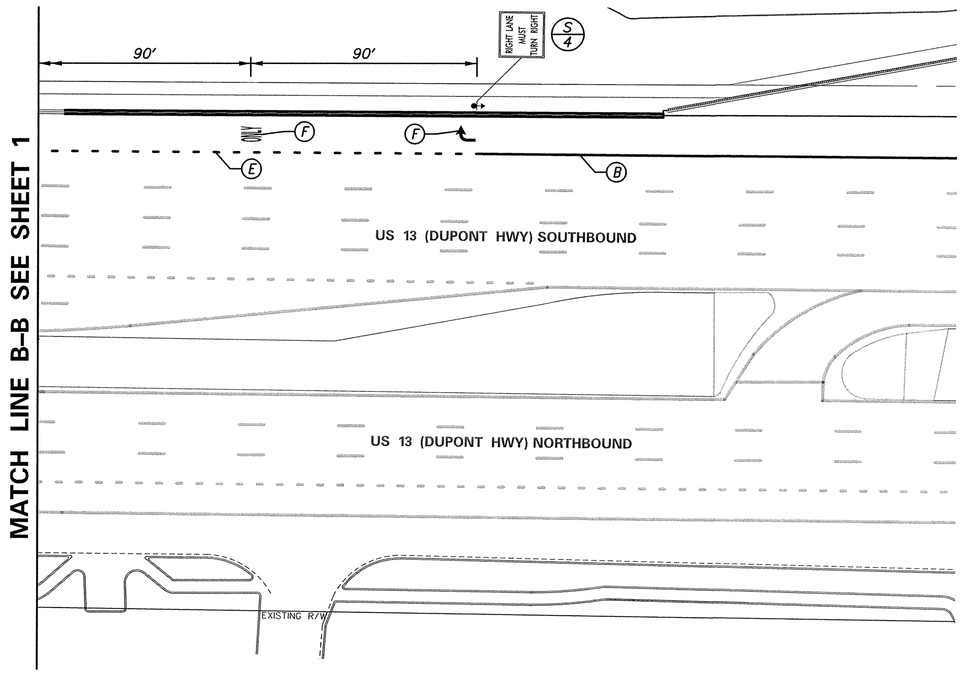
US 13 @ SCHOOL LANE / WILMINGTON AIRPORT

SHEET NO.
257
TOTAL SHTS.
265

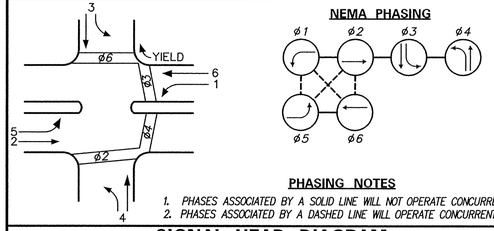
P:\60310862 ILG Parking Expansion\900_CAD\910_CAD\SHEETS\CVNCC Airport Signal Plan.dgn

REVISION PREPARED BY PENNONI ASSOCIATES INC.		TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
Teresa Lord	7/16/2024	
THIS SEAL APPLIES TO THE FOLLOWING SHEETS CHANGED UNDER REVISION #1: 257-259	DATE	SEAL





SIGNAL PHASING



SIGNAL HEAD DIAGRAM

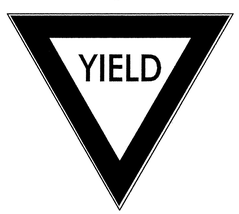


LEGEND

AB	ABANDON	OH	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

S1



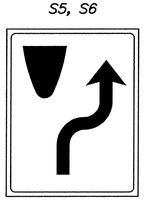
R1-2
48" X 48" X 48"

S2, S3, S4



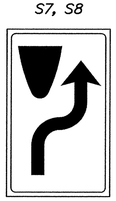
R3-7
36" X 36"

S5, S6



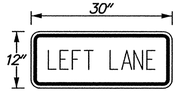
R4-7
24" X 30"

S7, S8

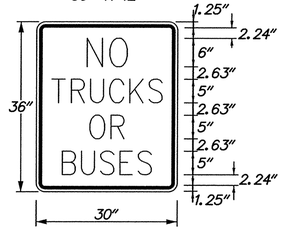


R4-7c
18" X 30"

S9A, S9B
S10A, S10B

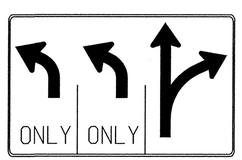


R3-5bP
30" X 12"



R5-2a(r)
30" X 36"

S11



R3-8a
48" X 30"

ADDITIONAL SIGNAL NOTES: 1

1. ITEMS NOTED IN RED BELOW ARE PROPOSED FOR SIGNAL PERMIT NO. N008P AS PART OF CONTRACT T201901102. ALL ITEMS IN BLACK (SOLID OR DASHED) ARE NOTED TO BE EXISTING.
2. ALL EXISTING SPAN WIRES, SIGNAL HEADS, AND OPTICOMS SHALL BE RENEWED.

ADDITIONAL SIGNAL NOTES

6. ALL ABANDONED CONDUITS TO HAVE WIRES REMOVED.
7. INSTALL "EDUCATIONAL SIGN FOR COUNT-DOWN PEDESTRIAN SIGNALS" (SYMBOL) R10-3E ABOVE PUSHBUTTON.
8. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNT-DOWN MODULES.
9. ALL CURB RAMPS TO BE MADE ADA COMPLIANT UNDER THIS CONTRACT.
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11. EXISTING POWER SERVICE METER TO BE REMOVED FROM CABINET.
12. INSTALL TUBULAR MARKERS ON NOSES OR TRIANGULAR CHANNELIZING ISLAND PER DELDOT STANDARD SPECIFICATIONS.
13. SHIFT AND REALIGN EXISTING SIGNAL HEAD POSITION 4 AND 15 AS INDICATED ON THE PLAN.
14. BE AWARE OF THE EXISTING TRAFFIC SIGNAL INSTALLATION AND MAINTENANCE AGREEMENT BETWEEN THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION AND DRBA AT THE INTERSECTION OF US 13 (DUPONT HWY) AT SCHOOL LANE/ WILMINGTON AIRPORT, RECORDED IN NEW CASTLE COUNTY.

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RECOMMENDED _____ DATE: 7-13-15	RECOMMENDED _____ DATE: 7/14/15	RECOMMENDED _____ DATE: 8/3/15	APPROVED TRAFFIC ENGINEER _____ DATE: 7/23/15	APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 7/23/15

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS
1 NW CORNER ISLAND RECONSTRUCTION - P. HORSEY, 6/7/2024

SCALE 0 30 60 90 FEET

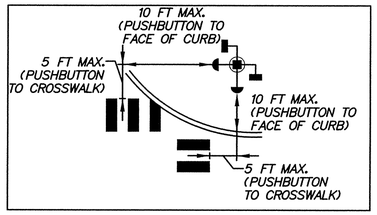
New Castle Airport Terminal Parking Improvements DRBA Contract No. ILG 13–02

CONTRACT	PERMIT NO.	N008P / NCAM288
--	DESIGNED BY: -	
COUNTY	CHECKED BY: -	
NEW CASTLE		

US 13 @ SCHOOL LANE / WILMINGTON AIRPORT

SHEET NO.	258
TOTAL SHTS.	265

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PUSHBUTTON DETAIL (TYPICAL)
(NOT TO SCALE)

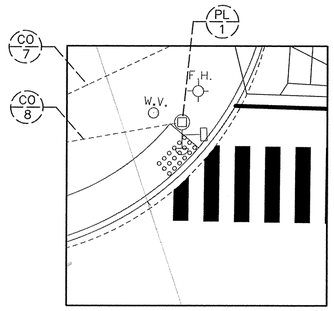
REVISION
PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

Teresa Lord — 7/16/2024
DATE

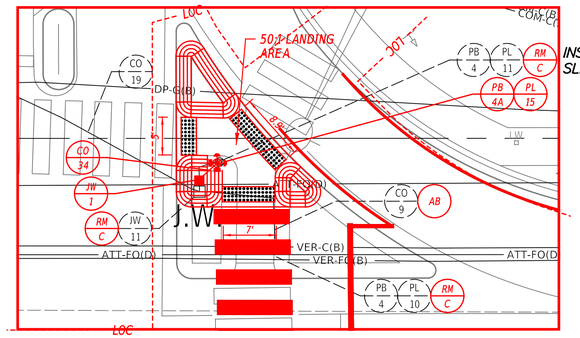
THIS SEAL APPLIES TO THE FOLLOWING SHEETS
CHANGED UNDER REVISION #1:
257-259

TERESA M. LORD — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER
SEAL



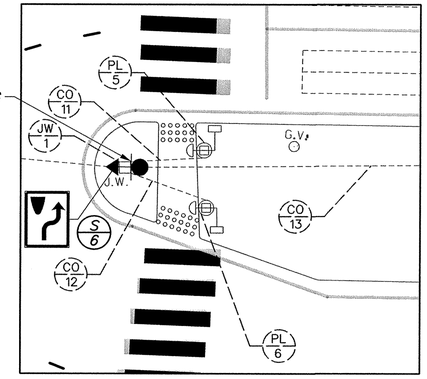
DETAIL 1
1" = 10'

1

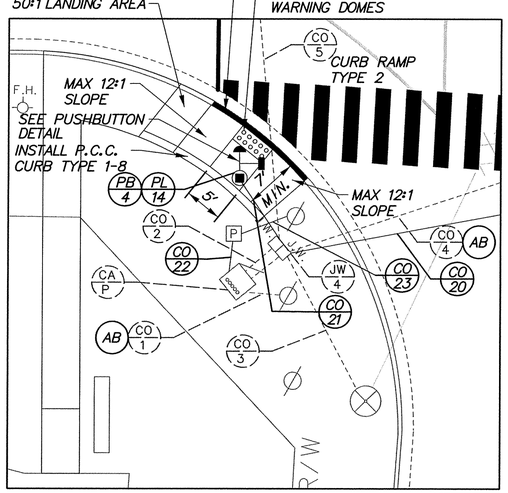


DETAIL 2
(FIELD ADJUSTMENTS AS REQUIRED)
1" = 10'

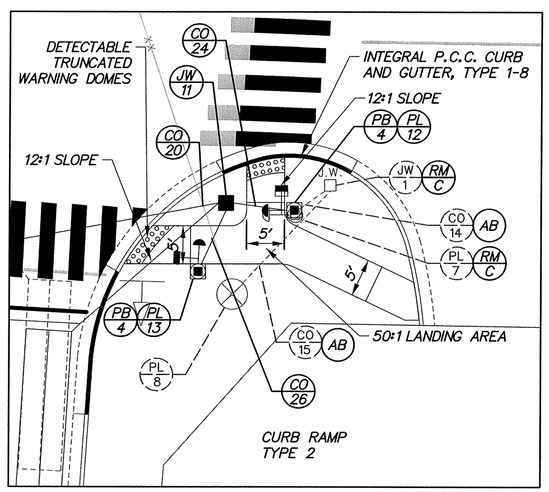
INSTALL AT EXISTING SLEEVE LOCATION



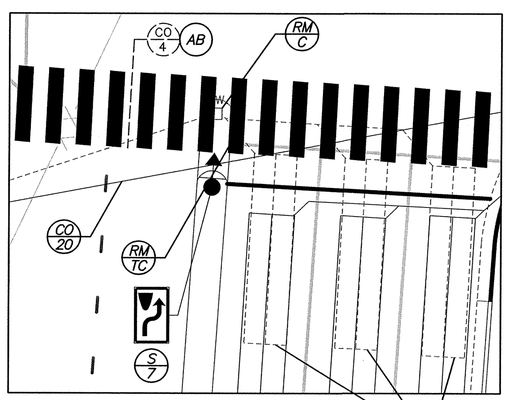
DETAIL 3
1" = 10'



DETAIL 4
(FIELD ADJUSTMENTS AS REQUIRED)
1" = 10'



DETAIL 5
(FIELD ADJUSTMENTS AS REQUIRED)
1" = 10'



DETAIL 6
(FIELD ADJUSTMENTS AS REQUIRED)
1" = 10'

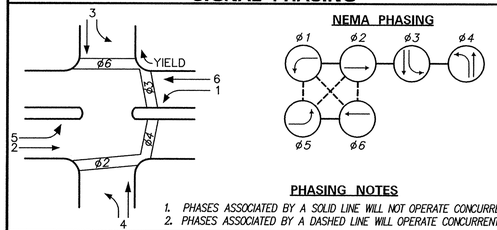
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ADDITIONAL SIGNAL NOTES

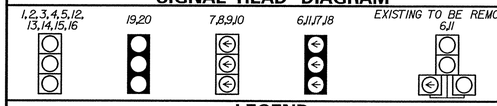
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SIGNAL PHASING



PHASING NOTES
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH•	EXISTING OVERHEAD RUN IDENTIFIER (• OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH•	PROPOSED OVERHEAD RUN IDENTIFIER (• OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO •	EXISTING CONDUIT RUN IDENTIFIER (• OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO •	PROPOSED CONDUIT RUN IDENTIFIER (• OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (• OF POLE)
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JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

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RECOMMENDED John Eggs DATE: 7-13-15

RECOMMENDED [signature] DATE: 7/14/15

RECOMMENDED [signature] DATE: 8/3/15

APPROVED TRAFFIC ENGINEER Norman C. Kelly DATE: 7/23/15

APPROVED FOR INSTALLATION
CHIEF TRAFFIC ENGINEER [signature] DATE: 7/23/15

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS
1 NW CORNER ISLAND RECONSTRUCTION - P. HORSEY, 6/7/2024

New Castle Airport
Terminal Parking Improvements
DRBA Contract No. ILG 13-02

CONTRACT: --
COUNTY: NEW CASTLE
PERMIT NO.: N008P / NCAM288
DESIGNED BY: -
CHECKED BY: -

US 13 @ SCHOOL LANE / WILMINGTON AIRPORT

SHEET NO. 259
TOTAL SHTS. 265

P:\60310862 ILG Parking Expansion\900_CAD\910_CAD\SHEETS\C\NCC Airport SignalPlan.dgn

ADDITIONAL SIGNAL NOTES

3. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/7 = R10-3e-DE2L (LEFT ARROW) PL/6 = R10-3e (MOD.)
   PL/9 = R10-3eR (RIGHT ARROW) PL/8 = R10-3eL (LEFT ARROW)
   PL/5 = R10-3e-DE2R (RIGHT ARROW)
4. THE TRAFFIC CONTRACTOR SHALL REPLACE THE EXISTING OVERHEAD SIGN (S-1) AND REPLACE WITH THE DE MUTCD COMPLIANT SIGN DESIGNATED AS W11-12-DE (S-2).
5. PROPOSED POWER SOURCE: DELMARVA UTILITY POLE # 47485-41127
6. THE TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING CABINET AND INSTALL NEW TYPE P CABINET, CABINET BASE EXTENSION, AND CABINET BASE. THE TRAFFIC CONTRACTOR SHALL INSTALL A SECONDARY DISCONNECT AT THE CABINET AND A JUNCTION WELL TYPE 1 SO THAT BOTH INTERCEPT CONDUIT RUNS 5A, 5B, AND 5C.
7. THE CONTRACTOR SHALL EXTEND EXISTING CONDUIT 9 TO TIE INTO PROPOSED JUNCTION WELL, TYPE 1.
8. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.

OVERHEAD RUN SCHEDULE

OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1*	226'	REMOVE [(3)16/#14, (5)4/#18], INSTALL [(1)16/#14, (4)4/#18]
2*	187'	REMOVE [(1)16/#14], INSTALL [(1)16/#14]
3*	301'	REMOVE [(1)16/#14], INSTALL [(1)16/#14]

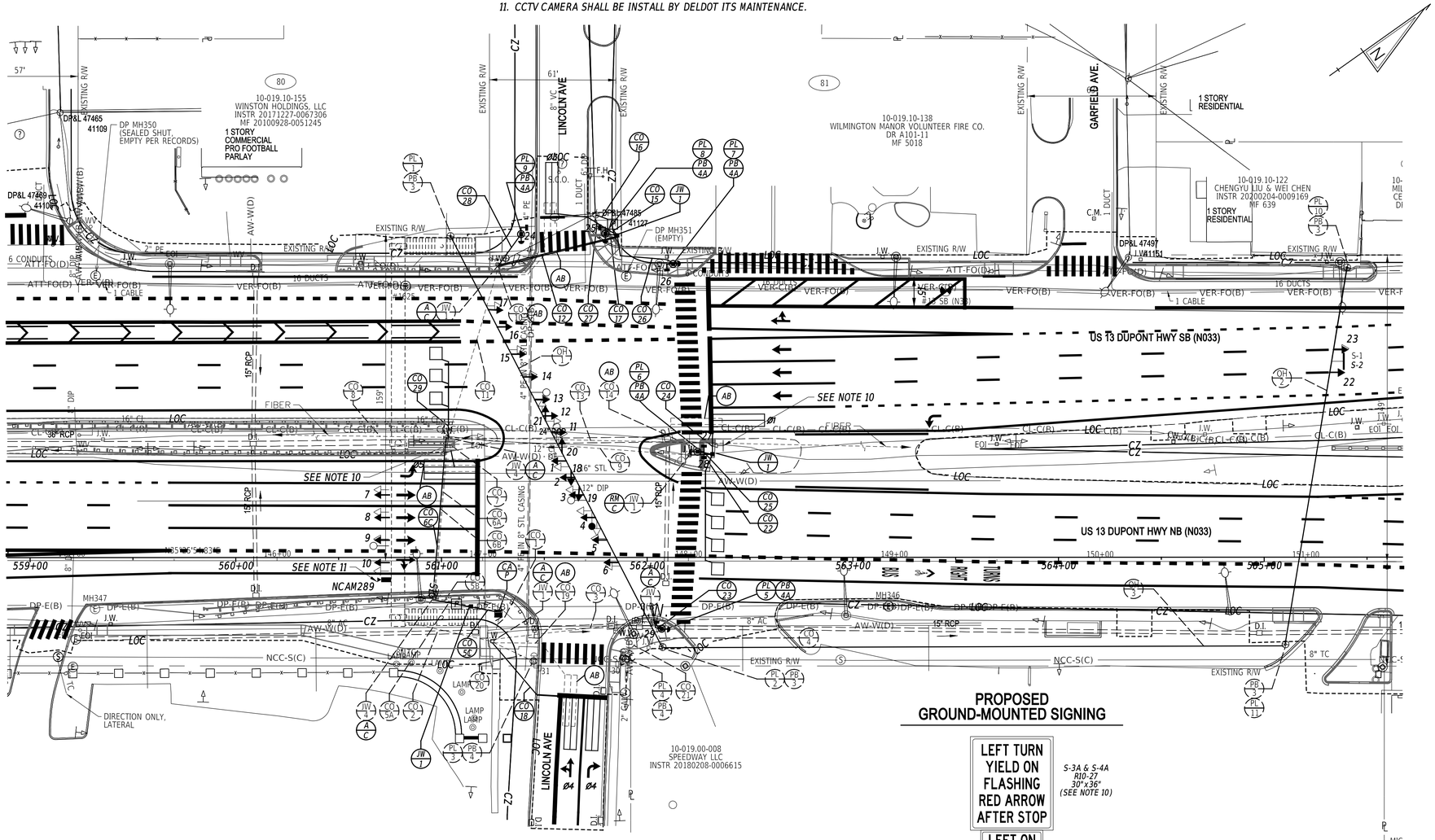
*DENOTES EXISTING SPAN WIRES TO BE RENEWED

9. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.
10. GROUND-MOUNTED FLASHING RED ARROW SIGNING TO BE INSTALLED ON THE BACK OF SIGN ASSEMBLIES 25 AND 30 ON SS-25.
11. CCTV CAMERA SHALL BE INSTALL BY DELDOT ITS MAINTENANCE.

SIGNAL POLE SCHEDULE

NO.	POLE TYPE	HEIGHT	NORTHING	EASTING
1*	STRAIN	28'	613114.259	607874.079
2*	STRAIN	28'	613082.602	608096.822
3*	PEDESTAL	10'	613027.465	608066.017
4*	PEDESTAL	10'	613064.148	608089.841
5	PEDESTAL	10'	613087.373	608089.267
6	PEDESTAL	10'	613151.423	608029.207
7	PEDESTAL	10'	613194.657	607947.832
8	PEDESTAL	10'	613176.283	607916.789
9	PEDESTAL	10'	613142.779	607893.222
10*	STRAIN	28'	613460.855	608138.993
11*	STRAIN	28'	613330.265	608271.127

*DENOTES EXISTING



EXISTING OVERHEAD SIGNING

FIRE SIGNAL
STOP ON FLASHING RED

S-1
W11-12-DE (NOT DE MUTCD COMPLIANT)
60" x 48"

PROPOSED OVERHEAD SIGNING

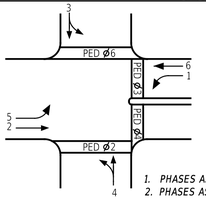
FIRE SIGNAL
STOP ON FLASHING RED

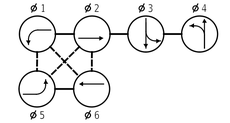
S-2
W11-12-DE (TETHERED)
60" x 48"

PROPOSED GROUND-MOUNTED SIGNING

LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP	S-3A & S-4A R10-27 30"x36" (SEE NOTE 10)
LEFT ON GREEN ARROW ONLY	S-3B & S-4B R10-5 30"x36" (SEE NOTE 10)
MON-FRI 7AM-9AM 4PM-6PM	S-3C & S-4C R10-20aP 24"x24" (SEE NOTE 10)

SIGNAL PHASING

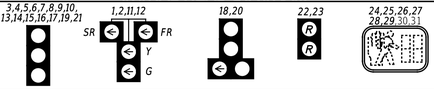




PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

THERESA M. LORD
LICENSE
No. 24274
DELAWARE
PROFESSIONAL ENGINEER
SEAL

THIS SEAL APPLIES TO ALL SHEETS BEARING THE *PAI* SECTION DESIGNATION.

6/14/2024
DATE

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

7/16/2024
DATE

PENNONI ASSOCIATES INC. | PEN_TABLE: SPRINT.tbl
FILE NAME: $FILEAS | PLOT DRIVER: SPT.DRV
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:29
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	PERMIT NO.	N220, NCAM289
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

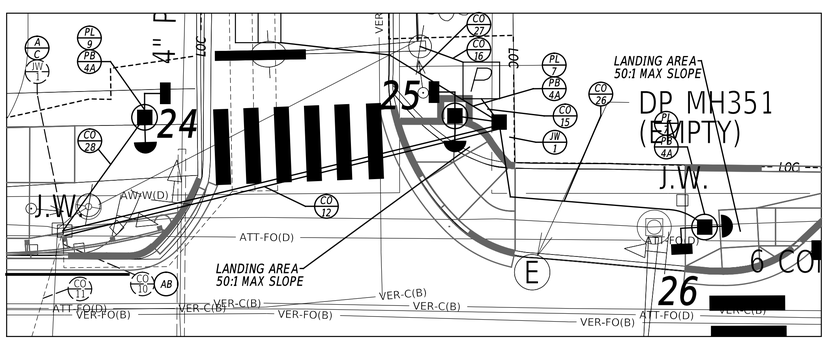
SIGNAL PLAN
N. DUPONT HWY AT
LINCOLN AVE

SECTION	PAI
SHEET NO.	260

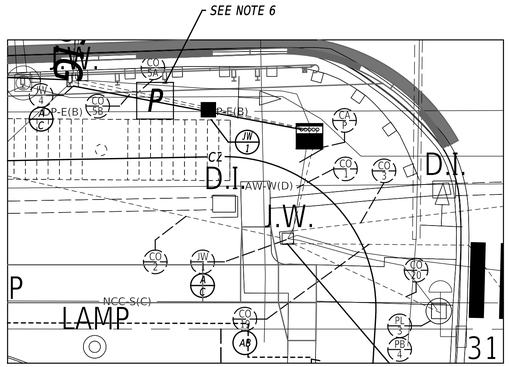
CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	3	2.5" PVC	11'	-	REMOVE [(7)4/#18, (2)9/#14], (1)16/#14], INSTALL [(4)16/#14, (3)5/#14, (5)4/#18, (2)2/#14, CCTV CABLES, (3)#6 GND]
*2	1	UNK	46'	-	REMOVE [(1)16/#14], INSTALL [(1) 16/#14, (1)4/#18, CCTV CABLES, (1)#6 GND]
*3	1	2.5" HDPE	78'	-	REMOVE [(4)16/#14, (5)4/#18, (1)9/#14], INSTALL [(2)5/#14, (3)16/#14, (4)4/#18, (1)#6 GND]
*4	1	1.5" PVC	13'	-	REMOVE [(4)16/#14, (5)4/#18], INSTALL [(3)16/#14, (4)4/#18, (1)#6 GND]
*5A	1	2.5" PVC	29'	-	REMOVE [(7)4/#18], EX.[FIBER]
*5B	1	2.5" GALV.	29'	-	REMOVE [(1)2/#8 U.F. w/G], INSTALL [(1)2/#8 U.F. w/G]
5C	1	4.0" PVC	29'	T	INSTALL [(5)5/#14, (10)2/#14, (1)#6 GND]
*6A	1	2.5" HDPE	79'	-	REMOVE [(7)4/#18], EX.[FIBER]
*6B	1	2.5" GALV.	79'	-	REMOVE [(1)2/#8 U.F. w/G], INSTALL [(1)2/#8 U.F. w/G]
6C	1	4.0" HDPE	79'	B	INSTALL [(5)5/#14, (10)2/#14, (1)#6 GND]
*7	1	1.5" PVC	7'	-	REMOVE[(1)4/#18], INSTALL [(1)2/#14, (1)#6 GND]
*8	1	UNK	UNK	-	EX.[FIBER]
*9	1	2.5" HDPE	118'	-	REMOVE [(3)4/#18], INSTALL [(2)5/#14, (5)2/#14, (1)#6 GND]
*10	1	1.5" PVC	4'	-	REMOVE [(1)4/#18]; ABANDON
*11	2	2.5" HDPE	88'	-	REMOVE [(1)2/#8 U.F. w/G, (1)4/#18], INSTALL[(1)2/#8 U.F. w/G, (3)5/#14, (1)2/#14, (1)#6 GND]
12	2	4.0" HDPE	59'	B	INSTALL [(1)2/#8 U.F. w/G, (2)5/#14, (1)2/#14, (1)#6 GND]
*13	1	UNK	UNK	-	EX.[FIBER]
*14	1	1.5" PVC	8'	-	REMOVE [(1)4/#18]; ABANDON
15	1	2.0" GALV.	4'	T	INSTALL [(1)2/#8 U.F. w/G]
16	1	2.0" GALV.	6'	T	INSTALL [(3)#8 THHN STRANDED COPPER]
17	1	2.5" PVC	6'	T	INSTALL [(1)5/#14, (1)#6 GND]
18	1	1.5" GALV.	34'	T	INSTALL [(2)1/#14]
*19	1	1.5" PVC	24'	-	REMOVE [(1)4/#18]; ABANDON
*20	1	2.5" PVC	22'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*21	1	2.5" PVC	23'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
22	1	2.0" GALV.	9'	T	INSTALL [(4)1/#14]
23	1	2.5" PVC	6'	T	INSTALL [(1)5/#14, (1)#6 GND]
24	1	1.5" GALV.	8'	T	INSTALL [(1)1/#14]
25	1	2.5" PVC	7'	T	INSTALL [(2)5/#14, (1)#6 GND]
26	1	2.5" PVC	36'	T	INSTALL [(1)5/#14, (1)#6 GND]
27	1	1.5" GALV.	17'	T	INSTALL [(1)1/#14]
28	1	2.5" PVC	19'	T	INSTALL [(1)5/#14, (1)#6 GND]
29	1	2.0" GALV.	9'	T	INSTALL [(3)1/#14]

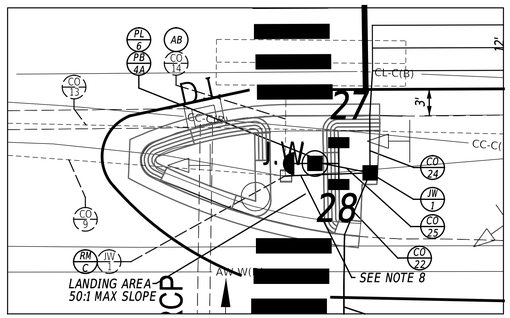
*DENOTES EXISTING B = BORE, T = TRENCH, O = OPEN CUT



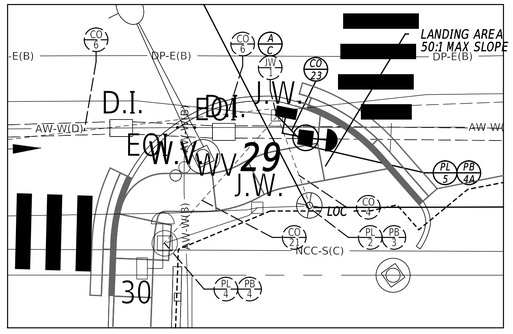
WEST CORNER
SCALE 1" = 10'



SOUTHEAST CORNER
SCALE 1" = 10'



NORTHERN MEDIAN ISLAND
SCALE 1" = 10'

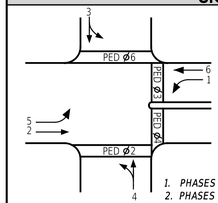


NORTHEAST CORNER
SCALE 1" = 10'

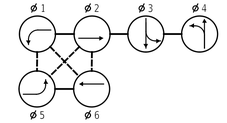
ADDITIONAL SIGNAL NOTES

3. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/7 = R10-3e-DE2L (LEFT ARROW) PL/6 = R10-3e (MOD.)
   PL/9 = R10-3eR (RIGHT ARROW) PL/8 = R10-3eL (LEFT ARROW)
   PL/5 = R10-3e-DE2R (RIGHT ARROW)
4. THE TRAFFIC CONTRACTOR SHALL REPLACE THE EXISTING OVERHEAD SIGN (S-1) AND REPLACE WITH THE DE MUTCD COMPLIANT SIGN DESIGNATED AS W11-12-DE (S-2).
5. PROPOSED POWER SOURCE: DELMARVA UTILITY POLE # 47485-41127
6. THE TRAFFIC CONTRACTOR SHALL INSTALL A SECONDARY DISCONNECT AT THE CABINET SO THAT IT INTERCEPTS CONDUIT RUN 5B.
7. THE CONTRACTOR SHALL EXTEND EXISTING CONDUIT 9 TO TIE INTO PROPOSED JUNCTION WELL, TYPE 1.
8. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.
9. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.

SIGNAL PHASING



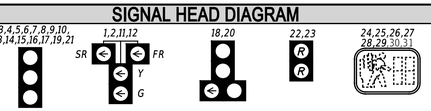
NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA Y	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB Y	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL Y	PROPOSED POLE IDENTIFIER (# OF POLE)
JW Y	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Lord — 6/14/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE *PAI* SECTION DESIGNATION.
DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 7/16/2024 DATE

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 13-JUN-2024@ 06:29
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE AS NOTED

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	PERMIT NO.	N220, NCAM289
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

SIGNAL PLAN
N. DUPONT HWY AT LINCOLN AVE

SECTION	
PAI	
SHEET NO.	261

ADDITIONAL SIGNAL NOTES

3. *THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.*
   PL/7, PL/11 = R10-3e-DE2L (LEFT ARROW)
   PL/6, PL/8, PL/9, PL/10 = R10-3eR (RIGHT ARROW)
4. *POWER SOURCE: DP&L POLE NO. 47543-41213.*
5. *ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.*
6. *THE CONTRACTOR SHALL EXTEND EXISTING CONDUIT 4A TO THE NEW JUNCTION WELL TYPE 4. THE CONTRACTOR SHALL TRIM EXISTING CONDUIT 3A TO THE NEW JUNCTION WELL TYPE 4.*
7. *PEDESTAL POLE NO. 8 SHALL BE INSTALLED UNDER THE PEDESTRIAN BRIDGE ON THE NW CORNER OF THE INTERSECTION. THE VERTICAL CLEARNCE UNDER THE PEDESTRIAN BRIDGE IS APPROXIMATELY 10.5-FEET. THEREFORE, THE TRAFFIC CONTRACTOR SHALL INSTALL AN 8-FOOT PEDESTAL POLE FOR PEDESTAL POLE NO. 8.*
8. *PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.*
9. *CCTV CAMERA SHALL BE INSTALLED BY DELDOT ITS MAINTENANCE.*

OVERHEAD RUN SCHEDULE

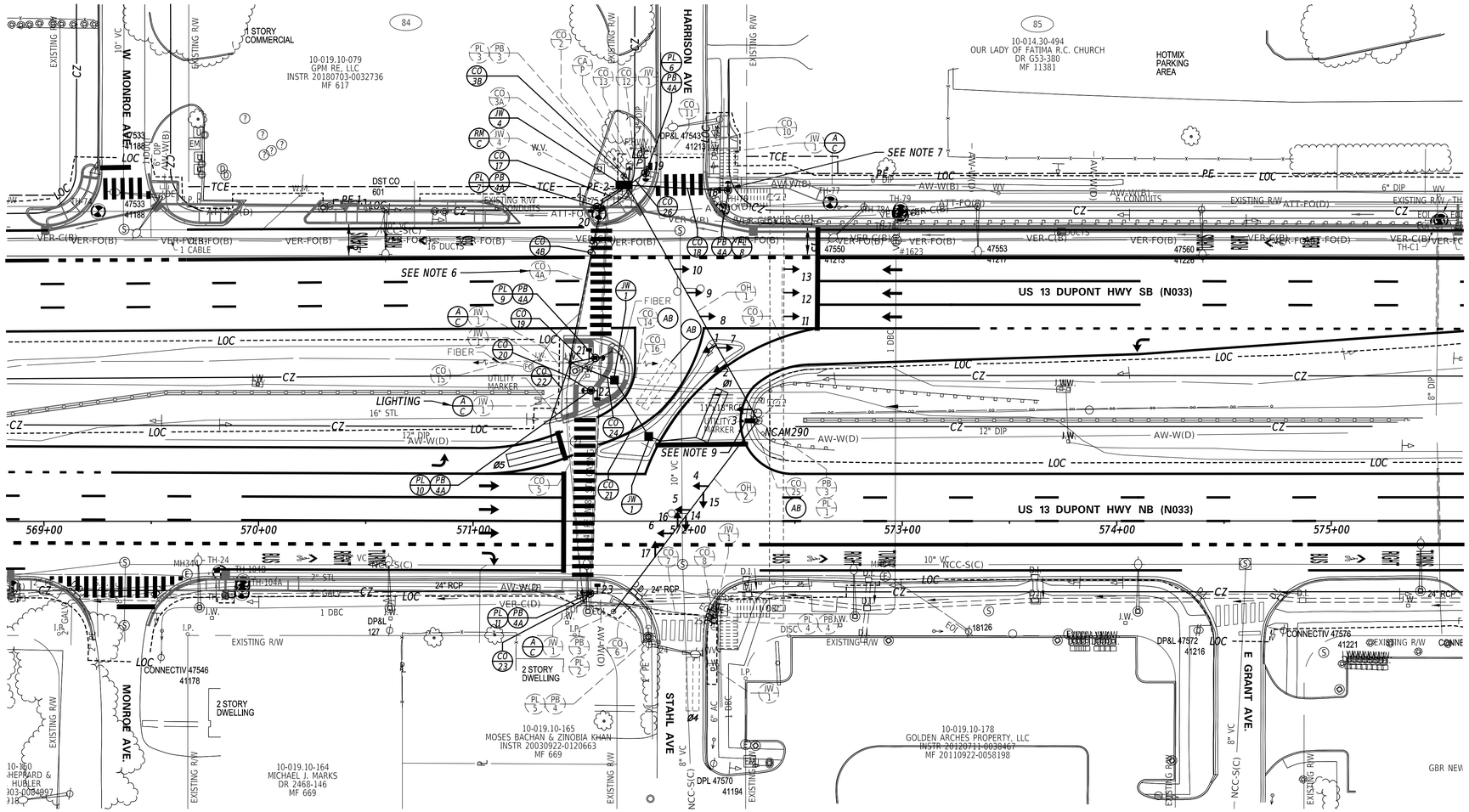
OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1	129'	REMOVE [(1)9/#14, (2)16/#14, (4)4/#18], INSTALL [(1)9/#14, (2)16/#14, (3)4/#18, CCTV CABLES]
2	112'	REMOVE [(1)16/#14, (1)4/#18], INSTALL [(1)16/#14, (1)4/#18]

**DENOTES EXISTING SPAN WIRES TO BE RENEWED*

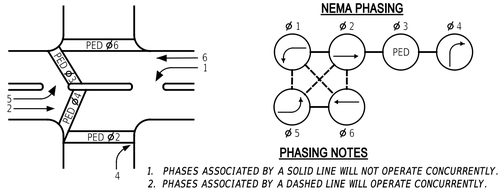
SIGNAL POLE SCHEDULE

NO.	POLE TYPE	HEIGHT	NORTHING	EASTING
1*	STRAIN	28'	613971.207	608616.730
2*	STRAIN	28'	613864.559	608650.059
3*	STRAIN	28'	613986.055	608487.331
4*	PEDESTAL	10'	613900.346	608680.393
5*	PEDESTAL	10'	613871.039	608668.937
6	PEDESTAL	10'	613995.166	608492.078
7	PEDESTAL	10'	613967.506	608491.844
8	PEDESTAL	7'	614021.739	608520.906
9	PEDESTAL	10'	613926.126	608548.816
10	PEDESTAL	10'	613915.658	608560.021
11	PEDESTAL	10'	613860.532	608636.913

**EXISTING TO REMAIN*



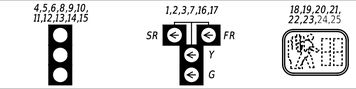
SIGNAL PHASING



PHASING NOTES

1. *PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.*
2. *PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.*

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	*OH #*	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	*PB X*	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	*PL X*	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	*RM C*	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	*RM O*	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	*RM TC*	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Ford — 6/14/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION. — DATE

TERESA M. FORD LICENSED No. 24274 DELAWARE PROFESSIONAL ENGINEER — SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 7/16/2024 DATE

PENNONI ASSOCIATES INC. | PEN TABLE: SPRINTBLS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:29
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

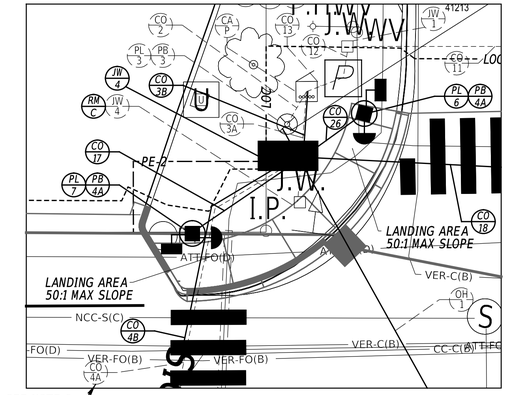
ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

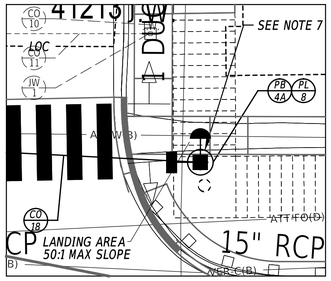
US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	PERMIT NO.	N219, NCAM290	SECTION
T201901102	DESIGNED BY: Z. BRANDER		PAI
COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
NEW CASTLE			262

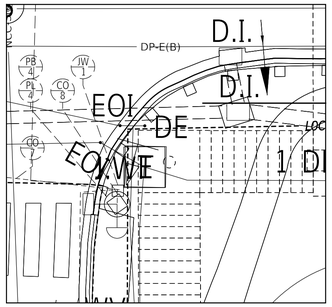
SIGNAL PLAN N. DUPONT HWY AT HARRISON AVE



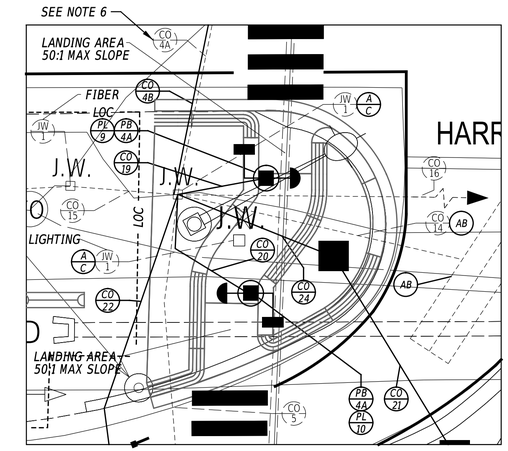
SOUTHWEST CORNER
SCALE 1" = 10'



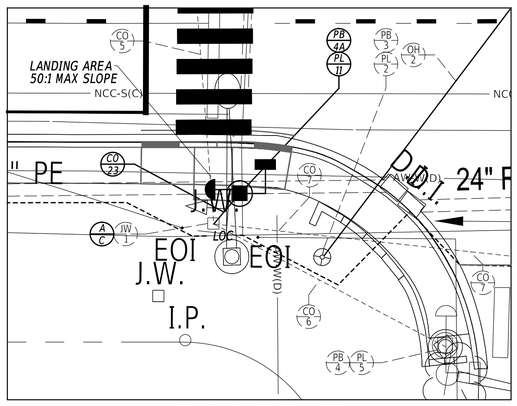
NORTHWEST CORNER
SCALE 1" = 10'



NORTHEAST CORNER
SCALE 1" = 10'



SOUTHERN MEDIAN ISLAND
SCALE 1" = 10'



SOUTHEAST CORNER
SCALE 1" = 10'

CONDUIT RUN SCHEDULE

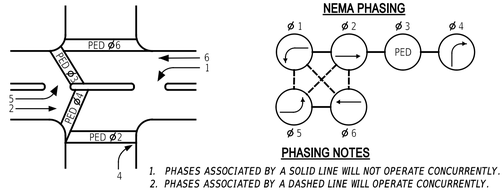
CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5" GALV.	-	-	EMPTY
*2	1	2.5" PVC	5'	-	REMOVE [(1)4/#18, (1)9/#14, (2)16/#14, (3)4/#18], INSTALL [(1)9/#14, (2)16/#14, (3)4/#18, CCTV CABLES (1)#6 GND]
*3A	1	2.5" PVC	15'	-	REMOVE [(2)4/#18, (2)9/#14], EX.[FIBER]
3B	1	4.0" PVC	15'	T	INSTALL [(8)5/#14, (3)2/#14, (1)#6 GND]
*4A	1	2.5" HDPE	91'	-	REMOVE [(2)4/#18, (2)9/#14], EX.[FIBER]
4B	1	4.0" HDPE	91'	B	INSTALL [(5)5/#14, (3)2/#14, (1)#6 GND]
*5	1	2.5" HDPE	112'	-	REMOVE [(1)4/#18, (2)9/#14], INSTALL [(3)5/#14, (1)2/#14, (1)#6 GND]
*6	1	2.5" PVC	35'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*7	1	2.5" HDPE	62'	-	REMOVE[(1)4/#18, (1)9/#14], INSTALL [(1)2/#14, (1)5/#14, (1)#6 GND]
*8	1	2.5" PVC	2'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*9	1	1.0" HDPE	76'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*10	1	2.0" GALV.	16'	-	REMOVE [(3)#8 THHN STRANDED COPPER], INSTALL [(3)#8 THHN STRANDED COPPER]
*11	1	2.0" GALV.	33'	-	REMOVE [(3)#8 THHN STRANDED COPPER], INSTALL [(3)#8 THHN STRANDED COPPER]
*12	1	2.0" GALV.	4'	-	REMOVE [(3)#8 THHN STRANDED COPPER], INSTALL [(3)#8 THHN STRANDED COPPER]
*13	1	2.0" GALV.	5'	-	REMOVE [(1)2/#8 U.F. w/G], INSTALL [(1)2/#8 U.F. w/G]
*14	1	1.5" GALV.	28'	-	REMOVE [(1)2/#14]; ABANDON
*15	1	4.0" GALV.	36'	-	EX.[FIBER]
*16	1	4.0" GALV.	135'	-	EX.[FIBER]
17	1	2.5" PVC	17'	T	INSTALL [(1)5/#14, (1)#6 GND]
18	1	4.0" HDPE	47'	B	INSTALL [(1)5/#14, (1)#6 GND]
19	1	2.5" PVC	12'	T	INSTALL [(1)5/#14, (1)#6 GND]
20	1	2.5" PVC	19'	T	INSTALL [(1)5/#14, (1)#6 GND]
21	1	4.0" HDPE	31'	B	INSTALL [(1)2/#14, (1)#6 GND]
22	1	1.5" GALV.	30'	T	INSTALL [(1)1/#14]
23	1	2.5" PVC	6'	T	INSTALL [(1)5/#14, (1)#6 GND]
24	1	4.0" PVC	23'	T	INSTALL [(1)2/#14, (1)#6 GND]
*25	1	1.5" GALV.	7'	-	REMOVE [(1)1/#14]; ABANDON
26	1	4.0" PVC	11'	T	INSTALL [(1)5/#14, (1)#6 GND]

*DENOTES EXISTING B = BORE, T = TRENCH, O = OPEN CUT

ADDITIONAL SIGNAL NOTES

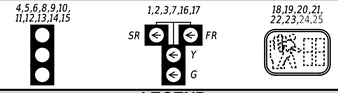
3. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/7, PL/11 = R10-3e-DE2L (LEFT ARROW)
   PL/6, PL/8, PL/9, PL/10 = R10-3eR (RIGHT ARROW)
4. POWER SOURCE: DP&L POLE NO. 47543-41213.
5. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.
6. THE CONTRACTOR SHALL EXTEND EXISTING CONDUIT 4A TO THE NEW JUNCTION WELL TYPE 4. THE CONTRACTOR SHALL TRIM EXISTING CONDUIT 3A TO THE NEW JUNCTION WELL TYPE 4.
7. PEDESTAL POLE NO. 8 SHALL BE INSTALLED UNDER THE PEDESTRIAN BRIDGE ON THE NW CORNER OF THE INTERSECTION. THE VERTICAL CLEARNCE UNDER THE PEDESTRIAN BRIDGE IS APPROXIMATELY 10.5-FEET. THEREFORE, THE TRAFFIC CONTRACTOR SHALL INSTALL AN 8-FOOT PEDESTAL POLE FOR PEDESTAL POLE NO. 8.
8. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.

SIGNAL PHASING



PHASING NOTES
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Ford — 6/14/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE *PAI* SECTION DESIGNATION. — DATE

TERESA M. FORD — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 7/16/2024 — DATE

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBS5
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024@ 06:29
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE AS NOTED

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	PERMIT NO.	N219, NCAM290
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNAL PLAN
N. DUPONT HWY AT HARRISON AVE

SECTION: PAI
SHEET NO.: 263

OVERHEAD RUN SCHEDULE

OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1*	207'	REMOVE [(1)16/#14], INSTALL[(1)16/#14]
2*	213'	REMOVE [(2)16/#14, (4)4/#18], INSTALL [(2)16/#14, (4)4/#18]

*DENOTES EXISTING SPAN WIRES TO BE RENEWED

SIGNAL POLE SCHEDULE

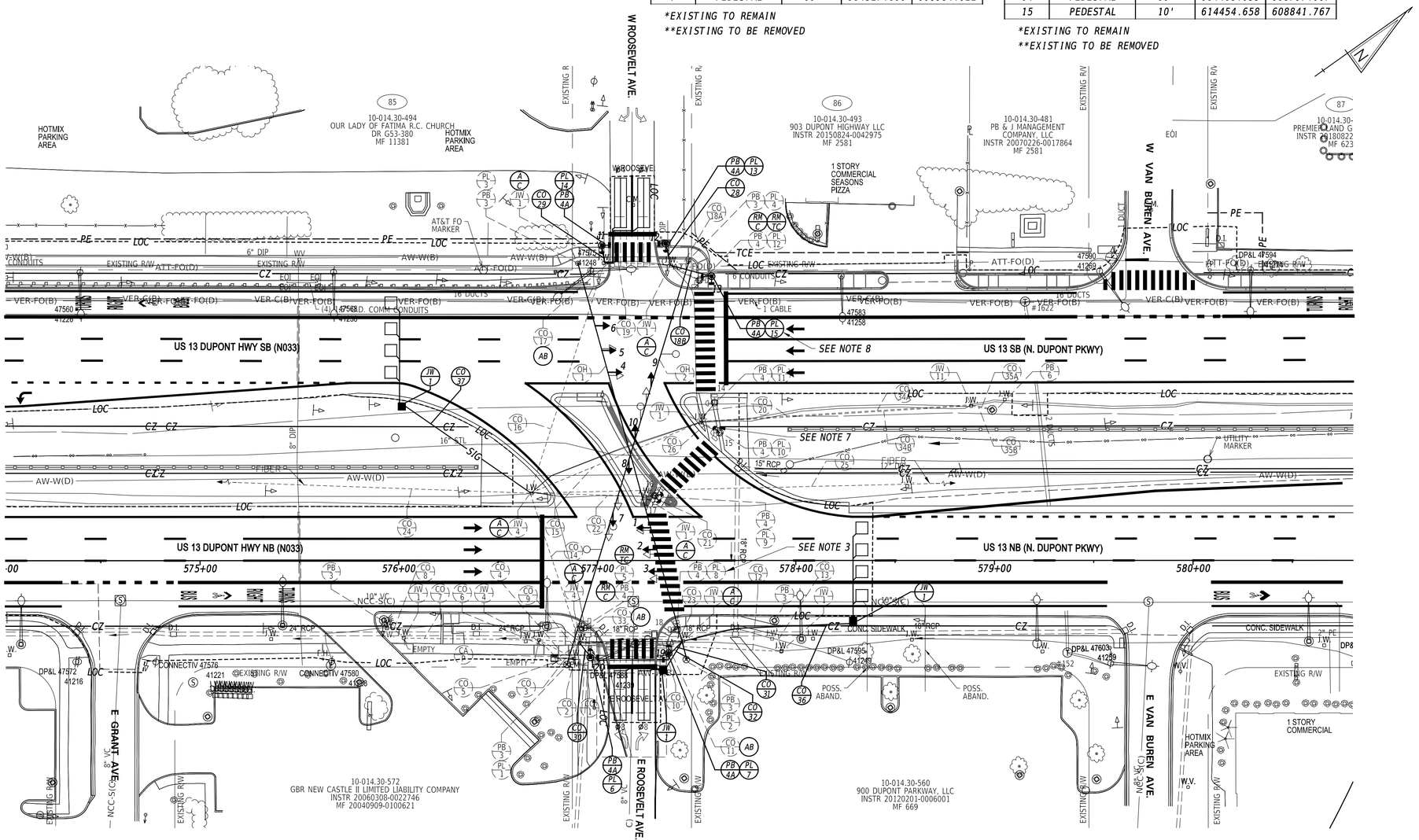
NO.	POLE TYPE	HEIGHT	NORTHING	EASTING
1*	STRAIN	28'	614282.068	608958.968
2*	STRAIN	28'	614332.502	608991.711
3*	STRAIN	28'	614403.508	608797.428
4*	STRAIN	28'	614449.487	608828.805
5**	PEDESTAL	10'	614298.144	608948.549
6	PEDESTAL	10'	614293.750	608962.813
7	PEDESTAL	10'	614327.100	608984.022

*EXISTING TO REMAIN
**EXISTING TO BE REMOVED

SIGNAL POLE SCHEDULE

NO.	POLE TYPE	HEIGHT	NORTHING	EASTING
8*	PEDESTAL	10'	614337.573	608976.889
9*	PEDESTAL	10'	614367.363	608915.262
10*	PEDESTAL	10'	614412.418	608908.379
11*	PEDESTAL	10'	614419.065	608894.499
12**	PEDESTAL	10'	614448.499	608839.841
13	PEDESTAL	10'	614445.321	608815.033
14	PEDESTAL	10'	614418.633	608797.067
15	PEDESTAL	10'	614454.658	608841.767

*EXISTING TO REMAIN
**EXISTING TO BE REMOVED



ADDITIONAL SIGNAL NOTES

3. TRAFFIC CONTRACTOR SHALL REMOVE THE PEDESTRIAN SIGNAL HEAD AND PUSH BUTTON FROM EXISTING PEDESTRIAN POLE 8, SERVICING THE E. ROOSEVELT AVENUE CROSSWALK. UPON REMOVAL, TRAFFIC CONTRACTOR MUST PLUG HOLES WITHIN PEDESTRIAN POLE 8.

4. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/6, PL/13 = R10-3eL (LEFT ARROW)
   PL/7, PL/14, PL/15 = R10-3eR (RIGHT ARROW)

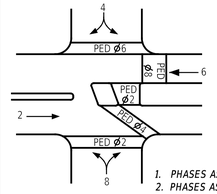
5. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.

6. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.

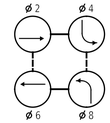
7. THE TRAFFIC CONTRACTOR SHALL REMOVE AND REINSTALL THE EXISTING PEDESTRIAN PUSHBUTTON ON EXISTING PEDESTRIAN POLE 9 TO ALIGN WITH THE CROSSWALK, INCIDENTAL TO ITEM 842500 - INSTALLATION OR REMOVAL OF PEDESTRIAN BUTTON ON WOOD OR METALL POLE.

8. PEDESTRIAN SIGNAL POLE 15 SHALL BE INSTALLED TO PROVIDE A 4-FT MINIMUM PAR WIDTH BETWEEN THE BACK OF CURB AND THE POLE.

SIGNAL PHASING



NEMA PHASING



PHASING NOTES

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2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

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PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Lord — 6/14/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 7/16/2024 DATE

PENNONI ASSOCIATES INC.	SFILEAS
FILE NAME:	$(DOT DRIVER): $PLTDRVSS
MICROSTATION VERSION:	SVERSIONS
MICROSTATION WORKSPACE:	SWORKSPACES
PEN TABLE:	$PENTBLSS
DATE PLOTTED:	13-JUN-2024@ 06:29
USER NAME:	SUSERS
OFFICE LOCATION:	$OFFICENAME

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	T201901102	PERMIT NO.	N218
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

SIGNAL PLAN
N. DUPONT HWY AT ROOSEVELT AVE

SECTION
PAI
SHEET NO.
264

CONDUIT RUN SCHEDULE

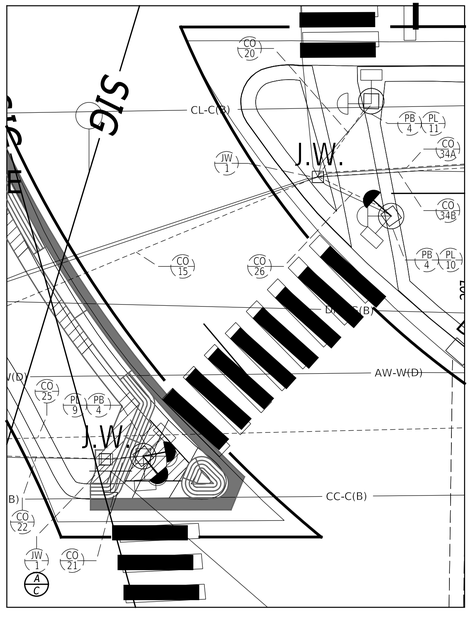
CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	2.0" GALV.	11'	-	REMOVE [(1)2/#8 U.F.w/G], INSTALL [(3)#8 THHN STRANDED COPPER - LINE SIDE]
*2	2	2.0" GALV.	3'	-	REMOVE [(1)2/#8 U.F.w/G], INSTALL [(1)2/#8 U.F.w/G - LOAD SIDE]
*3	1	2.0" GALV.	8'	-	REMOVE [(1)2/#8 U.F.w/G], INSTALL [(1)2/#8 U.F.w/G - LOAD SIDE]
*4	1	2.0" GALV.	21'	-	REMOVE [(1)2/#8 U.F.w/G], INSTALL [(1)2/#8 U.F.w/G - LOAD SIDE]
*5	1	2.5" PVC	6'	-	REMOVE [(2)16/#14, (4)4/#18], INSTALL [(2)16/#14, (4)4/#18, (1)#6 GND]
*6	2	UNK	11'	-	REMOVE [(1)2/#8 U.F.w/G]; EX.[COMM. CABLE], INSTALL [(1)2/#8 U.F.w/G]
*7	1	UNK	69'	-	EX.[CAMERA CABLE]
*8	1	UNK	14'	-	EX.[CAMERA CABLE]
*9	3	2.5" PVC	14'	-	REMOVE [(6)4/#18, (6)9/#14], EX. [(1)7/#14, (3) #8 THHN STRANDED COPPER, COMM. CABLE], INSTALL [(10)5/#14, (12)2/#14, (2)#6 GND]
*10	1	2.5" HDPE	52'	-	REMOVE [(1)4/#18, (1)9/#14], INSTALL[(2)5/#14, (6)2/#14, (1)#6 GND]
*11	1	-	-	-	REMOVE [(1)4/#18]; ABANDON
*12	1	UNK	122'	-	EX.[CAMERA CABLE]
*13	1	UNK	15'	-	EX.[CAMERA CABLE]
*14	1	2.5" HDPE	80'	-	REMOVE [(5)4/#18, (4)9/#14], EX.[(1)7/#14, (3) #8 THHN STRANDED COPPER, COMM. CABLE], INSTALL [(7)5/#14, (6)2/#14, (1)#6 GND]
*15	1	2.5" HDPE	93'	-	REMOVE [(2)4/#18, (2)9/#14], EX.[(1)7/#14, (3) #8 THHN STRANDED COPPER], INSTALL [(2)5/#14, (1)#6 GND]
*16	1	2.5" HDPE	124'	-	REMOVE[(1)4/#18, (1)9/#14], INSTALL [(3)5/#14, (2)2/#14, (1)#6 GND]
*17	1	1.5" GALV.	4'	-	REMOVE [(1)4/#18]; ABANDON
*18A	1	2.5" PVC	16'	-	REMOVE [(1)9/#14]; ABANDON

*DENOTES EXISTING B = BORE, T = TRENCH, O = OPEN CUT

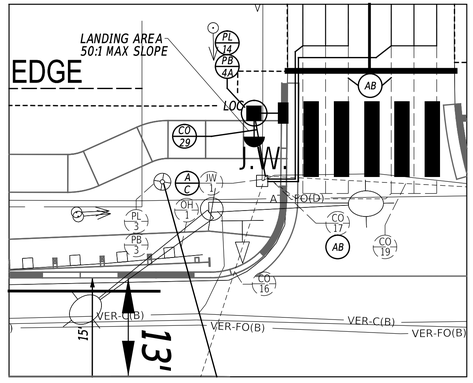
CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
18B	1	4.0" PVC	22'	T	INSTALL [(1)5/#14, (1)#6 GND]
*19	1	4.0" HDPE	34'	-	REMOVE [(1)9/#14], INSTALL [(2)5/#14, (1)#6 GND]
*20	1	2.5" PVC	11'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*21	1	2.5" PVC	6'	-	REMOVE [(1)9/#14], INSTALL [(2)5/#14, (1)#6 GND]
*22	1	2.5" HDPE	58'	-	REMOVE [(1)9/#14], INSTALL [(2)5/#14, (1)#6 GND]
*23	1	2.5" PVC	6'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
*24	1	UNK	UNK	-	EX.[FIBER]
*25	1	UNK	UNK	-	EX.[FIBER]
*26	1	2.5" PVC	11'	-	REMOVE [(1)9/#14], INSTALL [(1)5/#14, (1)#6 GND]
28	1	2.5" PVC	11'	T	INSTALL [(1)5/#14, (1)#6 GND]
29	1	2.5" PVC	9'	T	INSTALL [(1)5/#14, (1)#6 GND]
30	1	2.5" PVC	9'	T	INSTALL [(1)5/#14, (1)#6 GND]
31	1	2.5" PVC	9'	T	INSTALL [(1)5/#14, (1)#6 GND]
32	1	4.0" PVC	15'	T	INSTALL [(2)2/#14, (1)#6 GND]
*33	1	2.5" PVC	7'	-	REMOVE [(1)9/#14]; ABANDON
*34A	1	2.0" GALV.	UNK.	-	EX.[COMM CABLE]
*34B	1	2.0" GALV.	UNK.	-	EX.[(1)7/#14, (3)#8 THHN STRANDED COPPER]
*35A	1	2.0" GALV.	UNK.	-	EX.[COMM CABLE]
*35B	1	2.0" GALV.	UNK.	-	EX.[(1)7/#14, (3)#8 THHN STRANDED COPPER, (1)#6 GND]
36	1	4.0" PVC	84'	T	INSTALL [(4)2/#14, (1)#6 GND]
37	1	4.0" PVC	77'	T	INSTALL [(4)2/#14, (1)#6 GND]

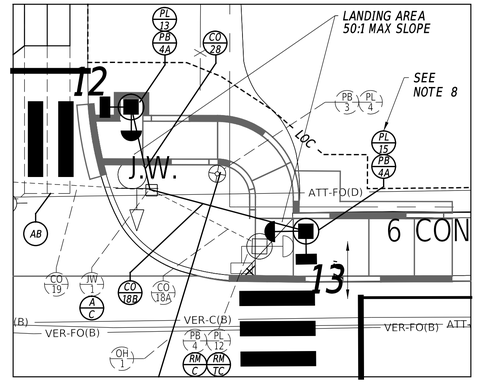
*DENOTES EXISTING B = BORE, T = TRENCH, O = OPEN CUT



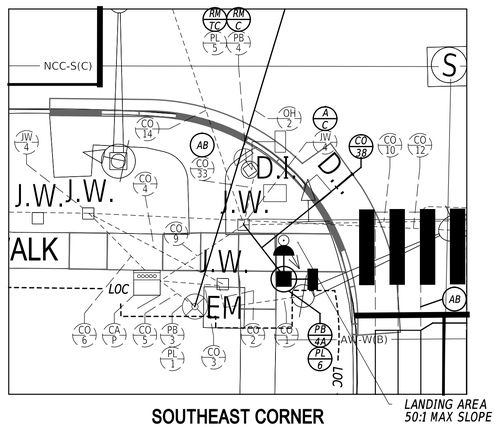
MEDIAN
SCALE 1" = 10'



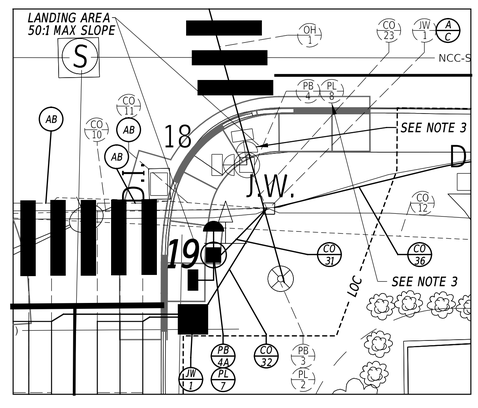
SOUTHWEST CORNER
SCALE 1" = 10'



NORTHWEST CORNER
SCALE 1" = 10'



SOUTHEAST CORNER
SCALE 1" = 10'



NORTHEAST CORNER
SCALE 1" = 10'

ADDITIONAL SIGNAL NOTES

3. TRAFFIC CONTRACTOR SHALL REMOVE THE PEDESTRIAN SIGNAL HEAD AND PUSH BUTTON FROM EXISTING PEDESTRIAN POLE 8, SERVICING THE E. ROOSEVELT AVENUE CROSSWALK. UPON REMOVAL, TRAFFIC CONTRACTOR MUST PLUG HOLES WITHIN PEDESTRIAN POLE 8.

4. THE CONTRACTOR SHALL INSTALL PEDESTRIAN COUNTDOWN DISPLAYS AND SIGNS ON ALL NEW PEDESTRIAN SIGNALS.
   PL/6, PL/13 = R10-3eL (LEFT ARROW)
   PL/7, PL/14, PL/15 = R10-3eR (RIGHT ARROW)

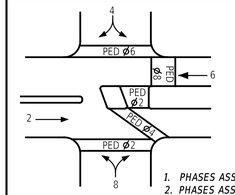
5. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH THE CURRENT ADA BEST PRACTICES. THESE POLE BASES SHOULD BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.

6. ALL EXISTING SPAN WIRES, SIGNAL HEADS, OPTICOMS AND SIGNAL WIRING SHALL BE RENEWED.

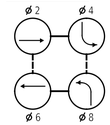
7. THE TRAFFIC CONTRACTOR SHALL REMOVE AND REINSTALL THE EXISTING PEDESTRIAN PUSHBUTTON ON EXISTING PEDESTRIAN POLE 9 TO ALIGN WITH THE CROSSWALK, INCIDENTAL TO ITEM 842500 - INSTALLATION OR REMOVAL OF PEDESTRIAN BUTTON ON WOOD OR METALL POLE.

8. PEDESTRIAN SIGNAL POLE 15 SHALL BE INSTALLED TO PROVIDE A 4-FT MINIMUM PAR WIDTH BETWEEN THE BACK OF CURB AND THE POLE.

SIGNAL PHASING



NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

6/14/2024
DATE

TERESA M. LORD LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING

7/16/2024
DATE

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTRISS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 13-JUN-2024 @ 06:29
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

SCALE AS NOTED

US 13 PAVING AND PEDESTRIAN IMPROVEMENTS - LLANGOLLEN BLVD TO BACON/BOULDEN BLVD

CONTRACT	PERMIT NO.	N218
T201901102	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNAL PLAN
N. DUPONT HWY AT ROOSEVELT AVE

SECTION PAI
SHEET NO. 265