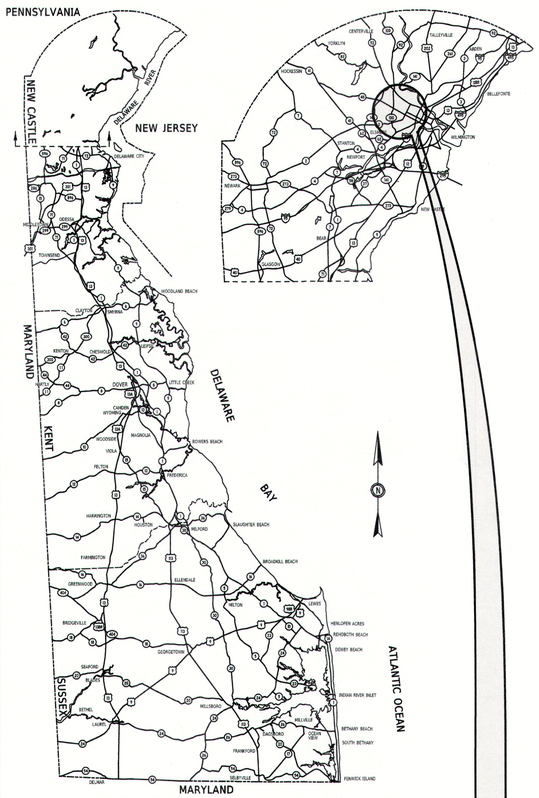


GENERAL LOCATION OF CONTRACT

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

1/28/2019
DATE

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

PHILIP ANDREW HORSEY REGISTERED No. 12429 DELAWARE PROFESSIONAL ENGINEER

SEAL

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

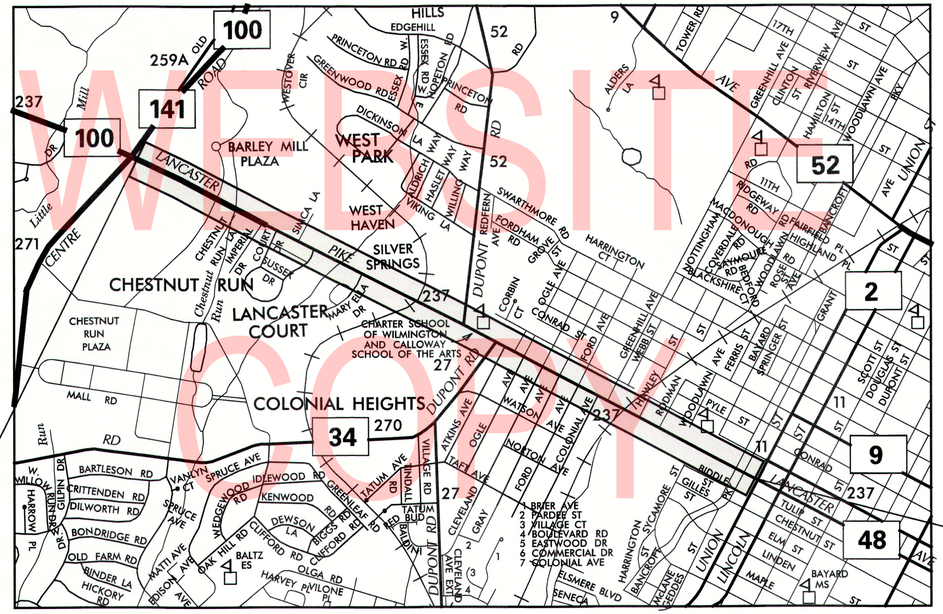
CONSTRUCTION PLANS FOR:

SR 48, SR 141 TO UNION STREET
PAR AND PAVEMENT IMPROVEMENTS

CONTRACT NUMBER: T201601103
FEDERAL AID PROJECT NUMBER: N/A

COUNTY: NEW CASTLE M.R. #: N237

UNOFFICIAL
WEBSITE
COPY



BEGIN CONTRACT
T201601103

END CONTRACT
T201601103

LOCATION MAP
NOT TO SCALE

DESIGN DESIGNATION

MRD #: N237	ROAD NAME: LANCASTER PIKE		
FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL		D.H.V. PROJECTED: N/A	N/A
TYPE OF CONSTRUCTION: PEDESTRIAN IMPROVEMENTS		DESIGN SPEED: N/A	
A.A.D.T. CURRENT: N/A	YEAR: N/A	TRUCKS: N/A	
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A	

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA / REVISIONS

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
900	LANCASTER AVE, GREENHILL ROAD TO MARKET STREET
1499	LANCASTER PIKE, N. DUPONT ROAD TO CENTRE ROAD

APPROVED FOR ADVERTISEMENT

DIRECTOR OF PLANNING

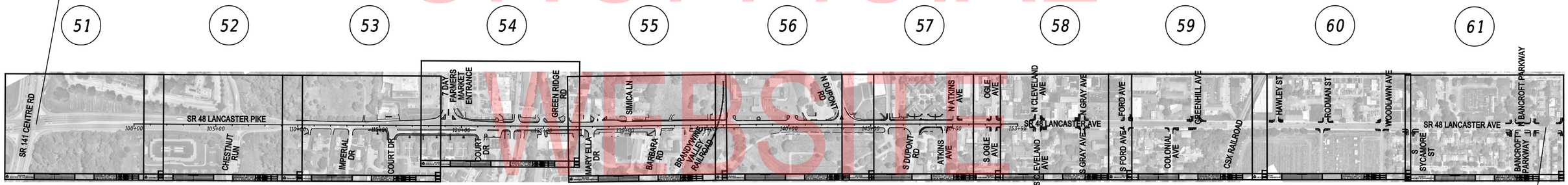
2/3/20
DATE

INDEX OF SHEETS		
SECTION	**SHEET DESCRIPTION**	**SHEET NO(S)**
PAI	TITLE	1
PAI	INDEX OF SHEETS	2
PAI	PEDESTRIAN CONNNECTION INDEX	3-5
PAI	ADDENDA AND REVISIONS	6
PAI	LEGEND	7
PAI	NOTES	8
PAI	TYPICAL SECTIONS	9
PAI	HORIZONTAL AND VERTICAL CONTROL	10
PAI	CONSTRUCTION PLANS	11-14
PAI	GRADES AND GEOMETRICS	15
PAI	PEDESTRIAN RAMP GENERAL PLAN AND ELEVATION	16
PAI	PEDESTRIAN RAMP ELEVATION AND SECTIONS	17
PAI	PEDESTRIAN RAMP JOINT DETAILS AND BAR SCHEDULE	18
PAI	CONSTRUCTION DETAILS	19-35
PAI	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS	36-46
PAI	LIGHTING PLANS	47-50
PAI	SIGNING, STRIPING AND CONDUIT PLANS	51-65
PAI	SIGNALIZATION PLANS	66-67

PLAN SHEET INDEX CROSS REFERENCE													
CONSTRUCTION PLAN	-	-	*11*	*12*	*13*	*14*	-	-	-	-	-	-	-
GRADES AND GEOMETRICS	-	-	*15*	*15*	-	-	-	-	-	-	-	-	-
CONSTRUCTION PHASING, M.O.T. AND E&S	-	-	*39,43*	*40,44*	*41,45*	*42,46*	-	-	-	-	-	-	-
LIGHTING PLAN	-	-	*47*	*48*	*49*	*50*	-	-	-	-	-	-	-
SIGNING, STRIPING AND CONDUIT PLAN	*51*	*52*	*53*	*54*	*55*	*56*	*57*	*58*	*59*	*60*	*61*	-	-
SIGNALIZATION PLANS	-	-	-	*66*	*67*	-	-	-	-	-	-	-	-

UNOFFICIAL
WEBSITE
COPY

BEGIN CONTRACT T201601103



END OF CONTRACT T201601103

PENNONI ASSOCIATES INC.	PEN TABLE: PENNONI-DELDOT.TBL
FILE NAME: ...\CTDGN\PSE PLANS\IS01.dgn	PLOT DRIVER: PENNONI-NW.CRD,DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/10/2020 @ 3:23:51 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS	

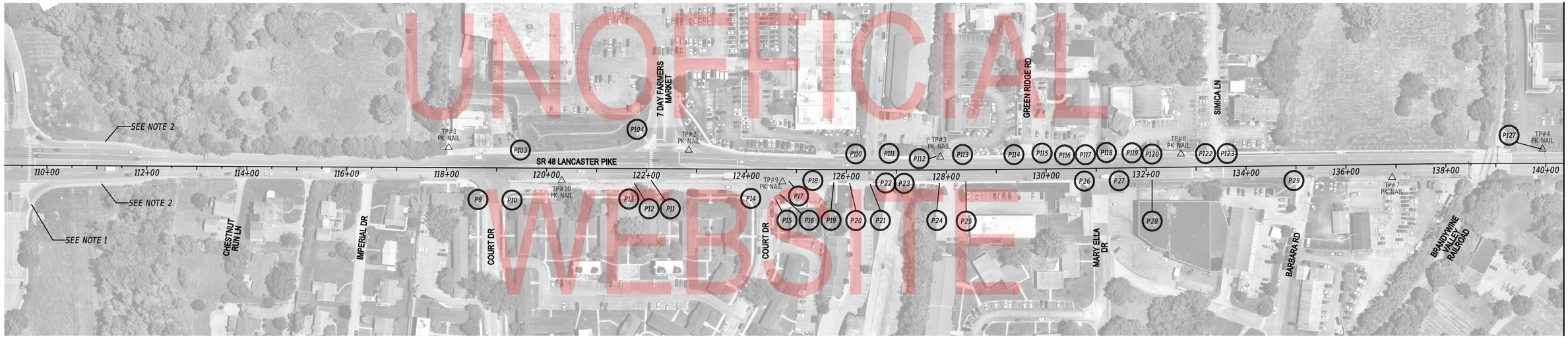
SCALE
0 300 600 900
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

INDEX OF SHEETS

	IS-01
SECTION	PAI
SHEET NO.	2



UNOFFICIAL
WEBSITE
COPY

PEDESTRIAN CONNECTION AND PAR IMPROVEMENT SCHEDULE

NO.	DESCRIPTION	CONSTRUCTION DETAIL SHEET NO.	CONTROL POINT #
P9	CONSTRUCT BY STANDARD DETAIL, TYPE 2	-	TP#1 PK NAIL
P10	CONSTRUCT BY CONSTRUCTION DETAIL	20	TP#1 PK NAIL
P11	CONSTRUCT BY CONSTRUCTION DETAIL	16	TP#10 PK NAIL
P12	CONSTRUCT BY CONSTRUCTION DETAIL	16	TP#10 PK NAIL
P13	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#10 PK NAIL
P14	CONSTRUCT BY CONSTRUCTION DETAIL	20	TP#9 PK NAIL
P15	CONSTRUCT BY CONSTRUCTION DETAIL	21	TP#9 PK NAIL
P16	CONSTRUCT BY CONSTRUCTION DETAIL	21	TP#9 PK NAIL
P17	CONSTRUCT BY CONSTRUCTION DETAIL	21	TP#9 PK NAIL
P18	CONSTRUCT BY CONSTRUCTION DETAIL	21	TP#9 PK NAIL
P19	CONSTRUCT BY CONSTRUCTION DETAIL	21	TP#9 PK NAIL
P20	CONSTRUCT BY CONSTRUCTION DETAIL	22	TP#9 PK NAIL
P21	CONSTRUCT BY STANDARD DETAIL, TYPE 1	22	TP#3 PK NAIL
P22	CONSTRUCT BY STANDARD DETAIL, TYPE 1	22	TP#3 PK NAIL
P23	CONSTRUCT BY STANDARD DETAIL, TYPE 1	22	TP#3 PK NAIL
P24	CONSTRUCT BY CONSTRUCTION DETAIL	23	TP#3 PK NAIL
P25	CONSTRUCT BY CONSTRUCTION DETAIL	23	TP#3 PK NAIL
P26	CONSTRUCT BY CONSTRUCTION DETAIL	24	TP#8 PK NAIL
P27	CONSTRUCT BY CONSTRUCTION DETAIL	24	TP#8 PK NAIL
P28	CONSTRUCT BY STANDARD DETAIL, TYPE 2	-	TP#8 PK NAIL
P29	CONSTRUCT BY CONSTRUCTION DETAIL	24	TP#7 PK NAIL

P## PEDESTRIAN CONNECTION IDENTIFIER

PEDESTRIAN CONNECTION AND PAR IMPROVEMENT SCHEDULE

NO.	DESCRIPTION	CONSTRUCTION DETAIL SHEET NO.	CONTROL POINT #
P103	CONSTRUCT BY CONSTRUCTION DETAIL (RPE)	20	TP#1 PK NAIL
P104	CONSTRUCT BY STANDARD DETAIL, TYPE 2	-	TP#2 PK NAIL
P110	CONSTRUCT BY STANDARD DETAIL, TYPE 1	20	TP#3 PK NAIL
P111	CONSTRUCT BY STANDARD DETAIL, TYPE 1	20	TP#3 PK NAIL
P112	CONSTRUCT BY CONSTRUCTION DETAIL	23	TP#3 PK NAIL
P113	CONSTRUCT BY STANDARD DETAIL, TYPE 1	23	TP#3 PK NAIL
P114	CONSTRUCT BY CONSTRUCTION DETAIL (RPE)	23	TP#3 PK NAIL
P115	CONSTRUCT BY CONSTRUCTION DETAIL	23	TP#3 PK NAIL
P116	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#3 PK NAIL
P117	CONSTRUCT BY CONSTRUCTION DETAIL	24	TP#3 PK NAIL
P118	CONSTRUCT BY CONSTRUCTION DETAIL	24	TP#8 PK NAIL
P119	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#8 PK NAIL
P120	CONSTRUCT BY STANDARD DETAIL, TYPE 2	-	TP#8 PK NAIL
P122	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#8 PK NAIL
P123	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#8 PK NAIL
P127	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#4 PK NAIL

NOTES:

1. EXISTING PEDESTRIAN CONNECTION TO BE RECONSTRUCTED AS PART OF T201801102: CHESTNUT RUN PLAZA PEDESTRIAN IMPROVEMENTS PROJECT.
2. EXISTING GUARDRAIL TO BE RECONSTRUCTED AS PART OF T201801102: CHESTNUT RUN PLAZA PEDESTRIAN IMPROVEMENTS PROJECT.
3. SEE HV-01 FOR CONTROL POINT DATA.

PENNONI ASSOCIATES INC.	FEN TABLE: pennoni-default.tbl
FILE NAME: ...\CTD\GNP\SE PLANS\S02.dgn	PLOT DRIVER: PENNONI.NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/31/2020 @ 2:17:17 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: SNickel OFFICE LOCATION: Newark, Delaware

Pennoni

ADDENDA / REVISIONS	

SCALE
0 100 200 300
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A	
T201601103	DESIGNED BY:	A. MALKIN	
COUNTY	CHECKED BY:	P. HORSEY	
NEW CASTLE			

PEDESTRIAN CONNECTION INDEX

SECTION	IS-02
	PAI
SHEET NO.	3

UNOFFICIAL WEBSITE COPY

P## PEDESTERIAN CONNECTION IDENTIFIER

HORIZONTAL / VERTICAL CONTROL DATA

POINT NO.	NORTHING	EASTING	ELEVATION
TP 103	638163.4555	608221.8663	162.37
TP 104	638033.9261	608478.9224	156.29
TP 107	637947.2465	608654.6650	150.74
TP 109	637792.8960	608932.6696	146.60
TP 111	637667.1339	609168.0187	143.33
TP 112	637563.5425	609363.4850	140.43
TP 116	637342.6799	609791.1607	134.82

PEDESTRIAN CONNECTION AND PAR IMPROVEMENT SCHEDULE

NO.	DESCRIPTION	CONSTRUCTION DETAIL SHEET NO.	CONTROL POINT #
P33	CONSTRUCT BY STANDARD DETAIL, TYPE 2	25	TRAV 104
P34	CONSTRUCT BY CONSTRUCTION DETAIL (RPE)	26	TRAV 107
P35	RPE, TO REMAIN	26	TRAV 107
P38	CONSTRUCT BY CONSTRUCTION DETAIL (RPE)	27	TRAV 111
P39	CONSTRUCT BY CONSTRUCTION DETAIL	27	TRAV 111
P40	CONSTRUCT BY CONSTRUCTION DETAIL	28	TRAV 112
P41	REPLACE BROKEN P.C.C. PANEL	28	TRAV 112
P42	REPLACE BROKEN P.C.C. PANEL (RPE)	29	TRAV 116

PEDESTRIAN CONNECTION AND PAR IMPROVEMENT SCHEDULE

NO.	DESCRIPTION	CONSTRUCTION DETAIL SHEET NO.	CONTROL POINT #
P128	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#5 PK NAIL
P129	CONSTRUCT BY STANDARD DETAIL, TYPE 1	-	TP#5 PK NAIL
P134	CONSTRUCT BY STANDARD DETAIL, TYPE 2	-	TP#6 PK NAIL
P140	REPLACE DWS AND PANEL	25	TRAV 104
P143	CONSTRUCT BY STANDARD DETAIL, TYPE 4	26	TRAV 107
P146	CONSTRUCT BY STANDARD DETAIL, TYPE 4	27	TRAV 111
P147	REPLACE DWS AND PANEL	27	TRAV 111
P148	CONSTRUCT BY STANDARD DETAIL, TYPE 2	28	TRAV 112
P149	REPLACE DWS AND PANEL	28	TRAV 112
P150	CONSTRUCT BY CONSTRUCTION DETAIL	30	TRAV 116

NOTES:

1. SEE HV-01 FOR CONTROL POINT DATA WEST OF N DUPONT ROAD.

PENNONI ASSOCIATES INC.
FILE NAME: ...\CTDGN\PS&E PLANS\IS03.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI.NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/31/2020 @ 2:19:20 PM
USER NAME: SNickel OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 100 200 300 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PEDESTRIAN CONNECTION INDEX

IS-03
SECTION
PAI
SHEET NO.
4

UNOFFICIAL WEBSITE COPY

P## PEDESTRIAN CONNECTION IDENTIFIER

HORIZONTAL / VERTICAL CONTROL DATA

POINT NO.	NORTHING	EASTING	ELEVATION
TP 117	637137.5188	610176.7237	136.56
TP 119	636995.1705	610447.1385	138.44
TP 121	636838.0601	610758.0538	145.30
TP 124	636750.4361	610893.2853	147.48
TP 126	636463.9928	611460.2841	146.67

PEDESTRIAN CONNECTION AND PAR IMPROVEMENT SCHEDULE

NO.	DESCRIPTION	CONSTRUCTION DETAIL SHEET NO.	CONTROL POINT #
P45	CONSTRUCT BY STANDARD DETAIL, TYPE 1	32	TP 119
P46	CONSTRUCT BY STANDARD DETAIL, TYPE 1	32	TP 119
P47	REPLACE DWS AND PANEL (RPE)	33	TP 121
P48	REPLACE DWS AND PANEL	33	TP 121

PEDESTRIAN CONNECTION AND PAR IMPROVEMENT SCHEDULE

NO.	DESCRIPTION	CONSTRUCTION DETAIL SHEET NO.	CONTROL POINT #
P152	CONSTRUCT BY STANDARD DETAIL, TYPE 1	31	TP 117
P153	CONSTRUCT BY STANDARD DETAIL, TYPE 4	31	TP 117
P158	CONSTRUCT BY CONSTRUCTION DETAIL	34	TP 126
P159	REPLACE DWS AND PANEL	34	TP 126
P160	REPLACE DWS AND PANEL	35	TP 126
P161	CONSTRUCT BY CONSTRUCTION DETAIL	35	TP 126

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-ddot.tbl
FILE NAME: ...\CTDGNPS&E PLANS\IS04.dgn | PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF-PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 2:20:17 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE
0 100 200 300
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

PEDESTRIAN CONNECTION INDEX

IS-04
SECTION PAI
SHEET NO. 5

UNOFFICIAL
WEBSITE
COPY

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni-dot60d.tbl
FILE NAME: ...\CTDGN\PS&E PLANSARG1.dgn	PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/10/2020 @ 3:24:30 PM
MICROSTATION WORKSPACE: DELDOT-v8i-OPENROADS	USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS						
			SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	ADDENDA AND REVISIONS	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: A. MALKIN		SHEET NO. 6
					CHECKED BY: P. HORSEY		

EXISTING SYMBOLS

DRAINAGE

	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
C.B. / D.I.	DRAINAGE INLET
J.B.	DRAINAGE JUNCTION BOX
D	DRAINAGE MANHOLE
SIZE/TYPE LABEL	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

MANMADE ROADSIDE FEATURES

	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
(TYPE LABEL)	CURB
(TYPE LABEL)	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
F.P.	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
LAMP	LAMP AND POST - RESIDENTIAL
MB	MAILBOX
P.M.	PARKING METER AND POST
	PAVEMENT - FLEXIBLE
	PAVEMENT - RIGID
	PILE - BRIDGE
	PILLAR OR MISCELLANEOUS POST
	TRAFFIC SIGN AND POST
	WALL - BRICK OR BLOCK
	WALL - STONE

NATURAL ROADSIDE FEATURES

	GRASS LAWN
	HEDGEROW OR THICKET
	MARSH BOUNDARY LINE
	TREE - CONIFEROUS
	TREE - DECIDUOUS
	TREE STUMP
	SHRUBBERY
WL	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY

RIGHT-OF-WAY SYMBOLS

C.M.	PROPERTY MARKER - CONCRETE MON.
I.P.	PROPERTY MARKER - IRON PIPE
100+00	HISTORIC RIGHT-OF-WAY BASELINE
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
EASEMENT TYPE	EXISTING EASEMENT
DA	EXISTING DENIAL OF ACCESS
R/W-DA	EXISTING R/W & DENIAL OF ACCESS

SURVEY CONTROL & MONUMENTATION

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

UTILITY

	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
TV	CABLE TV DISTRIBUTION BOX
E	ELECTRIC MANHOLE
EM	ELECTRIC METER
E	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
G	GAS MANHOLE
G.M.	GAS METER
G.V.	GAS VALVE
G.P.	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
S	SANITARY SEWER MANHOLE
S.V.	SANITARY SEWER VALVE
S.C.O.	SANITARY SEWER CLEANOUT OR VENT
S.D.F.	SEPTIC DRAIN FIELD
B	TELEPHONE BOOTH
T	TELEPHONE MANHOLE
T	TELEPHONE TEST POINT
J.W.	TRAFFIC - CONDUIT JUNCTION WELL
	TRAFFIC - LIGHT POLE AND BASE
	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
	TRAFFIC - SIGNAL POLE AND BASE
U	UTILITY BOX
	UTILITY POLE GUY WIRE ANCHOR
	UTILITY POLE
F.H.	WATER - FIRE HYDRANT
W.M.	WATER METER
WV	WATER VALVE
WELL	WELL HEAD
?	MANHOLE - UNDETERMINED OWNER

UTILITY COMPANY FACILITIES

CW-W (X)	CITY OF WILMINGTON WATER
ITMS-CON (X)	DELDOT (ITMS)
DP-E (X)	DELMARVA POWER ELECTRIC (UNDERGROUND)
DP-E-OH	DELMARVA POWER ELECTRIC (OVERHEAD)
DP-G (X)	DELMARVA GAS (UNDERGROUND)
NCC-S (X)	NEW CASTLE COUNTY SANITARY SEWER
VER-C (X)	VERIZON DELAWARE TELEPHONE (UNDERGROUND)
VER-C-OH	VERIZON DELAWARE TELEPHONE (OVERHEAD)
COM-C (X)	COMCAST DELAWARE CABLE (UNDERGROUND)
COM-C-OH	COMCAST DELAWARE CABLE (OVERHEAD)

(X) REPRESENTS ASCE DEFINED SUE QUALITY LEVEL

PROPOSED SYMBOLS

CONSTRUCTION

	CONCRETE SAFETY BARRIER - PERMANENT
BFS	BIOFILTRATION SWALE
	BRICK PATTERNED SURFACE
	BUTT JOINT
CZ	CLEAR ZONE
100+00	CONSTRUCTION BASELINE
CSF	CONSTRUCTION SAFETY FENCE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
	CURB OPENING - SUMP / ON GRADE
	CURB OPENING WITH SIDEWALK
	DRAINAGE INLET
	DITCH
	FENCE - METAL / FENCE - WOOD
	FLARED END
	GUARDRAIL, TYPE 1
	GUARDRAIL, TYPE 2
	GUARDRAIL, TYPE 3
	GUARDRAIL END ANCHORAGE
	GUARDRAIL END TREATMENT, TYPE 1
	GUARDRAIL END TREATMENT, TYPE 2
	GUARDRAIL END TREATMENT, TYPE 3
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
LO	LATERAL OFFSET
LOC	LIMIT OF CONSTRUCTION
MB	MAILBOX
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK - 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN OUTLET

RIGHT-OF-WAY SYMBOLS

	PROPOSED RIGHT-OF-WAY MONUMENT
DA	PROPOSED DENIAL OF ACCESS
PE	PROPOSED PERMANENT EASEMENT
R/W	PROPOSED RIGHT-OF-WAY
R/W-DA	PROPOSED R/W & DENIAL OF ACCESS
TCE	TEMPORARY CONSTRUCTION EASEMENT
100+00	PROPOSED RIGHT-OF-WAY BASELINE
RTE	RIGHT-TO-ENTER
ROE	PROPOSED RIGHT-OF-ENTRY

IDENTIFIERS

A C	ADJUST BY CONTRACTOR
A O	ADJUST BY OTHERS
B XXX	CONCRETE SAFETY BARRIER
C XXX	CURB OR CURB & GUTTER
CJB XXX	CONVERT TO JUNCTION BOX
CMH XXX	CONVERT TO DRAINAGE MANHOLE
C O	CURB OPENING - SUMP / ON GRADE
CO SW	CURB OPENING WITH SIDEWALK
CSF XXX	CONSTRUCTION SAFETY FENCE
DI XXX	DRAINAGE INLET
DND	DO NOT DISTURB
ED XXX	ENERGY DISSIPATOR
F XXX	FENCE
FES XXX	FLARED END SECTION
FF C	FILL WITH FLOWABLE FILL
GR XXX	GUARDRAIL
JB XXX	JUNCTION BOX
MH XXX	MANHOLE
M XXX	MONUMENT - RIGHT-OF-WAY
PC XX	PEDESTRIAN CONNECTION / TYPE
PC-N XXX	PEDESTRIAN CONNECTION / TYPE WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
P XXX	PIPE
RL C	RELOCATE BY CONTRACTOR
RL O	RELOCATE BY OTHERS
RL PO	RELOCATE BY PROPERTY OWNER
RM C	REMOVE BY CONTRACTOR
RM TC	REMOVE BY TRAFFIC CONTRACTOR
RM O	REMOVE BY OTHERS
UD XXX	UNDERDRAIN / LENGTH
UDO XXX	UNDERDRAIN OUTLET PIPE

LANDSCAPING

JB XXX	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC

ITMS-CON	ITMS CONDUIT
SIG-CON	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
	PAVEMENT STRIPING
	TRAFFIC SIGN

MISCELLANEOUS

	GUY WIRE ANCHOR BY OTHERS
	UTILITY POLE BY OTHERS

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

UTILITY COMPANY FACILITIES

ITMS-CON	PROPOSED ITMS CONDUIT
SIG-CON	PROP. DELMARVA GAS (UNDERGROUND)*

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | ...\CTDOINPSE PLANS\LG01.dgn | PEN TABLE: pennoni-ddot.tbl
FILE NAME: | PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF.PLT.CFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/10/2020 @ 3:24:33 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: CLivers | OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS

NOT TO SCALE

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LEGEND

LG-01

SECTION	PAI
SHEET NO.	7

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2016 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2018, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2. ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

( )	NONE
( )	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	ALL PLAN SHEETS, IN PDF FORMAT.
( )	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

NOTE: THE DOCUMENT ENTITLED "RELEASE FOR DELIVERY OF DOCUMENTS IN ELECTRONIC FORM TO A CONTRACTOR" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

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

( )	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 AIRCRAFT 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. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - A. WOOD FENCE POSTS IN CONFLICT WITH PROPOSED SIDEWALK AT THE NORTHWEST CORNER OF THE 7-DAY FARMERS MARKET INTERSECTION, STA. 119+50 LT TO STA. 121+95 LT.
   - B. EXISTING RAILING ON STONE MASONRY WALL WITHIN THE LIMITS OF THE PROPOSED PEDESTRIAN RAMP NEAR STA. 122+10 RT.
   - C. EXISTING RETAINING WALL, RAILING AND DRAINAGE INLETS ALONG LANCASTER PIKE PROPERTY LLC. FRONTAGE, STA. 124+75 RT TO STA. 126+00 RT.
   - D. EXISTING WOOD POSTS ALONG EASTBOUND LANCASTER PIKE FROM STA. 132+90 RT TO STA. 133+90 RT.
   - E. PORTION OF EXISTING MODULAR BLOCK WALL/PLANTER AT THE CANNERY SHOPPING CENTER, STA. 141+20 LT. TO STA. 141+40 LT.
   - F. EXISTING P.C.C. PARKING BUMPERS IN FRONT OF PARCEL 07-033.30-050 (6-L)
   - G. EXISTING ABANDONED UTILITY POLE LOCATED AT P42 (COLONIAL AVE.).

SECTION 400

4. 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

SECTION 600

5. 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.

6. 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

7. 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.

8. 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 - SAW CUTTING, CONCRETE, FULL DEPTH.

9. 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.

10. THE CONTRACTOR SHALL DELIVER ALL EXCESS MILLED MATERIAL TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S KIAMENSI 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.

11. 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.

SECTION 900

12. 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.

MISCELLANEOUS

13. 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.

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

15. THE CONTRACTOR MAY ENCROACH ON THE RAILROAD RIGHT-OF-WAY FOR MINOR SIDEWALK IMPROVEMENTS NEAR STATION 138+60, LEFT. THE CONTRACTOR IS NOT REQUIRED TO OBTAIN INSURANCE AND/OR RAILROAD AGREEMENTS FOR THIS WORK. RAILROAD FLAGGERS SHALL BE UTILIZED AS NECESSARY, TO BE PAID UNDER ITEM 801501 - MAINTENANCE OF RAILROAD TRAFFIC. THE CONTRACTOR SHALL CONTACT DELDOT'S RAILROAD SECTION AT LEAST TWO WEEKS PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN THE RAILROAD RIGHT-OF-WAY.

16. THE CONTRACTOR SHALL AVOID OR MINIMIZE IMPACTS TO THE EXISTING PAVEMENT SECTION DURING CURB CONSTRUCTION. THE CONTRACTOR SHALL UTILIZE THE EXISTING PAVEMENT AS FORMWORK FOR PROPOSED CURB. WHERE NEW CURB IS PROPOSED ADJACENT TO EXISTING HOT-MIX AND/OR REINFORCED P.C.C. PAVEMENT, THE CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING CURB WITHOUT DISTURBING THE EXISTING HOT-MIX AND/OR REINFORCED P.C.C. PAVEMENT BOX. ANY DAMAGE TO THE EXISTING HOT-MIX AND/OR REINFORCED P.C.C. PAVEMENT BOX SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE EXISTING HOT-MIX AND/OR REINFORCED P.C.C. PAVEMENT BOX IS DAMAGED, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY TO DETERMINE THE HOT-MIX AND/OR P.C.C. PAVEMENT PATCHING DETAIL REQUIRED.

17. 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 801500 - MAINTENANCE OF TRAFFIC - ALL INCLUSIVE.

18. THE FOLLOWING NOTES APPLY TO THE SIGNING AND STRIPING PLANS FOR THE EXTENDED PROJECT LIMITS (SR 141 TO COURT DRIVE, NORTH DUPONT ROAD TO UNION STREET):

   A. ROADWAY GEOMETRY IS BASED ON AERIAL PHOTOGRAPHY. CONTRACTOR SHALL FOLLOW PROPOSED PAVEMENT MARKINGS LEGEND. LOCATIONS OF EXISTING STRIPING SHOWN ON AERIAL ARE NOT TO BE REPRODUCED.

   B. THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS, EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT OR THROUGH WRITTEN APPROVAL BY THE ENGINEER.
      - DELDOT - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - 2011 EDITION AND SUBSEQUENT REVISIONS.
      - AASHTO - STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS - 2013, 6TH EDITION AND SUBSEQUENT REVISIONS
      - FHWA - STANDARD HIGHWAY SIGNS - 2004 EDITION AND SUBSEQUENT SUPPLEMENTS

   C. THE CONTRACTOR SHALL INSTALL NEW SIGN POSTS WHERE ADDITIONAL HEIGHT IS WARRANTED.

   D. THE CONTRACTOR SHALL RE-STRIPE CENTER LINE(S) ALONG THE SAME ALIGNMENT(S) AS EXISTING CENTER LINE STRIPING, UNLESS NOTED OTHERWISE. TRAVEL LANE WIDTH AND DIMENSIONS ARE SHOWN FROM THE STRIPING CENTER LINE(S) TO THE EDGE OF TRAVEL LANE, PLEASE NOTE: SHOULDER WIDTHS VARY THROUGHOUT CORRIDOR.

MISCELLANEOUS (CONTD.)

19. WORK ASSOCIATED WITH THE PROJECT TAKES PLACE NEAR FOUR KNOWN CEMETERIES: MOUNT OLIVE CEMETERY, MOUNT ZION CEMETERY, SILVERBROOK CEMETERY, AND CATHEDRAL CEMETERY. IN THE VICINITY OF THESE PROPERTIES, ALL PROJECT RELATED ACTIVITIES SHOULD REMAIN WITHIN THE LOC AS DEPICTED ON THE CONSTRUCTION PLANS. IF ANY CHANGES TO THE LOC ARE REQUIRED, THESE CHANGES MUST BE REVIEWED BY DELDOT CULTURAL RESOURCE STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV , (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

20. WORK ASSOCATED WITH THE PROJECT TAKES PLACE NEAR WETLANDS ON BOTH SIDES OF THE ROADWAY AT CHESTNUT RUN (APPROXIMATE STATION 110+00 TO STATION 113+00). ALL PROJECT RELATED ACTIVITIES IN THIS AREA SHALL REMAIN WITHIN THE LIMIT OF CONSTRUCTION AT THE FACE OF CURB AS SHOWN ON THE SIGNING AND STRIPING PLANS.

21. EXISTING RIGHT-OF-WAY SHOWN EAST OF NORTH DUPONT ROAD (PAVEMENT & REHABILITATION PROJECT SECTION) IS FOR INFORMATIONAL PURPOSES ONLY. RIGHT-OF-WAY AS SHOWN IS BASED ON THE FOLLOWING CONTRACTS:
   - CONTRACT 900: GREENHILL ROAD TO KING STREET
   - CONTRACT 1499: N. DUPONT ROAD TO CENTRE ROAD

22. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN 10-FOOT HORIZONTAL CLEARANCE FROM THE EXISTING NEW CASTLE COUNTY SEWER TRUNK LINE WHILE STAYING WITHIN RIGHT-OF-WAY DURING INSTALLATION OF DELDOT ITMS.

23. ALL 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.

24. THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT. AS SUCH, AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED.

UNOFFICIAL WEBSITE COPY

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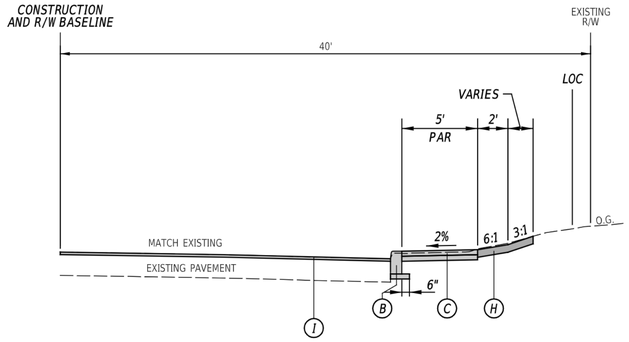
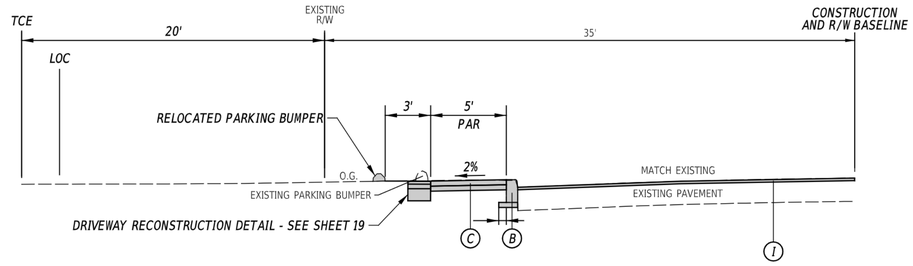
ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	NOTES	SECTION
				T201601103	DESIGNED BY: A. MALKIN		PAI
				COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
				NEW CASTLE			8

UNOFFICIAL WEBSITE COPY



TYPICAL SECTION - LANCASTER PIKE
STATION 124+00 TO STATION 132+22 RT



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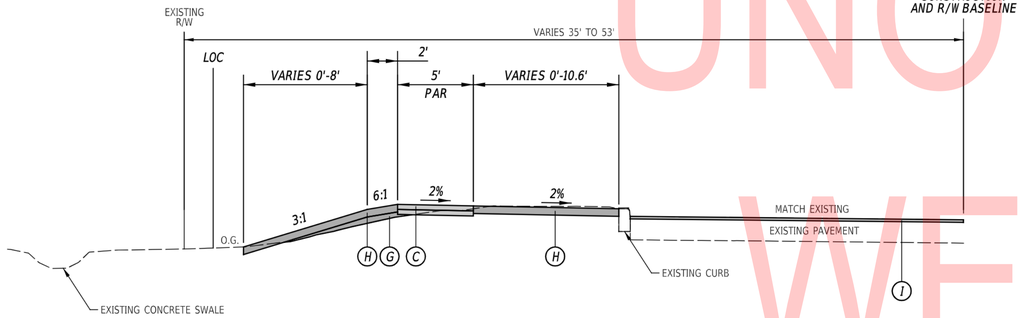
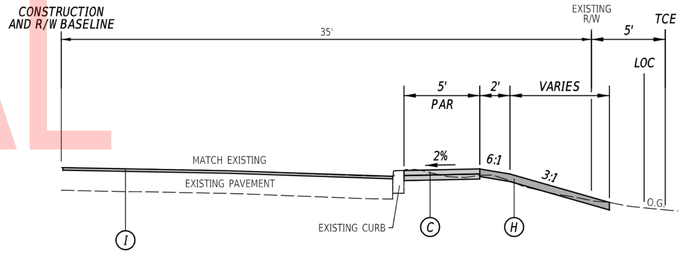
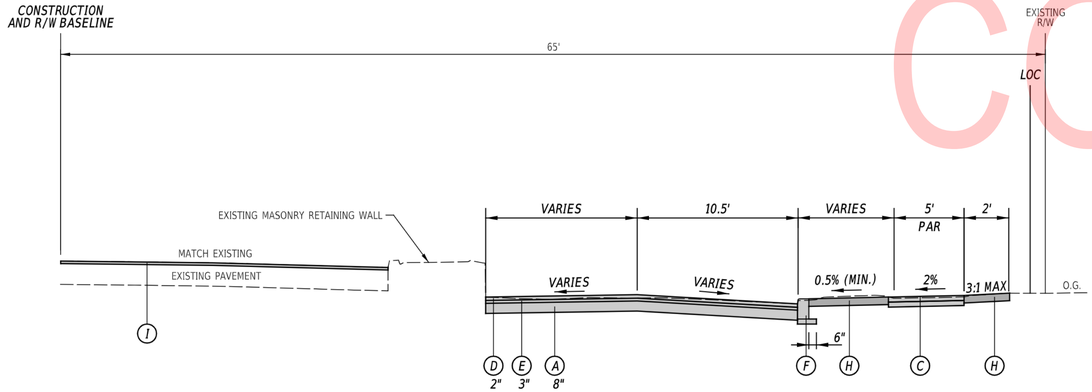
STATION 139+83 TO STATION 143+07 LT



TYPICAL SECTION - LANCASTER PIKE
STATION 119+38 TO STATION 121+92 LT



TYPICAL SECTION - LANCASTER PIKE
STATION 132+22 TO STATION 134+75 RT



TYPICAL SECTION - LANCASTER PIKE
STATION 119+30 TO STATION 124+00 RT

NOTES:

1. *PROPOSED DRIVEWAY PAVEMENT DEPTH SHALL BE EQUAL TO OR EXCEED EXISTING PAVEMENT DEPTH.*
2. *EXISTING LANCASTER PIKE PAVEMENT SECTION (PER ROADWAY CORES PERFORMED BY DELDOT):*
   - *1.75" TO 7.5" HOT-MIX*
   - *1.5" TO 1.75" ASPHALT TREATED BASE*
   - *7.5" TO 9.5" P.C.C.*

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	-	8"

LEGEND

- (A) *ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B*
- (B) *ITEM 701012 - P.C.C. CURB, TYPE 1-6*
  ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B, 4"
- (C) *ITEM 705001 - P.C.C. SIDEWALK, 4"*
  ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B, 4"
- (D) *ITEM 401045 - SUPERPAVE TYPE C, PG 70-22 (NON-CARBONATE STONE)*
- (E) *ITEM 401015 - SUPERPAVE TYPE B, PG 70-22*
- (F) *ITEM 701011 - P.C.C. CURB, TYPE 1-4*
  ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B,4"
- (G) *ITEM 209006 - BORROW, TYPE F*
- (H) *ITEM 908004 - TOPSOIL, 6" DEPTH*
  ITEM 908016 - PERMANENT GRASS SEEDING, SUBDIVISION
- (I) *ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE*
  ITEM 401045 - SUPERPAVE TYPE C, PG 70-22 (NON-CARBONATE STONE)

PENNONI ASSOCIATES INC.	
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MICROSTATION WORKSPACE:	DELDOT-V8i-OPENROADS
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OFFICE LOCATION:	Hampton Roads, Virginia

ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO.	N/A	TYPICAL SECTIONS	TS-01
				T201601103	DESIGNED BY:	A. MALKIN		SECTION
				COUNTY				PAI
				NEW CASTLE	CHECKED BY:	P. HORSEY		SHEET NO.
								9

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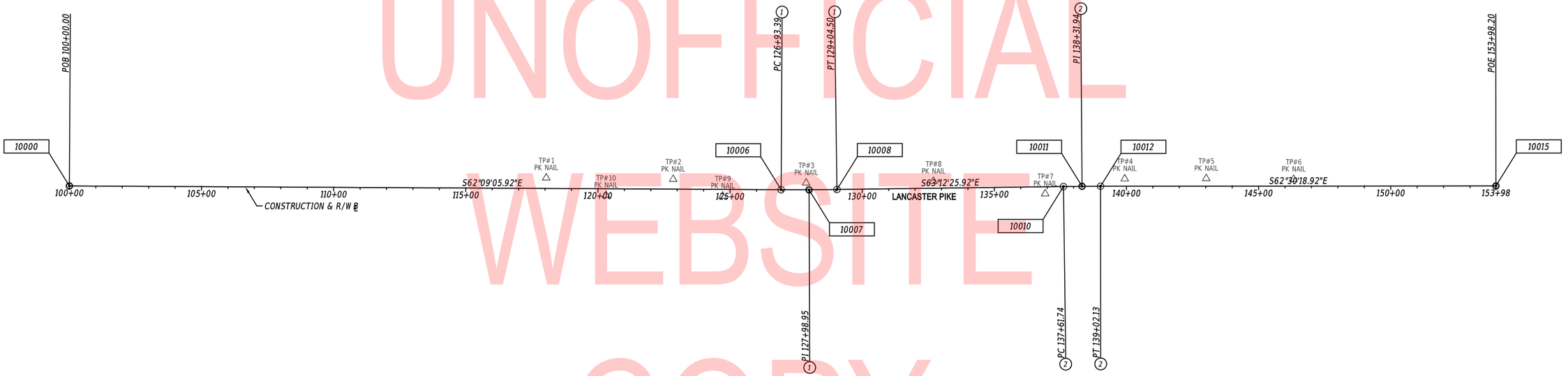

CIRCULAR CURVE NO. 1				
Element: Circular				
		STATION	NORTHING	EASTING
PC	(10006)	126+93.39	639221.3545	606100.9398
PI	(10007)	127+98.95	639172.0446	606194.2733
CC			649353.3954	611453.8919
PT	(10008)	129+04.50	639124.4625	606288.4994
Radius:		11459.1600		
Delta:		1°03'20.0000" Left		
Degree of Curvature (Arc):		0°29'59.9994"		
Length:		211.1112		
Tangent:		105.5586		
Chord:		211.1082		
Middle Ordinate:		0.4862		
External:		0.4862		
Tangent Direction:		S 62°09'05.9199" E		
Radial Direction:		S 27°50'54.0801" W		
Chord Direction:		S 62°40'45.9199" E		
Radial Direction:		S 26°47'34.0801" W		
Tangent Direction:		S 63°12'25.9199" E		

CIRCULAR CURVE NO. 2				
Element: Circular				
		STATION	NORTHING	EASTING
PC	(10010)	137+61.74	638738.0496	607053.7059
PI	(10011)	138+31.94	638706.4079	607116.3652
CC			628509.1167	601888.3134
PT	(10012)	139+02.13	638674.0010	607178.6322
Radius:		11459.1600		
Delta:		0°42'07.0000" Right		
Degree of Curvature (Arc):		0°29'59.9994"		
Length:		140.3889		
Tangent:		70.1953		
Chord:		140.3881		
Middle Ordinate:		0.2150		
External:		0.2150		
Tangent Direction:		S 63°12'25.9199" E		
Radial Direction:		S 26°47'34.0801" W		
Chord Direction:		S 62°51'22.4199" E		
Radial Direction:		S 27°29'41.0802" W		
Tangent Direction:		S 62°30'18.9199" E		

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
10000	100+00.00	0.0000	640479.5272	603719.4769
10001	105+00.00	0.0000	640245.9607	604161.5705
10002	110+00.00	0.0000	640012.3942	604603.6640
10003	115+00.00	0.0000	639778.8276	605045.7575
10004	120+00.00	0.0000	639545.2611	605487.8510
10005	125+00.00	0.0000	639311.6946	605929.9446
10009	134+00.00	0.0000	638901.1100	606730.8003
10013	144+00.00	0.0000	638444.1508	607620.2693
10014	149+00.00	0.0000	638213.3172	608063.7959
10015	153+98.20	0.0000	637983.3145	608505.7259

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP 1	118+04.04	-40.0312	639672.1945	605333.2877	167.23
TP 2	122+84.44	-37.5281	639445.5719	605756.8794	168.01
TP 3	127+88.06	-26.0649	639200.6250	606196.8094	157.41
TP 4	139+93.44	-28.4938	638657.1234	607272.7804	163.77
TP 5	143+01.83	-29.1101	638515.2949	607546.6264	165.89
TP 6	146+32.31	-25.8602	638359.8396	607838.2807	164.32
TP 7	136+92.21	26.3479	638745.8730	606979.7617	149.70
TP 8	132+69.96	-26.2952	638983.2004	606626.5727	140.09
TP 9	124+72.27	25.0229	639302.5217	605893.7400	165.35
TP 10	120+30.58	24.7826	639509.0632	605503.3137	168.38

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).

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Pennoni

ADDENDA / REVISIONS	

SCALE
0 200 400 600
FEET

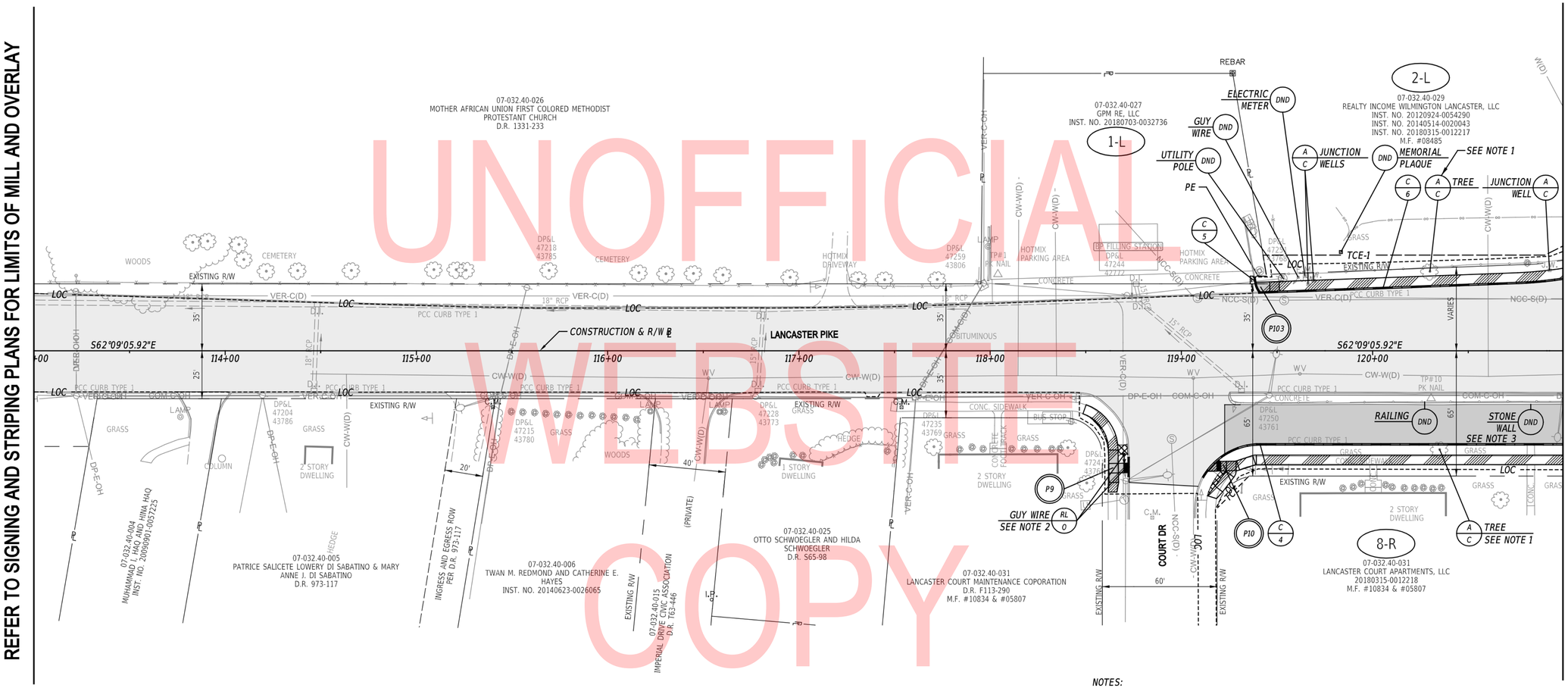
SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

HORIZONTAL AND VERTICAL CONTROL

HV-01
SECTION
PAI
SHEET NO.
10

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
4	P.C.C. CURB, TYPE 1-4	177'
*5	P.C.C. CURB SPECIAL	23'
6	P.C.C. CURB, TYPE 1-6	139'
*	SEE DELDOT STANDARD CONSTRUCTION DETAIL C-6	



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NOTES:

1. SEE SECTION 201.03.2.F OF THE DELDOT STANDARD SPECIFICATIONS FOR TREE TRIMMING REQUIREMENTS TO BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.
2. GUY WIRE ANCHOR RELOCATION BY OTHERS TO PROVIDE 80" VERTICAL CLEARANCE. REFER TO UTILITY STATEMENT FOR GUY WIRE ANCHOR RELOCATION COORDINATION REQUIREMENTS.
3. SEE PEDESTRIAN RAMP DETAIL SHEETS FOR SCOPE OF WALL REPAIRS.
4. DUE TO THE PRESENCE OF A KNOWN CEMETERY RESOURCE, CONTRACTOR ACCESS BEYOND THE LOC (STA 112+00 TO STA 118+00) IS PROHIBITED. THIS INCLUDES PARCEL 7-032.40-026 AND ADJACENT AREAS WITHIN DELDOT'S RIGHT-OF-WAY. ALL CHANGES TO THE LOC MUST BE COORDINATED WITH DELDOT CULTURAL RESOURCES STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV, (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-divdot.tbl
FILE NAME: ...\CTDOGNP\S&E PLANS\CP01.dgn | PLOT DRIVER: PENNONI-NWX-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 2:21:39 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickell | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-01
SECTION
PAI
SHEET NO.
11

FENCE SCHEDULE

NO.	QTY.	DESCRIPTION	NOTES
1	41 LF	ALUMINUM PEDESTRIAN RAILING, (ITEM 626010)	STA. 121+67, 28' RT. TO STA. 122+08, 28' RT. (+/-)
2	52 LF	ALUMINUM PEDESTRIAN RAILING, (ITEM 626010)	STA. 121+67, 33' RT. TO STA. 122+13, 28' RT. (+/-)
3	60 LF	ALUMINUM PEDESTRIAN RAILING, (ITEM 626010)	STA. 124+78,28' RT. TO STA. 125+38, 28' RT. (+/-)

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	12" RCP	V	74.00'	0.0047	161.87'	161.51'

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
1	125+21.31	45.39' RT	48" x 30"	TYPE 1	163.42'	160.87'
2	125+97.28	20.23' RT	48" x 30"	TYPE 1	163.55'	161.50'

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
TH-01	ELECTRIC	124+64.4	-28.7'	166.42'	1.57'	2" STEEL CONDUIT
TH-02	GAS	125+79.9	26.0'	164.42'	2.85'	6 3/4" PLASTIC

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	P.C.C. CURB, TYPE 2	44'
7	P.C.C. CURB, TYPE 1-6	93'
8	P.C.C. CURB, TYPE 1-4	61'
9	P.C.C. CURB, TYPE 1-6	56'
10	P.C.C. CURB, TYPE 1-6	50'
11	P.C.C. CURB, TYPE 1-4	229'
12	P.C.C. CURB, TYPE 1-6	306'
*13	P.C.C. CURB SPECIAL	20'
18	P.C.C. CURB, TYPE 1-6	7'
19	P.C.C. CURB, TYPE 1-6	7'
20	P.C.C. CURB, TYPE 1-4	27'
21	P.C.C. CURB, TYPE 1-4	63'
*23	P.C.C. CURB SPECIAL	23'
24	P.C.C. CURB, TYPE 1-4	71'
25	P.C.C. CURB, TYPE 1-4	141'
26	P.C.C. CURB, TYPE 1-8	11'
27	P.C.C. CURB, TYPE 1-6	22'

* SEE DELDOT STANDARD CONSTRUCTION DETAIL C-6

NOTES:

1. GAS VALVE'S CONCRETE FRAME TO BE REMOVED AND REPLACED WITH BORROW TYPE F, TOPSOIL, AND PERMANENT GRASS SEEDING. GAS VALVE TO BE ADJUSTED TO MEET SURFACE ELEVATION.

2. RECONSTRUCT DRIVEWAY PER STANDARD DETAIL C-3.

3. SEE PEDESTRIAN RAMP DETAIL SHEETS FOR SCOPE OF WALL REPAIRS.

4. CONTRACTOR SHALL RELOCATE EXISTING BUS SHELTER TO STATION 131+80 RT. PAYMENT SHALL BE UNDER ITEM 615519 - RELOCATING BUS STOP SHELTER.

5. DUE TO THE PRESENCE OF A KNOWN CEMETERY RESOURCE, CONTRACTOR ACCESS BEYOND THE LOC (STA 112+00 TO STA 118+00) IS PROHIBITED. THIS INCLUDES PARCEL 7-032.40-026 AND ADJACENT AREAS WITHIN DELDOT'S RIGHT-OF-WAY. ALL CHANGES TO THE LOC MUST BE COORDINATED WITH DELDOT CULTURAL RESOURCES STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV, (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

6. THE CONTRACTOR SHALL UTILIZE THE FOLLOWING PAVEMENT SECTION FOR PATCHING AROUND DRAINAGE INLET 2:
   - 8" GRADED AGGREGATE BASE COURSE, TYPE B (ITEM 301001)
   - 3" SUPERPAVE, TYPE B PG 70-22 (ITEM 401015)
   - 2" SUPERPAVE, TYPE C PG 70-22 (ITEM 401045)
   - 9" PATCHING P.C.C. PAVEMENT, 15' TO 100', TYPE B (ITEM 503001)

7. THE CONTRACTOR SHALL RELOCATE THE EXISTING PRIVATE SIGN DURING DURATION OF PHASE 1B OF CONSTRUCTION. REFER TO SPECIAL PROVISION 818504 FOR SIGN RELOCATION REQUIREMENTS.

8. CONTRACTOR SHALL SUBMIT DAY BY DAY SCHEDULE TO ENGINEER FOR APPROVAL TO COMPLETE WORK ON PARCEL 1-R. CONTRACTOR SHALL REFERENCE PROJECT RIGHT OF WAY AGREEMENT AND EXHIBIT 1 TO MAINTAIN PARCEL 1-R PARKING DURING CONSTRUCTION. CONTRACTOR SHALL REFERENCE RIGHT-OF-ENTRY AGREEMENT FOR PARCEL 1-R, WHEREAS "THE DEPARTMENT IS GRANTED THE UNINTERRUPTED RIGHT-OF-ENTRY... FOR RECONSTRUCTION OF THE EXISTING SIDEWALK AND RETAINING WALL, ADJUSTING DRAINAGE AND REPAVING. CONSTRUCTION... WILL OCCUR IN TWO PHASES AFFORDING PARKING DURING CONSTRUCTION."

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ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	T201601103	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	A. MALKIN
		CHECKED BY:	P. HORSEY

CONSTRUCTION PLAN

CP-02

SECTION: PAI

PENNONI ASSOCIATES INC.
FILE NAME: ...\CT\DGN\PS&E PLANS\CP02.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/31/2020 @ 3:29:37 PM
USER NAME: SNickel
OFFICE LOCATION: Newark, Delaware
Pennoni

FENCE SCHEDULE

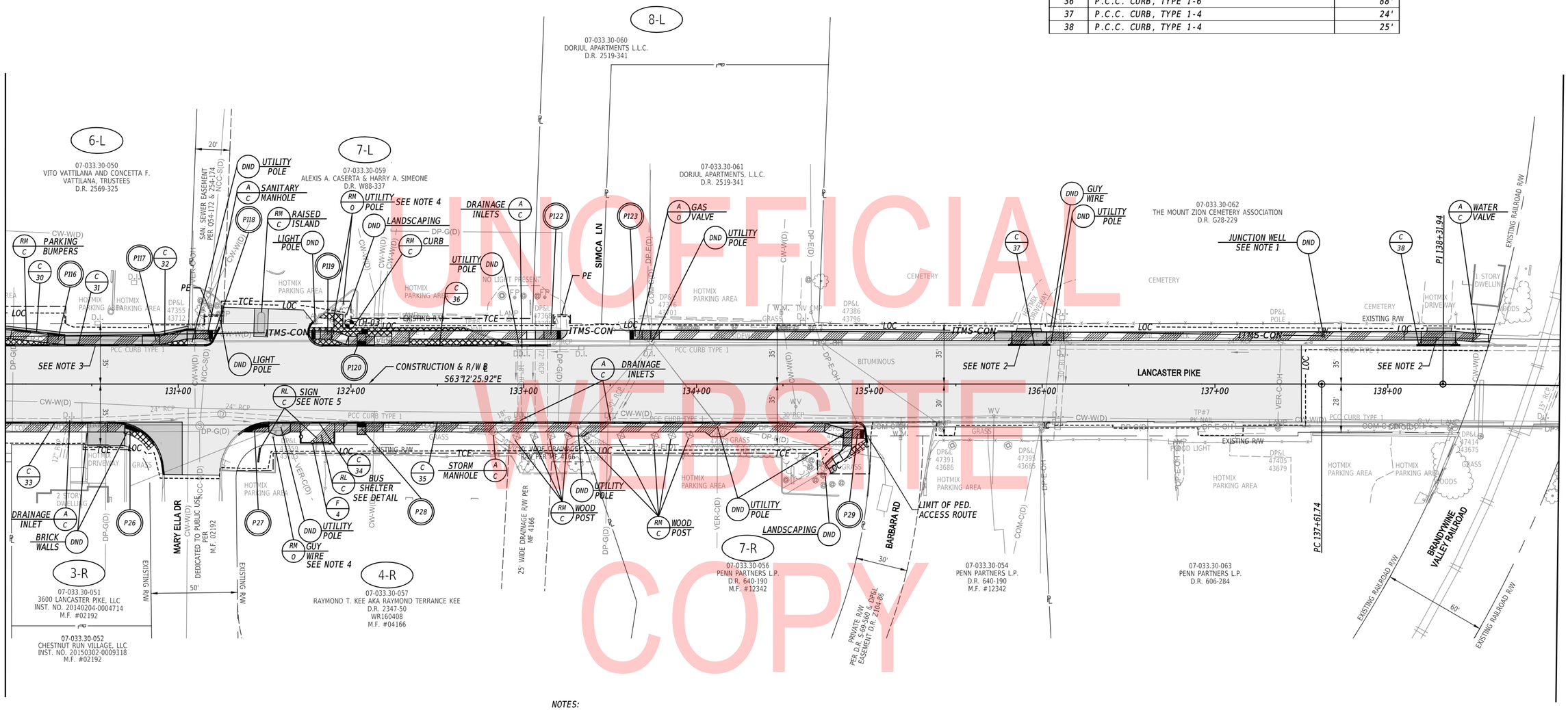
NO.	QTY.	DESCRIPTION	NOTES
4	33 LF	ALUMINUM PEDESTRIAN RAILING, (ITEM 626010)	STA. 131+71, 29' RT. TO STA. 131+89, 28' RT. (+/-)

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
TH-03	WATER	131+99.2	-34.7'	141.68'	2.52'	1" COPPER

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
30	P.C.C. CURB, TYPE 1-6	35'
31	P.C.C. CURB, TYPE 1-6	103'
32	P.C.C. CURB, TYPE 1-6	31'
33	P.C.C. CURB, TYPE 1-4	48'
34	P.C.C. CURB, TYPE 1-4	20'
35	P.C.C. CURB, TYPE 1-4	267'
36	P.C.C. CURB, TYPE 1-6	88'
37	P.C.C. CURB, TYPE 1-4	24'
38	P.C.C. CURB, TYPE 1-4	25'



NOTES:

1. ITMS CONDUIT AND JUNCTION WELLS FROM STA. 137+62 & STA. 141+06 TO BE INSTALLED IN ADVANCE OF THIS PROJECT VIA CONTRACT T201500514.
2. RECONSTRUCT DRIVEWAY PER STANDARD DETAIL C-3.
3. DEPRESS CURB BETWEEN P116 & P117.
4. SEE UTILITY STATEMENT FOR VERIZON COORDINATION REQUIREMENTS.
5. THE CONTRACTOR SHALL RELOCATE THE EXISTING PRIVATE SIGN FOR KEE SUPPLY CO. AND CHESTNUT RUN VILLAGE APARTMENTS FROM STATION 131+80, RT TO OUTSIDE OF THE STATE'S RIGHT-OF-WAY AT STATION 131+47, RT. REFER TO SPECIAL PROVISION 818504 FOR SIGN RELOCATION REQUIREMENTS.
6. DUE TO THE PRESENCE OF A KNOWN CEMETERY RESOURCE, CONTRACTOR ACCESS BEYOND THE LOC (STA 135+00 TO STA 139+00) IS PROHIBITED. THIS INCLUDES PARCEL 7-033.30-062 AND ADJACENT AREAS WITHIN DELDOT'S RIGHT-OF-WAY. ALL CHANGES TO THE LOC MUST BE COORDINATED WITH DELDOT CULTURAL RESOURCES STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV, (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

UNOFFICIAL WEBSITE COPY

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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

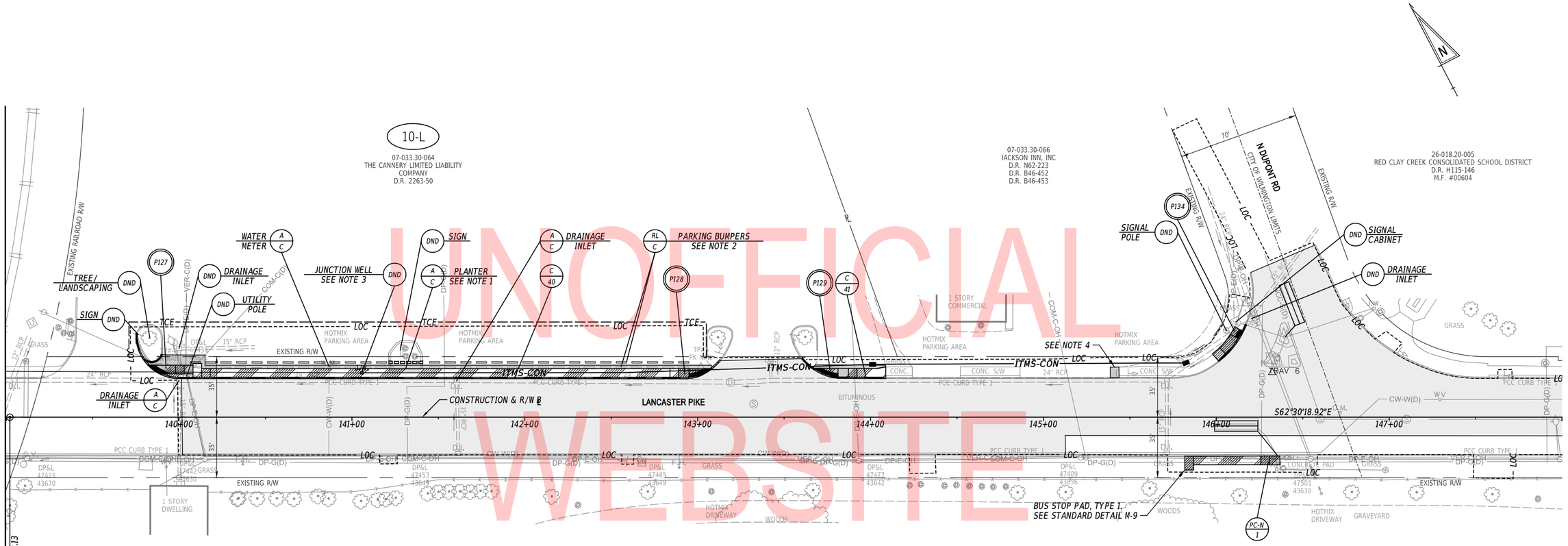
SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-03
SECTION
PAI
SHEET NO.
13

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
40	P.C.C. CURB, TYPE 1-6	276'
41	P.C.C. CURB, TYPE 1-4	17'



UNOFFICIAL WEBSITE COPY

NOTES:

1. RECONSTRUCT EXISTING MODULAR BLOCK WALL PLANTER TO PROVIDE MINIMUM 5' CLEAR WIDTH FOR PAR. REMOVAL OF EXISTING PORTION OF THE PLANTER TO BE PAID UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS. ALL WORK ASSOCIATED WITH RECONSTRUCTION OF PLANTER TO BE PAID FOR UNDER ITEM 607010 - MODULAR BLOCK WALL. SEE DETAIL SHEET.
2. EXISTING P.C.C. PARKING BUMPERS TO BE RELOCATED 3 FEET FROM THE EDGE OF PROPOSED SIDEWALK TO PROVIDE A BUFFER FOR OVERHANGING VEHICLES. WORK TO REMOVE AND RESET PCC PARKING BUMPERS TO BE PAID FOR UNDER ITEM 701506. SEE TYPICAL SECTIONS.
3. ITMS CONDUIT AND JUNCTION WELLS FROM STA. 137+62 & STA. 141+06 TO BE INSTALLED IN ADVANCE OF THIS PROJECT VIA CONTRACT T201500514.
4. PAVEMENT PATCH TO REMOVE OBSTRUCTIONS AND REPAIR VERTICAL DIFFERENCES FOR EXISTING PAR. CONTRACTOR SHALL USE DRIVEWAY RECONSTRUCTION DETAIL ON SHEET 19.
5. DUE TO THE PRESENCE OF A KNOWN CEMETERY RESOURCE, CONTRACTOR ACCESS BEYOND THE LOC (STA 135+00 TO STA 139+00) IS PROHIBITED. THIS INCLUDES PARCEL 7-033.30-062 AND ADJACENT AREAS WITHIN DELDOT'S RIGHT-OF-WAY. ALL CHANGES TO THE LOC MUST BE COORDINATED WITH DELDOT CULTURAL RESOURCES STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV, (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: SNickel OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

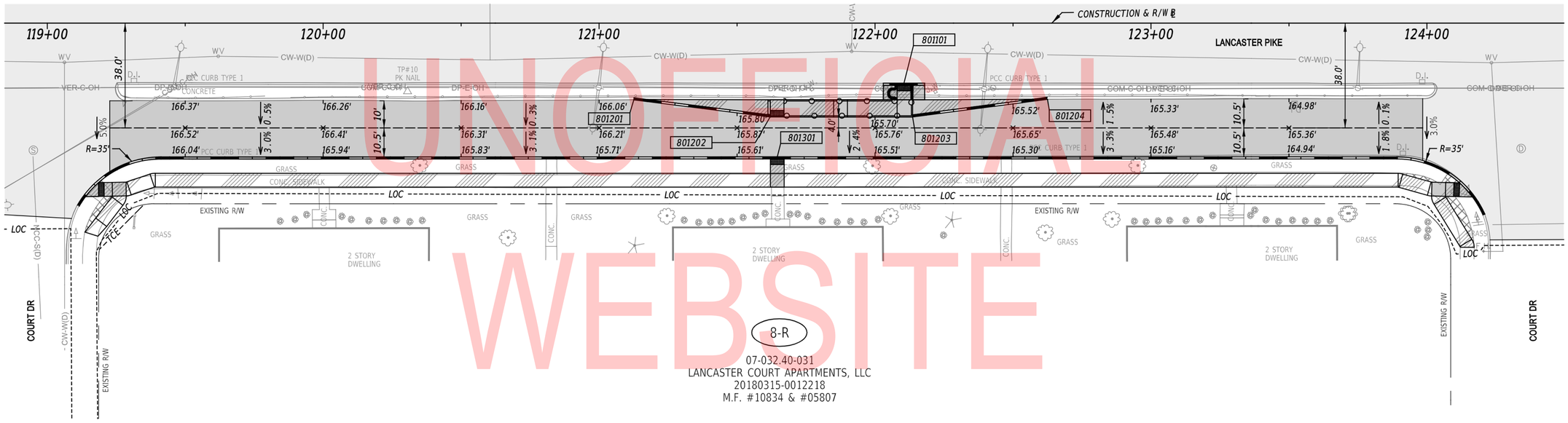
SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PLAN

CP-04
SECTION
PAI
SHEET NO.
14



8-R

07-032.40-031
LANCASTER COURT APARTMENTS, LLC
20180315-0012218
M.F. #10834 & #05807

UNOFFICIAL
WEBSITE
COPY

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801101	122+10.48	21.81	639427.6591	605663.7688
801201	121+12.57	27.83	639468.0663	605574.3873
801202	121+61.98	34.03	639439.4997	605615.1765
801203	122+13.61	34.03	639415.3840	605660.8227
801204	122+62.47	27.63	639398.2219	605707.0200
801301	121+64.57	48.50	639425.5009	605610.7077

PENNONI ASSOCIATES INC.
FILE NAME: ...\CTDGN\PS&E PLANS\GG01.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
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PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PSF.PLTCFG
DATE PLOTTED: 1/10/2020 @ 3:25:57 PM
USER NAME: CLlaves
OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS

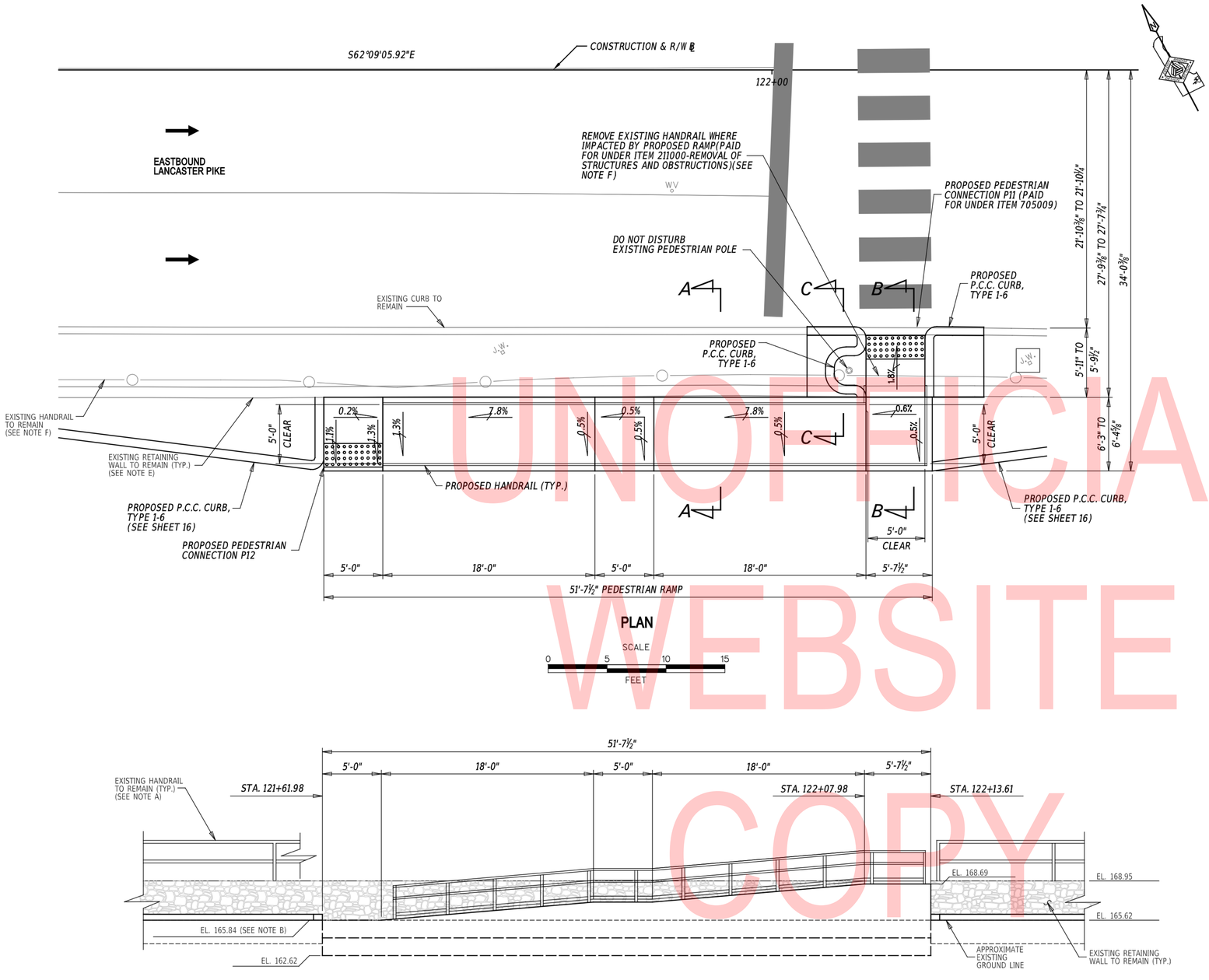
SCALE
0 20 40 60
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

GRADES AND GEOMETRICS

GG-01
SECTION
PAI
SHEET NO.
15

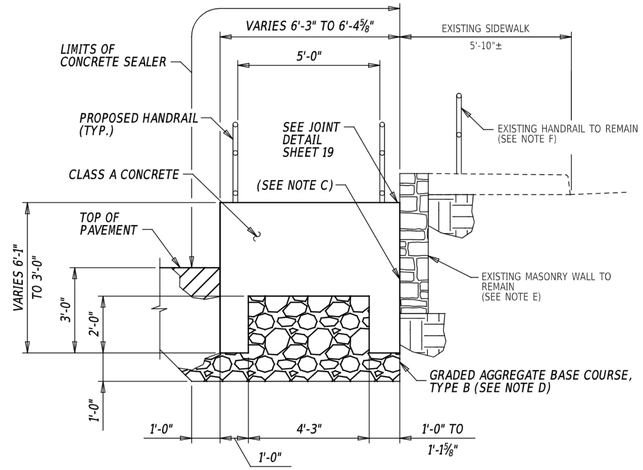


PLAN

SCALE
0 5 10 15
FEET

ELEVATION

SCALE
0 5 10 15
FEET



SECTION A-A

3/8" = 1'-0"

NOTES:

A. EXISTING HANDRAIL PARTIALLY OMITTED FOR CLARITY.
B. TOP OF RAMP ELEVATIONS SHOWN ARE ADJACENT TO THE EXISTING STONE MASONRY WALL. SEE SHEET 18 FOR ADDITIONAL ELEVATIONS.
C. APPLY BOND BREAKER TO FACE OF EXISTING STONE MASONRY WALL TO REMAIN. CAST PROPOSED PEDESTRIAN RAMP AGAINST FRONT FACE OF WALL. PAYMENT INCIDENTAL TO ITEM #610000 - PORTLAND CEMENT CONCRETE MASONRY, CLASS A.
D. PLACE PEDESTRIAN RAMP ON A 1-FOOT MINIMUM BED OF GRADED AGGREGATE BASE COURSE, TYPE B. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED MORE THAN 1-FOOT BELOW THE BOTTOM OF THE RAMP, REMOVE THE UNSUITABLE MATERIAL AND REPLACE WITH GRADED AGGREGATE BASE COURSE, TYPE B.
E. WITHIN LIMITS OF PROPOSED RAMP (STA. 121+61.98 TO STA. 122+13.61), RE-POINT AND RESET LOOSE STONES IN THE STONE MASONRY WALL. QUANTITY WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT, AND INCLUDED IN ITEM #619002 - POINTING EXISTING MASONRY.
F. THE CONTRACTOR SHALL COORDINATE WITH DELDOT NORTH DISTRICT M&O ONE MONTH PRIOR TO CLOSING THE APARTMENT FRONTAGE ROAD. DELDOT M&O TO REPAIR/REPLACE/ADJUST EXISTING HANDRAIL AND RE-POINT AND RESET LOOSE STONES ALONG THE PORTION OF THE WALL NOT IMPACTED BY THE PROPOSED RAMP.
G. FOR SECTIONS B-B AND C-C, SEE SHEET 18.

PROJECT NOTES

SECTION 100

1. PORTLAND CEMENT CONCRETE:
   USE PORTLAND CEMENT CONCRETE FOR CAST-IN-PLACE ELEMENTS AS FOLLOWS:
   (f'c = 28-DAY COMPRESSIVE STRENGTH)
   CLASS A - PEDESTRIAN RAMP (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.
   -KEYED CONSTRUCTION JOINTS SHALL BE 2"x4" OR AS NOTED.

2. BAR REINFORCEMENT:
   -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.
   -PEDESTRIAN RAMP 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:
   -SILICONE ACRYLIC SEALER SHALL BE APPLIED TO THE EXPOSED CONCRETE SURFACES OF THE PEDESTRIAN RAMP.

4. ALUMINUM PEDESTRIAN RAILING:
   -SEE TYPICAL HANDRAIL DETAIL ON SHEET 19.

MISCELLANEOUS

5. DESIGN SPECIFICATIONS:
   (A) AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES
   (B) 2010 AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN
   (C) PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH THE DELDOT STANDARD SPECIFICATIONS, AUGUST 2016, WITH 2018 REVISIONS

6. 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. PAYMENT SHALL BE INCIDENTAL TO ITEM #763501 - CONSTRUCTION ENGINEERING.
   -ANY DAMAGE TO THE EXISTING MASONRY WALL TO REMAIN SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

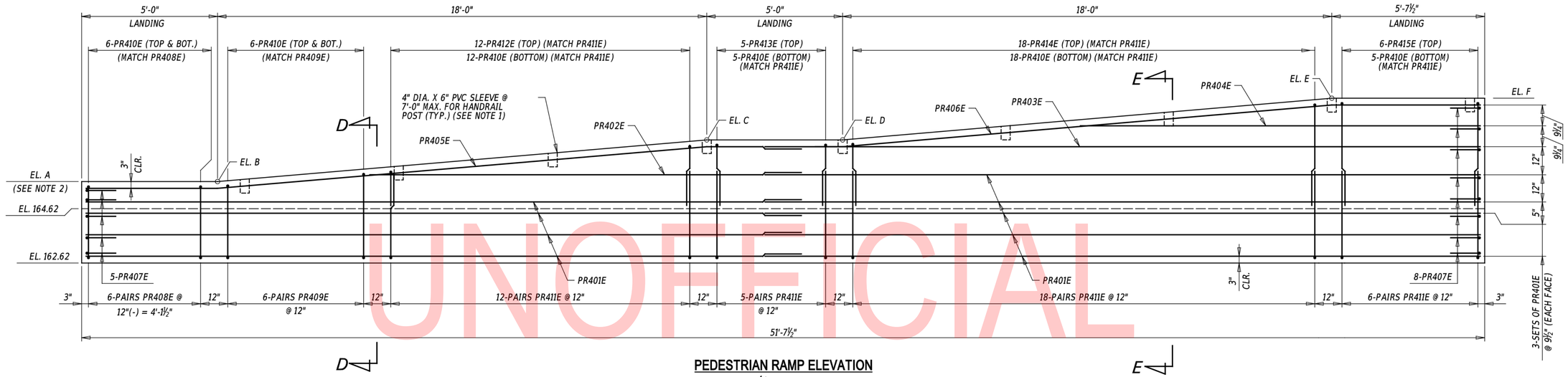
7. CONTINGENT QUANTITIES:
   THESE CONTRACT DRAWINGS HAVE BEEN PREPARED BASED ON FIELD INSPECTION NOTES. ACTUAL CONDITIONS MAY REQUIRE MODIFICATION IN CONSTRUCTION DETAILS AND WORK QUANTITIES. ALL DIMENSIONS AND DETAILS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS.

UNOFFICIAL WEBSITE COPY

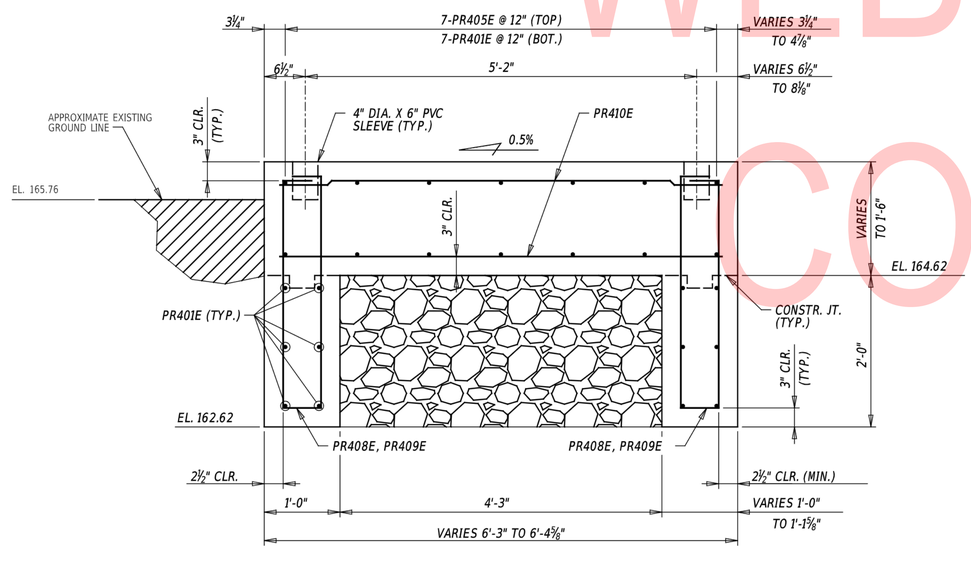
PENNONI ASSOCIATES INC. | PEN TABLE: PENNONI-DELDOT.TBL
FILE NAME: ...\CTDONPSE PLANSP601.dgn | PLOT DRIVER: PENNONI-NW.CTB,DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/10/2020 @ 3:26:02 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS		SCALE AS NOTED	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	PEDESTRIAN RAMP GENERAL PLAN AND ELEVATION	SECTION
				T201601103			PAI
				COUNTY	DESIGNED BY: C. MALKIN		SHEET NO.
				NEW CASTLE	CHECKED BY: P. HORSEY		16

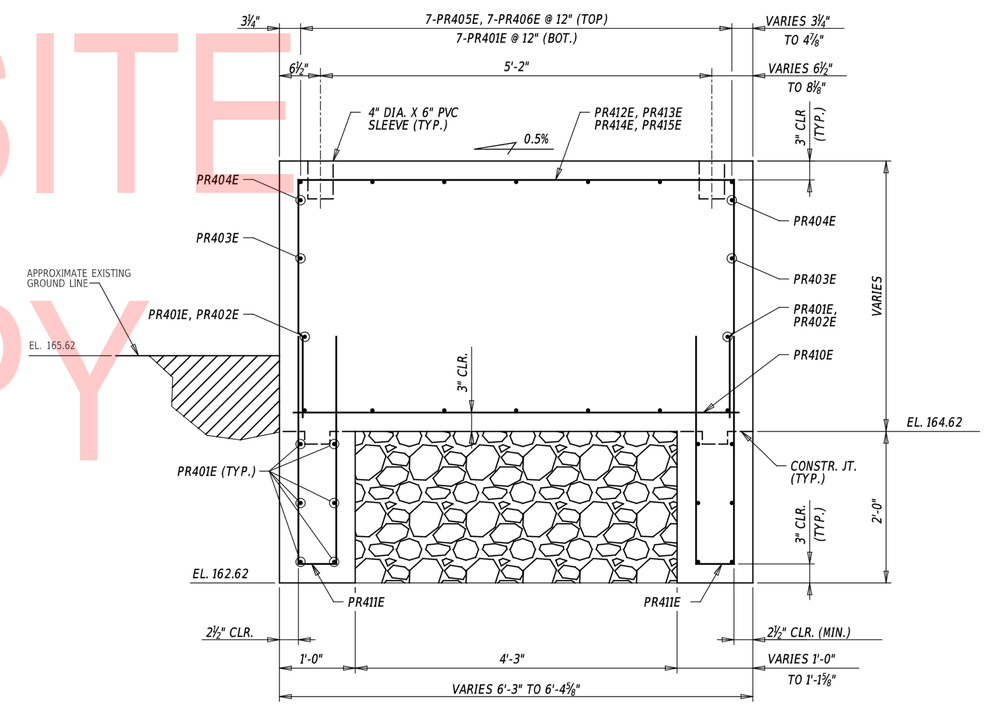
RAMP ELEVATIONS TABLE						
LOCATION	EL. A	EL. B	EL. C	EL. D	EL. E	EL. F
ALONG NORTH EDGE OF RAMP	165.84	165.84	167.24	167.26	168.66	168.69
ALONG SOUTH EDGE OF RAMP	165.77	165.76	167.21	167.23	168.63	168.66



PEDESTRIAN RAMP ELEVATION
½" = 1'-0"



SECTION D-D
1" = 1'-0"



SECTION E-E
1" = 1'-0"

NOTES:
1. PVC SLEEVE LOCATIONS SHOWN ARE FOR THE SOUTHERN HANDRAIL.
2. SEE RAMP ELEVATIONS TABLE FOR FINISHED ELEVATIONS ALONG NORTH AND SOUTH EDGES OF PEDESTRIAN RAMP.
3. EXISTING MASONRY WALL NOT SHOWN FOR CLARITY.

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-deldot.tbl
FILE NAME: ...\CT\DGN\PS&E PLANS\ST01.dgn | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
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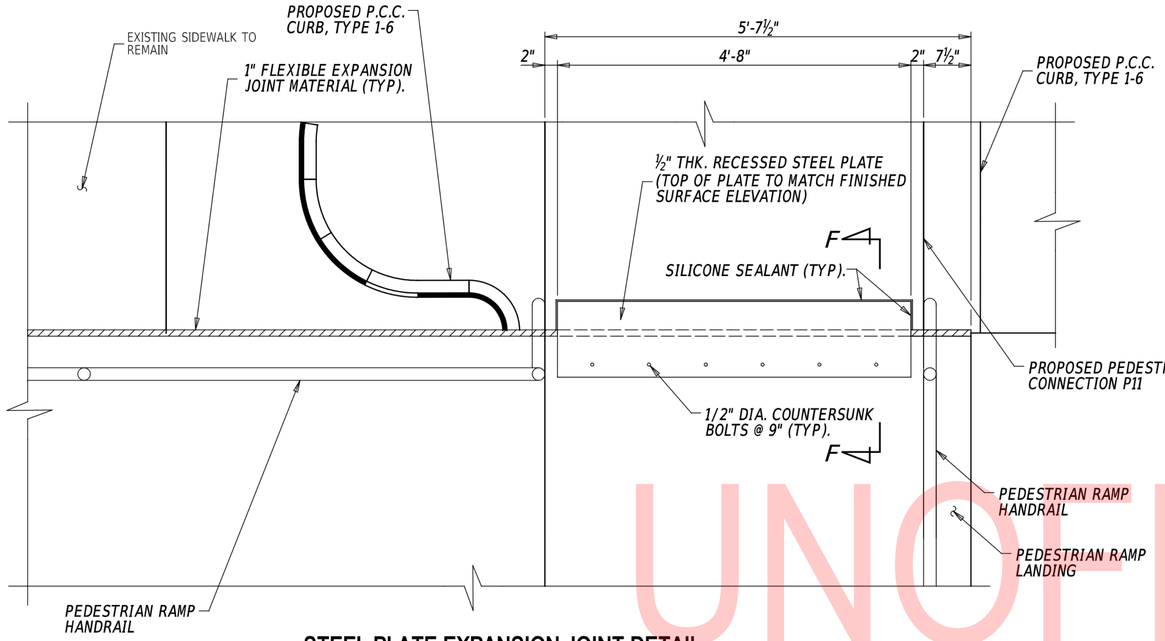
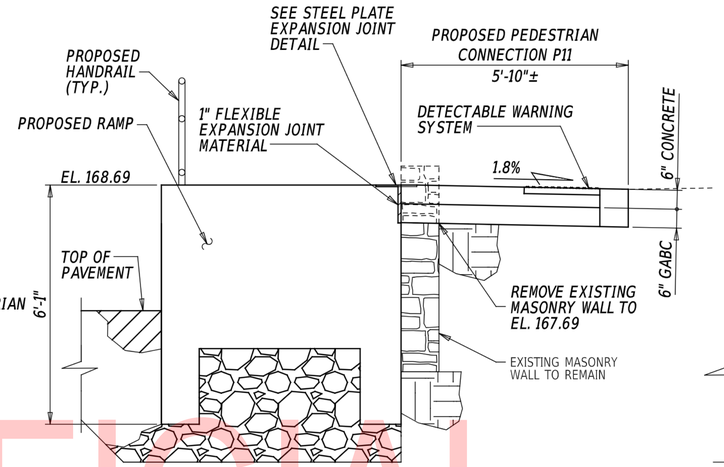
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: CLivers | OFFICE LOCATION: Hampton Roads, Virginia

Pennoni

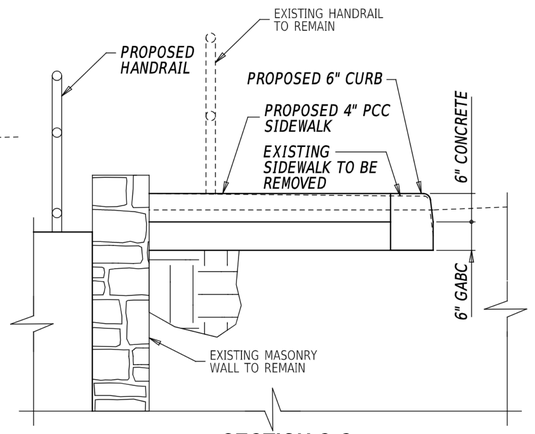
ADDENDA / REVISIONS	SCALE AS NOTED	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	PEDESTRIAN RAMP ELEVATION AND SECTIONS	SECTION PAI
			COUNTY NEW CASTLE	DESIGNED BY: C. MALKIN		SHEET NO. 17
				CHECKED BY: P. HORSEY		



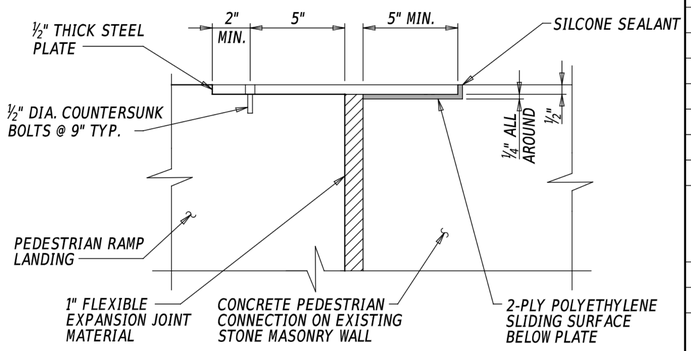
STEEL PLATE EXPANSION JOINT DETAIL
1" = 1'-0"



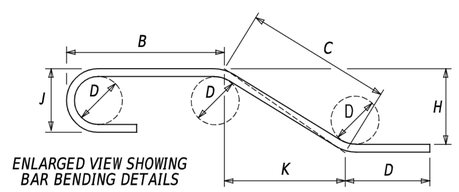
SECTION B-B
½" = 1'-0"



SECTION C-C
¾" = 1'-0"



SECTION F-F
3" = 1'-0"

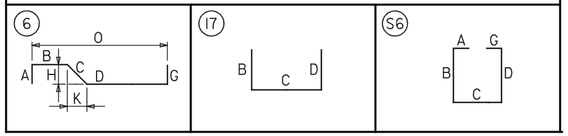


ENLARGED VIEW SHOWING BAR BENDING DETAILS

PEDESTRIAN RAMP REINFORCEMENT SCHEDULE

SPECIFICATIONS					BENDING DIMENSIONS (FEET-INCHES / QUARTER INCH)										
QTY.	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F / R	G	H	J	K	O
40	4	26'-4"	PR401E	STR		26'-4"									
2	4	15'-11"	PR402E	STR		15'-11"									
2	4	24'-6"	PR403E	STR		24'-6"									
2	4	14'-9"	PR404E	STR		14'-9"									
7	4	26'-4½"	PR405E	6		3'-5¾"	18'-1"	4'-9¾"				1'-6¼"		18'-0¼"	26'-3¾"
7	4	26'-3½"	PR406E	6		5'-4½"	18'-0¾"	2'-10¼"				1'-6¼"		18'-0"	26'-2¾"
13	4	7'-9"	PR407E	17		1'-0"	5'-9"	1'-0"							
12	4	6'-8½"	PR408E	S6	4½"	2'-8½"	6½"	2'-8½"			4½"				
12	4	6'-9½" TO 7'-6½"	PR409E	S6	4½" TO 4½"	2'-9" TO 3'-1½"	6½" TO 6½"	2'-9" TO 3'-1½"			4½" TO 4½"				
64	4	5'-10"	PR410E	STR		5'-10"									
82	4	12'-0½"	PR411E	17		3'-0"	6½"	3'-0"							
12	4	8'-2½" TO 9'-11"	PR412E	17		1'-2½" TO 2'-0¾"	5'-9½" TO 5'-9½"	1'-2½" TO 2'-0¾"							
5	4	10'-0"	PR413E	17		2'-1¼"	5'-9½"	2'-1¼"							
18	4	10'-1" TO 12'-8½"	PR414E	17		2'-1¾" TO 3'-5½"	5'-9½" TO 5'-9½"	2'-1¾" TO 3'-5½"							
6	4	12'-10"	PR415E	17		3'-6¼"	5'-9½"	3'-6¼"							

STANDARD BAR BENDS



ASTM STANDARD ENGLISH REINFORCING BARS

BAR SIZE	NOMINAL DIMENSIONS: DIAMETER (INCHES)	AREA (INCHES²)	WEIGHT (LBS. / FT.)
3	0.375	0.110	0.376
4	0.500	0.200	0.668
5	0.625	0.310	1.043
6	0.750	0.440	1.502
7	0.875	0.600	2.044
8	1.000	0.790	2.670
9	1.128	1.000	3.400
10	1.270	1.270	4.303
11	1.410	1.560	5.313
14	1.693	2.250	7.650
18	2.257	4.000	13.600

STIRRUP AND TIE HOOKS, APPLICABLE TO ALL GRADES

BAR SIZE	90° HOOK: D	135° HOOK: A OR G	135° HOOK: A OR G
3	1½"	4"	2½"
4	2"	4½"	3"
5	2½"	6"	3¾"
6	4½"	1-0"	8"	4½"
7	5¼"	1-2"	9"	5¼"
8	6"	1-4"	10½"	6"

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.

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WEBSITE
COPY

PENNONI ASSOCIATES INC. | FRN TABLE: pennoni-delot.tbl | ...\T1DGN\PS&E PLANS\ST02.dgn
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SMickel | OFFICE LOCATION: Newark, Delaware

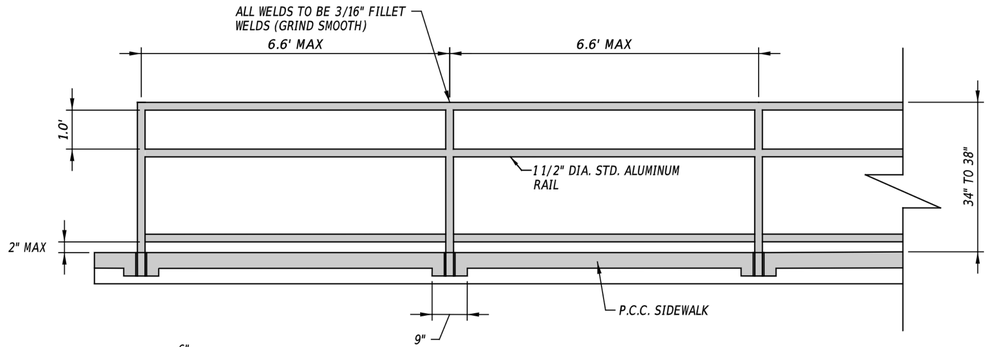
Pennoni

ADDENDA / REVISIONS		SCALE AS NOTED	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	T201601103	BRIDGE NO.	N/A	PEDESTRIAN RAMP JOINT DETAILS AND BAR SCHEDULE	SECTION	PAI
				COUNTY	NEW CASTLE	DESIGNED BY:	C. MALKIN		SHEET NO.	18
						CHECKED BY:	P. HORSEY			

UNOFFICIAL WEBSITE COPY

NOTES:

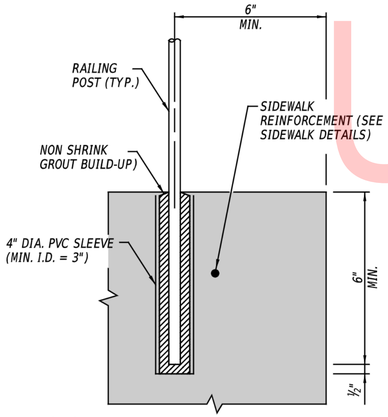
1.) ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE HANDRAILS SHALL BE INCLUDED UNDER ITEM 626010 - ALUMINUM PEDESTRIAN RAILING.



ITEM 626010 - ALUMINUM PEDESTRIAN RAILING

TYPICAL HANDRAIL DETAIL

NOT TO SCALE

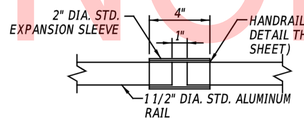


NOTES:

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 DRAWING FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL DETAIL ALL CONNECTIONS, WELDS, MATERIALS, DIMENSIONS, CALL OUTS, AND FINISHES.

RAILING ANCHORAGE DETAIL

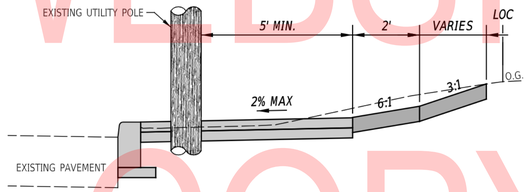
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS SHALL BE LOCATED EVERY 20' ALONG THE TOP, MIDDLE, AND BOTTOM RAILS

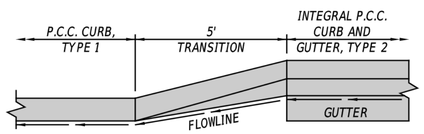
HANDRAIL EXPANSION JOINT

NOT TO SCALE



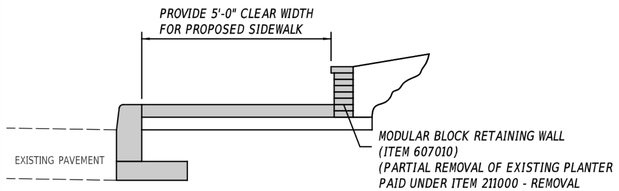
UTILITY POLE BUMPOUT DETAIL

NOT TO SCALE



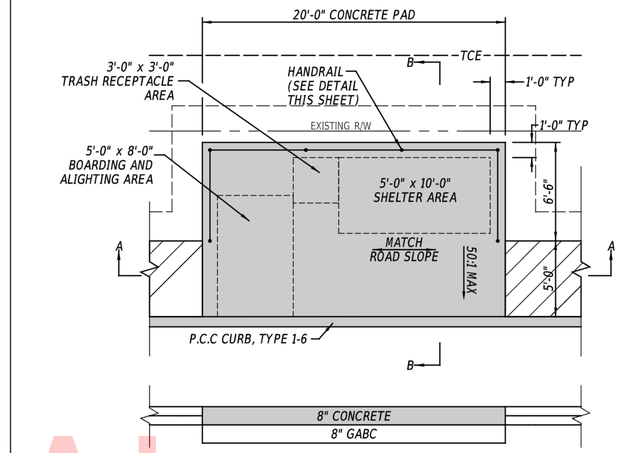
CURB TRANSITION DETAIL PLAN VIEW

NOT TO SCALE

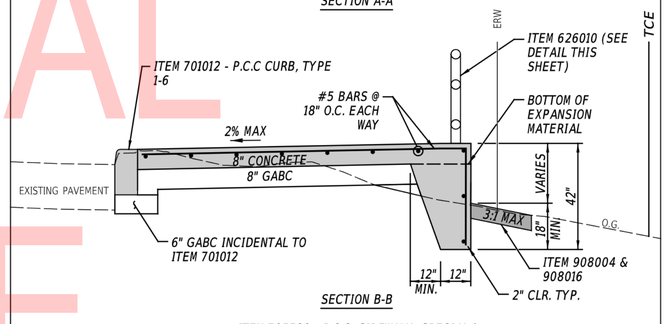


THE CANNERY PLANTER DETAIL STA. 141+21 TO 141+41

NOT TO SCALE



SECTION A-A

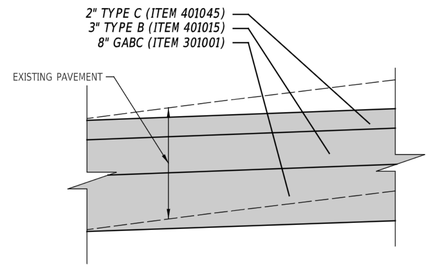


SECTION B-B

ITEM 705522 - P.C.C. SIDEWALK, SPECIAL 1

BUS STOP DETAIL STA. 131+72 TO 131+89

NOT TO SCALE



DRIVEWAY RECONSTRUCTION DETAIL

NOT TO SCALE

ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	CONSTRUCTION DETAILS	DT-01
				COUNTY NEW CASTLE	DESIGNED BY: A. MALKIN		SECTION PAI
					CHECKED BY: P. HORSEY		SHEET NO. 19

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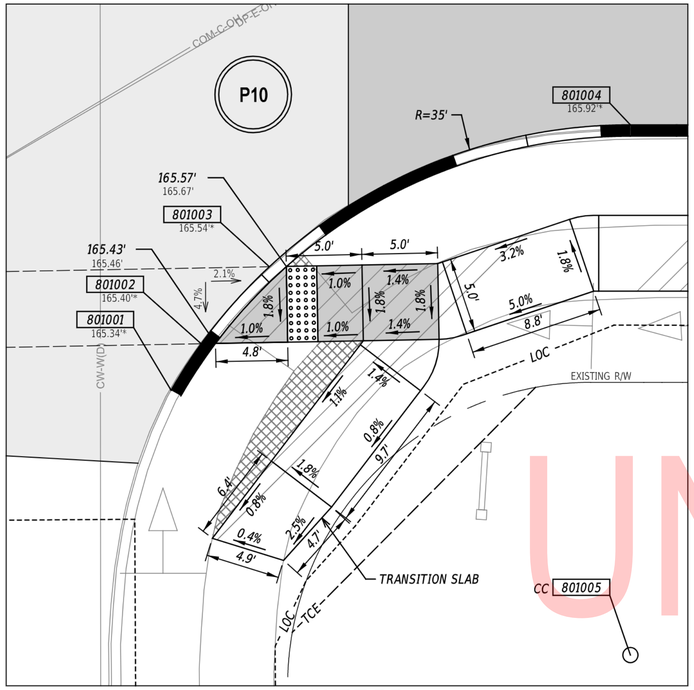
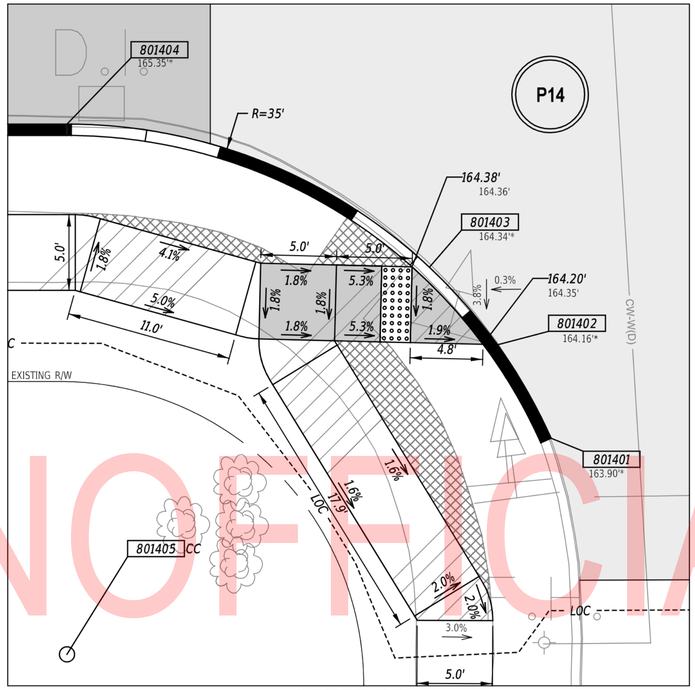
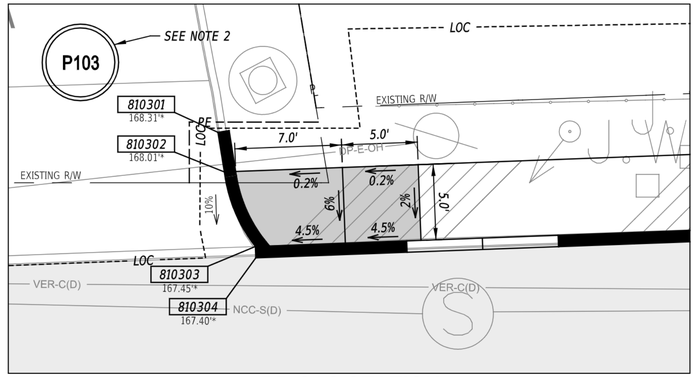
MICROSTATION WORKSPACE: DELDOT-V8I-OPENROADS | USER NAME: SNickell | OFFICE LOCATION: Newark, Delaware



COURT DR

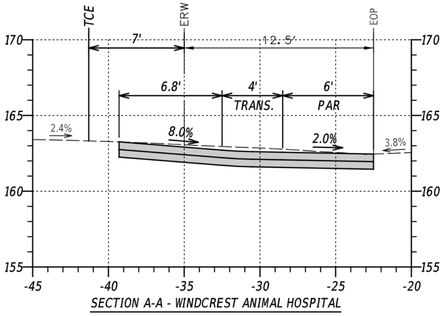


COURT DR



BP GAS STATION

WINDCREST ANIMAL HOSPITAL



SECTION A-A - WINDCREST ANIMAL HOSPITAL

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
801001	119+10.94	66.02	639528.4892	605378.2673
801002	119+12.93	62.95	639530.2725	605381.4591
801003	119+17.43	57.87	639532.6653	605387.8130
801004	119+41.26	48.50	639529.8154	605413.2619
801005	119+41.26	83.50	639498.8688	605396.9122
801401	124+20.99	69.24	639287.3842	605827.7384
801402	124+17.44	63.07	639294.4995	605827.4856
801403	124+12.95	57.95	639301.1202	605825.9018
801404	123+89.02	48.50	639320.6521	605809.1651
801405	123+89.02	83.50	639289.7055	605792.8155
810301	119+37.89	-38.33	639608.1615	605450.8366
810302	119+38.31	-35.72	639605.6604	605449.9881
810303	119+40.36	-30.79	639600.3460	605449.4988
810304	119+40.39	-30.04	639599.6704	605449.1732
811001	126+19.66	-22.50	639275.6904	606046.2593
811002	126+23.26	-23.17	639274.6020	606049.7517
811003	126+31.22	-28.21	639275.3467	606059.1434
811004	126+37.80	-39.30	639282.0717	606070.1452
811005	126+19.66	-32.50	639284.5323	606050.9306
811101	126+69.34	-39.30	639267.3412	606098.0274
811102	126+78.23	-28.22	639253.3855	606100.7147
811103	126+86.37	-23.19	639245.1419	606105.5642
811104	126+90.02	-22.50	639242.8236	606108.4706
811105	126+90.03	-32.50	639251.6640	606113.1445

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

* MATCH EXISTING ELEVATION

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. A REQUEST FOR PRACTICAL EXCEPTION IS REQUIRED AND HAS BEEN OBTAINED.

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni.ddot.tbl
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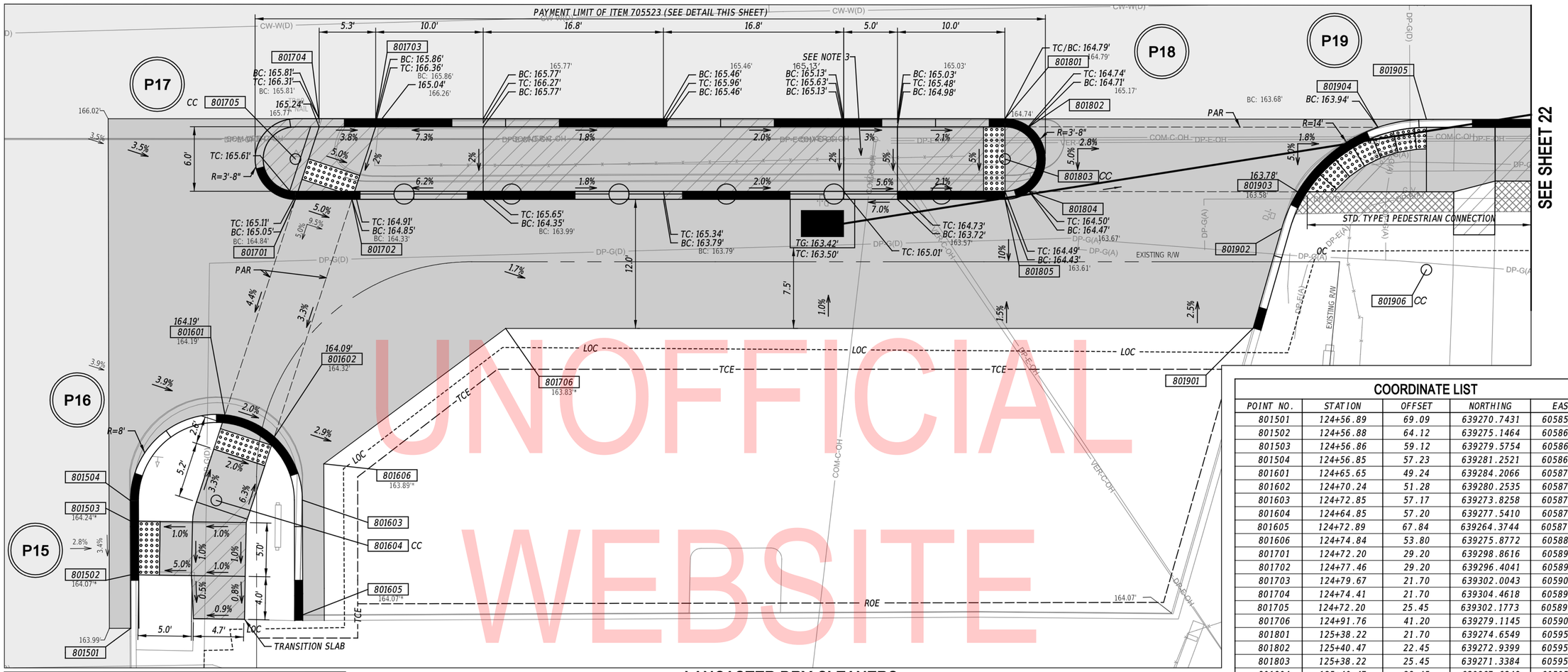
MICROSTATION WORKSPACE: DELDOT-V8I-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	CONSTRUCTION DETAILS	DT-02
		0 5 10 15 FEET		T201601103			SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: A. MALKIN		SHEET NO. 20
					CHECKED BY: P. HORSEY		



UNOFFICIAL WEBSITE COPY

COORDINATE LIST

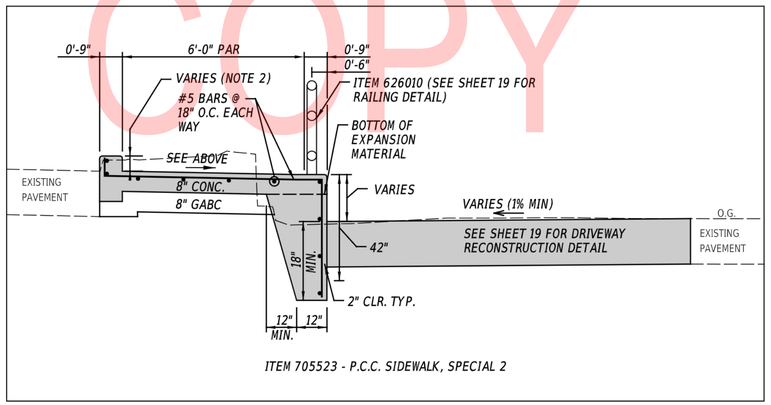
POINT NO.	STATION	OFFSET	NORTHING	EASTING
801501	124+56.89	69.09	639270.7431	605859.5552
801502	124+56.88	64.12	639275.1464	605861.8636
801503	124+56.86	59.12	639279.5754	605864.1854
801504	124+56.85	57.23	639281.2521	605865.0621
801601	124+65.65	49.24	639284.2066	605876.5688
801602	124+70.24	51.28	639280.2535	605879.6735
801603	124+72.85	57.17	639273.8258	605879.2343
801604	124+64.85	57.20	639277.5410	605872.1442
801605	124+72.89	67.84	639264.3744	605874.2817
801606	124+74.84	53.80	639275.8772	605882.5699
801701	124+72.20	29.20	639298.8616	605891.7259
801702	124+77.46	29.20	639296.4041	605896.3774
801703	124+79.67	21.70	639302.0043	605901.8339
801704	124+74.41	21.70	639304.4618	605897.1823
801705	124+72.20	25.45	639302.1773	605893.4777
801706	124+91.76	41.20	639279.1145	605903.4140
801801	125+38.22	21.70	639274.6549	605953.6019
801802	125+40.47	22.45	639272.9399	605955.2401
801803	125+38.22	25.45	639271.3384	605951.8493
801804	125+40.47	28.45	639267.6348	605952.4373
801805	125+38.22	29.20	639268.0227	605950.0975
801901	125+61.28	41.20	639246.6386	605964.8849
801902	125+63.97	31.90	639253.6048	605971.6066
801903	125+65.46	28.50	639255.9191	605974.5084
801904	125+72.92	22.50	639257.7386	605983.9152
801905	125+77.43	21.75	639256.2920	605988.2498
801906	125+77.43	35.75	639243.9134	605981.7099

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

* MATCH EXISTING ELEVATION

LANCASTER DRY CLEANERS
STATION 124+55 TO STATION 125+85



ITEM 705523 - P.C.C. SIDEWALK, SPECIAL 2

STATION 124+68 TO STATION 125+42

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. WHERE CURB REVEAL TRANSITIONS BELOW 3" HIGH, THE TOP OF #5 LONGITUDINAL BAR MAY BE OMITTED. FIELD CUT AS CURB REVEAL TRANSITIONS BELOW 3" HIGH. ENSURE 2" CLEAR COVER FOR REINFORCEMENT.
3. CONTRACTOR SHALL INSTALL SIDEWALK TO HAVE MINIMUM 3.4' PINCH POINT AT UTILITY POLE.

ADDENDA / REVISIONS	

SCALE 0 5 10 15 FEET

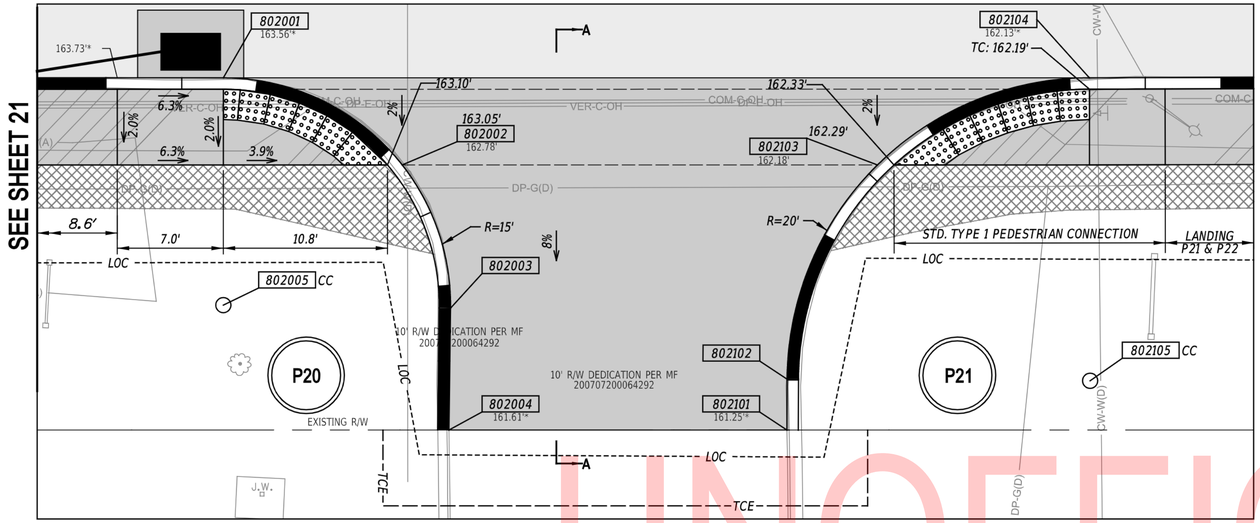
SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

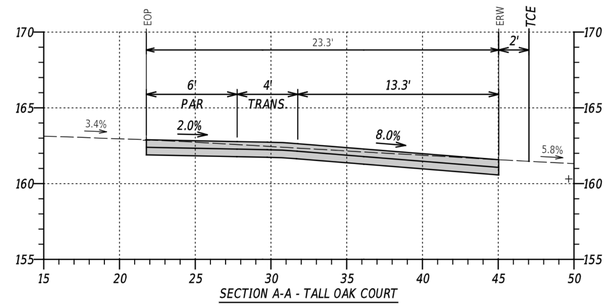
CONSTRUCTION DETAILS

DT-03 | SECTION: PAI | SHEET NO.: 21

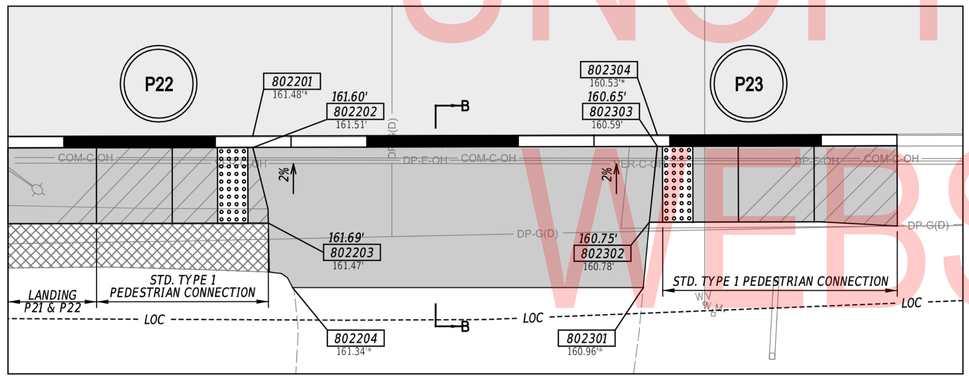
PENNONI ASSOCIATES INC. | PRN TABLE: pennoni.ctb(dot.tbl)
FILE NAME: ...\CTDGN\PSHE PLANSDT03.dgn | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 2:25:44 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware



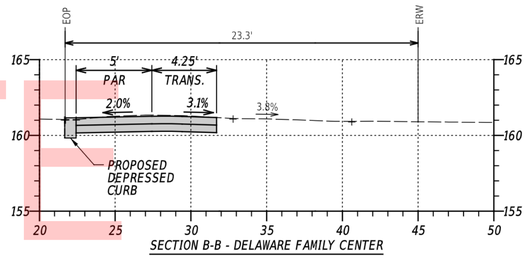
TALL OAK COURT



SECTION A-A - TALL OAK COURT



DELAWARE FAMILY CENTER



SECTION B-B - DELAWARE FAMILY CENTER

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

* MATCH EXISTING ELEVATION

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802001	125+99.46	21.75	639246.0015	606007.7275
802002	126+11.27	27.50	639235.4064	606015.4813
802003	126+14.46	36.95	639225.5553	606013.8886
802004	126+14.35	45.00	639218.4880	606010.0332
802005	125+99.46	36.75	639232.7387	606000.7205
802101	126+36.67	45.00	639208.0650	606029.7618
802102	126+36.68	41.64	639211.0259	606031.3456
802103	126+42.64	27.50	639220.7481	606043.2228
802104	126+56.64	21.74	639219.2988	606058.2817
802105	126+56.68	41.74	639201.5928	606048.9812
802201	126+77.80	21.69	639209.4583	606077.0157
802202	126+77.80	22.46	639208.7852	606076.6601
802203	126+78.82	27.44	639203.8979	606075.2365
802204	126+80.44	31.71	639199.3663	606074.6705
802301	127+03.55	31.70	639188.5697	606095.1341
802302	127+03.95	27.39	639192.2002	606097.5063
802303	127+04.48	22.39	639196.3745	606100.3115
802304	127+04.49	21.63	639197.0444	606100.6654

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-divdot.tbl
FILE NAME: ...\CTDOT\NP&E PLANS\DT04.dgn | PLOT DRIVER: PENNONI-NWX-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/10/2020 @ 3:27:19 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: CLlaves | OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS	

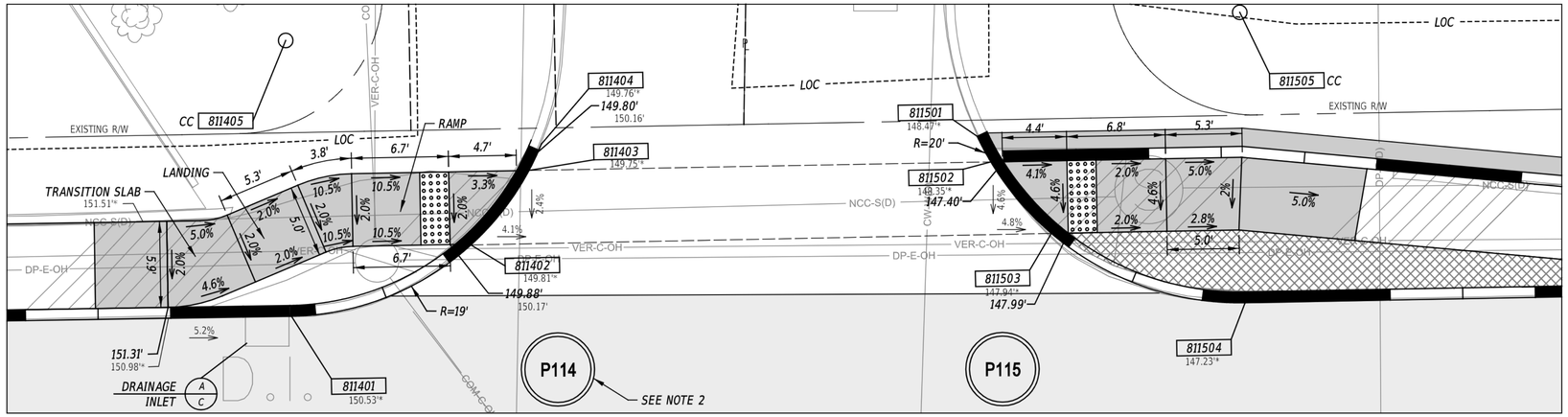
SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

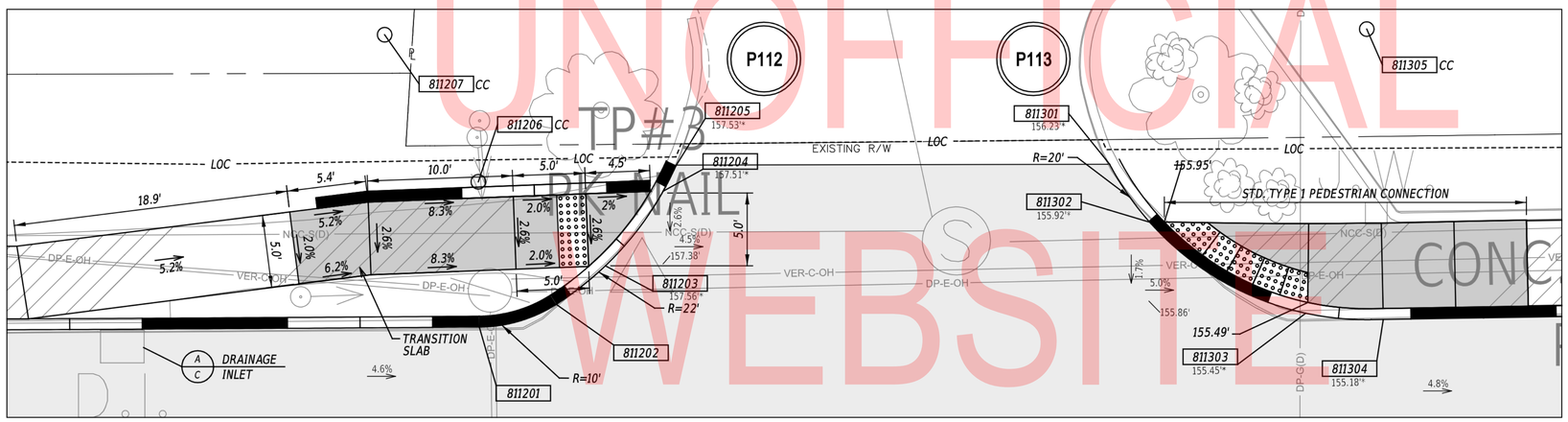
CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION DETAILS

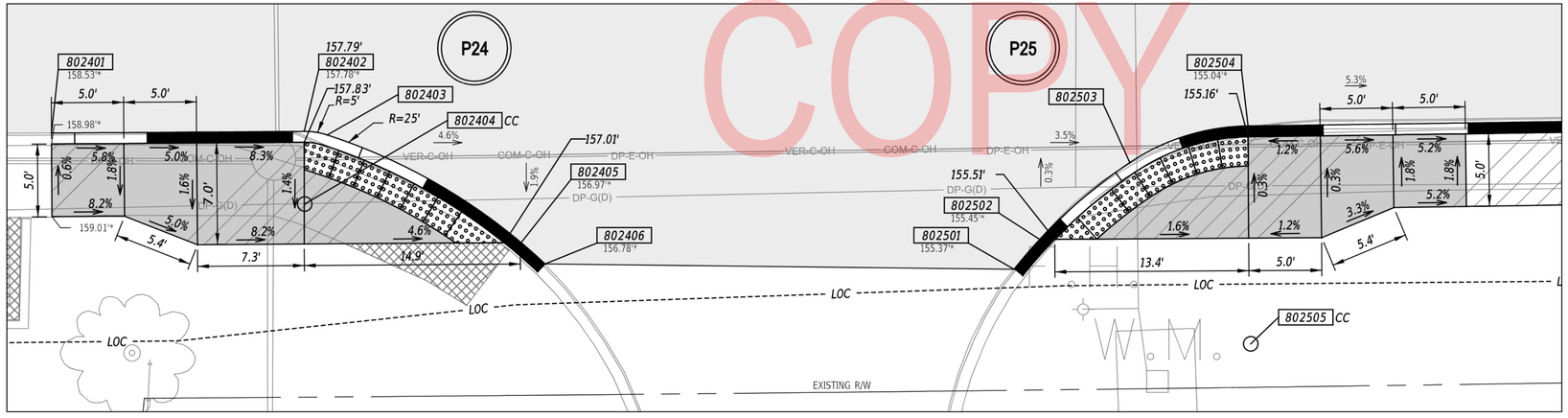
DT-04 | SECTION: PAI | SHEET NO.: 22



GREEN RIDGE RD



FEBY'S FISHERY DRIVEWAY



PAT'S PIZZA ENTRANCE

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

* MATCH EXISTING ELEVATION

COORDINATE LIST

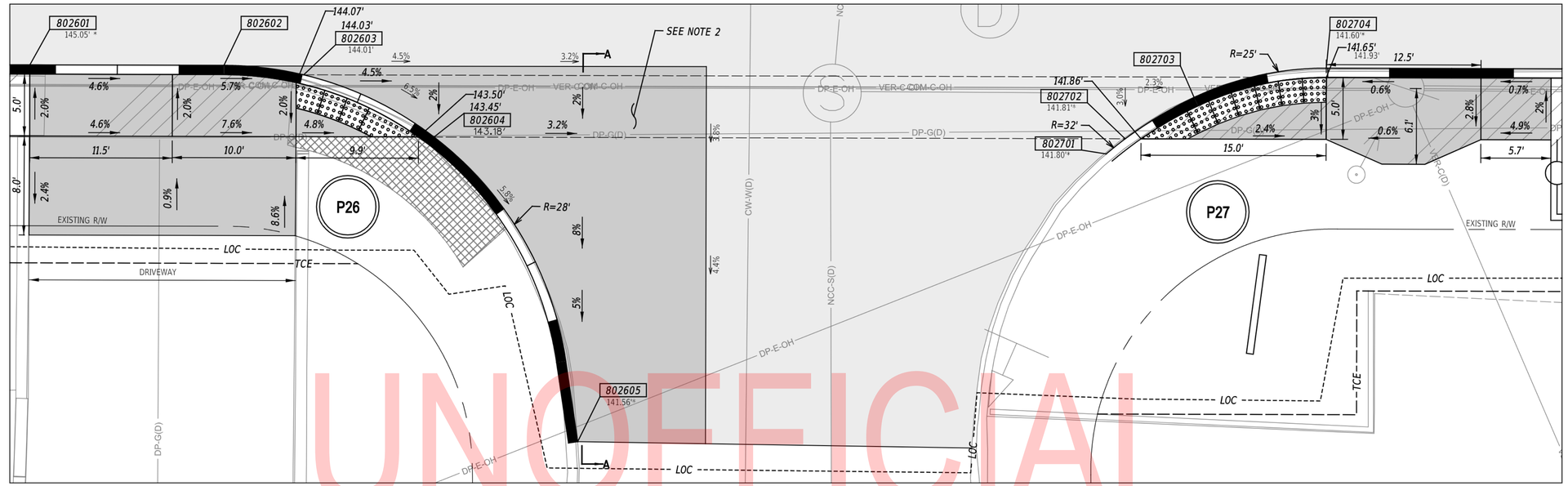
POINT NO.	STATION	OFFSET	NORTHING	EASTING
802401	127+62.40	21.70	639170.0531	606152.0342
802402	127+79.78	21.70	639162.0261	606167.4804
802403	127+81.36	21.96	639161.0692	606168.7668
802404	127+79.78	26.70	639157.5877	606165.1781
802405	127+94.62	29.48	639148.2755	606177.1142
802406	127+96.26	30.96	639146.2070	606177.8889
802501	128+28.46	31.67	639130.7921	606206.2748
802502	128+30.25	29.63	639131.7855	606208.7986
802503	128+36.51	24.42	639133.5609	606216.7558
802504	128+44.66	21.99	639131.9956	606225.1373
802505	128+44.65	37.00	639118.6400	606218.2948
811201	127+76.80	-22.50	639202.6319	606185.1925
811202	127+82.12	-24.03	639201.5406	606190.6112
811203	127+85.53	-26.65	639202.3064	606194.8406
811204	127+89.57	-31.75	639204.9861	606200.7591
811205	127+90.48	-33.53	639206.1459	606202.3877
811206	127+76.80	-32.50	639211.5076	606189.7993
811207	127+70.40	-42.66	639223.4680	606188.8251
811301	128+20.42	-33.31	639192.2592	606228.8135
811302	128+23.14	-29.29	639187.4421	606229.3894
811303	128+33.83	-22.90	639176.8892	606235.9639
811304	128+39.19	-22.40	639174.0114	606240.4909
811305	128+38.29	-42.40	639192.2164	606248.8134
811401	129+29.54	-22.36	639133.1332	606320.9254
811402	129+41.98	-27.04	639131.7084	606334.1465
811403	129+46.08	-32.10	639134.3755	606340.0841
811404	129+46.96	-33.90	639135.5814	606341.6803
811405	129+29.49	-41.36	639150.1175	606329.4449
811501	129+76.98	-33.88	639122.0345	606368.4715
811502	129+77.89	-32.10	639120.0355	606368.4814
811503	129+81.98	-27.10	639113.7332	606369.8707
811504	129+95.23	-22.08	639103.2806	606379.4359
811505	129+95.23	-42.08	639121.1335	606388.4512

NOTES:

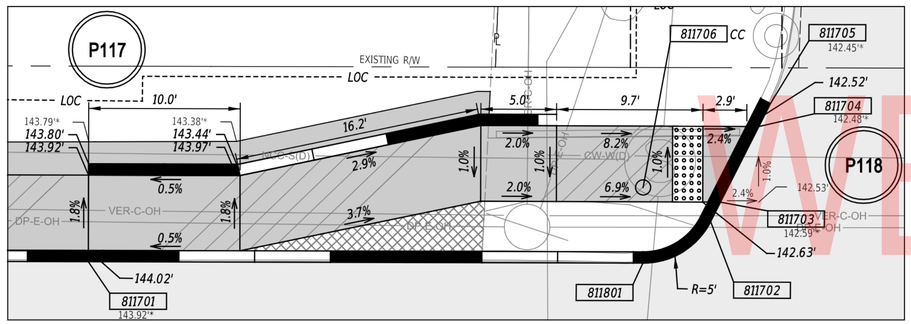
1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. A REQUEST FOR PRACTICAL EXCEPTION IS REQUIRED AND HAS BEEN OBTAINED.

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni-default.tbl
FILE NAME: ...\CTDON\PS&E PLANS\DT05.dgn	PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/31/2020 @ 2:14:58 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: SNickol OFFICE LOCATION: Newark, Delaware

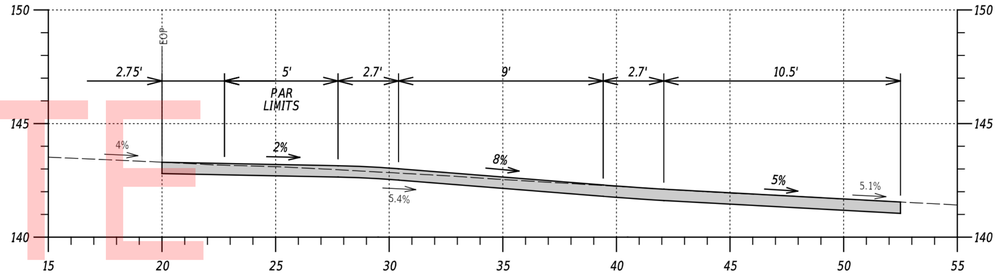
ADDENDA / REVISIONS		SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	CONSTRUCTION DETAILS	DT-05
		0 5 10 15 FEET		T201601103	DESIGNED BY: A. MALKIN		SECTION PAI
				COUNTY NEW CASTLE	CHECKED BY: P. HORSEY		SHEET NO. 23



MARY ELLA DRIVE



DORJUL PLACE ENTRANCE



SECTION A-A - MARY ELLA DRIVE

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

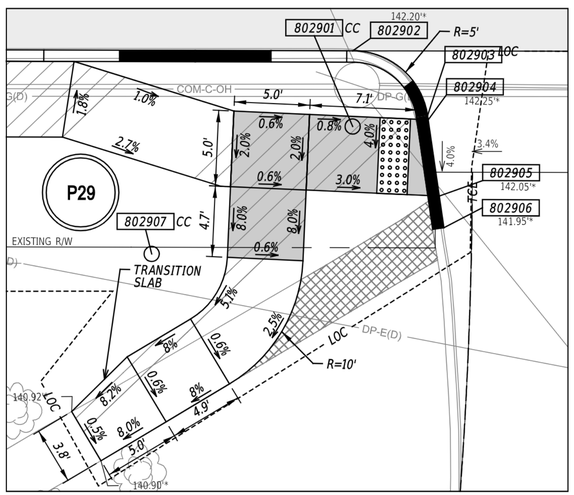
* MATCH EXISTING ELEVATION

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. SAWCUT AND REMOVE EXISTING FULL-DEPTH REINFORCED P.C.C. PAVEMENT. PLACE HOT-MIX IN ACCORDANCE WITH TYPICAL DRIVEWAY/SIDESTREET PATCHING DETAIL.

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
802601	130+47.64	22.00	639040.3037	606406.3516
802602	130+63.34	22.00	639033.2287	606420.3621
802603	130+69.77	22.75	639029.6576	606425.7701
802604	130+80.33	27.75	639020.4339	606432.9433
802605	130+92.00	52.34	638993.2265	606432.2771
802701	131+34.67	28.98	638994.8476	606480.8911
802702	131+36.20	27.75	638995.2519	606482.8107
802703	131+41.76	24.39	638995.7402	606489.2905
802704	131+52.44	22.00	638993.0651	606499.8974
802901	134+92.96	27.00	638835.1052	606801.6102
802902	134+92.96	22.00	638839.5684	606803.8640
802903	134+97.91	26.27	638833.5311	606806.3559
802904	134+97.95	26.54	638833.2634	606806.2671
802905	134+98.69	31.58	638828.4336	606804.6651
802906	134+99.00	33.67	638826.4295	606804.0004
802907	134+79.72	35.44	638833.5391	606785.9810
811701	130+79.25	-22.08	639065.4065	606454.4374
811801	131+15.86	-22.08	639048.9030	606487.1190
811702	131+20.32	-24.83	639049.3450	606492.3443
811703	131+20.98	-26.12	639050.2044	606493.5073
811704	131+23.49	-31.12	639053.5289	606498.0064
811705	131+24.28	-32.68	639054.5664	606499.4104
811706	131+15.86	-27.08	639053.3662	606489.3728



BARBARA RD

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC.	PEN_TABLE: pennoni-ctvdot.tbl
FILE NAME: ...\CTVDOT\P&E PLANS\DT06.dgn	PLOT DRIVER: PENNONI.NWK.DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/10/2020 @ 3:27:25 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPERROADS	USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A	CONSTRUCTION DETAILS
T201601103	DESIGNED BY:	A. MALKIN	
COUNTY	CHECKED BY:	P. HORSEY	
NEW CASTLE			

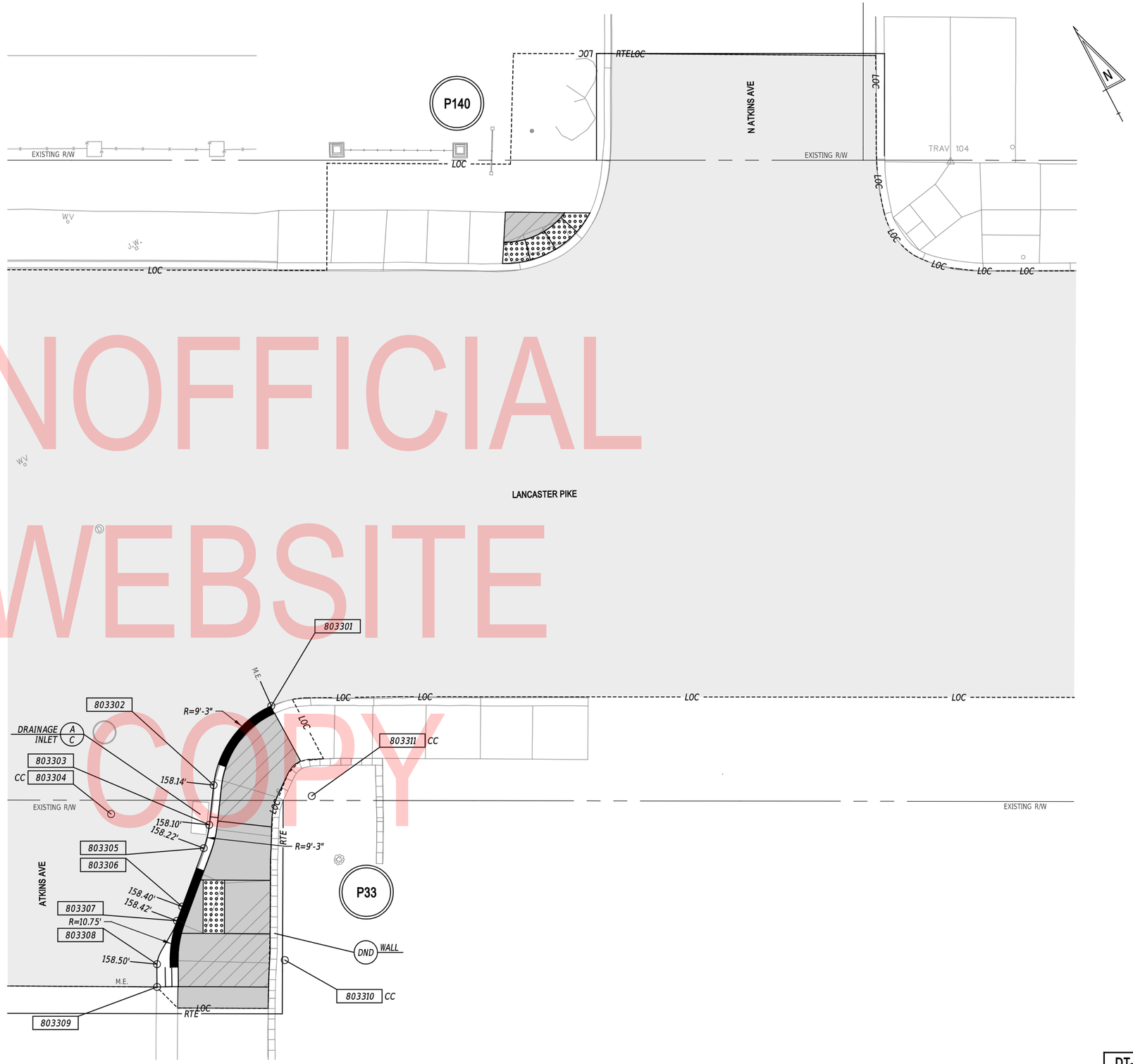
DT-06

SECTION PAI

SHEET NO. 24

P140 STANDARD CONSTRUCTION DETAIL
REPLACE DWS

P33 STANDARD CONSTRUCTION DETAIL
TYPE 2



UNOFFICIAL WEBSITE COPY

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
803301	152+87.41	18.45	638018.0993	608398.9344
803302	152+82.00	25.87	638014.0114	608390.7117
803303	152+81.59	29.59	638010.9002	608388.6282
803304	152+72.40	28.57	638016.0472	608380.9425
803305	152+81.08	31.77	638009.2019	608387.1638
803306	152+79.06	37.25	638005.2743	608382.8466
803307	152+78.57	38.58	638004.3205	608381.7982
803308	152+76.70	42.64	638001.5862	608378.2608
803309	152+76.71	44.77	637999.6866	608377.2829
803310	152+88.67	42.26	637996.3962	608389.0625
803311	152+91.20	26.89	638008.8643	608398.3975

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

* MATCH EXISTING ELEVATION

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".

PENNONI ASSOCIATES INC.
FILE NAME: ...\CTDGN\PS&E PLANS\DT07.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/10/2020 @ 3:27:30 PM
USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

Pennoni

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

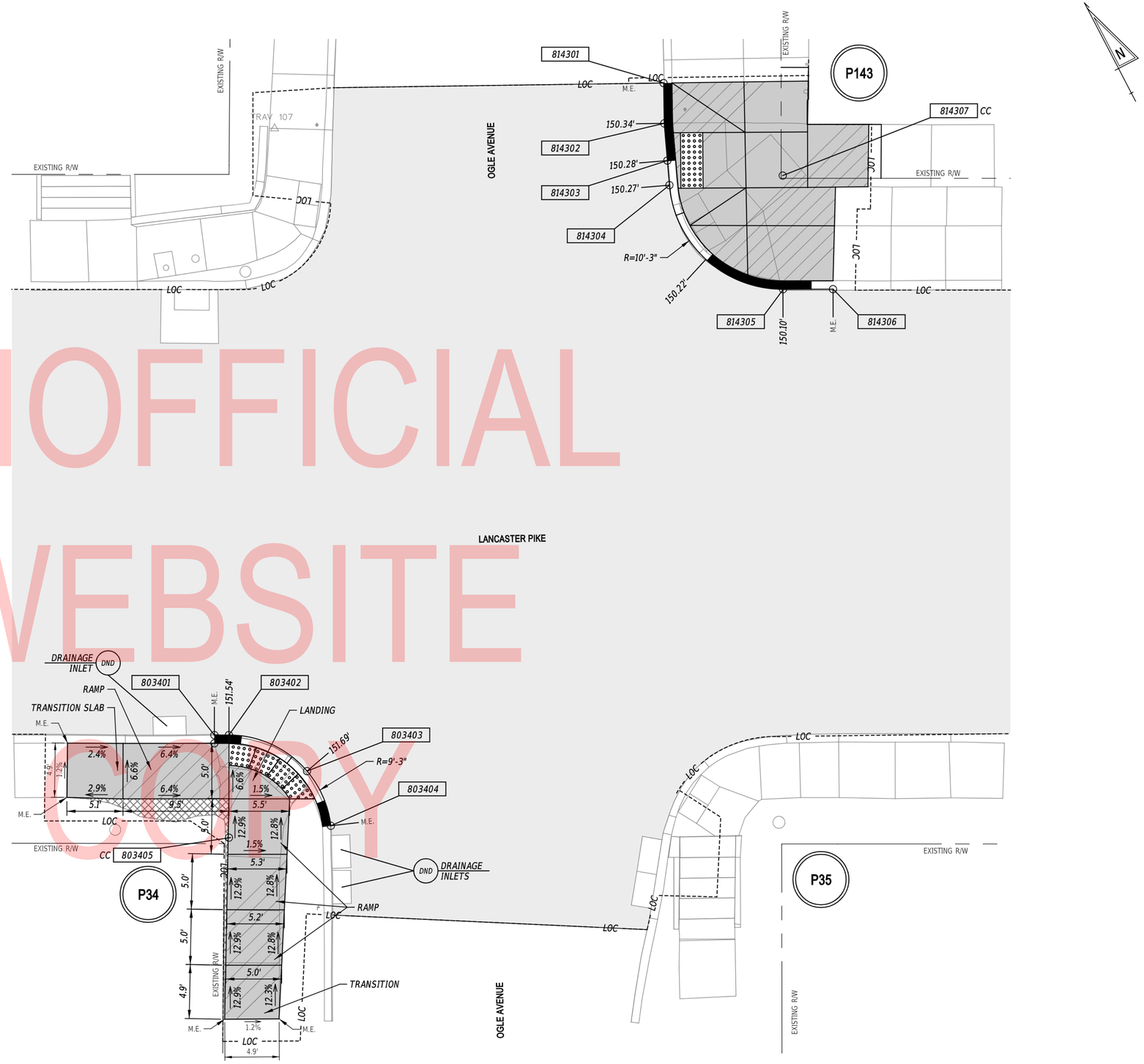
CONSTRUCTION DETAILS

DT-07
SECTION PAI
SHEET NO. 25

P143 STANDARD CONSTRUCTION DETAIL TYPE 4

P34 PEDESTRIAN CONNECTION CONSTRUCTION DETAIL TYPE 1 (SEE NOTE 3)

P35 RPE (SEE NOTE 3)



UNOFFICIAL WEBSITE COPY

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
814301	-	-	637935.6127	608687.1481
814302	-	-	637932.3386	608685.5677
814303	-	-	637929.2125	608684.3170
814304	-	-	637927.1489	608683.4914
814305	-	-	637914.1688	608688.4335
814306	-	-	637912.1570	608692.4675
814307	-	-	637923.3414	608693.0080
803401	-	-	637901.2403	608624.6056
803402	-	-	637900.6481	608625.7719
803403	-	-	637894.5134	608630.5142
803404	-	-	637889.1526	608630.1431
803405	-	-	637892.3867	608621.6243

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".
3. A REQUEST FOR PRACTICAL EXCEPTION IS REQUIRED AND HAS BEEN OBTAINED.

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-deldot.tbl
FILE NAME: ...\CTDGN\PS&E PLANS\DT08.dgn | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 1:54:17 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

Pennoni

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION DETAILS

DT-08

SECTION PAI

SHEET NO. 26

P146 STANDARD CONSTRUCTION DETAIL TYPE 4

P147 STANDARD CONSTRUCTION DETAIL REPLACE DWS

P38 PEDESTRIAN CONNECTION CONSTRUCTION DETAIL TYPE 1 (SEE NOTE 3)

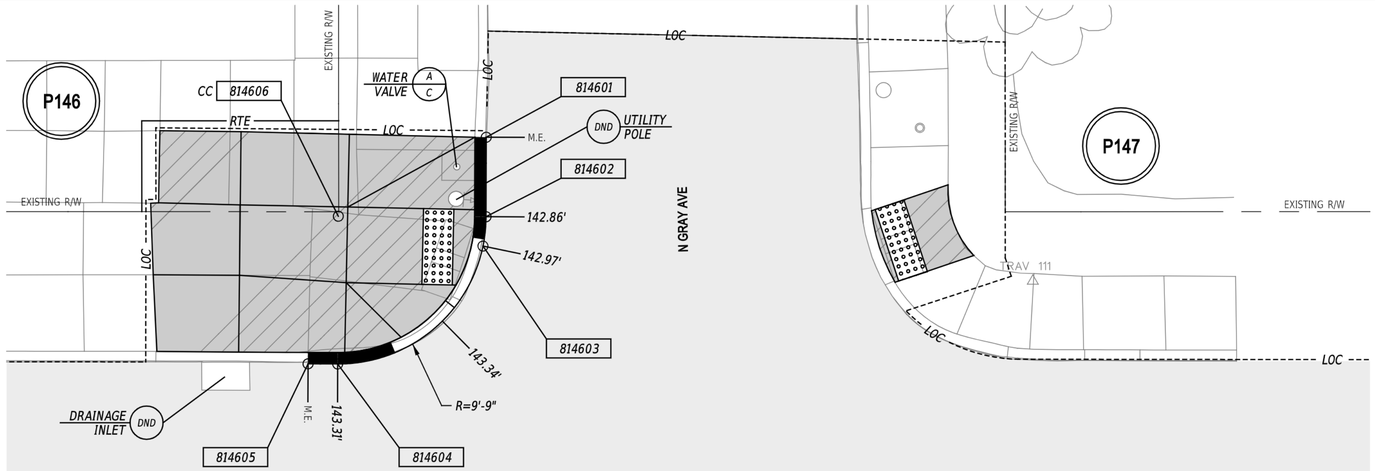
P39 PEDESTRIAN CONNECTION CONSTRUCTION DETAIL

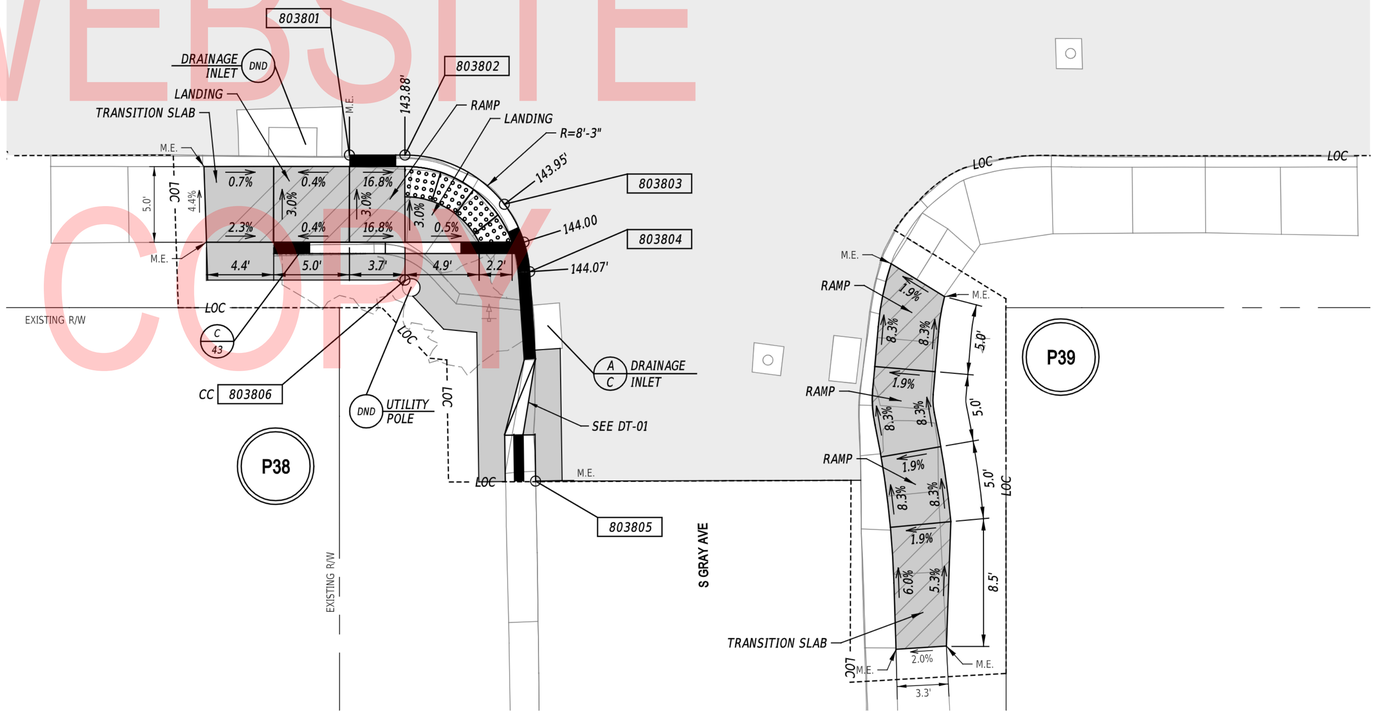
UNOFFICIAL WEBSITE COPY

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
43*	P.C.C. CURB SPECIAL	17'

*SEE DELDOT STANDARD CONSTRUCTION DETAIL C-6

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
803801	-	-	637648.2236	609106.9150
803802	-	-	637646.5044	609110.1520
803803	-	-	637640.5588	609114.4269
803804	-	-	637635.8462	609113.8174
803805	-	-	637623.4521	609107.6842
803806	-	-	637639.2158	609106.2869
814601	-	-	637692.4334	609140.5968
814602	-	-	637687.8054	609138.1215
814603	-	-	637686.1895	609137.0370
814604	-	-	637683.8108	609124.9173
814605	-	-	637684.7347	609123.1938
814606	-	-	637692.4038	609129.5240





NOTES:

1. *ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.*
2. *THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".*
3. *A REQUEST FOR PRACTICAL EXCEPTION IS REQUIRED AND HAS BEEN OBTAINED.*

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni.ctb(dot.tbl)
FILE NAME: ...\CTDGN\PSUE PLANS\DT10.dgn | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/18/2020 @ 2:57:08 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A	CONSTRUCTION DETAILS
T201601103	DESIGNED BY:	A. MALKIN	
COUNTY	CHECKED BY:	P. HORSEY	
NEW CASTLE			

DT-09 | SECTION: PAI | SHEET NO.: 27

P148 STANDARD CONSTRUCTION DETAIL
TYPE 2

P149 STANDARD CONSTRUCTION DETAIL
REPLACE DWS

P40 PEDESTRIAN CONNECTION
CONSTRUCTION DETAIL

P41 MAINTENANCE REPAIR
REPLACE CRACKED P.C.C. PANEL

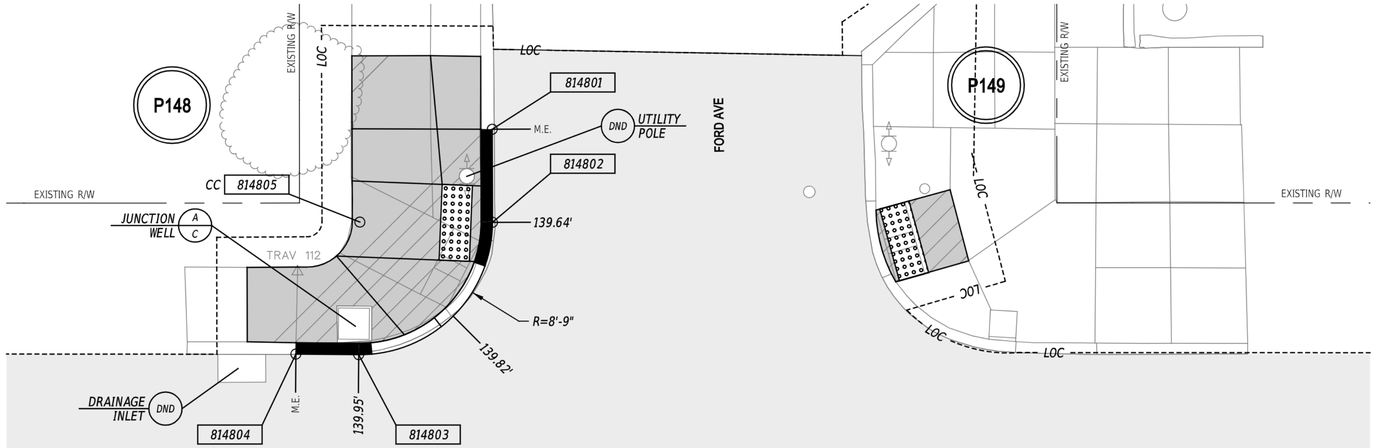
CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
44*	P.C.C. CURB SPECIAL	18'

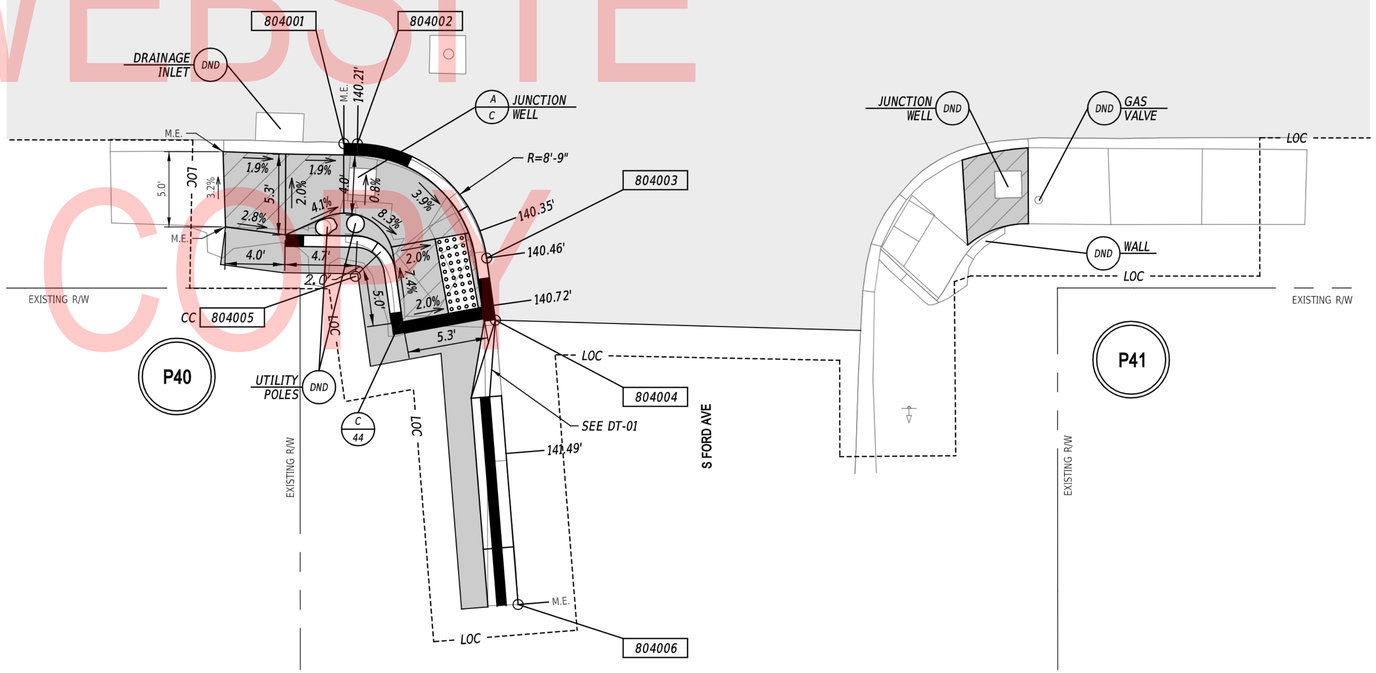
*SEE DELDOT STANDARD CONSTRUCTION DETAIL C-6

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
814801	-	-	637565.8247	609379.2534
814802	-	-	637560.3918	609376.3828
814803	-	-	637556.8133	609364.4926
814804	-	-	637558.7882	609360.8458
814805	-	-	637564.5067	609368.6607
804001	-	-	637521.5289	609344.6636
804002	-	-	637521.0991	609345.4485
804003	-	-	637510.4368	609349.4539
804004	-	-	637506.5492	609348.0375
804005	-	-	637513.4311	609341.2320
804006	-	-	637489.2648	609340.5673

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION
  SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS





LANCASTER PIKE

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni.ctb
FILE NAME: ...\CTDOX\PS&E PLANS\DT10.dgn | PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 2:01:28 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE
0 5 10 15
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A	CONSTRUCTION DETAILS
T201601103	DESIGNED BY:	A. MALKIN	
COUNTY	CHECKED BY:	P. HORSEY	
NEW CASTLE			

DT-10
SECTION
PAI
SHEET NO.
28

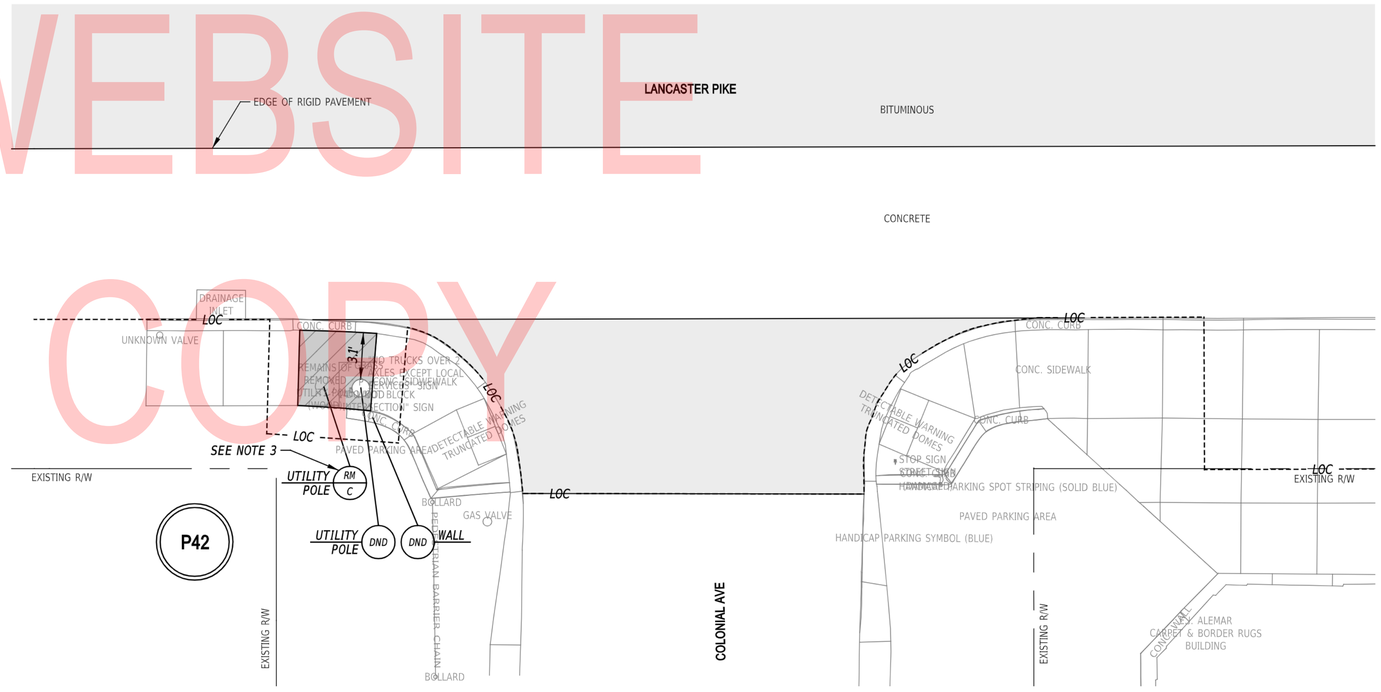
P42

MAINTENANCE REPAIR
REPLACE CRACKED P.C.C. PANEL
(SEE NOTE 4)

UNOFFICIAL WEBSITE COPY

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS



NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".
3. REMOVE REMAINS OF ABANDONED UTILITY POLE TO A MINIMUM OF ONE FOOT BELOW PROPOSED SIDEWALK GRADE; TO BE PAID FOR UNDER ITEM 211000.
4. A REQUEST FOR PRACTICAL EXCEPTION IS REQUIRED AND HAS BEEN OBTAINED.

PENNONI ASSOCIATES INC.
FILE NAME: ...\CT\DGN\PS&E PLANS\DT11.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/10/2020 @ 3:27:46 PM
USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

Pennoni

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

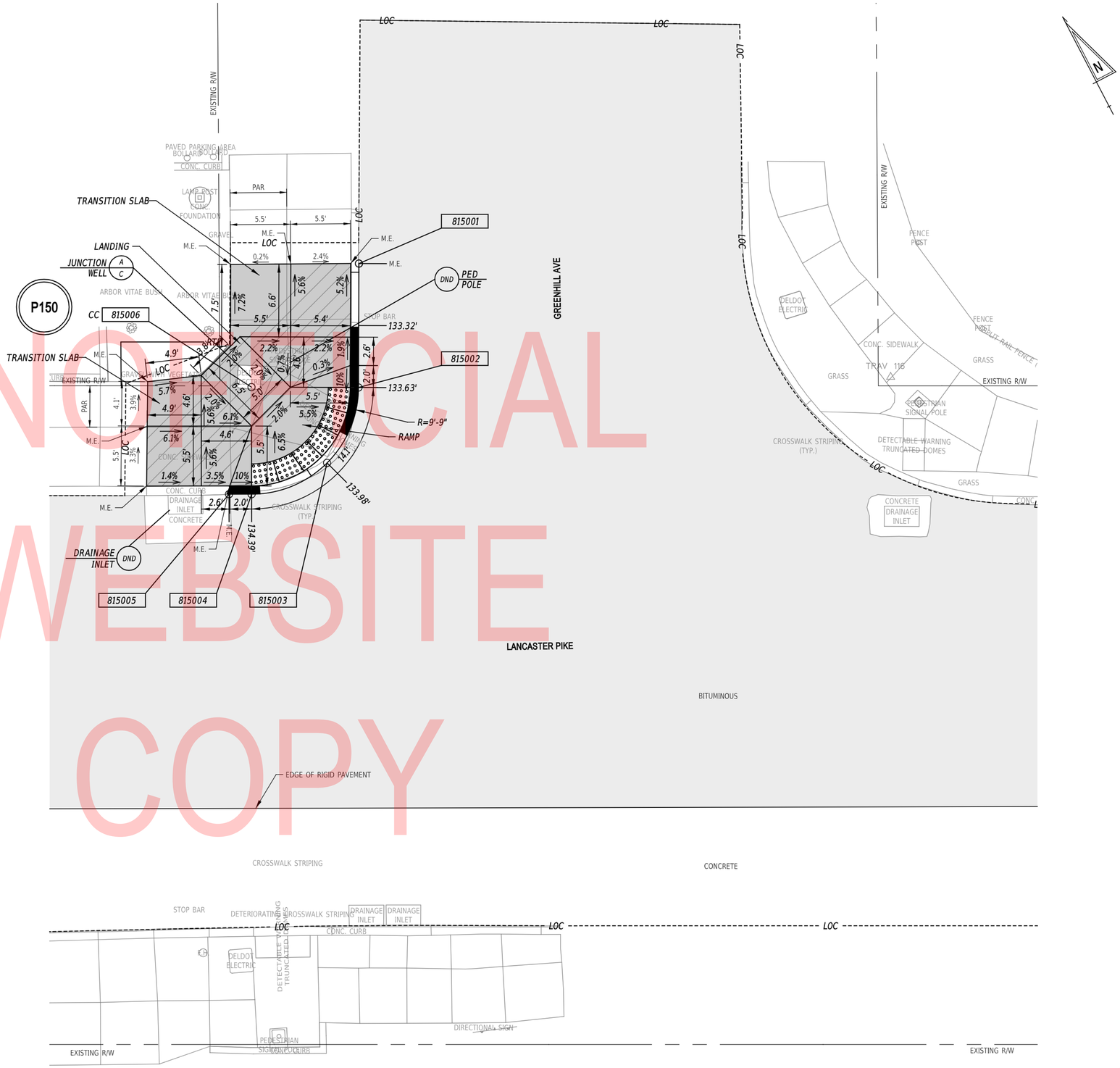
SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY		
NEW CASTLE	CHECKED BY:	P. HORSEY

CONSTRUCTION DETAILS

DT-11
SECTION PAI
SHEET NO. 29

P150 PEDESTRIAN CONNECTION CONSTRUCTION DETAIL TYPE 3



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
815001	-	-	637374.5205	609753.2027
815002	-	-	637364.5629	609747.8764
815003	-	-	637359.8365	609742.1279
815004	-	-	637360.5421	609734.7202
815005	-	-	637361.5048	609732.9000
815006	-	-	637369.1616	609739.2790

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC.
FILE NAME: ...\CT\DGN\PS&E PLANS\DT12.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/10/2020 @ 3:27:49 PM
USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

Pennoni

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

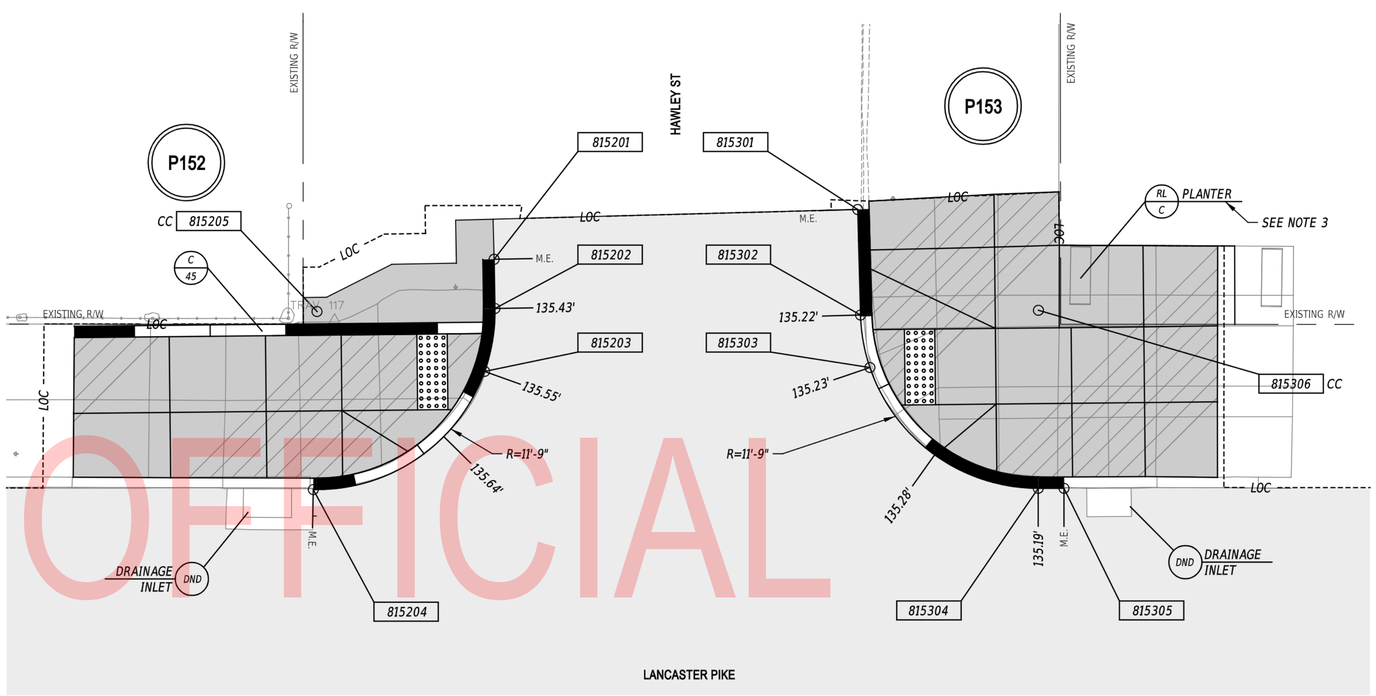
CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION DETAILS

DT-12
SECTION PAI
SHEET NO. 30

P152 STANDARD CONSTRUCTION DETAIL
TYPE 1

P153 STANDARD CONSTRUCTION DETAIL
TYPE 4



CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
45	P.C.C CURB, TYPE 1-6	28'

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
815201	-	-	637136.1148	610187.9101
815202	-	-	637133.2194	610186.4372
815203	-	-	637129.8701	610183.8873
815204	-	-	637128.2833	610170.2409
815205	-	-	637138.5471	610175.9645
815301	-	-	637127.7676	610210.6527
815302	-	-	637121.5276	610207.5525
815303	-	-	637118.1768	610206.4762
815304	-	-	637105.9284	610212.5523
815305	-	-	637105.1286	610214.0543
815306	-	-	637116.2995	610218.0753

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".
3. CONTRACTOR TO TEMPORARILY REMOVE PLANTER PRIOR TO WORK IN AREA. UPON COMPLETION OF WORK, CONTRACTOR SHALL REINSTALL PLANTER TO ORIGINAL LOCATION.

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. PEN TABLE: pennoni-deldot.tbl
FILE NAME: ...\CTIDGN\PS&E PLANS\DT13.dgn PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i DATE PLOTTED: 1/10/2020 @ 3:27:53 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

Pennoni

ADDENDA / REVISIONS	

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

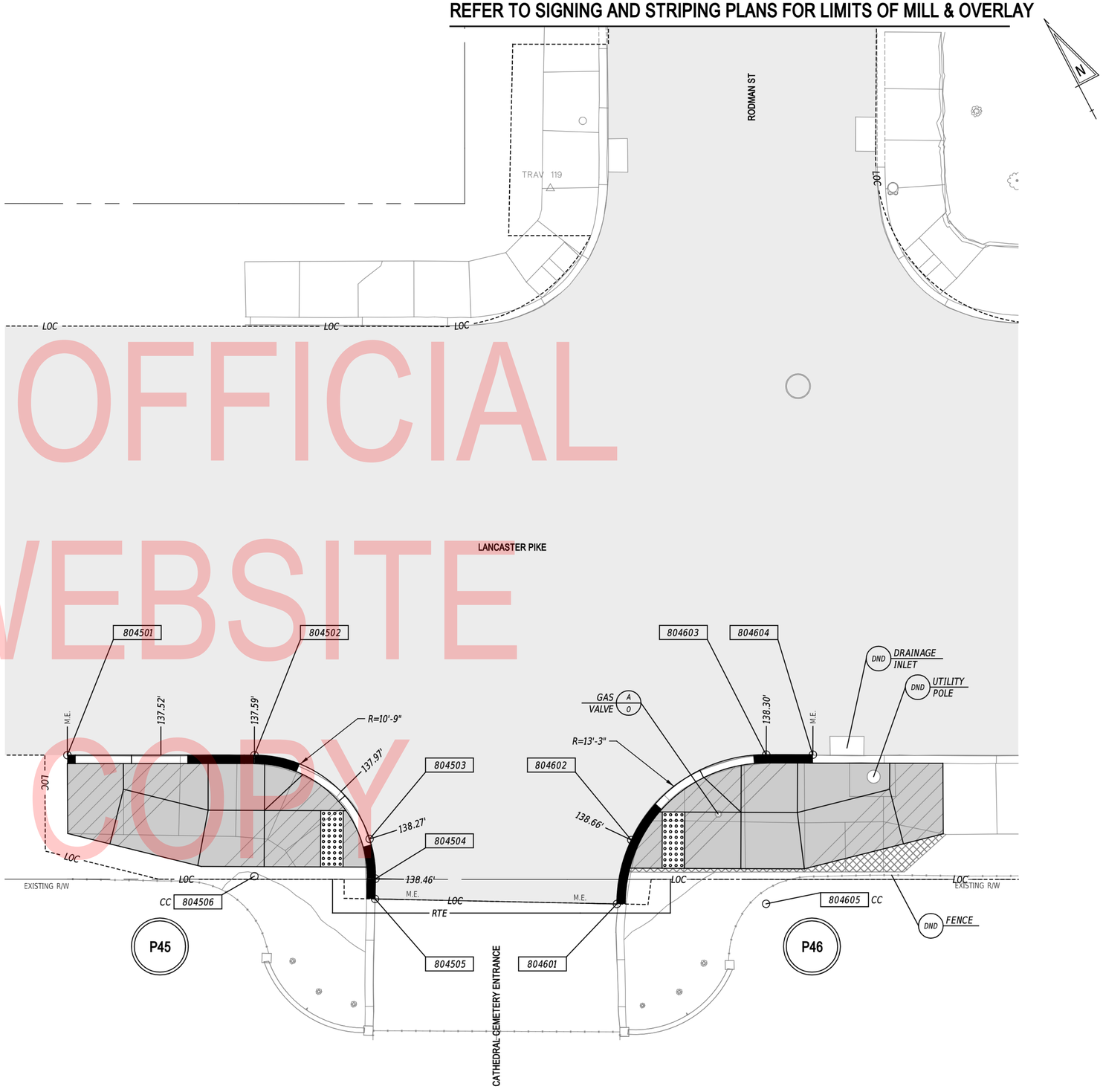
CONSTRUCTION DETAILS

DT-13
SECTION PAI
SHEET NO. 31

P45 **STANDARD CONSTRUCTION DETAIL TYPE 1**

P46 **STANDARD CONSTRUCTION DETAIL TYPE 1**

REFER TO SIGNING AND STRIPING PLANS FOR LIMITS OF MILL & OVERLAY



UNOFFICIAL WEBSITE COPY

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
804501	-	-	636970.8188	610385.6584
804502	-	-	636963.0323	610400.3368
804503	-	-	636951.6607	610405.8843
804504	-	-	636948.3015	610404.6887
804505	-	-	636946.7333	610403.8145
804506	-	-	636953.5361	610395.2993
804601	-	-	636936.2693	610422.5782
804602	-	-	636940.6906	610426.3655
804603	-	-	636941.7784	610440.4933
804604	-	-	636939.8331	610444.1477
804605	-	-	636930.0708	610434.2890

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".
3. DUE TO THE PRESENCE OF A KNOWN CEMETERY RESOURCE, CONTRACTOR ACCESS BEYOND THE LOC ALONG THE SOUTH OF THE LANCASTER PIKE IS PROHIBITED. THIS INCLUDES PARCEL 26-026.30-002 AND ADJACENT AREAS WITHIN DELDOT'S RIGHT-OF-WAY. ALL CHANGES TO THE LOC MUST BE COORDINATED WITH DELDOT CULTURAL RESOURCES STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV, (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni.tbl
FILE NAME: ...\CTD\GNRSE PLANS\DT14.dgn | PLOT DRIVER: PENNONI.NWK-DELDOT-FULL-PDF.PLT.CFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 3:33:29 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

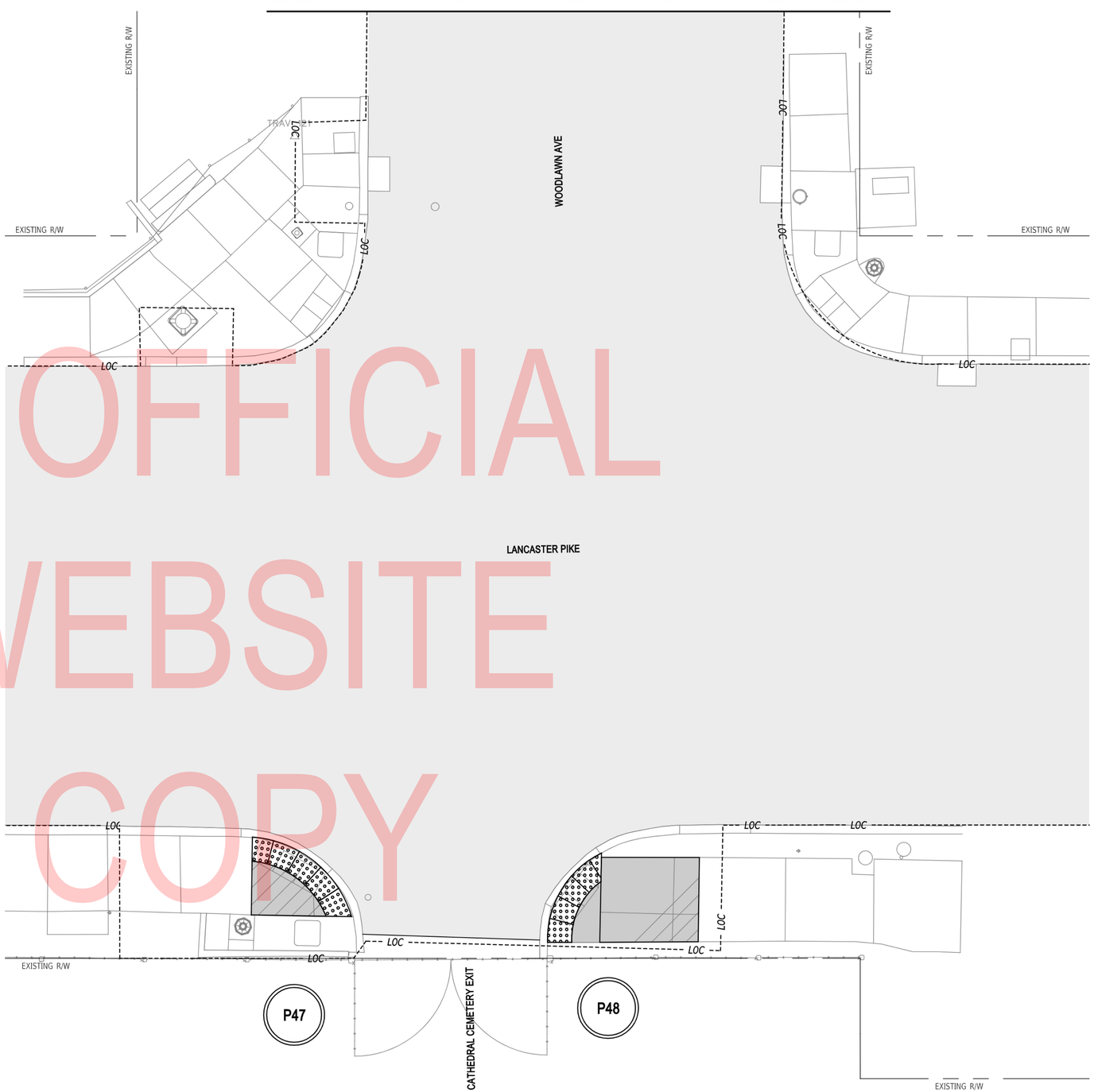
CONSTRUCTION DETAILS

DT-14	
SECTION	PAI
SHEET NO.	32

P47 — STANDARD CONSTRUCTION DETAIL
REPLACE DWS (SEE NOTE 3)

P48 — STANDARD CONSTRUCTION DETAIL
REPLACE DWS

REFER TO SIGNING AND STRIPING PLANS FOR LIMITS OF MILL & OVERLAY



UNOFFICIAL WEBSITE COPY

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".
3. A REQUEST FOR PRACTICAL EXCEPTION IS REQUIRED AND HAS BEEN OBTAINED.
4. DUE TO THE PRESENCE OF A KNOWN CEMETERY RESOURCE, CONTRACTOR ACCESS BEYOND THE LOC ALONG THE SOUTH OF LANCASTER PIKE IS PROHIBITED. THIS INCLUDES PARCEL 26-026.30-002 AND ADJACENT AREAS WITHIN DELDOT'S RIGHT-OF-WAY. ALL CHANGES TO THE LOC MUST BE COORDINATED WITH DELDOT CULTURAL RESOURCES STAFF. IF GRAVE SHAFTS, HUMAN REMAINS, OR GRAVE MARKERS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE AREA SHALL STOP IMMEDIATELY AND DELDOT ARCHAEOLOGIST KYLE W. EDWARDS WILL BE CONTACTED (KYLE.EDWARDS@DELAWARE.GOV, (302) 760-2093). WORK WILL NOT RESUME UNTIL DELDOT QUALIFIED STAFF AND THE STATE HISTORIC PRESERVATION OFFICE HAVE CONCURRED THAT THE CONSTRUCTION WORK WILL NOT IMPACT ANY INTACT ARCHAEOLOGICAL DEPOSITS OR HUMAN REMAINS. CONSULTATION BETWEEN DELDOT AND DE SHPO SHALL TAKE PLACE NO MORE THAN 24 HOURS AFTER CONSTRUCTION HAS STOPPED. ALL WORK ON THE PROJECT SHALL COMPLY WITH THE DELAWARE STATE UNMARKED HUMAN REMAINS LAW (7 DEL.C. CH. 54).

PENNONI ASSOCIATES INC.	...\CTDGN\PS&E PLANS\DT15.dgn
FILE NAME:	
MICROSTATION VERSION:	MicroStation V8i
MICROSTATION WORKSPACE:	DELDOT-V8i-OPENROADS
PEN TABLE:	pennoni-deldot.tbl
PLOT DRIVER:	PENNONI-NW-DELDOT-FULL-PDF-PLTCFG
DATE PLOTTED:	1/31/2020 @ 2:28:01 PM
USER NAME:	SNickol
OFFICE LOCATION:	Newark, Delaware

ADDENDA / REVISIONS

SCALE
0 5 10 15
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

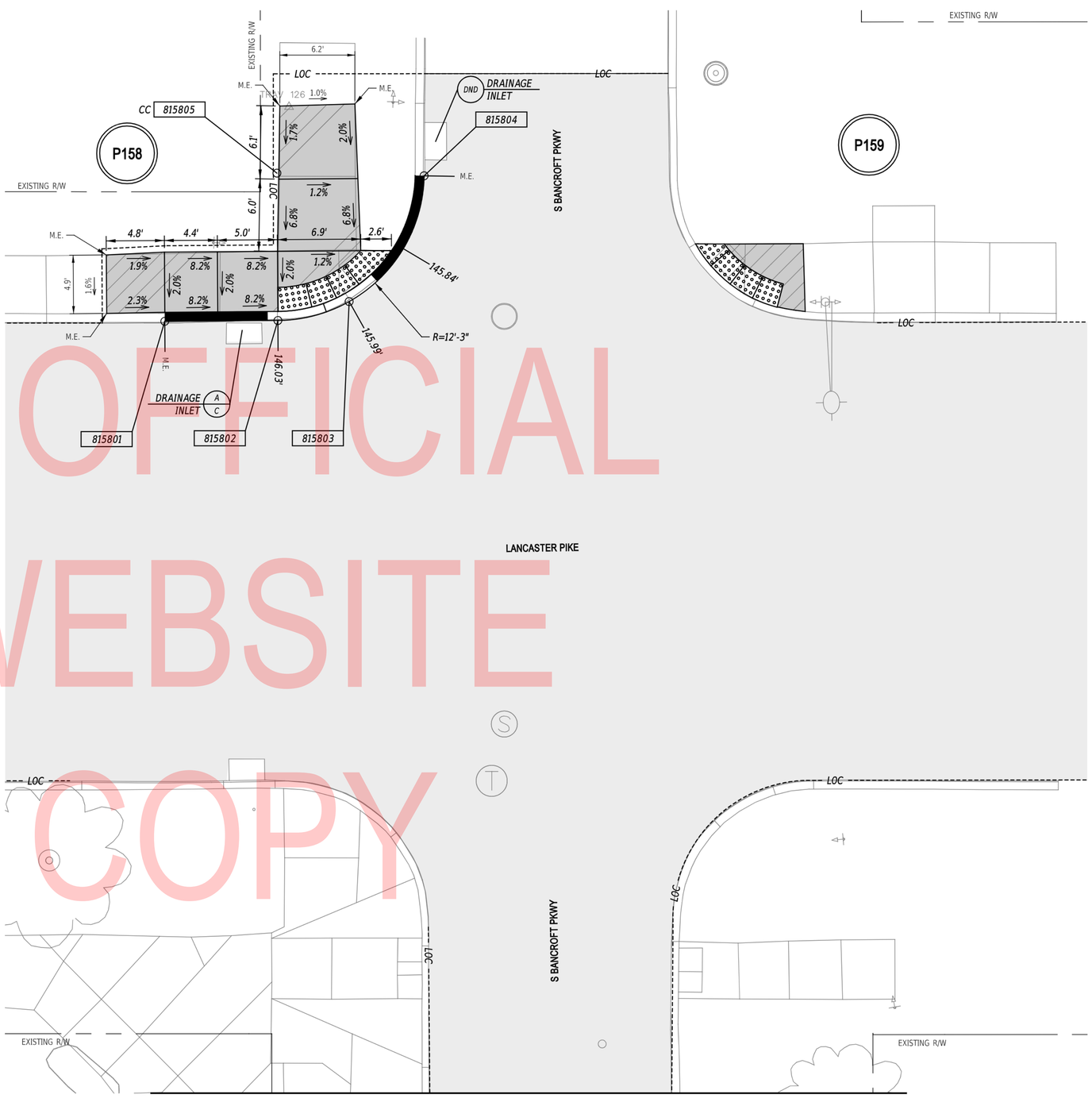
CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION DETAILS

DT-15	
SECTION	PAI
SHEET NO.	33

P158 PEDESTRIAN CONNECTION CONSTRUCTION DETAIL TYPE 3

P159 STANDARD CONSTRUCTION DETAIL REPLACE DWS



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
815801	-	-	636453.6661	611467.5220
815802	-	-	636447.3568	611457.1143
815803	-	-	636448.7408	611451.1431
815804	-	-	636453.0924	611442.7974
815805	-	-	636459.6011	611456.8102

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".

REFER TO SIGNING AND STRIPING PLANS FOR LIMITS OF MILL & OVERLAY

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC.
FILE NAME: ...\CT\DGN\PS&E PLANS\DT16.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/10/2020 @ 3:28:04 PM
USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

Pennoni

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

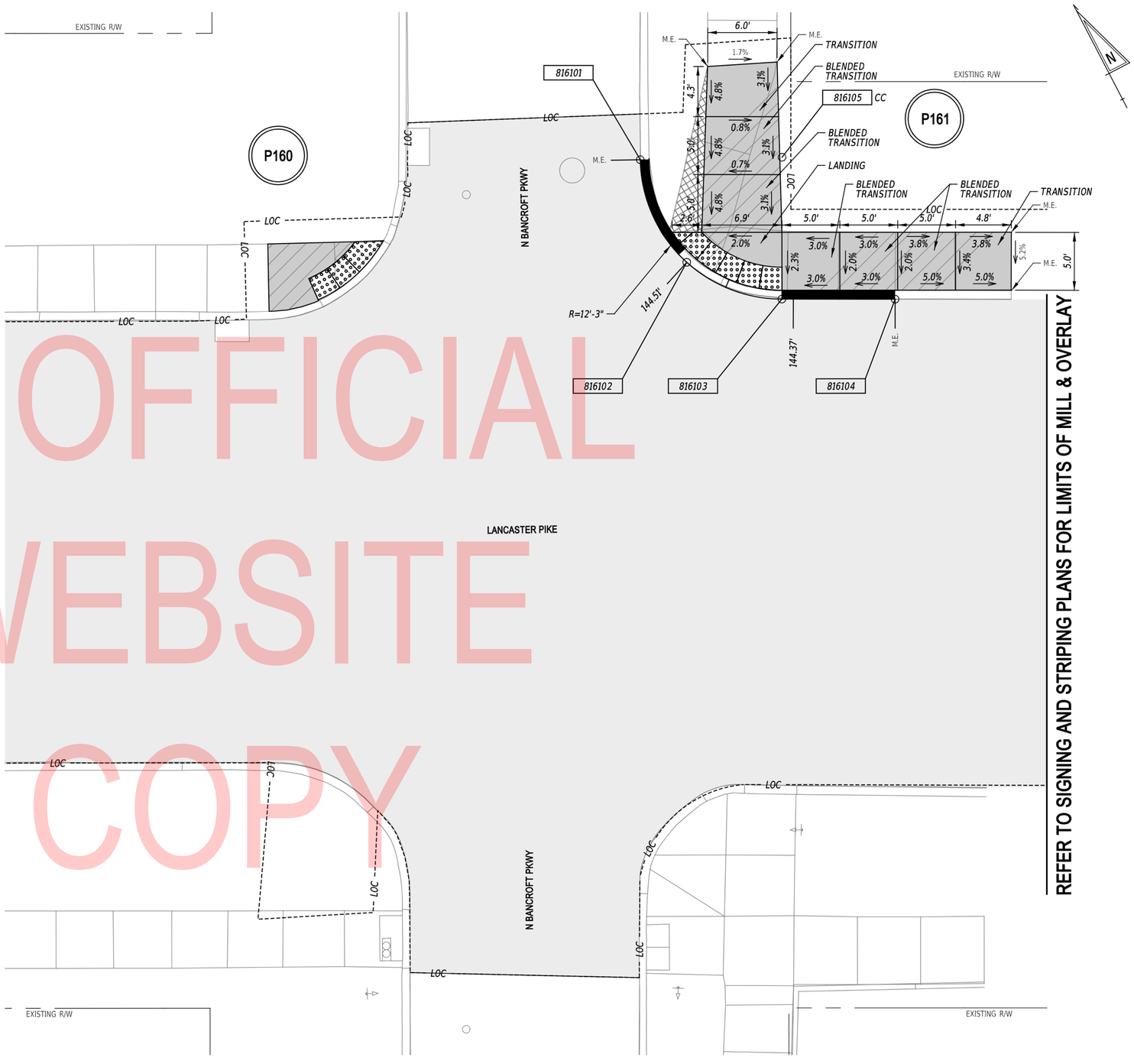
CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY		
NEW CASTLE	CHECKED BY:	P. HORSEY

CONSTRUCTION DETAILS

DT-16
SECTION PAI
SHEET NO. 34

P160 **STANDARD CONSTRUCTION DETAIL**
INSTALL DWS

P161 **PEDESTRIAN CONNECTION CONSTRUCTION**
DETAIL TYPE 3



REFER TO SIGNING AND STRIPING PLANS FOR LIMITS OF MILL & OVERLAY

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
816101	-	-	636392.3261	611587.2285
816102	-	-	636382.6183	611586.6281
816103	-	-	636375.9583	611592.3984
816104	-	-	636371.3677	611601.0337
816105	-	-	636386.7749	611598.1485

LEGEND

- PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
- MILL & OVERLAY
- FULL DEPTH RECONSTRUCTION SEE TS-01 NOTES 1 AND 2
- DETECTABLE WARNING SURFACE (DWS)
- P.C.C. SIDEWALK - 4"
- P.C.C. SIDEWALK - 6"
- TAG CALLOUT LOCATIONS

NOTES:

1. ALL DETECTABLE WARNING SURFACES SHALL BE PLANAR AND FLUSH WITH ADJACENT SURFACES.
2. THE CONTRACTOR SHALL TIE-IN BACK TO THE EXISTING SURFACE AT THE LOCATIONS THAT ARE SHOWN AS "M.E.".

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | FEN TABLE: pennoni.ctbl
FILE NAME: ...\CTDGN\PS&E PLANS\DT17.dgn | PLOT DRIVER: PENNONI NWK DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/10/2020 @ 3:28:07 PM
MICROSTATION WORKSPACE: DELDOT-V8i-QPENROADS | USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS	

SCALE 0 5 10 15 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	A. MALKIN
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION DETAILS

DT-17
SECTION PAI
SHEET NO. 35

GENERAL MOT NOTES

1. REFER TO CONTRACT T201601103 GENERAL CONTRACT PLAN NOTES FOR GENERAL MAINTENANCE OF TRAFFIC ASSOCIATED WITH MILL AND OVERLAY, ISOLATED PEDESTRIAN CONNECTION UPGRADES AND TEMPORARY/PERMANENT STRIPING WORK ACTIVITIES. FOR OTHER WORK ACTIVITIES IN THE PAR LIMITS OF THE PROJECT FROM COURT DRIVE TO N DUPONT ROAD, REFER TO THE SEQUENCE OF CONSTRUCTION ON THIS SHEET.

2. THE FOLLOWING MATRICIES PROVIDE TIME RESTRICTIONS FOR LANE CLOSURES RELATED TO THE PROJECT WORK ACTIVITIES:

Allowable Second Lane Closure (Active Work Zone) - Phase 1 and 2

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY								■	■	■	■	■	■	■	■	■	■	■	■					
MONDAY										■	■	■	■	■	■	■								
TUESDAY										■	■	■	■	■	■	■								
WEDNESDAY										■	■	■	■	■	■	■								
THURSDAY										■	■	■	■	■	■	■								
FRIDAY													■	■	■	■								
SATURDAY								■	■	■	■	■	■	■	■	■	■	■	■					

■ Second Lane Closure (Active Work Zone) - Phase 1 & 2
□ Restore Two-Way Center Left Turn Lane (Non-Active Work Zone) - Phase 1 & 2

Allowable Lane Closure (Maintain One Lane in EB Direction) SR 48 Eastbound, SR 141 to Union Street

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY								■	■	■	■	■	■	■	■	■	■	■	■					
MONDAY										■	■	■	■	■	■	■	■	■	■					
TUESDAY										■	■	■	■	■	■	■	■	■	■					
WEDNESDAY										■	■	■	■	■	■	■	■	■	■					
THURSDAY										■	■	■	■	■	■	■	■	■	■					
FRIDAY													■	■	■	■	■	■	■					
SATURDAY								■	■	■	■	■	■	■	■	■	■	■	■					

■ One Lane Closure
□ No Lane Closure

Allowable Lane Closure (Maintain One Lane in WB Direction) SR 48 Westbound, SR 141 to Union Street

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY								■	■	■	■	■	■	■	■	■	■	■	■					
MONDAY								■	■	■	■	■	■	■	■	■	■	■	■					
TUESDAY								■	■	■	■	■	■	■	■	■	■	■	■					
WEDNESDAY								■	■	■	■	■	■	■	■	■	■	■	■					
THURSDAY								■	■	■	■	■	■	■	■	■	■	■	■					
FRIDAY								■	■	■	■	■	■	■	■	■	■	■						
SATURDAY								■	■	■	■	■	■	■	■	■	■	■	■					

■ One Lane Closure
□ No Lane Closure

3. AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR REQUIREMENT FOR THIS PROJECT.

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
(X)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 801000.

4. THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING NOTE FROM THE SPECIAL PROVISION FOR ITEM 801500 - MAINTENANCE OF TRAFFIC - ALL INCLUSIVE:

"THE CONTRACTOR SHALL PROVIDE AND MAINTAIN INGRESS AND EGRESS FOR EACH PROPERTY ABUTTING THE CONSTRUCTION AREA AND EACH PROPERTY LOCATED BETWEEN THE DIVERSION POINTS OF ANY DETOUR AND THE ACTUAL CONSTRUCTION SITE. CONSTRUCTION ACTIVITIES WHICH MAY TEMPORARILY OR OTHERWISE INTERFERE WITH PROPERTY ACCESS SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED PROPERTY OWNERS."

THE CONTRACTOR SHALL MAKE EVERY EFFORT TO LIMIT THE DURATION OF PARCEL 8-R APARTMENT FRONTAGE ROAD AND THE BUSINESS AT 1-R PARKING LOT CLOSURES. THESE TWO PROPERTY CLOSURES SHALL NOT BE ACTIVE AT THE SAME TIME DURING ANY POINT OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN PARKING DURING PARTIAL CLOSURES OF THE 1-R PARKING LOT AS DESCRIBED IN THE PROJECT RIGHT-OF-WAY AGREEMENT AND EXHIBIT 1.

GENERAL MOT NOTES (CONTD.)

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, TAPERED EDGE 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. 801500 - MAINTENANCE OF TRAFFIC - ALL INCLUSIVE. 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. ACCEPTABLE MATERIALS FOR TEMPORARY PEDESTRIAN PATHS SHALL INCLUDE CONCRETE, HOT-MIX, COMPACTED MILLINGS 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. STONE OR GRADED AGGREGATE BASE COURSE SHALL NOT BE USED FOR TEMPORARY PEDESTRIAN PATHS.

7. PARCEL 07-032.40-041 (1-R) AND FRONTAGE ROAD SHALL NOT BE USED AS CONTRACTOR LAYDOWN AREA.

8. MESSAGE BOARDS SHALL BE PLACED 10 DAYS IN ADVANCE OF THE WORK AND REMAIN IN PLACE FOR 5 DAYS AFTER THE START OF WORK. LOCATIONS OF MESSAGE BOARDS AND MESSAGES DISPLAYED SHALL BE REVIEWED AND APPROVED BY THE DISTRICT SAFETY OFFICER.

SEQUENCE OF CONSTRUCTION

PHASE 1A - PARCEL 8-R

1. SEE CS-02 (SHEET 37) FOR THE ALLOWABLE LANE CLOSURES PER THE ACTIVE WORK ZONE DETAILS FOR EASTBOUND AND WESTBOUND IN CONJUNCTION WITH THE TABLE TITLED ALLOWABLE SECOND LANE CLOSURE (ACTIVE WORK ZONE) - PHASE 1 AND 2.
2. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE PHASE 1 MAINTENANCE OF TRAFFIC PLANS.
3. THE CONTRACTOR MAY TAKE AN ADDITIONAL LANE FOR WORK ACTIVITES BY SHIFTING EASTBOUND SR 48 TRAFFIC IN TO THE TWO-WAY CENTER LEFT-TURN LANE AS SHOWN ON THE "ACTIVE WORK ZONE - ADDITIONAL LANE CLOSURE" DETAIL. SEE LANE CLOSURE MATRICES FOR ALLOWABLE LANE CLOSURE HOURS.
4. ROAD CLOSED ALONG THE LANCASTER COURT APARTMENT FRONTAGE ROAD AND CONSTRUCT THE PROPOSED PEDESTRIAN RAMP AND MOMENT SLAB BARRIER, FULL-DEPTH PAVEMENT AND PROPOSED SIDEWALK FROM STATION 118+50 TO STATION 124+25. THE CONTRACTOR SHALL COORDINATE ADDITIONAL RETAINING WALL REPAIRS WITH DELDOT MAINTENANCE FORCES WHILE THE APARTMENT FRONTAGE ROAD IS CLOSED. CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING PEDESTRIAN SIGNAL DURING CONSTRUCTION OF THE PEDESRIAN RAMP AND ASSOCIATED APARTMENT FRONTAGE ROAD. CONTRACTOR SHALL RECONSTRUCT PEDESTRIAN CONNECTION ON TOP OF RETAINING WALL OVER A WEEKEND PERIOD, UTILIZING PEDESTRIAN RECALL MODE FOR THE TRAFFIC SIGNAL WHILE THE PEDESTRIAN SIGNAL IS INACCESSIBLE. FOR DELDOT MAINTENANCE AND OPERATIONS COORDINATION CONTACT JOHN GARCIA OFFICE: (302) 894-6307 CELL: (302) 547-2566 AND NATE DRAPER (302) 894-6311

PHASE 1B - PARCEL 1-R

1. SEE CS-02 (SHEET 37) FOR THE ALLOWABLE LANE CLOSURES PER THE ACTIVE WORK ZONE DETAILS FOR EASTBOUND AND WESTBOUND IN CONJUNCTION WITH THE TABLE TITLED ALLOWABLE SECOND LANE CLOSURE (ACTIVE WORK ZONE) - PHASE 1 AND 2.
2. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE PHASE 1 MAINTENANCE OF TRAFFIC PLANS.
3. THE CONTRACTOR MAY TAKE AN ADDITIONAL LANE FOR WORK ACTIVITES BY SHIFTING EASTBOUND SR 48 TRAFFIC IN TO THE TWO-WAY CENTER LEFT-TURN LANE AS SHOWN ON THE "ACTIVE WORK ZONE - ADDITIONAL LANE CLOSURE" DETAIL. SEE LANE CLOSURE MATRICES FOR ALLOWABLE LANE CLOSURE HOURS.
4. THE CONTRACTOR SHALL REFERENCE PROJECT RIGHT-OF-WAY AGREEMENT AND EXHIBIT 1 FOR PHASING OF PARCEL 1-R CONSTRUCTION:
PHASE 1B.1
- REMOVE EXISTING CURB BUMP-OUT LOCATED ON THE WEST SIDE OF THE PARKING LOT, AND CONSTRUCT AN 11-FOOT WIDE TEMPORARY PARKING STALL (SEE LOCATION #2A) TO BE UTILIZED DURING CONSTRUCTION PHASE 1B.2.
PHASE 1B.2
- TEMPORARILY RESTRIPE PARKING STALLS #2B AND #2C TO PROVIDE 11-FOOT WIDE PARKING STALLS.
- WITHIN THE AREA IDENTIFIED AS PHASE 1B.2, DEMOLISH THE EXISTING STONE RETAINING WALL AND REMOVE THE EXISTING DRAINAGE INLET AND PAVEMENT. CONSTRUCT THE NEW RETAINING WALL/SIDEWALK AND DRAINAGE/PAVEMENT IMPROVEMENTS.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO THE KANG PROPERTY.
PHASE 1B.3
- TEMPORARILY RESTRIPE PARKING STALLS #3A AND #3B TO PROVIDE 11-FOOT WIDE PARKING STALLS.
- WITHIN THE AREA IDENTIFIED AS PHASE 1B.3, DEMOLISH THE EXISTING STONE RETAINING WALL. CONSTRUCT THE NEW RETAINING WALL/SIDEWALK.
- ADDITIONALLY, REMOVE PARKING STALL #2A AND RECONSTRUCT CURB BUMPOUT AND PROPOSED PEDESTRIAN FACILITIES.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO THE KANG PROPERTY.

PHASE 1C

1. SEE CS-02 (SHEET 37) FOR THE ALLOWABLE LANE CLOSURES PER THE ACTIVE WORK ZONE DETAILS FOR EASTBOUND AND WESTBOUND IN CONJUNCTION WITH THE TABLE TITLED ALLOWABLE SECOND LANE CLOSURE (ACTIVE WORK ZONE) - PHASE 1 AND 2.
2. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE PHASE 1 MAINTENANCE OF TRAFFIC PLANS.
3. THE CONTRACTOR MAY TAKE AN ADDITIONAL LANE FOR WORK ACTIVITES BY SHIFTING EASTBOUND SR 48 TRAFFIC IN TO THE TWO-WAY CENTER LEFT-TURN LANE AS SHOWN ON THE "ACTIVE WORK ZONE - ADDITIONAL LANE CLOSURE" DETAIL. SEE LANE CLOSURE MATRICES FOR ALLOWABLE LANE CLOSURE HOURS.
4. CONSTRUCT PROPOSED SIDEWALK, CURB, PEDESTRIAN CONNECTIONS AND ENTRANCE/SIDE STREET MODIFICATIONS ON THE SOUTH SIDE OF LANCASTER PIKE FROM STATION 126+00 TO STATION 135+00, INCLUDING THE PROPOSED SIGNAL EQUIPMENT AND BUS STOP PAD NEAR STATION 132+00.

PHASE 2

1. SEE CS-02 (SHEET 37) FOR THE ALLOWABLE LANE CLOSURES PER THE ACTIVE WORK ZONE DETAILS FOR EASTBOUND AND WESTBOUND IN CONJUNCTION WITH THE TABLE TITLED ALLOWABLE SECOND LANE CLOSURE (ACTIVE WORK ZONE) - PHASE 1 AND 2.
2. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE PHASE 2 MAINTENANCE OF TRAFFIC PLANS.
3. THE CONTRACTOR MAY TAKE AN ADDITIONAL LANE FOR WORK ACTIVITES BY SHIFTING WESTBOUND SR 48 TRAFFIC IN TO THE TWO-WAY CENTER LEFT-TURN LANE AS SHOWN ON THE "ACTIVE WORK ZONE - ADDITIONAL LANE CLOSURE" DETAIL. SEE LANE CLOSURE MATRICES FOR ALLOWABLE LANE CLOSURE HOURS.
4. INSTALL NEW LIGHTING CONTROL CABINET AT STATION 121+75, LEFT AND RETROFIT EXISTING HPS LIGHT FIXTURES TO LED LIGHT FIXTURES.
5. CONSTRUCT PROPOSED SIDEWALK, CURB, PEDESTRIAN CONNECTIONS AND ENTRANCE/SIDE STREET MODIFICATIONS ON THE NORTH SIDE OF LANCASTER PIKE FROM STATION 119+40 TO STATION 138+50, INCLUDING THE PROPOSED ITMS/FIBER CONDUIT FROM STATION 121+80 TO 138+50, PROPOSED SIGNAL EQUIPMENT NEAR STATION 132+00 AND CURB LINE ADJUSTMENT FROM STATION 131+75 TO STATION 132+90.
6. RELOCATE EXISTING BUS SHELTER, BENCH AND TRASH RECEPTACLE FROM STATION 127+50 TO STATION 131+80. ACTIVATE NEW PEDESTRIAN HAWK SIGNAL.

PHASE 3

1. REFER TO THE LANE CLOSURE MATRIX TITLED ALLOWABLE LANE CLOSURE (MAINTAIN ONE LANE IN WB DIRECTION) SR 48 WESTBOUND, SR 141 TO UNION STREET FOR WORK HOUR RESTRICTIONS.
2. THE CONTRACTOR SHALL UTILIZE TA-23 TO CLOSE THE RIGHT LANE OF WESTBOUND SR 48 UPSTREAM OF THE INTERSECTION WITH NORTH DUPONT ROAD TO CONSTRUCT PROPOSED SIDEWALK, CURB, PEDESTRIAN CONNECTIONS ON THE NORTH SIDE OF LANCASTER PIKE FROM STATION 139+80 TO STATION 146+15. THE CONTRACTOR SHALL RESET EXISTING P.C.C. PARKING BUMPERS, RESTRIPE PARKING SPACES AND MODIFY THE EXISTING MODULAR BLOCK WALL PLANTER AT PARCEL 10-L FROM STATION 140+00 TO STATION 142+90 AS SHOWN ON THE CONSTRUCTION PLANS, CONSTUCTION DETAILS AND SIGNING AND STRIPING PLANS.

PHASE 4

1. REFER TO THE LANE CLOSURE MATRICES TITLED ALLOWABLE LANE CLOSURE (MAINTAIN ONE LANE IN EB DIRECTION) SR 48 EASTBOUND, SR 141 TO UNION STREET AND ALLOWABLE LANE CLOSURE (MAINTAIN ONE LANE IN WB DIRECTION) SR 48 WESTBOUND, SR 141 TO UNION STREET AND FOR WORK HOUR RESTRICTIONS.
2. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES. PHASE 4 WORK CAN BE DONE CONCURRENTLY WITH THE PREVIOUS PHASES.
3. CONTRACTOR SHALL CONSTRUCT PROPOSED PEDESTRIAN CONNECTIONS WITHIN THE PAVE AND REHAB WORK LIMITS.
4. CONTRACTOR SHALL MILL AND OVERLAY AS SHOWN ON PLANS.
5. CONTRACTOR SHALL INSTALL SIGNING AND PAVEMENT MARKING AS SHOWN ON PLANS.
6. CONTRACTOR SHALL REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES INSTALLED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL DEVICES WILL BE MAINTAINED IN PLACE AND WILL ONLY BE REMOVED WHEN IT IS NO LONGER NECESSARY TO PROVIDE FOR THEIR DESIGNATED FUNCTIONS AS APPROVED BY THE ENGINEER.
2.

EROSION POTENTIAL FOR THIS PROJECT	CONTRACTOR ESC SUPERVISOR REQUIREMENT
( ) INSIGNIFICANT	NONE
(X) MINOR	CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
( ) MAJOR	CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 6.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.

3. THE DISTURBED AREA FOR THIS PROJECT IS 1.27 ACRES. THE TOTAL AMOUNT OF NEW IMPERVIOUS AREA TO BE ADDED IS 0.10 ACRES.
4. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A FIVE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE FIVE YEARS, THE CONTRACTOR WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.
5. THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL DEVICES AT EACH INLET LOCATED WITHIN 10 FEET OF A PROPOSED EXCAVATION. INLET SEDIMENT DEVICES TO BE PAID UNDER ITEM 905005 - INLET SEDIMENT CONTROL, CURB INLET.
6. FOR FULL DEPTH PAVEMENT CONSTRUCTION, PEDESTRIAN CONNECTION CONSTRUCTION, SIDEWALK CONSTRUCTION, AND/OR UTILITY RELOCATIONS, BARE SOILS SHALL BE COVERED WITHIN 3 CALENDAR DAYS TO PREVENT EROSION. THIS CAN BE ACCOMPLISHED BY PLACING PROPOSED SUBBASE MATERIAL SUCH AS GRADED AGGREGATE BASE COURSE (GABC) OR GEOTEXTILE/PLASTIC SHEETING THAT IS SECURED SO AS TO NOT BLOW AWAY OR BE UNDERMINED BY RUNOFF.

Vincent W. Davis 01/28/2020
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."

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WORKING COPY

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-deldot.tbl
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ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN	CS-01
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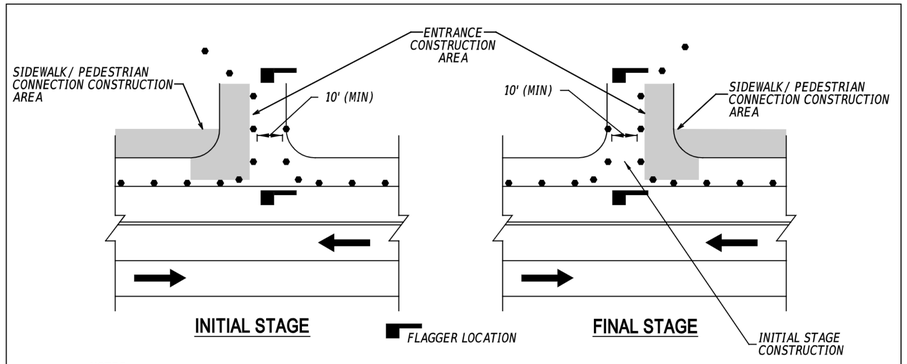
					CHECKED BY: P. HORSEY		SHEET NO. 36

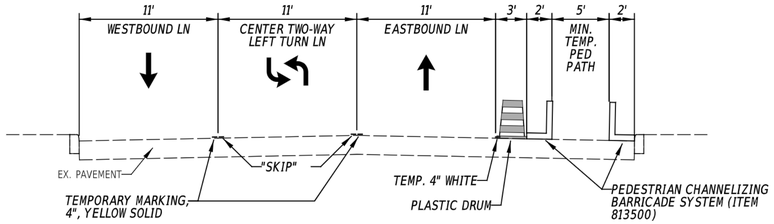


NOTES:

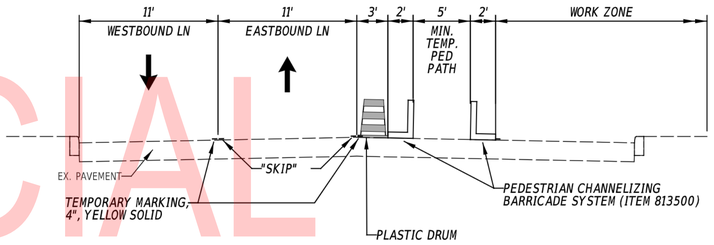
1. THIS DETAIL PROVIDES THE PROPER TRAFFIC CONTROL DEVICES AT DRIVEWAYS AND ENTRANCES THAT ARE TO BE BUILT IN HALF-SECTION UNDER FLAGGER CONTROL. APPLICATION OF THIS DETAIL SHALL BE AS INDICATED ON THE PLANS, DURING DAYLIGHT HOURS ONLY, OR AS DIRECTED BY THE ENGINEER, TRAFFIC CONTROL EVICES AT ENTRANCES 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

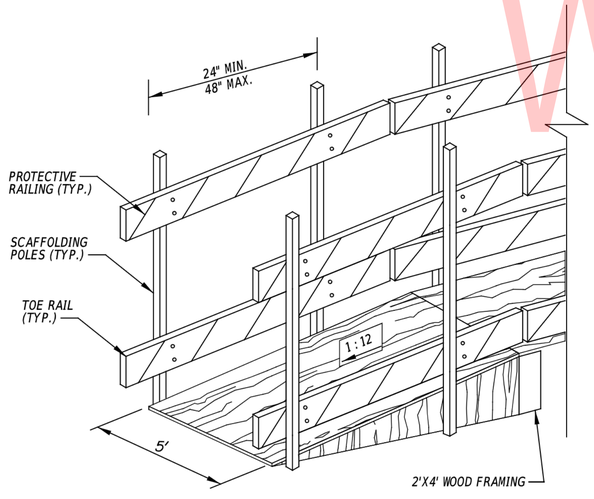
NOT TO SCALE



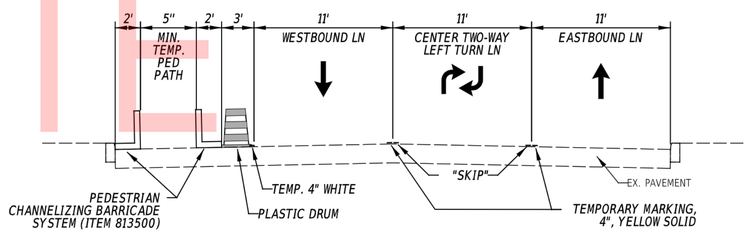
PHASE 1 - LANCASTER PIKE - NON-ACTIVE WORK ZONE
STA. 124+15 TO STA. 140+05



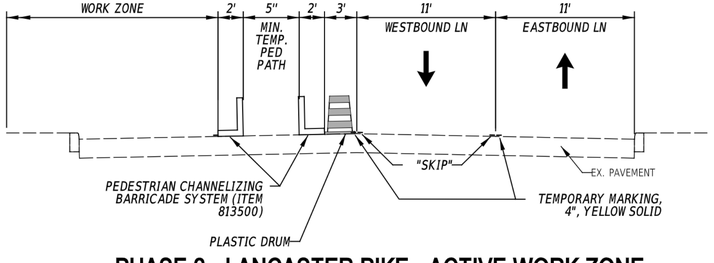
PHASE 1 - LANCASTER PIKE - ACTIVE WORK ZONE
STA. 124+15 TO STA. 140+05



TEMPORARY PEDESTRIAN CONNECTION ISOMETRIC VIEW



PHASE 2 - LANCASTER PIKE - NON-ACTIVE WORK ZONE
STA. 124+09 TO STA. 139+92



PHASE 2 - LANCASTER PIKE - ACTIVE WORK ZONE
STA. 124+09 TO STA. 139+92

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ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN	CS-02
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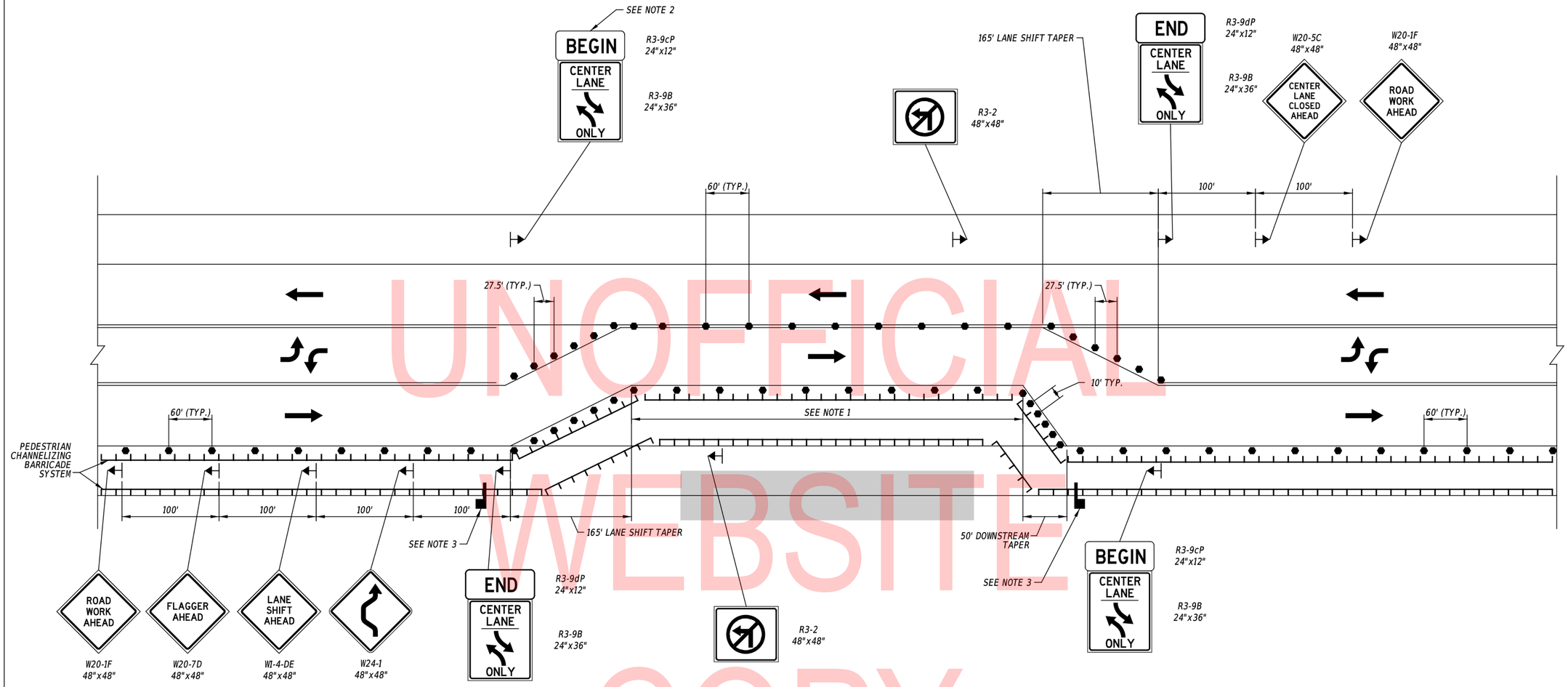

TYPICAL ACTIVE WORK ZONE - ADDITIONAL LANE CLOSURE

NOT TO SCALE

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NOTES:

1. *THE ACTIVE WORK ZONE LENGTH BETWEEN TAPERS SHALL BE 200' MAXIMUM. A FLAGGER SHALL BE UTILIZED AT EVERY DRIVEWAY/ENTRANCE/SIDE STREET WITHIN THE ACTIVE WORK ZONE.*
2. *THE TWO-WAY LEFT TURN ONLY (R3-9B) SIGN ASSEMBLIES MAY BE OMITTED IF THERE IS NO LANE PRESENT UPSTREAM AND/OR DOWNSTREAM OF THE LANE SHIFT TAPERS.*
3. *PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE TO DIRECT PEDESTRIANS IN TO THE CLOSED LANE.*
4. *AT THE END OF EACH WORK DAY THE CONTRACTOR SHALL RETURN THE ROADWAY TO ONE LANE IN EACH DIRECTION WITH A TWO-WAY CENTER LEFT-TURN LANE.*

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ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO.	N/A	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN	CS-03
				T201601103	DESIGNED BY:	Z. BRANDER		SECTION
				COUNTY				PAI
				NEW CASTLE	CHECKED BY:	P. HORSEY		SHEET NO.
								38

CONSTRUCTION PHASING & M.O.T

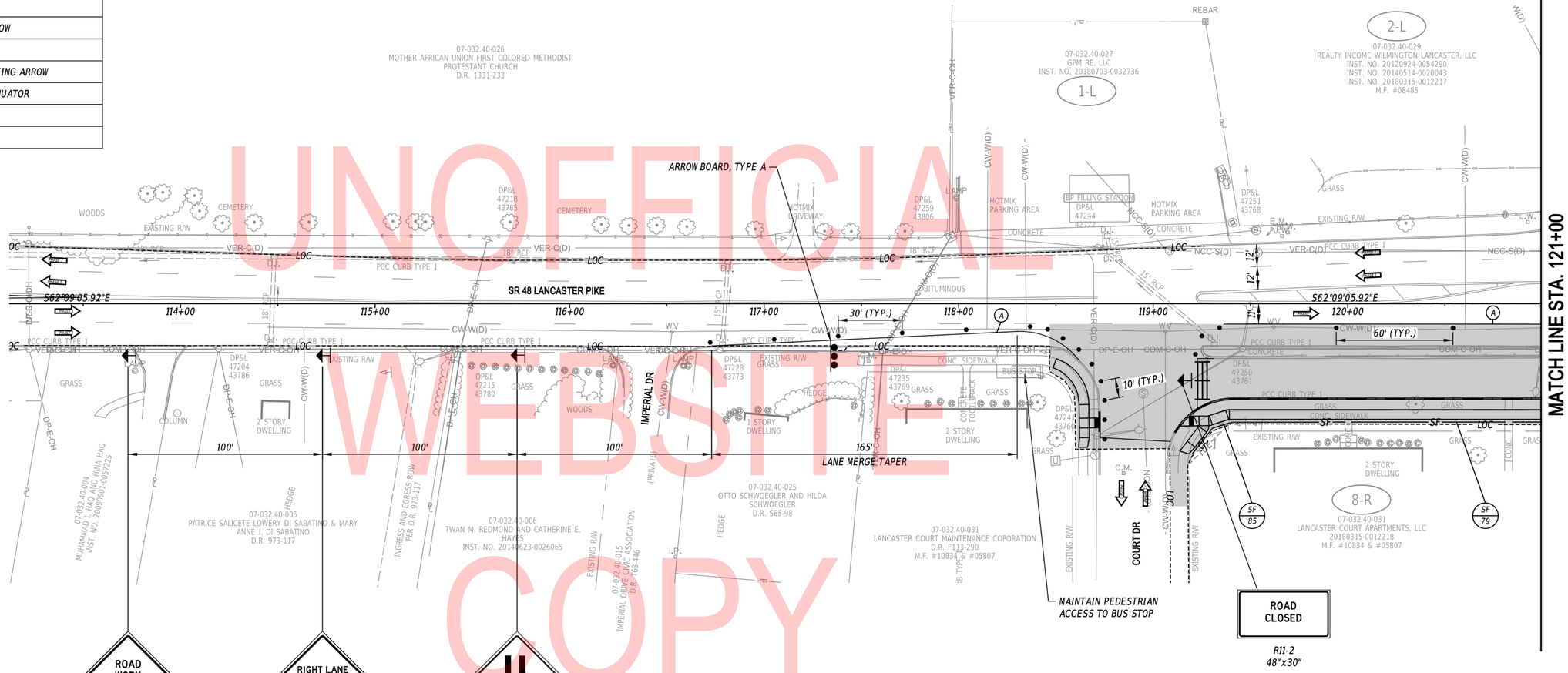
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
CSF XXX	CONSTRUCTION SAFETY FENCE / LENGTH
— CSF —	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
PHASE X	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL

	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
— SF —	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	357 LF
(B)	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	0 LF
(C)	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	0 SF
(D)	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	0 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	17 SF



UNOFFICIAL
WEBSITE
COPY

NOTES:

1. PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.
2. A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.
3. TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.

MERGE TAPER CALCULATIONS:
$L=WS^2/60$
$W=11'$
30 MPH=165'

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni.ctb
FILE NAME: ...\CTDOX\PS&E PLANS\CS04.dgn	PLOT DRIVER: PENNONI.NWK.DELDOT-FULL-PDF.PLT.cfg
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/10/2020 @ 3:28:54 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: CLivers OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

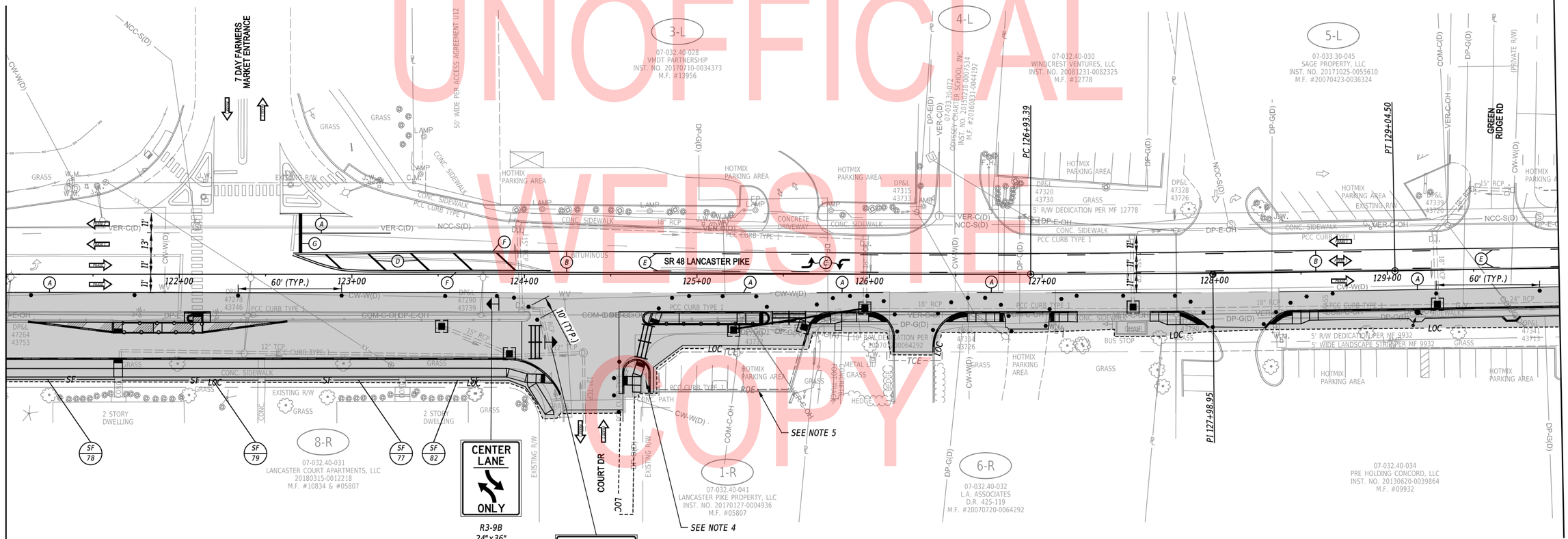
CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 1

CS-04	
SECTION	PAI
SHEET NO.	39

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 1	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL	
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
— SF —	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	756 LF
B	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1170 LF
C	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	32 SF
D	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	72 SF
E	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), 10' LINE, 30' GAP	600 LF
F	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), DOUBLE YELLOW	280 LF
G	TEMPORARY MARKINGS, 16" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	23 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1045 SF



UNOFFICIAL WEBSITE COPY

NOTES:

1. PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.
2. A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.
3. TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.
4. THE CONTRACTOR SHALL RELOCATE THE EXISTING PRIVATE SIGN DURING DURATION OF PHASE 1B OF CONSTRUCTION. REFER TO SPECIAL PROVISION 818504 FOR SIGN RELOCATION REQUIREMENTS.
5. CONTRACTOR SHALL SUBMIT DAY BY DAY SCHEDULE TO ENGINEER FOR APPROVAL TO COMPLETE WORK ON PARCEL 1-R. CONTRACTOR SHALL REFERENCE PROJECT RIGHT OF WAY AGREEMENT AND EXHIBIT 1 TO MAINTAIN PARCEL 1-R PARKING DURING CONSTRUCTION. CONTRACTOR SHALL REFERENCE RIGHT OF WAY AGREEMENT FOR PARCEL 1-R, WHEREAS "THE DEPARTMENT IS GRANTED THE UNINTERRUPTED RIGHT-OF-ENTRY... FOR RECONSTRUCTION OF THE EXISTING SIDEWALK AND RETAINING WALL, ADJUSTING DRAINAGE AND REPAVING. CONSTRUCTION... WILL OCCUR IN TWO PHASES AFFORDING PARKING DURING CONSTRUCTION."

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-odot.tbl
FILE NAME: ...\CTDGN\PS&E PLANS\CS05.dgn | PLOT DRIVER: PENNONI.NWK.DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/20/2020 @ 11:17:49 AM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: Dholley | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 1

CS-05
SECTION: PAI
SHEET NO.: 40

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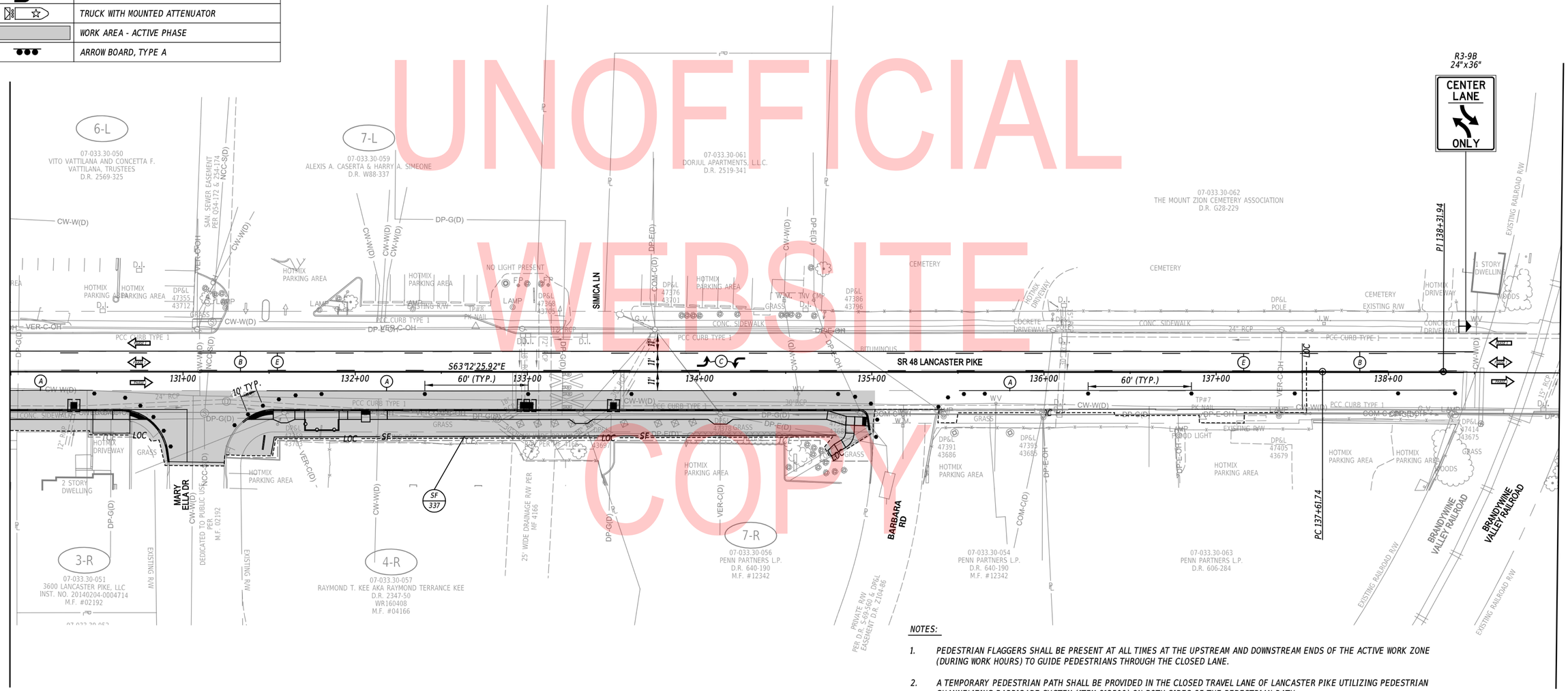
WEBSITE
COPY

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 1	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL	
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
— SF —	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	675 LF
(B)	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1695 LF
(C)	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	32 SF
(D)	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	0 SF
(E)	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), 10' LINE, 30' GAP	430 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	718 SF



NOTES:

1. PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.
2. A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.
3. TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.

PENNONI ASSOCIATES INC.
FILE NAME: ...\CTDOT\PSE PLANS\CS06.dgn
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MICROSTATION WORKSPACE: DELDOT-V8i-OPERROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI.NW.DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 12/4/2020 @ 8:43:45 AM
USER NAME: SNickol OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

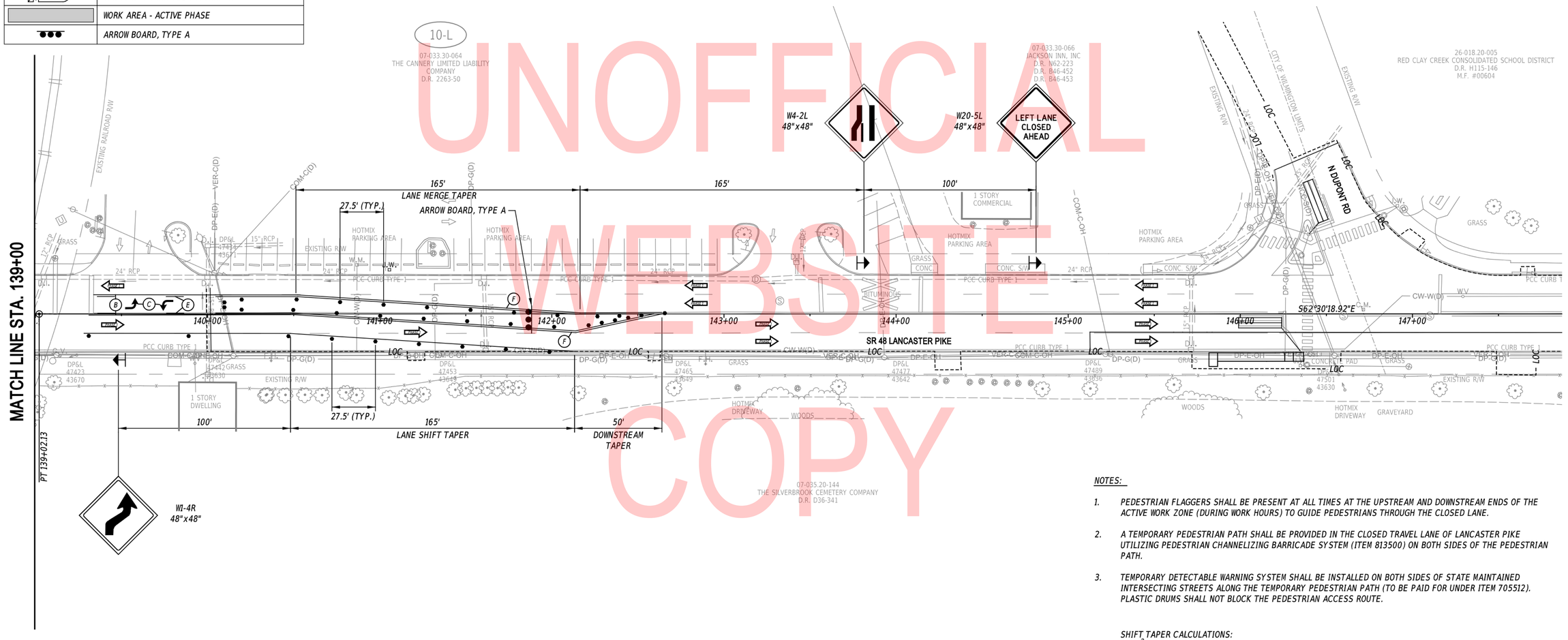
CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 1

CS-06	
SECTION	PAI
SHEET NO.	41

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
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL	
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
SF	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	285 LF
B	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	145 LF
C	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	32 SF
D	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	0 SF
E	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), 10' LINE, 30' GAP	40 LF
F	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), DOUBLE YELLOW	856 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	53 SF



UNOFFICIAL WEBSITE COPY

NOTES:

1. *PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.*
2. *A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.*
3. *TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.*

SHIFT TAPER CALCULATIONS:
$L=WS^2/60$
W=11'
30 MPH=165'

PENNONI ASSOCIATES INC. | ...\CTDOT\PS&E PLANS\CS07.dgn | PEN TABLE: pennoni-dotdot.tbl | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG | DATE PLOTTED: 1/10/2020 @ 3:29:11 PM | USER NAME: CLiveris | OFFICE LOCATION: Hampton Roads, Virginia
FILE NAME: MICROSTATION VERSION: Microstation V8i | MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

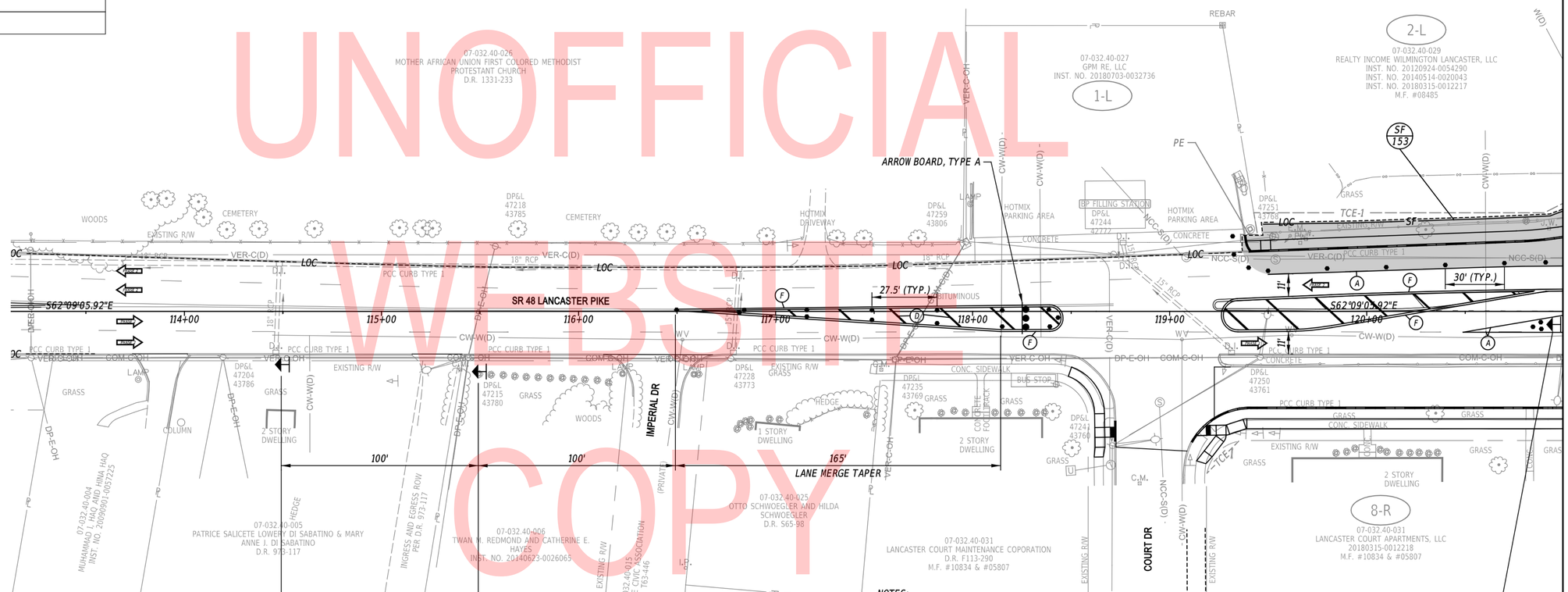
CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 1

CS-07
SECTION
PAI
SHEET NO.
42

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 1	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL	
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
SF	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	251 LF
B	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	0 LF
C	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	0 SF
D	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	172 SF
F	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), DOUBLE YELLOW	1520 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	800 SF



UNOFFICIAL WEBSITE COPY

NOTES:

1. *PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.*
2. *A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.*
3. *TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.*

MERGE TAPER CALCULATIONS:
L=WS²/60
W=11'
30 MPH=165'

PENNONI ASSOCIATES INC.
FILE NAME: ...\CTDGN\PSUE PLANS\CS08.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni.dwg&t.tbl
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USER NAME: SNickel
OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

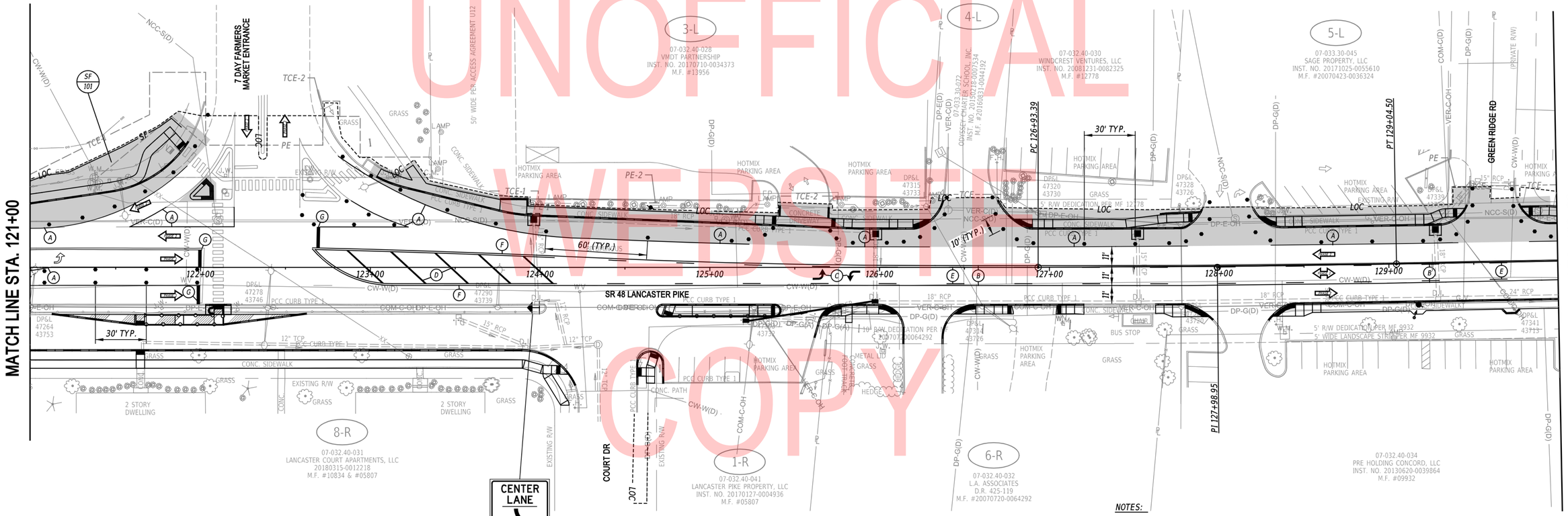
CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 2

CS-08
SECTION: PAI
SHEET NO.: 43

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
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL	
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
— SF —	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1018 LF
B	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	815 LF
C	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	32 SF
D	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	133 SF
E	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), 10' LINE, 30' GAP	300 LF
F	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), DOUBLE YELLOW	584 LF
G	TEMPORARY MARKINGS, 16" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	33 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	2300 SF



UNOFFICIAL WEBSITE COPY

NOTES:

1. PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.
2. A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.
3. TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni-cdot.tbl
FILE NAME: ...\CTDGN\PS&E PLANS\CS09.dgn	PLOT DRIVER: PENNONI.NW.CHELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i	DATE PLOTTED: 1/31/2020 @ 2:02:32 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: SNickel OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 2

CS-09
SECTION
PAI
SHEET NO.
44

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 X	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL

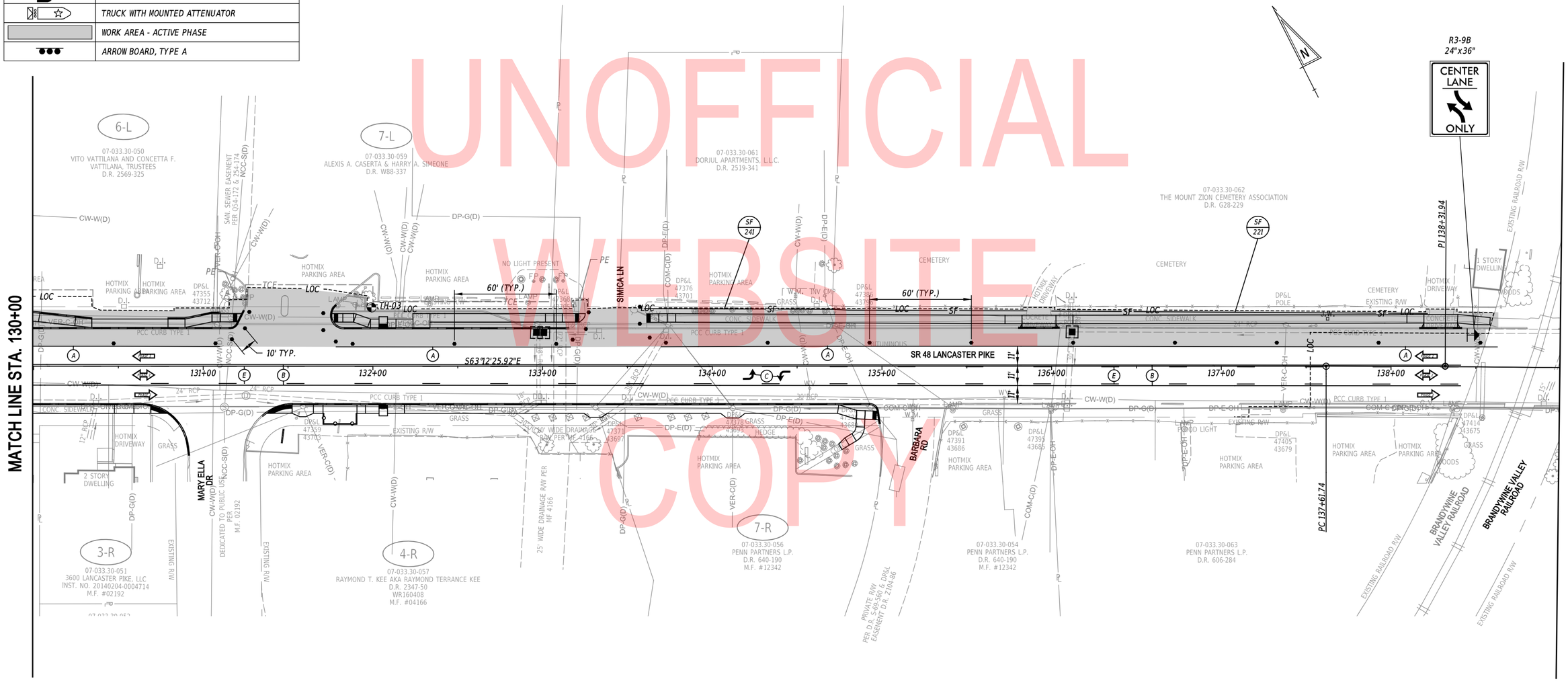
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
— SF —	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	741 LF
B	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1684 LF
C	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	32 SF
D	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	0 SF
E	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), 10' LINE, 30' GAP	430 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	2300 SF

NOTES:

1. PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.
2. A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.
3. TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.
4. SEE PROJECT NOTES FOR RAILROAD COORDINATION REQUIREMENTS FOR PROPOSED SIDEWALK WORK WITHIN THE RAILROAD RIGHT-OF-WAY.



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PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-dotlot.tbl
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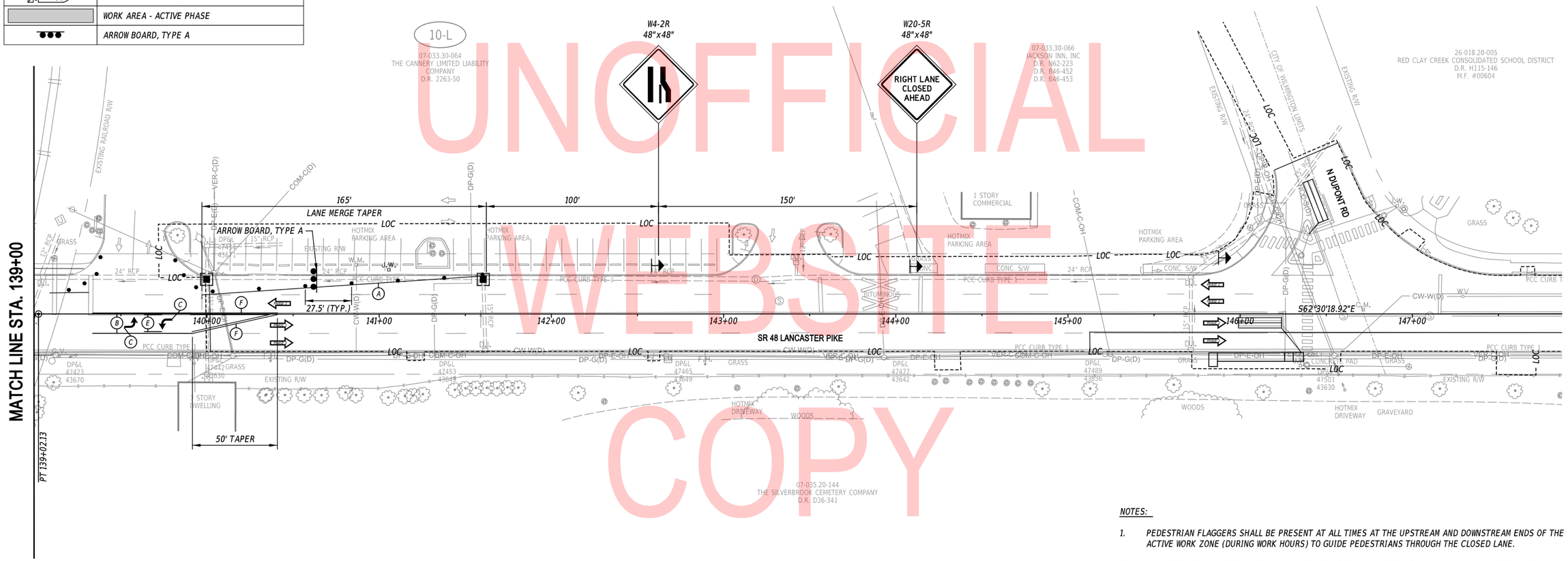
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: Dhilley | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 2	CS-10
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SECTION PAI
					CHECKED BY: P. HORSEY		SHEET NO. 45

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
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	ARROW BOARD, TYPE A

EROSION & SEDIMENT CONTROL	
	INLET SEDIMENT CONTROL
SF	SILT FENCE / LENGTH
SF	SILT FENCE

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	TEMPORARY MARKINGS, 5" WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	189 LF
B	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	115 LF
C	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), WHITE (ITEM 817002)	32 SF
D	TEMPORARY MARKINGS, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC (SF), YELLOW (ITEM 817002)	0 SF
E	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), 10' LINE, 30' GAP	40 LF
F	TEMPORARY MARKINGS, 5" YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013), DOUBLE YELLOW	204 LF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1000 SF



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NOTES:

1. PEDESTRIAN FLAGGERS SHALL BE PRESENT AT ALL TIMES AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE ACTIVE WORK ZONE (DURING WORK HOURS) TO GUIDE PEDESTRIANS THROUGH THE CLOSED LANE.
2. A TEMPORARY PEDESTRIAN PATH SHALL BE PROVIDED IN THE CLOSED TRAVEL LANE OF LANCASTER PIKE UTILIZING PEDESTRIAN CHANNELIZING BARRICADE SYSTEM (ITEM 813500) ON BOTH SIDES OF THE PEDESTRIAN PATH.
3. TEMPORARY DETECTABLE WARNING SYSTEM SHALL BE INSTALLED ON BOTH SIDES OF STATE MAINTAINED INTERSECTING STREETS ALONG THE TEMPORARY PEDESTRIAN PATH (TO BE PAID FOR UNDER ITEM 705512). PLASTIC DRUMS SHALL NOT BLOCK THE PEDESTRIAN ACCESS ROUTE.

MERGE TAPER CALCULATIONS:
$L=WS^2/60$
$W=11'$
30 MPH=165'

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni-dotdot.tbl
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: CLiveris OFFICE LOCATION: Hampton Roads, Virginia

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN PHASE 2

CS-11
SECTION
PAI
SHEET NO.
46

LUMINAIRE SCHEDULE

NO.	STATION	OFFSET	DPL POLE #	HEIGHT	ARM	ORIENTATION	LAMP	IES FILE
1	117+60.90	24.35' RT	47235-43769	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
2	118+71.52	29.01' LT	47244-42772	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*3	118+70.95	68.09' RT	47241-43760	25'	8'	5° CCW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*4	119+46.04	23.16' RT	47250-43761	25'	8'	10° CW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*5	120+99.85	23.36' RT	47264-43753	25'	4'	5° CW	100W HPS EQ LED, TYPE 2 CUTOFF	ATBS G MVOLT R2

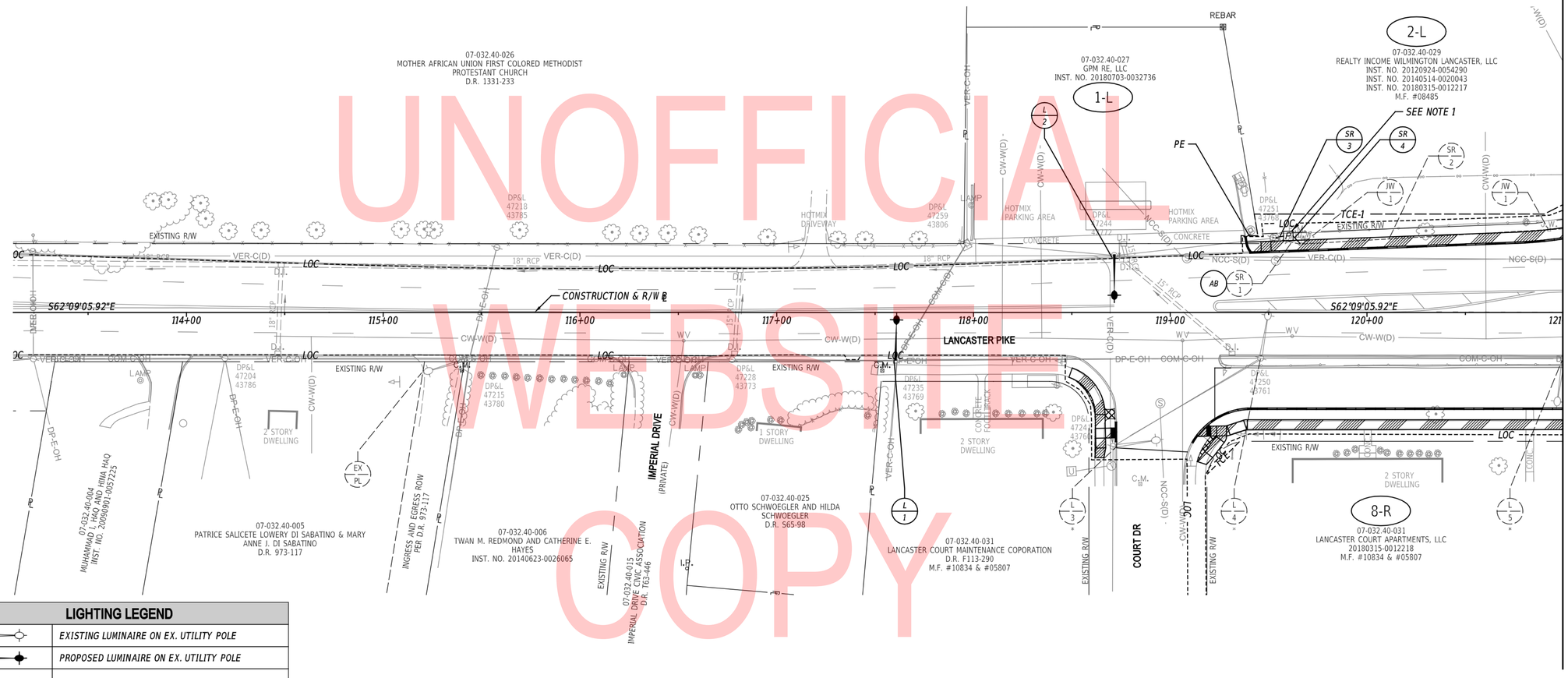
* DELMARVA POWER TO RETROFIT EXISTING HPS LUMINAIRE WITH LED LUMINAIRE AND BRACKET ARM AS SHOWN IN THE SCHEDULE

LIGHTING SERVICE SCHEDULE

SERVICE RUN	# OF CONDUITS	SIZE	DISTANCE (L.F.)	DESCRIPTION	INSTALLATION
1*	1	-	14'	REMOVE[(2)#6, (1)#6 GROUND], ABANDON	-
2*	1	-	125'	REMOVE [(2)#6, (1)#6 GROUND], INSTALL (2)#2, (1)#2 GND	-
3	1	2.5"	4'	INSTALL [(2)#2, (1)#2 GND]	T
4	1	2.5"	5'	INSTALL [(2)#2, (1)#2 GND]	T

B = BORE, T = TRENCH, O = OPEN CUT

* DENOTES EXISTING



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LIGHTING LEGEND

	EXISTING LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON PROP. UTILITY POLE
	EXISTING DELDOT LIGHT STD.
	PROPOSED DELDOT LIGHT STD.
JW X	EXISTING JUNCTION WELL IDENTIFIER
JW X	PROPOSED JUNCTION WELL IDENTIFIER
LCR X	EXISTING LIGHTING CONDUIT RUN IDENTIFIER
LCR X	PROP. LIGHTING CONDUIT RUN INDENTIFIER
L X	EXISTING LUMINAIRE IDENTIFIER
L X	PROPOSED LUMINAIRE IDENTIFIER
EX PL	EXISTING PRIVATE LIGHT (DO NOT DISTURB)

NOTES:

1. FURNISH AND INSTALL ELECTRICAL UTILITY SERVICE PEDESTAL WITH 120/240V, SINGLE PHASE, 3 WIRE, 100 AMP ELECTRICAL SERVICE PER DELDOT STANDARD T-17(2013). POWER SOURCE: DELMARVA POWER POLE 47251-43768.

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-deldot.tbl
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickell OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

LIGHTING PLAN

LI-01
SECTION PAI
SHEET NO. 47

LUMINAIRE SCHEDULE

NO.	STATION	OFFSET	DPL POLE #	HEIGHT	ARM	ORIENTATION	LAMP	IES FILE
6#	121+52.40	51.17' LT	DELDOT LIGHT	30'	15'	25° CCW	150W HPS EQ LED, TYPE 3 CUTOFF	ATB2 30BLED E85 MVOLT R3
7#	123+16.11	54.46' LT	DELDOT LIGHT	30'	15'	20° CW	150W HPS EQ LED, TYPE 3 CUTOFF	ATB2 30BLED E85 MVOLT R3
8	124+65.14	35.21' LT	NEW - TBD	25'	8'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
9	126+27.45	35.94' LT	47315-43733	25'	8'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*10	120+99.85	23.36' RT	47264-43753	25'	8'	5° CW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*11	122+39.53	23.91' RT	47278-43746	25'	4'	5° CW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*12	122+39.53	23.91' RT	47278-43746	25'	4'	5° CW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
*13	123+75.04	23.57' RT	47290-43739	25'	4'	0°	100W HPS EQ LED, TYPE 2 CUTOFF	ATBO 30BLED E10 MVOLT R3
14	125+26.13	23.58' RT	47303-43732	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
15	127+77.75	23.53' RT	47326-43720	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
16	129+17.15	24.13' RT	NEW - TBD	25'	8'	30° CCW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
17	129+71.44	23.68' RT	47341-43713	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3

* DELMARVA POWER TO RETROFIT EXISTING HPS LUMINAIRE WITH LED LUMINAIRE AND BRACKET ARM AS SHOWN IN THE SCHEDULE

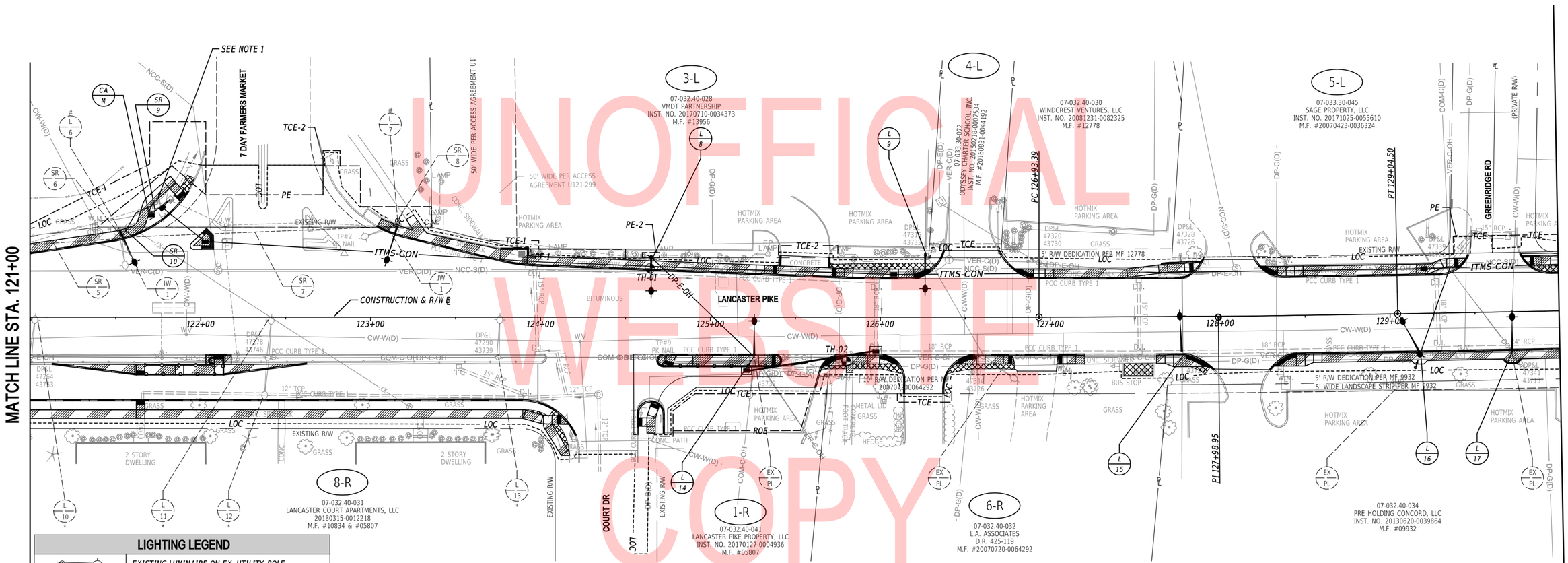
EXISTING DELDOT LIGHT STANDARD HPS LUMINAIRES TO BE RETROFIT WITH LED LUMINAIRES AND ORIENTED AS SHOWN IN SCHEDULE

LIGHTING SERVICE SCHEDULE

SERVICE RUN	# OF CONDUITS	SIZE	DISTANCE (L.F.)	DESCRIPTION	INSTALLATION
5*	1	-	60'	REMOVE [(2)#6, (1)#6 GROUND], INSTALL [(2)#2, (1)#2 GND]	-
6*	1	-	3'	(2)#6, (1)#6 GROUND	-
7*	1	-	155'	(2)#6, (1)#6 GROUND	-
8*	1	-	4'	(2)#6, (1)#6 GROUND	-
9	3	3.0"	2'	INSTALL [(2)#2, (1)#2 GND, (3)#6, (1)#6 GND]	T
10	3	3.0"	27'	INSTALL [(2)#2, (1)#2 GND, (3)#6, (1)#6 GND]	T

B = BORE, T = TRENCH, O = OPEN CUT

* DENOTES EXISTING



LIGHTING LEGEND

	EXISTING LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON PROP. UTILITY POLE
	EXISTING DELDOT LIGHT STD.
	PROPOSED DELDOT LIGHT STD.
JW X	EXISTING JUNCTION WELL IDENTIFIER
JW X	PROPOSED JUNCTION WELL IDENTIFIER
LCR X	EXISTING LIGHTING CONDUIT RUN IDENTIFIER
LCR X	PROP. LIGHTING CONDUIT RUN INDENTIFIER
L X	EXISTING LUMINAIRE IDENTIFIER
L X	PROPOSED LUMINAIRE IDENTIFIER
EX PL	EXISTING PRIVATE LIGHT (DO NOT DISTURB)

NOTES:

1. INSTALL A SECONDARY POWER DISCONNECT AT PROPOSED SIGNAL CONTROL CABINET.

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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

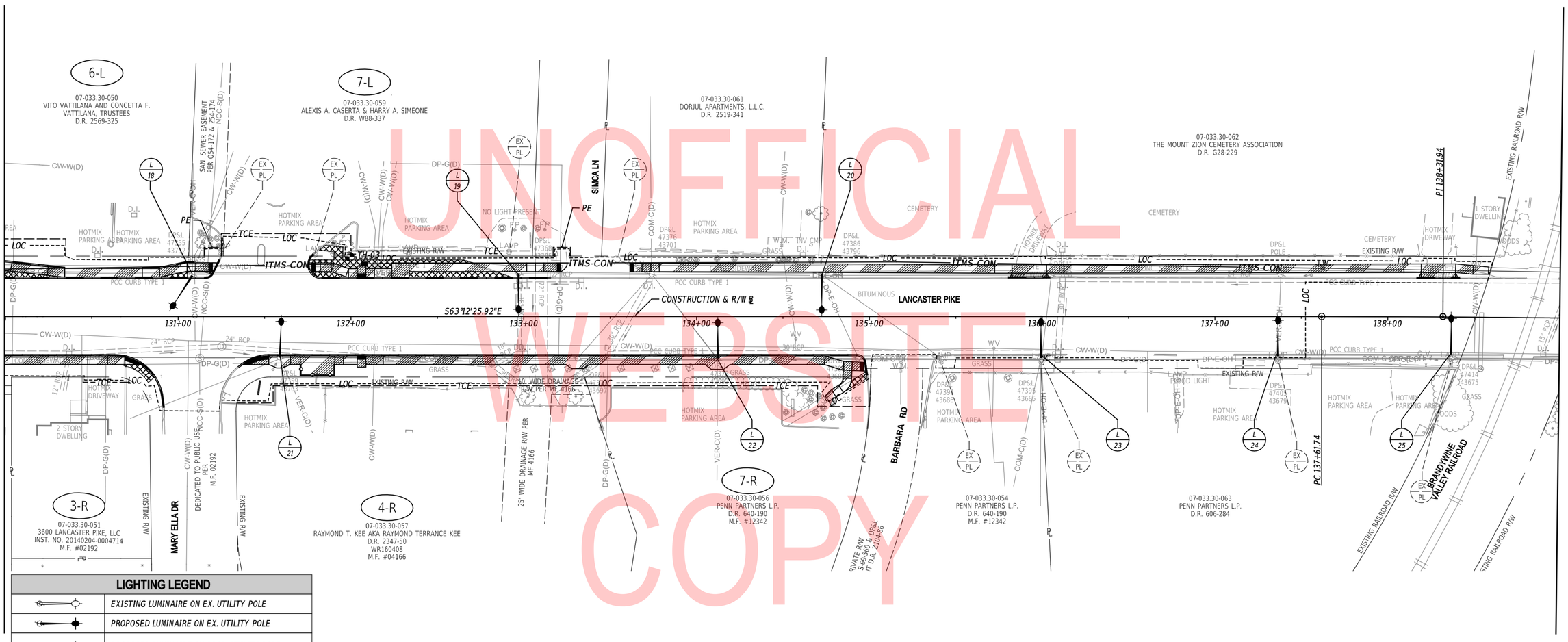
LIGHTING PLAN

LI-02
SECTION PAI
SHEET NO. 48

LUMINAIRE SCHEDULE

NO.	STATION	OFFSET	DPL POLE #	HEIGHT	ARM	ORIENTATION	LAMP	IES FILE
18	131+08.20	24.46'LT	47355-43712	25'	8'	35° CW	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
19	132+97.01	24.91'LT	47368-43705	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
20	134+72.36	23.71'LT	47386-43796	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
21	131+58.85	23.62'RT	47359-43703	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
22	134+12.11	24.80'RT	47378-43693	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
23	135+99.66	24.99'RT	47395-43685	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
24	137+36.26	24.25'RT	47405-43679	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
25	138+36.90	24.04'RT	47414-43675	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3

* DELMARVA POWER TO RETROFIT EXISTING HPS LUMINAIRE WITH LED LUMINAIRE AND BRACKET ARM AS SHOWN IN THE SCHEDULE



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LIGHTING LEGEND

	EXISTING LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON PROP. UTILITY POLE
	EXISTING DELDOT LIGHT STD.
	PROPOSED DELDOT LIGHT STD.
JW X	EXISTING JUNCTION WELL IDENTIFIER
JW X	PROPOSED JUNCTION WELL IDENTIFIER
LCR X	EXISTING LIGHTING CONDUIT RUN IDENTIFIER
LCR X	PROP. LIGHTING CONDUIT RUN INDENTIFIER
L X	EXISTING LUMINAIRE IDENTIFIER
L X	PROPOSED LUMINAIRE IDENTIFIER
EX PL	EXISTING PRIVATE LIGHT (DO NOT DISTURB)

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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickell OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

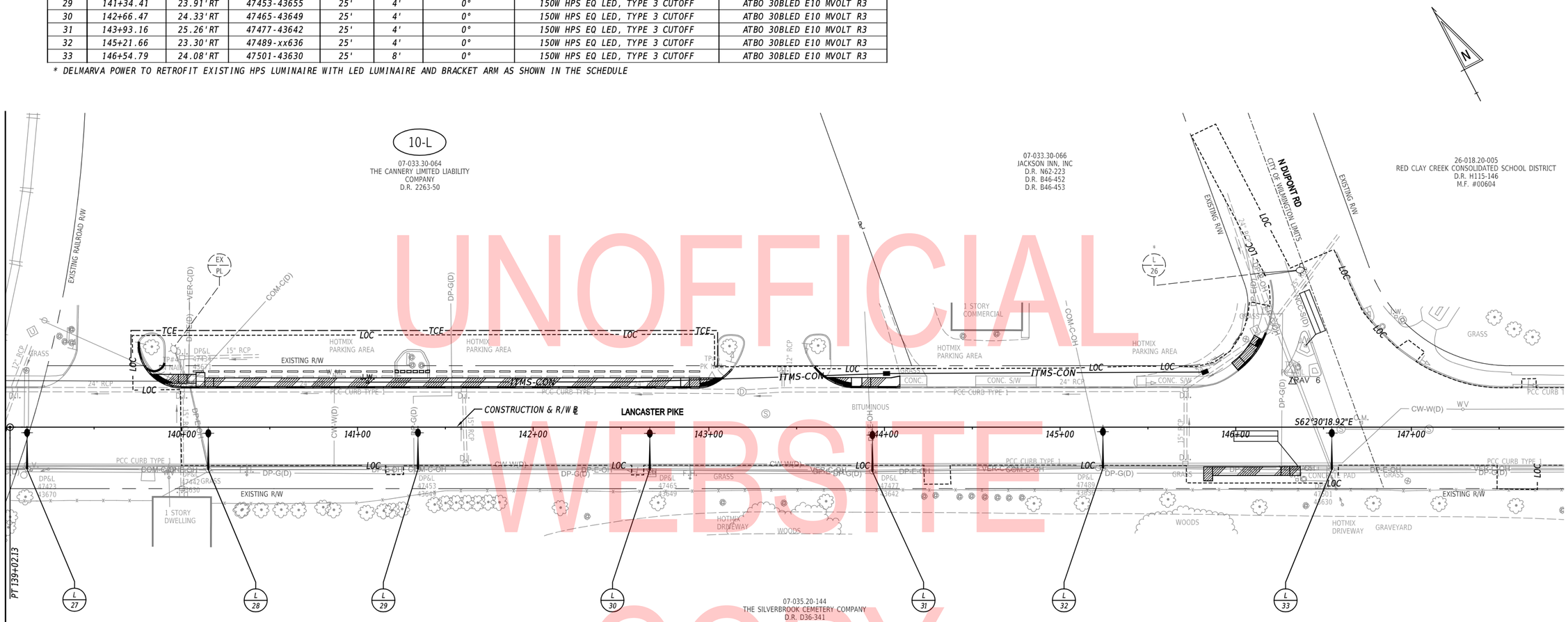
LIGHTING PLAN

LI-03
SECTION PAI
SHEET NO. 49

LUMINAIRE SCHEDULE

NO.	STATION	OFFSET	DPL POLE #	HEIGHT	ARM	ORIENTATION	LAMP	IES FILE
*26	146+14.83	86.82'LT	-	25'	8'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
27	139+12.06	23.72'RT	47423-43670	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
28	140+14.95	24.19'RT	47442-43660	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
29	141+34.41	23.91'RT	47453-43655	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
30	142+66.47	24.33'RT	47465-43649	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
31	143+93.16	25.26'RT	47477-43642	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
32	145+21.66	23.30'RT	47489-xx636	25'	4'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3
33	146+54.79	24.08'RT	47501-43630	25'	8'	0°	150W HPS EQ LED, TYPE 3 CUTOFF	ATBO 30BLED E10 MVOLT R3

* DELMARVA POWER TO RETROFIT EXISTING HPS LUMINAIRE WITH LED LUMINAIRE AND BRACKET ARM AS SHOWN IN THE SCHEDULE



LIGHTING LEGEND

	EXISTING LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON EX. UTILITY POLE
	PROPOSED LUMINAIRE ON PROP. UTILITY POLE
	EXISTING DELDOT LIGHT STD.
	PROPOSED DELDOT LIGHT STD.
IW X	EXISTING JUNCTION WELL IDENTIFIER
JW X	PROPOSED JUNCTION WELL IDENTIFIER
LCR X	EXISTING LIGHTING CONDUIT RUN IDENTIFIER
LCR X	PROP. LIGHTING CONDUIT RUN INDENTIFIER
L X	EXISTING LUMINAIRE IDENTIFIER
L X	PROPOSED LUMINAIRE IDENTIFIER
EX PL	EXISTING PRIVATE LIGHT (DO NOT DISTURB)

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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: TLord OFFICE LOCATION: Newark, Delaware

Pennoni

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	LIGHTING PLAN	LI-04
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SECTION PAI
					CHECKED BY: P. HORSEY		SHEET NO. 50

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LIMITS OF PAVING- MATCH EXISTING STRIPING (TO BE INSTALLED IN ADVANCE VIA CONTRACT T201706102)

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	815 LF
(B)	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	210 LF
(C)	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817013)	188 LF
(D)	5" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	663 LF
(E)	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	112 LF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	32 SF
(K)	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	2 EA

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-deldot.tbl
FILE NAME: ...\CTDGN\PS&E PLANS\SS01.dgn | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 8:45:57 AM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: TLord OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

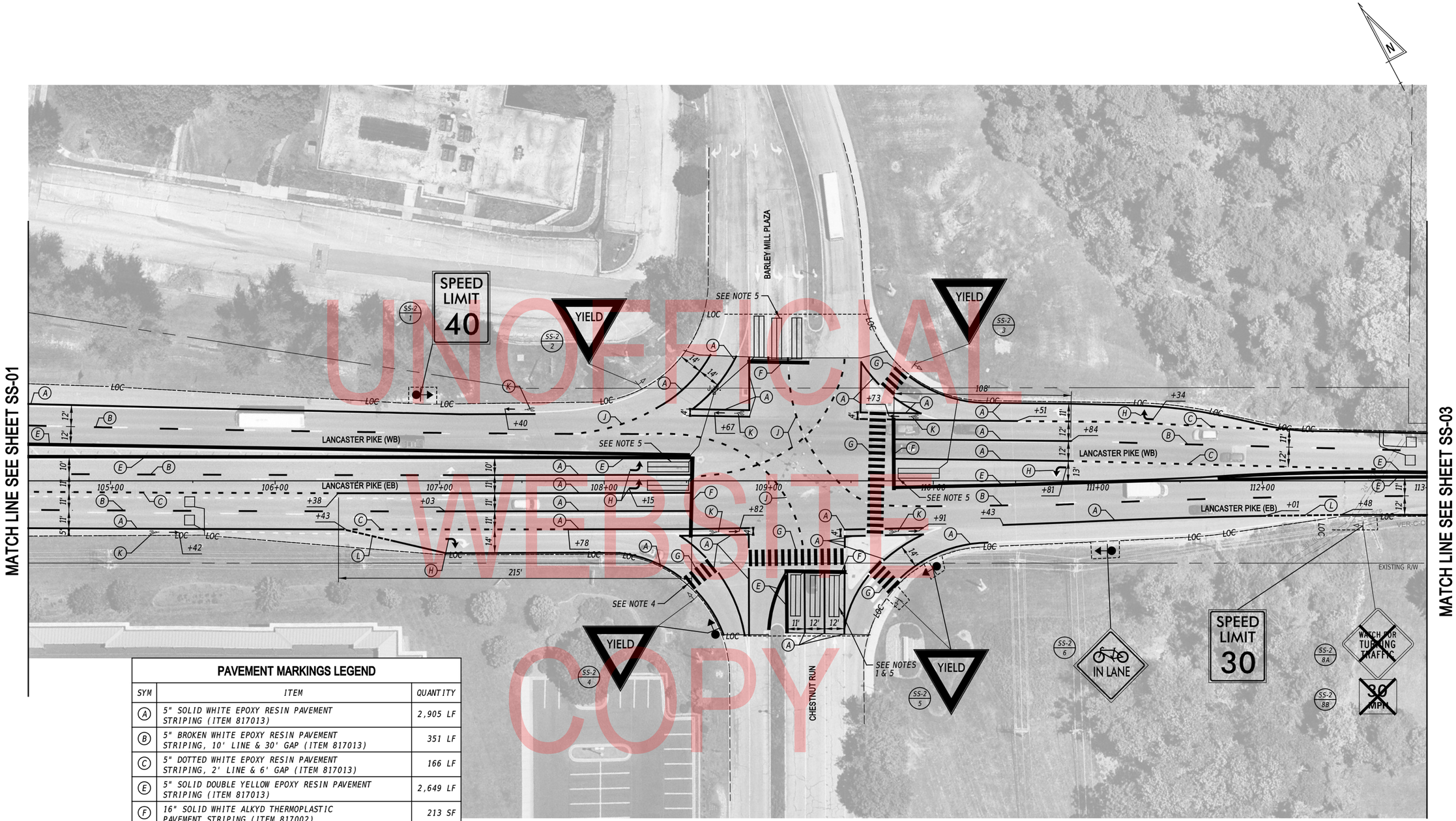
SCALE
0 30 60 90
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-01
SECTION
PAI
SHEET NO.
51



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PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	2,905 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	351 LF
C	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817013)	166 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	2,649 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	213 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	960 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	80 SF
J	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 5" DOTTED, 2' LINE AND 6' GAP (ITEM 817005)	110 LF
K	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	6 EA
L	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 2' GAP (ITEM 817013)	40 LF

NOTES:

1. THE CONTRACTOR SHALL REPLACE EXISTING TUBULAR MARKERS IN KIND ALONG THE MEDIAN OF LANCASTER PIKE AND THROUGH LANE OF THE CHESTNUT RUN PLAZA APPROACH.
2. THE CONTRACTOR SHALL STAY WITHIN THE GUARDRAIL ON LANCASTER PIKE BETWEEN STATION 110+50 AND STATION 112+70.
3. EXISTING GUARDRAIL TO BE RECONSTRUCTED AS PART OF T201801102: CHESTNUT RUN PLAZA PEDESTRIAN IMPROVEMENTS PROJECT.
4. MARKED CROSSWALKS TO BE INSTALLED ALONG THE CHESTNUT RUN APPROACH PER CONTRACT T201801102. THE CONTRACTOR SHALL REPLACE THE EXISTING CROSSWALK PAVEMENT MARKINGS.
5. SIGNAL DETECTION LOOPS HAVE BEEN SHOWN ON THE SIGNING AND STRIPING PLANS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS FROM SIGNAL PLANS. IF SIGNAL PLANS ARE NOT AVAILABLE, THE CONTRACTOR SHALL COORDINATE WITH THE TRAFFIC CONSTRUCTION INSPECTOR.
6. PROPOSED IMPROVEMENTS AT CHESTNUT RUN INTERSECTION ARE TO BE DONE UNDER EXISTING SIGNAL AGREEMENT FOR SIGNAL PERMIT NUMBER N041P.

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	T201601103	BRIDGE NO.	N/A
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

SIGNING, STRIPING AND CONDUIT PLAN

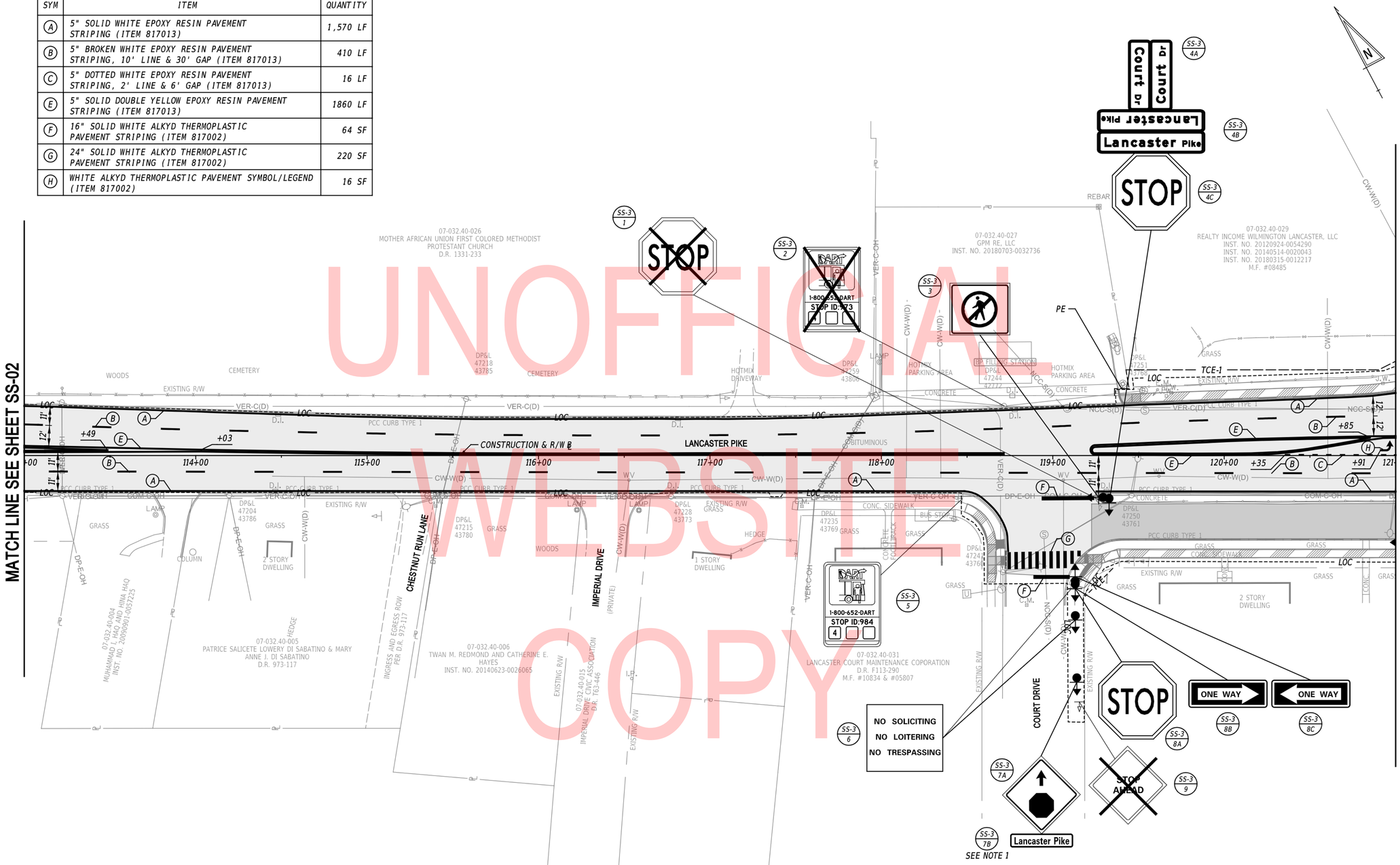
SS-02

SECTION: PAI

SHEET NO. 52

PENNONI ASSOCIATES INC. ...\CTDGN\PS&E PLANS\SS02.dgn
FILE NAME: MicroStation V8i
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/31/2020 @ 8:46:07 AM
USER NAME: TLord OFFICE LOCATION: Newark, Delaware

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,570 LF
(B)	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	410 LF
(C)	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817013)	16 LF
(E)	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1860 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	64 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	220 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	16 SF



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NOTES:

1. SIGN ASSEMBLY 7 TO BE PLACED IN GRASS BUFFER 100' FROM STOP BAR AT LANCASTER PIKE.
2. EXISTING GUARDRAIL TO BE RECONSTRUCTED AS PART OF T201801102: CHESTNUT RUN PLAZA PEDESTRIAN IMPROVEMENTS PROJECT.

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni.ctb
FILE NAME: ...\CTDGN\PS&E PLANS\SS03.dgn	PLOT DRIVER: PENNONI.NWK.DELDOT-FULL-PDF.PLT.CFG
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS	USER NAME: SNickel OFFICE LOCATION: Newark, Delaware

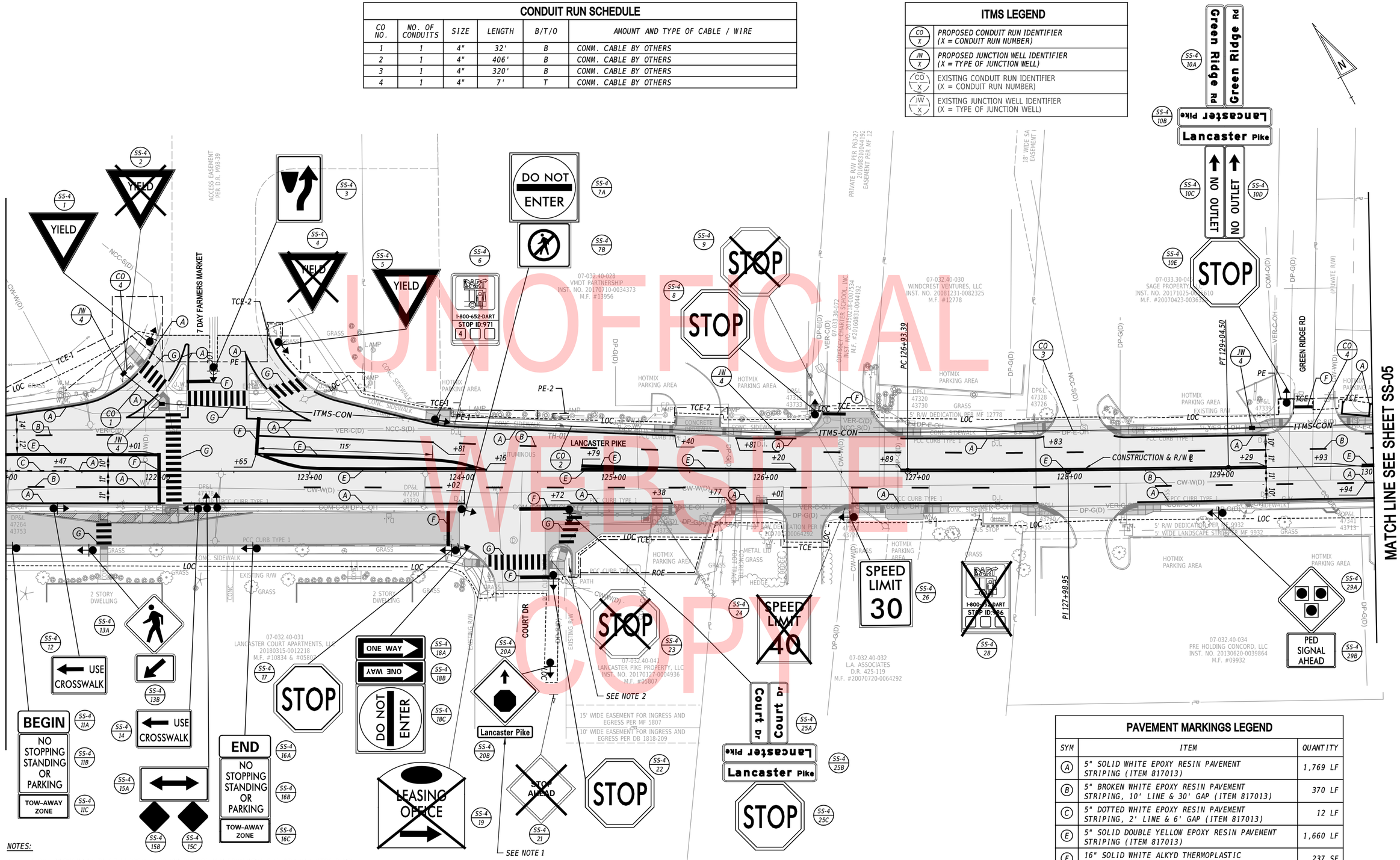
ADDENDA / REVISIONS		SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	SIGNING, STRIPING AND CONDUIT PLAN	SS-03 SECTION
		0 30 60 90 FEET		T201601103	DESIGNED BY: Z. BRANDER		PAI SHEET NO.
				COUNTY NEW CASTLE	CHECKED BY: P. HORSEY		53

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
1	1	4"	32'	B	COMM. CABLE BY OTHERS
2	1	4"	406'	B	COMM. CABLE BY OTHERS
3	1	4"	320'	B	COMM. CABLE BY OTHERS
4	1	4"	7'	T	COMM. CABLE BY OTHERS

ITMS LEGEND

CO X	PROPOSED CONDUIT RUN IDENTIFIER (X = CONDUIT RUN NUMBER)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (X = TYPE OF JUNCTION WELL)
CO X	EXISTING CONDUIT RUN IDENTIFIER (X = CONDUIT RUN NUMBER)
JW X	EXISTING JUNCTION WELL IDENTIFIER (X = TYPE OF JUNCTION WELL)



PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,769 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	370 LF
C	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817013)	12 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,660 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	237 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,076 SF

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PENNONI ASSOCIATES INC. | PEN TABLE: pennoni-ctdot.tbl
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickol | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-04
SECTION
PAI
SHEET NO.
54

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
4	1	4"	285'	B	COMM. CABLE BY OTHERS
5	1	4"	303'	B	COMM. CABLE BY OTHERS
6	1	4"	250'	T	COMM. CABLE BY OTHERS
7*	1	4"	345'	-	COMM. CABLE BY OTHERS

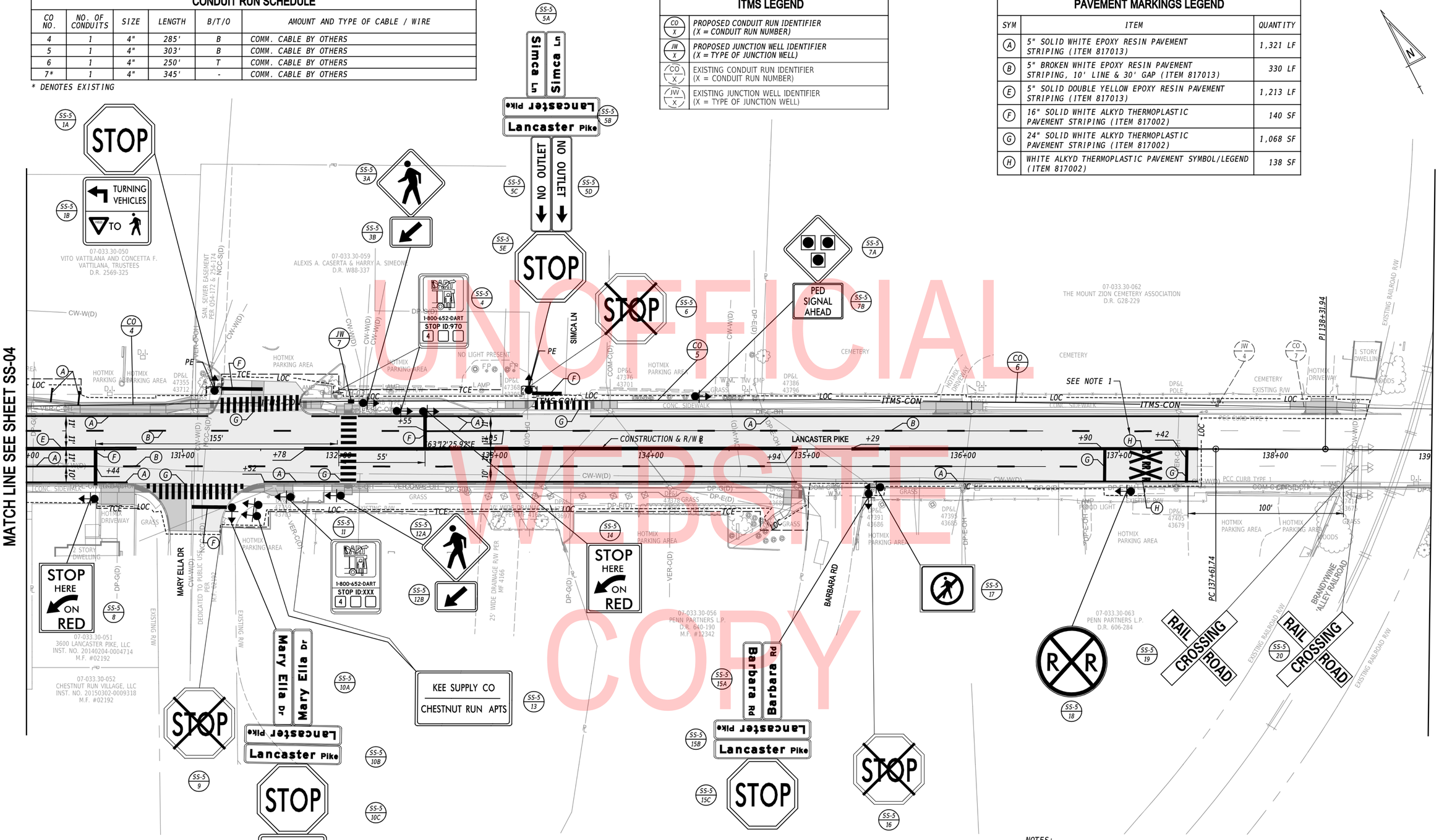
* DENOTES EXISTING

ITMS LEGEND

CO X	PROPOSED CONDUIT RUN IDENTIFIER (X = CONDUIT RUN NUMBER)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (X = TYPE OF JUNCTION WELL)
CO X	EXISTING CONDUIT RUN IDENTIFIER (X = CONDUIT RUN NUMBER)
JW X	EXISTING JUNCTION WELL IDENTIFIER (X = TYPE OF JUNCTION WELL)

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,321 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	330 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,213 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	140 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	1,068 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	138 SF



NOTES:

1. SEE MUTCD FIGURE 8B-7(A) FOR GRADE CROSSING PAVEMENT MARKING DETAIL.
2. ITMS CONDUIT RUN 7 AND JUNCTION WELLS TO BE INSTALLED IN ADVANCE VIA CONTRACT T201500514.

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MICROSTATION WORKSPACE:	DELDOT-V8i-OPENROADS
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PLOT DRIVER:	
DATE PLOTTED:	12/1/2020 @ 8:46:24 AM
USER NAME:	TLord
OFFICE LOCATION:	Newark, Delaware

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	T201601103
COUNTY	NEW CASTLE
BRIDGE NO.	N/A
DESIGNED BY:	Z. BRANDER
CHECKED BY:	P. HORSEY

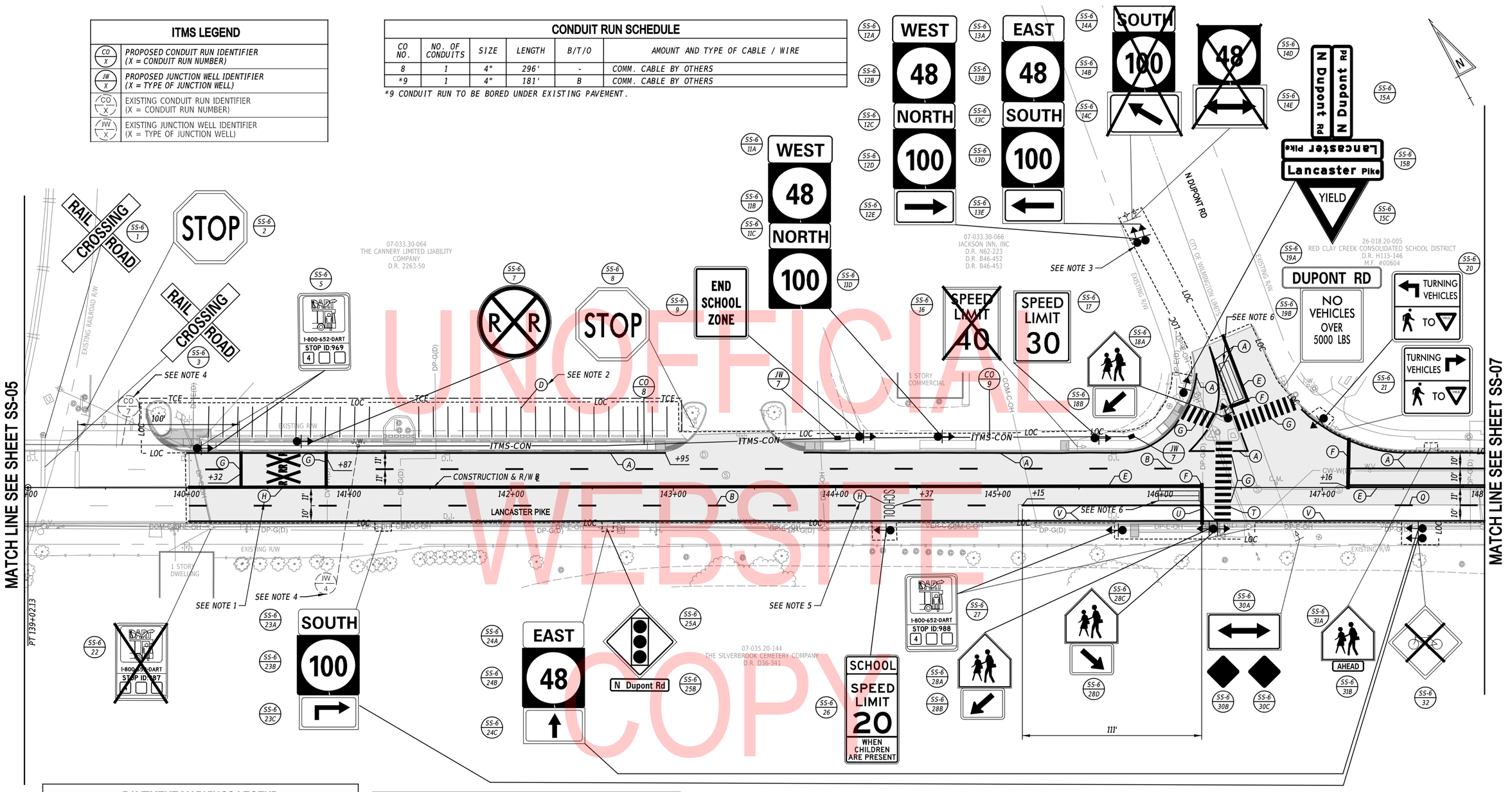
SIGNING, STRIPING AND CONDUIT PLAN

SS-05	
SECTION	PAI
SHEET NO.	55

ITMS LEGEND	
CO X	PROPOSED CONDUIT RUN IDENTIFIER (X = CONDUIT RUN NUMBER)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (X = TYPE OF JUNCTION WELL)
CO X	EXISTING CONDUIT RUN IDENTIFIER (X = CONDUIT RUN NUMBER)
JW X	EXISTING JUNCTION WELL IDENTIFIER (X = TYPE OF JUNCTION WELL)

CONDUIT RUN SCHEDULE					
CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
8	1	4"	296'	-	COMM. CABLE BY OTHERS
*9	1	4"	181'	B	COMM. CABLE BY OTHERS

*9 CONDUIT RUN TO BE BORED UNDER EXISTING PAVEMENT.



UNOFFICIAL WEBSITE COPY

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,401 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	268 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,500 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	70 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	588 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	292 SF

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
Q	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 5" (ITEM 817019)	22 LF
T	RETROFLECTIVE PREFORMED PATTERENED MARKINGS, 24" WHITE (ITEM 817012)	60 SF
U	RETROFLECTIVE PREFORMED PATTERENED MARKINGS, 16" WHITE (ITEM 817012)	16 SF
V	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING,(ITEM 817013) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 3" (ITEM 817018)	398 LF

NOTES:

1. SEE MUTCD FIGURE 8B-7(A) FOR GRADE CROSSING PAVEMENT MARKING DETAIL.
2. RESTRIPE PARKING LOT LINES TO EXTEND EACH LINE 5' IN CONJUNCTION WITH PROPOSED RELOCATION OF PARKING BUMPERS. 30 PARKING STALLS IMPACTED.
3. REMOVE EXISTING SIGNS AND POSTS AT THIS LOCATION AND REPLACE WITH NEW POSTS AND SIGNS AS SHOWN IN SAME LOCATION AS EXISTING SIGNS.
4. ITMS CONDUIT RUN 7 AND JUNCTION WELLS TO BE INSTALLED IN ADVANCE VIA CONTRACT T201500514.
5. SCHOOL PAVEMENT MARKING SYMBOL SHALL CONSIST OF 10 FEET HIGH BY 32 INCH WIDE LETTERS, SEPARATED BY 8 INCH SPACES, CENTERED ON THE TWO TRAVEL LANES. SEE DEMUTCD FIGURE 7C-1.
6. SIGNAL DETECTION LOOPS HAVE BEEN SHOWN ON THE SIGNING AND STRIPING PLANS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS FROM SIGNAL PLANS. IF SIGNAL PLANS ARE NOT AVAILABLE, THE CONTRACTOR SHALL COORDINATE WITH THE TRAFFIC CONSTRUCTION INSPECTOR.

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MICROSTATION WORKSPACE:	USER NAME:	TLord
	OFFICE LOCATION:	Newark, Delaware

ADDENDA / REVISIONS

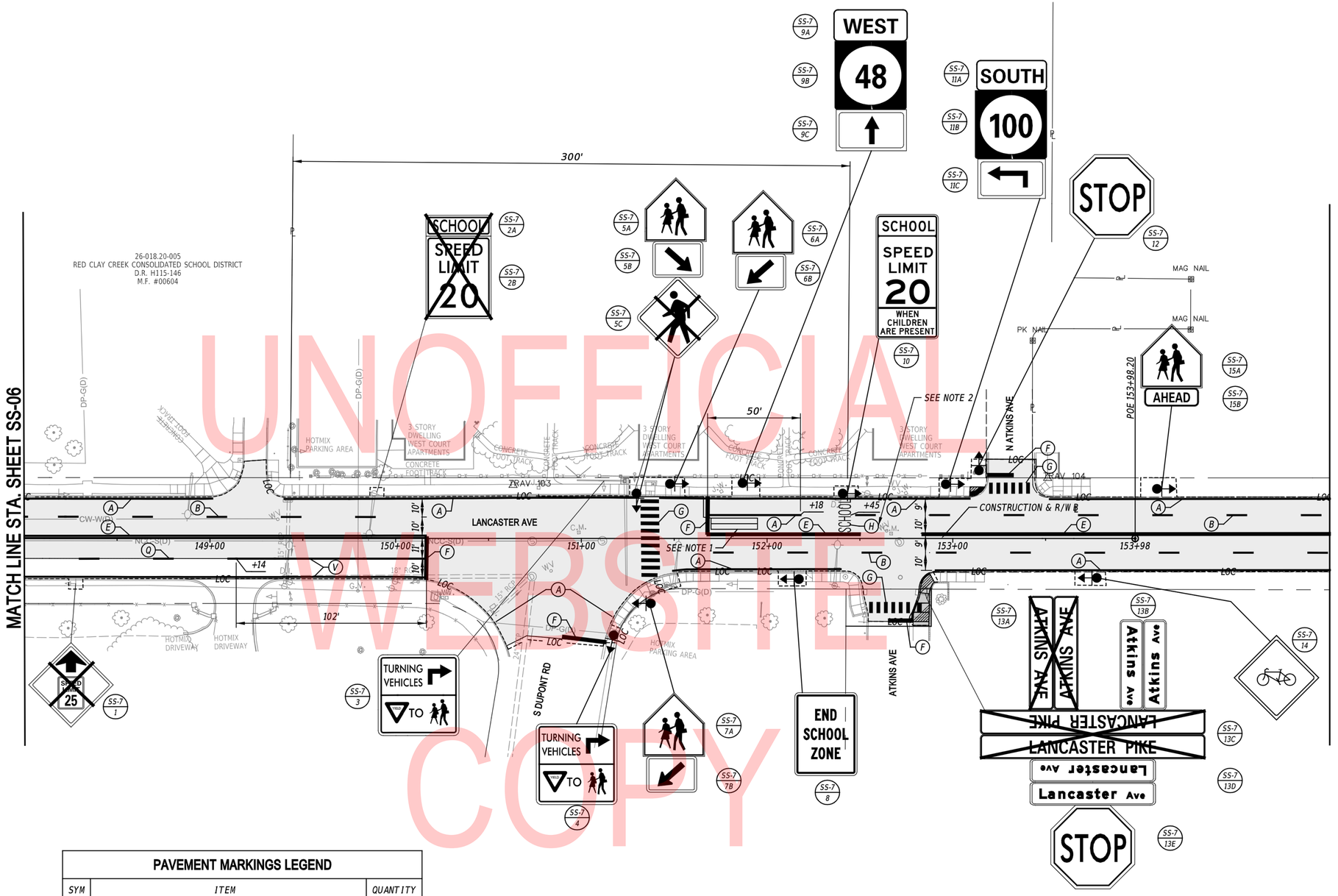
SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-06	
SECTION	PAI
SHEET NO.	56



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WEBSITE
COPY

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1067 LF
(B)	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	216 LF
(E)	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,036 LF
(F)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	115 SF
(G)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	364 SF
(H)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	94 SF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
(Q)	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 5" (ITEM 817019)	30 LF
(V)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING,(ITEM 817013) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 3" (ITEM 817018)	319 LF

NOTES:

1. *SIGNAL DETECTION LOOPS HAVE BEEN SHOWN ON THE SIGNING AND STRIPING PLANS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS FROM SIGNAL PLANS. IF SIGNAL PLANS ARE NOT AVAILABLE, THE CONTRACTOR SHALL COORDINATE WITH THE TRAFFIC CONSTRUCTION INSPECTOR.*
2. *SCHOOL PAVEMENT MARKING SYMBOL SHALL CONSIST OF 10 FEET HIGH BY 32 INCH WIDE LETTERS, SEPARATED BY 8 INCH SPACES, CENTERED ON THE TWO TRAVEL LANES. SEE DEMUTCD FIGURE 7C-1.*

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni.ctb
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: TLord | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS			

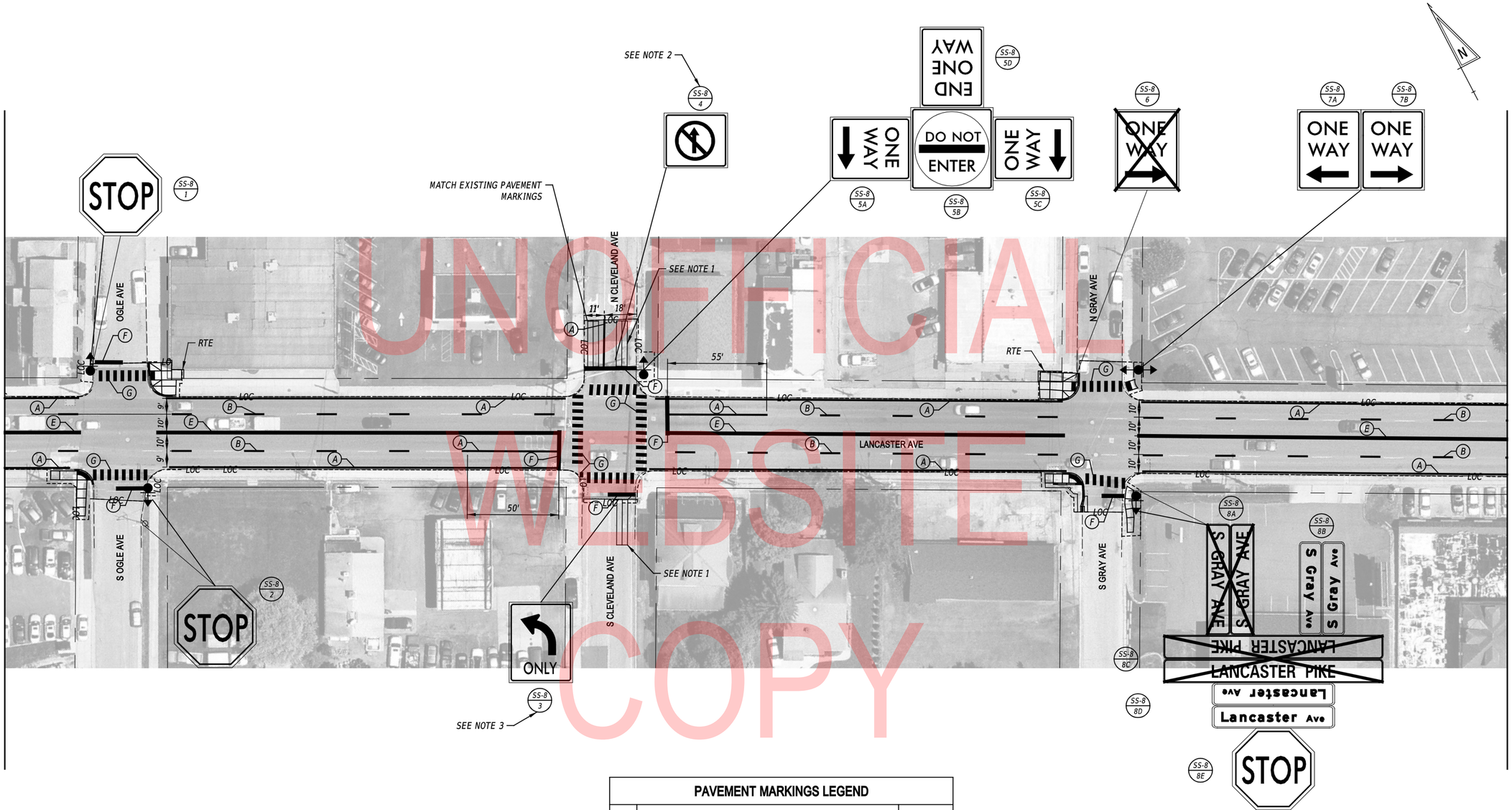
SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-07
SECTION
PAI
SHEET NO.
57



UNOFFICIAL WEBSITE COPY

PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,496 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	312 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,370 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	162 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	756 SF

NOTES:

1. SIGNAL DETECTION LOOPS HAVE BEEN SHOWN ON THE SIGNING AND STRIPING PLANS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS FROM SIGNAL PLANS. IF SIGNAL PLANS ARE NOT AVAILABLE, THE CONTRACTOR SHALL COORDINATE WITH THE TRAFFIC CONSTRUCTION INSPECTOR.
2. SIGN 4 SHALL BE INSTALLED ON THE EXISTING SIGNAL MAST ARM FACING THE NORTHBOUND LANES.
3. SIGN 3 SHALL BE INSTALLED ON THE EXISTING SIGNAL MAST ARM FACING THE SOUTHBOUND TURN LANE.

PENNONI ASSOCIATES INC.
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
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USER NAME: TLord OFFICE LOCATION: Newark, Delaware

Pennoni

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

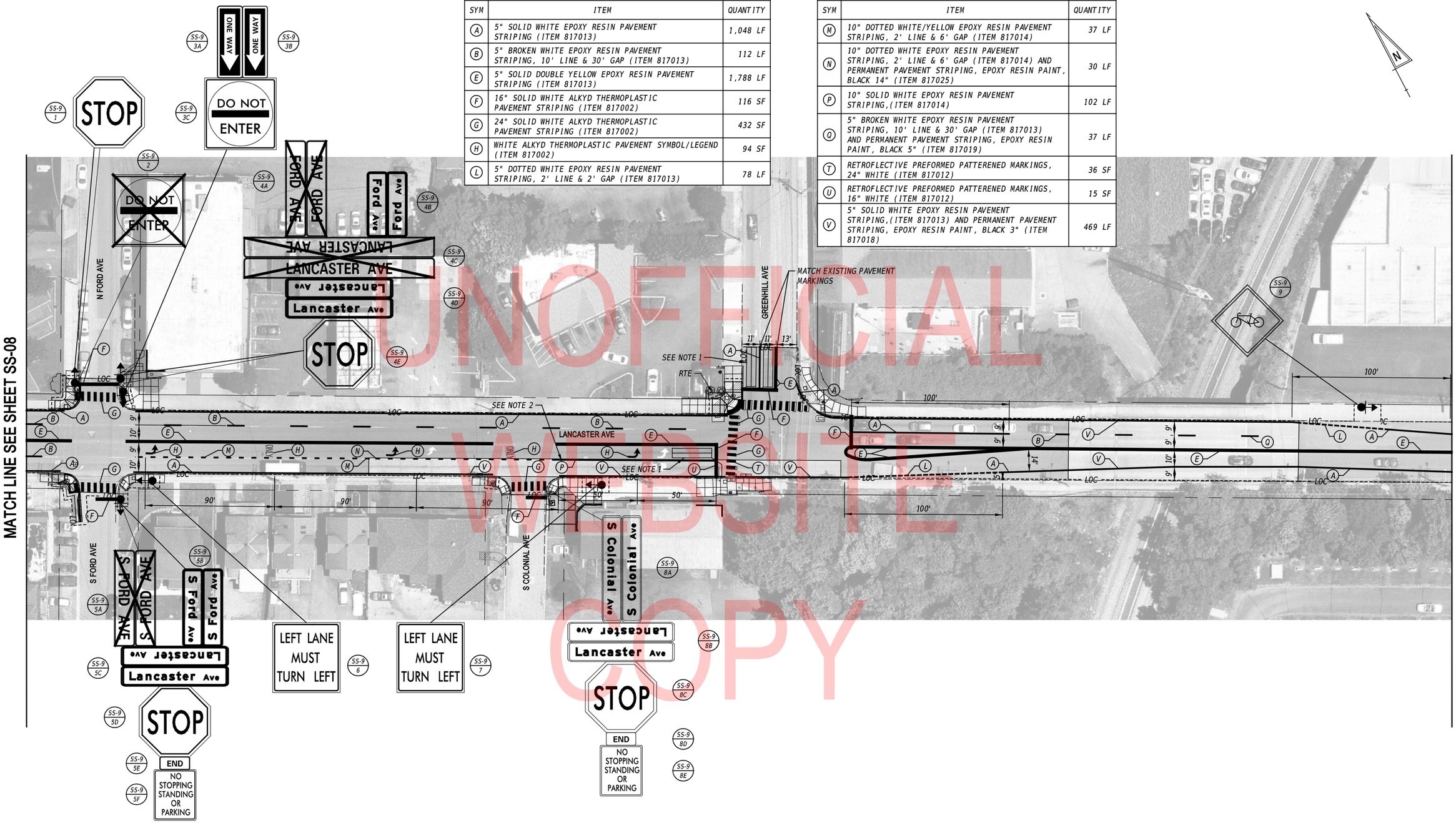
SS-08
SECTION PAI
SHEET NO. 58

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,048 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	112 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,788 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	116 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	432 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	94 SF
L	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 2' GAP (ITEM 817013)	78 LF

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
M	10" DOTTED WHITE/YELLOW EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817014)	37 LF
N	10" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 817014) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 14" (ITEM 817025)	30 LF
P	10" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING,(ITEM 817014)	102 LF
Q	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 5" (ITEM 817019)	37 LF
T	RETROFLECTIVE PREFORMED PATTERENED MARKINGS, 24" WHITE (ITEM 817012)	36 SF
U	RETROFLECTIVE PREFORMED PATTERENED MARKINGS, 16" WHITE (ITEM 817012)	15 SF
V	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING,(ITEM 817013) AND PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK 3" (ITEM 817018)	469 LF



NOTES:

1. SIGNAL DETECTION LOOPS HAVE BEEN SHOWN ON THE SIGNING AND STRIPING PLANS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS FROM SIGNAL PLANS. IF SIGNAL PLANS ARE NOT AVAILABLE, THE CONTRACTOR SHALL COORDINATE WITH THE TRAFFIC CONSTRUCTION INSPECTOR.
2. CONTRACTOR TO INSTALL PAVEMENT MARKING TYPE "P" ON P.C.C. SURFACE ONLY.

UNOFFICIAL WEBSITE COPY

PENNONI ASSOCIATES INC. | PEN TABLE: pennoni.ctb
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MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: SNickel | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	SIGNING, STRIPING AND CONDUIT PLAN	SS-09 SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 59
					CHECKED BY: P. HORSEY		

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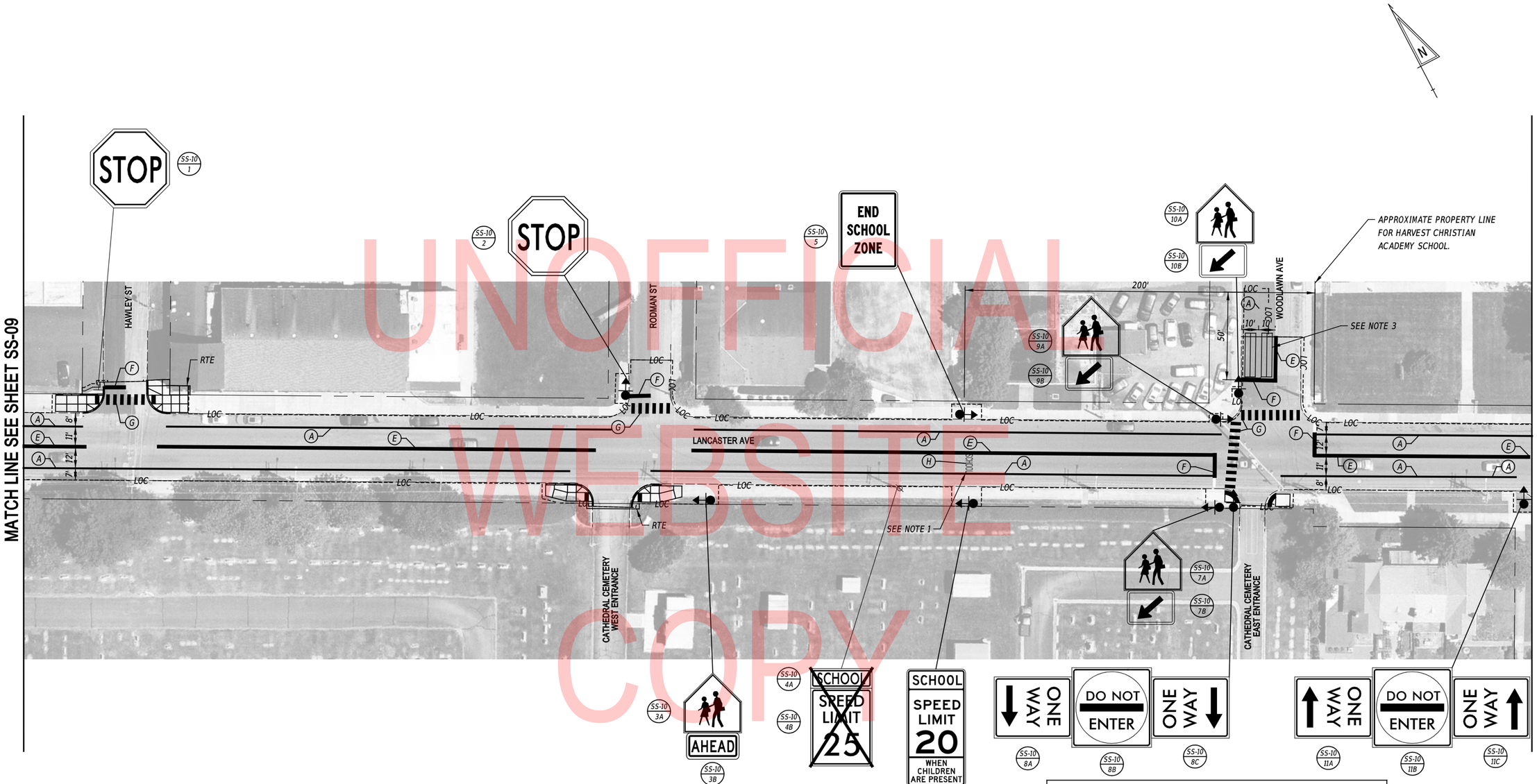

NOTES:

1. *SCHOOL PAVEMENT MARKING SYMBOL SHALL CONSIST OF 16 INCH HIGH BY 96 INCH WIDE LETTERS, SEPARATED BY 4 INCH SPACES, CENTERED ON THE 11-FOOT TRAVEL LANE. SEE DEMUTCD FIGURE 7C-1.*
2. *CONTRACTOR SHALL OFFSET SIGN ASSEMBLIES 7 AND 8 SUCH THAT 7 DOES NOT OBSTRUCT 8.*
3. *SIGNAL DETECTION LOOPS HAVE BEEN SHOWN ON THE SIGNING AND STRIPING PLANS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS FROM SIGNAL PLANS. IF SIGNAL PLANS ARE NOT AVAILABLE, THE CONTRACTOR SHALL COORDINATE WITH THE TRAFFIC CONSTRUCTION INSPECTOR.*

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,527 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,462 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	84 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	409 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	35 SF

PENNONI ASSOCIATES INC.	PEN TABLE: pennoni-default.tbl
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ADDENDA / REVISIONS	

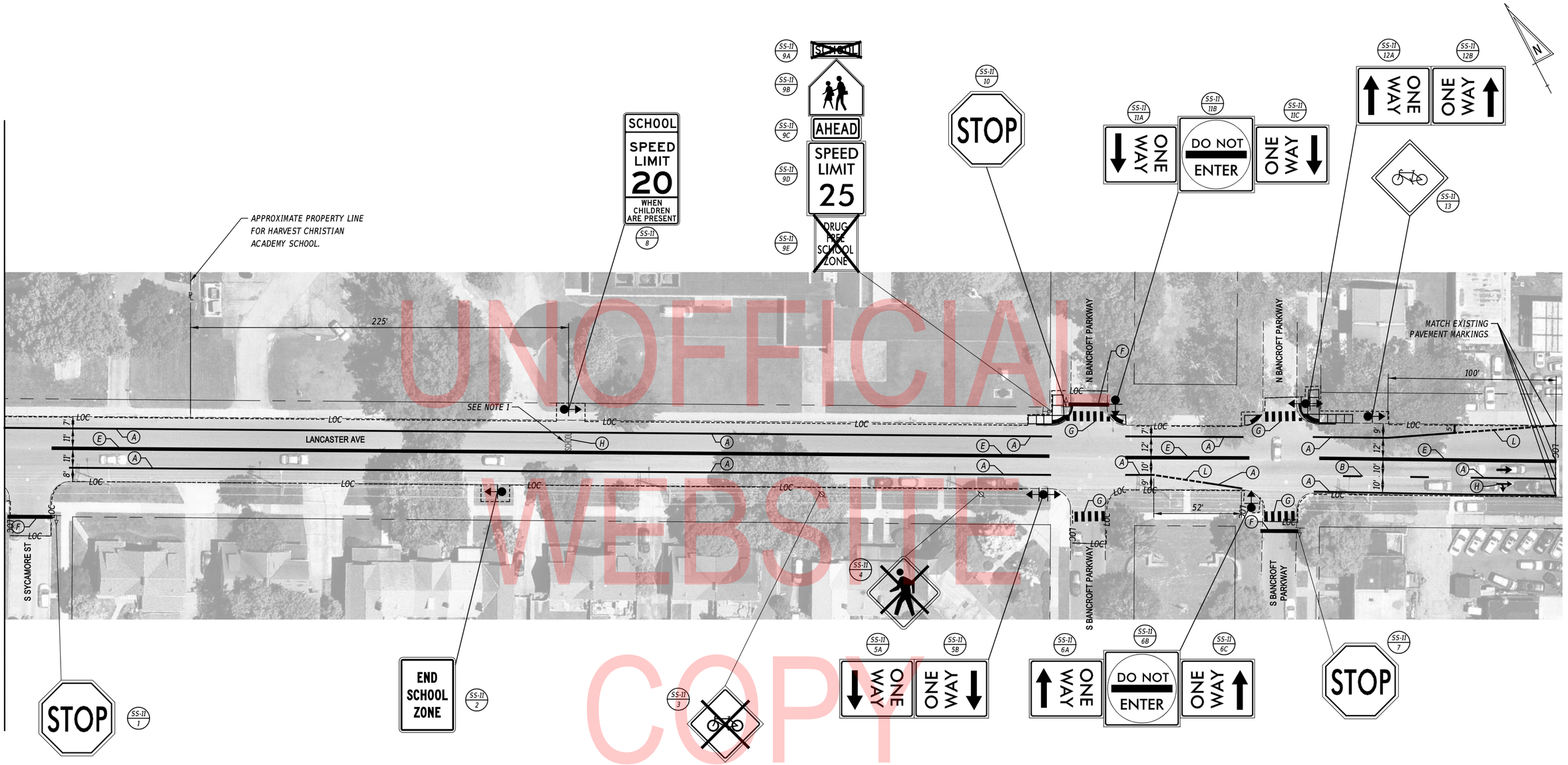
SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO. N/A
T201601103	DESIGNED BY: Z. BRANDER
COUNTY	CHECKED BY: P. HORSEY
NEW CASTLE	

SIGNING, STRIPING AND CONDUIT PLAN

SS-10
SECTION
PAI
SHEET NO.
60



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PAVEMENT MARKINGS LEGEND		
SYM	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,592 LF
B	5" BROKEN WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 817013)	23 LF
E	5" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 817013)	1,612 LF
F	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	90 SF
G	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 817002)	276 SF
H	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL/LEGEND (ITEM 817002)	68 SF
L	5" DOTTED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 2' GAP (ITEM 817013)	45 LF

NOTES:

1. SCHOOL PAVEMENT MARKING SYMBOL SHALL CONSIST OF 16 INCH HIGH BY 96 INCH WIDE LETTERS, SEPARATED BY 4 INCH SPACES, CENTERED ON THE 11-FOOT TRAVEL LANE. SEE DEMUTCD FIGURE 7C-1.

PENNONI ASSOCIATES INC.
FILE NAME: ...\CTLDGN\PS&E PLANS\SS11.dgn
MICROSTATION VERSION: MicroStation V8i
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni-deldot.tbl
PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
DATE PLOTTED: 1/31/2020 @ 8:47:07 AM
USER NAME: TLord OFFICE LOCATION: Newark, Delaware

Pennoni

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201601103	DESIGNED BY:	Z. BRANDER
COUNTY	CHECKED BY:	P. HORSEY
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-11
SECTION PAI
SHEET NO. 61

PERMANENT SIGN SCHEDULE

SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	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	Code X11 12' Post (W/ Basepost) (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	REMARKS
								SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
SS-1	1	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36		REMAIN										
SS-1	2A	W6-2(36)	1	DIVIDED HIGHWAY ENDS (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-1	2B	W6-1(36)	1	DIVIDED HIGHWAY (Symbol) - 36x36	36	36	9.0	ADD TO ASSEMBLY		1								
SS-2	1	R2-1-40(24)	1	SPEED LIMIT (40 MPH - 24x30)	24	30	5.0	NEW		1				SOIL	1			
SS-2	2	R1-2(36)	1	YIELD	36	36		REMAIN										
SS-2	3	R1-2(36)	1	YIELD	36	36		REMAIN										
SS-2	4	R1-2(36)	1	YIELD	36	36	3.9	RENEW	1	1				SOIL	1			
SS-2	5	R1-2(36)	1	YIELD	36	36	3.9	RENEW	1	1				SOIL	1			
SS-2	6	W11-1-DE(36)	1	BICYCLE (Symbol) IN LANE - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-2	7	R2-1-30(24)	1	SPEED LIMIT (30 MPH - 24x30)	24	30	5.0	ADD TO ASSEMBLY		1								
SS-2	8A	W21-9-DE(36)	1	WATCH FOR TURNING TRAFFIC - 36x36	36	36		REMOVE	1									
SS-2	8B	W13-1P-30(18)	1	ADVISORY SPEED (30 MPH) 18x18	18	18		REMOVE	1									
SS-3	1	R1-1(36)	1	STOP	36	36		REMOVE	1									
SS-3	2	D4-3-DE	1	BUS STOP (DART)	12	18		REMOVE	1									BUS ROUTE 4
SS-3	3	R9-3(18)	1	NO PEDESTRIAN CROSSING (Symbol) - 18x18	18	18	2.3	NEW		1				EX. CONCRETE	1	1		
SS-3	4A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	18	12	3.0	ADD TO ASSEMBLY		2								Court Dr (Highway C, Text Size 6"/4")
SS-3	4B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-3	4C	R1-1(36)	1	STOP	36	36	7.5	NEW		1				EX. CONCRETE	1	1		
SS-3	5	D4-3-DE	1	BUS STOP (DART)	12	18		REMAIN										BUS ROUTE 4
SS-3	6	N/A	1	NO SOLICITING/LOITERING/TRESPASSING				REPOSITION	1	1								
SS-3	7A	W3-1(36)	1	STOP AHEAD (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-3	7B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9	ADD TO ASSEMBLY		1								Lancaster Pike (Highway C, Text Size 5"/3.75")
SS-3	8A	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-3	8B	R6-2_R(24)	1	ONE WAY (RIGHT ARROW) - 24x30	24	30	5.0	ADD TO ASSEMBLY		1								
SS-3	8C	R6-2_L(24)	1	ONE WAY (LEFT ARROW) - 24x30	24	30	5.0	ADD TO ASSEMBLY		1								
SS-3	9	W3-1(36)	1	STOP AHEAD (Symbol) - 36x36	36	36		REMOVE	1									
SS-4	1	R1-2(36)	1	YIELD	36	36	3.9	NEW		1				SOIL	1			
SS-4	2	R1-2(36)	1	YIELD	36	36		REMOVE	1									
SS-4	3	R4-7c	1	NARROW KEEP RIGHT	18	30	3.8	NEW		1				EX. CONCRETE	1	1		
SS-4	4	R1-2(36)	1	YIELD	36	36		REMOVE	1									
SS-4	5	R1-2(36)	1	YIELD	36	36	3.9	NEW		1				SOIL	1			
SS-4	6	D4-3-DE	1	BUS STOP (DART)	12	18		RENEW	1	1				EX. CONCRETE	1	1		STOP ID: 971 BUS ROUTE 4 FURNISHED BY DART
SS-4	7A	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				EX. CONCRETE	1	1		
SS-4	7B	R9-3(18)	1	NO PEDESTRIAN CROSSING (Symbol) - 18x18	18	18	2.3	ADD TO ASSEMBLY		1								
SS-4	8	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-4	9	R1-1(36)	1	STOP	36	36		REMOVE	1									
SS-4	10A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	36	12	6.0	ADD TO ASSEMBLY		2								Green Ridge Rd (Highway C, Text Size 6"/4")
SS-4	10B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-4	10C	W14-2a_L	1	NO OUTLET (Arrow left)	36	8	2.0	ADD TO ASSEMBLY		1								
SS-4	10D	W14-2a_R	1	NO OUTLET (Arrow right)	36	8	2.0	ADD TO ASSEMBLY		1								
SS-4	10E	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-4	11A	R3-9cP	1	BEGIN (plaque)	30	12	2.5	NEW		1				SOIL	1			
SS-4	11B	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18	1.5	ADD TO ASSEMBLY		1								
SS-4	11C	R7-201P_R	1	TOW AWAY ZONE (plaque - red)	12	6	0.5	ADD TO ASSEMBLY		1								
SS-4	12	R9-3bP_L	1	<-- USE CROSSWALK (plaque)	18	12	1.5	NEW		1				EX. CONCRETE	1	1		
SS-4	13A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-4	13B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-4	14	R9-3bP_L	1	<-- USE CROSSWALK (plaque)	18	12	1.5	NEW		1				EX. CONCRETE	1	1		
SS-4	15A	W1-7(48)	1	TWO DIRECTIONAL LARGE ARROW - 48x24	48	24	8.0				NEW		8.0	EX. CONCRETE	2	2		
SS-4	15B	OM4-3	1	END OF ROAD OBJECT MARKER	18	18	2.3				ADD TO ASSEMBLY		2.3					
SS-4	15C	OM4-3	1	END OF ROAD OBJECT MARKER	18	18	2.3				ADD TO ASSEMBLY		2.3					
SS-4	16A	R3-9dP	1	END (plaque)	30	12	2.5	NEW		1				SOIL	1			
SS-4	16B	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24	3.0	ADD TO ASSEMBLY		1								
SS-4	16C	R7-201P_R	1	TOW AWAY ZONE (plaque - red)	12	6	0.5	ADD TO ASSEMBLY		1								
SS-4	17	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-4	18A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0	ADD TO ASSEMBLY		1								
SS-4	18B	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0	ADD TO ASSEMBLY		1								
SS-4	18C	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-4	19	N/A	1	LEASING OFFICE				REMOVE	1									
SS-4	20A	W3-1(36)	1	STOP AHEAD (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-4	20B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9	ADD TO ASSEMBLY		1								Lancaster Pike (Highway C, Text Size 5"/3.75")
SS-4	21	W3-1(36)	1	STOP AHEAD (Symbol) - 36x36	36	36		REMOVE	1									
SS-4	22	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-4	23	R1-1(36)	1	STOP	36	36		REMOVE	1									
SS-4	24	R2-1-40(30)	1	SPEED LIMIT (40 MPH - 30x36)	30	36		REMOVE	1									
SS-4	25A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	18	12	3.0	ADD TO ASSEMBLY		2								Court Dr (Highway C, Text Size 6"/4")
SS-4	25B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-4	25C	R1-1(36)	1	STOP	36	36	7.5	NEW		1				NEW CONCRETE	1	1		
SS-4	26	R2-1-30(30)	1	SPEED LIMIT (30 MPH - 30x36)	30	36	7.5	NEW		1				SOIL	1			
SS-4	28	D4-3-DE	1	BUS STOP (DART)	12	18		REMOVE	1									BUS ROUTE 4
SS-4	29A	W3-3-DE1(36)	1	PEDESTRIAN HYBRID BEACON AHEAD (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-4	29B	N/A	1	PED SIGNAL AHEAD (PLAQUE)	24	30	5.0	ADD TO ASSEMBLY		1								

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PENNONI ASSOCIATES INC. ...\CTDOT\PS&E PLANS\SS12.dgn | FILE NAME: | MICROSTATION VERSION: MicroStation V8i | MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | PEN TABLE: pennoni-deldot.tbl | PLOT DRIVER: PENNONI-NW-DELDOT-FULL-PDF.PLTCFG | DATE PLOTTED: 1/31/2020 @ 8:47:16 AM | USER NAME: TLord | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201601103	DESIGNED BY: Z. BRANDER		PAI
				COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
				NEW CASTLE			62

PERMANENT SIGN SCHEDULE

SHEET NO.	PLAN IDENTIFIER	CODE	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	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	Code X11 12' Post (W/ Basepost) (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	REMARKS
								SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
SS-5	1A	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-5	1B	R10-15	1	TURNING VEHICLES YIELD TO PEDS	30	30	6.3	ADD TO ASSEMBLY		1								Left Arrow
SS-5	3A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-5	3B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-5	4	D4-3-DE	1	BUS STOP (DART)	12	18		REPOSITION	1	1				SOIL	1			STOP ID: 970 BUS ROUTE 4 FURNISHED BY DART
SS-5	5A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Simca Ln (Highway C, Text Size 6"/4")
SS-5	5B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	36	12	6.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-5	5C	W14-2a_L	1	NO OUTLET (Arrow left)	36	8	2.0	ADD TO ASSEMBLY		1								
SS-5	5D	W14-2a_R	1	NO OUTLET (Arrow right)	36	8	2.0	ADD TO ASSEMBLY		1								
SS-5	5E	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-5	6	R1-1(36)	1	STOP	36	36		REMOVE	1									
SS-5	7A	W3-3-DE1(36)	1	PEDESTRIAN HYBRID BEACON AHEAD (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-5	7B	N/A	1	PED SIGNAL AHEAD	24	30	5.0	ADD TO ASSEMBLY		1								PED SIGNAL AHEAD Highway C, Text Size 6", No Kerning
SS-5	8	R10-6(24)	1	STOP HERE ON RED (Straight Arrow) - 24x36	24	36	6.0	NEW		1				SOIL	1			
SS-5	9	R1-1(36)	1	STOP	36	36		REMOVE	1									
SS-5	10A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Mary Ella Dr (Highway C, Text Size 6"/4")
SS-5	10B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-5	10C	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-5	10D	R10-15	1	TURNING VEHICLES YIELD TO PEDS	30	30	6.3	ADD TO ASSEMBLY		1								Right Arrow
SS-5	11	D4-3-DE	1	BUS STOP (DART)	12	18		NEW		1				SOIL	1			STOP ID: XXX BUS ROUTE 4 FURNISHED BY DART
SS-5	12A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-5	12B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-5	13	N/A	1	KEE SUPPLY CO	96	96					REPOSITION	64.0	64.0					KEE SUPPLY CO
SS-5	14	R10-6(24)	1	STOP HERE ON RED (Straight Arrow) - 24x36	24	36	6.0	NEW		1				SOIL	1			
SS-5	15A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12	4.0	ADD TO ASSEMBLY		2								Barbara Rd (Highway C, Text Size 6"/4")
SS-5	15B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-5	15C	R1-1(36)	1	STOP	36	36	7.5	NEW		1				SOIL	1			
SS-5	16	R1-1(36)	1	STOP	36	36		REMOVE	1									
SS-5	17	R9-3(18)	1	NO PEDESTRIAN CROSSING (Symbol) - 18x18	18	18	2.3	ADD TO ASSEMBLY		1								
SS-5	18	W10-1(36)	1	HIGHWAY-RAIL GRADE CROSSING ADVANCE WARNING 36 Inch	36	1	7.1	NEW		1				SOIL	1			
SS-5	19	R15-1	1	HIGHWAY RAIL GRADE CROSSING (Crossbuck)	48	9		REMAIN										
SS-5	20	R15-1	1	HIGHWAY RAIL GRADE CROSSING (Crossbuck)	48	9		REMAIN										
SS-6	1	R15-1	1	HIGHWAY RAIL GRADE CROSSING (Crossbuck)	48	9		REMAIN										
SS-6	2	R1-1(36)	1	STOP	36	36		REMAIN										
SS-6	3	R15-1	1	HIGHWAY RAIL GRADE CROSSING (Crossbuck)	48	9		REMAIN										
SS-6	5	D4-3-DE	1	BUS STOP (DART)	12	18		REPOSITION	1	1				EX. CONCRETE		1		STOP ID: 969 BUS ROUTE 4 FURNISHED BY DART
SS-6	7	W10-1(36)	1	HIGHWAY-RAIL GRADE CROSSING ADVANCE WARNING 36 Inch	36	1	7.1	NEW		1				BITUMINOUS	1		1	
SS-6	8	R1-1(36)	1	STOP	36	36		REMAIN										
SS-6	9	S5-2(24)	1	END SCHOOL ZONE - 24x30	24	30	5.0	NEW		1				SOIL	1			
SS-6	11A	M3-4(24)	1	CARDINAL DIRECTION - WEST - 24x12	24	12	2.0	NEW		1				SOIL	1			
SS-6	11B	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24	24	24	4.0	ADD TO ASSEMBLY		1								48
SS-6	11C	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-6	11D	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0	ADD TO ASSEMBLY		1								100
SS-6	12A	M3-4(24)	1	CARDINAL DIRECTION - WEST - 24x12	24	12	2.0	NEW		1				SOIL	1			
SS-6	12B	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24	24	24	4.0	ADD TO ASSEMBLY		1								48
SS-6	12C	M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-6	12D	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0	ADD TO ASSEMBLY		1								100
SS-6	12E	M6-1_R(21)	1	DIRECTIONAL ARROW (Right) - 21x15	21	15	2.2	ADD TO ASSEMBLY		1								
SS-6	13A	M3-2(24)	1	CARDINAL DIRECTION - EAST - 24x12	24	12	2.0	NEW		1	SOIL			SOIL	1			
SS-6	13B	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24	24	24	4.0	ADD TO ASSEMBLY		1								48
SS-6	13C	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-6	13D	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24	5.0	ADD TO ASSEMBLY		1								100
SS-6	13E	M6-1_L(21)	1	DIRECTIONAL ARROW (Left) - 21x15	21	15	2.2	ADD TO ASSEMBLY		1								
SS-6	14A	M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	24	12		REMOVE	1									
SS-6	14B	M1-5(30)	1	STATE ROUTE (3 - Digit Sign) - 30x24	30	24		REMOVE	1									100
SS-6	14C	M6-2_L(30)	1	DIRECTIONAL ARROW (Left - upward 45) - 30x21	30	21		REMOVE	1									
SS-6	14D	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24	24	24		REMOVE	1									48
SS-6	14E	M6-4(30)	1	DIRECTIONAL ARROW AUXILIARY (Left and Right) - 30x21	30	21		REMOVE	1									
SS-6	15A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								N Dupont Rd (Highway C, Text Size 6"/4")
SS-6	15B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Pike (Highway C, Text Size 6"/4")
SS-6	15C	R1-2(36)	1	YIELD	36	36	3.9	NEW		1	SOIL			SOIL	1			
SS-6	16	R2-1-40(30)	1	SPEED LIMIT (40 MPH - 30x36)	30	36		REMOVE	1									
SS-6	17	R2-1-30(30)	1	SPEED LIMIT (30 MPH - 30x36)	30	36	7.5	NEW		1	SOIL			SOIL	1			

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PENNONI ASSOCIATES INC. | ...\CTDOT\NP&E PLANS\SS13.dgn | PEN TABLE: pennoni-deldot.tbl
FILE NAME: | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG
MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 8:47:25 AM
MICROSTATION WORKSPACE: DELDOT-V8I-OPENROADS | USER NAME: TLord | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO.	N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201601103	DESIGNED BY:	Z. BRANDER		PAI
				COUNTY	CHECKED BY:	P. HORSEY		SHEET NO.
				NEW CASTLE				63

PERMANENT SIGN SCHEDULE

SHEET NO.	PLAN IDENTIFIER	CODE	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	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	Code X11 12' Post (W/ Basepost) (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	REMARKS
								SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
SS-6	18A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1	EX. CONCRETE			EX. CONCRETE	1	1		FYG
SS-6	18B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-6	19A	D3-1(9)	2	STREET NAME (1 Line)	30	9		REMAIN										DUPONT RD
SS-6	19B	N/A	1	NO VEHICLES OVER 5000 LBS				REMAIN										
SS-6	20	R10-15	1	TURNING VEHICLES YIELD TO PEDS	30	30	6.3	NEW		1				EX. CONCRETE	1	1		Left Arrow
SS-6	21	R10-15	1	TURNING VEHICLES YIELD TO PEDS	30	30		REMAIN										Right Arrow
SS-6	22	D4-3-DE	1	BUS STOP (DART)	12	18		REMOVE	1									BUS ROUTE 4
SS-6	23A	M3-3(36)	1	CARDINAL DIRECTION - SOUTH - 36x18	36	18	4.5	RENEW	1	1	SOIL			SOIL	1			
SS-6	23B	M1-5(45)	1	STATE ROUTE (3 - Digit Sign) - 45x36	45	36	11.3	RENEW	1	1								100
SS-6	23C	M5-1_R	1	ADVANCE TURN ARROW (Right - 90)	21	15	2.2	RENEW	1	1								
SS-6	24A	M3-2(36)	1	CARDINAL DIRECTION - EAST - 36x18	36	18	4.5	RENEW	1	1	SOIL			SOIL	1			
SS-6	24B	M1-5(36)	1	STATE ROUTE (2 - Digit Sign) - 36x36	36	36	9.0	RENEW	1	1								48
SS-6	24C	M6-3(30)	1	DIRECTIONAL ARROW (Up) - 30x21	30	21	4.4	RENEW	1	1								
SS-6	25A	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36	9.0	NEW		1	SOIL			SOIL	1			
SS-6	25B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	30	9	1.9	ADD TO ASSEMBLY		1								
SS-6	26	S5-1-DE(24)	1	SCHOOL SPEED LIMIT XX WHEN CHILDREN ARE PRESENT - 24x5	24	54	9.0	NEW		1	SOIL			SOIL	1			SCHOOL SPEED LIMIT 20
SS-6	27	D4-3-DE	1	BUS STOP (DART)	12	18		REPOSITION	1	1	SOIL			SOIL	1			STOP ID: 988 BUS ROUTE 4 FURNISHED BY DART
SS-6	28A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1	SOIL			SOIL	1			FYG
SS-6	28B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-6	28C	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	ADD TO ASSEMBLY		1								FYG
SS-6	28D	W16-7P_FYG(24)R	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-6	30A	W1-7(60)	1	TWO DIRECTIONAL LARGE ARROW - 60x30	60	30		REMAIN										
SS-6	30B	OM4-3	1	END OF ROAD OBJECT MARKER	18	18		REMAIN										
SS-6	30C	OM4-3	1	END OF ROAD OBJECT MARKER	18	18		REMAIN										
SS-6	31A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36		REMAIN										FYG
SS-6	31B	W16-9P_FYG(24)	1	AHEAD (plaque) - 24x12	24	12	2.0	RENEW	1	1								Renew with FYG
SS-6	32	W11-1(30)	1	BICYCLE (Symbol) - 30x30	30	30		REMOVE	1									
SS-7	1	W3-5(30)	1	SPEED REDUCTION (Symbol) - 30x30	30	30		REMOVE	1									
SS-7	2A	S4-3P(36)	1	SCHOOL - 36x12	36	12		REMOVE	1									
SS-7	2B	R2-1(30)	1	SPEED LIMIT (Blank - 30x36)	30	36		REMOVE	1									
SS-7	3	R10-15 (MOD.)	1	TURNING VEHICLES YIELD TO PEDS	30	30	6.3	RENEW	1	1								Right Arrow School symbol instead of Pedestrian symbol
SS-7	4	R10-15 (MOD.)	1	TURNING VEHICLES YIELD TO PEDS	30	30	6.3	NEW		1				SOIL	1			Right Arrow School symbol instead of Pedestrian symbol
SS-7	5A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			FYG
SS-7	5B	W16-7P_FYG(24)R	1	RIGHT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-7	5C	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36		REMOVE	1									FYG
SS-7	6A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			FYG
SS-7	6B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-7	7A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			FYG
SS-7	7B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-7	8	S5-2(24)	1	END SCHOOL ZONE - 24x30	24	30	5.0	NEW		1				SOIL	1			
SS-7	9A	M3-4(36)	1	CARDINAL DIRECTION - WEST - 36x18	36	18	4.5	ADD TO ASSEMBLY		1								
SS-7	9B	M1-5(36)	1	STATE ROUTE (2 - Digit Sign) - 36x36	36	36	9.0	NEW		1				SOIL	1			48
SS-7	9C	M6-3(30)	1	DIRECTIONAL ARROW (Up) - 30x21	30	21	4.4	ADD TO ASSEMBLY		1								
SS-7	10	S5-1-DE(24)	1	SCHOOL SPEED LIMIT XX WHEN CHILDREN ARE PRESENT - 24x5	24	54	9.0	NEW		1				SOIL	1			SCHOOL SPEED LIMIT 20
SS-7	11A	M3-3(36)	1	CARDINAL DIRECTION - SOUTH - 36x18	36	18	4.5	ADD TO ASSEMBLY		1								
SS-7	11B	M1-5(45)	1	STATE ROUTE (3 - Digit Sign) - 45x36	45	36	11.3	NEW		1				SOIL	1			100
SS-7	11C	M5-1_L	1	ADVANCE TURN ARROW (Left - 90)	21	15	2.2	ADD TO ASSEMBLY		1								
SS-7	12	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew with 36 x 36 from 30 x 30
SS-7	13A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12		REMOVE	2									ATKINS AVE
SS-7	13B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12	4.0	ADD TO ASSEMBLY		2								Atkins Ave (Highway C, Text Size 6"/4")
SS-7	13C	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12		REMOVE	2									LANCASTER PIKE
SS-7	13D	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Ave (Highway C, Text Size 6"/4")
SS-7	13E	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew with 36 x 36 from 30 x 30
SS-7	14	W11-1(30)	1	BICYCLE (Symbol) - 30x30	30	30	6.3	NEW		1				SOIL	1			
SS-7	15A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			FYG
SS-7	15B	W16-9P_FYG(24)	1	AHEAD (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								Renew with FYG
SS-8	1	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew 36 x 36
SS-8	2	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1				SOIL	1			Reposition from U.P. to Ground Mounted
SS-8	3	R3-5_L	1	MANDATORY MOVEMENT LANE CONTROL (Left)	30	36	7.5	NEW										Installed on Existing Mast Arm
SS-8	4	R3-27(36)	1	THRU MOVEMENT PROHIBITION (Symbol) - 36x36	36	36	9.0	NEW										Installed on Existing Mast Arm
SS-8	5A	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-8	5B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				EX. CONCRETE	1	1		
SS-8	5C	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-8	5D	R6-7(30)	1	END ONE WAY - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-8	6	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36		REMOVE	1									
SS-8	7A	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	NEW		1				SOIL	1			
SS-8	7B	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-8	8A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12		REMOVE	2									S GRAY AVE
SS-8	8B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								S Gray Ave (Highway C, Text Size 6"/4")
SS-8	8C	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12		REMOVE	2									LANCASTER PIKE

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PENNONI ASSOCIATES INC. | FILE NAME: ...\CTDOT\NP&E PLANS\SS14.dgn | MICROSTATION VERSION: MicroStation V8i | MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS
PEN TABLE: pennoni_deldot.tbl | PLOT DRIVER: PENNONI-NWK-DELDOT-FULL-PDF.PLTCFG | DATE PLOTTED: 1/31/2020 @ 8:47:34 AM | USER NAME: TLord | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT T201601103	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: Z. BRANDER		SHEET NO. 64
					CHECKED BY: P. HORSEY		

PERMANENT SIGN SCHEDULE

SHEET NO.	PLAN IDENTIFIER	CODE	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	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	Code X11 12' Post (W/ Basepost) (EACH)	ITEM 819016 4" HOLE, 0-6" (EACH)	ITEM 819017 4" HOLE, >6" (EACH)	REMARKS
								SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
SS-8	8D	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Ave (Highway C, Text Size 6"/4")
SS-8	8E	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1				EX. CONCRETE		1		Renew existing sign with 36"x36"
SS-9	1	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1				NEW CONCRETE				
SS-9	2	R5-1(36)	1	DO NOT ENTER - 36x36	36	36		REMOVE	1									
SS-9	3A	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12	3.0	ADD TO ASSEMBLY		1								
SS-9	3B	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0	ADD TO ASSEMBLY		1								
SS-9	3C	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				NEW CONCRETE	1			
SS-9	4A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	18	12		REMOVE	2									FORD AVE
SS-9	4B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	18	12	3.0	ADD TO ASSEMBLY		2								Ford Ave (Highway C, Text Size 6"/4")
SS-9	4C	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12		REMOVE	2									LANCASTER AVE
SS-9	4D	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Ave (Highway C, Text Size 6"/4")
SS-9	4E	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1				EX. CONCRETE	1	1		
SS-9	5A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12		REMOVE	2									S FORD AVE
SS-9	5B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								S Ford Ave (Highway C, Text Size 6"/4")
SS-9	5C	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12	5.0	ADD TO ASSEMBLY		2								Lancaster Ave (Highway C, Text Size 6"/4")
SS-9	5D	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1				SOIL	1			
SS-9	5E	R7-202aP-DE1	1	END (plaque - red)	12	6	0.5	RENEW	1	1								
SS-9	5F	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24	3.0	RENEW	1	1								
SS-9	6	R3-7_L(36)	1	LEFT LANE MUST TURN LEFT - 36"x36"	36	36	9.0	NEW		1				SOIL	1			
SS-9	7	R3-7_L(36)	1	LEFT LANE MUST TURN LEFT - 36"x36"	36	36	9.0	NEW		1				EX. CONCRETE	1	1		
SS-9	8A	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	36	12		REMAIN										S Colonial Ave (Highway C, Text Size 6"/4")
SS-9	8B	D3-1(12)	2	STREET NAME (1 Line) Posted speed ≤ 40 MPH	30	12		REMAIN										Lancaster Ave (Highway C, Text Size 6"/4")
SS-9	8C	R1-1(36)	1	STOP	36	36		REMAIN										
SS-9	8D	R7-202aP-DE1	1	END (plaque - red)	12	6		REMAIN										
SS-9	8E	R7-4-DE(18)	1	NO STOPPING, STANDING, OR PARKING - 18x24	18	24		REMAIN										
SS-9	9	W11-1(30)	1	BICYCLE (Symbol) - 30x30	30	30	6.3	NEW		1				EX. CONCRETE	1	1		
SS-10	1	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew existing sign with 36"x36"
SS-10	2	R1-1(36)	1	STOP	36	36	7.5	NEW		1				EX. CONCRETE	1	1		
SS-10	3A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			FYG
SS-10	3B	W16-9P_FYG(24)	1	AHEAD (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-10	4A	S4-3P(24)	1	SCHOOL - 24x8	24	8		REMOVE	1									
SS-10	4B	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24	30		REMOVE	1									
SS-10	5	S5-2(24)	1	END SCHOOL ZONE - 24x30	24	30	5.0	NEW		1				EX. CONCRETE	1	1		
SS-10	6	S5-1-DE(24)	1	CHOOL SPEED LIMIT XX WHEN CHILDREN ARE PRESENT - 24x5	24	54	9.0	NEW		1				SOIL	1			SCHOOL SPEED LIMIT 20
SS-10	7A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				SOIL	1			FYG
SS-10	7B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-10	8A	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-10	8B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-10	8C	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-10	9A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				EX. CONCRETE	1	1		FYG
SS-10	9B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-10	10A	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36	9.0	NEW		1				EX. CONCRETE	1	1		FYG
SS-10	10B	W16-7P_FYG(24)L	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								FYG
SS-10	11A	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36		REPOSITION	1	1								Renew from adj. Light Pole
SS-10	11B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-10	11C	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	RENEW	1	1								Renew from adj. Light Pole
SS-11	1	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew existing sign with 36"x36"
SS-11	2	S5-2(24)	1	END SCHOOL ZONE - 24x30	24	30	5.0	NEW		1				SOIL	1			
SS-11	3	W11-1(36)	1	BICYCLE (Symbol) - 36x36	36	36		REMOVE	1									
SS-11	4	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36		REMOVE	1									
SS-11	5A	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	NEW		1				SOIL	1			
SS-11	5B	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-11	6A	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-11	6B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-11	6C	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-11	7	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew existing sign with 36"x36"
SS-11	8	S5-1-DE(24)	1	CHOOL SPEED LIMIT XX WHEN CHILDREN ARE PRESENT - 24x5	24	54	9.0	NEW		1				SOIL	1			SCHOOL SPEED LIMIT 20
SS-11	9A	S4-3P(24)	1	SCHOOL - 24x8	24	8		REMOVE	1									FYG
SS-11	9B	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36		REMAIN										FYG
SS-11	9C	W16-9P_FYG(24)	1	AHEAD (plaque) - 24x12	24	12	2.0	ADD TO ASSEMBLY		1								
SS-11	9D	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24	30		REMAIN										
SS-11	9E	N/A	1	DRUG FREE SCHOOL ZONE				REMOVE	1									
SS-11	10	R1-1(36)	1	STOP	36	36	7.5	RENEW	1	1								Renew existing sign with 36"x36"
SS-11	11A	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-11	11B	R5-1(36)	1	DO NOT ENTER - 36x36	36	36	9.0	NEW		1				SOIL	1			
SS-11	11C	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-11	12A	R6-2_L(30)	1	ONE WAY (LEFT ARROW) - 30x36	30	36	7.5	NEW		1				SOIL	1			
SS-11	12B	R6-2_R(30)	1	ONE WAY (RIGHT ARROW) - 30x36	30	36	7.5	ADD TO ASSEMBLY		1								
SS-11	13	W11-1(30)	1	BICYCLE (Symbol) - 30x30	30	30	6.3	NEW		1				EX. CONCRETE	1	1		
SG-2	S-1	R10-23A	1	WALK STOP ON RED PROCEED ON FLASHING RED WHEN CLEA	30	36	7.5	NEW										OH SIGN FOR N832 SIGNAL
SG-2	S-2	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0	NEW										OH SIGN FOR N832 SIGNAL
SG-2	S-3	R10-23A	1	WALK STOP ON RED PROCEED ON FLASHING RED WHEN CLEA	30	36	7.5	NEW										OH SIGN FOR N832 SIGNAL
SG-2	S-4	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36	36	9.0	NEW										OH SIGN FOR N832 SIGNAL
JOB TOTALS							1150		81	223		64	77		92	23	1	

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PENNONI ASSOCIATES INC. | ...\CTDOT\NP&E PLANS\SS15.dgn | PEN TABLE: pennoni-dot.tbl
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MICROSTATION VERSION: MicroStation V8i | DATE PLOTTED: 1/31/2020 @ 3:09:02 PM
MICROSTATION WORKSPACE: DELDOT-V8i-OPENROADS | USER NAME: TLord | OFFICE LOCATION: Newark, Delaware

ADDENDA / REVISIONS		NOT TO SCALE	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	CONTRACT	BRIDGE NO. N/A	PERMANENT SIGN SCHEDULE	SECTION
				T201601103	DESIGNED BY: Z. BRANDER		PAI
				COUNTY	CHECKED BY: P. HORSEY		SHEET NO.
				NEW CASTLE			65

CONDUIT RUN SCHEDULE

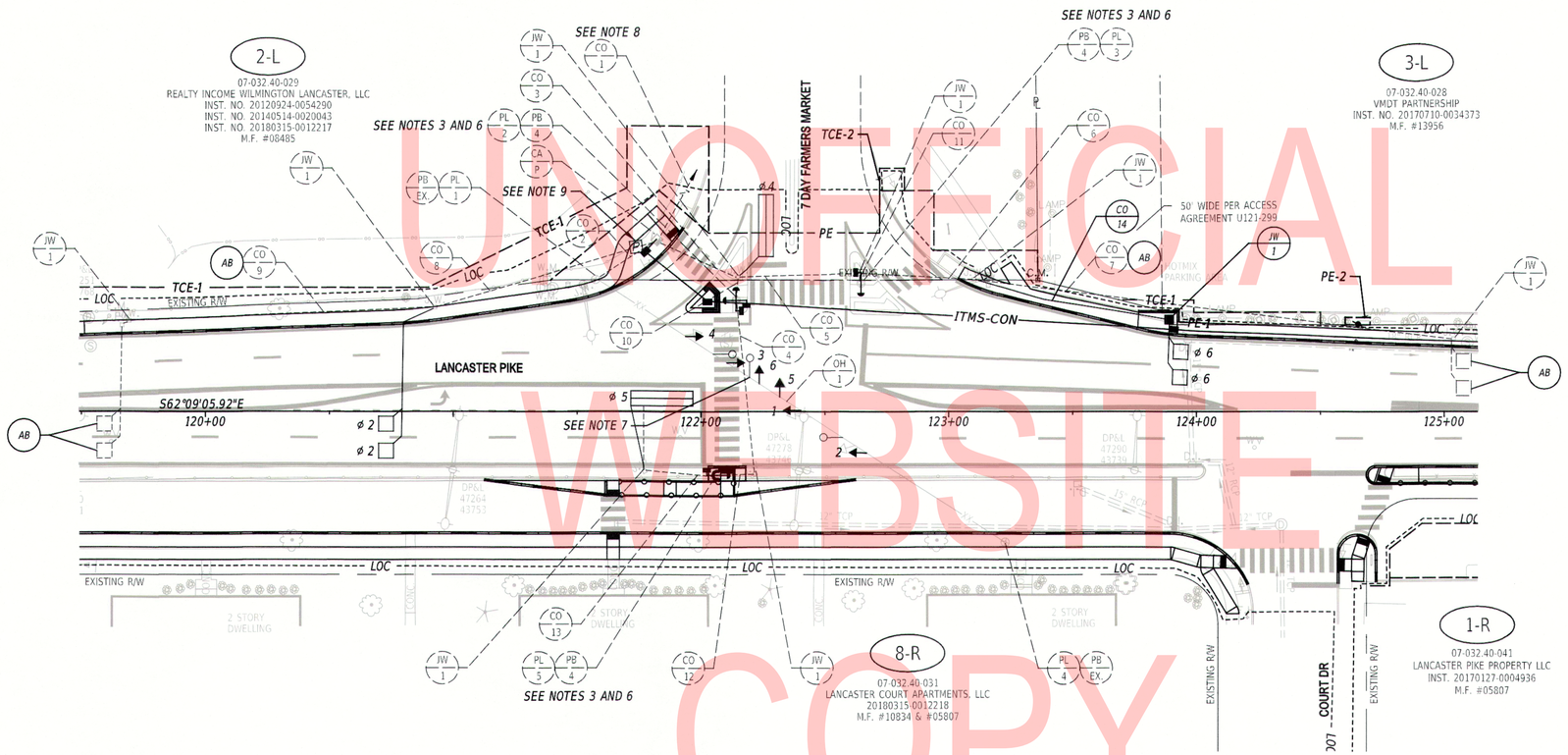
CO NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5"	UNK.	-	EX. (1)2/#8 U.F.W/GROUND
*2	1	2.5"	30'	-	REMOVE [(2)8/#14] INSTALL [(2)16/#14, (1)#6 GND] EX. (3)4/#18
*3	1	2.5"	39'	-	REMOVE [(3)9/#14,(1)4/#14,(2)8/#14] INSTALL [(4)5/#14,(4)2/#14, (1)#6 GND]
*4	1	2.5"	74'	-	REMOVE [(1)9/#14, (1)8/#14] INSTALL [(1)5/#14, (1)2/#14, (1)#6 GND]
*5	1	2.5"	53'	-	[REMOVE (1)9/#14,(1)4/#14] [INSTALL (1)5/#14,(2)2/#14,(1)#6 GND]

*DENOTES EXISTING

CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*6	1	2.5"	37'	-	[REMOVE (1)4/#14] [INSTALL (2)2/#14,(1)#6 GND]
*7	1	1.5"	198'	-	[REMOVE (1)4/#14]; ABANDON
*8	1	1.5"	98'	-	[REMOVE (1)4/#14] [INSTALL (2)2/#14,(1)#6 GND]
*9	1	1.5"	120'	-	[REMOVE (1)4/#14]; ABANDON
*10	1	2.5"	8'	-	[REMOVE (1)9/#14] [INSTALL (2)5/#14,(1)#6 GND]
*11	1	2.5"	5'	-	[REMOVE (1)9/#14] [INSTALL (1)5/#14,(1)#6 GND]
*12	1	2.5"	21'	-	[REMOVE (1)9/#14] [INSTALL (1)5/#14,(1)#6 GND]
*13	1	2.5"	41'	-	[REMOVE (1)4/#18] [INSTALL (1)2/#14,(1)#6 GND]
14	1	4"	80'	-	INSTALL (2)2/#14,(1)#6 GND

*DENOTES EXISTING



SIGNAL POLE SCHEDULE

NO.	POLE TYPE	HEIGHT
1*	STRAIN	28'
2*	PEDESTAL	10'
3*	PEDESTAL	10'
4*	STRAIN	28'
5*	PEDESTAL	10'

*DENOTES EXISTING TO REMAIN

OVERHEAD RUN SCHEDULE

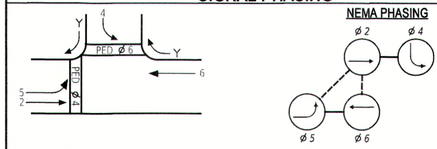
OH NO.	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1*	195'	REMOVE [(2)8/#14] INSTALL [(2)16/#14] EX. (3)4/#18

*DENOTES EXISTING

ADDITIONAL SIGNAL NOTES:

3. REPLACE EXISTING PEDESTRIAN SIGNAL HEADS WITH COUNTDOWN PEDESTRIAN SIGNAL HEADS. ALL EXISTING PUSHBUTTONS SHALL BE REPLACED WITH LATCHING LED INDICATOR PUSHBUTTONS.
4. REPLACE EXISTING VEHICULAR SIGNAL HEADS AND REPOSITION AS SHOWN.
5. THERE IS AN EXISTING SIGNAL AGREEMENT DATED MAY 23, 1980 FOR THIS TRAFFIC SIGNAL.
6. THE CONTRACTOR SHALL INSTALL R10-3e COUNTDOWN PEDESTRIAN SIGNS ON SIGNAL MOUNTED POLES NO. 3 AND 5 WITH ARROWS ALIGNED ON EACH STATION BUTTON PER DESIGN. THE CONTRACTOR SHALL INSTALL R10-3e-DE COUNTDOWN PEDESTRIAN SIGN ON SIGNAL MOUNTED POLE NO. 2.
7. THE TRAFFIC CONTRACTOR SHALL ADJUST EXISTING OPTICOM DEVICES TO REFLECT THE ORIENTATIONS SHOWN ON THE PLAN.
8. CO #1 IS NOT DRAWN TO SCALE, NOR IS THE DIRECTION NECESSARILY CORRECT.
9. PROPOSED SERVICE PEDESTAL WITH METER WILL BE INTEGRATED WITH THE TRAFFIC SIGNAL BY INTERCEPTING THE EXISTING CONDUIT NO. 1.

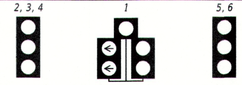
SIGNAL PHASING



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	⊗	⊙
CCTV CAMERA	CCTV	▬◂
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
PENNONI ASSOCIATES INC.

1/31/2020
DATE

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

PHILIP ANDREW HORSEY REGISTERED No. 12429 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF TRAFFIC ENGINEER

2/3/2020
DATE

ADDENDA / REVISIONS		SCALE		CONTRACT	PERMIT NO.	N023P	SECTION
		0 30 60 90	SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS	T201601103	DESIGNED BY: Z. BRANDER	SIGNAL PLAN LANCASTER PIKE AT 7 DAY FARMERS MARKET	PAI
		FEET		COUNTY NEW CASTLE	CHECKED BY: P. HORSEY		SHEET NO. 66

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CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
1	1	2" GALV.	6'	T	INSTALL [(3)#8 THHN STRANDED COPPER]
2A	1	2" GALV.	5'	T	INSTALL [(1)2/#8 U.F. w/GROUND]
2B	1	2" GALV.	63'	T	INSTALL [(1)2/#8 U.F. w/GROUND]
3	3	4" PVC	12'	T	INSTALL [(1)9/#14 (2)4/#18 (2)5/#14 (1)#6 GND] (LEAVE 2 CONDUITS EMPTY FOR FUTURE USE)
4	1	3" PVC	19'	T	INSTALL [(1)9/#14 (2)4/#18 (1)#6 GND]
5	1	2.5" PVC	16'	T	INSTALL [(1)5/#14 (1)#6 GND]
6	1	4" HDPE	60'	B/T	INSTALL [(1)5/#14 (1)#6 GND]
7	1	2.5" PVC	16'	T	INSTALL [(1)5/#14 (1)#6 GND]
8	1	4" PVC	12'	T	FUTURE COMM CABLES BY OTHERS

T = TRENCH, B = BORE, O = OPEN CUT

MAST ARM SCHEDULE

MA NO.	LENGTH OF ARM	NO. OF HEADS	S.F. OF SIGNING
1	55'	4	33

SIGNAL POLE SCHEDULE

NO.	POLE TYPE	HEIGHT
1	MAST ARM	21.5'
2	PEDESTAL	10'
3	PEDESTAL	10'

OVERHEAD SIGNS

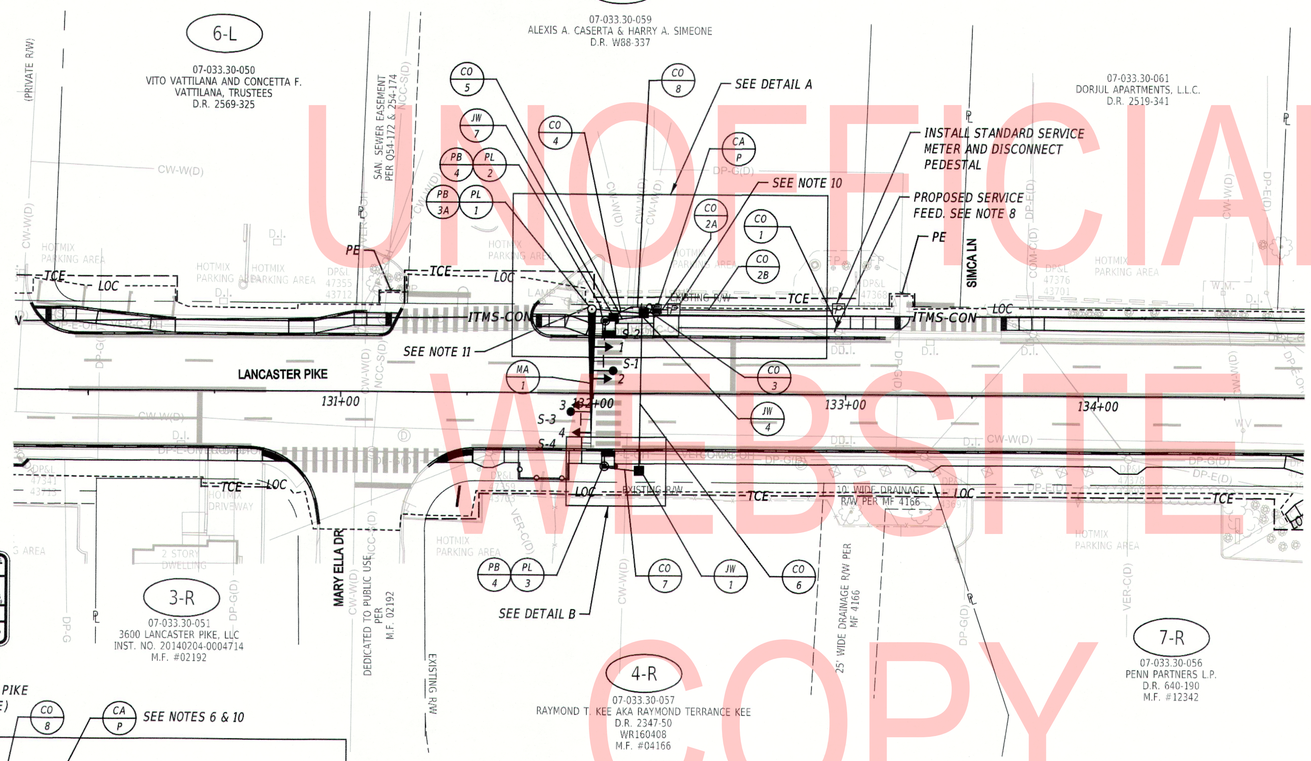
S-1,S-3

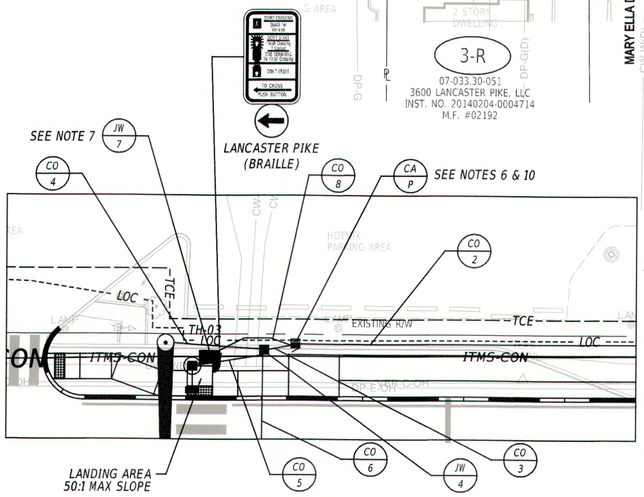
CROSSWALK
STOP ON RED
PROCEED ON FLASHING RED WHEN CLEAR

R10-23a
30" X 36"

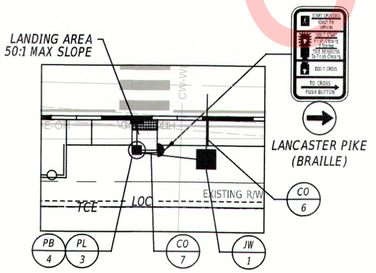
S-2,S-4

W11-2
36" X 36"





DETAIL A
SCALE 1"=15'



DETAIL B
SCALE 1"=15'

ADDITIONAL SIGNAL NOTES:

3. THE CONTRACTOR SHALL ADJUST THE SIGNAL HEADS IN THE MAST ARM BRACKETS SO THAT THE BOTTOM OF THE SIGNAL HOUSINGS ARE AT LEAST 16'-0" ABOVE THE PAVEMENT.
4. MOUNT MAST ARM 20.5' ABOVE PROPOSED SIDEWALK GRADE TO PROVIDE 2' VERTICAL CLEARANCE FROM OVERHEAD COMMUNICATION LINES, WHICH ARE APPROXIMATELY 18' ABOVE PROPOSED SIDEWALK GRADE.
5. THE CONTRACTOR SHALL INSTALL BACKPLATES ON SIGNAL HEADS 1-4. ALL BACKPLATES SHALL INCLUDE A 2" RETROREFLECTIVE YELLOW STRIP AROUND THE BORDER
6. PROGRAM SIGNAL CONTROLLER TO KEEP A STEADY DON'T WALK FOR PEDESTRIANS WHEN EMERGENCY PREEMPTION IS ACTIVATED.
7. SEE SIGNING, STRIPING AND CONDUIT PLAN FOR ITMS PATHWAY INFORMATION.
8. PROPOSED POWER SOURCE: DPL POLE NO. 47368-43705.
9. THE CONTRACTOR SHALL INSTALL AN APS STATION (ITEM 999476) FOR EACH PEDESTRIAN SIGNAL WITH PUSHBUTTONS ORIENTED PARALLEL WITH THE CROSSING. THE CONTRACTOR SHALL ALSO INSTALL R10-3e COUNTDOWN PEDESTRIAN SIGNS ON ALL SIGNAL MOUNTED POLES WITH ARROWS ALIGNED ON EACH STATION BUTTON PER DESIGN.
10. A SECONDARY DISCONNECT SHALL BE INSTALLED AT THE PROPOSED SIGNAL CABINET.
11. APPROXIMATE EXISTING UTILITY HEIGHT CLEARANCE FROM MAST ARM:
    PRIMARY: 11.7'
    SECONDARY: 5.8'

SIGNAL PHASING

1. THE PEDESTRIAN HYBRID BEACON REMAINS DARK (NOT ILLUMINATED) DURING PERIOD BETWEEN ACTUATIONS CONCURRENT WITH PEDESTRIAN DON'T WALK INDICATION.
2. UPON PEDESTRIAN ACTUATION, THE BEACON DISPLAYS A FLASHING YELLOW INDICATION CONCURRENT WITH THE PEDESTRIAN DON'T WALK INDICATION.
3. THE BEACON CHANGES TO A STEADY YELLOW INDICATION CONCURRENT WITH THE PEDESTRIAN DON'T WALK INDICATION.
4. THE BEACON CHANGES TO A STEADY RED INDICATION CONCURRENT WITH THE PEDESTRIAN WALK INTERVAL.
5. THE BEACON CHANGES TO AN ALTERNATING FLASHING RED INDICATION CONCURRENT WITH THE PEDESTRIAN COUNTDOWN INDICATION AND PEDESTRIAN CLEARANCE INTERVAL.
6. THE BEACON REVERTS BACK TO THE DARK CONDITION AFTER THE PEDESTRIAN CLEARANCE INTERVAL ENDS.

SIGNAL HEAD DIAGRAM

1-4

*SEE NOTE 5

LEGEND

AB	ABANDON	UH C	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA P	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA P	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)
JB 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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Pennoni

PREPARED BY
PENNONI ASSOCIATES INC.

1/31/2020
DATE

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

PHILIP ANDREW HORSEY REGISTERED No. 12429 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF TRAFFIC ENGINEER

2/3/2020
DATE

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

SR 48, SR 141 TO UNION STREET PAR AND PAVEMENT IMPROVEMENTS

CONTRACT	T201601103	PERMIT NO.	N832
COUNTY	NEW CASTLE	DESIGNED BY:	Z. BRANDER
		CHECKED BY:	P. HORSEY

SIGNAL PLAN (PEDESTRIAN HYBRID BEACON) LANCASTER PIKE AT MARY ELLA DRIVE

SECTION	PAI
SHEET NO.	67

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