THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

FINAL PLANS

GENERAL LOCATION OF CONTRACT

CONSTRUCTION PLANS FOR:

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

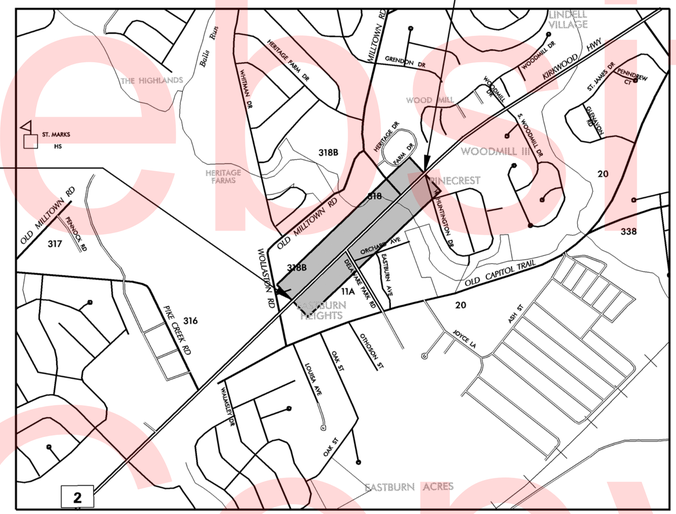
CONTRACT NUMBER: T201200701

FEDERAL AID PROJECT NUMBER: ESTP-N011(30)

COUNTY: NEW CASTLE **M.R. #:** N011

END CONTRACT STATION 26+10

BEGIN CONTRACT STATION 3+30



RECOMMENDED

Christopher Costello — 10/19/2015
SQUAD MANAGER, CONSTRUCTION — DATE

Christopher Costello — 10/19/2015
GROUP ENGINEER, CONSTRUCTION — DATE

[signature] — 10/19/2015
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) — DATE

DESIGN DESIGNATION

FUNCTIONAL CLASS: PRINCIPAL ARTERIAL	D.H.V. PROJECTED: 3,364	YEAR: 2040
TYPE OF CONSTRUCTION: SAFETY IMPROVEMENTS	DESIGN SPEED: 50 M.P.H.	
A.A.D.T. CURRENT: 43,897 YEAR: 2011	TRUCKS: 9 %	
A.A.D.T. PROJECTED: 58,000 YEAR: 2040	DIRECTION OF DISTRIBUTION: 58 %	

INDEX OF SHEETS

SHEET Nº	TABLE OF CONTENTS
1	TITLE
2	PLAN SHEET INDEX
3	LEGEND
4-5	NOTES
6-8	TYPICAL SECTIONS
9	HORIZONTAL AND VERTICAL CONTROL
10-12	CONSTRUCTION PLANS
13-16	PROFILES
17-21	GRADES AND GEOMETRICS
22-25	CONSTRUCTION DETAILS
26-43	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS
44-47	DETOUR PLANS
48	LIGHTING PLAN
49	LIGHTING DETAILS
50	LEASED LIGHTING PLAN
51-59	SIGNING, STRIPING AND CONDUIT PLANS
60-64	SIGNALIZATION PLANS

TOTAL SHEETS: 64

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
1000	NEWARK TO LIMESTONE ROAD (SECTION 2)
1497	NEWARK TO LIMESTONE ROAD
21-116-01	CHURCHMANS CROSSING FY 2001 SIDEWALK & BUS STOP IMPROVEMENTS
77-03-003	1977 S.I.P. - DEL 2, OLD CAPITOL TRAIL TO DELAWARE PARK

RECOMMENDED
Vincent W. Davis
STORMWATER ENGINEER
DATE 10/16/2015
VINCENT W. DAVIS REGISTERED No. 12898 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED
[signature]
SQUAD MANAGER, TRANSPORTATION SOLUTIONS (PROJECT DEVELOPMENT OR BRIDGE DESIGN)
DATE 09/29/2015
JERRY K. LOVELL LICENSE No. 16257 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED
BRIDGE DESIGN ENGINEER
DATE
SEAL

RECOMMENDED
Darren M. O'Neill
GROUP ENGINEER, PROJECT DEVELOPMENT
DATE 10/19/2015
DARREN M. O'NEILL REGISTERED No. 10857 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED
Mark C. Tudor
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS
DATE 10/19/2015
MARK CHRISTOPHER TUDOR REGISTERED No. 10803 DELAWARE PROFESSIONAL ENGINEER — SEAL

APPROVED
Robert Brian McCleary
CHIEF ENGINEER
DATE 10/19/2015
ROBERT BRIAN McCLEARY REGISTERED No. 8567 DELAWARE PROFESSIONAL ENGINEER — SEAL

LAST REVISED: 03/03/2011
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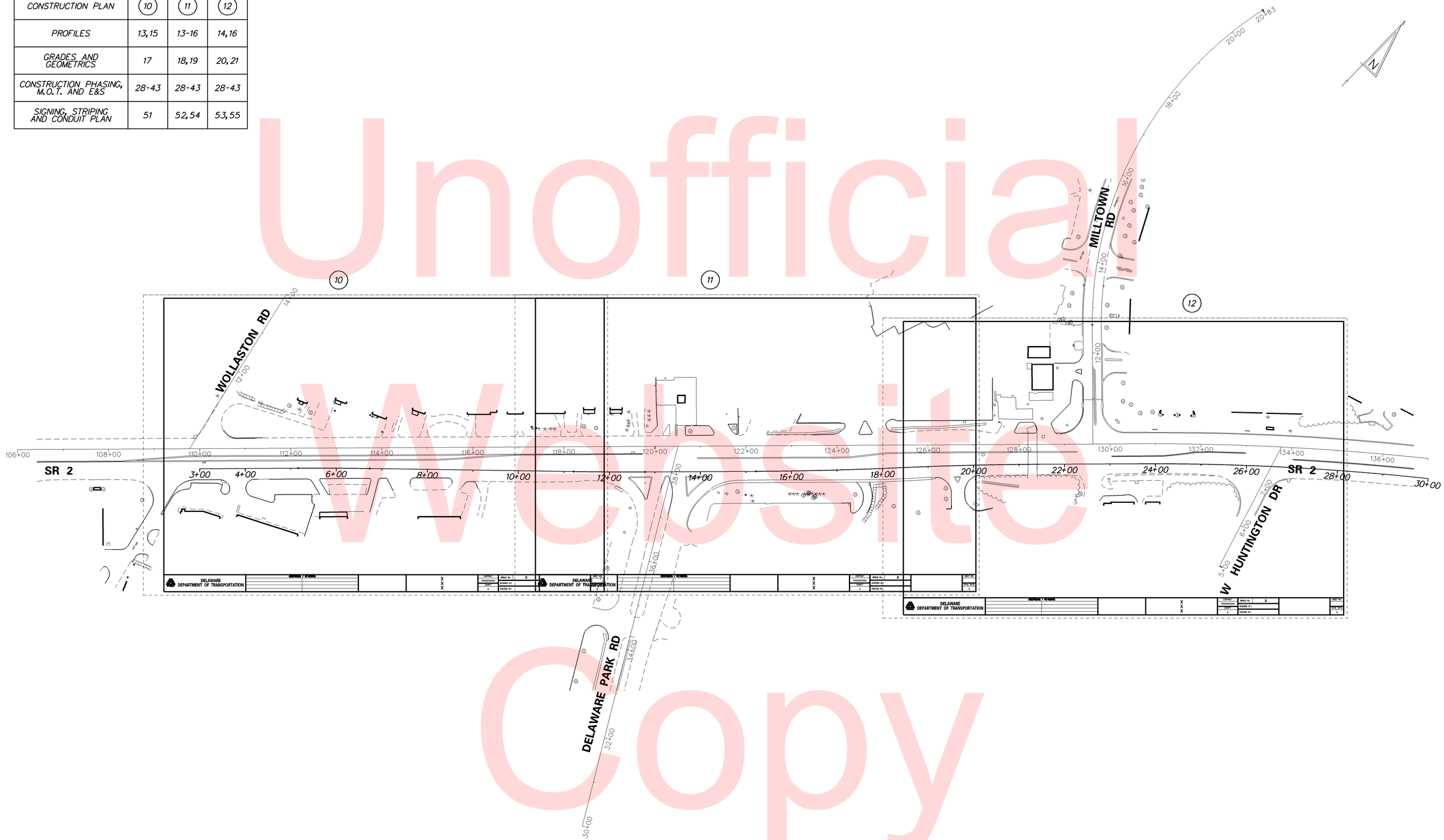
PLAN SHEET INDEX CROSS REFERENCE			
CONSTRUCTION PLAN	10	11	12
PROFILES	13,15	13-16	14,16
GRADES AND GEOMETRICS	17	18,19	20,21
CONSTRUCTION PHASING, M.O.T. AND E&S	28-43	28-43	28-43
SIGNING, STRIPING AND CONDUIT PLAN	51	52,54	53,55



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 100 200 300 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

PLAN SHEET INDEX

SHEET NO.
2
TOTAL SHTS.
64

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
FP	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
LAMP	LAMP AND POST - RESIDENTIAL
MB	MAILBOX
PM	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
VENT	SANITARY SEWER VENT OR CLEANOUT
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
W.V.	WATER VALVE
WELL	WELL HEAD
?	MANHOLE - UNDETERMINED OWNER

UTILITY COMPANY FACILITIES

AW-W	ARTESIAN WATER COMPANY
COM-C	COMCAST CABLE
COM-C-OH	COMCAST CABLE (OVERHEAD)
COM-FO	COMCAST CABLE - FIBER OPTIC
COM-FO-OH	COMCAST CABLE - FIBER OPTIC (OVHD)
DP-E	DELMARVA POWER - ELECTRIC
DP-E-OH	DELMARVA POWER - ELECTRIC (OVHD)
DP-G	DELMARVA POWER - GAS
NCC-S	NEW CASTLE COUNTY - SEWER
VER-C	VERIZON

PROPOSED SYMBOLS

CONSTRUCTION

	CONCRETE SAFETY BARRIER - PERMANENT
BFS	BIOFILTRATION SWALE
	BRICK PATTERNED SURFACE
	BUTT JOINT
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
CZ	CLEAR ZONE
	DRAINAGE INLET
	DITCH
	FENCE - METAL
	FENCE - WOOD
	FLARED END SECTION
	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

IDENTIFIERS

A/C	ADJUST BY CONTRACTOR
A/O	ADJUST BY OTHERS
B	CONCRETE SAFETY BARRIER
C	CURB OR CURB & GUTTER
C.J.B.	CONVERT TO JUNCTION BOX
C.M.H.	CONVERT TO DRAINAGE MANHOLE
C/O	CURB OPENING
CR	CURB RAMP / TYPE
CR-N	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
CSF	CONSTRUCTION SAFETY FENCE
DI	DRAINAGE INLET
DND	DO NOT DISTURB
ED	ENERGY DISSIPATOR
F	FENCE
FES	FLARED END SECTION
FF/C	FILL WITH FLOWABLE FILL
FS	FILTRATION STRUCTURE
GR	GUARDRAIL
JB	JUNCTION BOX
MH	MANHOLE
M	MONUMENT - RIGHT-OF-WAY
P	PIPE
RL/C	RELOCATE BY CONTRACTOR
RL/O	RELOCATE BY OTHERS
RM/C	REMOVE BY CONTRACTOR
RM/O	REMOVE BY OTHERS
UD	UNDERDRAIN / LENGTH
UDO	UNDERDRAIN OUTLET PIPE

LANDSCAPING

LS	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

PAVEMENT SECTION(S)

	MILL AND OVERLAY PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	2" SUPERPAVE, TYPE C WARM-MIX 8" GRADED AGGREGATE BASE COURSE, TYPE B

UTILITY COMPANY FACILITIES

AW-W	ARTESIAN WATER COMPANY
DP-G	DELMARVA POWER - GAS

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LAST REVISED: 01/09/2014
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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

LEGEND

SHEET NO. 3
TOTAL SHTS. 64

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2001 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2001, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2.

EROSION POTENTIAL FOR THIS PROJECT	CONTRACTOR ESC SUPERVISOR REQUIREMENT
( ) INSIGNIFICANT	NONE
( ) MINOR	CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
(X) MEDIUM	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. ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

( )	NONE
(X)	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.

4. 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)

5. 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.
( )	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 743000.
(X)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR SHALL BE PAID FOR UNDER ITEM 743031.

6. THE DISTURBED AREA FOR THIS PROJECT IS 6.67 ACRES.

7. 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 THREE 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 THREE 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.

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.

SECTION 200

2. THE CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE SET 46 INCHES ABOVE THE ROADWAY SURFACE. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE PLACED IN AN APPROPRIATE SIZE PVC SLEEVE. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

3. IN AREAS WHERE TREES OR SHRUBS WILL BE OVERHANGING THE PROPOSED SIDEWALK, PRUNING MAY BE NECESSARY TO ACHIEVE A VERTICAL CLEAR SPACE OF 10 FEET ABOVE THE PROPOSED SIDEWALK ELEVATION. THE CONTRACTOR SHALL PRUNE EXISTING TREE AND SHRUB BRANCHES, WHICH OVERHANG THE SIDEWALK, IN ACCORDANCE WITH I.S.A. STANDARDS. THE CONTRACTOR SHALL NOTIFY DELDOT'S ROADSIDE ENVIRONMENTALIST ADMINISTRATOR, EUGENE 'CHIP' ROSAN, JR. AT (302) 760-2185 AND/OR HIS DESIGNEE, AT LEAST TWO (2) DAYS PRIOR TO THE PRUNING OPERATION. ALL COSTS ASSOCIATED WITH THE ABOVE WORK TO BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

4. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO EXCAVATE TEST PITS ALONG PROPOSED DRAINAGE RUNS, AT POINTS OF POSSIBLE UTILITY CONFLICTS, TO DETERMINE IF A CONFLICT EXISTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR, WITH THE ENGINEER AND THE UTILITY COMPANY INVOLVED. THE ENGINEER SHALL ULTIMATELY DETERMINE THE SOLUTION TO THE UTILITY CONFLICT. TEST HOLES SHALL BE MEASURED IN ACCORDANCE WITH ITEM 208000 - EXCAVATION AND BACKFILL FOR PIPE TRENCHES AND PAID FOR IN ACCORDANCE WITH ITEM 202000 - EXCAVATION AND EMBANKMENT, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.

5. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - DRAINAGE STRUCTURES
   - MODULAR BLOCK WALL
   - HEADWALLS
   - JUNCTION WELLS
   - POLE BASES
   - CABINET FOUNDATIONS

6. 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 TEAM SUPPORT 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.

SECTION 300

7. A. THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B':
   a. CRUSHED STONE (PER STANDARD SPECIFICATION 821)
   b. CRUSHED CONCRETE (PER STANDARD SPECIFICATION 821)
   c. HOT-MIX MILLINGS (PER SPECIAL PROVISION 302514 MILLED HOT-MIX BASE COURSE)

   THE CONTRACTOR WILL NOT BE ALLOWED TO MIX DIFFERENT MATERIALS (OR SIMILAR MATERIALS FROM DIFFERENT SOURCES) TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

   ALL OF THE ABOVE LISTED MATERIALS ARE PERMITTED FOR USE ON THE JOB, PROVIDED THEY ARE SEPARATED INTO APPROVED AREAS. EACH AREA OF BASE COURSE MUST BE CONSTRUCTED USING MATERIALS FROM A SINGULAR SOURCE, FULL DEPTH, IN ORDER THAT PROPER TESTING MAY BE ACCOMPLISHED. THE CONTRACTOR AND ENGINEER SHALL AGREE ON THE LIMITS OF EACH SOURCE OF MATERIAL PRIOR TO PLACEMENT.

   B. THE QUANTITY USED FOR BASE OF EACH OF THE ABOVE LISTED MATERIALS WILL BE THE CONTRACTOR'S CHOICE, WITH THE TOTAL BEING EQUAL TO THE ACTUAL QUANTITY USED UNDER ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

   C. THE CONTRACTOR MAY ALSO ELECT TO RECYCLE MILLINGS FOR USE IN HOT-MIX AS PERMITTED BY THE STANDARD SPECIFICATIONS. THE CHOICE OF THE QUANTITY OF MILLINGS USED FOR THIS PURPOSE, OR FOR BASE COURSE, LIES WITH THE CONTRACTOR. ALL EXCESS MILLING MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR.

   D. HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:
   a. MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEMS 760003 AND 760507.
   b. MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000.
   c. MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE.
   ALL MILLED MATERIALS SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 302514 - MILLED HOT-MIX BASE COURSE.

   E. PAYMENT CLARIFICATION:
   a. SHOULD THE CONTRACTOR ELECT TO MILL PORTIONS OF HOT-MIX SHOWN ON THE PLANS TO BE REMOVED UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT THE COST OF MILLING THIS HOT-MIX WILL BE PAID AS ITEM 202000 - EXCAVATION AND EMBANKMENT. THE MILLINGS GENERATED MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE, OR DISPOSED OF TO AN APPROVED SITE. HAULING COSTS FOR DISPOSAL AND/OR RECYCLING ARE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.

   b. SHOULD THE CONTRACTOR ELECT TO TEMPORARILY STOCKPILE MILLINGS ON THE JOB SITE FOR LATER USE, ALL COSTS FOR STOCKPILING AND SUBSEQUENT REHANDLING SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.

   c. MILLINGS USED FOR BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE. NO SEPARATE PAYMENT WILL BE MADE TO FURNISH MILLINGS FROM AN OUTSIDE SOURCE OR TRANSPORT MILLINGS WITHIN THE PROJECT LIMITS. MILLINGS USED FOR BASE COURSE WILL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

   d. ALL COSTS TO UTILIZE MILLINGS IN RECYCLED HOT-MIX WILL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE HOT-MIX ITEM USING THE RECYCLED MATERIAL.

   e. SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE IS PROVIDED TO SPECIFY THE MEANS OF LAY DOWN AND COMPACTION AS WELL AS THE MATERIAL REQUIREMENTS FOR MILLINGS USED AS BASE COURSE. ALL COSTS TO BRING THE MILLINGS INTO COMPLIANCE WITH THE REQUIREMENTS OF ITEM - 302514 MILLED HOT-MIX BASE COURSE ARE INCIDENTAL TO ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'. NO PAYMENT WILL BE MADE FOR ITEM 302514 - MILLED HOT-MIX BASE COURSE. THE QUANTITY OF MILLINGS USED FOR BASE COURSE WILL BE PAID FOR UNDER ITEM 302007 - GRADED AGGREGATE BASE COURSE.

SECTION 400

8. THE PAVEMENT SECTION FOR WARM-MIX ASPHALT RESIDENTIAL DRIVEWAYS SHALL BE 2" WARM-MIX, TYPE 'C' OVER 8" GRADED AGGREGATE BASE COURSE, TYPE 'B', UNLESS OTHERWISE NOTED ON THE PLANS.

SECTION 600

9. THE DEPARTMENT AND THE CONTRACTOR SHALL INSPECT ALL EXISTING PIPES AND DRAINAGE STRUCTURES TO BE USED IN THE FINAL DRAINAGE SYSTEM AND AGREE ON THE CONDITION PRIOR TO THE START OF CONSTRUCTION. EXISTING PIPES AND DRAINAGE STRUCTURES DAMAGED DUE TO CONTRACTOR OPERATIONS SHALL BE REPAIRED OR REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE. THE DEPARTMENT WILL VIDEO INSPECT NEW PIPE RUNS TO CONFIRM CONDITION PRIOR TO ACCEPTANCE. PIPE CLEANING PRIOR TO VIDEO INSPECTION AND MAINTENANCE OF TRAFFIC DURING THE VIDEO INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND INCIDENTAL TO THE PIPE ITEM THAT IS BEING VIDEO INSPECTED.

10. THE COST FOR THE CONSTRUCTION OF MISCELLANEOUS TYPES OF STRUCTURES SUCH AS CONCRETE COLLARS CONNECTING EXISTING AND NEW PCC PIPE WHICH ARE DIRECTED BY THE ENGINEER SHALL BE INCIDENTAL TO CONSTRUCTION OF RESPECTIVE PROPOSED PIPE RUN.

SECTION 700

11. 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.

12. 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 762002 - SAWCUTTING, CONCRETE, FULL DEPTH.

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

14. 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.

15. 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 708060 - REPLACING DRAINAGE INLET. FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.

16. 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 710506 - ADJUST AND REPAIR EXISTING SANITARY SEWER MANHOLE.

17. THE CONTRACTOR SHALL DELIVER ALL EXCESS MILLED MATERIAL TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S CHAPMAN ROAD MAINTENANCE YARD. THE MATERIAL SHALL BE NEATLY STOCKPILED AT THE YARD. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO ITEM 760003 - PAVEMENT MILLING, HOT-MIX, VARIABLE DEPTH.

18. 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.

MISCELLANEOUS

19. THE CONTRACTOR SHALL CONTACT WILLIAM LOTHARP, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6006.

20. AS DESIGNED, THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT, SO AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED. THE WATER CROSSING AT BR-1-639 (EXISTING STA 128+40) IS JURISDICTIONAL. NO IMPACTS ARE TO OCCUR TO THIS WATERWAY. IN ADDITION, NO VEGETATION ADJACENT TO THE STREAM SHALL BE REMOVED WITHOUT PRIOR COORDINATION AND APPROVAL FROM THE ENVIRONMENTAL STUDIES SECTION AND APPROPRIATE AGENCIES.

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EARTHWORK SUMMARY

EARTHWORK SUMMARY	
EXCAVATION	
EXCAVATION FROM CROSS SECTIONS	5,732 C.Y.
ROCK EXCAVATION FOR ROADWAY AND TRENCHES	0 C.Y.
TOPSOIL STRIPPING	0 C.Y.
TOTAL EXCAVATION	5,732 C.Y.
EXCAVATION AVAILABLE FOR EMBANKMENT	
EXCAVATION MEETING BORROW TYPE 'A'	0 C.Y.
EXCAVATION MEETING BORROW TYPE 'F'	0 C.Y.
EXCAVATION MEETING TOPSOIL	0 C.Y.
EMBANKMENT REQUIREMENTS	
BORROW TYPE 'A' REQUIRED (INCLUDING UNDERCUT)	882 C.Y.
BORROW TYPE 'F' REQUIRED	623 C.Y.
TOPSOIL REQUIRED	897 C.Y.
MATERIAL BALANCE ("+"= EXCESS, "-"= NEED)	
BORROW TYPE 'A'	882 C.Y.
BORROW TYPE 'F'	623 C.Y.
TOPSOIL	897 C.Y.
UNSUITABLE MATERIAL	5,732 C.Y.

NOTES:

1) THE VALUES LISTED IN THE EARTHWORK SUMMARY ARE APPROXIMATE AND ARE NOT TO BE USED AS A BASIS OF PAYMENT. THE EARTHWORK SUMMARY IS CONSIDERED FOR INFORMATIONAL PURPOSES ONLY.

2) OTHER SOURCES OF EXCAVATION MAY INCLUDE PIPE TRENCH EXCAVATION, STRUCTURE EXCAVATION, UNDERCUT EXCAVATION, STORMWATER MANAGEMENT POND EXCAVATION, ENVIRONMENTAL SITE EXCAVATION, MAINTENANCE OF TRAFFIC EXCAVATION, ETC.

3) UNSUITABLE MATERIALS INCLUDE UNDERCUT SOILS, BITUMINOUS PAVEMENT, ETC.

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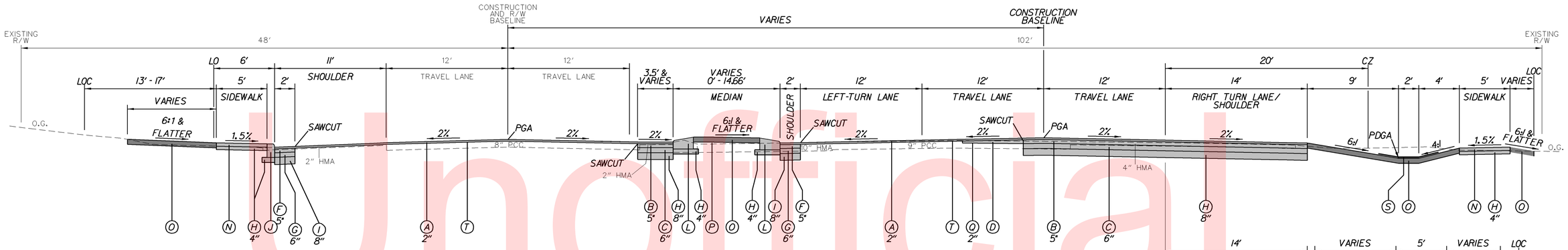
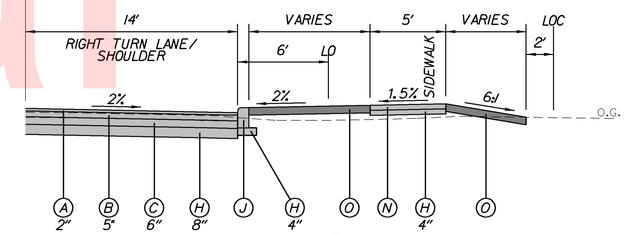
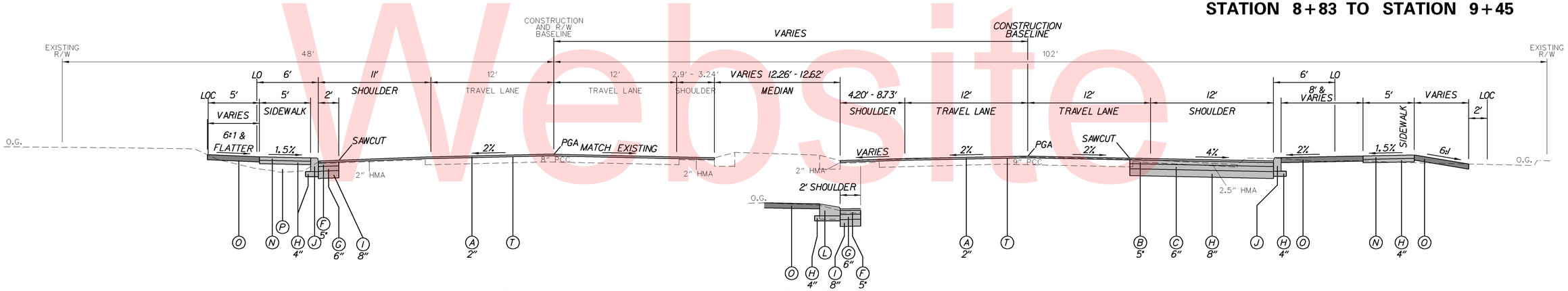


SR2
STATION 8+83 TO STATION 12+97



SR2
STATION 8+83 TO STATION 9+45



SR2
STATION 5+30 TO STATION 8+83

EASTBOUND SR2 MEDIAN
STATION 8+20
TO STATION 8+83

LEGEND

- (A) ITEM 401830 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (B) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (C) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (D) ITEM 401825 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, WEDGE
- (E) ITEM 501001 - PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- (F) ITEM 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING
- (G) ITEM 401823 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING
- (H) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (I) ITEM 302008 - GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING
- (J) ITEM 701012 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-4
- (K) ITEM 701010 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (L) ITEM 701011 - PORTAND CEMENT CONCRETE CURB, TYPE 2
- (M) ITEM 701026 - PORTLAND CEMENT CONCRETE MONOLITHIC MEDIAN
- (N) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (O) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (P) ITEM 209006 - BORROW, TYPE F
- (Q) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (R) ITEM 720043 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-27
- (S) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (T) ITEM 760003 - PAVEMENT MILLING, HOT-MIX, VARIABLE DEPTH
- (U) ITEM 401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING

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	3"	8"

NOTE: TYPE B MIX SHOULD BE PLACED IN TWO LIFTS.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY: SHB	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

TYPICAL SECTIONS

SHEET NO. 6
TOTAL SHTS. 64

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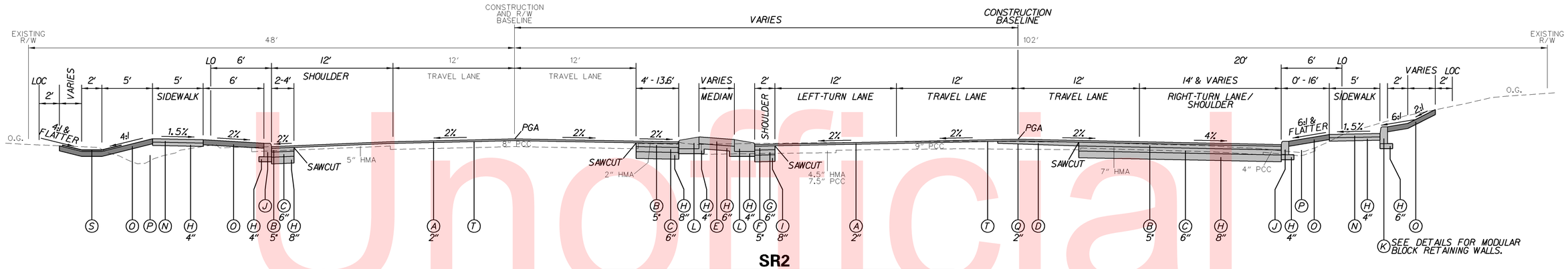
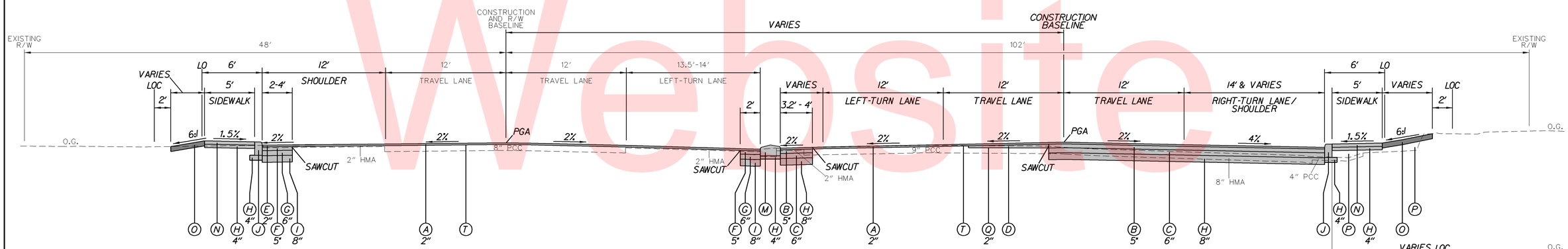


SR2
STATION 17+29 TO STATION 20+15



SR2
STATION 12+97 TO STATION 17+29

EASTBOUND SR2
STATION 14+69 TO STATION 17+29

LEGEND

- (A) ITEM 401830 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (B) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (C) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (D) ITEM 401825 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, WEDGE
- (E) ITEM 501001 - PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- (F) ITEM 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING
- (G) ITEM 401823 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING
- (H) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (I) ITEM 302008 - GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING
- (J) ITEM 701012 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-4
- (K) ITEM 701010 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (L) ITEM 701011 - PORTAND CEMENT CONCRETE CURB, TYPE 2
- (M) ITEM 701026 - PORTLAND CEMENT CONCRETE MONOLITHIC MEDIAN
- (N) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (O) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (P) ITEM 209006 - BORROW, TYPE F
- (Q) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (R) ITEM 720043 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-27
- (S) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (T) ITEM 760003 - PAVEMENT MILLING, HOT-MIX, VARIABLE DEPTH
- (U) ITEM 401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING

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	3"	8"

NOTE: TYPE B MIX SHOULD BE PLACED IN TWO LIFTS.

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: SHB / CHECKED BY: JKL	TYPICAL SECTIONS	SHEET NO. 7 / TOTAL SHTS. 64

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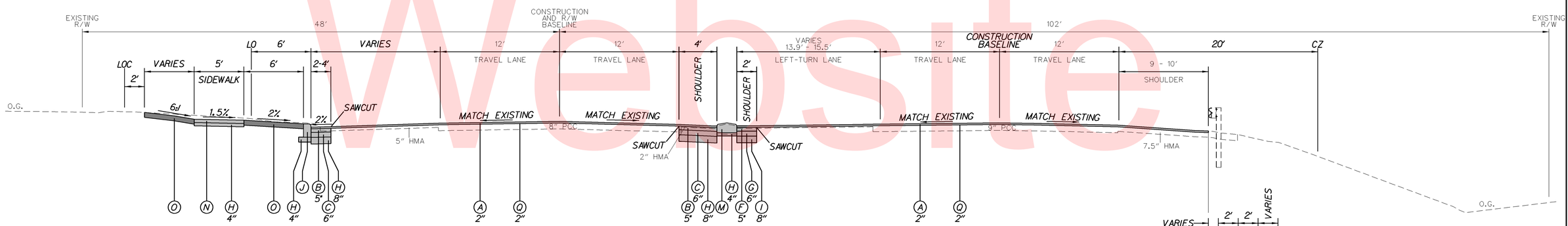
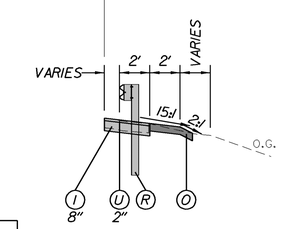


SR2
STATION 20+15 TO STATION 22+23



STATION 19+93 TO STATION 20+44
STATION 22+13 TO STATION 22+38

LEGEND

- (A) ITEM 401830 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (B) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (C) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
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- (E) ITEM 501001 - PORTLAND CEMENT CONCRETE PAVEMENT, 8"
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- (J) ITEM 701012 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-4
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- (L) ITEM 701011 - PORTAND CEMENT CONCRETE CURB, TYPE 2
- (M) ITEM 701026 - PORTLAND CEMENT CONCRETE MONOLITHIC MEDIAN
- (N) ITEM 705001 - P.C.C. SIDEWALK, 4"
- (O) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
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- (U) ITEM 401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING

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	3"	8"

NOTE: TYPE B MIX SHOULD BE PLACED IN TWO LIFTS.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

TYPICAL SECTIONS

SHEET NO. 8

TOTAL SHTS. 64

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CIRCULAR CURVE NO. 1

	STATION	NORTHING	EASTING
Element: Circular			
PC (10010)	130+60.47	625045.2755	584046.2759
PI (10009)	135+95.18	625418.7016	584428.9926
CC (10011)		620944.3823	588047.6180
PT (10012)	141+26.81	625714.8616	584874.1985
Radius:		5729.58	
Delta:		10° 39′ 48.2178″ Right	
Degree of Curvature(Arc):		1° 00′ 00.0000″	
Length:		1066.34	
Tangent:		534.71	
Chord:		1064.80	
Middle Ordinate:		24.79	
External:		24.90	
Tangent Direction:		N 45° 42′ 14.2231″ E	
Radial Direction:		S 44° 17′ 45.7769″ E	
Chord Direction:		N 51° 02′ 08.3320″ E	
Radial Direction:		S 33° 37′ 57.5591″ E	
Tangent Direction:		N 56° 22′ 02.4409″ E	

CIRCULAR CURVE NO. 2

	STATION	NORTHING	EASTING
Element: Circular			
PC (10802)	12+62.19	625164.5218	583793.0554
PI (10806)	17+10.58	625485.4542	583479.9137
CC (10803)		625736.1413	584378.8964
PT (10804)	20+82.61	625922.1184	583581.7947
Radius:		818.51	
Delta:		57° 25′ 45.0000″ Right	
Degree of Curvature(Arc):		7° 00′ 00.0350″	
Length:		820.42	
Tangent:		448.39	
Chord:		786.50	
Middle Ordinate:		100.66	
External:		114.77	
Tangent Direction:		N 44° 17′ 45.7769″ W	
Radial Direction:		N 45° 42′ 14.2231″ E	
Chord Direction:		N 15° 34′ 53.2769″ W	
Radial Direction:		S 76° 52′ 00.7769″ E	
Tangent Direction:		N 13° 07′ 59.2231″ E	

CIRCULAR CURVE NO. 3

	STATION	NORTHING	EASTING
Element: Circular			
PC (15017)	5+16.31	623725.6690	582757.2721
PI (15012)	5+95.00	623780.6249	582813.5952
CC (15018)		618092.7882	588253.4119
PT (15019)	6+73.69	623834.4436	582871.0060
Radius:		7870.00	
Delta:		1° 08′ 44.7462″ Right	
Degree of Curvature(Arc):		0° 43′ 40.8997″	
Length:		157.38	
Tangent:		78.69	
Chord:		157.38	
Middle Ordinate:		0.39	
External:		0.39	
Tangent Direction:		N 45° 42′ 14.2231″ E	
Radial Direction:		S 44° 17′ 45.7769″ E	
Chord Direction:		N 46° 16′ 36.5962″ E	
Radial Direction:		S 43° 09′ 01.0307″ E	
Tangent Direction:		N 46° 50′ 58.9693″ E	

CIRCULAR CURVE NO. 4

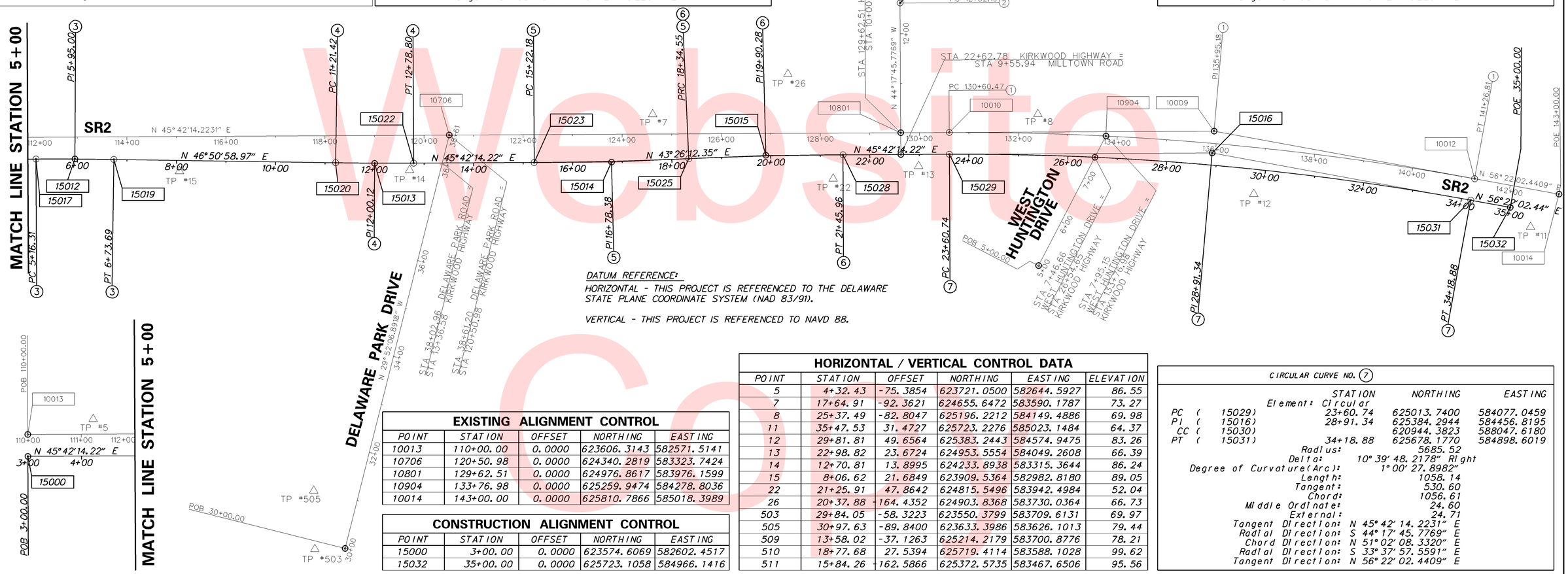
	STATION	NORTHING	EASTING
Element: Circular			
PC (15020)	11+21.42	624140.6571	583197.6579
PI (15013)	12+00.12	624194.4758	583255.0687
CC (15021)		629882.3125	577815.2520
PT (15022)	12+78.80	624249.4317	583311.3919
Radius:		7870.00	
Delta:		1° 08′ 44.7462″ Left	
Degree of Curvature(Arc):		0° 43′ 40.8997″	
Length:		157.38	
Tangent:		78.69	
Chord:		157.38	
Middle Ordinate:		0.39	
External:		0.39	
Tangent Direction:		N 46° 50′ 58.9693″ E	
Radial Direction:		S 43° 09′ 01.0307″ E	
Chord Direction:		N 46° 16′ 36.5962″ E	
Radial Direction:		S 44° 17′ 45.7769″ E	
Tangent Direction:		N 45° 42′ 14.2231″ E	

CIRCULAR CURVE NO. 5

	STATION	NORTHING	EASTING
Element: Circular			
PC (15023)	15+22.18	624419.3989	583485.5878
PI (15014)	16+78.38	624528.4857	583597.3885
CC (15024)		630069.4575	577972.6871
PT (15025)	18+34.55	624641.9098	583704.7863
Radius:		7894.00	
Delta:		2° 16′ 01.8802″ Left	
Degree of Curvature(Arc):		0° 43′ 32.9314″	
Length:		312.36	
Tangent:		156.20	
Chord:		312.34	
Middle Ordinate:		1.54	
External:		1.55	
Tangent Direction:		N 45° 42′ 14.2231″ E	
Radial Direction:		S 44° 17′ 45.7769″ E	
Chord Direction:		N 44° 34′ 13.2830″ E	
Radial Direction:		S 46° 33′ 47.6571″ E	
Tangent Direction:		N 43° 26′ 12.3429″ E	

CIRCULAR CURVE NO. 6

	STATION	NORTHING	EASTING
Element: Circular			
PC (15025)	18+34.55	624641.9125	583704.7889
PI (15015)	19+90.28	624754.9918	583811.8602
CC (15027)		619230.8661	589419.4609
PT (15028)	21+45.96	624863.7469	583923.3210
Radius:		7870.00	
Delta:		2° 16′ 01.8802″ Right	
Degree of Curvature(Arc):		0° 43′ 40.8997″	
Length:		311.42	
Tangent:		155.73	
Chord:		311.39	
Middle Ordinate:		1.54	
External:		1.54	
Tangent Direction:		N 43° 26′ 12.3429″ E	
Radial Direction:		S 46° 33′ 47.6571″ E	
Chord Direction:		N 44° 34′ 13.2830″ E	
Radial Direction:		S 44° 17′ 45.7769″ E	
Tangent Direction:		N 45° 42′ 14.2231″ E	



DATUM REFERENCE:
HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.

EXISTING ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
10013	110+00.00	0.0000	623606.3143	582571.5141
10706	120+50.98	0.0000	624340.2819	583323.7424
10801	129+62.51	0.0000	624976.8617	583976.1599
10904	133+76.98	0.0000	625259.9474	584278.8036
10014	143+00.00	0.0000	625810.7866	585018.3989

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
15000	3+00.00	0.0000	623574.6069	582602.4517
15032	35+00.00	0.0000	625723.1058	584966.1416

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
5	4+32.43	-75.3854	623721.0500	582644.5927	86.55
7	17+64.91	-92.3621	624655.6472	583590.1787	73.27
8	25+37.49	-82.8047	625196.2212	584149.4886	69.98
11	35+47.53	31.4727	625723.2276	585023.1484	64.37
12	29+81.81	49.6564	625383.2443	584574.9475	83.26
13	22+98.82	23.6724	624953.5554	584049.2608	66.39
14	12+70.81	13.8995	624233.8938	583315.3644	86.24
15	8+06.62	21.6849	623909.5364	582982.8180	89.05
22	21+25.91	47.8642	624815.5496	583942.4984	52.04
26	20+37.88	-164.4352	624903.8368	583730.0364	66.73
503	29+84.05	-58.3223	623550.3799	583709.6131	69.97
505	30+97.63	-89.8400	623633.3986	583626.1013	79.44
509	13+58.02	-37.1263	625214.2179	583700.8776	78.21
510	18+77.68	27.5394	625719.4114	583588.1028	99.62
511	15+84.26	-162.5866	625372.5735	583467.6506	95.56

CIRCULAR CURVE NO. 7

	STATION	NORTHING	EASTING
Element: Circular			
PC (15029)	23+60.74	625013.7400	584077.0459
PI (15016)	28+91.34	625384.2944	584456.8195
CC (15030)		620944.3823	588047.6180
PT (15031)	34+18.88	625678.1770	584898.6019
Radius:		5685.52	
Delta:		10° 39′ 48.2178″ Right	
Degree of Curvature(Arc):		1° 00′ 27.8982″	
Length:		1058.14	
Tangent:		530.60	
Chord:		1056.61	
Middle Ordinate:		24.60	
External:		24.71	
Tangent Direction:		N 45° 42′ 14.2231″ E	
Radial Direction:		S 44° 17′ 45.7769″ E	
Chord Direction:		N 51° 02′ 08.3320″ E	
Radial Direction:		S 33° 37′ 57.5591″ E	
Tangent Direction:		N 56° 22′ 02.4409″ E	

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 100 200 300 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A	
T201200701	DESIGNED BY:	SHB	
COUNTY			
NEW CASTLE	CHECKED BY:	JKL	

HORIZONTAL AND VERTICAL CONTROL

SHEET NO. 9

TOTAL SHTS. 64

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	15" RCP	III	8.00	0.0062	84.45	84.40
2	15" RCP	III	6.00	0.0032	84.47	84.45
3	15" RCP	III	288.00	0.0058	86.12	84.45
4	15" RCP	III	6.00	0.0096	86.28	86.22
5	15" RCP	III	6.00	0.0096	85.74	85.68
6	15" RCP	III	138.00	0.0132	85.48	83.66

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
1	DP-G	113+39.35	-35.74	88.06	2.78	1 1/4" PLASTIC
2	NCC-S	113+32.38	-30.25	87.74	10.02	8" D.S.V.C.
3	NCC-S	115+07.42	-22.16	88.34	10.99	8" D.S.V.C.
4	DP-G	115+12.21	-30.95	89.24	2.92	1 1/4" PLASTIC
5	DP-G	116+25.74	-34.15	90.11	3.50	1 1/4" PLASTIC
6	NCC-S	116+95.00	-22.00	88.55	11.61	8" D.S.V.C.

DRAINAGE INLET SCHEDULE

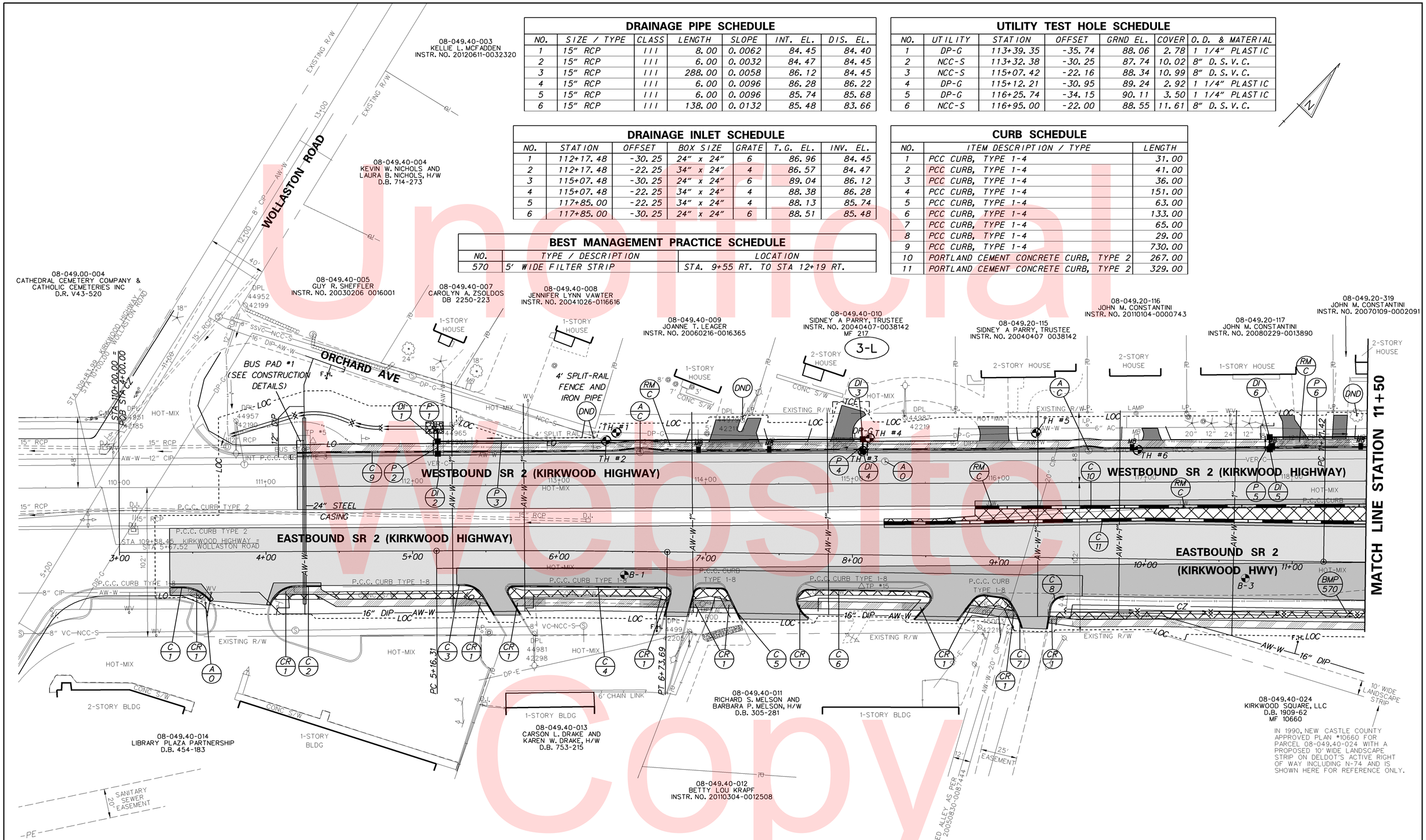
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
1	112+17.48	-30.25	24" x 24"	6	86.96	84.45
2	112+17.48	-22.25	34" x 24"	4	86.57	84.47
3	115+07.48	-30.25	24" x 24"	6	89.04	86.12
4	115+07.48	-22.25	34" x 24"	4	88.38	86.28
5	117+85.00	-22.25	34" x 24"	4	88.13	85.74
6	117+85.00	-30.25	24" x 24"	6	88.51	85.48

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	PCC CURB, TYPE 1-4	31.00
2	PCC CURB, TYPE 1-4	41.00
3	PCC CURB, TYPE 1-4	36.00
4	PCC CURB, TYPE 1-4	151.00
5	PCC CURB, TYPE 1-4	63.00
6	PCC CURB, TYPE 1-4	133.00
7	PCC CURB, TYPE 1-4	65.00
8	PCC CURB, TYPE 1-4	29.00
9	PCC CURB, TYPE 1-4	730.00
10	PORTLAND CEMENT CONCRETE CURB, TYPE 2	267.00
11	PORTLAND CEMENT CONCRETE CURB, TYPE 2	329.00

BEST MANAGEMENT PRACTICE SCHEDULE

NO.	TYPE / DESCRIPTION	LOCATION
570	5' WIDE FILTER STRIP	STA. 9+55 RT. TO STA 12+19 RT.



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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701	BRIDGE NO. N/A	CONSTRUCTION PLAN	SHEET NO. 10
				COUNTY NEW CASTLE	DESIGNED BY: SHB		TOTAL SHTS. 64
					CHECKED BY: JKL		

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CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
12	PCC CURB, TYPE 1-4	142.00
13	PCC CURB, TYPE 1-4	55.00
14	PORTLAND CEMENT CONCRETE CURB, TYPE 2	296.00
15*	PORTLAND CEMENT CONCRETE CURB, TYPE 2	131.00
16*	PORTLAND CEMENT CONCRETE CURB, TYPE 2	100.00
17	PORTLAND CEMENT CONCRETE CURB, TYPE 2	49.00
18	PORTLAND CEMENT CONCRETE CURB, TYPE 2	38.00
19*	PORTLAND CEMENT CONCRETE CURB, TYPE 2	45.00
20*	PORTLAND CEMENT CONCRETE CURB, TYPE 2	59.00
21*	PORTLAND CEMENT CONCRETE CURB, TYPE 2	75.00
22	PCC CURB, TYPE 1-4	388.00
23	PCC MONOLITHIC MEDIAN	334.00
24	PCC CURB, TYPE 1-4	191.00
25	PCC CURB, TYPE 1-4	50.00
26	PCC CURB, TYPE 1-4	26.00
27	PCC CURB, TYPE 1-4	189.00
28	PCC CURB, SPECIAL	52.00
29	PORTLAND CEMENT CONCRETE CURB, TYPE 2	35.00
30	PORTLAND CEMENT CONCRETE CURB, TYPE 2	66.00
31	PCC CURB, TYPE 1-4	99.00
32	PORTLAND CEMENT CONCRETE CURB, TYPE 2	343.00
33	PCC CURB, TYPE 1-4	144.00

* THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTAL TO ITEM 705530 - TRIANGULAR CHANNELIZING ISLANDS.

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
44	PCC CURB, TYPE 1-8	60.00
45	PCC CURB, TYPE 1-8	105.00
46	PCC CURB, TYPE 1-4	5.00

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
7	15" RCP	III	6.00	0.0096	83.82	83.76
8	15" RCP	III	62.00	0.0240	83.46	81.96
9	15" RCP	III	43.00	0.0235	81.76	80.76
10	15" RCP	III	12.00	0.0083	83.01	82.91
11	15" RCP	III	12.00	0.0508	81.06	80.45
12	15" RCP	III	144.00	0.0268	80.56	76.70
13	15" RCP	III	12.00	0.0100	77.22	77.10
14	15" RCP	III	254.00	0.0296	77.53	70.01
15	18" RCP	III	192.00	0.0200	75.34	71.50
16	15" RCP	III	12.00	0.0200	71.75	71.51
17	18" RCP	III	176.00	0.0206	69.78	66.16
18	15" RCP	III	185.00	0.0215	69.81	65.83
19	18" RCP	III	173.00	0.0240	63.21	59.06

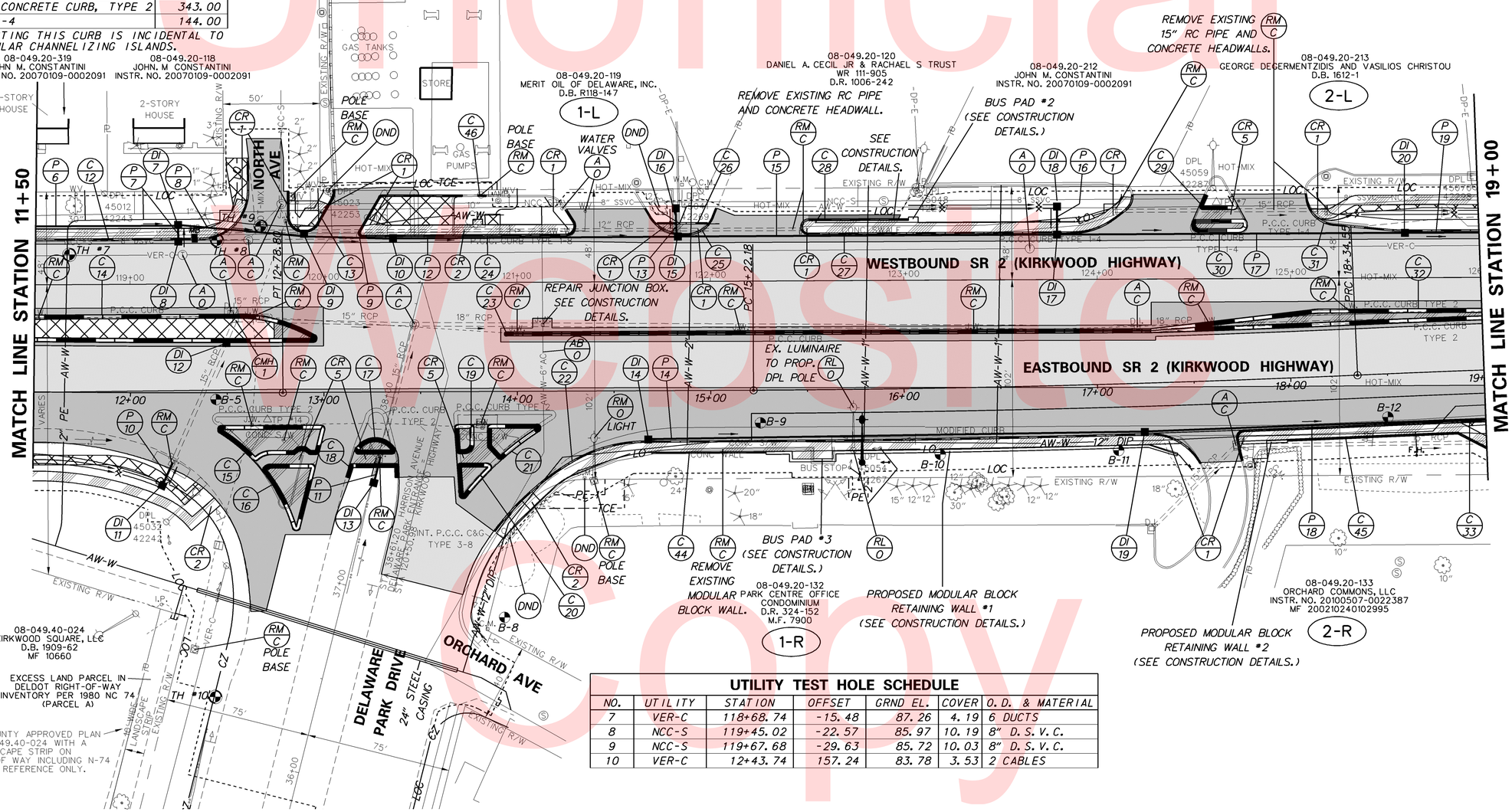
DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
7	119+25.00	-30.67	34" x 24"	3	86.71	83.46
8	119+25.00	-22.25	34" x 24"	4	86.34	83.82
9	119+90.09	-25.70	48" x 48"	4	85.26	81.76
10	120+36.00	-23.25	34" x 24"	4	84.31	80.56
11	12+16.63	48.00	34" x 24"	4	85.16	83.01
12*	12+49.68	-25.25	72" x 24"	4	86.00	EX. ELEV.
13	13+25.57	46.85	34" x 24"	4	83.21	81.06
14	14+67.62	25.25	34" x 24"	4	80.83	77.53
15	121+83.36	-23.25	48" x 30"	4	80.38	75.34
16	121+82.33	-37.91	34" x 24"	2	80.22	77.22
17	123+79.38	-23.25	48" x 30"	4	74.91	69.78
18	123+79.38	-37.75	34" x 24"	2	74.14	71.75
19	17+23.72	25.25	34" x 24"	4	73.39	69.81
20	125+59.28	-23.25	48" x 30"	4	70.17	63.21

* DOGHOUSE INLET

CONVERT TO MANHOLE SCHEDULE

NO.	STATION	OFFSET	T.C. EL.	INV. EL.
1	119+54.56	18.72	86.23	EX. ELEV.



UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
7	VER-C	118+68.74	-15.48	87.26	4.19	6 DUCTS
8	NCC-S	119+45.02	-22.57	85.97	10.19	8" D.S.V.C.
9	NCC-S	119+67.68	-29.63	85.72	10.03	8" D.S.V.C.
10	VER-C	12+43.74	157.24	83.78	3.53	2 CABLES

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

CONSTRUCTION PLAN

SHEET NO. 11 / TOTAL SHTS. 64

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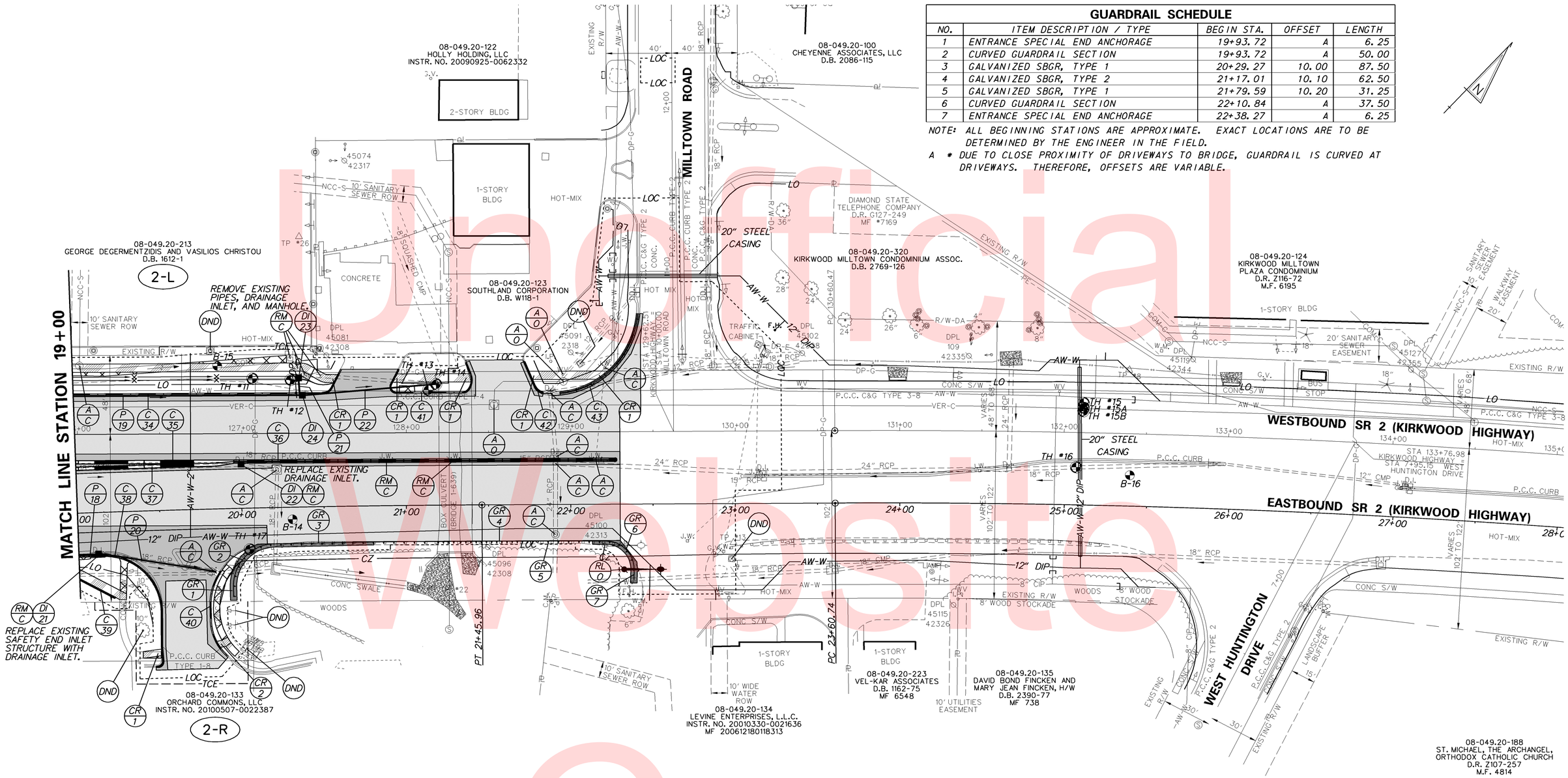

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	ENTRANCE SPECIAL END ANCHORAGE	19+93.72	A	6.25
2	CURVED GUARDRAIL SECTION	19+93.72	A	50.00
3	GALVANIZED SBGR, TYPE 1	20+29.27	10.00	87.50
4	GALVANIZED SBGR, TYPE 2	21+17.01	10.10	62.50
5	GALVANIZED SBGR, TYPE 1	21+79.59	10.20	31.25
6	CURVED GUARDRAIL SECTION	22+10.84	A	37.50
7	ENTRANCE SPECIAL END ANCHORAGE	22+38.27	A	6.25

NOTE: ALL BEGINNING STATIONS ARE APPROXIMATE. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

A * DUE TO CLOSE PROXIMITY OF DRIVEWAYS TO BRIDGE, GUARDRAIL IS CURVED AT DRIVEWAYS. THEREFORE, OFFSETS ARE VARIABLE.

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
34	PCC CURB, TYPE 1-4	172.00
35	PORTLAND CEMENT CONCRETE CURB, TYPE 2	96.00
36	PCC MONOLITHIC MEDIAN	233.00
37	PORTLAND CEMENT CONCRETE CURB, TYPE 2	96.00
38	PCC CURB, TYPE 1-4	107.00
39	PCC CURB, TYPE 1-8	24.00
40	PCC CURB, TYPE 1-4	57.00
41	PCC CURB, TYPE 1-4	81.00
42	PCC CURB, TYPE 1-4	23.00
43	INT PCC CURB AND GUTTER, TYPE 2	75.00

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
20	18" RCP	III	71.00	0.0060	65.63	65.21
21	15" RCP	III	8.00	0.0109	63.50	63.41
22	18" RCP	III	80.00	0.0734	58.86	52.99

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
21	19+11.93	25.25	48" x 30"	4	68.89	65.63
22	20+00.16	-26.68	72" x 48"	4	67.54	EX. ELEV.
23	127+34.64	-33.75	34" x 24"	2	66.44	63.50
24	127+37.13	-23.25	72" x 48"	4	67.18	58.86

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
11	DP-G	127+06.57	-33.36	66.66	2.93	2" PLASTIC
12	DP-G	127+29.79	-32.57	66.46	2.88	2" PLASTIC
13	AW-W	128+13.47	-25.92	66.87	2.75	12" CAST IRON
14	BRIDGE	128+18.21	-29.45	67.27	3.30	CONCRETE FRAME
15	VER-C	132+11.42	-18.01	70.37	UNF	6 DUCTS
15A	VER-C	132+11.52	-15.09	70.43	UNF	6 DUCTS
15B	VER-C	132+11.35	-13.03	70.47	UNF	6 DUCTS
16	PIPE	132+07.63	21.17	69.85	4.24	18" RCP
17	DP-G	20+04.34	25.05	67.99	UNF	2" PLASTIC

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY: SHB	
COUNTY	CHECKED BY: JKL	
NEW CASTLE		

CONSTRUCTION PLAN

SHEET NO. 12 TOTAL SHTS. 64

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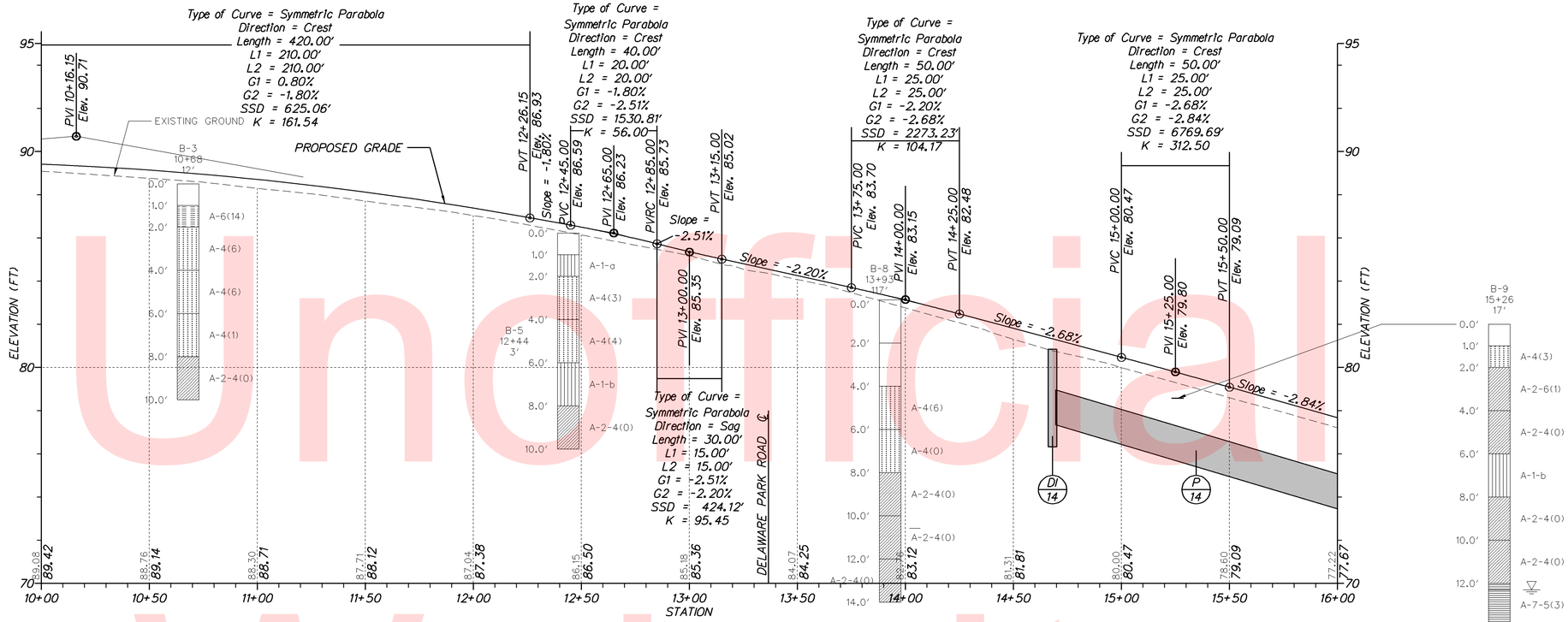
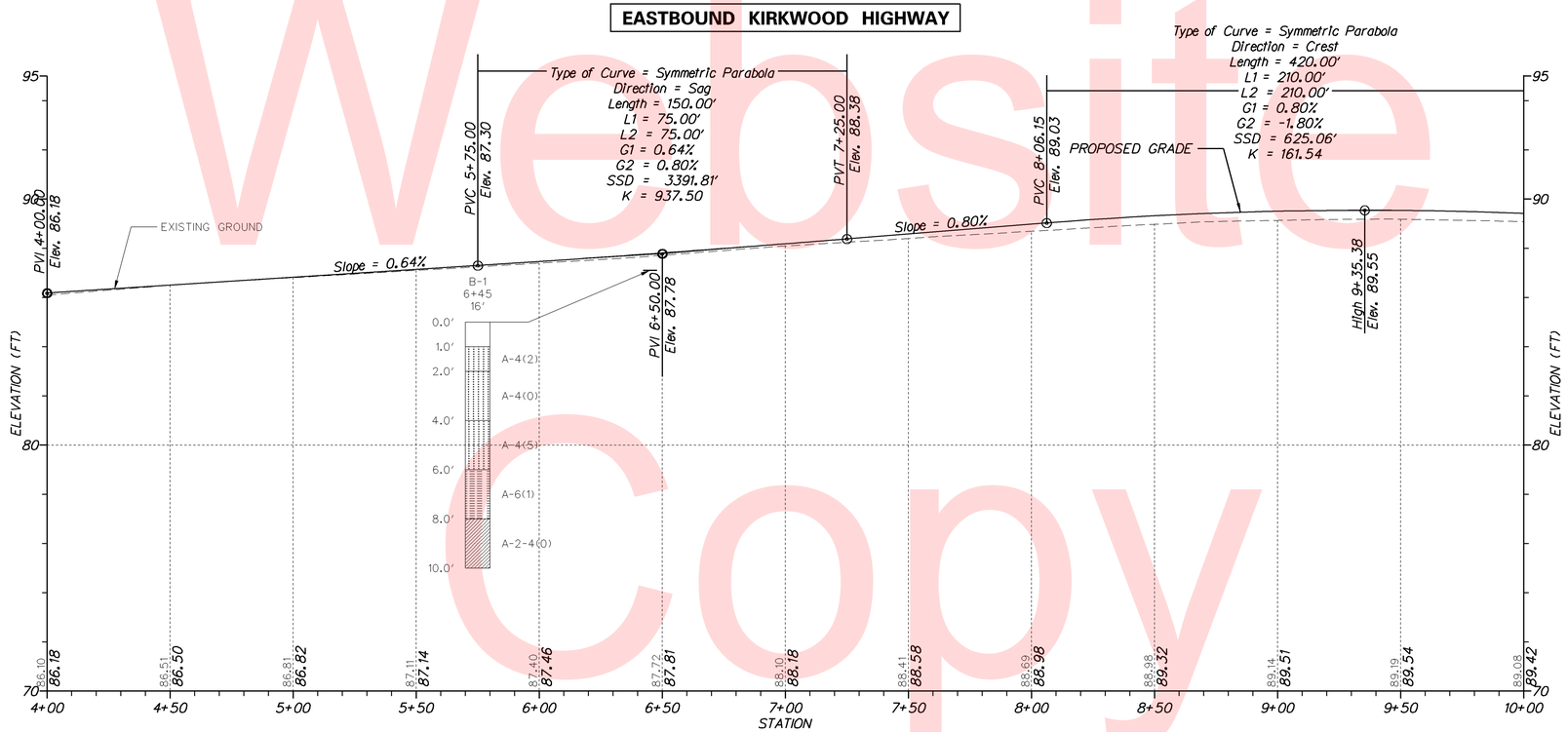


EASTBOUND KIRKWOOD HIGHWAY



EASTBOUND KIRKWOOD HIGHWAY

VERTICAL SCALE FEET 0 3 6 9

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

PROFILES

SHEET NO. 13

TOTAL SHTS. 64

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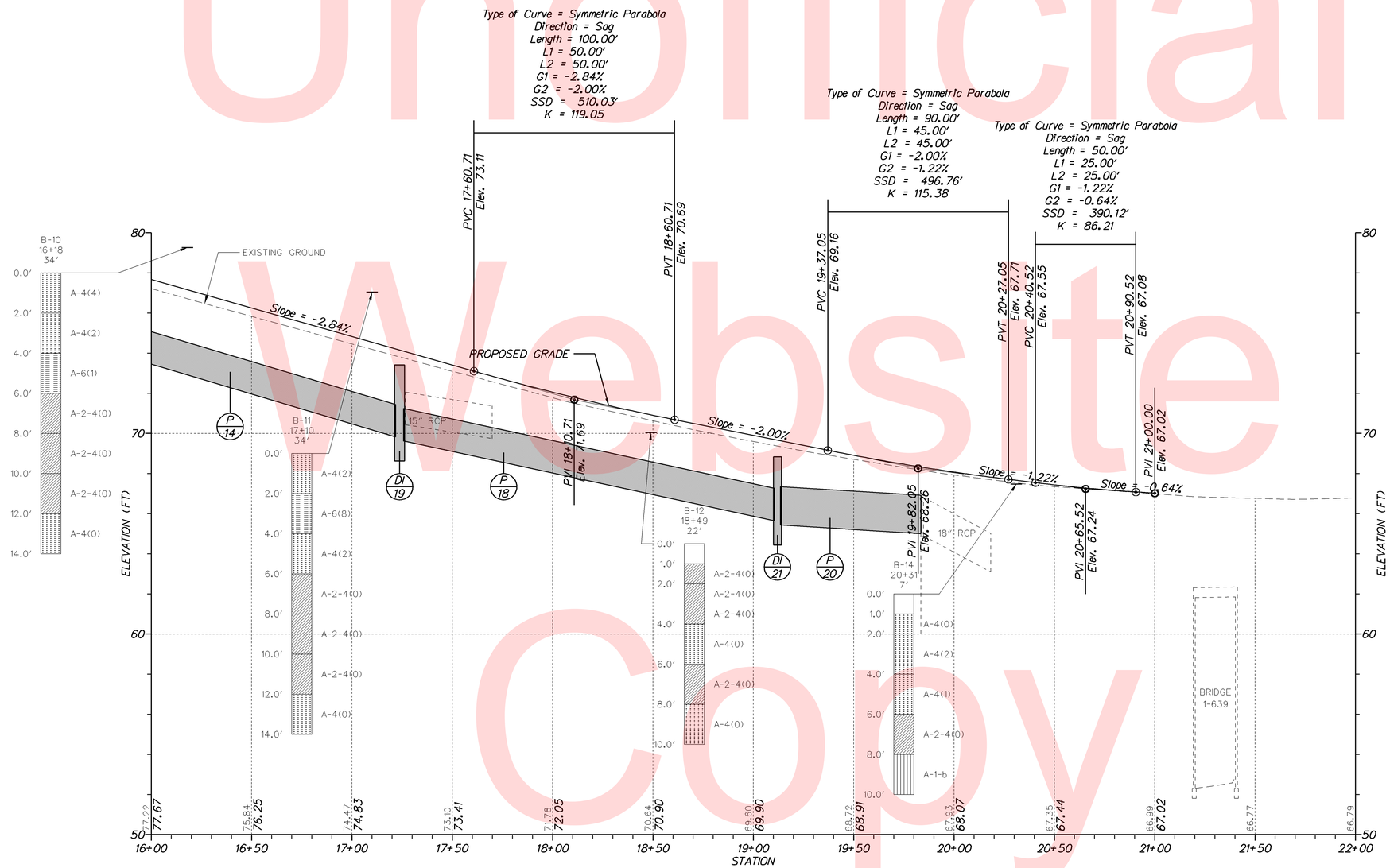

EASTBOUND KIRKWOOD HIGHWAY

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD**	CONTRACT T201200701	BRIDGE NO. N/A	**PROFILES**	SHEET NO. 14
				COUNTY NEW CASTLE	DESIGNED BY: SHB		TOTAL SHTS. 64
					CHECKED BY: JKL		

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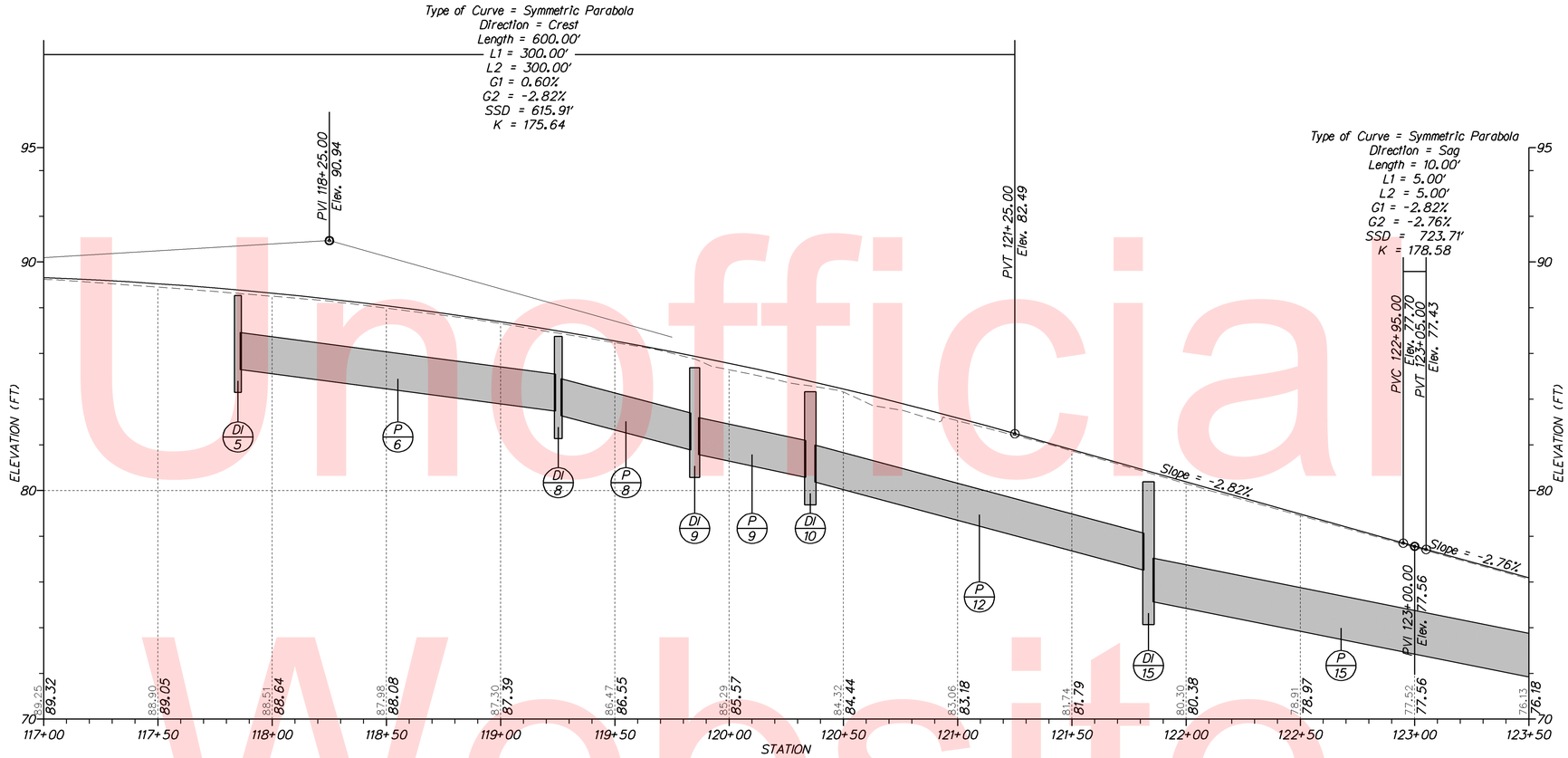
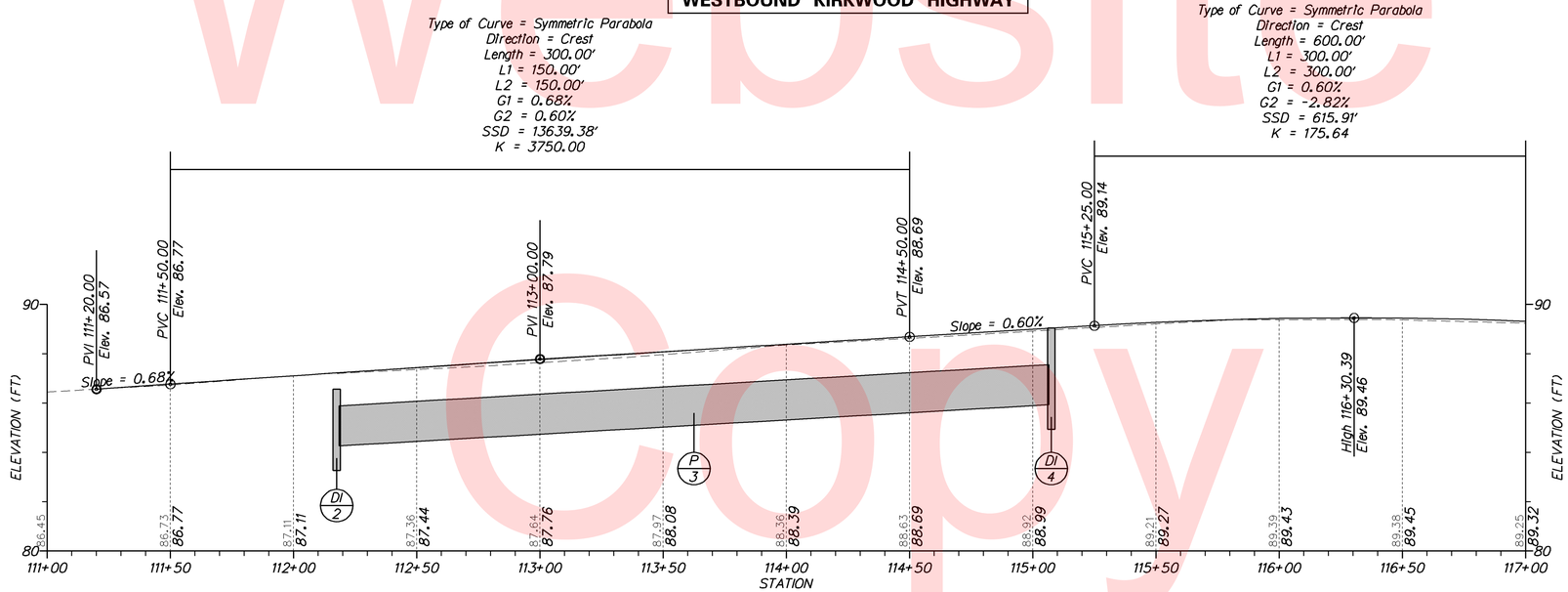


WESTBOUND KIRKWOOD HIGHWAY



WESTBOUND KIRKWOOD HIGHWAY

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VERTICAL SCALE FEET 0 3 6 9

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD**	CONTRACT T201200701 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: SHB / CHECKED BY: JKL	**PROFILES**	SHEET NO. 15 / TOTAL SHTS. 64

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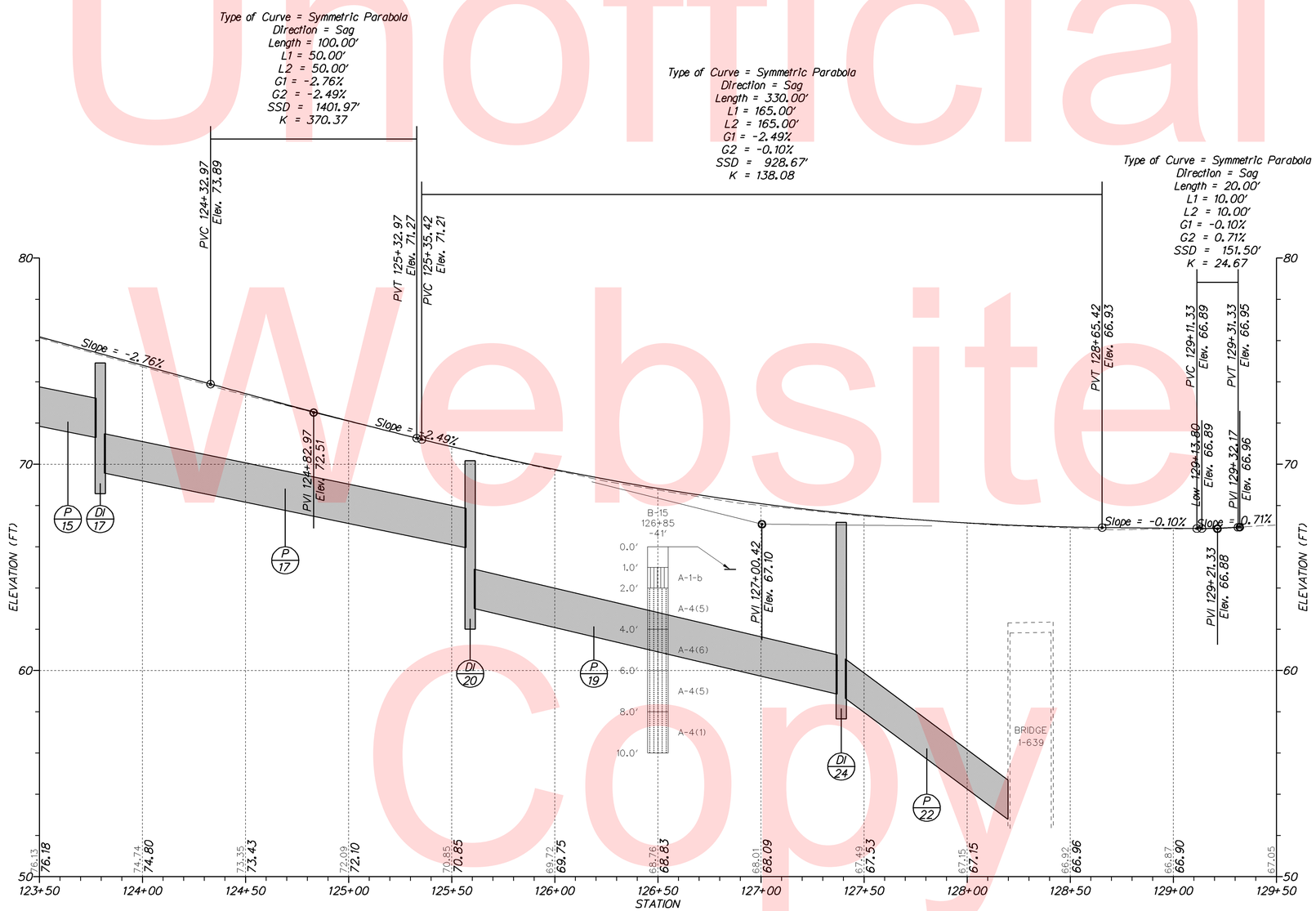

WESTBOUND KIRKWOOD HIGHWAY

VERTICAL SCALE FEET 0 3 6 9

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD**	CONTRACT T201200701	BRIDGE NO. N/A	**PROFILES**
				COUNTY NEW CASTLE	DESIGNED BY: SHB	
					CHECKED BY: JKL	

SHEET NO. 16
TOTAL SHTS. 64

NOTES:

1. OFFSETS SHOWN IN THE GEOMETRY TABLES WITH A MINUS SIGN ARE TO THE LEFT OF THE SR 2 (EASTBOUND KIRKWOOD HIGHWAY) CONSTRUCTION BASELINE OR THE R/W BASELINE (WESTBOUND KIRKWOOD HIGHWAY).
2. ULNESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN TO THE EDGE OF PAVEMENT.
3. RADII ARE GIVEN TO EDGE OF PAVEMENT.
4. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS AT CURB RETURNS ARE GIVEN AT 10 FOOT INTERVALS.
5. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
6. PROPOSED CURBS OR PAVEMENT THAT TIE INTO EXISTING PAVEMENT OR CURBS SHALL MATCH EXISTING PAVEMENT OR CURB ELEVATIONS.

COORDINATE LIST

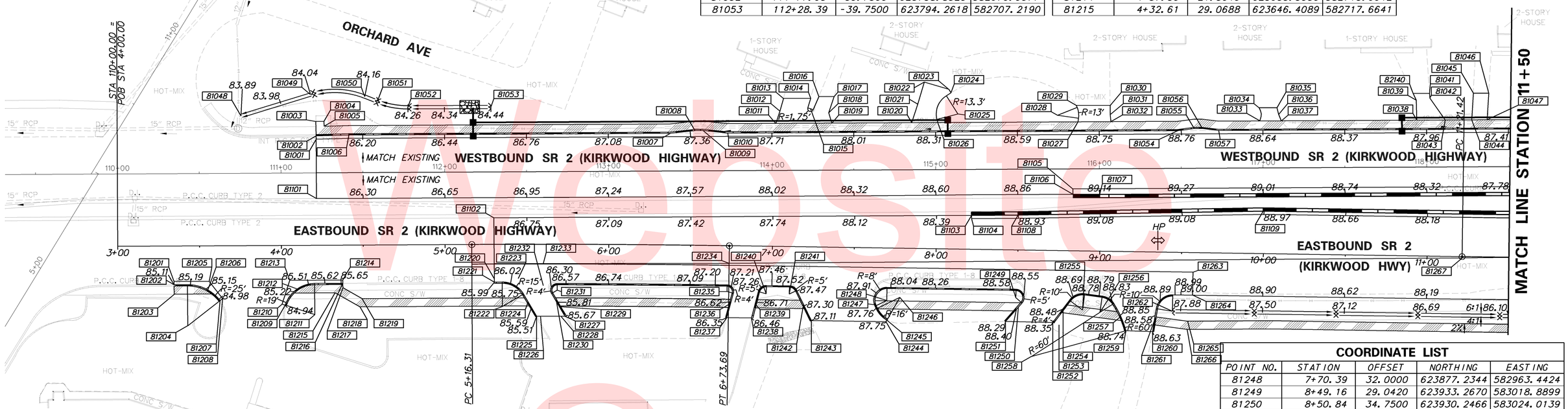
POINT NO.	STATION	OFFSET	NORTHING	EASTING
81001	111+21.58	-20.6004	623705.9662	582644.1473
81002	111+21.54	-22.6000	623707.3694	582642.7221
81003	111+21.36	-31.3482	623713.5085	582636.4872
81004	111+26.36	-31.4484	623717.0713	582639.9952
81005	111+26.42	-28.4490	623714.9665	582642.1329
81006	111+41.50	-23.0000	623721.5951	582656.7290
81007	113+38.00	-23.0000	623858.8240	582797.3721
81008	113+53.00	-24.6000	623870.4447	582806.9908
81009	113+58.00	-24.6000	623873.9365	582810.5695
81010	113+73.00	-23.0000	623883.2668	582822.4230
81011	114+02.43	-28.7500	623907.9322	582839.4685
81012	114+05.02	-36.2582	623915.1152	582836.0792
81013	114+07.25	-44.0000	623922.2148	582832.2698
81014	114+23.81	-44.0000	623933.7801	582844.1229
81015	114+23.71	-37.6421	623929.1583	582848.4900
81016	114+28.80	-45.0000	623937.9836	582846.9990
81017	114+38.15	-45.0000	623944.5088	582853.6865
81018	114+34.82	-35.1092	623935.1035	582858.2100
81019	114+36.64	-28.7500	623931.8281	582863.9589
81020	114+85.46	-28.7500	623965.9176	582898.8966
81021	114+89.23	-40.0666	623976.6508	582893.6924
81022	114+93.28	-53.5613	623989.1420	582887.1712
81023	115+08.24	-49.0654	623996.3704	582901.0170
81024	115+09.56	-46.9682	623995.7905	582903.4258
81025	115+13.82	-33.9344	623989.4353	582915.5759

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81026	115+01.40	-28.7500	623977.0514	582910.3074
81027	115+87.11	-28.7500	624036.9068	582971.6519
81028	115+74.54	-32.7749	624031.0127	582959.8479
81029	115+86.16	-38.7500	624043.4034	582963.9911
81030	116+06.79	-38.7500	624057.8086	582978.7546
81031	116+06.80	-33.1711	624053.8239	582982.6593
81032	116+07.16	-28.7500	624050.9129	582986.0066
81033	116+98.16	-28.7500	624114.4620	583051.1367
81034	116+97.80	-36.7500	624119.9387	583045.2943
81035	117+08.69	-36.7500	624127.5429	583053.0877
81036	117+09.66	-32.6998	624125.3204	583056.6094
81037	117+11.25	-28.7500	624123.6020	583060.5041
81038	117+94.05	-28.7500	624181.4291	583119.7699
81039	117+93.88	-40.8552	624189.9766	583111.1964
81040	117+91.91	-45.0000	624191.5674	583106.8919
81041	118+01.98	-45.0000	624198.5981	583114.0974
81042	118+02.15	-42.2857	624196.7713	583116.1118
81043	118+11.48	-28.7500	624193.6016	583132.2452
81044	118+27.72	-28.7500	624204.9432	583143.8690
81045	118+28.71	-45.0000	624217.2669	583133.2307
81046	118+38.15	-45.0000	624223.8548	583139.9825
81047	118+37.03	-28.7500	624211.4434	583150.5309
81048	110+75.67	-34.9940	623684.2073	582601.2366
81049	111+18.30	-47.8697	623723.1921	582622.7544
81050	111+51.33	-46.4295	623745.2263	582647.3991
81051	111+59.08	-43.3261	623748.4233	582655.1194
81052	111+77.65	-39.7500	623758.8320	582670.9077
81053	112+28.39	-39.7500	623794.2618	582707.2190

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81054	116+48.00	-23.0000	624075.3174	583019.2517
81055	116+58.00	-24.2500	624083.1958	583025.5362
81056	116+63.00	-24.2500	624086.6876	583029.1149
81057	116+73.00	-23.0000	624092.7766	583037.1453
81101	4+21.54	-28.5598	623679.9278	582669.4976
81102	5+29.83	-16.2505	623746.7553	582755.6302
81103	8+21.35	-20.7337	623950.5589	582964.5552
81104	8+21.39	-18.7341	623949.1273	582965.9519
81105	8+83.10	-37.8686	624005.2926	582997.8881
81106	8+83.13	-34.5299	624002.8798	583000.1959
81107	8+99.36	-34.6931	624014.0967	583011.9229
81108	8+49.81	-21.3009	623970.4341	582984.9277
81109	9+99.52	-26.0000	624076.2512	583090.9367
81201	3+34.29	21.7000	623583.0242	582642.1509
81202	3+34.29	23.7000	623581.5927	582643.5476
81203	3+34.29	29.4500	623577.4772	582647.5632
81204	3+42.51	48.7000	623569.4369	582666.8872
81205	3+55.80	21.7000	623598.0423	582657.5426
81206	3+54.83	26.9500	623593.6125	582660.5202
81207	3+62.32	33.4500	623594.1866	582670.4160
81208	3+63.90	32.2300	623596.1666	582670.6983
81209	4+02.14	36.5000	623619.8108	582701.0451
81210	4+00.24	35.8732	623618.9331	582699.2480
81211	4+20.21	42.3549	623628.2437	582718.0715
81212	4+09.54	26.6359	623632.0408	582699.4548
81213	4+05.01	21.3990	623632.6289	582692.5587
81214	4+37.39	21.3049	623655.3050	582715.6642
81215	4+32.61	29.0688	623646.4089	582717.6641



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81216	4+37.39	23.3049	623653.8776	582717.0651
81217	4+37.40	26.0549	623651.9149	582718.9913
81218	4+47.74	37.7500	623650.7671	582734.5614
81219	4+49.08	32.7500	623655.2760	582732.0229
81220	5+29.99	21.0498	623720.1248	582781.7484
81221	5+30.00	23.0497	623718.6970	582783.1488
81222	5+34.92	38.0272	623711.3694	582797.0997
81223	5+44.64	20.9732	623730.3529	582792.1771

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81224	5+50.72	35.1751	623724.3661	582806.4118
81225	5+55.91	43.9009	623721.6792	582816.1872
81226	5+58.26	43.9164	623723.2890	582817.8767
81227	5+73.42	44.0000	623733.6901	582828.7920
81228	5+70.92	43.9882	623731.9750	582826.9921
81229	5+69.82	38.1354	623735.4355	582822.1474
81230	5+68.14	35.2497	623736.3505	582818.9371
81231	5+68.55	28.0000	623741.8584	582814.2053
81232	5+60.00	25.2752	623737.9070	582806.1794
81233	5+60.00	11.7789	623747.6189	582796.8079
81234	6+73.69	10.7286	623826.6164	582878.3435
81235	6+72.69	28.0000	623813.3336	582889.4280

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81236	6+74.97	35.2501	623809.6045	582896.0508
81237	6+72.74	44.0000	623801.6970	582900.4094
81238	6+87.88	44.0000	623812.0487	582911.4520
81239	6+90.00	35.2523	623819.8826	582907.0181
81240	6+96.66	29.0000	623829.0006	582907.6027
81241	7+10.76	29.0000	623838.6406	582917.8862
81242	7+19.53	35.2500	623840.0779	582928.5580
81243	7+24.46	45.0000	623836.3408	582938.8276
81244	7+70.05	45.0000	623867.5188	582972.0866
81245	7+70.61	44.0000	623868.6268	582971.8064
81246	7+78.35	30.0000	623884.1383	582967.8827
81247	7+62.88	34.7500	623870.0902	582959.8423

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81248	7+70.39	32.0000	623877.2344	582963.4424
81249	8+49.16	29.0420	623933.2670	583018.8899
81250	8+50.84	34.7500	623930.2466	583024.0139
81251	8+43.08	43.7118	623918.4041	583024.4847
81252	8+71.99	43.9886	623937.9766	583045.7683
81253	8+75.75	45.3620	623939.5440	583049.4484
81254	8+78.12	35.4052	623948.4249	583044.3635
81255	8+90.04	36.0770	623956.0896	583053.5220
81256	9+00.71	37.3543	623962.4566	583062.1818
81257	9+13.42	39.6310	623969.4889	583073.0123
81258	8+59.05	65.0000	623913.7942	583050.6941
81259	9+16.70	48.3699	623965.3541	583081.3792
81260	9+33.02	48.7531	623976.2338	583093.5454
81261	9+33.98	42.0913	623981.7519	583089.6912
81262	9+44.96	36.0000	623993.7076	583093.5383
81263	9+57.15	12.0000	624019.5533	583086.0170
81264	9+57.15	26.0000	624009.3394	583095.5918
81265	9+54.36	42.0128	623995.7482	583104.5069
81266	9+54.11	47.0188	623991.9262	583107.7494
81267	11+21.42	0.8737	624140.0197	583198.2554

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

GRADES AND GEOMETRICS

SHEET NO. 17 / TOTAL SHTS. 64

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COORDINATE LIST

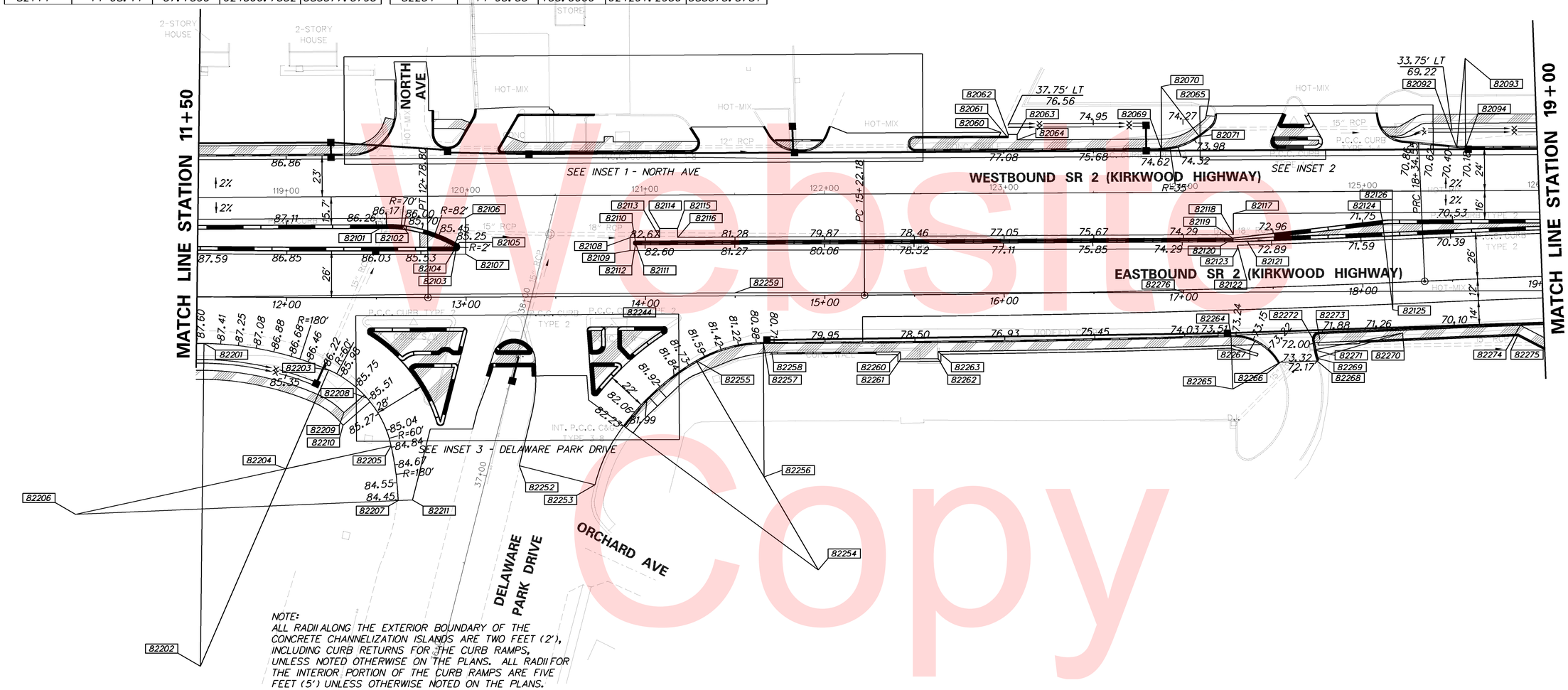
POINT NO.	STATION	OFFSET	NORTHING	EASTING
82060	122+98.47	-34.0000	624537.4577	583477.1387
82061	123+02.56	-31.0000	624538.1633	583482.1577
82062	123+02.56	-32.7500	624539.4159	583480.9355
82063	123+07.56	-32.7500	624542.9077	583484.5142
82064	123+07.56	-29.7500	624540.7605	583486.6093
82065	124+12.96	-42.6806	624623.6248	583553.0198
82069	123+88.01	-24.0000	624592.8301	583548.2079
82070	123+88.01	-59.0000	624617.8810	583523.7651
82071	124+09.23	-31.1639	624612.7747	583558.3906
82092	125+52.52	-24.2481	624707.8958	583665.7810
82093	125+57.49	-74.0000	624746.9797	583634.5970
82094	125+57.49	-24.0000	624711.1926	583669.5153
82101	12+55.75	-40.6664	624262.5449	583266.5524
82102	12+64.81	-40.1043	624268.4254	583273.4144
82103	12+94.46	-26.0000	624278.9775	583304.4430
82104	12+94.46	-28.0000	624280.4090	583303.0462
82105	12+95.47	-29.7300	624282.3481	583302.5564
82106	13+00.00	-44.2000	624295.8710	583295.6959
82107	13+00.00	-24.0000	624281.4130	583309.8029
82108	13+91.61	-32.7500	624351.6534	583369.2616
82109	13+91.61	-25.5700	624346.5144	583374.2759
82110	13+94.61	-30.7500	624352.3170	583372.8055
82111	13+94.61	-29.7500	624351.6013	583373.5039
82112	13+94.61	-28.7500	624350.8855	583374.2023
82113	14+08.11	-32.7500	624363.1765	583381.0713
82114	14+08.11	-37.7500	624366.7552	583377.5795

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82115	14+18.11	-37.7500	624373.7388	583384.7369
82116	14+18.11	-32.7500	624370.1601	583388.2287
82117	17+29.05	-41.7038	624594.8694	583601.8468
82118	17+28.75	-30.0578	624586.5310	583609.9828
82119	17+28.40	-28.0661	624584.8978	583611.1728
82120	17+25.53	-26.1398	624581.4997	583610.5540
82121	17+36.42	-26.0000	624589.1853	583618.2199
82122	17+30.87	-24.0000	624583.8280	583615.8041
82123	17+30.82	-22.0249	624582.4139	583617.1838
82124	18+12.38	-34.7794	624649.8168	583664.3339
82125	18+16.10	15.0818	624618.1387	583703.0185
82126	18+17.97	-34.8834	624653.9258	583668.1002
82201	11+54.19	26.0000	624144.2201	583239.3750
82202	11+54.19	206.0000	624013.4125	583363.0253
82203	12+23.54	40.3538	624181.8992	583299.6832
82204	12+00.10	95.5000	624125.7370	583320.7972
82205	12+58.07	82.6988	624175.6269	583354.1289
82206	10+84.18	122.3054	624025.9572	583254.1338
82207	12+61.87	113.2124	624156.4190	583378.1489
82208	12+44.90	56.0774	624185.5051	583326.0675
82209	12+31.98	64.0677	624170.7134	583322.2535
82210	12+31.49	71.1273	624165.2849	583326.7942
82211	12+69.67	112.9016	624162.1560	583383.6025
82252	13+29.25	94.1073	624217.3089	583413.2234
82253	13+71.37	104.9428	624238.9670	583450.9359
82254	14+95.55	153.0000	624291.2936	583573.3781

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82255	14+28.20	36.0000	624328.0005	583443.4643
82256	14+65.62	101.0000	624307.6078	583515.6386
82257	14+65.62	26.0000	624361.2883	583463.2612
82258	14+70.30	31.7500	624360.4449	583470.6303
82259	14+50.00	-1.7000	624370.2069	583432.7376
82260	15+41.94	31.7500	624410.5489	583521.9453
82261	15+41.95	35.7500	624407.6967	583524.7497
82262	15+62.85	35.7500	624422.4198	583539.7240
82263	15+62.86	31.7500	624425.2721	583536.9196
82264	17+25.71	26.0000	624545.2655	583648.0463
82265	17+25.71	56.0000	624524.3405	583669.5439
82266	17+52.19	42.2094	624553.0656	583678.1966
82267	17+39.22	29.2505	624552.7224	583659.8245
82268	17+73.06	42.0000	624568.3119	583692.6078
82269	17+72.63	40.2855	624569.1928	583691.0763
82270	18+20.98	28.3534	624612.5358	583716.0039
82271	17+71.73	35.7881	624571.6598	583687.2089
82272	17+70.96	29.3034	624575.5929	583681.9942
82273	17+74.88	30.0000	624577.9489	583685.2268
82274	18+86.84	26.7500	624661.2443	583760.1710
82275	18+85.52	31.7500	624656.8289	583762.8638
82276	17+00.00	1.4030	624544.0226	583612.4529



NOTE:
ALL RADII ALONG THE EXTERIOR BOUNDARY OF THE CONCRETE CHANNELIZATION ISLANDS ARE TWO FEET (2'), INCLUDING CURB RETURNS FOR THE CURB RAMPS, UNLESS NOTED OTHERWISE ON THE PLANS. ALL RADII FOR THE INTERIOR PORTION OF THE CURB RAMPS ARE FIVE FEET (5') UNLESS OTHERWISE NOTED ON THE PLANS.

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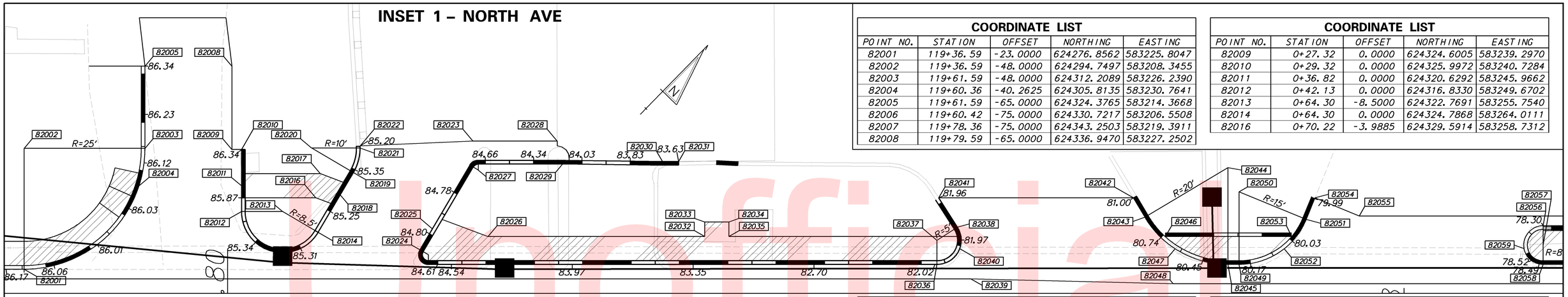
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701	BRIDGE NO. N/A	GRADES AND GEOMETRICS	SHEET NO. 18
				COUNTY NEW CASTLE	DESIGNED BY: SHB		TOTAL SHTS. 64
					CHECKED BY: JKL		

INSET 1 – NORTH AVE



INSET 2

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82001	119+36.59	-23.0000	624276.8562	583225.8047
82002	119+36.59	-48.0000	624294.7497	583208.3455
82003	119+61.59	-48.0000	624312.2089	583226.2390
82004	119+60.36	-40.2625	624305.8135	583230.7641
82005	119+61.59	-65.0000	624324.3765	583214.3668
82006	119+60.42	-75.0000	624330.7217	583206.5508
82007	119+78.36	-75.0000	624343.2503	583219.3911
82008	119+79.59	-65.0000	624336.9470	583227.2502

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82009	0+27.32	0.0000	624324.6005	583239.2970
82010	0+29.32	0.0000	624325.9972	583240.7284
82011	0+36.82	0.0000	624320.6292	583245.9662
82012	0+42.13	0.0000	624316.8330	583249.6702
82013	0+64.30	-8.5000	624322.7691	583255.7540
82014	0+64.30	0.0000	624324.7868	583264.0111
82016	0+70.22	-3.9885	624329.5914	583258.7312

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82072	124+11.96	-33.2500	624616.1791	583558.8926
82073	124+15.17	-35.6942	624620.1679	583559.4809
82074	124+09.71	-42.8520	624621.4810	583550.5772
82075	124+18.71	-42.8520	624627.7663	583557.0188
82076	124+18.71	-43.7500	624628.4090	583556.3917
82077	124+55.64	-43.7500	624654.1996	583582.8239
82078	124+55.13	-37.7500	624649.5490	583586.6491
82079	124+50.91	-33.2500	624643.3800	583586.7703
82080	124+51.08	-28.7500	624640.2762	583590.0329
82081	124+52.93	-28.0000	624641.0342	583591.8837

COORDINATE LIST

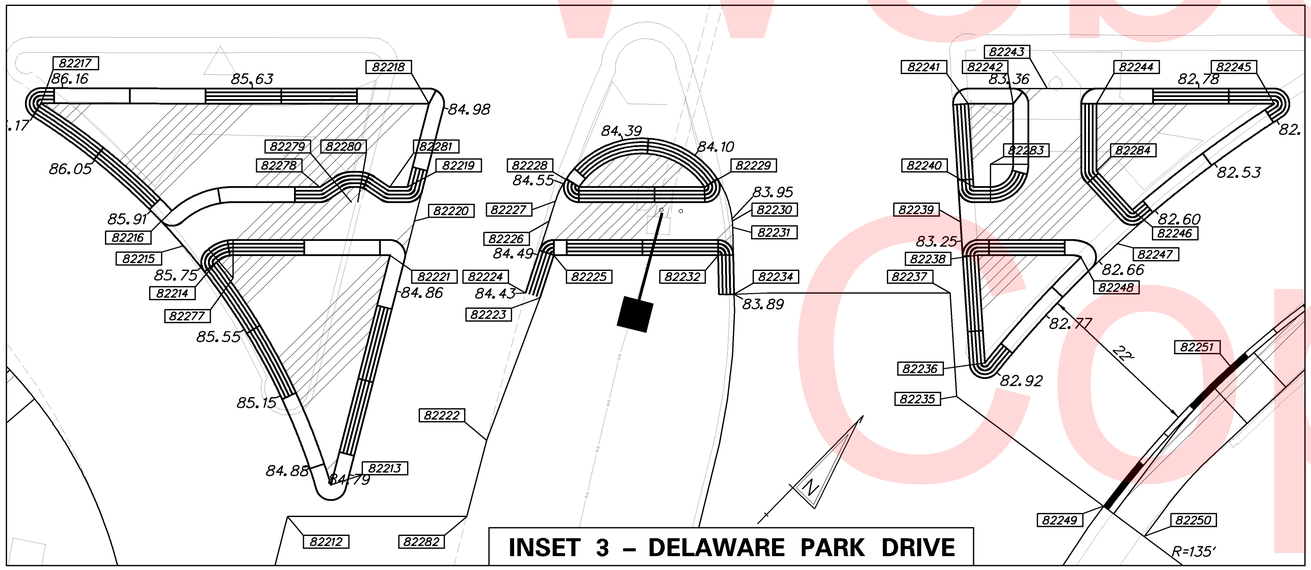
POINT NO.	STATION	OFFSET	NORTHING	EASTING
82082	124+73.73	-28.0000	624655.5545	583606.7652
82083	124+75.58	-28.7500	624657.3861	583607.5685
82084	124+75.41	-33.2500	624660.4895	583604.3054
82085	124+70.67	-37.7500	624660.3973	583597.7673
82086	124+69.66	-43.7500	624663.9899	583592.8578
82087	125+07.76	-43.7500	624690.5936	583620.1234
82088	125+08.14	-40.9851	624688.8822	583622.3285
82089	125+23.99	-43.1810	624701.5220	583632.1385
82090	125+22.40	-27.2604	624689.0151	583642.1174
82091	125+11.44	-33.2500	624685.6530	583630.0950
82095	125+18.81	-40.7500	624696.1691	583630.1334
82096	125+34.96	-32.7500	624701.7173	583647.2750

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82017	119+97.89	-42.7500	624333.8036	583255.8886
82018	120+02.00	-38.3993	624333.5589	583261.8676
82019	120+04.71	-42.9940	624338.7424	583260.6010
82020	119+96.10	-48.0791	624336.3687	583250.8868
82021	120+06.10	-48.0791	624343.3524	583258.0442
82022	120+06.10	-48.4973	624343.6517	583257.7521
82023	120+29.46	-49.5000	624360.6814	583273.7697
82024	120+20.22	-26.0000	624337.4136	583283.5729
82025	120+21.08	-31.3795	624341.8605	583280.4275
82026	120+32.54	-29.7500	624348.6978	583289.7682
82027	120+30.56	-43.5000	624357.1566	583278.7487
82028	120+46.91	-49.5000	624372.8666	583286.2580
82029	120+48.60	-45.5000	624371.1869	583290.2642
82030	120+68.67	-45.2553	624385.0282	583304.8002
82031	120+72.00	-45.2798	624387.3711	583307.1664
82032	120+77.39	-29.7500	624380.0178	583321.8675
82033	120+77.39	-32.7500	624382.1650	583319.7724
82034	120+82.39	-32.7500	624385.6569	583323.3511
82035	120+82.39	-29.7500	624383.5096	583325.4462
82036	121+25.45	-24.0000	624409.4667	583360.2825
82037	121+25.45	-29.0000	624413.0454	583356.7907
82038	121+29.66	-31.6871	624417.9134	583357.9321

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82039	121+32.45	-21.0000	624412.2080	583367.3878
82040	121+30.13	-27.2500	624415.0638	583361.3652
82041	121+25.80	-37.7500	624419.5545	583350.9325
82042	121+66.07	-37.7500	624447.6796	583379.7573
82043	121+68.46	-33.7562	624446.4844	583384.2512
82044	121+85.63	-44.0000	624465.8124	583389.3918
82045	121+85.63	-24.0000	624451.4976	583403.3591
82046	121+72.69	-29.7500	624446.5747	583390.0803
82047	121+74.70	-27.2500	624446.1915	583393.2673
82048	121+74.33	-20.0000	624440.7413	583398.0629
82049	121+87.95	-24.0000	624453.1133	583405.0150
82050	121+87.95	-39.0000	624463.8494	583394.5395
82051	122+01.82	-33.3069	624469.4662	583408.4482
82052	121+97.27	-27.2500	624461.9510	583409.4189
82053	121+98.79	-29.7500	624464.7989	583408.7578
82054	122+03.65	-37.7500	624473.9193	583406.6499
82055	122+12.79	-34.0000	624477.6190	583415.8113
82056	122+50.83	-32.0000	624502.7527	583444.4342
82057	122+50.83	-28.0000	624499.8898	583447.2276
82058	122+50.83	-24.0000	624497.0268	583450.0211
82059	122+46.90	-27.2500	624496.6090	583444.9392



INSET 3 – DELAWARE PARK DRIVE

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82212	12+79.67	73.5000	624197.4317	583363.3438
82213	12+85.39	69.3474	624204.3950	583364.5341
82214	12+70.31	39.9463	624214.8817	583333.1753
82215	12+65.96	37.7687	624213.3969	583328.5269
82216	12+64.46	33.1280	624215.6723	583324.2101
82217	12+47.17	19.0000	624213.7356	583301.9228
82218	12+98.34	19.0000	624249.4764	583338.6440
82219	12+95.51	30.0000	624239.6269	583344.3006
82220	12+96.42	34.5000	624237.0398	583348.0927
82221	12+93.19	39.0000	624231.5683	583348.9286
82222	13+05.95	63.4338	624222.9907	583375.1248
82223	13+13.00	44.6221	624241.3788	583367.0335
82224	13+11.10	44.0056	624240.4912	583365.2412
82225	13+14.83	39.0000	624246.6747	583364.4109
82226	13+14.18	34.5000	624249.4472	583360.8088
82227	13+15.04	31.8709	624251.9243	583359.5828
82228	13+18.15	30.0000	624255.4361	583360.5031
82229	13+34.75	30.0000	624267.0343	583372.3898
82230	13+38.40	34.5000	624266.3612	583378.1436
82231	13+38.45	35.3259	624265.8019	583378.7529
82232	13+36.52	39.0000	624261.8278	583379.9410
82234	13+38.63	44.1718	624259.5972	583385.0605
82235	13+68.03	57.6231	624270.4991	583415.4948
82236	13+71.75	53.2279	624276.2467	583415.0917

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
82237	13+67.15	44.0000	624279.6374	583405.3533
82238	13+70.84	39.0000	624285.7906	583404.5000
82239	13+68.55	34.6285	624287.3234	583399.8112
82240	13+70.26	30.0000	624291.8277	583397.8001
82241	13+69.55	19.0000	624299.2064	583389.6113
82242	13+75.50	19.0000	624303.3608	583393.8690
82243	13+80.00	17.0000	624307.9348	583395.6930
82244	13+86.50	19.0000	624311.0444	583401.7439
82245	14+09.97	19.0000	624327.4324	583418.5395
82246	13+91.24	33.0010	624304.3330	583414.9137
82247	13+89.24	37.4730	624299.7354	583416.6052
82248	13+84.44	39.2642	624295.1044	583414.4238
82249	13+87.44	72.1452	624273.6653	583439.5340
82250	13+92.78	76.1380	624274.5358	583446.1436
82251	14+04.18	53.6217	624298.6112	583438.5766
82277	12+72.51	42.0025	624214.9503	583336.1930
82278	12+83.93	30.0000	624231.5420	583336.0145
82279	12+88.14	32.0000	624233.0504	583340.4243
82280	12+88.93	32.0000	624233.6010	583340.9886
82281	12+93.14	30.0000	624237.9732	583342.6057
82282	13+03.34	73.5000	624213.9632	583380.2866
82283	13+72.50	27.0000	624295.5401	583397.3091
82284	13+86.50	27.8506	624304.7094	583407.9244

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 10 20 30 FEET

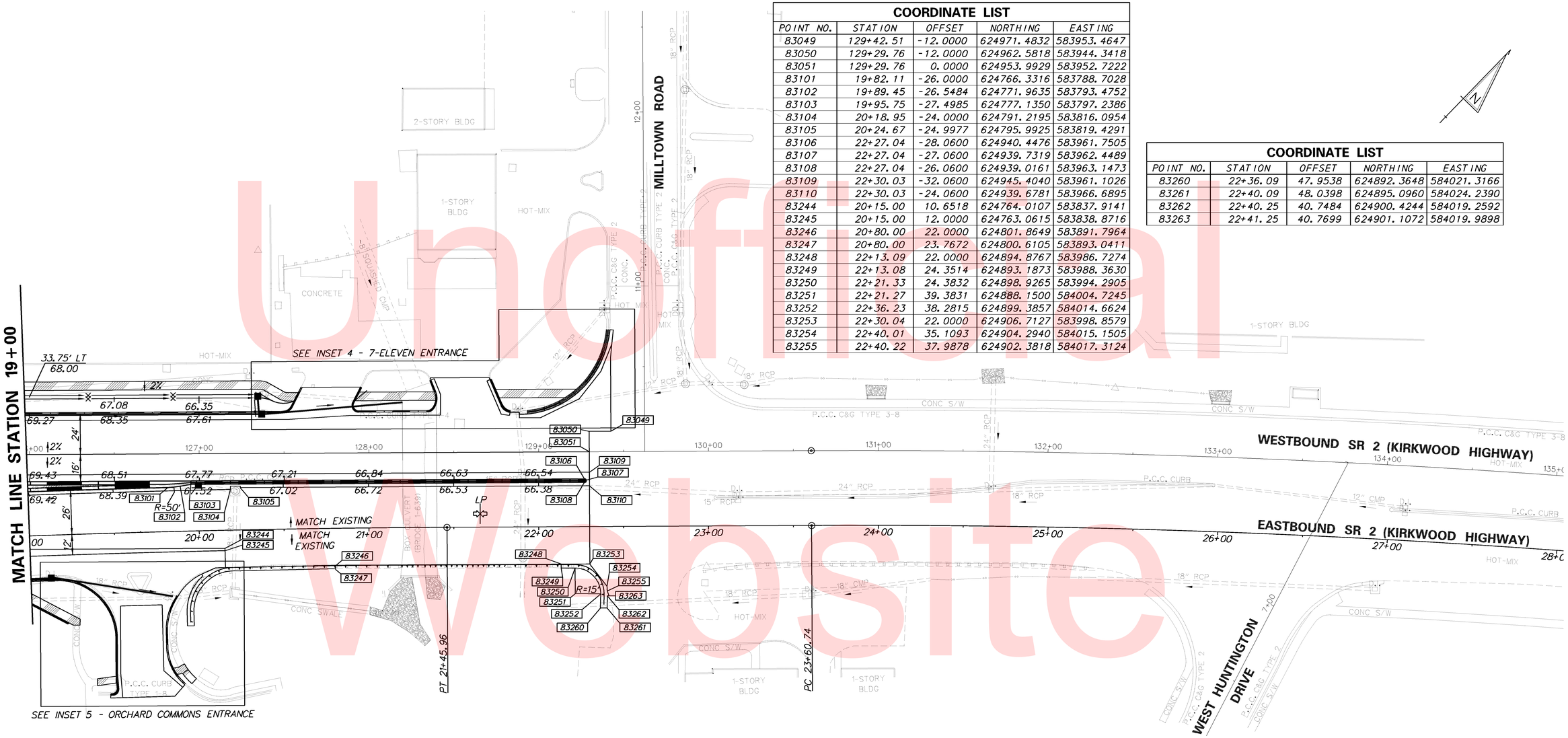
HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY: SHB	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

GRADES AND GEOMETRICS

SHEET NO. 19

TOTAL SHTS. 64



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83049	129+42.51	-12.0000	624971.4832	583953.4647
83050	129+29.76	-12.0000	624962.5818	583944.3418
83051	129+29.76	0.0000	624953.9929	583952.7222
83101	19+82.11	-26.0000	624766.3316	583788.7028
83102	19+89.45	-26.5484	624771.9635	583793.4752
83103	19+95.75	-27.4985	624777.1350	583797.2386
83104	20+18.95	-24.0000	624791.2195	583816.0954
83105	20+24.67	-24.9977	624795.9925	583819.4291
83106	22+27.04	-28.0600	624940.4476	583961.7505
83107	22+27.04	-27.0600	624939.7319	583962.4489
83108	22+27.04	-26.0600	624939.0161	583963.1473
83109	22+30.03	-32.0600	624945.4040	583961.1026
83110	22+30.03	-24.0600	624939.6781	583966.6895
83244	20+15.00	10.6518	624764.0107	583837.9141
83245	20+15.00	12.0000	624763.0615	583838.8716
83246	20+80.00	22.0000	624801.8649	583891.7964
83247	20+80.00	23.7672	624800.6105	583893.0411
83248	22+13.09	22.0000	624894.8767	583986.7274
83249	22+13.08	24.3514	624893.1873	583988.3630
83250	22+21.33	24.3832	624898.9265	583994.2905
83251	22+21.27	39.3831	624888.1500	584004.7245
83252	22+36.23	38.2815	624899.3857	584014.6624
83253	22+30.04	22.0000	624906.7127	583998.8579
83254	22+40.01	35.1093	624904.2940	584015.1505
83255	22+40.22	37.9878	624902.3818	584017.3124

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83260	22+36.09	47.9538	624892.3648	584021.3166
83261	22+40.09	48.0398	624895.0960	584024.2390
83262	22+40.25	40.7484	624900.4244	584019.2592
83263	22+41.25	40.7699	624901.1072	584019.9898

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY		
NEW CASTLE	CHECKED BY:	JKL

GRADES AND GEOMETRICS

SHEET NO. 20

TOTAL SHTS. 64

COORDINATE LIST

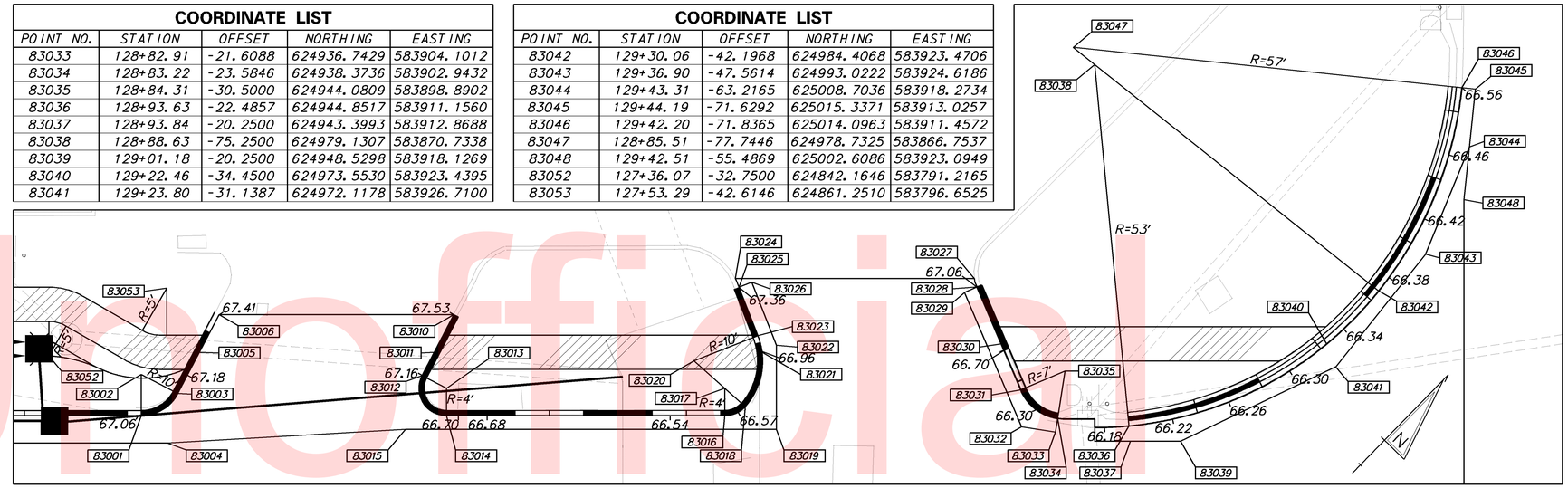
POINT NO.	STATION	OFFSET	NORTHING	EASTING
83001	127+49.56	-24.0000	624845.3218	583806.9814
83002	127+49.56	-30.0000	624849.6162	583802.7912
83003	127+54.87	-27.2214	624851.3413	583808.5379
83004	127+53.36	-20.0000	624845.1134	583812.4956
83005	127+58.02	-33.2500	624857.8560	583806.5823
83006	127+60.90	-38.7500	624863.7995	583804.7982
83010	127+95.15	-38.7500	624887.7202	583829.3140
83011	127+92.29	-33.2500	624881.7835	583831.1051
83012	127+90.51	-29.8475	624878.1108	583832.2131
83013	127+94.06	-28.0000	624879.2661	583836.0427
83014	127+94.06	-24.0000	624876.4032	583838.8361
83015	127+88.06	-22.0000	624870.7815	583835.9384
83016	128+34.68	-24.0000	624904.7667	583867.9053
83017	128+34.68	-28.0000	624907.6297	583865.1119
83018	128+37.66	-25.3333	624907.8031	583869.1081
83019	128+42.20	-22.0000	624908.5924	583874.6901
83020	128+30.20	-32.0000	624907.3694	583859.1175
83021	128+40.12	-33.2500	624915.1930	583865.3458
83022	128+42.20	-34.2686	624917.3736	583866.1221
83023	128+39.51	-35.6505	624916.4840	583863.2315
83024	128+36.19	-44.0000	624920.1428	583855.0257
83025	128+36.73	-42.7500	624919.6212	583856.2810
83026	128+38.59	-43.4801	624921.4441	583857.1038
83027	128+71.12	-44.0000	624944.5299	583880.0195
83028	128+71.49	-42.7500	624943.8945	583881.1582
83029	128+69.65	-41.9667	624942.0487	583880.3881
83030	128+75.02	-34.4500	624940.4210	583889.4832
83031	128+77.87	-27.7585	624937.6207	583896.1948
83032	128+77.98	-22.3824	624933.8529	583900.0314

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83033	128+82.91	-21.6088	624936.7429	583904.1012
83034	128+83.22	-23.5846	624938.3736	583902.9432
83035	128+84.31	-30.5000	624944.0809	583898.8902
83036	128+93.63	-22.4857	624944.8517	583911.1560
83037	128+93.84	-20.2500	624943.3993	583912.8688
83038	128+88.63	-75.2500	624979.1307	583870.7338
83039	129+01.18	-20.2500	624948.5298	583918.1269
83040	129+22.46	-34.4500	624973.5530	583923.4395
83041	129+23.80	-31.1387	624972.1178	583926.7100

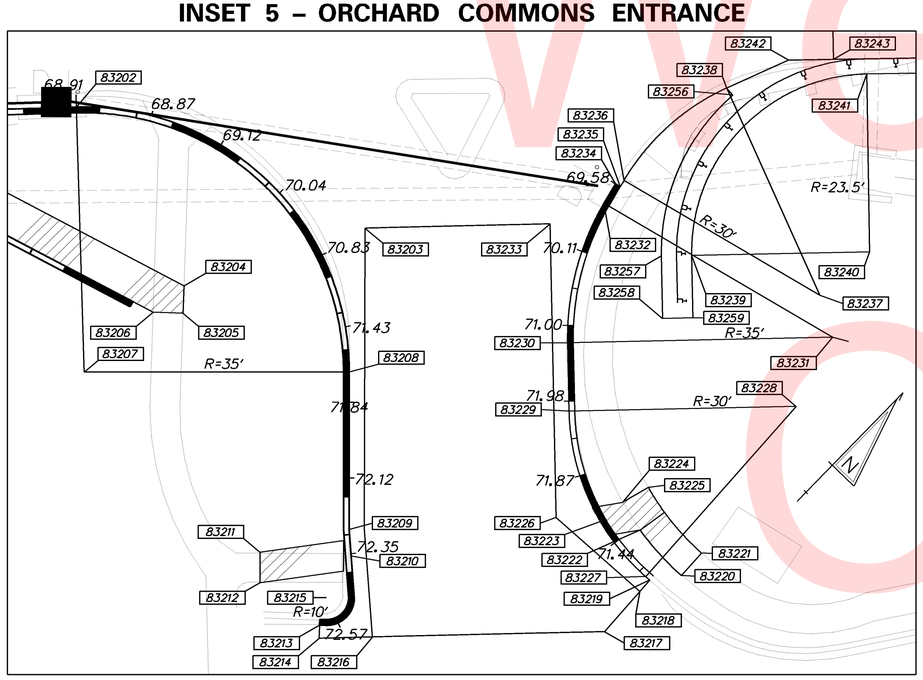
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83042	129+30.06	-42.1968	624984.4068	583923.4706
83043	129+36.90	-47.5614	624993.0222	583924.6186
83044	129+43.31	-63.2165	625008.7036	583918.2734
83045	129+44.19	-71.6292	625015.3371	583913.0257
83046	129+42.20	-71.8365	625014.0963	583911.4572
83047	128+85.51	-77.7446	624978.7325	583866.7537
83048	129+42.51	-55.4869	625002.6086	583923.0949
83052	127+36.07	-32.7500	624842.1646	583791.2165
83053	127+53.29	-42.6146	624861.2510	583796.6525



INSET 4 – 7-ELEVEN ENTRANCE

INSET 5 – ORCHARD COMMONS ENTRANCE



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83202	19+14.59	26.0000	624681.6837	583778.8117
83203	19+52.43	43.0000	624696.8724	583817.2557
83204	19+28.20	50.0000	624674.7241	583805.4775
83205	19+27.97	53.6154	624672.0451	583807.9157
83206	19+23.95	53.3648	624669.3528	583804.9575
83207	19+14.59	61.0000	624657.3621	583803.9804
83208	19+49.85	61.9550	624681.8016	583829.0344
83209	19+49.33	82.7290	624666.9263	583843.5450
83210	19+49.50	86.2464	624664.5949	583846.1844
83211	19+37.36	85.4320	624656.5598	583837.2259
83212	19+37.24	89.4698	624653.6583	583840.0366
83213	19+45.05	95.2645	624655.1510	583849.5736
83214	19+44.94	97.0000	624653.8619	583850.7406
83215	19+46.06	91.6502	624658.3890	583847.6819
83216	19+52.06	97.0000	624658.9007	583855.6521
83217	19+83.08	97.0000	624680.7818	583877.0835
83218	19+87.94	91.7864	624687.8657	583876.7394
83219	19+89.31	90.3156	624689.8633	583876.6423
83220	19+93.53	89.7870	624693.2051	583879.1932
83221	19+96.29	86.8572	624697.2013	583879.0196
83222	19+88.14	83.6774	624693.6969	583871.1009
83223	19+82.87	82.4484	624690.8422	583866.5679
83224	19+85.82	79.9820	624694.6497	583866.8535

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83225	19+89.36	78.0627	624698.4971	583867.9477
83226	19+76.98	81.7801	624687.1498	583862.0032
83227	19+88.75	89.8074	624689.8269	583875.8932
83228	20+09.26	67.7192	624719.7916	583874.4376
83229	19+79.00	67.7768	624698.3898	583853.4147
83230	19+79.00	58.7576	624704.7102	583846.9804
83231	20+14.26	58.6791	624729.6789	583871.5072
83232	19+84.21	40.4259	624721.2532	583837.5365
83233	19+76.99	43.0000	624714.3256	583834.3378
83234	19+85.79	37.8690	624724.1650	583836.8143
83235	19+86.43	38.2612	624724.3455	583837.5422
83236	19+86.92	37.4606	624725.2571	583837.3162
83237	20+12.67	53.1045	624732.4791	583866.4339
83238	20+00.78	25.5336	624743.4620	583838.5165
83239	19+95.73	47.5413	624724.4230	583850.6467
83240	20+19.38	47.5000	624741.1569	583867.1460
83241	20+19.38	24.0000	624757.7107	583850.4660
83242	20+09.05	22.0000	624751.8093	583841.8010
83243	20+15.00	22.0000	624756.0213	583845.9734
83256	20+01.57	26.4691	624743.3639	583839.7347
83257	19+91.71	47.5413	624721.5747	583847.8383
83258	19+91.71	55.7913	624715.7824	583853.7130
83259	19+95.74	55.7913	624718.6307	583856.5214

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 10 20 30 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY		
NEW CASTLE	CHECKED BY:	JKL

GRADES AND GEOMETRICS

SHEET NO. 21

TOTAL SHTS. 64

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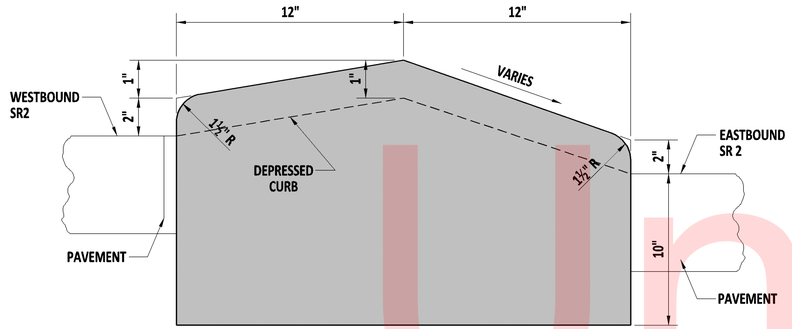
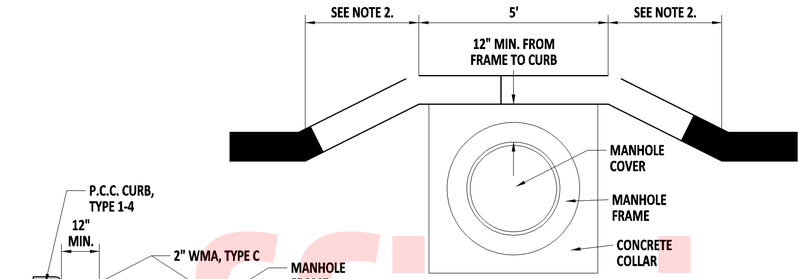


NOTES:

1) SEE NOTES ON STANDARD CONSTRUCTION DETAILS FOR TYPE 2 CURB.

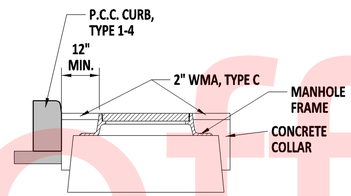
ITEM 701026: PORTLAND CEMENT CONCRETE MONOLITHIC MEDIAN - DETAIL

NOT TO SCALE



MANHOLE - PLAN

NOT TO SCALE



MANHOLE - SECTION

NOT TO SCALE

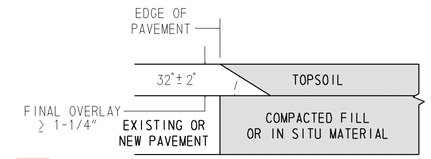
NOTE:

1) SEE NEW CASTLE COUNTY STANDARDS & SPECIFICATIONS FOR ADJUSTING SANITARY SEWER MANHOLES.

2) CURB TAPER LENGTH SHALL BE A MULTIPLE OF 5' IF A TAPER IS NEEDED. SEE GRADES AND GEOMETRICS SHEETS FOR MORE DETAILS.

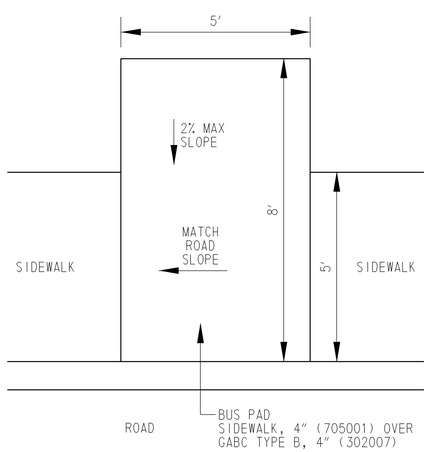
ITEM 710506, ADJUST AND REPAIR EXISTING SANITARY MANHOLE

NOT TO SCALE



SAFETY EDGE DETAIL (WARM-MIX) FOR ALL ROADSIDE EDGES

NOT TO SCALE

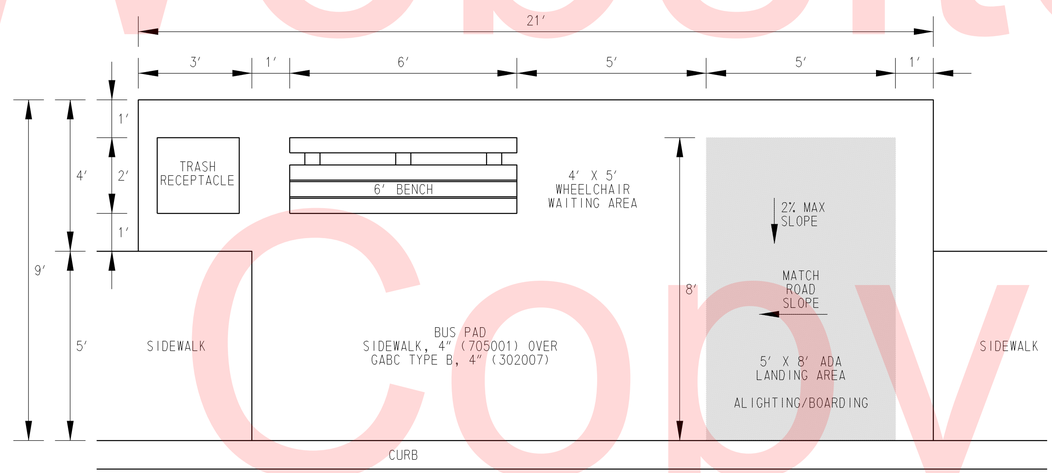


BUS PAD #1 AND #2 DETAIL

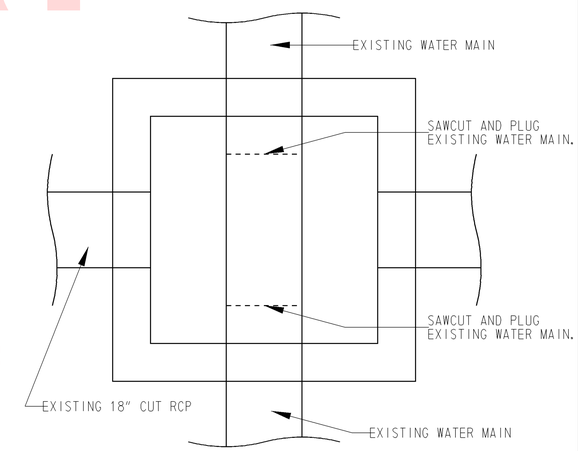
NOT TO SCALE

BUS PAD #3 DETAIL

NOT TO SCALE



NOTE: DART WILL REINSTALL THE EXISTING BENCH OR INSTALL A NEW BENCH AFTER CONSTRUCTION OF BUS PAD #3.



NOTES:

1) COORDINATE WITH ARTESIAN WATER COMPANY TO ENSURE WATER MAIN IS ABANDONED.
2) CUT EXISTING PIPE AT WALLS OF EXISTING JUNCTION BOX AND PLUG. SEE PIPE PLUGGING DETAIL ON STANDARD CONSTRUCTION DETTAILS.
3) PLACE CONCRETE, TYPE C AT BOTTOM OF JUNCTION BOX TO DOWNSTREAM PIPE INVERT.
4) REMOVE EXISTING TOP AND PLACE COVER SLAB.

ITEM 708595, REPAIR EXISTING JUNCTION BOX

NOT TO SCALE

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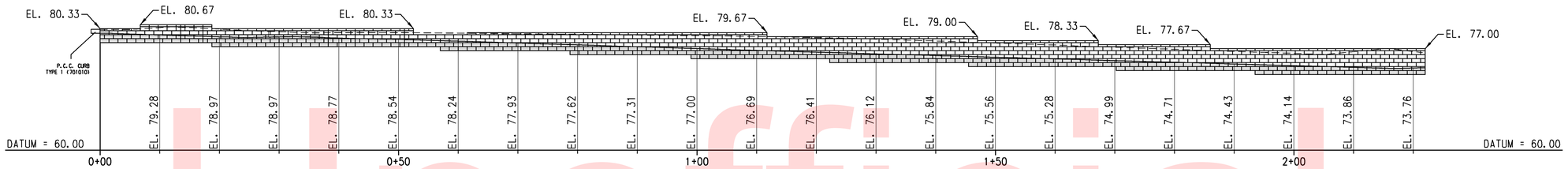
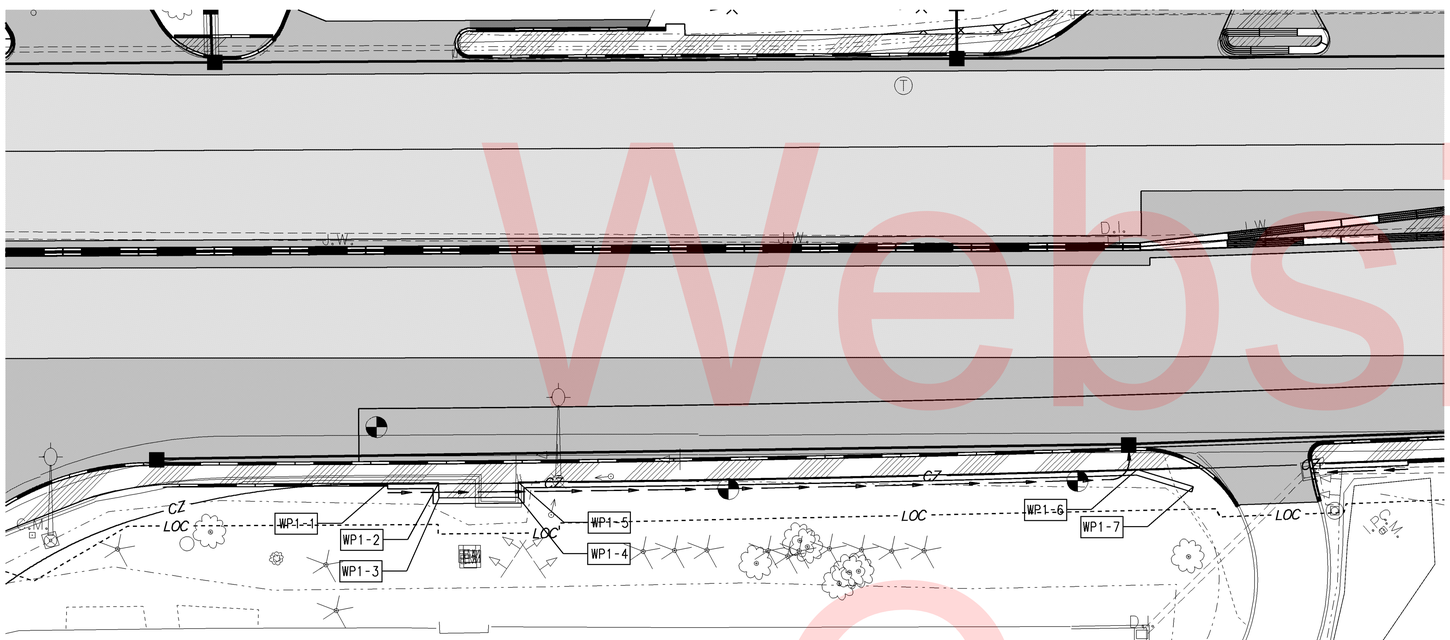
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SHEET NO. 22
				COUNTY NEW CASTLE	DESIGNED BY: SHB		TOTAL SHTS. 64
					CHECKED BY: JKL		



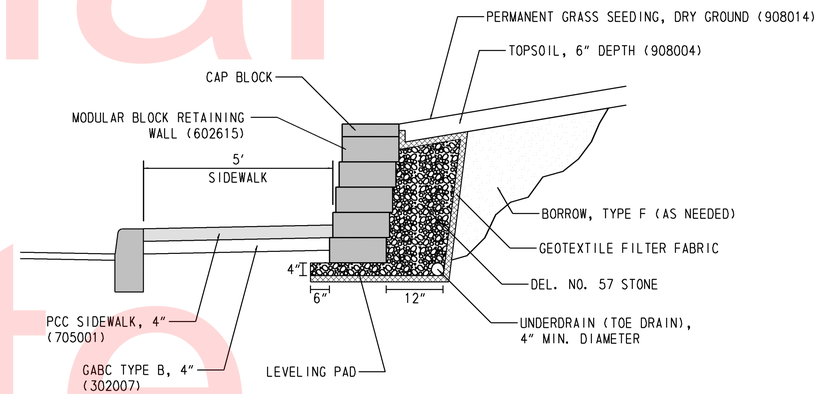
MODULAR BLOCK RETAINING WALL - ELEVATION

SCALE 1:10



MODULAR BLOCK RETAINING WALL - PLAN

SCALE 1:20



MODULAR BLOCK RETAINING WALL - SECTION

NOT TO SCALE

NOTES:

1) THE WALL, FOUNDATION, BORROW TYPE F, DEL. NO. 57 STONE, FILTER FABRIC, TOE DRAIN, AND EXPANSION JOINT MATERIAL SHALL BE INCIDENTAL IN THE UNIT PRICE PAID FOR ITEM 602615, MODULAR BLOCK RETAINING WALL, AND CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2) TOP OF LEVELING PAD (FOUNDATION) SHALL BE A MINIMUM OF 1', MAXIMUM OF 2' BELOW THE PROPOSED SIDEWALK SURFACE.

3) ALLOWABLE FOUNDATION BEARING PRESSURE IS 2 KSI.

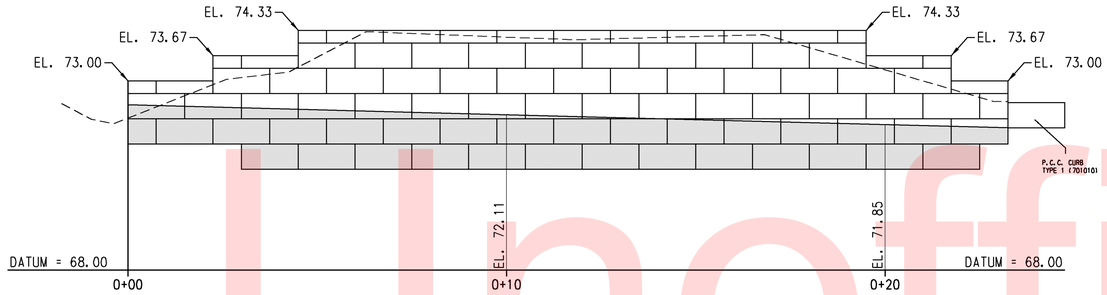
4) THE RETAINING WALL SHOWN ON THE PLANS AND DETAILS IS CONCEPTUAL. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.

5) THE TOP OF WALL ELEVATION SHALL VARY, BUT NO LOWER THAN THE FINISHED SIDEWALK GRADE. IT SHALL BE APPROVED BY THE ENGINEER.

WORKING POINT SCHEDULE

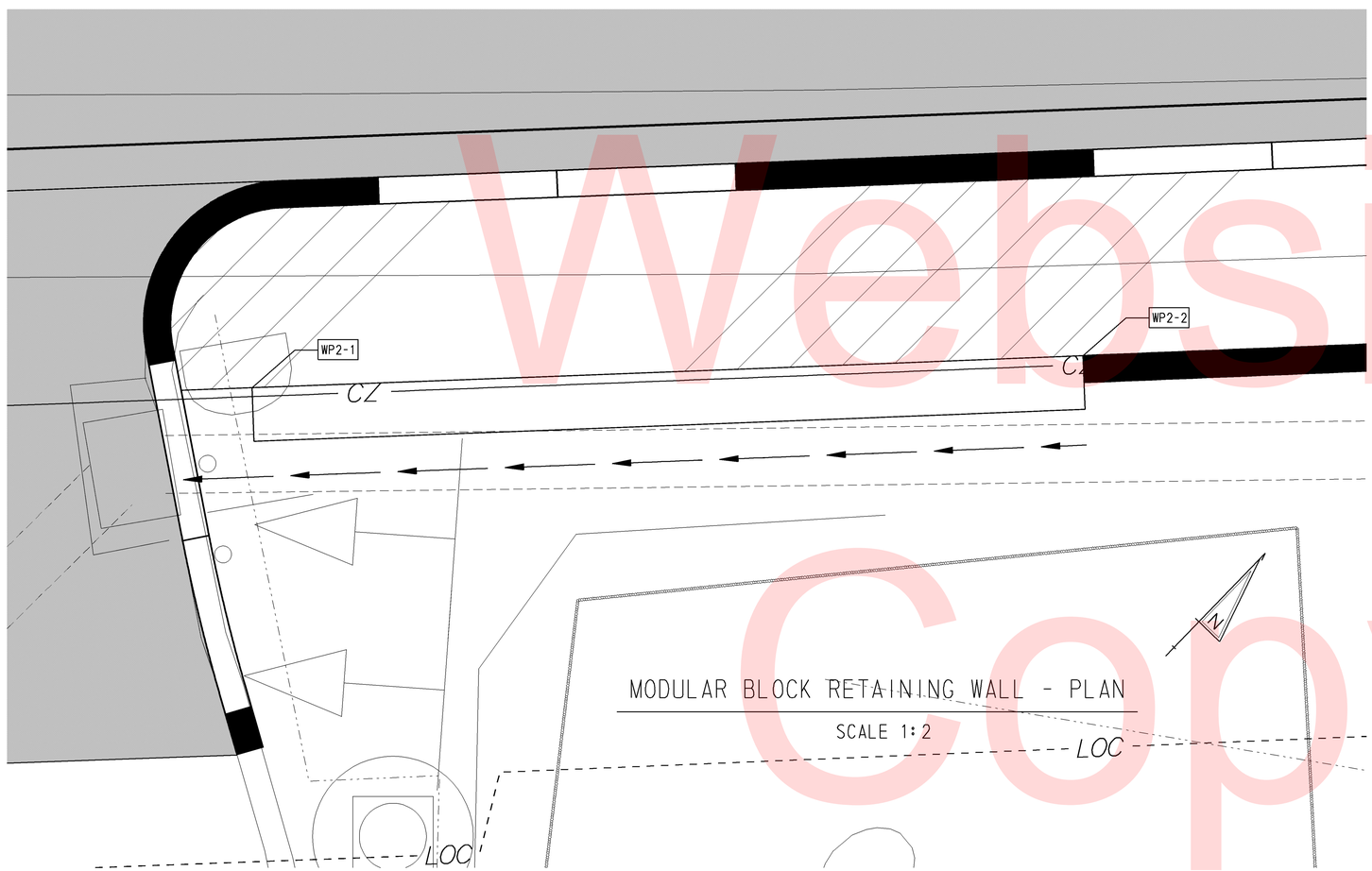
POINT	STATION	OFFSET	NORTHING	EASTING
WP1-1	15+28.50	31.7500	624401.1051	583512.2984
WP1-2	15+41.94	31.7500	624410.5489	583521.9453
WP1-3	15+41.95	35.7500	624407.6967	583524.7497
WP1-4	15+62.85	35.7500	624422.4198	583539.7240
WP1-5	15+62.86	31.7500	624425.2721	583536.9196
WP1-6	17+25.71	31.7500	624541.2549	583652.1667
WP1-7	17+40.37	36.7500	624548.3322	583666.0140

Unofficial Website Copy



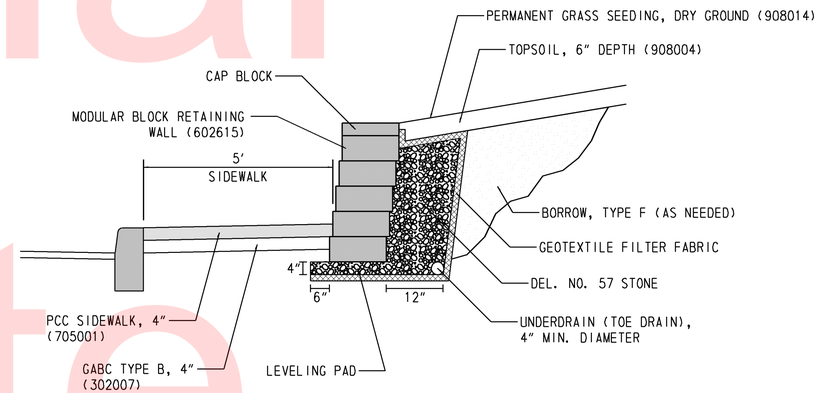
MODULAR BLOCK RETAINING WALL - ELEVATION

SCALE 1:2



MODULAR BLOCK RETAINING WALL - PLAN

SCALE 1:2



MODULAR BLOCK RETAINING WALL - SECTION

NOT TO SCALE

NOTES:

1) THE WALL, FOUNDATION, BORROW TYPE F, DEL. NO. 57 STONE, FILTER FABRIC, TOE DRAIN, AND EXPANSION JOINT MATERIAL SHALL BE INCIDENTAL IN THE UNIT PRICE PAID FOR ITEM 602615, MODULAR BLOCK RETAINING WALL, AND CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2) TOP OF LEVELING PAD (FOUNDATION) SHALL BE A MINIMUM OF 1', MAXIMUM OF 2' BELOW THE PROPOSED SIDEWALK SURFACE.

3) ALLOWABLE FOUNDATION BEARING PRESSURE IS 2 KSI.

4) THE RETAINING WALL SHOWN ON THE PLANS AND DETAILS IS CONCEPTUAL. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.

5) THE TOP OF WALL ELEVATION SHALL VARY, BUT NO LOWER THAN THE FINISHED SIDEWALK GRADE. IT SHALL BE APPROVED BY THE ENGINEER.

WORKING POINT SCHEDULE

POINT	STATION	OFFSET	NORTHING	EASTING
WP2-1	17+73.84	33.2500	624574.9467	583686.8488
WP2-2	17+97.00	33.2500	624591.7295	583702.9391

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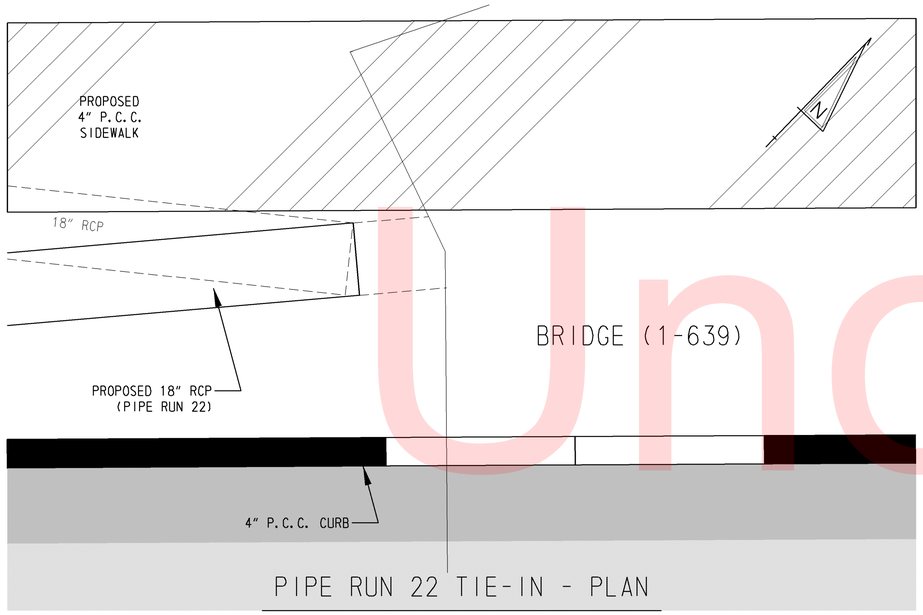
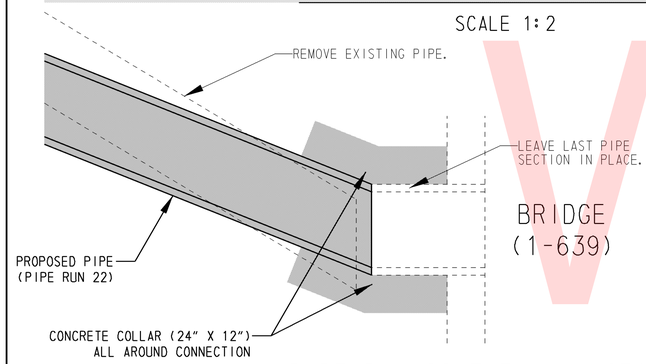


PIPE RUN 22 TIE-IN - PLAN

SCALE 1:2



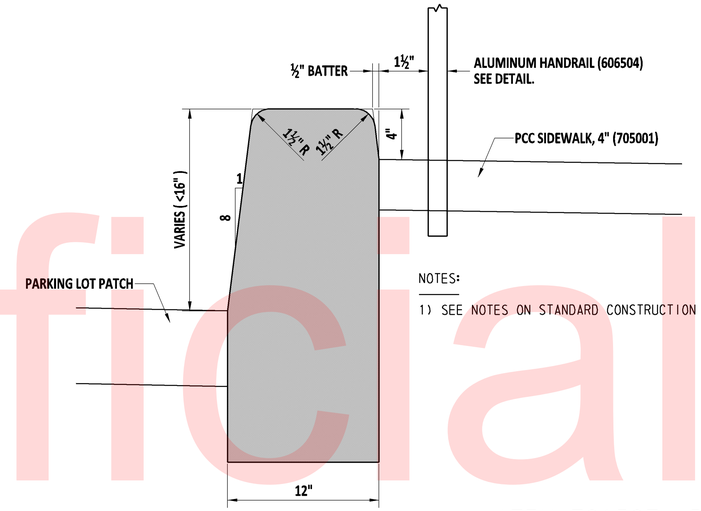
PIPE RUN 22 TIE-IN - SECTION

NOT TO SCALE

NOTES:

1) REMOVAL OF EXISTING PIPE SHALL BE INCIDENTIAL TO ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

2) EXCAVATION, BACKFILL, AND GROUT COLLAR FOR INSTALLATION OF PIPE RUN 22 TIE-IN SHALL BE INCIDENTAL TO CONSTRUCTION OF PIPE RUN 22 (ITEM 612003 - REINFORCED CONCRETE PIPE, 18", CLASS III).

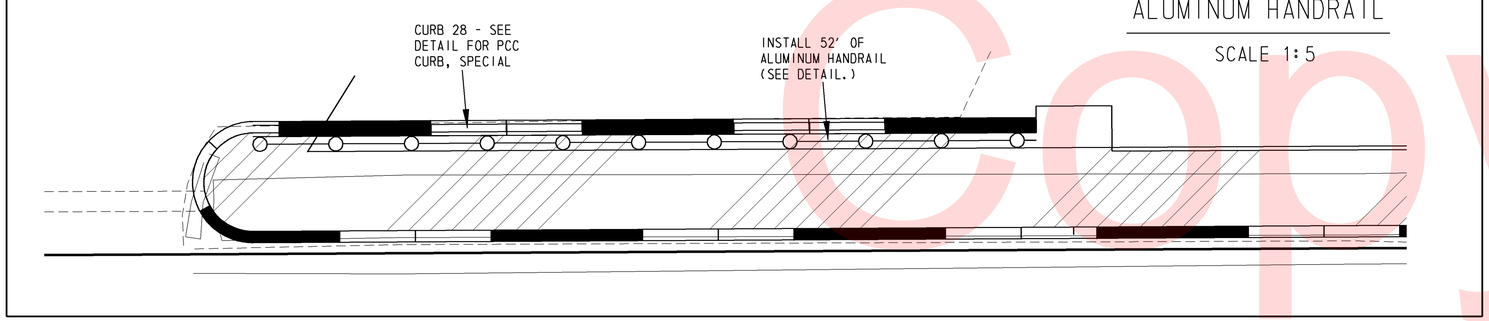


NOTES:

1) SEE NOTES ON STANDARD CONSTRUCTION DETAILS FOR TYPE 1 CURB.

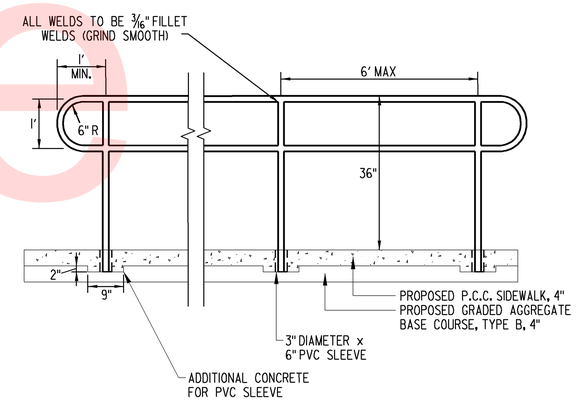
ITEM 701507: PORTLAND CEMENT CONCRETE CURB, SPECIAL - DETAIL

NOT TO SCALE



CURB 28 AND ALUMINUM HANDRAIL

SCALE 1:5



ITEM 606504: ALUMINUM HANDRAIL

NOT TO SCALE

NOTES:

1) THE CLEAR SPACE BETWEEN THE HANDRAIL AND THE P.C.C. CURB SHALL BE 1½".

2) ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE HANDRAILS SHALL BE INCLUDED UNDER ITEM 606504 - ALUMINUM HANDRAIL.

3) SHOP DRAWING SUBMITTAL REQUIRED FOR HANDRAIL.

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SHEET NO. 25
				COUNTY NEW CASTLE	DESIGNED BY: SHB		TOTAL SHTS. 64
					CHECKED BY: JKL		

MAINTENANCE OF TRAFFIC NOTES

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES ON SR2 OR DELAWARE PARK DRIVE SHALL CONFORM TO TYPICAL APPLICATION TA-33 OF THE DELAWARE MUTCD. LANE CLOSURES ON NORTH AVENUE SHALL CONFORM TO TYPICAL APPLICATION TA-10 OF THE DELAWARE MUTCD. SHOULDER CLOSURES SHALL CONFORM TO APPLICATION TA-3, TA-3A, OR TA-11B OF THE DELAWARE MUTCD.

2. GRADING AND MAINTAINING TEMPORARY ROADWAY MATERIAL THAT IS BEING USED AS A TRAVELWAY, DRIVEWAY, ACCESS RAMP, ETC. SHALL BE INCIDENTAL TO ITEM 743000 - MAINTENANCE OF TRAFFIC. NO PAYMENT SHALL BE MADE FOR 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. CONSTRUCTION OF A PLANNED RUNAROUND OR DETOUR WOULD BE ELIGIBLE FOR PAYMENT AS SPECIFIED IN THE CONTRACT.

3. THIS PROJECT IS CONSIDERED A SIGNIFICANT PROJECT AS DEFINED BY DELDOT'S WORK ZONE MOBILITY PROCEDURES AND GUIDELINES. A TYPE B TRANSPORTATION MANAGEMENT PLAN (TMP) HAS BEEN PREPARED AND IS AVAILABLE FOR VIEWING BY CONTACTING THE DEPARTMENT'S SAFETY PROGRAMS MANAGER AT (302)659-4060. ALL MONITORING REQUIREMENTS OF THE TMP SHALL BE CONDUCTED BY DELDOT FORCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MODIFICATIONS TO THE TMP SHALL BE COMPLETED BY THE CONTRACTOR IF CHANGES TO THE TIME RESTRICTIONS OR THE TRAFFIC CONTROL PLAN ARE DESIRED. THE MODIFIED TMP SHALL BE PREPARED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF DELAWARE.

4. ACCEPTABLE MATERIALS FOR TEMPORARY PEDESTRIAN PATHS SHALL INCLUDE CONCRETE, HOT-MIX, COMPACTED 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 743000 UNLESS OTHERWISE SPECIFIED IN THE PLANS. STONE OR GRADED AGGREGATE BASE COURSE SHALL NOT BE USED FOR TEMPORARY PEDESTRIAN PATHS.

5. THE CONTRACTOR SHALL SUPPLY CHANGEABLE MESSAGE SIGNS UNDER ITEM 743004 - FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN. MOVING THE MESSAGE SIGNS TO DIFFERENT LOCATIONS DURING CONSTRUCTION WILL BE INCIDENTAL TO ITEM 743004. AT A MINIMUM, MESSAGE SIGNS SHALL BE POSTED 10 DAYS PRIOR TO THE START OF CONSTRUCTION AND CHANGES IN TRAFFIC PATTERNS AND REMAIN 5 DAYS AFTER SWITCHES. SIX PLASTIC DRUMS SHALL BE PLACED IN FRONT OF THE MESSAGE SIGN. LOCATION AND MESSAGE OF MESSAGE SIGNS SHALL BE APPROVED BY DISTRICT TRAFFIC SAFETY OFFICER.

6. ROADWAY AND SHOULDER WORK SHALL BE PERFORMED IN A MANNER SUCH THAT POSITIVE DRAINAGE OF THE ROADWAY SURFACE IS MAINTAINED THROUGHOUT CONSTRUCTION. ALL WORK AND MATERIALS TO PROVIDE AND MAINTAIN THIS DRAINAGE SHALL BE INCIDENTAL TO ITEM 743000 - MAINTENANCE OF TRAFFIC.

7. THE CONTRACTOR SHALL PLACE A WEDGE OF WARM-MIX AT 20:1 AROUND CONSTRUCTED DRAINAGE INLETS PRIOR TO PLACEMENT OF FINAL WARM-MIX TYPE C PAVING. THE CONTRACTOR SHALL NOTCH DRAINAGE INLETS TO MAINTAIN POSITIVE DRAINAGE CONDITIONS ALONG THE ROADWAY PRIOR TO PLACEMENT OF TYPE C FINAL WARM-MIX PAVING. COST OF THIS WORK SHALL BE INCIDENTAL TO ITEMS 708051 - DRAINAGE INLET, 34" X 24" AND 708052 - DRAINAGE INLET, 48" X 30".

8. ALL EXISTING PUBLIC ROADWAY LIGHTING, PARKING LOT LIGHTING AND PRIVATE LIGHTING WITHIN THE PROJECT LIMITS NOT DIRECTLY IMPACTED BY CONSTRUCTION SHALL REMAIN OPERATIONAL AT ALL TIMES THROUGHOUT THE CONSTRUCTION.

9. CONSTRUCTION ENTRANCES. IT IS INTENDED THAT MUD TRACKING BE ELIMINATED ON ALL STATE MAINTAINED ROADWAYS ADJOINING THE PROJECT. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PLACED AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL PAVED SURFACES ADJOINING THE PROJECT SHALL BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH WORKDAY. STABILIZED CONSTRUCTION ENTRANCES SHALL BE DRESSED WITH TWO (2) INCHES OF CLEAN DE NO. 3 STONE WHEN THE VOIDS BECOME CLOGGED OR AS DIRECTED BY THE ENGINEER. ADDITIONAL STONE REQUIRED TO MAINTAIN THE ENTRANCES SHALL BE PAID UNDER THE SAME ITEM NO. 908023.

10. USE HIGH EARLY STRENGTH CONCRETE IN ALL AREAS OF CONCRETE DRIVEWAY RECONSTRUCTION, COST INCIDENTAL TO 705002 - P.C.C. SIDEWALK, 6". USE HIGH EARLY STRENGTH CONCRETE IN AREAS OF SIDEWALK CONSTRUCTION AS DEEMED NECESSARY BY ENGINEER IN THE FIELD FOR PEDESTRAIN M.O.T., COST INCIDENTAL TO 705001 - P.C.C. SIDEWALK, 4". USE OF HIGH EARLY STREGTH CONCRETE WITHIN THE TRIANGULAR CHANNELIZING ISLANDS SHALL BE INCIDENTAL TO ITEM 705530 - TRIANGULAR CHANNELIZING ISLANDS.

11. MERIT OIL OF DELAWARE ENTRANCES: GRANTEE WARRANTS AND COVENANTS THAT IT SHALL PROVIDE GRANTER WITH NO LESS THAN FORTY-EIGHT (48) HOURS' NOTICE PRIOR TO THE COMMENCEMENT OF SUCH WORK (CONTACT: ANDREW RAHRIG, arahrig@marathonpetroleum.com). GRANTEE FURTHER WARRANTS AND COVENANTS THAT REASONABLE ACCESS TO GRANTOR'S STORE SHALL BE MAINTAINED AT ALL TIMES.

12. THE CONTRACTOR OR ENGINEER SHALL CONTACT MELODY PETERS (AT 302-222-5920 OR 302-760-2565) OF DELDOT'S SIGNAL CONSTRUCTION SECTION A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ALL WORK ACTIVITIES THAT REQUIRE COORDINATION WITH DELDOT'S TRAFFIC CONTRACTOR, INCLUDING THE INSTALLATION, REMOVAL, OR RELOCATION OF TRAFFIC POLES, VEHICULAR AND PEDESTRIAN SIGNAL HEADS, SIGNAL CABINETS, SPAN WIRES, AND ELECTRICAL CABLES.

TRAFFIC RESTRICTIONS

13. LANE CLOSURES AND DETOURS SHALL NOT BE PERMITTED DURING PERIODS LISTED IN 743.07 AND AS LISTED BELOW:

    - OPENING DAY
    - DELAWARE HANDICAP
    - BREEDERS CUP

14. THE CONTRACTOR SHALL CONTACT MR. WILLIAM FASY, PRESIDENT OF DELAWARE PARK RACETRACK AND CASINO, 10 DAYS PRIOR TO THE START OF PHASE 2 CONSTRUCTION INVOLVING THE FULL CLOSURE OF DELAWARE PARK DRIVE, AT 302-994-2521 EXT. 2201.

15. ADDITIONALLY, THE VEHICULAR DETOUR OF DELAWARE PARK DRIVE SHALL NOT BE PERMITTED BETWEEN DECEMBER 26 THROUGH THE SECOND WEEK OF OCTOBER.

16. THE FOLLOWING SCHEDULE INDICATES THE ALLOWABLE TIME WHICH THE NUMBER OF LANES ON EASTBOUND AND WESTBOUND SR2 MAY BE REDUCED UNLESS OTHERWISE NOTED. THE START TIME REPRESENTS THE EARLIEST TIME FOR WHICH THE LANE CLOSURE CAN BEGIN. THE SETUP OF TRAFFIC CONTROL FOR THE LANE CLOSURE MAY START HALF AN HOUR BEFORE THE START TIME. THE PROCESS OF REMOVAL FOR THE LANE CLOSURE SETUP MUST BEGIN BY THE END TIME LISTED. THE REMOVAL OF THE TRAFFIC CONTROL DEVICES FOR LANE CLOSURE MUST BE COMPLETED HALF AN HOUR AFTER THE END TIME.

LANE CLOSURES MATRIX FOR EASTBOUND AND WESTBOUND SR2

HOUR	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
0							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

LANE CLOSURES NOT PERMITTED

LANE CLOSURES PERMITTED

17. TO ALLOW FOR GUARDRAIL RECONSTRUCTION IN PHASE 4, THE CONTRACTOR IS PERMITTED A WEEKEND CLOSURE OF THE RIGHT THROUGH LANE AND RIGHT TURN LANE OF EASTBOUND SR2 AT MILLTOWN ROAD STARTING AT 6:00 PM FRIDAY AND SHALL HAVE THE LANES REOPENED BY 6:00 AM THE FOLLOWING MONDAY MORNING.

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
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	IMPACT ATTENUATOR
PHASE	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

EROSION & SEDIMENT CONTROL

DWBAG	DEWATERING BAG
DWB	DEWATERING BASIN
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE / LENGTH
SF	SILT FENCE
RSF	SILT FENCE - REINFORCED
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN
T XXX	TURBIDITY CURTAIN / LENGTH
T	TURBIDITY CURTAIN

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WARNING SIGN LEGEND

ROAD WORK 1500 FT	ROAD WORK 1000 FT	ROAD WORK 500 FT	ROAD WORK AHEAD	END ROAD WORK
W20-1 48" X48" ①	W20-1 48" X48" ②	W20-1 48" X48" ③	W20-1 48" X48" ④	G20-2A 48" X24" ⑤

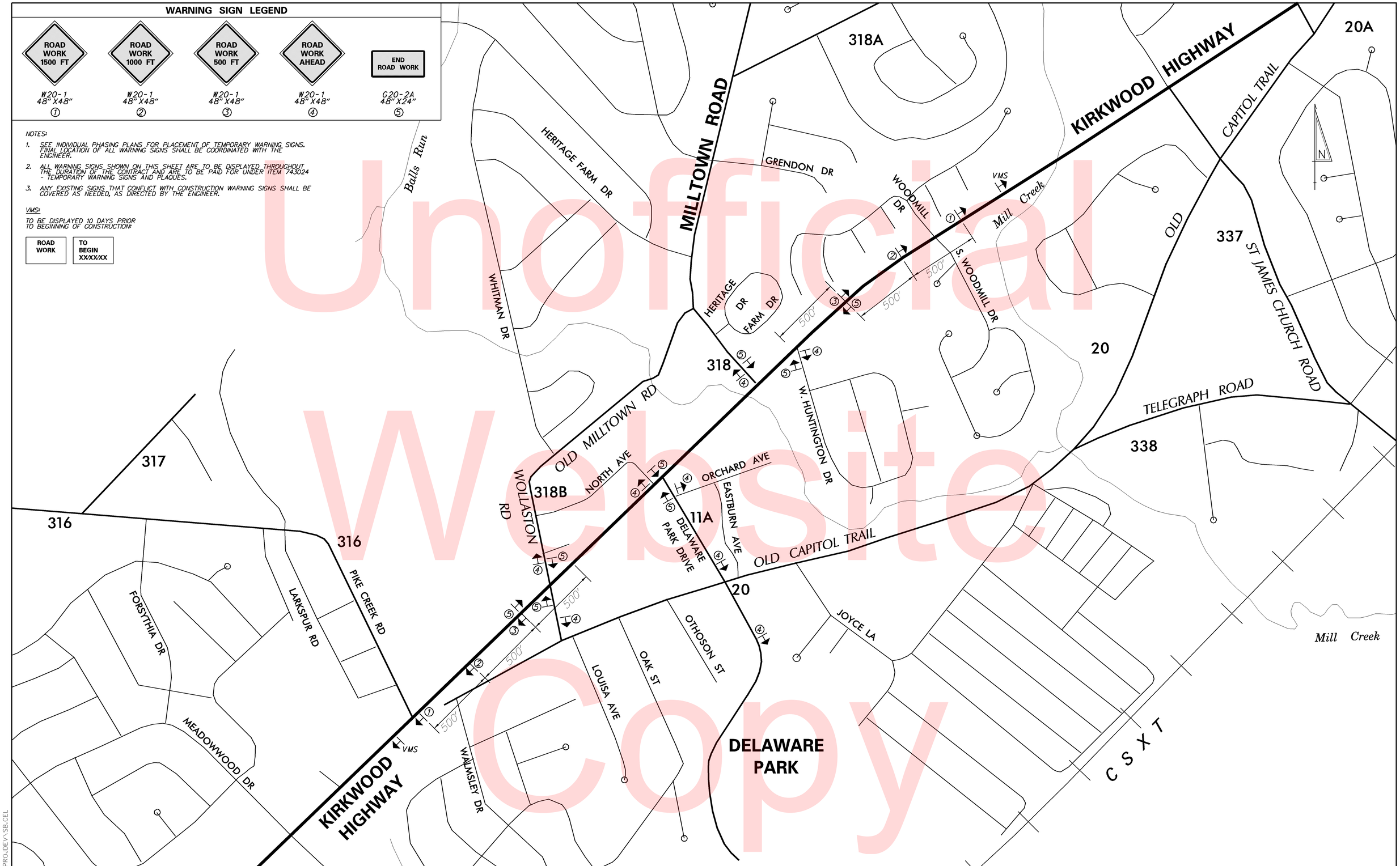
NOTES:

1. SEE INDIVIDUAL PHASING PLANS FOR PLACEMENT OF TEMPORARY WARNING SIGNS. FINAL LOCATION OF ALL WARNING SIGNS SHALL BE COORDINATED WITH THE ENGINEER.
2. ALL WARNING SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED THROUGHOUT THE DURATION OF THE CONTRACT AND ARE TO BE PAID FOR UNDER ITEM 743024 - TEMPORARY WARNING SIGNS AND PLAQUES.
3. ANY EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION WARNING SIGNS SHALL BE COVERED AS NEEDED, AS DIRECTED BY THE ENGINEER.

VMS:

TO BE DISPLAYED 10 DAYS PRIOR TO BEGINNING OF CONSTRUCTION:

ROAD WORK	TO BEGIN XX/XX/XX



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 300 600 900 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY:	SHB
COUNTY	CHECKED BY:	JKL
NEW CASTLE		

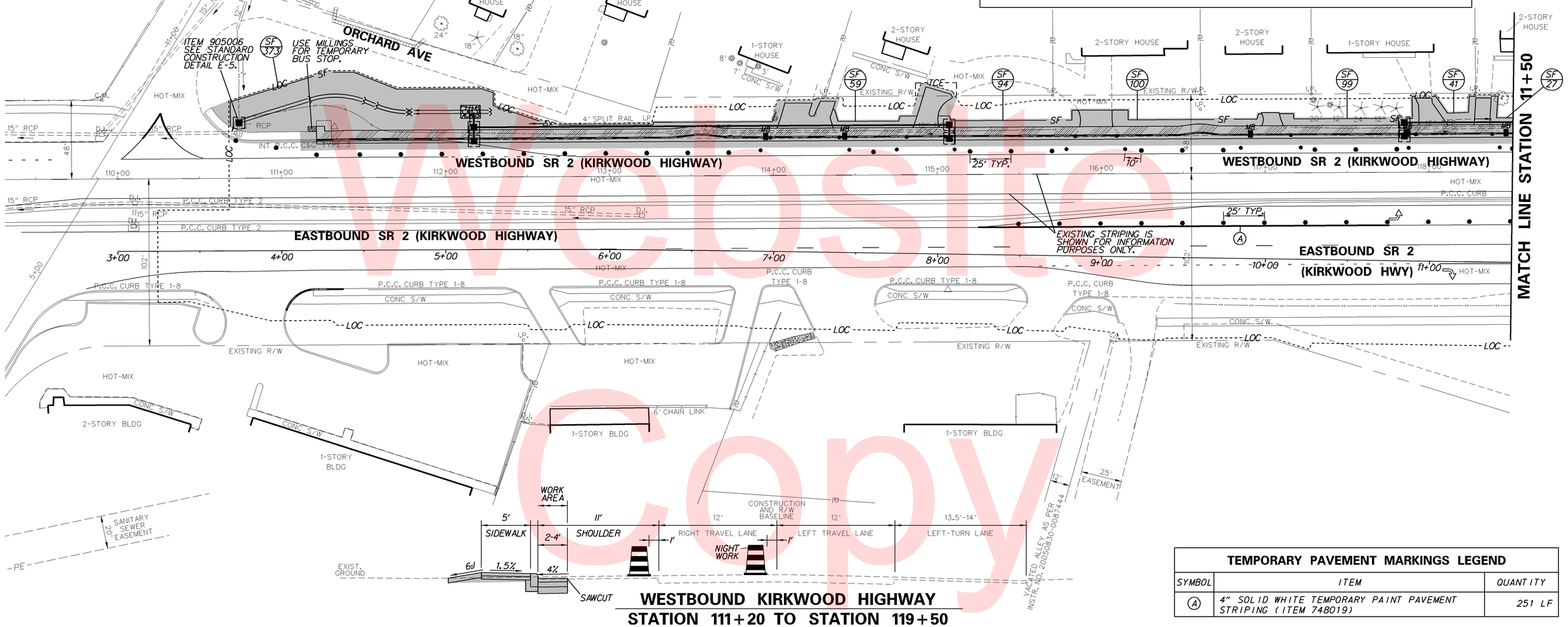
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN

SHEET NO. 27

TOTAL SHTS. 64

SEQUENCE OF CONSTRUCTION

1. PLACE ALL WARNING SIGNS AS SHOWN ON THE FIRST CONSTRUCTION PHASING, MOT AND EROSION CONTROL SHEET.
2. INSTALL MAINTENANCE OF TRAFFIC USING TA-3A OF THE DE MUTCD FOR WESTBOUND SR2 TO CLOSE RIGHT SHOULDER. MAINTAIN ACCESS TO ALL DRIVEWAYS. DURING WORK HOURS, UTILIZE TA-33 TO CLOSE RIGHT LANE. CLOSE NORTH AVENUE AT THE INTERSECTION WITH SR2.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN THE PLANS BELOW.
4. SAWCUT PAVEMENT IN FRONT OF EXISTING CURB ALONG SR2 AND BACK IN THE DRIVEWAYS TO ALLOW FOR CONSTRUCTION OF PROPOSED DRAINAGE AND REMOVAL OF EXISTING PIPES.
5. CONSTRUCT DRAINAGE INLET 24 AND REPLACE EXISTING DAMAGED PIPE RUN WITH PIPE RUN 22 BETWEEN DRAINAGE INLET 24 AND THE CULVERT OPENING. REMOVE EXISTING DAMAGED PIPES, EXISTING MANHOLE, AND DRAINAGE INLET.
6. INSTALL A SECTION OF PIPE 21 AND INLET SEDIMENT CONTROL TO ROUTE DRAINAGE TO BALLS RUN VIA INLET 24 AND PIPE RUN 22.
7. INSTALL DRAINAGE PIPES AND STRUCTURES UPSTREAM TO DRAINAGE INLET 16. REMOVE EXISTING DRAINAGE PIPE WEST OF STATION 124+00 TO THE HESS GAS STATION. BACKFILL AND GRADE OUT TO ALLOW ACCESS TO EXISTING BUSINESSES.
8. USE MILLINGS TO CONSTRUCT TEMPORARY BUS STOP AT STA 4+20 LT. CL. COORDINATE WITH DART AT LEAST 2 WEEKS IN ADVANCE TO CLOSE BUS STOPS AT STA 4+30 LT. CL. AND STA. 13+80 LT. CL. CLOSE LEFT TURN LANE ON EASTBOUND SR2 INTO HESS GAS STATION. IMPLEMENT PEDESTRIAN DETOUR PER THE PEDESTRIAN DETOUR PLAN "A".
9. CLEAR AND GRUB AREAS IN THE PROPOSED SIDEWALK AND BUS PAD. REMOVE EXISTING PIPES UP TO NORTH AVENUE. INSTALL DRAINAGE PIPES AND STRUCTURES BETWEEN DRAINAGE INLETS 15 AND 7. BACKFILL AND GRADE OUT TO ALLOW ACCESS TO HESS GAS STATION.
10. CONSTRUCT PROPOSED SIGNAL CONDUIT, FIBER CONDUIT, JUNCTION WELLS, AND POLE BASES NORTH OF THE WESTBOUND LANES AS PER SIGNAL PLANS. BORE CONDUIT RUN 13 ACROSS WESTBOUND SR2 AND CONDUIT RUN 52 ACROSS SR2. DO NOT DISTURB EXISTING SIGNAL POLES. INSTALL NORTHBOUND AND WESTBOUND SIGNAL HEADS, MAST ARMS AND OTHER TRAFFIC SIGNAL APPURTENANCES. DO NOT ACTIVATE NEW SIGNALS.
11. GRADE OUT AND BOX OUT FOR CURB, SIDEWALK, AND BUS PAD. INSTALL CURB, SIDEWALK, AND BUS PAD.
12. CONSTRUCT REMAINING DRAINAGE PIPES AND STRUCTURES ON THE NORTH SIDE OF WESTBOUND SR2. BACKFILL AND GRADE OUT DRIVEWAYS TO ALLOW ACCESS TO RESIDENTS AND BUSINESSES. CLEAR AND GRUBB AREAS IN THE PROPOSED SIDEWALKS.
13. GRADE OUT AND BOX OUT FOR PROPOSED CURB AND SIDEWALKS. CONSTRUCT CURB AND SIDEWALKS. TEMPORARILY CLOSE RIGHT TURN LANE ON MILLTOWN ROAD AS REQUIRED TO ALLOW CONSTRUCTION OF CURB RUNS 42 AND 43 AND PAVEMENT IN FRONT OF THESE CURBS.
14. CONSTRUCT PROPOSED PAVEMENT ON THE NORTH SIDE OF WESTBOUND SR2 UP TO TOP OF TYPE B WARM MIX.
15. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL AND SEEDING.
16. INSTALL TEMPORARY STRIPING IN SHOULDER BASED ON SIGNING AND STRIPING PLANS AT THE MILLTOWN ROAD AND NORTH STREET INTERSECTIONS. ANY PAVEMENT MARKINGS DISTURBED IN THIS PHASE NEED TO BE REPLACED WITH TEMPORARY MARKINGS AT THE END OF THIS PHASE.
17. REMOVE MAINTENANCE OF TRAFFIC (INSTALLED USING TA-3A OF THE DE MUTCD) TO REOPEN SHOULDER OF WESTBOUND SR2. MAINTAIN CLOSURE OF LEFT TURN LANE ON EASTBOUND SR2 INTO HESS GAS STATION. REMOVE NORTH AVENUE CLOSURE AND DETOURS INSTALLED IN THIS PHASE. BEGIN PHASE 2.



WESTBOUND KIRKWOOD HIGHWAY
STATION 111+20 TO STATION 119+50

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	251 LF

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: SHB / CHECKED BY: JKL	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SHEET NO. 28 / TOTAL SHTS. 64

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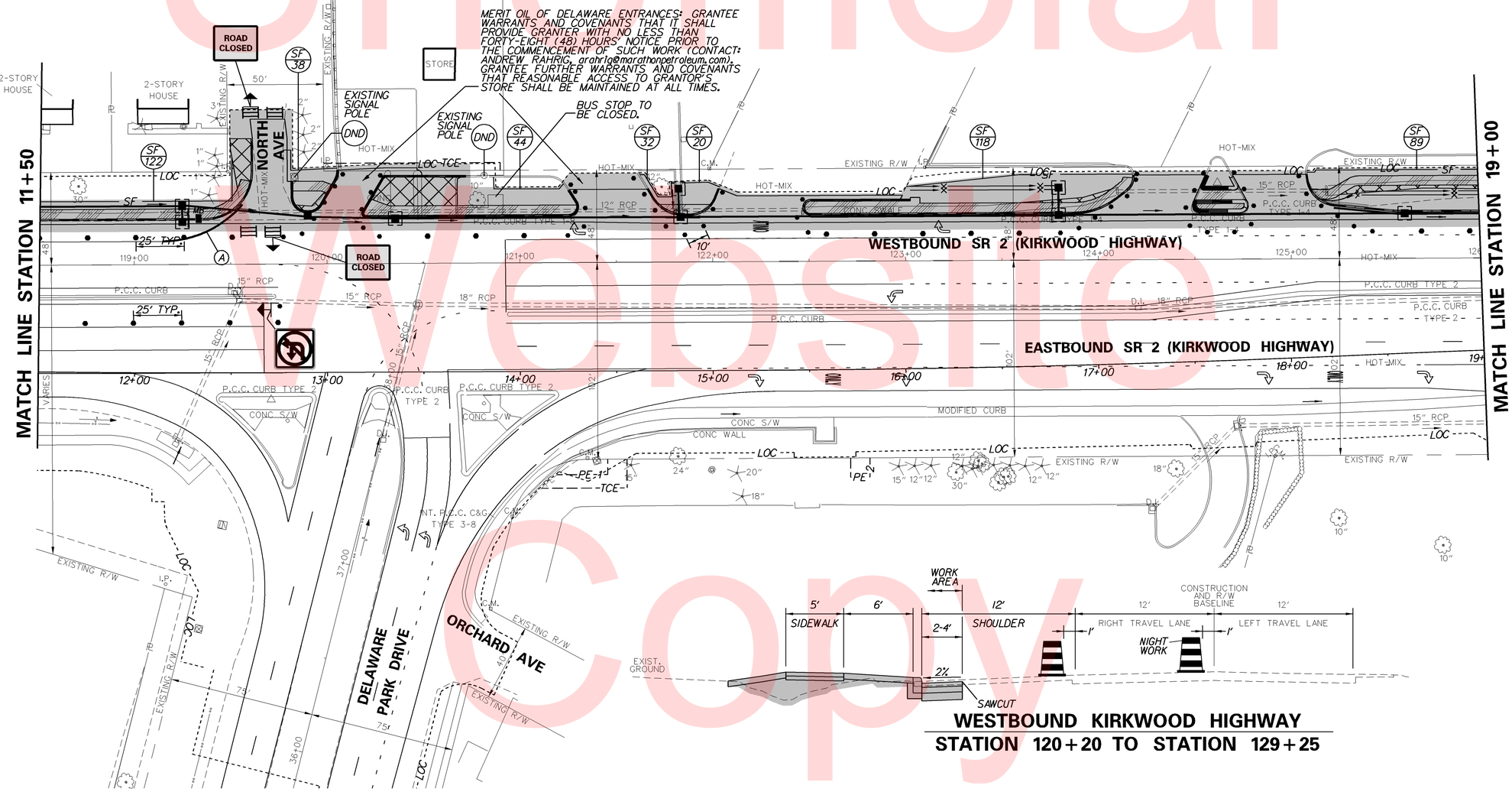
SEQUENCE OF CONSTRUCTION

1. PLACE ALL WARNING SIGNS AS SHOWN ON THE FIRST CONSTRUCTION PHASING, MOT AND EROSION CONTROL SHEET.
2. INSTALL MAINTENANCE OF TRAFFIC USING TA-3A OF THE DE MUTCD FOR WESTBOUND SR2 TO CLOSE RIGHT SHOULDER. MAINTAIN ACCESS TO ALL DRIVEWAYS. DURING WORK HOURS, UTILIZE TA-33 TO CLOSE RIGHT LANE. CLOSE NORTH AVENUE AT THE INTERSECTION WITH SR2.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN THE PLANS BELOW.
4. SAWCUT PAVEMENT IN FRONT OF EXISTING CURB ALONG SR2 AND BACK IN THE DRIVEWAYS TO ALLOW FOR CONSTRUCTION OF PROPOSED DRAINAGE AND REMOVAL OF EXISTING PIPES.
5. CONSTRUCT DRAINAGE INLET 24 AND REPLACE EXISTING DAMAGED PIPE RUN WITH PIPE RUN 22 BETWEEN DRAINAGE INLET 24 AND THE CULVERT OPENING. REMOVE EXISTING DAMAGED PIPES, EXISTING MANHOLE, AND DRAINAGE INLET.
6. INSTALL A SECTION OF PIPE 21 AND INLET SEDIMENT CONTROL TO ROUTE DRAINAGE TO BALLS RUN VIA INLET 24 AND PIPE RUN 22.
7. INSTALL DRAINAGE PIPES AND STRUCTURES UPSTREAM TO DRAINAGE INLET 16. REMOVE EXISTING DRAINAGE PIPE WEST OF STATION 124+00 TO THE HESS GAS STATION. BACKFILL AND GRADE OUT TO ALLOW ACCESS TO EXISTING BUSINESSES.
8. USE MILLINGS TO CONSTRUCT TEMPORARY BUS STOP AT STA 4+20 LT. CL. COORDINATE WITH DART AT LEAST 2 WEEKS IN ADVANCE TO CLOSE BUS STOPS AT STA 4+30 LT. CL. AND STA. 13+80 LT. CL. CLOSE LEFT TURN LANE ON EASTBOUND SR2 INTO HESS GAS STATION. IMPLEMENT PEDESTRIAN DETOUR PER THE PEDESTRIAN DETOUR PLAN 'A'.
9. CLEAR AND GRUB AREAS IN THE PROPOSED SIDEWALK AND BUS PAD. REMOVE EXISTING PIPES UP TO NORTH AVENUE. INSTALL DRAINAGE PIPES AND STRUCTURES BETWEEN DRAINAGE INLETS 15 AND 7. BACKFILL AND GRADE OUT TO ALLOW ACCESS TO HESS GAS STATION.
10. CONSTRUCT PROPOSED SIGNAL CONDUIT, FIBER CONDUIT, JUNCTION WELLS, AND POLE BASES NORTH OF THE WESTBOUND LANES AS PER SIGNAL PLANS. BORE CONDUIT RUN 13 ACROSS WESTBOUND SR2 AND CONDUIT RUN 52 ACROSS SR2. DO NOT DISTURB EXISTING SIGNAL POLES. INSTALL NORTHBOUND AND WESTBOUND SIGNAL HEADS, MAST ARMS AND OTHER TRAFFIC SIGNAL APPURTENANCES. DO NOT ACTIVATE NEW SIGNALS.
11. GRADE OUT AND BOX OUT FOR CURB, SIDEWALK, AND BUS PAD. INSTALL CURB, SIDEWALK, AND BUS PAD.
12. CONSTRUCT REMAINING DRAINAGE PIPES AND STRUCTURES ON THE NORTH SIDE OF WESTBOUND SR2. BACKFILL AND GRADE OUT DRIVEWAYS TO ALLOW ACCESS TO RESIDENTS AND BUSINESSES. CLEAR AND GRUBB AREAS IN THE PROPOSED SIDEWALKS.
13. GRADE OUT AND BOX OUT FOR PROPOSED CURB AND SIDEWALKS. CONSTRUCT CURB AND SIDEWALKS. TEMPORARILY CLOSE RIGHT TURN LANE ON MILLTOWN ROAD AS REQUIRED TO ALLOW CONSTRUCTION OF CURB RUNS 42 AND 43 AND PAVEMENT IN FRONT OF THESE CURBS.
14. CONSTRUCT PROPOSED PAVEMENT ON THE NORTH SIDE OF WESTBOUND SR2 UP TO TOP OF TYPE B WARM MIX.
15. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL AND SEEDING.
16. INSTALL TEMPORARY STRIPING IN SHOULDER BASED ON SIGNING AND STRIPING PLANS AT THE MILLTOWN ROAD AND NORTH STREET INTERSECTIONS. ANY PAVEMENT MARKINGS DISTURBED IN THIS PHASE NEED TO BE REPLACED WITH TEMPORARY MARKINGS AT THE END OF THIS PHASE.
17. REMOVE MAINTENANCE OF TRAFFIC (INSTALLED USING TA-3A OF THE DE MUTCD) TO REOPEN SHOULDER OF WESTBOUND SR2. MAINTAIN CLOSURE OF LEFT TURN LANE ON EASTBOUND SR2 INTO HESS GAS STATION. REMOVE NORTH AVENUE CLOSURE AND DETOURS INSTALLED IN THIS PHASE. BEGIN PHASE 2.

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	47 LF



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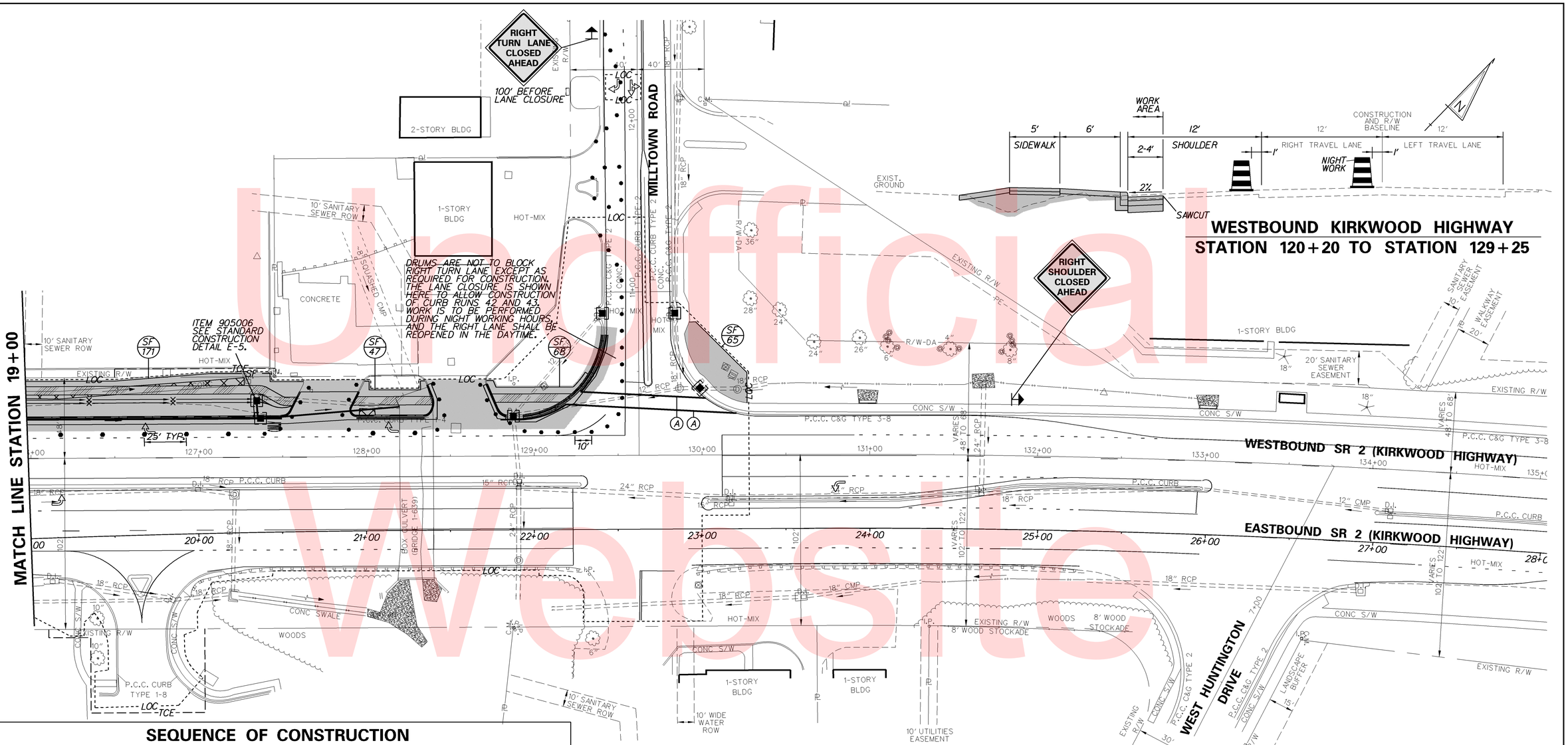
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD	CONTRACT T201200701 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: SHB / CHECKED BY: JKL	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SHEET NO. 29 / TOTAL SHTS. 64



SEQUENCE OF CONSTRUCTION

1. PLACE ALL WARNING SIGNS AS SHOWN ON THE FIRST CONSTRUCTION PHASING, MOT AND EROSION CONTROL SHEET.
2. INSTALL MAINTENANCE OF TRAFFIC USING TA-3A OF THE DE MUTCD FOR WESTBOUND SR2 TO CLOSE RIGHT SHOULDER. MAINTAIN ACCESS TO ALL DRIVEWAYS. DURING WORK HOURS, UTILIZE TA-33 TO CLOSE RIGHT LANE. CLOSE NORTH AVENUE AT THE INTERSECTION WITH SR2.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN THE PLANS BELOW.
4. SAWCUT PAVEMENT IN FRONT OF EXISTING CURB ALONG SR2 AND BACK IN THE DRIVEWAYS TO ALLOW FOR CONSTRUCTION OF PROPOSED DRAINAGE AND REMOVAL OF EXISTING PIPES.
5. CONSTRUCT DRAINAGE INLET 24 AND REPLACE EXISTING DAMAGED PIPE RUN WITH PIPE RUN 22 BETWEEN DRAINAGE INLET 24 AND THE CULVERT OPENING. REMOVE EXISTING DAMAGED PIPES, EXISTING MANHOLE, AND DRAINAGE INLET.
6. INSTALL A SECTION OF PIPE 21 AND INLET SEDIMENT CONTROL TO ROUTE DRAINAGE TO BALLS RUN VIA INLET 24 AND PIPE RUN 22.
7. INSTALL DRAINAGE PIPES AND STRUCTURES UPSTREAM TO DRAINAGE INLET 16. REMOVE EXISTING DRAINAGE PIPE WEST OF STATION 124+00 TO THE HESS GAS STATION. BACKFILL AND GRADE OUT TO ALLOW ACCESS TO EXISTING BUSINESSES.
8. USE MILLINGS TO CONSTRUCT TEMPORARY BUS STOP AT STA 4+20 LT. CL. COORDINATE WITH DART AT LEAST 2 WEEKS IN ADVANCE TO CLOSE BUS STOPS AT STA 4+30 LT. CL. AND STA. 13+80 LT. CL. CLOSE LEFT TURN LANE ON EASTBOUND SR2 INTO HESS GAS STATION. IMPLEMENT PEDESTRIAN DETOUR PER THE PEDESTRIAN DETOUR PLAN 'A'.
9. CLEAR AND GRUB AREAS IN THE PROPOSED SIDEWALK AND BUS PAD. REMOVE EXISTING PIPES UP TO NORTH AVENUE. INSTALL DRAINAGE PIPES AND STRUCTURES BETWEEN DRAINAGE INLETS 15 AND 7. BACKFILL AND GRADE OUT TO ALLOW ACCESS TO HESS GAS STATION.
10. CONSTRUCT PROPOSED SIGNAL CONDUIT, FIBER CONDUIT, JUNCTION WELLS, AND POLE BASES NORTH OF THE WESTBOUND LANES AS PER SIGNAL PLANS. BORE CONDUIT RUN 13 ACROSS WESTBOUND SR2 AND CONDUIT RUN 52 ACROSS SR2. DO NOT DISTURB EXISTING SIGNAL POLES. INSTALL NORTHBOUND AND WESTBOUND SIGNAL HEADS, MAST ARMS AND OTHER TRAFFIC SIGNAL APPURTENANCES. DO NOT ACTIVATE NEW SIGNALS.
11. GRADE OUT AND BOX OUT FOR CURB, SIDEWALK, AND BUS PAD. INSTALL CURB, SIDEWALK, AND BUS PAD.
12. CONSTRUCT REMAINING DRAINAGE PIPES AND STRUCTURES ON THE NORTH SIDE OF WESTBOUND SR2. BACKFILL AND GRADE OUT DRIVEWAYS TO ALLOW ACCESS TO RESIDENTS AND BUSINESSES. CLEAR AND GRUBB AREAS IN THE PROPOSED SIDEWALKS.
13. GRADE OUT AND BOX OUT FOR PROPOSED CURB AND SIDEWALKS. CONSTRUCT CURB AND SIDEWALKS. TEMPORARILY CLOSE RIGHT TURN LANE ON MILLTOWN ROAD AS REQUIRED TO ALLOW CONSTRUCTION OF CURB RUNS 42 AND 43 AND PAVEMENT IN FRONT OF THESE CURBS.
14. CONSTRUCT PROPOSED PAVEMENT ON THE NORTH SIDE OF WESTBOUND SR2 UP TO TOP OF TYPE B WARM MIX.
15. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL AND SEEDING.
16. INSTALL TEMPORARY STRIPING IN SHOULDER BASED ON SIGNING AND STRIPING PLANS AT THE MILLTOWN ROAD AND NORTH STREET INTERSECTIONS. ANY PAVEMENT MARKINGS DISTURBED IN THIS PHASE NEED TO BE REPLACED WITH TEMPORARY MARKINGS AT THE END OF THIS PHASE.
17. REMOVE MAINTENANCE OF TRAFFIC (INSTALLED USING TA-3A OF THE DE MUTCD) TO REOPEN SHOULDER OF WESTBOUND SR2. MAINTAIN CLOSURE OF LEFT TURN LANE ON EASTBOUND SR2 INTO HESS GAS STATION. REMOVE NORTH AVENUE CLOSURE AND DETOURS INSTALLED IN THIS PHASE. BEGIN PHASE 2.

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	177 LF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR2, WOLLASTON ROAD TO MILLTOWN ROAD

CONTRACT	BRIDGE NO.	N/A
T201200701	DESIGNED BY: SHB	
COUNTY	CHECKED BY: JKL	
NEW CASTLE		

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

SHEET NO. 30

TOTAL SHTS. 64

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