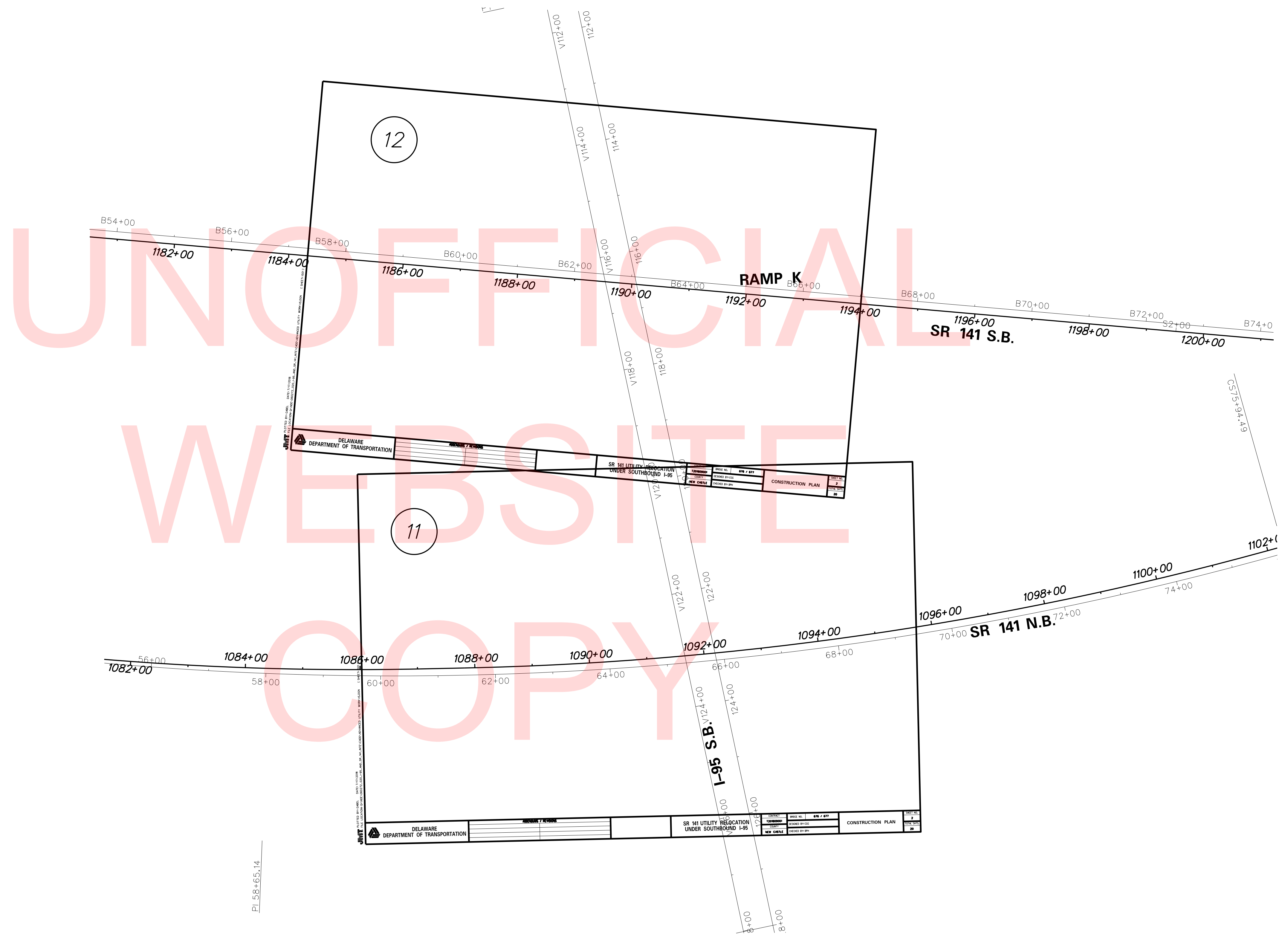
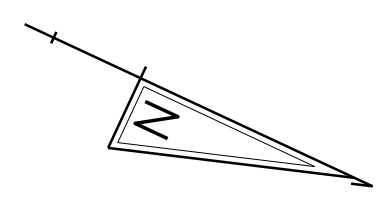


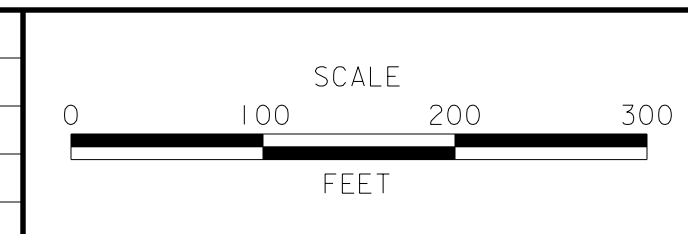
PLAN SHEET INDEX CROSS REFERENCE		
CONSTRUCTION PLAN	11	12
GRADES AND GEOMETRICS	13	-
ENVIROMENTAL COMPLIANCE PLANS	16	17



PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_I-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\IS.DGN [SHEET: IS01]

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	



SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY:	CGG
COUNTY	CHECKED BY:	BPH
NEW CASTLE		

PLAN SHEET INDEX

SHEET NO.	2
TOTAL SHTS.	20

EXISTING SYMBOLS

DRAINAGE	
	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
	DRAINAGE INLET
	DRAINAGE JUNCTION BOX
	DRAINAGE MANHOLE
	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

MANMADE ROADSIDE FEATURES	
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	CURB
	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
	LAMP AND POST - RESIDENTIAL
	MAILBOX
	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
	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY

RIGHT-OF-WAY SYMBOLS	
	PROPERTY MARKER - CONCRETE MON.
	PROPERTY MARKER - IRON PIPE
	HISTORIC RIGHT-OF-WAY BASELINE
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING DENIAL OF ACCESS
	EXISTING R/W & DENIAL OF ACCESS

SURVEY CONTROL & MONUMENTATION	
	SURVEY BENCHMARK LOCATION
	SURVEY TIE POINT LOCATION
	SURVEY TRAVERSE POINT
	POINT OF CURVATURE OR TANGENCY
	POINT OF INTERSECTING TANGENTS

UTILITY	
	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
	CABLE TV DISTRIBUTION BOX
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
	GAS MANHOLE
	GAS METER
	GAS VALVE
	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
	SANITARY SEWER MANHOLE
	SANITARY SEWER VALVE
	SANITARY SEWER CLEANOUT OR VENT
	SEPTIC DRAIN FIELD
	TELEPHONE BOOTH
	TELEPHONE MANHOLE
	TELEPHONE TEST POINT
	TRAFFIC - CONDUIT JUNCTION WELL
	TRAFFIC - LIGHT POLE AND BASE
	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
	TRAFFIC - SIGNAL POLE AND BASE
	UTILITY BOX
	UTILITY POLE GUY WIRE ANCHOR
	UTILITY POLE
	WATER - FIRE HYDRANT
	WATER METER
	WATER VALVE
	WELL HEAD
	MANHOLE - UNDETERMINED OWNER

UTILITY COMPANY FACILITIES	
	ARTESIAN WATER COMPANY
	AT&T - FIBER OPTIC
	COMCAST CABLE - FIBER OPTIC
	DELDOT MULTIDUCT CONDUIT
	DELDOT SIGNAL CONDUIT
	DELMARVA POWER - ELECTRIC
	DELMARVA POWER - GAS
	NEW CASTLE COUNTY SEWER
	VERIZON
	VERIZON - FIBER OPTIC

PROPOSED SYMBOLS

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	BRICK PATTERNED SURFACE
	BUTT JOINT
	CLEAR ZONE
	CONSTRUCTION BASELINE
	CONSTRUCTION SAFETY FENCE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
	CURB OPENING
	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
	LATERAL OFFSET
	LIMIT OF CONSTRUCTION
	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
	PROPOSED DENIAL OF ACCESS
	PROPOSED PERMANENT EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED R/W & DENIAL OF ACCESS
	TEMPORARY CONSTRUCTION EASEMENT
	PROPOSED RIGHT-OF-WAY BASELINE

IDENTIFIERS	
	ADJUST BY CONTRACTOR
	ADJUST BY OTHERS
	CONCRETE SAFETY BARRIER
	CURB OR CURB & GUTTER
	CONVERT TO JUNCTION BOX
	CONVERT TO DRAINAGE MANHOLE
	CURB OPENING
	CURB RAMP / TYPE
	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
	CONSTRUCTION SAFETY FENCE
	DRAINAGE INLET
	DO NOT DISTURB
	ENERGY DISSIPATOR
	FENCE
	FLARED END SECTION
	FILL WITH FLOWABLE FILL
	FILTRATION STRUCTURE
	GUARDRAIL
	JUNCTION BOX
	MANHOLE
	MONUMENT - RIGHT-OF-WAY
	PIPE
	RELOCATE BY CONTRACTOR
	RELOCATE BY OTHERS
	RELOCATE BY PROPERTY OWNER
	REMOVE BY CONTRACTOR
	REMOVE BY TRAFFIC CONTRACTOR
	REMOVE BY OTHERS
	UNDERDRAIN / LENGTH
	UNDERDRAIN OUTLET PIPE

LANDSCAPING	
	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC	
	ITMS CONDUIT
	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
	PAVEMENT STRIPING
	TRAFFIC SIGN

PAVEMENT SECTION(S)	
	OVERLAY PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	DRIVEWAY AND ENTRANCE PAVEMENT - SEE NOTES FOR MATERIALS AND DEPTHS

UTILITY COMPANY FACILITIES	
	DELMARVA POWER - GAS
	VERIZON

MISCELLANEOUS-EXISTING	
	TRAFFIC I-BEAM SIGN AND POST
	STATE MAPPED WETLAND LINE
	CASING PIPE

MISCELLANEOUS - PROPOSED	
	CASING PIPE

EROSION & SEDIMENT CONTROL	
	SILT FENCE / LENGTH
	SILT FENCE
	SILT FENCE - REINFORCED

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\LG.DGN [SHEET: LC01]

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2016 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2017, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2. 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.
(X)	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
(X)	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
()	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

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

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

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

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

4. THE DISTURBED AREA FOR THIS PROJECT IS 0.2 ACRES.

5. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A FIVE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE FIVE YEARS, THE CONTRACTOR WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

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

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

SECTION 200

3. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
a. EXISTING GUARDRAIL

4. TEST HOLES (ITEM 204000) ARE TO BE COMPLETED AT APPROXIMATELY STA. 1089+90 LT AND STA. 1093+40 LT ON NB SR 141 TO LOCATE AW-W EX WATER MAIN TO IDENTIFY CROSSING LOCATION WITH PROPOSED DP-G RELOCATION.

SECTION 400

5. THE PAVEMENT PATCH SECTION SHALL BE AS FOLLOWS:
a. 2" SUPERPAVE TYPE C, PG 64-22, PATCHING (ITEM NO. 401029)
b. 3" SUPERPAVE TYPE B, PG, 64-22 PATCHING (ITEM NO. 401030)
c. 8" GABC TYPE B, PATCHING (ITEM 301002)
d. AS REQUIRED DEPTH, FURNISHING BORROW TYPE C FOR PIPE AND UTILITY TRENCH BACKFILL (ITEM NO. 209005).

SECTION 900

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 STORMWATER SECTION. A COPY OF THE GENERAL PERMIT OR THE NOI CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

EROSION AND SEDIMENT CONTROL NOTES

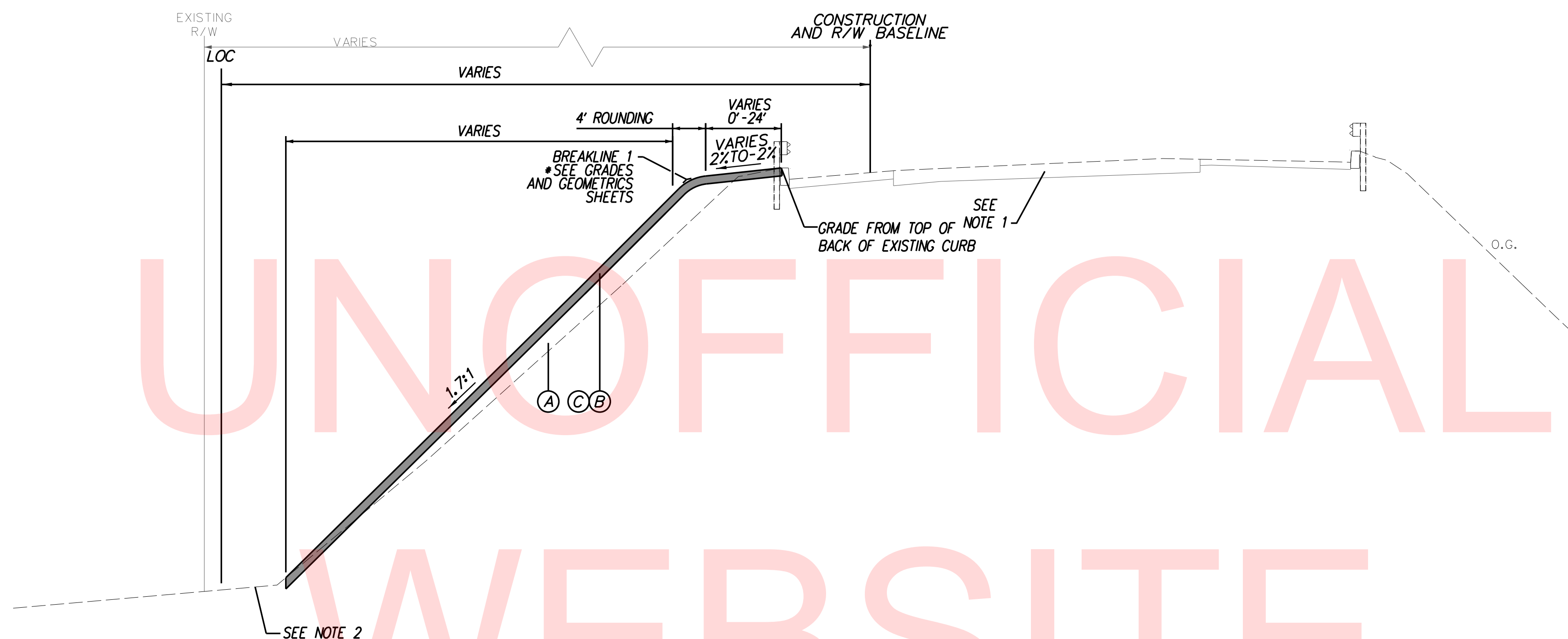
- EROSION AND SEDIMENT CONTROL MEASURES ARE SHOWN ON CONSTRUCTION PLANS.
- THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL DRAINAGE INLETS SHOWN ON THE CONSTRUCTION PLANS.
- THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOLLOWING FINAL VEGETATIVE STABILIZATION OF ENTIRE DISTURBED AREA AND UPON THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.
- THE SILT FENCE AND REINFORCED SILT FENCE LINES HAVE BEEN OFFSET FROM THE LIMIT OF CONSTRUCTION FOR PRESENTATION CLARITY. CONTRACTOR SHALL INSTALL ALL PERIMETER CONTROLS (I.E. SF AND SSF) AT THE LIMIT OF CONSTRUCTION.
- THE CONTRACTOR SHALL EMPLOY INCREMENTAL STABILIZATION PRACTICES WHEN CONSTRUCTING EMBANKMENT SLOPES AS PER SECTION 907 OF THE SUPPLEMENTAL SPECIFICATIONS AND AS SHOWN ON STD DETAIL E-11.
- TEMPORARY SLOPE DRAINS (ITEM NO. 907015) ARE TO BE PLACED DURING CONSTRUCTION OF EMBANKMENT SLOPES AS NEEDED OR AS DIRECTED BY THE ENGINEER AS PER SECTION 907 OF THE SUPPLEMENTAL SPECIFICATIONS AND AS SHOWN ON STD DETAIL E-10.

EROSION & SEDIMENT CONTROL	
	COMPOST FILTER LOG
	DEWATERING BAG
	DEWATERING BASIN
	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
	PORTABLE SEDIMENT TANK
	SANDBAG DIKE
	SANDBAG DIVERSION
	STONE CHECK DAM
	STABILIZED CONSTRUCTION ENTRANCE
	SILT FENCE / LENGTH
	SILT FENCE
	SILT FENCE - REINFORCED
	SUMP PIT
	SEDIMENT TRAP / NUMBER
	SEDIMENT TRAP
	SEDIMENT TRAP WITH INLET AS OUTLET
	SEDIMENT TRAP PIPE OUTLET
	STILLING WELL
	TEMPORARY SWALE
	TEMPORARY SLOPE DRAIN
	TURBIDITY CURTAIN / LENGTH
	TURBIDITY CURTAIN

EARTHWORK SUMMARY	
EXCAVATION	
FROM CROSS SECTIONS	650 C. Y.
FROM OTHER SOURCES (SEE NOTE 1)	-
TOTAL EXCAVATION	650 C. Y.
EXCAVATION AVAILABLE FOR EMBANKMENT	
TOTAL EXCAVATION	650 C. Y.
LESS UNSUITABLE EMBANKMENT MATERIAL (SEE NOTE 2)	650 C. Y.
SUBTOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	0 C. Y.
LESS DENSIFICATION (20%)	0 C. Y.
TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	0 C. Y.
EXCAVATION MEETING BORROW TYPE 'A'	0 C. Y.
EXCAVATION MEETING BORROW TYPE 'F'	0 C. Y.
EMBANKMENT REQUIREMENTS	
BORROW TYPE 'C'	1,442 C. Y.
CUT/FILL BALANCE (+ = EXCESS, - = NEED)	
BORROW TYPE 'C'	-1,442 C. Y.
TOPSOIL BALANCE (+ = EXCESS, - = NEED)	
TOPSOIL REMOVED FROM SITE (IN CUT & FILL)	1,945 C. Y.
LESS UNSUITABLE TOPSOIL (75%)	1,945 C. Y.
AVAILABLE TOPSOIL FOR REUSE	0 C. Y. = 0 S. Y.
TOPSOIL REQUIRED	11,667 S. Y.
TOPSOIL BALANCE	-11,667 S. 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.	

PLOTTED BY: GABEL DATE: 7/17/2018

FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141\INTE\CADD\ADVANCED UTILITY WORK\INDGN [SHEET: PN]



NB SR 141
 STATION 1089+50 TO STATION 1090+50
 STATION 1093+22 TO STATION 1093+73

UNOFFICIAL
WEBSITE
COPY

LEGEND	
(A)	ITEM 209004 - BORROW, TYPE C, OR PROJECT EXCAVATION MEETING THE REQUIREMENTS OF BORROW, TYPE C
(B)	ITEM 908004 - TOPSOIL, 6" DEPTH ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
(C)	ITEM 908020 - EROSION CONTROL BLANKET MULCH

- NOTES:**
- EXISTING NB & SB SR 141 IS VARIABLE DEPTH HOT-MIX OVER A VARIABLE DEPTH OF CONCRETE. SHOULDERS ARE VARIABLE DEPTH HOT-MIX.
 - SEE CONSTRUCTION DETAILS FOR BENCHING OF EMBANKMENT SLOPES.

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"

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\TSDGN [SHEET: TS01]



ADDENDUMS / REVISIONS

NOT TO SCALE

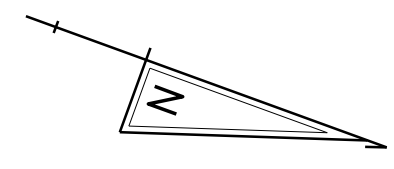
**SR 141 UTILITY RELOCATION
UNDER SOUTHBOUND I-95**

CONTRACT T201809001	BRIDGE NO. 676 / 677
COUNTY NEW CASTLE	DESIGNED BY: CGG
	CHECKED BY: BPH

TYPICAL SECTIONS

TS-01
SHEET NO. 5
TOTAL SHTS. 20

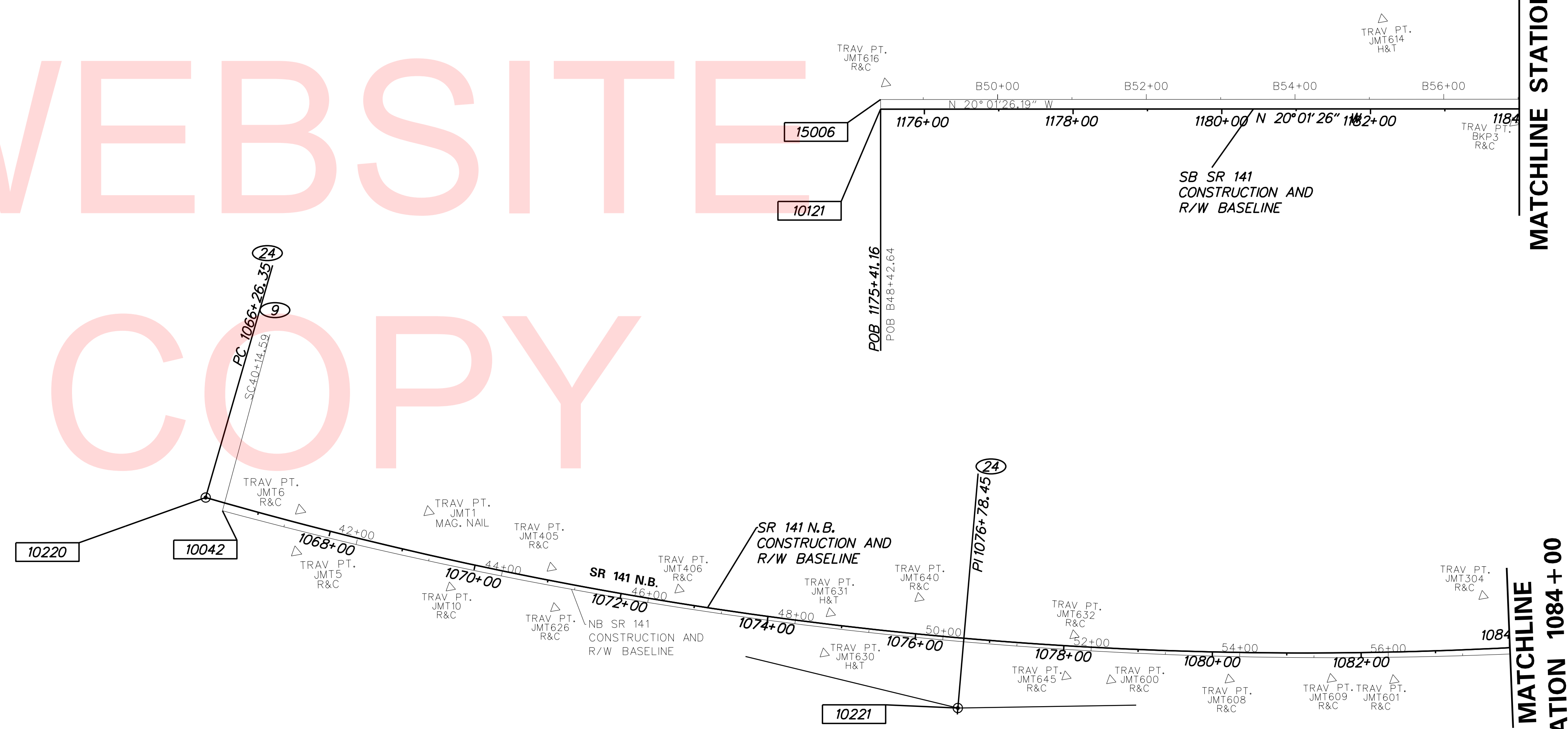
CONSTRUCTION ALIGNMENT CONTROL				
POINT	STATION	OFFSET	NORTHING	EASTING
10121	1175+41.16	0.00	618995.5468	603557.4918
15006	B48+42.64	0.00	618991.0765	603545.2846



HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
JMT1	1069+23.00	56.66' LT	618609.3866	604273.9894	22.53
JMT5	1067+62.20	38.05' RT	618460.4533	604385.8968	19.06
JMT6	1067+53.53	17.94' LT	618446.2814	604331.1634	18.12
JMT10	1069+73.72	35.84' RT	618671.6651	604359.7234	25.19
JMT304	57+30.47	79.47' LT	619980.8964	603895.2645	34.18
JMT405	1071+01.48	17.38' LT	618790.2641	604288.2415	27.49
JMT406	1072+75.94	18.69' LT	618961.7097	604257.0015	30.01
JMT600	1078+65.30	42.91' RT	619549.0974	604173.0208	34.88
JMT608	53+86.85	30.90' RT	619698.5075	604117.6630	35.86
JMT609	55+23.35	28.46' RT	619827.1799	604069.9861	36.10
JMT614	B55+17.66	107.73' LT	619588.4055	603212.9344	18.34
JMT616	1175+47.93	35.11' LT	618990.0051	603522.5103	31.23
JMT630	1074+81.09	39.08' RT	619174.5649	604271.0576	32.82
JMT631	1074+82.55	15.61' LT	619163.8186	604217.3398	32.50
JMT632	1078+12.73	15.43' LT	619481.9967	604133.1049	33.81
JMT640	1075+99.67	48.85' LT	619268.8654	604157.3890	11.61
JMT645	1078+04.98	40.51' RT	619490.6468	604188.8283	34.58
BKP3	B56+94.68	30.64' RT	619802.1189	603283.1149	36.03

SPIRAL CURVE NO. 9				
ELEMENT:	CIRCULAR	STATION	NORTHING	EASTING
SC (10042)		40+14.59	618348.4338	604367.6503
PI (10049)		58+65.14	620192.1950	604209.2817
CC (10043)			617858.1010	598659.0900
CS (10044)		75+94.49	621594.9846	603002.3362
RADIUS:		5729.58		
DELTA:	35° 47' 57" LT			
DEGREE OF CURVATURE (ARC):	1° 00' 00"			
LENGTH:	3579.90			
TANGENT:	1850.55			
CHORD:	3521.96			
MIDDLE ORDINATE:	277.33			
EXTERNAL:	291.44			
TANGENT DIRECTION:	N 4° 54' 34" W			
RADIAL DIRECTION:	N 85° 05' 26" E			
CHORD DIRECTION:	N 22° 48' 32" W			
RADIAL DIRECTION:	N 49° 17' 30" E			
TANGENT DIRECTION:	N 40° 42' 30" W			

CIRCULAR CURVE NO. 24				
ELEMENT:	CIRCULAR	STATION	NORTHING	EASTING
PC (10220)		1066+26.35	618321.1381	604358.6539
PI (10221)		1076+78.45	619370.7862	604286.9243
CC (10222)			617957.4095	599036.0675
PT (10223)		1087+03.88	620314.6161	603822.0681
RADIUS:		5335.00		
DELTA:	22° 18' 43" LT			
DEGREE OF CURVATURE (ARC):	01° 04' 26.26"			
LENGTH:	2077.53			
TANGENT:	1052.10			
CHORD:	2064.43			
MIDDLE ORDINATE:	100.81			
EXTERNAL:	102.75			
TANGENT DIRECTION:	N 03° 54' 34" W			
RADIAL DIRECTION:	N 86° 05' 26" E			
CHORD DIRECTION:	N 15° 03' 00" W			
RADIAL DIRECTION:	N 63° 46' 44" E			
TANGENT DIRECTION:	N 26° 13' 16" W			

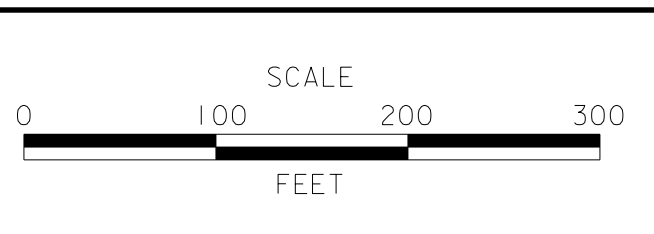


DATUM REFERENCE:
 HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).
 VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\HV.DGN [SHEET: HV01]



ADDENDUMS / REVISIONS



SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

HORIZONTAL AND VERTICAL CONTROL

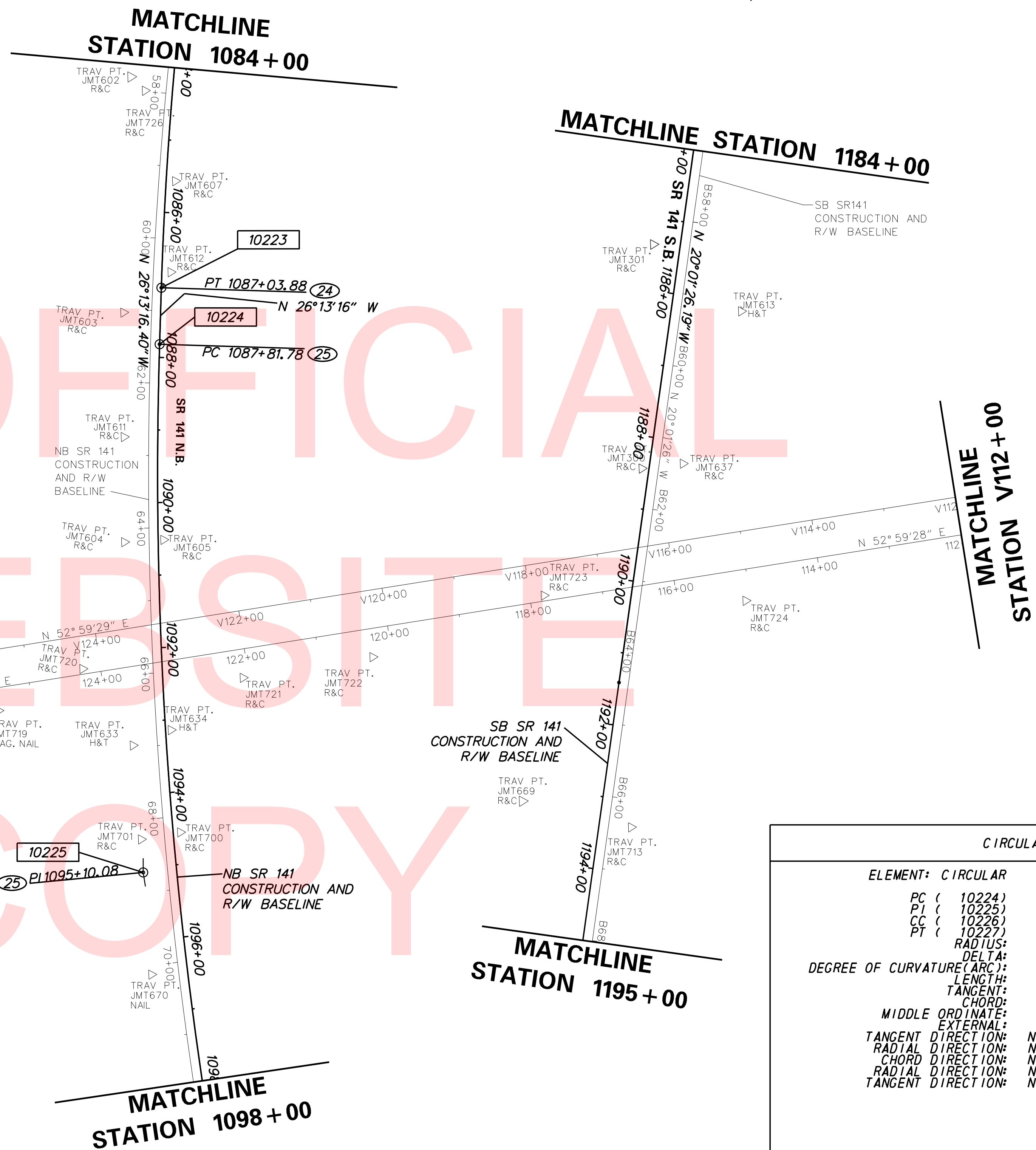
HV-01	SHEET NO.	6
	TOTAL SHTS.	20

MATCHLINE STATION 1184+00

MATCHLINE STATION 1084+00

HORIZONTAL / VERTICAL CONTROL DATA						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	
JMT300	B61+46.21	22.78' RT	620223.6435	603120.3285	34.32	
JMT301	B58+38.80	48.84' RT	619943.5243	603251.2630	35.95	
JMT602	57+99.15	28.99' RT	620085.4595	603969.4589	37.15	
JMT603	61+04.38	38.80' RT	620369.3389	603852.1554	37.81	
JMT604	1090+53.75	46.67' RT	620648.1225	603702.5855	35.15	
JMT605	64+16.51	19.85' LT	620620.0016	603656.3846	35.25	
JMT607	59+19.91	22.73' LT	620175.8802	603874.0750	37.50	
JMT611	62+74.69	34.15' RT	620520.4225	603771.1015	36.33	
JMT612	60+46.07	23.89' LT	620289.6393	603820.7314	37.29	
JMT613	B59+12.68	82.89' LT	619968.0508	603101.0107	28.78	
JMT633	66+97.54	33.76' RT	620889.9420	603560.5483	30.28	
JMT634	66+79.78	19.88' LT	620846.6150	603524.2132	29.68	
JMT637	B61+31.67	32.43' LT	620191.0841	603073.4349	33.99	
JMT669	1193+21.55	109.30' RT	620705.7379	603050.5514	2.67	
JMT670	1096+46.15	49.94' RT	621156.7754	603389.7838	22.30	
JMT700	1094+55.97	9.78' LT	620965.0856	603446.7080	26.30	
JMT701	1094+60.87	44.87' RT	620998.9655	603489.8732	26.52	
JMT713	B66+37.95	31.27' LT	620667.1410	602901.1670	24.63	
JMT718	V127+66.19	90.47' LT	621070.8140	603916.3963	13.31	
JMT719	V125+48.53	83.99' LT	620934.6229	603746.4901	11.98	
JMT720	V124+25.17	45.23' LT	620829.4184	603671.3033	11.63	
JMT721	V122+08.80	91.91' LT	620736.4559	603470.4276	10.33	
JMT722	V120+27.75	91.75' LT	620627.3423	603325.9460	10.03	
JMT723	V117+81.25	44.90' LT	620441.5575	603157.3038	10.56	
JMT724	V115+07.67	95.57' LT	620317.3391	602908.3372	9.97	
JMT726	1184+17.77	58.85' RT	620077.8145	603995.6537	34.45	

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COPY



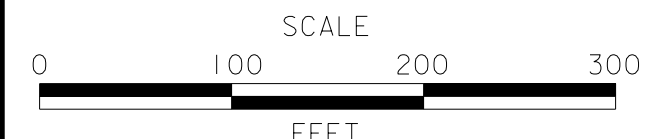
CIRCULAR CURVE NO. (25)			
ELEMENT: CIRCULAR	STATION	NORTHING	EASTING
PC (10224)	1087+81.78	620384.4967	603787.6504
PI (10225)	1095+10.08	621037.8460	603465.8621
CC (10226)		617852.7640	598647.2974
PT (10227)	1102+30.60	621589.9218	602990.8618
RADIUS:	5730.00		
DELTA:	14° 29' 14" LT		
DEGREE OF CURVATURE (ARC):	00° 59' 59.73"		
LENGTH:	1448.82		
TANGENT:	728.29		
CHORD:	1444.96		
MIDDLE ORDINATE:	45.73		
EXTERNAL:	46.10		
TANGENT DIRECTION:	N 26° 13' 16" W		
RADIAL DIRECTION:	N 63° 46' 44" E		
CHORD DIRECTION:	N 33° 27' 53" W		
RADIAL DIRECTION:	N 49° 17' 30" E		
TANGENT DIRECTION:	N 40° 42' 30" W		

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.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\HV.DGN [SHEET: HV02]



ADDENDUMS / REVISIONS



SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

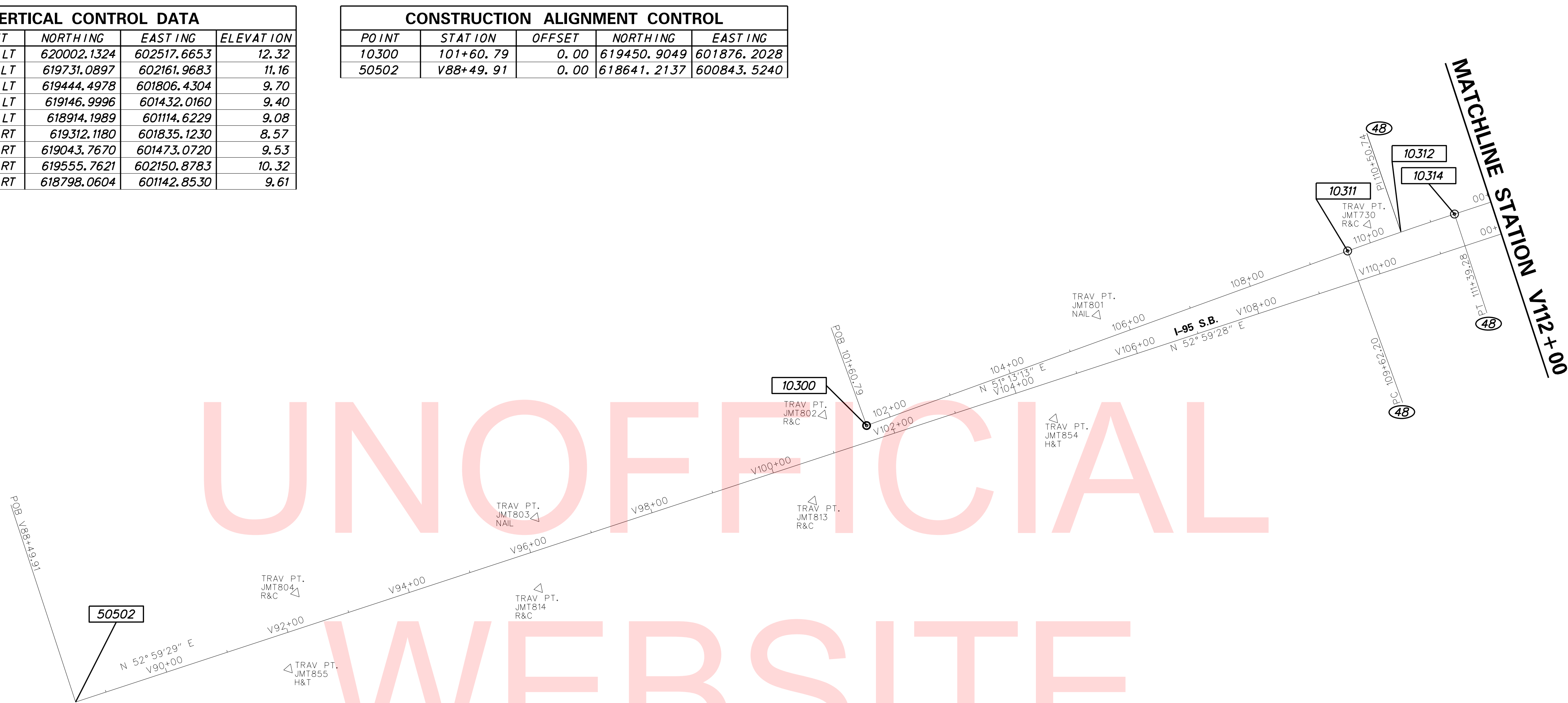
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

HORIZONTAL AND VERTICAL CONTROL

HV-02
SHEET NO.
7
TOTAL SHTS.
20

HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
JMT730	V110+05.96	79.03' LT	620002.1324	602517.6653	12.32
JMT801	V105+58.77	76.69' LT	619731.0897	602161.9683	11.16
JMT802	V101+02.35	61.85' LT	619444.4978	601806.4304	9.70
JMT803	V96+24.29	49.66' LT	619146.9996	601432.0160	9.40
JMT804	V92+30.71	54.81' LT	618914.1989	601114.6229	9.08
JMT813	V100+45.58	61.13' RT	619312.1180	601835.1230	8.57
JMT814	V95+94.94	57.49' RT	619043.7670	601473.0720	9.53
JMT854	V104+44.38	56.64' RT	619555.7621	602150.8783	10.32
JMT855	V91+83.34	54.93' RT	618798.0604	601142.8530	9.61

CONSTRUCTION ALIGNMENT CONTROL				
POINT	STATION	OFFSET	NORTHING	EASTING
10300	101+60.79	0.00	619450.9049	601876.2028
50502	V88+49.91	0.00	618641.2137	600843.5240



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WEBSITE
COPY

CIRCULAR CURVE NO. 48				
ELEMENT: CIRCULAR	STATION	NORTHING	EASTING	
PC (10311)	109+62.20	619952.8494	602500.9505	
PI (10312)	110+50.74	620008.3072	602569.9764	
CC (10313)		615486.2943	606089.5398	
PT (10314)	111+39.28	620061.6056	602640.6830	
RADIUS:	5729.58			
DELTA:	1° 46' 15" RT			
DEGREE OF CURVATURE (ARC):	1° 00' 00"			
LENGTH:	177.08			
TANGENT:	88.54			
CHORD:	177.07			
MIDDLE ORDINATE:	0.68			
EXTERNAL:	0.68			
TANGENT DIRECTION:	N 51° 13' 13" E			
RADIAL DIRECTION:	S 38° 46' 47" E			
CHORD DIRECTION:	N 52° 06' 21" E			
RADIAL DIRECTION:	S 37° 00' 32" E			
TANGENT DIRECTION:	N 52° 59' 28" E			

DATUM REFERENCE:

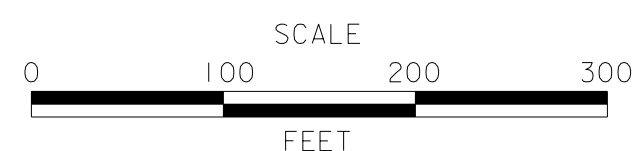
HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\HV.DGN [SHEET: HV03]



ADDENDUMS / REVISIONS



**SR 141 UTILITY RELOCATION
UNDER SOUTHBOUND I-95**

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

**HORIZONTAL AND
VERTICAL CONTROL**

HV-03

SHEET NO.

8

TOTAL SHTS.

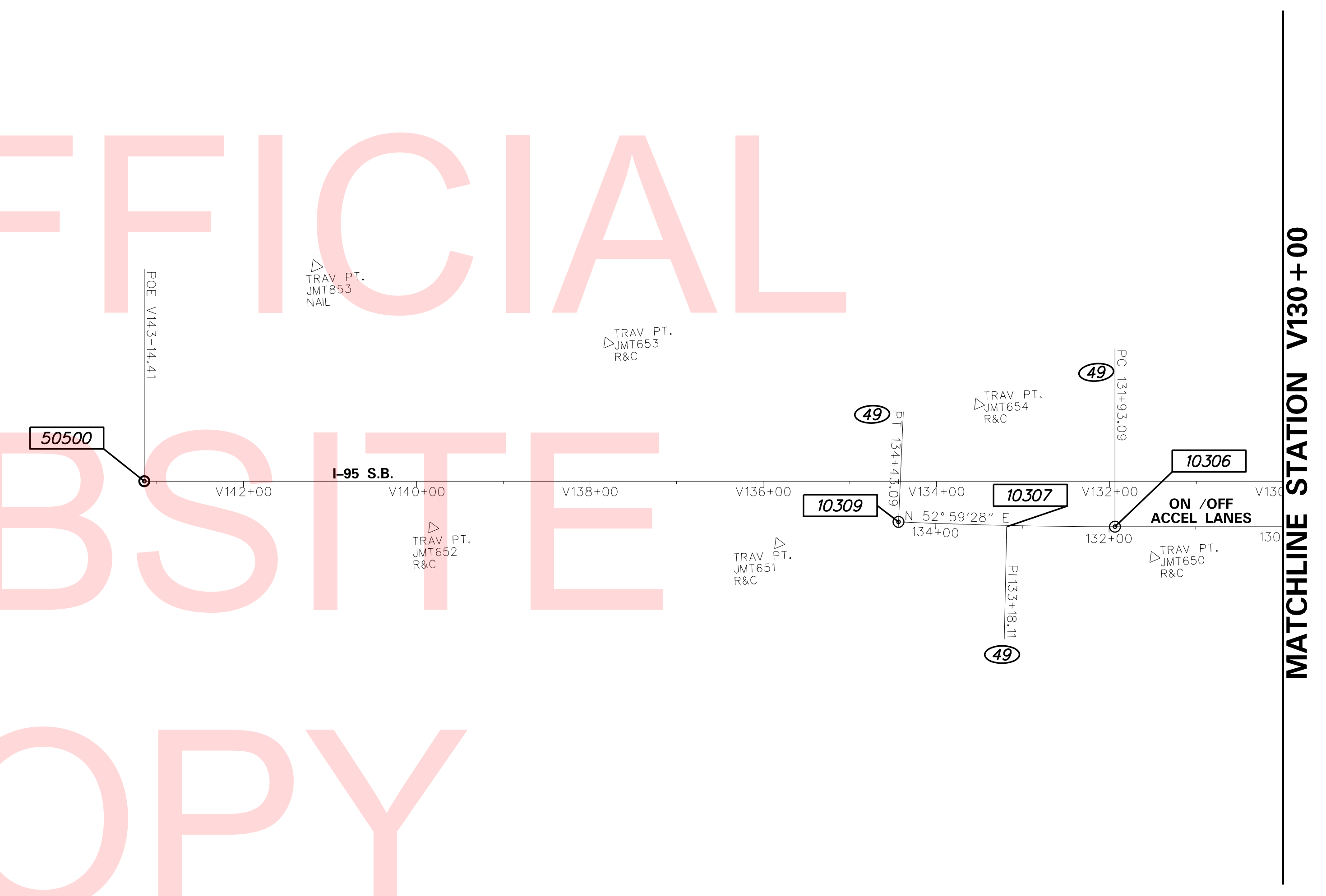
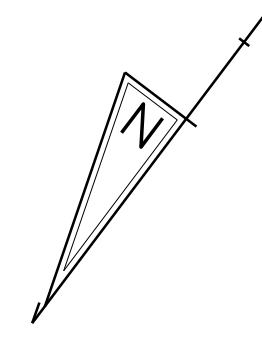
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HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
JMT650	V131+49.03	87.91' LT	621299.2131	604223.6489	14.18
JMT651	V135+82.24	71.99' LT	621547.2669	604579.1728	16.81
JMT652	V139+81.75	53.80' LT	621773.2228	604909.1413	18.30
JMT653	V137+79.47	159.68' RT	621480.9834	604876.1163	18.03
JMT654	V133+51.59	88.70' RT	621280.1124	604491.7149	15.17
JMT853	V141+16.36	248.40' RT	621612.9286	605198.5427	18.20

CONSTRUCTION ALIGNMENT CONTROL				
POINT	STATION	OFFSET	NORTHING	EASTING
50500	V143+14.41	0.00	621930.4962	605207.1670

CIRCULAR CURVE NO. 49				
ELEMENT: CIRCULAR	STATION	NORTHING	EASTING	
PC (10306)	131+93.09	621297.8770	604280.7413	
PI (10307)	133+18.11	621373.1313	604380.5749	
CC (10308)		616722.5656	607729.5981	
PT (10309)	134+43.09	621443.9593	604483.5961	
RADIUS:	5729.58			
DELTA:	2° 30' 00" RT			
DEGREE OF CURVATURE(ARC):	1° 00' 00"			
LENGTH:	250.00			
TANGENT:	125.02			
CHORD:	249.98			
MIDDLE ORDINATE:	1.36			
EXTERNAL:	1.36			
TANGENT DIRECTION:	N 52° 59' 28" E			
RADIAL DIRECTION:	S 37° 00' 32" E			
CHORD DIRECTION:	N 54° 14' 28" E			
RADIAL DIRECTION:	S 34° 30' 32" E			
TANGENT DIRECTION:	N 55° 29' 28" E			

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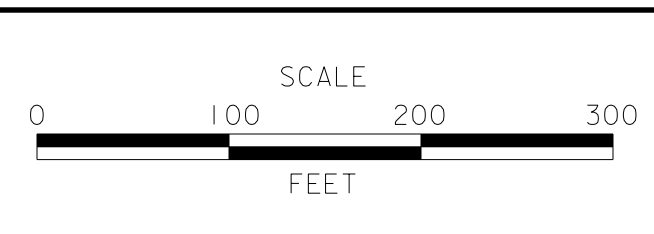


PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\HV.DGN [SHEET: HV04]

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.



ADDENDUMS / REVISIONS	



**SR 141 UTILITY RELOCATION
 UNDER SOUTHBOUND I-95**

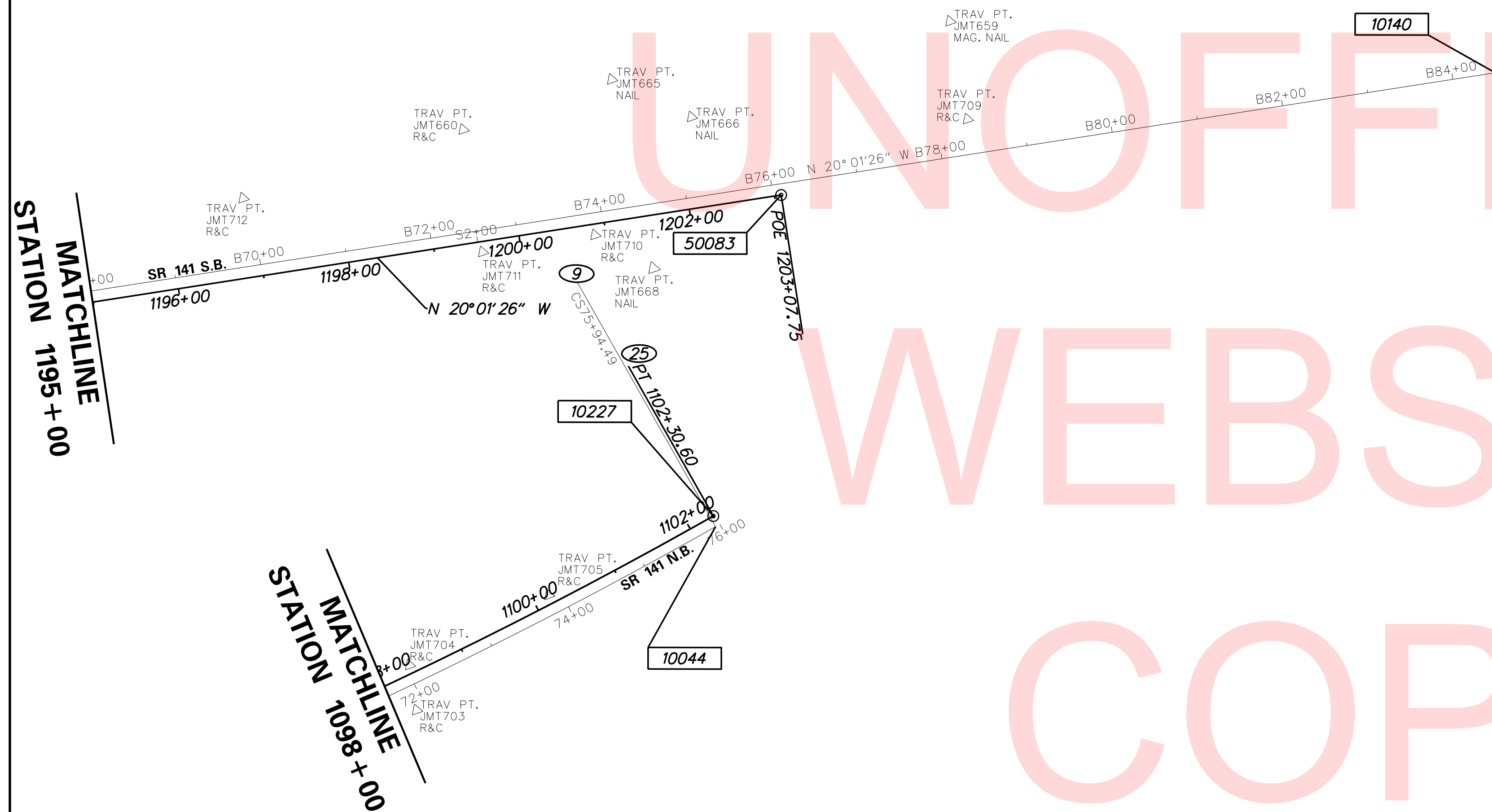
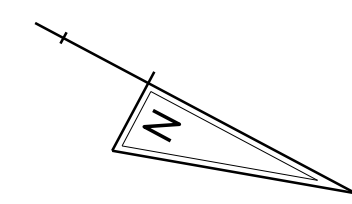
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY:	CGG
COUNTY	CHECKED BY:	BPH
NEW CASTLE		

**HORIZONTAL AND
 VERTICAL CONTROL**

HV-04
SHEET NO.
9
TOTAL SHTS.
20

CONSTRUCTION ALIGNMENT CONTROL				
POINT	STATION	OFFSET	NORTHING	EASTING
10140	B84+49.85	0.00	622380.2139	602310.1354
50083	1203+07.75	0.00	621594.8965	602610.1757

HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
JMT659	B78+33.74	156.18' LT	621747.8741	602374.3641	7.67
JMT660	B72+56.28	118.68' LT	621218.1609	602607.3170	14.25
JMT665	B74+35.50	149.71' LT	621375.9248	602516.8011	7.66
JMT666	B75+20.34	92.41' LT	621475.2557	602541.5852	10.76
JMT668	B74+49.81	74.16' RT	621466.0187	602722.2352	14.03
JMT703	1098+22.69	40.88' RT	621295.8943	603278.4828	18.74
JMT704	1098+37.76	9.74' LT	621277.7572	603228.8678	17.92
JMT705	1100+18.97	10.41' LT	621420.4922	603117.7601	16.63
JMT709	B78+36.37	40.79' LT	621789.8525	602481.8739	13.15
JMT710	B73+88.60	25.63' RT	621391.8901	602697.5974	16.19
JMT711	B72+56.81	25.17' RT	621267.9134	602742.2942	16.76
JMT712	B69+91.73	79.21' LT	620983.1233	602734.9899	16.69

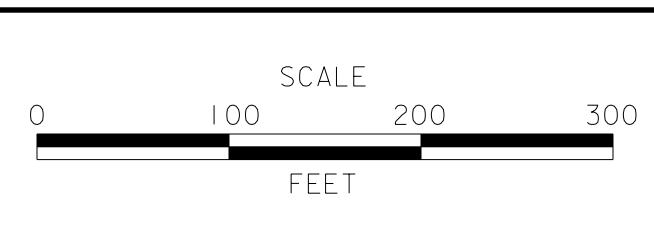


PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\HV.DGN [SHEET: HV05]

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.



ADDENDUMS / REVISIONS



SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

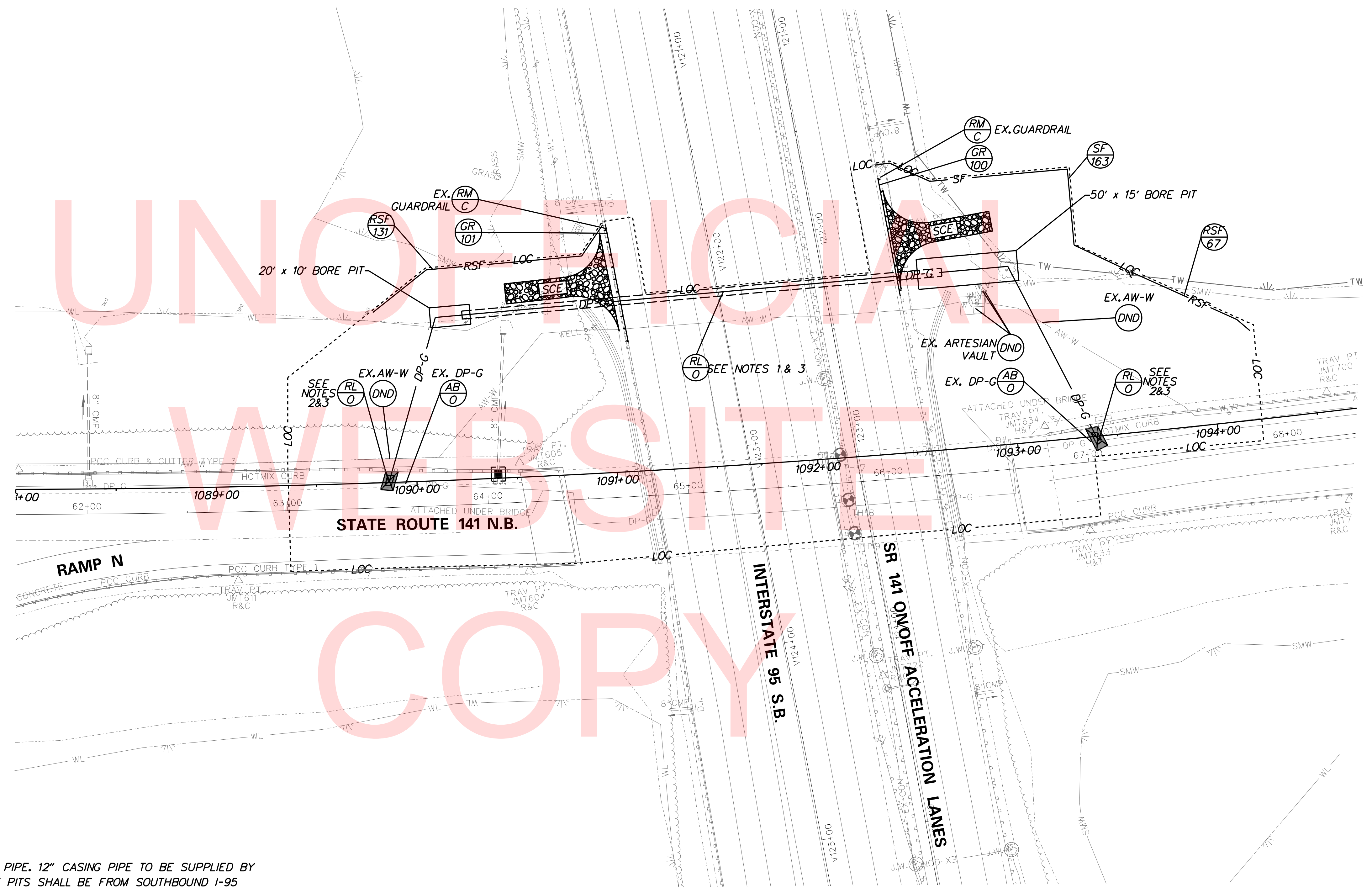
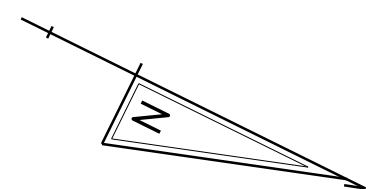
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY:	CGG
COUNTY	CHECKED BY:	BPH
NEW CASTLE		

HORIZONTAL AND VERTICAL CONTROL

HV-05
SHEET NO.
10
TOTAL SHTS.
20

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
100	STEEL BEAM GUARDRAIL, TYPE 1-27	*	*	60'
101	STEEL BEAM GUARDRAIL, TYPE 1-27	*	*	60'

*STATION/OFFSET DETERMINED BY LIMITS OF REMOVAL BY CONTRACTOR NECESSARY FOR ACCESS
 GUARDRAIL WILL BE PAID UNDER ITEM 720021, BUT SHALL BE 27" HEIGHT TO MATCH EXISTING CONDITION.

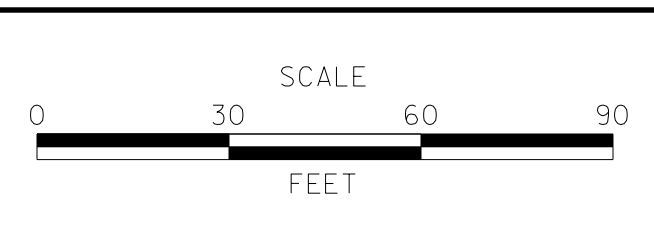


- NOTES:**
- STATE'S CONTRACTOR TO JACK AND BORE 12" CASING PIPE, 12" CASING PIPE TO BE SUPPLIED BY DELMARVA POWER - GAS. ACCESS TO JACK AND BORE PITS SHALL BE FROM SOUTHBOUND I-95 AND SR 141 ON/OFF ACCELERATION LANES. UTILIZE TA-5 TO CLOSE SHOULDERS AND REMOVE GAURDRAIL. REMOVE GUARDRAIL AS NEEDED FOR ACCESS UP TO 60' WIDE.
 - STATE'S CONTRACTOR TO CONSTRUCT EMBANKMENT SLOPES (SEE TYPICAL SECTIONS, GRADES & GEOMETRICS, AND CONSTRUCTION DETAILS).
 - DELMARVA POWER-GAS TO INSTALL GAS MAIN AND TIE-IN'S TO EXISTING MAIN ON NB SR 141 UTILIZING TA-33 (9AM - 3PM) AFTER STATE'S CONTRACTOR COMPLETES CASING INSTALLATION.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\CP.DGN [SHEET: CP01]



ADDENDUMS / REVISIONS



SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

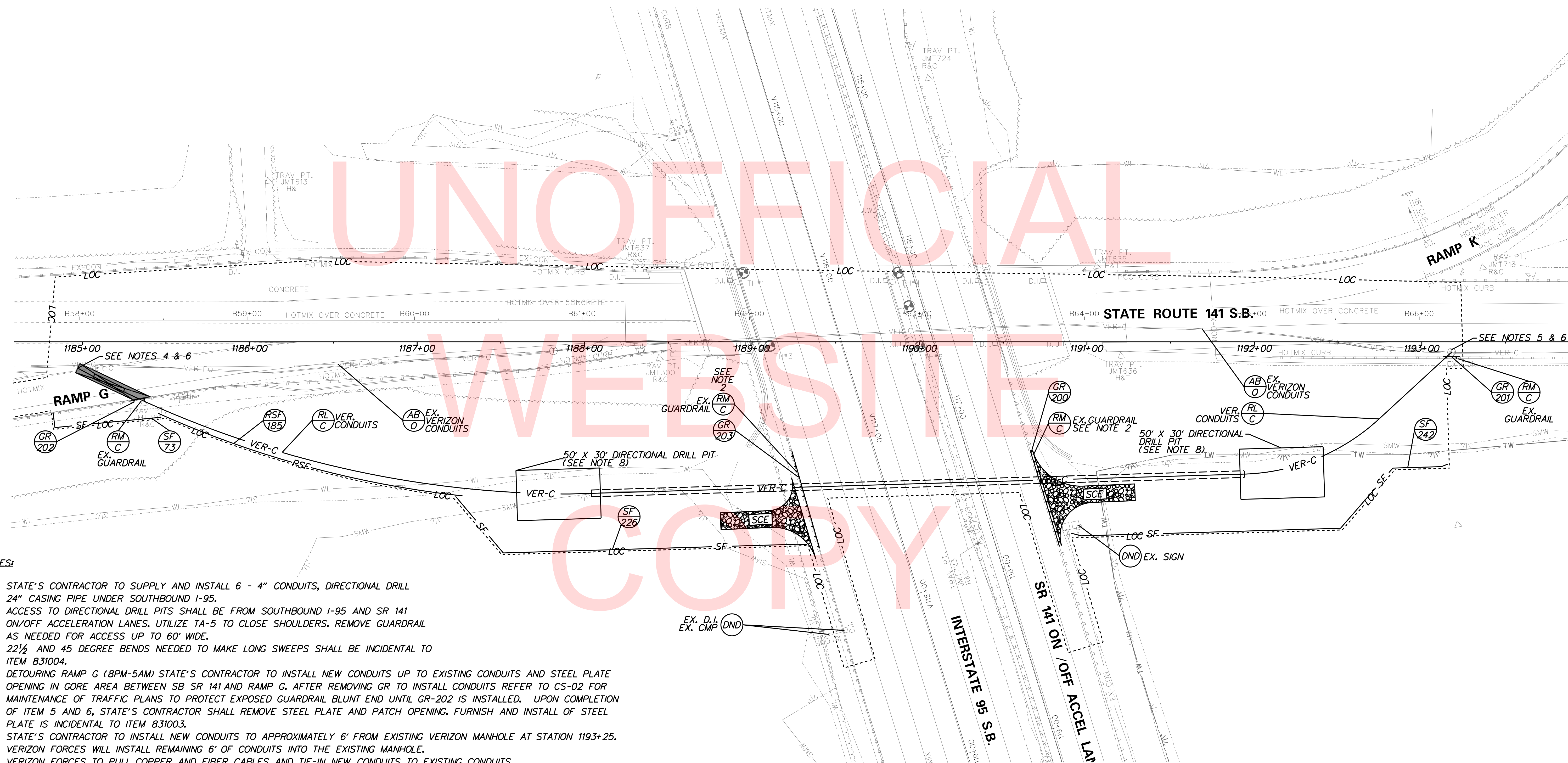
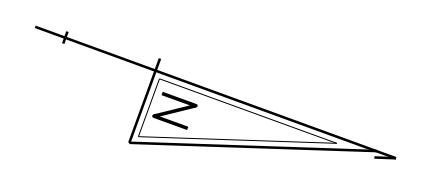
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

CONSTRUCTION PLAN

CP-01
SHEET NO.
11
TOTAL SHTS.
20

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
200	STEEL BEAM GUARDRAIL, TYPE 1-31	*	*	60'
201	STEEL BEAM GUARDRAIL, TYPE 1-31	*	*	10'
202	STEEL BEAM GUARDRAIL, TYPE 1-31	*	*	10'
203	STEEL BEAM GUARDRAIL, TYPE 1-31	*	*	60'

*STATION/OFFSET DETERMINED BY LIMITS OF REMOVAL BY CONTRACTOR NECESSARY FOR ACCESS
 GUARDRAIL WILL BE PAID UNDER ITEM 720021, BUT SHALL BE 27" HEIGHT TO MATCH EXISTING CONDITION.



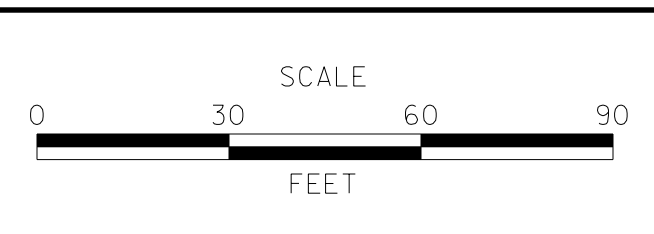
NOTES:

- STATE'S CONTRACTOR TO SUPPLY AND INSTALL 6 - 4" CONDUITS, DIRECTIONAL DRILL 24" CASING PIPE UNDER SOUTHBOUND I-95.
- ACCESS TO DIRECTIONAL DRILL PITS SHALL BE FROM SOUTHBOUND I-95 AND SR 141 ON/OFF ACCELERATION LANES. UTILIZE TA-5 TO CLOSE SHOULDERS. REMOVE GUARDRAIL AS NEEDED FOR ACCESS UP TO 60' WIDE.
- 22 1/2 AND 45 DEGREE BENDS NEEDED TO MAKE LONG SWEEPS SHALL BE INCIDENTAL TO ITEM 831004.
- DETOURING RAMP G (8PM-5AM) STATE'S CONTRACTOR TO INSTALL NEW CONDUITS UP TO EXISTING CONDUITS AND STEEL PLATE OPENING IN GORE AREA BETWEEN SB SR 141 AND RAMP G. AFTER REMOVING GR TO INSTALL CONDUITS REFER TO CS-02 FOR MAINTENANCE OF TRAFFIC PLANS TO PROTECT EXPOSED GUARDRAIL BLUNT END UNTIL GR-202 IS INSTALLED. UPON COMPLETION OF ITEM 5 AND 6, STATE'S CONTRACTOR SHALL REMOVE STEEL PLATE AND PATCH OPENING. FURNISH AND INSTALL OF STEEL PLATE IS INCIDENTAL TO ITEM 831003.
- STATE'S CONTRACTOR TO INSTALL NEW CONDUITS TO APPROXIMATELY 6' FROM EXISTING VERIZON MANHOLE AT STATION 1193+25. VERIZON FORCES WILL INSTALL REMAINING 6' OF CONDUITS INTO THE EXISTING MANHOLE.
- VERIZON FORCES TO PULL COPPER AND FIBER CABLES AND TIE-IN NEW CONDUITS TO EXISTING CONDUITS AT STATION 1185+00 AND STATION 1193+25. STATE'S CONTRACTOR SHALL PROVIDE VERIZON 14 DAYS NOTICE PRIOR TO INSTALLING CONDUITS TO WITHIN 6' OF THE TIE-IN LOCATIONS.
- SPlicing BY VERIZON FORCES SHALL BE DONE AT NIGHT (8PM-5AM) UTILIZING TA-5B.
- STATE'S CONTRACTOR SHALL COORDINATE WITH VERIZON TO LEAVE 50' X 30' BORE PIT OPEN FOLLOWING COMPLETION OF DIRECTIONAL DRILLING OPERATION TO ALLOW VERIZON TO PULL COPPER CABLE.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_I-95_AND_SR_141\INTE\CADD\ADVANCED UTILITY WORK\CP.DGN [SHEET: CP02]



ADDENDUMS / REVISIONS

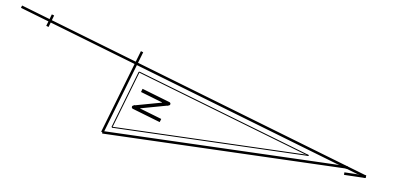


SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

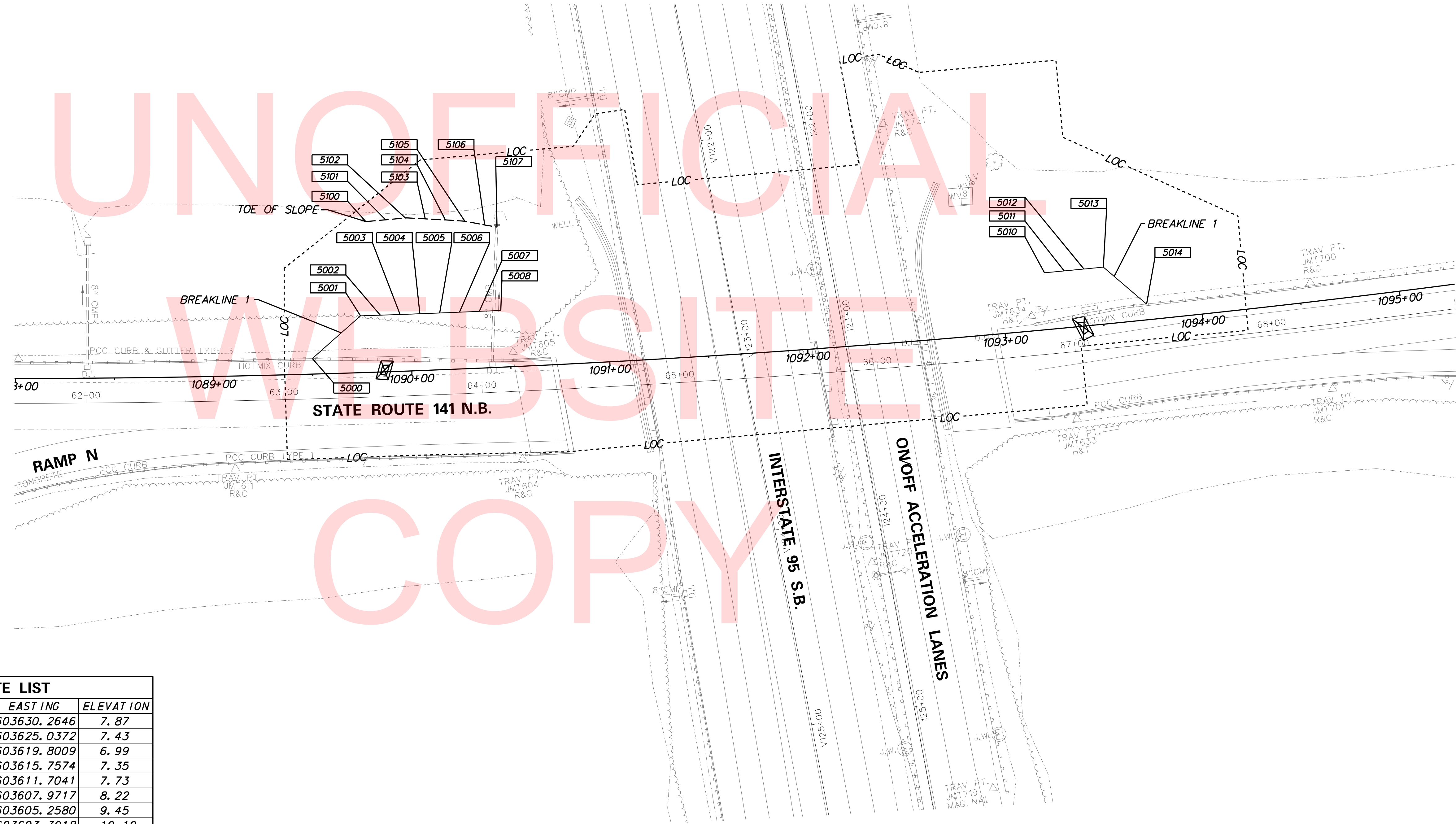
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

CONSTRUCTION PLAN

CP-02
SHEET NO.
12
TOTAL SHTS.
20



BREAKLINE 1 COORDINATE LIST					
POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
5000	1089+50.00	-7.88	620530.6077	603704.1555	36.10
5001	1089+75.00	-28.67	620542.8348	603674.0976	36.38
5002	1089+85.05	-28.67	620551.6475	603669.3716	36.28
5003	1089+95.10	-28.67	620560.4518	603664.6298	36.17
5004	1090+05.13	-28.67	620569.2265	603659.8826	36.05
5005	1090+15.20	-28.67	620578.0351	603655.0993	35.90
5006	1090+25.25	-28.67	620586.8142	603650.3111	35.74
5007	1090+35.30	-28.67	620595.5851	603645.5080	35.57
5008	1090+46.19	-28.67	620605.0803	603640.2858	35.38
5010	1093+22.60	-28.67	620842.6384	603501.7583	28.96
5011	1093+32.65	-28.67	620851.1512	603496.5113	28.70
5012	1093+42.70	-28.67	620859.6512	603491.2434	28.44
5013	1093+52.60	-28.67	620868.0159	603486.0422	28.18
5014	1093+72.51	-7.94	620895.8326	603493.0863	28.53



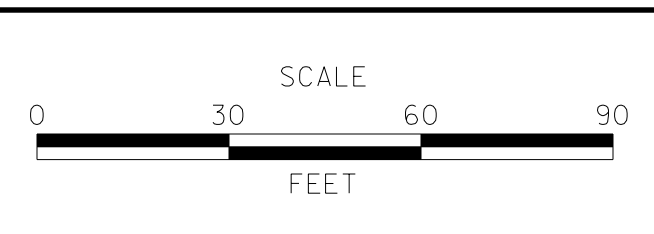
TOE OF SLOPE COORDINATE LIST					
POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
5100	1089+79.28	-76.12	620524.1705	603630.2646	7.87
5101	1089+89.44	-76.67	620532.7417	603625.0372	7.43
5102	1089+99.60	-77.21	620541.3086	603619.8009	6.99
5103	1090+09.72	-76.40	620550.4648	603615.7574	7.35
5104	1090+20.00	-75.49	620559.8106	603611.7041	7.73
5105	1090+29.92	-74.40	620568.9260	603607.9717	8.22
5106	1090+39.96	-72.06	620578.7391	603605.2580	9.45
5107	1090+46.19	-70.80	620584.7429	603603.3918	10.10

NOTE:
 TOE OF SLOPE COORDINATES PROVIDED TO MARK WHERE
 DE NO. 57 STONE SHALL BE PLACED. REFERENCE CONSTRUCTION DETAILS.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\GG.DGN [SHEET: GG01]



ADDENDUMS / REVISIONS

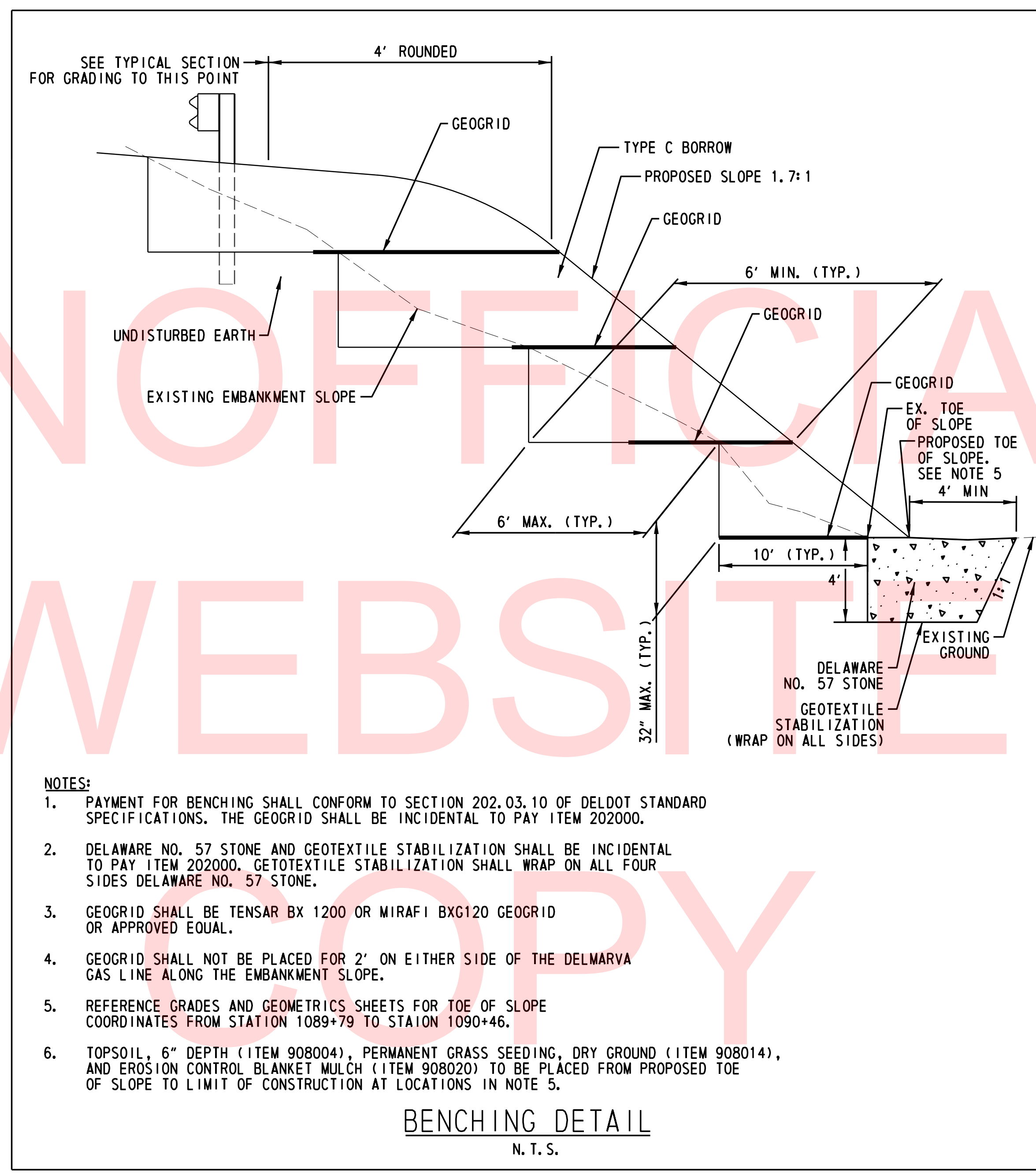


**SR 141 UTILITY RELOCATION
 UNDER SOUTHBOUND I-95**

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

GRADES AND GEOMETRICS	SHEET NO.	GG-01
	TOTAL SHTS.	13
		20

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\DT.DGN [SHEET: DT01]



- NOTES:**
- PAYMENT FOR BENCHING SHALL CONFORM TO SECTION 202.03.10 OF DELDOT STANDARD SPECIFICATIONS. THE GEOGRID SHALL BE INCIDENTAL TO PAY ITEM 202000.
 - DELAWARE NO. 57 STONE AND GEOTEXTILE STABILIZATION SHALL BE INCIDENTAL TO PAY ITEM 202000. GEOTEXTILE STABILIZATION SHALL WRAP ON ALL FOUR SIDES DELAWARE NO. 57 STONE.
 - GEOGRID SHALL BE TENSAR BX 1200 OR MIRAFI BXG120 GEOGRID OR APPROVED EQUAL.
 - GEOGRID SHALL NOT BE PLACED FOR 2' ON EITHER SIDE OF THE DELMARVA GAS LINE ALONG THE EMBANKMENT SLOPE.
 - REFERENCE GRADES AND GEOMETRICS SHEETS FOR TOE OF SLOPE COORDINATES FROM STATION 1089+79 TO STATION 1090+46.
 - TOPSOIL, 6" DEPTH (ITEM 908004), PERMANENT GRASS SEEDING, DRY GROUND (ITEM 908014), AND EROSION CONTROL BLANKET MULCH (ITEM 908020) TO BE PLACED FROM PROPOSED TOE OF SLOPE TO LIMIT OF CONSTRUCTION AT LOCATIONS IN NOTE 5.

BENCHING DETAIL
N. T. S.

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ADDENDUMS / REVISIONS

NOT TO SCALE

**SR 141 UTILITY RELOCATION
UNDER SOUTHBOUND I-95**

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

CONSTRUCTION DETAILS

DT-01
SHEET NO.
14
TOTAL SHTS.
20

ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

- A. THE PURPOSE OF THESE SHEETS ARE TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR AGENCY REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.
- B. IF A DEPARTURE FROM THE APPROVED PLANS (WHICH WOULD AFFECT ANY NATURAL AND/OR CULTURAL RESOURCES) IS NECESSARY, THE ENVIRONMENTAL STUDIES SECTION SHALL BE CONTACTED AT (302) 760-2264 TO ALLOW THEM TO COORDINATE WITH THE APPROPRIATE AGENCIES FOR APPROVAL.
- C. USE OF THESE SHEETS DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.

2. NATURAL RESOURCES:

A. PERMIT REQUIREMENTS / APPROVALS*

CORPS - NWP 3 (NO PCN)
 DNREC WLSL - PERMIT MODIFICATION TO WE-271/15 (PENDING)**
 DNREC WQC & CZM - ISSUED
 NCC DEPT. OF LAND USE - N/A (ALL IMPACTS TEMPORARY)

* THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING/OBTAINING THIS APPROVAL.
 ** THE CONTRACTOR MUST ENSURE THAT THESE PERMITS/APPROVALS (CORPS, DNREC WLSL, WQC & CZM, NCC) ARE IN THEIR POSSESSION PRIOR TO BEGINNING CONSTRUCTION IN THE PERMITTED AREA(S) AND ENSURE THEY ARE DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.

- B. CONSTRUCTION RESTRICTIONS: VARIOUS TIME OF YEAR RESTRICTIONS OCCUR BETWEEN MARCH 15 - JULY 31, AS FOLLOWS:
 FISHERIES - ANY IN-WATER WORK THAT BLOCKS UPSTREAM FISH PASSAGE SHALL BE AVOIDED FROM MARCH 15 - JUNE 30.
 ENDANGERED SPECIES - NONE
 MIGRATORY BIRDS (SONG BIRDS) - TO MINIMIZE DISTURBANCE TO NESTING BIRDS WITHIN THE PROJECT AREA, THE REMOVAL OF VEGETATION SHOULD BE AVOIDED BETWEEN APRIL 1 - JULY 31ST.

3. CULTURAL RESOURCE ISSUES:

- A. THE PROJECT IS CONSISTENT WITH THE ADVISORY COUNCIL ON HISTORIC PRESERVATION EXEMPTIONS REGARDING HISTORIC PRESERVATION REVIEW FOR EFFECTS TO THE INTERSTATE HIGHWAY SYSTEM (FEDERAL REGISTER VOLUME 70, NUMBER 46 - THURSDAY, MARCH 10, 2005, PP. 11928 - 11931). AS SUCH, THE PROJECT WAS REVIEWED AND DETERMINED BY ENVIRONMENTAL STUDIES QUALIFIED STAFF WHEREBY NO CULTURAL RESOURCES ISSUES WOULD EXIST. NO SPECIAL PROVISIONS ARE NECESSARY. HOWEVER, THE CONFINED LOC AND/OR OTHER GEOGRAPHIC LIMITS AS DEFINED IN THE DESIGN PLANS OR SPECIAL PROVISIONS SHALL REMAIN. CHANGES IN LOC LIMITS AND SCOPE WILL BE COORDINATED BACK WITH THE ENVIRONMENTAL STUDIES OFFICE TO DETERMINE THE CONSISTENCY THAT THE PROJECT IS STILL FOLLOWING THE FEDERAL REGISTER NOTICE.

4. PROTECTION OF RESOURCES:

- A. WETLAND AND STREAM RESOURCES OCCUR WITHIN AND IN THE VICINITY OF THE PROJECT. ACCESS INTO THESE RESOURCE AREAS WHICH IS NOT SPECIFICALLY AUTHORIZED BY THE ACOE AND DNREC PERMITS (AS ILLUSTRATED ON THESE ENVIRONMENTAL COMPLIANCE SHEETS) IS STRICTLY PROHIBITED.
- B. SILT FENCE/REINFORCED SILT FENCE SHALL BE USED ALONG THE LIMITS OF CONSTRUCTION IN ALL AREAS WHERE WATER/WETLANDS ARE BEING IMPACTED AND ALSO IN ANY AREA WHERE WATER/WETLANDS EXIST WITHIN 20 FEET OF THE LOC (AS SHOWN ON THE ENVIRONMENTAL COMPLIANCE PLANS). CONTRACTOR ACCESS BEYOND THE LOC IS STRICTLY PROHIBITED.
- C. CLEARING IN WETLAND AREAS SHALL BE KEPT TO A MINIMUM ABSOLUTELY NECESSARY FOR CONSTRUCTION ACCESS. ALL EQUIPMENT TRAVERSING WETLANDS AND SUBAQUEOUS LAND SHALL BE SUPPORTED ON MATS. IN WETLAND AREAS THAT ARE CLEARED, THERE SHALL BE NO GRUBBING. VEGETATION SHALL BE CUT FLUSH WITH THE GROUND, I.E. NO DISTURBANCE OF THE ROOT MAT. TEMPORARILY DISTURBED WETLAND AREAS SHALL BE RESTORED TO GRADE AND SEEDED WITH PERMANENT GRASS SEEDING - DRY GROUND, (PAYMENT UNDER ITEM 908014). ACCESS TO RESOURCE AREAS WHICH IS NOT SPECIFICALLY AUTHORIZED BY THE ACOE AND DNREC PERMITS (AS ILLUSTRATED ON THE ENVIRONMENTAL COMPLIANCE SHEET) IS STRICTLY PROHIBITED.

THIS PROJECT FALLS WITHIN DNREC MAP 401. DNREC MAP 401 WAS REVISED PER MAP CHANGE MC-164/15 (ASSOCIATED MC 181-13), APPROVED ON JULY 22, 2015.

WETLANDS DELINEATED BY MCCORMICK TAYLOR. ON VARIOUS DATES FROM FEBRUARY 2012 TO OCTOBER 2016 IN ACCORDANCE WITH THE 1987 USACE WETLAND DELINEATION MANUAL AND ATLANTIC AND GULF COASTAL REGIONAL SUPPLEMENTS.

SHEETS PREPARED BY: JOHNSON, MIRMIRAN & THOMPSON, INC.
 DATE: MARCH 5, 2018

SHEETS LAST UPDATED: JUNE 25, 2018

ENVIRONMENTAL COMPLIANCE	02	03
CONSTRUCTION PLAN	11	12

TOTAL TEMPORARY WETLAND IMPACTS					
SHEET	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
EC-02	USACE IMPACTS	5052.42	0.1160	N/A	USACE
EC-02	DNREC IMPACTS	3719.94	0.0854	137.77	DNREC
EC-03	USACE IMPACTS	15619.25	0.3586	N/A	USACE
EC-03	DNREC IMPACTS	12427.42	0.2853	460.27	DNREC
ALL	TOTAL DNREC IMPACTS	16147.36	0.3707	598.04	DNREC
ALL	TOTAL USACE IMPACTS	20674.93	0.4747	N/A	USACE

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\EC.DGN [SHEET: EC01]



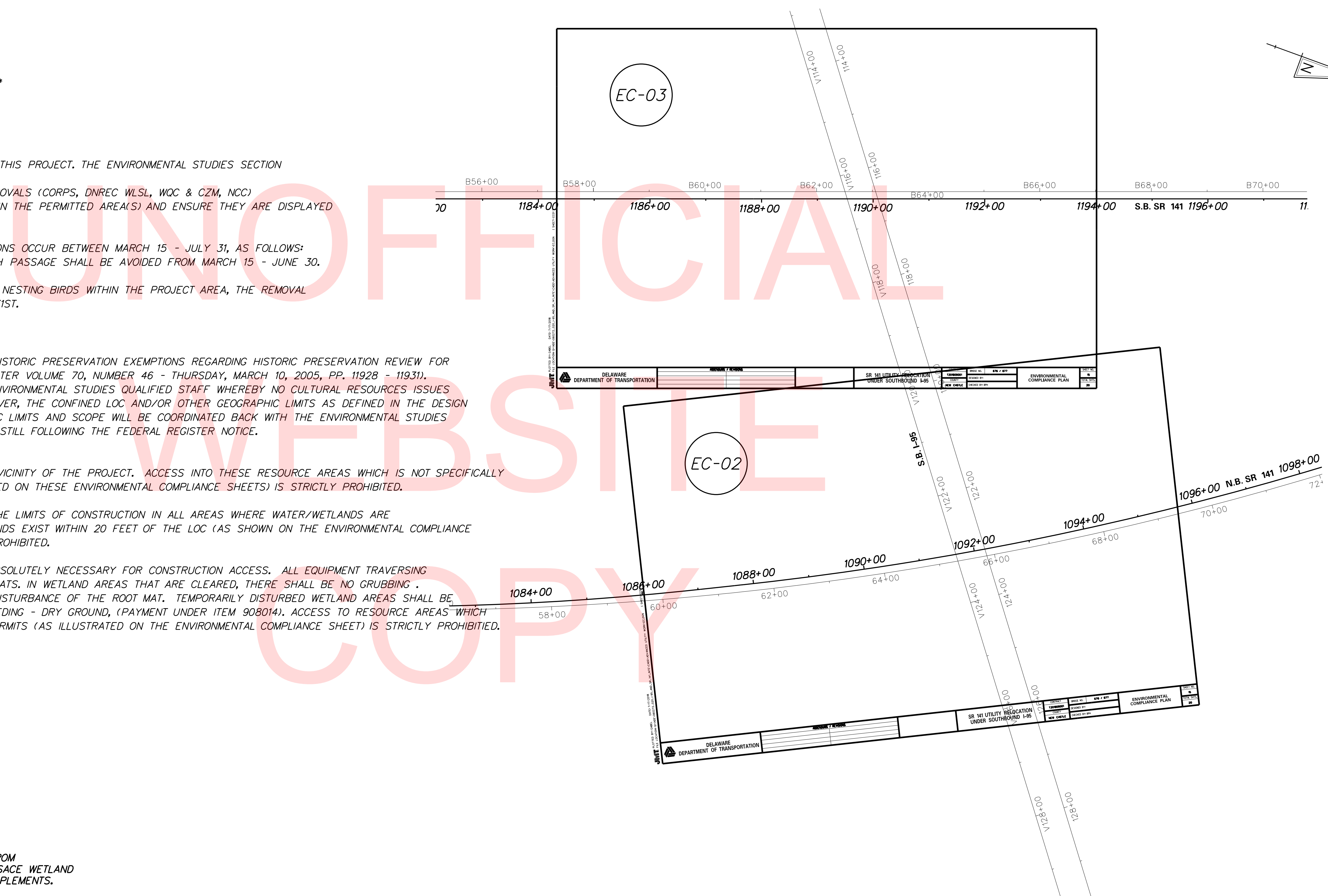
ADDENDUMS / REVISIONS

SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY:	KJA
COUNTY	CHECKED BY:	BPH
NEW CASTLE		

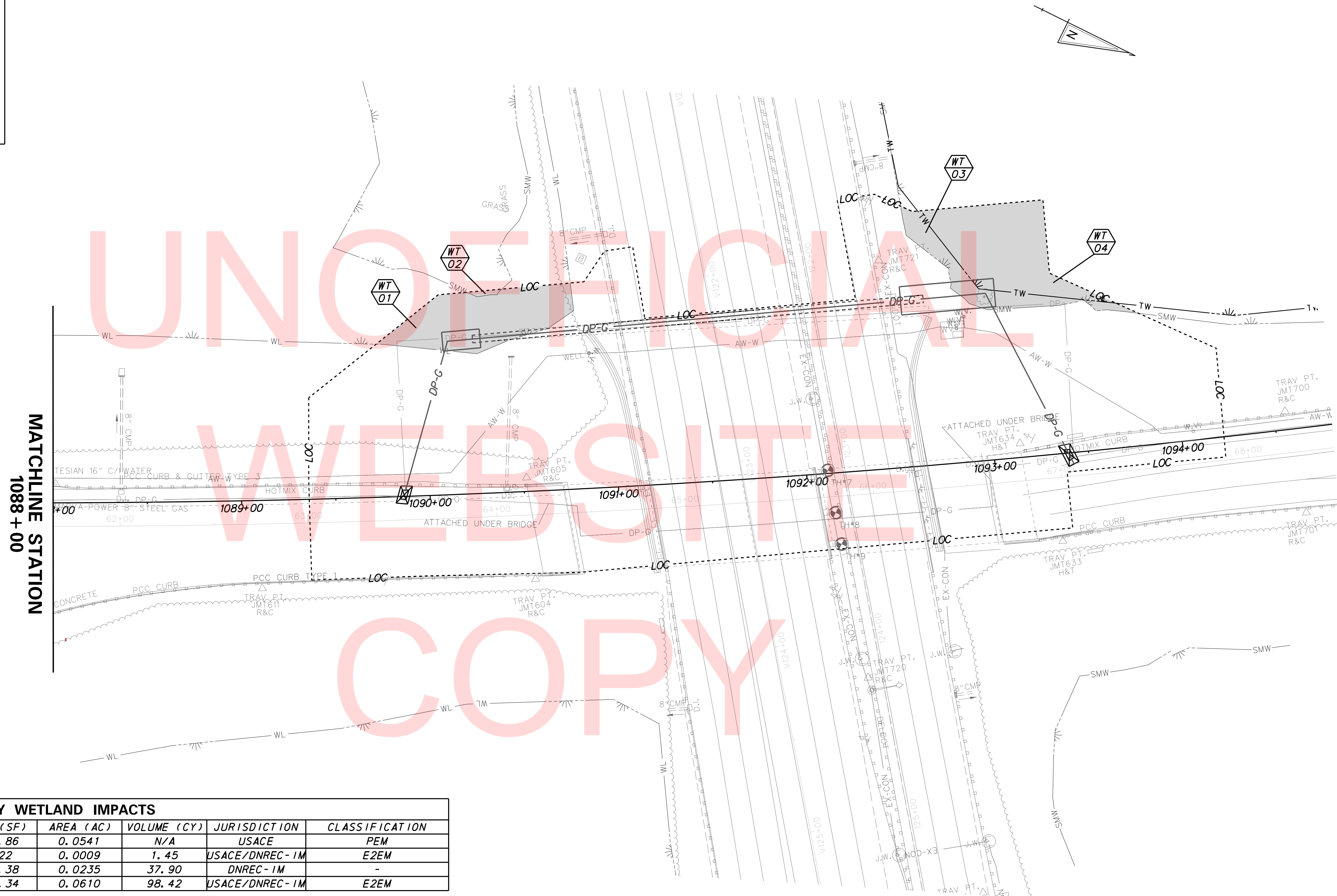
ENVIRONMENTAL COMPLIANCE PLAN

EC-01
SHEET NO.
15
TOTAL SHTS.
20



LEGEND

- TEMPORARY IMPACT AREA
- OHW--- ORDINARY HIGH WATER
- SMW--- STATE MAPPED WETLAND
- WL--- USACE WETLAND BOUNDARY
- TW--- TIDAL WETLAND (USACE)
- XX IMPACT AREA TYPE ID. (SEE BELOW)
- XX IMPACT AREA ID. AND/OR NUMBER
- IM = IMPOUNDED MARSH W = WETLAND IMPACT
- WT = TEMPORARY IMPACT
- PEM = PALUSTRINE EMERGENT MARSH
- E2EM = ESTUARINE INTERTIDAL EMERGENT



MATCHLINE STATION
1088 + 00

TEMPORARY WETLAND IMPACTS

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION	CLASSIFICATION
2-WT-01	UTILITY RELOCATIONS	2355.86	0.0541	N/A	USACE	PEM
2-WT-02	UTILITY RELOCATIONS	39.22	0.0009	1.45	USACE/DNREC-IM	E2EM
2-WT-03	UTILITY RELOCATIONS	1023.38	0.0235	37.90	DNREC-IM	-
2-WT-04	UTILITY RELOCATIONS	2657.34	0.0610	98.42	USACE/DNREC-IM	E2EM

TOTAL DNREC TEMPORARY IMPACTS FOR THIS SHEET = 0.0854 AC. (ALL IM)
 TOTAL USACE TEMPORARY IMPACTS FOR THIS SHEET = 0.1160 AC. (0.0541 PEM)
 (0.0619 E2EM)

NOTE:
 IMPACTS SHOWN ON THIS SHEET ARE ASSOCIATED WITH DELMARVA POWER-GAS UTILITY RELOCATIONS ADJACENT TO BRIDGE 1-676.
 DELDOT'S STATE CONTRACTOR WILL PERFORM ANY CLEARING/DISTURBANCE/RESTORATION WITHIN THE STATE REGULATED WETLANDS.

PLOTTED BY: GABEL DATE: 7/17/2018 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\EC02.DGN [SHEET: EC02]



ADDENDUMS / REVISIONS



**SR 141 UTILITY RELOCATION
 UNDER SOUTHBOUND I-95**

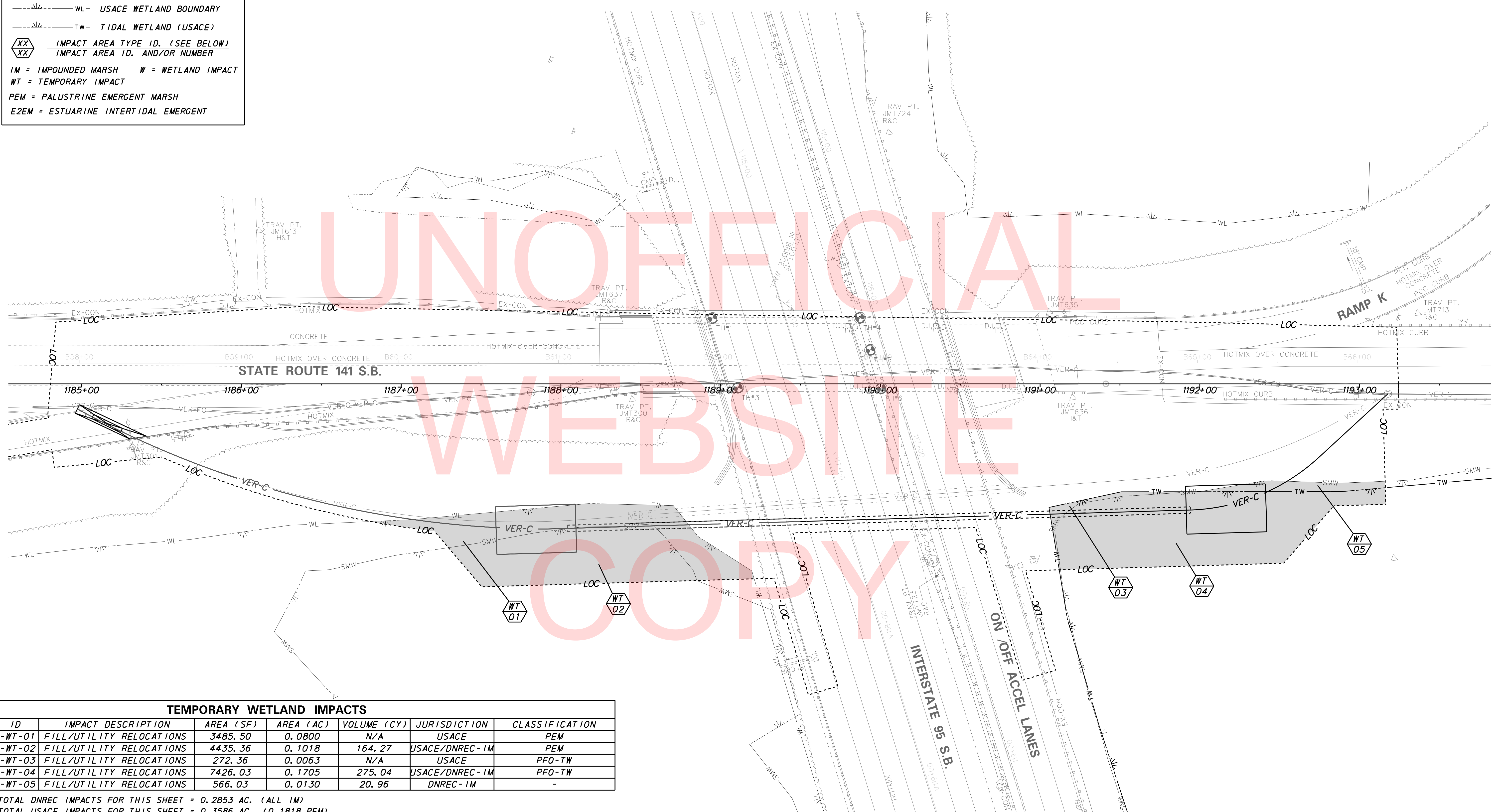
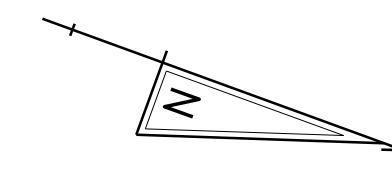
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: KJA	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

**ENVIRONMENTAL
 COMPLIANCE PLAN**

EC-02
SHEET NO.
16
TOTAL SHTS.
20

LEGEND

- TEMPORARY IMPACT AREA
- OHW----- ORDINARY HIGH WATER
- SMW----- STATE MAPPED WETLAND
- WL----- USACE WETLAND BOUNDARY
- TW----- TIDAL WETLAND (USACE)
- XX
XX IMPACT AREA TYPE ID. (SEE BELOW)
IMPACT AREA ID. AND/OR NUMBER
- IM = IMPOUNDED MARSH W = WETLAND IMPACT
- WT = TEMPORARY IMPACT
- PEM = PALUSTRINE EMERGENT MARSH
- E2EM = ESTUARINE INTERTIDAL EMERGENT



TEMPORARY WETLAND IMPACTS

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION	CLASSIFICATION
3-WT-01	FILL/UTILITY RELOCATIONS	3485.50	0.0800	N/A	USACE	PEM
3-WT-02	FILL/UTILITY RELOCATIONS	4435.36	0.1018	164.27	USACE/DNREC-IM	PEM
3-WT-03	FILL/UTILITY RELOCATIONS	272.36	0.0063	N/A	USACE	PFO-TW
3-WT-04	FILL/UTILITY RELOCATIONS	7426.03	0.1705	275.04	USACE/DNREC-IM	PFO-TW
3-WT-05	FILL/UTILITY RELOCATIONS	566.03	0.0130	20.96	DNREC-IM	-

TOTAL DNREC IMPACTS FOR THIS SHEET = 0.2853 AC. (ALL IM)
 TOTAL USACE IMPACTS FOR THIS SHEET = 0.3586 AC. (0.1818 PEM)
 (0.1768 PFO-TW)

NOTE:
 IMPACTS SHOWN ON THIS SHEET ARE ASSOCIATED WITH VERIZON UTILITY RELOCATIONS ADJACENT TO BRIDGE 1-677.
 DELDOT'S STATE CONTRACTOR WILL PERFORM ANY CLEARING/DISTURBANCE/RESTORATION WITHIN THE STATE REGULATED WETLANDS.

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\EC03.DGN [SHEET: EC03]



ADDENDUMS / REVISIONS



**SR 141 UTILITY RELOCATION
 UNDER SOUTHBOUND I-95**

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: KJA	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

**ENVIRONMENTAL
 COMPLIANCE PLAN**

EC-03
SHEET NO.
17
TOTAL SHTS.
20

MAINTENANCE OF TRAFFIC NOTES



- UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, MAINTENANCE OF TRAFFIC DURING LANE CLOSURES ON I-95, SR 141, AND ON/OFF ACCELERATION LANES SHALL CONFORM TO TA-33 OF THE DELAWARE MUTCD.
- MAINTENANCE OF TRAFFIC DURING SHOULDER CLOSURES ON INTERSTATES/ FREEWAYS/EXPRESSWAYS SHALL CONFORM TO TA-5A (FOR WORK OFF OF THE SHOULDER) AND TA-5B (FOR WORK ON THE SHOULDER). IF TA-5B IS USED, LANE CLOSURES SHALL COMPLY WITH THE TIMES SHOWN ON THIS SHEET.
- THE CONTRACTOR SHALL SUPPLY MESSAGE BOARDS TO PLACE AT LOCATIONS WITHIN 1 MILE OF THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER 10 DAYS IN ADVANCE TO THE START OF WORK OR IN ADVANCE OF NEW TRAFFIC PATTERNS. MESSAGE BOARDS SHALL REMAIN IN PLACE 5 DAYS AFTER THE START OF ROAD WORK OR START OF THE NEW TRAFFIC PATTERN. MESSAGES SHALL BE APPROVED BY THE DISTRICT SAFETY OFFICER. PAYMENT FOR THESE BOARDS WILL BE MADE UNDER ITEM NUMBER 803001.
- TEMPORARY FLOODLIGHTING NECESSARY DUE TO WORK OCCURRING AFTER DARK WILL BE PAID UNDER ITEM NUMBER 804001. THE ATSSA SUPERVISOR SHALL APPROVE THE POSITION OF THE LIGHT ASSEMBLY. DURING BOTH DAY AND NIGHT WORK, ALL PERSONS WORKING WITHIN THE WORK SITE MUST WEAR REFLECTORIZED VESTS IN ACCORDANCE WITH THE DELAWARE MUTCD.
- WHERE TYPICAL TRAFFIC CONTROL PLANS FROM THE DELAWARE MUTCD ARE USED, THE CONTRACTOR SHALL REVIEW THE REQUIRED SIGNING AND TRAFFIC CONTROL DEVICES WITH THE ENGINEER AND SAFETY OFFICER TO ENSURE THEIR APPLICABILITY PRIOR TO IMPLEMENTATION.
- CONTACT THE HAULING PERMIT OFFICE AT (302) 744-2700 FOR DELDOT'S OVERSIZE OVERWEIGHT PERMIT SYSTEM (OOPS) TO REQUEST POSTING ANY LANE RESTRICTIONS OR ROAD CLOSURES ON THE TEMPORARY ROUTE RESTRICTIONS WEBSITE AT LEAST TWO WEEKS IN ADVANCE OF NEW TRAFFIC PATTERNS.
- ACCESS TO ALL DELDOT MAINTENANCE ENTRANCES MUST BE MAINTAINED AT ALL TIMES.
- FOR NIGHT-TIME CLOSURES OF ANY ROAD OR RAMP, PROVIDE ONE TRAFFIC OFFICER AT EACH CLOSURE POINT SHOWN IN THE APPLICABLE DETOUR PLANS. TRAFFIC OFFICER SHALL BE PLACED BEHIND THE CLOSURE BARRICADE WITH THE FRONT OF THE VEHICLE FACING APPROACHING TRAFFIC AND ALL EMERGENCY LIGHTS SHALL BE ACTIVATED. TRAFFIC OFFICER SHALL PROVIDE A REPORT TO THE CONTRACTOR AT THE END OF THE DAY'S ACTIVITY IDENTIFYING THE NUMBER OF VEHICLES THAT ATTEMPTED TO NOT FOLLOW THE DETOUR.

TRAFFIC RESTRICTIONS

- LANE OR RAMP CLOSURES AND DETOURS SHALL NOT BE PERMITTED DURING STATE HOLIDAYS AND MAJOR EVENTS AS LISTED IN SECTION 801000 AS WELL AS THE FOLLOWING: ELECTION DAY, PRIMARY DAY, AND THE WEDNESDAY PRIOR TO FIREFLY CONCERT THROUGH THE MONDAY FOLLOWING FIREFLY CONCERT.
- THE FOLLOWING SCHEDULE INDICATES THE ALLOWABLE TIME WHICH THE NUMBER OF LANES ON SOUTHBOUND I-95 AND THE SOUTHBOUND ON/OFF ACCELERATION LANE MAY BE REDUCED UNLESS OTHERWISE NOTED ON THE PHASING PLAN SHEETS. 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. THE TIME RESTRICTIONS SHOWN ON THE LANE CLOSURE SCHEDULES APPLY TO BOTH THE CLOSURE OF THROUGH LANES AS WELL AS AUXILIARY LANES.

ALLOWABLE HOURS FOR A LANE CLOSURE ON SOUTHBOUND I-95 OR ON/OFF ACCELERATION LANES

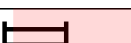


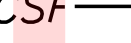





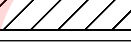

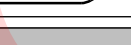




	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY																								
MONDAY																								
TUESDAY																								
WEDNESDAY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

 lane closed
 lane open

- CONSTRUCTION VEHICLE ACCESS TO THE SOUTHBOUND I-95 WORK ZONES FROM I-95 MAY NOT DIRECTLY ENTER THE WORK ZONE FROM AN I-95 TRAVEL LANE. THESE VEHICLES MUST FIRST DECELERATE WITHIN THE EXISTING SHOULDER AND THEN ACCESS THE WORK ZONE. CONSTRUCTION VEHICLE ACCESS TO I-95 FROM THE WORK ZONE MAY NOT DIRECTLY ENTER A TRAVEL LANE. THESE VEHICLES MUST FIRST ACCELERATE WITHIN THE EXISTING SHOULDER AND THEN MERGE INTO TRAFFIC.
- THE RESIDENT ENGINEER OR AN APPOINTED REPRESENTATIVE SHALL BE THE OFFICIAL TIME KEEPER FOR THE LANE CLOSURES. THE TIMES SHALL BE BASED ON "VERIZON TIME".

GUIDELINES FOR USE OF TRAFFIC OFFICERS

- CONTRACTOR SHALL BE REQUIRED TO ENSURE THAT A TRAFFIC OFFICER IS ON DUTY DURING ALL STRIPING OPERATIONS ALONG I-95. STRIPING IS NOT ANTICIPATED ALONG I-95.
- CONTRACTOR SHALL BE REQUIRED TO ENSURE THAT A TRAFFIC OFFICER IS ON DUTY DURING ANY WORK ZONE OPERATIONS ALONG I-95 OR SR 141 THAT REQUIRE BRIEF STOPPING OF ALL TRAFFIC IN ONE OR BOTH DIRECTIONS IN ACCORDANCE WITH TA-35H. THIS IS NOT ANTICIPATED NEEDING TO BE DONE.
- TRAFFIC OFFICERS SHALL BE ON DUTY DURING ALL ROAD OR RAMP CLOSURE OPERATIONS AND UP TO THREE HOURS FOLLOWING THE COMPLETE CLOSURE OF THE ROADWAY OR RAMP. COMPLETE CLOSURES OF ROADS OR RAMP ARE NOT ANTICIPATED.
- ADDITIONAL USE OF TRAFFIC OFFICERS SHALL BE APPROVED BY THE TRAFFIC SAFETY SECTION AS NEEDED.

CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION SAFETY FENCE / LENGTH
	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	IMPACT ATTENUATOR (TL-3)
	IMPACT ATTENUATOR, SPECIAL (WIDE BAY)

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141\INTE\CADD\ADVANCED UTILITY WORK\CS.DGN [SHEET: CS_Notes]



ADDENDUMS / REVISIONS

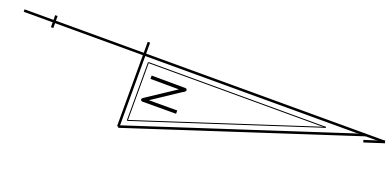
NOT TO SCALE

SR 141 UTILITY RELOCATION
UNDER SOUTHBOUND I-95

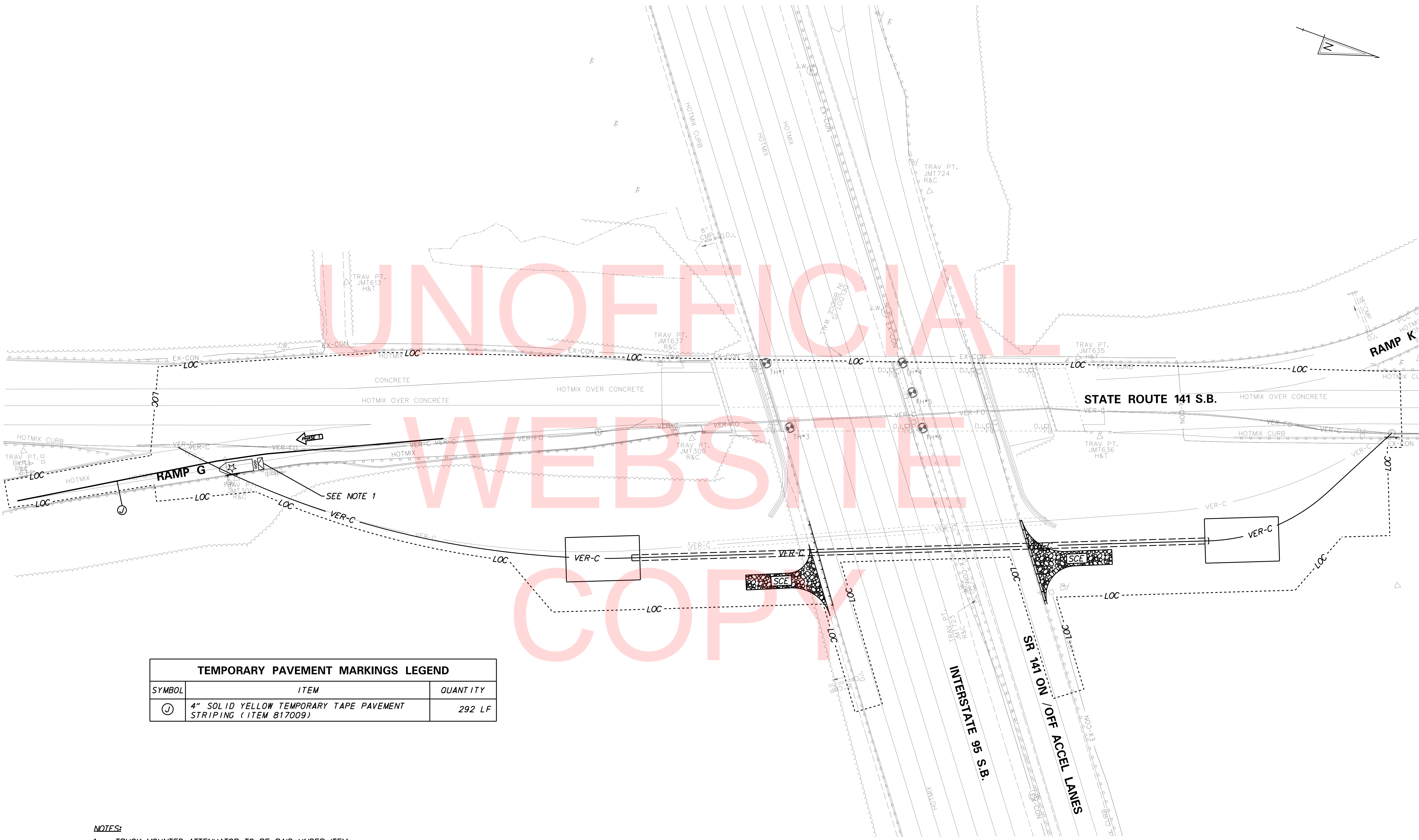
CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY: CGG	
COUNTY	CHECKED BY: BPH	
NEW CASTLE		

CONSTRUCTION PHASING
AND M.O.T. PLAN

CS-01
SHEET NO.
18
TOTAL SHTS.
20



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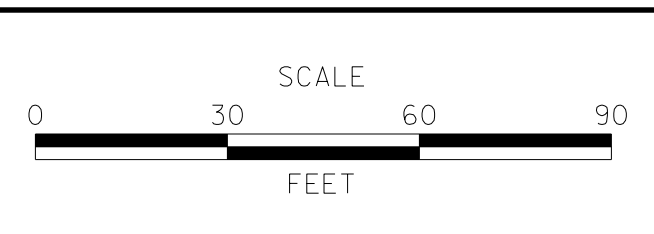
TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
Ⓧ	4" SOLID YELLOW TEMPORARY TAPE PAVEMENT STRIPING (ITEM 817009)	292 LF

- NOTES:**
- TRUCK MOUNTED ATTENUATOR TO BE PAID UNDER ITEM 808002, FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II

PLOTTED BY: GABEL DATE: 7/17/2018
 FILE LOCATION: Q:\INDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\CS.DGN [SHEET: CS02]



ADDENDUMS / REVISIONS



SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

CONTRACT	BRIDGE NO.	676 / 677
T201809001	DESIGNED BY:	CGG
COUNTY	CHECKED BY:	BPH
NEW CASTLE		

CONSTRUCTION PHASING AND M.O.T. PLAN

CS-02
SHEET NO.
19
TOTAL SHTS.
20

CHANGEABLE MESSAGE BOARDS

PRIOR TO DETOUR
110 DAYS PRIOR TO BEGINNING OF DETOUR

PCMS-1

EXIT 3A
1-95 NB
RAMP

CLOSING
STARTING
XXXXXX

DURING DETOUR

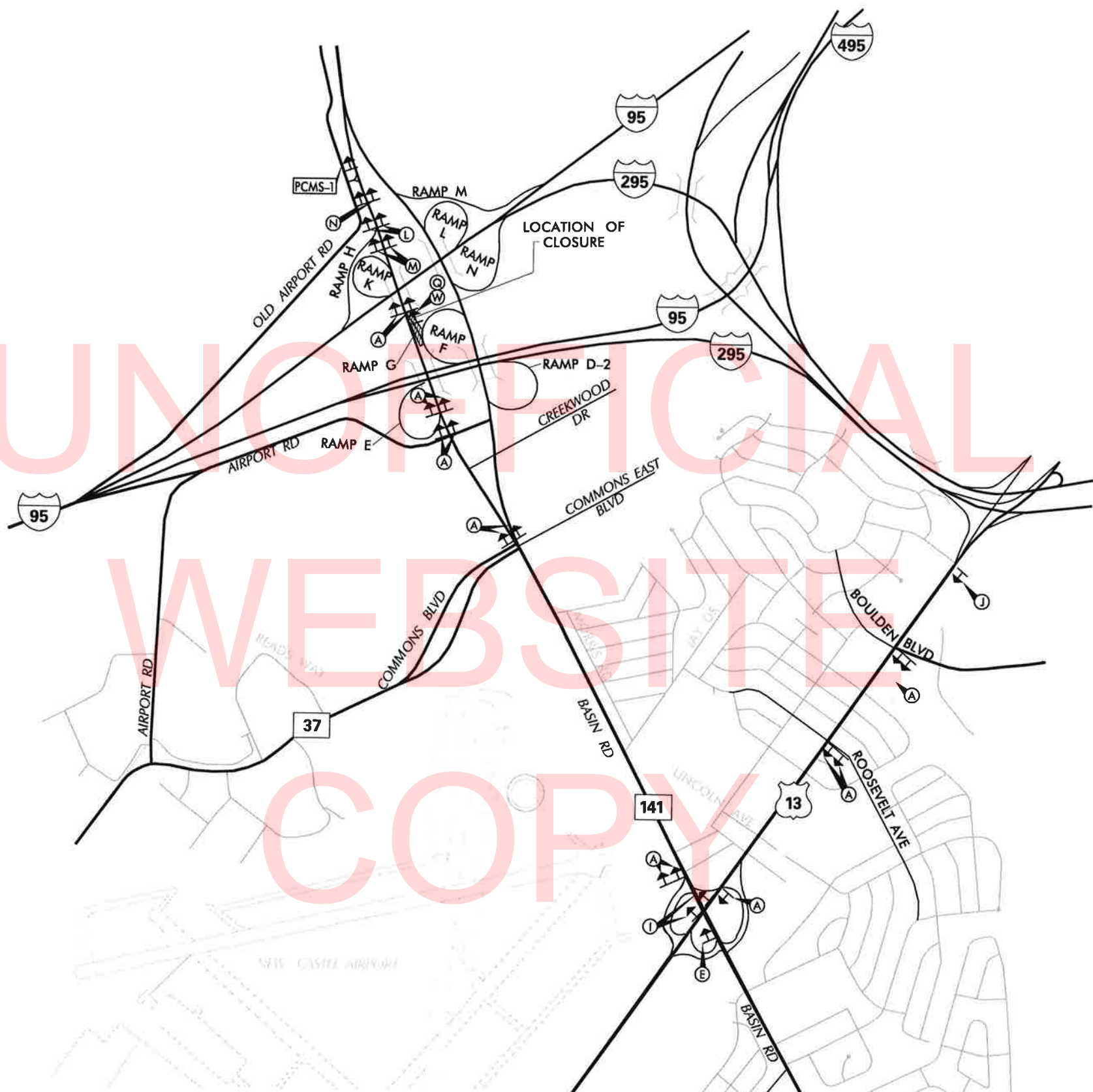
(5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

EXIT 3A
1-95 NB
RAMP

CLOSED
FOLLOW
DETOUR

SPECIAL SIGNS



LEGEND

GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS, (AS PER LATEST REVISION)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- THE COLORS, DIMENSIONS, AND CHARACTERISTICS OF ALL INTERSTATE, U.S. ROUTE, AND STATE ROUTE SHIELD SIGNS SHALL BE IN ACCORDANCE WITH SECTION 2D.11 OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "O" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED Mi Habel DATE: 6/8/18

RECOMMENDED _____ DATE: _____

RECOMMENDED E. Meman DATE: 6-11-18

APPROVED CHIEF SAFETY OFFICER [Signature] DATE: 6-11-18

APPROVED TRAFFIC ENGINEER [Signature] DATE: 6/11/18

PLOTTED BY: JDSMITH DATE: 6/8/2018 FILE LOCATION: Q:\NDE\060272_020_1-95_AND_SR_141_INTE\CADD\ADVANCED UTILITY WORK\DP.DGN [SHEET: DP32]

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

SR 141 UTILITY RELOCATION UNDER SOUTHBOUND I-95

CONTRACT T201809001
COUNTY NEW CASTLE
PERMIT NO. X
DESIGNED BY: JDS
CHECKED BY: MAW

DETOUR PLAN
RAMP G CLOSED

SHEET NO. 20
TOTAL SHTS. 20