

GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY
UNITS

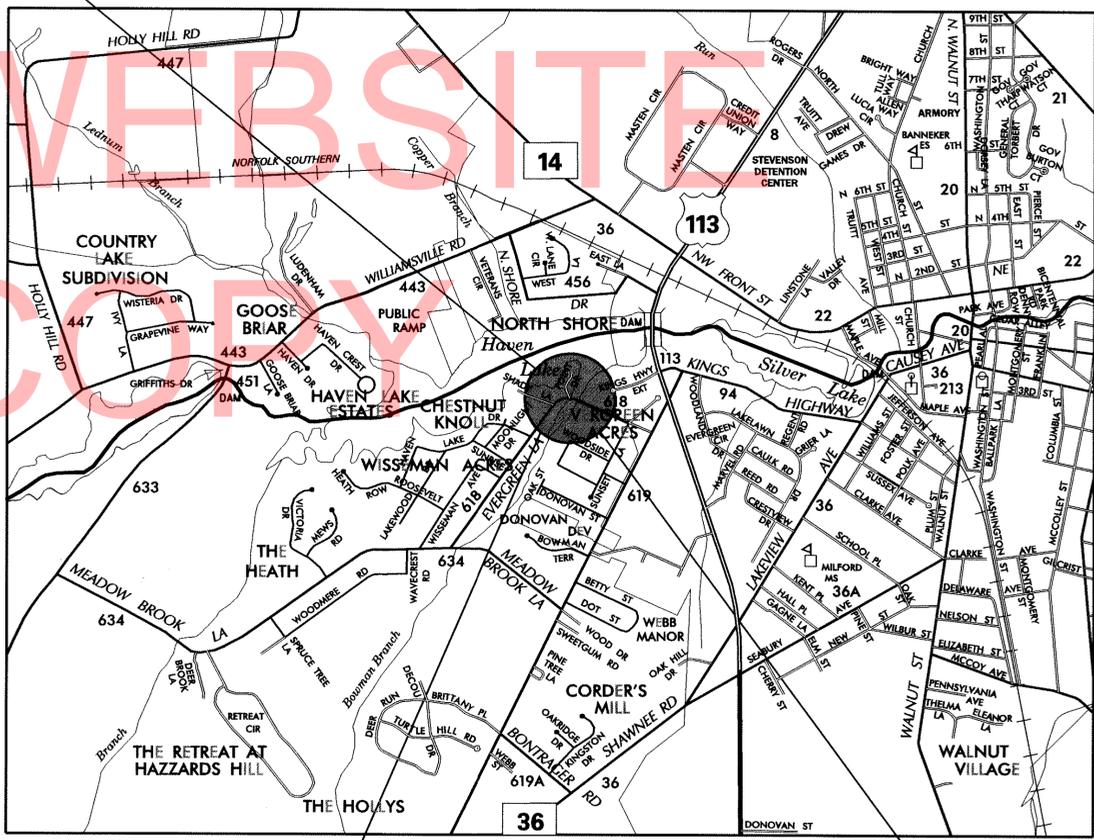


CONSTRUCTION PLANS FOR: BR 3-906 ON S618 EVERGREEN LANE OVER HAVEN LAKE, MILFORD

CONTRACT NUMBER: T201107305
FEDERAL AID PROJECT NUMBER: ESTP-S618(01)

COUNTY: SUSSEX M.R. #: S618

BR 3-906



BEGIN CONTRACT
STATION 00+50

END CONTRACT
STATION 3+50

DESIGN DESIGNATION		
FUNCTIONAL CLASS: MAJOR COLLECTOR	D.H.V. PROJECTED: 90	YEAR: 2040
TYPE OF CONSTRUCTION: BRIDGE REPLACEMENT	DESIGN SPEED: 25 M.P.H.	
A.A.D.T. CURRENT: 701	YEAR: 2010	TRUCKS: 8 %
A.A.D.T. PROJECTED: 1200	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60 %
INDEX OF SHEETS		
SHEET NO.	TABLE OF CONTENTS	
1	TITLE	
2	LEGEND	
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5	CONSTRUCTION PLANS	
6	PROFILE	
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8	ENVIRONMENTAL COMPLIANCE PLAN	
9	CONSTRUCTION PHASING AND EROSION CONTROL PLAN	
10	DETOUR PLAN	
11	RIGHT-OF-WAY PLAN	
12	RIGHT-OF-WAY DATA SHEET	
13	RIGHT-OF-WAY TABULATION SHEET	
TOTAL SHEETS: 13		

APPROVED DESIGN EXCEPTIONS			
DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS	
DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS	
CONTRACT NO.	CONTRACT NAME

RECOMMENDED

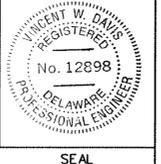
Wayne Massey
SQUAD MANAGER, CONSTRUCTION
DATE: 11/29/12

Bradford L. Sabnis
GROUP ENGINEER, CONSTRUCTION
DATE: 11/29/12

N/A
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION)
DATE: _____

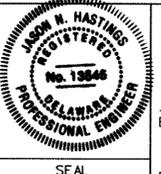
RECOMMENDED

Vincent W. Davis
STORMWATER ENGINEER
DATE: 30 Nov 2012



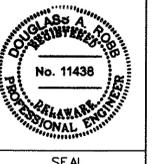
RECOMMENDED

[Signature]
SQUAD MANAGER, BRIDGE DESIGN
DATE: 11/30/12



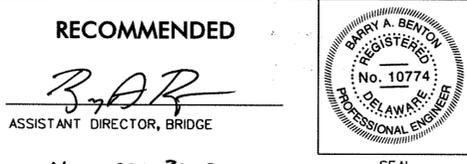
RECOMMENDED

[Signature]
BRIDGE DESIGN ENGINEER
DATE: November 30, 2012



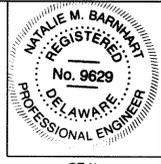
RECOMMENDED

[Signature]
ASSISTANT DIRECTOR, BRIDGE
DATE: NOVEMBER 30, 2012



APPROVED

Natalie Barmhart
CHIEF ENGINEER
DATE: 12/6/12



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 VENT OR CLEANOUT
	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	
	EXISTING UTILITY NAME

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	BRICK PATTERNED SURFACE
	BUTT JOINT
	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
	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
	HORIZONTAL CLEARANCE
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
	LIMIT OF CONSTRUCTION
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK @ 4"
	P.C.C. SIDEWALK @ 6"
	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

PROPOSED SYMBOLS

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
	REMOVE BY 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)	
	2" WMA SUPERPAVE, TYPE C HOT-MIX 6" GRADED AGGREGATE BASE COURSE, TYPE B
	2" WMA SUPERPAVE, TYPE C HOT-MIX 2 1/2" WMA SUPERPAVE, TYPE B HOT-MIX 8" GRADED AGGREGATE BASE COURSE, TYPE B
	N/A

UTILITY COMPANY FACILITIES	
	PROPOSED UTILITY NAME

EROSION & SEDIMENT CONTROL	
	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 - REINFORCED
	SUMP PIT, TYPE 1
	SUMP PIT, TYPE 2
	SEDIMENT TRAP
	SEDIMENT TRAP
	SEDIMENT TRAP WITH INLET AS OUTLET
	SEDIMENT TRAP PIPE OUTLET
	STILLING WELL
	TEMPORARY SWALE
	TEMPORARY SLOPE DRAIN
	TURBIDITY CURTAIN / LENGTH
	TURBIDITY CURTAIN

LAST REVISED: 12/02/2010
Y:\SUSSEX\618\BRIDGE\T201107305\PLANS\LG01.DGN

GENERAL NOTES

- 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.
- THE CONTRACTOR SHALL GIVE TWO (2) WEEKS NOTICE TO THE PROPERTY OWNER WHEN ANY FIXTURE, SHRUB OR OTHER OBJECT MUST BE REMOVED FROM THE RIGHT OF WAY OR EASEMENT AREA. IF THE OWNER HAS NOT ATTEMPTED TO SALVAGE THIS PROPERTY, THE CONTRACTOR SHALL REMOVE IT WITHOUT OBLIGATION. COMPENSATION SHALL BE INCIDENTAL TO THE CONTRACT.
- THE ENDS OF ALL CURBS SHALL BE DEPRESSED FLUSH WITH THE PAVEMENT AT A RATIO OF TWELVE TO ONE (12:1) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" INSIDE MINIMUM DIAMETER, 6" INSIDE MAXIMUM DIAMETER) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL SIT ON THE TOP OF THE SUBBASE MATERIAL. THE COST SHALL BE INCIDENTAL TO THE CONTRACT.
- STAGING AREAS - PROPER EROSION AND SEDIMENT CONTROL MEASURES AS DETERMINED BY THE ENGINEER SHALL BE INSTALLED IN ALL STAGING AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE CONTRACT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED IN ACCORDANCE WITH DELAWARE STANDARD SPECIFICATIONS 7.32, 7.34 AND 7.35, FOR TOPSOIL, SEED AND MULCH RESPECTIVELY, TO THE SATISFACTION OF THE ENGINEER. THE SEED SHALL ADHERE TO THE SPECIFICATIONS OF SECTION 7.34 FOR PERMANENT GRASS SEEDING - DRY GROUND. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH REESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- SITE REVIEWER - AN EROSION CONTROL SITE REVIEWER SHALL BE A PERSON FROM THE CONTRACTOR'S STAFF ASSIGNED TO EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE AND SHALL BE REQUIRED ON SPECIFIC PROJECTS. THE NAME AND DNREC CERTIFICATION NUMBER OF EACH SITE REVIEWER SO REQUIRED SHALL BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE NAME OF THE DELAWARE REGISTERED PROFESSIONAL ENGINEER PROVIDING DIRECTION AND SUPERVISION OF THE SITE REVIEWER, AS REQUIRED IN SECTION 12.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, SHALL ALSO BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

EROSION POTENTIAL FOR THIS PROJECT	SITE REVIEWER REQUIREMENT
() INSIGNIFICANT	NONE
() MINOR	CONTRACTOR CERTIFICATION COURSE TRAINING ONLY, AS DEFINED IN SECTION 13 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
(X) MEDIUM	AT THE TIME OF BID OF THE CONTRACT, EITHER THE SUPERINTENDENT OR A SEPARATE INDIVIDUAL FROM THE CONTRACTOR'S STAFF SHALL BE A CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 12 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
() MAJOR	SUPERINTENDENT AND AN INDIVIDUAL FROM CONTRACTOR'S STAFF SHALL BE CCR. ONE INDIVIDUAL FROM THE CONTRACTOR'S STAFF MUST BE A CCR AT THE TIME OF BID OF THE CONTRACT. THE SUPERINTENDENT MUST BECOME A CCR WITHIN ONE YEAR AFTER THE AWARD OF CONTRACT.

- ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR INCLUDE:

()	NONE
()	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	RASTER FILES, IN .CAL FILE FORMAT, FOR ALL PLAN SHEETS.
()	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.

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

(X)	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.
()	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.

- THE DISTURBED AREA FOR THIS PROJECT IS 0.2997 ACRES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK". ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.
- THE EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE EROSION AND SEDIMENT CONTROL 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 SHALL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVAL. DELDOT WILL REVIEW THE CURRENT EROSION AND SEDIMENT CONTROL PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

- 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

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

SECTION 700

- 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. ALL HOT-MIX SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- CENTERLINE OF ROAD SHALL BE STRIPED TO MATCH EXISTING STRIPING ON THE ROAD. STRIPING SHALL EXTEND THE LENGTH OF THE PROJECT LIMITS. PAYMENT UNDER ITEM *748548.
- TEMPORARY TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE PLANS, THE MUTCD, AND THE REQUIREMENTS OF ITEM 763643 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE.

MISCELLANEOUS

- UTILITIES
SEE THE UTILITIES STATEMENT FOR UTILITIES INFORMATION.
- HYDRAULIC DATA
DRAINAGE AREA: 2.21 mls
DESIGN FREQUENCY: 50-year
DESIGN DISCHARGE: 292 cfs
DESIGN FLOOD EL.: 16.11'
- SCOUR ANALYSIS
THE PROPOSED STRUCTURE HAS BEEN ANALYSED FOR THE EFFECTS OF SCOUR IN ACCORDANCE WITH HEC-18 'EVALUATING SCOUR AT BRIDGES'. THE EVENT FOR SCOUR IS THE WORST CASE OF THE OVERTOPPING FLOOD OR THE 500-YEAR FLOOD EVENT.

DESIGN EVENT: OVERTOPPING
DESIGN DISCHARGE: 355 cfs
DESIGN VELOCITY: 4.05 ft/s
TAILWATER DEPTH: 4.75'
- ENVIRONMENTAL COMPLIANCE
SEE ENVIRONMENTAL COMPLIANCE PLAN FOR FURTHER RESTRICTIONS/GUIDANCE ASSOCIATED WITH THIS PROJECT.

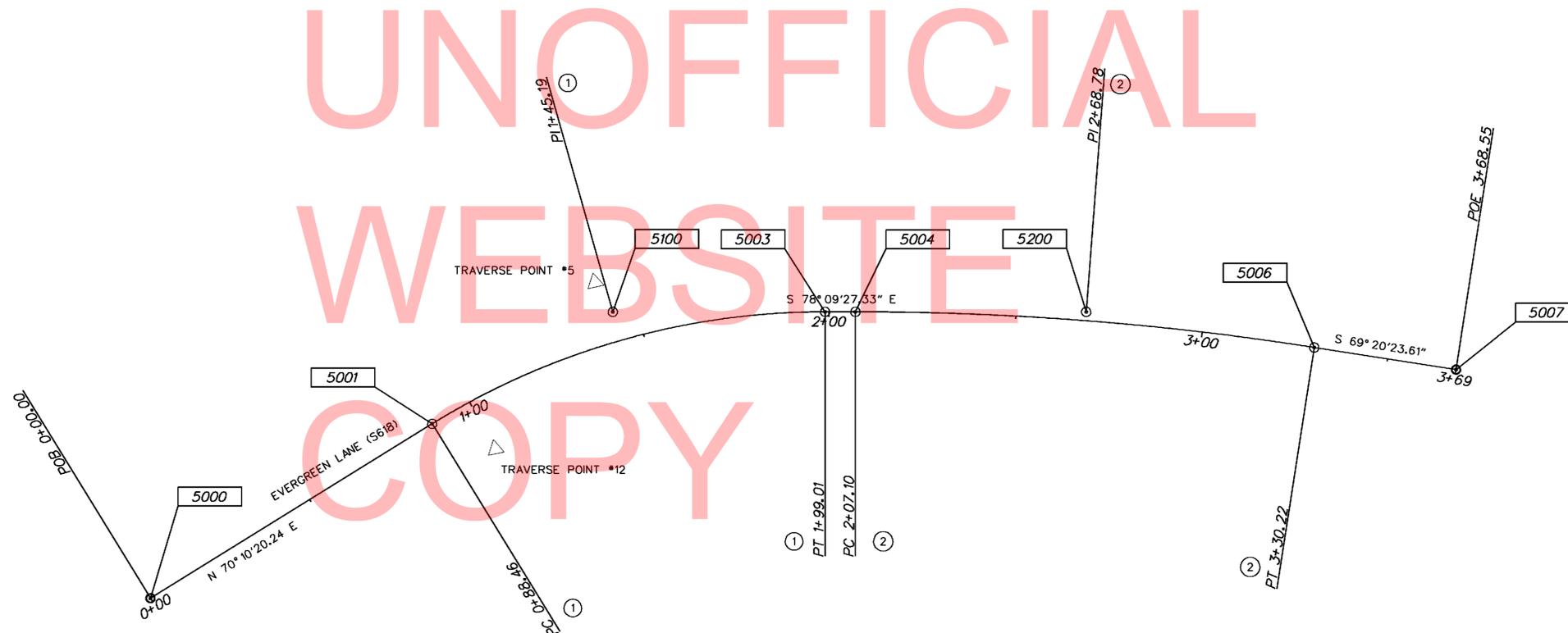
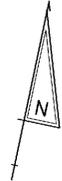
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 <p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS	NOT TO SCALE	BR 3-906 ON S618 EVERGREEN LANE OVER HAVEN LAKE, MILFORD	CONTRACT	BRIDGE NO.	3-906	NOTES	SHEET NO.	
					T201107305	DESIGNED BY: JAT		3	
					SUSSEX	CHECKED BY: JNH		TOTAL SHTS.	
								13	

HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP3			331184.9103	648066.0887	30.81
TP4			331369.9257	647677.1431	26.65
TP5	1+41.50	-16.78	331552.9329	647247.8807	17.91
TP6			331400.2988	647676.4124	26.48
TP7			331225.7710	648041.4222	30.80
TP8			331573.3199	648492.7934	25.43
TP11			331446.8367	646992.0630	20.21
TP12	1+00.19	14.26	331514.9860	647212.7305	17.16
TP20			331203.4172	647755.0017	0.00

CONSTRUCTION ALIGNMENT CONTROL					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
5000	0+00.00	0.00	331495.0024	647114.3303	
5007	3+68.55	0.00	331482.9998	647468.3000	

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



Element: Circular Curve #1
 PC (5001) 0+88.46 331525.0073 647197.5458
 PI (5100) 1+45.19 331544.2485 647250.9094
 CC (5002) 331336.8639 647265.3844
 PT (5003) 1+99.01 331532.6071 647306.4285

Radius: 200.00
 Delta: 31° 40' 12.4260" Right
 Degree of Curvature(Arc): 28° 38' 52.4031"
 Length: 110.55
 Tangent: 56.73
 Chord: 109.15
 Middle Ordinate: 7.59
 External: 7.89

Tangent Direction: N 70° 10' 20.2411" E
 Radial Direction: S 19° 49' 39.7589" E
 Chord Direction: N 86° 00' 26.4542" E
 Radial Direction: S 11° 50' 32.6672" W
 Tangent Direction: S 78° 09' 27.3328" E

Element: Circular Curve #2
 PC (5004) 2+07.10 331530.9472 647314.3447
 PI (5200) 2+68.78 331518.2890 647374.7128
 CC (5005) 330747.9746 647150.1683
 PT (5006) 3+30.22 331496.5265 647432.4270

Radius: 800.00
 Delta: 8° 49' 03.7264" Right
 Degree of Curvature(Arc): 7° 09' 43.1008"
 Length: 123.12
 Tangent: 61.68
 Chord: 123.00
 Middle Ordinate: 2.37
 External: 2.37

Tangent Direction: S 78° 09' 27.3328" E
 Radial Direction: S 11° 50' 32.6672" W
 Chord Direction: S 73° 44' 55.4696" E
 Radial Direction: S 20° 39' 36.3936" W
 Tangent Direction: S 69° 20' 23.6064" E

△ TRVERSE POINT #11

ADDENDUMS / REVISIONS

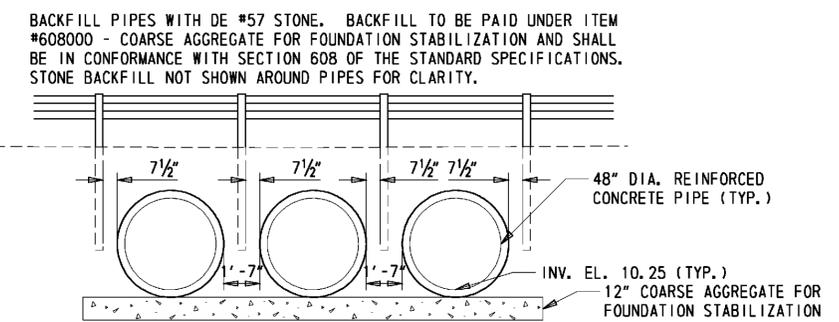
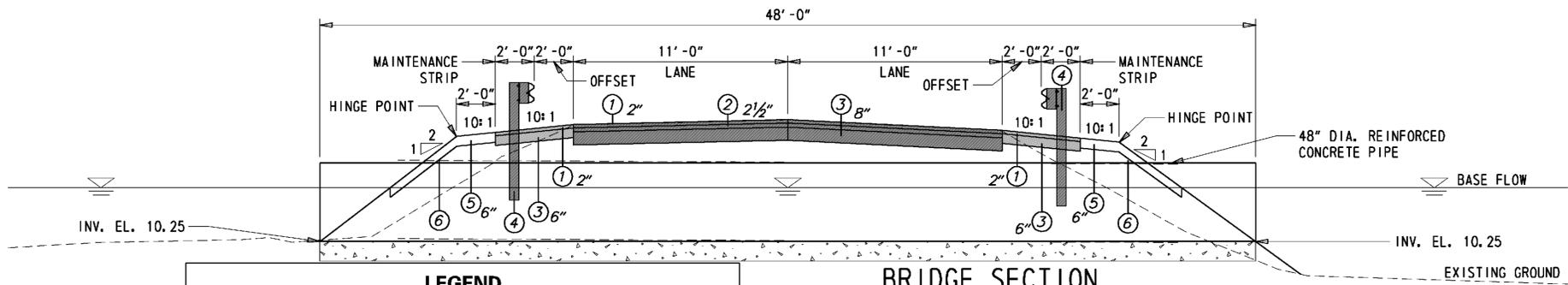


**BR 3-906 ON S618
 EVERGREEN LANE OVER
 HAVEN LAKE, MILFORD**

CONTRACT	BRIDGE NO.	3-906
T201107305	DESIGNED BY: JAT	
COUNTY	CHECKED BY: JNH	
SUSSEX		

**HORIZONTAL AND
 VERTICAL CONTROL**

SHEET NO.	4
TOTAL SHTS.	13

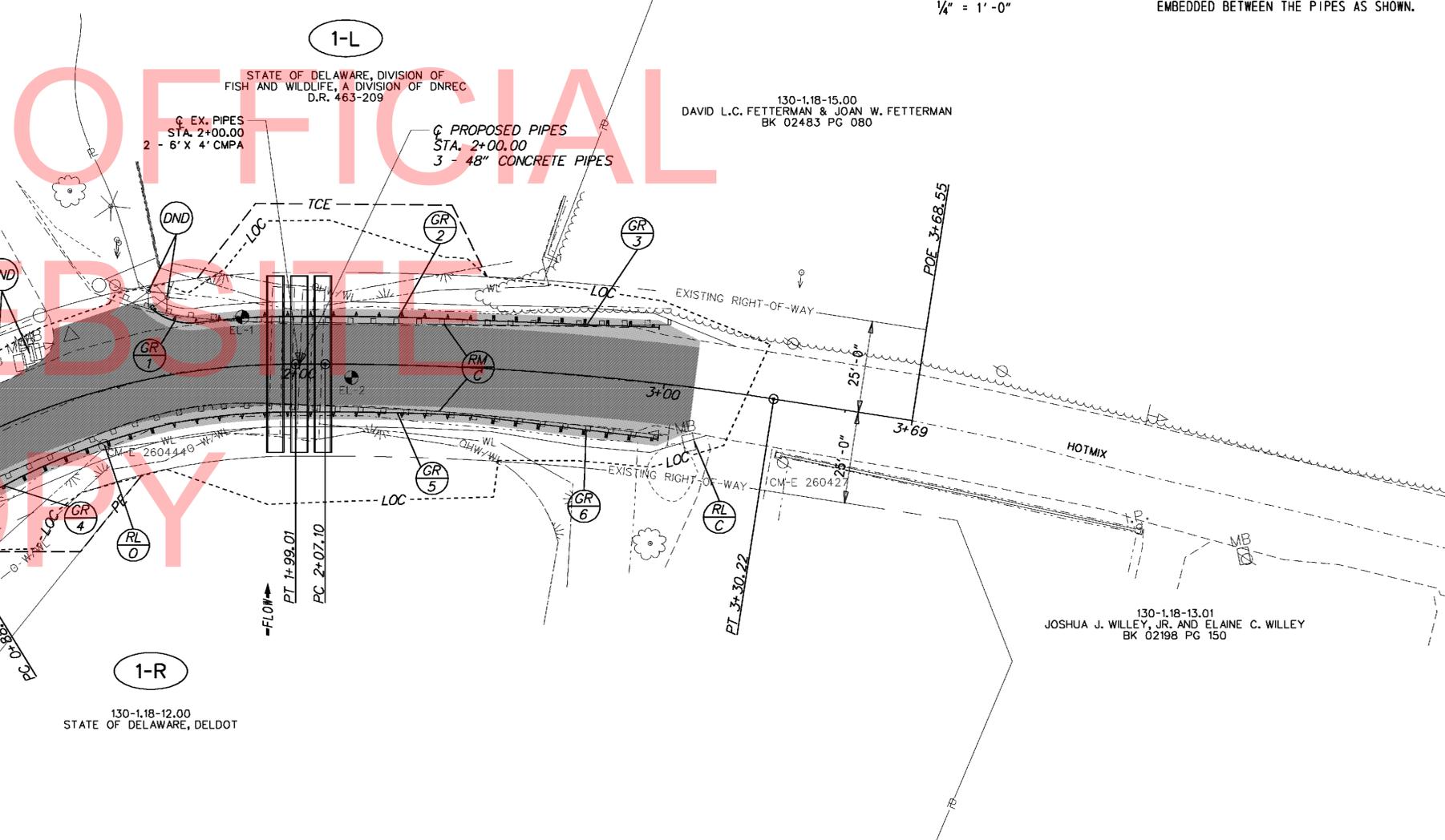
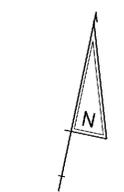


- LEGEND**
- ① ITEM 401801 - WMA, SUPERPAVE TYPE C, PG 64-22, 160 GYRATIONS (CARBONATE STONE)
 - ② ITEM 401810 - WMA, SUPERPAVE TYPE B, PG 64-22, 160 GYRATIONS (CARBONATE STONE)
 - ③ ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
 - ④ ITEM 720043 - GUARDRAIL, TYPE 1-27
 - ⑤ ITEM 732004 - TOPSOIL
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
 - ⑥ ITEM 209006 - BORROW, TYPE F

BRIDGE SECTION
1/4" = 1'-0"

BRIDGE ELEVATION
1/4" = 1'-0"

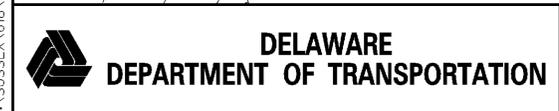
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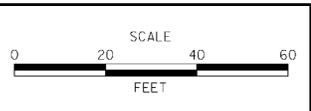
GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	END TREATMENT, TYPE 4	1+63.11	-18.30	25.00
2	TYPE 1-27	1+85.50	-13.00	62.50
3	END TREATMENT, TYPE 1-27	2+46.50	-13.00	50.00
4	END TREATMENT, TYPE 1-27	1+09.28	15.00	50.00
5	TYPE 1-27	1+63.00	13.00	81.25
6	END TREATMENT, TYPE 1-27	2+47.75	13.00	50.00

SOIL BORING SCHEDULE				
POINT	STATION	OFFSET	NORTHING	EASTING
EL-1	1+85.33	-13.32	331548.15	647294.79
EL-2	2+14.35	3.63	331525.88	647320.66

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ADDENDUMS / REVISIONS	

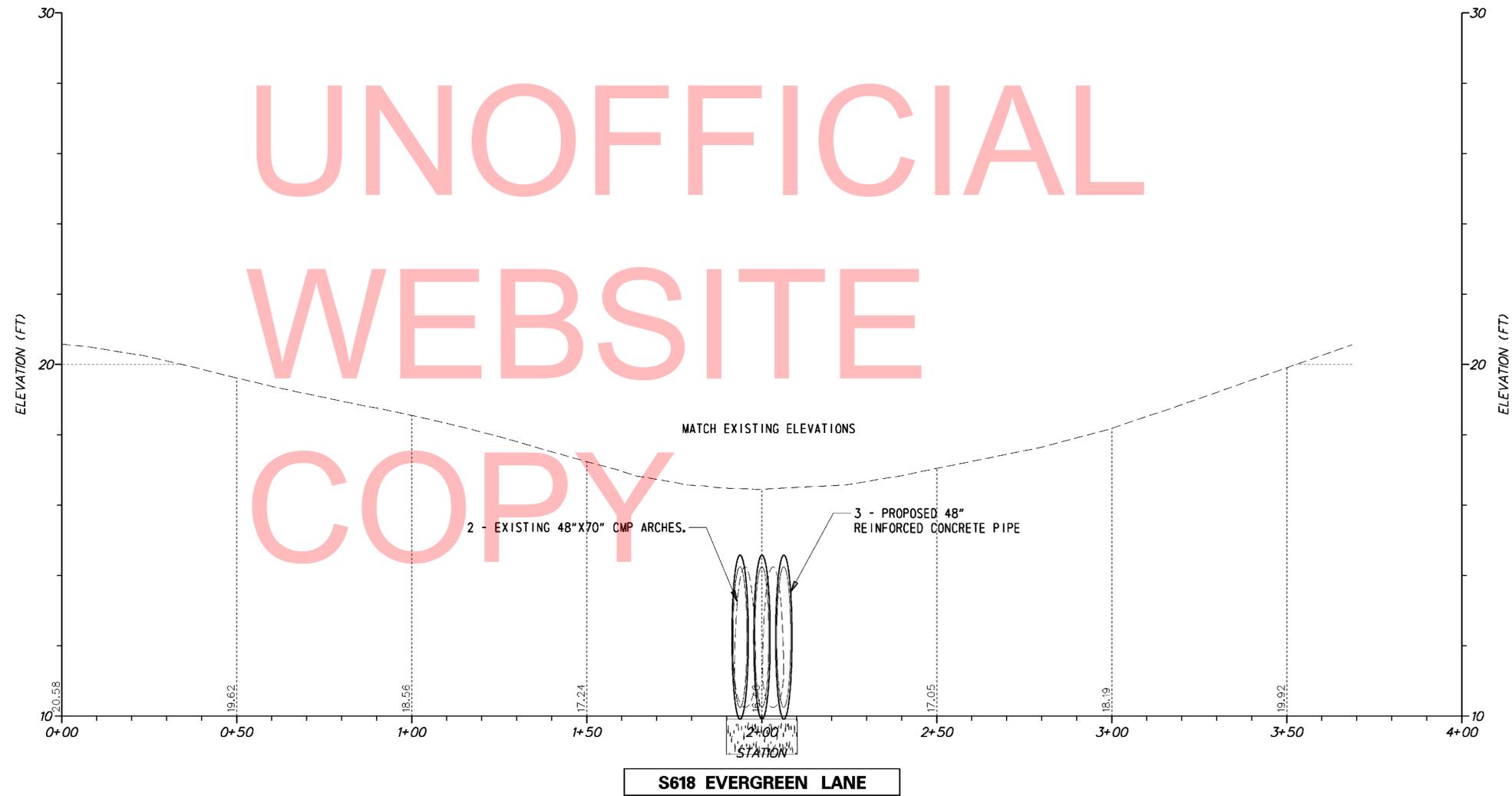


**BR 3-906 ON S618
EVERGREEN LANE OVER
HAVEN LAKE, MILFORD**

CONTRACT	BRIDGE NO.	3-906
T201107305	DESIGNED BY: JAT	
SUSSEX	CHECKED BY: JNH	

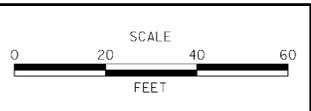
CONSTRUCTION PLAN	SHEET NO.	5
	TOTAL SHTS.	13

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ADDENDUMS / REVISIONS	



**BR 3-906 ON S618
EVERGREEN LANE OVER
HAVEN LAKE, MILFORD**

CONTRACT T201107305	BRIDGE NO. 3-906	
COUNTY SUSSEX	DESIGNED BY: JAT	
	CHECKED BY: JNH	

PROFILE

VERTICAL SCALE FEET	6 4 2 0
SHEET NO.	6
TOTAL SHTS.	13

BORING: EL # 1		DATE DRILLED: 1/19/2011	
STATION: 1+85.33	OFFSET: -13.32	ELEVATION: 16.15	NORTHING: 331548.15
COMMENTS: N/A			
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	DESCRIPTION
1	0.0		NO SAMPLING
2	0.0	9	SATURATED LOOSE GRAY SILTY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL.
		3	
3	2.0	2	SATURATED LOOSE GRAY FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
		3	
4	4.0	3	SATURATED LOOSE GRAY COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
		2	
5	6.0	4	NO RECOVERY - WOOD IN TIP OF SPOON.
		3	
6	8.0	2	NO RECOVERY - WOOD IN TIP OF SPOON.
		2	
7	10.0	4	SATURATED LOOSE TANNISH ORANGE FINE SAND W/SOME COARSE SAND AND SILT.
		3	
8	12.0	2	SATURATED VERY LOOSE ORANGE FINE TO COARSE SAND W/TRACE OF SILT AND FINE GRAVEL.
		1	
9	14.0	5	SATURATED MEDIUM DENSE ORANGISH BROWN FINE TO COARSE SAND W/SOME SILT.
		5	
10	16.0	2	SATURATED MEDIUM DENSE ORANGE FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
		5	
11	18.0	4	SATURATED MEDIUM DENSE GRAY FINE TO COARSE SAND W/SOME SILT.
		5	
12	23.0	3	SATURATED LOOSE GRAY FINE SAND W/SOME SILT, TRACE OF COARSE SAND.
		3	
13	28.0	3	SATURATED LOOSE GRAY SILTY FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL.
		5	
14	33.0	8	SATURATED MEDIUM DENSE GRAY SILTY FINE SAND W/TRACE OF COARSE SAND.
		9	
15	38.0	3	SATURATED STIFF GRAY CLAYEY FINE SANDY SILT W/TRACE OF COARSE SAND.
		5	
16	43.0	5	SATURATED STIFF GRAY FINE SANDY SILT W/TRACE OF COARSE SAND AND CLAY.
		6	
	48.0	9	END OF BORING

BORING: EL # 2 CONT.		DATE DRILLED: 1/19/2011	
STATION: 2+14.35	OFFSET: 3.63	ELEVATION: 16.38	NORTHING: 331525.88
COMMENTS: N/A			
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	DESCRIPTION
10	16.0	4	SATURATED MEDIUM DENSE ORANGE COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
		6	
11	18.0	2	SATURATED LOOSE ORANGE FINE SAND W/SOME SILT AND COARSE SAND.
		5	
12	23.0	3	SATURATED LOOSE GRAY FINE SAND W/SOME COARSE SAND AND SILT.
		4	
13	28.0	2	SATURATED LOOSE GRAY SILTY FINE SAND W/SOME COARSE SAND.
		3	
14	33.0	5	SATURATED MEDIUM DENSE GRAY SILTY FINE SAND W/TRACE OF COARSE SAND.
		9	
15	38.0	4	SATURATED STIFF GRAY FINE SANDY SILT W/TRACE OF COARSE SAND AND CLAY.
		7	
16	43.0	4	SATURATED STIFF GRAY FINE SANDY SILT W/TRACE OF COARSE SAND.
		6	
	48.0	7	END OF BORING
	48.0		
	50.0		

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BORING: EL # 2		DATE DRILLED: 1/19/2011	
STATION: 2+14.35	OFFSET: 3.63	ELEVATION: 16.38	NORTHING: 331525.88
COMMENTS: N/A			
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	DESCRIPTION
1	0.0	11	MOIST MEDIUM DENSE GRAY FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
		8	
2	1.0	7	WET LOOSE GRAY FINE TO COARSE SAND W/SOME SILT AND FINE GRAVEL.
		5	
3	2.0	4	SATURATED LOOSE GRAY FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
		2	
4	4.0	3	SATURATED VERY LOOSE GRAY FINE TO COARSE SAND W/SOME SILT.
		3	
5	6.0	1	SATURATED SOFT GRAYISH BROWN FINE SANDY SILT W/SOME ORGANIC MATTER, TRACE OF COARSE SAND.
		1	
6	8.0	2	SATURATED MEDIUM DENSE GRAY COARSE TO FINE SANDY FINE GRAVEL W/TRACE OF SILT.
		2	
7	10.0	2	SATURATED VERY LOOSE ORANGE COARSE TO FINE SAND W/TRACE OF SILT AND FINE GRAVEL.
		2	
8	12.0	2	SATURATED LOOSE ORANGE FINE TO COARSE SAND W/TRACE OF SILT AND FINE GRAVEL.
		2	
	14.0	2	



ADDENDUMS / REVISIONS	

**BR 3-906 ON S618
EVERGREEN LANE OVER
HAVEN LAKE, MILFORD**

CONTRACT	BRIDGE NO.	3-906
T201107305	DESIGNED BY:	JAT
COUNTY	CHECKED BY:	JNH
SUSSEX		

BORING LOG	SHEET NO.	7
	TOTAL SHTS.	13

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ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

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

2. NATURAL RESOURCE ISSUES:

- A. PERMIT REQUIREMENTS/APPROVALS*:
 - U.S. ARMY CORPS OF ENGINEERS (COE): NATIONWIDE PERMIT *3(a) AND (c) (NO PCN)
 - DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): PROJECT CONSISTENT WITH DEL. CODE 72, SECTION 7217(b), AS AMENDED BY SB 186
 - DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): WAIVED (PROJECT IS NOT LOCATED IN CRW)
 - * THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING AND/OR OBTAINING THIS APPROVAL.
 - NOTE: THE ABSENCE OF ASTERISKS AFTER A PERMIT (COE, WLSL, WQC, CZM) INDICATES THAT COORDINATION HAS BEEN DONE WITH THAT AGENCY BUT NO WRITTEN AUTHORIZATION WAS REQUIRED. AS SUCH, NO PAPERWORK FROM THAT AGENCY SHOULD BE ANTICIPATED.
- B. CONSTRUCTION RESTRICTIONS:
 - FISHERIES - NO IN-WATER WORK FROM APRIL 15 TO JUNE 30.
 - ENDANGERED SPECIES - NONE
 - MIGRATORY BIRDS - NONE

3. CULTURAL RESOURCE ISSUES:

NONE

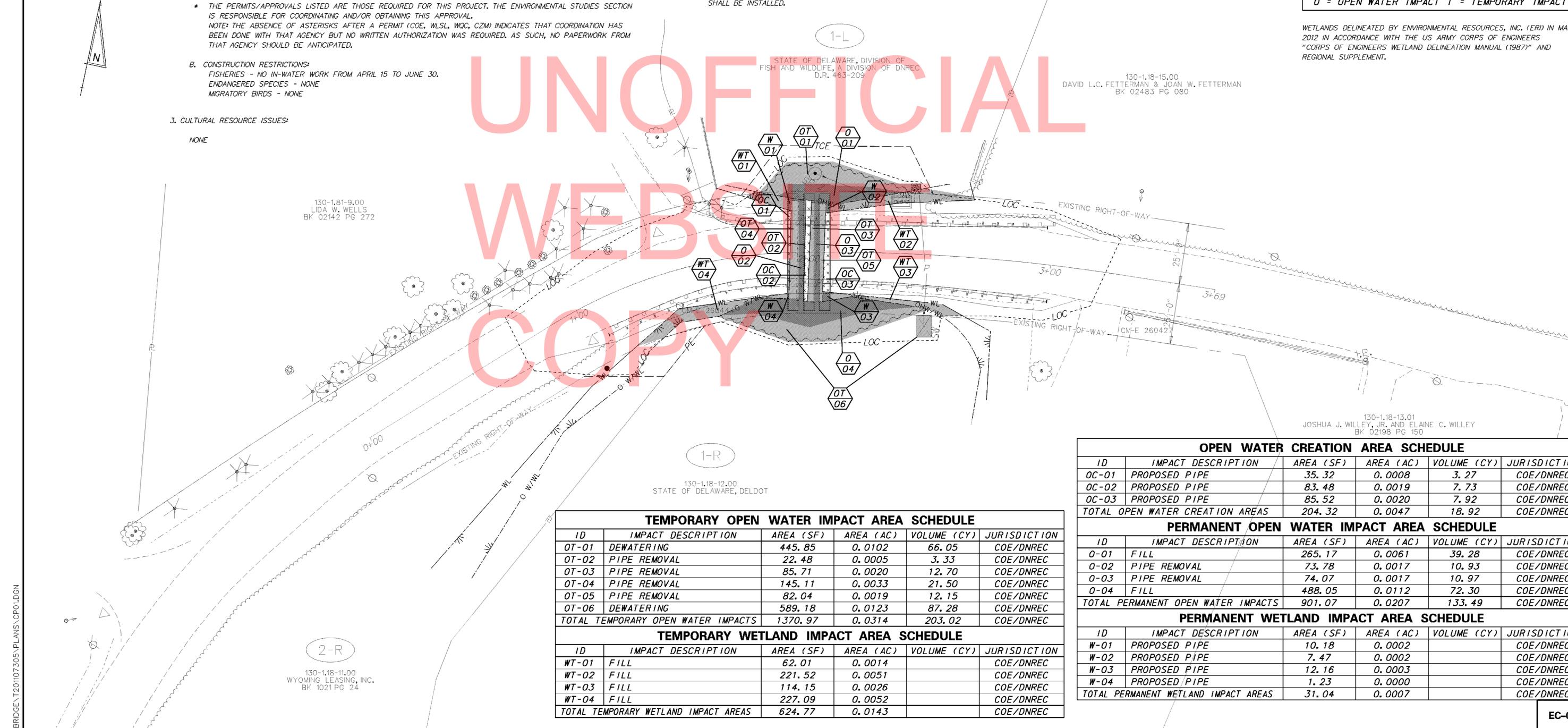
4. STREAM RESTORATION AND SLOPE TREATMENTS

- A. THE CONTRACTOR SHALL FOLLOW THE SPECIAL PROVISIONS OF ITEM *712531 - CHANNEL BED FILL IN REGARDS TO THE SALVAGING OF ON-SITE NATURAL STREAM BOTTOM MATERIAL OR THE FURNISHING OF OFF-SITE MATERIAL. IF SUFFICIENT SOURCES FOR CHANNEL BED FILL DO NOT EXIST ON-SITE, ANY NEW MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ITEM *712531 - CHANNEL BED FILL. FINAL CHANNEL ELEVATIONS SHALL MATCH EXISTING ELEVATIONS AT THE UPSTREAM AND DOWNSTREAM PROJECT LIMITS. THROUGH THE STRUCTURE, ELEVATIONS SHALL BE AS NOTED ON THE PLANS. PAYMENT UNDER ITEM *712531 - CHANNEL BED FILL.
- B. OTHER AREAS OF THE CHANNEL BOTTOM AFFECTED BY CONSTRUCTION (INCLUDING, BUT NOT LIMITED TO, THE LOCATION OF SUMP PITS, STABILIZED OUTFALLS, TEMPORARY PIPES AND/OR SANDBAG DIKES AND DIVERSIONS) SHALL BE RESTORED TO EXISTING CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH CHANNEL BED FILL. PAYMENT UNDER ITEM *712531 - CHANNEL BED FILL.
- C. WHEN ALL EROSION AND SEDIMENT CONTROL MEASURES ARE REMOVED AND THE STREAM RETURNS TO ITS NATURAL FLOW CONDITIONS, THE FLOW MUST REMAIN ABOVE GROUND AND ABOVE THE STRUCTURE (I.E. THE FLOW CANNOT BE "LOST" BENEATH THE STRUCTURE). IF THIS IS NOT ACHIEVED, THE CONTRACTOR WILL BE REQUIRED TO TAKE CORRECTIVE ACTION AT THE CONTRACTOR'S EXPENSE.
- D. SLOPE SEEDING SHALL BE WITH ITEM *734531 - STREAMBANK SEED MIX. FOLLOWING THE SEEDING OPERATION, ITEM *735535 - SOIL RETENTION BLANKET MULCH, TYPE S, OR OTHER BLANKET AS SHOWN ON THE PLANS SHALL BE INSTALLED.

LEGEND

- CREATION AREA
- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- OHW --- ORDINARY HIGH WATER
- OHW/WL --- ORD. HIGH WATER / WETLAND
- WL --- WETLAND BOUNDARY
- IMPACT AREA TYPE ID. (SEE BELOW)
- IMPACT AREA ID. AND/OR NUMBER
- C = CREATION AREA W = WETLAND IMPACT
- O = OPEN WATER IMPACT T = TEMPORARY IMPACT

WETLANDS DELINEATED BY ENVIRONMENTAL RESOURCES, INC. (ERI) IN MARCH 2012 IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987)" AND REGIONAL SUPPLEMENT.



TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OT-01	DEWATERING	445.85	0.0102	66.05	COE/DNREC
OT-02	PIPE REMOVAL	22.48	0.0005	3.33	COE/DNREC
OT-03	PIPE REMOVAL	85.71	0.0020	12.70	COE/DNREC
OT-04	PIPE REMOVAL	145.11	0.0033	21.50	COE/DNREC
OT-05	PIPE REMOVAL	82.04	0.0019	12.15	COE/DNREC
OT-06	DEWATERING	589.18	0.0123	87.28	COE/DNREC
TOTAL TEMPORARY OPEN WATER IMPACTS		1370.97	0.0314	203.02	COE/DNREC

TEMPORARY WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
WT-01	FILL	62.01	0.0014		COE/DNREC
WT-02	FILL	221.52	0.0051		COE/DNREC
WT-03	FILL	114.15	0.0026		COE/DNREC
WT-04	FILL	227.09	0.0052		COE/DNREC
TOTAL TEMPORARY WETLAND IMPACT AREAS		624.77	0.0143		COE/DNREC

OPEN WATER CREATION AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OC-01	PROPOSED PIPE	35.32	0.0008	3.27	COE/DNREC
OC-02	PROPOSED PIPE	83.48	0.0019	7.73	COE/DNREC
OC-03	PROPOSED PIPE	85.52	0.0020	7.92	COE/DNREC
TOTAL OPEN WATER CREATION AREAS		204.32	0.0047	18.92	COE/DNREC

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
O-01	FILL	265.17	0.0061	39.28	COE/DNREC
O-02	PIPE REMOVAL	73.78	0.0017	10.93	COE/DNREC
O-03	PIPE REMOVAL	74.07	0.0017	10.97	COE/DNREC
O-04	FILL	488.05	0.0112	72.30	COE/DNREC
TOTAL PERMANENT OPEN WATER IMPACTS		901.07	0.0207	133.49	COE/DNREC

PERMANENT WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
W-01	PROPOSED PIPE	10.18	0.0002		COE/DNREC
W-02	PROPOSED PIPE	7.47	0.0002		COE/DNREC
W-03	PROPOSED PIPE	12.16	0.0003		COE/DNREC
W-04	PROPOSED PIPE	1.23	0.0000		COE/DNREC
TOTAL PERMANENT WETLAND IMPACT AREAS		31.04	0.0007		COE/DNREC

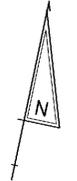
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<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS	<p>SCALE</p> <p>FEET</p>	<p>BR 3-906 ON S618 EVERGREEN LANE OVER HAVEN LAKE, MILFORD</p>	CONTRACT T201107305	BRIDGE NO. 3-906	<p>ENVIRONMENTAL COMPLIANCE PLAN</p>	SHEET NO. 8
				COUNTY SUSSEX	DESIGNED BY: JAT		TOTAL SHTS. 13
				CHECKED BY: JNH	EC-01		

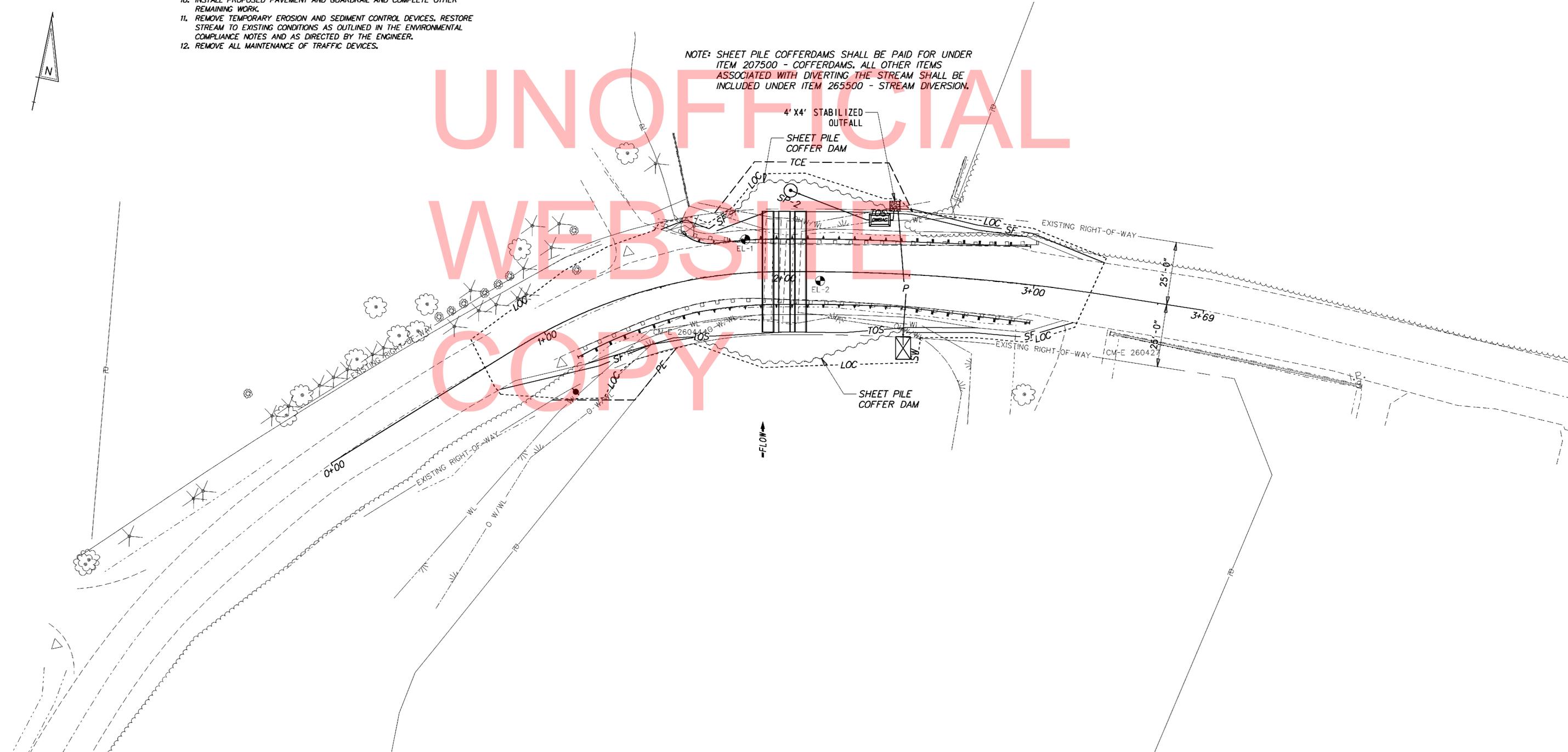
SEQUENCE OF CONSTRUCTION

1. INSTALL MAINTENANCE OF TRAFFIC DEVICES AS PER DETOUR PLAN.
2. INSTALL SILT FENCE, EXCEPT AT CONNECTION TO SHEET PILE.
3. INSTALL A 6'X9' STILLING WELL UPSTREAM OF THE PROPOSED UPSTREAM PUMP WITH THE TOP OF STONES LEVEL WITH THE EXISTING STREAM BOTTOM.
4. INSTALL COFFER DAMS AT LOCATIONS SHOWN. CONNECT SILT FENCE TO SHEET PILE TO COMPLETELY ENCLOSE THE WORK AREA.
5. INSTALL SUMP PIT, TYPE 2, AND DEWATERING BAG AS A SEDIMENT TRAPPING DEVICE.
DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 111 OF DELDOT STANDARD SPECIFICATIONS.
DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE RIPRAPPED DISCHARGE AREA FOR THE DIVERSION PUMP OR ON OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER.
6. REMOVE EXISTING PIPES AND GUARDRAIL.
7. EXCAVATE AND STOCKPILE THE EXISTING STREAMBED MATERIAL IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ELEVATIONS NOTED.
8. INSTALL REINFORCED CONCRETE PIPES.
9. CONSTRUCT SLOPES, PLACE CHANNEL BED FILL AND SLOPE STABILIZATION.
10. INSTALL PROPOSED PAVEMENT AND GUARDRAIL AND COMPLETE OTHER REMAINING WORK.
11. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES. RESTORE STREAM TO EXISTING CONDITIONS AS OUTLINED IN THE ENVIRONMENTAL COMPLIANCE NOTES AND AS DIRECTED BY THE ENGINEER.
12. REMOVE ALL MAINTENANCE OF TRAFFIC DEVICES.

NOTE: SHEET PILE COFFERDAMS SHALL BE PAID FOR UNDER ITEM 207500 - COFFERDAMS. ALL OTHER ITEMS ASSOCIATED WITH DIVERTING THE STREAM SHALL BE INCLUDED UNDER ITEM 265500 - STREAM DIVERSION.



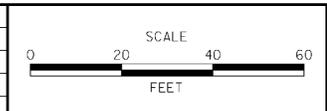
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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

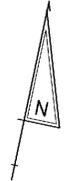


BR 3-906 ON S618
EVERGREEN LANE OVER
HAVEN LAKE, MILFORD

CONTRACT	BRIDGE NO.	3-906
T201107305	DESIGNED BY:	JAT
COUNTY	CHECKED BY:	JNH
SUSSEX		

CONSTRUCTION PHASING
AND EROSION
CONTROL PLAN

SHEET NO.	9
TOTAL SHTS.	13



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STATE OF DELAWARE, DIVISION OF FISH AND WILDLIFE, A DIVISION OF DNREC D.R. 463-209

130-1.18-15.00 DAVID L.C. FETTERMAN & JOAN W. FETTERMAN BK 02483 PG 080

130-1.81-9.00 LIDA W. WELLS BK 02142 PG 272

130-1.18-13.01 JOSHUA J. WILLEY, JR. AND ELAINE C. WILLEY BK 02198 PG 150

130-1.18-12.00 STATE OF DELAWARE, DELDOT

130-1.18-11.00 WYOMING LEASING, INC. BK 1021 PG 24

RECOMMENDED

Jude Crawford 8/2/12
TEAM SUPPORT SQUAD MANAGER DATE

John Dault 8-2-12
TEAM SUPPORT ENGINEER DATE

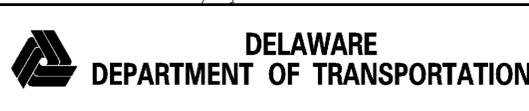
Robert B. Willey, Jr. 8/2/12
ASSISTANT DIRECTOR, ENGINEERING SUPPORT DATE

"AS-ACQUIRED" PLANS

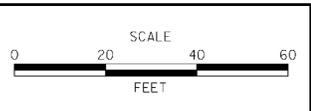
I CERTIFY THAT ALL PROPOSED RIGHT-OF-WAY HAS BEEN ACQUIRED IN THE NAME OF THE STATE OF DELAWARE AND THAT THESE PLANS ACCURATELY DEPICT THE NATURE AND EXTENT OF THE REAL ESTATE SECTION ACQUISITION UNDER THIS PROJECT.

CHIEF, REAL ESTATE DATE

RW SHEET 1 OF 3



ADDENDUMS / REVISIONS



**BR 3-906 ON S618
EVERGREEN LANE OVER
HAVEN LAKE, MILFORD**

CONTRACT	BRIDGE NO.	3-906
T201107305	DESIGNED BY:	JAT
COUNTY	CHECKED BY:	JNH
SUSSEX		

RIGHT-OF-WAY PLAN	SHEET NO.	11
	TOTAL SHTS.	13

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ASSESSMENT NUMBER	OWNERSHIP OF RECORD				TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)				
130-1.18-11.00	(2-R) WYOMING LEASING, INC.				P/E	BK1021-PG24	1.820				
ALIGNMENT NUMBER & DESCRIPTION: 1001 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
52001	1001	0+88.46	25.00	331501.4894	647206.0256	S 78°09' 27.33" E	33.0044				
52002	1001	1+23.72	39.85	331494.7162	647238.3276	N 50°45' 52.34" E	26.9374				
52003	1001	1+50.59	25.00	331511.7543	647259.1920			S 79°04' 20.00" W	54.1482	54.3666	-175.0000
52001	1001	0+88.46	25.00	331501.4894	647206.0256						
FIGURE 5200 AREA = 421.9934 SQ. FT. (0.0097 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD				TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)				
N/A	(1-L) STATE OF DELAWARE, DIVISION OF FISH AND WILDLIFE, A DIVISION OF DNREC				TCE	D.R. 463-209	0.000				
ALIGNMENT NUMBER & DESCRIPTION: 1001 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
42001	1001	1+75.00	-25.00	331561.0199	647284.8546	N 49°54' 55.32" E	25.8779				
42002	1001	1+90.00	-44.00	331577.6832	647304.6536	S 77°39' 39.29" E	53.7802				
42003	1001	2+40.00	-44.00	331566.1906	647357.1915	S 14°12' 38.57" E	21.6748				
42004	1001	2+50.00	-25.00	331545.1790	647362.5124			N 76°37' 16.55" W	44.2378	44.2431	-825.0000
42005	1001	2+07.10	-25.00	331555.4151	647319.4752	N 78°09' 27.33" W	8.0883				
42006	1001	1+99.01	-25.00	331557.0750	647311.5590			N 81°35' 48.02" W	26.9942	27.0105	-225.0000
42001	1001	1+75.00	-25.00	331561.0199	647284.8546						
FIGURE 4200 AREA = 1246.0398 SQ. FT. (0.0286 ACRES)											

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LEGEND	
FEE	AREA OF ACQUISITION
RW	AREA OCCUPIED BY EXISTING RW
PE	PERMANENT EASEMENT
TCE	TEMPORARY CONSTRUCTION EASEMENT
*	OFFSET IS LEFT OF BASELINE
**	CURVE TURNS TO THE LEFT

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 DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		BR 3-906 ON S618 EVERGREEN LANE OVER HAVEN LAKE, MILFORD	CONTRACT	BRIDGE NO.	3-906	RIGHT-OF-WAY DATA SHEET	SHEET NO.
				T201107305	DESIGNED BY: JAT			12
				SUSSEX	CHECKED BY: JNH			TOTAL SHTS.
						13		

