

**GENERAL LOCATION OF CONTRACT**

# THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION



## CONSTRUCTION & RIGHT-OF-WAY PLANS FOR: **BR 2-265B ON SPIDER WEB ROAD OVER WHITE MARSH BRANCH**

**CONTRACT NUMBER: T201307202**  
**FEDERAL AID PROJECT NUMBER: EBROS-K265(02)**

**COUNTY: KENT**                      **M.R. #: K265**

**U.S. CUSTOMARY  
UNITS**

**DESIGN DESIGNATION**

FUNCTIONAL CLASS: RURAL LOCAL ROAD	D.H.V. PROJECTED: 11	YEAR: 2040
TYPE OF CONSTRUCTION: BRIDGE REPLACEMENT	DESIGN SPEED: 55 M.P.H.	
A.A.D.T. CURRENT: 91	YEAR: 2011	TRUCKS: 9 %
A.A.D.T. PROJECTED: 150	YEAR: 2040	DIRECTION OF DISTRIBUTION: 65 %

**INDEX OF SHEETS**

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TOTAL SHEETS: 16

**APPROVED DESIGN EXCEPTIONS**

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

**ADDENDA & REVISIONS**

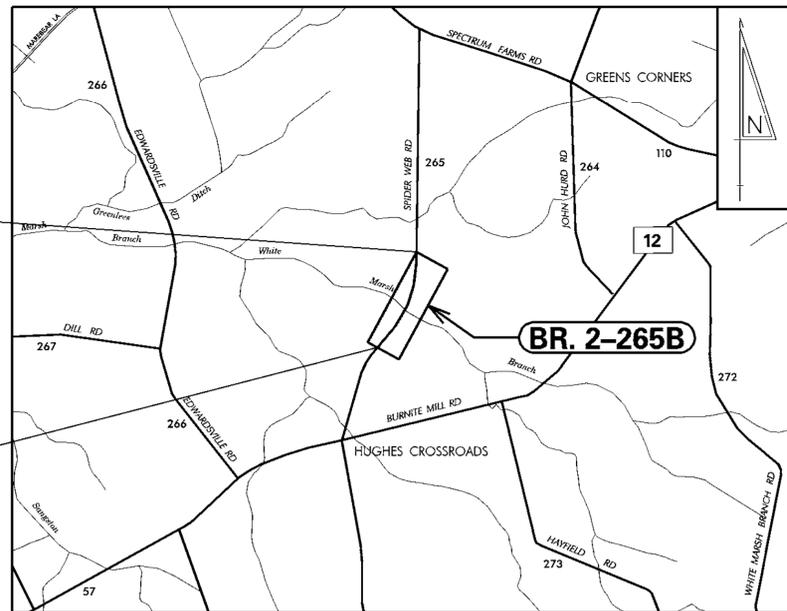
DESCRIPTION	NAME & DATE

**ASSOCIATED CONTRACTS**

CONTRACT NO.	CONTRACT NAME

**END CONTRACT  
STATION 13+75**

**BEGIN CONTRACT  
STATION 12+05**



**RECOMMENDED**

*Mark Smith*  
AREA ENGINEER, CONSTRUCTION      05/06/2015  
DATE

*Bradford L. Schmitz*  
GROUP ENGINEER, CONSTRUCTION      05/06/2015  
DATE

*Jim A. Jirj*  
ASSISTANT DIRECTOR, CONSTRUCTION      05/06/2015  
DATE

**FINAL PLANS**

**RECOMMENDED**

*Vincent W. Davis*  
STORMWATER ENGINEER  
DATE 05/05/2015



**RECOMMENDED**

*Kevin Lindell*  
SQUAD MANAGER, BRIDGE DESIGN  
DATE 05/04/2015



**RECOMMENDED**

*Jim A. Jirj*  
BRIDGE DESIGN ENGINEER  
DATE 05/06/2015



**RECOMMENDED**

*Jim A. Jirj*  
ASSISTANT DIRECTOR, BRIDGE  
DATE 05/06/2015



**APPROVED**

*Robert Brian McCleary*  
CHIEF ENGINEER  
DATE 05/06/2015



## 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	
	DELAWARE ELECTRIC COOPERATIVE
	VERIZON

## PROPOSED SYMBOLS

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
	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
	TOE OF SLOPE
	TOP OF BANK

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
	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)	
	PAVEMENT - MILLING, HOT-MIX 2" DEPTH, 2" TYPE C, PG 64-22, 115 GYRATIONS (CARBONATE STONE)
	1.25" TYPE C, PG 64-22, 115 GYRATIONS (CARBONATE STONE)
	2.25" TYPE B, PG 64-22, 115 GYRATIONS 6" GABC
	N/A

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
	SILT FENCE - REINFORCED
	SUMP PIT
	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

UTILITY COMPANY FACILITIES	
	DELAWARE ELECTRIC COOPERATIVE
	VERIZON

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

ADDENDUMS / REVISIONS

NOT TO SCALE

BR 2-265B ON  
SPIDER WEB ROAD OVER  
WHITE MARSH BRANCH

CONTRACT  
T201307202  
COUNTY  
KENT

BRIDGE NO.  
2-265B  
DESIGNED BY: CBB  
CHECKED BY: KRL

LEGEND

SHEET NO.  
2  
TOTAL SHTS.  
16

# 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.

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	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 PRIOR TO THE EXECUTION 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 AWARDED CONTRACTOR, INCLUDE:

( )	NONE
( )	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
( X )	RASTER FILES, IN PDF 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.

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

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

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

- THE DISTURBED AREA FOR THIS PROJECT IS 0.87 ACRES.

- THE ADDITIONAL IMPERVIOUS AREA FOR THIS PROJECT IS 0.00 SQ. FT.

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

# PROJECT NOTES

## SECTION 100

- 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

- 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 AND SACK HEADWALLS
  - EXISTING GUARDRAIL
  - EXISTING RCP DRAINAGE PIPES

## SECTION 300

- THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B':
  - CRUSHED STONE (PER STANDARD SPECIFICATION B21)
  - CRUSHED CONCRETE (PER STANDARD SPECIFICATION B21)
  - HOT-MIX MILLINGS (PER SPECIAL PROVISION 302514 MILLED HOT-MIX BASE COURSE)

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

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

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

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

- HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:

- MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEM 760006.
- MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000.
- MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE. ALL MILLED MATERIALS SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 302514 - MILLED HOT-MIX BASE COURSE.

- PAYMENT CLARIFICATION:

- SHOULD THE CONTRACTOR ELECT TO MILL PORTIONS OF HOT-MIX SHOWN ON THE PLANS TO BE REMOVED UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT THE COST OF MILLING THIS HOT-MIX WILL BE PAID AS ITEM 202000 - EXCAVATION AND EMBANKMENT. THE MILLINGS GENERATED MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE, OR DISPOSED OF TO AN APPROVED SITE. HAULING COSTS FOR DISPOSAL AND/OR RECYCLING ARE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.
- SHOULD THE CONTRACTOR ELECT TO TEMPORARILY STOCKPILE MILLINGS ON THE JOB SITE FOR LATER USE, ALL COSTS FOR STOCKPILING AND SUBSEQUENT REHANDLING SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.
- MILLINGS USED FOR BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE. NO SEPARATE PAYMENT WILL BE MADE TO FURNISH MILLINGS FROM AN OUTSIDE SOURCE OR TRANSPORT MILLINGS WITHIN THE PROJECT LIMITS. MILLINGS USED FOR BASE COURSE WILL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.
- ALL COSTS TO UTILIZE MILLINGS IN RECYCLED HOT-MIX WILL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE HOT-MIX ITEM USING THE RECYCLED MATERIAL.
- SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE IS PROVIDED TO SPECIFY THE MEANS OF LAY DOWN AND COMPACTION AS WELL AS THE MATERIAL REQUIREMENTS FOR MILLINGS USED AS BASE COURSE. ALL COSTS TO BRING THE MILLINGS INTO COMPLIANCE WITH THE REQUIREMENTS OF ITEM - 302514 MILLED HOT-MIX BASE COURSE ARE INCIDENTAL TO ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'. NO PAYMENT WILL BE MADE FOR ITEM 302514 - MILLED HOT-MIX BASE COURSE. THE QUANTITY OF MILLINGS USED FOR BASE COURSE WILL BE PAID FOR UNDER ITEM 302007 - GRADED AGGREGATE BASE COURSE.

## SECTION 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.
- STRIPING  
PROPOSED STRIPING SHALL MATCH EXISTING STRIPING. PAYMENT FOR PERMANENT PAVEMENT STRIPING UNDER ITEM 74548-PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5".
- SIGNING  
TO AVOID DAMAGE, SIGNS MAY BE REMOVED DURING CONSTRUCTION IF NEEDED, BUT MUST BE REPLACED TO MATCH EXISTING CONDITIONS BEFORE REOPENING THE ROADWAY. ALL WORK RELATED TO MOVING AND REINSTALLING THE SIGN SHALL BE INCIDENTAL TO ITEM \*211000-REMOVAL OF STRUCTURES AND OBSTRUCTIONS. IF THE SIGN IS DAMAGED, THE SIGN MUST BE REPLACED AT THE CONTRACTORS EXPENSE.
- MAINTENANCE OF TRAFFIC SHALL BE AS PER DETOUR. THE DETOUR SHALL REMAIN IN EFFECT UNTIL THE FINAL HOT MIX IS PLACED. ALL MOT ITEMS WITH THE EXCEPTION OF CHANGEABLE MESSAGE BOARDS AND FLAGGERS WILL BE INCLUDED IN ITEM \*763643 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE.

## SECTION 900

- 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 THE CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NO1S KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S TEAM SUPPORT SECTION. A COPY OF THE GENERAL PERMIT OR THE NO1CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

## MISCELLANEOUS

- HYDRAULIC DATA:
  - DRAINAGE AREA = 1.56 SQ. MILES
  - DESIGN FREQUENCY = 25-YEARS
  - DESIGN DISCHARGE = 259.0 CFS
  - DESIGN FLOOD ELEVATION = 51.58 FT
  - PROPOSED OPENING = (3) 58" X 91" ELLIPTICAL PIPES (88.5 SF)
- SCOUR ANALYSIS:
 

THE PROPOSED STRUCTURE HAS BEEN ANALYZED FOR THE EFFECTS OF SCOUR IN ACCORDANCE WITH HEC-14- 'HYDRAULIC DESIGN OF ENERGY DISSIPATORS FOR CULVERTS AND CHANNELS', HEC-18 - 'EVALUATING SCOUR AT BRIDGES'. SCOUR COUNTERMEASURES HAVE BEEN DESIGNED FOR THE LESSER OF THE OVERTOPPING FLOOD OR THE SCOUR DESIGN FLOOD.

- DESIGN EVENT = 100-YEAR STORM
- DESIGN DISCHARGE = 385.0 CFS
- DESIGN VELOCITY = 4.66 FT/S
- TAILWATER DEPTH = 5.06 FT

- ENVIRONMENTAL COMPLIANCE:
 

REFER TO THE ENVIRONMENTAL COMPLIANCE PLAN FOR ANY RESTRICTIONS AND ADDITIONAL GUIDANCE THAT MAY BE ASSOCIATED WITH THIS PROJECT.

- UTILITIES:
 

PERMITTING FOR UTILITIES: AS OUTLINED IN CHAPTER 3 OF THE DELDOT UTILITIES MANUAL, THE INDIVIDUAL UTILITY COMPANIES ARE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FROM MUNICIPAL, STATE AND FEDERAL GOVERNMENT AGENCIES AND RAILROADS. THIS INCLUDES BUT IS NOT LIMITED TO WATER QUALITY PERMIT/DNREC WATER QUALITY CERTIFICATION, DNREC SUBAQUEOUS LANDS/WETLANDS PERMITS, DNREC COASTAL ZONE CONSISTENCY CERTIFICATION, COUNTY FLOODPLAIN PERMITS (NEW CASTLE COUNTY ONLY), U.S. COAST GUARD PERMITS, U.S. ARMY CORPS 404 PERMITS, SEDIMENT AND EROSION PERMITS, AND RAILROAD CROSSING PERMITS. THE ENVIRONMENTAL PERMITS CITED ON THE EC SHEETS(S) DO NOT AUTHORIZE ANY PART OF THE UTILITY WORK ASSOCIATED WITH THIS PROJECT.

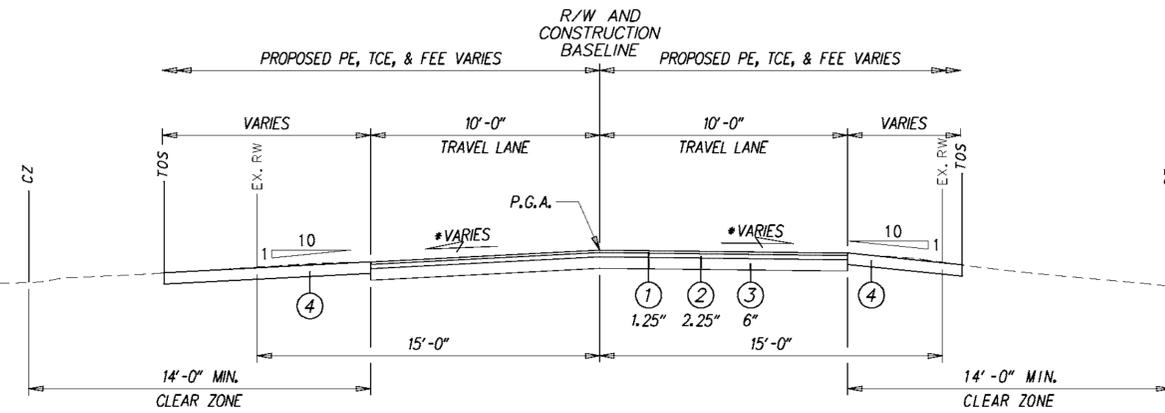
- UTILITIES:
 

SEE UTILITY STATEMENT FOR FULL DETAILS.

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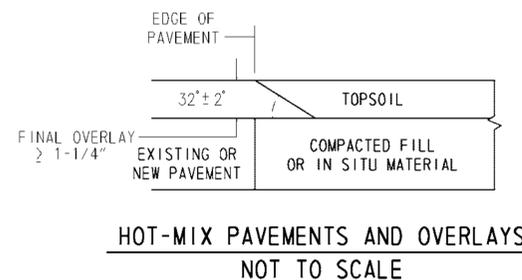
 <b>DELAWARE</b> DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		<b>NOT TO SCALE</b>	<b>BR 2-265B ON SPIDER WEB ROAD OVER WHITE MARSH BRANCH</b>	CONTRACT	BRIDGE NO.	<b>2-265B</b>	<b>NOTES</b>	SHEET NO.
	T201307202	DESIGNED BY: CBB			3				
	COUNTY	CHECKED BY: KRL			TOTAL SHTS.				
	KENT				16				

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



**TYPICAL SECTION**

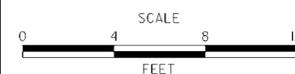
\*MATCH EXISTING CROSS SLOPES



**LEGEND**

- ① ITEM 401800 - BITUMINOUS CONCRETE, SUPERPAVE TYPE C, 115 GYRATIONS, PG 64-22 (CARBONATE STONE)
- ② ITEM 401809 - BITUMINOUS CONCRETE, SUPERPAVE TYPE B, 115 GYRATIONS, PG 64-22
- ③ ITEM 302007 - GRADE AGGREGATE BASE COURSE
- ④ ITEM 908004 - TOPSOIL, 6" DEPTH
- ITEM 908019 - STREAMBANK SEEDMIX, SEEDING

ADDENDUMS / REVISIONS

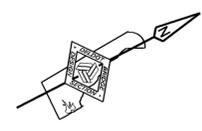


**BR 2-265B ON  
SPIDER WEB ROAD OVER  
WHITE MARSH BRANCH**

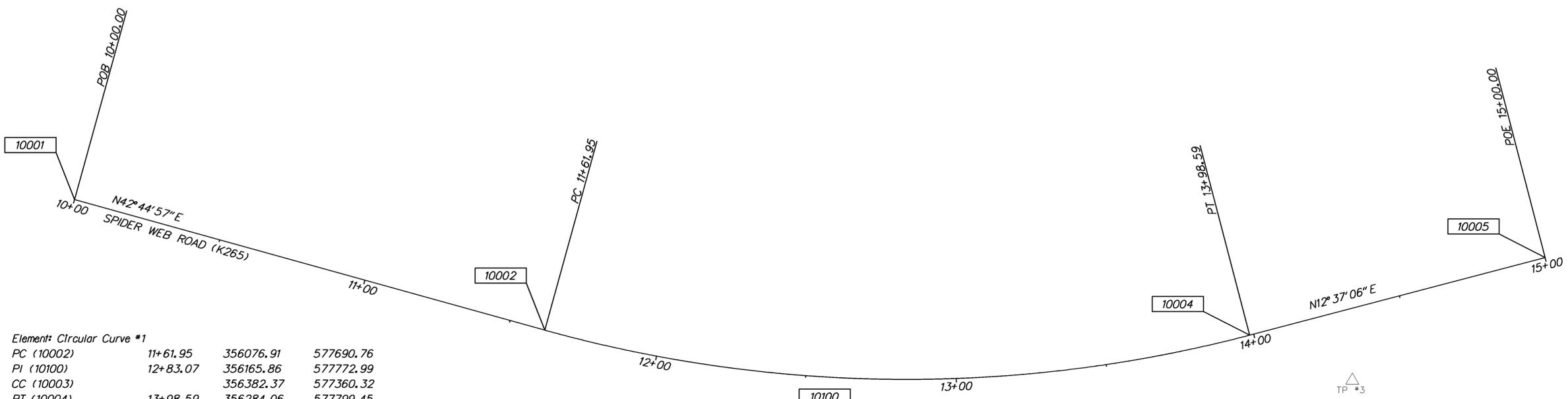
CONTRACT	BRIDGE NO.	<b>2-265B</b>
T201307202	DESIGNED BY:	CBB
COUNTY	CHECKED BY:	KRL
KENT		

**TYPICAL SECTION**

SHEET NO.	4
TOTAL SHTS.	16



TP #7



Element: Circular Curve #1

PC (10002)	11+61.95	356076.91	577690.76
PI (10100)	12+83.07	356165.86	577772.99
CC (10003)		356382.37	577360.32
PT (10004)	13+98.59	356284.06	577799.45
Radius:			450.00
Delta:			30°07'51" Left
Degree of Curvature (Arc):			12°43'57"
Length:			236.65
Tangent:			121.13
Chord:			233.93
Middle Ordinate:			15.47
External:			16.02
Tangent Direction:			N 42°44'57" E
Radial Direction:			S 47°15'03" E
Chord Direction:			N 27°41'01" E
Radial Direction:			S 77°22'54" E
Tangent Direction:			N 12°37'06" E

POINT	STATION	OFFSET	NORTHING	EASTING
10001	10+00.00	0.00	355957.99	577580.84
10005	15+00.00	0.00	356383.02	577821.60

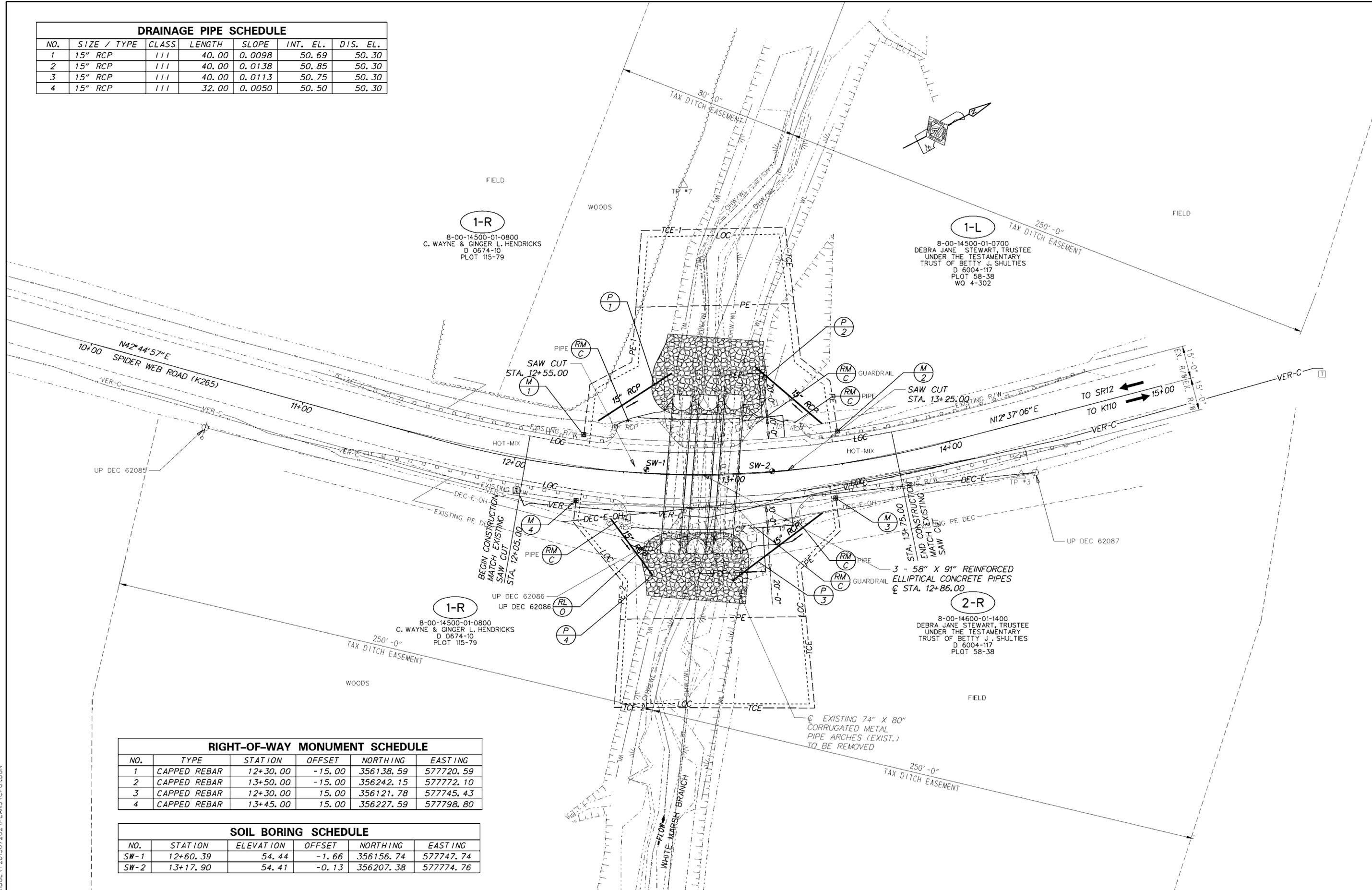
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP #3	14+27.83	23.14	356307.54	577828.42	53.31
TP #7	12+74.57	-131.76	356230.95	577640.23	53.01

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.

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<b>DELAWARE DEPARTMENT OF TRANSPORTATION</b>	ADDENDUMS / REVISIONS	SCALE  FEET	<b>BR 2-265B ON SPIDER WEB ROAD OVER WHITE MARSH BRANCH</b>	CONTRACT T201307202	BRIDGE NO. <b>2-265B</b>	<b>HORIZONTAL AND VERTICAL CONTROL</b>	SHEET NO. 5
				COUNTY KENT	DESIGNED BY: CBB		TOTAL SHTS. 16
				CHECKED BY: KRL			

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	15" RCP	111	40.00	0.0098	50.69	50.30
2	15" RCP	111	40.00	0.0138	50.85	50.30
3	15" RCP	111	40.00	0.0113	50.75	50.30
4	15" RCP	111	32.00	0.0050	50.50	50.30

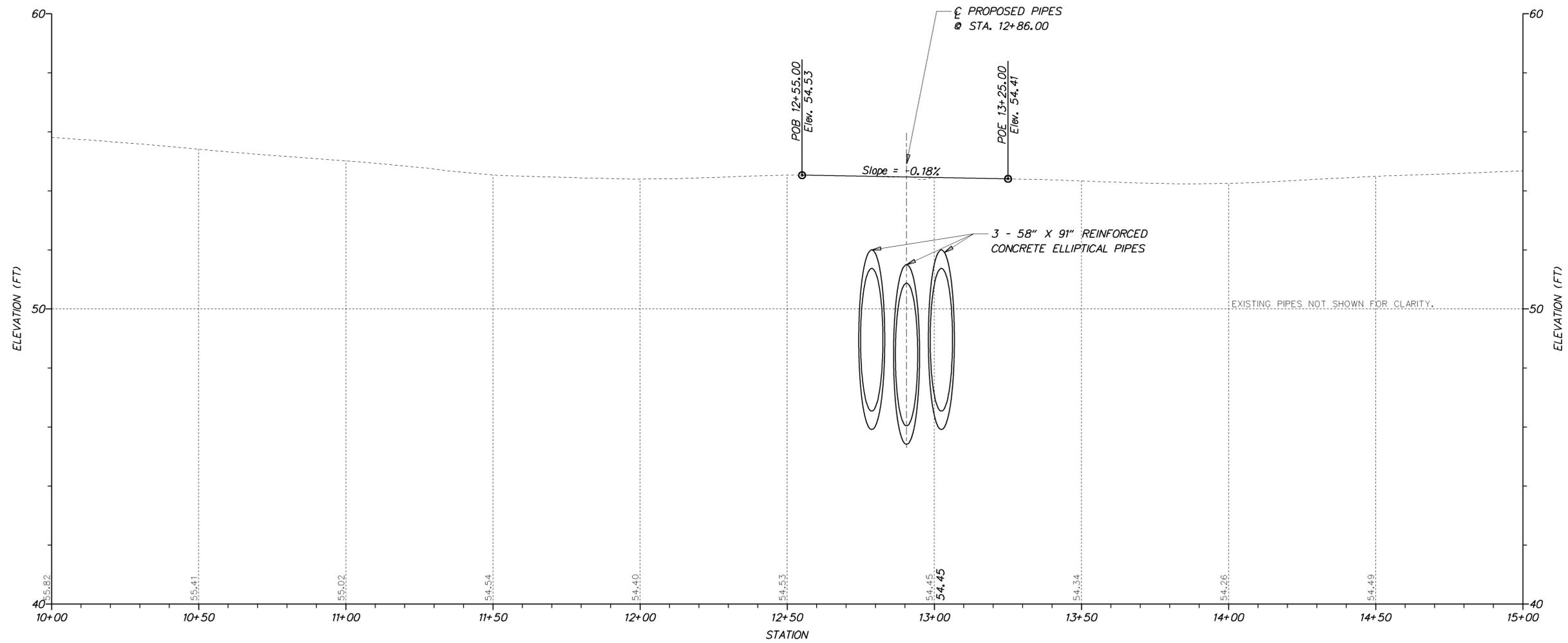


RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CAPPED REBAR	12+30.00	-15.00	356138.59	577720.59
2	CAPPED REBAR	13+50.00	-15.00	356242.15	577772.10
3	CAPPED REBAR	12+30.00	15.00	356121.78	577745.43
4	CAPPED REBAR	13+45.00	15.00	356227.59	577798.80

SOIL BORING SCHEDULE					
NO.	STATION	ELEVATION	OFFSET	NORTHING	EASTING
SW-1	12+60.39	54.44	-1.66	356156.74	577747.74
SW-2	13+17.90	54.41	-0.13	356207.38	577774.76

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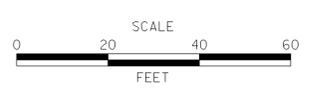
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**SPIDER WEB ROAD (K265)**



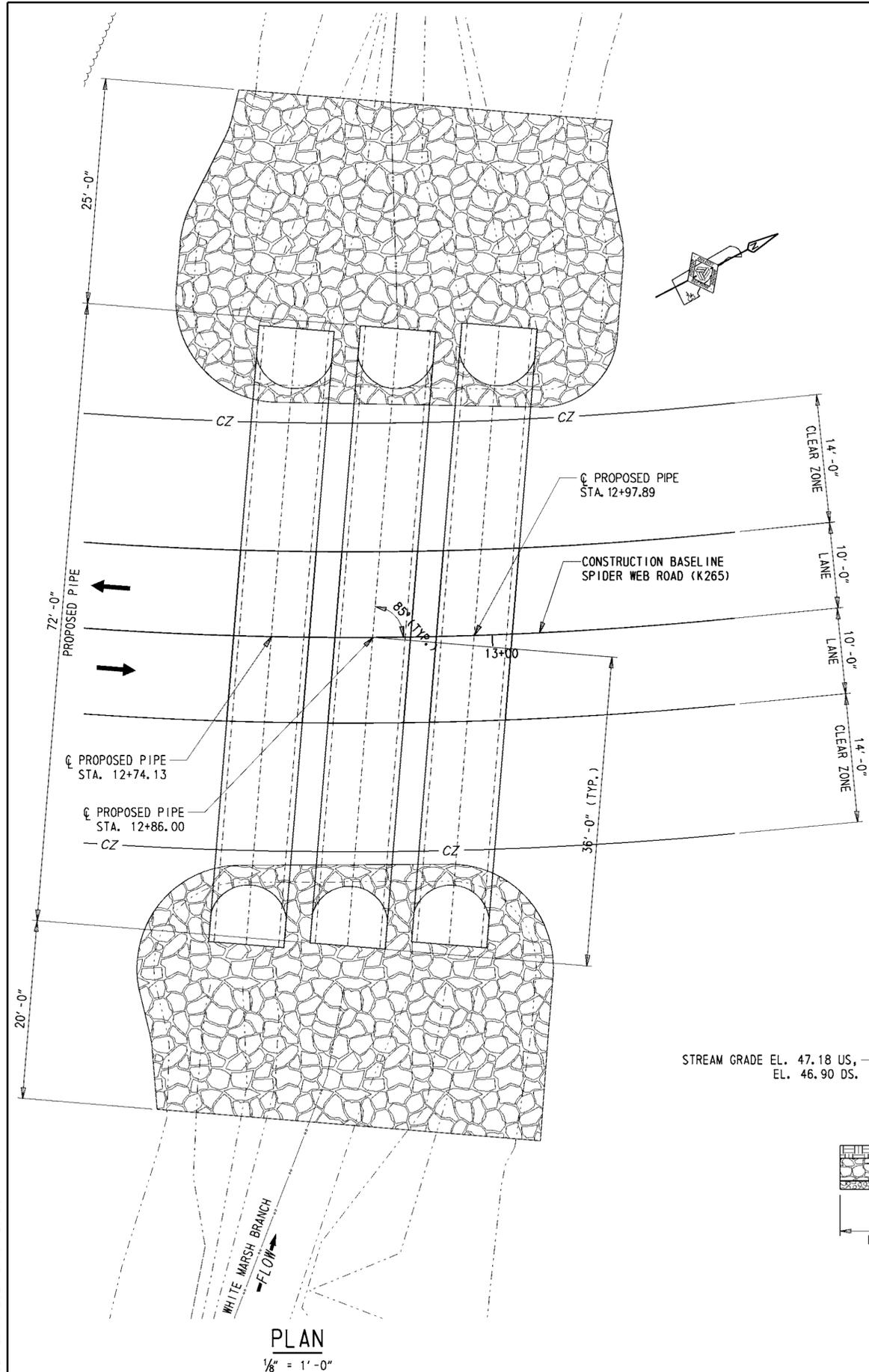
ADDENDUMS / REVISIONS	



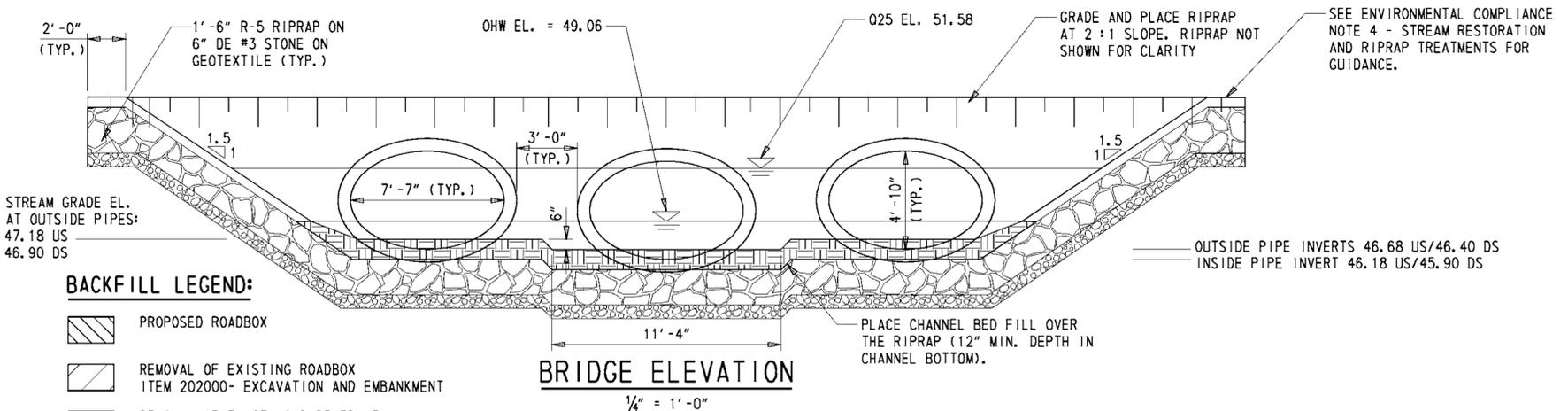
**BR 2-265B ON**  
**SPIDER WEB ROAD OVER**  
**WHITE MARSH BRANCH**

CONTRACT T201307202	BRIDGE NO. <b>2-265B</b>
COUNTY KENT	DESIGNED BY: CBB
	CHECKED BY: KRL

<b>PROFILE</b>	SHEET NO. 7
	TOTAL SHTS. 16

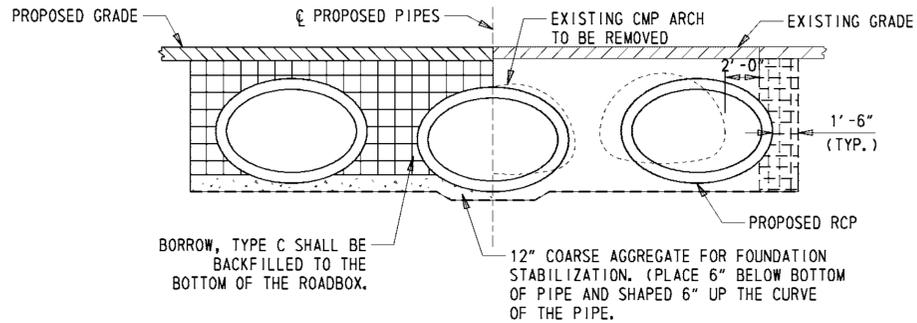


**PLAN**  
1/8" = 1'-0"



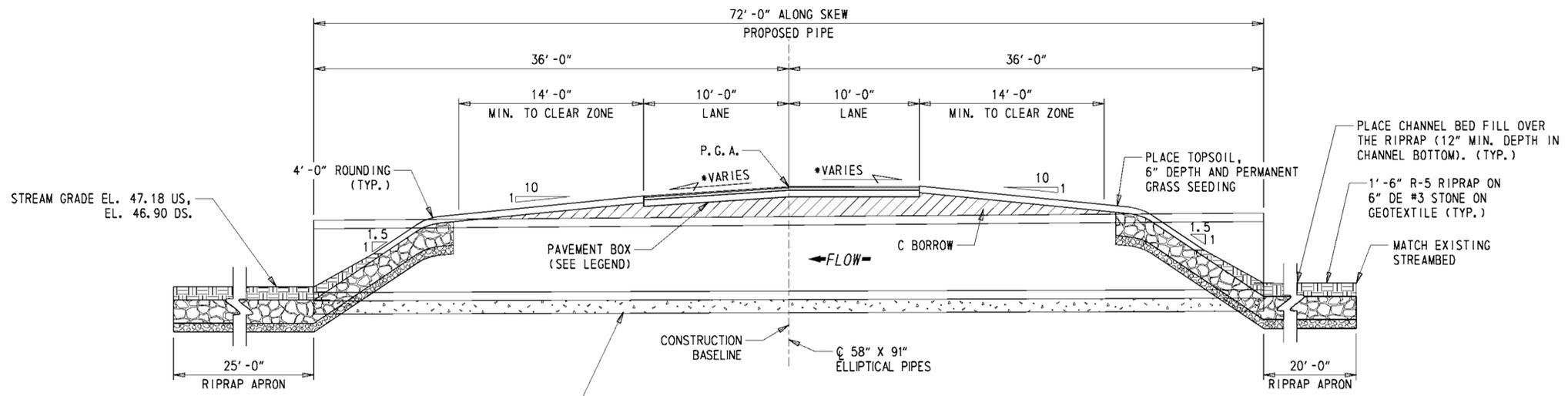
**BRIDGE ELEVATION**  
1/4" = 1'-0"

- BACKFILL LEGEND:**
- PROPOSED ROADBOX
  - REMOVAL OF EXISTING ROADBOX  
ITEM 202000- EXCAVATION AND EMBANKMENT
  - REMOVAL OF EXISTING PIPE/FRA  
ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS
  - EXCAVATION FOR PROPOSED STRUCTURES  
ITEM 207000 - EXCAVATION AND BACKFILL FOR STRUCTURES
  - BACKFILL AROUND PROPOSED STRUCTURES  
ITEM 210000 - FURNISHING BORROW TYPE "C" FOR PIPE, UTILITY TRENCH, AND STRUCTURE BACKFILL  
ITEM 209003 - BORROW TYPE 'C'



**TYPICAL BACKFILL SECTION**  
3/8" = 1'-0"

- NOTES:**
- PROPOSED BRIDGE  
THE EXISTING (3) 74" X 80" CORRUGATED METAL PIPE ARCHES SHALL BE REPLACED WITH (3) 58" X 91" REINFORCED CONCRETE ELLIPTICAL PIPES (72'-0" LONG). THE OUTSIDE PIPES SHALL BE PLACED 6" BELOW THE ESTABLISHED STREAM GRADE. PLACE PIPES WITH A 3'-0" GAP BETWEEN THE OUTER WALLS OF EACH RUN. PLACE 6" COARSE AGGREGATE BEDDING BENEATH PIPES AND 6" SHAPED UP THE CURVE OF EACH PIPE. BORROW, TYPE C SHALL BE BACKFILLED TO THE BOTTOM OF THE ROAD BOX.
  - RIPRAP PLACEMENT
    - UPSTREAM - RIPRAP SHALL BE PLACED IN THE CHANNEL BOTTOM 20'-0" FROM THE PIPE INLET ALONG THE STREAM CENTERLINE AND SHALL BE PLACED TO CREATE A SMOOTH BEND THAT MATCHES THE EXISTING STREAM BANKS.
    - DOWNSTREAM - RIPRAP SHALL BE PLACED IN THE CHANNEL BOTTOM 25'-0" FROM THE PIPE OUTLET ALONG THE STREAM CENTERLINE AND SHALL BE PLACED TO CREATE A SMOOTH BEND THAT MATCHES THE EXISTING STREAM BANKS.



**BRIDGE SECTION**  
3/8" = 1'-0"

BORING: SW-1		DATE DRILLED: 6/19/13	
STATION: 12+60.39		ELEVATION: 54.44	
OFFSET: -1.66		NORTHING: 356156.740	
EASTING: 577747.740		COMMENTS: N/A	
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	DESCRIPTION
1	1.0	6	MOIST MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME SILT AND FINE GRAVEL.
2	2.0	2	WET FIRM GRAY CLAYEY FINE SANDY SILT W/TRACE OF COARSE SAND.
		4	
	4.0	3	
3	4.0	4	WET VERY LOOSE BROWN SILTY FINE SAND W/TRACE OF COARSE SAND.
		2	
	6.0	2	
4	6.0	7	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
		11	
	8.0	10	
5	8.0	5	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
		5	
	10.0	6	
6	14.0	5	WET LOOSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
		5	
	16.0	5	
7	19.0	4	WET LOOSE BROWN FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL AND SILT.
		5	
	21.0	5	
8	24.0	20	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
		7	
	26.0	7	
9	29.0	11	WET MEDIUM DENSE BROWN FINE GRAVELLY COARSE SAND W/SOME FINE SAND, TRACE OF SILT.
		11	
	31.0	13	
10	34.0	30	WET DENSE BROWN COARSE SANDY FINE GRAVEL W/TRACE OF FINE SAND AND SILT.
	36.0	50	
11	39.0	5	SATURATED STIFF GRAY FINE SANDY CLAY W/SOME COARSE SAND AND SILT.
		5	
	41.0	7	
	42.0	8	
U-1	42.0		
	44.0		
12	44.0	5	SATURATED VERY STIFF GRAY COARSE TO FINE SANDY CLAY W/SOME SILT.
		7	
	46.0	16	
13	48.0	5	SATURATED VERY STIFF DARK GRAY CLAYEY FINE SANDY SILT W/TRACE OF COARSE SAND.
		7	
	50.0	10	
		12	END BORING.

BORING: SW-2		DATE DRILLED: 6/19/13	
STATION: 13+17.90		ELEVATION: 54.41	
OFFSET: -0.13		NORTHING: 356207.379	
EASTING: 577774.756		COMMENTS: N/A	
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	DESCRIPTION
1	1.0	6	MOIST MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
	2.0	6	
2	2.0	3	WET LOOSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
		4	
	4.0	4	
3	4.0	4	WET VERY LOOSE BROWN COARSE SAND W/SOME FINE SAND AND FINE GRAVEL, TRACE OF SILT.
		2	
	6.0	2	
4	6.0	3	WET VERY LOOSE BROWN SILTY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL.
		2	
	8.0	2	
5	8.0	5	WET LOOSE GRAY COARSE SAND W/SOME FINE SAND AND FINE GRAVEL, TRACE OF SILT.
		4	
	10.0	3	
6	13.0	5	WET MEDIUM DENSE ORANGE FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
		7	
	15.0	6	
7	18.0	7	WET MEDIUM DENSE ORANGE FINE TO COARSE SAND W/TRACE OF SILT.
		6	
	20.0	7	
8	23.0	9	WET MEDIUM DENSE ORANGE FINE TO COARSE SAND W/TRACE OF SILT AND FINE GRAVEL.
		7	
	25.0	9	
9	28.0	10	WET MEDIUM DENSE ORANGE FINE GRAVELLY COARSE SAND W/TRACE OF FINE SAND AND SILT.
		12	
	30.0	15	
10	33.0	16	WET DENSE ORANGE SILTY FINE GRAVELLY FINE SAND W/SOME COARSE SAND AND CLAY.
		18	
	35.0	21	
11	38.0	19	SATURATED STIFF GRAY COARSE TO FINE SANDY CLAY W/SOME SILT.
		5	
	40.0	5	
	42.0	6	
U-1	42.0	8	
	44.0		
12	44.0	9	SATURATED VERY STIFF GRAY CLAYEY FINE SANDY SILT W/TRACE OF COARSE SAND.
		10	
	46.0	16	
13	48.0	10	SATURATED VERY STIFF GRAY CLAYEY FINE SANDY SILT W/TRACE OF COARSE SAND.
		11	
	50.0	9	
		10	END BORING

NOTES:

- BORING LOGS CREATED BY THE DELAWARE DEPARTMENT OF TRANSPORTATION. SUBSURFACE EXPLORATION COMPLETED BY WALTON CORPORATION.
- REFER TO CONSTRUCTION PLAN SHEET FOR APPROXIMATE BORING LOCATIONS. BORING LOGS ARE LABELED AS SW-1 AND SW-2.
- SOIL SAMPLING: 2 IN. OUTSIDE DIA. SPLIT BARREL SAMPLER, DRIVEN WITH A 140 LB. HAMMER FALLING 30 IN.
- ALL DEPTHS GIVEN ARE IN FEET.

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 <b>DELAWARE DEPARTMENT OF TRANSPORTATION</b>	ADDENDUMS / REVISIONS		NOT TO SCALE	<b>BR 2-265B ON SPIDER WEB ROAD OVER WHITE MARSH BRANCH</b>	CONTRACT	BRIDGE NO.	<b>2-265B</b>	<b>SOIL BORING LOGS</b>	SHEET NO.
	T201307202	DESIGNED BY: CBB			9				
	COUNTY	CHECKED BY: KRL			TOTAL SHTS.				
	KENT				16				

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 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 THESE SHEETS DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.

2. NATURAL RESOURCE ISSUES:

A. PERMIT REQUIREMENTS/APPROVALS\*:

U.S. ARMY CORPS OF ENGINEERS (COE): NWP \*3(a) AND (c) (NO PCN)  
 DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): PROJECT CONSISTENT WITH DEL. CODE CH. 72, SECTION 7217, SPECIAL EXEMPTION (b)  
 DNREC - WATER QUALITY CERTIFICATION (WQC) & COASTAL ZONE CONSISTENCY (CZM): ISSUED (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 - NONE  
 ENDANGERED SPECIES - NONE  
 MIGRATORY BIRDS - NONE

3. CULTURAL RESOURCE ISSUES:

A. PROJECT WAS CONSISTENT WITH THE DELDOT CULTURAL RESOURCES PROGRAMMATIC AGREEMENT (STIP. II.B.4.a). NO CULTURAL RESOURCE IMPACTS BASED ON CURRENT PLANS.

4. STREAM RESTORATION AND RIPRAP 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. ALL RIPRAP IN THE CHANNEL BOTTOM (I.E. BELOW THE WATER LINE) SHALL BE RECESSED ONE FOOT BELOW STREAM BED ELEVATION AND CHOKED WITH BORROW TYPE 'B' SO THAT ALL OF THE VOIDS IN THE RIPRAP ARE FILLED WITH MATERIAL. PAYMENT UNDER ITEM \*209002 BORROW TYPE 'B'. THE RIPRAP SHALL THEN BE COVERED WITH A MINIMUM OF 12" 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 RIPRAP (I.E. THE FLOW CANNOT BE "LOST" IN THE RIPRAP OR BENEATH THE STRUCTURE). IF THIS IS NOT ACHIEVED, THE CONTRACTOR WILL BE REQUIRED TO TAKE CORRECTIVE ACTION AT THE CONTRACTOR'S EXPENSE.
- D. ALL RIPRAP ON THE STREAM BANK, OUTSIDE THE CHANNEL BED, SHALL BE CHOKED WITH DELAWARE \*57 STONE, FILLED WITH TOPSOIL, AND SEEDED. PLACE JUST ENOUGH CHOKE MATERIAL TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP, AND THEN FINISH FILLING THE VOIDS WITH TOPSOIL SO THAT THE RIPRAP PEAKS ARE BARELY VISIBLE. AN ADDITIONAL 4-INCH TOPSOIL LAYER SHALL BE PLACED ON TOP OF THE RIPRAP. SLOPE SEEDING SHALL BE WITH ITEM \*908019 STREAMBANK SEED MIX, SEEDING. FOLLOWING THE SEEDING OPERATION, ITEM \*908020 EROSION CONTROL BLANKET MULCH, OR OTHER BLANKET AS SHOWN ON THE PLANS SHALL BE INSTALLED. ALL WORK, STARTING WITH THE INITIAL CHOKING WITH TOPSOIL THROUGH THE SEEDING SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. PAYMENT FOR DELAWARE \*57 STONE SHALL BE INCIDENTAL TO THE RIPRAP ITEM. ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.
- E. THE TOPSOIL/SEED/MULCH CAN BE PLACED BEFORE OR AFTER THE REMOVAL OF THE STREAM DIVERSION. IF IT OCCURS AFTER STREAM DIVERSION REMOVAL, A TURBIDITY CURTAIN SHALL BE USED TO MINIMIZE IN-STREAM SEDIMENTATION. PAYMENT SHALL BE INCIDENTAL TO ITEM \*909005 STREAM DIVERSION.

5. PROTECTION OF RESOURCES:

- A. CLEARING IN WETLAND AREAS SHALL BE KEPT TO A MINIMUM ABSOLUTELY NECESSARY FOR CONSTRUCTION ACCESS. IN WETLAND AREAS THAT ARE CLEARED, THERE SHALL BE NO GRUBBING EXCEPT WHERE NECESSARY TO CONSTRUCT PROJECT COMPONENTS SUCH AS FOUNDATIONS AND RIPRAP PROTECTION. 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 TEMPORARY GRASS SEEDING (PAYMENT UNDER ITEM \*908017).
- B. SILT FENCE INSTALLATION ADJACENT TO WOODED UPLANDS/WETLANDS: SANDBAGS SHALL BE USED TO SECURE SILT FENCE IN LIEU OF TRENCHING UNLESS PROPER SEDIMENT CONTROL CANNOT BE MAINTAINED. SANDBAGS USED TO SECURE SILT FENCE SHALL BE INCIDENTAL TO ITEM \*905001 - SILT FENCE. THE ENVIRONMENTAL STUDIES SECTION (CAROL SULLIVAN, 302-760-2129) CAN PROVIDE FURTHER GUIDANCE REGARDING THIS METHOD OF INSTALLATION.

6. PLANTING GUIDANCE

(INFORMATIONAL ONLY. WORK TO BE DONE BY OTHERS. THERE SHALL BE NO PAYMENT FOR PLANTING ON THIS CONTRACT.) UPON FINAL ACCEPTANCE OF THE CONTRACT, APPROPRIATE TREES AND/OR SHRUBS SHALL BE PLANTED IN A NATURALIZED PATTERN (MINIMUM 8', MAXIMUM 12' CENTERS) IN TEMPORARILY DISTURBED WOODED WETLAND AREAS WITHIN THE LOC. FINAL PLANT COUNTS WILL BE BASED ON FIELD CONDITIONS AND DETERMINED BY THE ROADSIDE ENVIRONMENTAL ADMINISTRATOR OR HIS DESIGNEE. SPECIFIC PLANT SELECTION IS ALSO AT HIS DISCRETION BUT SHALL BE A NATIVE SPECIES APPROVED BY THE DELAWARE DEPARTMENT OF NATURAL RESOURCES.

ADDENDUMS / REVISIONS

NOT TO SCALE

**BR 2-265B ON  
 SPIDER WEB ROAD OVER  
 WHITE MARSH BRANCH**

CONTRACT	BRIDGE NO.	<b>2-265B</b>
T201307202	DESIGNED BY: CBB	
COUNTY	CHECKED BY: KRL	
KENT		

**ENVIRONMENTAL NOTES**

SHEET NO.	10
TOTAL SHTS.	16



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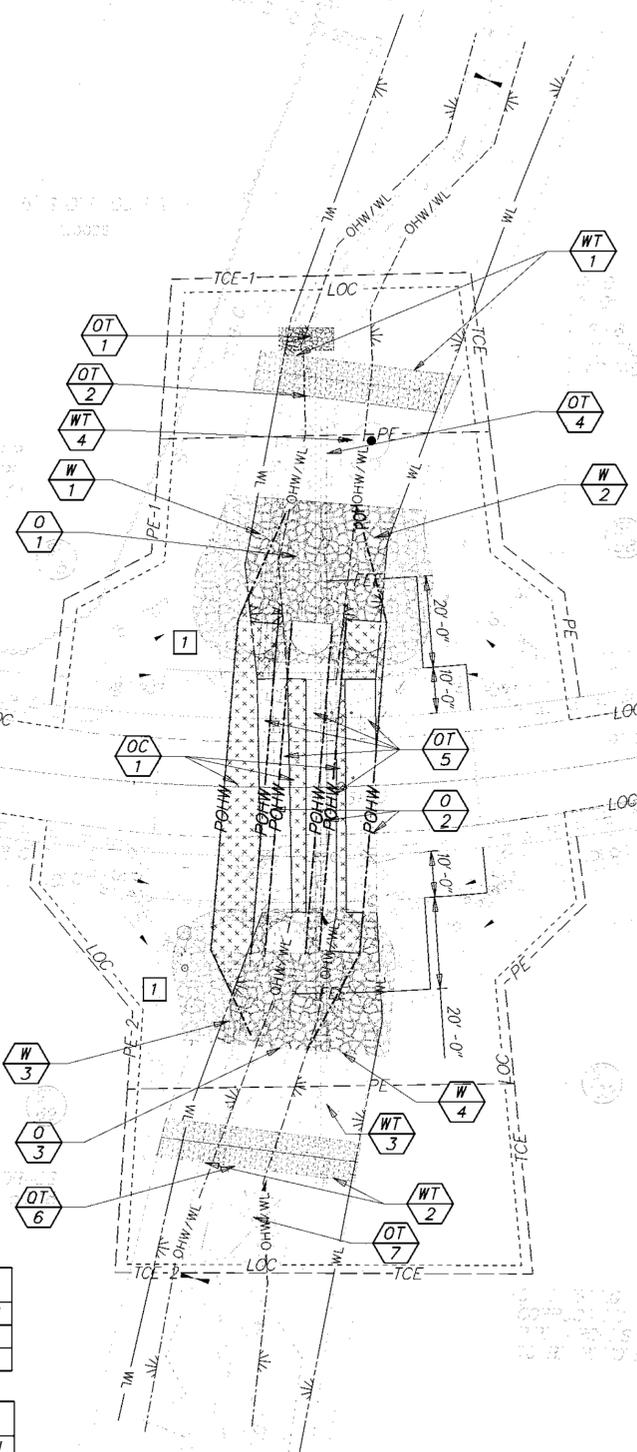
PROJECT AREA DELINEATED BY KEN DUNNE, DELDOT, ON 06/26/13, IN ACCORDANCE WITH THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE ATLANTIC AND GULF COAST REGIONAL SUPPLEMENT (2010)

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
WT-1	DOWNSTREAM SANDBAGS	179.11	0.0041	N/A	COE
WT-2	UPSTREAM SANDBAGS	222.69	0.0051	N/A	COE
WT-3	TEMPORARY DIVERSION PIPE	50.45	0.0012	N/A	COE
WT-4	SUMP PIT	50.27	0.0012	4.02	DNREC/COE
TOTAL PERMANENT WETLAND IMPACT AREAS		502.52	0.0116	4.02	DNREC/COE

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
W-1	DOWNSTREAM RIPRAP	280.97	0.0065	N/A	COE
W-2	DOWNSTREAM RIPRAP	310.63	0.0071	N/A	COE
W-3	UPSTREAM RIPRAP	243.05	0.0056	N/A	COE
W-4	UPSTREAM RIPRAP	376.39	0.0086	N/A	COE
TOTAL PERMANENT WETLAND IMPACT AREAS		1211.04	0.0278	N/A	COE

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

SHEET PREPARED BY BRYCE BAKER, (06/26/14), DELAWARE D.O.T. BRIDGE DESIGN SECTION



OPEN WATER CREATION AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OC-1	PROPOSED PIPES	1076.16	0.0247	86.09	DNREC/COE
TOTAL OPEN WATER CREATION AREAS		1076.16	0.0247	86.09	DNREC/COE

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OT-1	RIPRAP OUTFALL	25.00	0.0006	2.00	DNREC/COE
OT-2	DOWNSTREAM SANDBAGS	123.99	0.0028	9.92	DNREC/COE
OT-3	TEMPORARY DIVERSION PIPE	61.37	0.0014	4.91	DNREC/COE
OT-4	EXISTING TO PROPOSED PIPE	809.65	0.0186	64.77	DNREC/COE
OT-5	UPSTREAM SANDBAGS	103.08	0.0024	8.25	DNREC/COE
OT-6	STILLING WELL	120.00	0.0028	9.60	DNREC/COE
TOTAL TEMPORARY OPEN WATER IMPACTS		1243.09	0.0285	99.45	DNREC/COE

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
O-1	DOWNSTREAM RIPRAP	423.54	0.0097	33.88	DNREC/COE
O-2	EX. PIPES TO FILL	338.99	0.0078	27.12	DNREC/COE
O-3	UPSTREAM RIPRAP	249.21	0.0057	19.94	DNREC/COE
TOTAL PERMANENT OPEN WATER IMPACTS		1011.74	0.0232	80.94	DNREC/COE

ADDENDUMS / REVISIONS



**BR 2-265B ON  
SPIDER WEB ROAD OVER  
WHITE MARSH BRANCH**

CONTRACT	BRIDGE NO.	<b>2-265B</b>
T201307202	DESIGNED BY:	CBB
COUNTY	CHECKED BY:	KRL
KENT		

**ENVIRONMENTAL  
COMPLIANCE PLAN**

SHEET NO.	11
TOTAL SHTS.	16

**DELAWARE  
DEPARTMENT OF TRANSPORTATION**

Y:\KENT\265\BRIDGE\T201307202\PLANS\CP01.DGN

# SEQUENCE OF CONSTRUCTION:

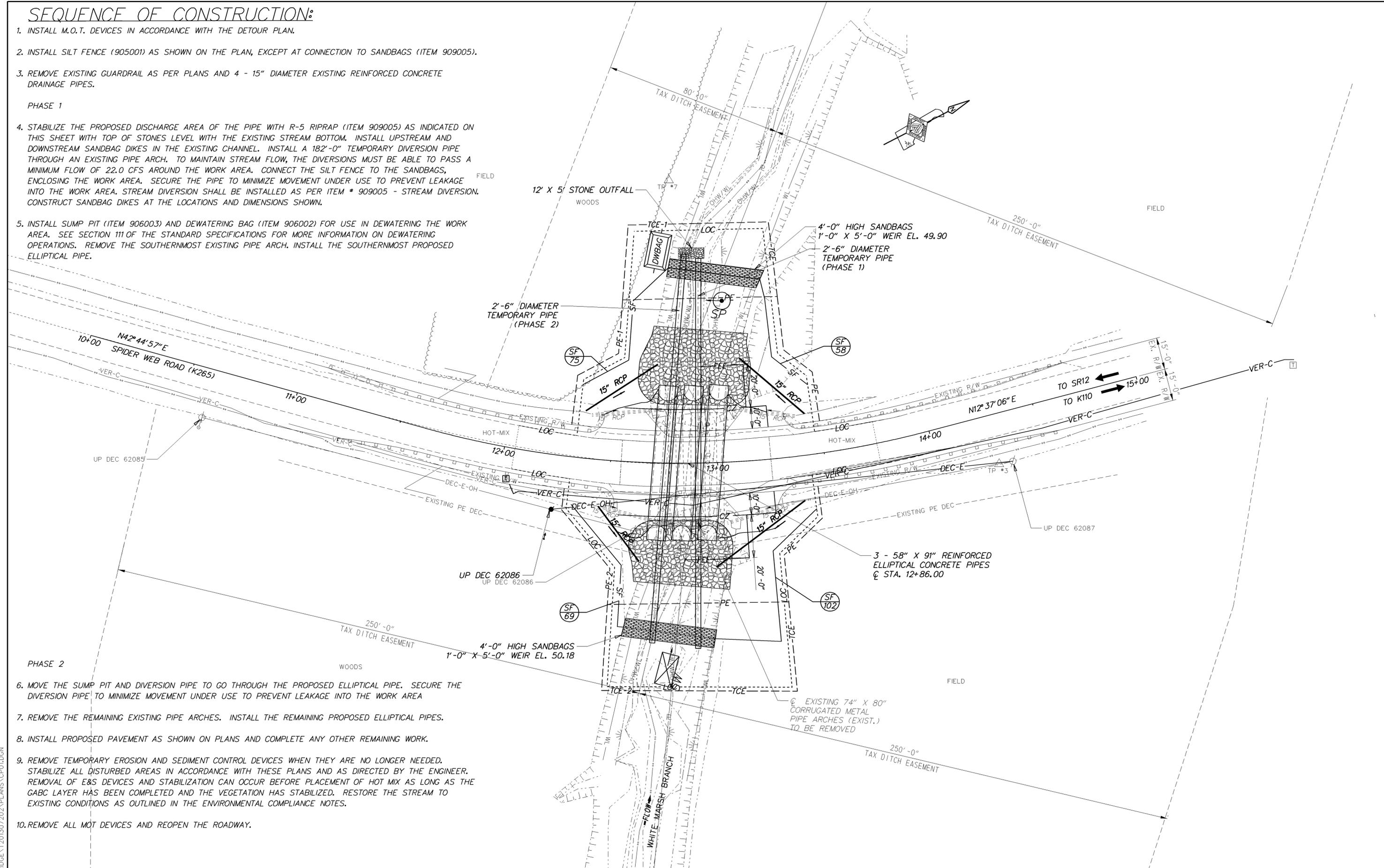
1. INSTALL M.O.T. DEVICES IN ACCORDANCE WITH THE DETOUR PLAN.
2. INSTALL SILT FENCE (905001) AS SHOWN ON THE PLAN, EXCEPT AT CONNECTION TO SANDBAGS (ITEM 909005).
3. REMOVE EXISTING GUARDRAIL AS PER PLANS AND 4 - 15" DIAMETER EXISTING REINFORCED CONCRETE DRAINAGE PIPES.

## PHASE 1

4. STABILIZE THE PROPOSED DISCHARGE AREA OF THE PIPE WITH R-5 RIPRAP (ITEM 909005) AS INDICATED ON THIS SHEET WITH TOP OF STONES LEVEL WITH THE EXISTING STREAM BOTTOM. INSTALL UPSTREAM AND DOWNSTREAM SANDBAG DIKES IN THE EXISTING CHANNEL. INSTALL A 182'-0" TEMPORARY DIVERSION PIPE THROUGH AN EXISTING PIPE ARCH. TO MAINTAIN STREAM FLOW, THE DIVERSIONS MUST BE ABLE TO PASS A MINIMUM FLOW OF 22.0 CFS AROUND THE WORK AREA. CONNECT THE SILT FENCE TO THE SANDBAGS, ENCLOSING THE WORK AREA. SECURE THE PIPE TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA. STREAM DIVERSION SHALL BE INSTALLED AS PER ITEM # 909005 - STREAM DIVERSION. CONSTRUCT SANDBAG DIKES AT THE LOCATIONS AND DIMENSIONS SHOWN.
5. INSTALL SUMP PIT (ITEM 906003) AND DEWATERING BAG (ITEM 906002) FOR USE IN DEWATERING THE WORK AREA. SEE SECTION 111 OF THE STANDARD SPECIFICATIONS FOR MORE INFORMATION ON DEWATERING OPERATIONS. REMOVE THE SOUTHERNMOST EXISTING PIPE ARCH. INSTALL THE SOUTHERNMOST PROPOSED ELLIPTICAL PIPE.

## PHASE 2

6. MOVE THE SUMP PIT AND DIVERSION PIPE TO GO THROUGH THE PROPOSED ELLIPTICAL PIPE. SECURE THE DIVERSION PIPE TO MINIMIZE MOVEMENT UNDER USE TO PREVENT LEAKAGE INTO THE WORK AREA
7. REMOVE THE REMAINING EXISTING PIPE ARCHES. INSTALL THE REMAINING PROPOSED ELLIPTICAL PIPES.
8. INSTALL PROPOSED PAVEMENT AS SHOWN ON PLANS AND COMPLETE ANY OTHER REMAINING WORK.
9. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES WHEN THEY ARE NO LONGER NEEDED. STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THESE PLANS AND AS DIRECTED BY THE ENGINEER. REMOVAL OF E&S DEVICES AND STABILIZATION CAN OCCUR BEFORE PLACEMENT OF HOT MIX AS LONG AS THE GABC LAYER HAS BEEN COMPLETED AND THE VEGETATION HAS STABILIZED. RESTORE THE STREAM TO EXISTING CONDITIONS AS OUTLINED IN THE ENVIRONMENTAL COMPLIANCE NOTES.
10. REMOVE ALL MOT DEVICES AND REOPEN THE ROADWAY.



Y:\KENT\265\BRIDGE\T201307202\PLANS\CP01.DGN

**PORTABLE CHANGEABLE MESSAGE SIGNS**

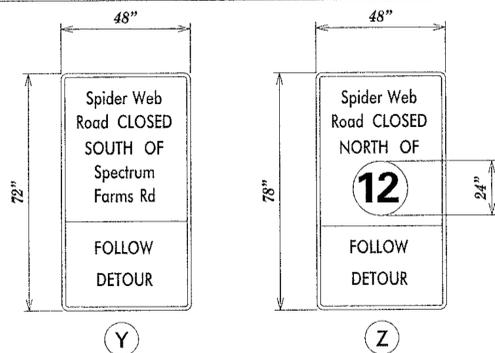
PRIOR TO DETOUR  
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

**SPIDER  
WEB  
ROAD**

**TO CLOSE  
STARTING  
XX/XX/XX**

**SPECIAL SIGNS**



**\*D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**

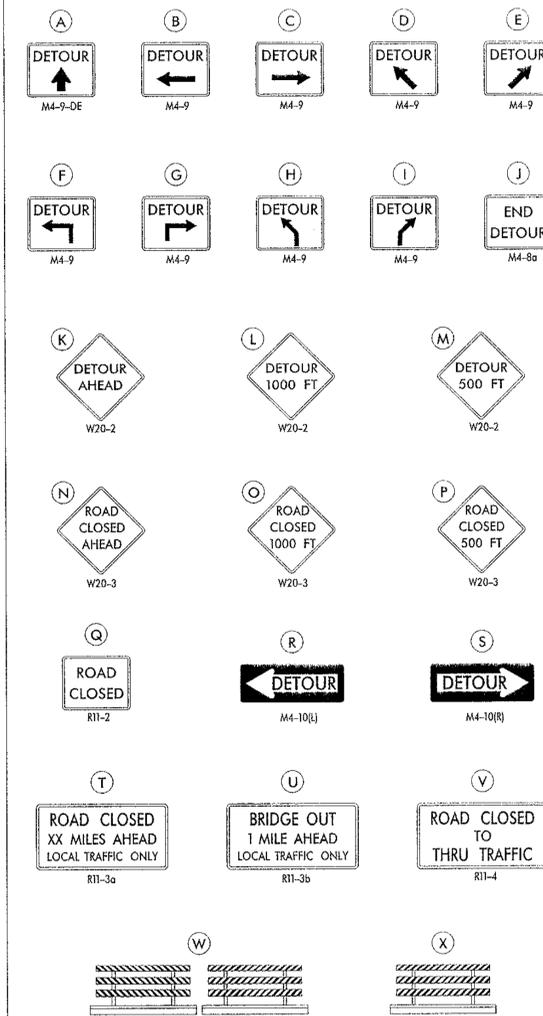
**12** —> **WHITE BACKGROUND; BLACK LEGEND**



**WHITE BACKGROUND; BLACK LEGEND**



**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.
- 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.

C:\DOCUMENTS AND SETTINGS\MICHAEL.RIVERA\MY DOCUMENTS\MICRO STATION DGN\SPIDER WEB RD (K265) BR 2-265B.DGN

RECOMMENDED *Mark* DATE: 6-4-13

RECOMMENDED *John* DATE: 06/04/13

RECOMMENDED \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED CHIEF SAFETY OFFICER *Michael Rivera* DATE: 6-5-13

APPROVED TRAFFIC ENGINEER *John* DATE: 6/7/13



NOT TO SCALE

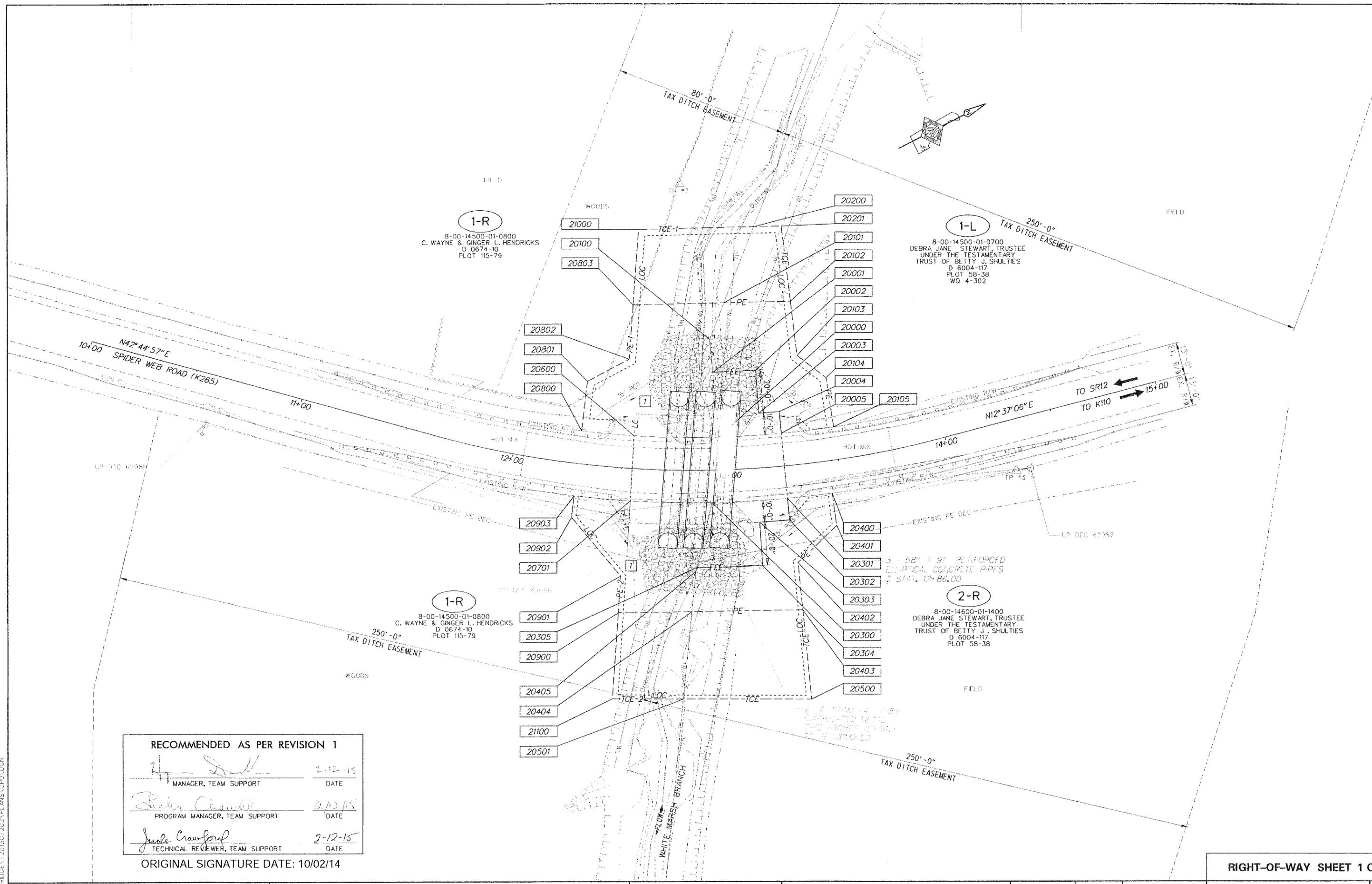
**SPIDER WEB RD ON  
BR 2-265B OVER  
WHITE MARSH BRANCH**

CONTRACT	ROAD NO.
T201307202	K265
COUNTY	DESIGNED BY: MFR
KENT	CHECKED BY: ASW

**VEHICULAR DETOUR PLAN  
SPIDER WEB RD**

SHEET NO.	13
TOTAL SHTS.	16

PLANET 265B BRIDGE I 201307202 VPLANS.CPO1.DGN



**1-R**  
 8-00-14500-01-0800  
 C. WAYNE & GINGER L. HENDRICKS  
 D 0674-10  
 PLOT 115-79

**1-L**  
 8-00-14500-01-0700  
 DEBRA JANE STEWART, TRUSTEE  
 UNDER THE TESTAMENTARY  
 TRUST OF BETTY J. SHULTIES  
 D 6004-117  
 PLOT 58-38  
 WQ 4-302

**1-R**  
 8-00-14500-01-0800  
 C. WAYNE & GINGER L. HENDRICKS  
 D 0674-10  
 PLOT 115-79

**2-R**  
 8-00-14600-01-1400  
 DEBRA JANE STEWART, TRUSTEE  
 UNDER THE TESTAMENTARY  
 TRUST OF BETTY J. SHULTIES  
 D 6004-117  
 PLOT 58-38

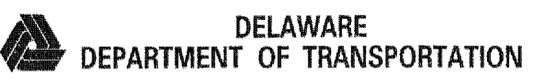
**RECOMMENDED AS PER REVISION 1**

*[Signature]* 2-12-15  
 MANAGER, TEAM SUPPORT DATE

*[Signature]* 2/12/15  
 PROGRAM MANAGER, TEAM SUPPORT DATE

*[Signature]* 2-12-15  
 TECHNICAL REVIEWER, TEAM SUPPORT DATE

ORIGINAL SIGNATURE DATE: 10/02/14



ADDENDUMS / REVISIONS	
7	MODIFICATION TO PARCEL 1-R DUE TO FEDERALLY FUNDED PRESERVATION EASEMENT CONVERTED FEE ACQUISITION TO PE
	CBB 1/20/15



**BR 2-265B ON SPIDER WEB ROAD OVER WHITE MARSH BRANCH**

CONTRACT	BRIDGE NO.	<b>2-265B</b>
T201307202	DESIGNED BY:	CBB
COUNTY	CHECKED BY:	KPL
KENT		

<b>RIGHT-OF-WAY SHEET 1 OF 3</b>	
<b>RIGHT-OF-WAY PLAN</b>	SHEET NO. 14
	TOTAL SHTS. 16

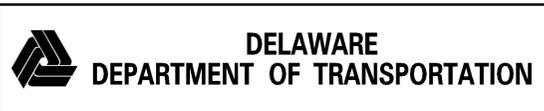
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14500-01-0700	(1-L) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES					FEE	D 6004-117	122.787			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20000	10000	12+95.28	-15.00	356193.2269	577752.0435	N 67°51'04.63" W	30.06				
20001	10000	12+93.17	-45.00	356204.5616	577724.1975	N 24°39'06.06" E	19.65	19.65			-405.00
20002	10000	13+15.00	-45.00	356222.4192	577732.3928	S 66°44'17.84" E	20.00				
20003	10000	13+15.00	-25.00	356214.5206	577750.7670	N 22°37'30.33" E	9.44	9.44			-425.00
20004	10000	13+25.00	-25.00	356223.2380	577754.4002	S 68°00'41.51" E	10.00				
20005	10000	13+25.00	-15.00	356219.4938	577763.6728	S 23°52'50.30" W	28.73	28.73			435.00
20000	10000	12+95.28	-15.00	356193.2269	577752.0435						
FIGURE 20000 AREA = 676.2787 SQ. FT. (0.0155 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14500-01-0700	(1-L) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES					P/E	D 6004-117	122.787			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20001	10000	12+93.17	-45.00	356204.5616	577724.1975	N 67°51'04.63" W	15.07				
20100	10000	12+91.99	-60.04	356210.2437	577710.2381	N 41°31'02.96" W	18.08				
20101	10000	13+00.25	-76.70	356223.7811	577698.2538	N 26°00'33.49" E	30.46				
20102	10000	13+36.84	-75.00	356251.1562	577711.6110	S 69°31'08.97" E	25.00				
20103	10000	13+36.84	-50.00	356242.4088	577735.0308	N 64°52'55.71" E	16.90				
20104	10000	13+50.03	-38.00	356249.5817	577750.3307	S 71°09'18.66" E	23.00				
20105	10000	13+50.01	-15.00	356242.1525	577772.0978	S 20°23'46.36" W	24.17	24.18			435.00
20005	10000	13+25.00	-15.00	356219.4938	577763.6728	N 68°00'41.51" W	10.00				
20004	10000	13+25.00	-25.00	356223.2380	577754.4002	S 22°37'30.33" W	9.44	9.44			425.00
20003	10000	13+15.00	-25.00	356214.5206	577750.7670	N 66°44'17.84" W	20.00				
20002	10000	13+15.00	-45.00	356222.4192	577732.3928	S 24°39'06.06" W	19.65	19.65			405.00
20001	10000	12+93.17	-45.00	356204.5616	577724.1975						
FIGURE 20100 AREA = 2019.1231 SQ. FT. (0.0464 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14500-01-0700	(1-L) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES					TCE	D 6004-117	122.787			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20101	10000	13+00.25	-76.70	356223.7811	577698.2538	N 41°31'02.96" W	37.70				
20200	10000	13+20.09	-110.99	356252.0093	577673.2643	N 26°00'33.49" E	12.68				
20201	10000	13+36.84	-110.00	356263.4025	577678.8234	S 69°31'08.97" E	35.00				
20102	10000	13+36.84	-75.00	356251.1562	577711.6110	S 26°00'33.49" W	30.46				
20101	10000	13+00.25	-76.70	356223.7811	577698.2538						
FIGURE 20200 AREA = 751.3865 SQ. FT. (0.0172 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14600-01-1400	(2-R) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES					FEE	D 6004-117	22.085			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20300	10000	12+91.44	15.00	356176.6217	577777.3211	N 24°07'29.17" E	34.67	34.68			-465.00
20301	10000	13+25.00	15.00	356208.2612	577791.4906	S 68°00'41.51" E	10.00				
20302	10000	13+25.00	25.00	356204.5170	577800.7632	S 22°48'57.87" W	13.72	13.72			475.00
20303	10000	13+12.00	25.00	356191.8689	577795.4422	S 66°21'22.74" E	20.00				
20304	10000	13+12.00	45.00	356183.8480	577813.7634	S 25°23'40.00" W	30.25	30.25			495.00
20305	10000	12+84.14	45.00	356156.5241	577800.7923	N 49°25'39.91" W	30.90				
20300	10000	12+91.44	15.00	356176.6217	577777.3211						
FIGURE 20300 AREA = 908.2458 SQ. FT. (0.0209 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14600-01-1400	(2-R) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES					P/E	D 6004-117	22.085			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20301	10000	13+25.00	15.00	356208.2612	577791.4906	N 20°42'54.83" E	20.66	20.67			-465.00
20400	10000	13+45.00	15.00	356227.5902	577798.8003	S 70°33'28.88" E	15.00				
20401	10000	13+45.00	30.00	356222.5974	577812.9450	S 16°43'23.99" E	24.74				
20402	10000	13+26.84	45.00	356198.9078	577820.0627	S 68°14'45.29" E	22.00				
20403	10000	13+26.84	67.00	356190.7541	577840.4959	S 26°27'17.79" W	50.84				
20404	10000	12+82.53	65.33	356145.2392	577817.8477	N 57°08'34.99" W	18.78				
20405	10000	12+84.14	46.64	356155.4276	577802.0730	N 49°25'39.91" W	1.69				
20305	10000	12+84.50	45.00	356156.5241	577800.7923	N 25°23'40.00" E	30.25	30.25			-495.00
20304	10000	13+12.00	45.00	356183.8480	577813.7634	N 66°21'22.74" W	20.00				
20303	10000	13+12.00	25.00	356191.8689	577795.4422	N 22°48'57.87" E	13.72	13.72			-475.00
20302	10000	13+25.00	25.00	356204.5170	577800.7632	N 68°00'41.51" W	10.00				
20301	10000	13+25.00	15.00	356208.2612	577791.4906						
FIGURE 20400 AREA = 1781.7399 SQ. FT. (0.0409 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14600-01-1400	(2-R) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES					TCE	D 6004-117	22.085			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20404	10000	12+82.53	65.33	356145.2392	577817.8477	N 26°27'17.79" E	50.84				
20403	10000	13+26.84	67.00	356190.7541	577840.4959	S 68°14'45.29" E	41.78				
20500	10000	13+26.84	108.78	356175.2681	577879.3038	S 27°27'48.24" W	58.83				
20501	10000	12+79.38	106.02	356123.0696	577852.1733	N 57°08'34.99" W	40.86				
20404	10000	12+82.53	65.33	356145.2392	577817.8477						
FIGURE 20500 AREA = 2255.1406 SQ. FT. (0.0518 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14500-01-0800	(1-R) C. WAYNE & GINGER L. HENDRICKS					P/E-1	D 0674-10	110.000			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20101	10000	13+00.25	-76.70	356223.7811	577698.2538	S 41°31'02.96" E	18.08				
20100	10000	12+91.99	-60.04	356210.2437	577710.2381	S 67°51'04.63" E	45.14				
20000	10000	12+95.28	-15.00	356193.2269	577752.0435	S 28°20'13.11" W	38.92	38.94			435.00
20600	10000	12+55.00	-15.00	356158.9686	577733.5688	S 32°29'33.70" W	24.16				
20800	10000	12+30.00	-15.00	356138.5876	577720.5884	N 55°54'56.72" W	23.00				
20801	10000	12+30.00	-38.00	356151.4771	577701.5394	N 0°48'34.40" W	21.67				
20802	10000	12+50.00	-50.00	356173.1423	577701.2333	N 58°27'44.04" W	25.00				
20803	10000	12+50.00	-75.00	356186.2188	577679.9259	N 26°00'33.49" E	41.80				
20101	10000	13+00.25	-76.70	356223.7811	577698.2538						
FIGURE 20600 AREA = 2977.4086 SQ. FT. (0.0684 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14500-01-0800	(1-R) C. WAYNE & GINGER L. HENDRICKS					P/E-2	D 0674-10	110.000			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20404	10000	12+82.53	65.33	356145.2392	577817.8477	S 26°27'17.79" W	33.90				
20900	10000	12+53.00	67.00	356114.8878	577802.7449	N 58°50'39.14" W	17.00				
20901	10000	12+53.00	50.00	356123.6830	577788.1969	S 77°42'34.07" W	35.29				
20902	10000	12+30.00	25.00	356116.1711	577753.7169	N 55°54'56.72" W	10.00				
20903	10000	12+30.00	15.00	356121.7753	577745.4348	N 32°29'33.70" E	25.83				
20701	10000	12+55.00	15.00	356143.5618	577759.3105	N 28°34'51.99" E	37.65	37.66			-465.00
20300	10000	12+91.44	15.00	356176.6217	577777.3211	S 49°25'39.91" E	32.59				
20405	10000	12+84.14	46.64	356155.4276	577802.0730	S 57°08'34.99" E	18.78				
20404	10000	12+82.53	65.33	356145.2392	577817.8477						
FIGURE 20700 AREA = 2375.4194 SQ. FT. (0.0545 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
8-00-14500-01-0800	(1-R) C. WAYNE & GINGER L. HENDRICKS					TCE-1	D 0674-10	110.000			
ALIGNMENT NUMBER & DESCRIPTION: 10000 - PROPOSED CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE				

COUNTY ASSESSMENT PARCEL NUMBER	PLAN SHEET NUMBER	OWNERSHIP OF RECORD	TITLE SOURCE	PROPERTY AREA BEFORE ACQUISITION (ACRE)  D=DEED C=CALCULATED A=ASSESSMENT	ACQUISITION CODE  FEE, R/W, P/E, TCE	AREA TO BE ACQUIRED				PROPERTY AREA REMAINING (SQ. FEET /ACRES)	DEED RECORD OF ACQUISITION	REMARKS
						ACQUISITION (SQ. FEET /ACRES)	AREA OCCUPIED BY EXISTING RIGHT OF WAY (SQ. FEET /ACRES)	EASEMENT				
								PERMANENT (SQ. FEET /ACRES)	TEMPORARY (SQ. FEET /ACRES)			
8-00-14500-01-0700	6	(1-L) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES	D 6004-117	D - 122.787	FEE P/E TCE	676,2787 / 0.02		2019,1231 / 0.05	751,3865 / 0.02	5347925,4410 / 122.77		
8-00-14600-01-1400	6	(2-R) DEBRA JANE STEWART, TRUSTEE UNDER THE TESTAMENTARY TRUST OF BETTY J. SHULTIES	D 6004-117	D - 22.09	FEE P/E TCE	908,2458 / 0.02		1781,7399 / 0.04	2255,1406 / 0.05	961114,7542 / 22.06		761.76 SF WITHIN DEC 589.56 SF WITHIN DEC
8-00-14500-01-0800	6	(1-R) C. WAYNE & GINGER L. HENDRICKS	D 0674-10	D - 110.00	P/E-1 P/E-2 TCE-1 TCE-2			7 2977,4086 / 0.07 7 2375,4194 / 0.05	1648,3132 / 0.04 1342,555 / 0.03	4791600,00 / 110,00		891.10 SF WITHIN DEC 540.85 SF WITHIN DEC

ACQUISITION CODES  
FEE - ACQUISITION  
R/W - AREA OCCUPIED BY EXISTING R/W  
P/E - PERMANENT EASEMENT  
TCE - TEMPORARY EASEMENT

RIGHT-OF-WAY SHEET 3 OF 3



ADDENDUMS / REVISIONS	
7	MODIFICATION TO PARCEL 1-R DUE TO FEDERALLY FUNDED PRESERVATION EASEMENT CONVERTED FEE ACQUISITION TO PE MODIFIED PARCEL 1-L PROPERTY AREA
	CBB 1/20/15

NOT TO SCALE

**BR 2-265B ON  
SPIDER WEB ROAD OVER  
WHITE MARSH BRANCH**

CONTRACT T201307202	BRIDGE NO. 2-265B
COUNTY KENT	DESIGNED BY: CBB CHECKED BY: KRL

**RIGHT-OF-WAY  
TABULATION SHEET**

SHEET NO. 16
TOTAL SHTS. 16

Y:\KENT\265\BRIDGE\T201307202\PLANS\RT01.DGN