



GENERAL LOCATION OF CONTRACT

# THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION



CONSTRUCTION PLANS FOR:

## STATEWIDE RAILROAD CROSSING REPAIR II, 2011 NEWPORT GAP PIKE (SR 41) - RR NO. 140 737G

UNOFFICIAL

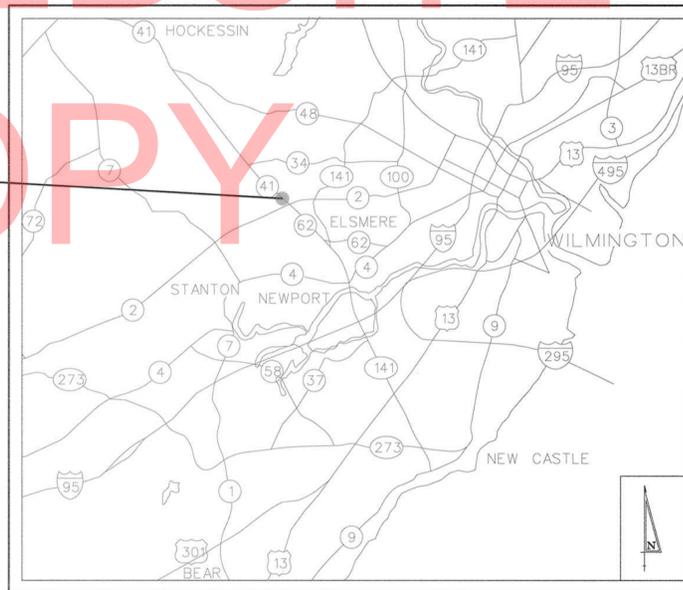
CONTRACT NUMBER: T201100506  
FEDERAL AID PROJECT NUMBER: ESTP-2013(14)

COUNTY: NEW CASTLE

WEBSITE

COPY

LOCATION NO. 1  
CONTRACT NO. T201100506  
NEWPORT GAP PIKE (SR 41)



PROJECT LOCATION

U.S. CUSTOMARY  
UNITS

DESIGN DESIGNATION

FUNCTIONAL CLASS: N/A	D.H.V. PROJECTED: N/A	YEAR: N/A
TYPE OF CONSTRUCTION: HIGHWAY/RAIL CROSSING	DESIGN SPEED: N/A	
A.A.D.T. CURRENT: N/A	YEAR: N/A	TRUCKS: N/A %
A.A.D.T. PROJECTED: N/A	YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A %

INDEX OF SHEETS

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TOTAL SHEETS: 19

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME

PREPARED BY  
THE CONSULTING FIRM OF  
**CENTURY ENGINEERING**  
CONSULTING ENGINEERS, SURVEYORS  
4134 N. DUROUNT HWY.  
DOVER, DELAWARE 19901  
(302) 734-9188



SEAL

*William F. Conway* 8.30.12  
RECOMMENDED DATE

RECOMMENDED

SQUAD MANAGER, CONSTRUCTION DATE

GROUP ENGINEER, CONSTRUCTION DATE

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) DATE

RECOMMENDED

STORMWATER ENGINEER

DATE SEAL

RECOMMENDED

SQUAD MANAGER, TRANSPORTATION SOLUTIONS (PROJECT DEVELOPMENT OR BRIDGE DESIGN)

DATE SEAL

RECOMMENDED

BRIDGE DESIGN ENGINEER

DATE SEAL

RECOMMENDED

RAILROAD PROGRAM MANAGER

*Sean J. Golt*  
DATE 9/17/12 SEAL

RECOMMENDED

ASSISTANT DIRECTOR, DESIGN

*James T. Pappas III*  
DATE 9.26.12 SEAL



SEAL

APPROVED

CHIEF ENGINEER

*Natalie Barnhart*  
DATE 9/26/12 SEAL



SEAL

## 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	
	ARTESIAN WATER (UNDERGROUND)
	DELMARVA POWER (ELECTRIC)
	DELMARVA POWER (GAS)
	NEW CASTLE COUNTY - SEWER
	COMCAST CABLE (OVERHEAD)
	COMCAST CABLE (UNDERGROUND)
	VERIZON (OVERHEAD)
	VERIZON (UNDERGROUND)
	CAVALIER TELEPHONE

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)	
	WARM MIX ASPHALT PATCHING
	MILL AND WARM MIX OVERLAY

GENERAL NOTES

- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2001, THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2001, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT, THE MOST CURRENT SUPPLEMENTAL APECIFICATIONS, AND MOST CURRENT DELAWARE MUTCD.
- 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 732, 734 AND 735, FOR TOPSOIL, SEED AND MULCH RESPECTIVELY, TO THE SATISFACTION OF THE ENGINEER. THE SEED SHALL ADHERE TO THE SPECIFICATIONS OF SECTION 734 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. ALL STAGING AREAS SHALL BE SECTIONED OFF FROM THE TRAVELING PUBLIC USING TRAFFIC CONTROL DEVICES APPROVED BY THE ENGINEER, ALL COSTS SHALL BE PAID BY THE RESPECTIVE TRAFFIC CONTROL ITEM.
- 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. 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. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

EROSION POTENTIAL FOR THIS PROJECT	SITE REVIEWER REQUIREMENT
( X ) INSIGNIFICANT	NONE
( ) MINOR	CONTRACTOR CERTIFICATION COURSE TRAINING ONLY, AS DEFINED IN SECTION 13 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
( ) 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).

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

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
( X )	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR.
( )	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 0.096 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.

- EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO OBTAIN THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST TWO WORKING DAYS (48 HOURS) IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
- THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WORK WITH ANY CONSTRUCTION ACTIVITY BY UTILITY COMPANIES, OR ADJACENT CONSTRUCTION CONTRACTS. PROPOSED UTILITY RELOCATIONS ARE SHOWN ON THE PLANS. REFER TO UTILITY STATEMENT FOR DETAILED SCOPE AND TIMING OF UTILITY WORK.
- ALL PROPOSED UTILITY WORK SHOWN ON THE PLANS SHALL BE INSTALLED BY THE RESPECTIVE UTILITY COMPANY, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL SUPPLY MESSAGE BOARDS THAT ARE TO BE PLACED TEN (10) DAYS PRIOR TO ANY ROAD CONSTRUCTION. THE PROPER WORDING ON THE MESSAGE BOARD WILL NEED TO BE COORDINATED WITH THE DISTRICT SAFETY OFFICER.
- THE CONTRACTOR SHALL HAVE THE LIMITS OF CONSTRUCTION (LOC) LINES STAKED AND/OR MARKED OUT AND VERIFIED PRIOR TO PERFORMING ANY WORK. THE LOC LINES MUST REMAIN STAKED AND/OR MARKED FOR THE DURATION OF THE WORK. ALL COSTS ARE INCIDENTAL TO THE CONTRACT.

PROJECT NOTES

SECTION 100

- ANY DAMAGE DONE BY THE CONTRACTOR TO ITEMS NOTED TO BE RELOCATED OR RESET BY OTHERS OR BY THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL, AS PART OF HIS PROJECT SCHEDULE, SUBMIT TO THE ENGINEER AN ESTIMATE OF THE MONTHLY PAYMENTS EXPECTED TO BE RECEIVED ON THE CONTRACT. THIS WILL BE REFERENCED AS THE "MONTHLY PAYMENT CHART".

A CHART IN MICROSOFT EXCEL, MICROSOFT WORD, OR HAND WRITTEN FORMAT WILL BE ACCEPTABLE FOR THIS PURPOSE. THE CHART SHOULD INCLUDE, AS A MINIMUM, COLUMNS FOR THE MONTH, YEAR, AND ESTIMATED MONTHLY PAYMENTS. THE TOTAL OF ALL ESTIMATED MONTHLY PAYMENTS SHOULD EQUAL THE AWARDED CONTRACT TOTAL BID PRICE.

THE ENGINEER MAY REQUEST AN UPDATED "MONTHLY PAYMENT CHART" AT HIS DISCRETION, DEPENDING ON THE ACCURACY OF THE INITIAL ESTIMATES AND ACCORDING TO THE OVERALL NEEDS OF THE DEPARTMENT.

THE "MONTHLY PAYMENT CHART" WILL NOT BE CONSIDERED A BINDING DOCUMENT BY EITHER THE CONTRACTOR OR THE DEPARTMENT AND IS CONSIDERED SOLELY INFORMATIONAL.

ON PROJECTS REQUIRING CPM SCHEDULES, THE CONTRACTOR MAY, BUT IS NOT REQUIRED TO, "COST LOAD" THE CPM SCHEDULE IN ORDER TO GENERATE THE MONTHLY SPEND PAYMENT CHART.

COSTS TO PREPARE AND/OR UPDATE THE "MONTHLY PAYMENT CHART" ARE ADDRESSED AS FOLLOWS:

- ON CONTRACTS REQUIRING CPM SCHEDULES AND UPDATES, PREPARATION OF THE INITIAL CHART SHALL BE INCIDENTAL TO ITEM 763508. UPDATES SHALL BE INCIDENTAL TO ITEM 763509.
- ON CONTRACTS NOT REQUIRING CPM SCHEDULES, THE COST TO PREPARE AND UPDATE THE "MONTHLY PAYMENT CHART" SHALL BE INCLUDED IN ITEM 763000, INITIAL 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 INCIDENTAL TO THE CONTRACT.
- THE ENGINEER MAY REQUIRE THE CONTRACTOR TO EXCAVATE TEST PITS ALONG THE PROPOSED CONSTRUCTION AT POINTS OF POSSIBLE UTILITY CONFLICTS, TO DETERMINE IF CONFLICTS EXIST. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR, WITH THE ENGINEER AND THE UTILITY COMPANY INVOLVED. THE ENGINEER SHALL ULTIMATELY DETERMINE THE SOLUTION TO THE UTILITY CONFLICT. TEST HOLES SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 208000, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.

SECTION 200

- ITEMS TO BE REMOVED UNDER ITEM 21501 - REMOVAL OF RAILROAD CROSSING SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:  
ALL EXISTING RAIL CROSSING, INCLUDING ALL CONCRETE ASSOCIATED WITH THE CROSSING. FOUNDATIONS, GATES AND STRUCTURES WHICH ARE NOT DESIGNATED TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION.
- THIS PROJECT IS COVERED UNDER A "NPDES" GENERAL PERMIT FOR CONSTRUCTION, UNDER THE GENERAL PERMIT, COMPLIANCE WITH DELDOT'S APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS WILL CONSTITUTE COMPLIANCE WITH THE NPDES INDUSTRIAL PERMITTING REQUIREMENTS FOR THIS CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NOIS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S TEAM SUPPORT SECTION. A COPY OF THE GENERAL PERMIT OR THE NOICAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.
- REMOVAL OF EXISTING UNDERDRAIN IF ENCOUNTERED SHALL BE INCIDENTAL TO ITEM 202000. CONNECTING TO AN EXISTING UNDERDRAIN SYSTEM SHALL BE INCIDENTAL TO THE CONTRACT IF REQUIRED.
- UNSUITABLE MATERIALS FROM THE RAIL BED, ROADWAY AND UNDERCUT EXCAVATION SHALL NOT BE USED AS FILL AND SHALL BE LEGALLY DISPOSED OF OUTSIDE THE PROJECT AREA. ALL COSTS ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THIS MATERIAL SHALL BE INCIDENTAL TO THE ITEM BEING REMOVED.
- THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, SHALL BE DIRECTED TO USE ON THE PROJECT BORROW MATERIALS AS MAY BE FOUND IN THE EXCAVATIONS THAT ARE DETERMINED BY THE ENGINEER TO BE SUITABLE FOR USE ELSEWHERE WITHIN THE PROJECT. PAYMENT FOR PLACING THESE BORROW MATERIALS AT LOCATIONS AS DIRECTED BY THE ENGINEER SHALL BE INCIDENTAL TO THE ITEM THAT GENERATED THE MATERIAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DRY OR WET THE MATERIALS, IF NEEDED, SO THAT THE MATERIALS WILL MEET THE REQUIREMENTS OF ITS INTENDED USE. THE CONTRACTOR MAY, WITH APPROVAL OF THE ENGINEER, STOCKPILE MATERIALS TO MEET THESE REQUIREMENTS. HOWEVER, MOVING THE MATERIAL FROM THE STOCKPILE AND THEN UTILIZING THE MATERIALS SHALL NOT BE MEASURED FOR PAYMENT. ALL MATERIALS ENCOUNTERED IN THE EXCAVATIONS OF THE PROJECT THAT ARE NOT USED ELSEWHERE ON THE PROJECT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL COSTS ASSOCIATED WITH STOCKPILING MATERIAL, MOVING ANY MATERIAL FROM ANY STOCKPILES, WETTING AND/OR DRYING THE MATERIAL, OR REMOVAL AND FINAL DISPOSAL SHALL BE INCIDENTAL TO THE ITEM THAT GENERATED THAT MATERIAL.
- EXCEPT WHERE NOTED ON THE PLANS, THE CONTRACTOR SHALL CLEAR ALL TREES AND SHRUBS WITHIN THE LIMITS OF CONSTRUCTION. THE CONTRACTOR SHALL PROTECT TREES NOTED ON THE PLANS BY "DND" BY PLACING CONSTRUCTION SAFETY FENCE AT THE DRIPLINE OF THE TREES WITHIN THE LIMIT OF CONSTRUCTION AS SHOWN ON THE PLANS. THIS SHALL BE INCIDENTAL TO THE CONTRACT.
- ALL TREE STUMPS AND ROOT MAT TO BE REMOVED SHALL BE ENTIRELY REMOVED REGARDLESS OF DEPTH. BURIAL OF ORGANIC MATTER IS NOT PERMITTED. CHIPPED MATERIAL MUST BE REMOVED PRIOR TO PLACING EMBANKMENT OR TOPSOIL.
- ROADSIDE AMENITIES WITHIN THE LIMITS OF CONSTRUCTION OR EASEMENT AREAS THAT ARE TO REMAIN IN PLACE AND ARE NOTED BY "DND" SHALL BE PROTECTED BY THE CONTRACTOR WITH SAFETY FENCE OR OTHER MEASURES AS DIRECTED BY THE ENGINEER. ALL COSTS SHALL BE INCIDENTAL TO THE CONTRACT. ANY DAMAGE TO THESE TO THESE AMENITIES WHICH IS DONE BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- ALL EXISTING PIPES TO BE REMOVED SHALL BE INCIDENTAL TO ITEM 202000, IF REQUIRED.
- EXISTING PROPERTY MARKERS AND MONUMENTS THAT WILL BE DISTURBED DURING CONSTRUCTION SHALL BE REMOVED WITH REASONABLE CARE AND STORED PRIOR TO CLEARING AND GRUBBING. AFTER CONSTRUCTION, THE CONTRACTOR SHALL RESET THE PROPERTY MARKERS IN ACCORDANCE WITH SECTION 107.29 AT THE INTERSECTION OF THE RIGHT-OF-WAY AND PROPERTY LINE. WHERE MARKERS ARE TO BE RESET IN PROPOSED P.C.G. CONCRETE SIDEWALK, A PK NAIL SHALL BE SET IN THE CONCRETE TO IDENTIFY THE PROPERTY CORNER, IF EXISTING RIGHT-OF-WAY MARKER IS NOT RE- USABLE AS A RESULT OF THE METHOD THE CONTRACTOR USED TO REMOVE OR RESET IT, THE CONTRACTOR SHALL REPLACE IT WITH A COMPARABLE MARKER. ANY DISTURBED MARKERS SHALL BE RESET BY A REGISTERED DELAWARE PROFESSIONAL LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL USE DELAWARE NO. 57 STONE TO BACKFILL ALL UNDERCUT AREAS AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL COSTS PAID UNDER ITEM \*302012 - DELAWARE NO. 57 STONE.

SECTION 300

16. A. THE CONTRACTOR MAY ELECT TO USE THE FOLLOWING MATERIALS FOR ITEM 302008 (GRADED AGGREGATE BASE COURSE, TYPE B) PROVIDED THEY MEET THE REQUIREMENTS OF ITEM 302008. DELDOT'S M&R SECTION SHALL HAVE THE FINAL APPROVAL ON USING THE MATERIAL:
- a. CRUSHED STONE (PER STANDARD SPEC. 821)
  - b. CRUSHED CONCRETE (PER STANDARD SPEC. 821)
  - c. HOT MIX MILLINGS (PER SPECIAL PROVISION 302514)

THE CONTRACTOR WILL NOT BE ALLOWED TO MIX DIFFERENT MATERIALS (OR SIMILAR MATERIALS FROM ANY DIFFERENT SOURCES) TO MEET THE REQUIREMENTS OF 302008. ALL 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 DELDOT PROJECT RESIDENT SHALL AGREE ON THE LIMITS OF EACH SOURCE OF MATERIAL PRIOR TO PLACEMENT.

B. THE QUANTITY USED FOR BASE COURSE OF EACH OF THE ABOVE LISTED MATERIALS WILL BE THE CONTRACTOR'S CHOICE, WITH THE TOTAL MEETING THE ADVERTISED QUANTITY OF ITEM 302008.

C. THE CONTRACTOR MAY ALSO ELECT TO RECYCLE MILLINGS FOR THE USE IN HOT MIX AS PERMITTED BY THE STANDARD SPECIFICATIONS. THE OF THE QUANTITY OF MILLINGS USED FOR THIS PURPOSE, OR FOR BASE COURSE, LIES WITH THE CONTRACTOR.

D. HOT MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:

- a. MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT.
- b. MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 302008
- c. MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE. ALL MILLED MATERIALS SHALL BE REQUIRED TO MEET THE MATERIAL REQUIREMENTS OF ITEM 302514.

E. PAYMENT CLARIFICATION:

- a. SHOULD THE CONTRACTOR ELECT TO MILL PORTIONS OF HOT MIX SHOWN ON THE PLANS TO BE REMOVED UNDER ITEM 202000, THE COST OF MILLING THIS HOT MIX WILL BE INCIDENTAL TO ITEM 202000. 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.
- b. MILLINGS GENERATED MAY BE RECYCLED INTO HOT MIX, UTILIZED FOR BASE COURSE OR DISPOSED BY THE CONTRACTOR TO AN APPROVED SITE. NO SEPARATE PAYMENT WILL BE MADE FOR TRANSPORTING MILLINGS ON SITE OR TO AN APPROVED SITE.
- c. 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.
- d. MILLINGS USED FOR BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF PROVISION 302514. 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 IN PLACE AT THE UNIT BID PRICE FOR ITEM 302008.
- e. ALL COSTS TO UTILIZE THE MILLINGS IN HOT MIX WILL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE HOT MIX ITEM USING THE RECYCLED MATERIAL.
- f. SPECIAL PROVISION 302514 IS PROVIDED TO SPECIFY THE MEANS OF LAY DOWN AND COMPACTION AS THE MATERIAL REQUIREMENTS FOR MILLINGS USED AS BASE COURSE. ALL COSTS TO BRING THE MILLINGS INTO COMPLIANCE WITH THE REQUIREMENTS OF 302514 AND THE QUANTITY OF MILLINGS USED FOR BASE COURSE WILL BE PAID FOR UNDER ITEM 302007.

SECTION 400

17. THE PAVEMENT SECTION FOR HOT MIX RESIDENTIAL DRIVEWAYS, IF REQUIRED, SHALL BE 2" WMA, SUPERPAVE, TYPE C OVER 8" GRADED AGGREGATE BASE COURSE, UNLESS OTHERWISE IDENTIFIED ON THE PLANS.

SECTION 600

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

SECTION 700

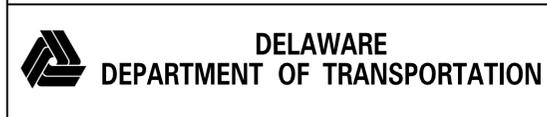
19. IN AREAS WHERE PROPOSED CURB MEETS EXISTING CURB AND THE TWO CURB TYPES ARE NOT SIMILAR, THE PROPOSED CURB SHALL BE TRANSITIONED IN 10 LINEAR FEET OR AS DIRECTED BY THE ENGINEER IN THE FIELD. PAYMENT FOR TRANSITIONING SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.
20. WHERE NEW SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, SAWCUT THE EXISTING SIDEWALK OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR IN ITEM 762002- SAWCUTTING, CONCRETE, FULL DEPTH.
21. STATION AND ELEVATION DATA GIVEN FOR DRAINAGE STRUCTURES ARE TO BE APPLIED ALONG THE CENTERLINE OF THE STRUCTURE WITH ITS INTERSECTION TO THE FLOWLINE FOR CURB INLETS, THE CENTER OF THE STRUCTURE FOR LAWN BASINS AND JUNCTION BOXES, AND THE CENTER OF THE LID FOR MANHOLES.
22. ALL DISTURBED AREAS WITHIN THE LIMIT OF CONSTRUCTION, SHALL BE TOPSOILED (6" MINIMUM), SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. ALL COSTS ARE PAID UNDER THE RESPECTIVE ITEMS BEING INSTALLED.
23. THE CONTRACTOR SHALL INSTALL ALL PERMANENT SIGNAGE AND TEMPORARY SIGNAGE AS SHOWN ON THE CONTRACT DOCUMENTS. ALL COSTS COVERED UNDER THE APPROPRIATE ITEMS.
24. ALL PAVED AREAS (INCLUDING DRIVEWAYS) TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.
25. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
26. DURING CONSTRUCTION OF THE RAIL CROSSING AND SIDEWALK, ALL BARE AREAS SHALL BE STABILIZED AT THE END OF EACH WORK DAY. BARE AREAS SHALL BE EITHER PERMANENTLY STABILIZED OR COVERED WITH STONE.

MISCELLANEOUS

27. THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT. AS SUCH, AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED.
28. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN AREA SUITABLE FOR STOCKPILING BORROW, TOPSOIL, AND OTHER FILL MATERIAL REQUIRED FOR THE PROJECT IN ACCORDANCE WITH SECTIONS 110.07 AND 110.10 OF THE STANDARD SPECIFICATIONS. SUBJECT TO THE APPROVAL OF THE ENGINEER, STOCKPILE AREA MAY BE LOCATED OUTSIDE OF THE PROJECT LIMITS, IF NECESSARY. NO ADDITIONAL PAYMENT WILL OCCUR FOR OFFSITE STOCKPILING.
29. THE CONTRACTOR SHALL INSTALL ALL SIDEWALK TO CONFORM TO CURRENT ADA STANDARDS. ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 2% ALONG THE PROPOSED CONSTRUCTION. ALL DRIVEWAY CROSSING AND CURB RAMPS SHALL CONFORM TO CURRENT DEPARTMENT AND ADA STANDARDS. ALL COSTS ARE INCIDENTAL TO THE ITEMS BEING INSTALLED.
30. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL RESIDENTS AND BUSINESSES DURING CONSTRUCTION ACTIVITIES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ALL COSTS INCIDENTAL TO THE CONTRACT.
31. REQUESTS FOR MATERIAL SOURCES FOR ALL SPECIALTY ITEMS AND FOR ALL REQUIRED CONTRACT SHOP DRAWINGS SHALL BE SUBMITTED TO CENTURY ENGINEERING, INC., 4134 NORTH DUPONT HIGHWAY, DOVER, DE 19901, ATTENTION MR. ANDY WASLYN. SHOP DRAWING SUBMITTAL PROCEDURES WILL BE ESTABLISHED AT THE PRECONSTRUCTION MEETING. MATERIAL SOURCE REQUESTS FOR ALL OTHER CONTRACT ITEMS SHALL BE SUBMITTED TO DELDOT MATERIALS AND RESEARCH, PO BOX 778, DOVER, DE 19903, ATTENTION MR. GREG HAINSWORTH.
32. ALL WORK SHALL TAKE PLACE WITHIN RAILROAD RIGHT OF WAY OWNED BY WILMINGTON WESTERN RAILROAD AND/OR STATE MAINTAINED RIGHT OF WAY.
33. THE CONTRACTOR SHALL CONTACT MICHAEL ELLER, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT (302) 576-6061.
34. IF THE EXISTING RAIL REMOVED IS DETERMINED BY THE ENGINEER TO BE UNDAMAGED, THE CONTRACTOR SHALL COORDINATE WITH THE RAILROAD COMPANY TO DELIVER THE SALVAGED SECTION TO THEIR YARD OR AS DIRECTED BY THE ENGINEER. IF THE EXISTING RAIL IS DEEMED TOO WORN AND UNSALVAGEABLE, THE CONTRACTOR SHALL LEGALLY DISPOSE OF THE RAIL OUTSIDE THE PROJECT AREA. ALL COSTS ASSOCIATED WITH THE REMOVAL AND SALVAGE/DISPOSAL OF THIS MATERIAL SHALL BE INCIDENTAL TO ITEM 211501 - REMOVAL OF RAILROAD CROSSING.

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WEBSITE  
COPY

3/11/2013 G:\PROJECTS\06535.00 (DelDOT Agmt. 1376 DOTS Open End)\06535.25 Task 15 RailCrossings\CAD FILES\STATEWIDE RR CROSSING\Newport Pike\_dgn\_files\pn\_IRR.dgn 3:50:05 PM



ADDENDUMS / REVISIONS	

NOT TO SCALE

**STATEWIDE RAILROAD CROSSING  
REPAIR II, 2011**

CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

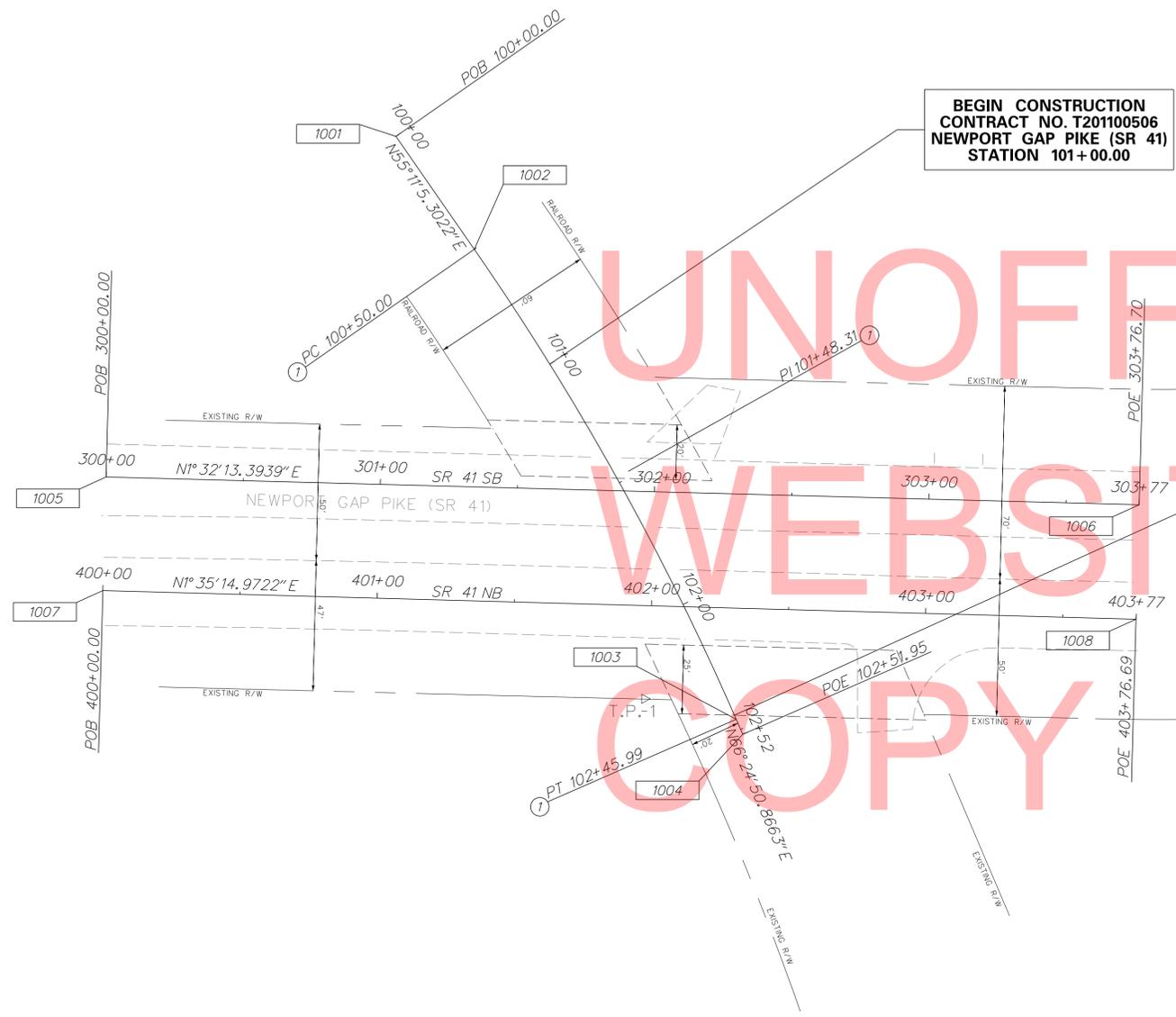
<b>PROJECT NOTES</b>	SHEET NO.	4
	TOTAL SHTS.	19



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CURVE ①			
PC ( 1002 )	100+50.00	4937.9669	9836.6415
PI ( )	101+48.31	4994.0947	9917.3532
CC ( )		4116.9691	10407.5728
PT ( 1003 )	102+45.99	5033.4305	10007.4498
		Radius:	1000.0000
		Delta:	11° 13' 45.5640" Right
		Degree of Curvature(Chord):	5° 43' 55.0847"
		Length:	195.9887
		Tangent:	98.3092
		Chord:	195.6751
		Middle Ordinate:	4.7976
		External:	4.8207
		Tangent Direction:	N 55° 11' 05.3022" E
		Radial Direction:	S 34° 48' 54.6978" E
		Chord Direction:	N 60° 47' 58.0842" E
		Radial Direction:	S 23° 35' 09.1337" E
		Tangent Direction:	N 66° 24' 50.8663" E



**BEGIN CONSTRUCTION**  
**CONTRACT NO. T201100506**  
**NEWPORT GAP PIKE (SR 41)**  
**STATION 101+00.00**

**END CONSTRUCTION**  
**CONTRACT NO. T201100506**  
**NEWPORT GAP PIKE (SR 41)**  
**STATION 102+44.36**

**LOCATION NO.1**  
**NEWPORT GAP PIKE (SR 41)**  
**RR NO. 140 737G**

CONSTRUCTION ALIGNMENT CONTROL				
POINT	STATION	OFFSET	NORTHING	EASTING
· 1001	100+00.00	0.00	4909.4204	9795.5917
· 1002	100+50.00	0.00	4937.9669	9836.6415
· 1003	102+45.99	0.00	5033.4305	10007.4498
· 1004	102+51.95	0.00	5035.8168	10012.9154
· 1005	300+00.00	0.00	4803.7523	9919.4077
· 1006	303+76.70	0.00	5180.3120	9929.5120
· 1007	400+00.00	0.00	4802.6082	9960.6724
· 1008	403+76.69	0.00	5179.1583	9971.1081

CONTROL POINTS			
POINT	NORTHING	EASTING	ELEVATION
· TP-1	10000.0000	5000.0000	100.00
· TP-2	10000.0000	5427.5806	88.49

NOTE: ALL CONTROL VALUES BOTH HORIZONTALLY AND VERTICALLY ARE BASED ON AN ASSUMED DATUM.

T.P.-2



ADDENDUMS / REVISIONS	

**STATEWIDE RAILROAD CROSSING**  
**REPAIR II, 2011**

CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

**HORIZONTAL AND VERTICAL CONTROL**  
**LOCATION NO. 1**

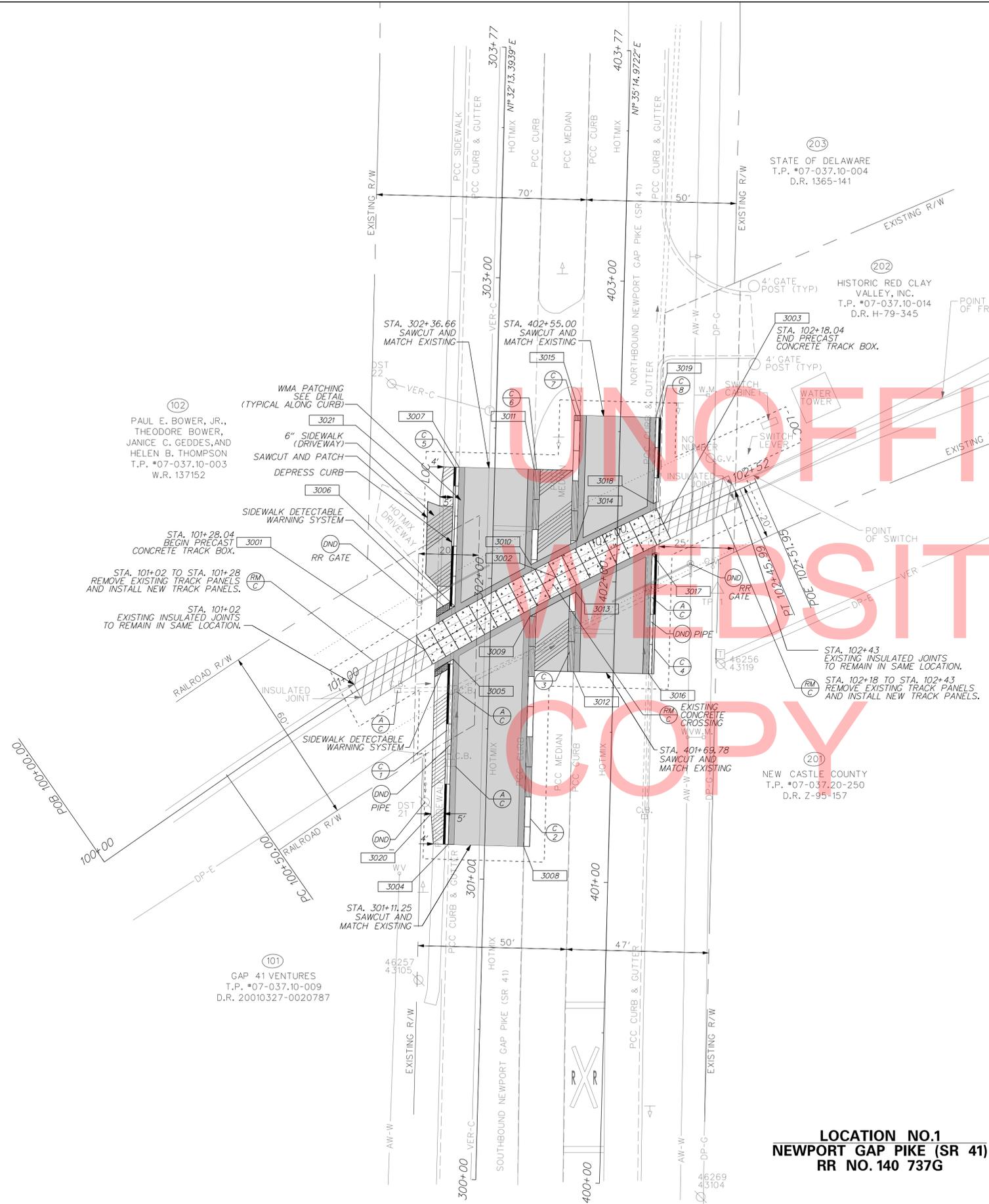
SHEET NO.	6
TOTAL SHTS.	19

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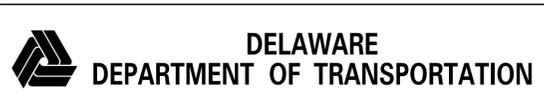
CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	INTEGRAL PCC CURB AND GUTTER, TYPE 3-8	62.0'
2	P. C. C. CURB, TYPE 2	78.0'
3	P. C. C. CURB, TYPE 2	25.0'
4	INTEGRAL PCC CURB AND GUTTER, TYPE 3-8	41.0'
5	INTEGRAL PCC CURB AND GUTTER, TYPE 3-8	48.0'
6	P. C. C. CURB, TYPE 2	32.0'
7	P. C. C. CURB, TYPE 2	43.0'
8	INTEGRAL PCC CURB AND GUTTER, TYPE 3-8	29.0'

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
3001	101+28.04	0.00'	4979.9784	9902.3849
3002	101+78.04	0.00'	5004.1487	9946.1487
3003	102+18.04	0.00'	5021.8911	9981.9955
3004	301+11.25	-12.17'	4915.2887	9910.2298
3005	301+72.82	-12.14'	4976.8352	9911.9051
3006	301+90.41	-12.06'	4994.4203	9912.4611
3007	302+36.66	-11.87'	5040.6456	9913.8855
3008	301+11.23	12.99'	4914.5955	9935.3810
3009	301+87.75	13.05'	4991.0836	9937.4878
3010	302+04.93	12.93'	5008.2596	9937.8297
3011	302+36.66	13.14'	5039.9746	9938.8926
3012	401+69.78	-13.34'	4972.6927	9952.0373
3013	401+96.24	-13.32'	4999.1423	9952.7905
3014	402+13.27	-13.44'	5016.1641	9953.1450
3015	402+55.00	-13.42'	5057.8820	9954.3262
3016	401+69.78	11.71'	4971.9986	9977.0847
3017	402+09.60	11.77'	5011.8043	9978.2405
3018	402+26.40	11.70'	5028.6015	9978.6413
3019	402+55.00	11.79'	5057.1837	9979.5221
3020	301+21.25	-18.15'	4925.4499	9904.5186
3021	302+26.66	-18.00'	5030.8134	9907.4984

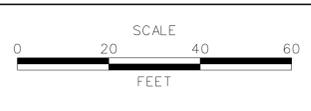
- NOTES:**
- THE CONTRACTOR SHALL COORDINATE THE RAIL CLOSURE WITH THE WILMINGTON & WESTERN RAILROAD (RAILROAD) IN ORDER AS TO NOT IMPAIR RAILROAD OPERATIONS. THIS NOTICE SHALL BE GIVEN A MINIMUM OF FOURTEEN (14) CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. THE ADDRESS OF THE RAILROAD AND THEIR POINT OF CONTACT IS:  
  
 WILMINGTON & WESTERN RAILROAD  
 ATTN: MR. DAVID LUDLOW  
 1601 RAILROAD AVENUE  
 P.O. BOX 5787  
 WILMINGTON, DE 19808-5787  
  
 TELEPHONE: (302) 998-1930  
 FAX: (302) 998-7408  
 E-MAIL: david@wwrc.com
  - ALL RAIL INSTALLED FROM THE WESTERLY LIMITS OF THE ISLAND CIRCUIT, ACROSS THE HIGHWAY, TO THE INSULATED JOINT JUST WEST OF THE FIRST SWITCH, SHALL BE CONTINUOUS WELDED RAIL (CWR). ALL COSTS INCIDENTAL TO ITEM 601529.
  - NEW TRACK CONSTRUCTION SHALL FOLLOW THE EXISTING ALIGNMENT WITHIN THE CONSTRUCTION LIMITS. VERTICAL ALIGNMENT SHALL FOLLOW THE RAIL PROFILE SHEET FOUND IN THE PLAN SHEETS. NO DEVIATIONS FROM THE EXISTING ALIGNMENT AND/OR RAIL ELEVATION PLAN SHALL BE ALLOWED UNLESS DIRECTED BY THE ENGINEER. ALL COSTS INCIDENTAL TO ITEM 601529 AND ITEM 601516.
  - NEW OR APPROVED RELAY 132RE RAIL SHALL BE SUPPLIED FOR THIS CONTRACT. ALL RAIL INSTALLED FOR THIS PROJECT SHALL BE CONTINUOUSLY WELDED RAIL (CWR). RAIL JOINTS INSTALLED AS COMPROMISE JOINTS, INSULATED JOINTS OR REGULAR RAIL JOINT BARS SHALL BE LOCATED NO CLOSER THAN SIX (6) FEET FROM ONE ANOTHER UNLESS DIRECTED BY THE ENGINEER. ALL COSTS INCIDENTAL TO ITEM 601529 AND ITEM 601516.
  - RAIL ALTERED IN LENGTH WHEN REQUIRED, SHALL BE HOT SAWED, COLD SAWED, MILLED, ABRASIVE WHEEL CUT, OR GROUND TO LENGTH. THE USE OF A HEAT DEPENDENT DEVICE TO CUT RAIL IS PROHIBITED. THE DRILLING OF ANY REQUIRED HOLES SHALL BE BY HAND OR POWER DRILLING DEVICES. THE USE OF A HEAT DEPENDENT DEVICE TO BURN HOLES IN THE RAIL IS PROHIBITED. SEE SPECIAL PROVISION ITEM 601516 - INSTALLATION OF RAILROAD TRACK PANELS FOR FURTHER INFORMATION.
  - SIGNALIZATION: CONTRACTOR SHALL REUSE EXISTING INSULATED JOINTS, IF REQUIRED FOR THE CIRCUIT DESIGN AT THIS CROSSING. ALL EXISTING TRACK WIRING AS WELL AS THE EXISTING WIRING FROM THE EXISTING CABINET TO THE BASE JUNCTION WELL OF BOTH CANTILEVER SIGNALS SHALL BE REPLACED WITH NEW TRACK WIRING. NEW WIRING SHALL BE OF SIZE AND TYPE AS SPECIFIED WITHIN SPECIAL PROVISION ITEM 746619 - RAILROAD SIGNALIZATION. ALL OTHER WIRING SHALL REMAIN AS IS.
  - ALL EXISTING UTILITIES ARE TO REMAIN AS IS UNLESS OTHERWISE DIRECTED BY ENGINEER IN THE FIELD. THE CONTRACTOR SHALL UTILIZE CAUTION WHILE EXCAVATING FOR TRACK INSTALLATION.
  - THE CONTRACTOR SHALL NOT INSTALL PROPOSED CURB PRIOR TO THE PLACEMENT OF THE PRECAST CONCRETE TRACK BOX ADJACENT TO THE WORK IN ORDER SET FINAL GRADES.
  - THE CONTRACTOR SHALL INSTALL ITEM 705007 - SIDEWALK SURFACE DETECTABLE WARNING SYSTEM (TRUNCATED DUMPS) AT THE PROPOSED CROSSWALK LOCATIONS SHOWN ON THE PLANS.
  - THE CONTRACTOR SHALL SAWCUT AND MATCH EXISTING CONCRETE MEDIAN AS SHOWN ON THE PLANS OR AS DIRECTED BY ENGINEER IN FIELD. ALL CURB SHALL MATCH THE EXISTING PCC MEDIAN AS DIRECTED BY ENGINEER.
  - THE CONTRACTOR SHALL DEPRESS THE MEDIAN ISLAND AND CURB AS DIRECTED IN THE FIELD BY THE ENGINEER.
  - THE CONTRACTOR SHALL TOPSOIL, SEED AND PLACE SOIL RETENTION BLANKET, TYPE 4 ON ALL DISTURBED SOIL AREAS AS DIRECTED BY THE ENGINEER.
  - RIGHT-OF-WAY LINES AS SHOWN ARE APPROXIMATE AND ARE FOR INFORMATIONAL PURPOSES ONLY.



**LOCATION NO.1  
NEWPORT GAP PIKE (SR 41)  
RR NO. 140 737G**



ADDENDUMS / REVISIONS	

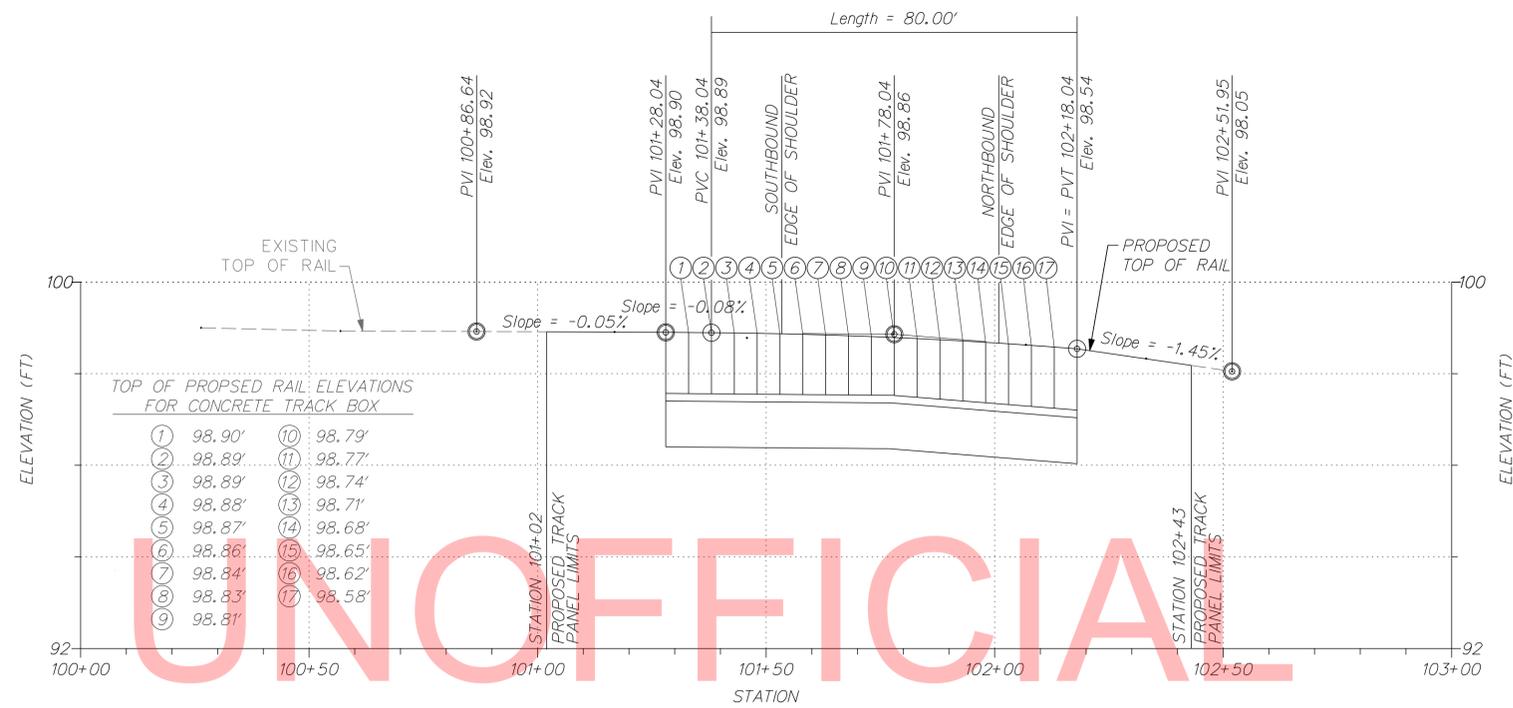


**STATEWIDE RAILROAD CROSSING  
REPAIR II, 2011**

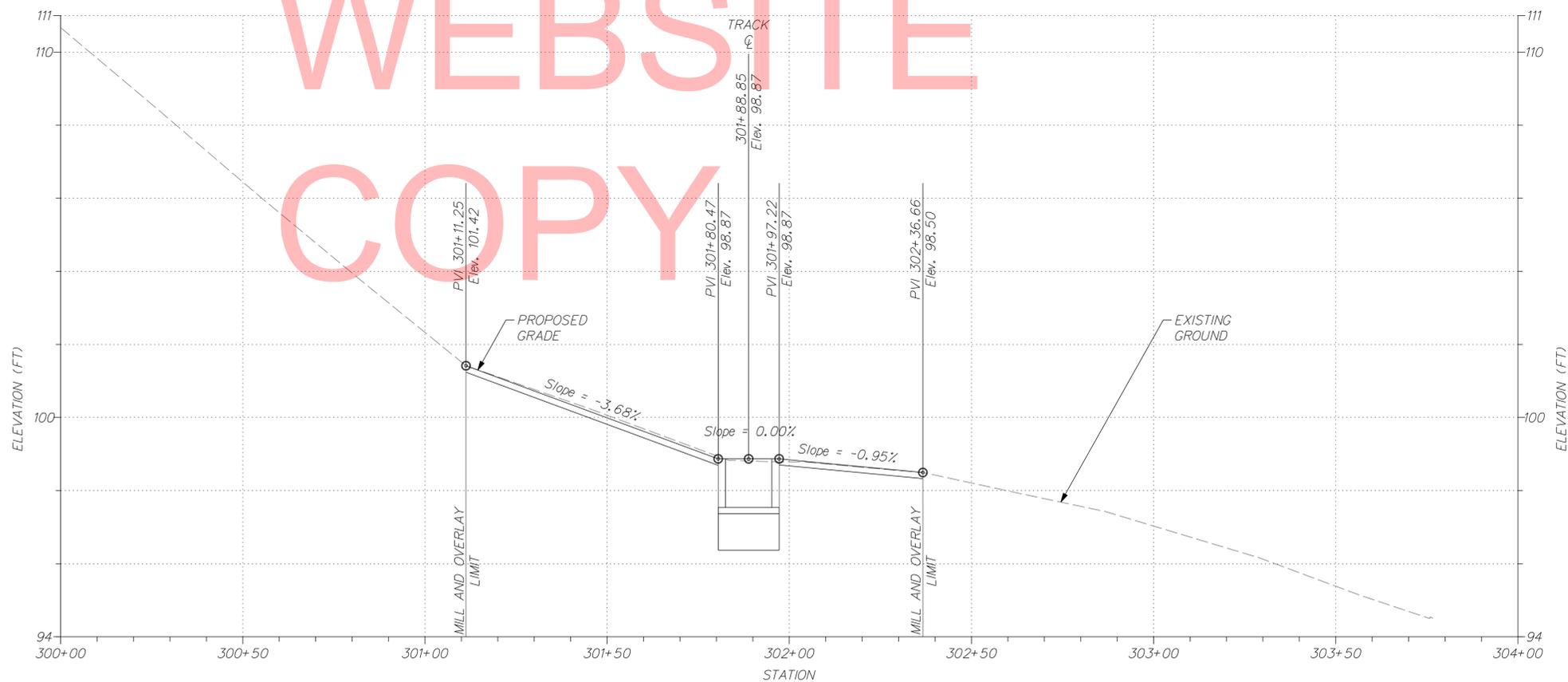
CONTRACT	T201100506
COUNTY	NEW CASTLE
BRIDGE NO.	-
DESIGNED BY:	ASH
CHECKED BY:	AMW

<b>NEWPORT GAP PIKE (SR 41) CONSTRUCTION PLAN</b>	
SHEET NO.	7
TOTAL SHTS.	19

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**NEWPORT GAP PIKE (SR 41)  
CENTERLINE OF TRACK**



**NEWPORT GAP PIKE (SR 41)  
EDGE OF SHOULDER - SOUTHBOUND**

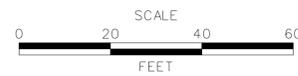
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NEWPORT GAP PIKE (SR 41)  
EDGE OF SHOULDER - NORTHBOUND



ADDENDUMS / REVISIONS

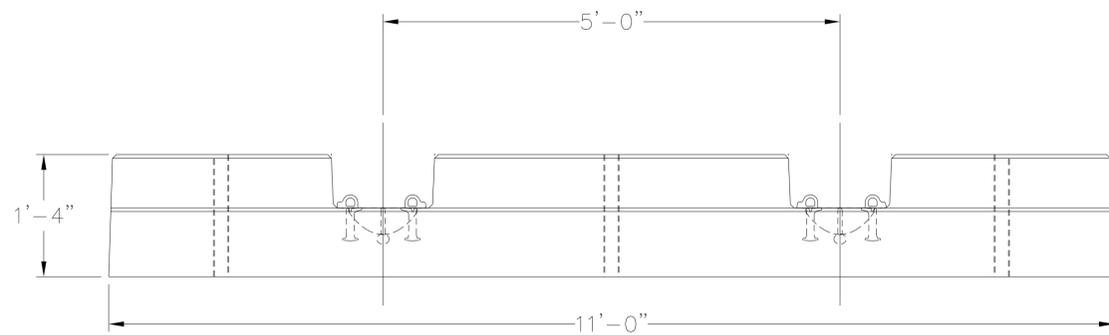


STATEWIDE RAILROAD CROSSING  
REPAIR II, 2011

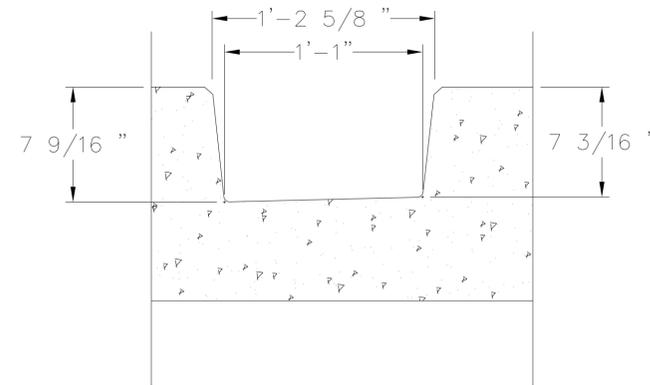
CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

PROFILES

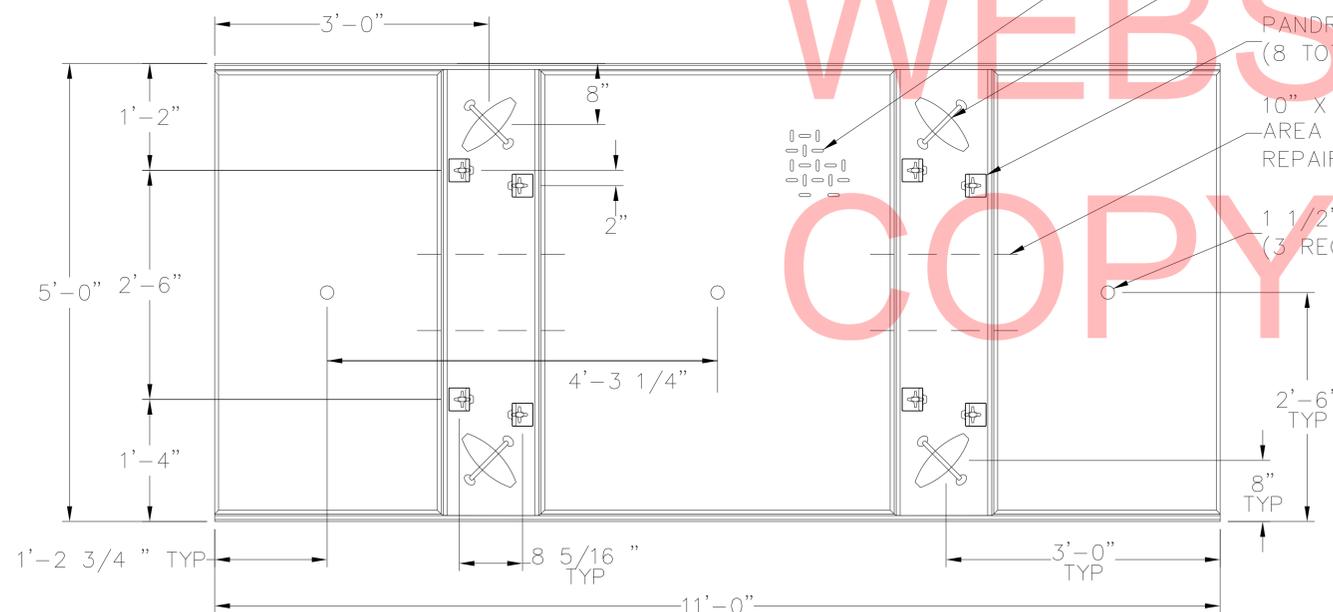
SHEET NO.	9
TOTAL SHTS.	19



END VIEW  
SCALE: 3/8" = 1'-0"

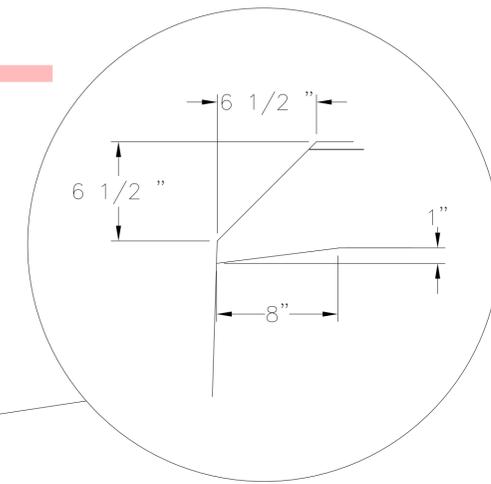


D - PAN DETAIL  
SCALE: 3/16" = 1'-0"

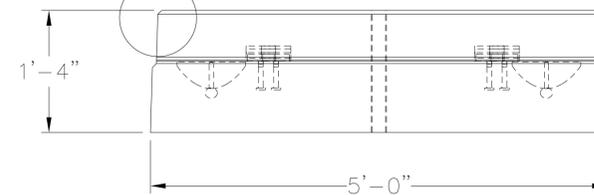


PLAN VIEW  
SCALE: 3/8" = 1'-0"

- 3/16" DEEP DIAMOND PLATE PATTERN ON CONCRETE
- 2 TON X 3 3/4" A-ANCHOR LIFTING INSERT (4 REQUIRED)
- PANDROL (8 TOTAL REQUIRED)
- 10" X 12" UNREINFORCED AREA FOR FUTURE RAIL REPAIR ACCESS (TYPICAL)
- 1 1/2" DIA PVC GROUT TUBE (3 REQUIRED)



END SECTION CHAMFER DETAIL



SIDE VIEW  
SCALE: 3/8" = 1'-0"

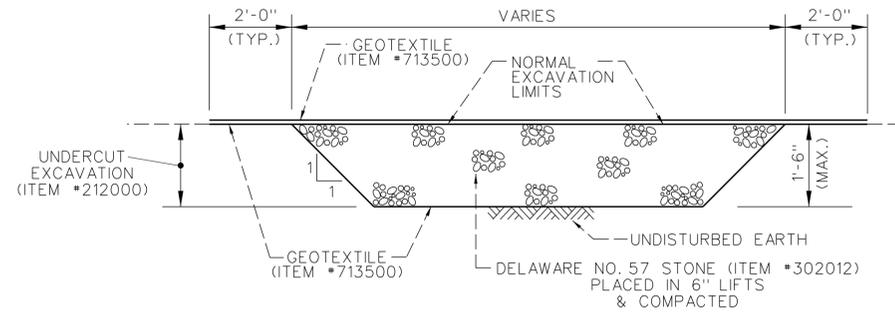
NOTES:

1. ALL COSTS ARE PAID FOR UNDER ITEM #601529.
2. PANDROLS MUST NOT TOUCH REBAR OR LIFTING DEVICES.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SIGNED AND SEALED BY A DELAWARE ENGINEER FOR APPROVAL BY THE ENGINEER.
4. THE CONTRACTOR SHALL ACCOUNT FOR THE HORIZONTAL CURVE OF THE PROPOSED RAIL IN THE SHOP DRAWINGS.

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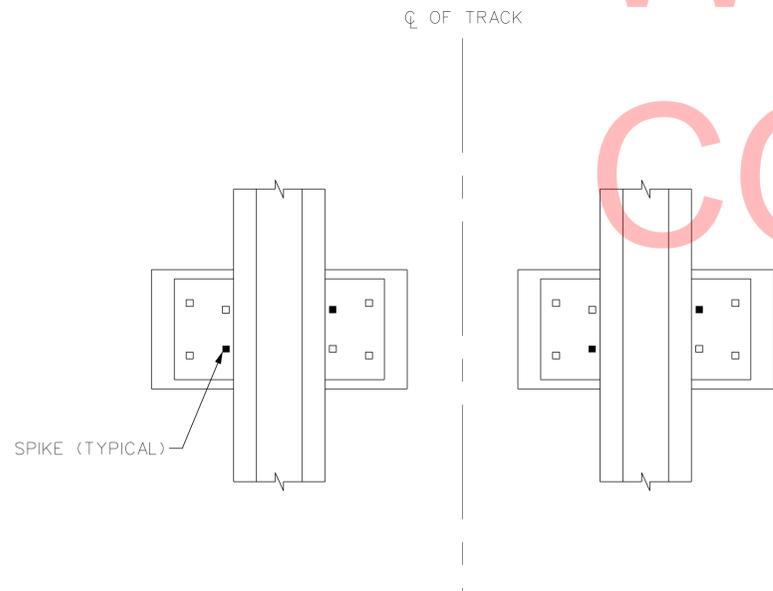
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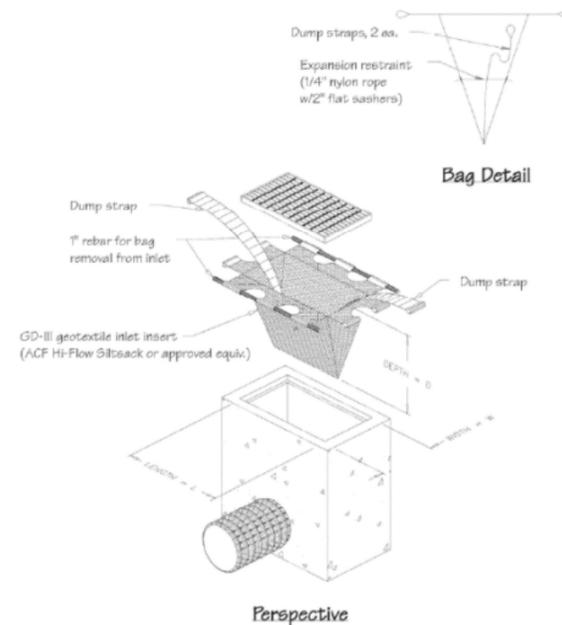
**UNDERCUT EXCAVATION**  
NOT TO SCALE

NOTE: UNDERCUT EXCAVATION SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.



**TRACK SPIKING PATTERN**  
NOT TO SCALE

NOTE: ALL COSTS PAID UNDER ITEM #601529 AND ITEM #601516.



**Notes:**

1. This practice shall only be used in situations in which Inlet Protection - Type 1 cannot be used due to site constraints. These include, but are not limited to partially completed parking areas, streets, roads, etc.
2. It may be necessary to transition from Type 1 to Type 2 Inlet Protection as construction proceeds.
3. For areas where there is a concern for oil run-off or spills, insert shall meet one of the above specifications with an oil-absorbent pillow or shall be made completely from an oil-absorbent material with a woven pillow.

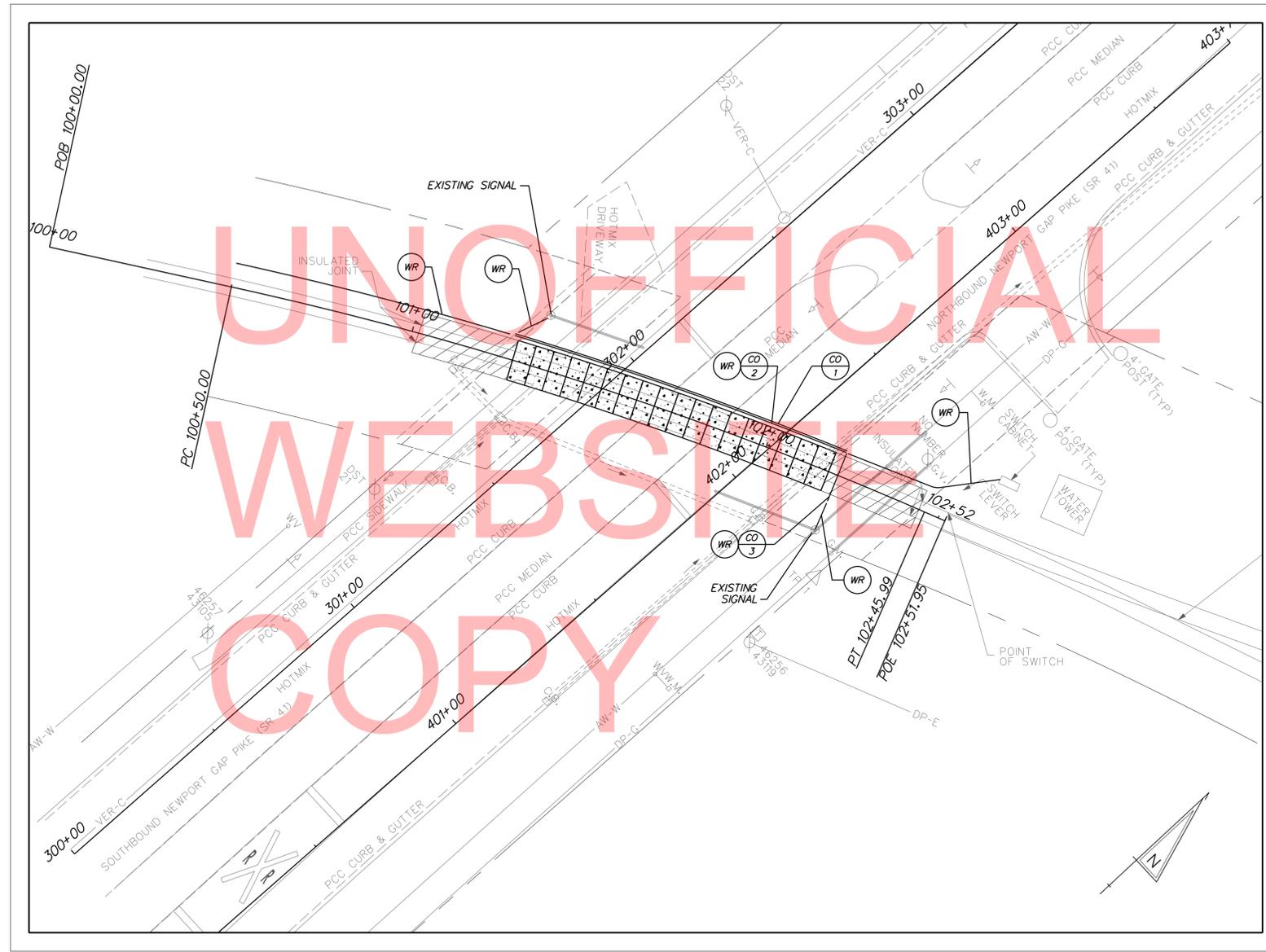
**Materials:**

The geotextile inlet insert shall meet or exceed the specifications of Type GD-II geotextile in accordance with Appendix A-3 of the Delaware Erosion & Sediment Control Handbook.

**INLET PROTECTION AT CURB**  
NOT TO SCALE

NOTE: ALL COSTS PAID UNDER ITEM #252001 - INLET SEDIMENT CONTROL, CURB INLET.

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**LOCATION NO. 1**  
**NEWPORT GAP PIKE (SR 41)**  
**RR NO. 140 737G**

- NOTES:**
1. SIGNALIZATION CONTRACTOR SHALL REUSE EXISTING INSULATED JOINTS, IF REQUIRED FOR THE CIRCUIT DESIGN AT THIS CROSSING. ALL EXISTING TRACK WIRING AS WELL AS THE EXISTING WIRING FROM THE EXISTING CABINET TO THE BASE JUNCTION WELL OF BOTH CANTILEVER SIGNALS SHALL BE REPLACED WITH NEW TRACK WIRING. NEW WIRING SHALL BE OF SIZE AND TYPE AS SPECIFIED WITHIN SPECIAL PROVISION ITEM 746619, RAILROAD SIGNALIZATION. ALL OTHER WIRING SHALL REMAIN AS IS.
  2. ALL COSTS FOR SUPPLYING AND INSTALLING SIGNALIZATION MATERIALS SHALL BE PAID UNDER 746619 - RAILROAD SIGNALIZATION.
  3. SIGNALIZATION CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER.
  4. THE INSTALLATION OF CONDUIT SHALL BE COMPLETED CONCURRENTLY WITH THE TRACK INSTALLATION. THE SIGNALIZATION CONTRACTOR SHALL SUPPLY PROPOSED CONDUIT TO THE CONTRACTOR INSTALLING THE TRACK PRIOR TO PAVING THE TRACK BOX.
  5. ALL EXISTING UTILITIES ARE TO REMAIN AS IS UNLESS OTHERWISE DIRECTED BY ENGINEER IN THE FIELD. THE CONTRACTOR SHALL UTILIZE CAUTION WHILE EXCAVATING FOR TRACK INSTALLATION.

SIGNALIZATION LEGEND	
SYMBOL	DESCRIPTION
⊗	EXISTING UTILITY POLE
■	PROPOSED JUNCTION WELL
■	PROPOSED SIGNAL CABINET
○	PROPOSED SIGNAL POLE BASE
◄	PROPOSED SIGNAL HEAD
□	SERVICE PEDESTAL
(WR)	PROPOSED WIRE RUN IDENTIFIER (* OF WIRE RUN)
(CO)	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
(CA)	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)

CONDUIT RUN SCHEDULE					
CO#	# OF CONDUITS	SIZE	LENGTH	B/T/O	TYPE OF CABLE/WIRE
1	1	4"	95'	T	SPARE
2	1	4"	95'	T	SIGNALIZATION & TRACK WIRING
3	2	4"	14'	T	SIGNALIZATION WIRE

**LEGEND**  
 X - DENOTES EXISTING  
 B - BORE T - TRENCH O - OPEN CUT  
 NOTE: ALL 4" CONDUIT TO BE SCHEDULE 80 PVC CONDUIT UNDER NEW PAVEMENT OR IN SODDED TRENCH



ADDENDUMS / REVISIONS

NOT TO SCALE

**STATEWIDE RAILROAD CROSSING**  
**REPAIR II, 2011**

CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

<b>SIGNALIZATION DETAILS</b>	SHEET NO.
	12
	TOTAL SHTS.
	19

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TRAFFIC CONTROL NOTES

1. ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL REASONABLY PROVIDE THE LEAST PRACTICABLE OBSTRUCTION TO ALL ROAD USERS, INCLUDING VEHICULAR, PEDESTRIAN AND BICYCLE TRAFFIC, AND SHALL CONFORM TO THE REQUIREMENTS OF THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART 6, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT FOR BIDS.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF EXISTING PAVEMENT WITHIN THE PROJECT LIMITS FOR THE DURATION OF THE CONTRACT OR AS DIRECTED BY THE ENGINEER OR DESIGNEE. ALL REPAIRS ARE AT THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE ENGINEER.
3. CONTRACTOR SHALL ONLY WORK ON ONE SIDE OF THE ROAD AT A TIME OR AS DIRECTED IN FIELD BY THE ENGINEER.
4. CONTRACTOR SHALL SUBMIT PROPOSED PEDESTRIAN DETOUR PLAN FOR APPROVAL BY DELDOT PRIOR TO CONSTRUCTION. PEDESTRIAN DETOUR SHALL FOLLOW GUIDELINES IN DEMUTCOD. THE CONTRACTOR MAY USE A DESIGNATED FLAGGER TO ASSIST PEDESTRIANS TO PASS THROUGH THE WORK ZONE, WHEN REQUIRED. ALL COSTS ARE INCIDENTAL TO THE CONTRACT.
5. FOR THIS PROJECT PEAK HOURS ARE DEFINED AS 6:00 AM TO 9:00 AM AND 3:00 PM TO 7:00 PM, MONDAY THROUGH FRIDAY OR AS PER OTHER RESTRICTIONS AS NOTED IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
6. TRAFFIC OFFICERS ARE ANTICIPATED TO BE UTILIZED AT THE NEWPORT GAP PIKE (SR 41) LOCATION DURING THE OPERATION OF CLOSING DOWN THE ROAD AND IMPLEMENTING THE DETOURS. IT IS NOT THE INTENT TO HAVE OFFICERS ON-SITE FOR WORK OCCURRING WHILE THE DETOUR IS ESTABLISHED AND FUNCTIONING. IF NECESSARY, OFFICERS MAY BE UTILIZED WHEN REOPENING THE ROAD TO TRAFFIC AS THE DETOUR IS TAKEN DOWN AT THE DIRECTION OF THE ENGINEER IN THE FIELD.
7. THE CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' DURING SINGLE LANE CLOSURES.

PROJECT NOTES FOR SEDIMENT AND STORMWATER MANAGEMENT

- 1) DUST CONTROL  
DUST IS TO BE CONTROLLED EXCLUSIVELY THROUGH THE USE OF WATER. COSTS ASSOCIATED WITH THE FURNISHING AND APPLICATION OF WATER FOR DUST CONTROL SHALL BE INCIDENTAL TO ALL THE CONTRACT ITEMS.
- 2) REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE THE REQUIREMENTS OF THE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM THE ERRORS OR OMISSIONS IN THE APPROVED PLAN.
- 3) SOIL DISTURBANCE  
FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS.
- 4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR OF ALL EROSION AND SEDIMENT CONTROLS, AND STORMWATER MANAGEMENT PRACTICES DURING THE PROJECT.
- 5) EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY ENGINEER IN THE FIELD.
- 6) STAGING AREAS. PROPER EROSION AND SEDIMENT CONTROL MEASURES AS DETERMINED BY THE ENGINEER SHALL BE INSTALLED IN ALL STAGING AREAS, AT COMPLETION OF THE PROJECT. STAGING AREAS THAT ARE PAVED SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF UNPAVED, STAGING AREAS SHALL BE REGRADED TO THE SATISFACTION OF THE ENGINEER, TOPSOILED SEEDED, AND MULCHED IN ACCORDANCE WITH DELDOT STANDARD SPECIFICATIONS SECTIONS 732, 734, AND 735 FOR TOPSOIL, SEED AND MULCH RESPECTIVELY. SEED SHALL ADHERE TO THE SPECIFICATIONS FOR PERMANENT GRASS SEEDING - DRY GROUND. ALL COSTS ASSOCIATED TO THE ABOVE ITEMS 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 RE-ESTABLISHING A SATISFACTORY STAND OF GRASS SHALL ALSO BE AT THE CONTRACTOR'S EXPENSE.
- 7) CONSTRUCTION ENTRANCES (IF REQUIRED.) IT IS INTENDED THAT MUCK TRACKING BE ELIMINATED ON STATE MAINTAINED ROADWAYS ADJOINING THE PROJECT. EACH POINT OF INGRESS AND EGRESS FROM THE PROJECT SHALL HAVE INSTALLED STABILIZED CONSTRUCTION ENTRANCES (SCE), ITEM 268000. ALL PAVED SURFACES ADJOINING THE PROJECT LIMITS SHALL BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH WORKDAY. STABILIZED CONSTRUCTION ENTRANCES SHALL BE TOP DRESSED WITH TWO (2) INCHES OF CLEAN DE NO. 3 STONES WHEN THE VOIDS BECOME CLOGGED OR AS DIRECTED BY THE ENGINEER. ADDITIONAL STONES REQUIRED TO MAINTAIN THE ENTRANCES SHALL BE PAID UNDER ITEM 268000.
- 8) SOIL STOCKPILES (IF REQUIRED.) STOCKPILES OF SOIL SHALL BE STABILIZED WITH ITEM 734013 GRASS SEEDING, DRY GROUND AND MULCHED WITH ITEM 735006, MULCHING, STRAW.
- 9) THE CONTRACTOR SHALL PLACE SILT FENCE (IF REQUIRED) AS DIRECTED IN THE FIELD BY THE ENGINEER. ALL COSTS ARE INCLUDED UNDER ITEM 251000.
- 10) REMOVAL OF ALL PIPES AND RIPRAP AT THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE INCIDENTAL TO THEIR RESPECTIVE ITEMS. (IF REQUIRED)

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ADDENDUMS / REVISIONS



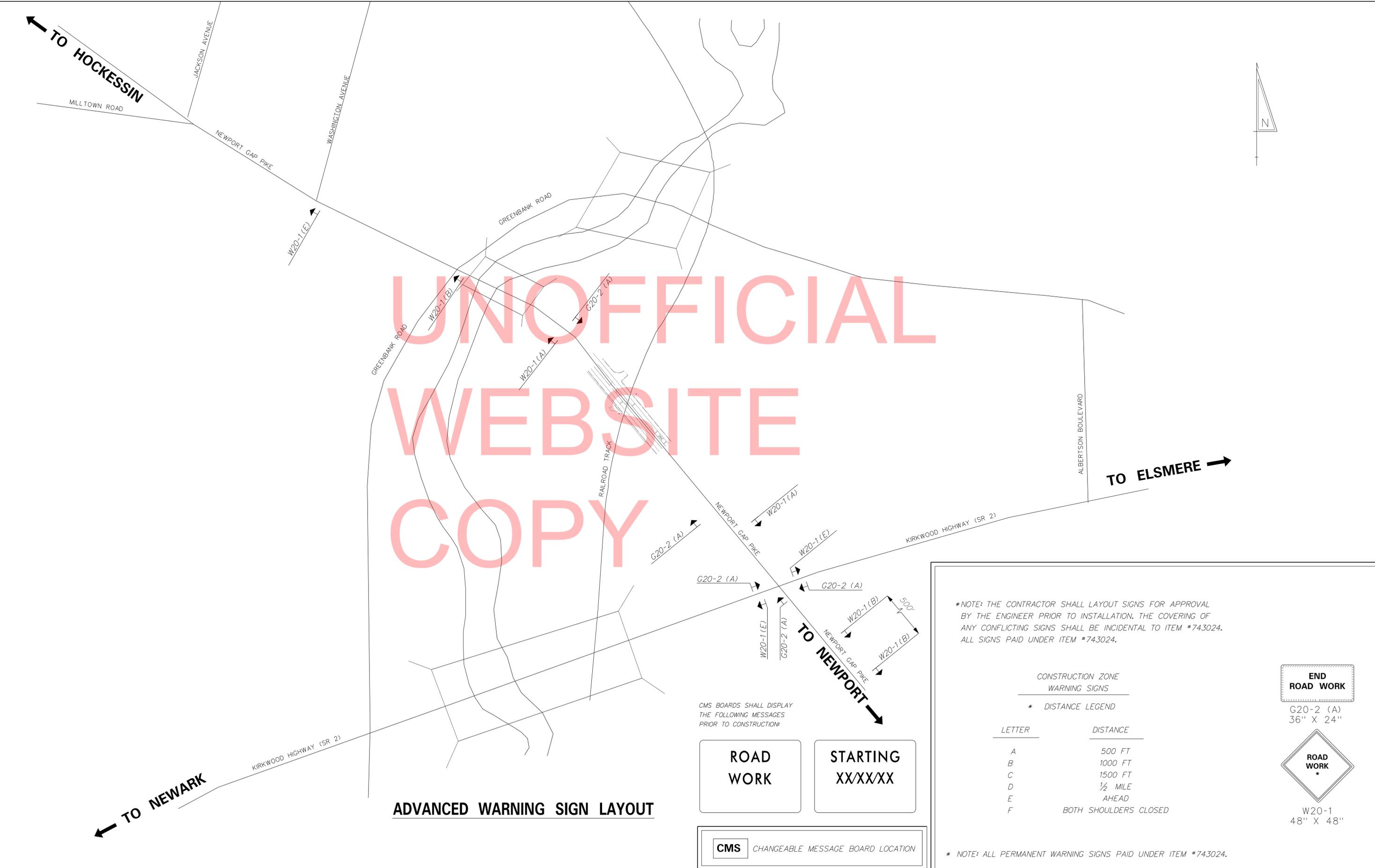

**STATEWIDE RAILROAD CROSSING  
REPAIR II, 2011**

CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

**CONSTRUCTION PHASING,  
M.O.T. AND EROSION  
CONTROL NOTES**

SHEET NO.	13
TOTAL SHTS.	19

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**ADVANCED WARNING SIGN LAYOUT**

CMS BOARDS SHALL DISPLAY THE FOLLOWING MESSAGES PRIOR TO CONSTRUCTION:

**ROAD WORK**

**STARTING  
XXXXXX**

**CMS** CHANGEABLE MESSAGE BOARD LOCATION

\*NOTE: THE CONTRACTOR SHALL LAYOUT SIGNS FOR APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION. THE COVERING OF ANY CONFLICTING SIGNS SHALL BE INCIDENTAL TO ITEM #743024. ALL SIGNS PAID UNDER ITEM #743024.

CONSTRUCTION ZONE WARNING SIGNS

\* DISTANCE LEGEND

LETTER	DISTANCE
A	500 FT
B	1000 FT
C	1500 FT
D	1/2 MILE
E	AHEAD
F	BOTH SHOULDERS CLOSED

**END ROAD WORK**

G20-2 (A)  
36" X 24"



W20-1  
48" X 48"

\* NOTE: ALL PERMANENT WARNING SIGNS PAID UNDER ITEM #743024.

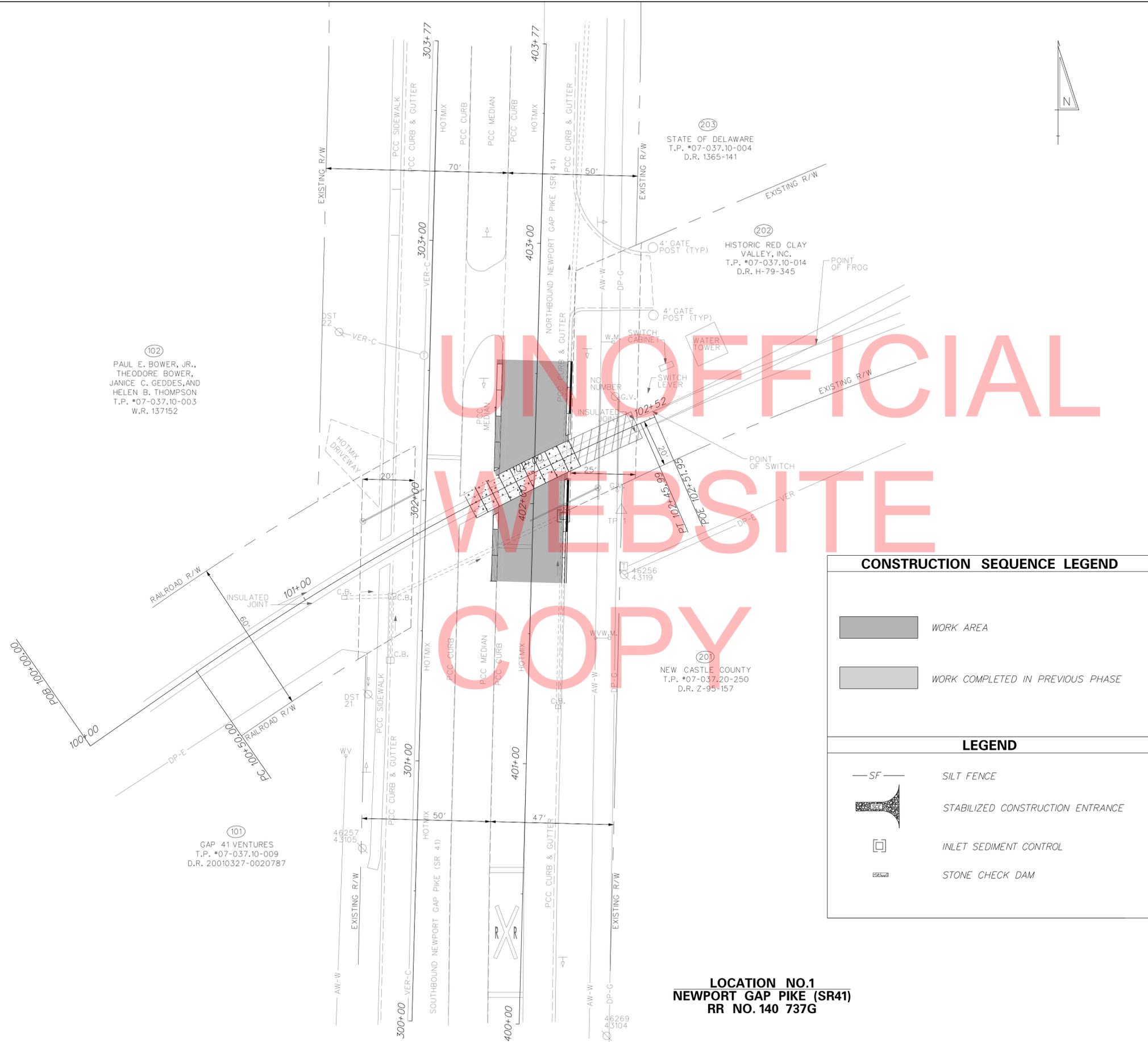
ADDENDUMS / REVISIONS



CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

SHEET NO.	14
TOTAL SHTS.	19

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102  
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 THEODORE BOWER,  
 JANICE C. GEDDES, AND  
 HELEN B. THOMPSON  
 T.P. \*07-037.10-003  
 W.R. 137152

101  
 GAP 41 VENTURES  
 T.P. \*07-037.10-009  
 D.R. 20010327-0020787

203  
 STATE OF DELAWARE  
 T.P. \*07-037.10-004  
 D.R. 1365-141

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 VALLEY, INC.  
 T.P. \*07-037.10-014  
 D.R. H-79-345

201  
 NEW CASTLE COUNTY  
 T.P. \*07-037.20-250  
 D.R. Z-95-157

**LOCATION NO.1**  
**NEWPORT GAP PIKE (SR41)**  
**RR NO. 140 737G**

**SEQUENCE OF CONSTRUCTION**

THE CONTRACTOR SHALL COMPLETE ALL WORK IN THE FOLLOWING SEQUENCE. ALL WORK SHALL BE COMPLETED IN A PHASE/STAGE BEFORE STARTING WORK IN A SUBSEQUENT PHASE/STAGE UNLESS OTHERWISE APPROVED BY THE ENGINEER. ALL DISTURBED AREAS IN A STAGE SHALL BE STABILIZED AS DIRECTED BY THE ENGINEER BEFORE BEGINNING WORK IN THE NEXT PHASE/STAGE.

**NEWPORT GAP PIKE CONSTRUCTION**

**PHASE 1 - NORTHBOUND CONSTRUCTION**

1. INSTALL ADVANCE WARNING SIGNS PER ADVANCE WARNING SIGN LAYOUT SHEET.
2. PLACE VARIABLE MESSAGE BOARD TEN (10) DAYS IN ADVANCE OF CONSTRUCTION.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES.
4. BEGINNING AT 6:00 P.M. ON FRIDAY, IMPLEMENT DETOUR PLAN TO CLOSE NORTHBOUND NEWPORT GAP PIKE TO TRAFFIC BETWEEN THE KIRKWOOD HIGHWAY INTERSECTION AND THE MILL CREEK INTERSECTION, DURING CONSTRUCTION. THE CONTRACTOR SHALL WORK CONTINUOUSLY UNTIL MONDAY MORNING AT 6:00 A.M. TO COMPLETE STAGES 5 THRU 12. IF THE WORK IS NOT COMPLETED BY THE TIME ALLOCATED, THE CONTRACTOR SHALL OPEN THE ROAD TO TRAFFIC AND STOP ALL WORK UNTIL THE CONTRACTOR CAN IMPLEMENT THE SAME DETOUR THE FOLLOWING FRIDAY IN ORDER TO COMPLETE STAGES 5 THRU 12. THE CONTRACT TIME SHALL NOT BE SUSPENDED AND ALL COSTS FOR THIS WORK ADDITIONAL TO THE ORIGINAL SEQUENCING SHOWN IN THE PLANS SHALL BE AT THE CONTRACTOR'S EXPENSE.
5. REMOVE THE EXISTING CROSSING SURFACE IN THE NORTHBOUND LANE TO THE LIMITS SHOWN IN THIS PHASE (SAW CUTTING OF THE PAVEMENT, AND CONSTRUCTION OF THE CURB AND MEDIAN CAN BE COMPLETED AHEAD OF THE CLOSURE UTILIZING TA-36).
6. PREPARE BASE FOR PRECAST CONCRETE SURFACE AND PLACE CONDUITS FOR SIGNAL AND TRACK WIRING.
7. PLACE PRECAST CONCRETE SURFACE.
8. CONSTRUCT TRACK PANELS THROUGH THE LIMITS OF THE CROSSING.
9. PLACE BALLAST AND TAMP TRACK.
10. PLACE AND TEMPORARILY SECURE THE REMOVED RAIL IN TRACK SLOTS ON THE PRECAST CONCRETE SURFACE TO ALLOW VEHICLE TRAFFIC OVER CROSSING.
11. PLACE GABC, TYPE B AND WARM MIX ASPHALT BASE PATCHING TO WITHIN TWO INCHES OF THE FINISH GRADE. PLACE TEMPORARY ROAD MATERIAL IN THE PATCHED AREA IN ORDER TO CREATE AN EVEN TRANSITION BEFORE AND AFTER THE CROSSING (PAID UNDER ITEM #402000.)
12. CROSSING MUST BE OPEN TO TRAFFIC BY 6:00 A.M. MONDAY.

AT THIS TIME, THE FOLLOWING WORK MAY BE COMPLETE USING THE PROPER TRAFFIC CONTROLS MEASURES, DURING OFF-PEAK HOURS:

13. UTILIZING TA-36 OF THE TRAFFIC CONTROL MANUAL, DURING OFF-PEAK HOURS, THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION OF THE PROPOSED PCC CURBS, INLET ADJUSTMENTS, AND ASPHALT PATCHING ADJACENT TO THE NORTHBOUND LANE, SHOWN IN THIS PHASE.
14. TOPSOIL, SEED AND PLACE RETENTION BLANKET ON ALL DISTURBED AREAS WITHIN THIS PHASE OF CONSTRUCTION.
15. CONTRACTOR SHALL PROFILE MILL THE EXISTING PAVEMENT IN THE NORTHBOUND LANE TO THE DEPTH OF 2" BELOW THE FINAL GRADES. PLACE MINIMUM 2" OF WARM ASPHALT MIX, TYPE C TO FINAL ELEVATIONS.
16. PLACE ALL PERMANENT PAVEMENT MARKINGS AND WARNING SIGNS UTILIZING TA-36 IN THE TRAFFIC CONTROL MANUAL.

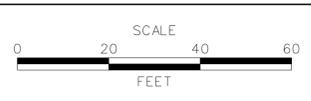
CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES DURING THIS PHASE OF CONSTRUCTION. COSTS ASSOCIATED WITH MAINTAINING ENTRANCES ARE INCIDENTAL TO THE CONTRACT.

CONSTRUCTION SEQUENCE LEGEND	
	WORK AREA
	WORK COMPLETED IN PREVIOUS PHASE

LEGEND	
	SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	INLET SEDIMENT CONTROL
	STONE CHECK DAM

ADDENDUMS / REVISIONS



CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

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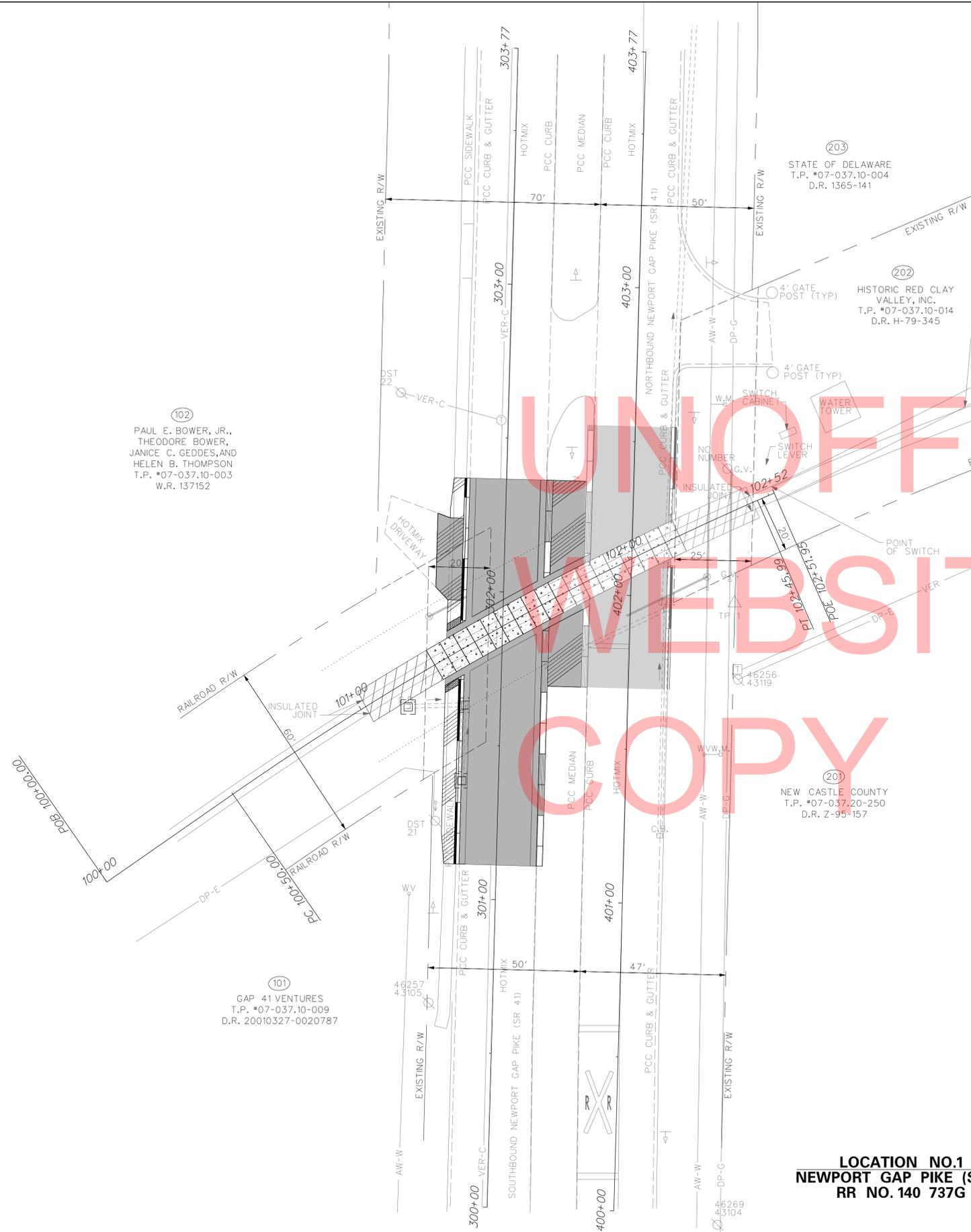
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**SEQUENCE OF CONSTRUCTION**

THE CONTRACTOR SHALL COMPLETE ALL WORK IN THE FOLLOWING SEQUENCE. ALL WORK SHALL BE COMPLETED IN A PHASE/STAGE BEFORE STARTING WORK IN A SUBSEQUENT PHASE/STAGE UNLESS OTHERWISE APPROVED BY THE ENGINEER. ALL DISTURBED AREAS IN A STAGE SHALL BE STABILIZED AS DIRECTED BY THE ENGINEER BEFORE BEGINNING WORK IN THE NEXT PHASE/STAGE.

**NEWPORT GAP PIKE CONSTRUCTION**

**PHASE 2 - SOUTHBOUND CONSTRUCTION**

- PLACE VARIABLE MESSAGE BOARD TEN (10) DAYS IN ADVANCE OF CONSTRUCTION.
- INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES.
- BEGINNING AT 6:00 P.M. ON FRIDAY, IMPLEMENT DETOUR PLAN TO CLOSE SOUTHBOUND NEWPORT GAP PIKE TO TRAFFIC BETWEEN THE KIRKWOOD HIGHWAY INTERSECTION AND THE MILL CREEK INTERSECTION, DURING CONSTRUCTION. THE CONTRACTOR SHALL WORK CONTINUOUSLY UNTIL MONDAY MORNING AT 6:00 A.M. TO COMPLETE STAGES 4 THRU 11. IF THE WORK IS NOT COMPLETED BY THE TIME ALLOCATED, THE CONTRACTOR SHALL OPEN THE ROAD TO TRAFFIC AND STOP ALL WORK UNTIL THE CONTRACTOR CAN IMPLEMENT THE SAME DETOUR THE FOLLOWING FRIDAY IN ORDER TO COMPLETE STAGES 4 THRU 11. THE CONTRACT TIME SHALL NOT BE SUSPENDED AND ALL COSTS FOR THIS WORK ADDITIONAL TO THE ORIGINAL SEQUENCING SHOWN IN THE PLANS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- REMOVE THE EXISTING CROSSING SURFACE IN THE SOUTHBOUND LANE TO THE LIMITS SHOWN IN THIS PHASE (SAW CUTTING OF THE PAVEMENT, AND CONSTRUCTION OF THE CURB AND MEDIAN CAN BE COMPLETED AHEAD OF THE CLOSURE UTILIZING TA-36).
- PREPARE BASE FOR PRECAST CONCRETE SURFACE AND PLACE CONDUITS FOR SIGNAL AND TRACK WIRING.
- PLACE PRECAST CONCRETE SURFACE.
- CONSTRUCT TRACK PANELS THROUGH THE LIMITS OF THE CROSSING.
- PLACE BALLAST AND TAMP TRACK.
- PLACE AND TEMPORARILY SECURE THE REMOVED RAIL IN TRACK SLOTS ON THE PRECAST CONCRETE SURFACE TO ALLOW VEHICLE TRAFFIC OVER CROSSING.
- PLACE GABC, TYPE B AND WARM MIX ASPHALT BASE PATCHING TO WITHIN TWO INCHES OF THE FINISH GRADE. PLACE TEMPORARY ROAD MATERIAL IN THE PATCHED AREA IN ORDER TO CREATE AN EVEN TRANSITION BEFORE AND AFTER THE CROSSING (PAID UNDER ITEM#402000.)
- CROSSING MUST BE OPEN TO TRAFFIC BY 6:00 A.M. MONDAY.

AT THIS TIME, THE FOLLOWING WORK MAY BE COMPLETE USING THE PROPER TRAFFIC CONTROLS MEASURES, DURING OFF-PEAK HOURS:

- UTILIZING TA-36 OF THE TRAFFIC CONTROL MANUAL, DURING OFF-PEAK HOURS, THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION OF THE PROPOSED PCC CURB, MEDIAN AND SIDEWALK, INLET ADJUSTMENTS, AND ASPHALT PATCHING ADJACENT TO THE SOUTHBOUND LANE, SHOWN IN THIS PHASE.
- TOPSOIL, SEED AND PLACE RETENTION BLANKET ON ALL DISTURBED AREAS WITHIN THIS PHASE OF CONSTRUCTION.
- USING TRAFFIC CONTROL TA-13, WHICH WILL ALLOW INTERMITTENT AND COMPLETE TRAFFIC STOPPAGES (LESS THAN 20 MINUTES DURING OFF-PEAK HOURS), REMOVE THE EXISTING RAIL WITHIN THE PRECAST CONCRETE CROSSING AND INSTALL NEW 132RE CWR RAIL, RAIL CLAMPS AND RUBBER INSERTS TO COMPLETE INSTALLATION. THIS WORK SHALL BE PERFORMED AT NIGHT UNLESS DIRECTED BY ENGINEER. ALL COSTS FOR LIGHTING FOR THIS WORK SHALL BE PAID UNDER ITEM #743005, PORTABLE LIGHT ASSEMBLY.
- CONTRACTOR SHALL PROFILE MILL THE EXISTING PAVEMENT IN THE SOUTHBOUND LANE TO THE DEPTH OF 2" BELOW THE FINAL GRADES. PLACE MINIMUM 2" OF WARM ASPHALT MIX, TYPE C TO FINAL ELEVATIONS.
- PLACE ALL PERMANENT PAVEMENT MARKINGS AND WARNING SIGNS UTILIZING TA-36 IN THE TRAFFIC CONTROL MANUAL.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES DURING THIS PHASE OF CONSTRUCTION. COSTS ASSOCIATED WITH MAINTAINING ENTRANCES ARE INCIDENTAL TO THE CONTRACT.

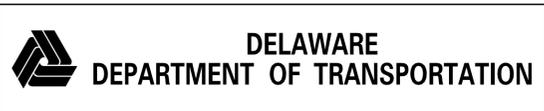
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CONSTRUCTION SEQUENCE LEGEND	
	WORK AREA
	WORK COMPLETED IN PREVIOUS PHASE

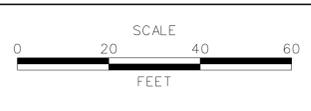
  

LEGEND	
	SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	INLET SEDIMENT CONTROL
	STONE CHECK DAM

**LOCATION NO.1  
 NEWPORT GAP PIKE (SR41)  
 RR NO. 140 737G**



ADDENDUMS / REVISIONS



**STATEWIDE RAILROAD CROSSING  
 REPAIR II, 2011**

CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

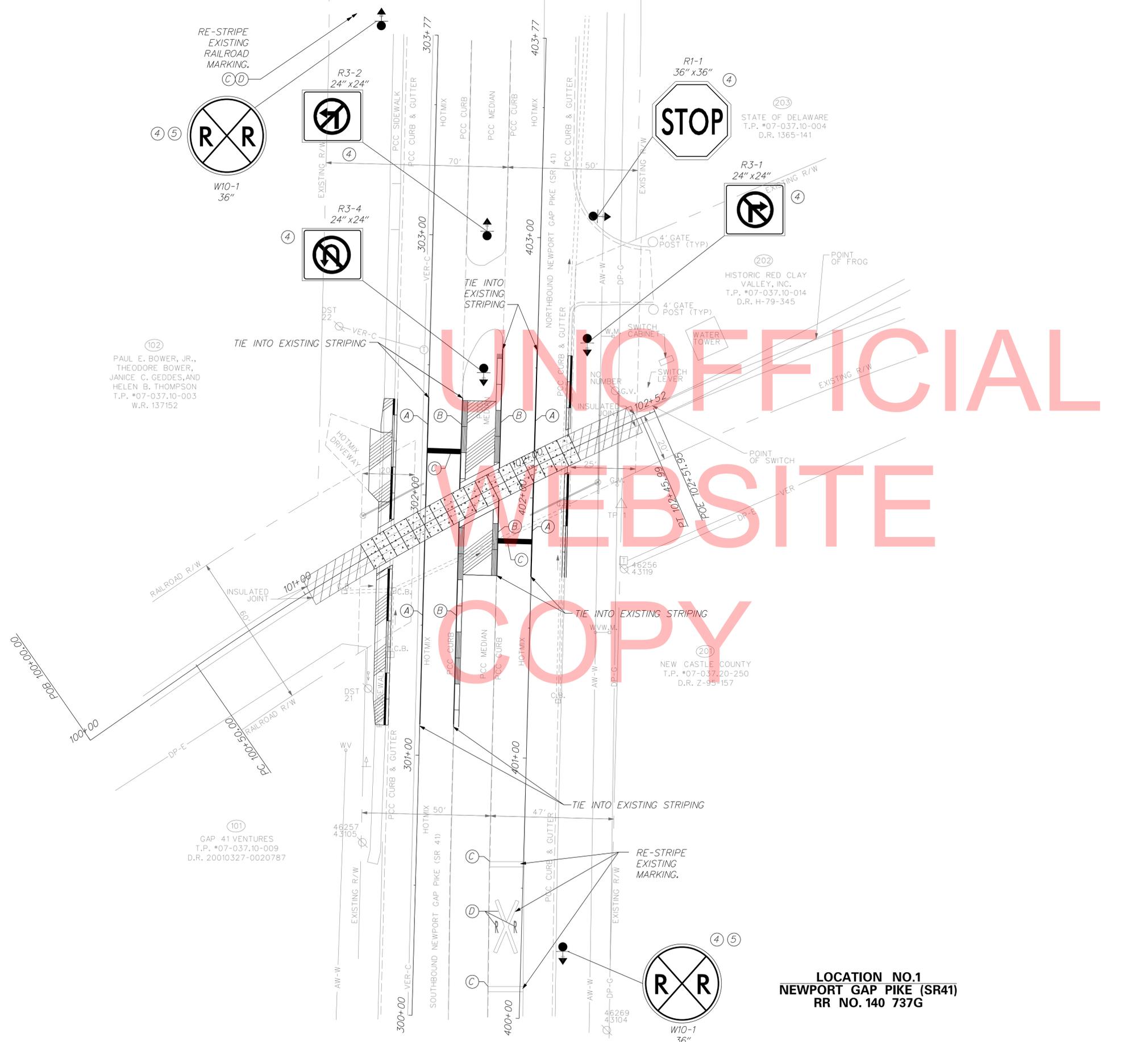
**CONSTRUCTION PHASING,  
 M.O.T. AND EROSION  
 CONTROL PLANS**

SHEET NO.	16
TOTAL SHTS.	19





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T.P. \*07-037.10-014  
D.R. H-79-345

201  
NEW CASTLE COUNTY  
T.P. \*07-037.20-250  
D.R. Z-95-157

**LOCATION NO.1**  
**NEWPORT GAP PIKE (SR41)**  
**RR NO. 140 737G**

SIGNING LEGEND	
①	REMOVE EXISTING SIGN
②	EXISTING SIGN TO REMAIN
③	PLACE NEW SIGN
④	RENEW EXISTING SIGN
⑤	REPOSITION EXISTING SIGN

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	190 LF
(B)	5" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	190 LF
(C)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	156 SF
(D)	WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	136 SF

NOTE:  
1. EXISTING PAVEMENT MARKINGS TO REMAIN UNLESS OTHERWISE NOTED.



ADDENDUMS / REVISIONS



**STATEWIDE RAILROAD CROSSING**  
**REPAIR II, 2011**

CONTRACT	BRIDGE NO.	-
T201100506	DESIGNED BY:	ASH
COUNTY	CHECKED BY:	AMW
NEW CASTLE		

**SIGNING AND STRIPING**  
**LOCATION NO. 1**

SHEET NO.	19
TOTAL SHTS.	19