PROJECT NOTES:

1. LOCATION

PROPOSED NEW STRUCTURE RETAINING SOUTHBOUND SR1 ADJACENT TO BRIDGE 1-903S IN NEW CASTLE COUNTY. DELAWARE.

2. ELEVATIONS

VERTICAL DATUM IS REFERENCED TO NAVD 88.

3. DESIGN CRITERIA

4TH ED. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS INCLUDING 2008 AND 2009 INTERIM PROVISIONS DELDOT BRIDGE DESIGN MANUAL. MAY 2005, LATEST REVIONS JANUARY 2008,

4. LOADING

HL-93 AND DELAWARE LEGAL LOAD FOR LIVE LOAD. 40 PCF EQUIVALENT FLUID EARTH PRESSURE.

SEISMIC DESIGN AND REQUIREMENTS SHALL BE IN ACCORDANCE WITH 4TH ED. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS WITH 2008 AND 2009 INTERIM PROVISIONS.

5. CONCRETE

ALL CONCRETE PROPERTIES SHALL BE IN ACCORDANCE WITH SECTION 812 OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

CLASS A - WALL STEM AND PARAPET (f'c = 4,500 PSI).

CLASS B - RETAINING WALL FOOTING NOT EXPOSED (f'c = 3.000 PSI).

ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE.

6. REINFORCING STEEL

ALL REINFORCING STEEL SHALL BE AASHTO M31 (ASTM A615), GRADE 60 AND UNLESS SPECIFIED OTHERWISE ON THE PLANS SHALL BE PROTECTED WITH FUSION BONDED EPOXY. CONFORMING TO AASHTO M284 (ASTM A775) AND DENOTED WITH A SUFFIX 'E' IN THE BAR MARKS.

MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE:

FOUNDATION ELEMENTS: 3" ELSEWHERE: 2" CLEAR TO MAIN STEEL

2" CLEAR TO MAIN STEEL AT ENDS

7. CONSTRUCTION JOINTS

KEYED CONSTRUCTION JOINTS SHALL BE 2" X 4" OR AS NOTED. ALL EXPOSED CONSTRUCTION JOINT EDGES SHALL HAVE A 34" V-NOTCH UNLESS NOTED OTHERWISE.

8. EXISTING STRUCTURE

ALL DIMENSIONS AND STATIONS SHOWN ARE APPROXIMATE. ALL DIMENSIONS AFFECTED BY THE GEOMETRICS, AND/OR LOCATION OF EXISTING STRUCTURES SHALL BE CHECKED IN THE FIELD BY THE CONTRACTOR, BEFORE ANY CONSTRUCTION IS DONE AND BEFORE ANY MATERIAL IS ORDERED OR FABRICATED. IF THE GEOMETRICS DIFFER FROM THAT SHOWN ON THE PLANS, THE ENGINEER SHALL BE CONTACTED FOR EVALUATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY THE ENGINEER WITH ALL FIELD DIMENSIONS REQUIRED TO CHECK DETAIL DRAWINGS.

ANY DAMAGE INCURRED TO EXISTING STRUCTURES TO REMAIN RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED ALL AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

9. MISCELLANEOUS

ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE GRADED BACK TO THE ORIGINAL EXISTING GRADE, TOP SOILED, SEEDED AND MULCHED. PAYMENT SHALL BE INCIDENTAL TO THE CONTRACT. AS DIRECTED BY THE ENGINEER, ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATION RESULTING FROM UNAUTHORIZED ACTIVITIES OUTSIDE THE LIMIT OF CONSTRUCTION SHALL BE TOP SOILED, SEEDED, AND MULCHED AT THE CONTRACTOR'S EXPENSE.

10. STABILIZING STRUCTURAL EXCAVATIONS

IN LIEU OF A 2:1 SLOPE. THE CONTRACTOR MAY USE SHORING FOR EXCAVATIONS EXCEEDING 5 FEET IN HEIGHT. THE COST OF THE SHORING SHALL BE INCIDENTAL TO ITEM 207000 EXCAVATION AND BACKFILL FOR STRUCTURES.

FOR ALL EXCAVATIONS REQUIRING TEMPORARY EXCAVATION SUPPORT, THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS AND CALCULATIONS FOR DESIGN OF THE TEMPORARY EXCAVATION SUPPORT SYSTEMS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN DELAWARE. THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF THE TEMPORARY EXCAVATION SUPPORT SYSTEMS. METHODS OF DEWATERING EXCAVATIONS SHALL CONFORM TO THOSE SHOWN ON THE MAINTENANCE OF STREAM FLOW PLANS ON DWG. NOS. MS 1/2-1 AND MS 1/2-2.

THE FOLLOWING EARTH PRESSURE PARAMETERS ARE RECOMMENDED FOR USE IN DESIGNING TEMPORARY EXCAVATION SUPPORT SYSTEMS:

> SOIL UNIT WT = 120 PCF SOIL BUOYANT UNIT WT = 58 PCF PHI = 30 DEG

C = O PSF

Ka = 0.333

11.FOUNDATION

THE FACTORED BEARING RESISTANCE FOR RETAINING WALL FOOTING IS

SERVICE LIMIT STATE = 2.1 KSF STRENGTH LIMIT STATE = 4.8 KSF

12. UTILITIES BEFORE BEGINNING WORK, THE CONTRACTOR SHALL GIVE NOTIFICATION BY TELEPHONE BY CALLING "MISS UTILITY" AT 1-800-282-8555 A MINIMUM OF 2 WORKING DAYS PRIOR TO START OF WORK. VERIFY AND LOCATE ALL UTILITIES PRIOR TO STARTING WORK.

COORDINATE THE REQUIREMENTS FOR PROTECTION OF ANY UTILITY WITH THE UTILITY OWNER PRIOR TO STARTING WORK.

CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED. ANY DAMAGE INCURRED TO THESE UTILITIES OR ANY OTHER UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS, DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY. THE DEPARTMENT DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS, OR LIABILITY FOR ACCURACY OF TYPE, SIZE AND LOCATION OF ANY UTILITY.

THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARILY SUPPORTING, PROTECTING, OR RELOCATING ANY UTILITIES DURING CONSTRUCTION. WHERE NECESSARY. THE COST FOR THIS WORK WILL BE INCIDENTAL TO THE CONTRACT.

13. 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 PROJECT. IF THE STAGING AREA IS PAVED. IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE STAGING AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOP SOILED, SEEDED AND MULCHED IN ACCORDANCE WITH DELAWARE STANDARD SPECIFICATION SECTIONS 732. 734 AND 735, FOR TOP SOIL, 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 ALSO BE AT THE CONTRACTOR'S EXPENSE.

RETAINING WALL RW1-1 INDEX OF SHEETS SHEET NO. | DWG. NO. TABLE OF CONTENTS 293 PN-01 PROJECT NOTES 294 PE-01 GENERAL PLAN AND ELEVATION - 1 295 GL-01 GEOMETRIC FOOTING LAYOUT PLAN 296 PE-02 FOOTING PLAN & WALL ELEVATION - 1 297 PE-03 FOOTING PLAN & WALL ELEVATION - 2 298 BR-01 REINFORCEMENT BAR LIST 299 B0-01 BORING PROFILE

OLIANITITY SLIMMARY

QUANTITY SUMMARY										
ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY							
202000	EXCAVATION AND EMBANKMENT	CY	385							
207000	EXCAVATION AND BACKFILL FOR STRUCTURES	CY	850							
602001	PORTLAND CEMENT CONCRETE MASONRY, CLASS A	CY	76							
602002	PORTLAND CEMENT CONCRETE MASONRY, CLASS B	CY	58							
6 <mark>020</mark> 17	PORTLAND CEMENT CONCRETE MASONRY, PARAPET, CLASS A	CY	17							
603000	BAR REINFORCEMENT	LB	5,340							
604000	BAR REINFORCEMENT, EPOXY COATED	LB	13,600							

1. ITEM 202000 IS REPRESENTED UNDER TYPE C MATERIAL REQUIRED, "TYPE C BACKFILL FOR STRUCTURES"; SEE DRAWING EW-02.

2. ITEM 207000 IS REPRESENTED ON DRAWING EW-02 UNDER EXCAVATION AVAILABLE FOR EMBANKMENT, "PLUS EXCAVATION AND BACKFILLING FOR STRUCTURES."

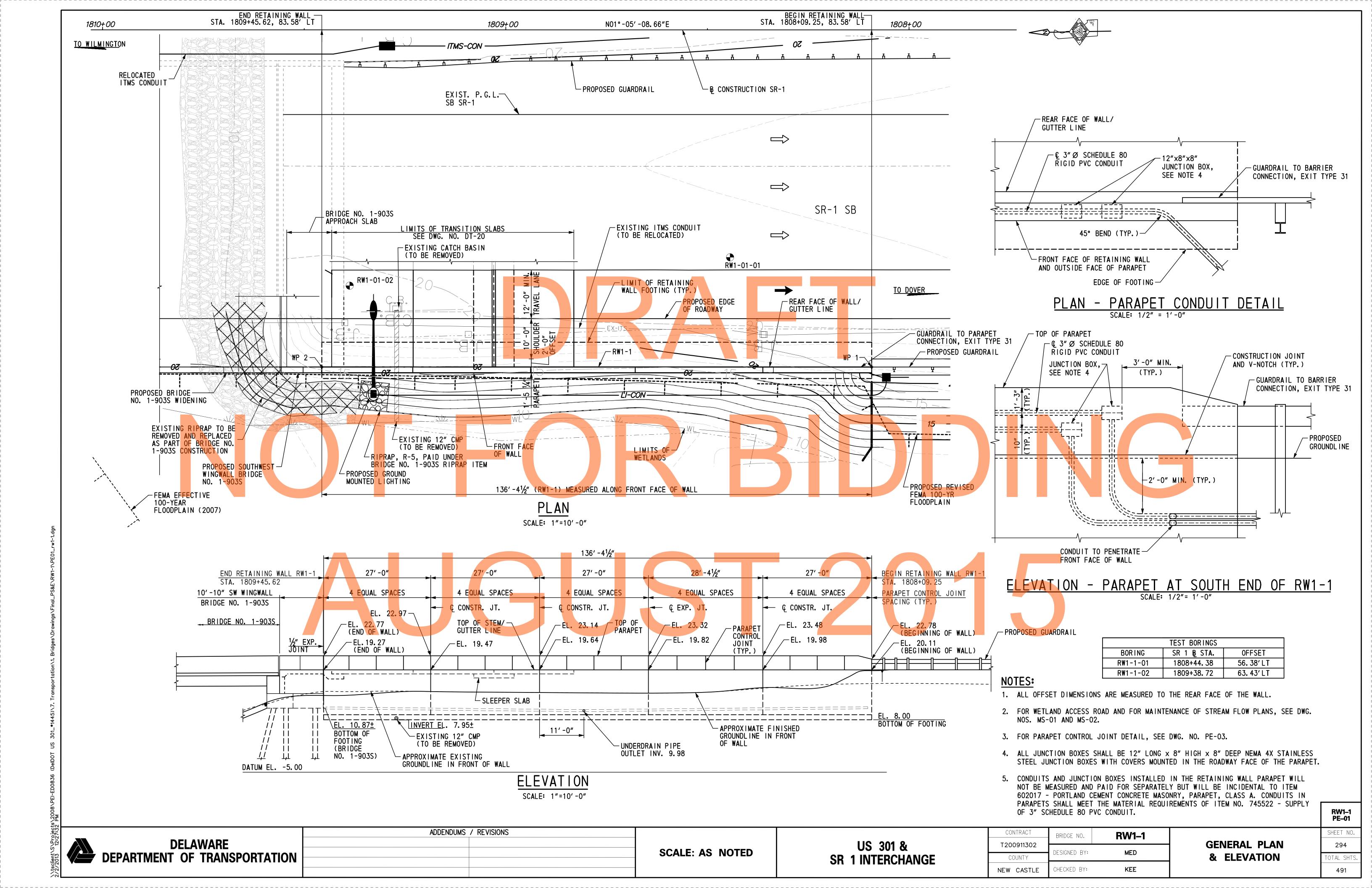
DELAWARE DEPARTMENT OF TRANSPORTATION ADDENDUMS / REVISIONS

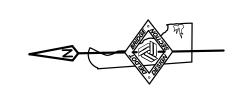
US 301 & **SR 1 INTERCHANGE**

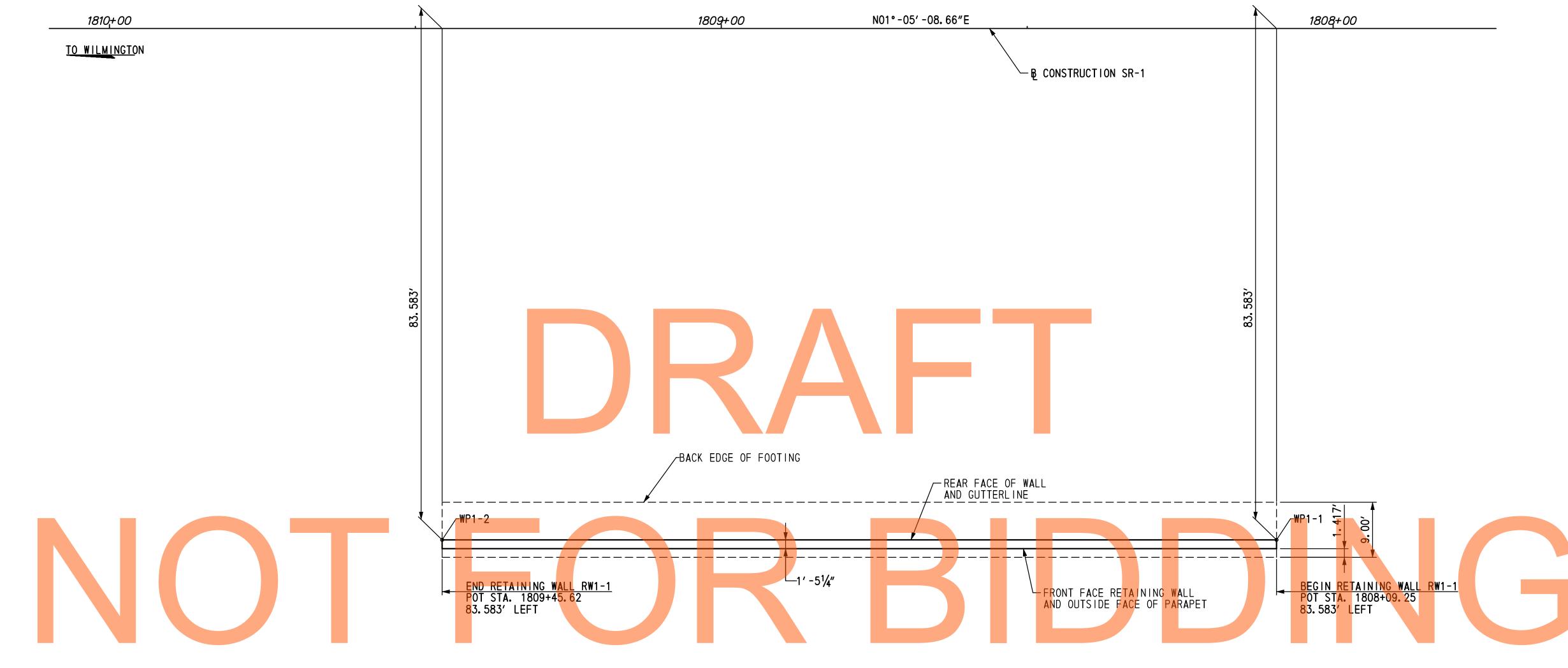
CONTRACT BRIDGE NO. **RW1-1** T200911302 DESIGNED BY: MED COUNTY KEE NEW CASTLE CHECKED BY:

PROJECT NOTES

PN-01 293 TAL SHTS 491







PLAN SCALE: 1"=10'-0"

WORKING POINT	BE CONSTR. SR 1 STA.	OFFSET	NORTHING	EASTING				
W. P. 1	1808+09.25	83. 583′ LT	559179 . 0 <mark>727</mark>	590389 <mark>. 33</mark> 84		_		
W. P. 2	1809+45.62	83. 583′ LT	5 59315. 4 <mark>232</mark>	590391 <mark>. 92</mark> 25				

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE: AS NOTED

US 301 & SR 1 INTERCHANGE

CONTRACT
BRIDGE NO.

T200911302

COUNTY

DESIGNED BY:
MED

NEW CASTLE
CHECKED BY:
KEE

GEOMETRIC FOOTING
LAYOUT PLAN

TOTA

RW1-1 GL-01

SHEET NO.

295

TOTAL SHTS.

491

