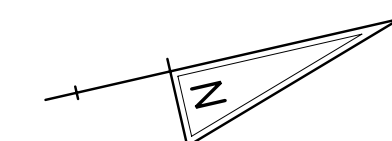
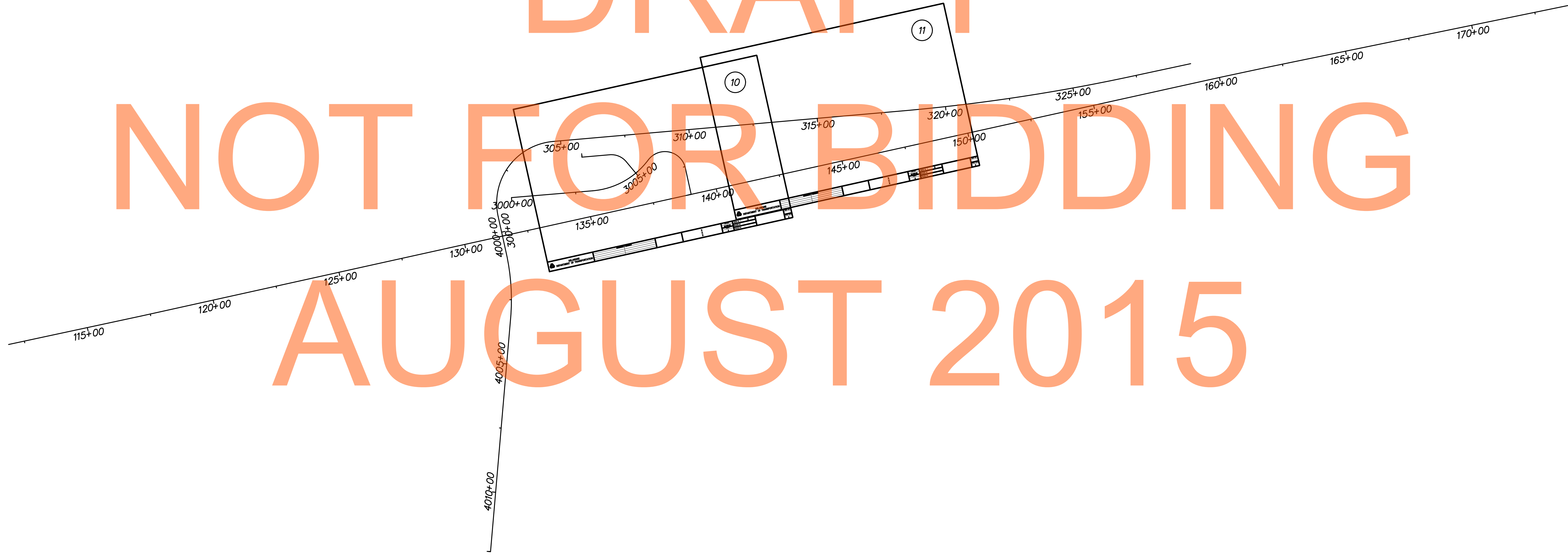


PLAN SHEET INDEX CROSS REFERENCE

ENVIRONMENTAL COMPLIANCE	96	97
CONSTRUCTION PLAN	10	11



DRAFT  
NOT FOR BIDDING  
AUGUST 2015



ADDENDUMS / REVISIONS




**US 13 & PORT PENN RD INTERSECTION**

CONTRACT	BRIDGE NO.
T201011302	
COUNTY	DESIGNED BY: REL
NEW CASTLE	CHECKED BY: LMM

**ENVIRONMENTAL COMPLIANCE INDEX**

EC-01
SHEET NO.
96
TOTAL SHTS.
179

**DELAWARE DEPARTMENT OF TRANSPORTATION**

\$DGNAMES\$ \$DATE\$ \$TIME\$



ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

A. THE PURPOSE OF THESE ENVIRONMENTAL COMPLIANCE SHEETS IS TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR AGENCY REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.

B. AN ENVIRONMENTAL MONITOR WILL BE RESPONSIBLE FOR REVIEWING ENVIRONMENTAL COMPLIANCE. CONTACT INFORMATION FOR THE PROJECT'S ENVIRONMENTAL MONITOR WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETINGS AND MAY ALSO BE OBTAINED BY CALLING THE DELDOT ENVIRONMENTAL STUDIES SECTION AT (302) 760-2264. THE PRESENCE OF THE DEPARTMENT'S ENVIRONMENTAL MONITOR DOES NOT ALLEVIATE OR NULLIFY ANY OF THE CONTRACTOR'S OBLIGATIONS TO FULLY COMPLY WITH ALL ENVIRONMENTAL PERMITS AND/OR REGULATIONS.

C. IF A DEPARTURE FROM THE APPROVED PLANS IS NECESSARY, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND ENVIRONMENTAL MONITOR IMMEDIATELY. THE ENVIRONMENTAL MONITOR SHALL COORDINATE WITH THE APPROPRIATE RESOURCE AGENCIES INCLUDING BUT NOT LIMITED TO THE ARMY CORPS OF ENGINEERS (USACE), DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL (DNREC), STATE HISTORIC PRESERVATION OFFICE (SHPO), AND MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE). WORK SHALL NOT PROCEED UNTIL ALL THE NECESSARY APPROVALS, PERMITS OR MODIFICATIONS ARE OBTAINED. THIS RESOURCE AGENCY APPROVAL IS IN ADDITION TO ANY APPROVAL THAT NEEDS TO BE DERIVED FROM THE ENGINEER. THE ENVIRONMENTAL MONITOR CANNOT APPROVE ANY CHANGE INDEPENDENT FROM THE ENGINEER. APPROVAL MAY TAKE A SIGNIFICANT AMOUNT OF TIME TO COMPLETE AND ALL CHANGES MAY NOT BE APPROVED. THE CONTRACTOR SHALL HAVE NO CLAIM AGAINST THE DEPARTMENT FOR COSTS OR DELAYS ASSOCIATED WITH RESOURCE AGENCY APPROVAL OR REJECTION OF CHANGES OR DEVIATIONS FROM THESE PLANS.

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

E. THE IDENTIFIED PERMANENT AND TEMPORARY IMPACTS TO JURISDICTIONAL RESOURCES SHOWN ON THE ENVIRONMENTAL COMPLIANCE SHEETS ARE THE ONLY AUTHORIZED IMPACTS.

2. NATURAL AND CULTURAL RESOURCE ISSUES:

A. PERMIT REQUIREMENTS / APPROVALS:

USACE - INDIVIDUAL PERMIT - CENAP-OP-R-2006-6071-1 (PROVISIONAL PENDING WQ CERTIFICATION); PROVISIONAL APPROVAL AUGUST 18, 2009; EXPIRES DECEMBER 31, 2019\*\*

DNREC SUBAQUEOUS LANDS PERMIT - PENDING\*\*

DNREC WATER QUALITY CERTIFICATION - PENDING\*\*

DELAWARE COASTAL ZONE MANAGEMENT FEDERAL CONSISTENCY CERTIFICATION - SEPTEMBER 14, 2007; NO EXPIRATION\*\*

\* THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING/OBTAINING THESE PERMITS/APPROVALS.

\*\* THE CONTRACTOR MUST ENSURE THAT THESE PERMITS/APPROVALS ARE IN THEIR POSSESSION PRIOR TO THE BEGINNING OF CONSTRUCTION AND ENSURE THESE PERMITS/APPROVALS ARE DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.

B. CONSTRUCTION RESTRICTIONS:

ENDANGERED SPECIES: BOG TURTLES POTENTIALLY OCCUPY THE SCOTT RUN WATERSHED. PORTIONS OF WETLAND 29E ARE CONSIDERED POTENTIAL HABITAT FOR THE BOG TURTLE. THE CONTRACTOR SHALL NOT DISTURB OR ENCROACH ON WETLAND 29E EXCEPT AS SPECIFICALLY IDENTIFIED ON THESE EC SHEETS. WORK IN THE VICINITY OF WETLAND 29E IS SUBJECT TO THE FOLLOWING CONDITIONS IDENTIFIED IN THE PROJECT'S BIOLOGICAL ASSESSMENT.

1. EXCLUSIONARY FENCING SHALL BE INSTALLED TO PREVENT BOG TURTLES FROM ENTERING THE WORK AREA. FENCING SHALL CONSIST OF ITEM 251001 - REINFORCED SILT FENCE. FENCING SHALL BE INSTALLED BY HAND WITH MINIMAL DISTURBANCE TO THE WETLAND RESOURCE. FENCING SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. FENCE INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE ENGINEER IN CONSULTATION WITH DELDOT'S QUALIFIED BOG TURTLE SURVEYOR AND THE ENVIRONMENTAL MONITOR.

2. FOLLOWING FENCING INSTALLATION AND PRIOR TO ANY CONSTRUCTION ACTIVITIES, A PRE-CONSTRUCTION SURVEY OF THE EXCLUSION AREA WILL BE CONDUCTED BY DELDOT'S QUALIFIED BOG TURTLE SURVEYOR TO ENSURE NO BOG TURTLES ARE PRESENT IN THE WORK AREA.

3. SHOULD THE EXCLUSIONARY FENCE BE DAMAGED OR BREACHED, THE FENCE SHALL BE REPAIRED AND THE EXCLUSION AREA SHALL BE RE-SURVEYED PRIOR TO RESUMING CONSTRUCTION ACTIVITIES. ALL COSTS FOR THE FENCE DAMAGE OR BREACH SHALL BE AT THE CONTRACTOR'S EXPENSE.

FISHERIES: NONE

MIGRATORY BIRDS: NONE

C. PROTECTION OF RESOURCES:

I. ITEM 727552 - RESOURCE PROTECTION FENCE (WITH ASSOCIATED SIGNAGE) SHALL BE USED ALONG THE LIMIT OF CONSTRUCTION (LOC) AND OTHER AREAS SHOWN ON THE PLANS WHERE WETLANDS, WATERS OR CULTURAL RESOURCES EXIST. RESOURCE PROTECTION FENCE SHALL BE INSTALLED IMMEDIATELY AFTER STAKEOUT OF LOC AND PRIOR TO INSTALLATION OF EROSION AND SEDIMENT CONTROLS. THE CONTRACTOR SHALL STAKEOUT THE LOCATION OF THE RESOURCE PROTECTION FENCE AND THE ENVIRONMENTAL MONITOR WILL BE RESPONSIBLE FOR CONFIRMING OR ADJUSTING THE FENCING LOCATIONS PRIOR TO CONSTRUCTION. IMPROPERLY PLACED FENCE SHALL BE RE-INSTALLED AT CONTRACTOR EXPENSE. ANY ADDITIONAL RESOURCE PROTECTION FENCE AS REQUESTED BY THE ENVIRONMENTAL MONITOR AND CONFIRMED BY THE ENGINEER SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE. RESOURCE PROTECTION FENCE SIGNAGE SHALL BE PROVIDED BY DELDOT AND INSTALLED BY THE CONTRACTOR ALONG THE FENCE NO GREATER THAN 100 FEET APART AND WITH A MINIMUM OF 2 SIGNS PER CONTINUOUS FENCE RUN AS INDICATED IN THE SPECIAL PROVISIONS. RESOURCE PROTECTION FENCE SHALL BE PAID FOR UNDER ITEM 727552 - RESOURCE PROTECTION FENCE.

II. THE PURPOSE OF ITEM 727552 - RESOURCE PROTECTION FENCE IS TO PREVENT IMPACTS TO SENSITIVE RESOURCES DURING CONSTRUCTION. ACCESS INTO THESE AREAS IS STRICTLY PROHIBITED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL EMPLOYEES UNDERSTAND AND COMPLY WITH THE PURPOSE OF THE RESOURCE PROTECTION FENCE.

III. THE INSTALLATION OF THE RIGHT-OF-WAY FENCE AND RESOURCE PROTECTION FENCE ARE THE ONLY CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED TO OCCUR OUTSIDE OF THE LOC.

IV. RESOURCE PROTECTION FENCE SHALL BE INSTALLED BY HAND AS PER THE DETAILS AND SPECIFICATIONS OF ITEM 727552 - RESOURCE PROTECTION FENCE. THERE SHALL BE NO GRUBBING FOR THE INSTALLATION OF RESOURCE PROTECTION FENCE. RIGHT-OF-WAY FENCE SHALL BE INSTALLED BY HAND IN SENSITIVE AREAS, INCLUDING WETLANDS, FORESTS, AND CULTURAL RESOURCE AREAS PROTECTED BY RESOURCE PROTECTION FENCE. THERE SHALL BE NO GRUBBING FOR THE INSTALLATION OF RIGHT-OF-WAY FENCE IN SENSITIVE AREAS. WHERE CLEARING IS NECESSARY FOR FENCE INSTALLATION, VEGETATION SHALL BE CUT FLUSH WITH THE GROUND (I.E. NO DISTURBANCE OF THE ROOT MAT). ENVIRONMENTAL IMPACTS SHALL BE MINIMIZED DURING THE INSTALLATION OF THE RESOURCE PROTECTION FENCE AND RIGHT-OF-WAY FENCE AND THE REMOVAL OF THE RESOURCE PROTECTION FENCE. ACCESS AND INSTALLATION/REMOVAL OF RESOURCE PROTECTION FENCE AND INSTALLATION OF RIGHT-OF-WAY FENCE SHALL BE COORDINATED WITH THE ENVIRONMENTAL MONITOR.

D. STAGING, STOCKPILING AND DISPOSAL:

I. NO STOCKPILING OR STORAGE OF EQUIPMENT, MATERIALS, OR STRUCTURAL STEEL; NO STAGING AREA; AND NO INSTALLATION OF ANCILLARY FACILITIES SUCH AS CONCRETE OR ASPHALT PLANTS OR CONSTRUCTION TRAILERS SHALL BE PERMITTED ON ANY CULTURAL RESOURCE SITE OR WITHIN WETLANDS OR STREAMS OUTSIDE OF IDENTIFIED STORAGE AREAS APPROVED BY THE SHPO OR THE USACE. NO CONSTRUCTION MATERIALS, AGGREGATES, OR EARTH SHALL BE STOCKPILED OR STORED IN A MANNER THAT WOULD AFFECT WETLANDS OR STREAMS. STOCKPILES SHALL HAVE EROSION AND SEDIMENT CONTROLS APPROVED BY DELDOT.

II. ALL EXCESS EXCAVATED MATERIALS NOT USED IN HIGHWAY OR COMPENSATORY MITIGATION SITE CONSTRUCTION SHALL BE DISPOSED OF IN UPLAND, NON-WETLAND, NON-CULTURAL RESOURCE SITE(S). THE EXCAVATED MATERIAL SHALL BE PROPERLY CONTAINED AND STABILIZED TO PREVENT ITS ENTRY INTO ANY ADJACENT WETLANDS OR WATERWAYS. OUTSIDE OF ANY LOCATION DESIGNATED ON PLANS FOR DISPOSAL, NO DISPOSAL/WASTING OPERATION SHALL COMMENCE UNTIL WRITTEN APPROVAL OF THE DISPOSAL SITE(S) IS OBTAINED BY THE ENGINEER FROM THE USACE AND THE SHPO. THE CONTRACTOR SHALL SUBMIT THE PROPOSED DISPOSAL SITE LOCATION(S) TO THE ENGINEER. THE ENGINEER WILL SUBMIT THE PROPOSED DISPOSAL SITE INFORMATION TO THE SHPO AND USACE FOR APPROVAL. THE DEPARTMENT WILL NOT CONSIDER ANY DELAYS OR MONETARY CLAIMS OF ANY NATURE RESULTING FROM DELAYS IN APPROVAL OR REJECTION OF DISPOSAL SITES OR FROM THE CONTRACTOR'S FAILURE OR DIFFICULTY IN FINDING ACCEPTABLE DISPOSAL SITES TO MEET THE TIME FRAMES AND CAPACITIES REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PLANS, EROSION AND SEDIMENTATION CONTROL MEASURES, ETC. REQUIRED BY THE APPROPRIATE REGULATORY AGENCY FOR UTILIZING OFF-SITE SPOILS AREAS.

E. MINIMIZATION AND RESTORATION OF TEMPORARY IMPACTS:

ALL TEMPORARY IMPACTS SHOWN ON THESE SHEETS SHALL BE RESTORED AS SPECIFIED IN THE MISCELLANEOUS PROJECT NOTES TO PREDISTURBANCE GRADE AND CONDITION AND STABILIZED. THE AREA SHALL BE PLANTED AS SHOWN IN THE MOT SHEETS AND NOTED ON THESE EC SHEETS. STREAMS SHALL BE RESTORED TO PREDISTURBANCE PATTERN AND PROFILE.

F. CULTURAL RESOURCES:

IF ANY UNANTICIPATED DISCOVERIES OF ARCHAEOLOGICAL OR HUMAN REMAINS OCCUR DURING CONSTRUCTION, ALL WORK SHALL BE IMMEDIATELY SUSPENDED IN THE AREA OF THE DISCOVERY AND THE ENVIRONMENTAL MONITOR SHALL BE CONTACTED. THE ENVIRONMENTAL MONITOR WILL CONTACT DELDOT CULTURAL RESOURCES, SHPO AND USACE TO COMMENCE THE NECESSARY FEDERAL AND STATE COORDINATION. WORK SHALL NOT RESUME UNTIL APPROPRIATE RESOURCE AGENCY COORDINATION, INVESTIGATION AND/OR RECOVERY IS COMPLETE.

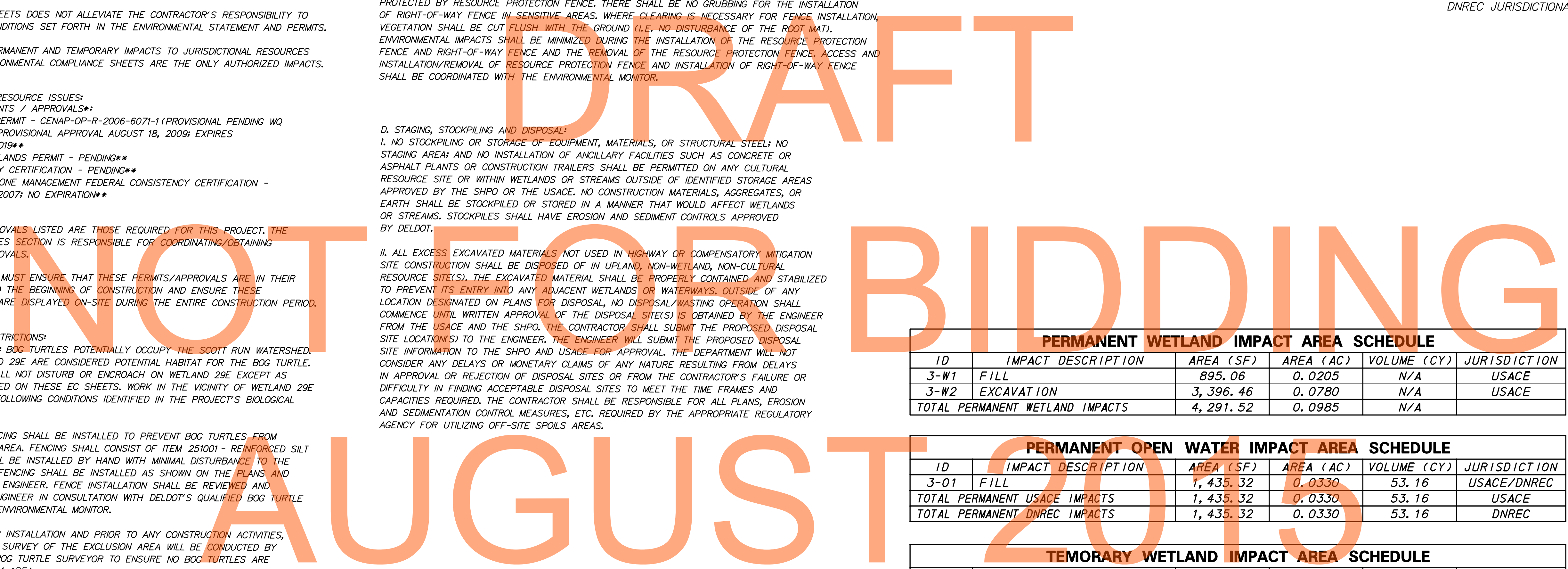
WETLANDS DELINEATED BY RUMMEL KLEPPER & KAHL, LLP. IN JUNE 2005 THROUGH MAY 2011 IN ACCORDANCE WITH THE 1987 USACE WETLAND DELINEATION MANUAL AND APPLICABLE REGIONAL SUPPLEMENTS.

PRELIMINARY JURISDICTIONAL DETERMINATION AUGUST 18, 2009 (EXPIRES AUGUST 18, 2014). WETLAND IDENTIFIERS (ALPHANUMERIC LABELS) CORRESPOND TO THE US 301 WETLAND DELINEATION REPORT AND ARE CONSISTENT WITH THE JURISDICTIONAL DETERMINATION.

SHEET PREPARED BY: MCCORMICK TAYLOR, INC. DATE: APRIL 11, 2011

SHEETS LAST UPDATED: APRIL 11, 2012

ALL IDENTIFIED WATER/WETLANDS ON THESE ENVIRONMENTAL COMPLIANCE SHEETS ARE USACE JURISDICTIONAL AND/OR DNREC JURISDICTIONAL.



PERMANENT WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
3-W1	FILL	895.06	0.0205	N/A	USACE
3-W2	EXCAVATION	3,396.46	0.0780	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		4,291.52	0.0985	N/A	

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
3-O1	FILL	1,435.32	0.0330	53.16	USACE/DNREC
TOTAL PERMANENT USACE IMPACTS		1,435.32	0.0330	53.16	USACE
TOTAL PERMANENT DNREC IMPACTS		1,435.32	0.0330	53.16	DNREC

TEMPORARY WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
4-WT1	E&S AREA	366.23	0.0084	N/A	USACE
4-WT2	E&S AREA	21.05	0.0005	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		387.28	0.0089	N/A	

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
4-OT1	E&S AREA	255.64	0.0059	9.47	USACE/DNREC
TOTAL TEMPORARY USACE IMPACTS		255.64	0.0059	9.47	USACE
TOTAL TEMPORARY DNREC IMPACTS		255.64	0.0059	9.47	DNREC

ADDENDUMS / REVISIONS

NOT TO SCALE

US 13 & PORT PENN RD INTERSECTION

CONTRACT	BRIDGE NO.
T201011302	
COUNTY	DESIGNED BY: REL
NEW CASTLE	CHECKED BY: LMM

ENVIRONMENTAL COMPLIANCE NOTES

EC-02

SHEET NO.

97

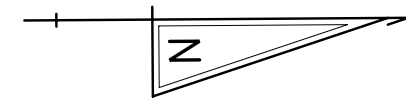
TOTAL SHTS.

179





LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
O	OPEN WATER IMPACT
W	WETLAND IMPACT
T	TEMPORARY IMPACT



PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
3-W1	FILL	895.06	0.0205	N/A	USACE
3-W2	EXCAVATION	3,396.46	0.0780	N/A	USACE
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PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
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TOTAL PERMANENT USACE IMPACTS		1,435.32	0.0330	53.16	
TOTAL PERMANENT DNREC IMPACTS		1,435.32	0.0330	53.16	

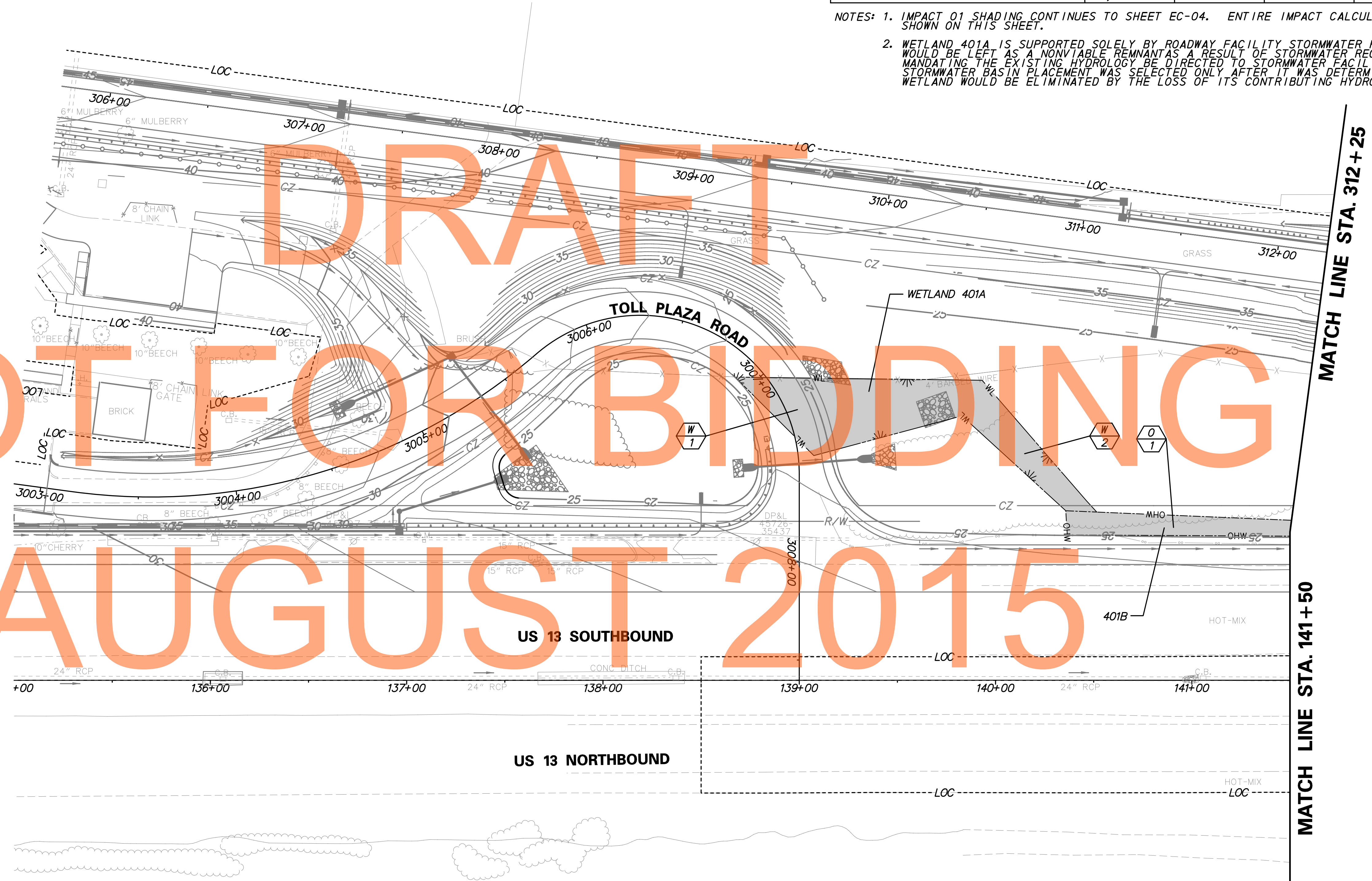
NOTES: 1. IMPACT O1 SHADING CONTINUES TO SHEET EC-04. ENTIRE IMPACT CALCULATION IS SHOWN ON THIS SHEET.

2. WETLAND 401A IS SUPPORTED SOLELY BY ROADWAY FACILITY STORMWATER RUNOFF AND WOULD BE LEFT AS A NONVIABLE REMNANT AS A RESULT OF STORMWATER REGULATIONS MANDATING THE EXISTING HYDROLOGY BE DIRECTED TO STORMWATER FACILITIES. THE STORMWATER BASIN PLACEMENT WAS SELECTED ONLY AFTER IT WAS DETERMINED THE WETLAND WOULD BE ELIMINATED BY THE LOSS OF ITS CONTRIBUTING HYDROLOGY.

DRAFT

NOT FOR BIDDING

AUGUST 2015

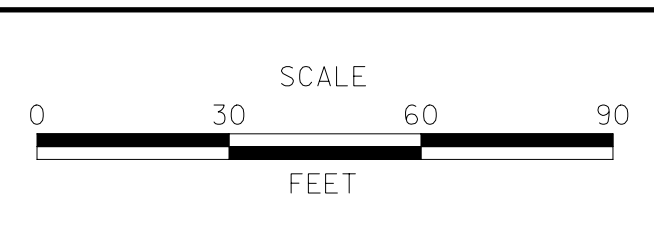


MATCH LINE STA. 312+25

MATCH LINE STA. 141+50

PARKWAY GRAVEL, INC.  
T.M.\*13-004.00-001  
D.R.485-48

ADDENDUMS / REVISIONS



**US 13 & PORT PENN RD INTERSECTION**

CONTRACT	BRIDGE NO.
T201011302	DESIGNED BY: REL
COUNTY	CHECKED BY: LMM
NEW CASTLE	

**ENVIRONMENTAL COMPLIANCE PLAN**



TEMORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
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4-WT2	E&S AREA	21.05	0.0005	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		387.28	0.0089	N/A	

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
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TOTAL TEMPORARY USACE IMPACTS		255.64	0.0059	9.47	USACE
TOTAL TEMPORARY DNREC IMPACTS		255.64	0.0059	9.47	DNREC

**LEGEND**

PERMANENT IMPACT AREA

TEMPORARY IMPACT AREA

OHW - ORDINARY HIGH WATER

OHW/WL - ORD. HIGH WATER / WETLAND

WL - WETLAND BOUNDARY

XX - IMPACT AREA TYPE ID. (SEE BELOW)

OX - IMPACT AREA ID. AND/OR NUMBER

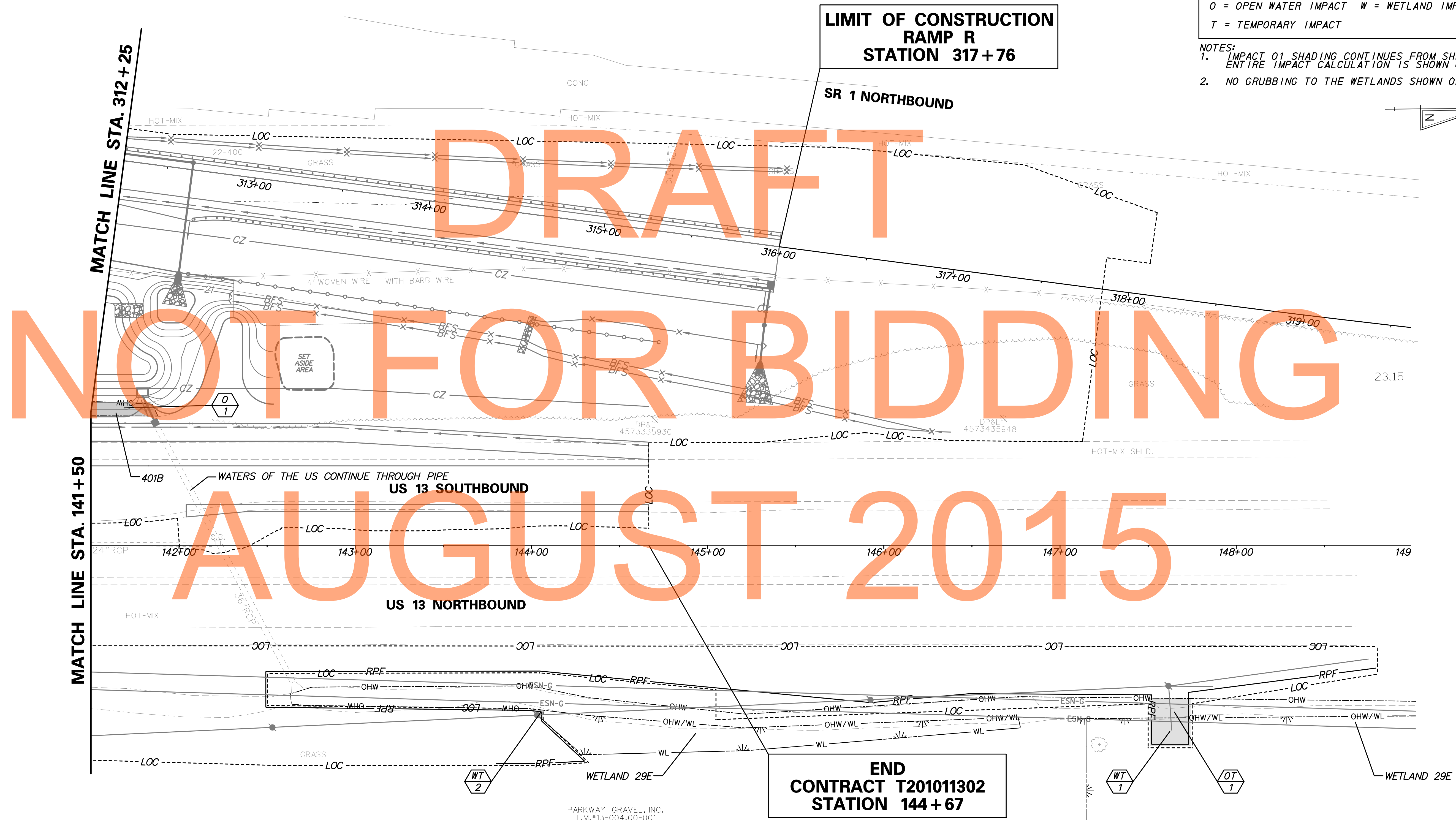
O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

**NOTES:**

1. IMPACT 01 SHADING CONTINUES FROM SHEET EC-03. ENTIRE IMPACT CALCULATION IS SHOWN ON EC-03.

2. NO GRUBBING TO THE WETLANDS SHOWN ON THIS SHEET.



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D.R.485-48