

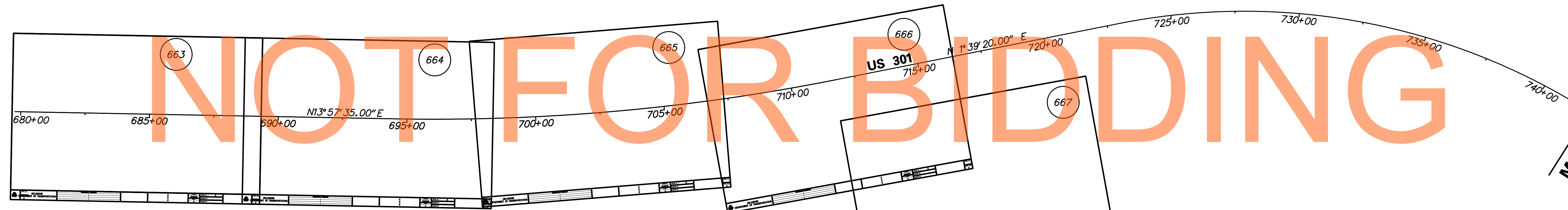
PLAN SHEET INDEX CROSS REFERENCE					
ENVIRONMENTAL COMPLIANCE	663	664	665	666	667
CONSTRUCTION PLAN	69	71	72	73	74

**BEGIN**  
**CONTRACT T200911308**  
**STATION 680+00**

**DRAFT**

**NOT FOR BIDDING**

**AUGUST 2015**

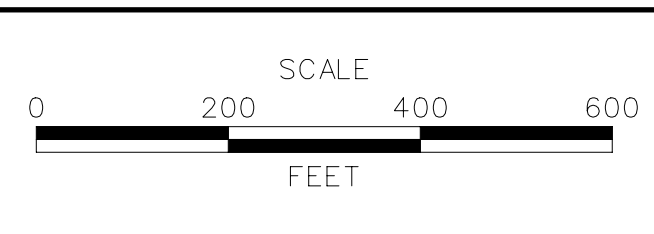


**MATCH LINE**  
**STA. 742+00**  
**SHEET EC-02**

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ADDENDUMS / REVISIONS



**US 301,**  
**SR 896 TO SR 1**

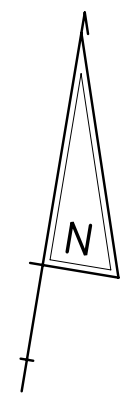
CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

**ENVIRONMENTAL COMPLIANCE INDEX**

<b>EC-01</b>
SHEET NO. 658
TOTAL SHTS. 875

PLAN SHEET INDEX CROSS REFERENCE	
ENVIRONMENTAL COMPLIANCE	668
CONSTRUCTION PLAN	102

LIMIT OF CONSTRUCTION  
CONTRACT T200911308  
STATION 132 + 93



DRAFT  
NOT FOR BIDDING  
AUGUST 2015

MATCH LINE  
STA. 742+00  
SHEET EC-01

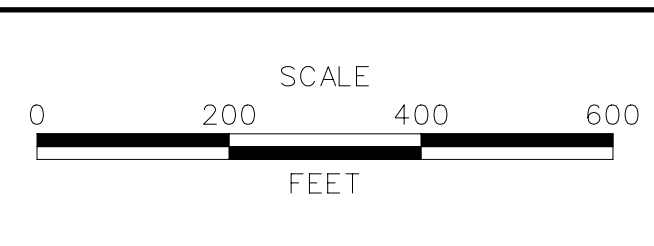
MATCH LINE  
STA. 794+00  
SHEET EC-03

LIMIT OF CONSTRUCTION  
CONTRACT T200911308  
STATION 103 + 50

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ADDENDUMS / REVISIONS



US 301,  
SR 896 TO SR 1

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

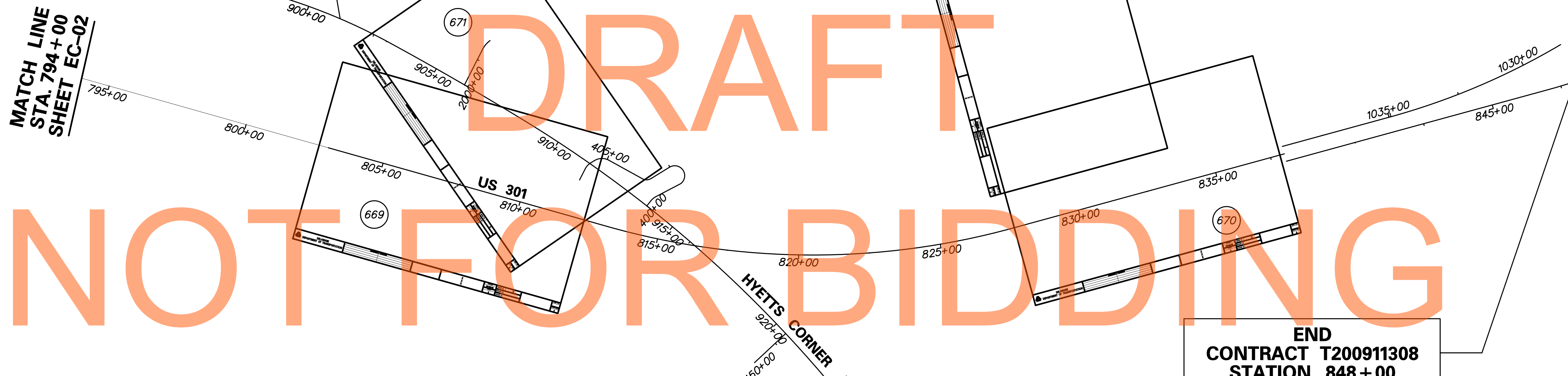
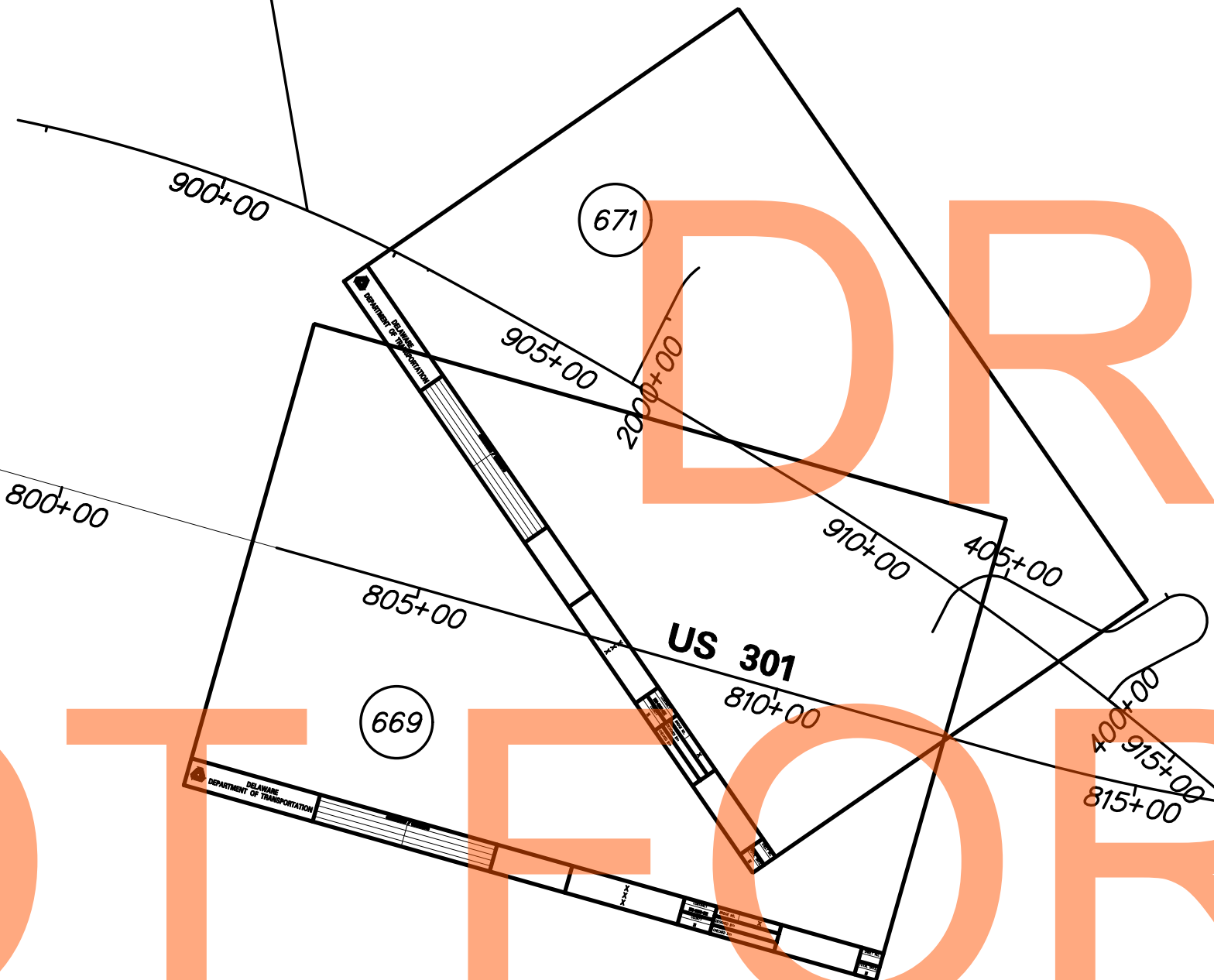
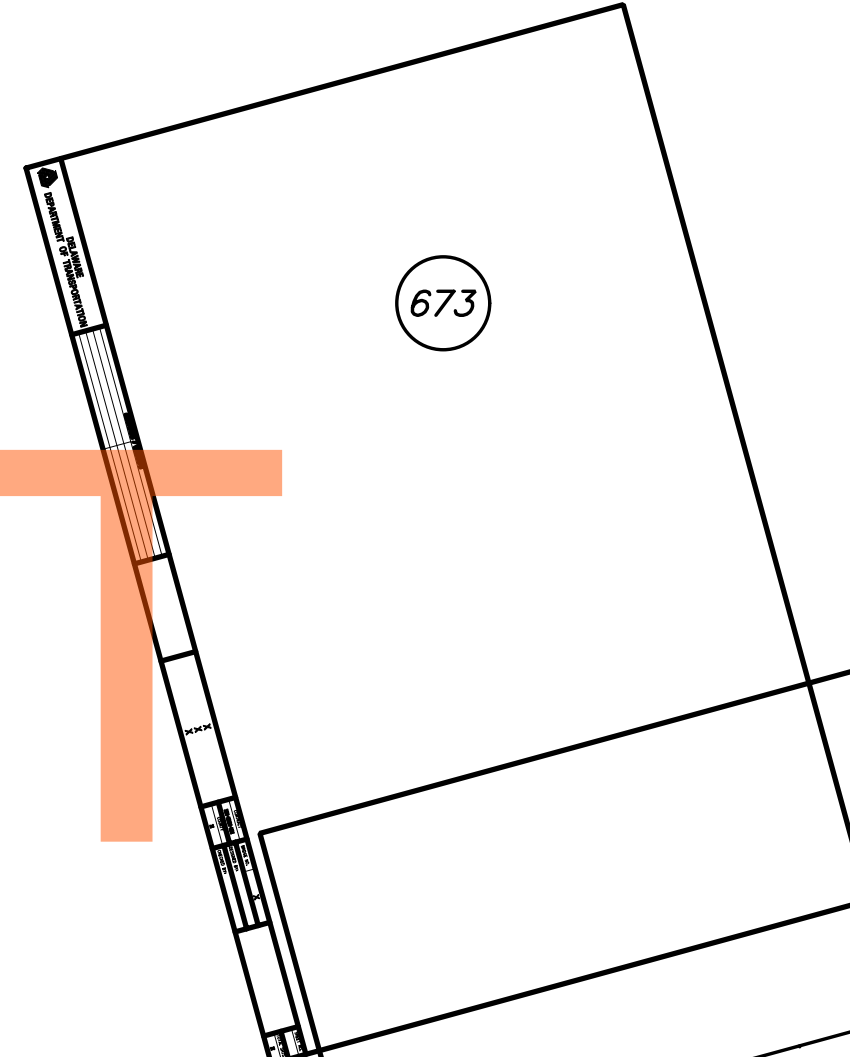
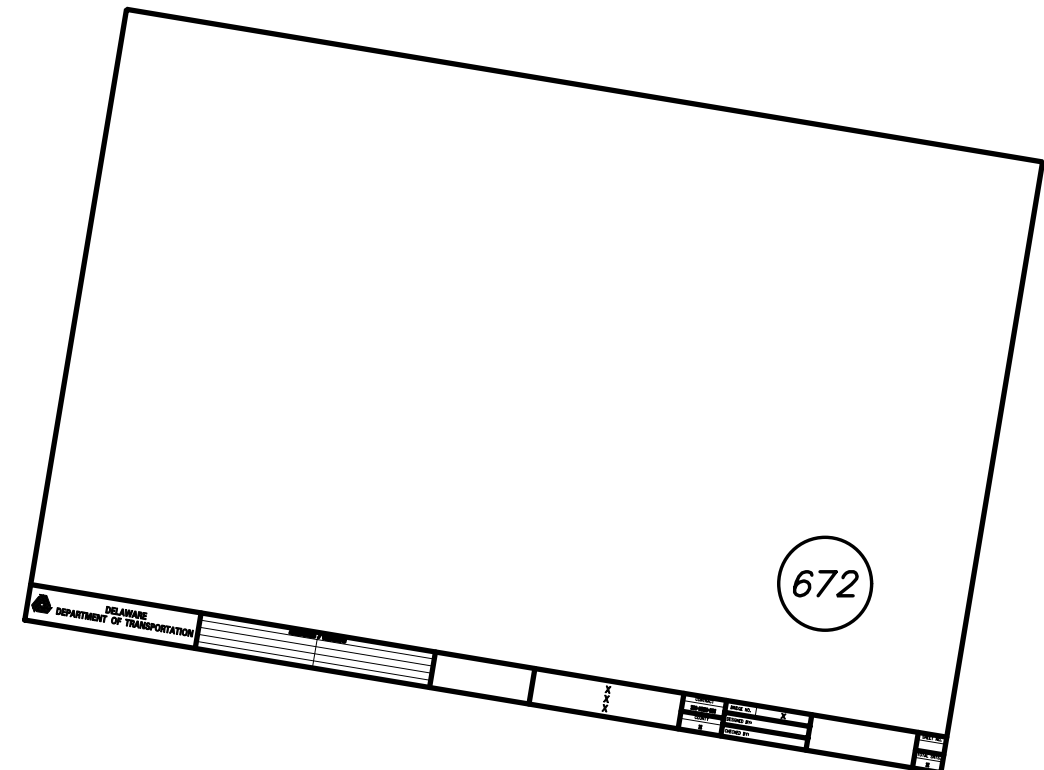
ENVIRONMENTAL  
COMPLIANCE  
INDEX

EC-02
SHEET NO. 659
TOTAL SHTS. 875



**LIMIT OF CONSTRUCTION  
CONTRACT T200911308  
STATION 902 + 81**

**MATCH LINE  
STA. 794 + 00  
SHEET EC-02**



**END  
CONTRACT T200911308  
STATION 848 + 00**

**LIMIT OF CONSTRUCTION  
CONTRACT T200911308  
STATION 930 + 25**

**DRAFT  
NOT FOR BIDDING  
AUGUST 2015**

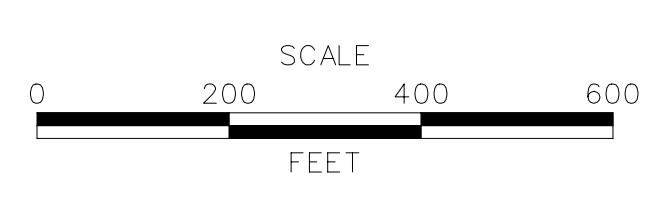
PLAN SHEET INDEX CROSS REFERENCE

ENVIRONMENTAL COMPLIANCE	669	670	671	672	673
CONSTRUCTION PLAN	86	89	103, 104	N/A	N/A

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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

<b>ENVIRONMENTAL COMPLIANCE INDEX</b>	SHEET NO.
	660
	TOTAL SHTS. 875

<b>EC-03</b>
SHEET NO.
660
TOTAL SHTS.
875

# 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\*\*

NEW CASTLE COUNTY FLOODPLAIN APPROVAL - PENDING\*\*

\* 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: NONE

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. STREAM RESTORATION AND SLOPE RIPRAP TREATMENT:**

I. 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 A SEPARATE SPECIAL PROVISION OR MATERIAL GRADATION HAS BEEN DETAILED ON THE PLANS FOR A SPECIFIC CHANNEL LOCATION, THAT SPECIFICATION OR GRADATION SHALL BE UTILIZED FOR CHANNEL BED FILL AT THE INDICATED LOCATION(S). PIPES WITH DIAMETERS  $\geq 60"$  SHALL BE RECESSED A MINIMUM OF 12" BELOW THE STREAMBED ELEVATION. PIPES  $< 60"$  SHALL BE RECESSED A MINIMUM OF 4" OR 20% OF THE DIAMETER OF THE PIPE, WHICHEVER IS GREATER. BOX CULVERTS SHALL BE RECESSED 12" BELOW THE STREAMBED ELEVATION. ALL RIPRAP SHALL BE PLACED SUCH THAT THE TOP OF THE RIPRAP IS PLACED TO MATCH THE INVERT ELEVATION OF THE PIPE OR CULVERT 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 CHANNEL BED FILL TO MATCH EXISTING UPSTREAM/DOWNSTREAM CHANNEL BED ELEVATIONS. PAYMENT UNDER ITEM 712531 - CHANNEL BED FILL.

PIPES AND RIPRAP SHALL BE RECESSED IN STREAMS LOCATED AT THE FOLLOWING CROSSINGS: UNNAMED TRIBUTARY TO SCOTT RUN - STA 696+00

II. 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 PREDISTURBANCE CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH CHANNEL BED FILL. PAYMENT UNDER ITEM 712531 - CHANNEL BED FILL.

III. 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.

IV. ALL RIPRAP ON THE STREAM BANK, ABOVE THE ORDINARY HIGH WATER MARK, SHALL BE PLACED AS DESCRIBED BELOW:

CHOKE THE RIPRAP WITH ENOUGH ITEM 302012 - DELAWARE \*57 STONE TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP AS APPROVED BY THE ENGINEER. FILL THE REMAINING VOIDS WITH TOPSOIL SO THAT THE RIPRAP IS BARELY VISIBLE. REGARDLESS OF DEPTH, THIS SHALL BE PAID FOR UNDER ITEM 733001 - TOPSOILING, 4" DEPTH. APPLY AN ADDITIONAL 4 INCH LAYER OF TOPSOIL (ITEM 733001 - TOPSOILING, 4" DEPTH). SEED WITH ITEM 734531 - STREAMBANK SEED MIX FROM ABOVE THE ORDINARY HIGH WATER MARK TO THE TOP OF THE SLOPE. IMMEDIATELY FOLLOWING THE SEEDING, INSTALL ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5. ALL WORK, STARTING WITH TOPSOIL PLACEMENT THROUGH SEEDING AND MULCHING, SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. RIPRAP AND ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

STREAMBANK RIPRAP SHALL BE TREATED AS DESCRIBED ABOVE IN STREAMS LOCATED AT THE FOLLOWING CROSSINGS: UNNAMED TRIBUTARY TO SCOTT RUN - STA 696+00

V. THE CHANNEL AND STREAM BANK SEGMENTS ENTERING AND EXITING THE BRIDGES, PIPES AND CULVERTS SHALL NOT BE WIDENED BEYOND THE DIMENSIONS SHOWN ON THE PLANS. THE CHANNEL WIDTHS, CHANNEL BANKS AND SIDE-SLOPES SHALL NOT BE WIDENED OR RE-CONTOURED TO ACCOMMODATE EASIER CONSTRUCTION OR ACCESS.

**E. 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.

**F. MINIMIZATION AND RESTORATION OF TEMPORARY IMPACTS:**

ALL TEMPORARY IMPACTS SHOWN ON THESE SHEETS SHALL BE RESTORED 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.

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. WETLAND IDENTIFIERS (ALPHANUMERIC LABELS) CORRESPOND TO THE US 301 WETLAND DELINEATION REPORT AND ARE CONSISTANT WITH THE JURISDICTIONAL DETERMINATION.

SHEET PREPARED BY: MCCORMICK TAYLOR, INC.  
DATE: MARCH 10, 2010

SHEETS LAST UPDATED: APRIL 23, 2012

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

**DRAFT**  
**NOT FOR BIDDING**  
**UGS 2015**

**G. 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.

**H. SOIL AND EARTH DISTURBANCE:**

I. ITEM 727500 - REINFORCED SILT FENCE SHALL BE USED DUE TO THE HIGH PROBABILITY OF OVERBANK FLOODING IN THE FOLLOWING LOCATIONS:

SCOTT RUN AT MAINLINE - STA 805+00 TO 811+00

II. THERE SHALL BE NO GRUBBING UNDER BRIDGES EXCEPT WHERE NECESSARY TO CONSTRUCT PROJECT COMPONENTS SUCH AS FOUNDATIONS, SLOPE PROTECTION AND UTILITIES. BRIDGE LOCATIONS ARE AS FOLLOWS:

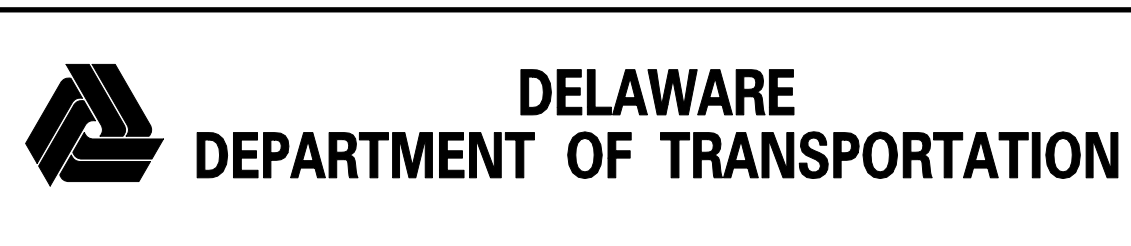
SCOTT RUN - STA 809+00  
UNNAMED TRIBUTARY TO SCOTT RUN - STA 830+00

**I. FLOODPLAIN:**

NEW RIPRAP PLACED IN THE FLOODPLAIN BENEATH BRIDGES SHALL BE BURIED. RIPRAP FLOODPLAIN LOCATIONS ARE AS FOLLOWS:

UNNAMED TRIBUTARY TO SCOTT RUN - STA 696+00  
SCOTT RUN - STA 809+00  
UNNAMED TRIBUTARY TO SCOTT RUN - STA 830+00  
SCOTT RUN - HYETTS CORNER ROAD - STA 910+00

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ADDENDUMS / REVISIONS	

**NOT TO SCALE**

**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

<b>ENVIRONMENTAL COMPLIANCE NOTES</b>	SHEET NO.
	661
	TOTAL SHTS. 875

<b>EC-04</b>
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PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
7-01	RIPRAP	93.69	0.0022	3.47	USACE/DNREC
7-02	FILL	957.41	0.0220	35.46	USACE/DNREC
7-03	RIPRAP	70.57	0.0016	2.61	USACE/DNREC
12-01	FILL	619.30	0.0142	22.94	USACE/DNREC
12-02	SHADING	1,458.48	0.0335	N/A	DNREC
12-03	FILL	2,889.80	0.0663	107.03	USACE/DNREC
12-05	FILL	27.70	0.0006	1.03	USACE/DNREC
12-06	SHADING	51.64	0.0012	N/A	DNREC
13-01	SHADING	1,000.15	0.0230	N/A	USACE/DNREC
14-01	FILL	678.13	0.0156	25.12	USACE/DNREC
14-02	FILL	605.15	0.0139	22.41	USACE/DNREC
14-03	FILL	450.70	0.0103	16.69	USACE/DNREC
14-04	FILL	963.03	0.0221	35.67	USACE/DNREC
TOTAL PERMANENT OPEN WATER IMPACTS		8,355.63	0.1919	272.43	USACE
TOTAL PERMANENT OPEN WATER IMPACTS		9,865.75	0.2265	272.43	DNREC

NOTE: 12-04 IS NO LONGER USED

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
7-OT1	TEMPORARY ACCESS	446.01	0.0102	N/A	USACE/DNREC
7-OT2	E&S AREA	522.56	0.0120	19.35	USACE/DNREC
7-OT3	E&S AREA	258.32	0.0059	9.57	USACE/DNREC
7-OT4	TEMPORARY ACCESS	151.45	0.0035	N/A	USACE/DNREC
12-OT1	CHANNEL MODIFICATION	1,283.42	0.0295	47.53	USACE/DNREC
12-OT2	E&S AREA	783.71	0.0180	29.03	USACE/DNREC
12-OT3	TEMPORARY ACCESS	1,458.48	0.0335	N/A	USACE
12-OT4	E&S AREA	619.18	0.0142	22.93	USACE/DNREC
12-OT5	CHANNEL MODIFICATION	508.87	0.0117	18.85	USACE/DNREC
12-OT6	CHANNEL MODIFICATION	1,040.06	0.0239	38.52	USACE/DNREC
12-OT7	E&S AREA	841.46	0.0193	31.17	USACE/DNREC
12-OT8	TEMPORARY ACCESS	51.64	0.0012	N/A	USACE
13-OT1	TEMPORARY ACCESS	28.71	0.0007	N/A	USACE/DNREC
13-OT2	TEMPORARY ACCESS	133.53	0.0031	N/A	USACE/DNREC
13-OT3	TEMPORARY ACCESS	49.82	0.0011	N/A	USACE/DNREC
13-OT4	E&S AREA	314.68	0.0072	11.65	USACE/DNREC
13-OT5	E&S AREA	489.59	0.0112	18.13	USACE/DNREC
14-OT1	CHANNEL MODIFICATION	175.25	0.0040	6.49	USACE/DNREC
14-OT2	CHANNEL MODIFICATION	875.34	0.0201	32.42	USACE/DNREC
14-OT3	CHANNEL MODIFICATION	1,115.73	0.0256	41.32	USACE/DNREC
14-OT4	CHANNEL MODIFICATION	135.35	0.0031	5.01	USACE/DNREC
TOTAL TEMPORARY OPEN WATER IMPACTS		11,283.16	0.2590	331.97	USACE
TOTAL TEMPORARY OPEN WATER IMPACTS		9,773.04	0.2243	331.97	DNREC

OPEN WATER CREATION AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-OC1	STREAM RELOCATION	72.70	0.0017	2.69	USACE/DNREC
12-OC2	STREAM RELOCATION	114.65	0.0026	4.25	USACE/DNREC
12-OC3	STREAM RELOCATION	1,315.42	0.0302	48.72	USACE/DNREC
12-OC4	STREAM RELOCATION	6.85	0.0002	0.25	USACE/DNREC
14-OC1	STREAM RELOCATION	1,255.48	0.0288	46.50	USACE/DNREC
14-OC2	STREAM RELOCATION	130.43	0.0030	4.83	USACE/DNREC
14-OC3	STREAM RELOCATION	1,224.49	0.0281	45.35	USACE/DNREC
14-OC4	STREAM RELOCATION	228.44	0.0052	8.46	USACE/DNREC
TOTAL OPEN WATER CREATION AREAS		4,348.46	0.0998	161.05	USACE
TOTAL OPEN WATER CREATION AREAS		4,348.46	0.0998	161.05	DNREC

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
6-W1	EXCAVATION	1,746.41	0.0401	N/A	USACE
6-W2	FILL	33,291.74	0.7643	N/A	USACE
7-W1	EXCAVATION	13,290.56	0.3051	N/A	USACE
7-W2	FILL	134,937.97	3.0977	N/A	USACE
7-W3	EXCAVATION	10,626.97	0.2440	N/A	USACE
7-W4	RIPRAP	229.14	0.0053	N/A	USACE
7-W5	RIPRAP	281.81	0.0065	N/A	USACE
7-W6	EXCAVATION	14,959.33	0.3434	N/A	USACE
7-W7	FILL	43,436.66	0.9972	N/A	USACE
7-W8	RIPRAP	61.92	0.0014	N/A	USACE
7-W9	RIPRAP	29.73	0.0007	N/A	USACE
7-W10	EXCAVATION	12,403.79	0.2848	N/A	USACE
7-W11	RIPRAP	529.97	0.0122	N/A	USACE
7-W12	RIPRAP	258.28	0.0059	N/A	USACE
8-W1	FILL	13,259.64	0.3044	N/A	USACE
8-W2	EXCAVATION	9,613.85	0.2207	N/A	USACE
8-W3	EXCAVATION	4,482.78	0.1029	N/A	USACE
8-W4	FILL	9,918.22	0.2277	N/A	USACE
8-W5	RIPRAP	135.04	0.0031	N/A	USACE
9-W1	EXCAVATION	1,277.46	0.0293	N/A	USACE
9-W2	FILL	4,306.84	0.0989	N/A	USACE
9-W3	EXCAVATION	3,344.39	0.0768	N/A	USACE
9-W4	FILL	46,856.05	1.0757	N/A	USACE
9-W5	EXCAVATION	2,129.59	0.0489	N/A	USACE
9-W6	EXCAVATION	11,430.65	0.2624	N/A	USACE
9-W7	RIPRAP	106.04	0.0024	N/A	USACE
9-W8	RIPRAP	232.50	0.0053	N/A	USACE
9-W9	RIPRAP	1,132.16	0.0260	N/A	USACE
10-W1	EXCAVATION	193.75	0.0044	N/A	USACE
10-W2	EXCAVATION	267.76	0.0061	N/A	USACE
12-W1	FILL	931.12	0.0214	N/A	USACE
12-W2	EXCAVATION	72.70	0.0017	N/A	USACE
12-W3	EXCAVATION	114.65	0.0026	N/A	USACE
12-W4	FILL	2,687.45	0.0617	N/A	USACE
12-W6	RIPRAP	445.86	0.0102	N/A	USACE
12-W7	SHADING	6886.27	0.1581	N/A	USACE
12-W8	SHADING	1190.81	0.0273	N/A	USACE
12-W9	EXCAVATION	637.88	0.0146	N/A	USACE
12-W10	SHADING	901.10	0.0207	N/A	USACE
12-W11	EXCAVATION	6.85	0.0002	N/A	USACE
13-W1	EXCAVATION	6,099.08	0.1400	N/A	USACE
13-W2	SHADING	5,052.55	0.1160	N/A	USACE
13-W3	FILL	27,237.07	0.6253	N/A	USACE
13-W4	RIPRAP	6,376.42	0.1464	N/A	USACE
13-W5	FILL	856.41	0.0197	N/A	USACE
13-W6	EXCAVATION	6,070.04	0.1393	N/A	USACE
14-W1	FILL	596.52	0.0137	N/A	USACE
14-W2	EXCAVATION	130.43	0.0030	N/A	USACE
14-W3	EXCAVATION	1,224.49	0.0281	N/A	USACE
14-W4	RIPRAP	264.23	0.0061	N/A	USACE
14-W5	FILL	197.39	0.0045	N/A	USACE
14-W6	FILL	4,142.40	0.0951	N/A	USACE
14-W7	EXCAVATION	228.44	0.0052	N/A	USACE
14-W8	RIPRAP	121.65	0.0028	N/A	USACE
14-W9	EXCAVATION	1,806.29	0.0415	N/A	USACE
TOTAL PERMANENT WETLAND IMPACT AREAS		449,049.10	10.3087	N/A	

NOTE: 12-W5 IS NO LONGER USED

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-WT1	TEMPORARY ACCESS	2,796.84	0.0642	N/A	USACE
12-WT2	TEMPORARY ACCESS	6,415.87	0.1473	N/A	USACE
12-WT3	TEMPORARY ACCESS	3,066.35	0.0704	N/A	USACE
12-WT4	TEMPORARY ACCESS	7,055.88	0.1620	N/A	USACE
13-WT1	TEMPORARY ACCESS	3,132.39	0.0719	N/A	USACE
13-WT2	TEMPORARY ACCESS	2,357.65	0.0541	N/A	USACE
14-WT1	TEMPORARY ACCESS	3,166.99	0.0727	N/A	USACE
14-WT2	TEMPORARY ACCESS	58.29	0.0013	N/A	USACE
14-WT3	TEMPORARY ACCESS	3,363.71	0.0772	N/A	USACE
14-WT4	TEMPORARY ACCESS	1,133.03	0.0260	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACT AREAS		32,547.00	0.7472	N/A	

**LEGEND**

- PERMANENT IMPACT AREA
  - TEMPORARY IMPACT AREA
  - CREATION AREA
  - OHW --- ORDINARY HIGH WATER
  - OHW/WL --- ORD. HIGH WATER / WETLAND
  - WL --- WETLAND BOUNDARY
  - OHW/WL --- PROPOSED ORD. HIGH WATER / WETLAND
  - OHW --- PROPOSED ORD. HIGH WATER
  - RPF --- RESOURCE PROTECTION FENCE
  - LOC --- LIMIT OF CONSTRUCTION
- XX IMPACT AREA TYPE ID. (SEE BELOW)  
?X IMPACT AREA ID. AND/OR NUMBER
- O = OPEN WATER IMPACT    W = WETLAND IMPACT  
 T = TEMPORARY IMPACT    C = CREATION AREA

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
6-W1 *1	EXCAVATION	1,746.41	0.0401	N/A	USACE
6-W2 *2	FILL	33,291.74	0.7643	N/A	USACE
TOTAL FOR THIS SHEET		35,038.15	0.8044	N/A	

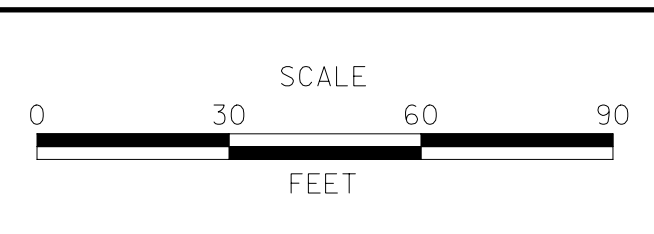
\*1 - IMPACT CONTINUES ON SHEET EC-07 AS 7-W1  
 \*2 - IMPACT CONTINUES ON SHEET EC-07 AS 7-W2

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**DELAWARE DEPARTMENT OF TRANSPORTATION**

ADDENDUMS / REVISIONS



**US 301,  
SR 896 TO SR 1**

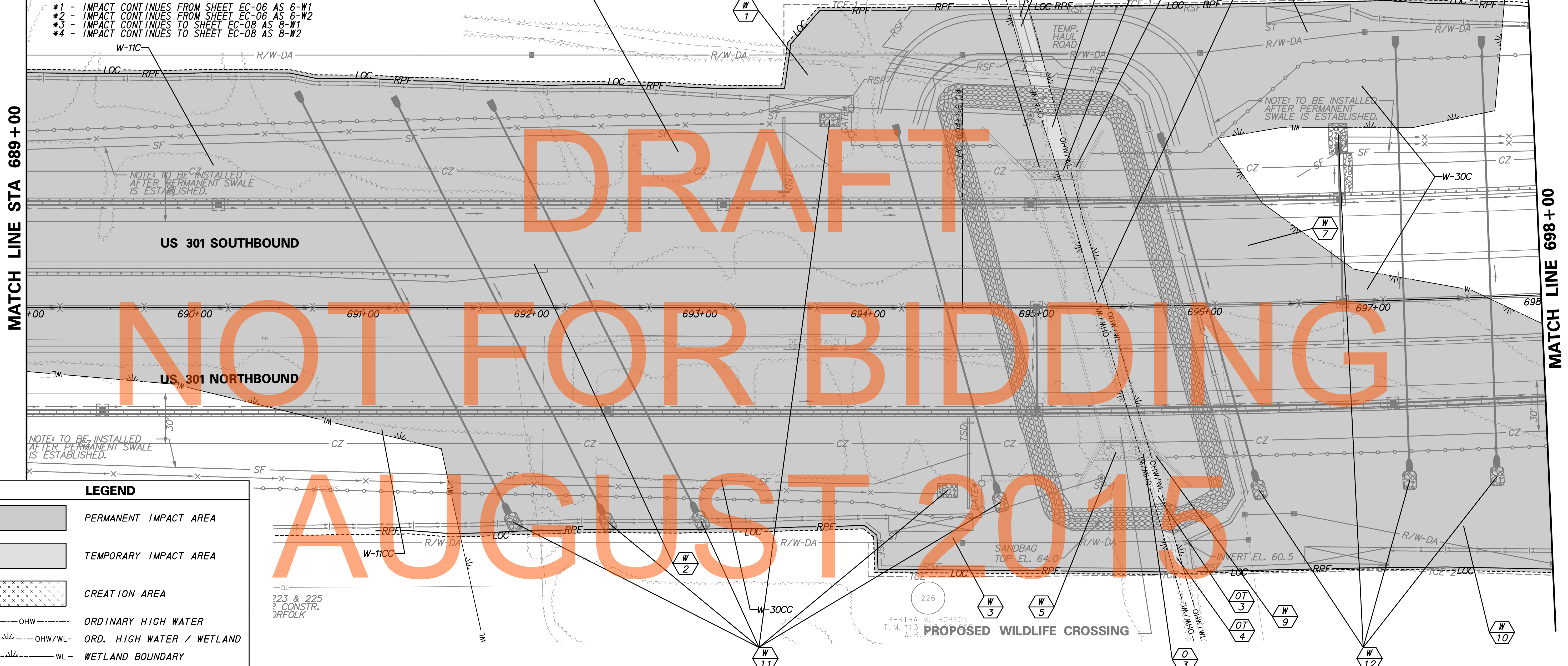
CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

**ENVIRONMENTAL COMPLIANCE PLAN**

EC-06
SHEET NO. 663
TOTAL SHTS. 875

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
7-W1 *1	EXCAVATION	13,290.56	0.3051	N/A	USACE
7-W2 *2	FILL	134,937.97	3.0977	N/A	USACE
7-W3	EXCAVATION	10,626.97	0.2440	N/A	USACE
7-W4	RIPRAP	229.14	0.0053	N/A	USACE
7-W5	RIPRAP	281.81	0.0065	N/A	USACE
7-W6	EXCAVATION	14,959.33	0.3434	N/A	USACE
7-W7 *3	FILL	43,436.66	0.9972	N/A	USACE
7-W8	RIPRAP	61.92	0.0014	N/A	USACE
7-W9	RIPRAP	29.73	0.0007	N/A	USACE
7-W10 *4	EXCAVATION	12,403.79	0.2848	N/A	USACE
7-W11	RIPRAP	529.97	0.0122	N/A	USACE
7-W12	RIPRAP	258.28	0.0059	N/A	USACE
TOTAL FOR THIS SHEET		231,046.13	5.3041	N/A	

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
7-O1	RIPRAP	93.69	0.0022	3.47	USACE/DNREC
7-O2	FILL	957.41	0.0220	35.46	USACE/DNREC
7-O3	RIPRAP	70.57	0.0016	2.61	USACE/DNREC
TOTAL USACE FOR THIS SHEET		1,121.67	0.0258	41.54	USACE
TOTAL DNREC FOR THIS SHEET		1,121.67	0.0258	41.54	DNREC



MATCH LINE STA 689+00

MATCH LINE STA 698+00

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**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- CREATION AREA
- ORDINARY HIGH WATER
- ORD. HIGH WATER / WETLAND
- WETLAND BOUNDARY
- PROPOSED ORD. HIGH WATER / WETLAND
- PROPOSED ORD. HIGH WATER
- RESOURCE PROTECTION FENCE
- LIMIT OF CONSTRUCTION

XX IMPACT AREA TYPE ID. (SEE BELOW)  
 ?X IMPACT AREA ID. AND/OR NUMBER

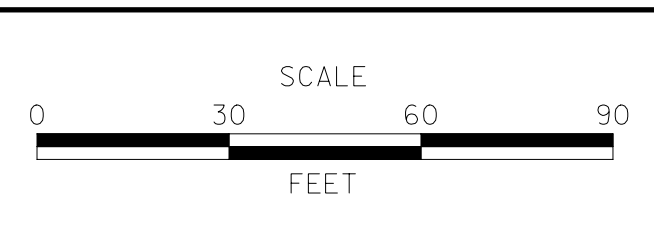
O = OPEN WATER IMPACT    W = WETLAND IMPACT  
 T = TEMPORARY IMPACT    C = CREATION AREA

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
7-OT1	TEMPORARY ACCESS	446.01	0.0102	N/A	USACE/DNREC
7-OT2	E&S AREA	522.56	0.0120	19.35	USACE/DNREC
7-OT3	E&S AREA	258.32	0.0059	9.57	USACE/DNREC
7-OT4	TEMPORARY ACCESS	151.45	0.0035	N/A	USACE/DNREC
TOTAL USACE FOR THIS SHEET		1,378.34	0.0316	28.92	USACE
TOTAL DNREC FOR THIS SHEET		1,378.34	0.0316	28.92	DNREC

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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY:
	CHECKED BY:

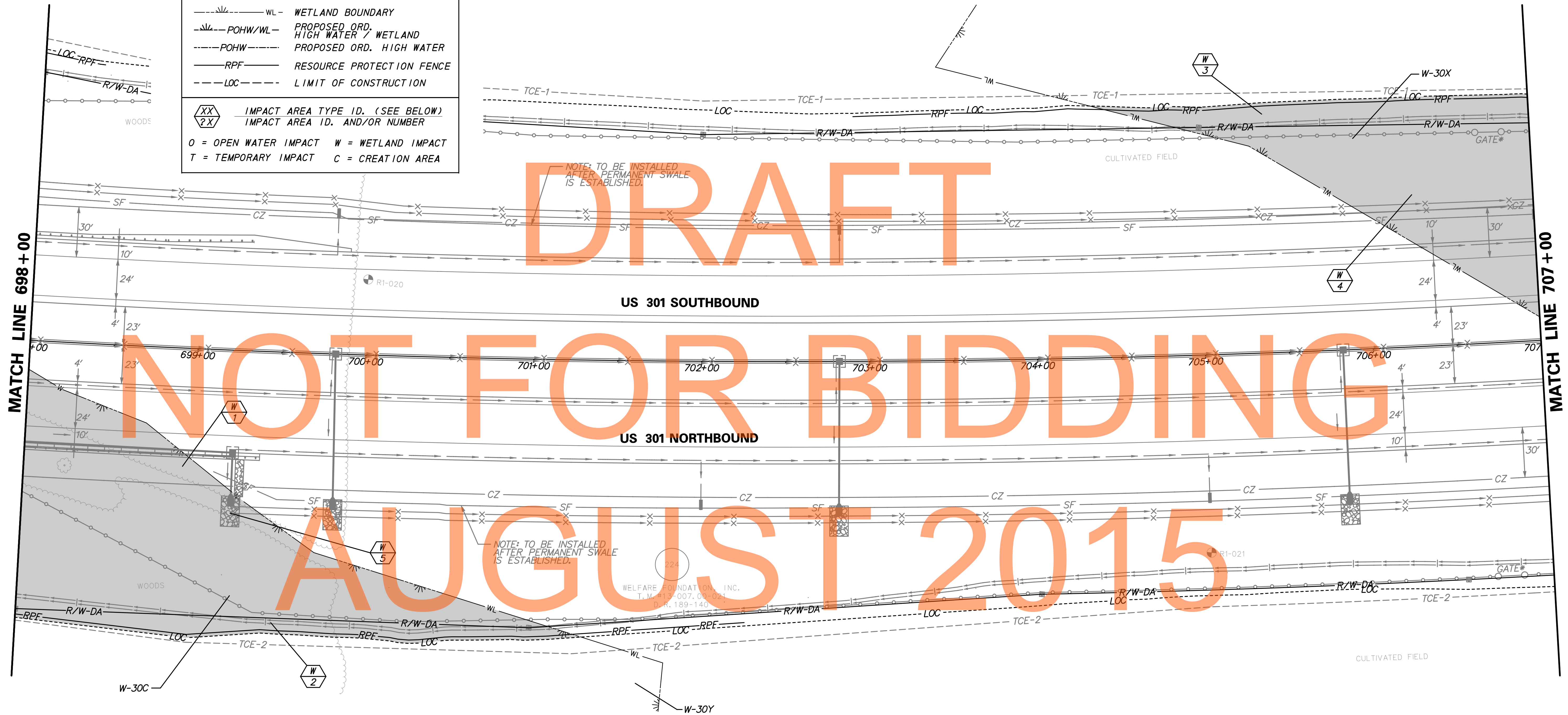
**ENVIRONMENTAL  
COMPLIANCE PLAN**

EC-07
SHEET NO. 664
TOTAL SHTS. 875

LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	CREATION AREA
-----OHW-----	ORDINARY HIGH WATER
---OHW/WL---	ORD. HIGH WATER / WETLAND
---WL---	WETLAND BOUNDARY
---POHW/WL---	PROPOSED ORD. HIGH WATER / WETLAND
---POHW---	PROPOSED ORD. HIGH WATER
---RPF---	RESOURCE PROTECTION FENCE
---LOC---	LIMIT OF CONSTRUCTION
	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

PERMANENT WETLAND IMPACT AREA SCHEDULE																						
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION																	
8-W1 *1	FILL	13,259.64	0.3044	N/A	USACE																	
8-W2 *2	EXCAVATION	9,613.85	0.2207	N/A	USACE																	
8-W3 *3	EXCAVATION	4,482.78	0.1029	N/A </tr <tr> <td>8-W4 *4</td> <td>FILL</td> <td>9,918.22</td> <td>0.2277</td> <td>N/A</td> <td>USACE</td> </tr> <tr> <td>8-W5</td> <td>RIPRAP</td> <td>135.04</td> <td>0.0031</td> <td>N/A</td> <td>USACE</td> </tr> <tr> <td colspan="2">TOTAL FOR THIS SHEET</td> <td>37,409.53</td> <td>0.8588</td> <td>N/A</td> <td></td> </tr>	8-W4 *4	FILL	9,918.22	0.2277	N/A	USACE	8-W5	RIPRAP	135.04	0.0031	N/A	USACE	TOTAL FOR THIS SHEET		37,409.53	0.8588	N/A	
8-W4 *4	FILL	9,918.22	0.2277	N/A	USACE																	
8-W5	RIPRAP	135.04	0.0031	N/A	USACE																	
TOTAL FOR THIS SHEET		37,409.53	0.8588	N/A																		

\*1 - IMPACT CONTINUES FROM SHEET EC-07 AS 7-W7  
 \*2 - IMPACT CONTINUES FROM SHEET EC-07 AS 7-W10  
 \*3 - IMPACT CONTINUES TO SHEET EC-09 AS 9-W1  
 \*4 - IMPACT CONTINUES TO SHEET EC-09 AS 9-W2



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AUGUST 2015

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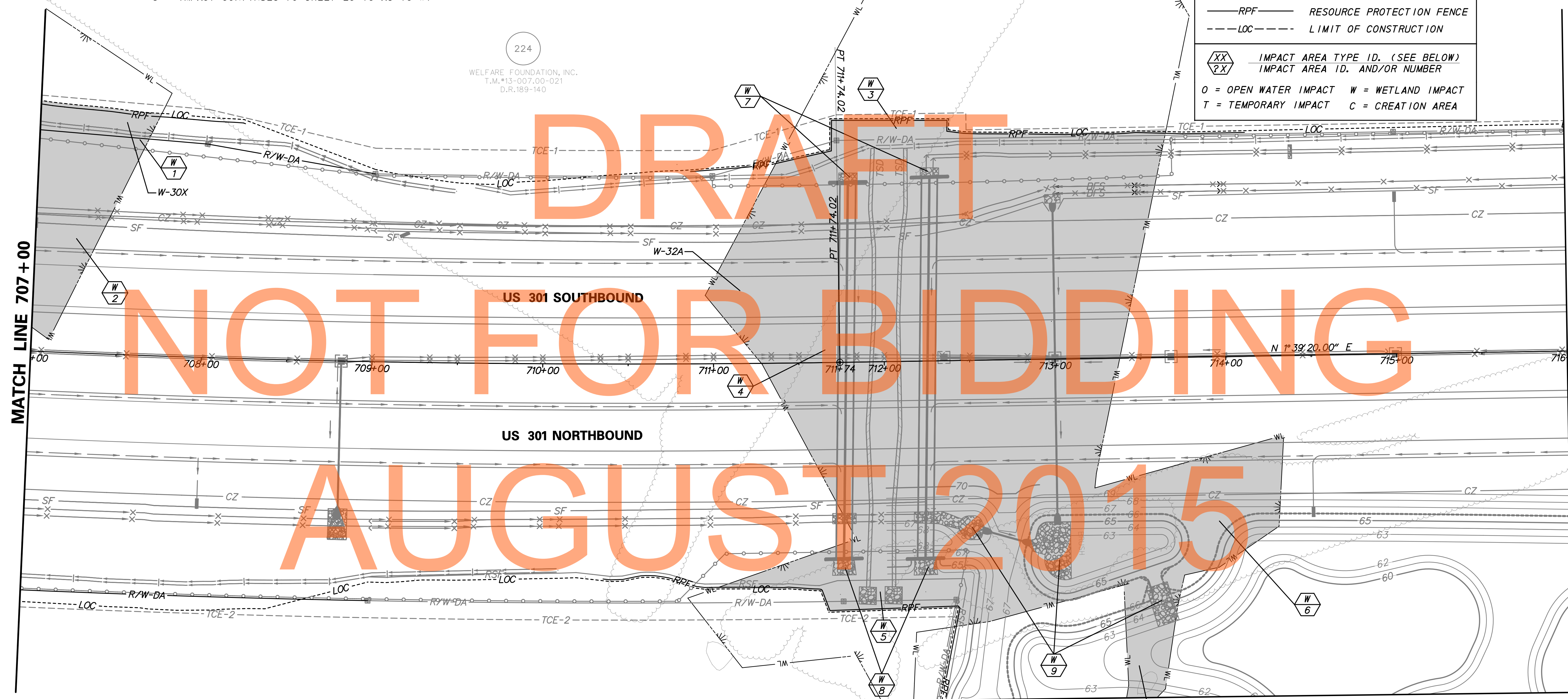
	DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	US 301, SR 896 TO SR 1	CONTRACT T200911308 COUNTY NEW CASTLE	BRIDGE NO. DESIGNED BY: REL CHECKED BY: LMM	<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	EC-08 SHEET NO. 665 TOTAL SHTS. 875



PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
9-W1 *1	EXCAVATION	1,277.46	0.0293	N/A	USACE
9-W2 *2	FILL	4,306.84	0.0989	N/A	USACE
9-W3	EXCAVATION	3,344.39	0.0768	N/A	USACE
9-W4	FILL	46,856.05	1.0757	N/A	USACE
9-W5	EXCAVATION	2,129.59	0.0489	N/A	USACE
9-W6 *3	EXCAVATION	11,430.65	0.2624	N/A	USACE
9-W7	RIPRAP	106.04	0.0024	N/A	USACE
9-W8	RIPRAP	232.50	0.0053	N/A	USACE
9-W9	RIPRAP	1,132.16	0.0260	N/A	USACE
TOTAL FOR THIS SHEET		70,815.68	1.6257	N/A	

\*1 - IMPACT CONTINUES FROM SHEET EC-08 AS 8-W3  
 \*2 - IMPACT CONTINUES FROM SHEET EC-08 AS 8-W4  
 \*3 - IMPACT CONTINUES TO SHEET EC-10 AS 10-W1

LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	CREATION AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	PROPOSED ORD. HIGH WATER / WETLAND
	PROPOSED ORD. HIGH WATER
	RESOURCE PROTECTION FENCE
	LIMIT OF CONSTRUCTION
	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



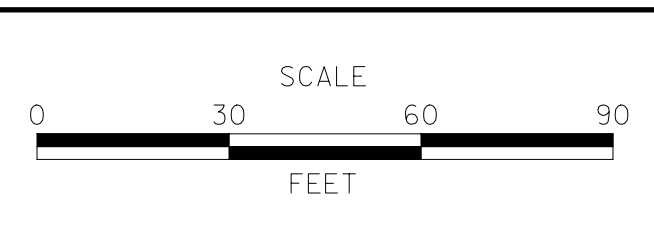
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NOTE: THE LOSS OF WETLAND W-32A IS CAUSED BY ROADWAY EMBANKMENT.

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ADDENDUMS / REVISIONS



**US 301,  
SR 896 TO SR 1**

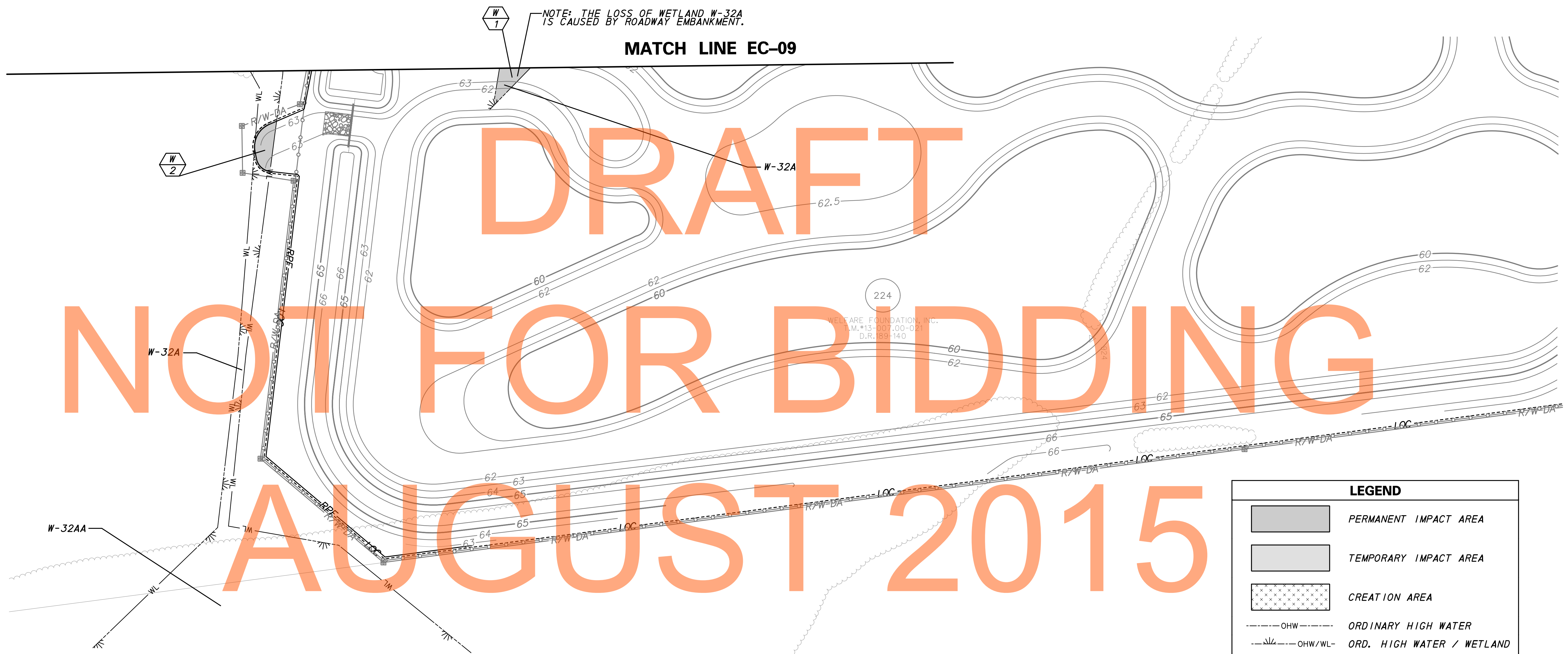
CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

**ENVIRONMENTAL  
COMPLIANCE PLAN**

EC-09
SHEET NO. 666
TOTAL SHTS. 875

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
10-W1 *1	EXCAVATION	193.75	0.0044	N/A	USACE
10-W2	EXCAVATION	267.76	0.0061	N/A	USACE
TOTAL FOR THIS SHEET		461.51	0.0106	N/A	

\*1 - IMPACT CONTINUES FROM SHEET EC-9 AS 9-W6

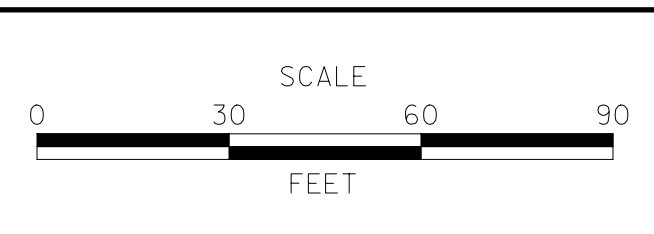


LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	CREATION AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	PROPOSED ORD. HIGH WATER / WETLAND
	PROPOSED ORD. HIGH WATER
	RESOURCE PROTECTION FENCE
	LIMIT OF CONSTRUCTION
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
O = OPEN WATER IMPACT    W = WETLAND IMPACT	
T = TEMPORARY IMPACT    C = CREATION AREA	

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ADDENDUMS / REVISIONS

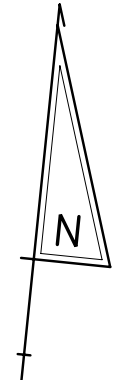


**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

**ENVIRONMENTAL  
COMPLIANCE PLAN**

EC-10
SHEET NO. 667
TOTAL SHTS. 875



232  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-007  
D.R.189-140

NOTE: NO IMPACTS ON THIS SHEET

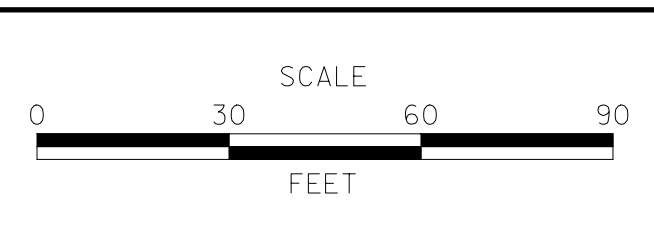
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LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	CREATION AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	PROPOSED ORD. HIGH WATER / WETLAND
	PROPOSED ORD. HIGH WATER
	RESOURCE PROTECTION FENCE
	LIMIT OF CONSTRUCTION
	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

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ADDENDUMS / REVISIONS



US 301,  
SR 896 TO SR 1

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

ENVIRONMENTAL  
COMPLIANCE PLAN

EC-11
SHEET NO. 668
TOTAL SHTS. 875

**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- CREATION AREA
- OHW - ORDINARY HIGH WATER
- OHW/WL - ORD. HIGH WATER / WETLAND
- WL - WETLAND BOUNDARY
- POHW/WL - PROPOSED ORD. HIGH WATER / WETLAND
- POHW - PROPOSED ORD. HIGH WATER
- RPF - RESOURCE PROTECTION FENCE
- LOC - LIMIT OF CONSTRUCTION

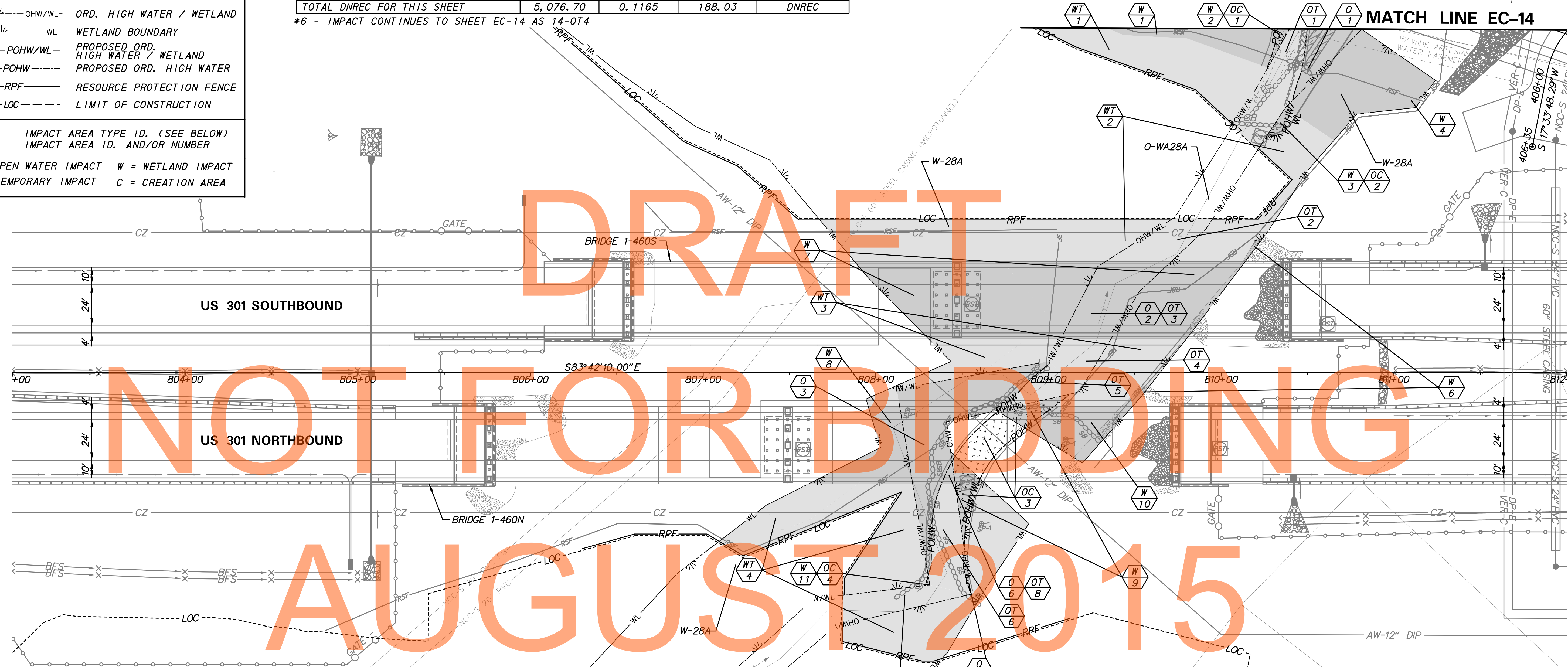
- IMPACT AREA TYPE ID. (SEE BELOW)
- IMPACT AREA ID. AND/OR NUMBER
- O = OPEN WATER IMPACT    W = WETLAND IMPACT
- T = TEMPORARY IMPACT    C = CREATION AREA

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-OT1*6	CHANNEL MODIFICATION	1,283.42	0.0295	47.53	USACE/DNREC
12-OT2	E&S AREA	783.71	0.0180	29.03	USACE/DNREC
12-OT3	TEMPORARY ACCESS	1,458.48	0.0335	N/A	USACE
12-OT4	E&S AREA	619.18	0.0142	22.93	USACE/DNREC
12-OT5	CHANNEL MODIFICATION	508.87	0.0117	18.85	USACE/DNREC
12-OT6	CHANNEL MODIFICATION	1040.06	0.0239	38.52	USACE/DNREC
12-OT7	E&S AREA	841.46	0.0193	31.17	USACE/DNREC
12-OT8	TEMPORARY ACCESS	51.64	0.0012	N/A	USACE
TOTAL USACE FOR THIS SHEET		6,586.82	0.1512	188.03	USACE
TOTAL DNREC FOR THIS SHEET		5,076.70	0.1165	188.03	DNREC

\*6 - IMPACT CONTINUES TO SHEET EC-14 AS 14-OT4

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-01*5	FILL	619.30	0.0142	22.94	USACE/DNREC
12-02	SHADING	1,458.48	0.0335	N/A	DNREC
12-03	FILL	2,889.80	0.0663	107.03	USACE/DNREC
12-05	FILL	27.70	0.0006	1.03	USACE/DNREC
12-06	SHADING	51.64	0.0012	N/A	DNREC
TOTAL USACE FOR THIS SHEET		3,536.80	0.0812	130.99	USACE
TOTAL DNREC FOR THIS SHEET		5,046.92	0.1158	130.99	DNREC

\*5 - IMPACT CONTINUES TO SHEET EC-14 AS 14-04  
NOTE: 12-04 IS NO LONGER USED



**PERMANENT WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-W1*2	FILL	931.12	0.0214	N/A	USACE
12-W2*3	EXCAVATION	72.70	0.0017	N/A	USACE
12-W3	EXCAVATION	114.65	0.0026	N/A	USACE
12-W4	FILL	2,687.45	0.0617	N/A	USACE
12-W6	RIPRAP	445.86	0.0102	N/A	USACE
12-W7	SHADING	6,886.27	0.1581	N/A	USACE
12-W8	SHADING	1190.81	0.0273	N/A	USACE
12-W9	EXCAVATION	637.88	0.0146	N/A	USACE
12-W10	SHADING	901.10	0.0207	N/A	USACE
12-W11	EXCAVATION	6.85	0.0002	N/A	USACE
TOTAL FOR THIS SHEET		13,874.69	0.3185	N/A	

\*2 - IMPACT CONTINUES TO SHEET EC-14 AS 14-W6  
\*3 - IMPACT CONTINUES TO SHEET EC-14 AS 14-W7  
NOTE: 12-W5 IS NO LONGER USED

**TEMPORARY WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-WT*1	TEMPORARY ACCESS	2,796.84	0.0642	N/A	USACE
12-WT2	TEMPORARY ACCESS	6,415.87	0.1473	N/A	USACE
12-WT3	TEMPORARY ACCESS	3,066.35	0.0704	N/A	USACE
12-WT4	TEMPORARY ACCESS	7,055.88	0.1620	N/A	USACE
TOTAL FOR THIS SHEET		19,334.94	0.4439	N/A	

\*1 - IMPACT CONTINUES TO SHEET EC-14 AS 14-WT4  
NOTE: NO GRUBBING SHALL OCCUR IN TEMPORARY WETLAND IMPACT AREAS.  
NOTE: SEE STREAM RESTORATION PLANS FOR TEMPORARY IMPACT RESTORATION.

**OPEN WATER CREATION AREA SCHEDULE**

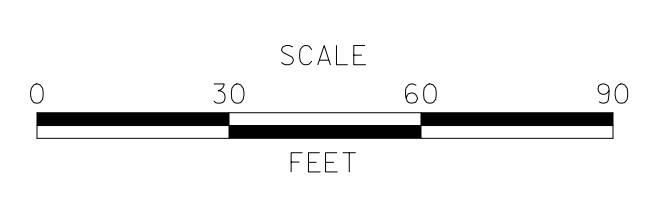
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-OC1*4	STREAM RELOCATION	72.70	0.0017	2.69	USACE/DNREC
12-OC2	STREAM RELOCATION	114.65	0.0026	4.25	USACE/DNREC
12-OC3	STREAM RELOCATION	1,315.42	0.0302	48.72	USACE/DNREC
12-OC4	STREAM RELOCATION	6.85	0.0002	0.25	USACE/DNREC
TOTAL USACE FOR THIS SHEET		1,509.62	0.0347	55.91	USACE
TOTAL DNREC FOR THIS SHEET		1,509.62	0.0347	55.91	USACE

\*4 - IMPACT CONTINUES TO SHEET EC-14 AS 14-OC4

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ADDENDUMS / REVISIONS



**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	EC-12
SHEET NO. 669	TOTAL SHTS. 875

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
13-W1	EXCAVATION	6,099.08	0.1400	N/A	USACE
13-W2	SHADING	5,052.55	0.1160	N/A	USACE
13-W3	FILL	27,237.07	0.6253	N/A	USACE
13-W4	RIPRAP	6,376.42	0.1464	N/A	USACE
13-W5	FILL	856.41	0.0197	N/A	USACE
13-W6	EXCAVATION	6,070.04	0.1393	N/A	USACE
TOTAL FOR THIS SHEET		51,691.57	1.1867	N/A	

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
13-OT1	TEMPORARY ACCESS	28.71	0.0007	N/A	USACE/DNREC
13-OT2	TEMPORARY ACCESS	133.53	0.0031	N/A	USACE/DNREC
13-OT3	TEMPORARY ACCESS	49.82	0.0011	N/A	USACE/DNREC
13-OT4	E&S AREA	314.68	0.0072	11.65	USACE/DNREC
13-OT5	E&S AREA	489.59	0.0112	18.13	USACE/DNREC
TOTAL USACE FOR THIS SHEET		1,016.33	0.0233	29.79	USACE
TOTAL DNREC FOR THIS SHEET		1,016.33	0.0233	29.79	DNREC

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
13-WT1	TEMPORARY ACCESS	3,132.39	0.0719	N/A	USACE
13-WT2	TEMPORARY ACCESS	2,357.65	0.0541	N/A	USACE
TOTAL FOR THIS SHEET		5,490.04	0.1260	N/A	

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
13-O1	SHADING	1,000.15	0.0230	N/A	USACE/DNREC
TOTAL USACE FOR THIS SHEET		1,000.15	0.0230	N/A	USACE
TOTAL DNREC FOR THIS SHEET		1,000.15	0.0230	N/A	DNREC

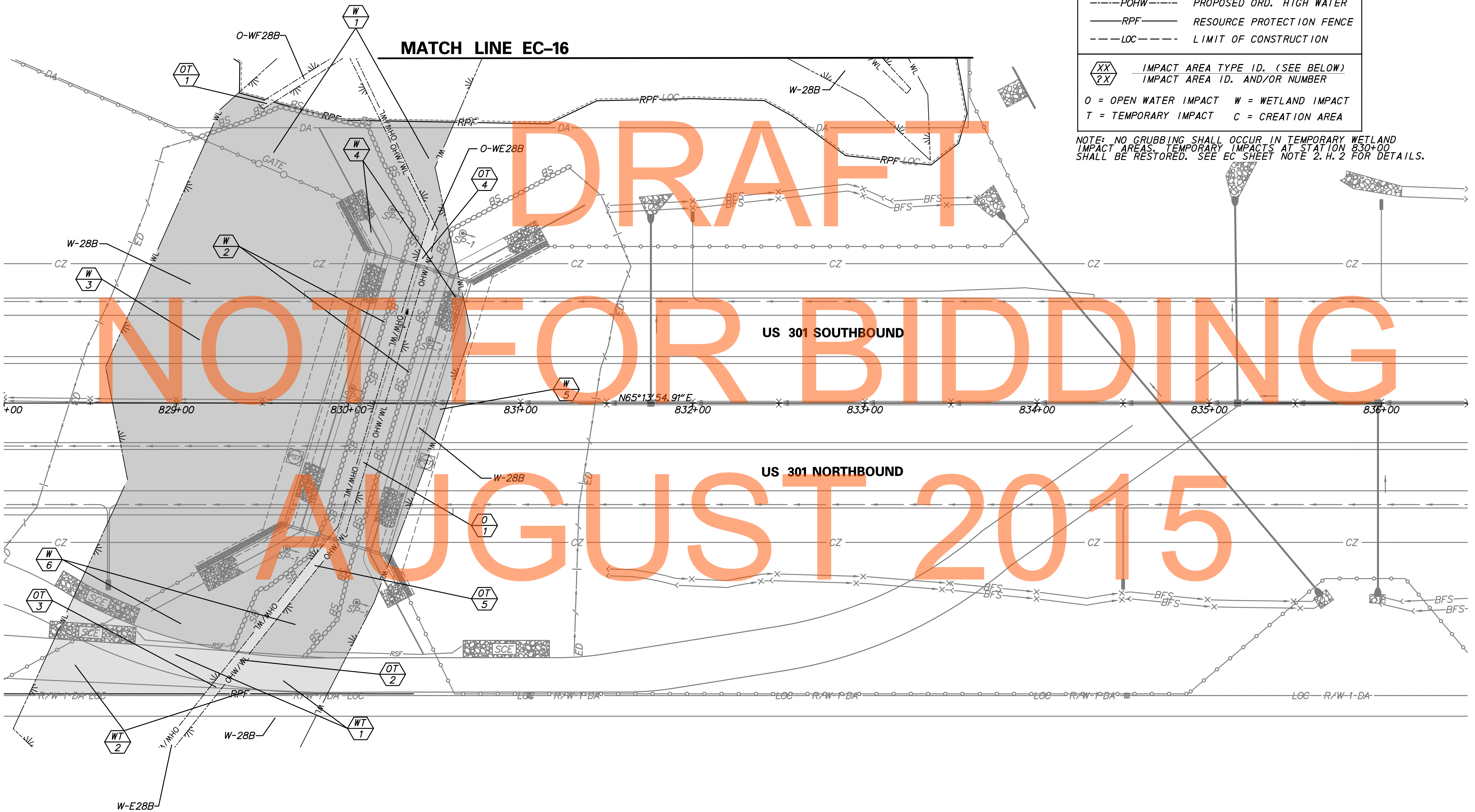
**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- CREATION AREA
- ORDINARY HIGH WATER
- ORD. HIGH WATER / WETLAND
- WETLAND BOUNDARY
- PROPOSED ORD. HIGH WATER / WETLAND
- PROPOSED ORD. HIGH WATER
- RESOURCE PROTECTION FENCE
- LIMIT OF CONSTRUCTION

**Impact Area ID. (SEE BELOW)**  
**Impact Area ID. AND/OR NUMBER**

O = OPEN WATER IMPACT    W = WETLAND IMPACT  
T = TEMPORARY IMPACT    C = CREATION AREA

NOTE: NO GRUBBING SHALL OCCUR IN TEMPORARY WETLAND IMPACT AREAS. TEMPORARY IMPACTS AT STATION 830+00 SHALL BE RESTORED. SEE EC SHEET NOTE 2.H.2 FOR DETAILS.



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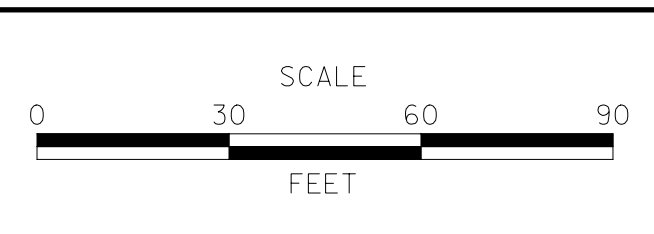
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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

CONTRACT	BRIDGE NO.	1-436
T200911308	DESIGNED BY:	REL
COUNTY	CHECKED BY:	LMM
NEW CASTLE		

**ENVIRONMENTAL  
COMPLIANCE PLAN**

EC-13
SHEET NO.
670
TOTAL SHTS.
875

**TEMPORARY WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
14-WT1	TEMPORARY ACCESS	3,166.99	0.0727	N/A	USACE
14-WT2	TEMPORARY ACCESS	58.29	0.0013	N/A	USACE
14-WT3	TEMPORARY ACCESS	3,363.71	0.0772	N/A	USACE
14-WT4*1	TEMPORARY ACCESS	1,133.03	0.0260	N/A	USACE
TOTAL FOR THIS SHEET		7,722.02	0.1773	N/A	

\*1 - IMPACT CONTINUES FROM SHEET EC-12 AS 12-WT1

**PERMANENT WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
14-W1	FILL	596.52	0.0137	N/A	USACE
14-W2	EXCAVATION	130.43	0.0030	N/A	USACE
14-W3	EXCAVATION	1,224.49	0.0281	N/A	USACE
14-W4	RIPRAP	264.23	0.0061	N/A	USACE
14-W5	FILL	197.39	0.0045	N/A	USACE
14-W6*3	FILL	4,142.40	0.0951	N/A	USACE
14-W7*6	EXCAVATION	228.44	0.0052	N/A	USACE
14-W8	RIPRAP	121.65	0.0028	N/A	USACE
14-W9	EXCAVATION	1,806.29	0.0415	N/A	USACE
TOTAL FOR THIS SHEET		8,711.84	0.2000	N/A	

\*3 - IMPACT CONTINUES FROM SHEET EC-12 AS 12-W1

\*6 - IMPACT CONTINUES FROM SHEET EC-12 AS 12-W2

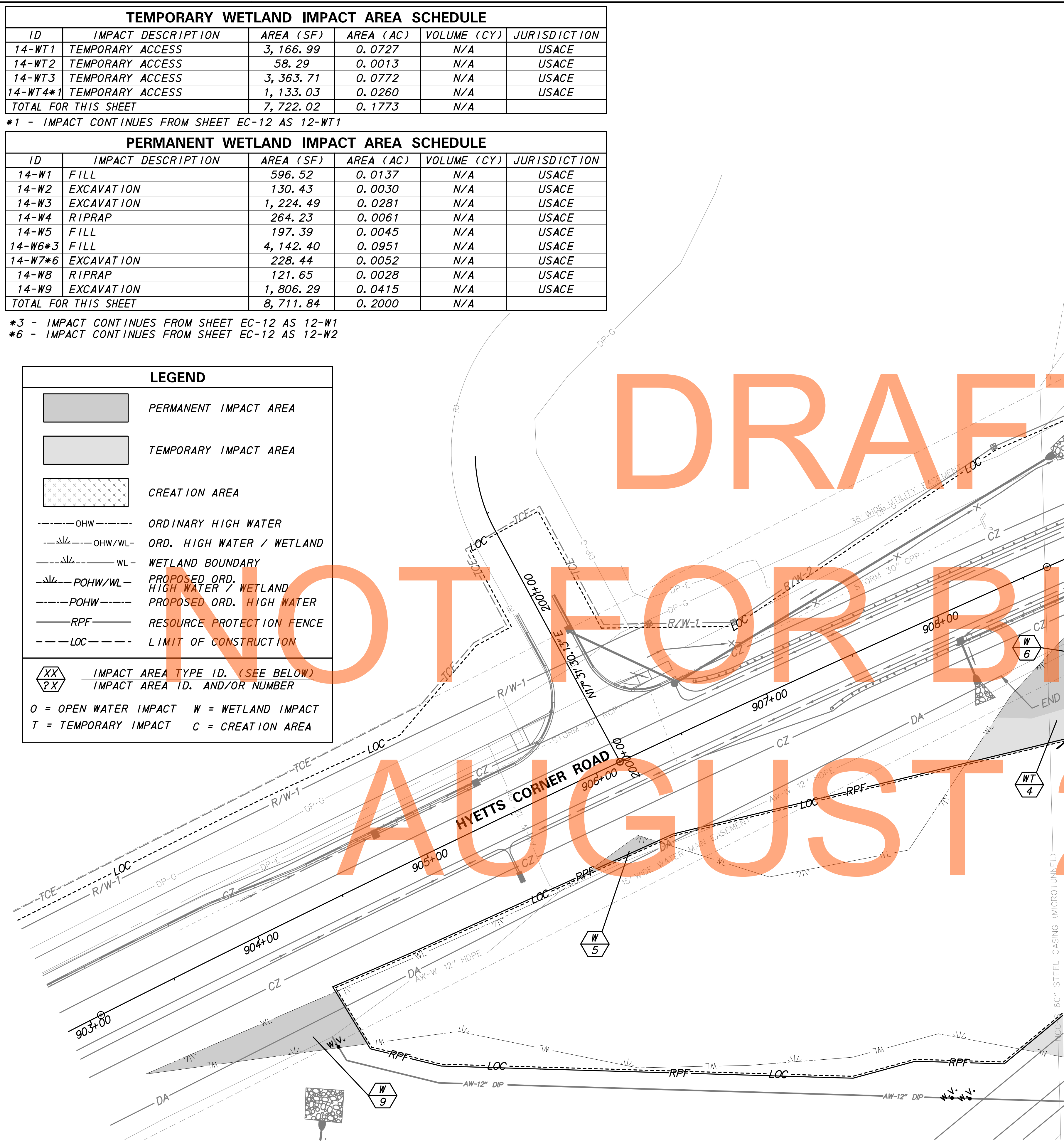
**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- CREATION AREA
- OHW - ORDINARY HIGH WATER
- OHW/WL - ORD. HIGH WATER / WETLAND
- WL - WETLAND BOUNDARY
- POHW/WL - PROPOSED ORD. HIGH WATER / WETLAND
- POHW - PROPOSED ORD. HIGH WATER
- RPF - RESOURCE PROTECTION FENCE
- LOC - LIMIT OF CONSTRUCTION

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

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**PERMANENT OPEN WATER IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
14-O1	FILL	678.13	0.0156	25.12	USACE/DNREC
14-O2	FILL	605.15	0.0139	22.41	USACE/DNREC
14-O3	FILL	450.70	0.0103	16.69	USACE/DNREC
14-O4*5	FILL	963.03	0.0221	35.67	USACE/DNREC
TOTAL USACE FOR THIS SHEET		2,697.01	0.0619	99.89	USACE
TOTAL DNREC FOR THIS SHEET		2,697.01	0.0619	99.89	DNREC

\*5 - IMPACT CONTINUES FROM SHEET EC-12 AS 12-O1

**TEMPORARY OPEN WATER IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
14-OT1	CHANNEL MODIFICATION	175.25	0.0040	6.49	USACE/DNREC
14-OT2	CHANNEL MODIFICATION	875.34	0.0201	32.42	USACE/DNREC
14-OT3	CHANNEL MODIFICATION	1,115.73	0.0256	41.32	USACE/DNREC
14-OT4*4	CHANNEL MODIFICATION	135.35	0.0031	5.01	USACE/DNREC
TOTAL USACE FOR THIS SHEET		2,301.67	0.0528	85.25	USACE
TOTAL DNREC FOR THIS SHEET		2,301.67	0.0528	85.25	DNREC

\*4 - IMPACT CONTINUES FROM SHEET EC-12 AS 12-OT1

**OPEN WATER CREATION AREA SCHEDULE**

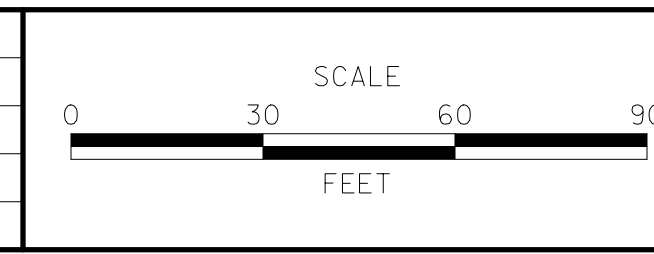
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
14-OC1	STREAM RELOCATION	1,255.48	0.0288	46.50	USACE/DNREC
14-OC2	STREAM RELOCATION	130.43	0.0030	4.83	USACE/DNREC
14-OC3	STREAM RELOCATION	1,224.49	0.0281	45.35	USACE/DNREC
14-OC4*2	STREAM RELOCATION	228.44	0.0052	8.46	USACE/DNREC
TOTAL USACE FOR THIS SHEET		2,838.84	0.0652	105.14	USACE
TOTAL DNREC FOR THIS SHEET		2,838.84	0.0652	105.14	DNREC

\*2 - IMPACT CONTINUES FROM SHEET EC-12 AS 12-OC1

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**DELAWARE DEPARTMENT OF TRANSPORTATION**

ADDENDUMS / REVISIONS



**US 301, SR 896 TO SR 1**

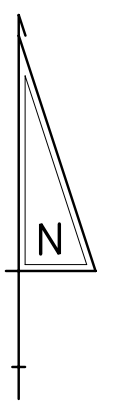
CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

**ENVIRONMENTAL COMPLIANCE PLAN**

SHEET NO.	671
TOTAL SHTS.	875

EC-14

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# AUGUST 2015

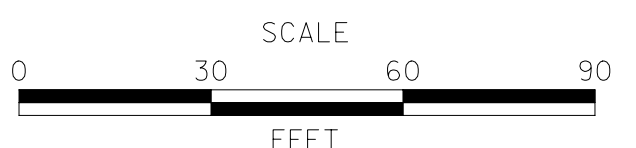
PROPOSED BORROW SITE

LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	CREATION AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	PROPOSED ORD. HIGH WATER / WETLAND
	PROPOSED ORD. HIGH WATER
	RESOURCE PROTECTION FENCE
	LIMIT OF CONSTRUCTION
	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

NOTE: NO IMPACTS ON THIS SHEET



ADDENDUMS / REVISIONS	





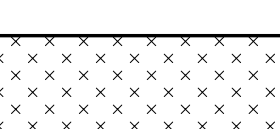
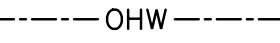
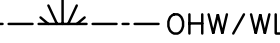
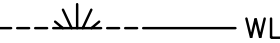




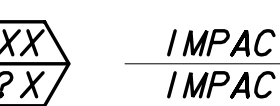
US 301,  
SR 896 TO SR 1

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

ENVIRONMENTAL  
COMPLIANCE PLAN

EC-15
SHEET NO. 672
TOTAL SHTS. 875

NOTE: NO IMPACTS ON THIS SHEET

LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	CREATION AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	PROPOSED ORD. HIGH WATER / WETLAND
	PROPOSED ORD. HIGH WATER
	RESOURCE PROTECTION FENCE
	LIMIT OF CONSTRUCTION
	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

TOPSOIL STOCKPILE  
(VILLAGE OF SCOTT RUN EAST BORROW SITE)

TOPSOIL STOCKPILE  
(VILLAGE OF SCOTT RUN WEST BORROW SITE)

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NOT FOR BIDDING

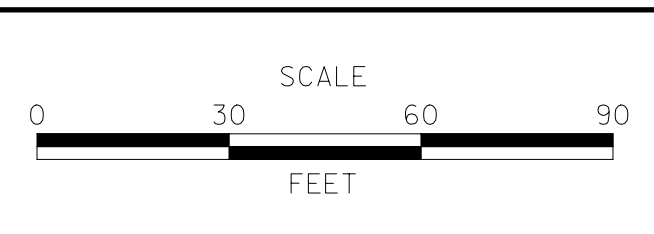
AUGUST 2015

MATCH LINE EC-13

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ADDENDUMS / REVISIONS



US 301,  
SR 896 TO SR 1

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: REL
	CHECKED BY: LMM

**ENVIRONMENTAL COMPLIANCE PLAN**

EC-16
SHEET NO. 673
TOTAL SHTS. 875