DRAFT
NOT FOR BIDDING
AUGUST 2015

PLAN SHEET INDEX CROSS REFERENCE								
BORROW SITE GRADING PLAN SHEET NO.	805	806	807	808	809	810	811	812
ENVIRONMENTAL COMPLIANCE SHEET NO.	833/ EC-7	834/ EC-8	835/ EC-9	N/A	N/A	N/A	836/ EC-10	837/ EC-11

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 200 400 600 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: MRS
CHECKED BY: JTR

ENVIRONMENTAL COMPLIANCE PLAN SHEET INDEX

EC-1
SHEET NO. 827
TOTAL SHTS. 1256

7/24/2012 11:56:26 AM
\\RKKM\V2008\2008\08013_DE301\CADD\2911303\PLANS\EC01_301DS2_000_RKK.DGN

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 CONSISTENT WITH THE JURISDICTIONAL DETERMINATION.

SHEETS PREPARED BY: AECOM
DATE: APRIL 16, 2010

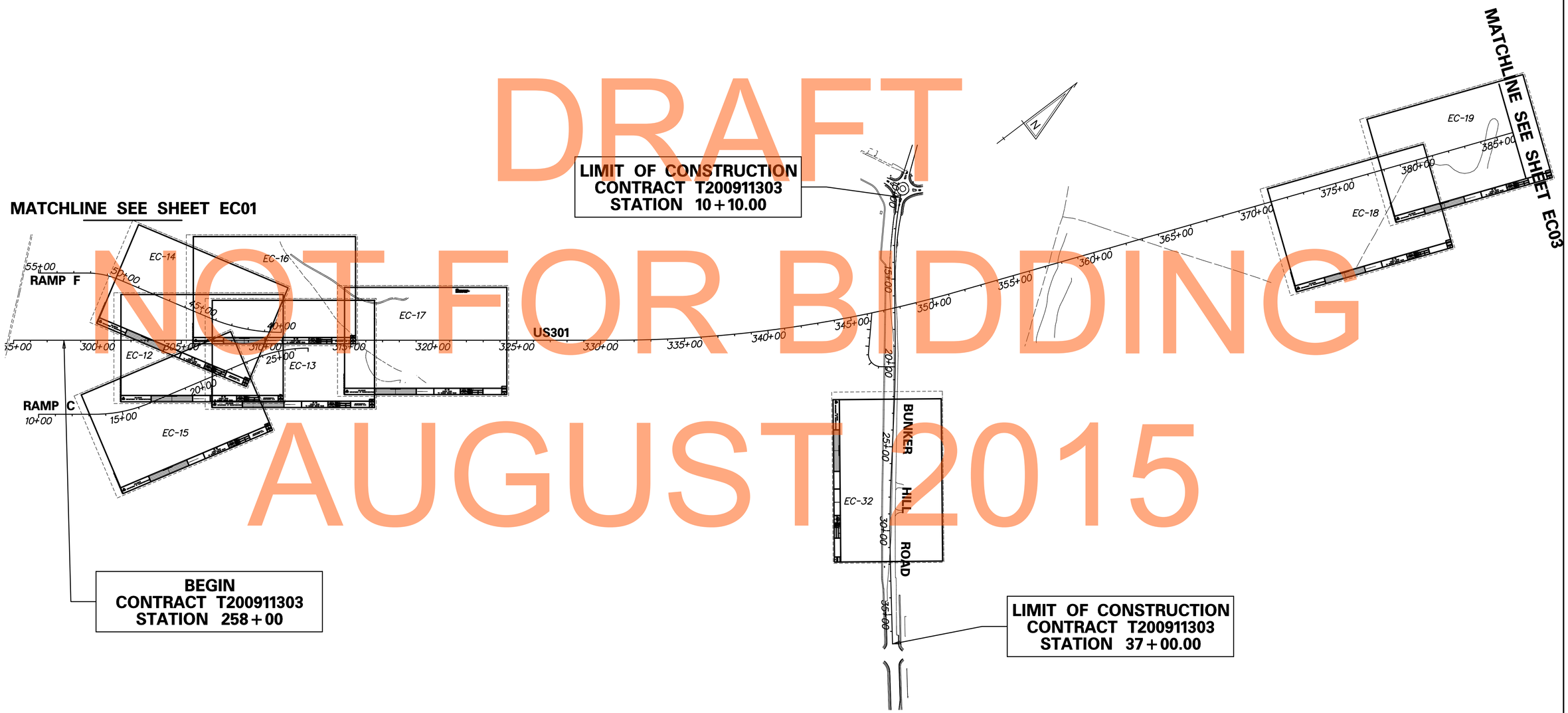
SHEETS LAST UPDATED: NOVEMBER 14, 2012

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

PLAN SHEET INDEX CROSS REFERENCE

CONSTRUCTION PLAN	69	70	72	74	75	76	88 89	90	131
ENVIRONMENTAL COMPLIANCE	838/ EC-12	839/ EC-13	840/ EC-14	841/ EC-15	842/ EC-16	843/ EC-17	844/ EC-18	845/ EC-19	858/ EC-32

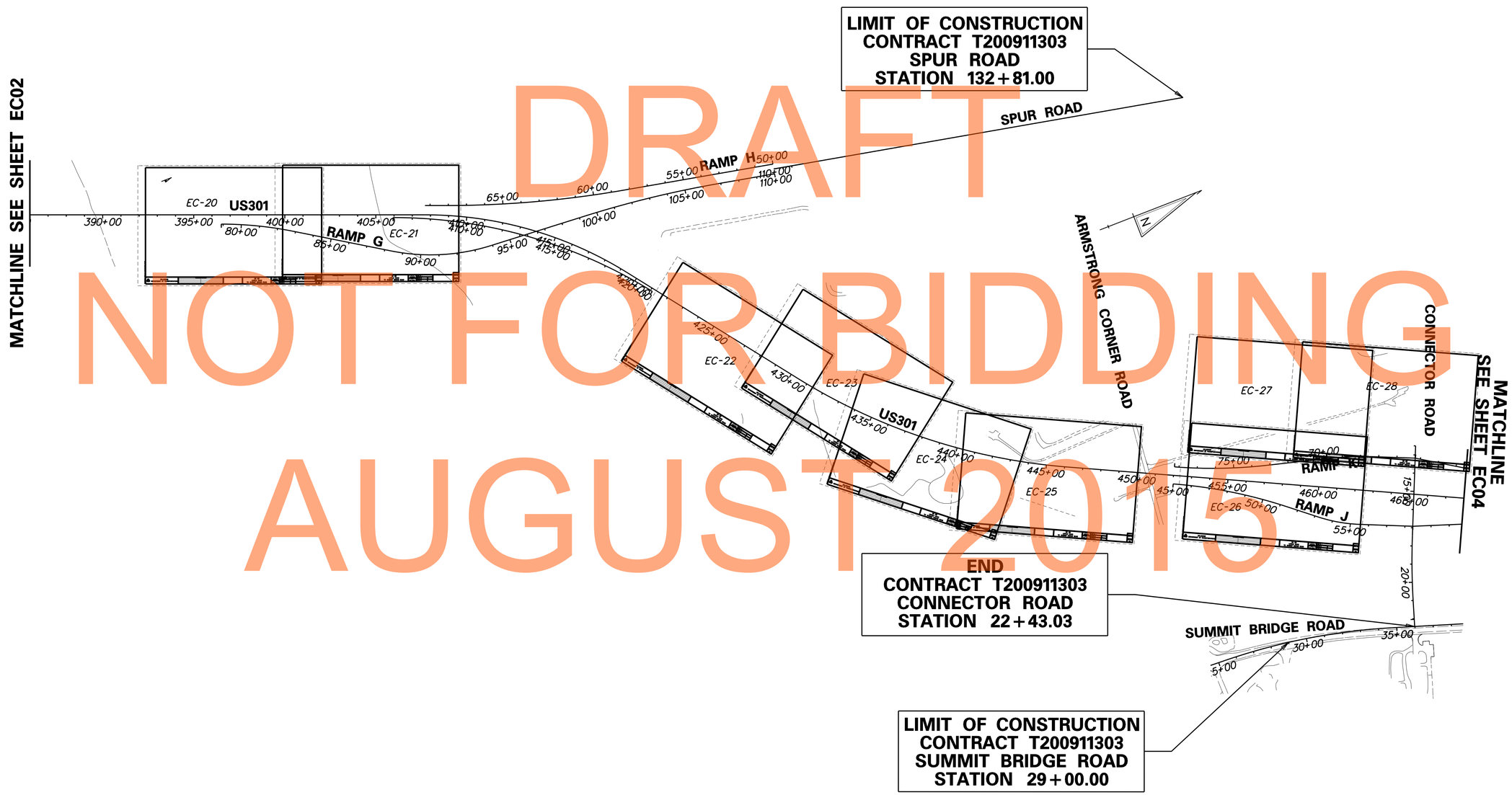
DRAFT
NOT FOR BIDDING
AUGUST 2015



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 300 600 900 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN SHEET INDEX	EC-02 SHEET NO. 828
				COUNTY NEW CASTLE	DESIGNED BY: AW JW		TOTAL SHTS. 1256
					CHECKED BY: JF SF		

P:\cadd2\60049040_US301\Civil\Plans\2A\CP\AET\EC-02.dgn

PLAN SHEET INDEX CROSS REFERENCE									
CONSTRUCTION PLAN	93	95	104	106	108	110	112	113	116
ENVIRONMENTAL COMPLIANCE	846/ EC-20	847/ EC-21	848/ EC-22	849/ EC-23	850/ EC-24	851/ EC-25	852/ EC-26	853/ EC-27	854/ EC-28

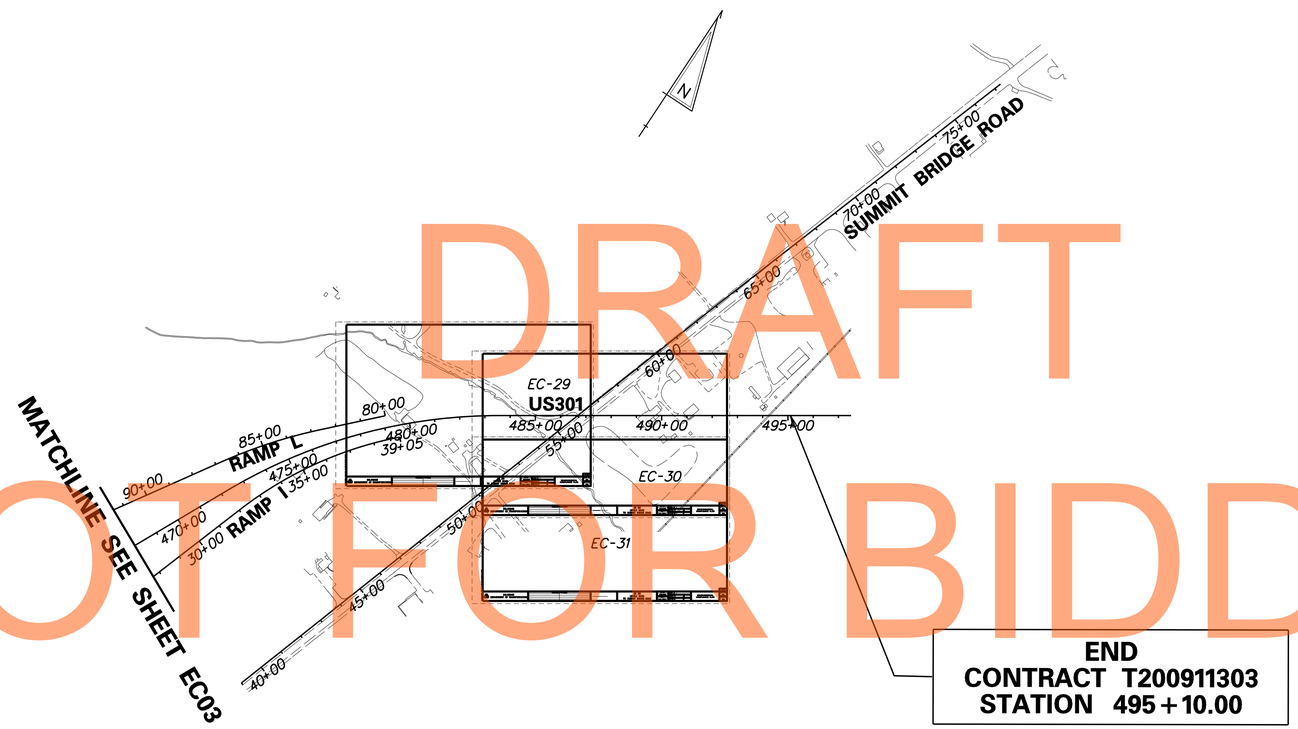


DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040 US301\Civil\Plans\2A\CPY\AET\EC-03.dgn

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 300 600 900 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN SHEET INDEX	EC-03
				COUNTY NEW CASTLE	DESIGNED BY: AW JW		SHEET NO. 829
					CHECKED BY: JF SF		TOTAL SHTS. 1256

PLAN SHEET INDEX CROSS REFERENCE			
CONSTRUCTION PLAN	123	124	125
ENVIRONMENTAL COMPLIANCE	855/ EC-29	856/ EC-30	857/ EC-31



DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040_US301\Civil\Plans\2A\CP\EC-04.dgn

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 300 600 900 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN SHEET INDEX	EC-04 SHEET NO. 830
				COUNTY NEW CASTLE	DESIGNED BY: AW JW		TOTAL SHTS. 1256
					CHECKED BY: JF SF		

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 ENVIROMENTAL 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 LAND 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 ≥60" SHALL BE RECESSED A MINIMUM OF 12" BELOW THE STREAMBED ELEVATION. PIPES < 60" SHALL BE RECESSED A MINIMUM OF 4 INCHES 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:

SPRING MILL BRANCH OF DRAWYER CREEK STA 484+00

PIPES AND RIPRAP SHALL NOT BE RECESSED AND RIPRAP SHALL BE CHOKED WITH ITEM 712531-CHANNEL BED FILL TO CREATE A SMOOTH STREAM BOTTOM IN STREAMS LOCATED AT THE FOLLOWING CROSSINGS:

SPRING MILL BRANCH OF DRAWYER CREEK - RAMP K STA 67+50
SPRING MILL BRANCH OF DRAWYER CREEK - RAMP K STA 75+60

STREAMS LOCATED AT THE FOLLOWING CROSSINGS ARE NOT ASSOCIATED WITH PIPES, BUT RIPRAP SHALL BE RECESSED 1 FOOT BELOW THE STREAMBED ELEVATIONS AND BACKFILLED WITH ITEM 712531-CHANNEL BED FILL:

SANDY BRANCH STA 304+00
UNNAMED TRIBUTARY TO SANDY BRANCH STA 313+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:

SANDY BRANCH STA 304+00
UNNAMED TRIBUTARY TO SANDY BRANCH STA 313+00
SPRING MILL BRANCH OF DRAWYER CREEK STA 484+00
SPRING MILL BRANCH OF DRAWYER CREEK - RAMP K STA 67+50
SPRING MILL BRANCH OF DRAWYER CREEK - RAMP K STA 75+60

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 LOCATIONS(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 SPOIL AREAS.

F. 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.

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 251001-REINFORCED SILT FENCE SHALL BE USED DUE TO THE HIGH PROBABILITY OF OVERBANK FLOODING IN THE FOLLOWING LOCATIONS:

SANDY BRANCH AT MAINLINE STATION 301+00 TO 306+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:

SANDY BRANCH STA 304+00
UNNAMED TRIBUTARY TO SANDY BRANCH STA 313+00

I. FLOODPLAIN:

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

SANDY BRANCH STA 304+00
UNNAMED TRIBUTARY TO SANDY BRANCH STA 313+00

DRAFT
NOT FOR BIDDING
AUGUST 2015

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
10-W1	RIPRAP	153.93	0.0035	N/A	USACE
10-W2	RIPRAP	153.93	0.0035	N/A	USACE
10-W3	RIPRAP	254.47	0.0058	N/A	USACE
10-W4	RIPRAP	420.22	0.0097	N/A	USACE
10-W5	RIPRAP	483.39	0.0111	N/A	USACE
10-W6	RIPRAP	438.95	0.0101	N/A	USACE
10-W7	EXCAVATION	68.76	0.0016	N/A	USACE
10-W8	EXCAVATION	145.68	0.0033	N/A	USACE
10-W9	EXCAVATION	135.38	0.0031	N/A	USACE
12-W1	SHADING	3,473.73	0.0797	N/A	USACE
12-W2	RIPRAP	508.63	0.0117	N/A	USACE
12-W3	RIPRAP	266.01	0.0061	N/A	USACE
12-W4	RIPRAP	274.63	0.0063	N/A	USACE
12-W5	SHADING	3,111.92	0.0714	N/A	USACE
12-W6	SHADING	1,520.93	0.0349	N/A	USACE
12-W7	FILL	199.08	0.0046	N/A	USACE
12-W8	RIPRAP	372.96	0.0086	N/A	USACE
12-W9	RIPRAP	5,292.23	0.1215	N/A	USACE
12-W10	SHADING	2,720.99	0.0625	N/A	USACE
12-W11	FILL	356.08	0.0082	N/A	USACE
12-W12	SHADING	1,012.12	0.0232	N/A	USACE
12-W13	RIPRAP	158.85	0.0036	N/A	USACE
12-W14	RIPRAP	163.17	0.0037	N/A	USACE
13-W1	SHADING	2,974.54	0.0683	N/A	USACE
13-W2	SHADING	2,436.66	0.0559	N/A	USACE
13-W3	RIPRAP	2,417.06	0.0555	N/A	USACE
13-W4	FILL	419.25	0.0096	N/A	USACE
13-W5	SHADING	1,075.04	0.0247	N/A	USACE
13-W6	RIPRAP	250.46	0.0057	N/A	USACE
13-W7	SHADING	2,961.15	0.0680	N/A	USACE
14-W1	SHADING	1,214.43	0.0279	N/A	USACE
14-W2	SHADING	1,973.55	0.0453	N/A	USACE
14-W3	RIPRAP	221.94	0.0051	N/A	USACE
15-W1	FILL	3,747.47	0.0860	N/A	USACE
15-W2	RIPRAP	512.20	0.0118	N/A	USACE
15-W3	RIPRAP	323.20	0.0074	N/A	USACE
20-W1	EXCAVATION	489.53	0.0112	N/A	USACE
21-W1	FILL	17,052.88	0.3915	N/A	USACE
21-W2	EXCAVATION	8,768.82	0.2013	N/A	USACE
21-W3	RIPRAP	329.02	0.0076	N/A	USACE
23-W1	FILL	145,195.59	3.3332	N/A	USACE
23-W2	RIPRAP	170.94	0.0039	N/A	USACE
23-W3	RIPRAP	124.15	0.0029	N/A	USACE
24-W1	FILL	129,084.74	2.9634	N/A	USACE
24-W2	RIPRAP	124.75	0.0029	N/A	USACE
24-W3	RIPRAP	36.99	0.0008	N/A	USACE
24-W4	RIPRAP	519.24	0.0119	N/A	USACE
24-W5	RIPRAP	519.24	0.0119	N/A	USACE
24-W6	RIPRAP	498.77	0.0115	N/A	USACE
24-W7	EXCAVATION	9,326.11	0.2141	N/A	USACE
25-W1	FILL	9,518.25	0.2185	N/A	USACE
26-W1	FILL	1,630.42	0.0374	N/A	USACE
26-W2	RIPRAP	165.13	0.0038	N/A	USACE
26-W3	EXCAVATION	2,430.00	0.0558	N/A	USACE
29-W1	FILL	2,798.92	0.0643	N/A	USACE
29-W2	FILL	16,849.14	0.3868	N/A	USACE
29-W3	FILL	381.78	0.0088	N/A	USACE
29-W4	RIPRAP	102.19	0.0023	N/A	USACE
29-W5	RIPRAP	18.96	0.0004	N/A	USACE
29-W6	EXCAVATION	10,669.05	0.2449	N/A	USACE
29-W7	RIPRAP	115.20	0.0026	N/A	USACE
29-W8	RIPRAP	64.51	0.0015	N/A	USACE
29-W9	EXCAVATION	1,010.06	0.0232	N/A	USACE
30-W1	FILL	4,329.75	0.0994	N/A	USACE
30-W2	FILL	2,340.42	0.0537	N/A	USACE
30-W3	FILL	2,369.92	0.0544	N/A	USACE
31-W1	FILL	9,717.80	0.2231	N/A	USACE
31-W2	RIPRAP	360.87	0.0083	N/A	USACE
31-W3	RIPRAP	97.14	0.0022	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		419,423.27	9.6284	-	-

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
12-OT1	TEMPORARY ACCESS	185.18	0.0043	13.79	DNREC/USACE
12-OT2	E&S AREA	586.92	0.0135	43.69	DNREC/USACE
12-OT3	E&S AREA	286.62	0.0066	21.34	USACE
12-OT4	E&S AREA	119.54	0.0027	8.90	USACE
12-OT5	E&S AREA	1,353.66	0.0311	100.77	DNREC/USACE
12-OT6	TEMPORARY ACCESS	507.52	0.0117	37.78	DNREC/USACE
13-OT1	TEMPORARY ACCESS	212.49	0.0049	15.82	DNREC/USACE
13-OT2	TEMPORARY ACCESS	536.19	0.0123	39.92	DNREC/USACE
13-OT3	E&S AREA	3.08	0.0001	0.23	USACE
13-OT4	E&S AREA	198.81	0.0046	14.80	DNREC/USACE
13-OT5	E&S AREA	206.06	0.0047	15.34	USACE
13-OT6	TEMPORARY ACCESS	112.20	0.0026	8.35	USACE
13-OT7	TEMPORARY ACCESS	75.57	0.0017	5.63	DNREC/USACE
13-OT8	E&S AREA	103.83	0.0024	7.73	DNREC/USACE
13-OT9	E&S AREA	118.84	0.0027	8.85	DNREC/USACE
14-OT1	TEMPORARY ACCESS	120.27	0.0028	8.95	DNREC/USACE
14-OT2	TEMPORARY ACCESS	274.07	0.0063	20.40	DNREC/USACE
14-OT3	TEMPORARY ACCESS	1,130.18	0.0259	84.14	USACE
15-OT1	TEMPORARY ACCESS	281.93	0.0065	20.99	DNREC/USACE
15-OT2	E&S AREA	241.27	0.0055	17.96	DNREC/USACE
15-OT3	TEMPORARY ACCESS	31.88	0.0007	2.37	DNREC/USACE
15-OT4	E&S AREA	395.63	0.0091	29.45	DNREC/USACE
19-OT1	TEMPORARY ACCESS	364.28	0.0084	27.12	DNREC
19-OT2	E&S AREA	27.72	0.0006	2.06	DNREC
19-OT3	TEMPORARY ACCESS	49.90	0.0011	3.71	DNREC
19-OT4	E&S AREA	35.58	0.0008	2.65	DNREC
19-OT5	TEMPORARY ACCESS	58.86	0.0014	4.38	DNREC
27-OT1	E&S AREA	229.58	0.0053	17.09	DNREC/USACE
27-OT2	TEMPORARY ACCESS	115.67	0.0027	8.61	DNREC/USACE
28-OT1	TEMPORARY ACCESS	183.58	0.0042	13.67	DNREC/USACE
28-OT2	TEMPORARY ACCESS	245.48	0.0056	18.27	DNREC/USACE
28-OT3	E&S AREA	118.73	0.0027	8.84	DNREC/USACE
28-OT4	E&S AREA	112.52	0.0026	8.38	DNREC/USACE
28-OT5	TEMPORARY ACCESS	16.60	0.0004	1.24	DNREC/USACE
29-OT1	TEMPORARY ACCESS	167.66	0.0038	12.48	DNREC/USACE
29-OT2	E&S AREA	67.41	0.0015	5.02	DNREC/USACE
29-OT3	TEMPORARY ACCESS	456.51	0.0105	33.98	DNREC/USACE
31-OT1	E&S AREA	331.36	0.0076	24.67	DNREC/USACE
31-OT2	E&S AREA	109.95	0.0025	8.19	DNREC/USACE
31-OT3	E&S AREA	97.22	0.0022	7.24	DNREC/USACE
31-OT4	TEMPORARY ACCESS	123.94	0.0028	9.23	DNREC/USACE
TOTAL DNREC		8,136.61	0.1868	605.73	-
TOTAL USACE		9,457.95	0.2171	704.11	-

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
12-01	RIPRAP	3,214.10	0.0738	239.27	DNREC/USACE
12-02	SHADING	286.62	0.0066	N/A	DNREC
12-03	SHADING	119.54	0.0027	N/A	DNREC
12-04	FILL	156.80	0.0036	11.67	DNREC/USACE
13-01	SHADING	112.20	0.0026	N/A	DNREC
13-02	SHADING	206.06	0.0047	N/A	DNREC
13-03	SHADING	3.08	0.0001	N/A	DNREC
13-04	RIPRAP	755.46	0.0173	56.24	DNREC/USACE
14-01	SHADING	1,130.18	0.0259	N/A	DNREC
15-01	RIPRAP	1,372.20	0.0315	102.15	DNREC/USACE
15-02	EXCAVATION	3,375.20	0.0775	251.26	DNREC/USACE
15-03	FILL	988.94	0.0227	73.62	DNREC/USACE
15-04	RIPRAP	79.17	0.0018	5.89	DNREC/USACE
19-01	EXCAVATION	147.16	0.0034	10.96	DNREC
24-01	FILL	1,791.06	0.0411	65.67	USACE
24-02	RIPRAP	127.82	0.0029	4.69	USACE
24-03	FILL	990.66	0.0227	36.32	USACE
24-04	NON-VIABLE REMNANT	704.53	0.0162	25.83	USACE
26-01	EXCAVATION	161.95	0.0037	12.06	USACE
26-02	RIPRAP	87.02	0.0020	6.48	USACE
26-03	EXCAVATION	250.22	0.0057	18.63	USACE
27-01	EXCAVATION	834.37	0.0192	62.11	USACE
27-02	EXCAVATION	48.40	0.0011	3.60	DNREC/USACE
28-01	RIPRAP	90.64	0.0021	6.75	DNREC/USACE
29-01	FILL	1,393.17	0.0320	103.71	DNREC/USACE
29-02	RIPRAP	83.86	0.0019	6.24	DNREC/USACE
29-03	EXCAVATION	217.45	0.0050	16.19	DNREC/USACE
29-04	RIPRAP	82.79	0.0019	6.16	DNREC/USACE
29-05	EXCAVATION	34.15	0.0008	2.54	DNREC/USACE
30-01	FILL	704.50	0.0162	52.45	DNREC/USACE
30-02	FILL	541.14	0.0124	40.28	DNREC/USACE
31-01	FILL	950.24	0.0218	70.74	DNREC/USACE
31-02	RIPRAP	69.50	0.0016	5.17	DNREC/USACE
31-03	RIPRAP	88.31	0.0020	6.57	DNREC/USACE
31-04	RIPRAP	96.71	0.0022	7.20	DNREC/USACE
TOTAL DNREC		16,347.57	0.3752	1,078.66	-
TOTAL USACE		19,290.36	0.4427	1,299.49	-

TEMPORARY WETLAND IMPACT AREA SCHEDULE

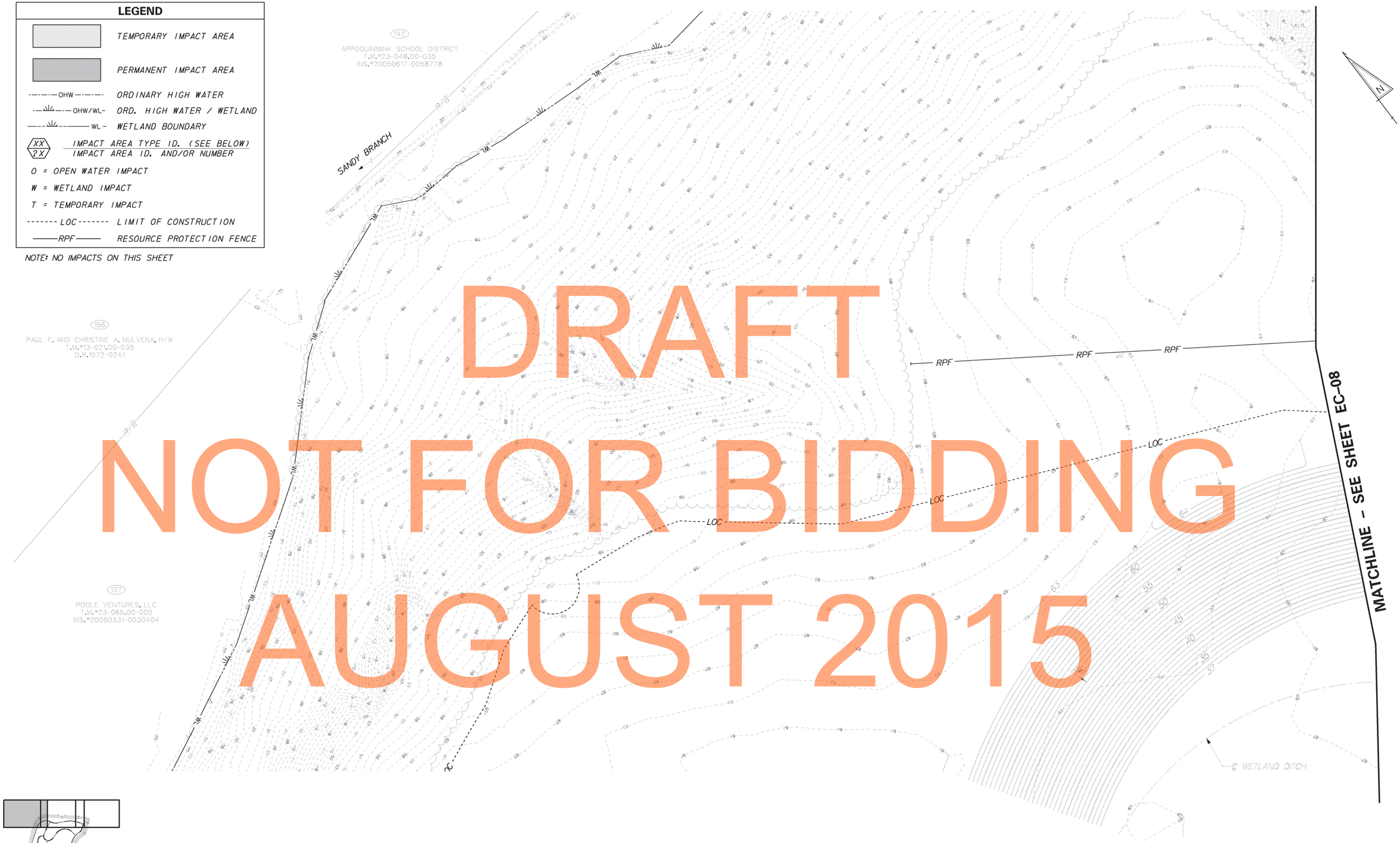
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
10-WT1	TEMPORARY ACCESS	16,544.40	0.3798	N/A	USACE
12-WT1	E&S AREA	2,192.38	0.0503	N/A	USACE
12-WT2	E&S AREA	577.05	0.0132	N/A	USACE
12-WT3	TEMPORARY ACCESS	1,398.42	0.0321	N/A	USACE
12-WT4	TEMPORARY ACCESS	1,846.05	0.0424	N/A	USACE
12-WT5	TEMPORARY ACCESS	3,213.05	0.0738	N/A	USACE
12-WT6	E&S AREA	181.42	0.0042	N/A	USACE
12-WT7	TEMPORARY ACCESS	1,286.84	0.0295	N/A	USACE
12-WT8	E&S AREA	1,489.64	0.0342	N/A	USACE
12-WT9	TEMPORARY ACCESS	722.77	0.0166	N/A	USACE
12-WT10	TEMPORARY ACCESS	158.12	0.0036	N/A	USACE
12-WT11	TEMPORARY ACCESS	140.86	0.0032	N/A	USACE
13-WT1	TEMPORARY ACCESS	7,331.29	0.1683	N/A	USACE
13-WT2	TEMPORARY ACCESS	6,486.71	0.1489	N/A	USACE
13-WT3	E&S AREA	373.30	0.0086	N/A	USACE
13-WT4	E&S AREA	370.47	0.0085	N/A	USACE
13-WT5	E&S AREA	337.98	0.0078	N/A	USACE
13-WT6	E&S AREA	389.73	0.0089	N/A	USACE
13-WT7	TEMPORARY ACCESS	1,923.30	0.0442	N/A	USACE
13-WT8	TEMPORARY ACCESS	1,171.10	0.0269	N/A	USACE
13-WT9	TEMPORARY ACCESS	484.13	0.0111	N/A	USACE
13-WT10	TEMPORARY ACCESS	383.18	0.0088	N/A	USACE
14-WT1	TEMPORARY ACCESS	164.05	0.0038	N/A	USACE
14-WT2	TEMPORARY ACCESS	206.72	0.0047	N/A	USACE
14-WT3	TEMPORARY ACCESS	266.03	0.0061	N/A	USACE
14-WT4	TEMPORARY ACCESS	484.20	0.0111	N/A	USACE
15-WT1	TEMPORARY ACCESS	2,788.10	0.0640	N/A	USACE
15-WT2	E&S AREA	256.25	0.0059	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		53,167.54	1.2205	-	-

DRAFT
NOT FOR BIDDING
AUGUST 2017

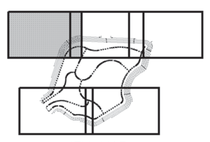
LEGEND

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

NOTE: NO IMPACTS ON THIS SHEET



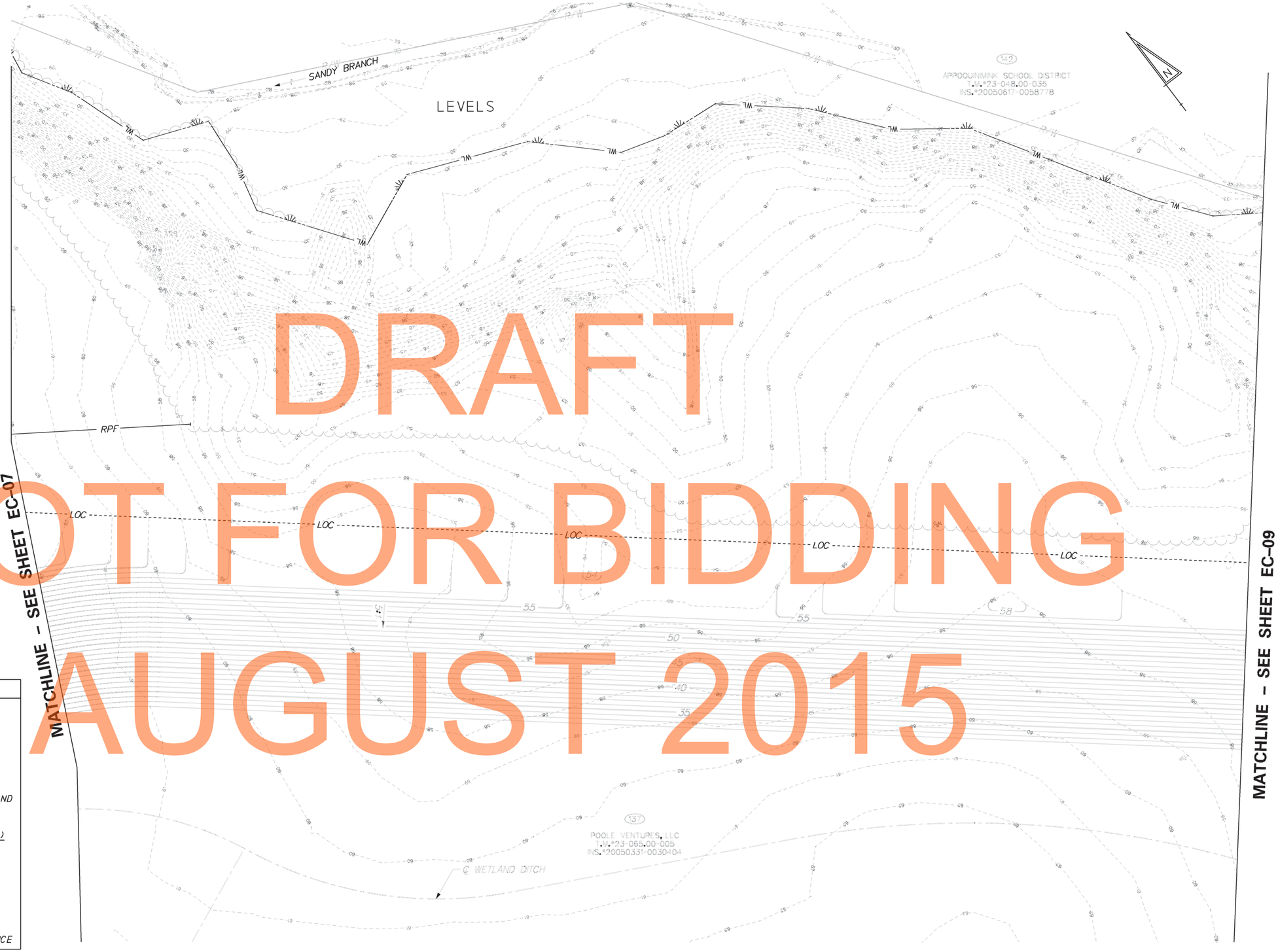
DRAFT
NOT FOR BIDDING
AUGUST 2015



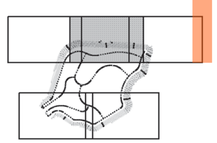
KEY MAP

7/24/2012 7:54:53 PM
\\RKRM\V2008\2008\08013_DE301\CADD\2911303\PLANS\EC07_301DS2_000_RKK.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 50 100 150 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN	EC-7
				COUNTY NEW CASTLE	DESIGNED BY: MRS		SHEET NO. 833
					CHECKED BY: JTR		TOTAL SHTS. 1256



DRAFT
NOT FOR BIDDING
AUGUST 2015



KEY MAP

LEGEND

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

NOTE: NO IMPACTS ON THIS SHEET

7/24/2012 7:55:54 PM
\\RKKM\V2008\2008\08013_DE301\CADD\2911303\PLANS\EC08_301DS2_000_RKK.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

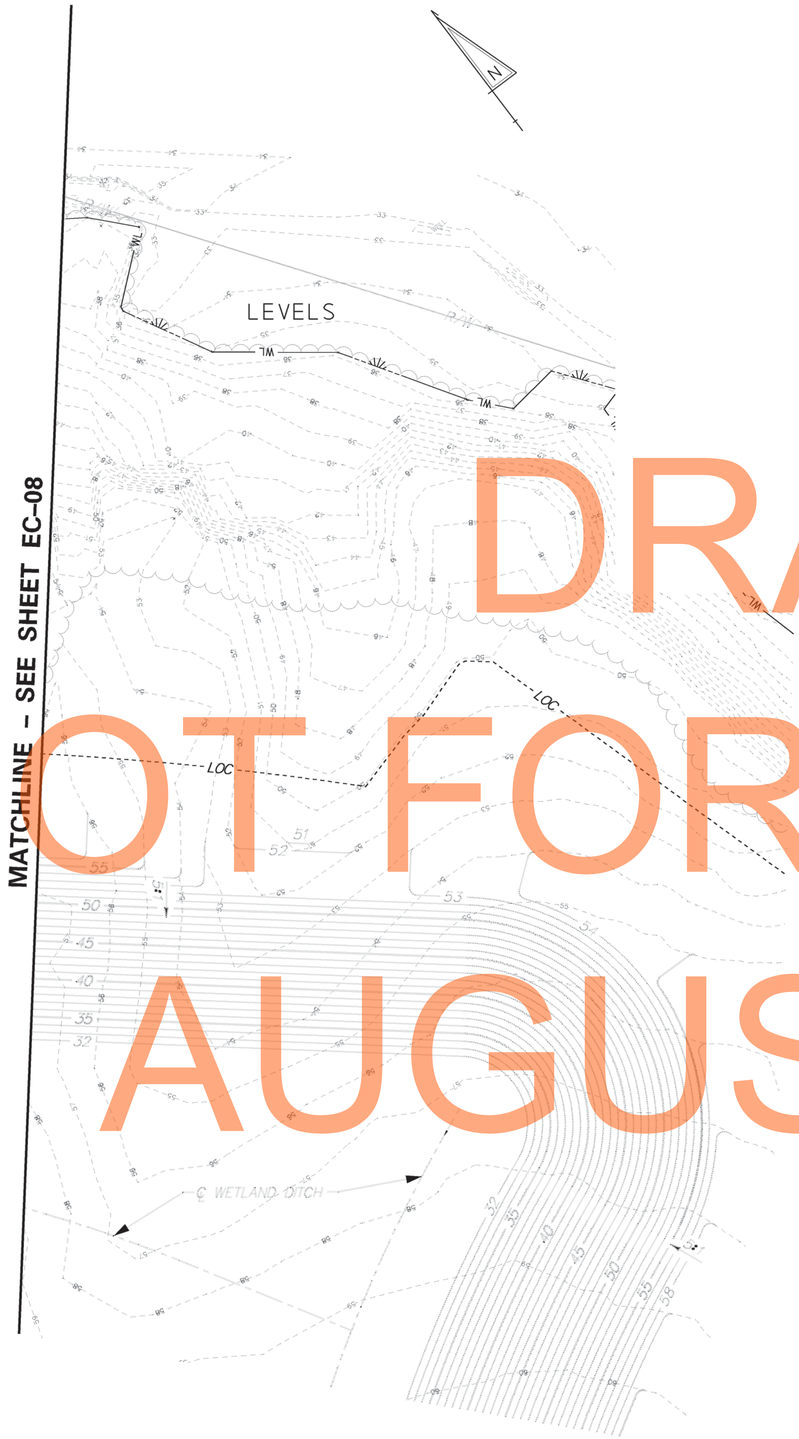
SCALE 0 50 100 150 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200911303	DESIGNED BY: MRS
COUNTY	
NEW CASTLE	CHECKED BY: JTR

ENVIRONMENTAL COMPLIANCE PLAN

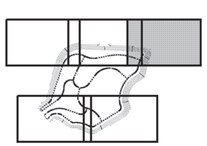
	EC-8
SHEET NO.	834
TOTAL SHTS.	1256



LEGEND

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

NOTE: NO IMPACTS ON THIS SHEET



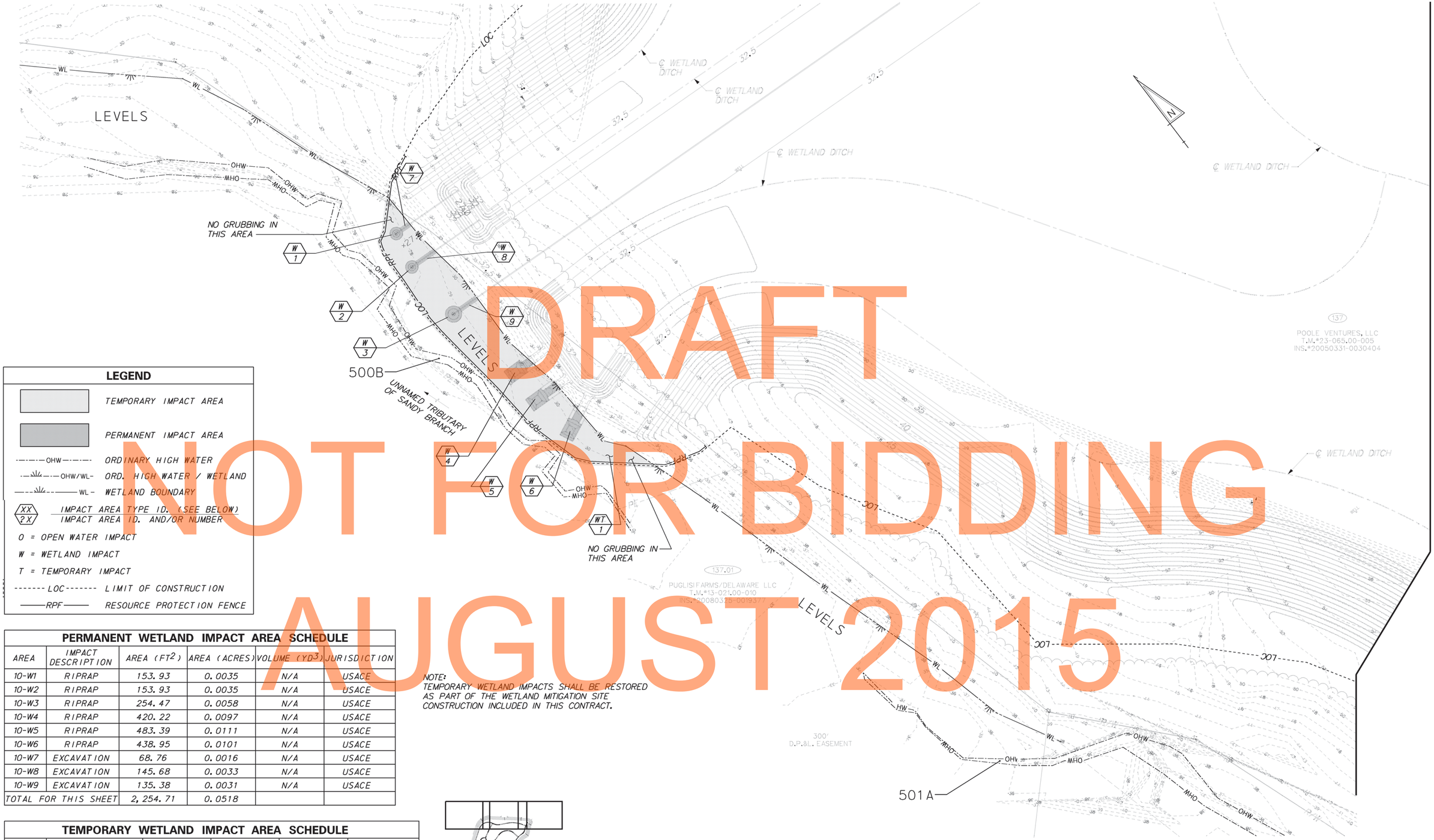
KEY MAP

DRAFT
NOT FOR BIDDING
AUGUST 2015

7/24/2012 12:18:52 PM
\\RKKMV2008\2008\08013_DE301\CADD\2911303\PLANS\EC09_301DS2_000_RKK.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 50 100 150 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: MRS / CHECKED BY: JTR	ENVIRONMENTAL COMPLIANCE PLAN

EC-9
SHEET NO. 835
TOTAL SHTS. 1256



DRAFT
NOT FOR BIDDING
AUGUST 2015

MATCHLINE – SEE SHEET EC-10

LEGEND

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

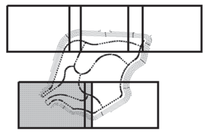
PERMANENT WETLAND IMPACT AREA SCHEDULE

AREA	IMPACT DESCRIPTION	AREA (FT^2)	AREA (ACRES)	VOLUME (YD^3)	JURISDICTION
10-W1	RIPRAP	153.93	0.0035	N/A	USACE
10-W2	RIPRAP	153.93	0.0035	N/A	USACE
10-W3	RIPRAP	254.47	0.0058	N/A	USACE
10-W4	RIPRAP	420.22	0.0097	N/A	USACE
10-W5	RIPRAP	483.39	0.0111	N/A	USACE
10-W6	RIPRAP	438.95	0.0101	N/A	USACE
10-W7	EXCAVATION	68.76	0.0016	N/A	USACE
10-W8	EXCAVATION	145.68	0.0033	N/A	USACE
10-W9	EXCAVATION	135.38	0.0031	N/A	USACE
TOTAL FOR THIS SHEET		2,254.71	0.0518		

NOTE:
TEMPORARY WETLAND IMPACTS SHALL BE RESTORED AS PART OF THE WETLAND MITIGATION SITE CONSTRUCTION INCLUDED IN THIS CONTRACT.

TEMPORARY WETLAND IMPACT AREA SCHEDULE

AREA	IMPACT DESCRIPTION	AREA (FT^2)	AREA (ACRES)	VOLUME (YD^3)	JURISDICTION
10-WT1	TEMPORARY ACCESS	16,544.40	0.3798	N/A	USACE
TOTAL FOR THIS SHEET		16,544.40	0.3798		



KEY MAP

7/24/2012 7:57:18 PM
\\RAKM\V2008\2008\08013.DE301\CADD\2911303\PLANS\EC10.301DS2_000.RKK.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 50 100 150 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: MRS	
COUNTY		
NEW CASTLE	CHECKED BY: JTR	

ENVIRONMENTAL COMPLIANCE PLAN

EC-10
SHEET NO.
836
TOTAL SHTS.
1256

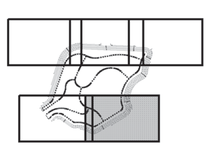
MATCHLINE – SEE SHEET EC-10

DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

NOTE: NO IMPACTS ON THIS SHEET

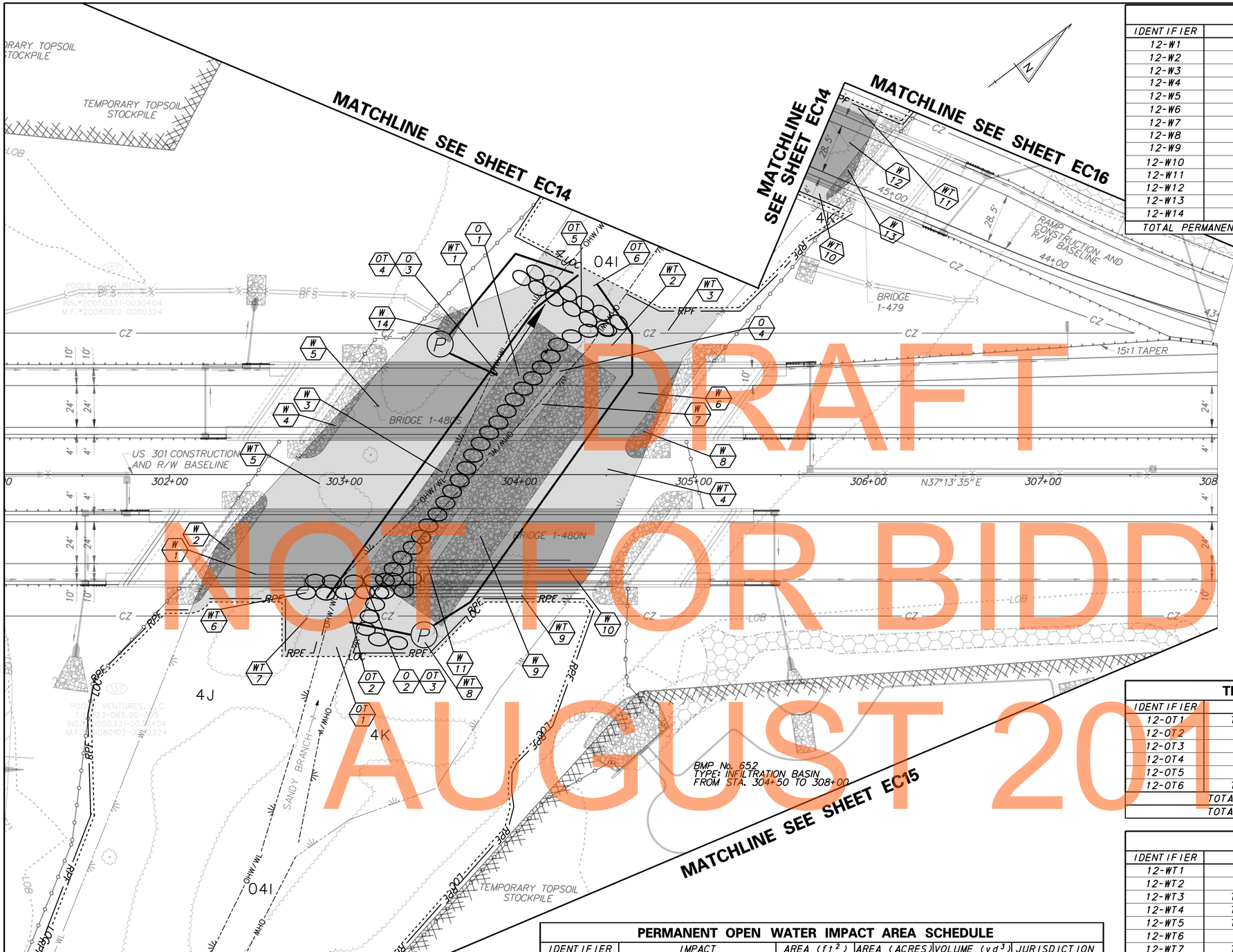


KEY MAP

7/24/2012 12:34:37 PM
\\RKMV\2008\2008\08013_DE301\CADD\2911303\PLANS\EC11_301DS2_000_RKK.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 50 100 150 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: MRS / CHECKED BY: JTR	ENVIRONMENTAL COMPLIANCE PLAN

EC-11	SHEET NO.
837	TOTAL SHTS.
1256	



PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
12-W1	SHADING	3,473.73	0.0797	N/A	USACE
12-W2	RIPRAP	508.63	0.0117	N/A	USACE
12-W3	RIPRAP	266.01	0.0061	N/A	USACE
12-W4	RIPRAP	274.63	0.0063	N/A	USACE
12-W5	SHADING	3,111.92	0.0714	N/A	USACE
12-W6	SHADING	1,520.93	0.0349	N/A	USACE
12-W7	FILL	199.08	0.0046	N/A	USACE
12-W8	RIPRAP	372.96	0.0086	N/A	USACE
12-W9	RIPRAP	5,292.23	0.1215	N/A	USACE
12-W10	SHADING	2,720.99	0.0625	N/A	USACE
12-W11	FILL	356.08	0.0082	N/A	USACE
12-W12	SHADING	1,012.12	0.0232	N/A	USACE
12-W13	RIPRAP	158.85	0.0036	N/A	USACE
12-W14	RIPRAP	163.17	0.0037	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		19,431.33	0.4461	N/A	USACE

LEGEND

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

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

NOTE:
TEMPORARY WETLAND IMPACTS AT WT1, WT2, WT3, WT4, WT5, WT6, WT7, WT8, WT9, WT10, AND WT11 SHALL BE RESTORED. REFER TO EC NOTE NO.2F FOR ADDITIONAL DETAILS.

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
12-OT1	TEMPORARY ACCESS	185.18	0.0043	13.79	DNREC/USACE
12-OT2	E&S AREA	586.92	0.0135	43.69	DNREC/USACE
12-OT3	E&S AREA	286.62	0.0066	21.34	USACE
12-OT4	E&S AREA	119.54	0.0027	8.90	USACE
12-OT5	E&S AREA	1,353.66	0.0311	100.77	DNREC/USACE
12-OT6	TEMPORARY ACCESS	507.52	0.0117	37.78	DNREC/USACE
TOTAL DNREC		2,633.28	0.0605	196.03	-
TOTAL USACE		3,039.44	0.0698	226.27	-

TEMPORARY WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
12-WT1	E&S AREA	2,192.38	0.0503	N/A	USACE
12-WT2	E&S AREA	577.05	0.0132	N/A	USACE
12-WT3	TEMPORARY ACCESS	1,398.42	0.0321	N/A	USACE
12-WT4	TEMPORARY ACCESS	1,846.05	0.0424	N/A	USACE
12-WT5	TEMPORARY ACCESS	3,213.05	0.0738	N/A	USACE
12-WT6	E&S AREA	181.42	0.0042	N/A	USACE
12-WT7	TEMPORARY ACCESS	1,286.84	0.0295	N/A	USACE
12-WT8	E&S AREA	1,489.64	0.0342	N/A	USACE
12-WT9	TEMPORARY ACCESS	722.77	0.0166	N/A	USACE
12-WT10	TEMPORARY ACCESS	158.12	0.0036	N/A	USACE
12-WT11	TEMPORARY ACCESS	140.86	0.0032	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		13,206.60	0.3032	N/A	USACE

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
12-01	RIPRAP	3,214.10	0.0738	239.27	DNREC/USACE
12-02	SHADING	286.62	0.0066	N/A	DNREC
12-03	SHADING	119.54	0.0027	N/A	DNREC
12-04	FILL	156.80	0.0036	11.67	DNREC/USACE
TOTAL DNREC		3,777.06	0.0867	250.94	-
TOTAL USACE		3,370.90	0.0774	250.94	-

MATCHLINE SHEET EC15

P:\CADD2\60049040 US301\CIVIL\PLANS\2A\CPAET\EC-12.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY		
NEW CASTLE	CHECKED BY: JF	SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-12
SHEET NO.
838
TOTAL SHTS.
1256

TEMPORARY WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
13-WT1	TEMPORARY ACCESS	7,331.29	0.1683	N/A	USACE
13-WT2	TEMPORARY ACCESS	6,486.71	0.1489	N/A	USACE
13-WT3	E&S AREA	373.30	0.0086	N/A	USACE
13-WT4	E&S AREA	370.47	0.0085	N/A	USACE
13-WT5	E&S AREA	337.98	0.0078	N/A	USACE
13-WT6	E&S AREA	389.73	0.0089	N/A	USACE
13-WT7	TEMPORARY ACCESS	1,923.30	0.0442	N/A	USACE
13-WT8	TEMPORARY ACCESS	1,171.10	0.0269	N/A	USACE
13-WT9	TEMPORARY ACCESS	484.13	0.0111	N/A	USACE
13-WT10	TEMPORARY ACCESS	383.18	0.0088	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		19,251.19	0.4419	N/A	USACE

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
13-W1	SHADING	2,974.54	0.0683	N/A	USACE
13-W2	SHADING	2,436.66	0.0559	N/A	USACE
13-W3	RIPRAP	2,417.06	0.0555	N/A	USACE
13-W4	FILL	419.25	0.0096	N/A	USACE
13-W5	SHADING	1,075.04	0.0247	N/A	USACE
13-W6	RIPRAP	250.46	0.0057	N/A	USACE
13-W7	SHADING	2,961.15	0.0680	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		12,534.16	0.2877	N/A	USACE

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

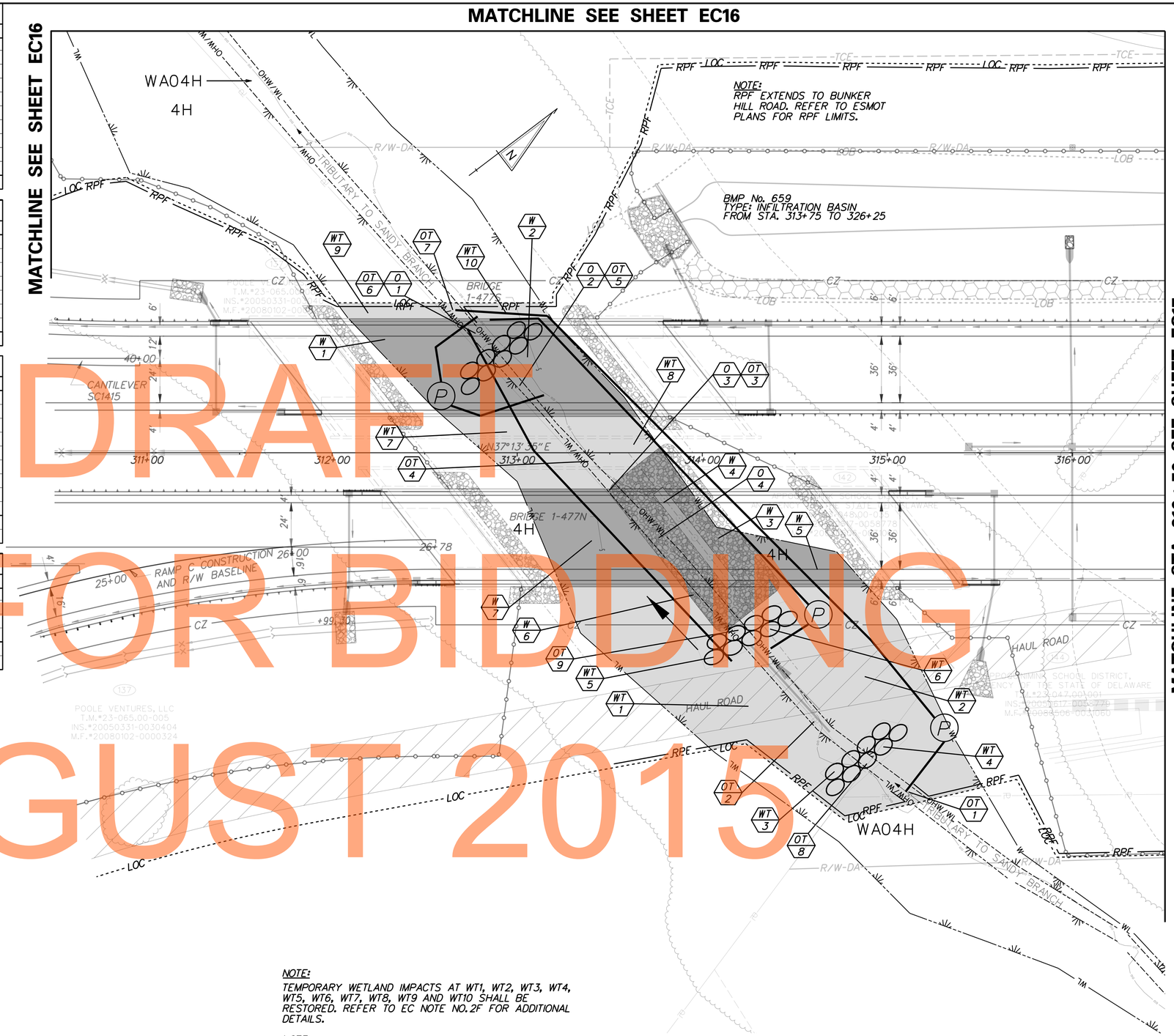
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
13-OT1	TEMPORARY ACCESS	212.49	0.0049	15.82	DNREC/USACE
13-OT2	TEMPORARY ACCESS	536.19	0.0123	39.92	DNREC/USACE
13-OT3	E&S AREA	3.08	0.0001	0.23	USACE
13-OT4	E&S AREA	198.81	0.0046	14.80	DNREC/USACE
13-OT5	E&S AREA	206.06	0.0047	15.34	USACE
13-OT6	TEMPORARY ACCESS	112.20	0.0026	8.35	USACE
13-OT7	TEMPORARY ACCESS	75.57	0.0017	5.63	DNREC/USACE
13-OT8	E&S AREA	103.83	0.0024	7.73	DNREC/USACE
13-OT9	E&S AREA	118.84	0.0027	8.85	DNREC/USACE
TOTAL DNREC		1,245.73	0.0286	92.75	-
TOTAL USACE		1,567.07	0.0360	116.67	-

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
13-01	SHADING	112.20	0.0026	N/A	DNREC
13-02	SHADING	206.06	0.0047	N/A	DNREC
13-03	SHADING	3.08	0.0001	N/A	DNREC
13-04	RIPRAP	755.46	0.0173	56.24	DNREC/USACE
TOTAL DNREC		1,076.80	0.0247	56.24	-
TOTAL USACE		755.46	0.0173	56.24	-

LEGEND

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



NOTE:
TEMPORARY WETLAND IMPACTS AT WT1, WT2, WT3, WT4, WT5, WT6, WT7, WT8, WT9 AND WT10 SHALL BE RESTORED. REFER TO EC NOTE NO.2F FOR ADDITIONAL DETAILS.

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

DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040 US301\CIVIL\PLANS\2A\CP\AET\EC-13.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

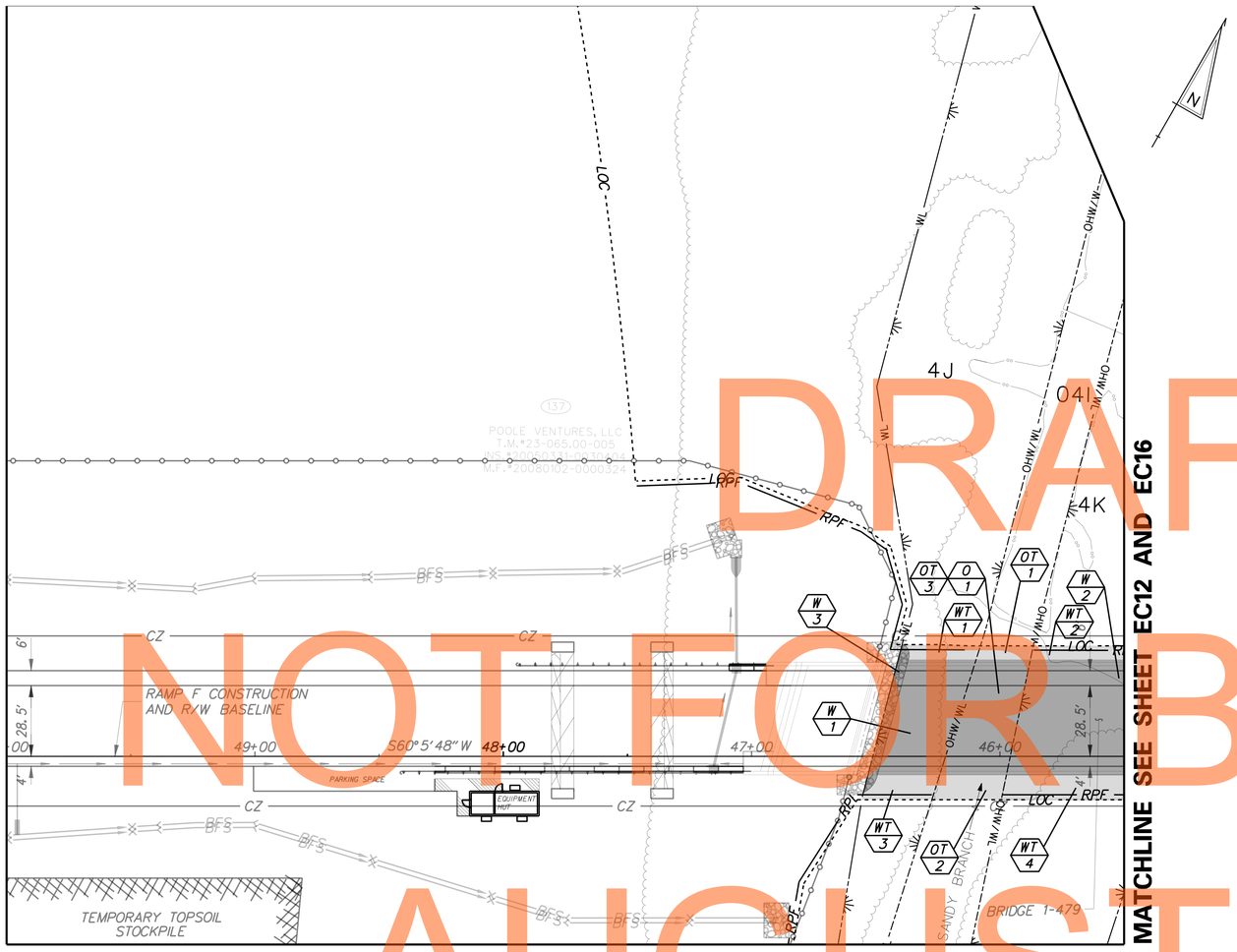
SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY	CHECKED BY: JF	SF
NEW CASTLE		

ENVIRONMENTAL COMPLIANCE PLAN

EC-13
SHEET NO.
839
TOTAL SHTS.
1256



TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
14-OT1	TEMPORARY ACCESS	120.27	0.0028	8.95	DNREC/USACE
14-OT2	TEMPORARY ACCESS	274.07	0.0063	20.40	DNREC/USACE
14-OT3	TEMPORARY ACCESS	1,130.18	0.0259	84.14	USACE
TOTAL DNREC		394.34	0.0091	29.36	-
TOTAL USACE		1,524.52	0.0350	113.49	-

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
14-WT1	TEMPORARY ACCESS	164.05	0.0038	N/A	USACE
14-WT2	TEMPORARY ACCESS	206.72	0.0047	N/A	USACE
14-WT3	TEMPORARY ACCESS	266.03	0.0061	N/A	USACE
14-WT4	TEMPORARY ACCESS	484.20	0.0111	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		1,121.00	0.0257	N/A	USACE

PERMANENT WETLAND IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
14-W1	SHADING	1,214.43	0.0279	N/A	USACE
14-W2	SHADING	1,973.55	0.0453	N/A	USACE
14-W3	RIPRAP	221.94	0.0051	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		3,409.92	0.0783	N/A	USACE

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
14-01	SHADING	1,130.18	0.0259	N/A	DNREC
TOTAL DNREC		1,130.18	0.0259	N/A	-

LEGEND

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

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

NOTE:
TEMPORARY WETLAND IMPACTS AT WT1, WT2, WT3, WT4, SHALL BE RESTORED. REFER TO EC NOTE NO.2F FOR ADDITIONAL DETAILS.

DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040 US301\CIVIL\PLANS\2A\CP\AET\EC-14.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

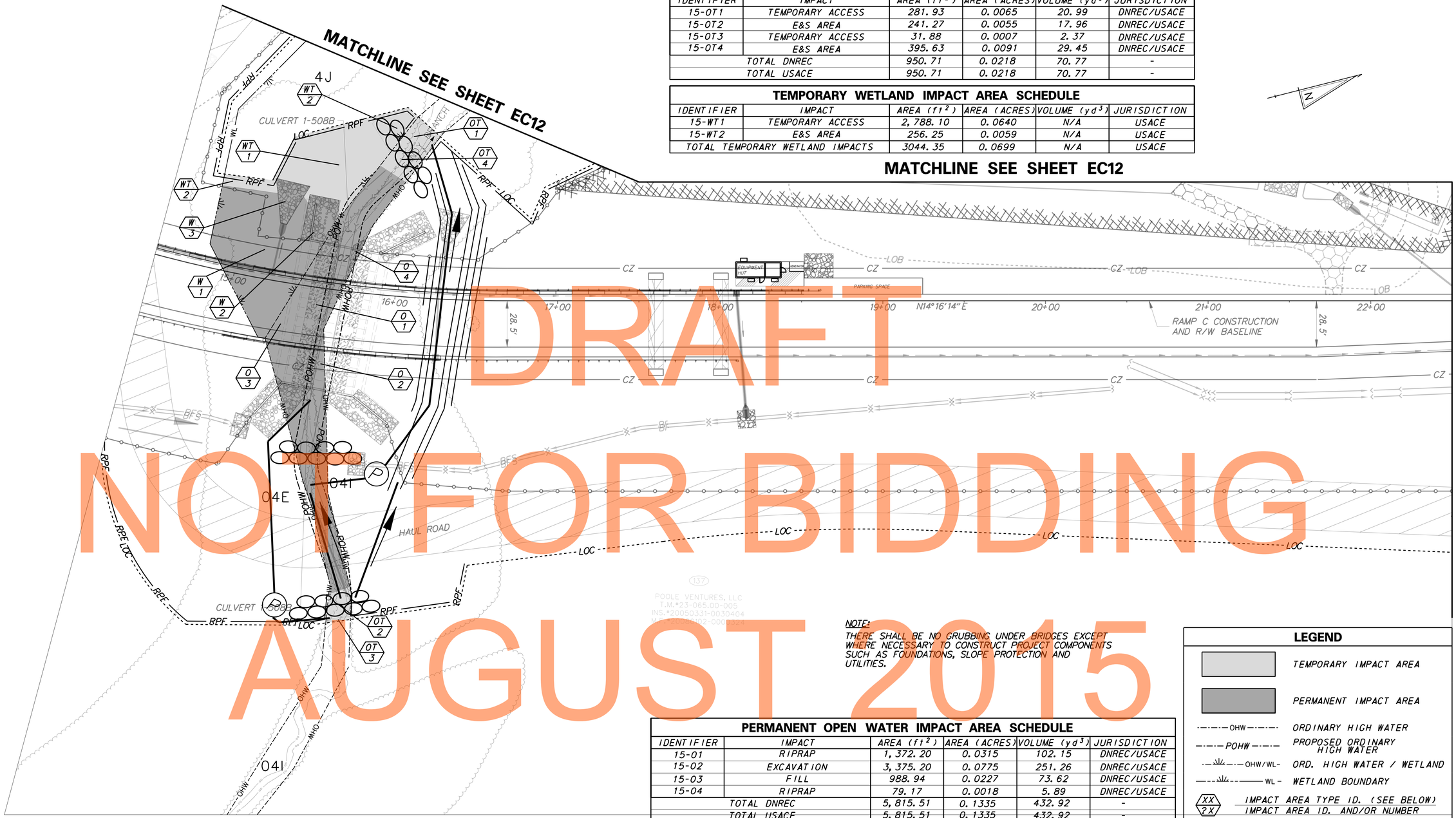
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY	CHECKED BY: JF	SF
NEW CASTLE		

ENVIRONMENTAL COMPLIANCE PLAN

EC-14
SHEET NO.
840
TOTAL SHTS.
1256

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
15-OT1	TEMPORARY ACCESS	281.93	0.0065	20.99	DNREC/USACE
15-OT2	E&S AREA	241.27	0.0055	17.96	DNREC/USACE
15-OT3	TEMPORARY ACCESS	31.88	0.0007	2.37	DNREC/USACE
15-OT4	E&S AREA	395.63	0.0091	29.45	DNREC/USACE
TOTAL DNREC		950.71	0.0218	70.77	-
TOTAL USACE		950.71	0.0218	70.77	-

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
15-WT1	TEMPORARY ACCESS	2,788.10	0.0640	N/A	USACE
15-WT2	E&S AREA	256.25	0.0059	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACTS		3044.35	0.0699	N/A	USACE



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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
15-01	RIPRAP	1,372.20	0.0315	102.15	DNREC/USACE
15-02	EXCAVATION	3,375.20	0.0775	251.26	DNREC/USACE
15-03	FILL	988.94	0.0227	73.62	DNREC/USACE
15-04	RIPRAP	79.17	0.0018	5.89	DNREC/USACE
TOTAL DNREC		5,815.51	0.1335	432.92	-
TOTAL USACE		5,815.51	0.1335	432.92	-

NOTE:
TEMPORARY WETLAND IMPACTS AT WT1, SHALL BE RESTORED. REFER TO EC NOTE NO.2F FOR ADDITIONAL DETAILS.

PERMANENT WETLAND IMPACT AREA SCHEDULE					
IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
15-W1	FILL	3,747.47	0.0860	N/A	USACE
15-W2	RIPRAP	512.20	0.0118	N/A	USACE
15-W3	RIPRAP	323.20	0.0074	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		4,582.87	0.1052	N/A	USACE

LEGEND

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

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

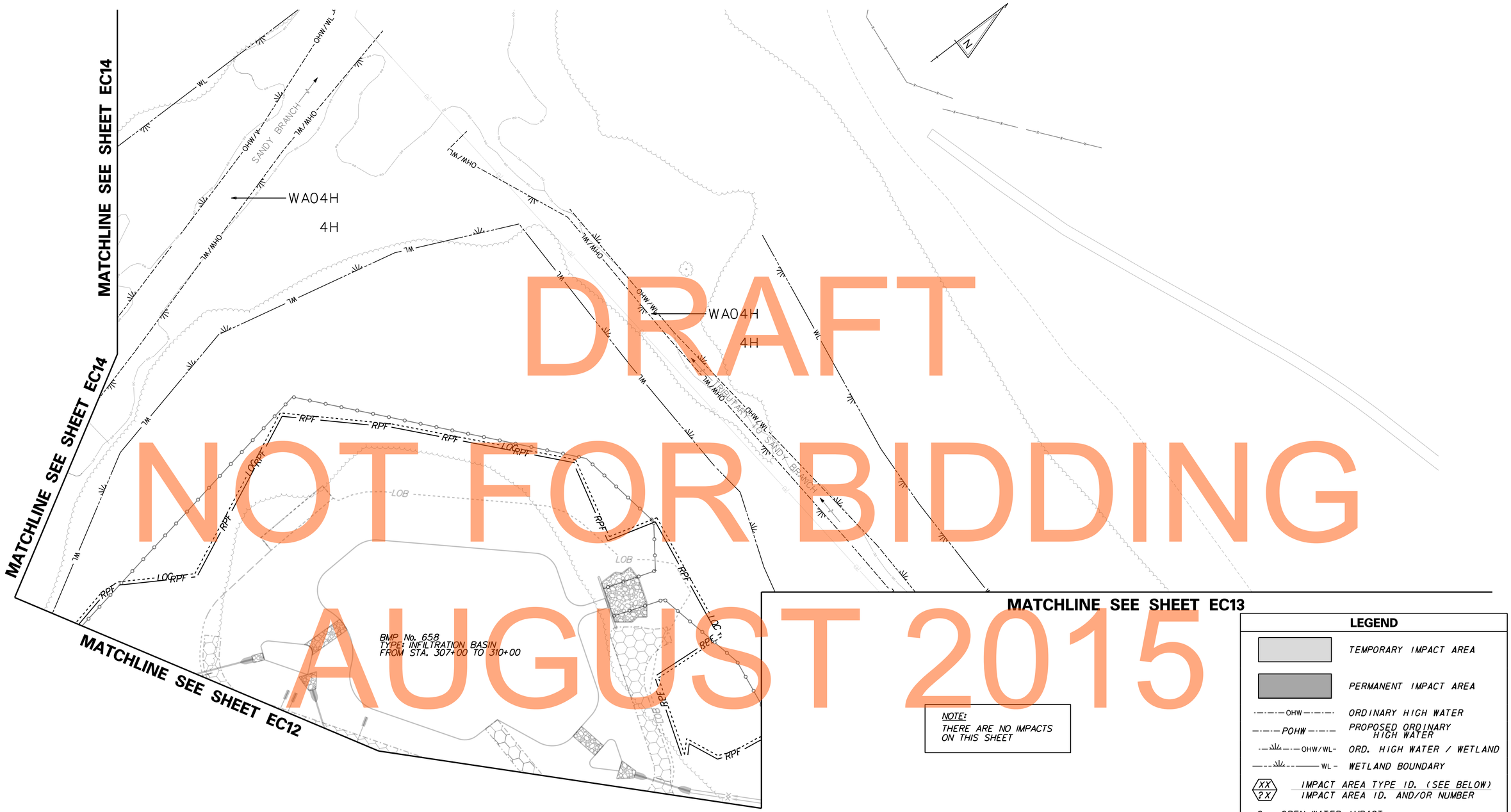
US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY		
NEW CASTLE	CHECKED BY: JF	SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-15
SHEET NO.
841
TOTAL SHTS.
1256

G:\60049040 US301\CIVIL\PLANS\2A\CP\AET\EC-15.DGN



DRAFT
NOT FOR BIDDING
AUGUST 2015

NOTE:
THERE ARE NO IMPACTS ON THIS SHEET

LEGEND

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

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-16.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

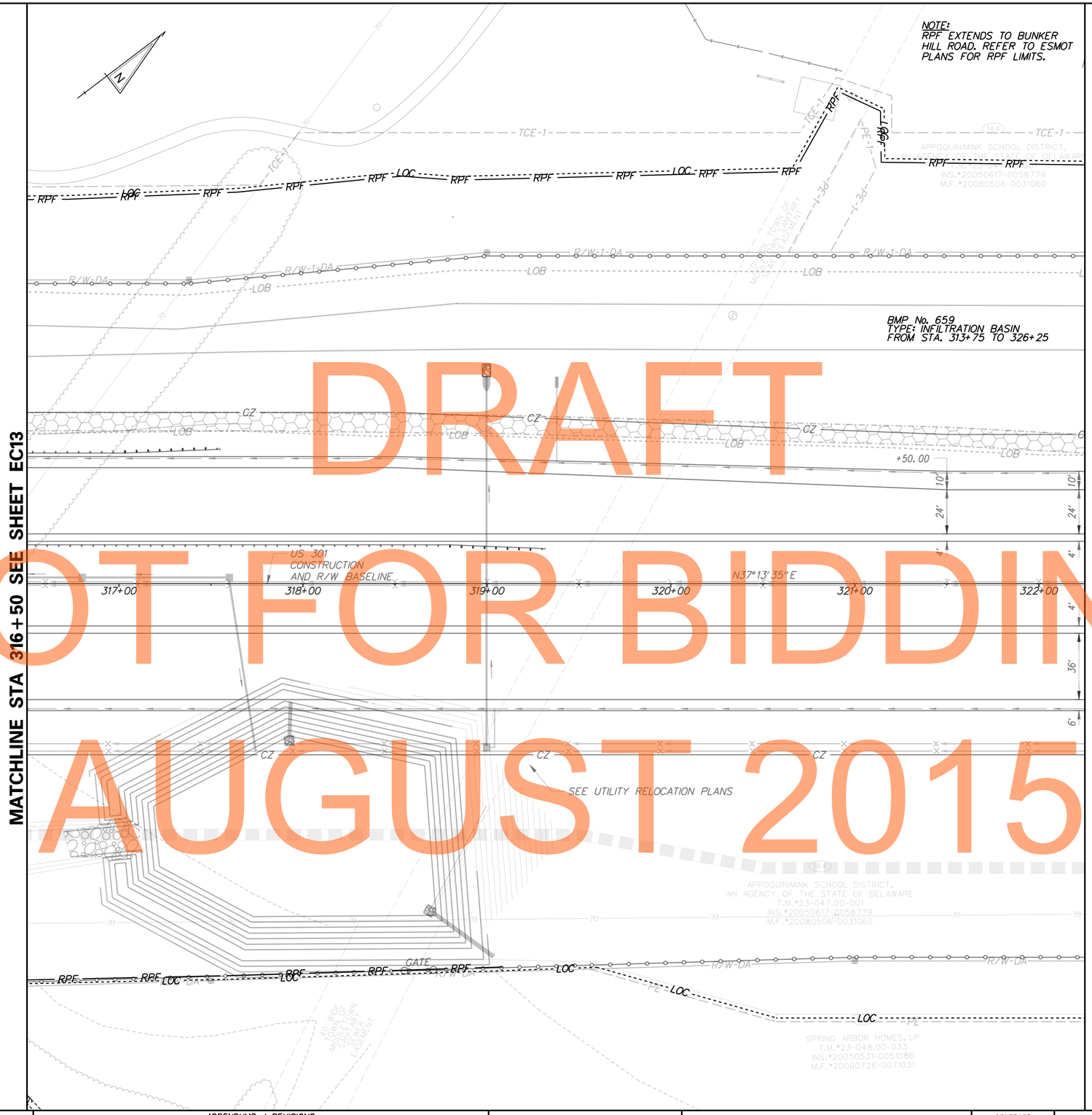
SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	AW
CHECKED BY:	SF

ENVIRONMENTAL COMPLIANCE PLAN

	EC-16
SHEET NO.	842
TOTAL SHTS.	1256



MATCHLINE STA 316+50 SEE SHEET EC13

LEGEND

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

NOTE:
THERE ARE NO IMPACTS ON THIS SHEET

DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040_US301\CIVIL\PLANS\2A\CP\EC-17.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

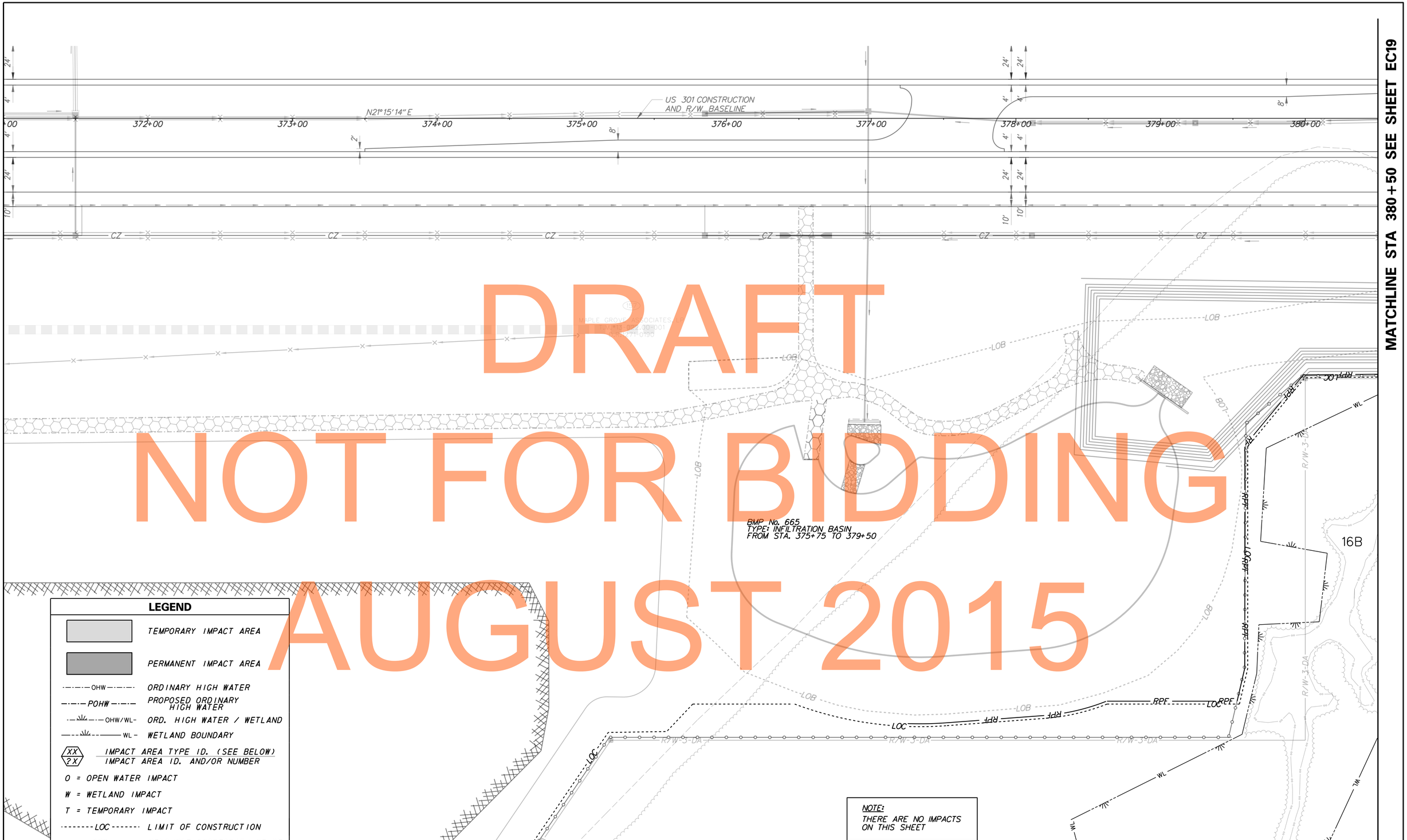
SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	AW
CHECKED BY:	SF

ENVIRONMENTAL COMPLIANCE PLAN

	EC-17
SHEET NO.	843
TOTAL SHTS.	1256



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

NOTE:
THERE ARE NO IMPACTS ON THIS SHEET

G:\60049040_US301\CIVIL PLANS\2A\CP\EC-18.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN
				COUNTY NEW CASTLE	DESIGNED BY: AW JW	
					CHECKED BY: JF SF	

EC-18
SHEET NO. 844
TOTAL SHTS. 1256

LEGEND

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

DRAFT
NOT FOR BIDDING
AUGUST 2015

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
19-01	EXCAVATION	147.16	0.0034	10.96	DNREC
TOTAL DNREC		147.16	0.0034	10.96	-

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
19-OT1	TEMPORARY ACCESS	364.28	0.0084	27.12	DNREC
19-OT2	E&S AREA	27.72	0.0006	2.06	DNREC
19-OT3	TEMPORARY ACCESS	49.90	0.0011	3.71	DNREC
19-OT4	E&S AREA	35.58	0.0008	2.65	DNREC
19-OT5	TEMPORARY ACCESS	58.86	0.0014	4.38	DNREC
TOTAL DNREC		536.34	0.0123	39.93	-

G:\60049040 US301\CIVIL\PLANS\2A\CPVEC-19.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

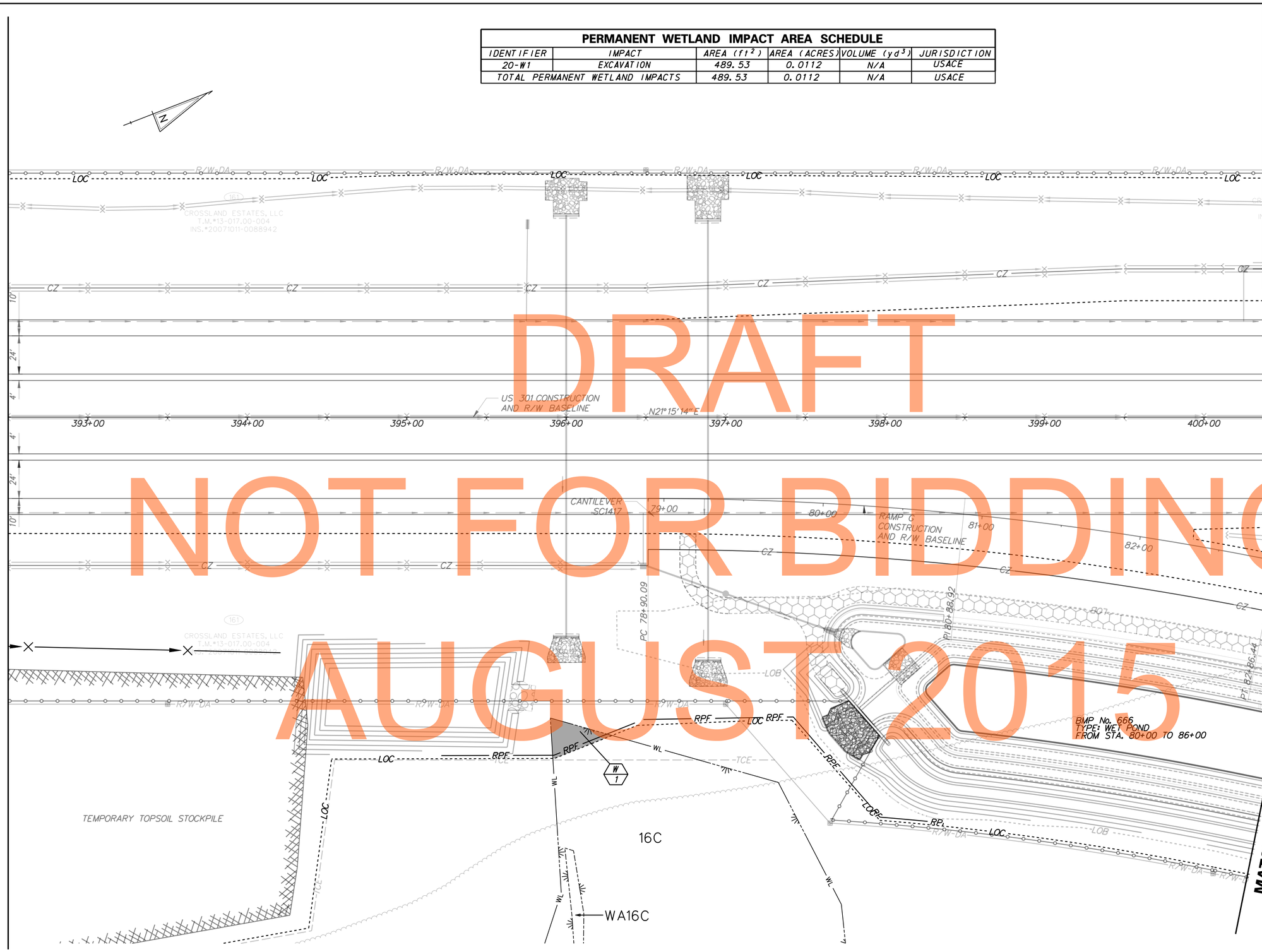
CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	AW
CHECKED BY:	SF

ENVIRONMENTAL COMPLIANCE PLAN

	EC-19
SHEET NO.	845
TOTAL SHTS.	1256

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
20-W1	EXCAVATION	489.53	0.0112	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		489.53	0.0112	N/A	USACE



LEGEND

- TEMPORARY IMPACT AREA
- PERMANENT IMPACT AREA
- OHW — ORDINARY HIGH WATER
- POHW — PROPOSED ORDINARY HIGH WATER
- OHW/WL — ORD. HIGH WATER / WETLAND
- WL — WETLAND BOUNDARY
- XX / 2X — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER
- O = OPEN WATER IMPACT
- W = WETLAND IMPACT
- T = TEMPORARY IMPACT
- LOC — LIMIT OF CONSTRUCTION
- RPF — RESOURCE PROTECTION FENCE

DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-20.DGN

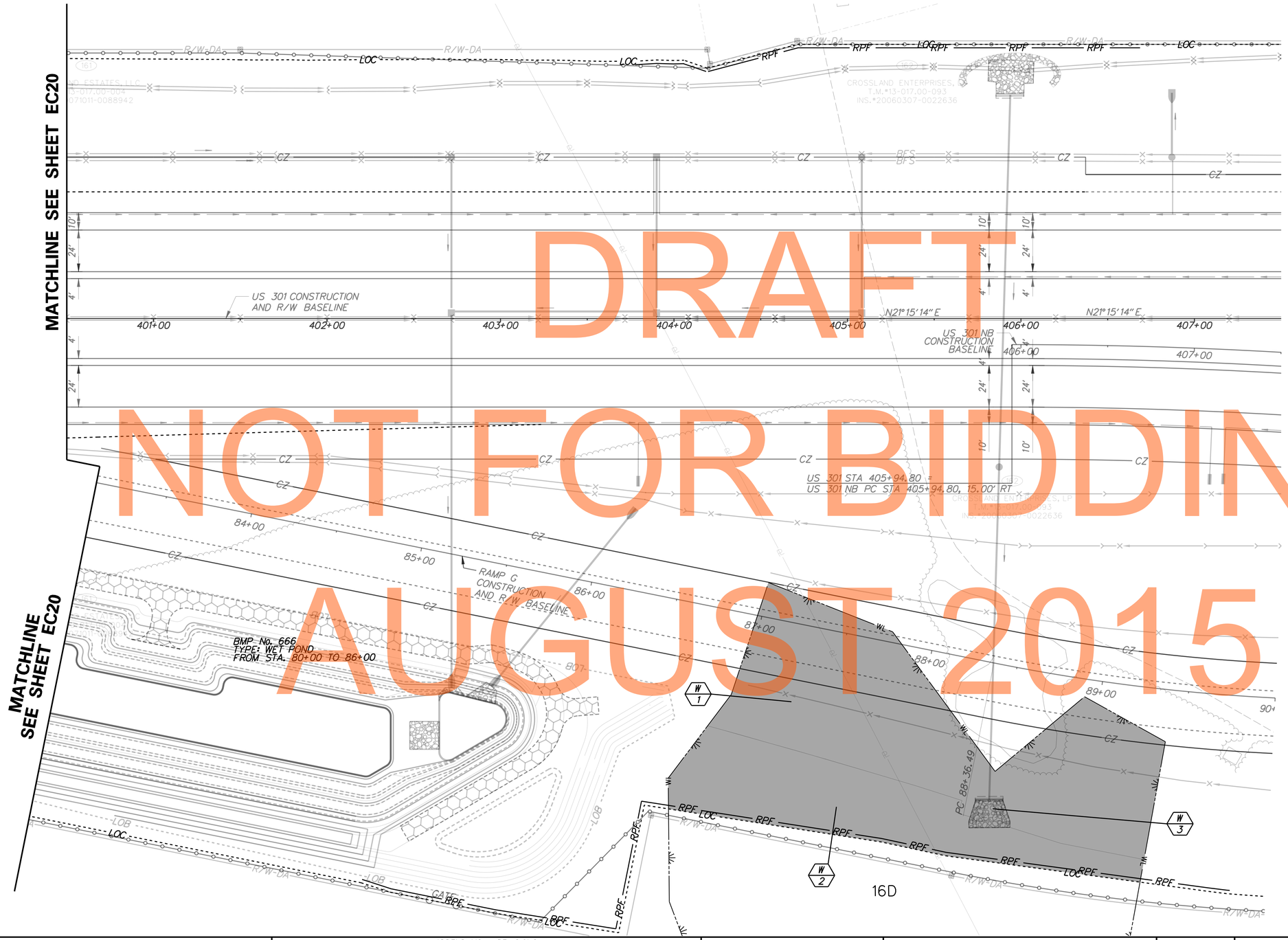
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN	EC-20
				COUNTY NEW CASTLE	DESIGNED BY: AW JW		SHEET NO. 846
					CHECKED BY: JF SF		TOTAL SHTS. 1256

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
21-W1	FILL	17,052.88	0.3915	N/A	USACE
21-W2	EXCAVATION	8,768.82	0.2013	N/A	USACE
21-W3	RIPRAP	329.02	0.0076	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		26,150.72	0.6003	N/A	USACE

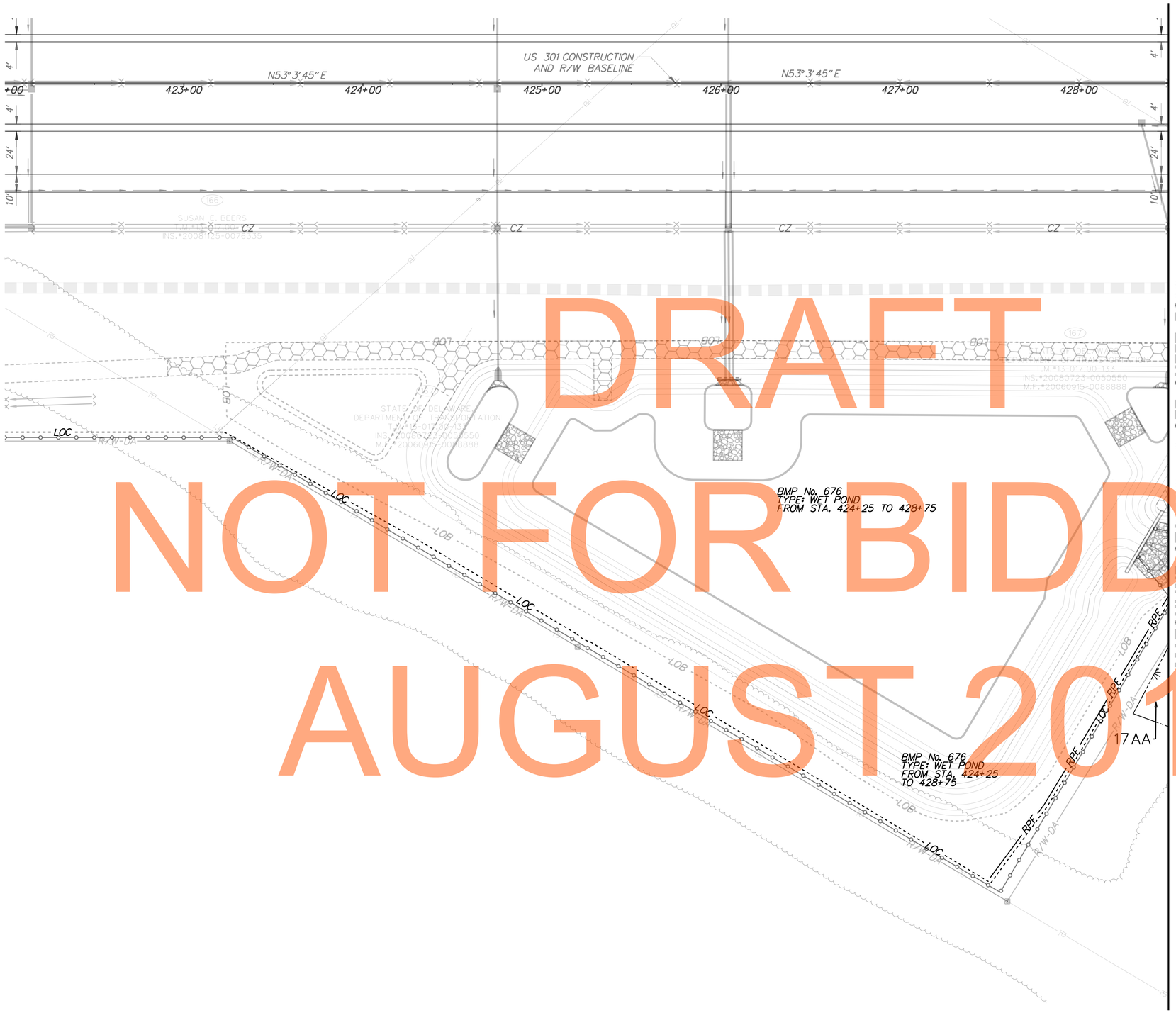
LEGEND

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



G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-21.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: AW JW / CHECKED BY: JF SF	ENVIRONMENTAL COMPLIANCE PLAN	EC-21 / SHEET NO. 847 / TOTAL SHTS. 1256



DRAFT
NOT FOR BIDDING
AUGUST 2015

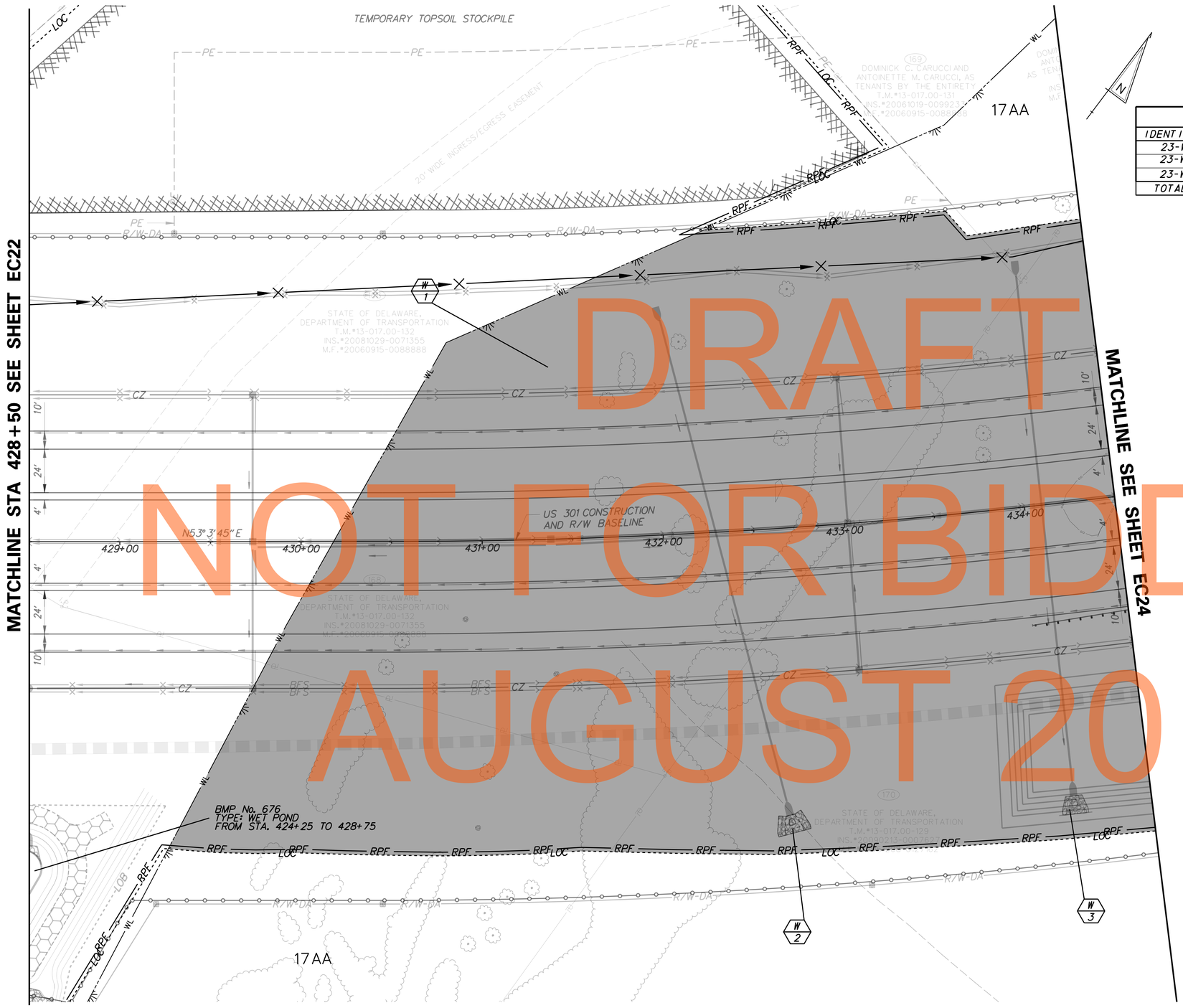
LEGEND

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

NOTE:
THERE ARE NO IMPACTS ON THIS SHEET

G:\60049040_US301\Civil\Plans\2A\CP\EC-22.dgn

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT T200911303	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN	EC-22
				COUNTY NEW CASTLE	DESIGNED BY: AW		SHEET NO. 848
					CHECKED BY: SF		TOTAL SHTS. 1256



DRAFT
NOT FOR BIDDING
AUGUST 2015

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
23-W1	FILL	145,195.59	3.3332	N/A	USACE
23-W2	RIPRAP	170.94	0.0039	N/A	USACE
23-W3	RIPRAP	124.15	0.0029	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		145,490.68	3.3400	N/A	USACE

LEGEND

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

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-23.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

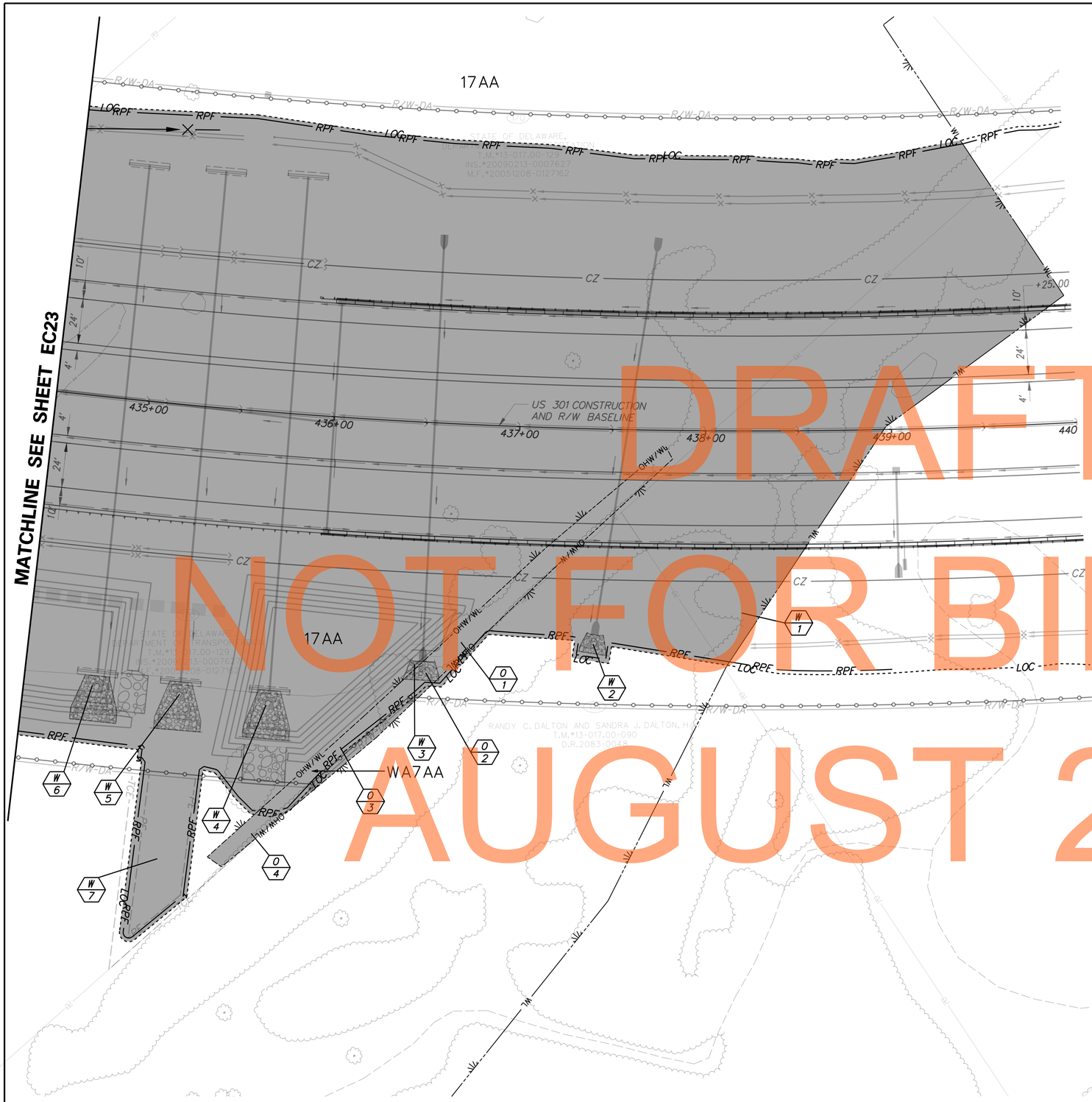
SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: AW JW
CHECKED BY: JF SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-23
SHEET NO. 849
TOTAL SHTS. 1256



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
24-01	FILL	1,791.06	0.0411	65.67	USACE
24-02	RIPRAP	127.82	0.0029	4.69	USACE
24-03	FILL	990.66	0.0227	36.32	USACE
24-04	NON-VIABLE REMNANT	704.53	0.0162	25.83	USACE
TOTAL USACE		3,614.07	0.0830	132.52	-

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
24-W1	FILL	129,084.74	2.9634	N/A	USACE
24-W2	RIPRAP	124.75	0.0029	N/A	USACE
24-W3	RIPRAP	36.99	0.0008	N/A	USACE
24-W4	RIPRAP	519.24	0.0119	N/A	USACE
24-W5	RIPRAP	519.24	0.0119	N/A	USACE
24-W6	RIPRAP	498.77	0.0115	N/A	USACE
24-W7	EXCAVATION	9,326.11	0.2141	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		140,109.84	3.2165	N/A	USACE

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-24.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

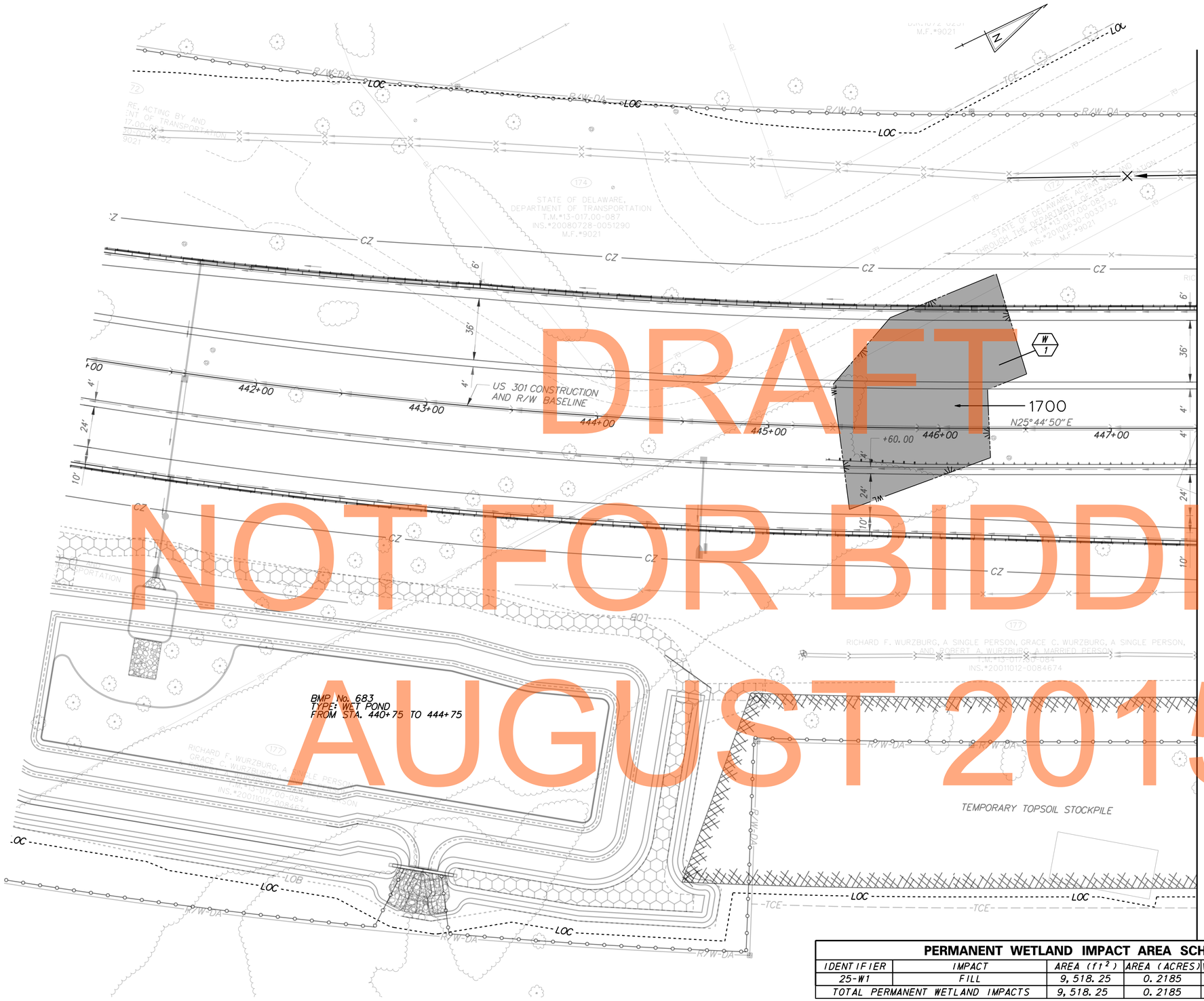
SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: AW JW
CHECKED BY: JF SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-24
SHEET NO. 850
TOTAL SHTS. 1256



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
25-W1	FILL	9,518.25	0.2185	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		9,518.25	0.2185	N/A	USACE

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-25.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

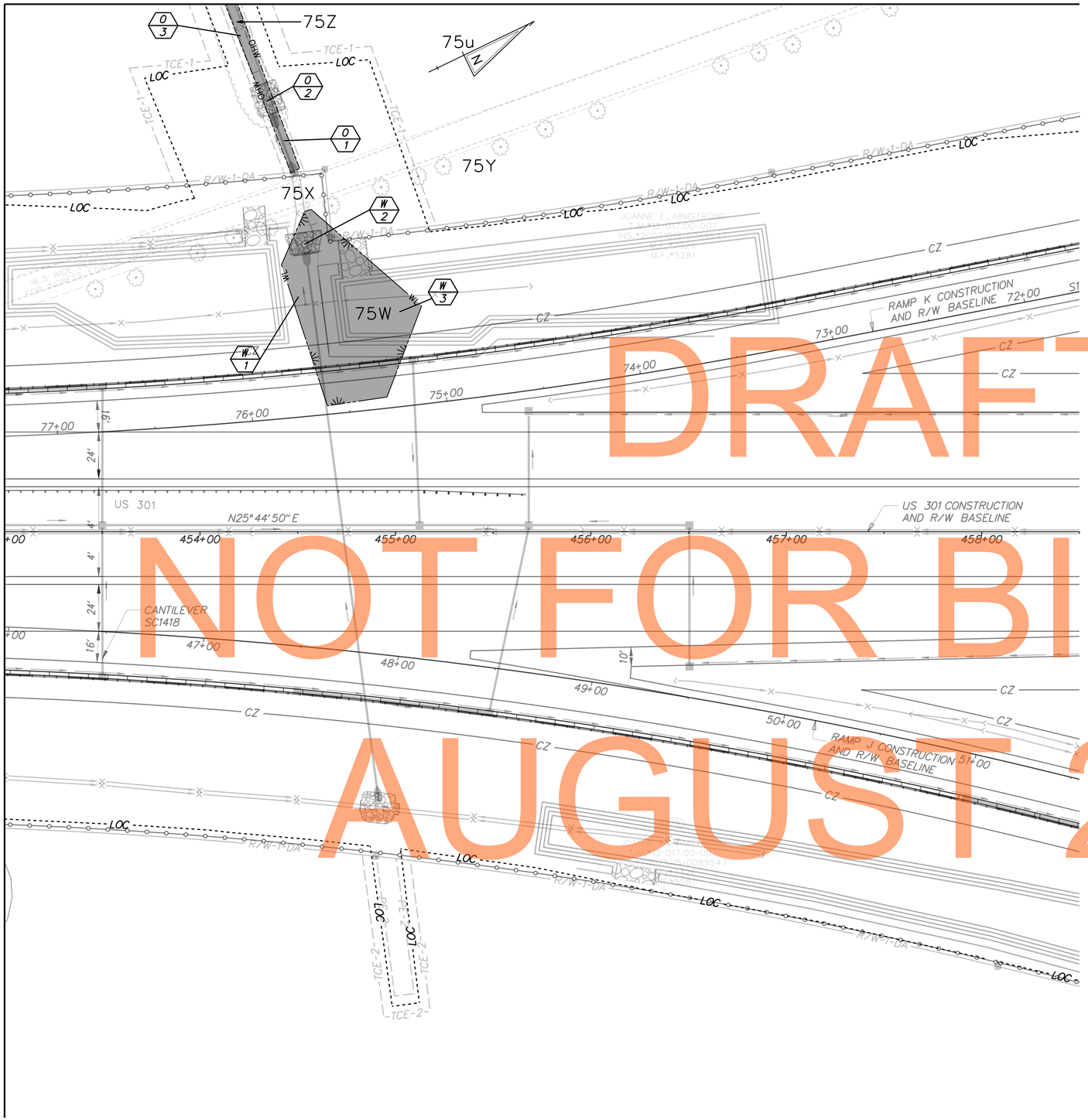
US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT: T200911303
COUNTY: NEW CASTLE
BRIDGE NO.
DESIGNED BY: AW JW
CHECKED BY: JF SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-25
SHEET NO. 851
TOTAL SHTS. 1256

MATCHLINE SEE SHEET EC27



LEGEND

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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
26-01	EXCAVATION	161.95	0.0037	12.06	USACE
26-02	RIPRAP	87.02	0.0020	6.48	USACE
26-03	EXCAVATION	250.22	0.0057	18.63	USACE
TOTAL USACE		499.19	0.0115	37.16	-

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
26-W1	FILL	1,630.42	0.0374	N/A	USACE
26-W2	RIPRAP	165.13	0.0038	N/A	USACE
26-W3	EXCAVATION	2,430.00	0.0558	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		4,225.55	0.0970	N/A	USACE

DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040_US301\CIVIL\PLANS\2A\CP\EC-26.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

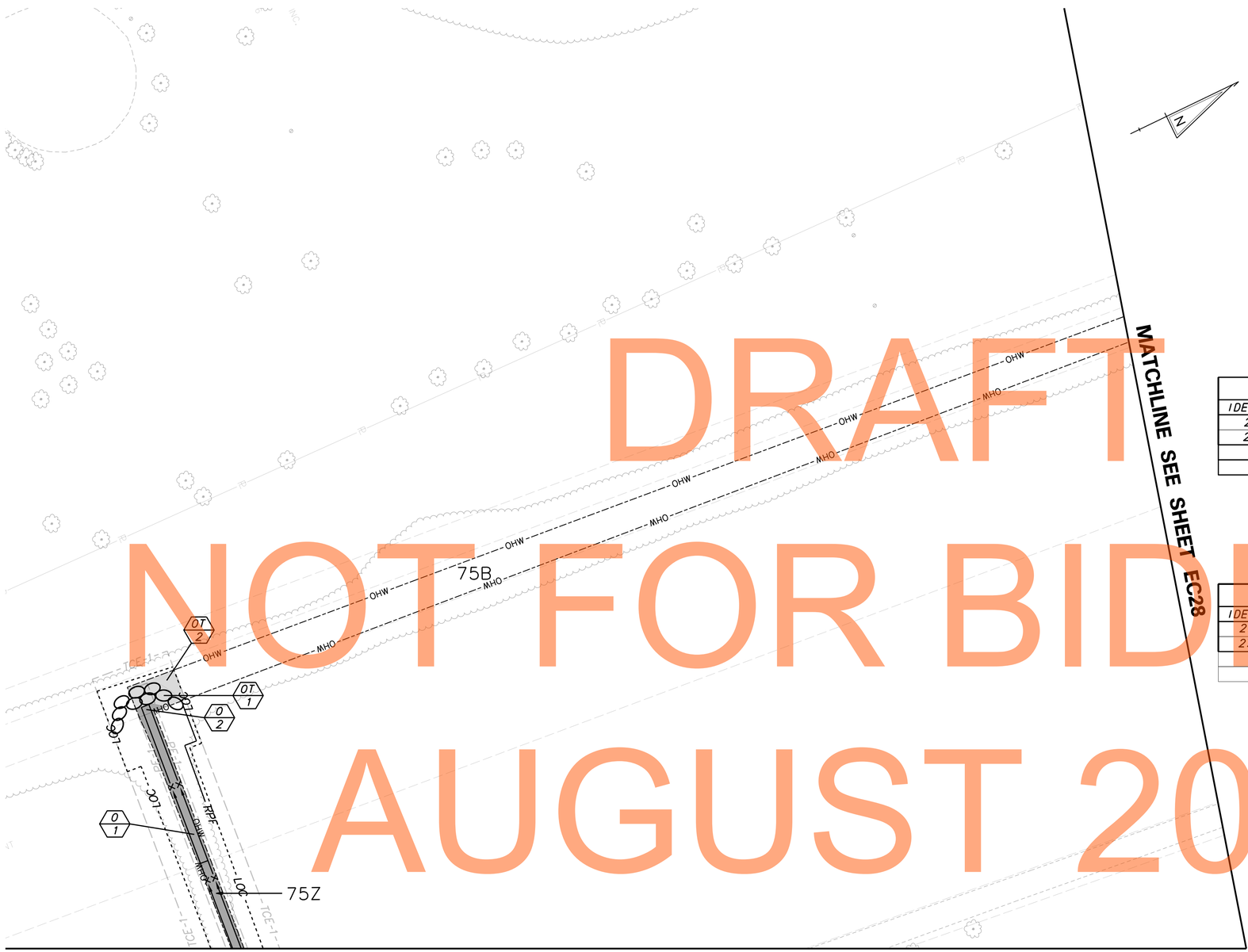
SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY		
NEW CASTLE	CHECKED BY: JF	SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-26
SHEET NO. 852
TOTAL SHTS. 1256



LEGEND

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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
27-01	EXCAVATION	834.37	0.0192	62.11	USACE
27-02	EXCAVATION	48.40	0.0011	3.60	DNREC/USACE
TOTAL DNREC		48.40	0.0011	3.60	-
TOTAL USACE		882.77	0.0203	65.71	-

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
27-OT1	E&S AREA	229.58	0.0053	17.09	DNREC/USACE
27-OT2	TEMPORARY ACCESS	115.67	0.0027	8.61	DNREC/USACE
TOTAL DNREC		345.25	0.0080	25.70	-
TOTAL USACE		345.25	0.0080	25.70	-

DRAFT
NOT FOR BIDDING
AUGUST 2015

G:\60049040_US301\CIVIL\PLANS\2A\CP\EC-27.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

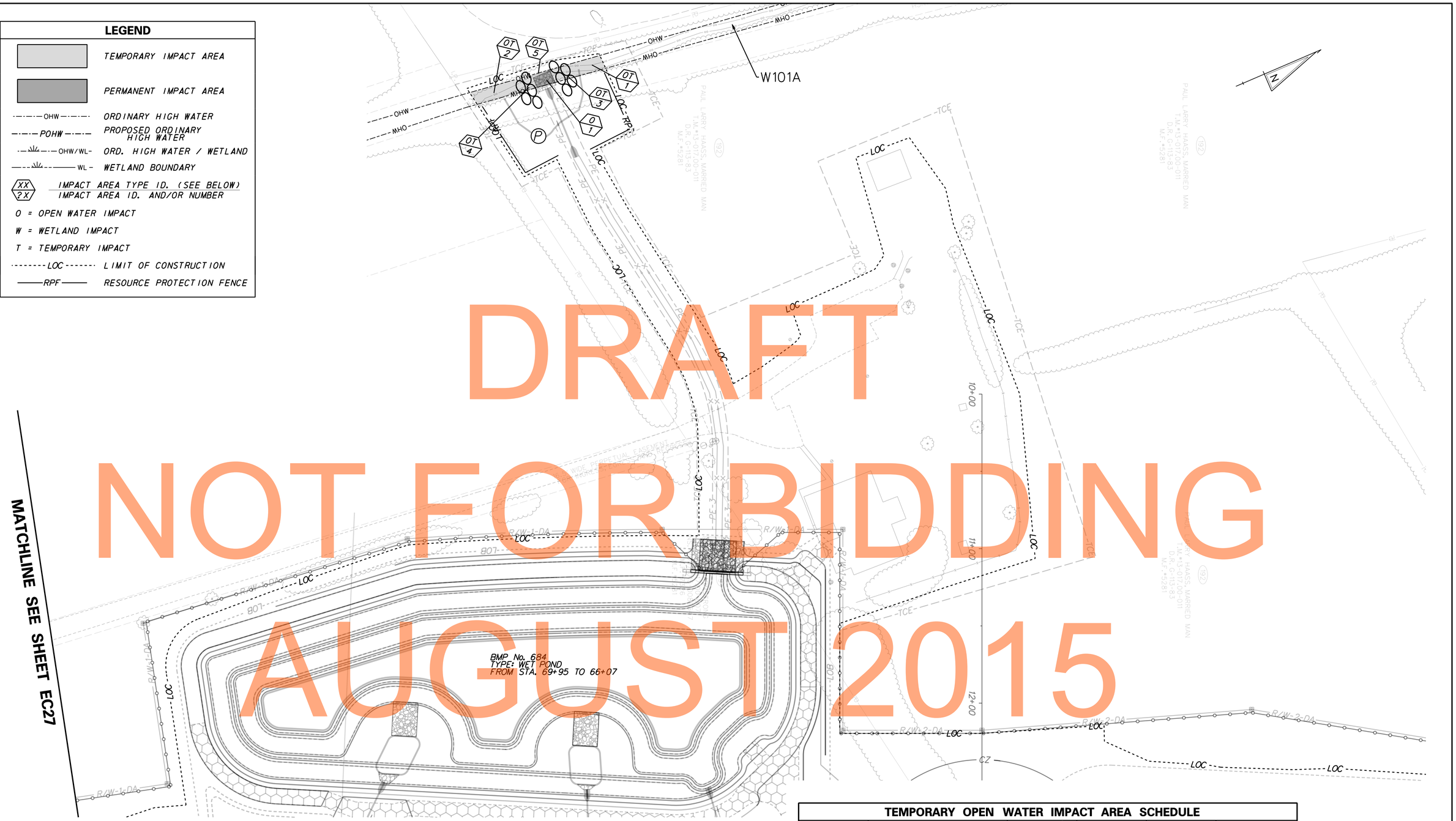
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AW
COUNTY		
NEW CASTLE	CHECKED BY:	SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-27
SHEET NO. 853
TOTAL SHTS. 1256

LEGEND

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



DRAFT
NOT FOR BIDDING
AUGUST 2015

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
28-01	RIPRAP	90.64	0.0021	6.75	DNREC/USACE
TOTAL DNREC & USACE		90.64	0.0021	6.75	-

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
28-OT1	TEMPORARY ACCESS	183.58	0.0042	13.67	DNREC/USACE
28-OT2	TEMPORARY ACCESS	245.48	0.0056	18.27	DNREC/USACE
28-OT3	E&S AREA	118.73	0.0027	8.84	DNREC/USACE
28-OT4	E&S AREA	112.52	0.0026	8.38	DNREC/USACE
28-OT5	TEMPORARY ACCESS	16.60	0.0004	1.24	DNREC/USACE
TOTAL DNREC & USACE		676.91	0.0155	50.39	-

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

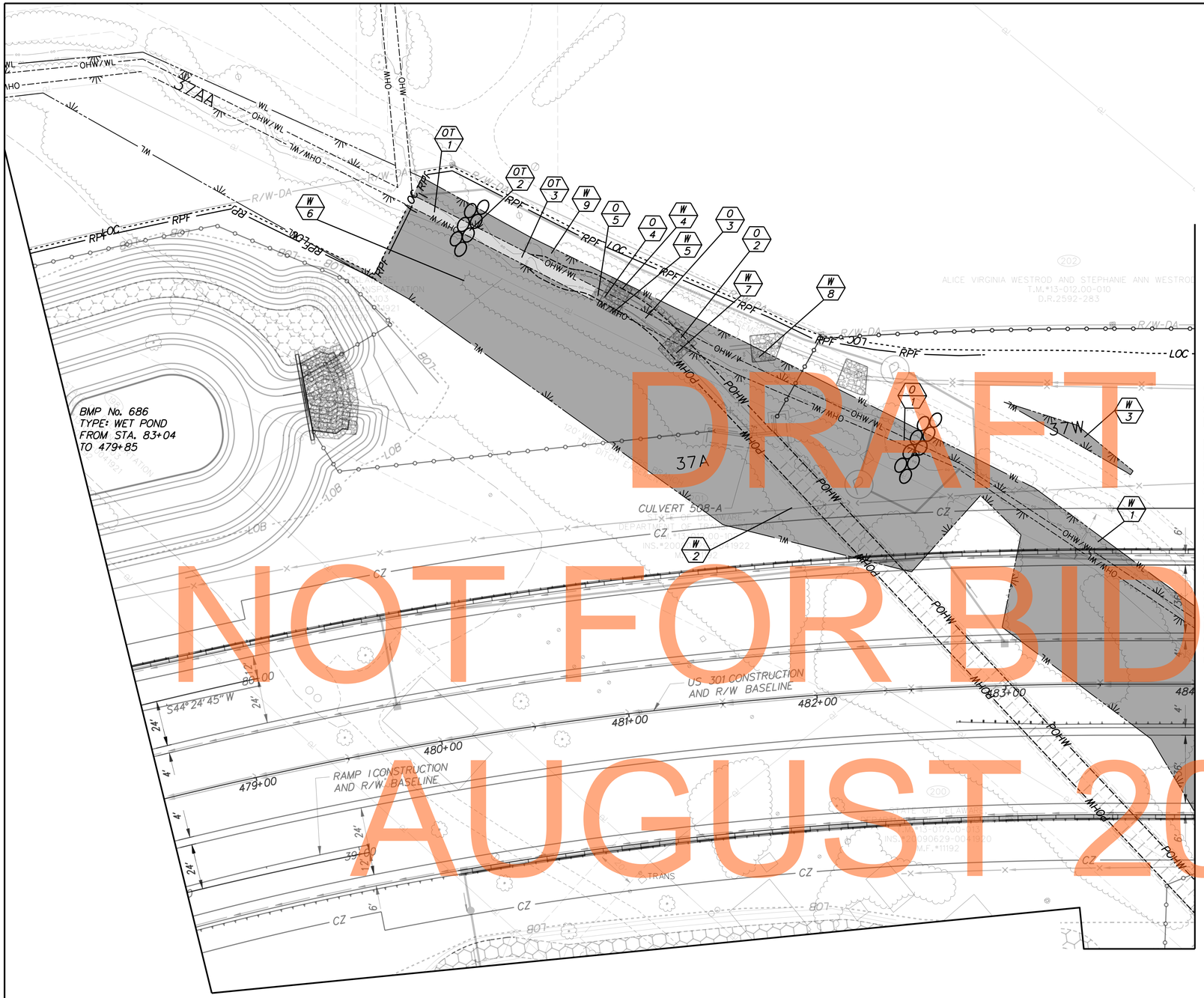
US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	AW
CHECKED BY:	SF

ENVIRONMENTAL COMPLIANCE PLAN

	EC-28
SHEET NO.	854
TOTAL SHTS.	1256

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-28.DGN



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
29-01	FILL	1,393.17	0.0320	103.71	DNREC/USACE
29-02	RIPRAP	83.86	0.0019	6.24	DNREC/USACE
29-03	EXCAVATION	217.45	0.0050	16.19	DNREC/USACE
29-04	RIPRAP	82.79	0.0019	6.16	DNREC/USACE
29-05	EXCAVATION	34.15	0.0008	2.54	DNREC/USACE
TOTAL DNREC & USACE		1,811.42	0.0416	134.84	-

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
29-W1	FILL	2,798.92	0.0643	N/A	USACE
29-W2	FILL	16,849.14	0.3868	N/A	USACE
29-W3	FILL	381.78	0.0088	N/A	USACE
29-W4	RIPRAP	102.19	0.0023	N/A	USACE
29-W5	RIPRAP	18.96	0.0004	N/A	USACE
29-W6	EXCAVATION	10,669.05	0.2449	N/A	USACE
29-W7	RIPRAP	115.20	0.0026	N/A	USACE
29-W8	RIPRAP	64.51	0.0015	N/A	USACE
29-W9	EXCAVATION	1,010.06	0.0232	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		32,009.81	0.7348	N/A	USACE

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
29-OT1	TEMPORARY ACCESS	167.66	0.0038	12.48	DNREC/USACE
29-OT2	E&S AREA	67.41	0.0015	5.02	DNREC/USACE
29-OT3	TEMPORARY ACCESS	456.51	0.0105	33.98	DNREC/USACE
TOTAL DNREC & USACE		691.58	0.0158	51.48	-

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-29.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

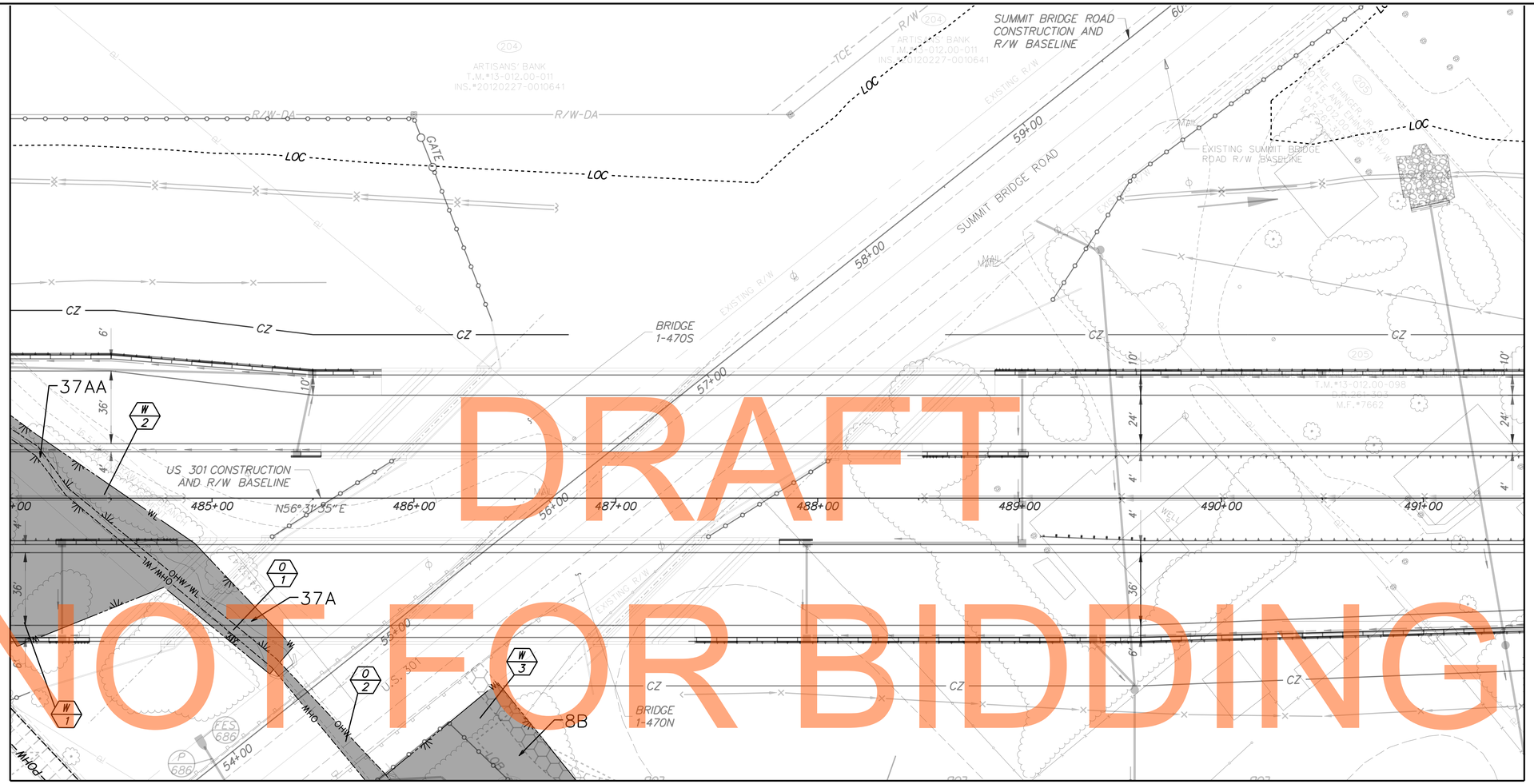
SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY	CHECKED BY: JF	SF
NEW CASTLE		

ENVIRONMENTAL COMPLIANCE PLAN

EC-29
SHEET NO.
855
TOTAL SHTS.
1256



MATCHLINE SEE SHEET EC31

DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
30-01	FILL	704.50	0.0162	52.45	DNREC/USACE
30-02	FILL	541.14	0.0124	40.28	DNREC/USACE
TOTAL DNREC & USACE		1,245.64	0.0286	92.73	-

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
30-W1	FILL	4,329.75	0.0994	N/A	USACE
30-W2	FILL	2,340.42	0.0537	N/A	USACE
30-W3	FILL	2,369.92	0.0544	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		9,040.09	0.2075	N/A	USACE

G:\60049040 US301\CIVIL\PLANS\2A\CP\EC-30.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

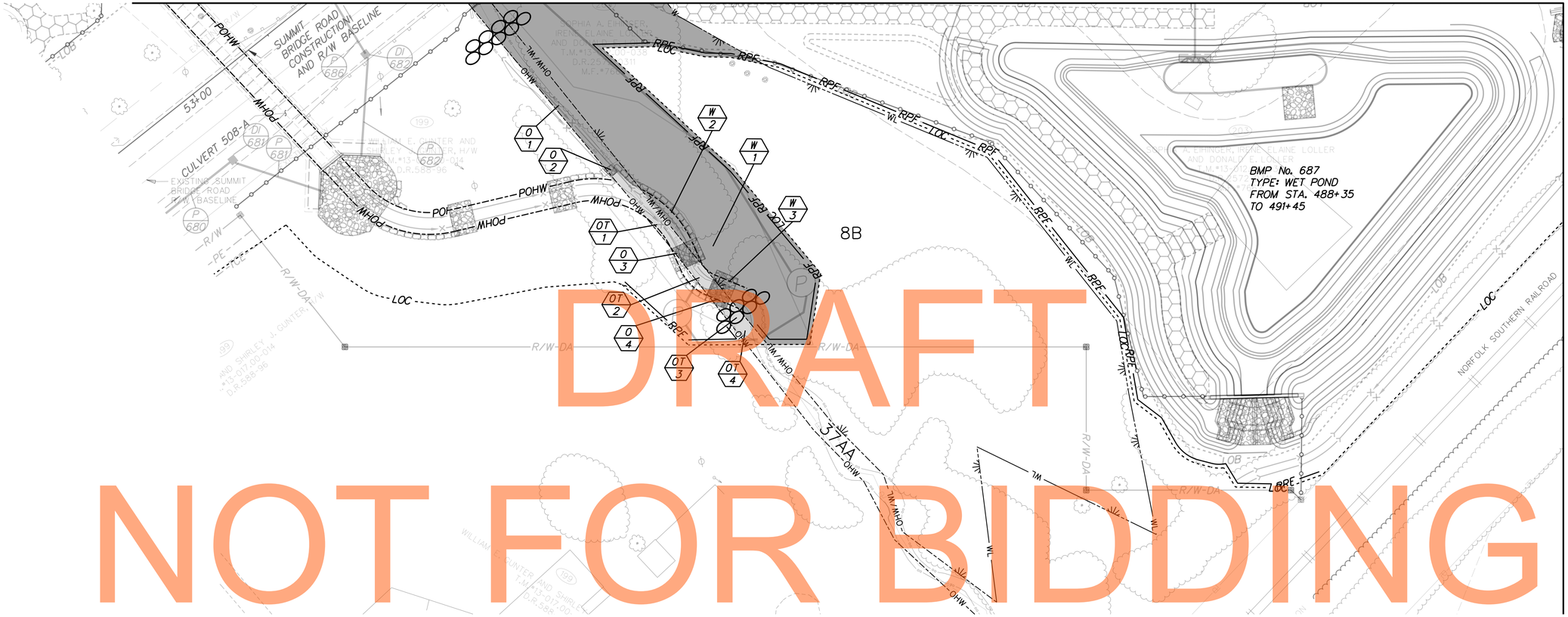
US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT T200911303
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: AW JW
CHECKED BY: JF SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-30
SHEET NO. 856
TOTAL SHTS. 1256

MATCHLINE SEE SHEET EC30



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

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

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
31-01	FILL	950.24	0.0218	70.74	DNREC/USACE
31-02	RIPRAP	69.50	0.0016	5.17	DNREC/USACE
31-03	RIPRAP	88.31	0.0020	6.57	DNREC/USACE
31-04	RIPRAP	96.71	0.0022	7.20	DNREC/USACE
TOTAL DNREC & USACE		1,204.76	0.0277	89.68	-

PERMANENT WETLAND IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
31-W1	FILL	9,717.80	0.2231	N/A	USACE
31-W2	RIPRAP	360.87	0.0083	N/A	USACE
31-W3	RIPRAP	97.14	0.0022	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		10,175.80	0.2336	N/A	USACE

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE

IDENTIFIER	IMPACT	AREA (ft^2)	AREA (ACRES)	VOLUME (yd^3)	JURISDICTION
31-OT1	E&S AREA	331.36	0.0076	24.67	DNREC/USACE
31-OT2	E&S AREA	109.95	0.0025	8.19	DNREC/USACE
31-OT3	E&S AREA	97.22	0.0022	7.24	DNREC/USACE
31-OT4	TEMPORARY ACCESS	123.94	0.0028	9.23	DNREC/USACE
TOTAL		662.47	0.0152	49.33	-

NOTE:
REFER TO STREAM RELOCATION AND RESTORATION PLANS (SHEETS 870-872).

G:\60049040_US301\CIVIL\PLANS\2A\CP\EC-31.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY: AW	JW
COUNTY		
NEW CASTLE	CHECKED BY: JF	SF

ENVIRONMENTAL COMPLIANCE PLAN

EC-31
SHEET NO.
857
TOTAL SHTS.
1256

LEGEND

	TEMPORARY IMPACT AREA
	PERMANENT IMPACT AREA
—·—·—OHW—·—·—	ORDINARY HIGH WATER
—·—OHW/WL—·—	ORD. HIGH WATER / WETLAND
——WL——	WETLAND BOUNDARY
XX / 2X	IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER
O = OPEN WATER IMPACT	
W = WETLAND IMPACT	
T = TEMPORARY IMPACT	
--------LOC-------	LIMIT OF CONSTRUCTION
——RPF——	RESOURCE PROTECTION FENCE

ENVIRONMENTAL COMPLIANCE NOTES

1. THERE ARE NO IMPACTS ON THIS SHEET.

DRAFT
NOT FOR BIDDING
AUGUST 2015

T:\NEW CASTLE\301\ROAD\T200911303\PLANS\CPY\EC05_2A URS.DGN

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	T200911303
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY:	JL
CHECKED BY:	MT

ENVIRONMENTAL COMPLIANCE PLAN

	EC-32
SHEET NO.	858
TOTAL SHTS.	1256