THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

FINAL PLANS

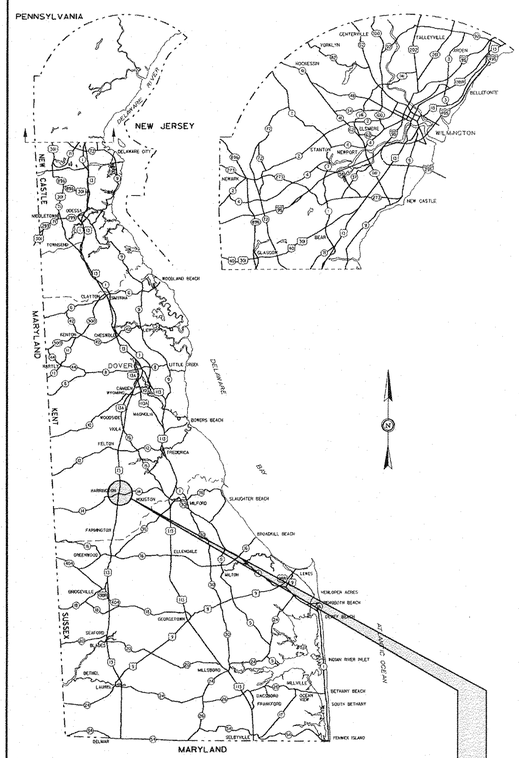
CONSTRUCTION PLANS FOR:

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

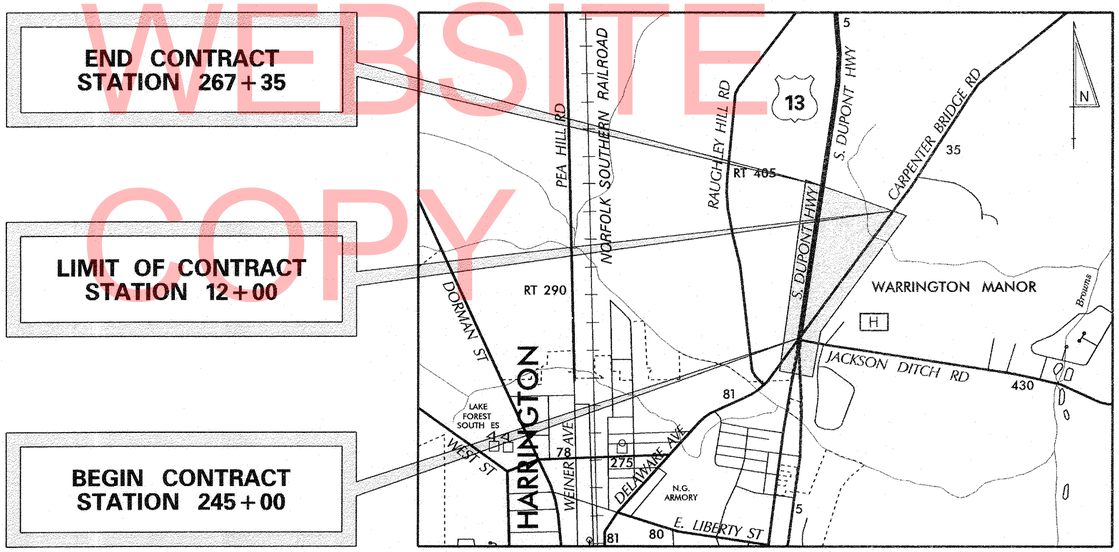
CONTRACT NUMBER: T200900801
FEDERAL AID PROJECT NUMBER: ESTP-K005(6)

COUNTY: KENT M.R. #: 035

UNOFFICIAL WEBSITE COPY



GENERAL LOCATION OF CONTRACT



PROJECT LOCATION
NOT TO SCALE

PREPARED BY
THE CONSULTING FIRM OF

SEAL

RECOMMENDED DATE

RECOMMENDED

Brezz D. Pawlowski 4/13/12
SQUAD MANAGER, CONSTRUCTION DATE

[signature] 4/13/12
GROUP ENGINEER, CONSTRUCTION DATE

N/A
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) DATE

DESIGN DESIGNATION

FUNCTIONAL CLASS: MINOR ARTERIAL		D.H.V. PROJECTED: 215	YEAR: 2030
TYPE OF CONSTRUCTION: SAFETY		DESIGN SPEED: 45 M.P.H.	
A.A.D.T. CURRENT: 1894	YEAR: 2008	TRUCKS: 13 %	
A.A.D.T. PROJECTED: 3000	YEAR: 2030	DIRECTION OF DISTRIBUTION: 65 %	

INDEX OF SHEETS

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TOTAL SHEETS: 39

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
916	FARMINGTON THRU HARRINGTON
79-062-04	3R PROGRAM, U.S. 13 HARRINGTON TO CAMDEN

RECOMMENDED
Vincent W. Davis
STORMWATER ENGINEER
DATE 12 MAR 2012
VINCENT W. DAVIS REGISTERED No. 12898 DELAWARE PROFESSIONAL ENGINEER
SEAL

RECOMMENDED
[signature]
SQUAD MANAGER, TRANSPORTATION SOLUTIONS (PROJECT DEVELOPMENT OR BRIDGE DESIGN)
DATE 3/15/12
THOMAS M. BANEY LICENSED No. 13701 DELAWARE PROFESSIONAL ENGINEER
SEAL

RECOMMENDED
BRIDGE DESIGN ENGINEER
DATE
SEAL

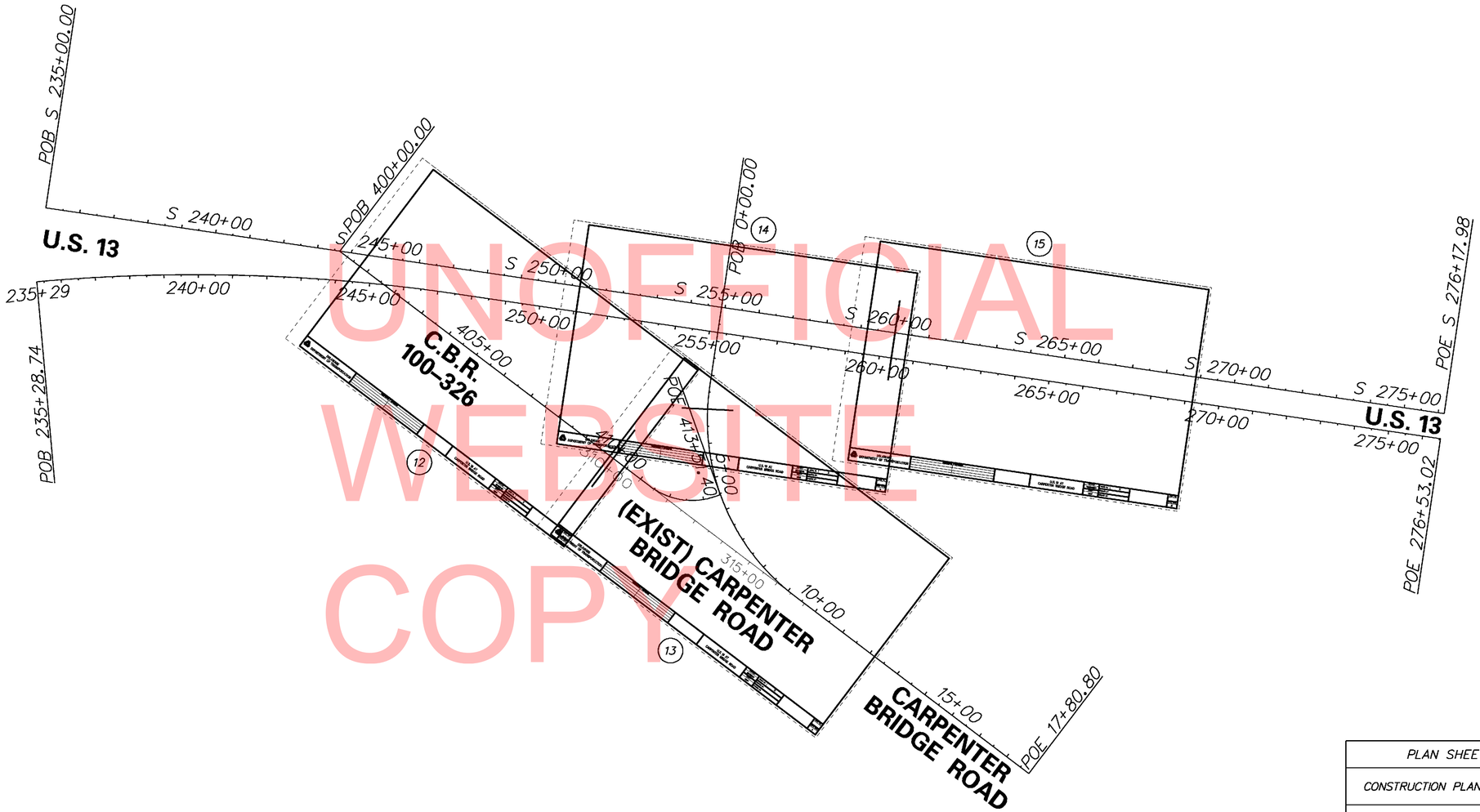
RECOMMENDED
[signature]
GROUP ENGINEER, PROJECT DEVELOPMENT
DATE 3/15/12
JAMES M. SATTERFIELD IV LICENSED No. 10391 DELAWARE PROFESSIONAL ENGINEER
SEAL

RECOMMENDED
[signature]
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS
DATE 3/15/12
MICHAEL H. SIMMONS REGISTERED No. 8211 DELAWARE PROFESSIONAL ENGINEER
SEAL

APPROVED
Natalie Barnhart
CHIEF ENGINEER
DATE 3/20/12
NATALIE M. BARNHART REGISTERED No. 9629 DELAWARE PROFESSIONAL ENGINEER
SEAL

LAST REVISED: 8/7/2008
Y:\KENT\035\ROAD\2900801\PLANS\TC.DGN

5/24/2012 - t200900801



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PLAN SHEET INDEX CROSS REFERENCE				
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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 180 360 540
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY: STEVE BROWN
KENT	CHECKED BY:

PLAN SHEET INDEX

SHEET NO.
2
TOTAL SHTS.
39

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EXISTING SYMBOLS

DRAINAGE

	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
C.B.	DRAINAGE CATCH BASIN
J.B.	DRAINAGE JUNCTION BOX
D	DRAINAGE MANHOLE
SIZE/TYPE LABEL	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

MANMADE ROADSIDE FEATURES

(TYPE LABEL)	CURB
(TYPE LABEL)	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
FP	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
LAMP	LAMP AND POST - RESIDENTIAL
MB	MAILBOX
PM	PARKING METER AND POST
	PAVEMENT - FLEXIBLE
	PAVEMENT - RIGID
	PILE - BRIDGE
	PILLAR OR MISCELLANEOUS POST
	TRAFFIC SIGN AND POST
	WALL - BRICK OR BLOCK
	WALL - STONE

NATURAL ROADSIDE FEATURES

	GRASS LAWN
	HEDGEROW OR THICKET
	MARSH BOUNDARY LINE
	TREE - CONIFEROUS
	TREE - DECIDUOUS
	TREE STUMP
	SHRUBBERY
WL	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY

SURVEY CONTROL & MONUMENTATION

B.M.	SURVEY BENCHMARK LOCATION
T.P.	SURVEY TIE POINT LOCATION
△	SURVEY TRAVERSE POINT
	POINT OF CURVATURE OR TANGENCY
	POINT OF INTERSECTING TANGENTS
C.M.	PROPERTY MARKER - CONCRETE MON.
I.P.	PROPERTY MARKER - IRON PIPE

UTILITY

	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
TV	CABLE TV DISTRIBUTION BOX
E	ELECTRIC MANHOLE
E	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
G	GAS MANHOLE
G.M.	GAS METER
G.V.	GAS VALVE
G.P.	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
S	SANITARY SEWER MANHOLE
S.V.	SANITARY SEWER VALVE
VENT	SANITARY SEWER VENT OR CLEANOUT
S.D.F.	SEPTIC DRAIN FIELD
B	TELEPHONE BOOTH
T	TELEPHONE MANHOLE
T	TELEPHONE TEST POINT
J.W.	TRAFFIC - CONDUIT JUNCTION WELL
	TRAFFIC - LIGHT POLE AND BASE
	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
	TRAFFIC - SIGNAL POLE AND BASE
U	UTILITY BOX
	UTILITY POLE GUY WIRE ANCHOR
	UTILITY POLE
F.H.	WATER - FIRE HYDRANT
W.M.	WATER METER
W.V.	WATER VALVE
WELL	WELL HEAD

UTILITY COMPANY FACILITIES

—VER-C-UG—	VERIZON
—ESNG—	EASTERN SHORE NATURAL GAS

PROPOSED SYMBOLS

CONSTRUCTION

	CONCRETE SAFETY BARRIER - PERMANENT
BFS	BIOFILTRATION SWALE
	BUTT JOINT
100+00	CONSTRUCTION BASELINE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
CZ	CLEAR ZONE
	DRAINAGE INLET
	DITCH
	FENCE - METAL
	FENCE - WOOD
	FLARED END SECTION
	GUARDRAIL, TYPES 1 & 3
	GUARDRAIL, TYPE 2
	GUARDRAIL END TREATMENT - PARALLEL
	GUARDRAIL END TREATMENT - PARABOLIC
HC	HORIZONTAL CLEARANCE
	JUNCTION BOX - DRAINAGE
LOC	LIMIT OF CONSTRUCTION
	MANHOLE
	PAVEMENT PATCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK @ 4"
	P.C.C. SIDEWALK @ 6"
	UNDERDRAIN
	UNDERDRAIN OUTLET

CONSTRUCTION PHASING SYMBOLS

	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	PHASING TRAFFIC FLOW ARROW

LANDSCAPING

	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

EROSION & SEDIMENT CONTROL

DWB	DEWATERING BASIN
	REMOVE EXISTING PAVEMENT TOPSOIL, SEED, AND MULCH
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
RSF	REINFORCED SILT FENCE
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN

IDENTIFIERS

A/C	ADJUST BY CONTRACTOR
A/O	ADJUST BY OTHERS
B	CONCRETE SAFETY BARRIER
C	CURB OR CURB & GUTTER
C/JB	CONVERT TO JUNCTION BOX
C/MH	CONVERT TO DRAINAGE MANHOLE
C/O	CURB OPENING
CR	CURB RAMP / TYPE
CR-M	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
DI	DRAINAGE INLET
DND	DO NOT DISTURB
FES	FLARED END SECTION
FS	FILTRATION STRUCTURE
GR	GUARDRAIL
JB	JUNCTION BOX
LS	LANDSCAPE PLANTINGS
MH	MANHOLE
M	MONUMENT - RIGHT-OF-WAY
P	PIPE
REL/C	RELOCATE BY CONTRACTOR
REL/O	RELOCATE BY OTHERS
RM/C	REMOVE BY CONTRACTOR
RM/O	REMOVE BY OTHERS
ST	SEDIMENT TRAP
SF	SILT FENCE
UD	UNDERDRAIN

PAVEMENT SECTION(S)

	OVERLAY PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	DRIVEWAY AND ENTRANCE PAVEMENT

RIGHT-OF-WAY SYMBOLS

	PROPOSED RIGHT-OF-WAY MONUMENT
	EXISTING PROPERTY LINE
EASEMENT TYPE	EXISTING EASEMENT
	EXISTING RIGHT-OF-WAY
DA	PROPOSED DENIAL OF ACCESS
PE	PROPOSED PERMANENT EASEMENT
R/W	PROPOSED RIGHT-OF-WAY
R/W-DA	PROPOSED R/W & DENIAL OF ACCESS
TCE	TEMPORARY CONSTRUCTION EASEMENT
100+00	PROPOSED RIGHT-OF-WAY BASELINE
100+00	HISTORIC RIGHT-OF-WAY BASELINE

TRAFFIC

ITMS-CON	ITMS CONDUIT
SIG-CON	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
	PAVEMENT STRIPING
	TRAFFIC SIGN

UTILITY COMPANY FACILITIES

	PROPOSED UTILITY POLE
	PROPOSED GUY WIRE ANCHOR

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LAST REVISED: 3/12/2008
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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	T200900801
COUNTY	KENT
BRIDGE NO.	
DESIGNED BY:	STEVE BROWN
CHECKED BY:	

LEGEND

SHEET NO.	3
TOTAL SHTS.	39

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2001 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2001, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2. THE CONTRACTOR SHALL GIVE TWO (2) WEEKS NOTICE TO THE PROPERTY OWNER WHEN ANY FIXTURE, SHRUB OR OTHER OBJECT MUST BE REMOVED FROM THE RIGHT OF WAY OR EASEMENT AREA. IF THE OWNER HAS NOT ATTEMPTED TO SALVAGE THIS PROPERTY, THE CONTRACTOR SHALL REMOVE IT WITHOUT OBLIGATION. COMPENSATION SHALL BE INCIDENTAL TO THE CONTRACT.

3. THE ENDS OF ALL CURBS SHALL BE DEPRESSED FLUSH WITH THE PAVEMENT AT A RATIO OF TWELVE TO ONE (12:1) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

4. THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" INSIDE MINIMUM DIAMETER, 6" INSIDE MAXIMUM DIAMETER) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL SIT ON THE TOP OF THE SUBBASE MATERIAL. THE COST SHALL BE INCIDENTAL TO THE CONTRACT.

5. STAGING AREAS - PROPER EROSION AND SEDIMENT CONTROL MEASURES AS DETERMINED BY THE ENGINEER SHALL BE INSTALLED IN ALL STAGING AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE CONTRACT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED IN ACCORDANCE WITH DELAWARE STANDARD SPECIFICATIONS 732, 734 AND 735, FOR TOPSOIL, SEED AND MULCH RESPECTIVELY, TO THE SATISFACTION OF THE ENGINEER. THE SEED SHALL ADHERE TO THE SPECIFICATIONS OF SECTION 734 FOR PERMANENT GRASS SEEDING - DRY GROUND. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH REESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.

6. SITE REVIEWER - AN EROSION CONTROL SITE REVIEWER SHALL BE A PERSON FROM THE CONTRACTOR'S STAFF ASSIGNED TO EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE AND SHALL BE REQUIRED ON SPECIFIC PROJECTS. THE NAME AND DNREC CERTIFICATION NUMBER OF EACH SITE REVIEWER SO REQUIRED SHALL BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE NAME OF THE DELAWARE REGISTERED PROFESSIONAL ENGINEER PROVIDING DIRECTION AND SUPERVISION OF THE SITE REVIEWER, AS REQUIRED IN SECTION 12.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, SHALL ALSO BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

EROSION POTENTIAL FOR THIS PROJECT	SITE REVIEWER REQUIREMENT
( ) INSIGNIFICANT	NONE
( ) MINOR	CONTRACTOR CERTIFICATION COURSE TRAINING ONLY, AS DEFINED IN SECTION 1.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
(X) MEDIUM	AT THE TIME OF BID OF THE CONTRACT, EITHER THE SUPERINTENDENT OR A SEPARATE INDIVIDUAL FROM THE CONTRACTOR'S STAFF SHALL BE A CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 12 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
( ) MAJOR	SUPERINTENDENT AND AN INDIVIDUAL FROM CONTRACTOR'S STAFF SHALL BE CCR. ONE INDIVIDUAL FROM THE CONTRACTOR'S STAFF MUST BE A CCR AT THE TIME OF BID OF THE CONTRACT. THE SUPERINTENDENT MUST BECOME A CCR WITHIN ONE YEAR AFTER THE AWARD OF CONTRACT.

7. ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR INCLUDE:

( )	NONE
(X)	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	RASTER FILES, IN .CAL FILE FORMAT, FOR ALL PLAN SHEETS.
( )	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

NOTE: THE DOCUMENT ENTITLED "RELEASE FOR DELIVERY OF DOCUMENTS IN ELECTRONIC FORM TO A CONTRACTOR" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

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

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
(X)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR.
( )	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR.

9. THE DISTURBED AREA FOR THIS PROJECT IS 7.45 ACRES.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK". ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.

11. THE EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE EROSION AND SEDIMENT CONTROL PLANS ARE VALID FOR A THREE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR SHALL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVAL. DELDOT WILL REVIEW THE CURRENT EROSION AND SEDIMENT CONTROL PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

1. ANY DAMAGE TO ITEMS NOTED TO BE RELOCATED OR RESET BY THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

SECTION 200

2. THE CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE SET 46 INCHES ABOVE THE ROADWAY SURFACE. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE PLACED IN AN APPROPRIATE SIZE PVC SLEEVE. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

3. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO EXCAVATE TEST PITS ALONG PROPOSED DRAINAGE RUNS, AT POINTS OF POSSIBLE UTILITY CONFLICTS, TO DETERMINE IF A CONFLICT EXISTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR, WITH THE ENGINEER AND THE UTILITY COMPANY INVOLVED. THE ENGINEER SHALL ULTIMATELY DETERMINE THE SOLUTION TO THE UTILITY CONFLICT. TEST HOLES SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 208000 - EXCAVATION AND BACKFILL FOR PIPE TRENCHES, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.

4. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- EXISTING DRAINAGE STRUCTURES

5. THIS PROJECT IS COVERED UNDER AN NPDES GENERAL PERMIT FOR CONSTRUCTION. UNDER THE GENERAL PERMIT, COMPLIANCE WITH DELDOT'S APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS WILL CONSTITUTE COMPLIANCE WITH THE NPDES INDUSTRIAL PERMITTING REQUIREMENTS FOR THIS CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NOI IS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S TEAM SUPPORT SECTION. A COPY OF THE GENERAL PERMIT OR THE NOI CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

SECTION 300

6. A. THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B':
a. CRUSHED STONE (PER STANDARD SPECIFICATION 821)
b. CRUSHED CONCRETE (PER STANDARD SPECIFICATION 821)
c. HOT-MIX MILLINGS (PER SPECIAL PROVISION 302514 MILLED HOT-MIX BASE COURSE)

THE CONTRACTOR WILL NOT BE ALLOWED TO MIX DIFFERENT MATERIALS (OR SIMILAR MATERIALS FROM DIFFERENT SOURCES) TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

ALL OF THE ABOVE LISTED MATERIALS ARE PERMITTED FOR USE ON THE JOB, PROVIDED THEY ARE SEPERATED INTO APPROVED AREAS. EACH AREA OF BASE COURSE MUST BE CONSTRUCTED USING MATERIALS FROM A SINGULAR SOURCE, FULL DEPTH, IN ORDER THAT PROPER TESTING MAY BE ACCOMPLISHED. THE CONTRACTOR AND DELDOT'S PROJECT ENGINEER SHALL AGREE ON THE LIMITS OF EACH SOURCE OF MATERIAL PRIOR TO PLACEMENT.

B. THE QUANTITY USED FOR BASE OF EACH OF THE ABOVE LISTED MATERIALS WILL BE THE CONTRACTOR'S CHOICE, WITH THE TOTAL MEETING THE ADVERTISED QUANTITY OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

C. THE CONTRACTOR MAY ALSO ELECT TO RECYCLE MILLINGS FOR USE IN HOT-MIX AS PERMITTED BY THE STANDARD SPECIFICATIONS. THE CHOICE OF THE QUANTITY OF MILLINGS USED FOR THIS PURPOSE, OR FOR BASE COURSE, LIES WITH THE CONTRACTOR. ALL MILLING MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR.

D. HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:
a. MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEM 760507.
b. MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000.
c. MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE.
ALL MILLED MATERIALS SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 302514 - MILLED HOT-MIX BASE COURSE.

E. PAYMENT CLARIFICATION:
a. SHOULD THE CONTRACTOR ELECT TO MILL PORTIONS OF HOT-MIX SHOWN ON THE PLANS TO BE REMOVED UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT THE COST OF MILLING THIS HOT-MIX WILL BE PAID AS ITEM 202000 - EXCAVATION AND EMBANKMENT. THE MILLINGS GENERATED MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE, OR DISPOSED OF TO AN APPROVED SITE. HAULING COSTS FOR DISPOSAL AND/OR RECYCLING ARE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.

b. MILLINGS GENERATED UNDER ITEM 760507 - PROFILE MILLING, HOT MIX MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE OR DISPOSED OF BY THE CONTRACTOR TO AN APPROVED SITE. NO SEPARATE PAYMENT WILL BE MADE FOR TRANSPORTING MILLINGS ON SITE OR TO AN APPROVED DISPOSAL SITE.

c. SHOULD THE CONTRACTOR ELECT TO TEMPORARILY STOCKPILE MILLINGS ON THE JOB SITE FOR LATER USE, ALL COSTS FOR STOCKPILING AND SUBSEQUENT REHANDLING SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.

d. MILLINGS USED FOR BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE. NO SEPARATE PAYMENT WILL BE MADE TO FURNISH MILLINGS FROM AN OUTSIDE SOURCE OR TRANSPORT MILLINGS WITHIN THE PROJECT LIMITS. MILLINGS USED FOR BASE COURSE WILL BE PAID IN PLACE AT THE UNIT BID PRICE FOR ITEM 302007 - GRADED AGGREGATE BASE COUSRE, TYPE 'B'.

e. ALL COSTS TO UTILIZE MILLINGS IN RECYCLED HOT-MIX WILL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE HOT-MIX ITEM USING THE RECYCLED MATERIAL.

f. SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE IS PROVIDED TO SPECIFY THE MEANS OF LAY DOWN AND COMPACTION AS WELL AS THE MATERIAL REQUIREMENTS FOR MILLINGS USED AS BASE COURSE. ALL COSTS TO BRING THE MILLINGS INTO COMPLIANCE WITH THE REQUIREMENTS OF ITEM - 302514 MILLED HOT-MIX BASE COURSE ARE INCIDENTAL TO ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'. NO PAYMENT WILL BE MADE FOR ITEM 302514 - MILLED HOT-MIX BASE COURSE. THE QUANTITY OF MILLINGS USED FOR BASE COURSE WILL BE PAID FOR UNDER ITEM 302007 - GRADED AGGREGATE BASE COURSE.

SECTION 400

7. THE PAVEMENT SECTION FOR WARM-MIX RESIDENTIAL DRIVEWAYS SHALL BE 2" WARM-MIX, TYPE 'C', 160 GYRATION, PG-64-22, OVER 8" GRADED AGGREGATE BASE COURSE, TYPE 'B', UNLESS OTHERWISE NOTED ON THE PLANS.

SECTION 600

8. THE DEPARTMENT AND THE CONTRACTOR SHALL INSPECT ALL EXISTING PIPES AND DRAINAGE STRUCTURES TO BE USED IN THE FINAL DRAINAGE SYSTEM AND AGREE ON THE CONDITION PRIOR TO THE START OF CONSTRUCTION. EXISTING PIPES AND DRAINAGE STRUCTURES DAMAGED DUE TO CONTRACTOR OPERATIONS SHALL BE REPAIRED OR REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS REQUIRED TO VIDEO INSPECT NEW PIPE RUNS TO CONFIRM CONDITION PRIOR TO ACCEPTANCE. PAYMENT FOR VIDEO INSPECTION OF NEW PIPES WILL BE MADE UNDER ITEM 612529 - VIDEO INSPECTION.

SECTION 700

9. STATION AND ELEVATION DATA GIVEN FOR DRAINAGE STRUCTURES ARE TO BE APPLIED TO THE CENTER OF THE GRATE FOR INLETS, AND TO THE CENTER OF THE STRUCTURE FOR JUNCTION BOXES AND MANHOLES.

10. DRAINAGE INLET GRATES ADJACENT TO THE ROAD, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE 1 SHALL BE REPLACED. THE ACTUAL LOCATIONS, THE NEED FOR ANY GRATE MODIFICATIONS OR FOR NEW FRAMES SHALL BE DETERMINED BY THE ENGINEER. ALL REPLACED GRATES/FRAMES SHALL BE DELIVERED TO THE NEAREST DISTRICT MAINTENANCE YARD WITH THE COST OF DELIVERY INCIDENTAL TO ITEM 708060 - REPLACING DRAINAGE INLETS GRATES. FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.

11. ALL PAVED AREAS TO BE RECONSTRUCTED, WIDENED, AND/OR REMOVED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.

12. ALL HOT-MIX SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

13. CONTRACTOR SHALL BE REQUIRED TO WATER ALL MAJOR AND MINOR TREES, SHRUBS, AND ALL HERBACIOUS BEDS BI-WEEKLY DURING THE PERIOD FROM JUNE 15 THROUGH OCTOBER 1. WATERING, ONCE INITIATED, SHALL CONTINUE WITHOUT INTERRUPTION UNTIL ALL PLANTS ON THE PROJECT HAVE BEEN WATERED. PAYMENT SHALL BE PER 1,000 GALS OF WATER APPLIED AND SHALL BE BASED ON THE FOLLOWING SCHEDULE: MAJOR TREES-15 GALS PER TREE, MINOR TREES-10 GALS PER TREE, SHRUBS-5 GALS PER SHRUB, PERENNIALS-10 GALS PER 100 SQUARE FEET OF PLANTING BED. WATER USED FOR THIS ITEM SHALL MEET THE REQUIREMENTS OF SECTION 803 OF THE STANDARD SPECIFICATIONS. TREE WATERING BAGS, IF UTILIZED, SHALL BE FILLED AS PART OF THE WATERING OPERATION: PAYMENT SHALL BE AS DETAILED HEREIN. TREE WATERING BAGS SHALL REMAIN PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED PRIOR TO FINAL INSPECTION.

MISCELLANEOUS

13. THE CONTRACTOR SHALL CONTACT MICHAEL ELLER, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6061.

14. CROSS SECTIONS USED IN THE PREPARATION OF THIS CONTRACT ARE AVAILABLE AFTER THE PROJECT HAS BEEN AWARDED FROM THE DEPARTMENT.

15. RIGHT-OF-WAY PLANS FOR RIGHT-OF-WAY OR EASEMENT STAKEOUT PURPOSES ARE AVAILABLE FROM THE DEPARTMENT.

16. AS DESIGNED, THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT AND ENVIRONMENTAL COMPLIANCE SHEETS WERE NOT PREPARED. THERE ARE JURISDICTIONAL WATERS LOCATED BEYOND THE LIMITS OF THE PROJECT. IN ORDER TO PROTECT THESE WATERS, CONSTRUCTION FENCING SHALL BE PLACED ALONG THE LOC FROM STATION 258+50 LT TO STATION 259+00 LT. AT STATION 259+00 LT THE FENCE SHALL CONTINUE (PERPENDICULAR TO THE ROAD) FROM THE LOC TO THE EXISTING RIGHT OF WAY LINE. CONSTRUCTION FENCE PLACEMENT SHALL BE INCIDENTAL TO ITEM #201000 - CLEARING AND GRUBBING. CONTRACTOR ACCESS BEYOND THE LOC IS STRICTLY PROHIBITED.

17. THE CONTRACTOR SHALL NOT USE STONE WHEN BACKFILLING THE TRENCH FOR PIPE 18 WHERE IT CROSSES OVER THE NATURAL GAS UTILITY. INSTEAD, THE CONTRACTOR SHALL USE TYPE C BORROW EXCLUSIVELY.

EARTHWORK SUMMARY

EXCAVATION	
EXCAVATION FROM CROSS SECTIONS	3,244C.Y.
ROCK EXCAVATION FOR ROADWAY AND TRENCHES	0 C.Y.
TOPSOIL STRIPPING	2,053 C.Y.
TOTAL EXCAVATION	5,297 C.Y.
EXCAVATION AVAILABLE FOR EMBANKMENT	
EXCAVATION MEETING BORROW TYPE 'A'	0 C.Y.
EXCAVATION MEETING BORROW TYPE 'F'	1,488 C.Y.
EXCAVATION MEETING TOPSOIL	2,053 C.Y.
EMBANKMENT REQUIREMENTS	
BORROW TYPE 'A' REQUIRED (INCLUDING UNDERCUT)	374 C.Y.
BORROW TYPE 'F' REQUIRED	185 C.Y.
TOPSOIL REQUIRED	2,493 C.Y.
MATERIAL BALANCE ("+"= EXCESS, "-"= NEED)	
BORROW TYPE 'A'	-374 C.Y.
BORROW TYPE 'F'	+1303 C.Y.
TOPSOIL	-440 C.Y.
UNSUITABLE MATERIAL	+1,757 C.Y.

NOTES:
1) THE VALUES LISTED IN THE EARTHWORK SUMMARY ARE APPROXIMATE AND ARE NOT TO BE USED AS A BASIS OF PAYMENT. THE EARTHWORK SUMMARY IS CONSIDERED FOR INFORMATIONAL PURPOSES ONLY.

2) OTHER SOURCES OF EXCAVATION MAY INCLUDE PIPE TRENCH EXCAVATION, STRUCTURE EXCAVATION, UNDERCUT EXCAVATION, STORMWATER MANAGEMENT POND EXCAVATION, ENVIRONMENTAL SITE EXCAVATION, MAINTENANCE OF TRAFFIC EXCAVATION, ETC.

3) UNSUITABLE MATERIALS INCLUDE UNDERCUT SOILS, BITUMINOUS PAVEMENT, ETC.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

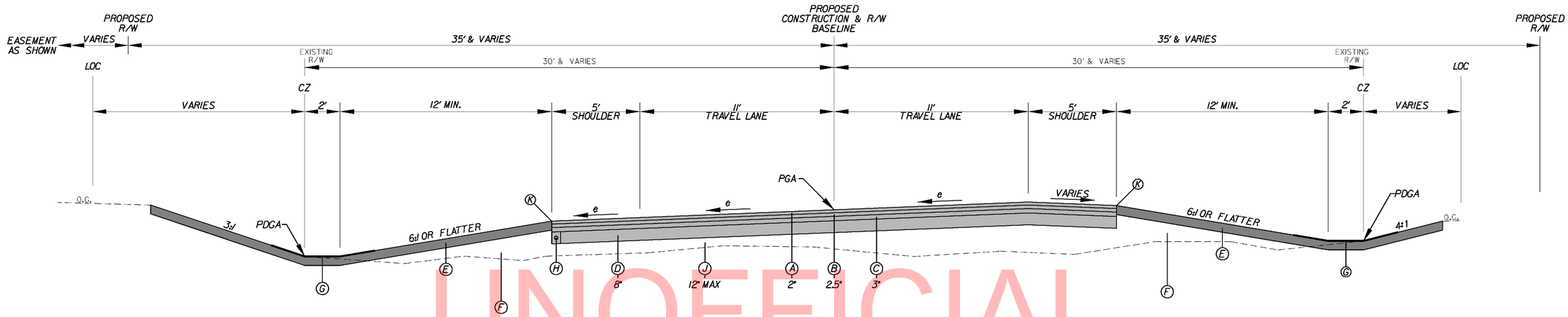
NOT TO SCALE

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY: STEVE BROWN
COUNTY	CHECKED BY:
KENT	

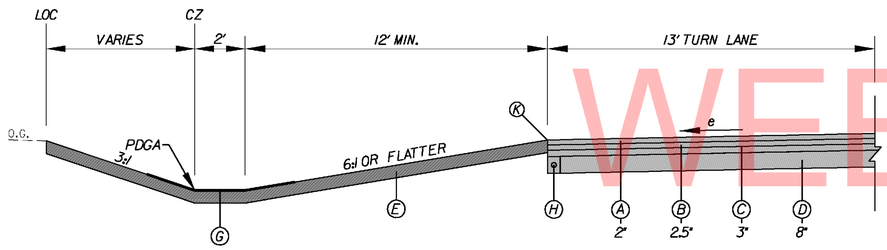
NOTES

SHEET NO.
4
TOTAL SHTS.
39



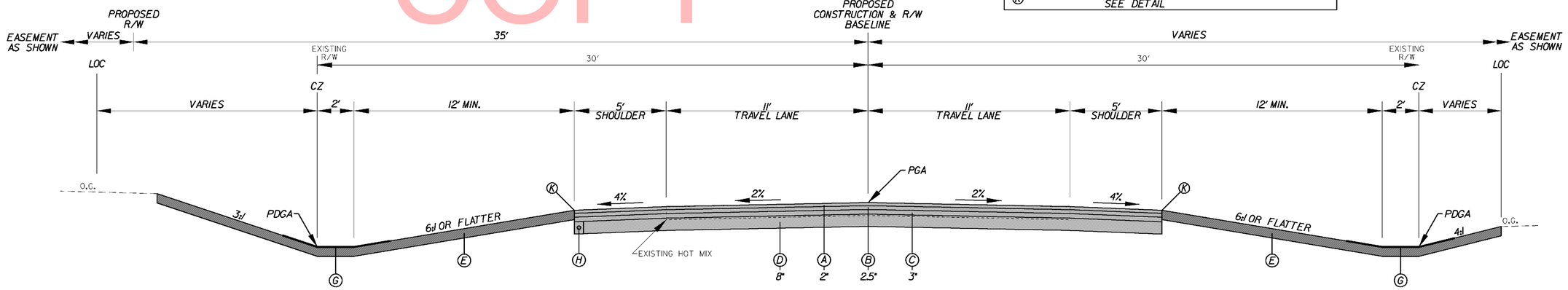
TYPICAL SUPERELEVATION SECTION – CARPENTER BRIDGE ROAD

MAX e = 6.0%
STATION 0+86.00 TO 10+58.52



RIGHT TURN LANE – CARPENTER BRIDGE ROAD

MAX e = 6.0%
STATION 0+86.00 TO 3+58.73



TYPICAL NORMAL SECTION – CARPENTER BRIDGE ROAD

STATION 10+58.52 TO 11+60.00

LEGEND

- (A) ITEM 401827 - WMA, SUPERPAVE TYPE C, 160 GYRATION, PG 64-22, (NON-CARBONATE STONE)
- (B) ITEM 401810 - WMA, SUPERPAVE TYPE B, 160 GYRATION, PG 64-22
- (C) ITEM 401819 - WMA, SUPERPAVE BCBC, 160 GYRATION, PG 64-22
- (D) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (E) ITEM 732002 - TOPSOIL, 6" DEPTH OR ITEM 733002 - TOPSOILING, 6" DEPTH ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (F) ITEM 209006 - BORROW, TYPE F
- (G) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5 FOR 1 ROLL WITH MINIMUM 6' OF WIDTH
- (H) ITEM 715001 - PERFORATED PIPE UNDERDRAIN, 6"
- (I) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (J) ITEM 209001 - BORROW, TYPE A
- (K) ITEM 401752 - SAFETY EDGE FOR ROADWAY PAVEMENT - SEE DETAIL

PAVEMENT LIFT NOTE:
MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
WMA, SUPERPAVE, TYPE C HOT-MIX - 2"
WMA, SUPERPAVE, TYPE B HOT-MIX - 3"
WMA, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE - 6"
GRADED AGGREGATE BASE COURSE - 8"

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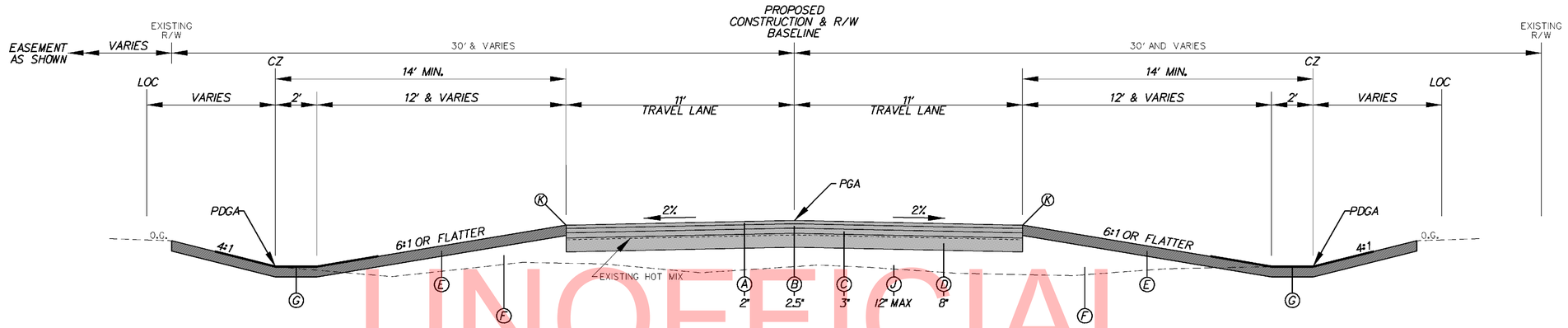
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	BRIDGE NO.	TYPICAL SECTIONS	SHEET NO. 5
				COUNTY KENT	DESIGNED BY: STEVE BROWN		TOTAL SHTS. 39
					CHECKED BY:		



TYPICAL NORMAL SECTION – CARPENTER BRIDGE ROAD 100–326

STATION 411+00 TO 413+35.37

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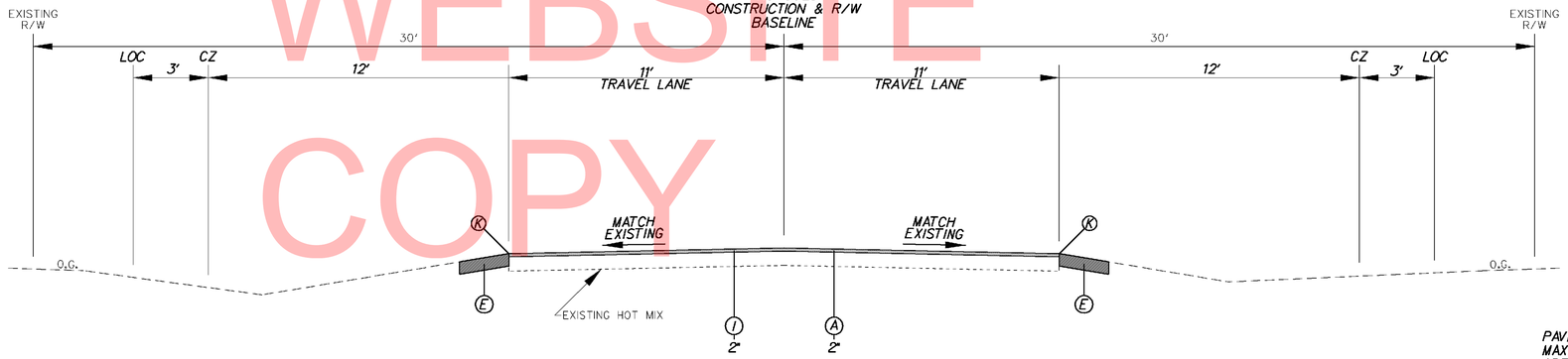

TYPICAL NORMAL SECTION – CARPENTER BRIDGE ROAD 100–326

STATION 405+09.11 TO 411+00

PAVEMENT LIFT NOTE:
MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
WMA, SUPERPAVE, TYPE C HOT-MIX - 2"
WMA, SUPERPAVE, TYPE B HOT-MIX - 3"
WMA, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE - 6"
GRADED AGGREGATE BASE COURSE - 8"

LEGEND

- (A) ITEM 401827 - WMA, SUPERPAVE TYPE C, 160 GYRATION, PG 64-22, (NON-CARBONATE STONE)
- (B) ITEM 401810 - WMA, SUPERPAVE TYPE B, 160 GYRATION, PG 64-22
- (C) ITEM 401819 - WMA, SUPERPAVE BCBC, 160 GYRATION, PG 64-22
- (D) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (E) ITEM 732002 - TOPSOIL, 6" DEPTH OR ITEM 733002 - TOPSOILING, 6" DEPTH ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (F) ITEM 209006 - BORROW, TYPE F
- (G) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5 FOR 1 ROLL WITH MINIMUM 6' OF WIDTH
- (H) ITEM 715001 - PERFORATED PIPE UNDERDRAIN, 6"
- (I) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (J) ITEM 209001 - BORROW, TYPE A
- (K) ITEM 401752 - SAFETY EDGE FOR ROADWAY PAVEMENT - SEE DETAIL

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	BRIDGE NO.	TYPICAL SECTIONS	SHEET NO. 6
				COUNTY KENT	DESIGNED BY: STEVE BROWN		TOTAL SHTS. 39
					CHECKED BY:		

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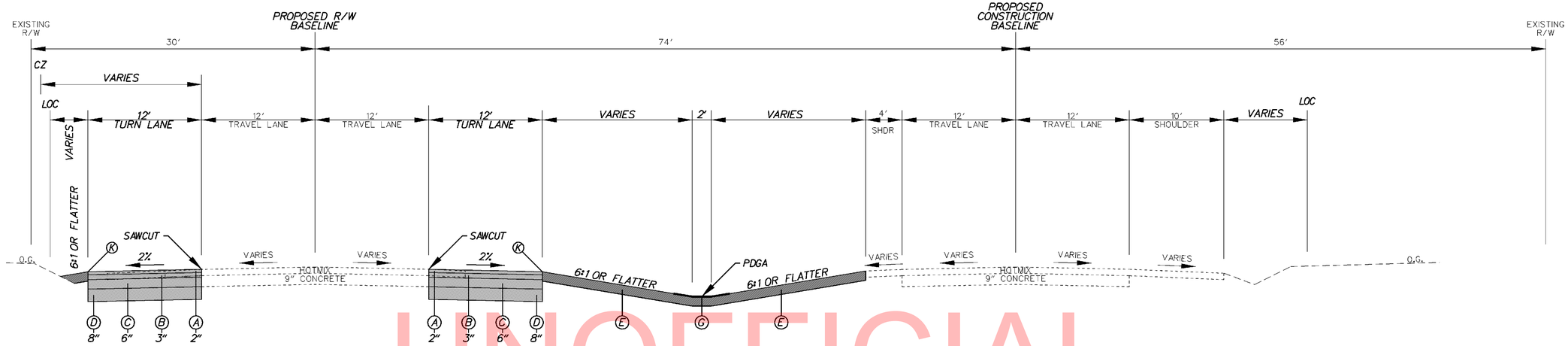

TYPICAL NORMAL SECTION WITH LEFT TURN LANE – U.S. 13 SOUTH BOUND

STATION S 255+57.10 TO S 259+90.08

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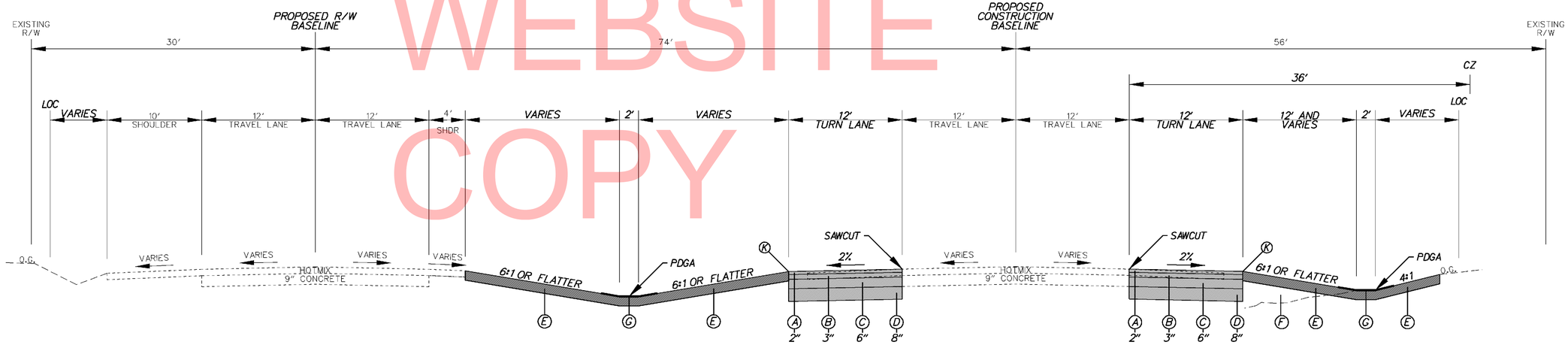

TYPICAL NORMAL SECTION WITH RIGHT AND LEFT TURN LANES – U.S. 13 NORTH BOUND

STATION 252+08.65 TO 253+84.65

LEGEND

- (A) ITEM 401830 - WMA, SUPERPAVE TYPE C, 160 GYRATION, PG 70-22, (NON-CARBONATE STONE)
- (B) ITEM 401813 - WMA, SUPERPAVE TYPE B, 160 GYRATION, PG 70-22
- (C) ITEM 401819 - WMA, SUPERPAVE BCBC, 160 GYRATION, PG 64-22
- (D) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (E) ITEM 732002 - TOPSOIL, 6" DEPTH OR ITEM 733002 - TOPSOILING, 6" DEPTH ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (F) ITEM 209006 - BORROW, TYPE F
- (G) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5 FOR 1 ROLL WITH MINIMUM 6' OF WIDTH
- (H) ITEM 715001 - PERFORATED PIPE UNDERDRAIN, 6"
- (K) ITEM 401752 - SAFETY EDGE FOR ROADWAY PAVEMENT - SEE DETAIL

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	TYPICAL SECTIONS	SHEET NO. 7
				COUNTY KENT	BRIDGE NO.	TOTAL SHTS. 39
				DESIGNED BY: STEVE BROWN		
				CHECKED BY:		

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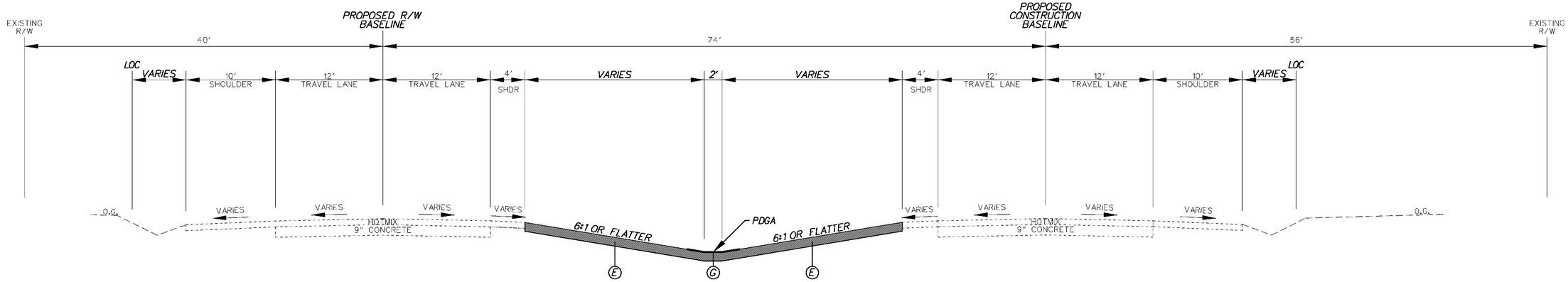

TYPICAL NORMAL SECTION WITH BIOSWALE – U.S. 13

STATION 260+25.16 TO 261+37.57

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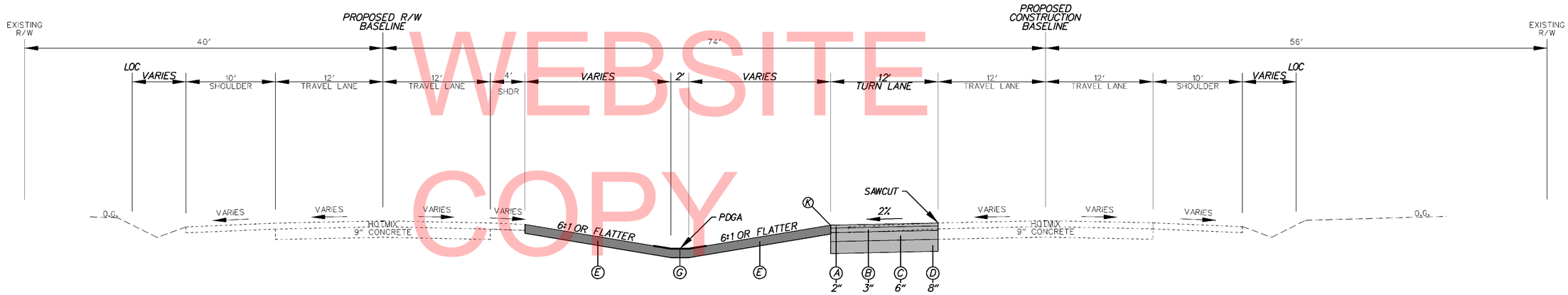

TYPICAL NORMAL SECTION WITH LEFT TURN LANE – U.S. 13 NORTH BOUND

STATION 261+57.57 TO 265+53.64

LEGEND

- (A) ITEM 401830 - WMA, SUPERPAVE TYPE C, 160 GYRATION, PG 70-22, (NON-CARBONATE STONE)
- (B) ITEM 401813 - WMA, SUPERPAVE TYPE B, 160 GYRATION, PG 70-22
- (C) ITEM 401819 - WMA, SUPERPAVE BCBC, 160 GYRATION, PG 64-22
- (D) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (E) ITEM 732002 - TOPSOIL, 6" DEPTH OR ITEM 733002 - TOPSOILING, 6" DEPTH ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (F) ITEM 209006 - BORROW, TYPE F
- (G) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5 FOR 1 ROLL WITH MINIMUM 6' OF WIDTH
- (H) ITEM 715001 - PERFORATED PIPE UNDERDRAIN, 6"
- (K) ITEM 401752 - SAFETY EDGE FOR ROADWAY PAVEMENT - SEE DETAIL

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	TYPICAL SECTIONS	SHEET NO. 8
				BRIDGE NO.		TOTAL SHTS. 39
				DESIGNED BY: STEVE BROWN		
				COUNTY KENT		
				CHECKED BY:		

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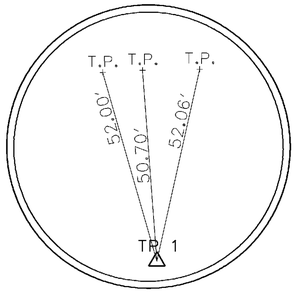
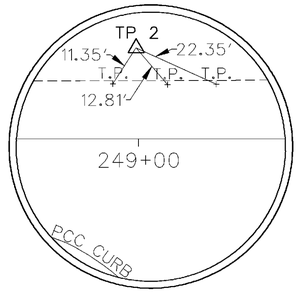
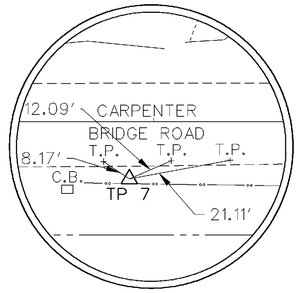


TRAVERSE POINT #1
GPS MON. "K100"



TRAVERSE POINT #2
GPS MON. "BR1"



TRAVERSE POINT #7
DELDOT CAP

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP 1	S 238+39.7	66.9602	339496.7784	613673.3757	49.3175
TP 2	S 248+64.2	49.9203	340512.8163	613805.8688	52.1390
TP 3	254+12.4	-28.59	341021.0270	613876.1950	52.8300
TP 7	406+43.5	15.1125	340529.8050	614084.5740	51.7773

NOTE: NEGATIVE DENOTES LEFT OF BASE LINE

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
13000	S 235+00.0	0.0000	339170.3946	613557.5986
13100	235+28.74	0.0000	339143.5825	613773.2058
13102	247+52.99	0.0000	340364.5124	613808.3553
13150	241+43.70	-36.177	339756.1224	613718.7068
13500	400+00.00	0.0000	340026.1539	613683.6979
13502	402+62.49	0.0000	340155.6299	613781.8773

NOTE: NEGATIVE DENOTES LEFT OF BASE LINE

CIRCULAR CURVE NO. ①

		STATION	NORTHING	EASTING
	Element: Circular			
PC (13100)		235+28.74	339143.5825	613773.2058
PI (13150)		241+43.70	339756.1224	613718.7068
CC ( )			339605.1891	618961.4212
PT (13102)		247+52.99	340364.5124	613808.3553
	Radius:	5208.7100		
	Delta:	13°28'00.3448" Right		
	Degree of Curvature(Arc):	1°05'59.9979"		
	Length:	1224.2518		
	Tangent:	614.9595		
	Chord:	1221.4357		
	Middle Ordinate:	35.9270		
	External:	36.1766		
	Tangent Direction:	N 5°05'03.6226" W		
	Radial Direction:	N 84°54'56.3774" E		
	Chord Direction:	N 1°38'56.5498" E		
	Radial Direction:	S 81°37'03.2778" E		
	Tangent Direction:	N 8°22'56.7222" E		

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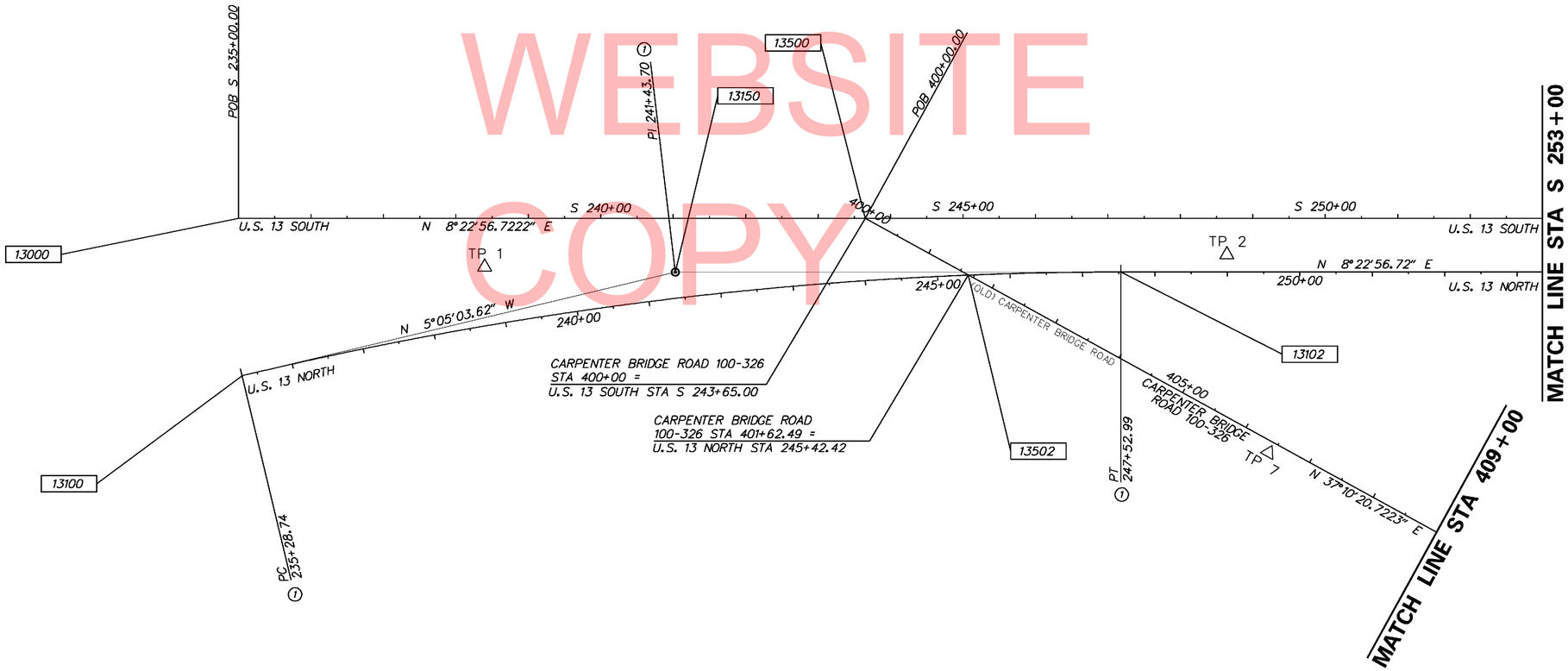


DATUM REFERENCE NOTE:
HORIZONTAL - PROJECT BASED ON THE DELAWARE STATE PLAN COORDINATE SYSTEM (NAD 83)

VERTICAL - PLAN ELEVATIONS ARE BASED ON N.G.S. SURVEY DATUM (NAVD 88)

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 90 180 270
FEET

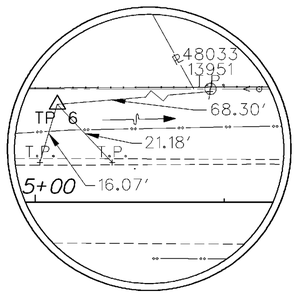
HSIP KC, US 13 AT
CARPENTER BRIDGE ROAD

CONTRACT T200900801
COUNTY KENT
BRIDGE NO.
DESIGNED BY: STEVE BROWN
CHECKED BY:

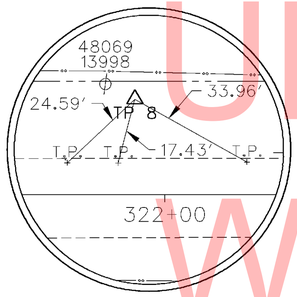
HORIZONTAL AND
VERITCAL CONTROL

SHEET NO. 9
TOTAL SHTS. 39

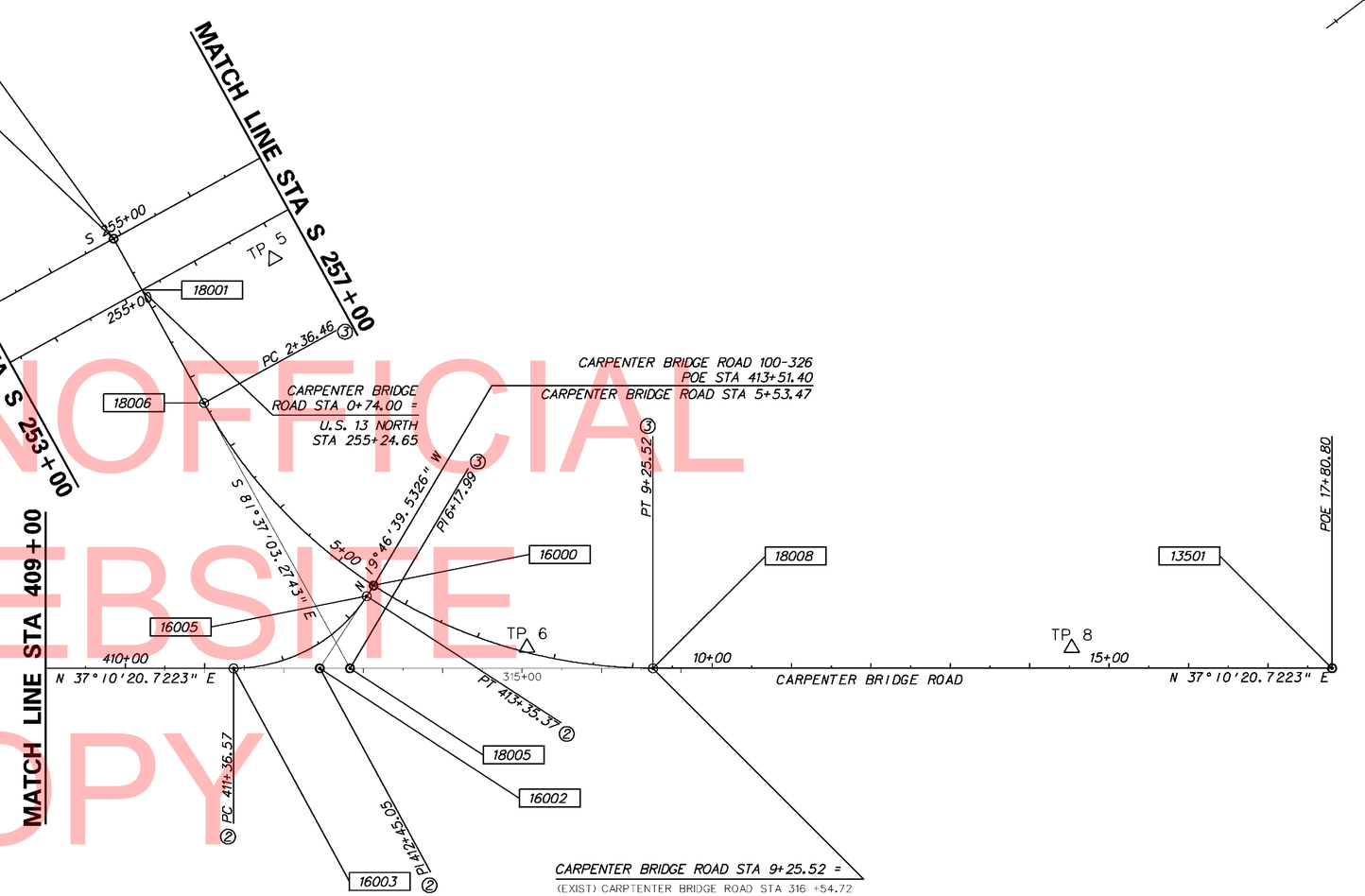
TRAVERSE POINT #5
DELDOT CAP



TRAVERSE POINT #6
DELDOT CAP



TRAVERSE POINT #8
DELDOT CAP



UNOFFICIAL WEBSITE COPY

CIRCULAR CURVE NO. ②

		STATION	NORTHING	EASTING
Element: Circular				
PC	(16003)	411+36.57	340931.7984	614370.4327
PI	(16002)	412+45.05	341018.2362	614435.9771
CC	(16004)		341052.6416	614211.0686
PT	(16005)	413+35.37	341120.3158	614399.2712

Radius:	200.0000
Delta:	56°57'00.2549" Left
Degree of Curvature(Arc):	28°38'52.4031"
Length:	198.7932
Tangent:	108.4783
Chord:	190.7103
Middle Ordinate:	24.1950
External:	27.5248
Tangent Direction:	N 37°10'20.7223" E
Radial Direction:	S 52°49'39.2777" E
Chord Direction:	N 8°41'50.5949" E
Radial Direction:	N 70°13'20.4674" E
Tangent Direction:	N 19°46'39.5326" W

CIRCULAR CURVE NO. ③

		STATION	NORTHING	EASTING
Element: Circular				
PC	(18006)	2+36.46	341104.2456	614081.5695
PI	(18005)	6+17.99	341048.6266	614459.0216
CC	(18007)		341742.3551	614175.5973
PT	(18008)	9+25.52	341352.6360	614689.5467

Radius:	645.0000
Delta:	61°12'36.0034" Left
Degree of Curvature(Arc):	8°52'59.0397"
Length:	689.0639
Tangent:	381.5279
Chord:	656.7603
Middle Ordinate:	89.8500
External:	104.3921
Tangent Direction:	S 81°37'03.2743" E
Radial Direction:	S 8°22'56.7257" W
Chord Direction:	N 67°46'38.7240" E
Radial Direction:	S 52°49'39.2777" E
Tangent Direction:	N 37°10'20.7223" E

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP 5	S 256+89.1	44.9243	341284.0840	613989.2670	54.4200
TP 6	7+63.57	-5.8737	341241.7630	614572.9510	52.7640
TP 8	14+52.92	-25.229	341788.1240	614988.1070	48.2023

NOTE: NEGATIVE DENOTES LEFT OF BASELINE

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
13501	17+80.80	0.0000	342034.1424	615206.3214
16000	413+51.40	0.0000	341135.4018	614393.8465
16002	412+45.05	27.5248	341018.2362	614435.9771
16003	411+36.57	0.0000	340931.7985	614370.4327
16005	413+35.37	0.0000	341120.3158	614399.2712
18001	0+74.00	0.0000	341127.9286	613920.8475
18003	0+00.00	0.0000	341138.7163	613847.6381
18005	6+17.99	104.392	341048.6266	614459.0216
18006	2+36.46	0.0000	341104.2456	614081.5695
18008	9+25.52	0.0000	341352.6360	614689.5467

DATUM REFERENCE NOTE:
HORIZONTAL - PROJECT BASED ON THE DELAWARE STATE PLAN COORDINATE SYSTEM (NAD 83)

VERTICAL - PLAN ELEVATIONS ARE BASED ON N.G.S. SURVEY DATUM (NAVD 88)

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 90 180 270
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	T200900801
COUNTY	KENT
BRIDGE NO.	
DESIGNED BY: STEVE BROWN	
CHECKED BY:	

HORIZONTAL AND VERTICAL CONTROL

SHEET NO.	10
TOTAL SHTS.	39

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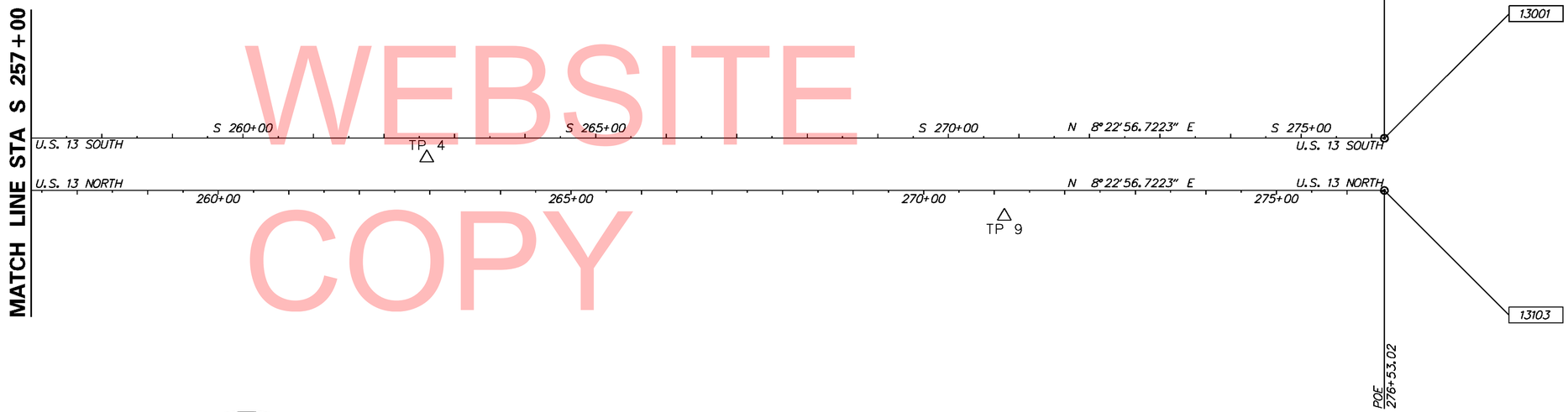
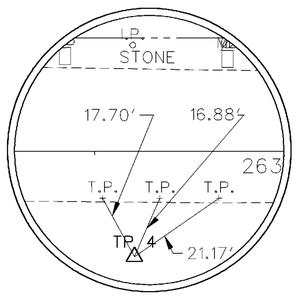
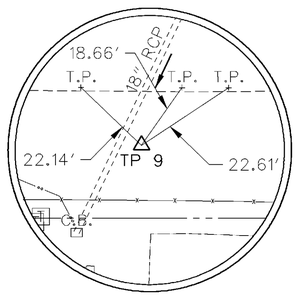




TRAVERSE POINT #4
DELDOT CAP



TRAVERSE POINT #9
DELDOT CAP

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
13001	S 276+17.9	0.0000	343244.3821	614157.9157
13103	276+53.02	0.0000	343233.5594	614231.1200

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP 4	S 262+60.5	27.9335	341897.3860	613987.6660	55.6663
TP 9	271+14.3	36.7010	342695.2740	614188.8990	55.0763

DATUM REFERENCE NOTE:
HORIZONTAL - PROJECT BASED ON THE DELAWARE STATE PLAN COORDINATE SYSTEM (NAD 83)

VERTICAL - PLAN ELEVATIONS ARE BASED ON N.G.S. SURVEY DATUM (NAVD 88)

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 90 180 270 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

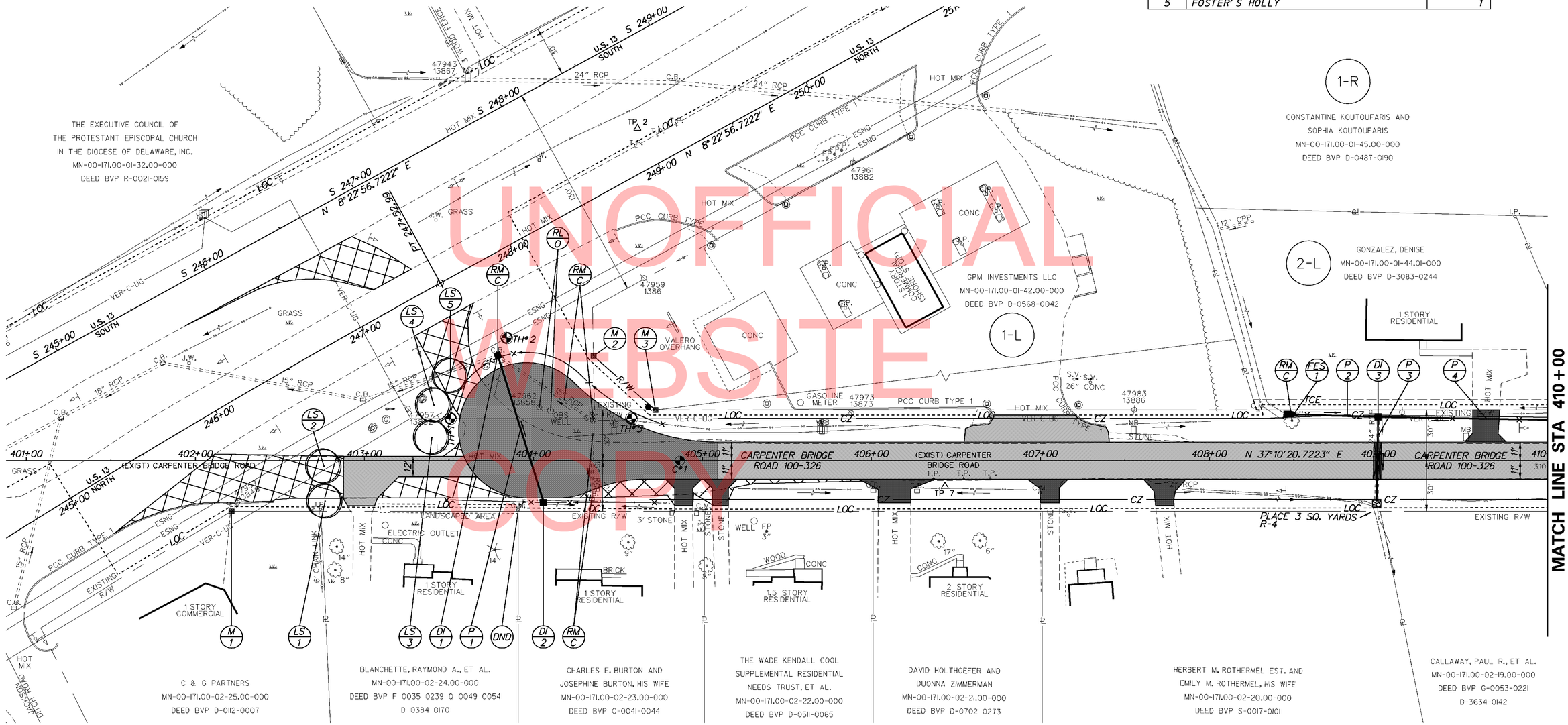
CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY: STEVE BROWN
KENT	CHECKED BY:

HORIZONTAL AND VERTICAL CONTROL

SHEET NO.
11
TOTAL SHTS.
39

LANDSCAPE PLANTING SCHEDULE

NO.	PLANTING DESCRIPTION	QUANTITY
1	FOSTER'S HOLLY	1
2	FOSTER'S HOLLY	1
3	FOSTER'S HOLLY	1
4	FOSTER'S HOLLY	1
5	FOSTER'S HOLLY	1



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UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
1	VERIZON	403+51.01	-24.96	52.02	1.72	3/4" CABLE
2	E.S.N.G.	403+85.35	-64.99	51.17	3.24	6" METAL
3	VERIZON	404+58.12	-25.00	52.07	2.14	3/4" CABLE

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C#1	404+86.71	0.00	EXISTING CARPENTER BRIDGE ROAD

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
1	403+78.97	-62.20	34" x 24"	1	49.98	46.87
2	404+05.84	24.71	34" x 24"	1	51.50	48.40
3	409+00.00	-25.83	48" x 48"	1	50.00	46.47

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	STATION	OFFSET	NORTHING	EASTING
1	402+21.40	30.00	340184.4405	613841.3736
2	404+35.57	-61.99	340410.6796	613897.4761
3	404+72.21	-30.00	340420.5446	613945.1081

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	15" RCP	IV	91.00	0.0167	48.40	46.88
2	19"x30" RCP	IV	48.00	0.0148	47.18	46.47
3	19"x30" RCP	IV	48.00	0.0042	46.47	46.26
4	15" RCP	IV	102.00	0.0035	46.83	46.47

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
1	19"x30" RCP	0.014	YES

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY: STEVE BROWN
KENT	CHECKED BY:

CONSTRUCTION PLAN

SHEET NO.
12
TOTAL SHTS.
39

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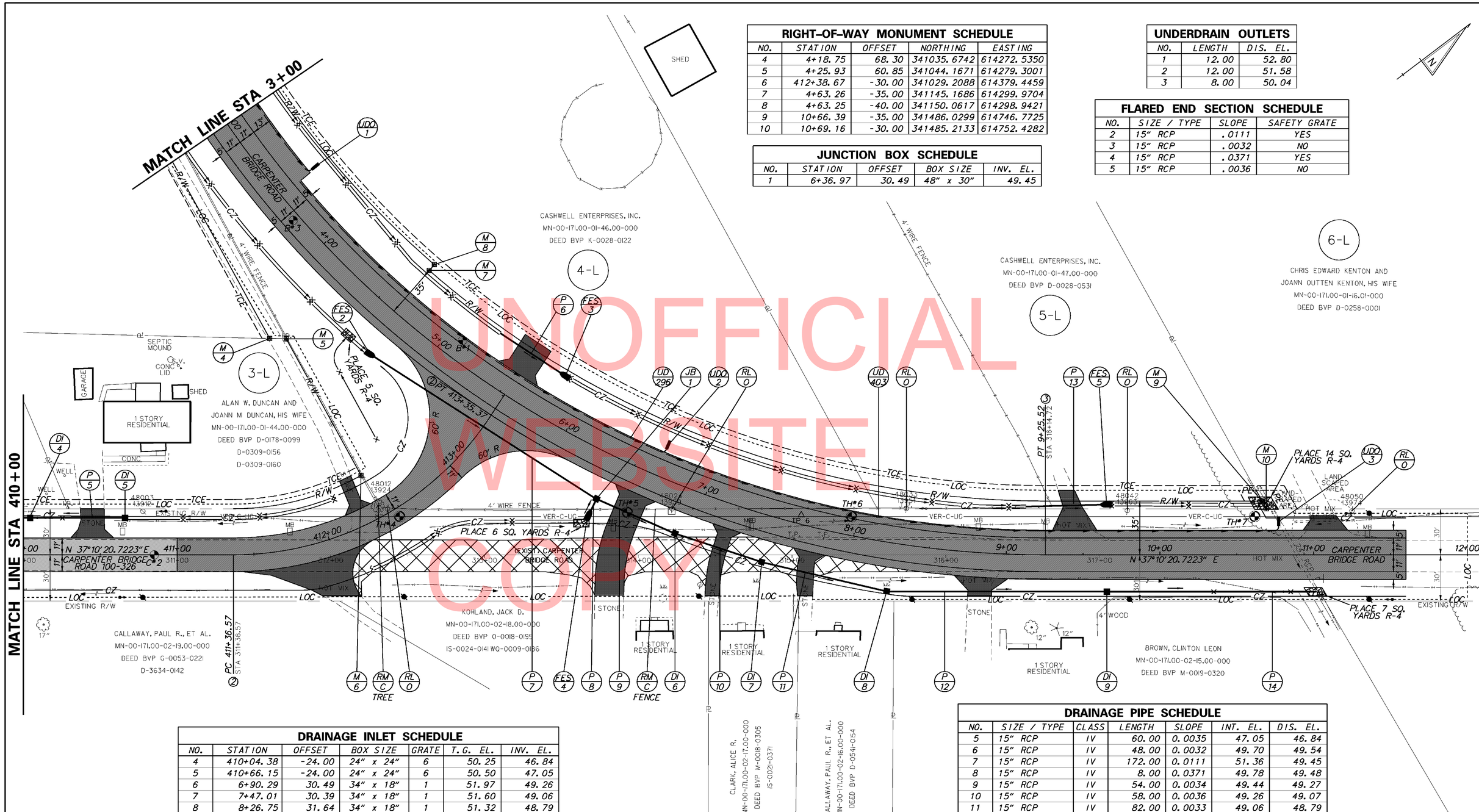

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RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	STATION	OFFSET	NORTHING	EASTING
4	4+18.75	68.30	341035.6742	614272.5350
5	4+25.93	60.85	341044.1671	614279.3001
6	412+38.67	-30.00	341029.2088	614379.4459
7	4+63.26	-35.00	341145.1686	614299.9704
8	4+63.25	-40.00	341150.0617	614298.9421
9	10+66.39	-35.00	341486.0299	614746.7725
10	10+69.16	-30.00	341485.2133	614752.4282

JUNCTION BOX SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	INV. EL.
1	6+36.97	30.49	48" x 30"	49.45

UNDERDRAIN OUTLETS

NO.	LENGTH	DIS. EL.
1	12.00	52.80
2	12.00	51.58
3	8.00	50.04

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
2	15" RCP	.0111	YES
3	15" RCP	.0032	NO
4	15" RCP	.0371	YES
5	15" RCP	.0036	NO

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
4	410+04.38	-24.00	24" x 24"	6	50.25	46.84
5	410+66.15	-24.00	24" x 24"	6	50.50	47.05
6	6+90.29	30.49	34" x 18"	1	51.97	49.26
7	7+47.01	30.39	34" x 18"	1	51.60	49.06
8	8+26.75	31.64	34" x 18"	1	51.32	48.79
9	9+65.51	24.00	34" x 18"	1	50.85	48.32

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
4	VERIZON	412+47.26	5.74	54.29	2.22	3/4" CABLE
5	VERIZON	6+58.00	29.66	52.42	2.23	3/4" CABLE
6	VERIZON	7+96.18	-12.21	52.11	2.14	3/4" CABLE
7	VERIZON	10+61.88	-25.00	50.65	2.10	3/4" CABLE

*NOTE:
GRADE WEST SIDE OF CBR 100-326 AT INTERSECTION TO DRAIN TOWARDS FES 2
**NOTE:
ALONG EAST SIDE OF CARPENTER BRIDGE ROAD BETWEEN THE DRIVEWAYS, GRADE SIDES TO DRAIN TOWARDS INLETS

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
5	15" RCP	IV	60.00	0.0035	47.05	46.84
6	15" RCP	IV	48.00	0.0032	49.70	49.54
7	15" RCP	IV	172.00	0.0111	51.36	49.45
8	15" RCP	IV	8.00	0.0371	49.78	49.48
9	15" RCP	IV	54.00	0.0034	49.44	49.27
10	15" RCP	IV	58.00	0.0036	49.26	49.07
11	15" RCP	IV	82.00	0.0033	49.06	48.79
12	15" RCP	IV	142.00	0.0033	48.79	48.32
13	15" RCP	IV	50.00	0.0036	48.52	48.34
14	15" RCP	IV	135.00	0.0033	48.32	47.87

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C#2	410+85.47	0.00	EXISTING CARPENTER BRIDGE ROAD

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	T200900801
COUNTY	KENT
BRIDGE NO.	
DESIGNED BY: STEVE BROWN	
CHECKED BY:	

CONSTRUCTION PLAN

SHEET NO.	13
TOTAL SHTS.	39

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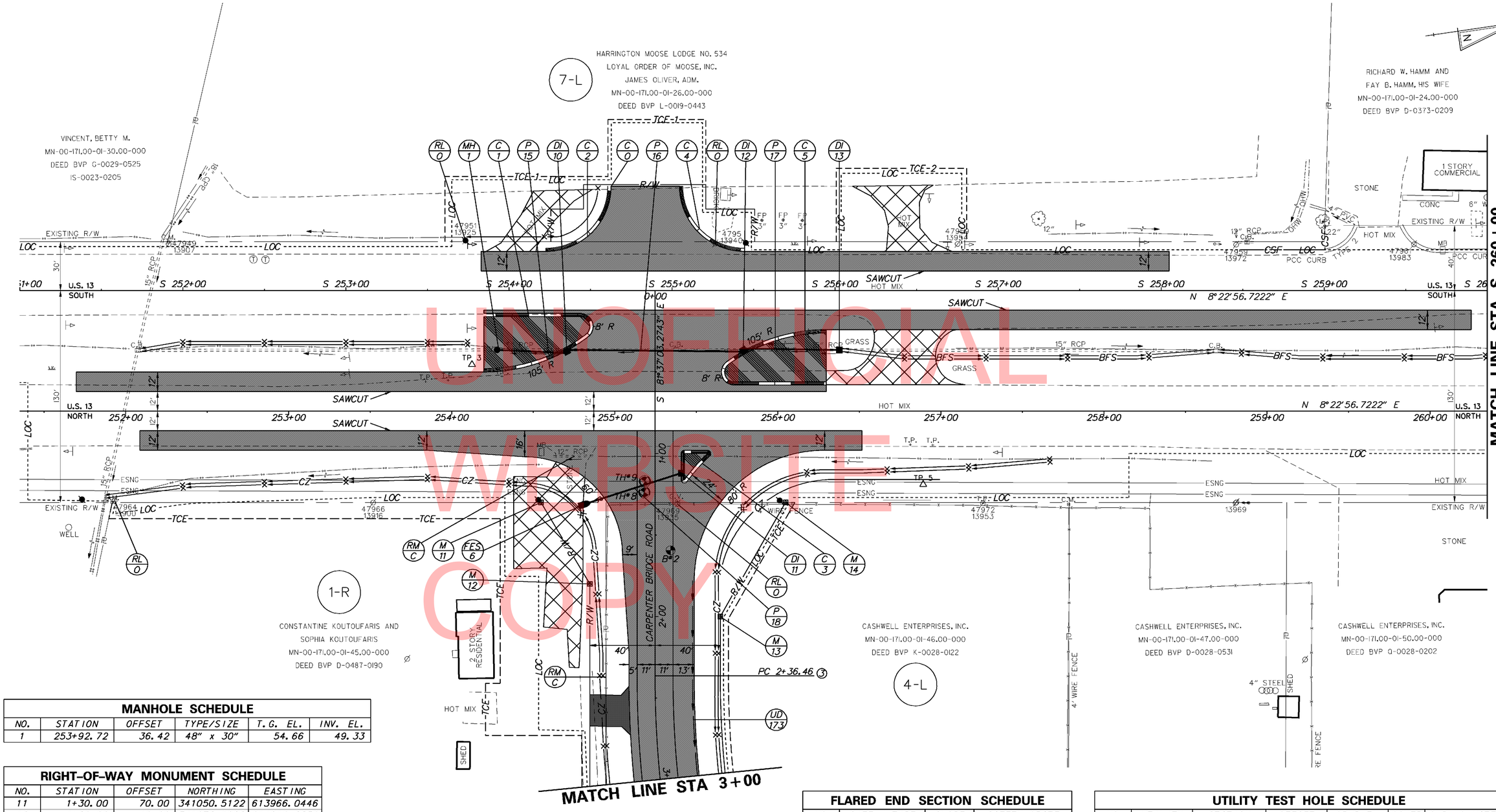

MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T. G. EL.	INV. EL.
1	253+92.72	36.42	48" x 30"	54.66	49.33

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	STATION	OFFSET	NORTHING	EASTING
11	1+30.00	70.00	341050.5122	613966.0446
12	1+80.00	40.00	341072.9028	614019.8839
13	2+00.00	-40.00	341149.1325	614051.3326
14	1+30.00	-80.00	341198.9098	613987.9116

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	P.C.C. CURB, TYPE 2	147.50
2	P.C.C. CURB, TYPE 2	62.80
3	P.C.C. CURB, TYPE 2	64.30
4	P.C.C. CURB, TYPE 2	62.80
5	P.C.C. CURB, TYPE 2	141.50

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
6	11"x18" RCP	0.1500	NO

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
8	E.S.N.G.	1+28.59	0.00	53.48	3.82	10" METAL
9	E.S.N.G.	1+18.59	0.00	53.45	2.87	6" METAL

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
10	254+35.42	37.43	48" x 48"	1	53.79	49.45
11	1+12.15	-16.50	34" x 18"	1	54.28	52.17
12	255+43.73	36.56	48" x 48"	1	54.16	49.78
13	256+02.58	36.49	34" x 24"	1	53.35	49.96

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
15	15" RCP	IV	40.00	0.0030	49.45	49.33
16	15" RCP	IV	105.00	0.0030	49.78	49.46
17	15" RCP	IV	56.00	0.0030	49.96	49.79
18	11"x18" RCP	IV	60.00	0.0032	52.17	51.98

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT
CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY: STEVE BROWN
COUNTY	CHECKED BY:
KENT	

CONSTRUCTION PLAN

SHEET NO.
14
TOTAL SHTS.
39

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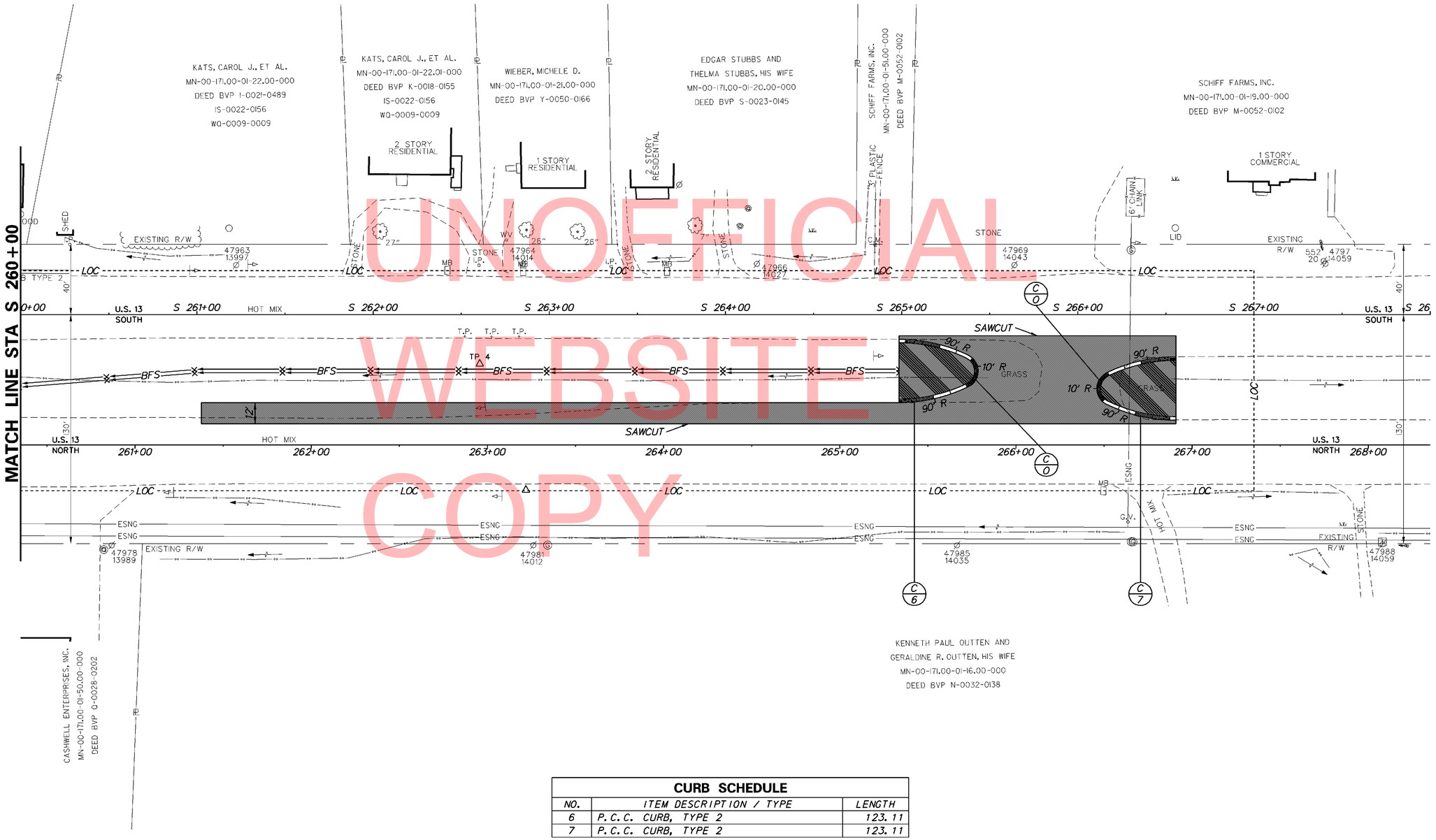

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CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
6	P.C.C. CURB, TYPE 2	123.11
7	P.C.C. CURB, TYPE 2	123.11

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	BRIDGE NO.	SHEET NO. 15
				COUNTY KENT	DESIGNED BY: STEVEN BROWN	TOTAL SHTS. 39
					CHECKED BY:	CONSTRUCTION PLAN

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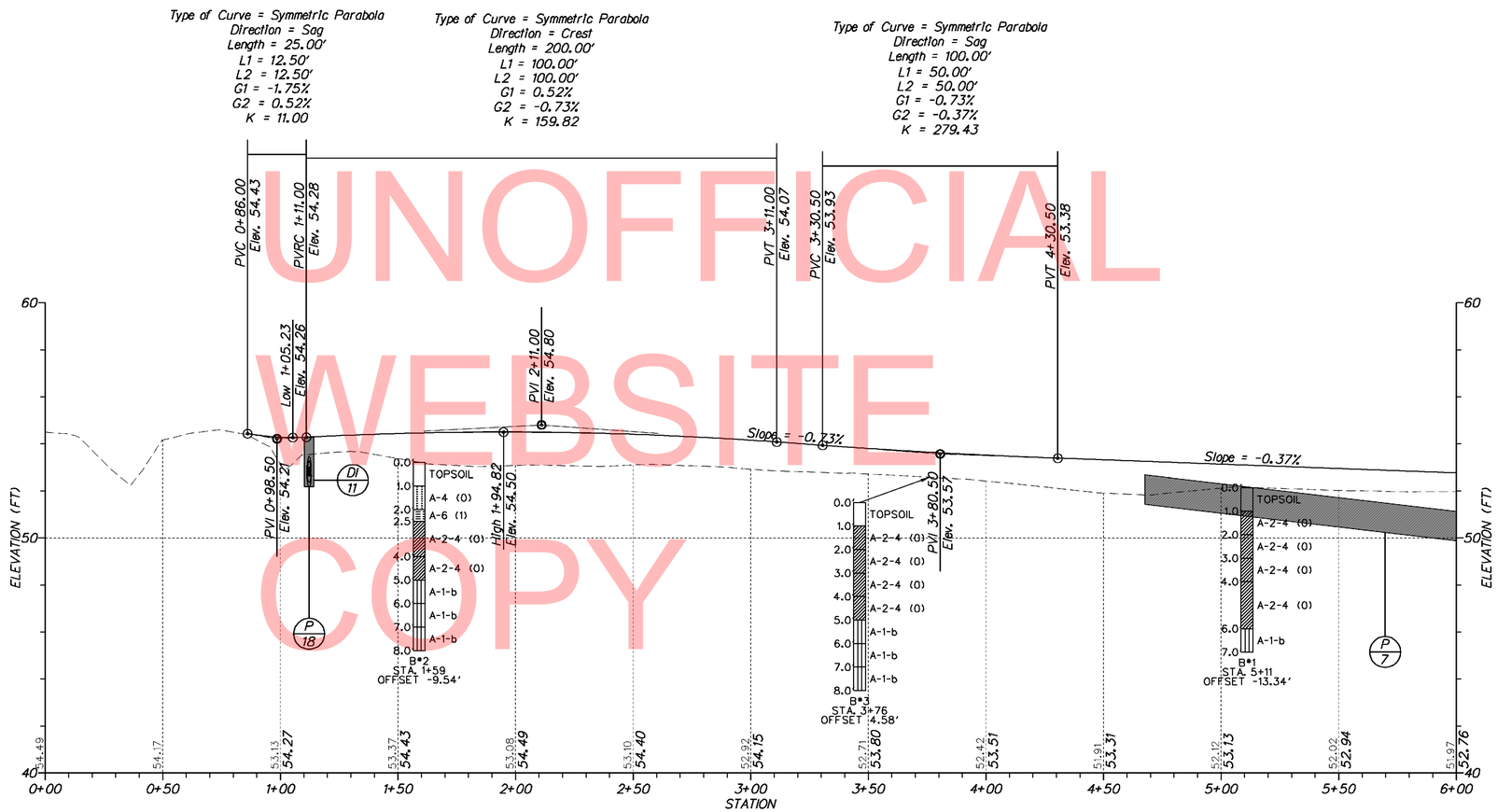

CARPENTER BRIDGE ROAD

VERTICAL SCALE FEET 0 3 6 9

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	BRIDGE NO.	SHEET NO. 16
				COUNTY KENT	DESIGNED BY: STEVE BROWN	TOTAL SHTS. 39
					CHECKED BY:	PROFILES

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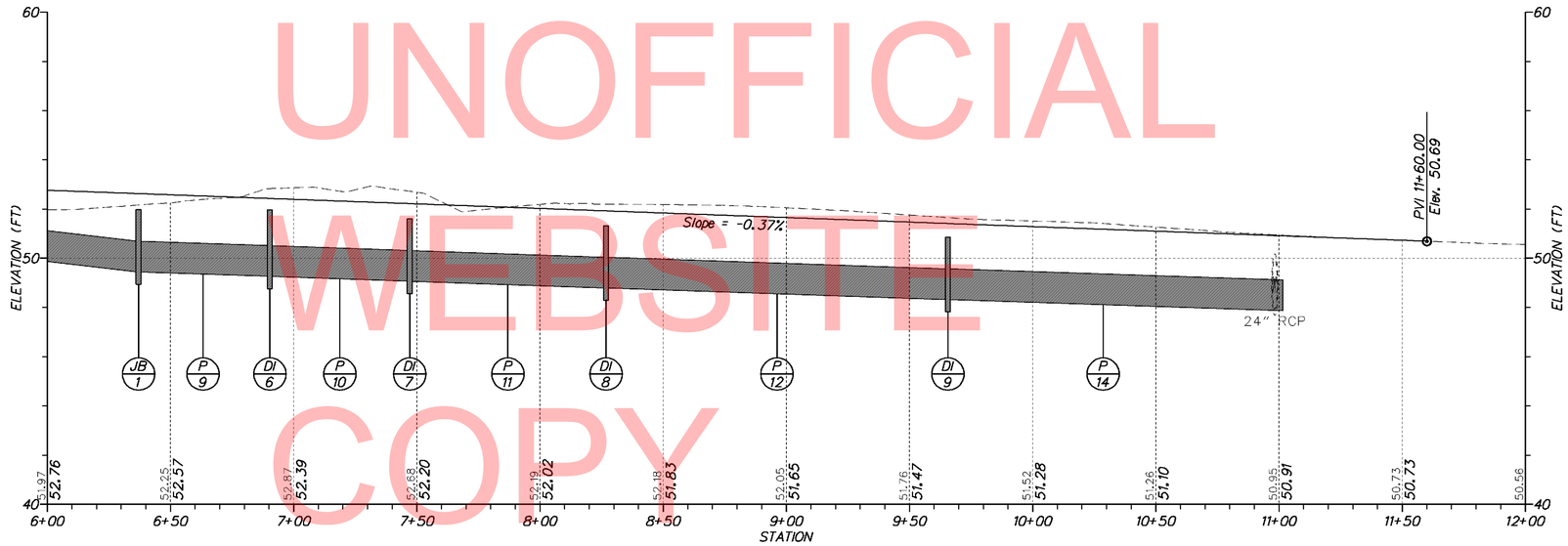

CARPENTER BRIDGE ROAD

VERTICAL SCALE FEET 0 3 6 9

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HSIP KC, US 13 AT CARPENTER BRIDGE ROAD**	CONTRACT T200900801 / COUNTY KENT / BRIDGE NO. / DESIGNED BY: STEVE BROWN / CHECKED BY:	**PROFILES**	SHEET NO. 17 / TOTAL SHTS. 39

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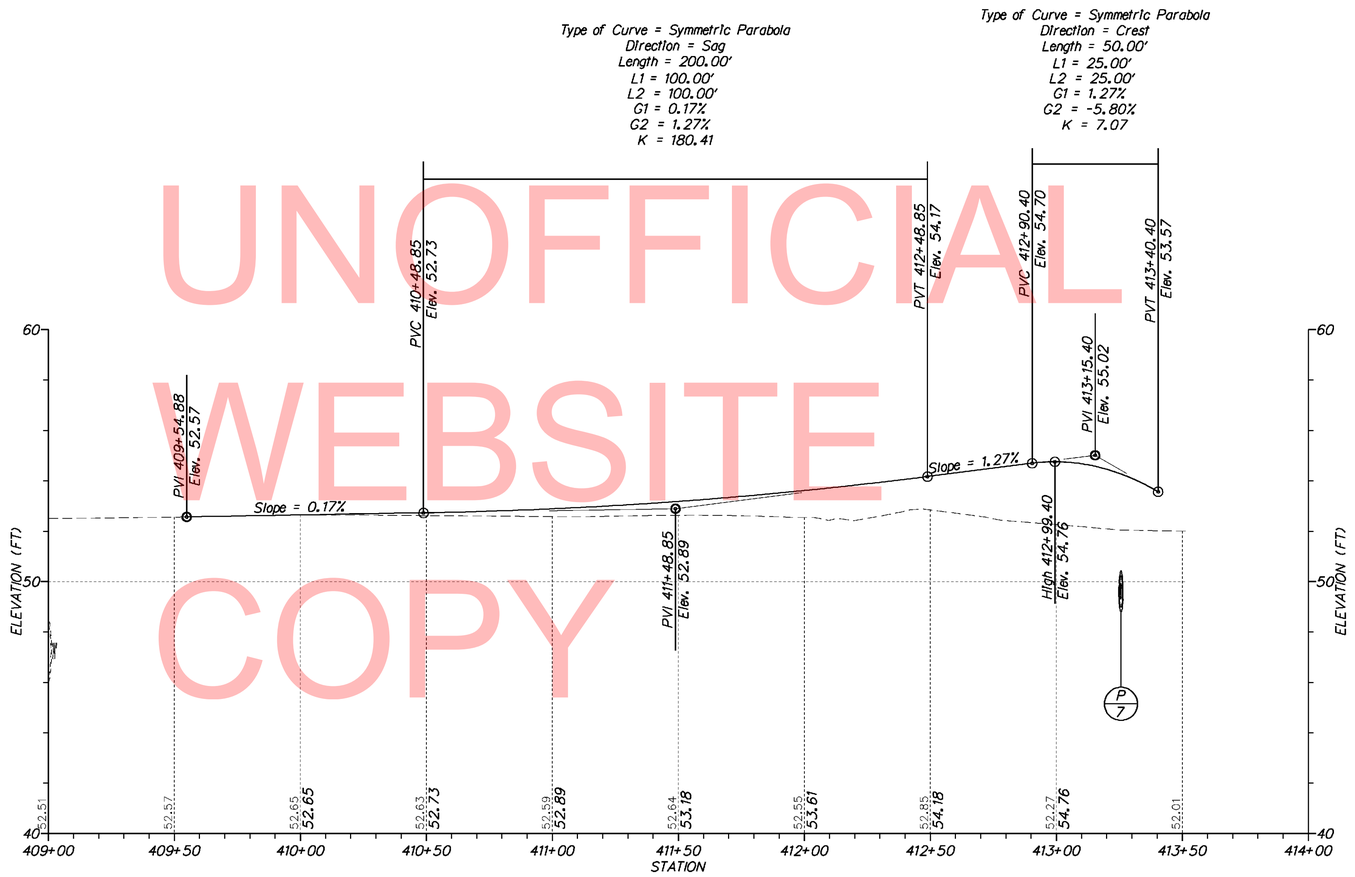

ACCESS ROAD

VERTICAL SCALE FEET
9
6
3
0

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HSIP KC, US 13 AT CARPENTER BRIDGE ROAD**	CONTRACT T200900801 / COUNTY KENT	BRIDGE NO. / DESIGNED BY: STEVE BROWN / CHECKED BY:	**PROFILES**	SHEET NO. 18 / TOTAL SHTS. 39

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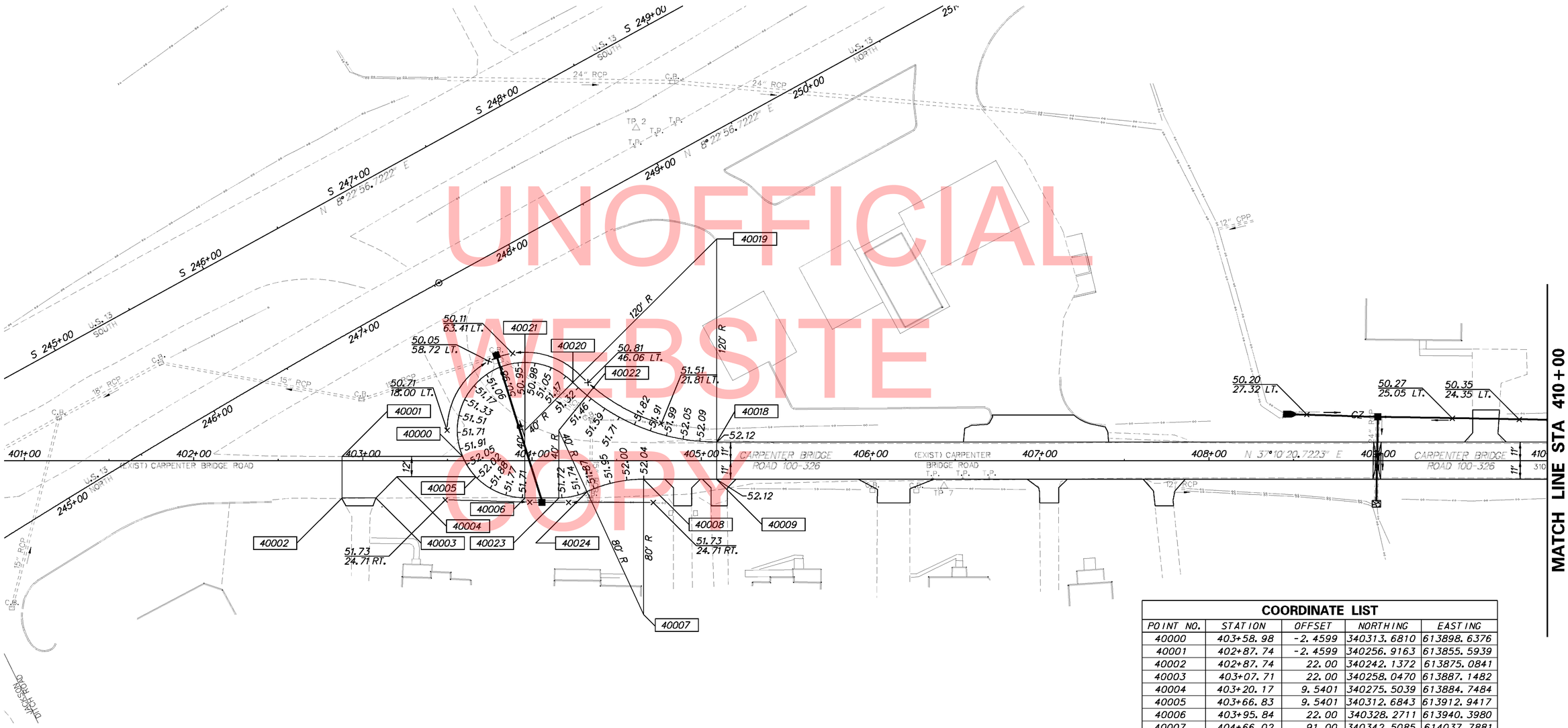

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COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
40000	403+58.98	-2.4599	340313.6810	613898.6376
40001	402+87.74	-2.4599	340256.9163	613855.5939
40002	402+87.74	22.00	340242.1372	613875.0841
40003	403+07.71	22.00	340258.0470	613887.1482
40004	403+20.17	9.5401	340275.5039	613884.7484
40005	403+66.83	9.5401	340312.6843	613912.9417
40006	403+95.84	22.00	340328.2711	613940.3980
40007	404+66.02	91.00	340342.5085	614037.7881
40008	404+66.02	11.00	340390.8457	613974.0424
40009	405+09.11	11.00	340425.1766	614000.0749
40018	405+09.11	-11.00	340438.4693	613982.5448
40019	405+09.11	-131.00	340510.9752	613886.9263
40020	404+24.15	-46.25	340392.0736	613903.1254
40021	403+95.84	-18.00	340352.4397	613908.5251
40022	404+15.84	-18.00	340368.3759	613920.6092
40023	404+15.84	22.00	340344.2072	613952.4820
40024	404+32.57	18.33	340359.7534	613959.6688

*NOTE: NEGATIVE DENOTES LEFT OF BASELINE

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

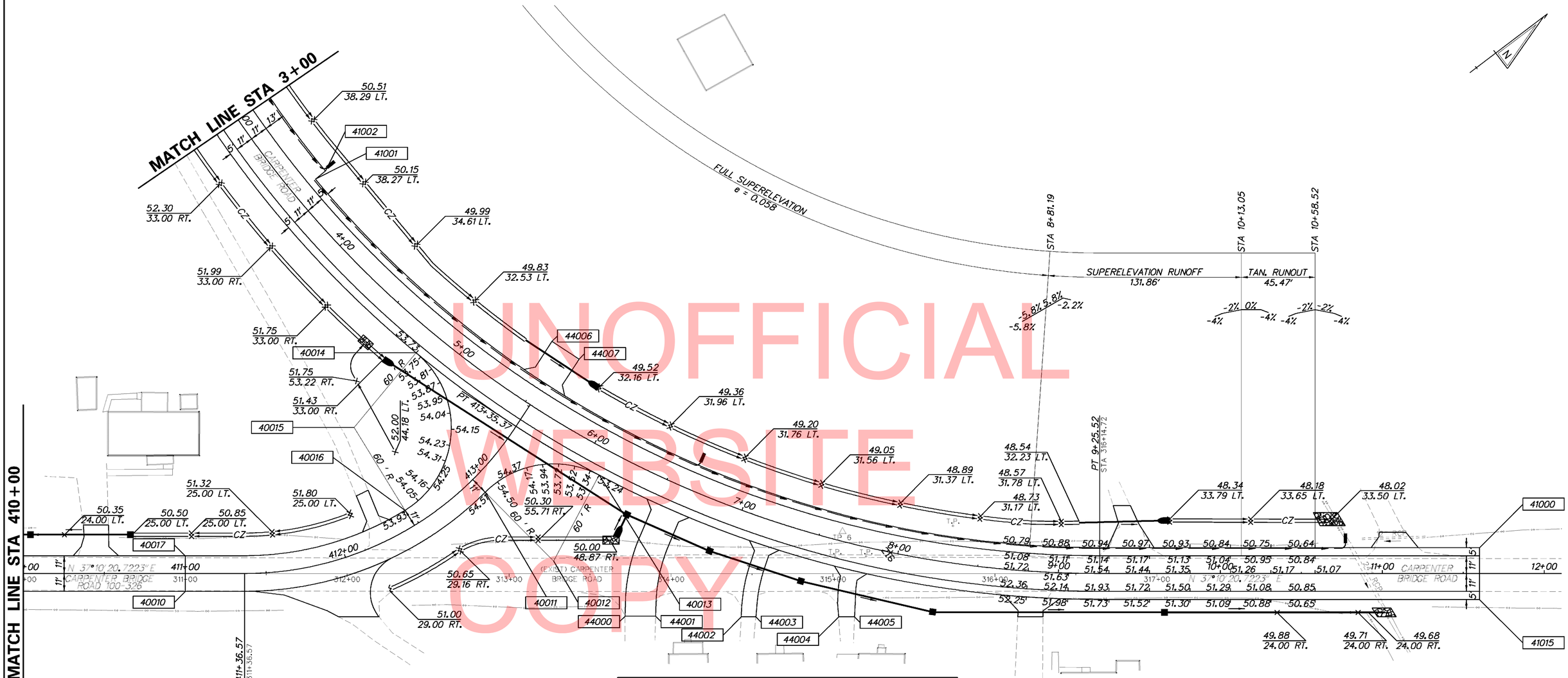
SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY: STEVE BROWN
KENT	CHECKED BY:

GRADES AND GEOMETRICS

SHEET NO.
19
TOTAL SHTS.
39



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COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
40010	411+00.00	11.00	340896.0104	614357.1002
40011	412+92.95	11.00	341080.6479	614420.2017
40012	412+92.95	71.00	341088.6118	614479.6708
40013	6+11.63	16.00	341143.0149	614454.3665
40014	4+78.71	16.00	341098.6546	614325.8325
40015	412+47.05	-71.00	341040.2249	614339.4696
40016	412+47.05	-11.00	341034.4497	614399.1910
40017	411+00.00	-11.00	340909.3032	614339.5701
41000	11+60.00	-16.00	341549.1410	614818.4733
41001	3+58.73	-16.00	341113.9439	614202.8062
41002	3+58.73	-24.00	341121.9364	614202.4601
41015	11+60.00	16.00	341529.8061	614843.9715
44000	6+59.99	87.54	341103.1588	614533.4262
44001	6+75.40	80.18	341118.2208	614544.8475
44002	7+20.17	62.30	341160.0555	614577.0957
44003	7+28.04	59.52	341167.2630	614582.5611
44004	7+73.56	45.84	341207.9748	614613.4321
44005	7+82.56	43.60	341215.8502	614619.4039
44006	5+42.80	40.00	341169.7367	614370.8735
44007	5+64.13	40.00	341176.5401	614389.6937

*NOTE: NEGATIVE DENOTES LEFT OF BASELINE

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

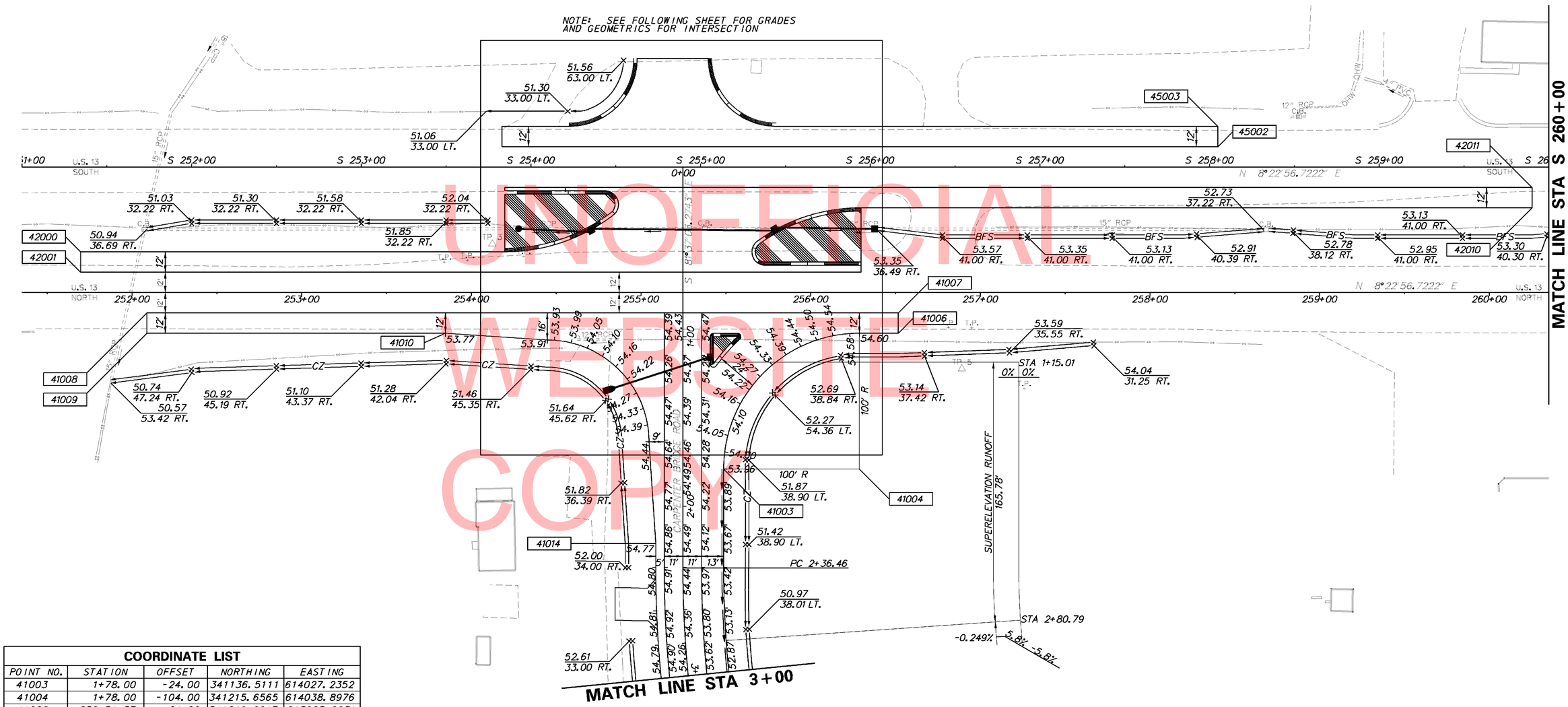
HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY: STEVE BROWN
COUNTY	CHECKED BY:
KENT	

GRADES AND GEOMETRICS

SHEET NO.
20
TOTAL SHTS.
39

Y:\KENT\035\ROAD\2900801\PLANS\CPSF02.DGN



UNOFFICIAL WEBSITE COPY

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
41003	1+78.00	-24.00	341136.5111	614027.2352
41004	1+78.00	-104.00	341215.6565	614038.8976
41006	256+51.57	24.00	341249.9917	613963.0931
41007	256+51.57	12.00	341251.7410	613951.2213
41008	252+08.65	12.00	340813.5550	613886.6530
41009	252+08.65	24.00	340811.8057	613898.5248
41010	253+84.65	24.00	340985.9255	613924.1820
41014	2+22.00	16.00	341090.5241	614064.9340
42000	251+69.65	-24.00	340780.2197	613845.3522
42001	251+69.65	-12.00	340778.4704	613857.2240
42010	S259+90.08	24.00	341630.3770	613944.3453
42011	S259+90.08	12.00	341632.1263	613932.4734
45002	S258+04.85	-12.00	341452.3749	613881.7273
45003	S258.04.85	-24.00	341454.1243	613869.8555

*NOTE: NEGATIVE DENOTES LEFT OF BASELINE

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

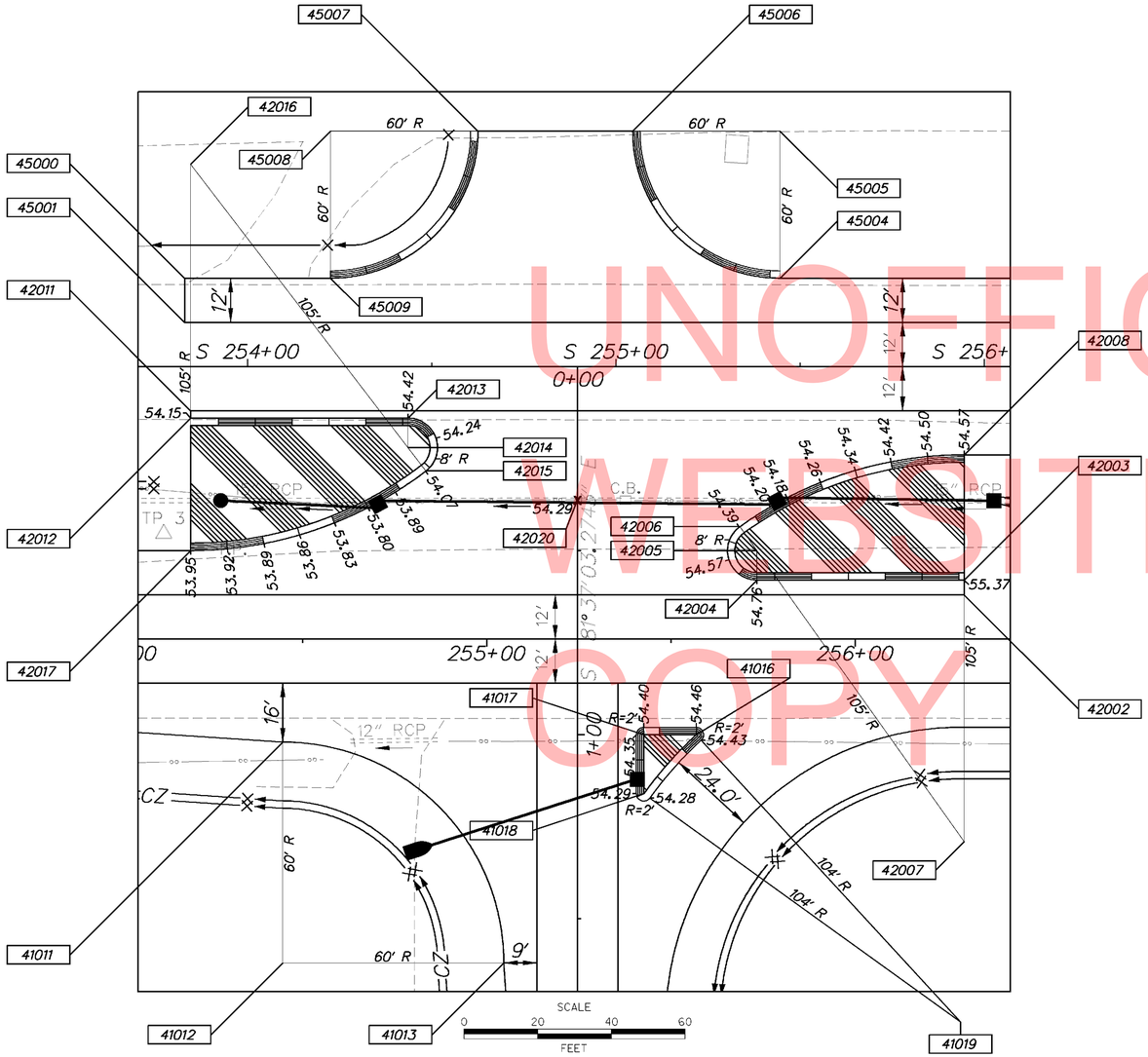
HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY: STEVE BROWN
KENT	CHECKED BY:

GRADES AND GEOMETRICS

SHEET NO.
21
TOTAL SHTS.
39

Y:\KENT\035\ROAD\2900801\PLANS\CPSF03.DGN



UNOFFICIAL WEBSITE COPY

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
41011	254+44.65	28.00	341044.7014	613936.8861
41012	254+44.65	88.00	341035.9546	613996.2451
41013	1+62.00	20.00	341095.3136	614004.9919
41016	1+00.00	-32.22	341156.0166	613951.2672
41017	1+00.00	-18.00	341141.9460	613949.1938
41018	1+16.03	-18.00	341139.6088	613965.0548
41019	1+78.00	-104.00	341215.6565	614038.8976
42002	256+29.65	-12.00	341233.5562	613924.2826
42003	256+29.65	-16.00	341234.1393	613920.3253
42004	255+73.37	-16.00	341178.4556	613912.1201
42005	255+73.37	-24.00	341179.6219	613904.2056
42006	255+68.72	-30.52	341175.9792	613897.0830
42007	256+29.65	55.00	341223.7890	613990.5668
42008	S255+94.48	24.00	341239.0958	613886.6885
42011	S259+84.58	12.00	341033.0886	613844.2030
42012	S253+84.58	14.00	341032.7970	613846.1817
42013	S254+43.57	14.00	341091.1584	613854.7814
42014	S254+43.57	22.00	341089.9921	613862.6960
42015	S254+48.43	28.35	341093.8796	613869.6879
42016	S253+84.58	-55.00	341042.8558	613777.9188
42017	254+19.65	-24.00	341027.5490	613881.7971
45000	S253+82.94	-24.00	341036.7182	613808.3491
45001	S253+82.94	-12.00	341034.9688	613820.2209
45004	S255+44.58	-24.00	341196.6274	613831.9123
45005	S255+44.58	-64.00	341202.4586	613792.3397
45006	S255+04.58	-64.00	341162.8859	613786.5085
45007	S254+62.58	-64.00	341121.3345	613780.3862
45008	S254+22.58	-64.00	341081.7619	613774.5545
45009	S254+22.58	-24.00	341075.9307	613814.1272

Y:\KENT\035\ROAD\2900801\PLANS\CP02PLNOTES.DGN

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

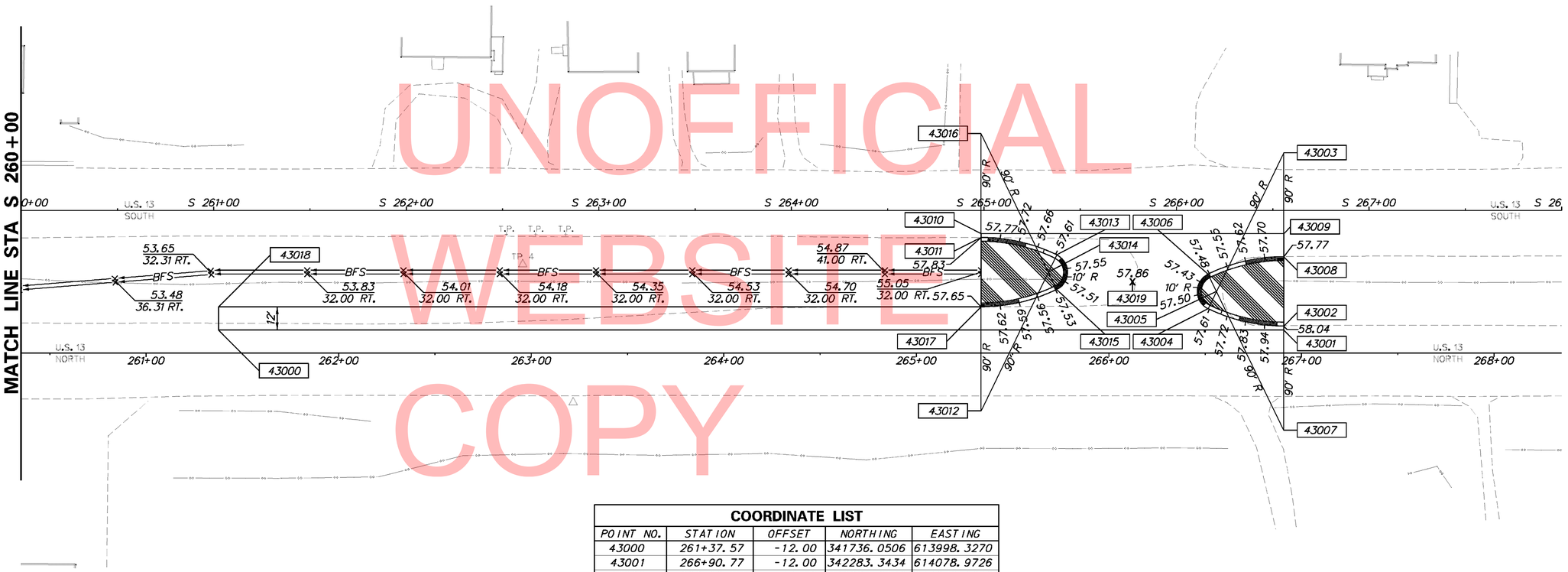
SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT
CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.	X
T200900801	DESIGNED BY:	
COUNTY		
KENT	CHECKED BY:	

GRADES AND
GEOMETRICS

SHEET NO.
22
TOTAL SHTS.
39



UNOFFICIAL WEBSITE COPY

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
43000	261+37.57	-12.00	341736.0506	613998.3270
43001	266+90.77	-12.00	342283.3434	614078.9726
43002	266+90.77	-14.00	342283.6349	614076.9940
43003	S266+55.70	-30.00	342296.7551	613987.9554
43004	266+51.54	-23.00	342246.1359	614062.3712
43005	266+55.90	-32.00	342251.7603	614054.1028
43006	S266+16.47	33.00	342248.7600	614044.5635
43007	266+90.77	40.00	342275.7628	614130.4171
43008	S266+55.70	24.00	342288.8830	614041.3786
43009	S266+55.70	12.00	342290.6323	614029.5067
43010	S264+98.56	12.00	342135.1726	614006.5992
43011	S264+98.56	14.00	342134.8810	614008.5778
43012	265+33.64	30.00	342121.7609	614097.6164
43013	S265+37.79	23.00	342172.3800	614023.2006
43014	S265+33.43	32.00	342166.7557	614031.4690
43015	265+72.87	-33.00	342169.7560	614041.0083
43016	S264+98.56	-40.00	342142.7531	613955.1547
43017	265+33.64	-24.00	342129.6330	614044.1932
43018	261+37.57	-24.00	341737.7999	613986.4552
43019	266+12.21	-37.00	342209.2580	614042.7859

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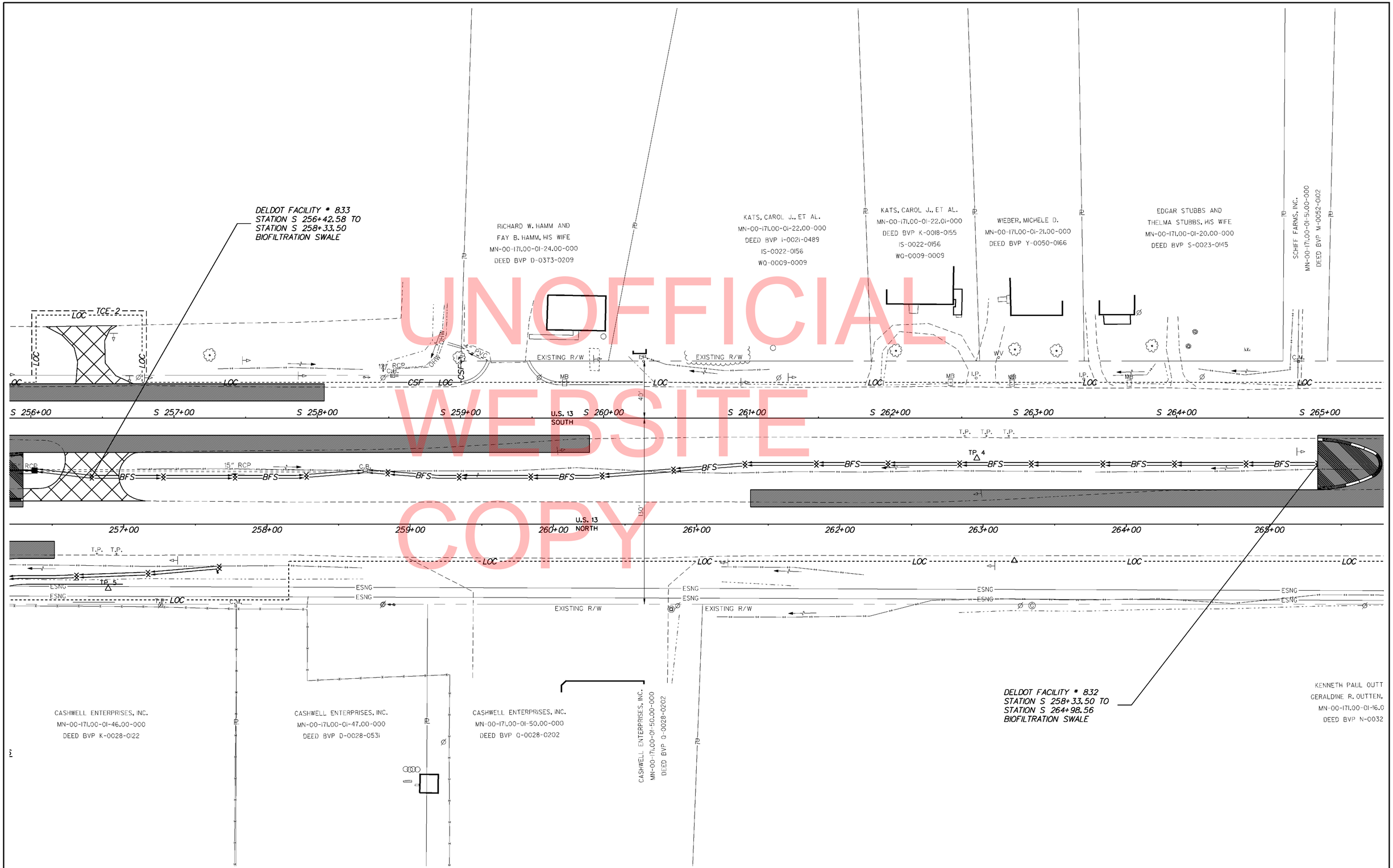
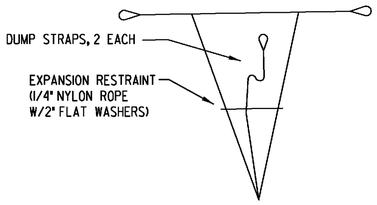
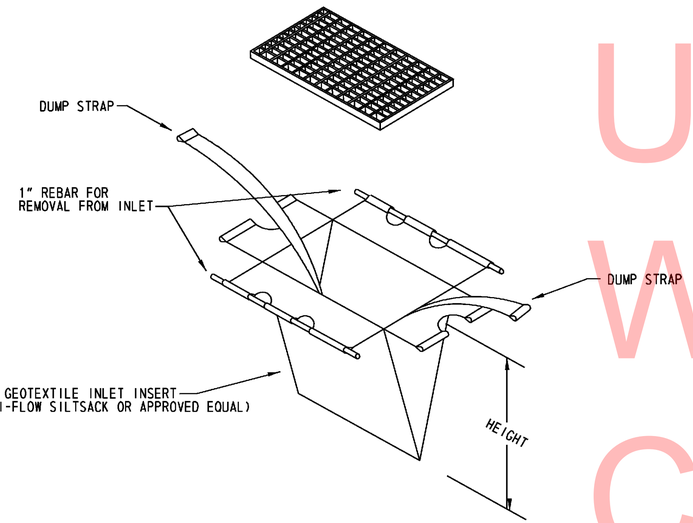


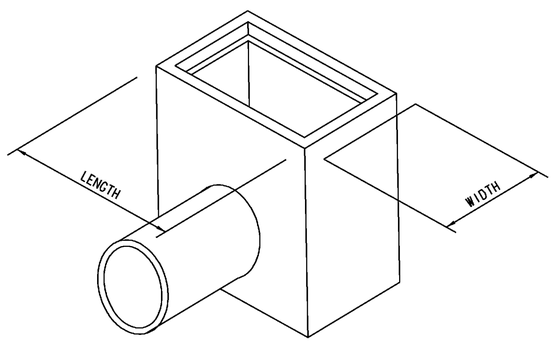
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HSIP KC, US 13 AT CARPENTER BRIDGE ROAD**	CONTRACT T200900801	BRIDGE NO.	**STORMWATER MANAGEMENT PLAN**
				COUNTY KENT	DESIGNED BY: STEVE BROWN	SHEET NO. 24
					CHECKED BY:	TOTAL SHTS. 39

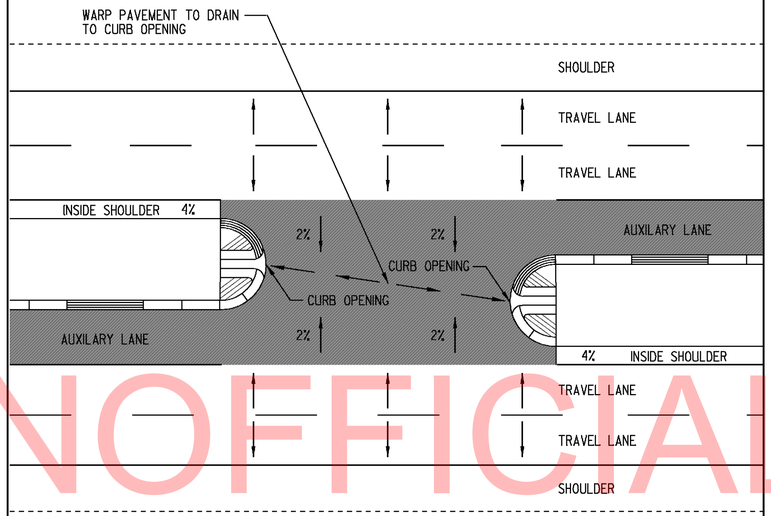
Y:\KENT\035\ROAD\2900801\PLANS\SWM01.DGN

NOTE: THE CONTRACTOR SHALL CONSTRUCT ITEM 252002 AS PER THE DNREC EROSION AND SEDIMENT CONTROL HANBOOK. THE GEOTEXTILE INLET INSERT SHALL MEET OR EXCEED THE SPECIFICATIONS OF TYPE GD-III GEOTEXTILE IN ACCORDANCE WITH APPENDIX A-3 OF THE DELAWARE EROSION & SEDIMENT CONTROL HANBOOK. ALL COSTS SHALL BE COVERED UNDER PRICE BID FOR ITEM 252002.





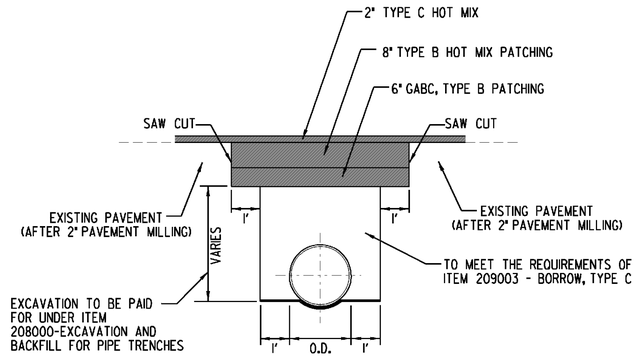




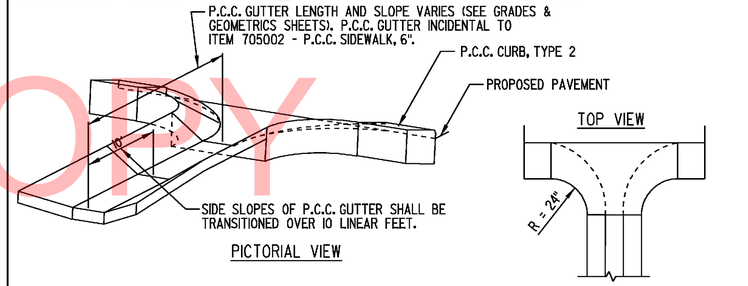
CROSSOVER DRAINAGE DETAIL
NOT TO SCALE

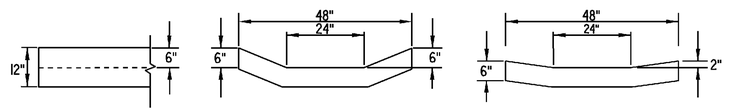
NOTES:
SAWING OF JOINTS TO BE INCLUDED UNDER ITEMS 762001- SAW CUTTING, HOT MIX.

USE CLASS C PIPE BEDDING UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



HOT-MIX PATCH AND PIPE TRENCH DETAILS
NOT TO SCALE

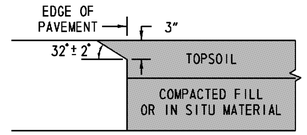




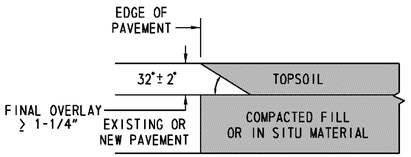
NOTES:
COST OF CURB OPENING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THAT PARTICULAR CURB. THE COST SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING AND PLACING MATERIALS, THE DISPOSAL OF SURPLUS MATERIAL AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

PLACE AS DIRECTED ON THE PLANS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

CURB OPENING AND GUTTER DETAIL
NOT TO SCALE



CONCRETE PAVEMENTS
NOT TO SCALE



HOT-MIX PAVEMENTS AND OVERLAYS
NOT TO SCALE

SAFETY EDGE DETAIL
NOT TO SCALE

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	BRIDGE NO.	CONSTRUCTION DETAILS
			COUNTY KENT	DESIGNED BY: STEVE BROWN	SHEET NO. 25
				CHECKED BY:	TOTAL SHTS. 39

MOT NOTES

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO CASE TA-10 OF THE DELAWARE MUTCD FOR CARPENTER BRIDGE ROAD AND CASE TA-33 OF THE DELAWARE MUTCD FOR US 13.

2. GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED AS A TRAVELWAY, DRIVEWAY, ACCESS RAMP, ETC. SHALL BE INCIDENTAL TO ITEM 743000 - MAINTENANCE OF TRAFFIC. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE PAY ITEM. NO PAYMENT SHALL BE MADE FOR TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM. CONSTRUCTION OF A PLANNED RUNAROUND OR DETOUR WOULD BE ELIGIBLE FOR PAYMENT AS SPECIFIED IN THE CONTRACT.

3. THIS PROJECT IS CONSIDERED A SIGNIFICANT PROJECT AS DEFINED BY DELDOT'S WORK ZONE MOBILITY PROCEDURES AND GUIDELINES. A TYPE B TRANSPORTATION MANAGEMENT PLAN (TMP) HAS BEEN PREPARED AND IS AVAILABLE FOR VIEWING BY CONTACTING THE DEPARTMENT'S SAFETY PROGRAMS MANAGER AT (302)659-4060. ALL MONITORING REQUIREMENTS OF THE TMP SHALL BE CONDUCTED BY DELDOT FORCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MODIFICATIONS TO THE TMP SHALL BE COMPLETED BY THE CONTRACTOR IF CHANGES TO THE TIME RESTRICTIONS OR THE TRAFFIC CONTROL PLAN ARE DESIRED. THE MODIFIED TMP SHALL BE PREPARED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF DELAWARE.

4. A TYPE II TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE REQUIRED ON THIS PROJECT DURING THE FOLLOWING PAVEMENT OPERATIONS: TEMPORARY/PERMANENT PAVEMENT MARKINGS, ROADSIDE SPRAYING, PATCHING, MILLING, SWEEPING, TEMPORARY TRAFFIC BARRIER PLACEMENT OR AS DIRECTED BY THE ENGINEER. THE ROLL AHEAD DISTANCE SHALL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS. THE TMA SHALL CONFORM TO THE REQUIREMENTS OF SECTION 6F.82 OF THE DELAWARE MUTCD.

5. TRAFFIC CONTROL SIGNS INSTALLED ON DIVIDED HIGHWAYS WITH MORE THAN ONE LANE IN EACH DIRECTION SHALL HAVE SIGNS PLACED ON THE EDGE OF THE RIGHT SHOULDER AND IN THE MEDIAN.

6. A PORTABLE CHANGABLE MESSAGE SIGN (PCMS) SHALL BE PLACED IN ADVANCE OF ANY TRAFFIC PATTERN MODIFICATION 10 DAYS PRIOR TO THE CHANGE, AND REMAIN 5 DAYS AFTER THE CHANGE. THE MESSAGE SHALL READ:

   CAUTION NEW
   CAUTION TRAFFIC
   CAUTION PATTERN

7. LONGITUDINAL EDGE DROP-OFFS SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

   a) WHERE PLACEMENT OF A WEDGE/FILLET BETWEEN TRAVEL LANES AND A PAVEMENT BOX IS REQUIRED, APPROVED BASE COURSE MATERIAL SHALL BE USED FOR THE FILLET MATERIAL. THE BASE COURSE MATERIAL SHALL BE PLACED AT NO GREATER THAN THE SLOPE SPECIFIED IN TABLE 6G-1 AND SHALL BE COMPACTED. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE ITEM.

   b) WHERE PLACEMENT OF A WEDGE/FILLET AT THE EDGE OF THE ROADWAY IS REQUIRED, PAVEMENT MILLINGS SHALL BE USED FOR THE FILLET MATERIAL. PAYMENT FOR PAVEMENT MILLINGS SHALL BE INCIDENTAL TO ITEM 743000. NO SEPARATE PAYMENT SHALL BE MADE FOR PAVEMENT MILLINGS TO CORRECT PAVEMENT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY USED AS PART OF A PERMANENT ROADWAY, AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT BID ITEM.

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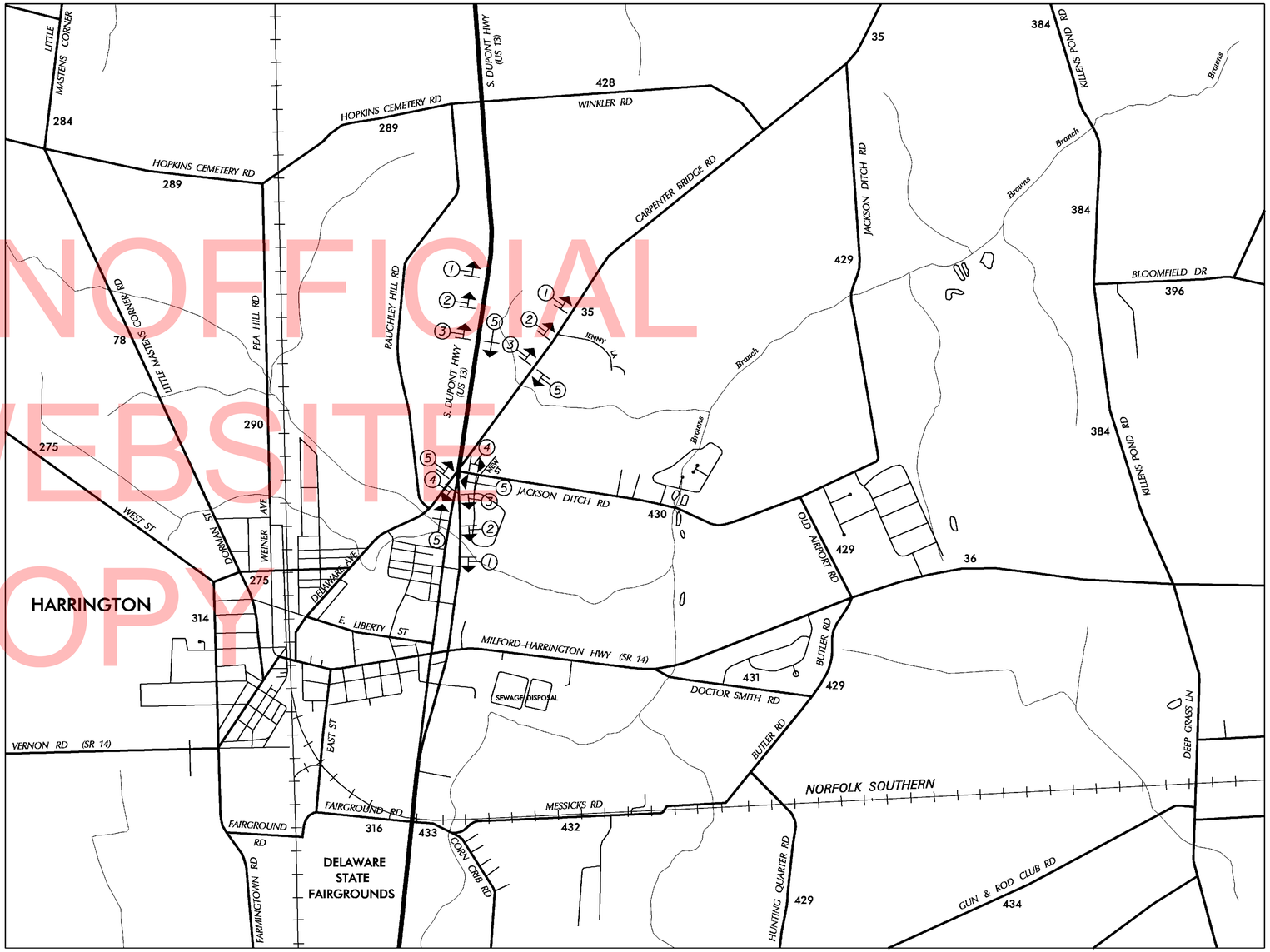

WARNING SIGN LEGEND

ROAD WORK 1500 FT	ROAD WORK 1000 FT	ROAD WORK 500 FT	ROAD WORK AHEAD	END ROAD WORK
W20-1 48" x 48" ①	W20-1 48" x 48" ②	W20-1 48" x 48" ③	W20-1 48" x 48" ④	G20-2A 48" x 24" ⑤

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801 / COUNTY KENT	BRIDGE NO. / DESIGNED BY: / CHECKED BY:	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SHEET NO. 26 / TOTAL SHTS. 39

LEGEND

- WORK TO BE COMPLETED IN THIS PHASE.
- WORK COMPLETED IN PREVIOUS PHASE.
- TYPE III BARRICADE
- PHASE — TRAFFIC FLOW ARROW
- —RSF— REINFORCED SILT FENCE

UNOFFICIAL WEBSITE COPY

PHASE I

STAGE 1:
1. PLACE VARIABLE MESSAGE SIGNS ON NORTHBOUND US 13, SOUTHBOUND US 13 AND CARPENTER BRIDGE ROAD SEVEN (7) CALENDAR DAYS IN ADVANCE OF CONSTRUCTION TO INFORM TRAVELING PUBLIC OF IMPENDING ROAD CONSTRUCTION.
2. INSTALL PERMANENT ADVANCE WARNING SIGNS ON US 13 AND CARPENTER BRIDGE ROAD.

STAGE 2:
1. CLEAR VEGETATION AND DEBRIS WITHIN THE PROPOSED LIMITS OF CONSTRUCTION FOR RELOCATED CARPENTER BRIDGE ROAD FROM STA 1+00 TO STA 7+00 AND ALL LOCATIONS OF PROPOSED UTILITY RELOCATIONS.
2. INSTALL E&S CONTROL MEASURES AS SHOWN ON THE PLANS FOR PHASE I CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.

STAGE 3:
1. INSTALL PROPOSED DRAINAGE IMPROVEMENTS AND DITCHING AS SHOWN. CONSTRUCT PROPOSED ROADWAY IMPROVEMENTS ON RELOCATED CARPENTER BRIDGE ROAD FROM STA 1+00 TO STA 7+00 UP TO THE TYPE B HOT MIX. SHOULDER CLOSURE ON NORTHBOUND US 13 SHALL BE PERFORMED UTILIZING CASE TA-3A. LANE CLOSURES ON CARPENTER BRIDGE ROAD SHALL BE PERFORMED UTILIZING CASE TA-10.

2. CONSTRUCT PROPOSED DRAINAGE, MEDIAN, TURN LANE AND ENTRANCE IMPROVEMENTS ON US 13 UP TO THE TYPE C HOT MIX. LANE CLOSURES ON US 13 SHALL BE PERFORMED UTILIZING CASE TA-33. ALL WORK INVOLVING LANE CLOSURES ON US 13 SHALL BE RESTRICTED TO THE HOURS OF 8:00 PM TO 6:00 AM. ALL THRU LANES OF US 13 SHALL BE OPEN TO TRAFFIC BY 6:00 AM THE FOLLOWING DAY.

STAGE 4:
1. REMOVE PORTION OF EXISTING MEDIAN CROSSOVER ON US 13 AT APPROXIMATE STA S256+50 AND INSTALL PROPOSED DITCHING AS SHOWN.
2. PLACE TOPSOIL, SEED AND MULCH. REMOVE ANY E&S MEASURES NO LONGER NEEDED FOR UPCOMING WORK.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 90 180 270 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY:
KENT	CHECKED BY:

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1

SHEET NO.
27
TOTAL SHTS.
39

UNOFFICIAL WEBSITE COPY

PHASE 1

STAGE 1:
1. PLACE VARIABLE MESSAGE SIGNS ON NORTHBOUND US 13, SOUTHBOUND US 13 AND CARPENTER BRIDGE ROAD SEVEN (7) CALENDAR DAYS IN ADVANCE OF CONSTRUCTION TO INFORM TRAVELING PUBLIC OF IMPENDING ROAD CONSTRUCTION.
2. INSTALL PERMANENT ADVANCE WARNING SIGNS ON US 13 AND CARPENTER BRIDGE ROAD.

STAGE 2:
1. CLEAR VEGETATION AND DEBRIS WITHIN THE PROPOSED LIMITS OF CONSTRUCTION FOR RELOCATED CARPENTER BRIDGE ROAD FROM STA 1+00 TO STA 7+00 AND ALL LOCATIONS OF PROPOSED UTILITY RELOCATIONS.
2. INSTALL E&S CONTROL MEASURES AS SHOWN ON THE PLANS FOR PHASE 1 CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.

STAGE 3:
1. INSTALL PROPOSED DRAINAGE IMPROVEMENTS AND DITCHING AS SHOWN. CONSTRUCT PROPOSED ROADWAY IMPROVEMENTS ON RELOCATED CARPENTER BRIDGE ROAD FROM STA 1+00 TO STA 7+00 UP TO THE TYPE B HOT MIX. SHOULDER CLOSURE ON NORTHBOUND US 13 SHALL BE PERFORMED UTILIZING CASE TA-3A. LANE CLOSURES ON CARPENTER BRIDGE ROAD SHALL BE PERFORMED UTILIZING CASE TA-10.

2. CONSTRUCT PROPOSED DRAINAGE, MEDIAN, TURN LANE AND ENTRANCE IMPROVEMENTS ON US 13 UP TO THE TYPE C HOT MIX. LANE CLOSURES ON US 13 SHALL BE PERFORMED UTILIZING CASE TA-33. ALL WORK INVOLVING LANE CLOSURES ON US 13 SHALL BE RESTRICTED TO THE HOURS OF 8:00 PM TO 6:00 AM. ALL THRU LANES OF US 13 SHALL BE OPEN TO TRAFFIC BY 6:00 AM THE FOLLOWING DAY.

STAGE 4:
1. REMOVE PORTION OF EXISTING MEDIAN CROSSOVER ON US 13 AT APPROXIMATE STA S256+50 AND INSTALL PROPOSED DITCHING AS SHOWN.
2. PLACE TOPSOIL, SEED AND MULCH. REMOVE ANY E&S MEASURES NO LONGER NEEDED FOR UPCOMING WORK.

LEGEND

- WORK TO BE COMPLETED IN THIS PHASE.
- WORK COMPLETED IN PREVIOUS PHASE.
- TRAFFIC FLOW ARROW
- RSF — REINFORCED SILT FENCE
- STONE CHECK DAM
- ST — SEDIMENT TRAP

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 60 120 180
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY:
COUNTY	CHECKED BY:
KENT	

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1

SHEET NO.
28
TOTAL SHTS.
39

W:\MSV8\CELLS\PROJDEV\SB.CEL

LEGEND

(dark shading)	WORK TO BE COMPLETED IN THIS PHASE.
(light shading)	WORK COMPLETED IN PREVIOUS PHASE.
(barricade symbol)	TYPE III BARRICADE
PHASE ⇨	TRAFFIC FLOW ARROW
—RSF—	REINFORCED SILT FENCE

UNOFFICIAL WEBSITE COPY

PHASE II

STAGE 1:
1. INSTALL WARNING AND DETOUR SIGNS AS SHOWN ON DETOUR PLAN SHEET.
2. CLOSE CARPENTER BRIDGE ROAD BY PLACING TYPE III BARRICADES AT STA 12+00 AND ON ACCESS ROAD AT STA 410+75. LOCAL ACCESS SHALL BE PROVIDED THROUGH THE DURATION OF THE ROAD CLOSURE.

STAGE 2:
1. CONSTRUCT PROPOSED ROADWAY TIE INS FOR CARPENTER BRIDGE ROAD AND THE ACCESS ROAD, AS SHOWN, UP TO THE TYPE B HOT MIX.
2. REMOVE EXISTING PORTION OF CARPENTER BRIDGE ROAD AS SHOWN. ALL WORK TO CONSTRUCT TIE INS AND REMOVAL OF EXISTING ROADWAY SHALL BE COMPLETED UNDER DETOUR UTILIZING CASE TA-20.
3. PLACE 2" OF TYPE C HOT MIX ON CARPENTER BRIDGE ROAD FROM US 13 THROUGH STA 11+60.
4. PLACE TOPSOIL, SEED AND MULCH. REMOVE ANY E&S MEASURES NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

STAGE 3:
1. LAYOUT AND PLACE PERMANENT PAVEMENT MARKINGS ON US 13 AND CARPENTER BRIDGE ROAD.
2. LAYOUT AND PLACE TEMPORARY PAVEMENT MARKINGS ON OTHER ROADWAYS AS NEEDED FOR PHASE III CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
3. REMOVE DETOUR AND OPEN ROADWAYS TO TRAFFIC FOR PHASE III CONSTRUCTION.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 90 180 270 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY:
COUNTY	
KENT	CHECKED BY:

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 2

UNOFFICIAL WEBSITE COPY

LEGEND

- WORK TO BE COMPLETED IN THIS PHASE.
- WORK COMPLETED IN PREVIOUS PHASE.
- PHASE — TRAFFIC FLOW ARROW
- —RSF— REINFORCED SILT FENCE
- STONE CHECK DAM
- ST SEDIMENT TRAP

PHASE II

STAGE 1:
1. INSTALL WARNING AND DETOUR SIGNS AS SHOWN ON DETOUR PLAN SHEET.
2. CLOSE CARPENTER BRIDGE ROAD BY PLACING TYPE III BARRICADES AT STA 12+00 AND ON ACCESS ROAD AT STA 410+75. LOCAL ACCESS SHALL BE PROVIDED THROUGH THE DURATION OF THE ROAD CLOSURE.

STAGE 2:
1. CONSTRUCT PROPOSED ROADWAY TIE INS FOR CARPENTER BRIDGE ROAD AND THE ACCESS ROAD, AS SHOWN, UP TO THE TYPE B HOT MIX.
2. REMOVE EXISTING PORTION OF CARPENTER BRIDGE ROAD AS SHOWN. ALL WORK TO CONSTRUCT TIE INS AND REMOVAL OF EXISTING ROADWAY SHALL BE COMPLETED UNDER DETOUR UTILIZING CASE TA-20.
3. PLACE 2" OF TYPE C HOT MIX ON CARPENTER BRIDGE ROAD FROM US 13 THROUGH STA 11+60.
4. PLACE TOPSOIL, SEED AND MULCH. REMOVE ANY E&S MEASURES NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

STAGE 3:
1. LAYOUT AND PLACE PERMANENT PAVEMENT MARKINGS ON US 13 AND CARPENTER BRIDGE ROAD.
2. LAYOUT AND PLACE TEMPORARY PAVEMENT MARKINGS ON OTHER ROADWAYS AS NEEDED FOR PHASE III CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
3. REMOVE DETOUR AND OPEN ROADWAYS TO TRAFFIC FOR PHASE III CONSTRUCTION.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

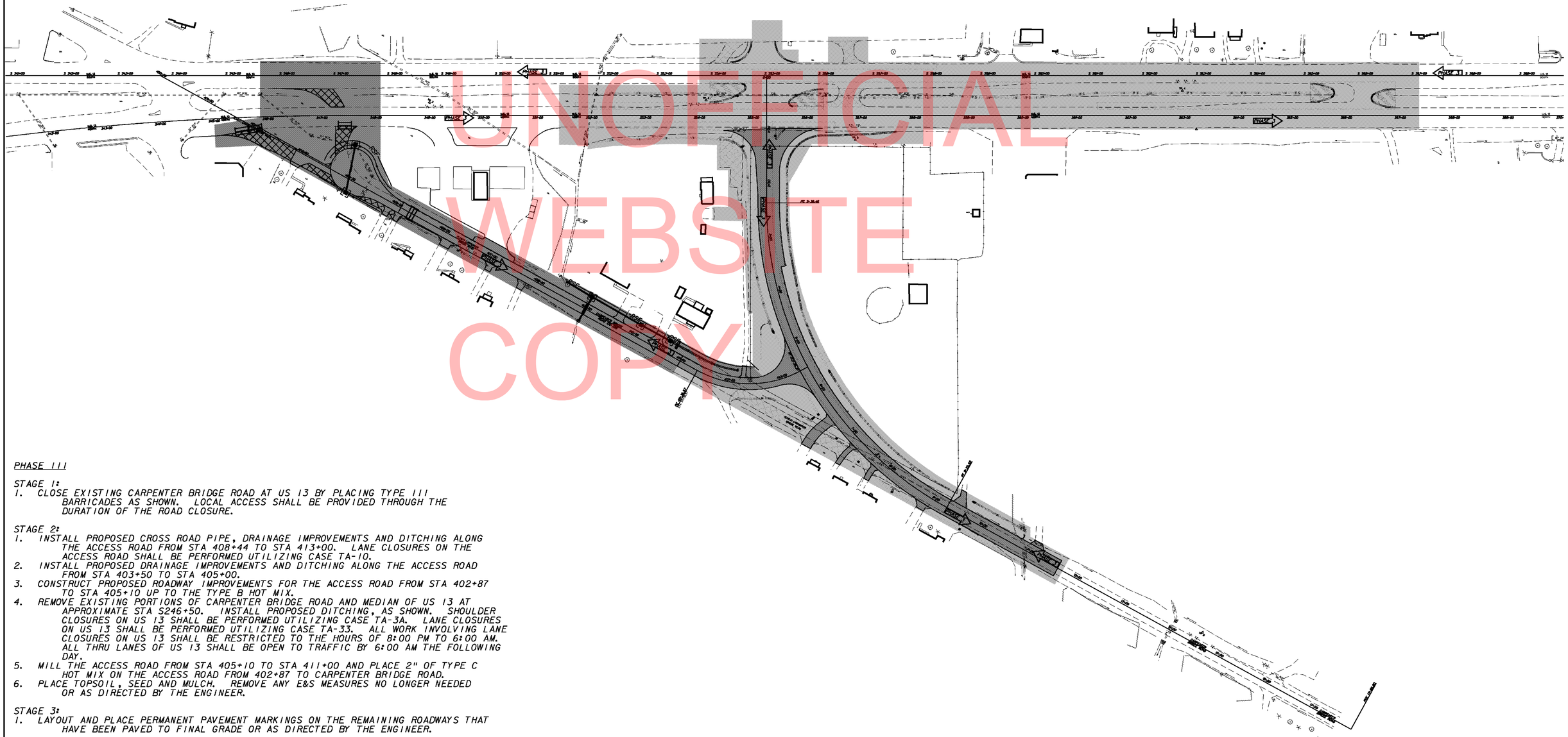
CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY:
COUNTY	
KENT	CHECKED BY:

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 2

SHEET NO.
30
TOTAL SHTS.
39

LEGEND

- WORK TO BE COMPLETED IN THIS PHASE.
- WORK COMPLETED IN PREVIOUS PHASE.
- TYPE III BARRICADE
- PHASE — TRAFFIC FLOW ARROW
- —RSF— REINFORCED SILT FENCE



UNOFFICIAL WEBSITE COPY

PHASE III

STAGE 1:
1. CLOSE EXISTING CARPENTER BRIDGE ROAD AT US 13 BY PLACING TYPE III BARRICADES AS SHOWN. LOCAL ACCESS SHALL BE PROVIDED THROUGH THE DURATION OF THE ROAD CLOSURE.

STAGE 2:
1. INSTALL PROPOSED CROSS ROAD PIPE, DRAINAGE IMPROVEMENTS AND DITCHING ALONG THE ACCESS ROAD FROM STA 408+44 TO STA 413+00. LANE CLOSURES ON THE ACCESS ROAD SHALL BE PERFORMED UTILIZING CASE TA-10.
2. INSTALL PROPOSED DRAINAGE IMPROVEMENTS AND DITCHING ALONG THE ACCESS ROAD FROM STA 403+50 TO STA 405+00.
3. CONSTRUCT PROPOSED ROADWAY IMPROVEMENTS FOR THE ACCESS ROAD FROM STA 402+87 TO STA 405+10 UP TO THE TYPE B HOT MIX.
4. REMOVE EXISTING PORTIONS OF CARPENTER BRIDGE ROAD AND MEDIAN OF US 13 AT APPROXIMATE STA S246+50. INSTALL PROPOSED DITCHING, AS SHOWN. SHOULDER CLOSURES ON US 13 SHALL BE PERFORMED UTILIZING CASE TA-3A. LANE CLOSURES ON US 13 SHALL BE PERFORMED UTILIZING CASE TA-33. ALL WORK INVOLVING LANE CLOSURES ON US 13 SHALL BE RESTRICTED TO THE HOURS OF 8:00 PM TO 6:00 AM. ALL THRU LANES OF US 13 SHALL BE OPEN TO TRAFFIC BY 6:00 AM THE FOLLOWING DAY.
5. MILL THE ACCESS ROAD FROM STA 405+10 TO STA 411+00 AND PLACE 2" OF TYPE C HOT MIX ON THE ACCESS ROAD FROM 402+87 TO CARPENTER BRIDGE ROAD.
6. PLACE TOPSOIL, SEED AND MULCH. REMOVE ANY E&S MEASURES NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

STAGE 3:
1. LAYOUT AND PLACE PERMANENT PAVEMENT MARKINGS ON THE REMAINING ROADWAYS THAT HAVE BEEN PAVED TO FINAL GRADE OR AS DIRECTED BY THE ENGINEER.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

SCALE
0 90 180 270
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY:
COUNTY	CHECKED BY:
KENT	

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 3

SHEET NO.
31
TOTAL SHTS.
39

UNOFFICIAL WEBSITE COPY

LEGEND

- WORK TO BE COMPLETED IN THIS PHASE.
- WORK COMPLETED IN PREVIOUS PHASE.
- PHASE — TRAFFIC FLOW ARROW
- —RSF— REINFORCED SILT FENCE
- STONE CHECK DAM
- ST SEDIMENT TRAP

PHASE III

STAGE 1:
1. CLOSE EXISTING CARPENTER BRIDGE ROAD AT US 13 BY PLACING TYPE III BARRICADES AS SHOWN. LOCAL ACCESS SHALL BE PROVIDED THROUGH THE DURATION OF THE ROAD CLOSURE.

STAGE 2:
1. INSTALL PROPOSED CROSS ROAD PIPE, DRAINAGE IMPROVEMENTS AND DITCHING ALONG THE ACCESS ROAD FROM STA 408+44 TO STA 413+00. LANE CLOSURES ON THE ACCESS ROAD SHALL BE PERFORMED UTILIZING CASE TA-10.
2. INSTALL PROPOSED DRAINAGE IMPROVEMENTS AND DITCHING ALONG THE ACCESS ROAD FROM STA 403+50 TO STA 405+00.
3. CONSTRUCT PROPOSED ROADWAY IMPROVEMENTS FOR THE ACCESS ROAD FROM STA 402+87 TO STA 405+10 UP TO THE TYPE B HOT MIX.
4. REMOVE EXISTING PORTIONS OF CARPENTER BRIDGE ROAD AND MEDIAN OF US 13 AT APPROXIMATE STA S246+50. INSTALL PROPOSED DITCHING, AS SHOWN. SHOULDER CLOSURES ON US 13 SHALL BE PERFORMED UTILIZING CASE TA-3A. LANE CLOSURES ON US 13 SHALL BE PERFORMED UTILIZING CASE TA-33. ALL WORK INVOLVING LANE CLOSURES ON US 13 SHALL BE RESTRICTED TO THE HOURS OF 8:00 PM TO 6:00 AM. ALL THRU LANES OF US 13 SHALL BE OPEN TO TRAFFIC BY 6:00 AM THE FOLLOWING DAY.
5. MILL THE ACCESS ROAD FROM STA 405+10 TO STA 411+00 AND PLACE 2" OF TYPE C HOT MIX ON THE ACCESS ROAD FROM 402+87 TO CARPENTER BRIDGE ROAD.
6. PLACE TOPSOIL, SEED AND MULCH. REMOVE ANY E&S MEASURES NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

STAGE 3:
1. LAYOUT AND PLACE PERMANENT PAVEMENT MARKINGS ON THE REMAINING ROADWAYS THAT HAVE BEEN PAVED TO FINAL GRADE OR AS DIRECTED BY THE ENGINEER.

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	DESIGNED BY:
COUNTY	CHECKED BY:
KENT	

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 3

SHEET NO.
32
TOTAL SHTS.
39

W:\MSV8\CELLS\PROJDEV\SB.CEL

CHANGEABLE MESSAGE BOARDS

PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

CMS-1

CARPENTR BRIDGE ROAD	CLOSING STARTING XX/XX/XX

DURING DETOUR
(TO BE REMOVED 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

CMS-2

CARPENTR BRIDGE ROAD	CLOSED FOLLOW DETOUR

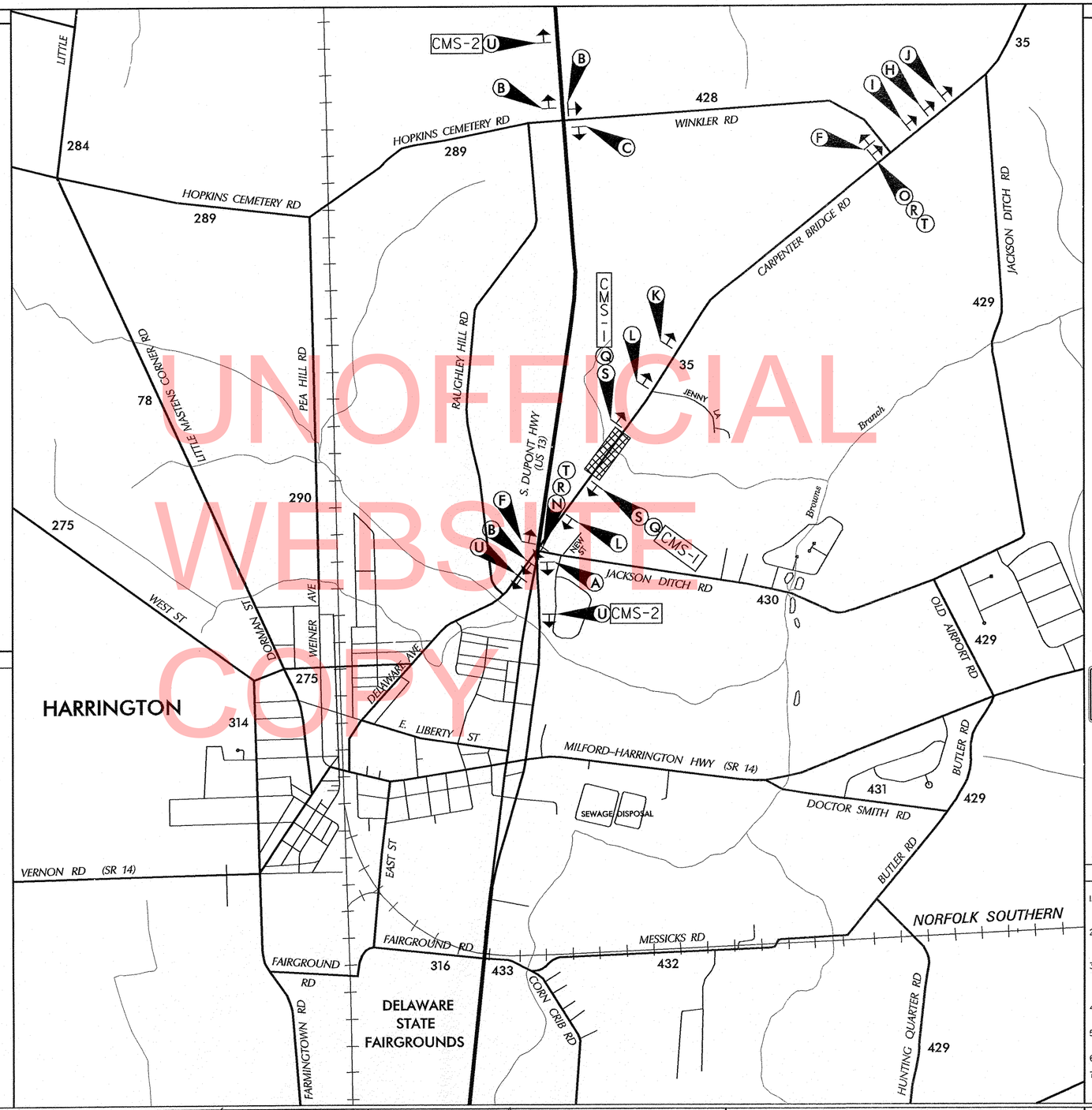
SPECIAL SIGNS

U 48"

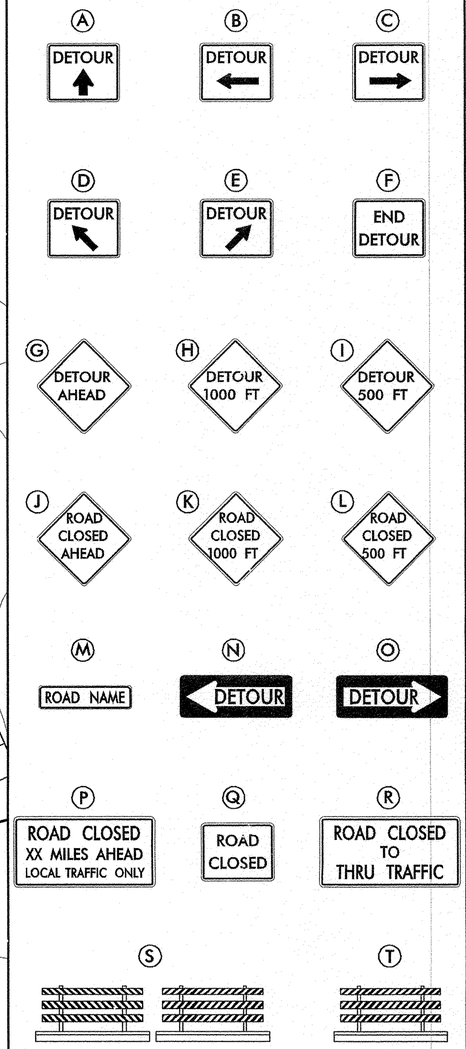
72"

Carpenter	6" C
Bridge Rd	6" C
CLOSED	6" C
FOLLOW	6" C
DETOUR	6" C

D/G FLUORESCENT ORANGE; BLACK LEGEND



LEGEND



GENERAL NOTES

1. ALL DETOUR SIGNING INCLUDING, TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE TO THE DE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE- MUTCD PART 6) FOR LIGHTS, BARRICADES AND SIGNS.(AS PER LATEST REVISION)
3. FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WILL PREVAIL.
4. SIGNS J THROUGH L AND P THROUGH R ,THE WORD (ROAD) SHOULD BE CHANGED TO RAMP, R/R OR BRIDGE WHERE APPLICABLE.
5. WARNING SIGNS SHOULD BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT SHEETING.
6. "S" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF ROADWAY.
7. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

UNOFFICIAL WEBSITE COPY

RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: 2/27/12	RECOMMENDED _____ DATE: 2/27/12	APPROVED CHIEF SAFETY OFFICER _____ DATE: 2-29-12

APPROVED TRAFFIC ENGINEER _____ DATE: 3/29/12

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUM / REVISIONS	NOT TO SCALE	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801	PERMIT NO. X	DETOUR PLAN HSIP KC, US 13 AT CARPENTER BRIDGE ROAD
				COUNTY KENT	DESIGNED BY:	SHEET NO. 33
					CHECKED BY:	TOTAL SHTS. 39

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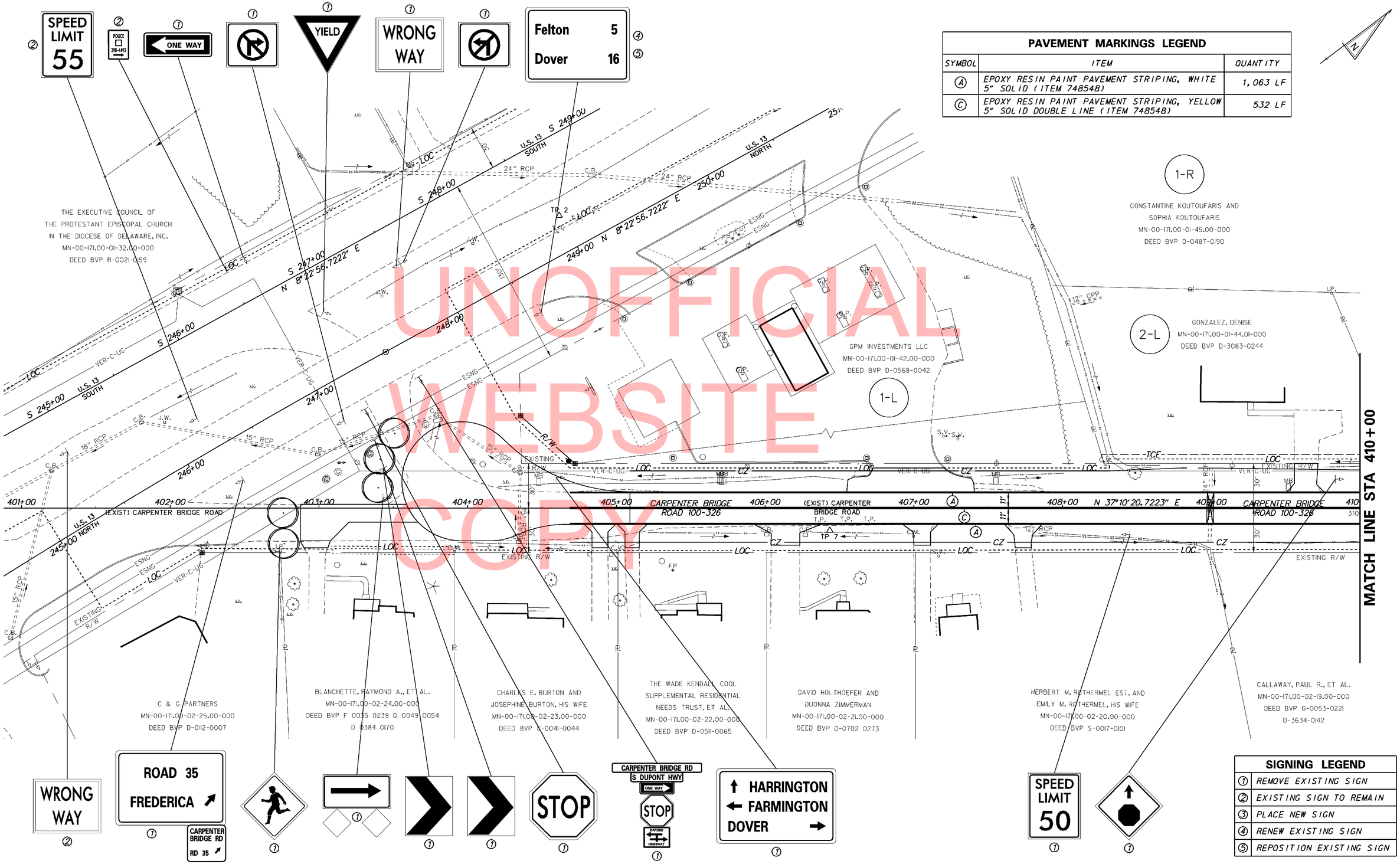

UNOFFICIAL WEBSITE COPY

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	1,063 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	532 LF

SIGNING LEGEND

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

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT T200900801
COUNTY KENT
BRIDGE NO.
DESIGNED BY: STEVE BROWN
CHECKED BY:

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO. 34
TOTAL SHTS. 39

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	2,329 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	1,094 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	69 LF
(G)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	38 SF

UNOFFICIAL WEBSITE COPY

MATCH LINE STA 3+00

MATCH LINE STA 410+00

CARPENTER BRIDGE ROAD

CARPENTER BRIDGE ROAD 100-326

S DuPont Hwy

NEW

Carpenter Bridge Rd 100-326

Carpenter Bridge Rd

NO OUTLET

STOP

40 MPH

3-L
ALAN W. DUNCAN AND
JOANN M. DUNCAN, HIS WIFE
MN-00-171.00-01-44.00-000
DEED BVP D-0178-0099
D-0309-0156
D-0309-0160

4-L
CASHWELL ENTERPRISES, INC.
MN-00-171.00-01-46.00-000
DEED BVP K-0028-0122

5-L
CASHWELL ENTERPRISES, INC.
MN-00-171.00-01-47.00-000
DEED BVP D-0028-0531

6-L
CHRIS EDWARD KENTON AND
JOANN OUTTEN KENTON, HIS WIFE
MN-00-171.00-01-16.01-000
DEED BVP D-0258-0001

CALLAWAY, PAUL R., ET AL.
MN-00-171.00-02-19.00-000
DEED BVP G-0053-0221
D-3634-0142

KOHLAND, JACK D.
MN-00-171.00-02-18.00-000
DEED BVP O-0018-0195
IS-0024-0141 WQ-0009-0186

CLARK, ALICE R.
MN-00-171.00-02-17.00-000
DEED BVP M-0018-0305
IS-0021-0371

CALLAWAY, PAUL R., ET AL.
MN-00-171.00-02-16.00-000
DEED BVP D-0541-0154

BROWN, CLINTON LEON
MN-00-171.00-02-15.00-000
DEED BVP M-0019-0320

PC 411+36.57
STA 311+36.57

PT 413+35.37

PT 9+25.52
STA 316+14.72

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

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT
CARPENTER BRIDGE ROAD

CONTRACT	BRIDGE NO.
T200900801	
COUNTY	DESIGNED BY: STEVE BROWN
KENT	CHECKED BY:

SIGNING, STRIPING
AND CONDUIT PLAN

SHEET NO.
35
TOTAL SHTS.
39

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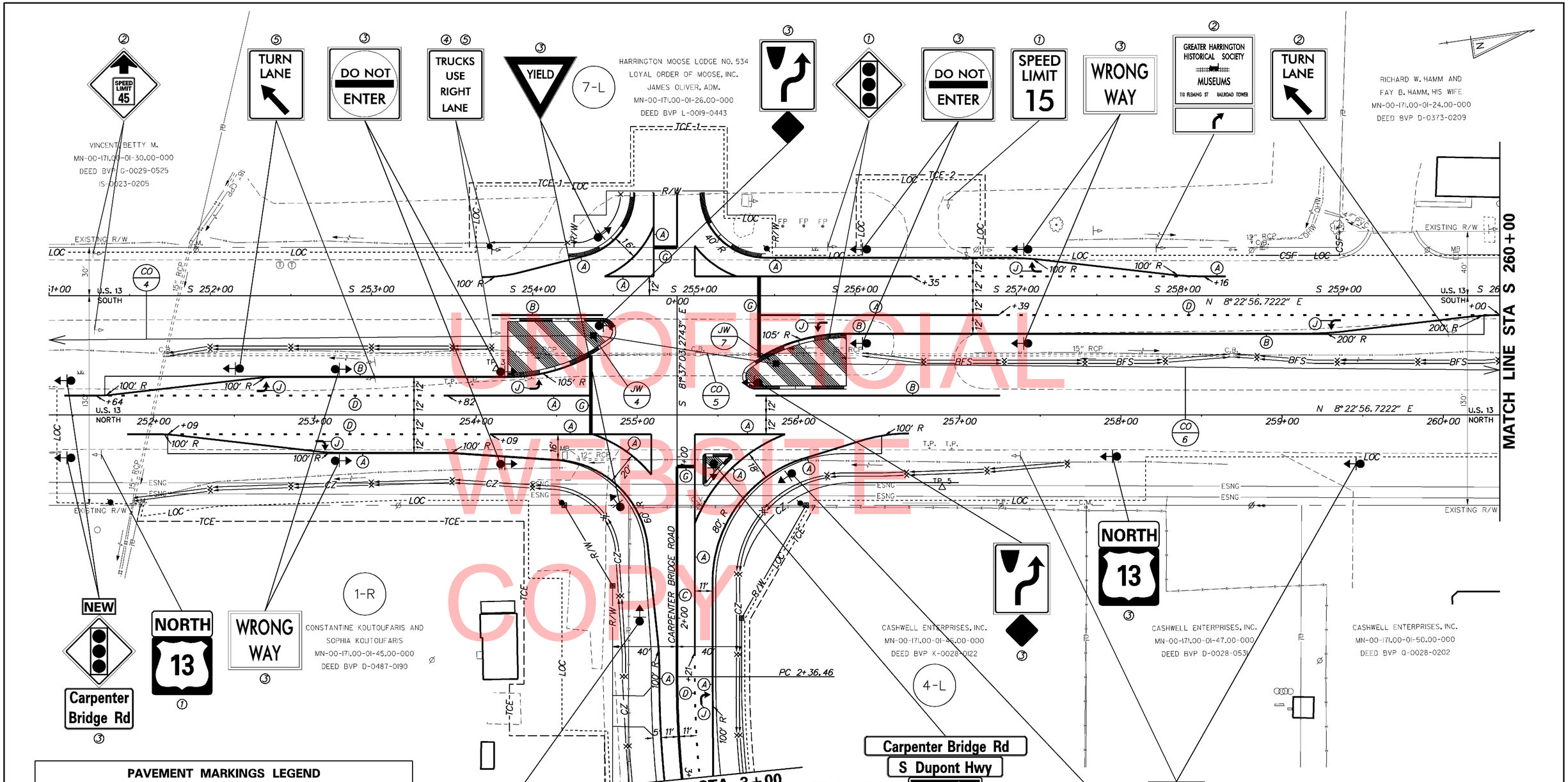

UNOFFICIAL WEBSITE COPY

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	2,280 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 748548)	1,013 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	195 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	830 LF
(G)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	183 SF
(J)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL (ITEM 748015)	108.5 SF

CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
4	1	4"	615'	FIBER CABLE
5	1	4"	110'	FIBER CABLE
6	1	4"	490'	FIBER CABLE

SIGNING LEGEND

(1)	REMOVE EXISTING SIGN
(2)	EXISTING SIGN TO REMAIN
(3)	PLACE NEW SIGN
(4)	RENEW EXISTING SIGN
(5)	REPOSITION EXISTING SIGN

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT	T200900801
COUNTY	KENT
BRIDGE NO.	
DESIGNED BY: STEVE BROWN	
CHECKED BY:	

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO.	36
TOTAL SHTS.	39

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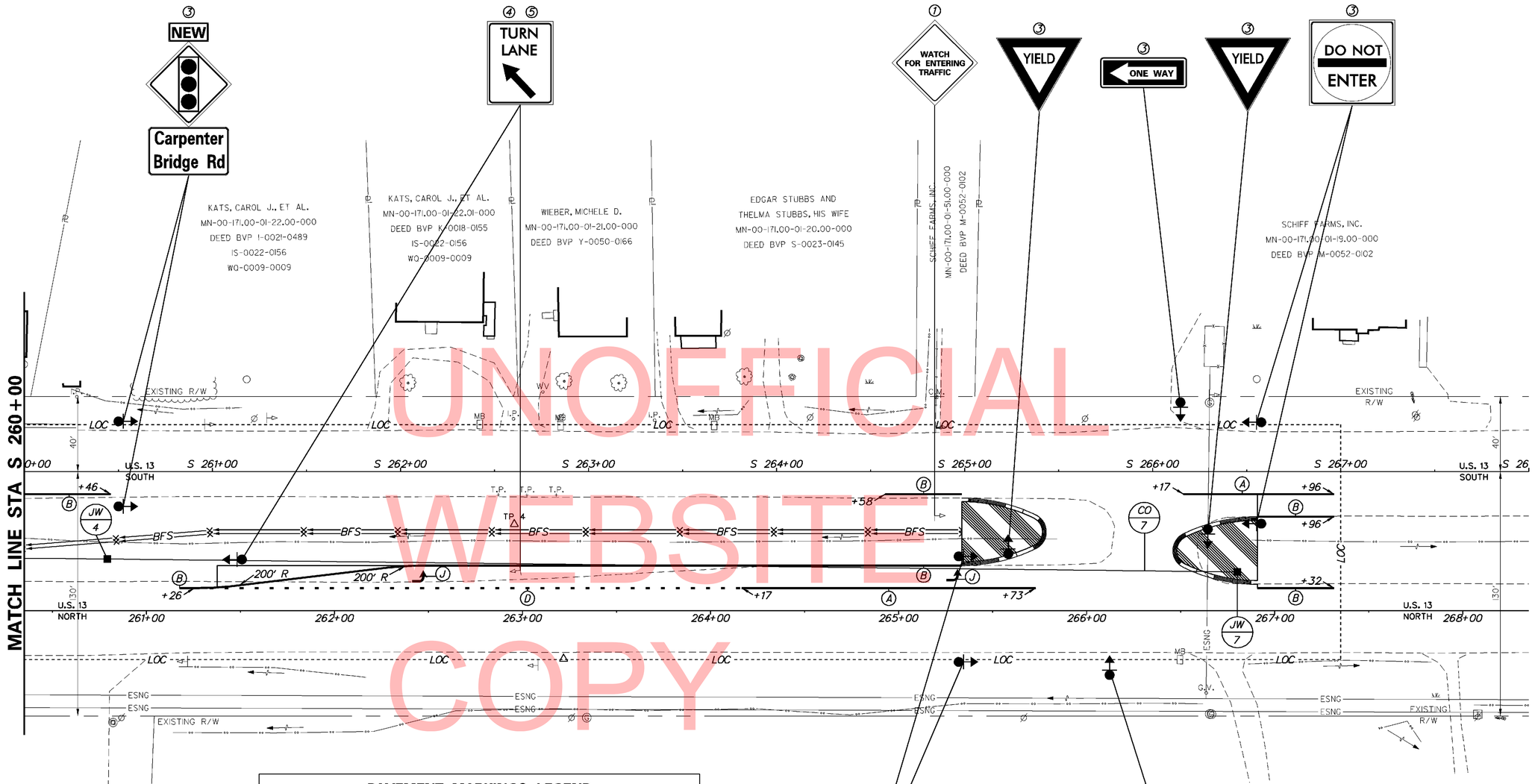

UNOFFICIAL WEBSITE
COPY

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	237 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 748548)	583 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	291 LF
(J)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL (ITEM 748015)	31 SF

CONDUIT RUN SCHEDULE				
CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
7	1	4"	601'	FIBER CABLE

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

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

HSIP KC, US 13 AT
CARPENTER BRIDGE ROAD

CONTRACT	T200900801
COUNTY	KENT
BRIDGE NO.	
DESIGNED BY: STEVEN BROWN	
CHECKED BY:	

SIGNING, STRIPING
AND CONDUIT PLAN

SHEET NO.	37
TOTAL SHTS.	39

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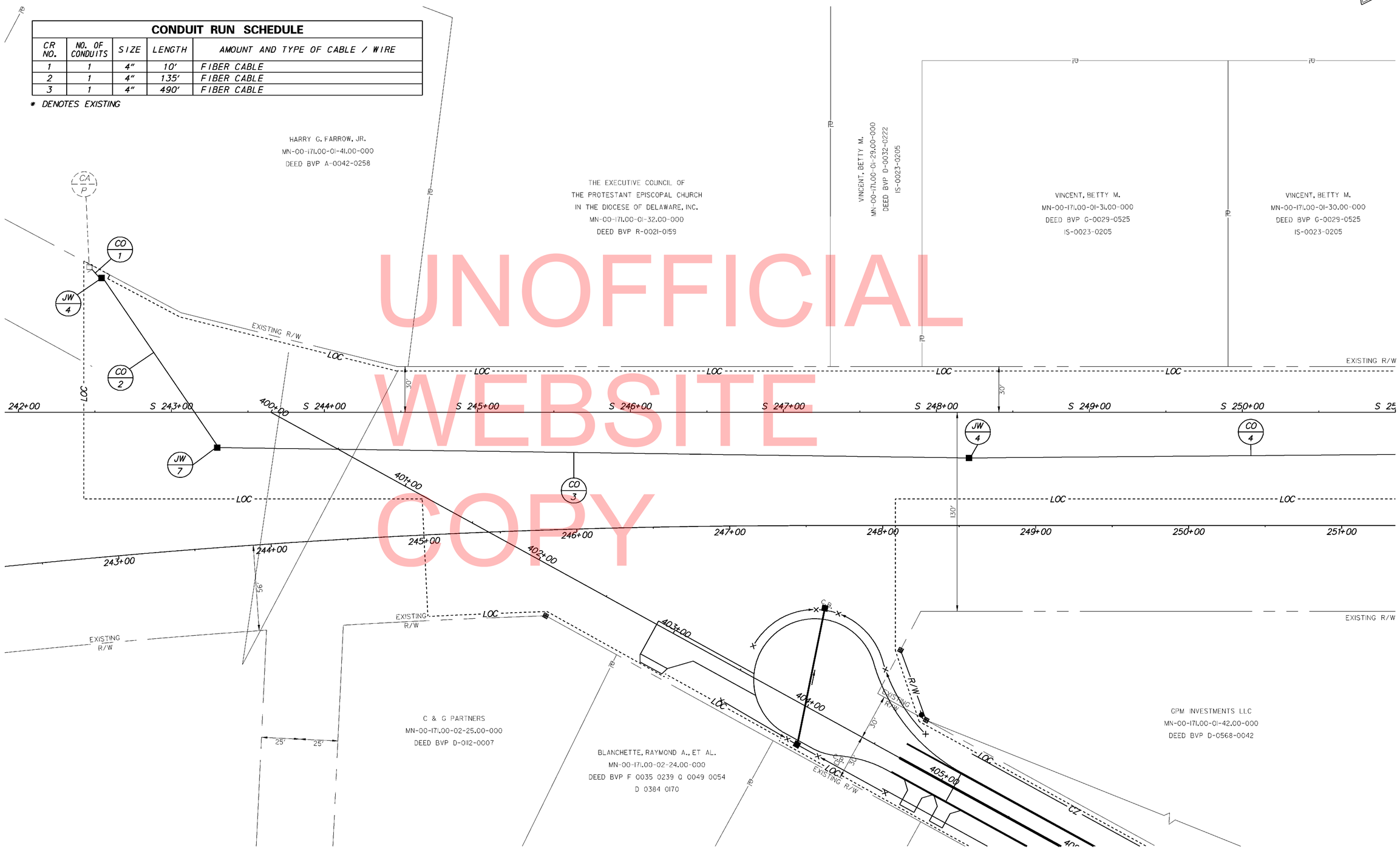
CONDUIT RUN SCHEDULE				
CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1	1	4"	10'	FIBER CABLE
2	1	4"	135'	FIBER CABLE
3	1	4"	490'	FIBER CABLE

* DENOTES EXISTING



UNOFFICIAL
WEBSITE
COPY

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP KC, US 13 AT CARPENTER BRIDGE ROAD	CONTRACT T200900801 / COUNTY KENT	BRIDGE NO. / DESIGNED BY: STEVEN BROWN / CHECKED BY:	SIGNING, STRIPING AND CONDUIT PLAN	SHEET NO. 38 / TOTAL SHTS. 39

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ADDITIONAL SIGNAL NOTES

8. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHALL BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (5.0:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH CURRENT ADA BEST PRACTICES. THESE POLE BASES SHALL BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSH BUTTON SHALL BE INSTALLED AT HEIGHT OF 40-44 INCHES ABOVE THE LANDING AREA/SIDEWALK AND SHALL BE LOCATED SUCH THAT MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE SIDEWALK.

9. FOLLOW SPAN WIRE SCHEDULE. PROPOSED SPAN WIRES SHALL BE ATTACHED USING A GALVANIZED STEEL BULL RING. THE BULL RING SHALL HAVE A 4-INCH INSIDE DIAMETER AND BE FABRICATED FROM STEEL CONFORMING TO A668, QUENCHED AND TEMPERED. THE BAR DIAMETER SHALL NOT BE LESS THAN 7/16 INCHES. THE WELDLESS RINGS SHALL MEET FEDERAL SPECIFICATION RR-C271B TYPE VI. THE RINGS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH A153 SPECIFICATIONS. TWO GALVANIZED 3-BOLT GUY CLAMPS AND A SERVICE SLEEVE SHALL BE INSTALLED FOR EACH SPAN WIRE ATTACHMENT IN ACCORDANCE WITH STANDARD NO. 1-12.

10. INSTALL CDMA TO ESTABLISH COMMUNICATION BETWEEN THIS SIGNAL AND THE TMC. INSTALL UNDERGROUND FIBER FOR COMMUNICATION WITH THE SIGNAL AT DELAWARE AVE.

11. INSTALL FULL TUNNEL VISORS FOR SIGNAL HEADS *9,10,11,12

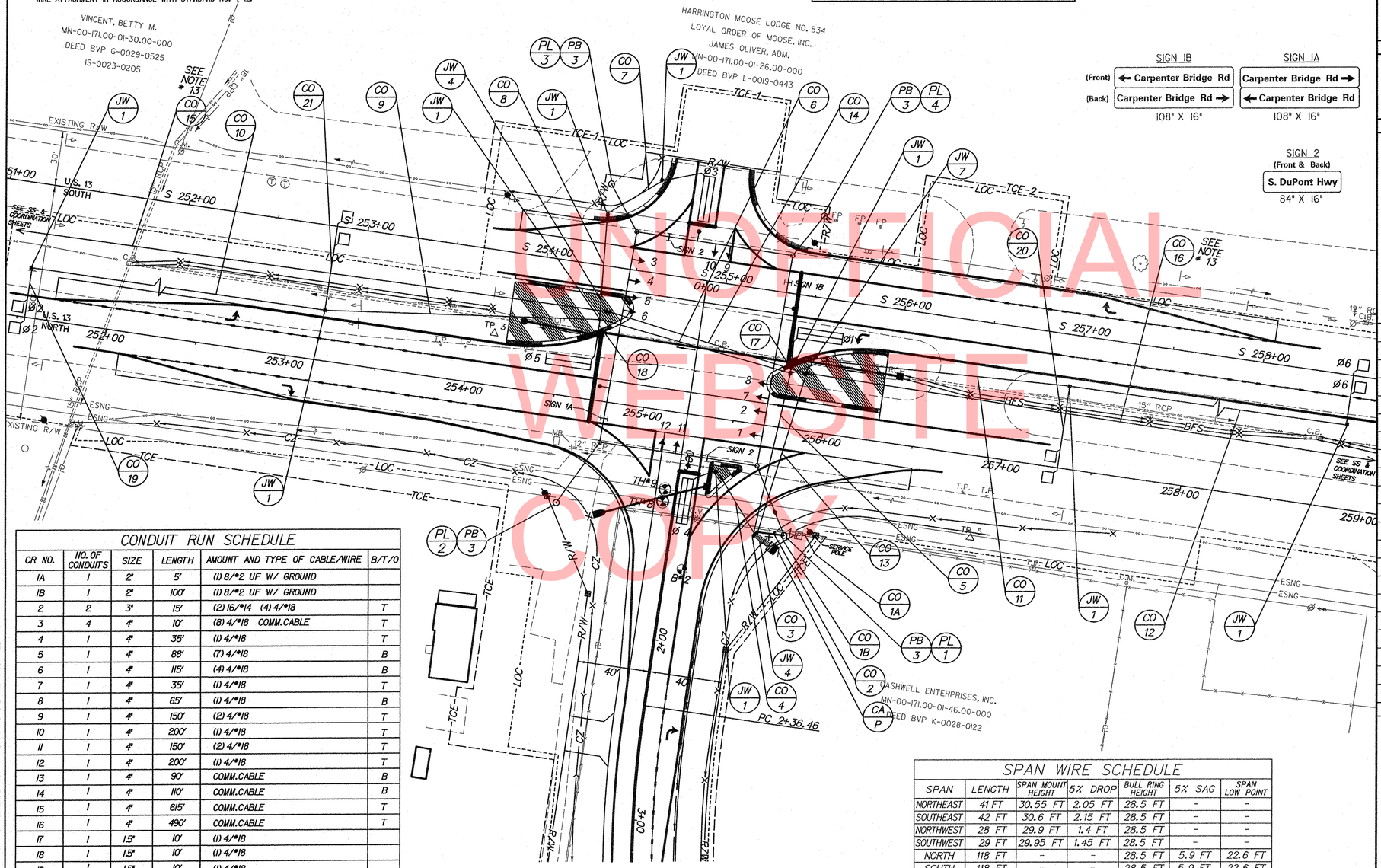
12. DESIGN ASSUMES THAT UTILITY POLES AT INTERSECTION ARE 50 FT TALL WITH NEUTRAL LINE BEING AT NO LESS THAN 42 FT FROM THE GROUND.

13. CONTINUE WITH 4" SCH 80 PVC CONDUIT INSTALLATION TO STATION 266+50 NB US 13 AND TO STATION 243+25 SB US 13 (DELAWARE AVENUE SIGNAL. THEN BORE TO NEW TYPE 4 JW IN FRONT OF EXISTING SIGNAL CABINET.

14. PROPERLY BOND AND GROUND ALL PROJECT'S JUNCTION WELLS & LIDS WHERE APPLICABLE.

SIGNAL POLE SCHEDULE

POLE #	POLE TYPE	HEIGHT	MATERIAL
1	STRAIN	32'	STEEL
2	STRAIN	32'	STEEL
3	STRAIN	32'	STEEL
4	STRAIN	32'	STEEL



SIGN 1B

(Front) ← Carpenter Bridge Rd
(Back) Carpenter Bridge Rd →
108" X 16"

SIGN 1A

Carpenter Bridge Rd →
← Carpenter Bridge Rd
108" X 16"

SIGN 2

(Front & Back)
S. DuPont Hwy
84" X 16"

CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE/WIRE	B/T/O
1A	1	2"	5'	(1) 8/#2 UF W/ GROUND	
1B	1	2"	100'	(1) 8/#2 UF W/ GROUND	
2	2	3"	15'	(2) 16/#14 (4) 4/#18	T
3	4	4"	10'	(8) 4/#18 COMM.CABLE	T
4	1	4"	35'	(1) 4/#18	T
5	1	4"	88'	(7) 4/#18	B
6	1	4"	115'	(4) 4/#18	B
7	1	4"	35'	(1) 4/#18	T
8	1	4"	65'	(1) 4/#18	B
9	1	4"	150'	(2) 4/#18	T
10	1	4"	200'	(1) 4/#18	T
11	1	4"	150'	(2) 4/#18	T
12	1	4"	200'	(1) 4/#18	T
13	1	4"	90'	COMM.CABLE	B
14	1	4"	110'	COMM.CABLE	B
15	1	4"	615'	COMM.CABLE	T
16	1	4"	490'	COMM.CABLE	T
17	1	1.5"	10'	(1) 4/#18	
18	1	1.5"	10'	(1) 4/#18	
19	1	1.5"	30'	(1) 4/#18	
20	1	1.5"	30'	(1) 4/#18	
19	1	1.5"	30'	(1) 4/#18	

* DENOTES EXISTING B - BORE, T - TRENCH, O - OPEN CUT
** ALL CONDUITS SHALL BE SCH 80 PVC, EXCEPT FOR BORING USE SDR-13.5 HDPE

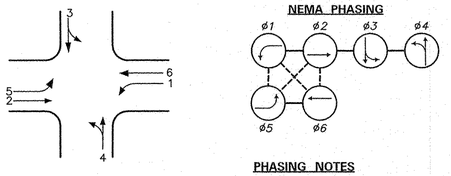
SPAN WIRE SCHEDULE

SPAN	LENGTH	SPAN MOUNT HEIGHT	5% DROP	BULL RING HEIGHT	5% SAG	SPAN LOW POINT
NORTHEAST	41 FT	30.55 FT	2.05 FT	28.5 FT	-	-
SOUTHEAST	42 FT	30.6 FT	2.15 FT	28.5 FT	-	-
NORTHWEST	28 FT	29.9 FT	1.4 FT	28.5 FT	-	-
SOUTHWEST	29 FT	29.95 FT	1.45 FT	28.5 FT	-	-
NORTH	118 FT	-	-	28.5 FT	5.9 FT	22.6 FT
SOUTH	118 FT	-	-	28.5 FT	5.9 FT	22.6 FT
EAST	88 FT	-	-	28.5 FT	4.4 FT	24.1 FT
WEST	88 FT	-	-	28.5 FT	4.4 FT	24.1 FT

* FIELD ADJUSTMENTS AS REQUIRED
** ALL SIGNAL POLES ARE 32 FEET

SIGNAL PHASING

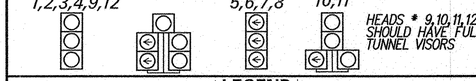
NEMA PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH X	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH X	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO *	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO *	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (* OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (* OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1	⬚	□
LOOP DETECTOR, TYPE 2	▭	▭
LUMINAIRE	—◁	—✦
MAST ARM	—▷	—▶
MICROWAVE DETECTION	—◀	—◀
OPTICOM RECEIVER	—○	—●
OVERHEAD SIGNING		—┤
PEDESTRIAN POLE/BASE	◎	◉
PEDESTRIAN PUSHBUTTON	—▯	—▶
PEDESTRIAN SIGNAL HEAD	—▱	—▰
RIGHT-OF-WAY	———	—R/W—
SERVICE PEDESTAL		P
SIGNAL CABINET	▯	▮
SIGNAL HEAD	—▷◇	—▶
SIGNAL POLE/BASE	⊗	⊙
SPAN INSULATOR	—◇	—◆
SPAN WIRE	—XX—	—◇—
UTILITY POLE	⊘	✎
VIDEO DETECTION	◁	◀

GENERAL SIGNAL NOTES

1. ADVANCED LOOPS PLACED AT 350 FT FROM STOP BAR ON NB AND SB US 13.
2. ALL SIGNAL POLES WILL BE XX FEET, EXCEPT WHERE SHOWN.
3. CO *1 IS NOT DRAWN TO SCALE, NOR IS THE DIRECTION NECESSARILY CORRECT.
4. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
5. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
6. ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
7. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

UNOFFICIAL WEBSITE COPY

RECOMMENDED [signature] DATE: 4/17/12
RECOMMENDED _____ DATE: _____
RECOMMENDED _____ DATE: _____
APPROVED TRAFFIC ENGINEER [signature] DATE: 4/17/12
APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER [signature] DATE: 4/17/12

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

CONTRACT T200900801
COUNTY KENT
PERMIT NO. K295
DESIGNED BY: MS
CHECKED BY: ML

SIGNAL PLAN HSIP KC, US 13 AT CARPENTER BRIDGE ROAD

SHEET NO. 39
TOTAL SHTS. 39

Y:\TRAFFIC\PROJECTS\MISC\US 13 & CARPENTER BRIDGE RD\FINAL\FINAL SIGNAL UPDATED