THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

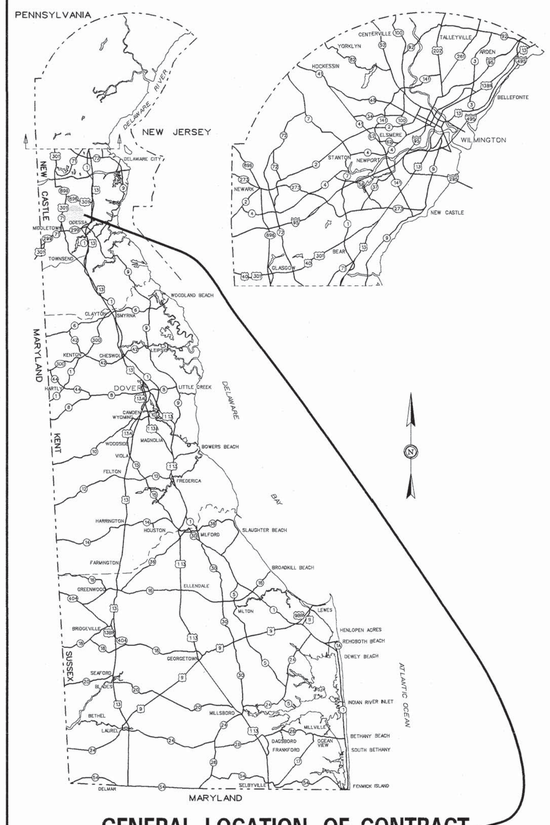
CONSTRUCTION PLANS FOR:

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

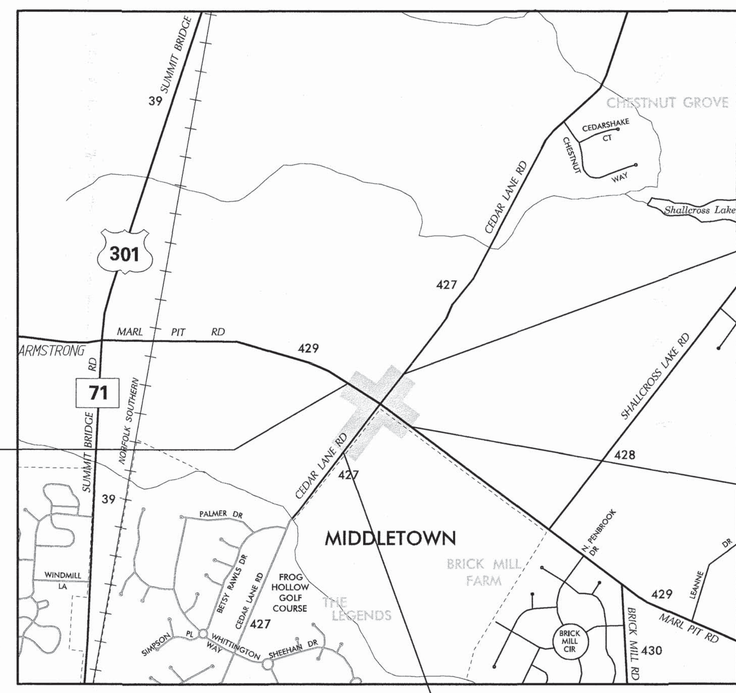
CONTRACT NUMBER: T201612001

FEDERAL AID PROJECT NUMBER: N/A

COUNTY: NEW CASTLE **M.R. #:** N427 & N429



GENERAL LOCATION OF CONTRACT



END CONTRACT STATION 433+90

LIMIT OF CONTRACT STATION 506+65

LIMIT OF CONTRACT STATION 529+00

BEGIN CONTRACT STATION 413+10

DESIGN DESIGNATION

MRD #: 427	ROAD NAME: CEDAR LANE ROAD		
FUNCTIONAL CLASS: MAJOR COLLECTOR		D.H.V. PROJECTED: 453	YEAR: 2040
TYPE OF CONSTRUCTION: INTERSECTION IMPROVEMENT		DESIGN SPEED: 50	
A.A.D.T. CURRENT: 5435	YEAR: 2014	TRUCKS: 8	
A.A.D.T. PROJECTED: 7100	YEAR: 2040	DIRECTION OF DISTRIBUTION: 58	
MRD #: 429	ROAD NAME: MARL PIT ROAD		
FUNCTIONAL CLASS: MAJOR COLLECTOR		D.H.V. PROJECTED: 412	YEAR: 2040
TYPE OF CONSTRUCTION: INTERSECTION IMPROVEMENT		DESIGN SPEED: 50	
A.A.D.T. CURRENT: 4084	YEAR: 2014	TRUCKS: 8	
A.A.D.T. PROJECTED: 6250	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60	

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
608	MARL PIT ROAD, ARMSTRONG TO ODESSA
91-061-11	CEDAR LANE RD., N429 TO MT. PLEASANT RD.
T200712005	N427 CEDAR LANE ROAD, MARL PIT ROAD TO BOYDS CORNER ROAD

APPROVED FOR ADVERTISEMENT

Robert B. McCleary 5/29/2019
DIRECTOR OF TRANSPORTATION SOLUTIONS DATE

PREPARED BY
DELDOT – TRANSPORTATION SOLUTIONS
PROJECT DEVELOPMENT

Sasmit H. Bhayde 05/22/2019
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PD" SECTION DESIGNATION. DATE

SASMIT H. BHAYDE LICENSE No. 15669 DELAWARE PROFESSIONAL ENGINEER
SEAL

LAST REVISED: 03/03/2011
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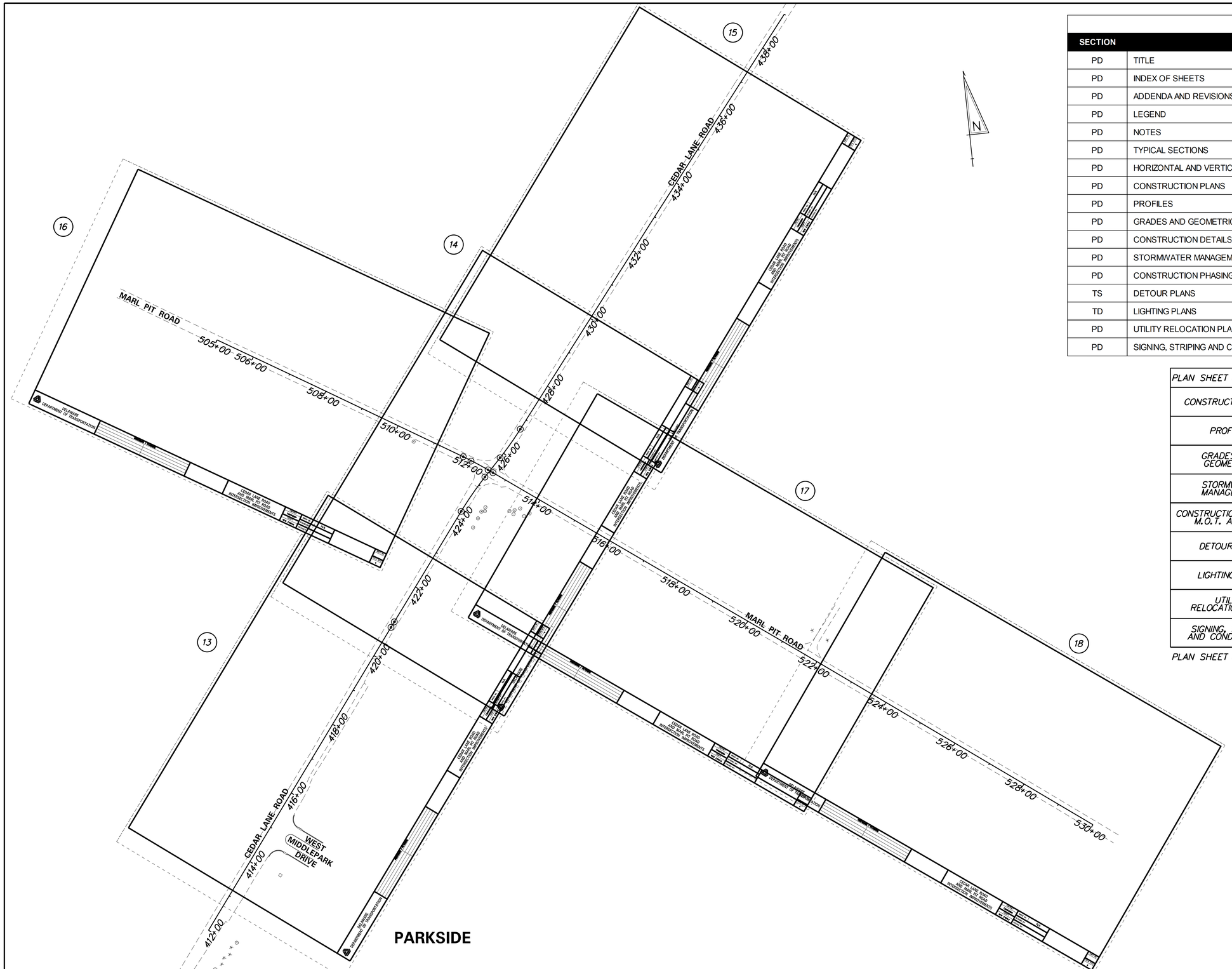

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DETOUR PLAN	51	51	51	51	51	51
LIGHTING PLAN	52	52	52	52	52	N/A
UTILITY RELOCATION PLAN	55	56	57	58	59	60
SIGNING, STRIPING AND CONDUIT PLAN	61	62	63	64	65	N/A

PLAN SHEET INDEX CROSS REFERENCE

ADDENDA / REVISIONS

SCALE
0 120 240 600
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

INDEX OF SHEETS

SECTION: PD
SHEET NO.: 2

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ADDENDA / REVISIONS	

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY: S. BHAYDE	
COUNTY		
NEW CASTLE	CHECKED BY: T. BROOKS	

ADDENDA AND REVISIONS

SECTION
PD
SHEET NO.
3

EXISTING SYMBOLS

DRAINAGE

	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
C.B. / D.I.	DRAINAGE INLET
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

	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
(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

RIGHT-OF-WAY SYMBOLS

C.M.	PROPERTY MARKER - CONCRETE MON.
I.P.	PROPERTY MARKER - IRON PIPE
100+00	HISTORIC RIGHT-OF-WAY BASELINE
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
EASEMENT TYPE	EXISTING EASEMENT
DA	EXISTING DENIAL OF ACCESS
R/W-DA	EXISTING R/W & DENIAL OF ACCESS

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

UTILITY

	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
TV	CABLE TV DISTRIBUTION BOX
E	ELECTRIC MANHOLE
EM	ELECTRIC METER
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
SCO	SANITARY SEWER CLEANOUT OR VENT
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
?	MANHOLE - UNDETERMINED OWNER

UTILITY COMPANY FACILITIES

-ATL-BB (X)-	ATLANTIC BROAD BAND (CATV)
-AW-W (X)-	ARTESIAN WATER COMPANY
-CU-G (X)-	CHESAPEAKE UTILITY - GAS
-DP-E-OH-	DELMARVA POWER - ELECTRIC (OVHD)
-NCC-S (X)-	NEW CASTLE COUNTY - SEWER
-TM-E (X)-	TOWN OF MIDDLETOWN - ELECTRIC
-TM-W (X)-	TOWN OF MIDDLETOWN - WATER
-VER-C (X)-	VERIZON
-VER-C-OH-	VERIZON (OVERHEAD)

(X) REPRESENTS ASCE DEFINED SUE QUALITY LEVEL

PROPOSED SYMBOLS

CONSTRUCTION

	CONCRETE SAFETY BARRIER - PERMANENT
BFS	BIOFILTRATION SWALE
	BRICK PATTERNED SURFACE
	BUTT JOINT
CZ	CLEAR ZONE
100+00	CONSTRUCTION BASELINE
CSF	CONSTRUCTION SAFETY FENCE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
	CURB OPENING - SUMP / ON GRADE
	CURB OPENING WITH SIDEWALK
	DRAINAGE INLET
	DITCH
	FENCE - METAL
	FENCE - WOOD
	FLARED END SECTION
	GUARDRAIL, TYPE 1
	GUARDRAIL, TYPE 2
	GUARDRAIL, TYPE 3
	GUARDRAIL END ANCHORAGE
	GUARDRAIL END TREATMENT, TYPE 1
	GUARDRAIL END TREATMENT, TYPE 2
	GUARDRAIL END TREATMENT, TYPE 3
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
LO	LATERAL OFFSET
LOC	LIMIT OF CONSTRUCTION
MB	MAILBOX
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK - 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN OUTLET

RIGHT-OF-WAY SYMBOLS

	PROPOSED RIGHT-OF-WAY MONUMENT
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

IDENTIFIERS

A/C	ADJUST BY CONTRACTOR
A/O	ADJUST BY OTHERS
B	CONCRETE SAFETY BARRIER
C	CURB OR CURB & GUTTER
CJB	CONVERT TO JUNCTION BOX
CMH	CONVERT TO DRAINAGE MANHOLE
C/O	CURB OPENING - SUMP / ON GRADE
CO/SW	CURB OPENING WITH SIDEWALK
PC	PEDESTRIAN CONNECTION / TYPE
PC-N	PEDESTRIAN CONNECTION / TYPE WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
CSF	CONSTRUCTION SAFETY FENCE
DI	DRAINAGE INLET
DND	DO NOT DISTURB
ED	ENERGY DISSIPATOR
F	FENCE
FES	FLARED END SECTION
FF/C	FILL WITH FLOWABLE FILL
FS	FILTRATION STRUCTURE
GR	GUARDRAIL
JB	JUNCTION BOX
MH	MANHOLE
M	MONUMENT - RIGHT-OF-WAY
P	PIPE
RL/C	RELOCATE BY CONTRACTOR
RL/O	RELOCATE BY OTHERS
RL/PO	RELOCATE BY PROPERTY OWNER
RM/C	REMOVE BY CONTRACTOR
RM/TC	REMOVE BY TRAFFIC CONTRACTOR
RM/O	REMOVE BY OTHERS
SES	SAFETY END SECTION
UD	UNDERDRAIN / LENGTH
UDO	UNDERDRAIN OUTLET PIPE

LANDSCAPING

LS	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC

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

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 - SEE NOTES FOR MATERIALS AND DEPTHS

UTILITY COMPANY FACILITIES

AW-W	ARTESIAN WATER COMPANY
CU-G	CHESAPEAKE UTILITY - GAS
DP-E-OH	DELMARVA POWER - ELECTRIC (OVHD)
VER-C	VERIZON
TM-E	TOWN OF MIDDLETOWN - ELECTRIC

ADDENDA / REVISIONS

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT T201612001	BRIDGE NO. N/A	LEGEND	SECTION PD
COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 4
	CHECKED BY: T. BROOKS		

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GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2016 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2017, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2. ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

( )	NONE
(X)	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	ALL PLAN SHEETS, IN PDF FORMAT.
(X)	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
(X)	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
(X)	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.

3. PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

(X)	CROSS SECTIONS
(X)	RIGHT-OF-WAY PLANS

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.

2. THE CONTRACTOR WILL CONTACT THE DELAWARE TMC AT 302-659-4600 PRIOR TO ANY UNMANNED AIRCRAFT VEHICLE (UAV) FLIGHTS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE FOLLOWING INFORMATION: THE REGISTRATION NUMBER OF THE UAV, THE FLIGHT TIME, LOCATION OF THE FLIGHT, THE PILOT'S NAME AND THE PILOT'S CONTACT NUMBER DURING THE FLIGHT.

SECTION 200

3. EXCAVATION FOR THE FOLLOWING SECTION(S) WILL NOT BE INCIDENTAL TO THEIR INDIVIDUAL CONSTRUCTION ITEMS AND WILL BE QUANTIFIED AND PAID UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT:
   a. UNDERDRAIN INSTALLATIONS
   b. CURB AND GUTTER INSTALLATIONS
   c. SIDEWALK AND CURB RAMP INSTALLATIONS
   d. EXISTING HOT-MIX PAVEMENT

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

SECTION 600

5. DRAINAGE INLET GRATES ADJACENT TO THE ROAD, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE 1 OR TYPE 4, 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 602100 - REPLACING DRAINAGE INLET GRATE(S). FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.

6. 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.

PROJECT NOTES

SECTION 700

7. IN AREAS WHERE PROPOSED CURB MEETS EXISTING CURB AND THE TWO CURB TYPES ARE NOT SIMILAR, THE PROPOSED CURB SHALL BE TRANSITIONED IN 10 LINEAR FEET, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK, INCLUDING SAW CUTTING EXISTING CURB SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.

8. WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, THE EXISTING SIDEWALK SHALL BE SAWCUT AT THE TIE-IN POINT OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 762001 - SAW CUTTING, CONCRETE, FULL DEPTH.

9. PORTLAND CEMENT CONCRETE CHANNELIZING ISLANDS THAT ARE LESS THAN 75 SQ FT MAY BE POURED MONOLITHICALLY, OR AS DIRECTED BY THE ENGINEER.

10. ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.

SECTION 900

11. 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 STORMWATER 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.

MISCELLANEOUS

12. REFER TO THE CONSTRUCTION PLAN SHEETS FOR THE LOCATION OF THE CLEAR ZONE AREA LIMITS.

13. THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT. AS SUCH, AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED.

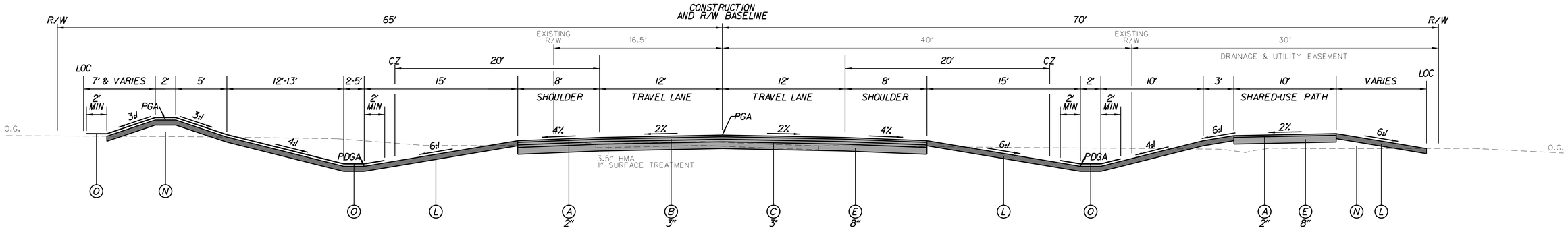
EARTHWORK SUMMARY

EXCAVATION	
EXCAVATION FROM CROSS SECTIONS	10,300 C.Y.
ROCK EXCAVATION FOR ROADWAY AND TRENCHES	0 C.Y.
TOPSOIL STRIPPING	4,600 C.Y.
TOTAL EXCAVATION	14,900 C.Y.
EXCAVATION AVAILABLE FOR EMBANKMENT	
EXCAVATION MEETING BORROW TYPE 'A'	0 C.Y.
EXCAVATION MEETING BORROW TYPE 'F'	5,100 C.Y.
EXCAVATION MEETING TOPSOIL	2,200 C.Y.
EMBANKMENT REQUIREMENTS	
BORROW TYPE 'A' REQUIRED (INCLUDING UNDERCUT)	1,100 C.Y.
BORROW TYPE 'F' REQUIRED	2,000 C.Y.
TOPSOIL REQUIRED	3,500 C.Y.
MATERIAL BALANCE ("+"= EXCESS, "-"= NEED)	
BORROW TYPE 'A'	-1,100 C.Y.
BORROW TYPE 'F'	3,100 C.Y.
TOPSOIL	-1,300 C.Y.
UNSUITABLE MATERIAL	7,600 C.Y.

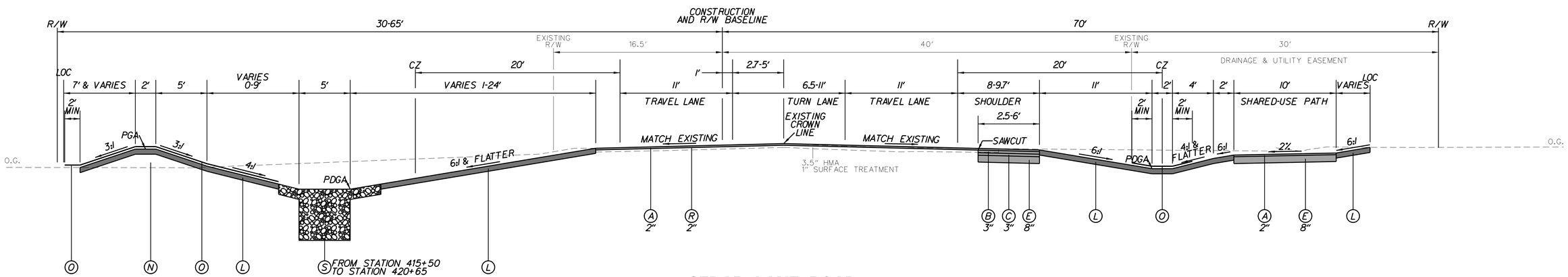
NOTES:
1) THE VALUES LISTED IN THE EARTHWORK SUMMARY ARE APPROXIMATE AND ARE NOT TO BE USED AS A BASIS OF PAYMENT. THE EARTHWORK SUMMARY IS CONSIDERED FOR INFORMATIONAL PURPOSES ONLY.

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.



CEDAR LANE ROAD
STATION 418+25 TO STATION 423+21



CEDAR LANE ROAD
STATION 413+10 TO STATION 418+25

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	4"	8"

LEGEND

- (A) ITEM 401005 - SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)
- (B) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (C) ITEM 401021 - SUPERPAVE TYPE BCBC, PG 64-22
- (D) ITEM 501526 - PATTERNED P.C.C., 8"
- (E) ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
- (F) ITEM 701013 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (G) ITEM 701016 - INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (H) ITEM 701025 - PORTLAND CEMENT CONCRETE CURB, TYPE 2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (J) ITEM 701027 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM 709001 - PERFORATED PIPE UNDERDRAIN, 6"
- (L) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908010 - TOPSOILING, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (M) ITEM 209001 - BORROW, TYPE A
- (N) ITEM 209006 - BORROW, TYPE F
- (O) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (P) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22 WEDGE (IF THICKNESS < 2")
- (Q) ITEM 401037 - SUPERPAVE TYPE B, PG 64-22 WEDGE
- (R) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (S) ITEM 910009 - INFILTRATION TRENCH (SEE STORMWATER MANAGEMENT PLAN ON SHEET 37.)

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

TYPICAL SECTIONS

SECTION	SHEET NO.
PD	6

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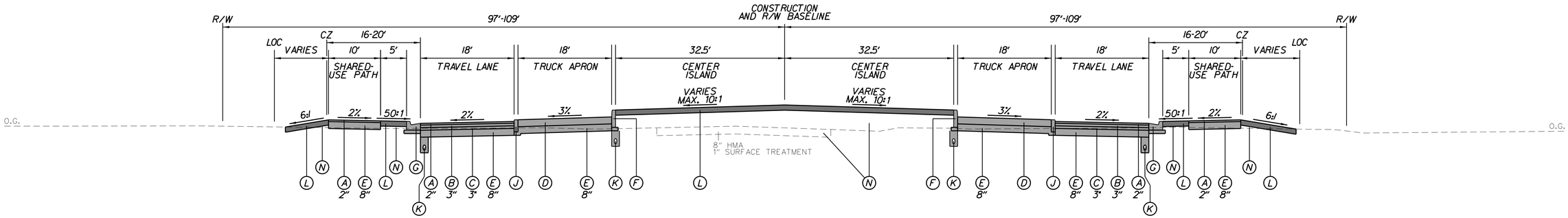
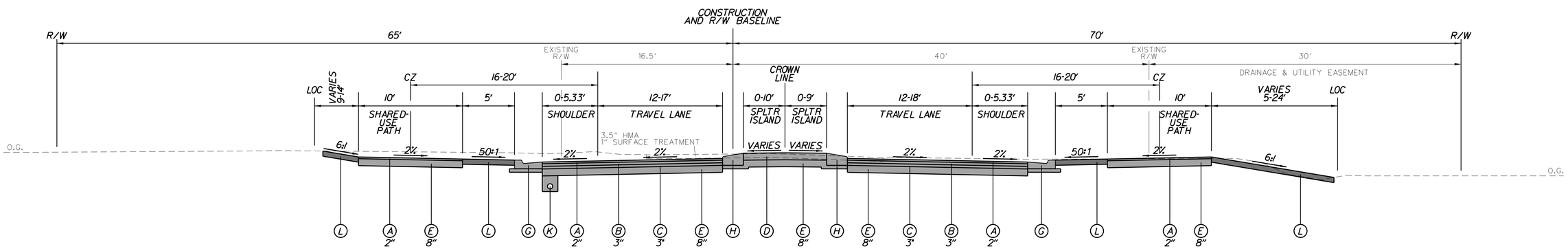


TYPICAL ROUNDABOUT SECTION
CEDAR LANE ROAD: STATION 424+74 TO STATION 426+14
MARL PIT ROAD: STATION 511+85 TO STATION 513+25



ROUNDABOUT APPROACH
CEDAR LANE ROAD
STATION 423+21 TO STATION 424+74

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	4"	8"

LEGEND

- (A) ITEM 401005 - SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)
- (B) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (C) ITEM 401021 - SUPERPAVE TYPE BCBC, PG 64-22
- (D) ITEM 501526 - PATTERNED P.C.C., 8" (SEE CONSTRUCTION DETAILS.)
- (E) ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
- (F) ITEM 701013 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (G) ITEM 701016 - INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (H) ITEM 701025 - PORTLAND CEMENT CONCRETE CURB, TYPE 2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (J) ITEM 701027 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM 709001 - PERFORATED PIPE UNDERDRAIN, 6"
- (L) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908010 - TOPSOILING, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (M) ITEM 209001 - BORROW, TYPE A
- (N) ITEM 209006 - BORROW, TYPE F
- (O) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (P) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22 WEDGE (IF THICKNESS < 2")
- (Q) ITEM 401037 - SUPERPAVE TYPE B, PG 64-22 WEDGE
- (R) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (S) ITEM 910009 - INFILTRATION TRENCH (SEE STORMWATER MANAGEMENT PLAN.)

ADDENDA / REVISIONS

NOT TO SCALE

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

TYPICAL SECTIONS

SECTION: PD
SHEET NO.: 7

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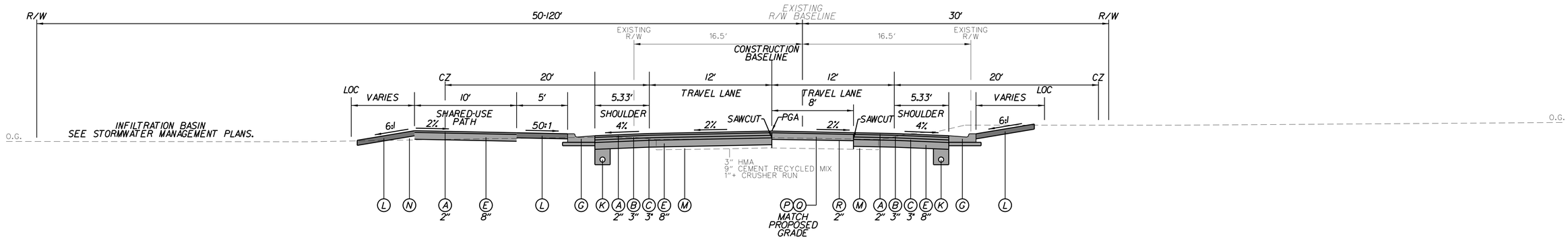
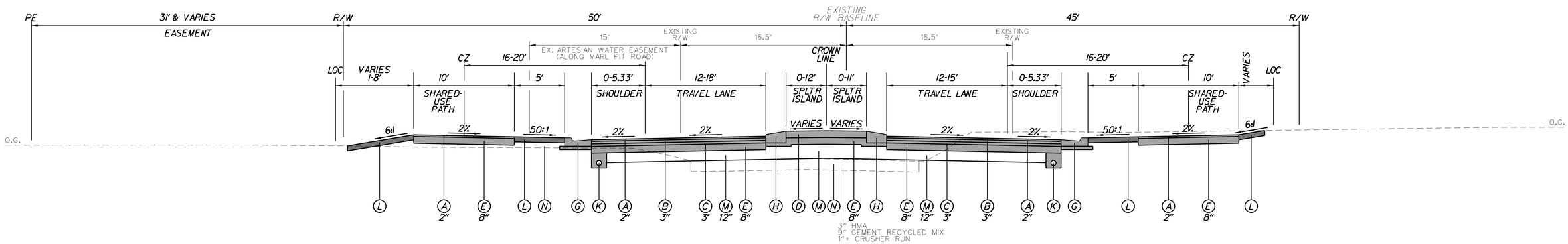


CEDAR LANE ROAD
STATION 428+21 TO STATION 431+24



ROUNDABOUT APPROACH
CEDAR LANE ROAD: STATION 426+14 TO STATION 428+21

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	4"	8"

LEGEND

- (A) ITEM 401005 - SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)
- (B) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (C) ITEM 401021 - SUPERPAVE TYPE BCBC, PG 64-22
- (D) ITEM 501526 - PATTERNED P.C.C., 8"
- (E) ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
- (F) ITEM 701013 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (G) ITEM 701016 - INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (H) ITEM 701025 - PORTLAND CEMENT CONCRETE CURB, TYPE 2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (J) ITEM 701027 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM 709001 - PERFORATED PIPE UNDERDRAIN, 6"
- (L) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908010 - TOPSOILING, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (M) ITEM 209001 - BORROW, TYPE A
- (N) ITEM 209006 - BORROW, TYPE F
- (O) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (P) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22 WEDGE (IF THICKNESS < 2")
- (Q) ITEM 401037 - SUPERPAVE TYPE B, PG 64-22 WEDGE
- (R) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (S) ITEM 910009 - INFILTRATION TRENCH (SEE STORMWATER MANAGEMENT PLAN.)

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY: S. BHAYDE	
COUNTY		
NEW CASTLE	CHECKED BY: T. BROOKS	

TYPICAL SECTIONS

SECTION	SHEET NO.
PD	8

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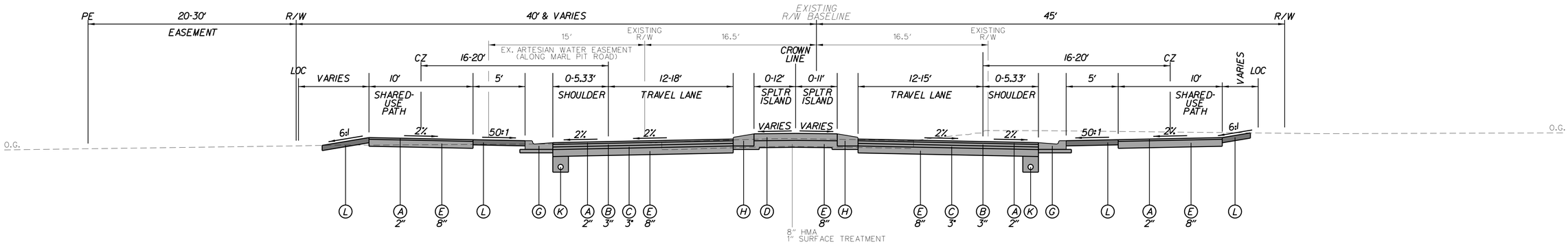
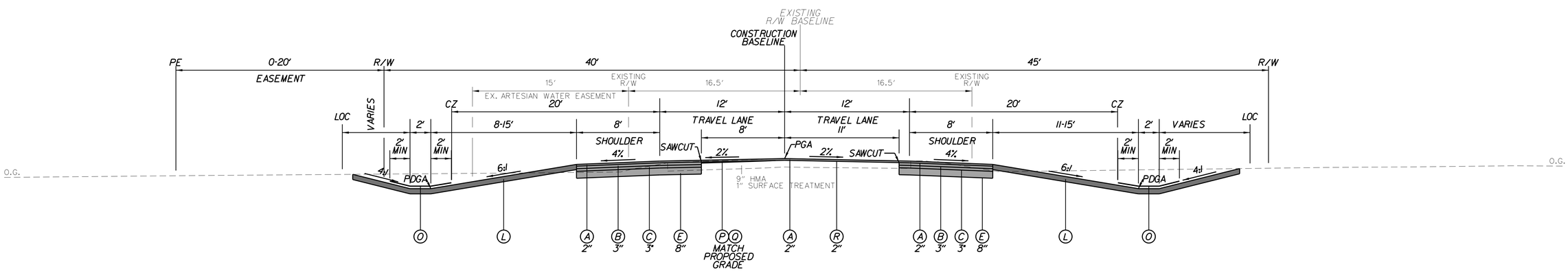


ROUNDABOUT APPROACH
MARL PIT ROAD: STATION 509+66 TO STATION 511+85



MARL PIT ROAD
STATION 506+65 TO STATION 509+66

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	4"	8"

LEGEND

- (A) ITEM 401005 - SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)
- (B) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (C) ITEM 401021 - SUPERPAVE TYPE BCBC, PG 64-22
- (D) ITEM 501526 - PATTERNED P.C.C., 8"
- (E) ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
- (F) ITEM 701013 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (G) ITEM 701016 - INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (H) ITEM 701025 - PORTLAND CEMENT CONCRETE CURB, TYPE 2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (J) ITEM 701027 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM 709001 - PERFORATED PIPE UNDERDRAIN, 6"
- (L) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908010 - TOPSOILING, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (M) ITEM 209001 - BORROW, TYPE A
- (N) ITEM 209006 - BORROW, TYPE F
- (O) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (P) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22 WEDGE (IF THICKNESS < 2")
- (Q) ITEM 401037 - SUPERPAVE TYPE B, PG 64-22 WEDGE
- (R) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (S) ITEM 910009 - INFILTRATION TRENCH (SEE STORMWATER MANAGEMENT PLAN.)

ADDENDA / REVISIONS

SCALE
0 5 10 15
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY: S. BHAYDE	
COUNTY		
NEW CASTLE	CHECKED BY: T. BROOKS	

TYPICAL SECTIONS

SECTION	SHEET NO.
PD	9

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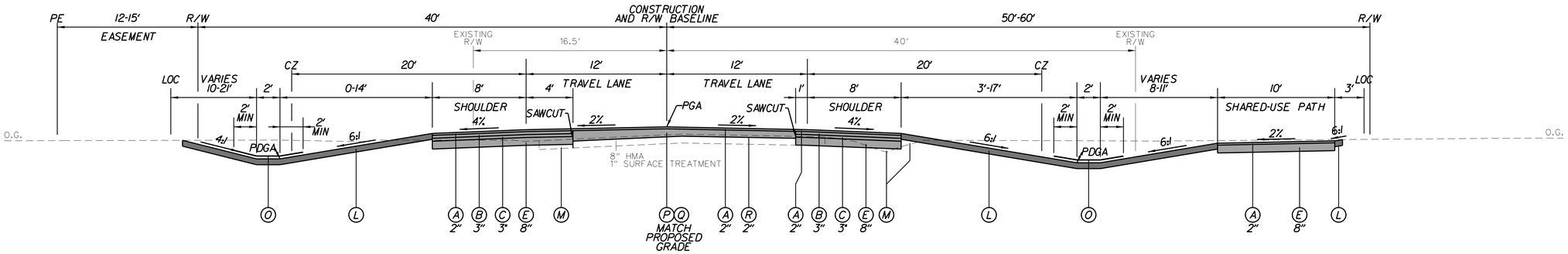
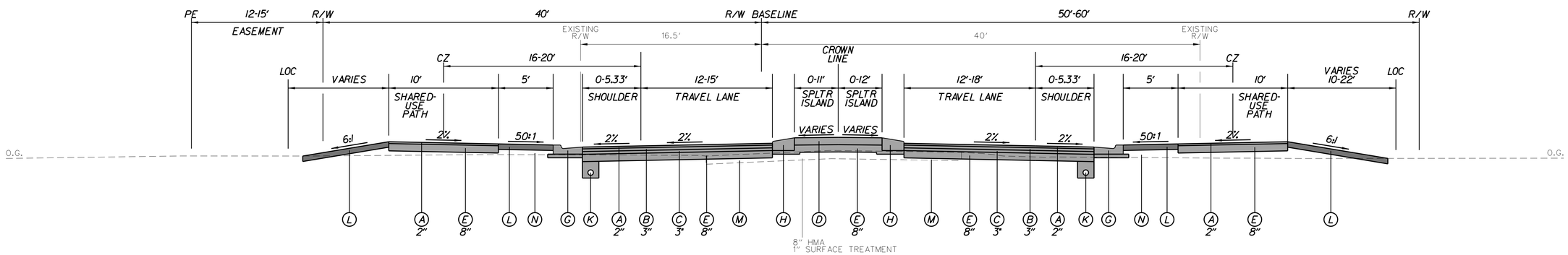


MARL PIT ROAD
STATION 515+34 TO STATION 518+50



ROUNDABOUT APPROACH
MARL PIT ROAD
STATION 513+25 TO STATION 515+34

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	4"	8"

LEGEND

- (A) ITEM 401005 - SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)
- (B) ITEM 401014 - SUPERPAVE TYPE B, PG 64-22
- (C) ITEM 401021 - SUPERPAVE TYPE BCBC, PG 64-22
- (D) ITEM 501526 - PATTERNED P.C.C., 8"
- (E) ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
- (F) ITEM 701013 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (G) ITEM 701016 - INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (H) ITEM 701025 - PORTLAND CEMENT CONCRETE CURB, TYPE 2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (J) ITEM 701027 - PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM 709001 - PERFORATED PIPE UNDERDRAIN, 6"
- (L) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908010 - TOPSOILING, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (M) ITEM 209001 - BORROW, TYPE A
- (N) ITEM 209006 - BORROW, TYPE F
- (O) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (P) ITEM 401036 - SUPERPAVE TYPE C, PG 64-22 WEDGE (IF THICKNESS < 2")
- (Q) ITEM 401037 - SUPERPAVE TYPE B, PG 64-22 WEDGE
- (R) ITEM 760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
- (S) ITEM 910009 - INFILTRATION TRENCH (SEE STORMWATER MANAGEMENT PLAN.)

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO. N/A	TYPICAL SECTIONS	SECTION
T201612001	DESIGNED BY: S. BHAYDE		PD
COUNTY			SHEET NO.
NEW CASTLE	CHECKED BY: T. BROOKS		10

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HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
GKW038	214+41.02	18.6159	539393.4708	576230.3224	38.43
GKW039	208+94.97	-34.5477	538999.8491	575847.8814	52.83
GKW040	125+01.91	25.6869	538239.5354	575298.7111	63.58
GKW041	116+03.01	46.8339	537510.1641	574773.0120	58.83
GKW042	106+64.91	69.5239	536748.6494	574224.4754	57.95
GKW043	102+15.75	-19.7967	536444.8935	573881.7546	50.70
GKW044	N/A	N/A	536137.2040	573662.3999	N/A
GKW045	319+46.03	23.9781	537855.6035	575854.0423	59.65
GKW046	305+42.87	-31.8626	538683.6655	574720.8850	61.85
NCC01	312+22.67	-34.65	538330.3800	575302.7900	N/A
NCC02	302+30.71	-26.76	538842.2900	574451.9900	N/A

EXISTING ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
30101	103+02.16	0.0000	536501.8224	573949.7030
30102	111+61.17	0.0000	537185.8933	574469.2655
30105	100+00.00	0.0000	536260.9465	573767.2764
30225	215+32.32	0.0000	539476.4120	576272.7736
30226	209+19.18	0.0000	538997.4280	575890.0008
30311	300+00.00	0.0000	538939.9179	574241.2435
30313	321+42.62	0.0000	537758.8147	576026.8308
30314	331+54.10	0.0000	537156.2040	576839.2052

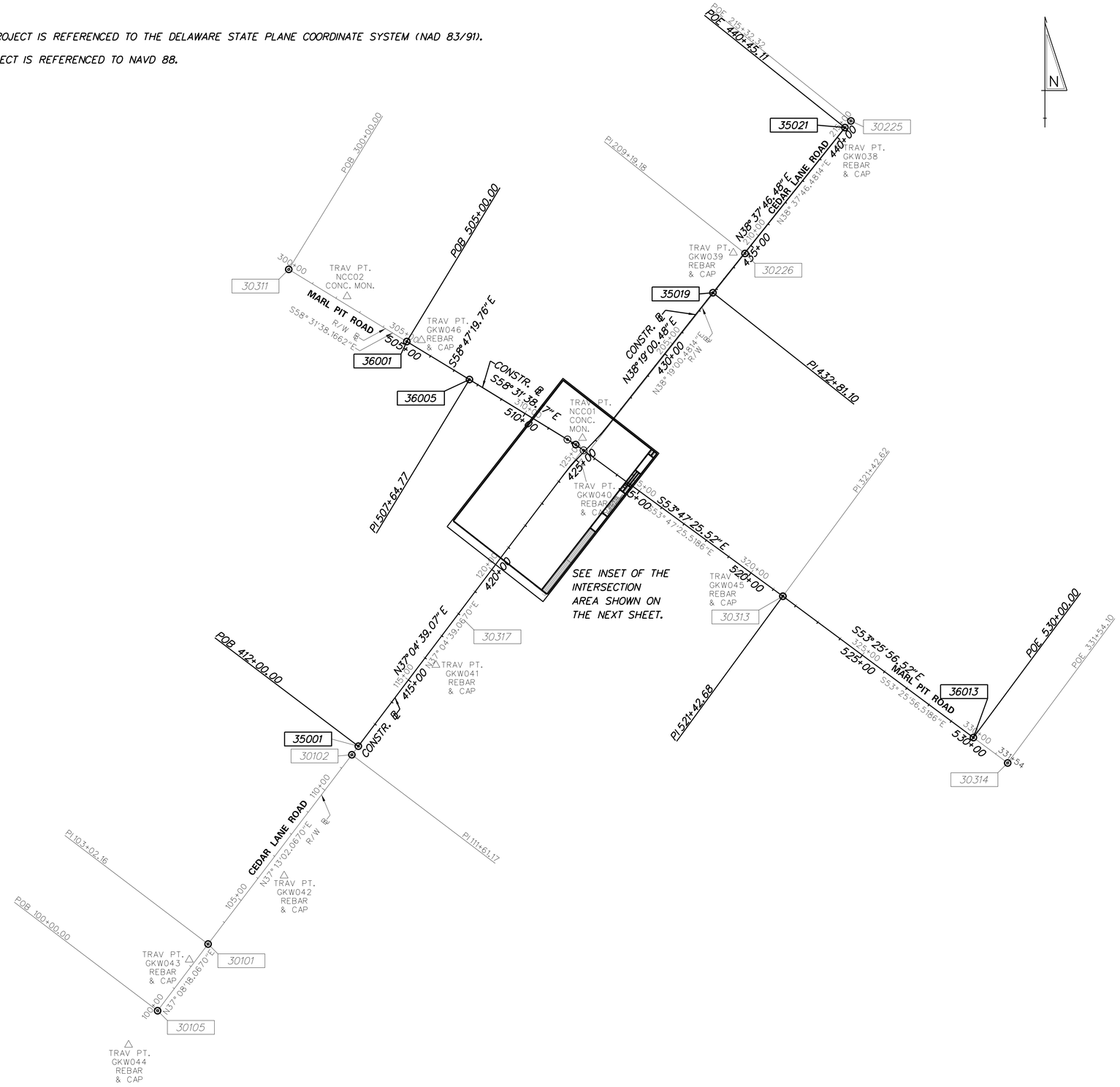
CONSTRUCTION ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
35001	412+00.00	0.00	537216.8727	574492.6759
35019	432+81.10	0.00	538855.5689	575774.0760
35021	440+45.11	0.00	539452.4122	576251.0344
36001	505+00.00	0.00	538679.1186	574667.8423
36005	507+64.77	0.00	538541.9180	574894.2877
36013	530+00.00	0.00	537248.0488	576715.3900

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.



ADDENDA / REVISIONS	

SCALE 0 200 400 600 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

HORIZONTAL AND VERTICAL CONTROL

SECTION	SHEET NO.
PD	11

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HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
GKW040	125+01.91	25.6869	538239.5354	575298.7111	63.58
NCC01	312+22.67	-34.6522	538330.3800	575302.7900	N/A

EXISTING ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
30103	120+90.20	0.0000	537927.0925	575029.3730
30106	125+43.51	0.0000	538288.2064	575303.3991
30227	200+00.00	0.0000	538276.2444	575320.1008

CONSTRUCTION ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
30103	420+90.20	0.00	537927.0925	575029.3730
35022	425+44.29	0.00	538283.1976	575310.6037

CIRCULAR CURVE NO. 1

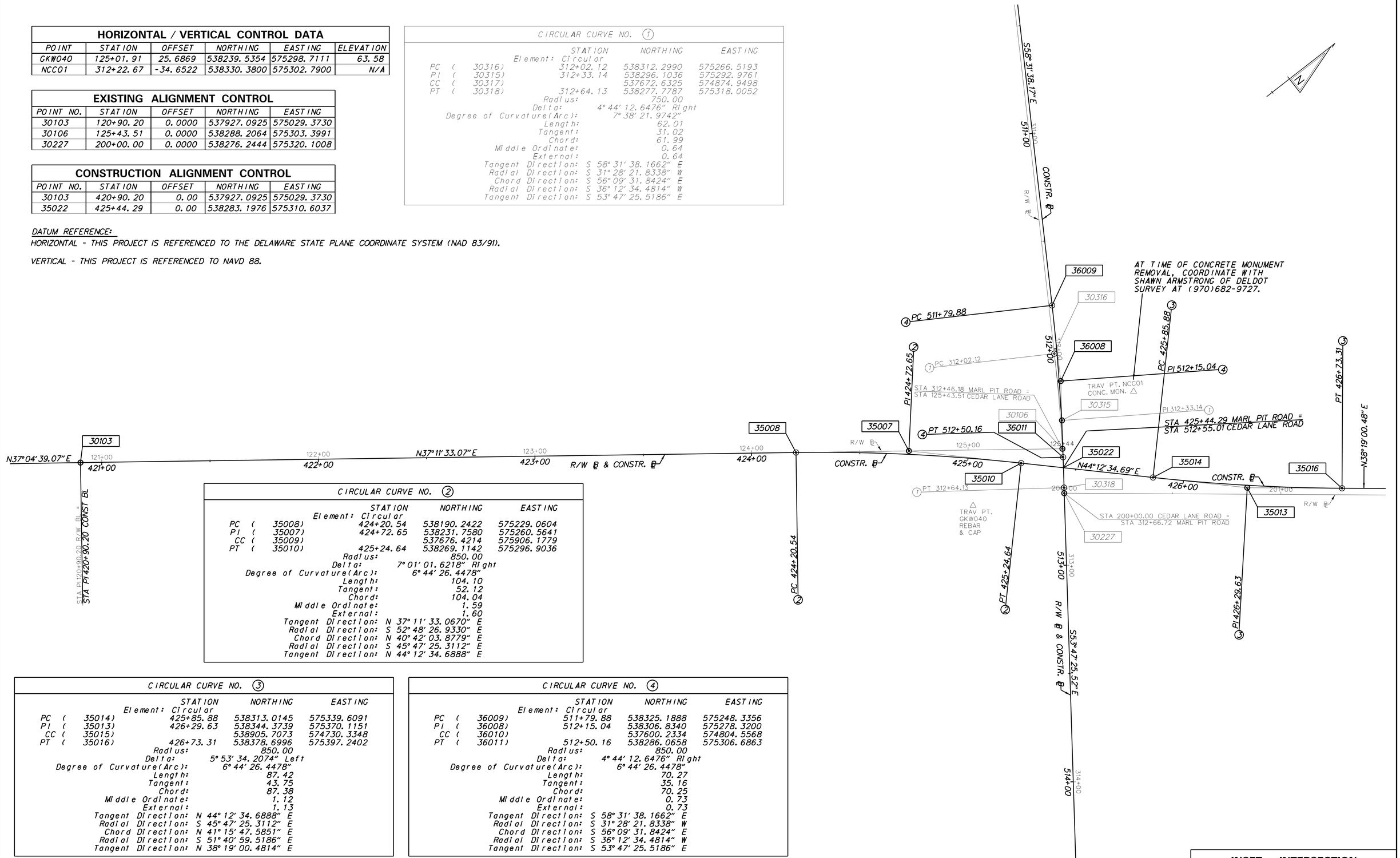
	STATION	NORTHING	EASTING
Element: Circular			
PC (30316)	312+02.12	538312.2990	575266.5193
PI (30315)	312+33.14	538296.1036	575292.9761
CC (30317)		537672.6325	574874.9498
PT (30318)	312+64.13	538277.7787	575318.0052

Radius:	750.00
Delta:	4° 44′ 12.6476″ Right
Degree of Curvature(Arc):	7° 38′ 21.9742″
Length:	62.01
Tangent:	31.02
Chord:	61.99
Middle Ordinate:	0.64
External:	0.64
Tangent Direction:	S 58° 31′ 38.1662″ E
Radial Direction:	S 31° 28′ 21.8338″ W
Chord Direction:	S 56° 09′ 31.8424″ E
Radial Direction:	S 36° 12′ 34.4814″ W
Tangent Direction:	S 53° 47′ 25.5186″ E

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.



CIRCULAR CURVE NO. 2

	STATION	NORTHING	EASTING
Element: Circular			
PC (35008)	424+20.54	538190.2422	575229.0604
PI (35007)	424+72.65	538231.7580	575260.5641
CC (35009)		537676.4214	575906.1779
PT (35010)	425+24.64	538269.1142	575296.9036

Radius:	850.00
Delta:	7° 01′ 01.6218″ Right
Degree of Curvature(Arc):	6° 44′ 26.4478″
Length:	104.10
Tangent:	52.12
Chord:	104.04
Middle Ordinate:	1.59
External:	1.60
Tangent Direction:	N 37° 11′ 33.0670″ E
Radial Direction:	S 52° 48′ 26.9330″ E
Chord Direction:	N 40° 42′ 03.8779″ E
Radial Direction:	S 45° 47′ 25.3112″ E
Tangent Direction:	N 44° 12′ 34.6888″ E

CIRCULAR CURVE NO. 3

	STATION	NORTHING	EASTING
Element: Circular			
PC (35014)	425+85.88	538313.0145	575339.6091
PI (35013)	426+29.63	538344.3739	575370.1151
CC (35015)		538905.7073	574730.3348
PT (35016)	426+73.31	538378.6996	575397.2402

Radius:	850.00
Delta:	5° 53′ 34.2074″ Left
Degree of Curvature(Arc):	6° 44′ 26.4478″
Length:	87.42
Tangent:	43.75
Chord:	87.38
Middle Ordinate:	1.12
External:	1.13
Tangent Direction:	N 44° 12′ 34.6888″ E
Radial Direction:	S 45° 47′ 25.3112″ E
Chord Direction:	N 41° 15′ 47.5851″ E
Radial Direction:	S 51° 40′ 59.5186″ E
Tangent Direction:	N 38° 19′ 00.4814″ E

CIRCULAR CURVE NO. 4

	STATION	NORTHING	EASTING
Element: Circular			
PC (36009)	511+79.88	538325.1888	575248.3356
PI (36008)	512+15.04	538306.8340	575278.3200
CC (36010)		537600.2334	574804.5568
PT (36011)	512+50.16	538286.0658	575306.6863

Radius:	850.00
Delta:	4° 44′ 12.6476″ Right
Degree of Curvature(Arc):	6° 44′ 26.4478″
Length:	70.27
Tangent:	35.16
Chord:	70.25
Middle Ordinate:	0.73
External:	0.73
Tangent Direction:	S 58° 31′ 38.1662″ E
Radial Direction:	S 31° 28′ 21.8338″ W
Chord Direction:	S 56° 09′ 31.8424″ E
Radial Direction:	S 36° 12′ 34.4814″ W
Tangent Direction:	S 53° 47′ 25.5186″ E

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

INSET – INTERSECTION

HORIZONTAL AND VERTICAL CONTROL

SECTION	SHEET NO.
PD	12

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CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	INT PCC CURB AND GUTTER, TYPE 3-8	38'
2	STONE CURB**	47'
3	INT PCC CURB AND GUTTER, TYPE 3-8	13'

** CONTRACTOR TO SALVAGE AND REUSE EXISTING BLOCK CURB. PAYMENT WILL BE INCIDENTAL TO STONE CURB.

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C2 SB	421+49.94	-8.42	3.5" HMA ON 1" ST

* LOCATIONS OF PAVEMENT CORES ARE APPROXIMATE.

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	15" RCP	III	44'	0.0175	57.16	56.39
2	18" RCP	III	68'	0.0076	58.25	57.73

FLARED END SECTION SCHEDULE

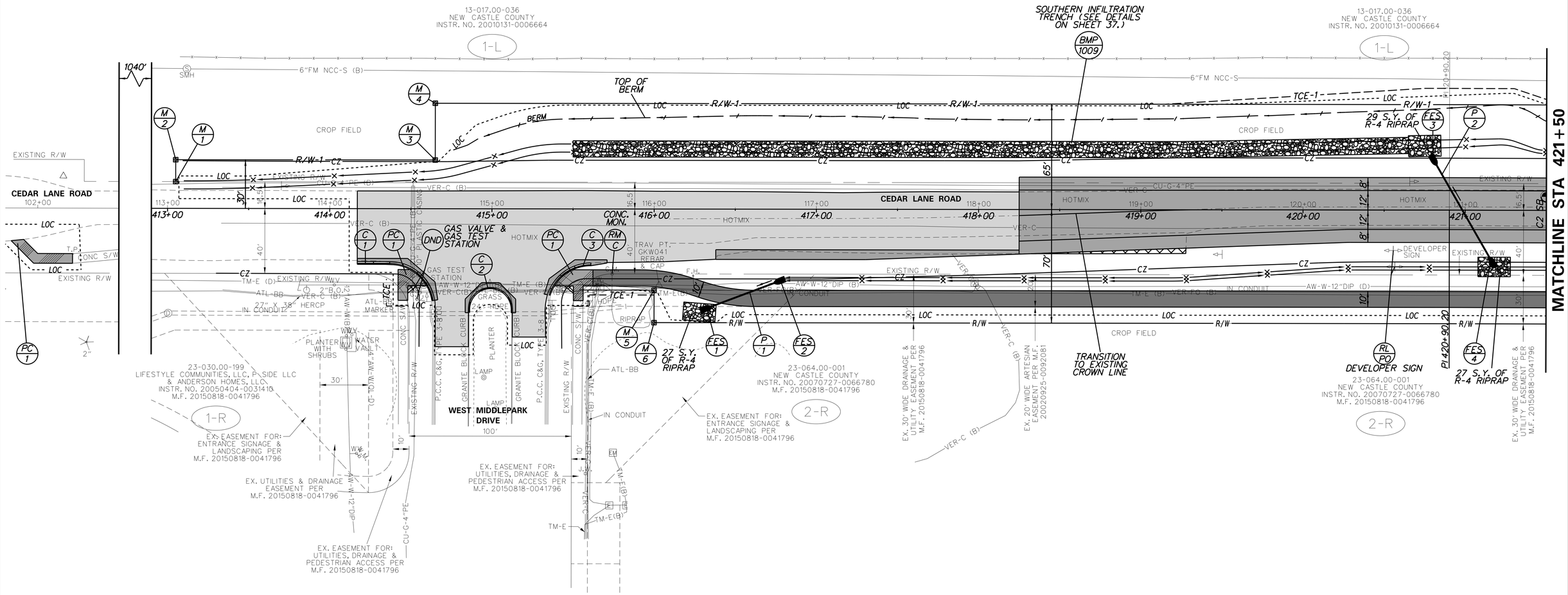
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
1	15" RCP	0.0180	NO
2	15" RCP	0.0180	NO
3	18" RCP	0.0076	NO
4	18" RCP	0.0076	NO

DELDOT SWM FACILITY SCHEDULE

NO.	TYPE / DESCRIPTION	LOCATION
1009	INFILTRATION TRENCH	STA. 415+50 LT. TO STA. 420+65 LT.

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CONCRETE	113+05.00	-16.50	537310.5916	574542.8159
2	CONCRETE	113+05.00	-30.00	537318.7307	574532.0453
3	CAPPED REBAR	114+65.00	-30.00	537446.3819	574628.5085
4	CAPPED REBAR	114+65.00	-65.00	537467.4829	574600.5845
5	CONCRETE	116+00.00	50.00	537505.8561	574773.7249
6	CONCRETE	116+00.00	70.00	537493.7982	574789.6814



ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

CONSTRUCTION PLAN

CP-01

SECTION: PD

SHEET NO. 13

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DRAINAGE INLET SCHEDULE

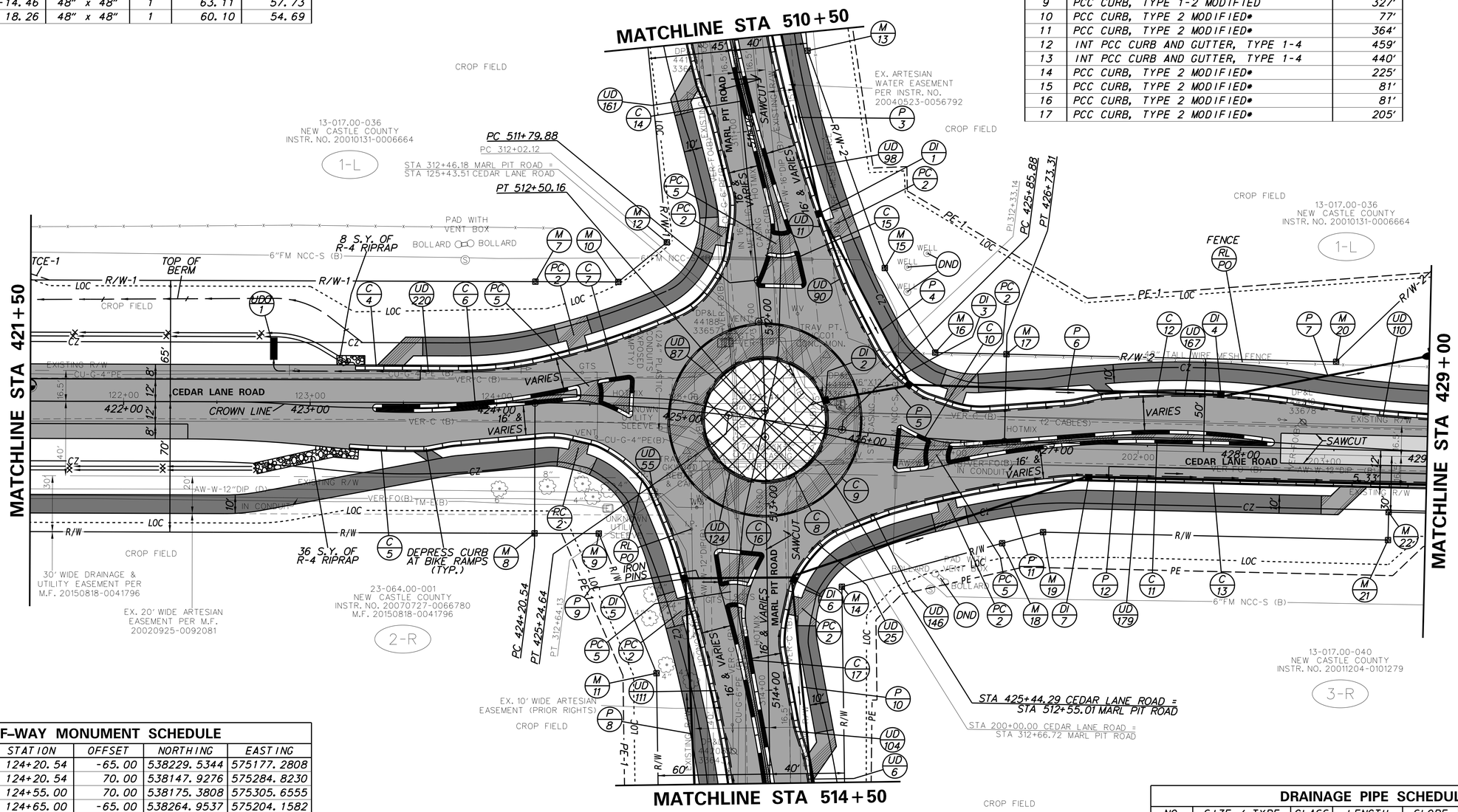
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
1	511+47.59	-36.16	48" x 48"	1	63.52	57.42
2	425+75.24	-14.49	34" x 24"	1	64.39	59.77
3	426+19.53	-27.81	66" x 66"	1	63.01	56.04
4	427+88.69	-28.14	48" x 48"	1	58.58	55.00
5	513+39.71	44.27	48" x 30"	1	63.12	59.44
6	513+40.91	-14.46	48" x 48"	1	63.11	57.73
7	427+18.90	18.26	48" x 48"	1	60.10	54.69

UNDERDRAIN OUTLETS

NO.	LENGTH	DIS. EL.
1	15.00	59.62

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
4	INT PCC CURB AND GUTTER, TYPE 1-4	310'
5	INT PCC CURB AND GUTTER, TYPE 1-4	310'
6	PCC CURB, TYPE 2 MODIFIED*	232'
7	PCC CURB, TYPE 2 MODIFIED*	72'
8	PCC CURB, TYPE 1-8	209'
9	PCC CURB, TYPE 1-2 MODIFIED	327'
10	PCC CURB, TYPE 2 MODIFIED*	77'
11	PCC CURB, TYPE 2 MODIFIED*	364'
12	INT PCC CURB AND GUTTER, TYPE 1-4	459'
13	INT PCC CURB AND GUTTER, TYPE 1-4	440'
14	PCC CURB, TYPE 2 MODIFIED*	225'
15	PCC CURB, TYPE 2 MODIFIED*	81'
16	PCC CURB, TYPE 2 MODIFIED*	81'
17	PCC CURB, TYPE 2 MODIFIED*	205'



RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
7	CONCRETE	124+20.54	-65.00	538229.5344	575177.2808
8	CONCRETE	124+20.54	70.00	538147.9276	575284.8230
9	CAPPED REBAR	124+55.00	70.00	538175.3808	575305.6555
10	CAPPED REBAR	124+65.00	-65.00	538264.9537	575204.1582
11	CONCRETE	313+90.00	60.00	538155.0085	575384.1231
12	CONCRETE	311+55.00	45.00	538298.5208	575202.8358
13	CONCRETE	310+60.00	-40.00	538420.6152	575166.1892
14	CONCRETE	313+45.00	-40.00	538262.2779	575406.8884
15	CAPPED REBAR	311+80.00	-70.00	538383.5507	575284.1987
16	CAPPED REBAR	200+90.00	-50.00	538377.8583	575336.6719
17	CONCRETE	201+28.21	-50.00	538407.8400	575360.3642
18	CONCRETE	201+28.21	51.46	538344.9361	575439.9664
19	CAPPED REBAR	201+50.00	45.00	538366.0332	575448.4089
20	CAPPED REBAR	203+05.00	-50.00	538546.5462	575469.9738
21	CAPPED REBAR	203+35.00	45.00	538511.1832	575563.1106
22	CAPPED REBAR	203+35.00	30.00	538520.4833	575551.3417

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
3	21" RCP	III	156'	0.0050	58.40	57.62
4	21" RCP	III	98'	0.0050	57.42	56.93
5	15" RCP	III	44'	0.0050	59.77	59.55
6	21" RCP	III	163'	0.0050	56.04	55.22
7	21" RCP	III	112'	0.0050	55.00	54.44
8	15" RCP	III	193'	0.0050	60.61	59.64
9	18" RCP	III	55'	0.0051	59.44	59.16
10	15" RCP	III	161'	0.0050	60.20	59.39
11	18" RCP	III	165'	0.0050	57.73	56.90
12	18" RCP	III	227'	0.0050	54.69	53.55

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

CONSTRUCTION PLAN

CP-02

SECTION PD

SHEET NO. 14

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DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
8	429+50.00	18.26	48" x 48"	1	56.66	53.35
9	429+53.00	-18.26	34" x 24"	1	56.70	52.98

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
13	14"x23" HERCP	III	33'	0.0052	53.35	53.18
14	14"x23" HERCP	III	28'	0.0050	52.98	52.84

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
23	CAPPED REBAR	203+75.00	-120.00	538644.8684	575458.4529
24	CAPPED REBAR	205+70.00	-120.00	538797.8644	575579.3546
25	CONCRETE	206+10.00	16.50	538744.6169	575711.2522
26	CONCRETE	206+10.00	30.00	538736.2468	575721.8442
27	CAPPED REBAR	206+95.00	-95.00	538880.4385	575676.4706
28	CONCRETE	208+50.00	-95.00	539002.0507	575772.5721
29	CONCRETE	208+50.00	-16.50	538953.3799	575834.1627

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C1 SB	431+43.45	-7.78	3"HMA, 10"CEMENT RECYCLED, 1"+ CR
C3 NB	429+09.43	6.53	3"HMA, 9"CEMENT RECYCLED, 1"+ CR

* LOCATIONS OF PAVEMENT CORES ARE APPROXIMATE.

DELDOT SWM FACILITY SCHEDULE

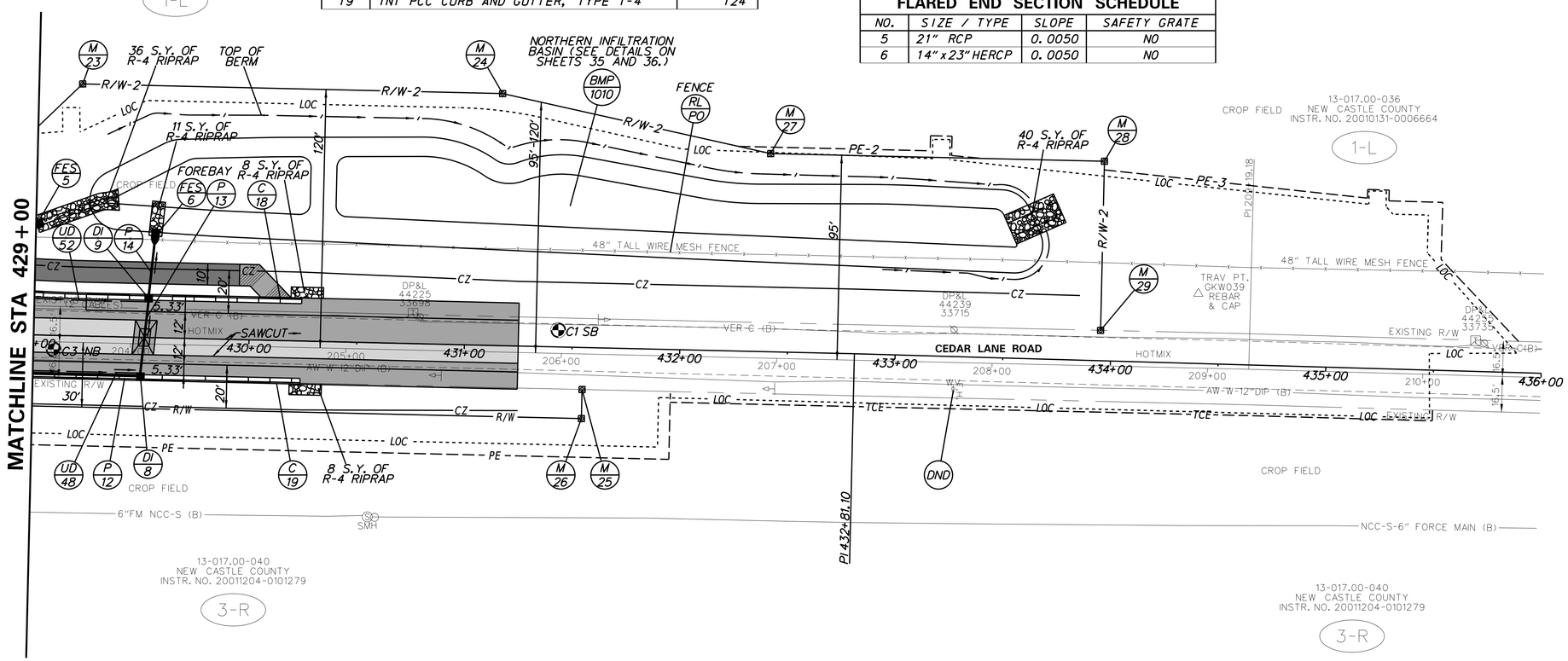
NO.	TYPE / DESCRIPTION	LOCATION
1010	INFILTRATION BASIN	STA. 429+29 LT. TO STA. 433+59 LT.

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
18	INT PCC CURB AND GUTTER, TYPE 1-4	124'
19	INT PCC CURB AND GUTTER, TYPE 1-4	124'

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
5	21" RCP	0.0050	NO
6	14"x23"HERCP	0.0050	NO



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

CONSTRUCTION PLAN

CP-03
SECTION PD
SHEET NO. 15

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CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
20	INT PCC CURB AND GUTTER, TYPE 1-4	100'
21	PCC CURB, TYPE 2 MODIFIED*	147'
22	INT PCC CURB AND GUTTER, TYPE 1-4	75'

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
15	18" RCP	III	48'	0.0056	59.41	59.14
16	18" RCP	III	45'	0.0053	58.84	58.60
17	15" RCP	III	44'	0.0050	59.83	59.61

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
30	CONCRETE	305+60.00	16.50	538633.4733	574710.2466
31	CONCRETE	305+60.00	45.00	538609.1660	574695.3670
32	CONCRETE	306+40.00	-40.00	538639.8941	574807.9760
33	CONCRETE	306+40.00	-16.50	538619.8512	574795.7068

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
7	18" RCP	0.0056	YES
8	15" RCP	0.0050	YES

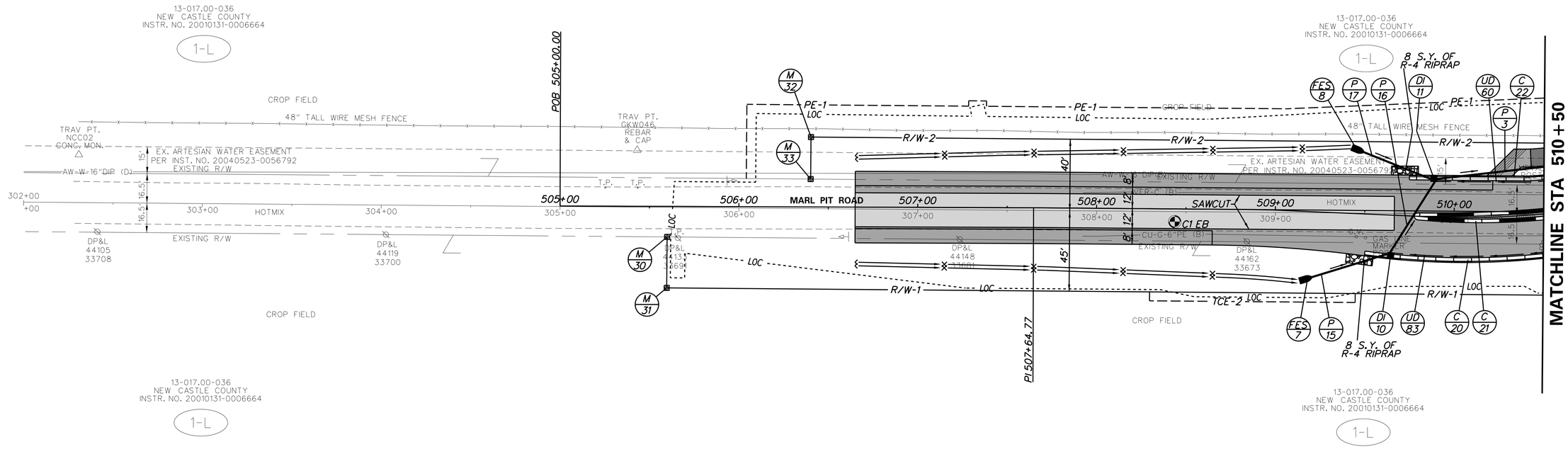
DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
10	509+64.59	25.19	48" x 48"	1	62.46	58.84
11	509+88.47	-18.26	48" x 48"	1	62.56	58.40

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C1 EB	508+43.76	7.13	9" HMA ON 1" ST

* LOCATIONS OF PAVEMENT CORES ARE APPROXIMATE.



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

CONSTRUCTION PLAN

CP-04

SECTION	SHEET NO.
PD	16

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CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
23	PCC CURB, TYPE 2 MODIFIED*	167'
24	INT PCC CURB AND GUTTER, TYPE 1-4	85'
25	INT PCC CURB AND GUTTER, TYPE 1-4	83'

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
9	15" RCP	0.0050	YES
10	15" RCP	0.0050	YES

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
34	CAPPED REBAR	315+25.00	60.00	538075.2585	575493.0495
35	CONCRETE	316+25.00	50.00	538024.2530	575579.6430
36	CONCRETE	318+70.00	-40.00	537952.1391	575830.4908
37	CONCRETE	318+70.00	-16.50	537933.1779	575816.6084
38	CONCRETE	321+42.78	50.00	537718.5639	575997.1678

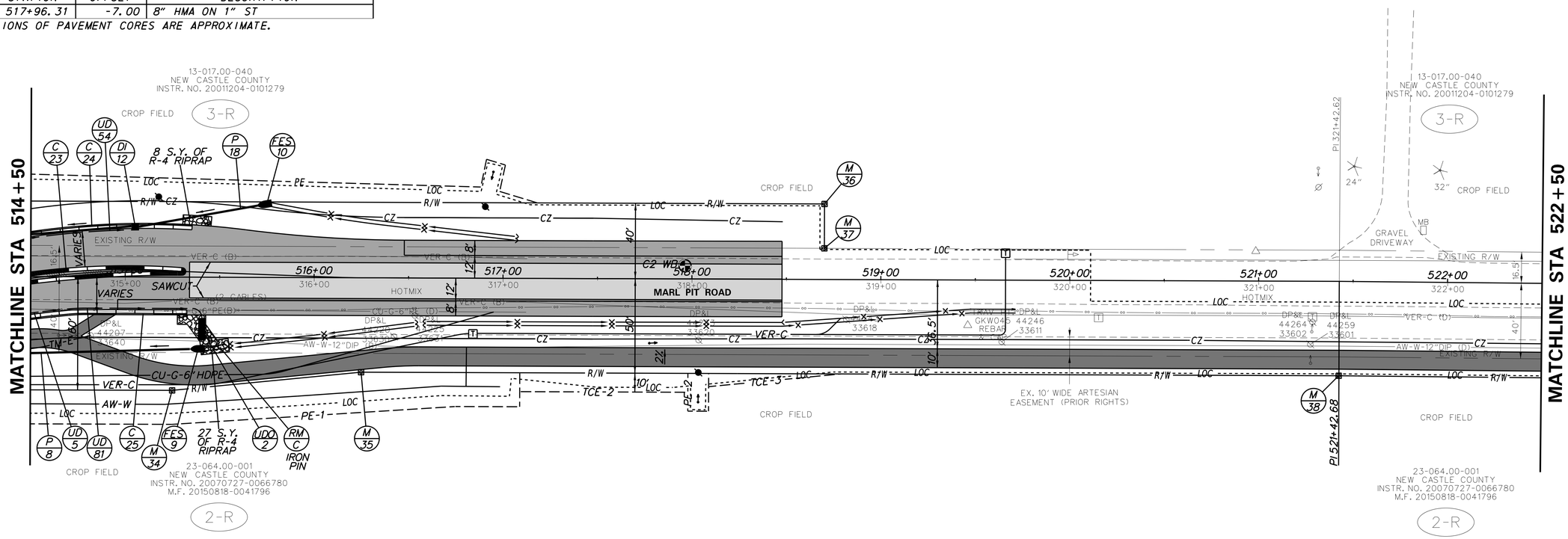
DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
12	515+05.22	-26.62	48" x 30"	1	63.63	60.20

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
2	18.00	60.61

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
18	15" RCP	III	68'	0.0050	60.78	60.44

ROADWAY CORE SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
C2 WB	517+96.31	-7.00	8" HMA ON 1" ST

* LOCATIONS OF PAVEMENT CORES ARE APPROXIMATE.



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

CONSTRUCTION PLAN

CP-05
SECTION
PD
SHEET NO.
17

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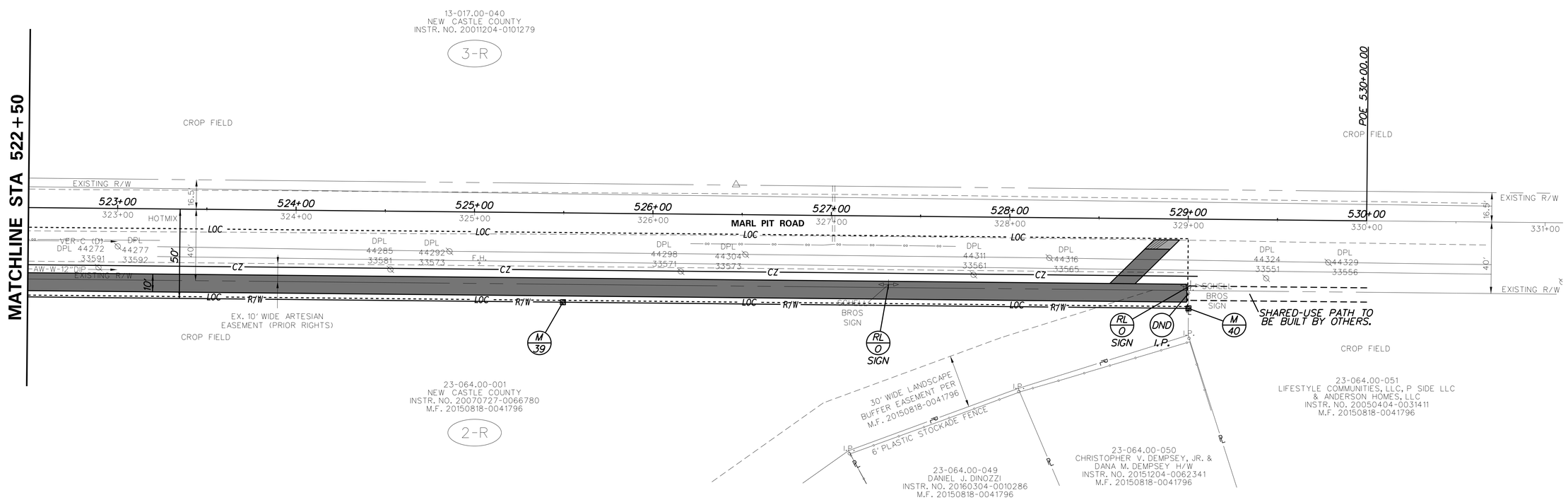
RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
39	CONCRETE	325+50.00	50.00	537475.9540	576324.2281
40	CONCRETE	329+00.57	50.00	537267.0939	576605.7906



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ADDENDA / REVISIONS	

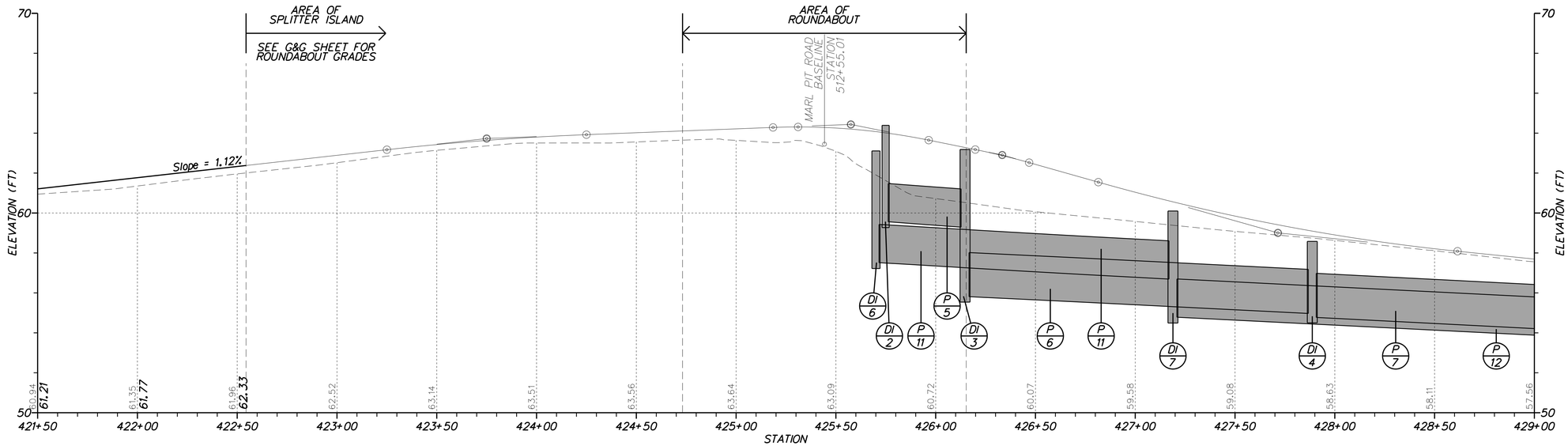
SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

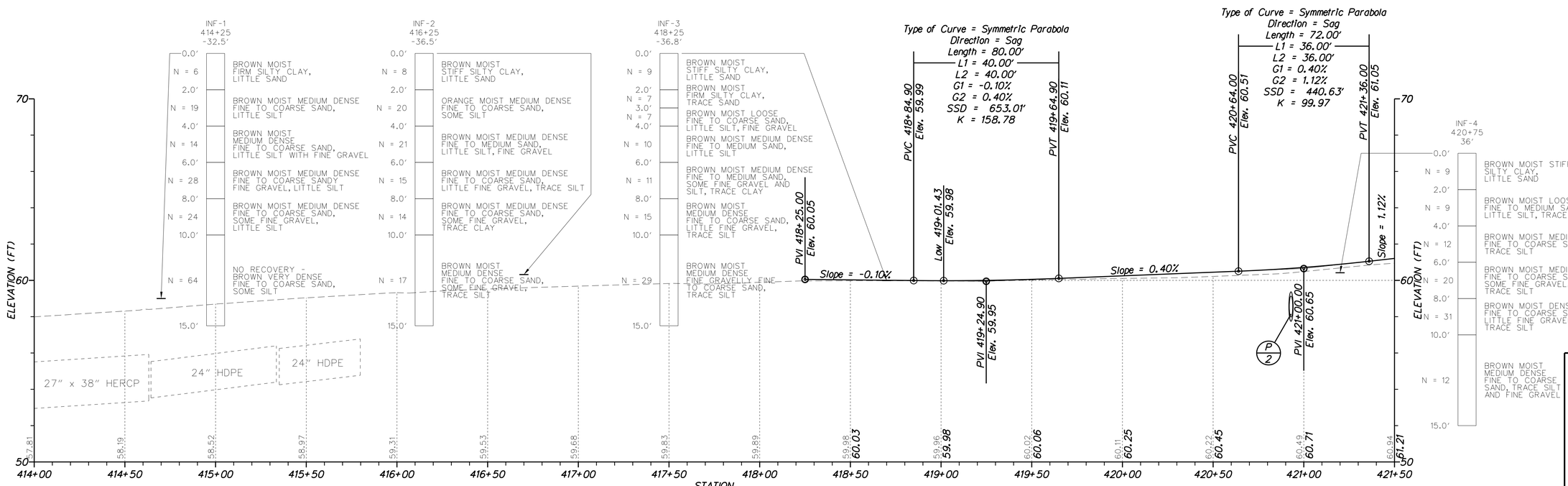
CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

CONSTRUCTION PLAN

CP-06
SECTION
PD
SHEET NO.
18



CEDAR LANE ROAD



CEDAR LANE ROAD

NOTE: THE BORING DATA PROVIDED ON THE PROFILE SHEETS INDICATES THE SOIL CONDITION ONLY AT THE SPECIFIC LOCATION EACH BORING WAS PERFORMED AND ONLY TO THE DEPTH PENETRATED.

* NOTE: BORING INFORMATION IS FOR INFORMATION PURPOSES ONLY. INFORMATION WAS DERIVED FROM VISUAL OBSERVATION DURING THE DRILLING OF BORINGS. BORINGS WERE TERMINATED 15 FEET BELOW EXISTING GRADE. TOP 10"-12" OF BORINGS WAS TOPSOIL.

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

PROFILES

SECTION
PD
SHEET NO.
19

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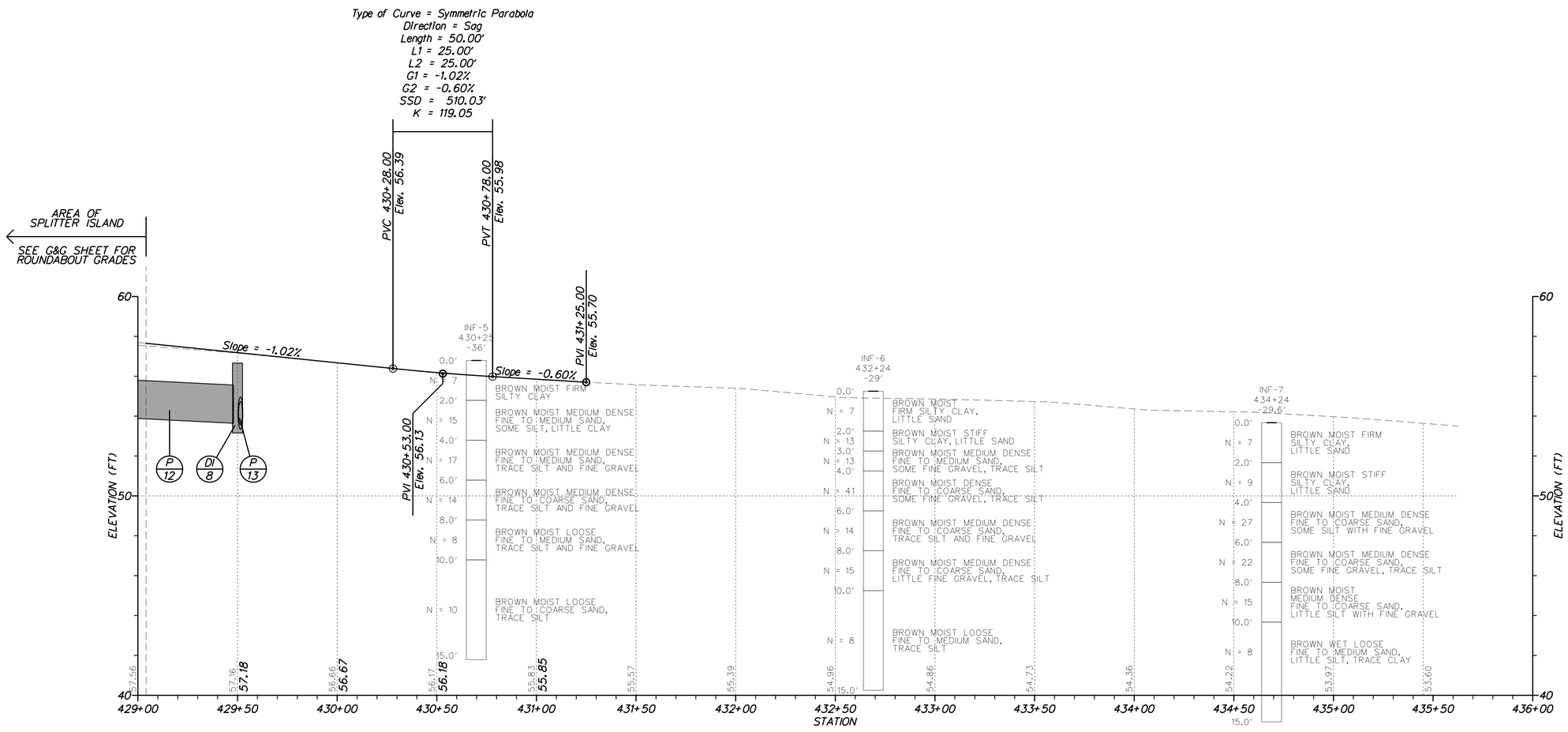

CEDAR LANE ROAD

NOTE: THE BORING DATA PROVIDED ON THE PROFILE SHEETS INDICATES THE SOIL CONDITION ONLY AT THE SPECIFIC LOCATION EACH BORING WAS PERFORMED AND ONLY TO THE DEPTH PENETRATED.

VERTICAL SCALE FEET: 0 3 6 9

ADDENDA / REVISIONS	

SCALE: 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

PROFILES

SECTION
PD
SHEET NO.
20

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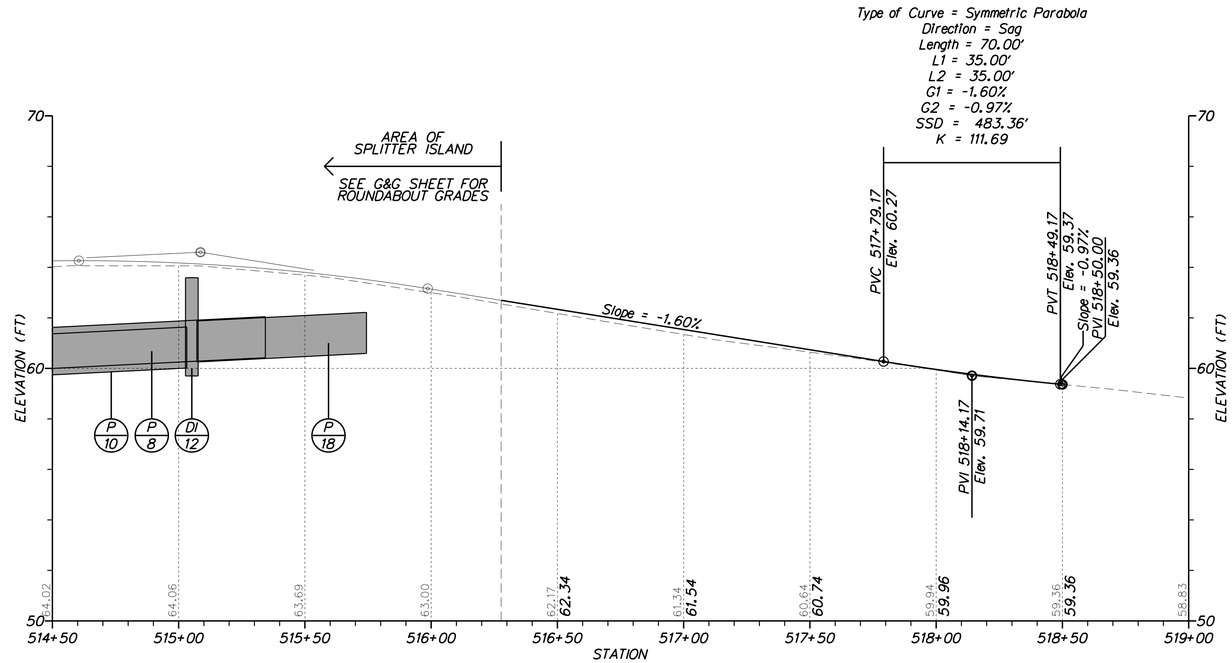
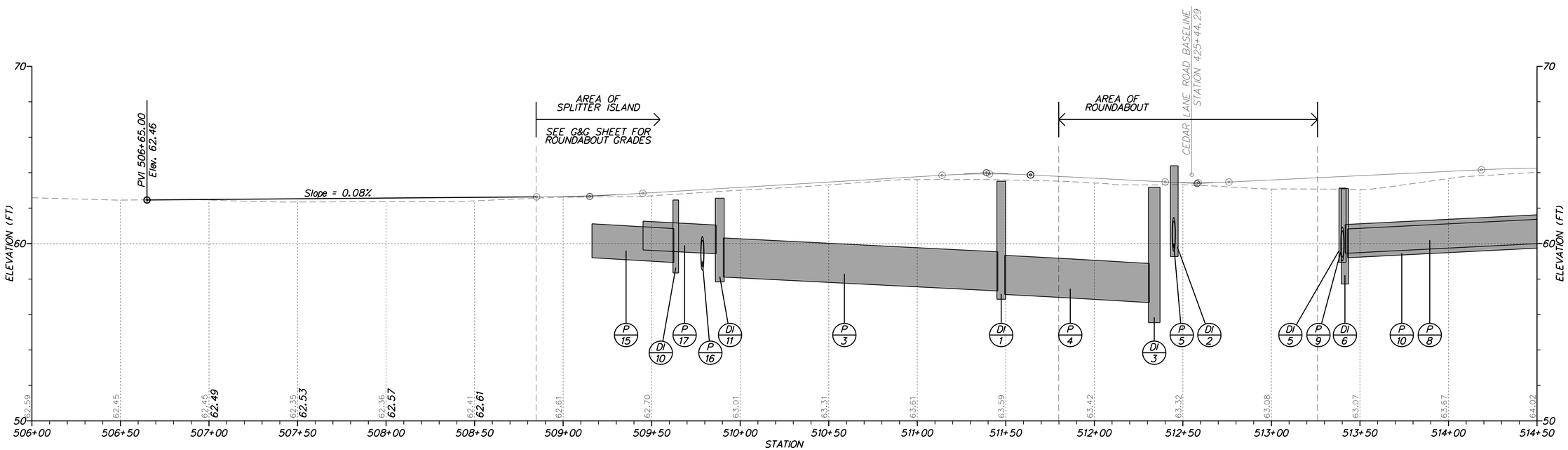


MARL PIT ROAD



MARL PIT ROAD

VERTICAL SCALE FEET 9 6 3 0

NOTE: THE BORING DATA PROVIDED ON THE PROFILE SHEETS INDICATES THE SOIL CONDITION ONLY AT THE SPECIFIC LOCATION EACH BORING WAS PERFORMED AND ONLY TO THE DEPTH PENETRATED.

ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

PROFILES

SECTION
PD
SHEET NO.
21

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NOTES:

1. OFFSETS SHOWN IN THE GEOMETRY TABLES WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS ALONG INTERSECTION CURVES ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATIONS.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.
7. AT LOCATIONS WHERE CURB OR CURB AND GUTTER IS REMOVED FOR CURB RAMP REPLACEMENT, EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED FOR A MINIMUM OF 10' OR TO THE NEAREST JOINT IN THE EXISTING CURB.

COORDINATE LIST

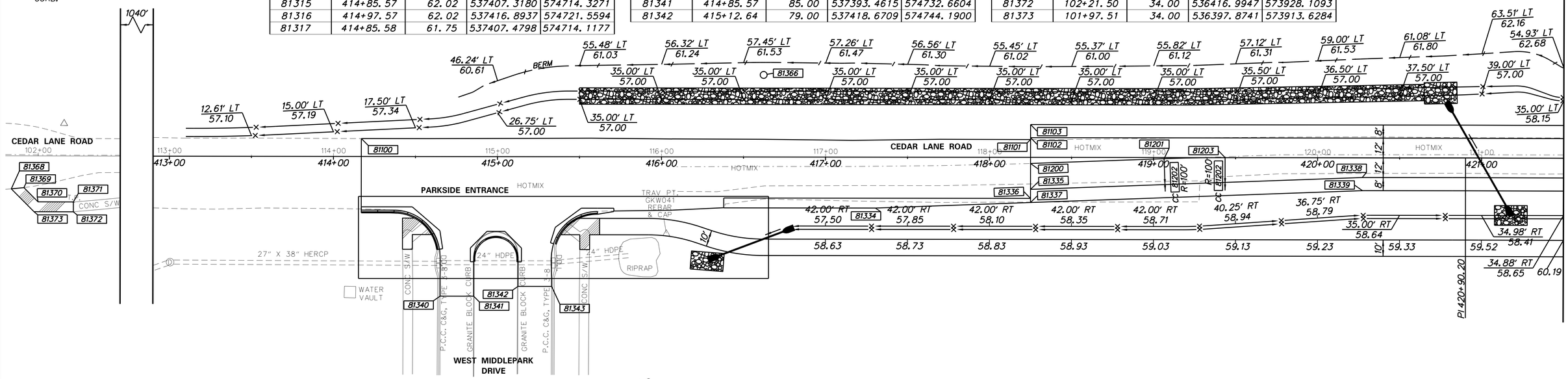
POINT NO.	STATION	OFFSET	NORTHING	EASTING
81100	414+17.00	-10.91	537396.5771	574614.8015
81101	418+25.00	-10.87	537722.0615	574860.8162
81102	418+25.00	-12.00	537722.7452	574859.9114
81103	418+25.00	-20.00	537727.5684	574853.5289
81200	418+25.00	3.72	537713.2652	574872.4566
81201	419+06.40	0.69	537780.0340	574919.1126
81202	419+43.61	1000.00	537207.2487	575738.8180
81203	419+43.61	0.00	537810.1437	574940.9975
81300	414+17.00	30.67	537371.5115	574647.9712
81301	414+17.00	32.67	537370.3057	574649.5669
81302	414+48.11	30.67	537396.3300	574666.7260
81303	414+64.97	45.13	537401.0577	574688.4328
81304	414+66.65	56.11	537395.7834	574698.2086
81305	414+37.00	32.67	537386.2621	574661.6248
81306	414+37.00	60.67	537369.3811	574683.9637
81307	414+64.68	56.42	537394.0233	574697.2589
81308	414+83.57	64.02	537404.5167	574714.7177
81309	414+83.57	55.61	537409.5851	574708.0070
81310	414+93.68	45.50	537423.7466	574706.0363
81311	415+04.56	45.50	537432.4286	574712.5970
81312	415+14.69	55.62	537434.4018	574726.7767
81313	415+14.67	64.06	537429.2992	574733.4979
81314	414+85.57	64.02	537406.1127	574715.9230
81315	414+85.57	62.02	537407.3180	574714.3271
81316	414+97.57	62.02	537416.8937	574721.5594
81317	414+85.58	61.75	537407.4798	574714.1177

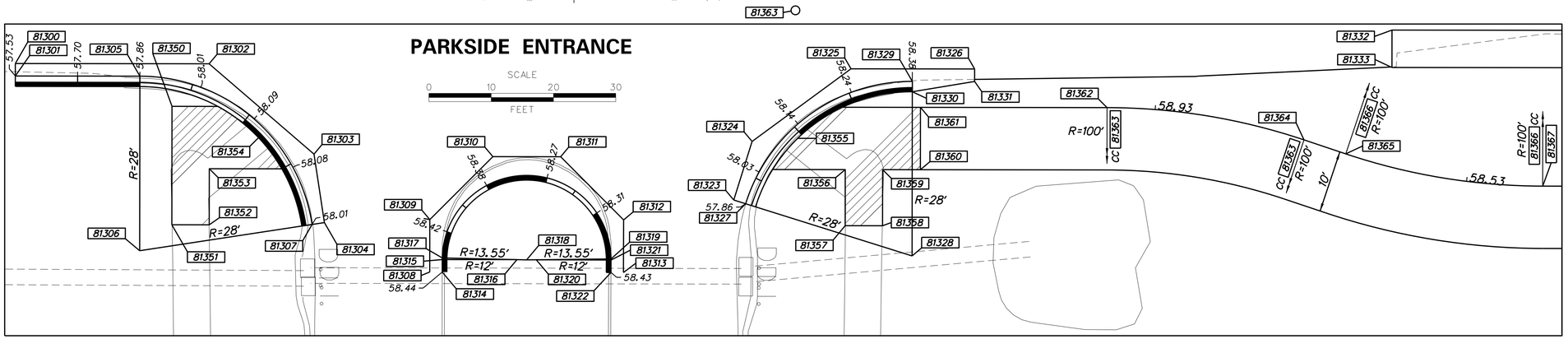
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81318	414+99.12	62.05	537418.1101	574722.5209
81319	415+12.67	61.88	537429.0212	574730.5543
81320	415+00.67	62.03	537419.3579	574723.4396
81321	415+12.67	62.06	537428.9156	574730.6956
81322	415+12.67	64.06	537427.7063	574732.2886
81323	415+32.36	52.40	537450.4445	574734.8658
81324	415+35.29	43.00	537458.4502	574729.1326
81325	415+51.16	31.33	537478.1424	574729.3852
81326	415+71.00	31.33	537493.9765	574741.3507
81327	415+34.27	53.00	537451.6089	574736.4918
81328	415+61.00	61.33	537467.9114	574759.2565
81329	415+61.00	33.33	537484.7925	574736.9175
81330	415+61.01	35.00	537483.7919	574738.2504
81331	415+71.00	33.33	537492.7707	574742.9464
81332	416+38.00	25.00	537551.2457	574776.6894
81333	416+38.00	31.00	537547.6283	574781.4764
81334	417+30.37	31.00	537621.3232	574837.1659
81335	418+25.00	19.49	537703.7602	574885.0346
81336	418+25.00	25.00	537700.4381	574889.4308
81337	418+25.00	27.50	537698.9338	574891.4215
81338	420+27.22	12.00	537869.6127	575000.9779
81339	420+27.37	20.00	537864.9077	575007.4497
81340	414+65.14	85.00	537377.1608	574720.3423
81341	414+85.57	85.00	537393.4615	574732.6604
81342	415+12.64	79.00	537418.6709	574744.1900

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
81343	415+33.11	79.00	537435.0092	574756.5366
81350	414+42.16	37.50	537387.4649	574668.5917
81351	414+42.16	56.50	537376.0099	574683.7503
81352	414+48.16	56.50	537380.7969	574687.3677
81353	414+48.16	47.50	537386.2229	574680.1873
81354	414+56.06	42.50	537395.5429	574680.9631
81355	415+42.60	42.50	537464.5820	574733.1344
81356	415+50.26	47.50	537467.6765	574741.7400
81357	415+50.26	56.50	537462.2505	574748.9203
81358	415+56.26	56.50	537467.0374	574752.5377
81359	415+56.26	47.50	537472.4635	574745.3573
81360	415+62.32	47.50	537477.2999	574749.0121
81361	415+62.32	37.50	537483.3288	574741.0339
81362	415+92.27	37.50	537507.2269	574759.0932
81363	415+92.27	137.50	537446.9374	574838.8752
81364	416+23.90	42.63	537529.3624	574782.2525
81365	416+30.60	44.87	537533.3673	574788.0824
81366	416+62.23	-50.00	537615.7922	574731.4597
81367	416+62.23	50.00	537555.5027	574811.2418
81368	101+83.63	20.12	536395.1889	573894.1818
81369	101+91.34	19.34	536401.8030	573898.2167
81370	102+00.00	28.00	536403.4777	573910.3457
81371	102+21.50	28.00	536420.6171	573923.3262
81372	102+21.50	34.00	536416.9947	573928.1093
81373	101+97.51	34.00	536397.8741	573913.6284





ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-01

SECTION: PD

SHEET NO. 22

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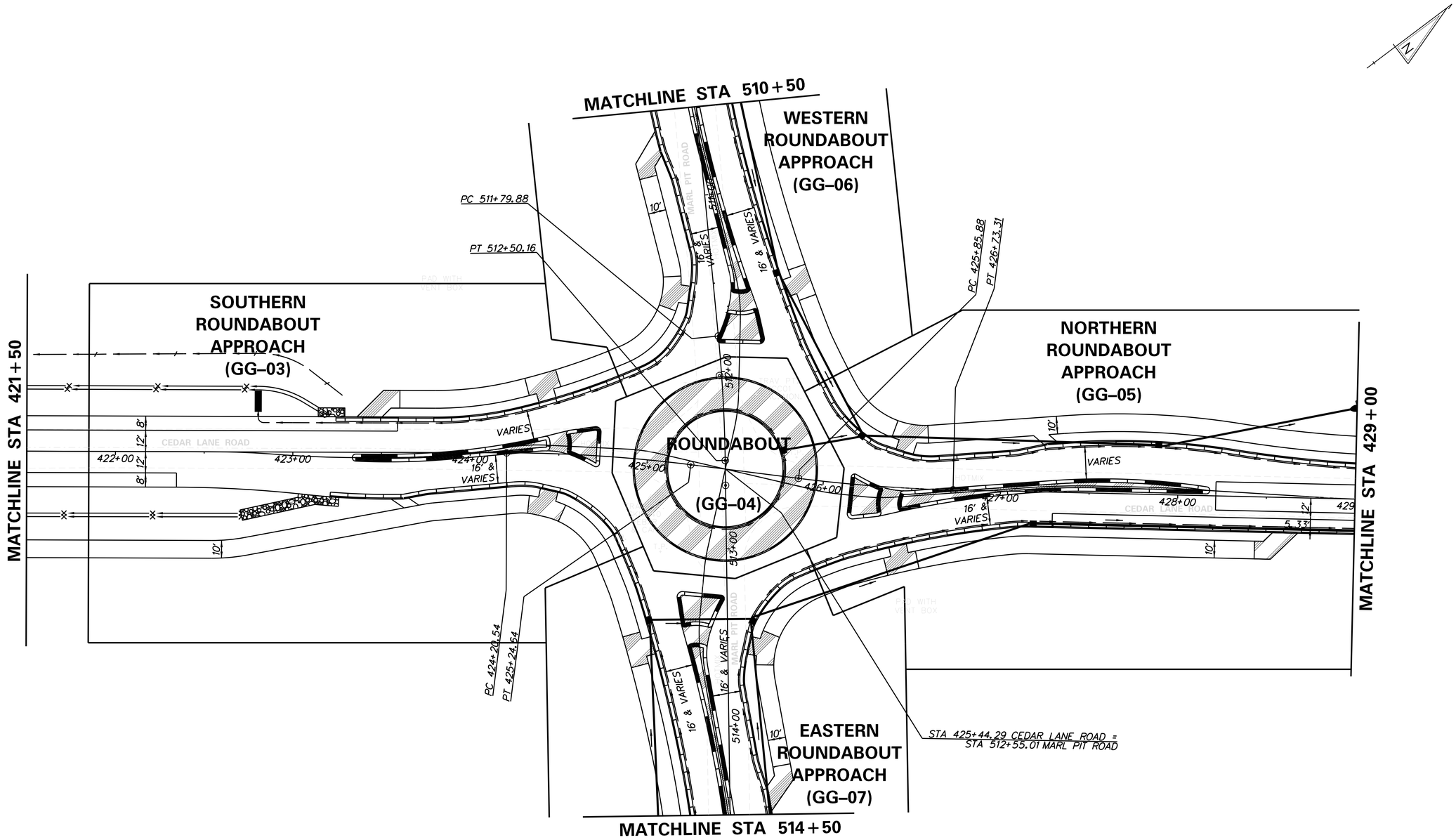

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG–02
SECTION
PD
SHEET NO.
23

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COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
87000	422+54.44	0.00	538057.9259	575128.6541
87001	422+54.44	501.00	537755.0739	575527.7551
87002	422+91.46	1.37	538086.5934	575152.1279
87003	423+35.51	-593.00	538480.9758	574705.2739
87004	423+35.51	3.00	538120.6968	575180.0528
87005	423+52.52	3.00	538134.2429	575190.3321
87006	423+52.52	-393.13	538373.7018	574874.7712
87007	424+21.05	-2.97	538192.4538	575227.0046
87008	424+40.61	95.31	538146.6991	575315.9232
87009	424+42.80	-4.67	538210.7215	575239.1044
87100	423+24.26	-17.33	538124.0260	575157.0543
87101	423+24.26	-20.00	538125.6380	575154.9300

COORDINATE LIST

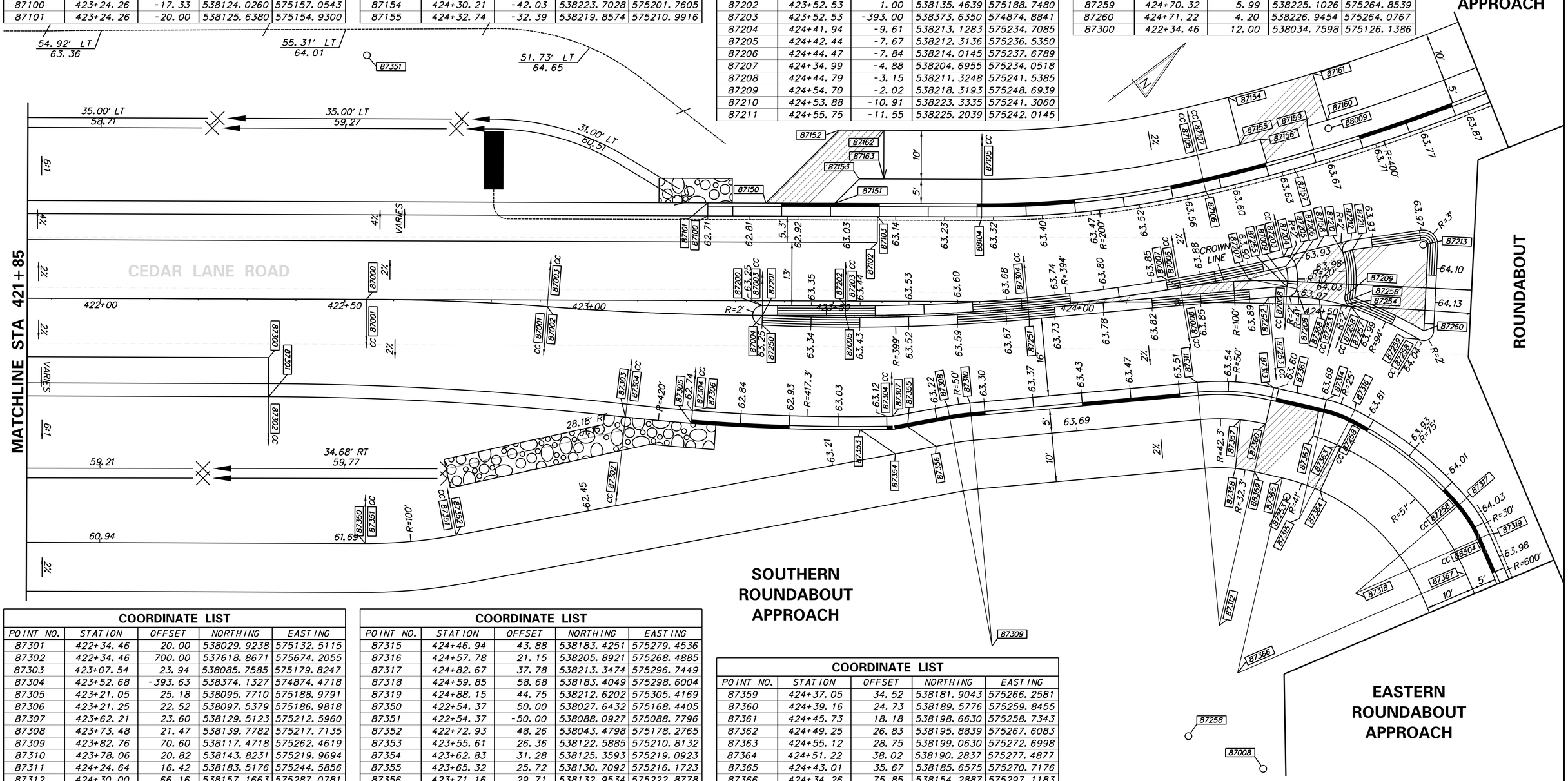
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87102	423+58.98	-12.00	538148.4576	575182.2889
87103	423+58.98	-17.33	538151.6816	575178.0403
87104	423+80.34	-17.33	538168.7002	575190.9546
87105	423+80.34	-217.33	538289.5992	575031.6328
87106	424+26.07	-22.69	538208.4718	575214.4397
87107	423+34.46	-412.00	538370.7266	574848.8260
87150	423+36.12	-20.00	538135.0874	575162.1005
87151	423+50.27	-20.00	538146.3532	575170.6494
87152	423+51.12	-35.00	538156.1040	575159.2188
87153	423+55.27	-25.00	538153.3587	575169.6888
87154	424+30.21	-42.03	538223.7028	575201.7605
87155	424+32.74	-32.39	538219.8574	575210.9916

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
87156	424+36.66	-33.54	538223.7759	575212.5991
87157	424+43.48	-27.67	538225.6430	575221.5870
87158	424+48.51	-11.49	538219.4844	575237.4102
87159	424+45.83	-36.52	538233.0949	575216.2262
87160	424+49.67	-37.89	538237.0691	575217.6906
87161	424+46.55	-47.33	538240.4758	575208.2888
87162	423+60.27	-35.00	538163.3867	575164.7452
87163	423+60.27	-25.00	538157.3418	575172.7113
87200	423+35.53	1.00	538121.9168	575178.4680
87201	423+35.53	3.00	538120.7078	575180.0612
87202	423+52.53	1.00	538135.4639	575188.7480
87203	423+52.53	-393.00	538373.6350	574874.8841
87204	424+41.94	-9.61	538213.1283	575234.7085
87205	424+42.44	-7.67	538212.3136	575236.5350
87206	424+44.47	-7.84	538214.0145	575237.6789
87207	424+34.99	-4.88	538204.6955	575234.0518
87208	424+44.79	-3.15	538211.3248	575241.5385
87209	424+54.70	-2.02	538218.3193	575248.6939
87210	424+53.88	-10.91	538223.3335	575241.3060
87211	424+55.75	-11.55	538225.2039	575242.0145

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
87212	424+55.19	-13.47	538225.9863	575240.1738
87213	424+70.00	-13.37	538237.4407	575249.9217
87251	423+90.14	3.61	538163.8492	575213.5616
87252	424+39.13	-1.22	538205.6863	575239.5065
87253	424+44.10	39.49	538184.0782	575274.3503
87254	424+54.16	-0.31	538216.8180	575249.6701
87255	424+42.82	-3.49	538209.9990	575240.0412
87256	424+56.68	-1.76	538219.6817	575250.1581
87257	424+56.06	0.14	538217.9903	575251.2253
87258	424+23.32	88.89	538138.4910	575301.3838
87259	424+70.32	5.99	538225.1026	575264.8539
87260	424+71.22	4.20	538226.9454	575264.0767
87300	422+34.46	12.00	538034.7598	575126.1386



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
87301	422+34.46	20.00	538029.9238	575132.5115
87302	422+34.46	700.00	537618.8671	575674.2055
87303	423+07.54	23.94	538085.7585	575179.8247
87304	423+52.68	-393.63	538374.1327	574874.4718
87305	423+21.05	25.18	538095.7710	575188.9791
87306	423+21.25	22.52	538097.5379	575186.9818
87307	423+62.21	23.60	538129.5123	575212.5960
87308	423+73.48	21.47	538139.7782	575217.7135
87309	423+82.76	70.60	538117.4718	575262.4619
87310	423+78.06	20.82	538143.8231	575219.9694
87311	424+24.64	16.42	538183.5176	575244.5856
87312	424+30.00	66.16	538157.1663	575287.0781
87313	424+40.68	17.21	538195.4210	575254.8822
87314	424+51.79	19.32	538202.5524	575263.3556

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
87315	424+46.94	43.88	538183.4251	575279.4536
87316	424+57.78	21.15	538205.8921	575268.4885
87317	424+82.67	37.78	538213.3474	575296.7449
87318	424+59.85	58.68	538183.4049	575298.6004
87319	424+88.15	44.75	538212.6202	575305.4169
87350	422+54.37	50.00	538027.6432	575168.4405
87351	422+54.37	-50.00	538088.0927	575088.7796
87352	422+72.93	48.26	538043.4798	575178.2765
87353	423+55.61	26.36	538122.5885	575210.8132
87354	423+62.83	31.28	538125.3593	575219.0923
87355	423+65.32	25.72	538130.7092	575216.1723
87356	423+71.16	29.71	538132.9534	575222.8778
87357	424+33.84	23.99	538185.9774	575256.0616
87358	424+32.97	33.95	538179.1717	575263.3883

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
87359	424+37.05	34.52	538181.9043	575266.2581
87360	424+39.16	24.73	538189.5776	575259.8455
87361	424+45.73	18.18	538198.6630	575258.7343
87362	424+49.25	26.83	538195.8839	575267.6083
87363	424+55.12	28.75	538199.0630	575272.6998
87364	424+51.22	38.02	538190.2837	575277.4877
87365	424+43.01	35.67	538185.6575	575270.7176
87366	424+34.26	75.85	538154.2887	575297.1183
87367	424+83.83	53.40	538203.8418	575309.1803
87368	424+49.49	-1.17	538213.7400	575246.0452

ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

GRADES AND GEOMETRICS

GG-03

SECTION PD

SHEET NO. 24

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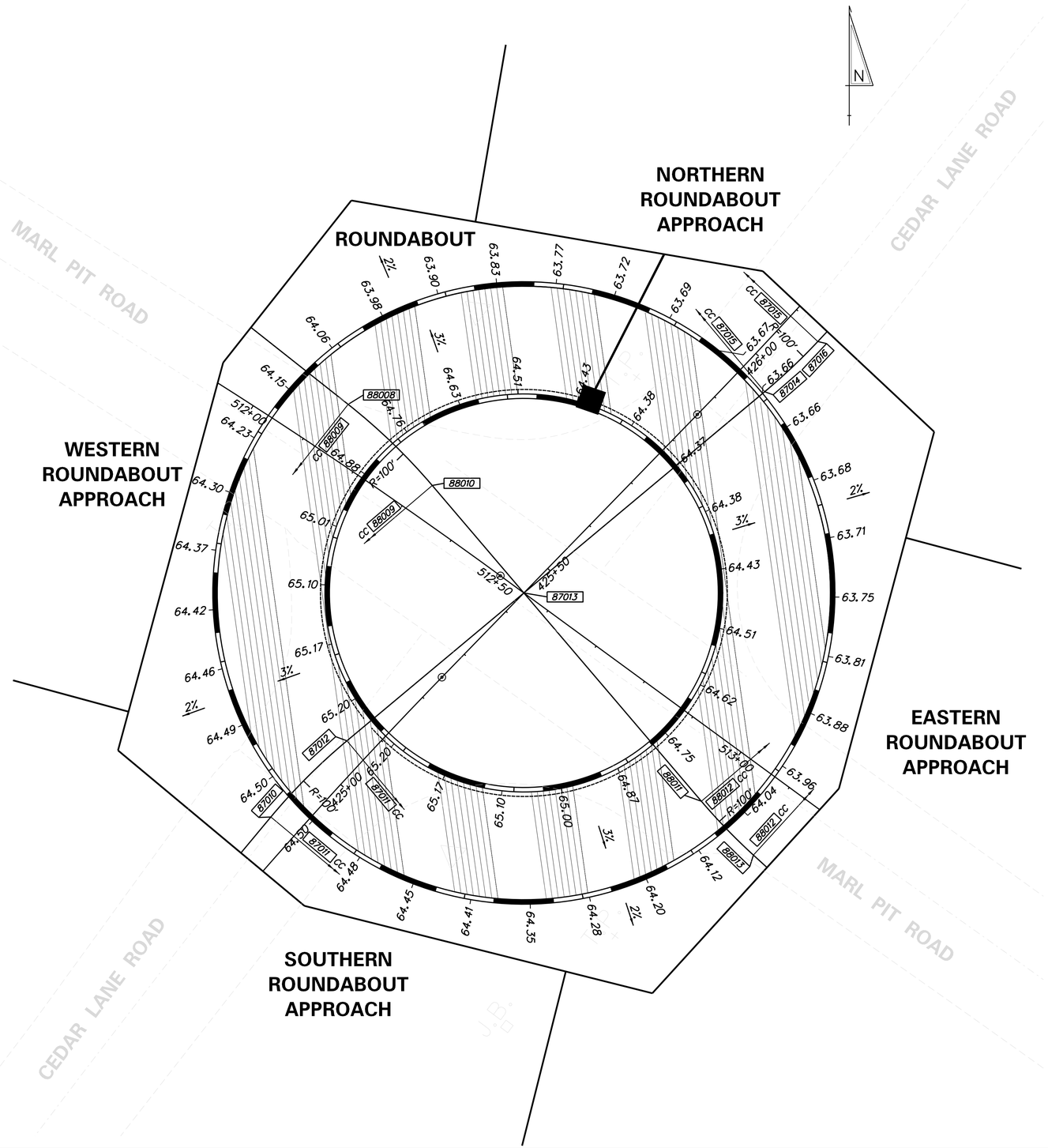
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87010	424+88.17	-5.00	538245.7684	575268.3132
87011	424+91.99	94.93	538181.7460	575345.1320
87012	425+06.05	-4.18	538258.4987	575281.0303
87013	425+44.29	0.00	538283.1976	575310.6037
87014	425+96.39	5.48	538316.8167	575350.8578
87015	426+09.36	-93.77	538393.5694	575286.7561
87016	426+08.49	6.23	538325.2023	575359.7351
88008	512+13.08	-8.89	538314.7040	575281.2338
88009	512+04.04	90.74	538236.2716	575219.1986
88010	512+32.17	-5.64	538301.1554	575295.2913
88011	512+99.51	10.55	538248.3976	575340.2775
88012	513+22.58	-86.75	538313.2813	575416.3702
88013	513+11.84	12.67	538239.4061	575348.9725



ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-04

SECTION	SHEET NO.
PD	25

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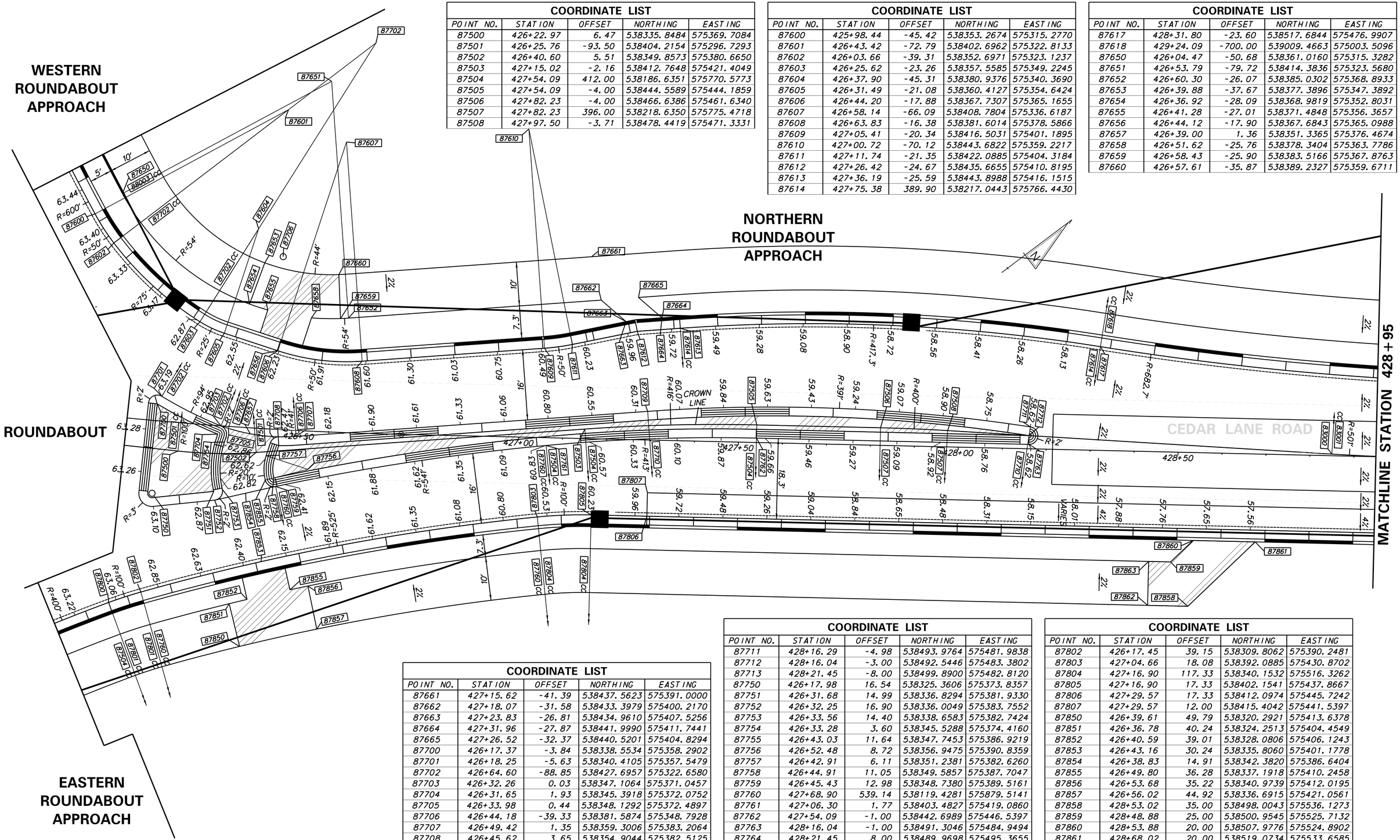

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87500	426+22.97	6.47	538335.8484	575369.7084
87501	426+25.76	-93.50	538404.2154	575296.7293
87502	426+40.60	5.51	538349.8573	575380.6650
87503	427+15.02	-2.16	538412.7648	575421.4049
87504	427+54.09	412.00	538186.6351	575770.5773
87505	427+54.09	-4.00	538444.5589	575444.1859
87506	427+82.23	-4.00	538466.6386	575461.6340
87507	427+82.23	396.00	538218.6350	575775.4718
87508	427+97.50	-3.71	538478.4419	575471.3331

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87600	425+98.44	-45.42	538353.2674	575315.2770
87601	426+43.42	-72.79	538402.6962	575322.8133
87602	426+03.66	-39.31	538352.6971	575323.1237
87603	426+25.62	-23.26	538357.5585	575349.2245
87604	426+37.90	-45.31	538380.9376	575340.3690
87605	426+31.49	-21.08	538360.4127	575354.6424
87606	426+44.20	-17.88	538367.7307	575365.1655
87607	426+58.14	-66.09	538408.7804	575336.6187
87608	426+63.83	-16.38	538381.6014	575378.5866
87609	427+05.41	-20.34	538416.5031	575401.1895
87610	427+00.72	-70.12	538443.6822	575359.2217
87611	427+11.74	-21.35	538422.0885	575404.3184
87612	427+26.42	-24.67	538435.6655	575410.8195
87613	427+36.19	-25.59	538443.8988	575416.1515
87614	427+75.38	389.90	538217.0443	575766.4430

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87617	428+31.80	-23.60	538517.6844	575476.9907
87618	429+24.09	-700.00	539009.4663	575003.5096
87650	426+04.47	-50.68	538361.0160	575315.3282
87651	426+53.79	-79.72	538414.3836	575323.5680
87652	426+60.30	-26.07	538385.0302	575368.8933
87653	426+39.88	-37.67	538377.3896	575347.3892
87654	426+36.92	-28.09	538368.9819	575352.8031
87655	426+41.28	-27.01	538371.4848	575356.3657
87656	426+44.12	-17.90	538367.6843	575365.0988
87657	426+39.00	1.36	538351.3365	575376.4674
87658	426+51.62	-25.76	538378.3404	575363.7786
87659	426+58.43	-25.90	538383.5166	575367.8763
87660	426+57.61	-35.87	538389.2327	575359.6711

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87661	427+15.62	-41.39	538437.5623	575391.0000
87662	427+18.07	-31.58	538433.3979	575400.2170
87663	427+23.83	-26.81	538434.9610	575407.5256
87664	427+31.96	-27.87	538441.9990	575411.7441
87665	427+26.52	-32.37	538440.5201	575404.8294
87700	426+17.37	-3.84	538338.5534	575358.2902
87701	426+18.25	-5.63	538340.4105	575357.5479
87702	426+64.60	-88.85	538427.6957	575322.6580
87703	426+32.26	0.03	538347.1064	575371.0457
87704	426+31.65	1.93	538345.3918	575372.0752
87705	426+33.98	0.44	538348.1292	575372.4897
87706	426+44.18	-39.33	538381.5874	575348.7928
87707	426+49.42	1.35	538359.3006	575383.2064
87708	426+45.62	3.65	538354.9044	575382.5125
87709	427+29.20	-6.51	538426.5940	575426.7868
87710	427+65.92	382.76	538214.0538	575754.9752

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87711	428+16.29	-4.98	538493.9764	575481.9838
87712	428+16.04	-3.00	538492.5446	575483.3802
87713	428+21.45	-8.00	538499.8900	575482.8120
87750	426+17.98	16.54	538325.3606	575373.8357
87751	426+31.68	14.99	538336.8294	575381.9330
87752	426+32.25	16.90	538336.0049	575383.7552
87753	426+33.56	14.40	538338.6583	575382.7424
87754	426+33.28	3.60	538345.5288	575374.4160
87755	426+43.03	11.64	538347.7453	575386.9219
87756	426+52.48	8.72	538356.9475	575390.8359
87757	426+42.91	6.11	538351.2381	575382.6260
87758	426+44.91	11.05	538349.5857	575387.7047
87759	426+45.43	12.98	538348.7380	575389.5161
87760	427+68.90	539.14	538119.4281	575879.5141
87761	427+06.30	1.77	538403.4827	575419.0860
87762	427+54.09	-1.00	538442.6989	575446.5397
87763	428+16.04	-1.00	538491.3046	575484.9494
87764	428+21.45	8.00	538489.9698	575495.3655
87800	426+10.68	42.19	538302.5133	575387.7297
87801	426+48.18	133.26	538273.5437	575483.4416

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
87802	426+17.45	39.15	538309.8062	575390.2481
87803	427+04.66	18.08	538392.0885	575430.8702
87804	427+16.90	117.33	538340.1532	575516.3262
87805	427+16.90	17.33	538402.1541	575437.8667
87806	427+29.57	17.33	538412.0974	575445.7242
87807	427+29.57	12.00	538415.4042	575441.5397
87850	426+39.61	49.79	538320.2921	575413.6378
87851	426+36.78	40.24	538324.2513	575404.4549
87852	426+40.59	39.01	538328.0806	575406.1243
87853	426+43.16	30.24	538335.8060	575401.1778
87854	426+38.83	14.91	538342.3820	575386.6404
87855	426+49.80	36.28	538337.1918	575410.2458
87856	426+53.68	35.22	538340.9739	575412.0195
87857	426+56.02	44.92	538336.6915	575421.0561
87858	428+53.02	35.00	538498.0043	575536.1273
87859	428+48.88	25.00	538500.9545	575525.7132
87860	428+53.88	20.00	538507.9776	575524.8902
87861	428+68.02	20.00	538519.0734	575533.6585
87862	428+43.88	35.00	538490.8314	575530.4591
87863	428+43.88	25.00	538497.0315	575522.6131

ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-05

SECTION PD

SHEET NO. 26

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COORDINATE LIST

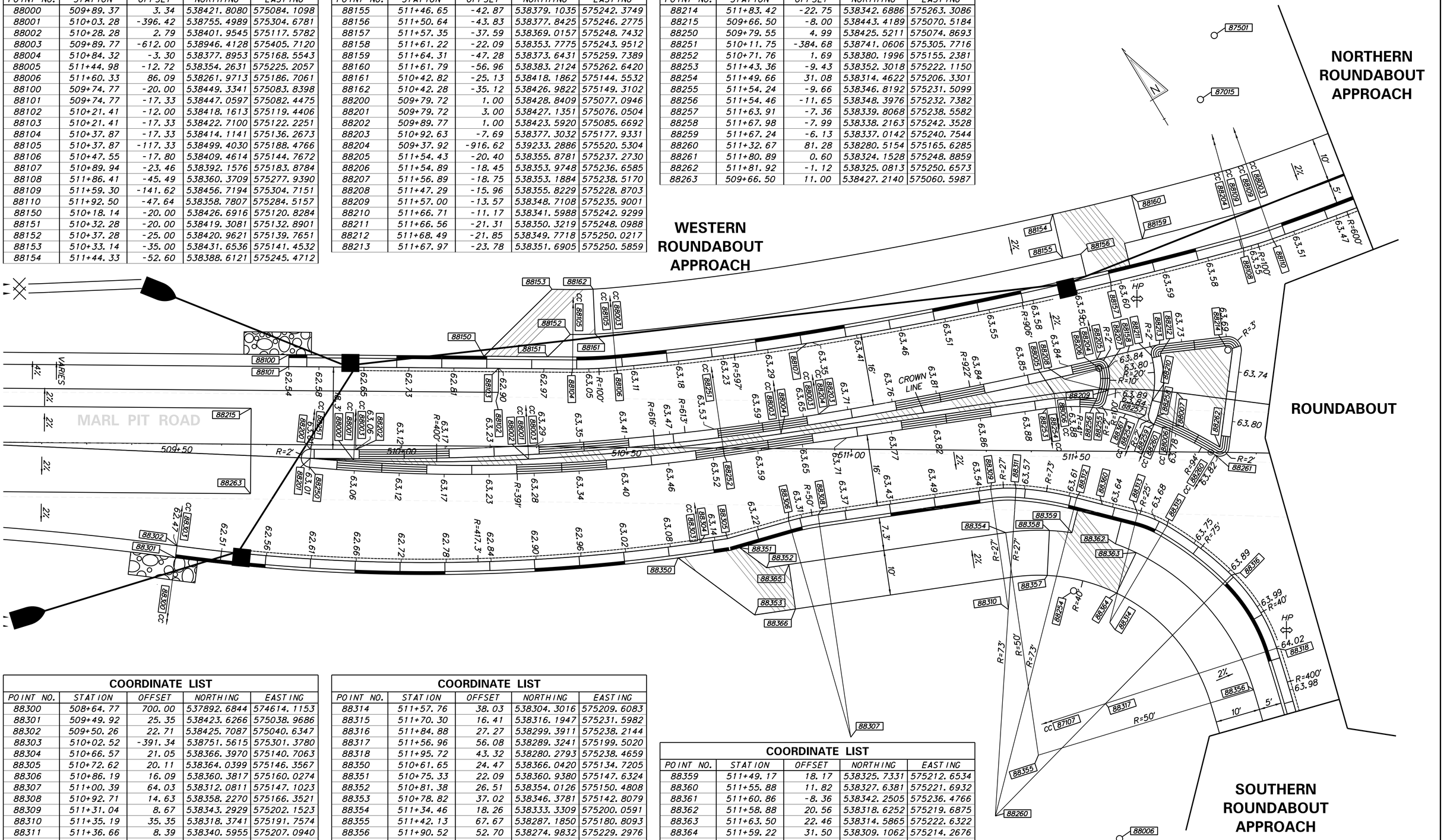
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88000	509+89.37	3.34	538421.8080	575084.1098
88001	510+03.28	-396.42	538755.4989	575304.6781
88002	510+28.28	2.79	538401.9545	575117.5782
88003	509+89.77	-612.00	538946.4128	575405.7120
88004	510+84.32	-3.30	538377.8953	575168.5543
88005	511+44.98	-12.72	538354.2631	575225.2057
88006	511+60.33	86.09	538261.9713	575186.7061
88100	509+74.77	-20.00	538449.3341	575083.8398
88101	509+74.77	-17.33	538447.0597	575082.4475
88102	510+21.41	-12.00	538418.1613	575119.4406
88103	510+21.41	-17.33	538422.7100	575122.2251
88104	510+37.87	-17.33	538414.1141	575136.2673
88105	510+37.87	-117.33	538499.4030	575188.4766
88106	510+47.55	-17.80	538409.4614	575144.7672
88107	510+89.94	-23.46	538392.1576	575183.8784
88108	511+86.41	-45.49	538360.3709	575277.9390
88109	511+59.30	-141.62	538456.7194	575304.7151
88110	511+92.50	-47.64	538358.7807	575284.5157
88150	510+18.14	-20.00	538426.6916	575120.8284
88151	510+32.28	-20.00	538419.3081	575132.8901
88152	510+37.28	-25.00	538420.9621	575139.7651
88153	510+33.14	-35.00	538431.6536	575141.4532
88154	511+44.33	-52.60	538388.6121	575245.4712

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
88155	511+46.65	-42.87	538379.1035	575242.3749
88156	511+50.64	-43.83	538377.8425	575246.2775
88157	511+57.35	-37.59	538369.0157	575248.7432
88158	511+61.22	-22.09	538353.7775	575243.9512
88159	511+64.31	-47.28	538373.6431	575259.7389
88160	511+61.79	-56.96	538383.2124	575262.6420
88161	510+42.82	-25.13	538418.1862	575144.5532
88162	510+42.28	-35.12	538426.9822	575149.3102
88200	509+79.72	1.00	538428.8409	575077.0946
88201	509+79.72	3.00	538427.1351	575076.0504
88202	509+89.77	1.00	538423.5920	575085.6692
88203	510+92.63	-7.69	538377.3032	575177.9331
88204	509+37.92	-916.62	539233.2886	575520.5304
88205	511+54.43	-20.40	538355.8781	575237.2730
88206	511+54.89	-18.45	538353.9748	575236.6585
88207	511+56.89	-18.75	538353.1884	575238.5170
88208	511+47.29	-15.96	538355.8229	575228.8703
88209	511+57.00	-13.57	538348.7108	575235.9001
88210	511+66.71	-11.17	538341.5988	575242.9299
88211	511+66.56	-21.31	538350.3219	575248.0988
88212	511+68.49	-21.85	538349.7718	575250.0217
88213	511+67.97	-23.78	538351.6905	575250.5859

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
88214	511+83.42	-22.75	538342.6886	575263.3086
88215	509+66.50	-8.00	538443.4189	575070.5184
88250	509+79.55	4.99	538425.5211	575074.8693
88251	510+11.75	-384.68	538741.0606	575305.7716
88252	510+71.76	1.69	538380.1996	575155.2381
88253	511+43.36	-9.43	538352.3018	575222.1150
88254	511+49.66	31.08	538314.4622	575206.3301
88255	511+54.24	-9.66	538346.8192	575231.5099
88256	511+54.46	-11.65	538348.3976	575232.7382
88257	511+63.91	-7.36	538339.8068	575238.5582
88258	511+67.98	-7.99	538338.2163	575242.3528
88259	511+67.24	-6.13	538337.0142	575240.7544
88260	511+32.67	81.28	538280.5154	575165.6285
88261	511+80.89	0.60	538324.1528	575248.8859
88262	511+81.92	-1.12	538325.0813	575250.6573
88263	509+66.50	11.00	538427.2140	575060.5987



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
88300	508+64.77	700.00	537892.6844	574614.1153
88301	509+49.92	25.35	538423.6266	575038.9686
88302	509+50.26	22.71	538425.7087	575040.6347
88303	510+02.52	-391.34	538751.5615	575301.3780
88304	510+66.57	21.05	538366.3970	575140.7063
88305	510+72.62	20.11	538364.0399	575146.3567
88306	510+86.19	16.09	538360.3817	575160.0274
88307	511+00.39	64.03	538312.0811	575147.1023
88308	510+92.71	14.63	538358.2270	575166.3521
88309	511+31.04	8.67	538343.2929	575202.1523
88310	511+35.19	35.35	538318.3741	575191.7574
88311	511+36.66	8.39	538340.5955	575207.0940
88312	511+50.15	10.41	538331.8330	575217.5468
88313	511+63.75	13.76	538321.8761	575227.3885

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
88314	511+57.76	38.03	538304.3016	575209.6083
88315	511+70.30	16.41	538316.1947	575231.5982
88316	511+84.88	27.27	538299.3911	575238.2144
88317	511+56.96	56.08	538289.3241	575199.5020
88318	511+95.72	43.32	538280.2793	575238.4659
88350	510+61.65	24.47	538366.0420	575134.7205
88351	510+75.33	22.09	538360.9380	575147.6324
88352	510+81.38	26.51	538354.0126	575150.4808
88353	510+78.82	37.02	538346.3781	575142.8079
88354	511+34.46	18.26	538333.3309	575200.0591
88355	511+42.13	67.67	538287.1850	575180.8093
88356	511+90.52	52.70	538274.9832	575229.2976
88357	511+43.76	27.70	538320.4197	575203.0682
88358	511+44.17	17.71	538328.7283	575208.6329

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
88359	511+49.17	18.17	538325.7331	575212.6534
88360	511+55.88	11.82	538327.6381	575221.6932
88361	511+60.86	-8.36	538342.2505	575236.4766
88362	511+58.88	20.56	538318.6252	575219.6875
88363	511+63.50	22.46	538314.5865	575222.6322
88364	511+59.22	31.50	538309.1062	575214.2676
88365	510+86.32	25.74	538352.0876	575155.0953
88366	510+87.85	35.62	538342.8584	575151.2454

ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

GRADES AND GEOMETRICS

GG-06

SECTION: PD

SHEET NO.: 27

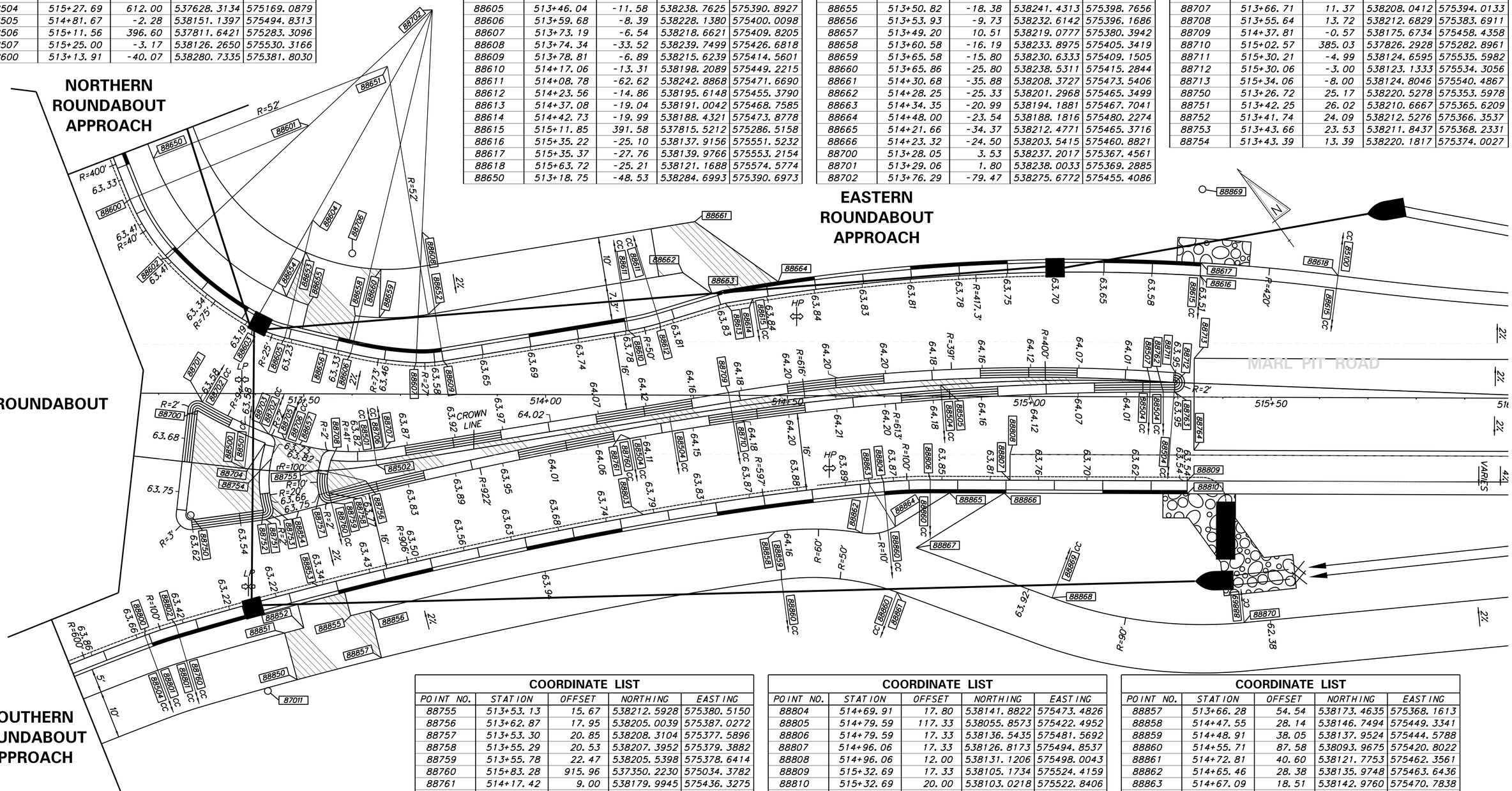
W:\MSV8_DEV\CELL\SB.CEL

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88500	513+37.84	15.48	538221.7826	575368.2897
88501	513+48.58	-83.95	538295.6578	575435.6874
88502	513+65.14	14.67	538206.3022	575390.7824
88503	514+25.67	4.51	538178.7443	575445.6414
88504	515+27.69	612.00	537628.3134	575169.0879
88505	514+81.67	-2.28	538151.1397	575494.8313
88506	515+11.56	396.60	537811.6421	575283.3096
88507	515+25.00	-3.17	538126.2650	575530.3166
88600	513+13.91	-40.07	538280.7335	575381.8030

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88601	513+50.84	-55.45	538271.3237	575420.6804
88602	513+21.76	-27.99	538266.3482	575380.9910
88603	513+39.45	-14.14	538244.7259	575387.0930
88604	513+51.73	-35.92	538255.0430	575409.8649
88605	513+46.04	-11.58	538238.7625	575390.8927
88606	513+59.68	-8.39	538228.1380	575400.0098
88607	513+73.19	-6.54	538218.6621	575409.8205
88608	513+74.34	-33.52	538239.7499	575426.6818
88609	513+78.81	-6.89	538215.6239	575414.5601
88610	514+17.06	-13.31	538198.2089	575449.2215
88611	514+08.78	-62.62	538242.8868	575471.6690
88612	514+23.56	-14.86	538195.6148	575455.3790
88613	514+37.08	-19.04	538191.0042	575468.7585
88614	514+42.73	-19.99	538188.4321	575473.8778
88615	515+11.85	391.58	537815.5212	575286.5158
88616	515+35.22	-25.10	538137.9156	575551.5232
88617	515+35.37	-27.76	538139.9766	575553.2154
88618	515+63.72	-25.21	538121.1688	575574.5774
88650	513+18.75	-48.53	538284.6993	575390.6973

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88651	513+67.05	-67.78	538271.7018	575441.0467
88652	513+75.66	-16.50	538225.2369	575417.7013
88653	513+50.31	-29.26	538250.5086	575404.7859
88654	513+46.33	-20.09	538245.4626	575396.1524
88655	513+50.82	-18.38	538241.4313	575398.7656
88656	513+53.93	-9.73	538232.6142	575396.1686
88657	513+49.20	10.51	538219.0777	575380.3942
88658	513+60.58	-16.19	538233.8975	575405.3419
88659	513+65.58	-15.80	538230.6333	575409.1505
88660	513+65.86	-25.80	538238.5311	575415.2844
88661	514+30.68	-35.88	538208.3727	575473.5406
88662	514+28.25	-25.33	538201.2968	575465.3499
88663	514+34.35	-20.99	538194.1881	575467.7041
88664	514+48.00	-23.54	538188.1816	575480.2274
88665	514+21.66	-34.37	538212.4771	575465.3716
88666	514+23.32	-24.50	538203.5415	575460.8821
88700	513+28.05	3.53	538237.2017	575367.4561
88701	513+29.06	1.80	538238.0033	575369.2885
88702	513+76.29	-79.47	538275.6772	575455.4086

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88703	513+42.79	8.35	538224.6019	575376.4953
88704	513+42.08	10.22	538223.5152	575374.8162
88705	513+46.14	9.55	538221.6617	575378.4896
88706	513+59.92	-29.07	538244.6771	575412.4203
88707	513+66.71	11.37	538208.0412	575394.0133
88708	513+55.64	13.72	538212.6829	575383.6911
88709	514+37.81	-0.57	538175.6734	575458.4358
88710	515+02.57	385.03	537826.2928	575282.8961
88711	515+30.21	-4.99	538124.6595	575535.5982
88712	515+30.06	-3.00	538123.1333	575534.3056
88713	515+34.06	-8.00	538124.8046	575540.4867
88750	513+26.72	25.17	538220.5278	575353.5978
88751	513+42.25	26.02	538210.6667	575365.6209
88752	513+41.74	24.09	538212.5276	575366.3537
88753	513+43.66	23.53	538211.8437	575368.2331
88754	513+43.39	13.39	538220.1817	575374.0027



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88755	513+53.13	15.67	538212.5928	575380.5150
88756	513+62.87	17.95	538205.0039	575387.0272
88757	513+53.30	20.85	538208.3104	575377.5896
88758	513+55.29	20.53	538207.3952	575379.3882
88759	513+55.78	22.47	538205.5398	575378.6414
88760	515+83.28	915.96	537350.2230	575034.3782
88761	514+17.42	9.00	538179.9945	575436.3275
88762	515+27.69	-1.00	538122.9196	575531.2119
88763	515+30.06	-1.00	538121.5196	575533.1241
88764	515+34.06	11.00	538109.4743	575529.2627
88800	513+17.34	50.08	538205.9669	575331.3115
88801	513+52.40	143.73	538109.6913	575304.2742
88802	513+23.76	47.93	538203.9182	575337.7601
88803	514+20.30	24.74	538165.5950	575429.3522

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88804	514+69.91	17.80	538141.8822	575473.4826
88805	514+79.59	117.33	538055.8573	575422.4952
88806	514+79.59	17.33	538136.5435	575481.5692
88807	514+96.06	17.33	538126.8173	575494.8537
88808	514+96.06	12.00	538131.1206	575498.0043
88809	515+32.69	17.33	538105.1734	575524.4159
88810	515+32.69	20.00	538103.0218	575522.8406
88850	513+48.87	59.11	538180.0574	575351.4128
88851	513+46.23	49.47	538189.3989	575354.9817
88852	513+50.19	48.39	538187.9264	575358.8096
88853	513+53.07	39.69	538193.2414	575366.2756
88854	513+49.01	24.25	538208.1048	575372.1273
88855	513+59.86	45.85	538184.2631	575368.1144
88856	513+63.83	44.84	538182.7307	575371.9187

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
88857	513+66.28	54.54	538173.4635	575368.1613
88858	514+47.55	28.14	538146.7494	575449.3341
88859	514+48.91	38.05	538137.9524	575444.5788
88860	514+55.71	87.58	538093.9675	575420.8022
88861	514+72.81	40.60	538121.7753	575462.3561
88862	514+65.46	28.38	538135.9748	575463.6436
88863	514+67.09	18.51	538142.9760	575470.7838
88864	514+72.39	27.00	538133.0030	575470.0497
88865	514+83.58	20.00	538132.0341	575483.2143
88866	514+94.90	20.00	538125.3454	575492.3500
88867	514+76.70	31.37	538126.9209	575470.9452
88868	515+04.84	41.62	538102.0330	575487.6002
88869	515+35.63	-42.96	538152.0871	575562.3972
88870	515+44.58	46.60	538074.5396	575516.7201

ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

GRADES AND GEOMETRICS

GG-07

SECTION PD

SHEET NO. 28

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NOTES:

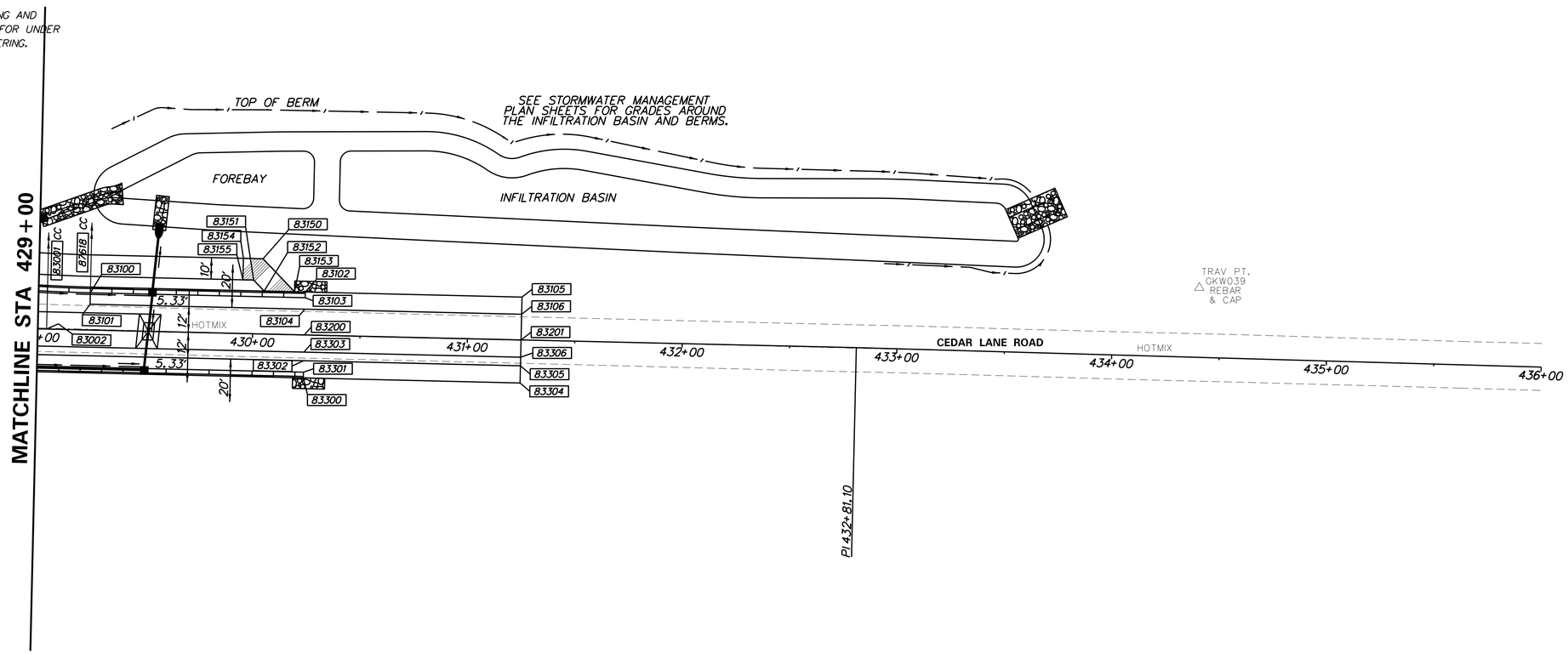
1. OFFSETS SHOWN IN THE GEOMETRY TABLES WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.
3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS ALONG INTERSECTION CURVES ARE GIVEN AT 10 FOOT INTERVALS.
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATIONS.
6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83000	428+84.98	-0.37	538545.0040	575528.1930
83001	429+04.11	-501.00	538870.4122	575147.2593
83002	429+04.11	0.00	538559.7877	575540.3412
83100	429+24.09	-17.33	538586.2068	575539.1262
83101	429+24.09	-12.00	538582.9000	575543.3107
83102	430+24.09	-20.00	538666.3196	575599.0349
83103	430+24.09	-17.33	538664.6662	575601.1271
83104	430+24.09	-12.00	538661.3620	575605.3136
83105	431+25.00	-19.95	538745.4634	575661.6448
83106	431+25.01	-11.95	538740.5083	575667.9255
83150	430+04.09	-35.00	538659.9278	575574.8658
83151	429+99.94	-25.00	538650.4778	575580.1436

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
83152	430+04.94	-20.00	538651.3008	575587.1666
83153	430+19.09	-20.00	538662.3966	575595.9348
83154	429+94.94	-35.00	538652.7549	575569.1976
83155	429+94.94	-25.00	538646.5549	575577.0435
83200	430+24.09	0.00	538653.9194	575614.7268
83201	431+25.00	0.05	538733.0632	575677.3367
83300	430+24.09	20.00	538641.5192	575630.4187
83301	430+24.09	17.33	538643.1726	575628.3264
83302	430+24.08	12.00	538646.4768	575624.1399
83303	430+24.08	8.00	538648.9577	575621.0022
83304	431+25.00	20.05	538720.6630	575693.0285
83305	431+24.99	12.05	538725.6181	575686.7478



ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-08

SECTION	SHEET NO.
PD	29

W:\MSV8_DEV\CELL\SB.CEL

NOTES:

1. OFFSETS SHOWN IN THE GEOMETRY TABLES WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.

2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.

3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS ALONG INTERSECTION CURVES ARE GIVEN AT 10 FOOT INTERVALS.

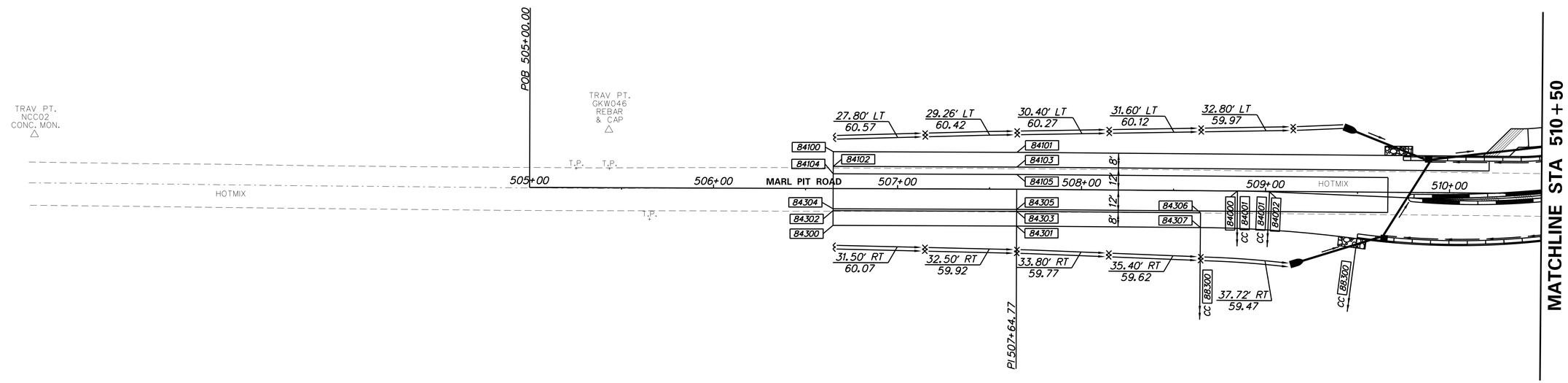
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.

5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATIONS.

6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
84000	508+84.75	0.00	538479.2777	574996.6166
84001	508+84.75	501.00	538051.9805	574735.0482
84002	509+02.16	0.30	538469.9283	575011.3100
84100	506+65.00	-20.00	538610.7219	574819.3246
84101			538558.9974	574904.6942
84102	506+65.00	-12.00	538603.8798	574815.1790
84103			538552.1647	574900.5331
84104	506+65.00	-8.00	538600.4587	574813.1063
84105			538548.7484	574898.4525
84300	506+65.00	20.00	538576.5113	574798.5968
84301	507+64.82	20.00	538524.8342	574883.8884
84302	506+65.00	12.00	538583.3534	574802.7424
84303	507+64.80	12.00	538531.6668	574888.0495
84304	506+65.00	11.00	538584.2087	574803.2606
84305	507+64.80	11.00	538532.5209	574888.5697
84306	508+64.77	12.00	538479.4718	574973.3151
84307	508+64.77	20.00	538472.6487	574969.1383



ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-09

SECTION	SHEET NO.
PD	30

W:\MSV8_DEV\CELL\SB.CEL

NOTES:

1. OFFSETS SHOWN IN THE GEOMETRY TABLES WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.

2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.

3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS ALONG INTERSECTION CURVES ARE GIVEN AT 10 FOOT INTERVALS.

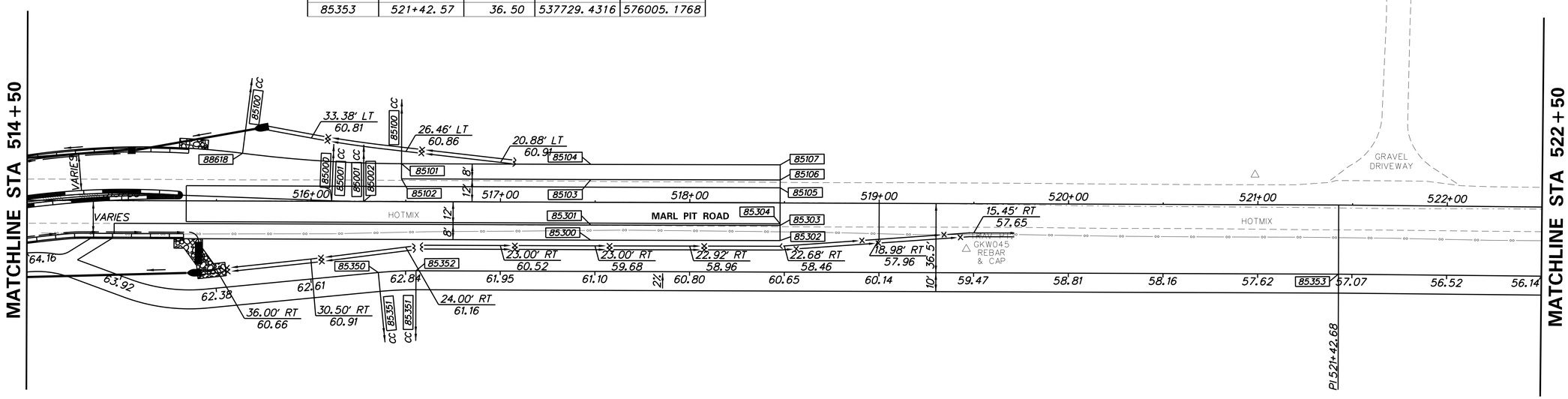
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.

5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATIONS.

6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
85000	516+10.89	-0.28	538073.1964	575597.9123
85001	516+27.72	-501.00	538467.2615	575907.2885
85002	516+27.72	0.00	538063.0239	575611.3275
85100	516+47.69	-700.00	538616.0270	576040.9629
85101	516+47.69	-20.00	538067.3611	575639.2593
85102	516+47.69	-12.00	538060.9062	575634.5334
85103	517+47.68	-12.00	538001.8374	575715.2124
85104	517+47.68	-20.00	538008.2957	575719.9336
85105	518+47.68	-8.00	537939.5375	575793.5334
85106	518+47.68	-12.15	537942.8872	575795.9783
85107	518+47.66	-20.15	537949.3490	575800.6948
85300	517+47.71	20.00	537976.0039	575696.3277
85301	517+47.70	12.00	537982.4623	575701.0489
85302	518+47.72	19.85	537917.0398	575777.1126
85303	518+47.71	11.85	537923.5016	575781.8291
85304	518+47.71	11.00	537924.1906	575782.3319
85350	516+35.62	37.49	538028.1030	575595.5570
85351	516+55.52	236.50	537855.7754	575494.0524
85352	516+55.52	36.50	538017.1477	575612.2005
85353	521+42.57	36.50	537729.4316	576005.1768



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-10
SECTION
PD
SHEET NO.
31

W:\MSV8_DEV\CELL\SB.CEL

NOTES:

1. OFFSETS SHOWN IN THE GEOMETRY TABLES WITH A MINUS SIGN ARE TO THE LEFT OF THE CONSTRUCTION BASELINE.

2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB AND CURB AND GUTTER IS GIVEN AT THE EDGE OF PAVEMENT.

3. UNLESS OTHERWISE NOTED, EDGE OF PAVEMENT ELEVATIONS ALONG INTERSECTION CURVES ARE GIVEN AT 10 FOOT INTERVALS.

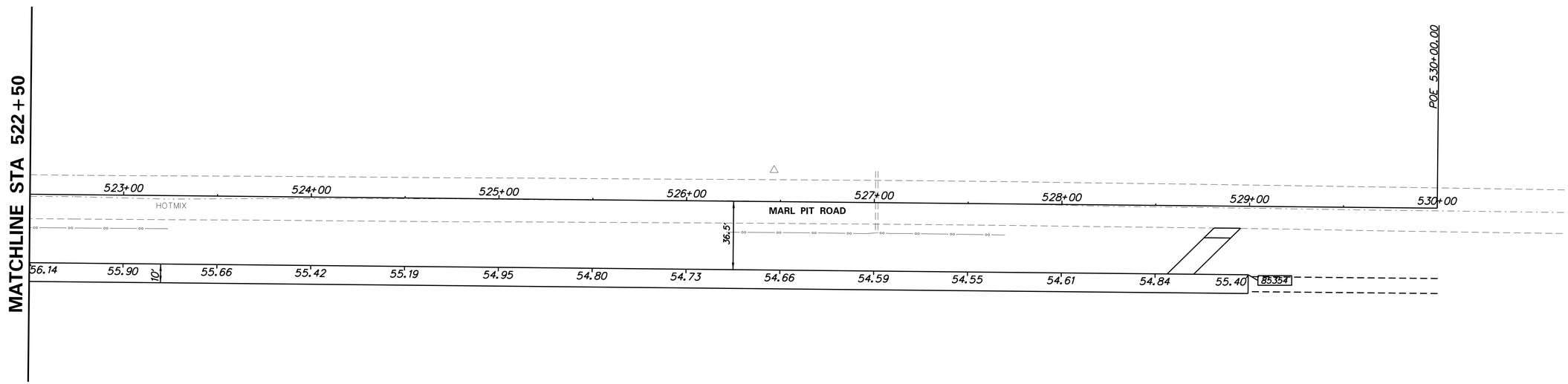
4. RADII ARE GIVEN TO THE EDGE OF PAVEMENT.

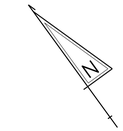
5. PROPOSED PAVEMENT OR CURBS THAT TIE INTO EXISTING PAVEMENT OR EXISTING CURBS SHALL MATCH THE EXISTING PAVEMENT OR EXISTING CURB ELEVATIONS.

6. ALL WORK REQUIRED FOR CALCULATING AND STAKING OF GRADES SHALL BE PAID FOR UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
85354	528+99.63	36.50	537278.5323	576613.0304





ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

GRADES AND GEOMETRICS

GG-11
SECTION
PD
SHEET NO.
32

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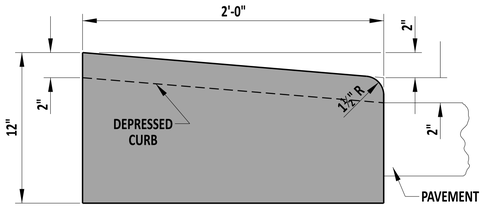
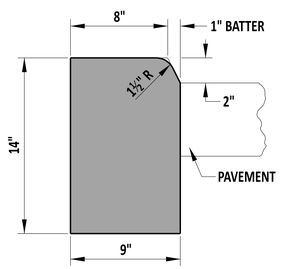
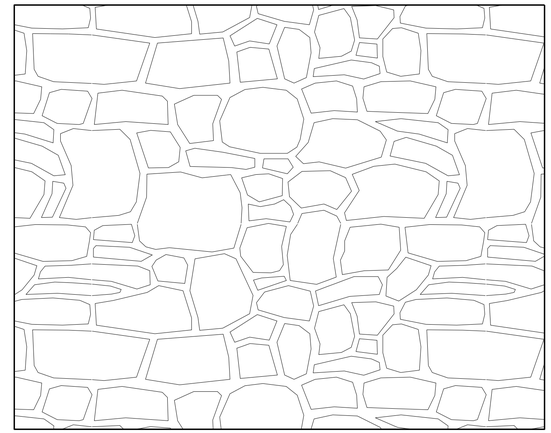


P.C.C. CURB
TYPE 2 MODIFIED
NOT TO SCALE



P.C.C. CURB
TYPE 1-2 MODIFIED
NOT TO SCALE

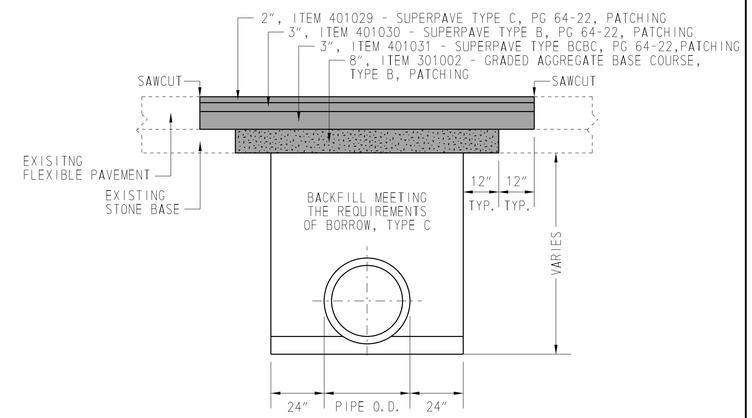


PATTERNED PORTLAND CEMENT CONCRETE PAVEMENT, 8"
ITEM # 501526

NOT TO SCALE

COLOR: GRANITE
PATTERN: RANDOM STONE

NOTES:
1) PATTERNED CONCRETE TO BE USED ON SPLITTER ISLANDS AND TRUCK APRON
2) USE CLASS A CONCRETE FOR TRUCK APRON



NOTES:
1) SEE STANDARD CONSTRUCTION DETAILS FOR PIPE BEDDING REQUIREMENTS.
2) THIS DETAIL SHOWS THE MINIMUM PAVEMENT PATCH REQUIREMENTS. IF THE EXISTING ROADWAY HAS A HEAVIER CROSS SECTION, THE PROPOSED PAVEMENT PATCH WILL MATCH THE HEAVIER CROSS SECTION, OR AS DIRECTED BY THE ENGINEER.

FLEXIBLE PAVEMENT PATCH
NOT TO SCALE

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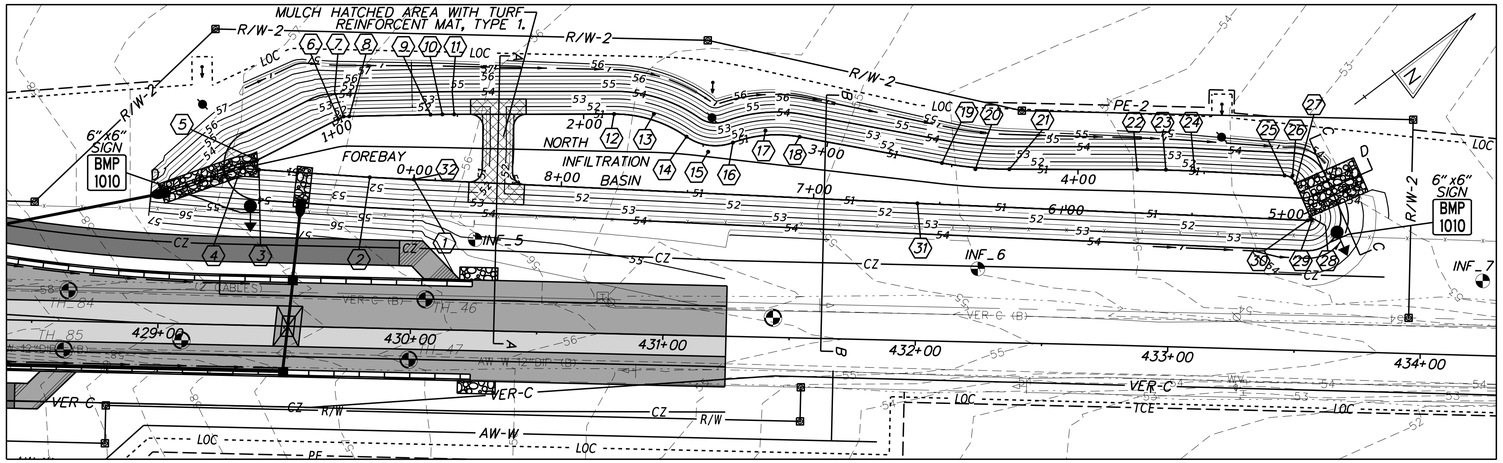
ADDENDA / REVISIONS		NOT TO SCALE	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SECTION PD
				COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 33
					CHECKED BY: T. BROOKS		



PLAN – BMP #1010

POND DESIGN SUMMARY FOR BMP #1010				
DESIGN STORM	FACILITY INFLOW	FACILITY DISCHARGE	WATER SURFACE ELEVATION	STORAGE VOLUME (AC. FT.)
1 - YEAR	4.15 cfs	0.03 cfs	53.01	0.448
2 - YEAR	5.96 cfs	0.98 cfs	53.12	0.487
10 - YEAR	12.44 cfs	7.10 cfs	53.42	0.596
100 - YEAR	26.86 cfs	23.69 cfs	53.85	0.763

HAZARD CLASSIFICATION: CLASS A AS PER POND CODE 378

DRAINAGE AREA TO FACILITY: 8.53 ACRES

MANAGEMENT PROVIDED BY FACILITY: WATER QUALITY BY EXTENDED DETENTION FOR FIRST 1" OF RUNOFF WATER QUANTITY FOR 2 AND 10 YEAR STORMS.

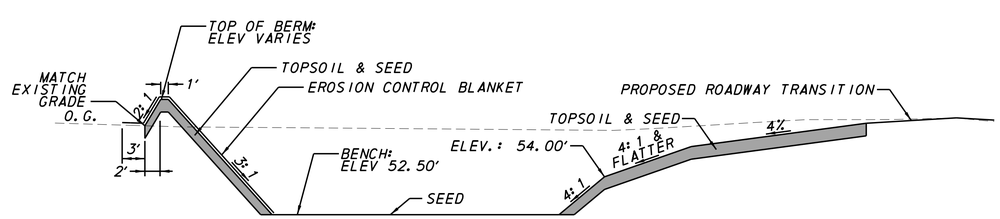
PLACE EROSION CONTROL BLANKETS ON ALL DISTURBED SLOPED AREAS BEHIND THE SHARED-USE PATH ON THE LEFT SIDE FROM STATIONS 429+00 TO 433+65.

ALL DISTURBED AREAS FROM STA 429+00 LT TO STA 434+00 LT WILL RECEIVE 908015 - PERMANENT GRASS SEEDING, STORMWATER.

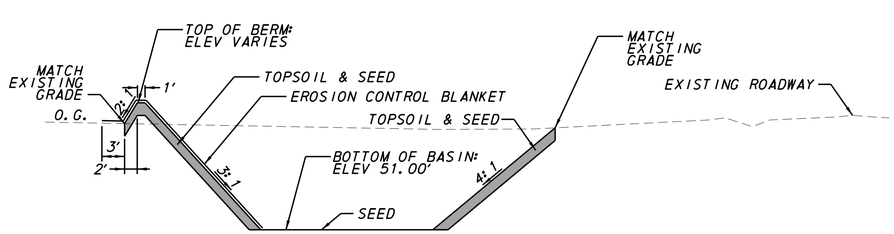
ALL REFERENCES TO "SEED" ON THIS SHEET AND THE FOLLOWING SHEET REFER TO ITEM 908015, PERMANENT GRASS SEEDING, STORMWATER.

℄ POND EMBANKMENT			
STATION	NORTHING	EASTING	RADIUS
1 POB STA 0+00.00	538671.77	575553.29	
2 PI STA 0+17.47	538658.33	575542.12	
3 PC STA 0+61.41	538625.12	575513.35	2.00'
4 PI STA 0+64.02	538619.62	575508.59	
5 PT STA 0+66.62	538626.78	575509.87	
6 PC STA 1+02.71	538662.30	575516.23	10.00'
7 PI STA 1+04.95	538664.55	575516.63	
8 PT STA 1+07.19	538666.40	575517.96	
9 PC STA 1+39.37	538692.49	575536.79	500.00'
10 PI STA 1+44.05	538696.29	575539.53	
11 PT STA 1+48.74	538700.04	575542.34	
12 PC STA 2+12.07	538750.69	575580.35	50.00'
13 PI STA 2+27.33	538763.29	575589.80	
14 PRC STA 2+42.59	538768.19	575604.77	20.00'
15 PI STA 2+52.22	538771.45	575614.70	
16 PRC STA 2+61.84	538781.45	575617.70	50.00'
17 PI STA 2+75.25	538794.61	575621.65	
18 PT STA 2+88.65	538803.90	575631.76	
19 PC STA 3+46.01	538842.72	575673.98	150.00'
20 PI STA 3+59.40	538851.81	575683.87	
21 PT STA 3+72.80	538862.52	575691.99	
22 PC STA 4+23.44	538902.87	575722.59	500.00'
23 PI STA 4+34.81	538911.93	575729.45	
24 PT STA 4+46.17	538920.66	575736.72	
25 PC STA 4+81.86	538948.09	575759.56	5.00'
26 PI STA 4+84.64	538950.48	575761.54	
27 PT STA 4+87.41	538949.76	575764.56	
28 PC STA 5+02.03	538946.36	575778.78	1.00'
29 PI STA 5+03.04	538945.99	575780.34	
30 PT STA 5+04.06	538944.76	575779.32	
31 PI STA 6+58.82	538825.32	575680.90	
32 POE STA 8+58.37	538671.85	575553.36	

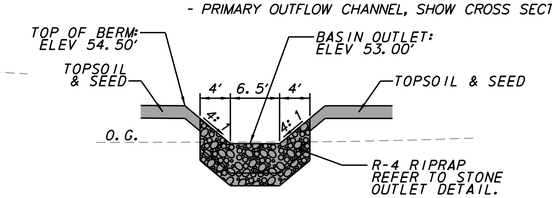
DELDOT SWM FACILITY SCHEDULE		
NO.	TYPE / DESCRIPTION	LOCATION
1010	INFILTRATION BASIN	STA. 429+29 LT. TO STA. 433+59 LT.



SECTION A–A



SECTION B–B



SECTION C–C

INFILTRATION BASIN CONSTRUCTION SEQUENCE AND NOTES

IF THE INFILTRATION BASIN IS TO BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION, GRADING SHALL ONLY BE COMPLETED TO 1-FOOT ABOVE THE PERMANENT BOTTOM ELEVATION AT ALL TIMES.

A. INITIAL CONSTRUCTION:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE(S) AS NEEDED.
2. CLEAR AND GRUB FOR INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS.
3. INSTALL PERIMETER CONTROLS AS SHOWN ON THE PLANS.
4. CLEAR AND GRUB REMAINING AREA FOR INFILTRATION BASIN CONSTRUCTION MAKING SURE NOT TO IMPEDE WITHIN 1-FOOT OF THE PERMANENT BOTTOM ELEVATION.
5. CONSTRUCT BASIN OUTLET AND OUTFALL AS SHOWN ON THE PLANS.
6. COMPLETE BASIN EXCAVATION TO MAINTAIN A MINIMUM OF 1-FOOT COVER ABOVE THE PERMANENT BOTTOM ELEVATION. NO EQUIPMENT SHALL BE USED WITHIN 1-FOOT OR AT THE PERMANENT BOTTOM ELEVATION. SIDE SLOPES AND FOREBAYS SHALL BE CONSTRUCTED AS PER FINAL DESIGN ELEVATION AND CONFIGURATION.

B. MAINTENANCE OF INFILTRATION BASIN BEING USED AS A SEDIMENT BASIN:

1. THE CONTRACTOR SHALL INSPECT THE BASIN THE NEXT WORK DAY FOLLOWING A RAIN EVENT AND MAKE ANY REPAIRS AS NEEDED.
2. ANY EXCESS SEDIMENT AROUND THE OUTFALL AREA WILL BE REMOVED AND DISPOSED AT A LOCATION APPROVED BY THE ENGINEER.

C. CONVERSION TO PERMANENT INFILTRATION BASIN:

1. CONVERT THE SEDIMENT BASIN AFTER ALL AREAS DRAINING INTO IT HAVE ATTAINED FINAL STABILIZATION AND THE STORMWATER ENGINEER HAS APPROVED THE CONVERSION.
2. REMOVE ANY EXCESS SEDIMENT FROM THE FOREBAY. NO EQUIPMENT SHALL BE USED WITHIN 1-FOOT OR AT THE PERMANENT BOTTOM ELEVATION. THE FINAL 1-FOOT OF MATERIAL TO BE EXCAVATED SHALL BE STARTED AT FROM ONE SIDE OF THE BASIN AND REMOVED GOING ACROSS OR STARTED IN THE MIDDLE AND WORKED TOWARDS THE OUTSIDES. THE ABSOLUTE MINIMUM OF INGRESS AND EGRESS POINTS SHALL BE UTILIZED AS WELL AS THESE AREAS WILL BE STABILILIZED WITHIN ONE WORKING DAY WHEN NO LONGER NEEDED. OTHER THAN THAT NECESSARY TO COMPLETE THE BOTTOM EXCAVATION, NO DISTURBANCE OF THE SIDE SLOPES TO THE DESIGN BOTTOM ELEVATION SHALL BE COMPLETED TO THE BEST OF THE CONTRACTOR'S ABILITY TO LIMIT DISTURBANCE TO THE ADJACENT AREAS.
3. POST CONSTRUCTION INFILTRATION TESTING SHALL BE PERFORMED AS PER DNREC DOCUMENTATION BY DELDOT.
4. ALL DISTURBED AREAS AFTER STATION 429+00 ON THE SOUTHBOUND SIDE OF CEDAR LANE ROAD AND MEETING FINAL ELEVATIONS AND GRADES SHALL BE SEEDED WITH PERMANENT GRASS SEEDING, STORMWATER AS SPECIFIED IN THE STANDARD SPECIFICATIONS.

D. INFILTRATION BASIN EXCAVATION WILL BE PAID FOR UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT.

E. THE CONTRACTOR IS ADVISED THAT THE UTILITY POLES, DOWN GUYS AND ANCHORS SHOWN ON THE PLANS ARE TO REMAIN IN PLACE DURING CONSTRUCTION. THERE HAS BEEN NO PROVISIONS MADE WITH THE UTILITY COMPANY TO MODIFY, REMOVE OR MOVE THE UTILITY POLES, DOWN GUYS AND/ OR ANCHORS DURING CONSTRUCTION.

A FIELD MEETING WITH THE STORMWATER ENGINEER SHALL OCCUR BEFORE THE FINAL CONVERSION OF THE INFILTRATION BASIN.

AS-BUILT DRAWINGS WILL BE COMPLETED BY THE CONTRACTOR AND CERTIFIED BY A DELAWARE PLS BEFORE THE DELDOT SEMI-FINAL INSPECTION DATE. THESE DRAWINGS SHALL BE SENT TO THE STORMWATER ENGINEER FOR VERIFICATION. AS-BUILT DRAWINGS WILL INCLUDE, BUT NOT BE LIMITED TO:

- GENERAL TOPOGRAPHY OF THE WHOLE FACILITY AT 1-FOOT CONTOURS INCLUDING FOREBAYS AND TOP/TOE OF ANY EMBANKMENT.
- INVERTS OF ALL PIPES AND SWALES THAT INFLOW TO THE BASIN.
- OUTLINE OF ALL RIPRAP AND OBTAIN SPOT ELEVATIONS ON TOP OF THE RIPRAP.
- PRIMARY OUTFLOW CHANNEL, SHOW CROSS SECTIONS AND SLOPE FOR 50 FEET IMMEDIATELY DOWNSTREAM.

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY: S. BHAYDE	
COUNTY		
NEW CASTLE	CHECKED BY: T. BROOKS	

STORMWATER MANAGEMENT PLAN

SECTION PD

SHEET NO. 34

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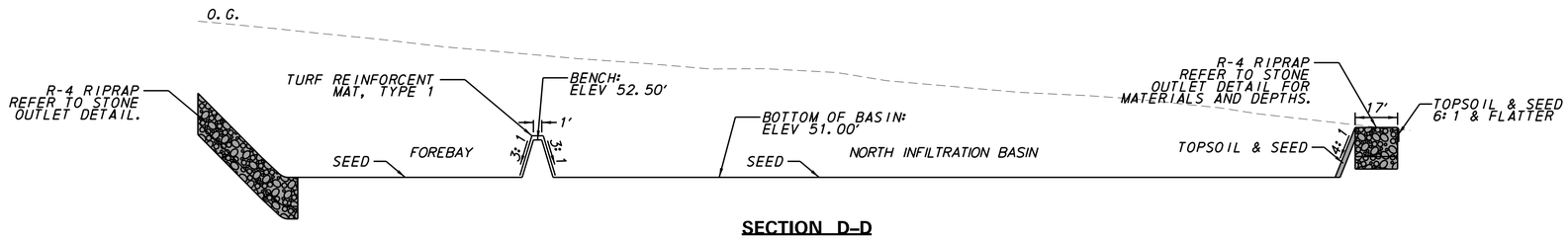
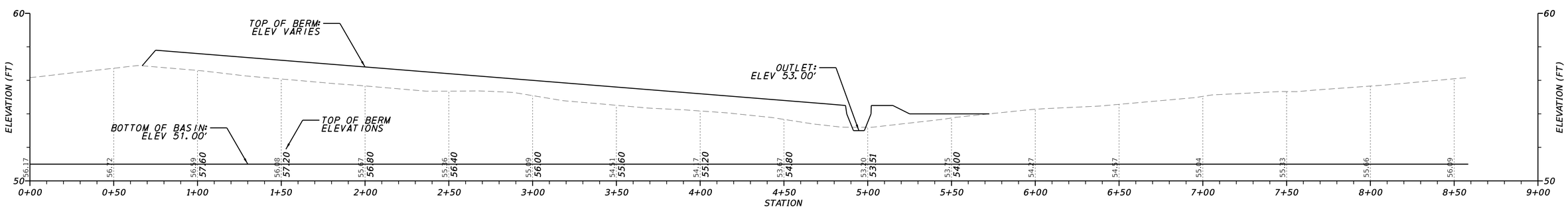


SECTION D–D



NORTH_BASIN

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

STORMWATER MANAGEMENT PLAN

SECTION
PD
SHEET NO.
35

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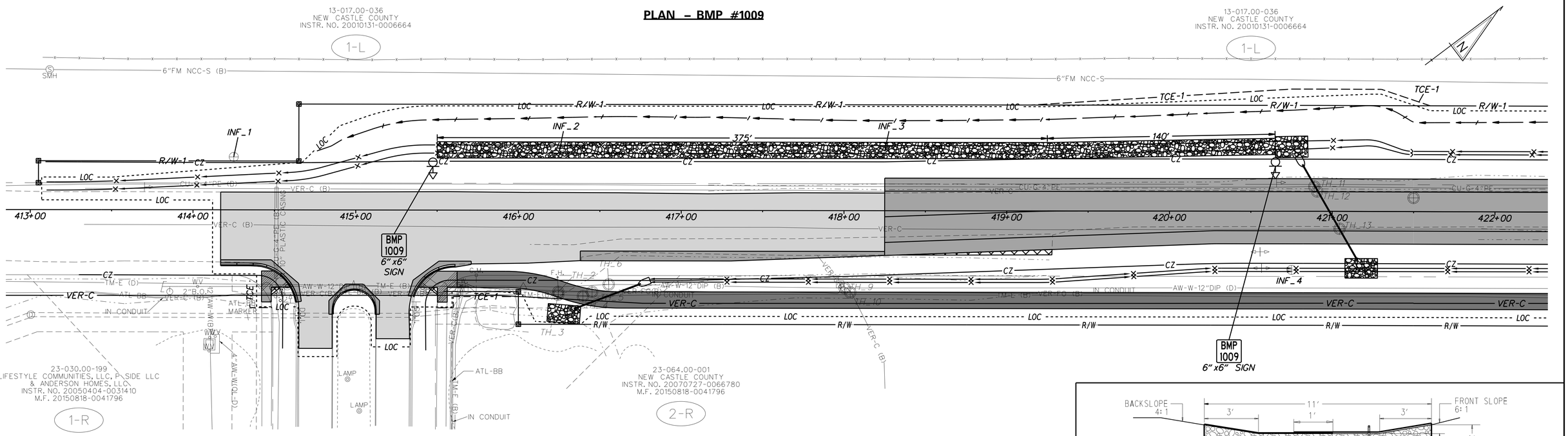
PLAN – BMP #1009



GENERAL NOTES:

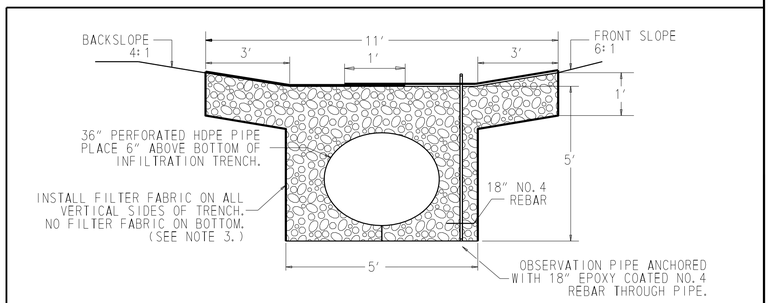
1. *AT NO TIME DURING CONSTRUCTION SHOULD EXCAVATION OCCUR WITHIN 1-FOOT OF THE PROPOSED TRENCH AREA BOTTOM UNTIL ACTUAL TRENCH CONSTRUCTION COMMENCES.*

2. *FILTER FABRIC SHALL BE IN ACCORDANCE WITH SECTION 1060.01 OF THE STANDARD SPECIFICATIONS SHALL BE INCIDENTAL TO 910009.*

DELDOT SWM FACILITY SCHEDULE		
NO.	TYPE / DESCRIPTION	LOCATION
1009	INFILTRATION TRENCH	STA. 415+50 LT. TO STA. 420+65 LT.

AS-BUILT DRAWINGS WILL BE COMPLETED BY THE CONTRACTOR AND CERTIFIED BY A DELAWARE PLS BEFORE THE DELDOT SEMI-FINAL INSPECTION DATE. THESE DRAWINGS SHALL BE SENT TO THE STORMWATER ENGINEER FOR VERIFICATION. AS-BUILT DRAWINGS WILL INCLUDE, BUT NOT BE LIMITED TO:

- *GENERAL TOPOGRAPHY OF THE WHOLE FACILITY AT 1-FOOT CONTOURS.*
- *INVERT OF SWALE THAT INFLOWS TO THE TRENCH.*
- *PRIMARY OUTFLOW CHANNEL, SHOW CROSS SECTIONS AND SLOPE FOR 50 FEET IMMEDIATELY DOWNSTREAM.*



INFILTRATION TRENCH - ITEM 910009

NOT TO SCALE

NOTES:

INFILTRATION TRENCH CONSTRUCTION SEQUENCE
BEFORE CONSTRUCTION OF THE INFILTRATION TRENCH, ALL AREAS DRAINING TO THE TRENCH MUST BE AT FINAL GRADE AND STABILIZED. ABSOLUTELY NO EQUIPMENT SHALL BE IN THE ACTUAL TRENCH AREA ONCE CONSTRUCTION ON THE TRENCH HAS STARTED. ALL EXCAVATION WITH HEAVY EQUIPMENT SHALL BE DONE FROM THE SIDE. ALL STONE USED IN THE TRENCH SHALL CONFORM TO THE INFILTRATION STONE SPECIFICATION.

1. IF AREA(S) DRAINING TO THE INFILTRATION TRENCH ARE NOT VEGETATIVELY STABILIZED, INFLOW SWALES WILL HAVE A STONE CHECK DAM OR 18" COMPOST FILTER LOG PLACED 25 FEET BEFORE THE EDGE OF THE PROPOSED TRENCH OR CLOSER IF DIRECTED BY THE ENGINEER. OTHER INFLOW AREAS, INCLUDING SIDE SLOPES, WILL HAVE SILT FENCE OR 18" COMPOST FILTER LOG INSTALLED SO THAT RUNOFF IS INTERCEPTED BEFORE ENTERING THE TRENCH AREA. THESE ITEMS WILL REMAIN UNTIL SURROUNDING VEGETATION IS ESTABLISHED.

2. EXCAVATE THE TRENCH TO THE DIMENSIONS SHOWN ON THE PLANS AND SCARIFY THE BOTTOM.

3. INSTALL GEOTEXTILE ON ALL TRENCH SIDES MAKING SURE TO HAVE ENOUGH EXTRA TO COVER THE TOP OF THE TRENCH COMPLETELY AFTER STONE IS PLACED AND HAVING AT LEAST 1 FOOT OF OVERLAP OF THE GEOTEXTILE.
THE ONLY AREA THAT IS NOT COVERED WITH GEOTEXTILE IS THE BOTTOM.

4. PLACE THE INSPECTION PORT (OBSERVATION PIPE) AS SHOWN IN THE PLANS.

5. ADD #3 INFILTRATION STONE.

6. AFTER STONE PLACEMENT, IMMEDIATELY COVER THE ENTIRE TOP OF THE TRENCH WITH THE EXCESS GEOTEXTILE AND SPARINGLY SECURE WITH #3 STONE, SO GEOTEXTILE DOES NOT MOVE.
BRUSH CLEAN GEOTEXTILE COVER AS NEEDED TO PREVENT SEDIMENT ACCUMULATION.

7. THE SAME DAY THAT THE TRENCH IS COMPLETED, PERMANENTLY STABILIZE THE DISTURBED AREA AROUND THE TRENCH WITH PERMANENT SEED DRY GROUND AND EROSION CONTROL BLANKET.

8. INSPECT THE TRENCH AND REMOVE LOOSE SEDIMENT AFTER EVERY RAIN EVENT. ENSURE E&S CONTROLS ARE PROPERLY FUNCTIONING.

9. AFTER ALL SURROUNDING AREAS DRAINING TO THE TRENCH HAVE SUFFICIENT VEGETATION, AS DETERMINED BY THE STORMWATER ENGINEER, ALL E&S DEVICES SHALL BE REMOVED AND THE EXCESS GEOTEXTILE REMOVED FROM THE TOP.

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

STORMWATER MANAGEMENT PLAN

SECTION
PD
SHEET NO.
36

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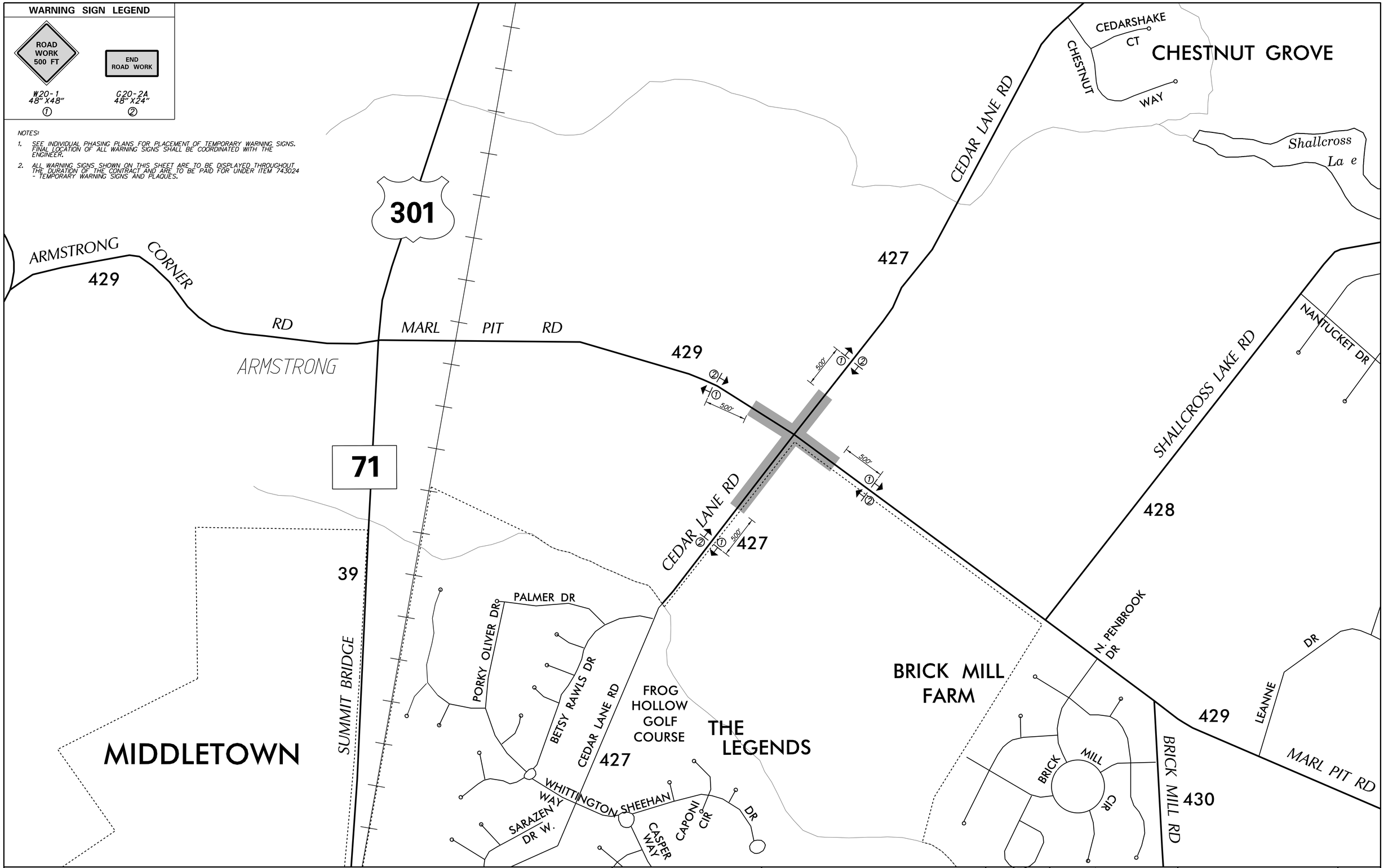
WARNING SIGN LEGEND

ROAD WORK 500 FT	END ROAD WORK
W20-1 48" X48" ①	G20-2A 48" X24" ②

NOTES:

1. SEE INDIVIDUAL PHASING PLANS FOR PLACEMENT OF TEMPORARY WARNING SIGNS. FINAL LOCATION OF ALL WARNING SIGNS SHALL BE COORDINATED WITH THE ENGINEER.
2. ALL WARNING SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED THROUGHOUT THE DURATION OF THE CONTRACT AND ARE TO BE PAID FOR UNDER ITEM 743024 - TEMPORARY WARNING SIGNS AND PLAQUES.



ADDENDA / REVISIONS	SCALE 0 500 1000 1500 FEET	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SECTION PD
			COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 37
				CHECKED BY: T. BROOKS		

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MAINTENANCE OF TRAFFIC NOTES

1. 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. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 801000.

2. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO TYPICAL APPLICATIONS 10 AND 27 OF THE DELAWARE MUTCD.

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. THE USE OF MILLINGS AND GRADED AGGREGATE BASE COURSE (GABC) IN THE TRAVEL WAY, TEMPORARY TRAVEL WAY, HIGH VOLUME ENTRANCES AND ACCESS RAMP FOR THE PURPOSE OF PROVIDING A TEMPORARY ROADWAY SURFACE, POTHOLE REPAIR, TAPERED EDGE FOR UTILITIES, BUTT JOINTS, AND LONGITUDINAL DROP-OFFS (MILLING AND PAVING OPERATIONS) IS PROHIBITED UNLESS IT IS OTHERWISE DESIGNATED TO BE USED IN THE CONTRACT PLANS. USE COLD PATCH, BITUMINOUS CONCRETE, BITUMINOUS CONCRETE WEDGE, OR TAPER MILL, AS NOTED IN THE CONTRACT DOCUMENTS OR APPROVED BY THE ENGINEER. PAYMENT FOR COLD PATCH, BITUMINOUS CONCRETE OR BITUMINOUS CONCRETE WEDGE SHALL BE PAID AS NOTED IN THE CONTRACT DOCUMENTS. TAPER MILL BITUMINOUS CONCRETE SHALL BE PAID UNDER THE BITUMINOUS CONCRETE MILLING ITEM.

   MILLINGS OR GABC SHALL BE USED AT THE FOLLOWING LOCATIONS WHERE ACCESS TO A BUSINESS, RESIDENCE, OR EDGE DROP OFF NEEDS TO BE MAINTAINED UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER TO USE BITUMINOUS CONCRETE OR COLD PATCH. ALL MILLINGS AND GABC WILL BE ROLLED AND COMPACTED TO HELP PREVENT THE MATERIAL FROM UNRAVELLING:
   a. DRIVEWAYS
   b. ENTRANCES
   c. LOW VOLUME ACCESS RAMPS (IDENTIFIED IN THE CONTRACT DOCUMENTS)
   d. EDGE DROP-OFFS ADJACENT TO LIVE ROADWAY(LANES AND SHOULDER) AND THE PROPOSED ROAD CONSTRUCTION
   e. EDGE OF ROADWAY DROP-OFF

   GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED FOR ROADWAY WEDGE/FILLET BETWEEN TRAVEL LANES AND PAVEMENT BOX, EDGE OF TRAVELWAY, DRIVEWAY OR ENTRANCE ACCESS SHALL BE INCIDENTAL TO ITEM NO. 801000 - MAINTENANCE OF TRAFFIC. 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 PAY ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR MILLINGS OR GABC 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. VERTICAL DIFFERENCES SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

5. ALL NECESSARY SIGNS, PAVEMENT MARKINGS AND ROADSIDE APPURTENANCES SHALL BE INSTALLED PRIOR TO THE OPENING/REOPENING OF A ROADWAY OR RAMP. A WALKTHROUGH WITH THE ENGINEER, TRAFFIC SAFETY, TRAFFIC CONSTRUCTION AND OTHER PERSONNEL SHALL OCCUR NO LESS THAN 48 HOURS PRIOR TO THE OPENING/REOPENING OF ANY ROAD OR RAMP.

PREPARED BY
DELDOT - TRANSPORTATION SOLUTIONS
SASMIT H. BHAYDE

Sasmit H. Bhayde 05/22/2019
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PD" SECTION DESIGNATION. — DATE

SASMIT H. BHAYDE LICENSE No. 15669 DELAWARE PROFESSIONAL ENGINEER — SEAL

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN OF THESE PLANS MEETS THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS."

Vincent W. Davis 05/24/2019
DELDOT STORMWATER ENGINEER — DATE

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THESE PLANS MEET THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS AND THAT ALL CLEARING, GRADING, AND CONSTRUCTION WILL BE ACCOMPLISHED PURSUANT TO THE PLAN."

MAINTENANCE OF TRAFFIC NOTES

6. LANE CLOSURES ARE PERMITTED AS SHOWN IN THE MATRIX BELOW. IF ACTIVITIES ARE NOT OCCURRING, ALL LANES SHALL BE OPEN. INTERSECTION CONSTRUCTION WORK SHALL BE COMPLETED ONLY ON ONE QUADRANT AT THE TIME.

LANE CLOSURE MATRIX FOR
Cedar lane and Marl Pit Road

Hour	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
0							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

LANES CLOSURES NOT PERMITTED

LANE CLOSURES PERMITTED

EROSION AND SEDIMENT CONTROL NOTES

7. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A FIVE 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 FIVE YEARS, THE CONTRACTOR WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

8.

EROSION POTENTIAL FOR THIS PROJECT	CONTRACTOR ESC SUPERVISOR REQUIREMENT
( ) INSIGNIFICANT	NONE
( ) MINOR	CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
(X) MAJOR	CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 6.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.

9. THE DISTURBED AREA FOR THIS PROJECT IS 7.78 ACRES.

10. THE ADDITIONAL IMPERVIOUS AREA FOR THIS PROJECT IS 93,000 SQUARE FEET.

CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
CSF XXX	CONSTRUCTION SAFETY FENCE / LENGTH
CSF	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
PHASE	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

EROSION & SEDIMENT CONTROL	
CFL	COMPOST FILTER LOG
CFL	COMPOST FILTER LOG / LENGTH
DWBAG	DEWATERING BAG
DWB	DEWATERING BASIN
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE / LENGTH
SF	SILT FENCE
RSF	REINFORCED SILT FENCE / LENGTH
RSF	REINFORCED SILT FENCE
SSF	SUPER SILT FENCE / LENGTH
SSF	SUPER SILT FENCE
SP	SUMP PIT
ST	SEDIMENT TRAP / NUMBER
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN
T XXX	TURBIDITY CURTAIN / LENGTH
T	TURBIDITY CURTAIN

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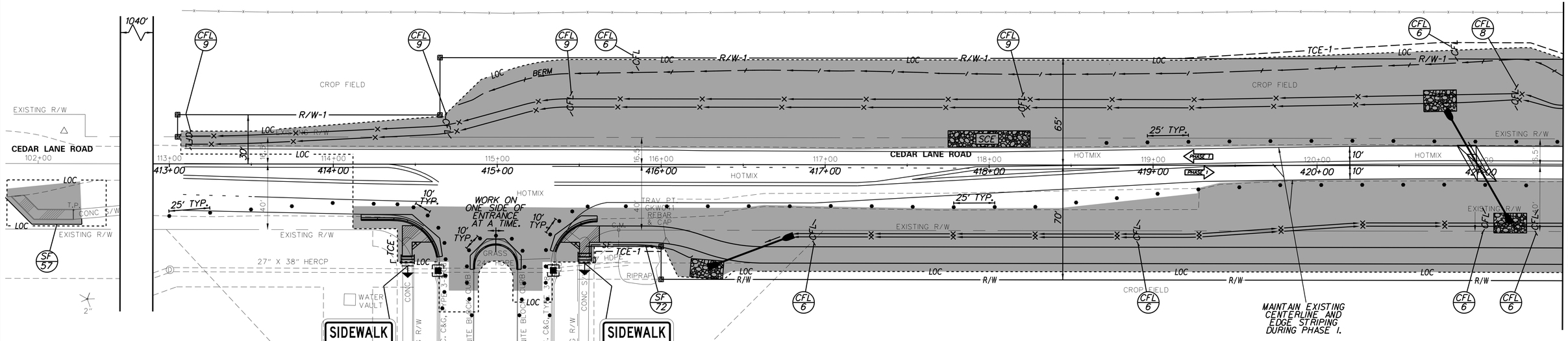
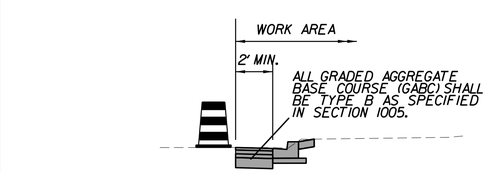
ADDENDA / REVISIONS	NOT TO SCALE	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SECTION PD
			COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 38
				CHECKED BY: T. BROOKS		

SEQUENCE OF CONSTRUCTION

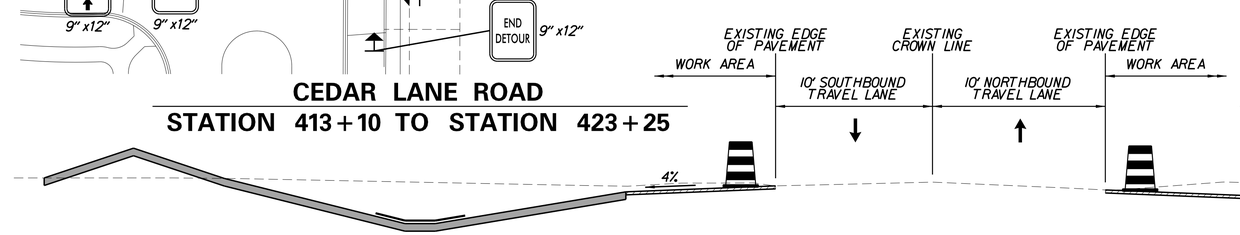
1. MOST UTILITIES SHALL BE RELOCATED PRIOR TO START OF CONSTRUCTION. MIDDLETOWN ELECTRIC RELOCATION WILL BE CONCURRENT WITH THIS PROJECT. REFER TO UTILITY STATEMENT. REFER TO UTILITY RELOCATION PLAN SHEETS FOR UTILITY LOCATIONS.
2. PLACE WARNING SIGNS AS SHOWN ON THE FIRST CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN SHEET.
3. UTILIZE TA-10 OR TA-27 OF THE DE MUTCD TO CLOSE LANES OR PARTS OF INTERSECTION AS NEEDED DURING THIS PHASE.
4. INSTALL SILT FENCES AND STABILIZED CONSTRUCTION ENTRANCES AS SHOWN IN THIS PHASE. INSTALL INLET AND PIPE SEDIMENT CONTROLS AT WEST MIDDLEPARK DRIVE INTERSECTION AND AT CROSS ROAD PIPE AT STA 527+00 ON MARL PIT ROAD.
5. CLEAR AND GRUB AREAS WITHIN THE LOC ONE CORNER OF THE INTERSECTION AT A TIME.
6. REFER TO STORMWATER MANAGEMENT PLANS AND GRADE AREA AROUND THE INFILTRATION BASIN FOR USE AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION.
7. TO MINIMIZE DISRUPTIONS TO TRAFFIC AND AREAS DISTURBED AT ANY GIVEN TIME, THE PROJECT AREA IS BROKEN DOWN IN SEVERAL SECTIONS. CERTAIN STEPS LISTED BELOW ARE REPEATED IN VARIOUS SECTIONS.
   - A. GRADE AREAS AS NEEDED FROM THE EDGE OF EXISTING PAVEMENT TO MAINTAIN POSITIVE DRAINAGE AND PLACE DRUMS BY THE EDGE OF EXISTING PAVEMENT. REINSTALL ANY EXISTING STOP SIGNS TAKEN DOWN FOR THE ROADSIDE REGRADING.
   - B. CONSTRUCT PROPOSED DRAINAGE PIPES AND STRUCTURES WITHIN ACTIVE QUADRANT. PLACE INLET SEDIMENT CONTROL AT CONSTRUCTED DRAINAGE INLETS AND PIPE INLETS.
   - C. INSTALL DRAINAGE PIPE CROSSINGS AS APPLICABLE FROM ACTIVE DOWNSTREAM QUADRANT AND STUB INTO ADJACENT UPSTREAM QUADRANT AND PLACE TEMPORARY ROADWAY PATCHES.
   - D. INSTALL UNDERGROUND PORTION OF LIGHTING SYSTEM (CONDUITS, JUNCTION WELLS, POLE BASES, ETC.) AS PER LIGHTING PLANS WITHIN ACTIVE QUADRANT.
   - E. INSTALL CONDUIT CROSSINGS OF UNDERGROUND LIGHTING SYSTEM AS APPLICABLE FROM ACTIVE QUADRANT AND STUB INTO ADJACENT QUADRANTS AND PLACE TEMPORARY ROADWAY PATCHES.
   - F. GRADE OUT FOR DITCHES. PLACE COMPOST FILTER LOGS (CFL) AS SHOWN ON PLANS.
   - G. BOX OUT FOR PROPOSED CURBS, ADJACENT UNDERDRAINS, BIKE AND CURB RAMPS, SHARED-USE PATHS, AND RIP-RAP AREAS AS SHOWN.
   - H. CONSTRUCT CURB AND GUTTER, ADJACENT UNDERDRAINS, CURB RAMPS, SIDEWALKS, AND BIKE RAMPS AS SHOWN. PLACE GABC FOR SHARED-USE PATHS. PLACE RIP-RAP WHERE SHOWN ON THIS PHASE.
   - J. PLACE TYPE C SUPERPAVE ON SECTIONS OF SHARED-USE PATHS WHERE GABC HAS BEEN PLACED.
   - K. STABILIZE DISTURBED AREAS WITH TOPSOIL, SEED, AND MULCH.
8. FOLLOW STEPS 7A-7K TO CONSTRUCT DRAINAGE, UNDERGROUND LIGHTING, CURB AND SHARED-USE PATH IN THE NORTHWEST QUADRANT OF THE INTERSECTION.
9. FOLLOW STEPS 7A-7K TO CONSTRUCT DRAINAGE, UNDERGROUND LIGHTING, CURG AND SHARED-USE PATH IN THE NORTHEAST QUADRANT OF THE INTERSECTION.
10. FOLLOW STEPS 7A-7K TO CONSTRUCT DRAINAGE, UNDERGROUND LIGHTING, CURB AND SHARED-USE PATH IN THE SOUTHWEST QUADRANT OF THE INTERSECTION.
11. INSTALL TEMPORARY WARNING SIGNS AS SHOWN ON THE PLAN BELOW TO CLOSE SIDEWALK AT THE WEST MIDDLEPARK INTERSECTION.
12. SAWCUT PAVEMENT AROUND CURBS TO RECONSTRUCT AT WEST MIDDLEPARK DRIVE. SAWCUT EXISTING SIDEWALKS AT TIE-IN POINTS AT EXISTING JOINTS. GRADE OUT AND BOX OUT FOR PROPOSED CURBS, CURB RAMPS AND SIDEWALKS.
13. PLACE GABC AND CONSTRUCT CURB AND GUTTER AND SIDEWALKS AT WEST MIDDLEPARK DRIVE.
14. PATCH AREAS IN FRONT OF CURB TO THE TOP OF TYPE C SUPERPAVE AT WEST MIDDLEPARK DRIVE AND AT STA SIDEWALK TIE-IN AT STA 102+00.
15. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND MULCH. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER VEGETATION HAS STABILIZED ALL DISTURBED AREAS IN ACCORDANCE WITH THESE PLANS AND AS DIRECTED BY THE STORMWATER ENGINEER PRIOR TO PROCEEDING TO THE NEXT PHASE. REMOVE TEMPORARY WARNING SIGNS INSTALLED FOR THE SIDEWALK CLOSURE AND PEDESTRIAN DETOUR.
16. FOLLOW STEPS 7A-7K TO CONSTRUCT DRAINAGE DITCH, CURB AND SHARED-USE PATH IN THE SOUTHEAST QUADRANT OF THE INTERSECTION.





PARKSIDE SUBDIVISION ENTRANCE (WEST MIDDLEPARK DRIVE)

TYPICAL SECTIONS ARE NOT TO SCALE ON MOT SHEETS.



CEDAR LANE ROAD STATION 413+10 TO STATION 423+25

CEDAR LANE ROAD STATION 419+30 TO STATION 423+20

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SECTION PD
				COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 39
					CHECKED BY: T. BROOKS		

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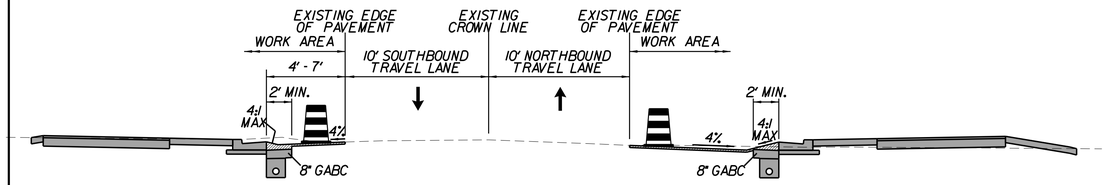
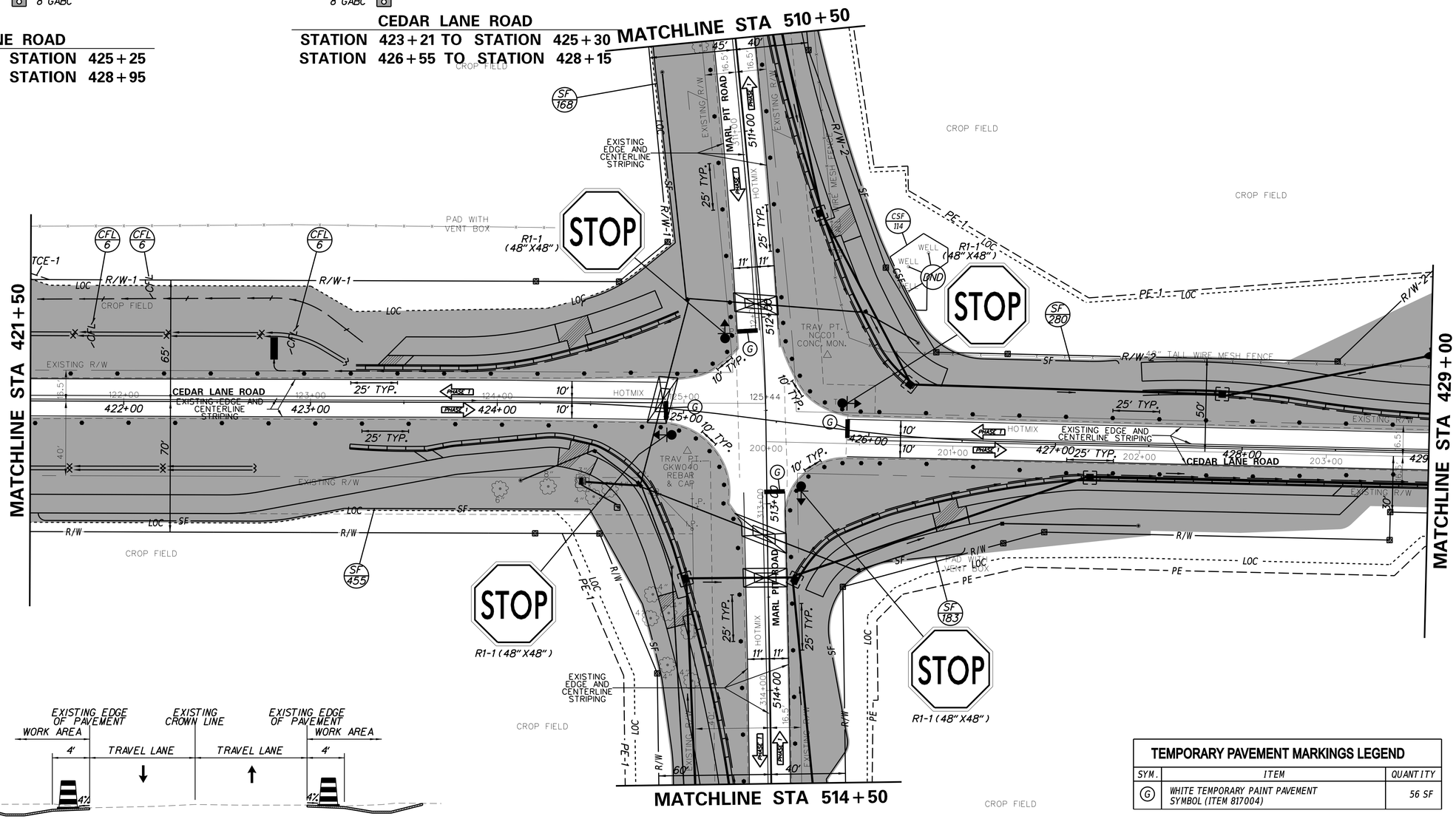


CEDAR LANE ROAD

STATION	423+25	TO STATION	425+25
STATION	427+45	TO STATION	428+95

CEDAR LANE ROAD

STATION	423+21	TO STATION	425+30
STATION	426+55	TO STATION	428+15



CEDAR LANE ROAD

STATION	425+55	TO STATION	427+45

MARL PIT ROAD

STATION	510+88	TO STATION	512+15
STATION	513+05	TO STATION	515+35

CEDAR LANE ROAD

STATION	425+50	TO STATION	426+35

MARL PIT ROAD

STATION	509+50	TO STATION	512+15
STATION	513+10	TO STATION	514+15

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 817004)	56 SF

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY: S. BHAYDE	
COUNTY		
NEW CASTLE	CHECKED BY: T. BROOKS	

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

SECTION PD

SHEET NO. 40

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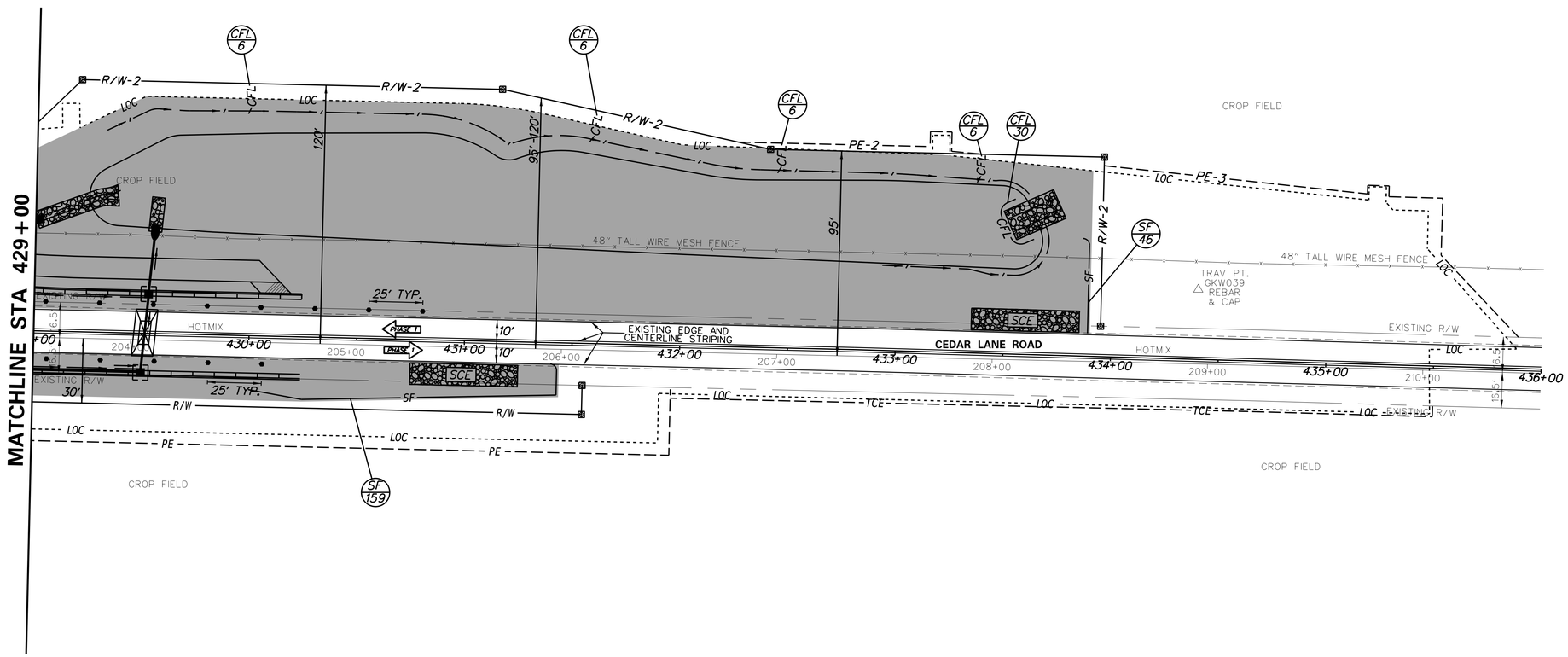

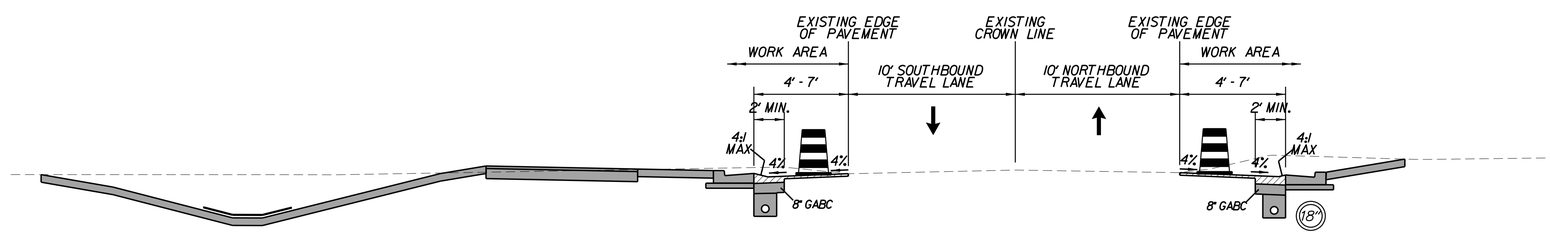

CEDAR LANE ROAD
STATION 428+95 TO STATION 430+80

CEDAR LANE ROAD
STATION 428+15 TO STATION 430+80

ADDENDA / REVISIONS	SCALE 0 30 60 90 FEET	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SECTION PD
			COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 41
				CHECKED BY: T. BROOKS		

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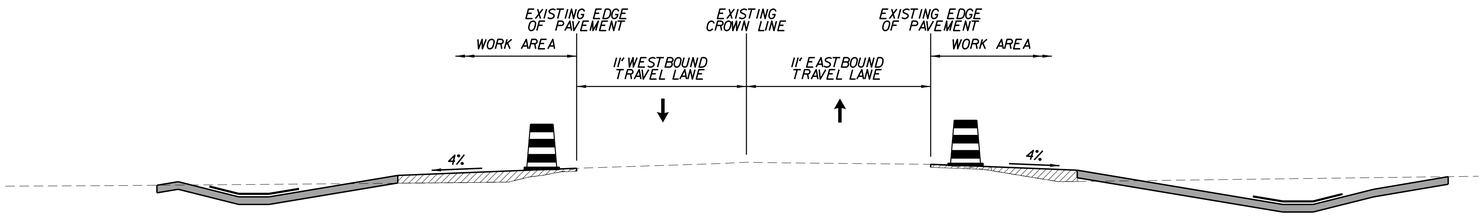
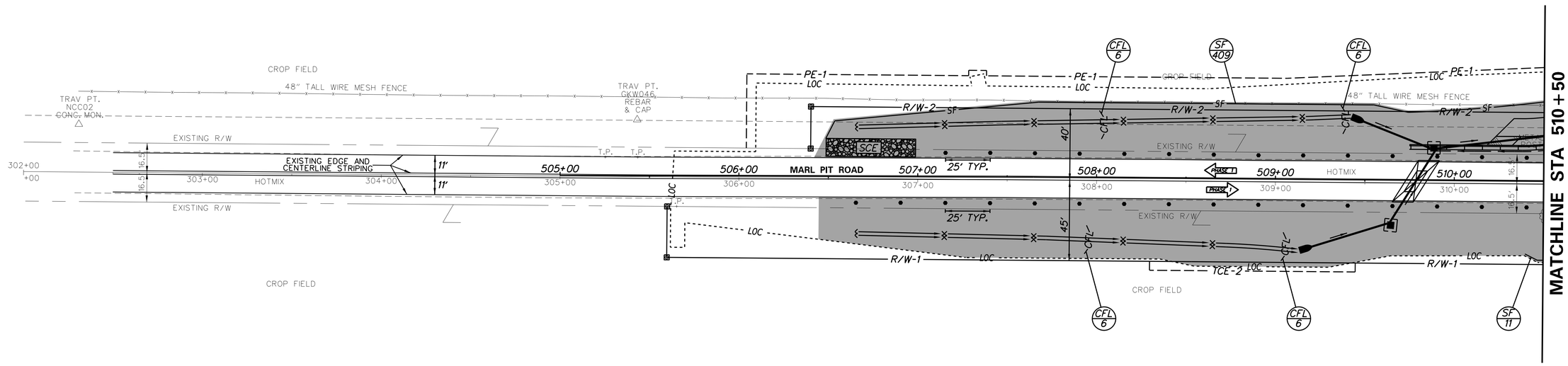
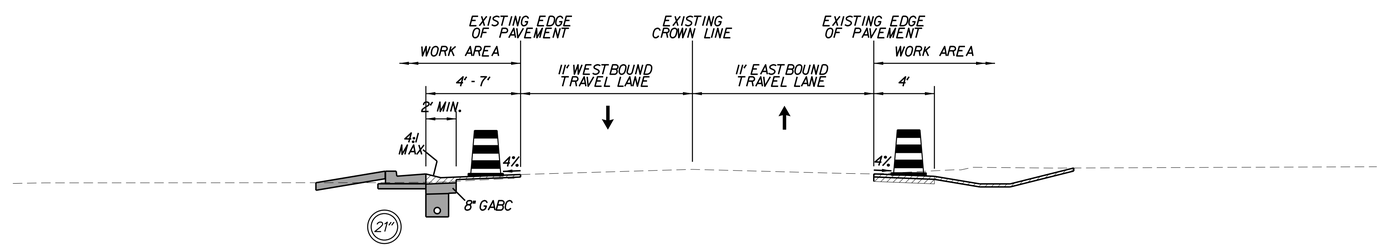


MARL PIT ROAD
STATION 506+45 TO STATION 509+75

MARL PIT ROAD
STATION 506+45 TO STATION 509+50





MARL PIT ROAD
STATION 509+75 TO STATION 510+90

MARL PIT ROAD
STATION 509+50 TO STATION 512+15

ADDENDA / REVISIONS	SCALE 0 30 60 90 FEET	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SECTION PD
			COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 42
				CHECKED BY: T. BROOKS		

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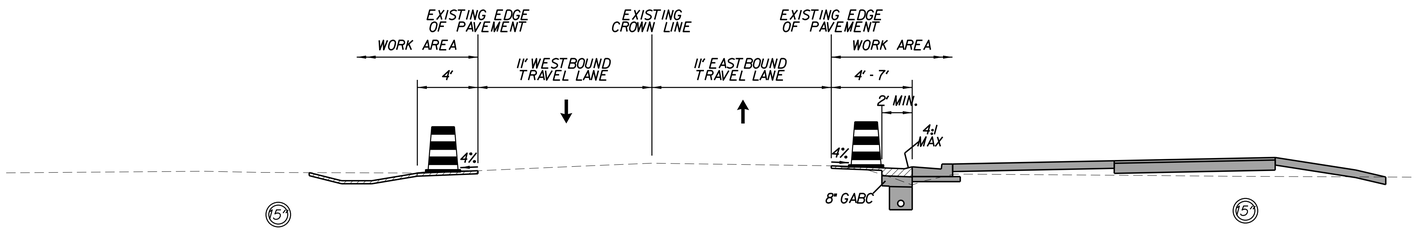
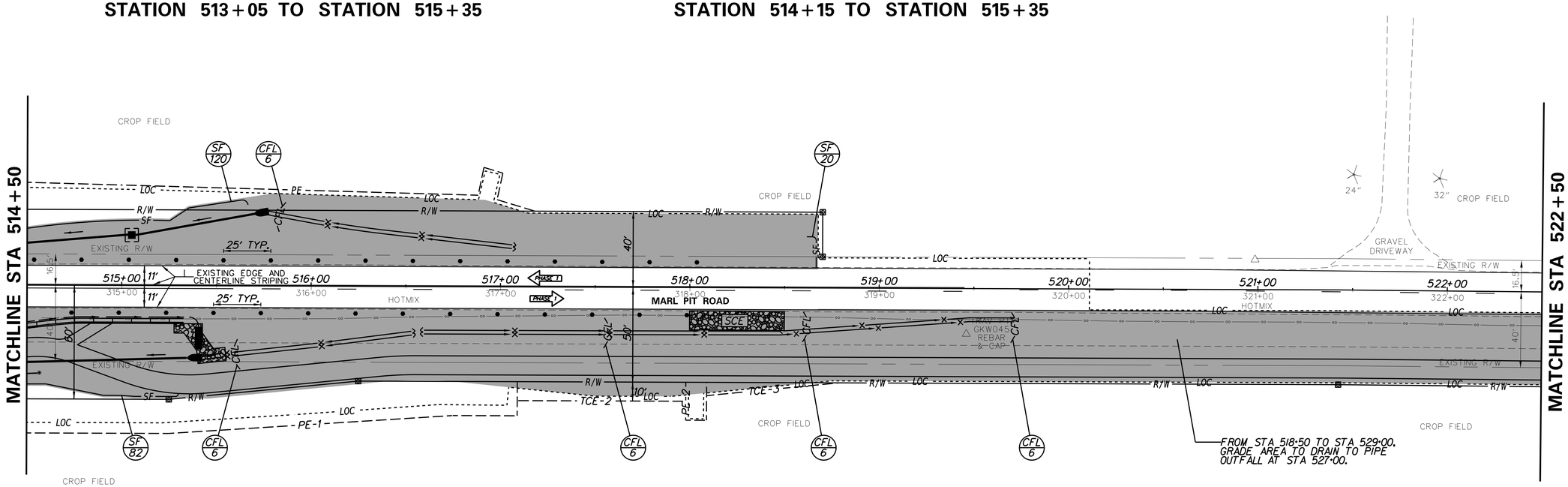
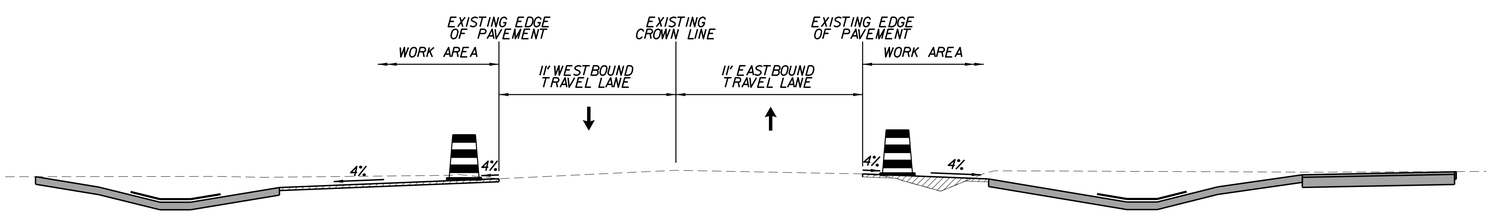


MARL PIT ROAD
STATION 513+05 TO STATION 515+35

MARL PIT ROAD
STATION 514+15 TO STATION 515+35





MARL PIT ROAD
STATION 515+35 TO STATION 517+10

ADDENDA / REVISIONS	SCALE 0 30 60 90 FEET	CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201612001	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SECTION PD
			COUNTY NEW CASTLE	DESIGNED BY: S. BHAYDE		SHEET NO. 43
				CHECKED BY: T. BROOKS		

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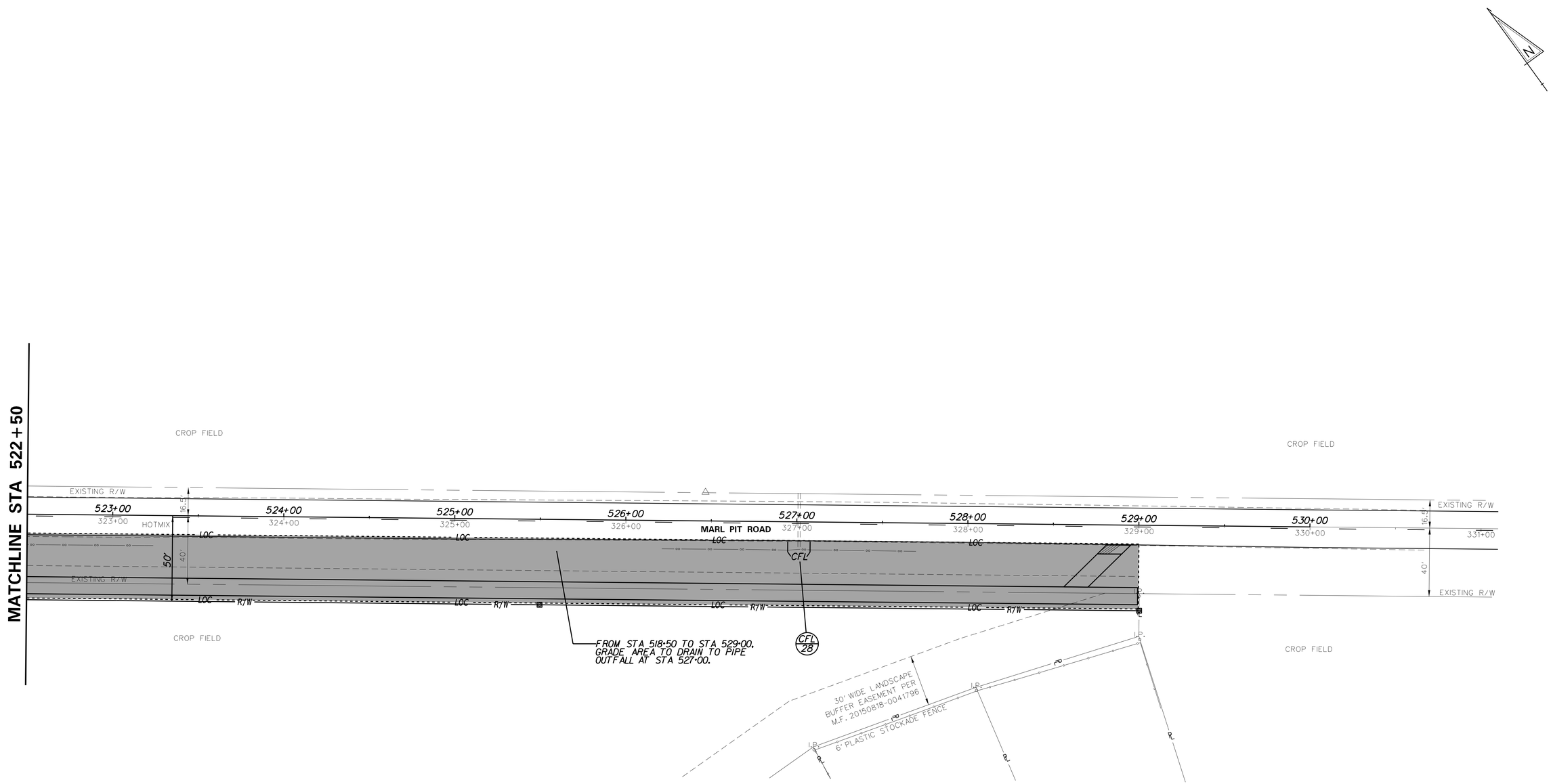

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

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

SECTION	SHEET NO.
PD	44

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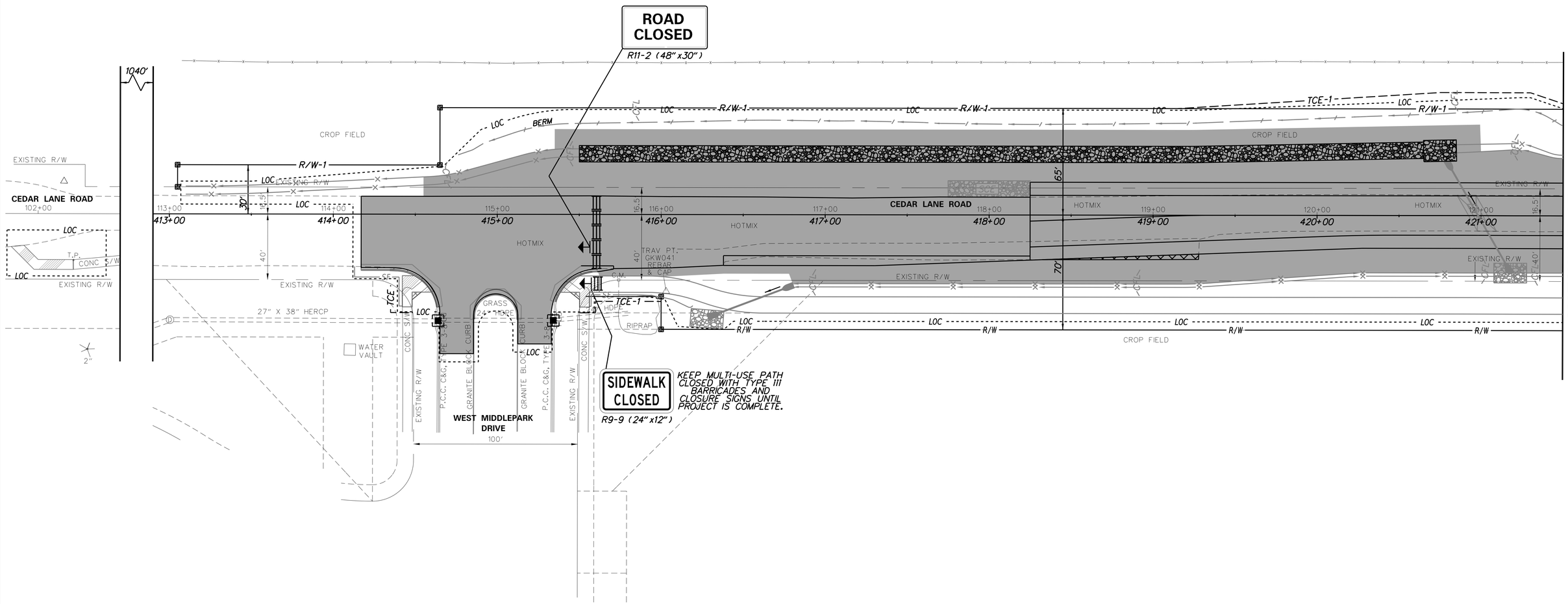
SEQUENCE OF CONSTRUCTION

1. REFER TO DETOUR PLANS, AND CLOSE CEDAR LANE ROAD AND MARL PIT ROAD. INSTALL FULL INTERSECTION DETOUR AS PER PLAN. CLOSE THE INTERSECTION OF CEDAR LANE ROAD AND MARL PIT ROAD.
2. MILL 2" OFF THE TOP OF EXISTING PAVEMENT ON MARL PIT ROAD (STATION 506+65 TO 509+65 AND STATION 515+35 TO 518+50) AND CEDAR LANE ROAD NORTH OF MARL PIT ROAD (STATION 428+20 TO 431+25) CONSISTENT WITH AREAS SHOWN ON CONSTRUCTION PLANS.
3. SAWCUT EDGES OF EXISTING PAVEMENT TO PROVIDE A STRAIGHT EDGE FOR PROPOSED PAVEMENT WIDENING TO TIE INTO.
4. REMOVE EXISTING PAVEMENT AT THE ROUNDABOUT IN AREAS OF PAVEMENT RECONSTRUCTION.
5. CONSTRUCT PIPE RUN 5 AND DRAINAGE INLET 2.
6. GRADE OUT AND BOX OUT FOR PROPOSED SPLITTER ISLANDS, TRUCK APRON, PROPOSED ROADWAY SECTIONS, AND REMAINING PROPOSED CURBS, UNDERDRAINS, RIPRAP AREAS, CURB RAMPS, AND SHARED-USE PATHS.
7. CONSTRUCT REMAINING UNDERDRAINS.
8. PLACE RIPRAP IN RIPRAP AREAS NOT CONSTRUCTED IN PHASE 1.
9. PLACE BORROW AND GABC FOR ROUNDABOUT TRUCK APRONS, SPLITTER ISLANDS, PROPOSED ROADWAY SECTIONS, AND REMAINING CURBS, CURB RAMPS, BIKE RAMPS, AND SHARED-USE PATHS.
10. CONSTRUCT CONCRETE TRUCK APRON, SPLITTER ISLANDS, AND REMAINING CURBS, CURB RAMPS, AND BIKE RAMPS.
11. INSTALL REMAINING PORTION OF LIGHTING SYSTEM (LIGHT POLES, DAVIT ARMS, LUMINAIRES, ETC.) AS PER LIGHTING PLANS.
12. CONSTRUCT PROPOSED ROADWAY SECTION TO THE TOP OF TYPE B WARM MIX. ADD TYPE B WARM MIX WEDGE AS DETERMINED NECESSARY BY ENGINEER IN THE FIELD.
13. REGRADE FORESLOPES OF ROADSIDE DITCHES. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND MULCH.
14. AT THE CIRCULATORY ROADWAY AROUND THE TRUCK APRON, PLACE 2" OF TYPE C WARM MIX.
15. INSTALL TEMPORARY STRIPING IN THE FINAL PATTERN. PLACE PERMANENT SIGNING AS PER SIGNING AND STRIPING PLANS.
16. REMOVE ALL BARRICADES AND DETOUR SIGNS USED FOR DETOUR AND REOPEN INTERSECTION TO TRAFFIC.
17. REFER TO STORMWATER MANAGEMENT PLANS. CONSTRUCT INFILTRATION TRENCH ON THE SOUTH END AND INFILTRATION BASIN ON THE NORTH END OF THE PROJECT.
18. ADD TYPE C WARM MIX WEDGE AS DETERMINED NECESSARY BY ENGINEER IN THE FIELD. PLACE 2" OF TYPE C WARM MIX ON ROADWAY SECTIONS AND REMAINING SECTIONS OF BIKE RAMPS AND MULTI-USE PATHS.
19. INSTALL TEMPORARY STRIPING IN THE FINAL PATTERN ON THE TYPE C WARM MIX PLACED IN STEP 18.
20. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOLLOWING FINAL VEGETATIVE STABILIZATION OF ENTIRE DISTURBED AREA AND WITH CONCURRENCE FROM THE STORMWATER ENGINEER.
21. AT COMPLETION, PLACE PERMANENT STRIPING AS PER SIGNING AND STRIPING PLANS. REMOVE ALL TEMPORARY WARNING SIGNS.



ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

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

SECTION	SHEET NO.
PD	45

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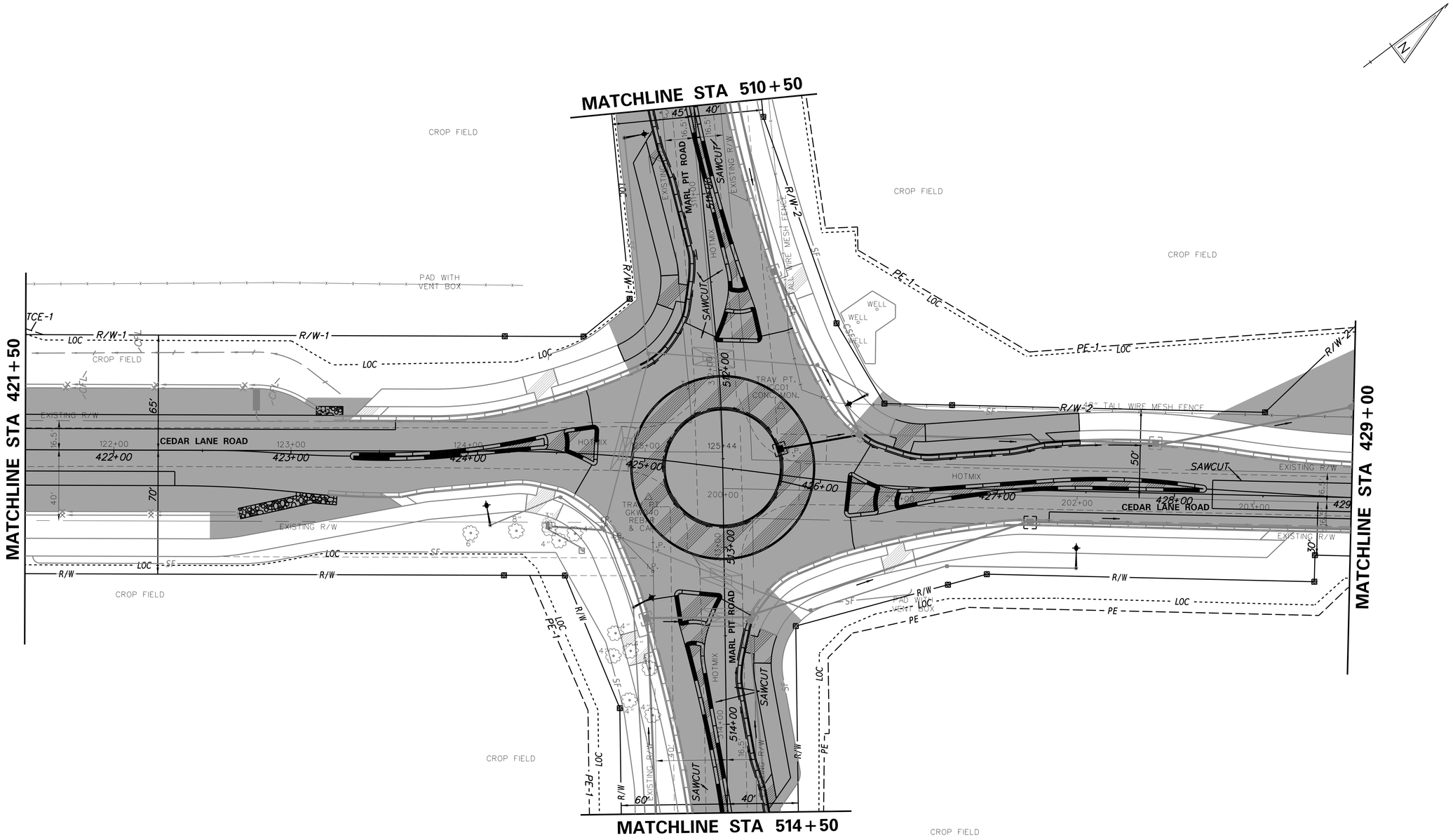

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

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

SECTION	SHEET NO.
PD	46

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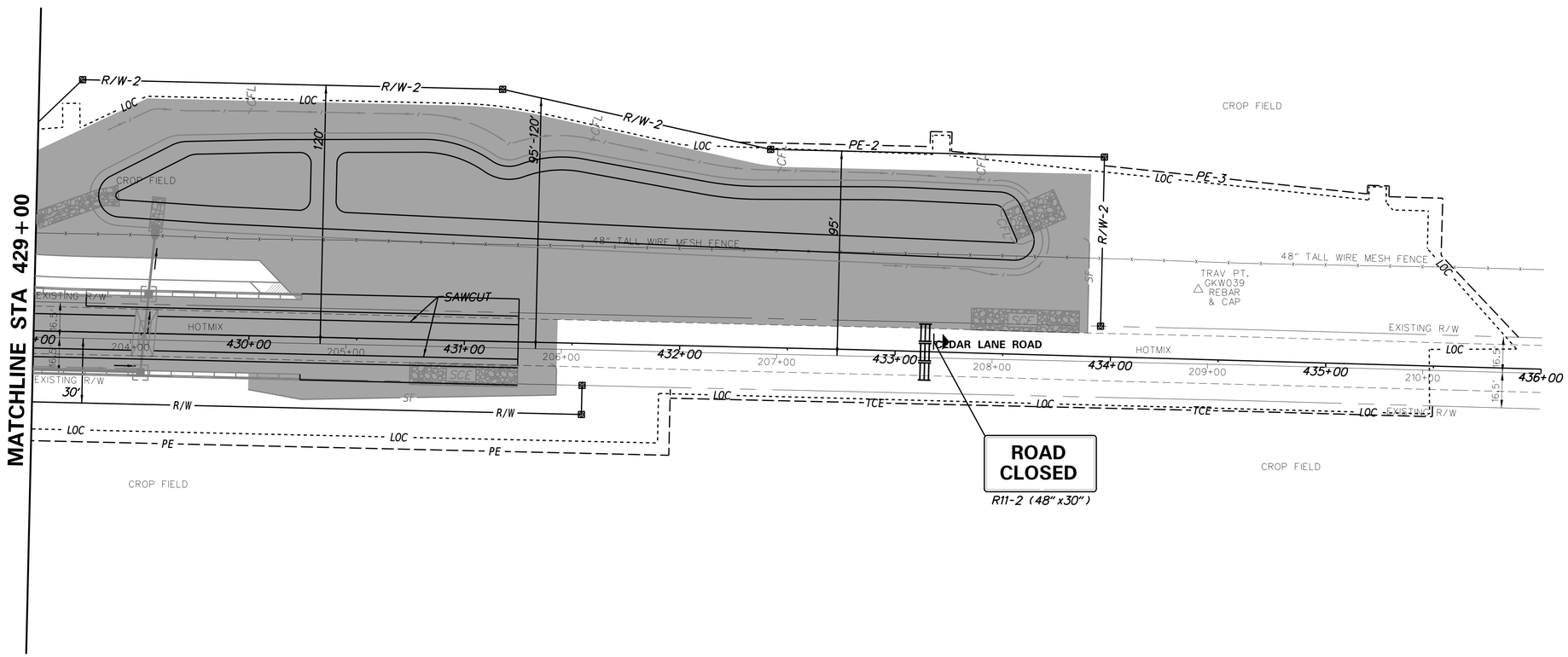

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

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

SECTION	SHEET NO.
PD	47

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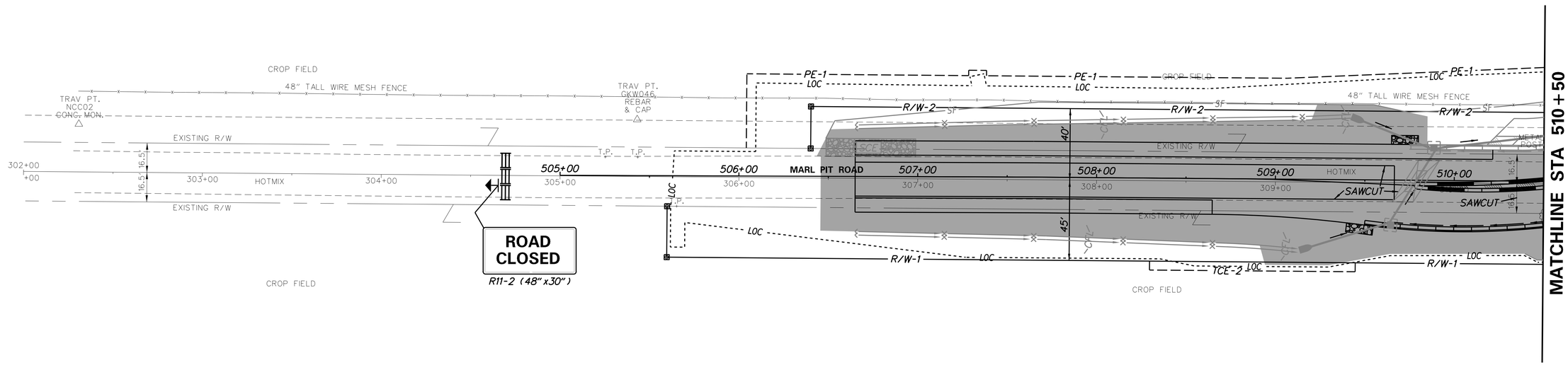

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

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

SECTION	SHEET NO.
PD	48

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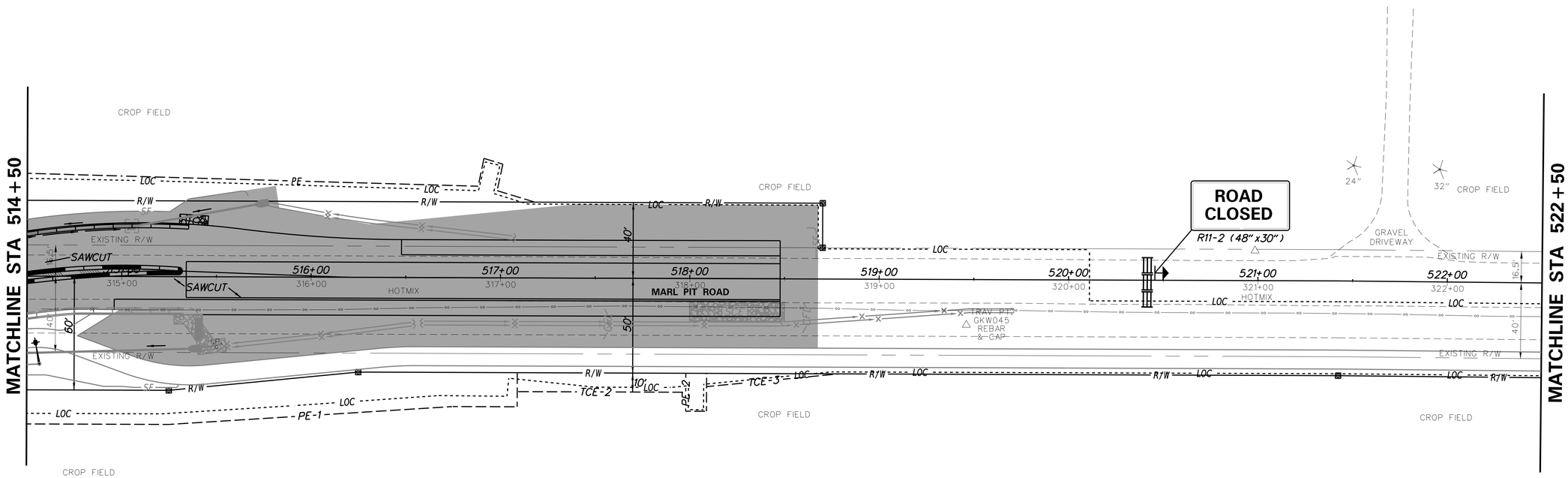

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

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

SECTION	
PD	
SHEET NO.	
49	

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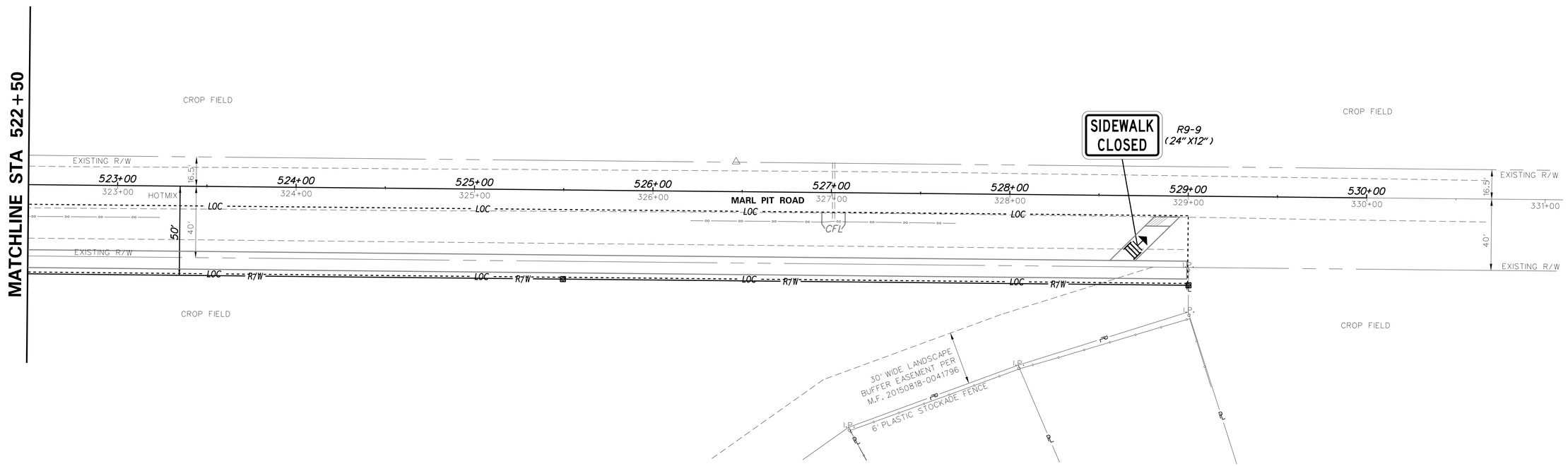

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

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

SECTION	SHEET NO.
PD	50

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PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

CEDAR LN AT MARL PIT	TO CLOSE STARTING XX/XX/XX

DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-2

CEDAR LN AT MARL PIT	CLOSED FOLLOW DETOUR

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

PCMS-3

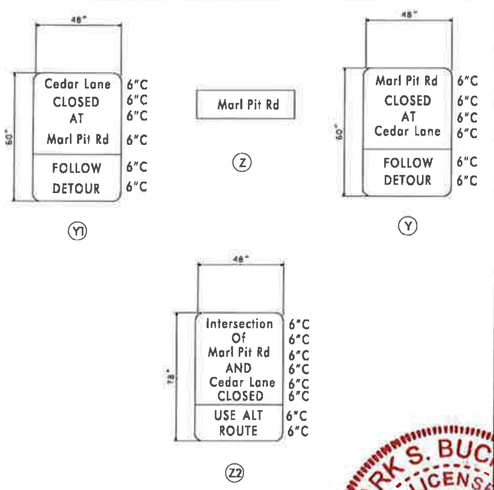
MARL PIT AT CEDAR LN	TO CLOSE STARTING XX/XX/XX

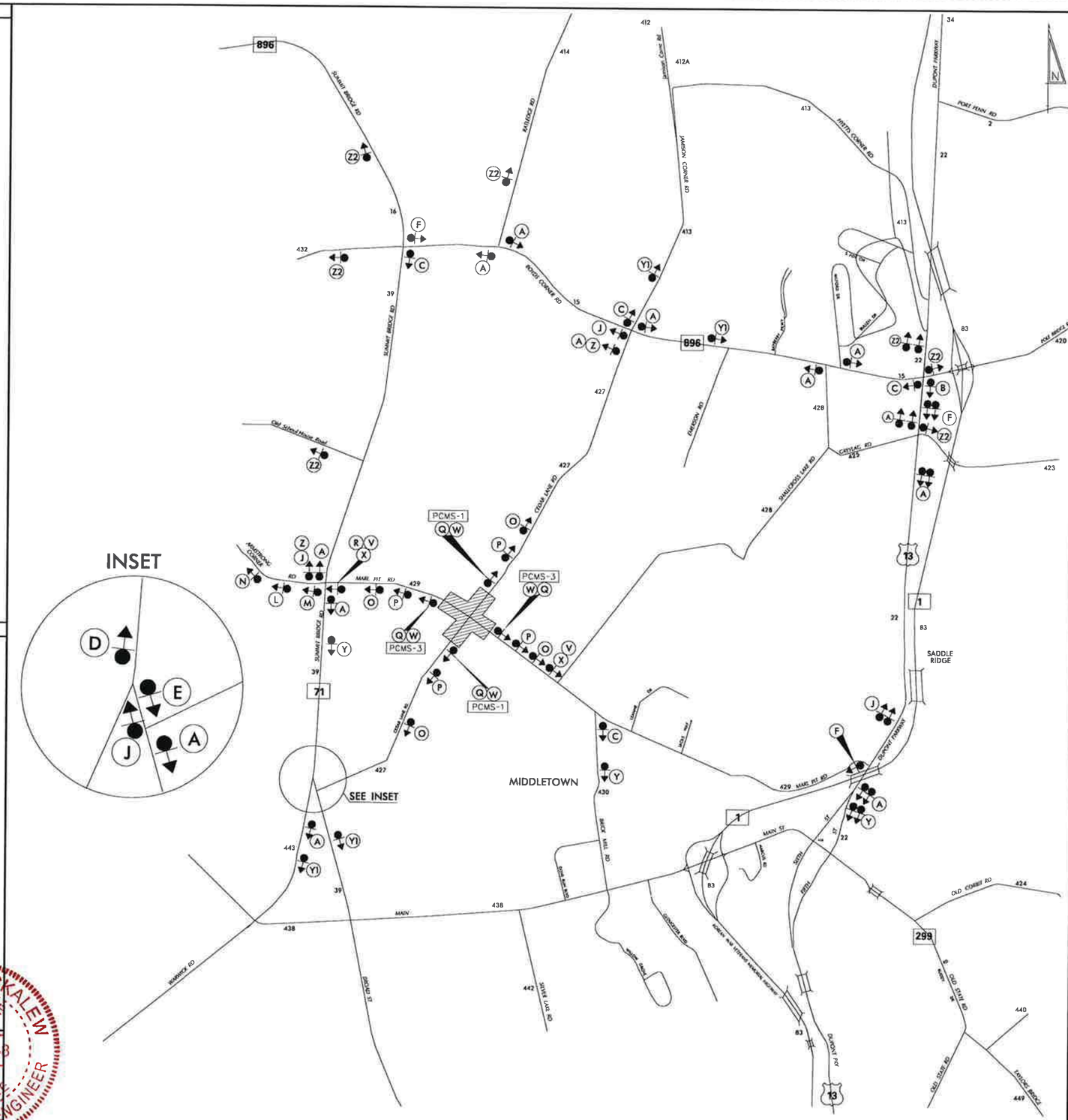
DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-4

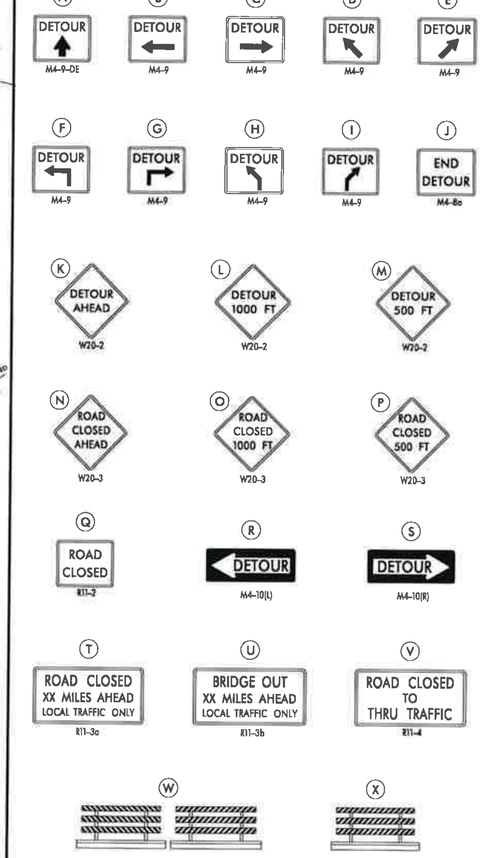
MARL PIT AT CEDAR LN	CLOSED FOLLOW DETOUR

SPECIAL SIGNS





LEGEND



GENERAL NOTES

1. ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
2. THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
3. DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
4. SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
5. SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
6. 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" (DE MUTCD) WILL PREVAIL.
7. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
8. WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
9. "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
10. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

PREPARED BY
DELDOT – TRANSPORTATION SOLUTIONS
TRAFFIC SAFETY

10-4-18
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "TS" SECTION DESIGNATION.

MARK S. BUCKALEW
LICENSE
No. 16738
DELAWARE
PROFESSIONAL ENGINEER
SEAL

ADDENDA / REVISIONS

NOT TO SCALE

CEDAR LANE ROAD
AND MARL PIT ROAD
INTERSECTION IMPROVEMENTS

CONTRACT	ROAD NO.	427/429
T201612001	DESIGNED BY: YFH	
COUNTY		
NEW CASTLE	CHECKED BY: MSB	

VEHICULAR
DETOUR PLAN

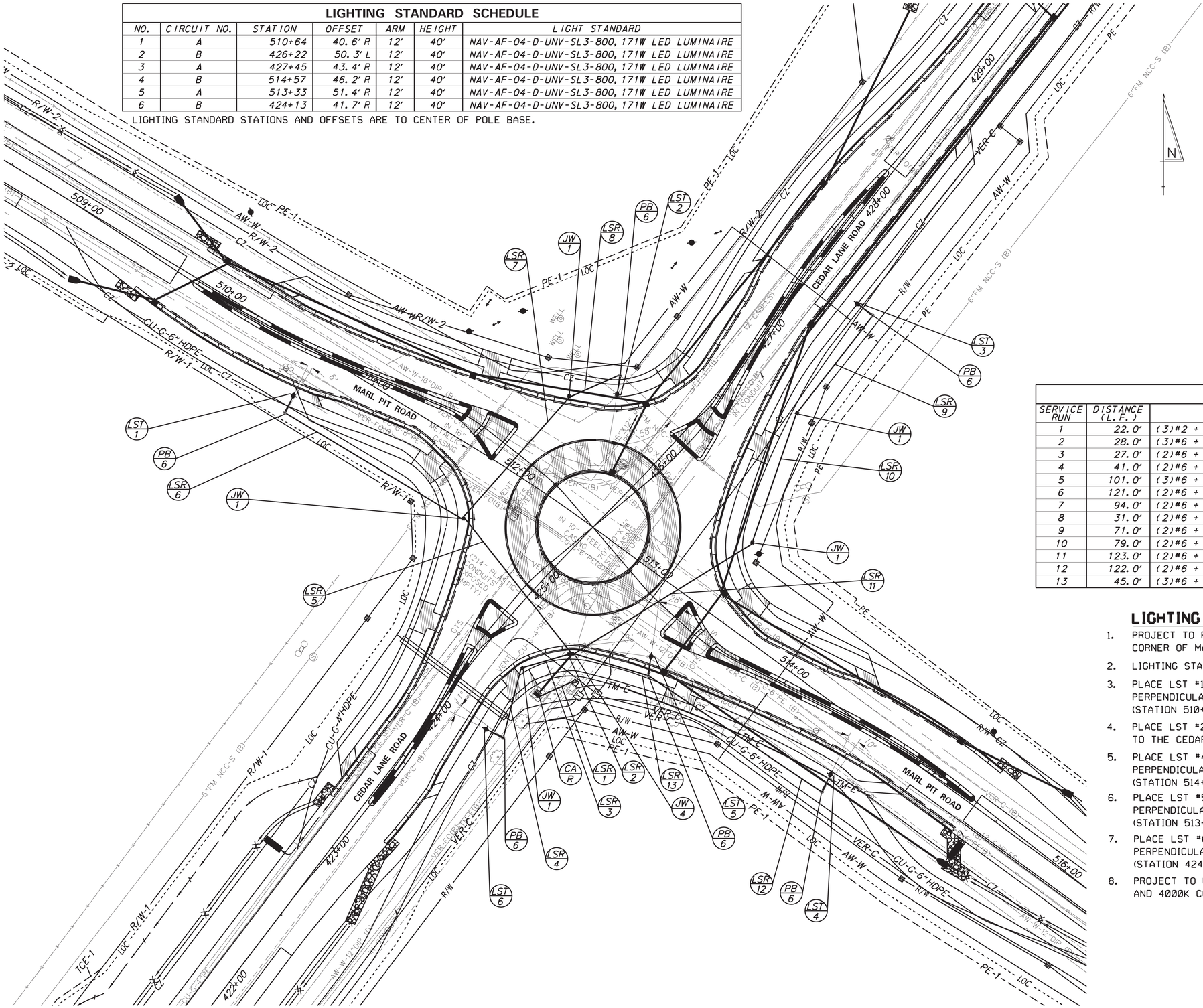
SECTION TS
SHEET NO. 51

LAST REVISED: 9/11/2018
$TIME$
$TIMES$
$FILES$

LIGHTING STANDARD SCHEDULE

NO.	CIRCUIT NO.	STATION	OFFSET	ARM	HEIGHT	LIGHT STANDARD
1	A	510+64	40.6' R	12'	40'	NAV-AF-04-D-UNV-SL3-800, 171W LED LUMINAIRE
2	B	426+22	50.3' L	12'	40'	NAV-AF-04-D-UNV-SL3-800, 171W LED LUMINAIRE
3	A	427+45	43.4' R	12'	40'	NAV-AF-04-D-UNV-SL3-800, 171W LED LUMINAIRE
4	B	514+57	46.2' R	12'	40'	NAV-AF-04-D-UNV-SL3-800, 171W LED LUMINAIRE
5	A	513+33	51.4' R	12'	40'	NAV-AF-04-D-UNV-SL3-800, 171W LED LUMINAIRE
6	B	424+13	41.7' R	12'	40'	NAV-AF-04-D-UNV-SL3-800, 171W LED LUMINAIRE

LIGHTING STANDARD STATIONS AND OFFSETS ARE TO CENTER OF POLE BASE.



LEGEND

SYMBOL	DESCRIPTION
CA X	PROPOSED LIGHTING CONTROL CABINET AND CABINET IDENTIFIER (TYPE OF CABINET)
LSR X	PROPOSED LIGHTING SERVICE RUN AND LIGHTING SERVICE RUN IDENTIFIER (# OF LIGHTING SERVICE RUN)
JW X	PROPOSED JUNCTION WELLS AND JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
LST X	PROPOSED LIGHTING STANDARD AND POLE BASE (# OF LIGHTING STANDARD)
PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
P	PROPOSED SERVICE PEDESTAL

LIGHTING SERVICE SCHEDULE

SERVICE RUN	DISTANCE (L.F.)	DESCRIPTION	INSTALLATION
1	22.0'	(3)#2 + (1)#2 GND IN 2" GALVANIZED CONDUIT	DIRECT BURIAL
2	28.0'	(3)#6 + (1)#6 GND IN 4" SCH 80 PVC CONDUIT	DIRECT BURIAL
3	27.0'	(2)#6 + (1)#6 GND IN 4" SCH 80 PVC CONDUIT	DIRECT BURIAL
4	41.0'	(2)#6 + (1)#6 GND IN 3" SCH 80 PVC CONDUIT	DIRECT BURIAL
5	101.0'	(3)#6 + (1)#6 GND IN 4" SCH 80 PVC CONDUIT	DIRECT BURIAL
6	121.0'	(2)#6 + (1)#6 GND IN 3" SCH 80 PVC CONDUIT	DIRECT BURIAL
7	94.0'	(2)#6 + (1)#6 GND IN 4" SCH 80 PVC CONDUIT	DIRECT BURIAL
8	31.0'	(2)#6 + (1)#6 GND IN 3" SCH 80 PVC CONDUIT	DIRECT BURIAL
9	71.0'	(2)#6 + (1)#6 GND IN 3" SCH 80 PVC CONDUIT	DIRECT BURIAL
10	79.0'	(2)#6 + (1)#6 GND IN 4" SCH 80 PVC CONDUIT	DIRECT BURIAL
11	123.0'	(2)#6 + (1)#6 GND IN 4" SCH 80 PVC CONDUIT	DIRECT BURIAL
12	122.0'	(2)#6 + (1)#6 GND IN 3" SCH 80 PVC CONDUIT	DIRECT BURIAL
13	45.0'	(3)#6 + (1)#6 GND IN 3" SCH 80 PVC CONDUIT	DIRECT BURIAL

LIGHTING NOTES

1. PROJECT TO PROVIDE 120 /240 V POWER SERVICE FOR LIGHTING SYSTEM ON SOUTHEAST CORNER OF MARL PIT ROAD AND CEDAR LANE ROAD.
2. LIGHTING STANDARD STATIONS AND OFFSETS ARE TO CENTER OF POLE BASE.
3. PLACE LST #1 MAST ARM AT 6 DEGREE COUNTERCLOCKWISE ANGLE FROM THE PERPENDICULAR TO THE MARL PIT ROAD CONSTRUCTION BASE LINE (STATION 510+64, OFFSET 40.6' R).
4. PLACE LST #2 MAST ARM AT 58 DEGREE CLOCKWISE ANGLE FROM THE PERPENDICULAR TO THE CEDAR LANE ROAD CONSTRUCTION BASE LINE (STATION 426+22, OFFSET 50.3' L).
5. PLACE LST #4 MAST ARM AT 10 DEGREE COUNTERCLOCKWISE ANGLE FROM THE PERPENDICULAR TO THE MARL PIT ROAD CONSTRUCTION BASE LINE (STATION 514+57, OFFSET 46.2' R).
6. PLACE LST #5 MAST ARM AT 28 DEGREE COUNTERCLOCKWISE ANGLE FROM THE PERPENDICULAR TO THE MARL PIT ROAD CONSTRUCTION BASE LINE (STATION 513+33, OFFSET 51.4' R).
7. PLACE LST #6 MAST ARM AT 11 DEGREE COUNTERCLOCKWISE ANGLE FROM THE PERPENDICULAR TO THE CEDAR LANE ROAD CONSTUCTION BASE LINE (STATION 424+13, OFFSET 41.7' R).
8. PROJECT TO UTILIZE NAVION STREETWORKS 171W LED LUMINAIRE WITH TYPE 3 DISTRIBUTION AND 4000K COLOR TEMPERATURE AS SHOWN IN THE SCHEDULE.

PREPARED BY
DELDOT – TRANSPORTATION SOLUTIONS
TRAFFIC DESIGN

Nan-Atswei Tetteh 02/12/2019
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "TD" SECTION DESIGNATION. DATE

NA-ATSWEI TETTEH LICENSE No. 14933 DELAWARE PROFESSIONAL ENGINEER
SEAL

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	NT
COUNTY	CHECKED BY:	MS
NEW CASTLE		

LIGHTING PLAN

SECTION TD

SHEET NO. 52

1-FEB-2019
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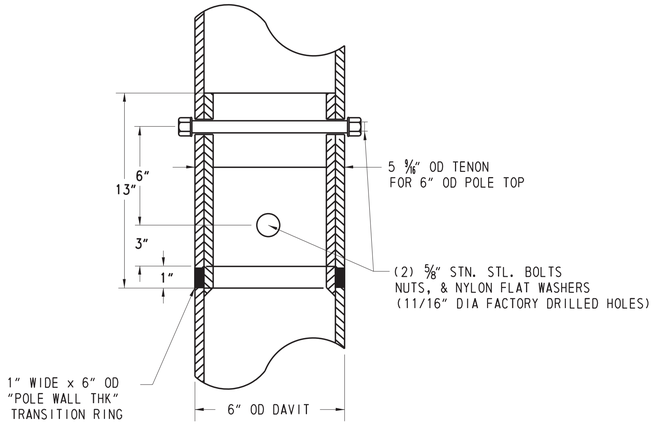
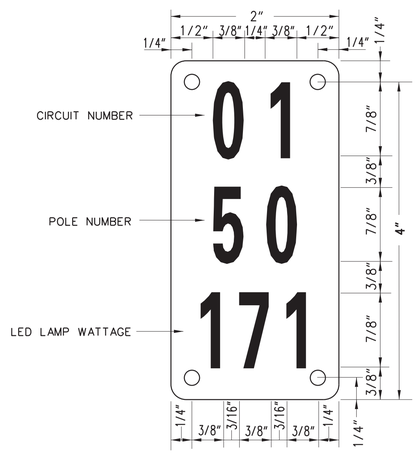
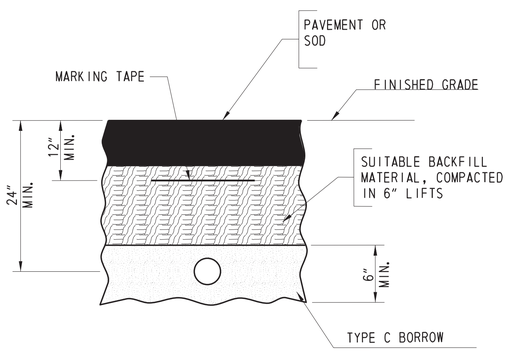


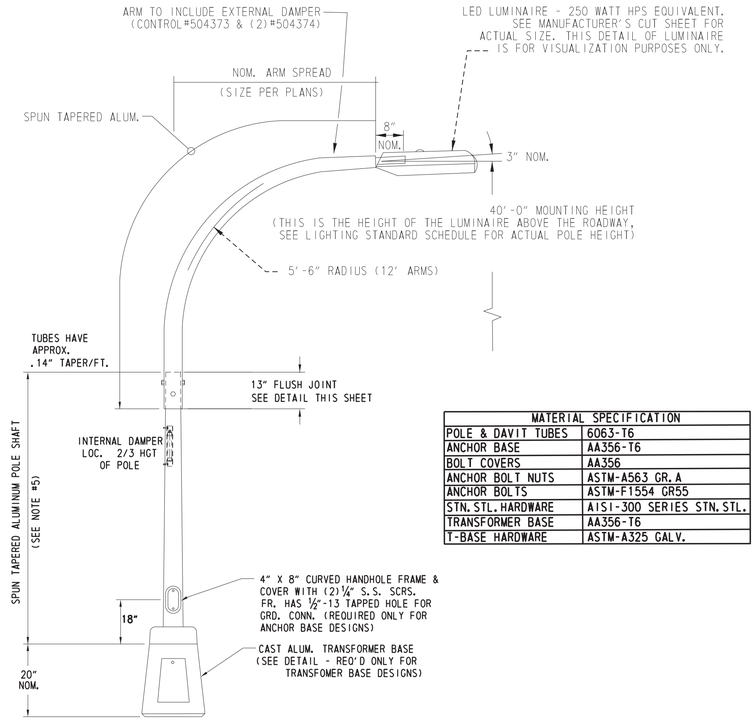
FLUSH JOINT DETAIL



TYPICAL POLE I.D. TAG



BURIED CONDUIT DETAIL

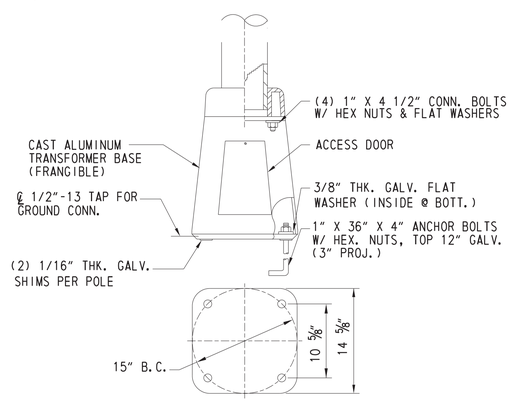


MATERIAL SPECIFICATION	
POLE & DAVIT TUBES	6063-T6
ANCHOR BASE	AA356-T6
BOLT COVERS	AA356
ANCHOR BOLT NUTS	ASTM-A563 GR. A
ANCHOR BOLTS	ASTM-F1554 GR55
STN. STL. HARDWARE	AISI-300 SERIES STN. STL.
TRANSFORMER BASE	AA356-T6
T-BASE HARDWARE	ASTM-A325 GALV.

DAVIT ARM LIGHT POLE DETAIL

N. T. S.

NOTES:
1. HEAT TREAT POLE & DAVIT TO -T6, TEMPER AFTER WELDING.
2. FINISH - POLE & DAVIT SHALL BE SATIN FINISHED POLISHED AND WRAPPED.
3. DESIGNED IN ACCORDANCE WITH STANDARDS ESTABLISHED BY THE LATEST EDITION OF AASHTO REQUIREMENTS.
4. TRANSFORMER SHALL MEET THE STANDARDS ESTABLISHED BY THE LATEST EDITION OF AASHTO BREAKAWAY REQUIREMENTS.
5. DUE TO VARYING ELEVATIONS OF ROADWAY, IT MAY BE NECESSARY TO MAINTAIN A NOMINAL FIXTURE MOUNTING HEIGHT (OF 30' OR 40', AS SPECIFIED ON PLANS) ABOVE THE ROADWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THESE MEASUREMENTS. BETWEEN TWO ADJACENT LUMINAIRES, THE DIFFERENCE IN HEIGHT SHALL NOT EXCEED 12".



TRANSFORMER BASE DETAIL

NOTES:
1. TRANSFORMER BASE SHALL BE PROVIDED WITH ALL LIGHT POLES, WHETHER PROTECTED OR UNPROTECTED, UNLESS OTHERWISE NOTED.
2. REFER TO NOTES FOR THE ANCHOR BASE DETAIL FOR CONDITIONS WHERE AN ANCHOR BASE IS REQUIRED.

GENERAL NOTES: (LIGHTING)

1. ALL ELECTRICAL WORK SHALL BE PERFORMED AND ALL MATERIAL PROVIDED SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, TO ALL LOCAL AND SPECIAL LAWS, AND/OR TO ORDINANCES GOVERNING SUCH MATERIAL. CODE SHALL BE CONSIDERED THE MINIMUM REQUIREMENTS FOR THE ELECTRICAL WORK AND IF THERE IS A CONFLICT BETWEEN THE REQUIREMENTS SPECIFIED IN THE CONTRACT DOCUMENTS AND THE CODE, THE MORE STRINGENT REQUIREMENT WILL APPLY AS DETERMINED AND APPROVED BY THE ENGINEER. WHEN THESE REQUIREMENTS DO NOT GOVERN, AND WHERE NOT OTHERWISE SPECIFIED, ELECTRICAL MATERIALS SHALL CONFORM TO THE STANDARDIZATION RULES OF THE INSTITUTE OF ELECTRICAL ENGINEERS.
2. THE CONTRACTOR SHALL PROVIDE AND SECURE ALL ELECTRICAL INSPECTIONS AS REQUIRED AND PAY FOR THE SAME. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AT HIS EXPENSE ALL NECESSARY PERMITS AND CERTIFICATES AS REQUIRED.
3. BURIED ELECTRICAL CABLE AND CONDUIT, AND OTHER UTILITIES MAY EXIST THROUGHOUT THIS PROJECT. 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 PRIOR TO THE BEGINNING OF CONSTRUCTION FOR UTILITY MARKOUTS. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING DAMAGE TO THEM, AND MAINTAINING THEM IN SERVICE WHEN AND WHERE REQUIRED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS PRIOR TO COMMENCING WORK. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT MAY OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY PRIOR TO COMMENCING CONSTRUCTION IN THAT AREA.
4. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK MATERIAL AND LABOR TO BE FREE FROM DEFECTS FOR A ONE YEAR PERIOD FROM THE TIME OF OWNER ACCEPTANCE. ANY DEFECTS OCCURRING DURING THIS PERIOD SHALL BE CORRECTED BY THE ELECTRICAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. CONDUIT RUNS ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL LOCATE THE CONDUIT RUNS IN A MANNER THAT AVOIDS CONFLICTS WITH ALL EXISTING AND PROPOSED FEATURES AS FIELD CONDITIONS DICTATE AND AS APPROVED BY THE ENGINEER.
6. ALL GALVANIZED CONDUITS(GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET, SCREW, BOLTED AND COMPESSION FITTINGS ARE NOT ACCEPTABLE.
7. TERMINATE ALL GALVANIZED CONDUITS WHEN ENTERING ENCLOSURES WITH LOCKNUT AND BONDING BUSHINGS. ALL OTHER GALVANIZED CONDUITS SHALL BE PROVIDED WITH BONDING BUSHINGS. ALL GALVANIZED CONDUITS SHALL BE BONDED WITH GROUND WIRE.
8. COLOR CODING SHALL BE PROVIDED THROUGHOUT THE ENTIRE NETWORK FOR SERVICE,FEEDER, BRANCH AND CONTROL CONDUCTORS. EACH PHASE SHALL BE AN INDEPENDENT COLOR. CONDUCTORS SHALL HAVE FACTORY IMPREGNATED COLOR THROUGHOUT THEIR ENTIRE LENGTH. PHASE TAPING IS NOT PERMITTED.
9. THE CONTRACTOR SHALL NOTIFY TOWN OF MIDDLETOWN TWO WEEKS IN ADVANCE TO ARRANGE FINAL POWER CONNECTIONS.
10. ALL FUSED CONNECTIONS SHALL BE MADE IN THE POLE BASE. SPLICES IN JUNCTION WELLS SHALL NOT BE FUSED.
11. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT SITE PRIOR TO WORK. WORK INCLUDES FURNISHING LABOR, MATERIAL, EQUIPMENT AND SERVICE NECESSARY AND INCIDENTAL TO PROPER COMPLETION OF THE ELECTRICAL WORK AS SHOWN. MINOR ITEMS,ACCESSORIES OR DEVICES NECESSARY FOR COMPLETION AND PROPER OPERATION OF ANY SYSTEM SHALL BE PROVIDED WHETHER OR NOT THEY ARE SPECIFICALLY CALLED FOR BY SPECIFICATIONS OR DRAWINGS.
12. ALL CONDUITS, JUNCTION WELLS, LIGHTING STANDARDS, ETC. SHALL BE STAKED OUT AND EVERY LOCATION APPROVED BY THE ENGINEER BEFORE ANY WORK IS DONE.
13. ALL STATION AND OFFSET INFORMATION SHOWN ON THE PLANS FOR PROPOSED LIGHTING STANDARDS IS TO THE CENTER OF THE POLE BASE.
14. SPLICES FOR ALL ROADWAY LIGHTING ELECTRICAL CABLES SHALL BE COMPLETED USING APPROVED SPLICE KITS OR METHODS APPROVED BY THE ENGINEER AND SHALL BE INCIDENTAL TO THE SUPPLY AND INSTALLATION OF VARIOUS ROADWAY LIGHTING ELECTRICAL CABLES.
15. ALL PROPOSED DAVIT ARM LIGHTING STANDARDS SHALL BE PROVIDED AND INSTALLED WITH BREAKAWAY TRANSFORMER BASES.
16. ALL LIGHT POLE FOUNDATIONS SHALL BE DELDOT STANDARD POLE BASE TYPE 6 (STD. NO. T-5).
17. UNDERGROUND CONDUIT SHALL BE SLOPED TO DRAIN TO NEAREST JUNCTION WELL. IF THIS CANNOT BE ACCOMPLISHED, PROVIDE A DRAINAGE TEE AT LOW POINT OF CONDUIT RUN. DRAINAGE TEES SHALL BE INCIDENTAL TO SUPPLY OF CONDUIT.
18. RIGID GALVANIZED STEEL CONDUIT SHALL BE USED FOR ELECTRICAL SERVICE. SCHEDULE 80 PVC CONDUIT SHALL BE USED IN TRENCHES. SCHEDULE 80 HDPE CONDUIT SHALL BE USED FOR BORES.
19. CONTRACTOR SHALL VERIFY THE LUMINAIRE DETAIL WITH THE LED SUPPLIER.

PREPARED BY
DELDOT – TRANSPORTATION SOLUTIONS
TRAFFIC DESIGN

Nan-Atswei Tetteh — 02/12/2019
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "TD" SECTION DESIGNATION. — DATE

NAA-ATSWEI TETTEH LICENSE No. 14933 DELAWARE PROFESSIONAL ENGINEER — SEAL

ADDENDA / REVISIONS	

NOT TO SCALE

CEDAR LANE ROAD
AND MARL PIT ROAD
INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612201	DESIGNED BY:	NT
COUNTY	CHECKED BY:	MS
NEW CASTLE		

LIGHTING DETAILS

SECTION: TD
SHEET NO.: 53

$DATE$
$TIME$ 2019 10:09:59 AM
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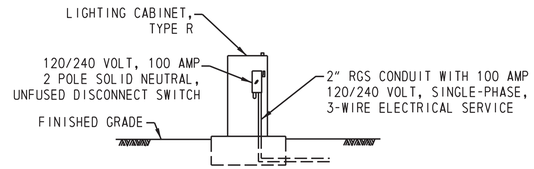
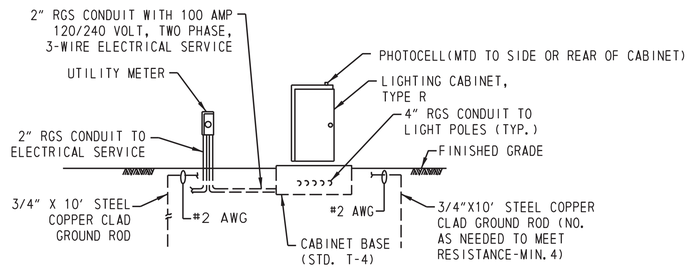
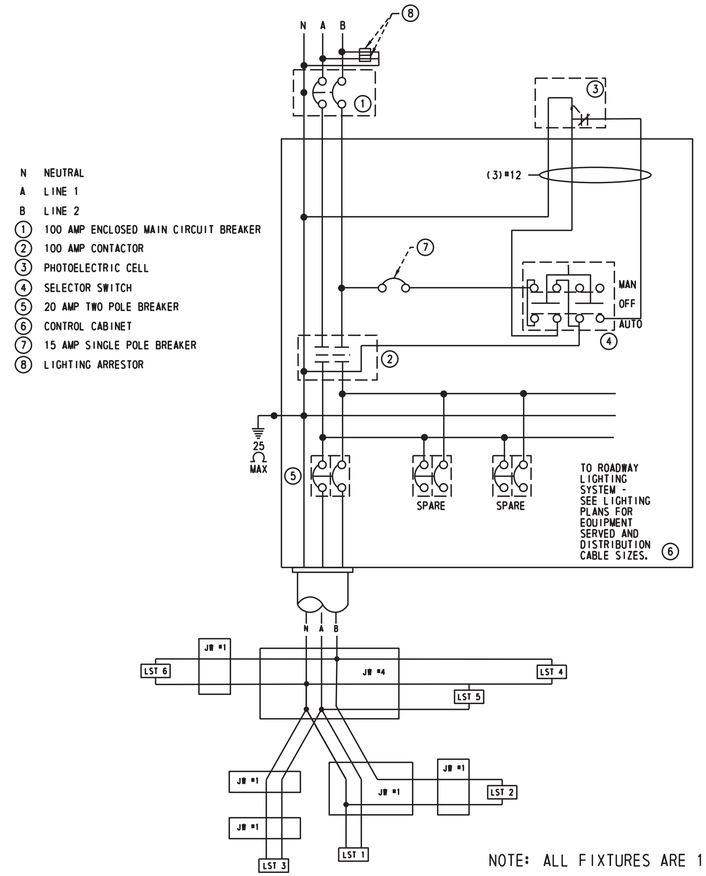


LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE (SIDE VIEW)



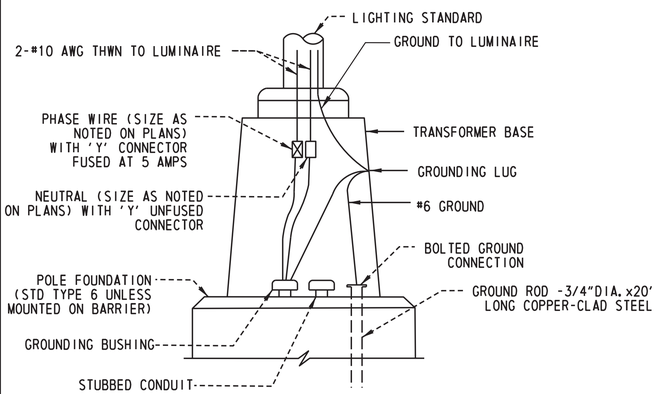
ELECTRICAL SERVICE ON PEDESTAL AND LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE (FRONT VIEW)



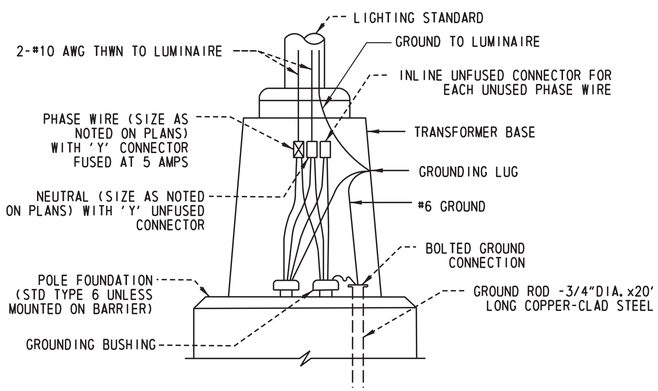
NOTE: ALL FIXTURES ARE 171W LED LUMINAIRES

PROPOSED LOAD CENTER CABINET SCHEMATIC WIRING DIAGRAM POWERING LIGHTS #1-#6

N.T.S.



TYPICAL LUMINAIRE CONNECTION
120/240V SERVICE
END OF RUN



TYPICAL LUMINAIRE CONNECTION
120/240V SERVICE
CONTINUOUS RUN

LIGHTING PANEL SCHEDULE

TYPE: 1P, 3W
NUMBER OF POLES: 6(MIN)
GROUND BUS RATING: 100%
MAIN BUS RATING: 100 AMP
MAIN RATING: 100 AMP, 1P MCB

VOLTAGE 120/240
ENCLOSURE: TYPE R, NEMA 3R
PANEL MIN. A.I.C. RATING: 10KA
LOCATION: MARL PIT RD, SOUTH OF ROUNDABOUT

CIRCUIT NO.	CIRCUIT BKR	DESCRIPTION	LOAD/PHASE LOAD	L1	L2	LOAD	DESCRIPTION	CIRCUIT BKR	CIRCUIT NO.
1	20A	LST 1, 3, 5	513	513	513	513	LST 2, 4, 6	20A	2
3		N/A	-	-	-	-	N/A		4
5		N/A	-	-	-	-	N/A		6
7		N/A	-	-	-	-	N/A		8
		TOTALS		513	513				
		TOTAL CONNECTED VA LOAD		1026					

WIRING SCHEMATICS IN TRANSFORMER BASE

PREPARED BY
DELDOT – TRANSPORTATION SOLUTIONS
TRAFFIC DESIGN

02/12/2019
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "TD" SECTION DESIGNATION.

MAA-ATSWEI TETTEH LICENSE No. 14933 DELAWARE PROFESSIONAL ENGINEER
SEAL

ADDENDA / REVISIONS

NOT TO SCALE

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	NT
COUNTY	CHECKED BY:	MS
NEW CASTLE		

LIGHTING DETAILS

SECTION TD
SHEET NO. 54

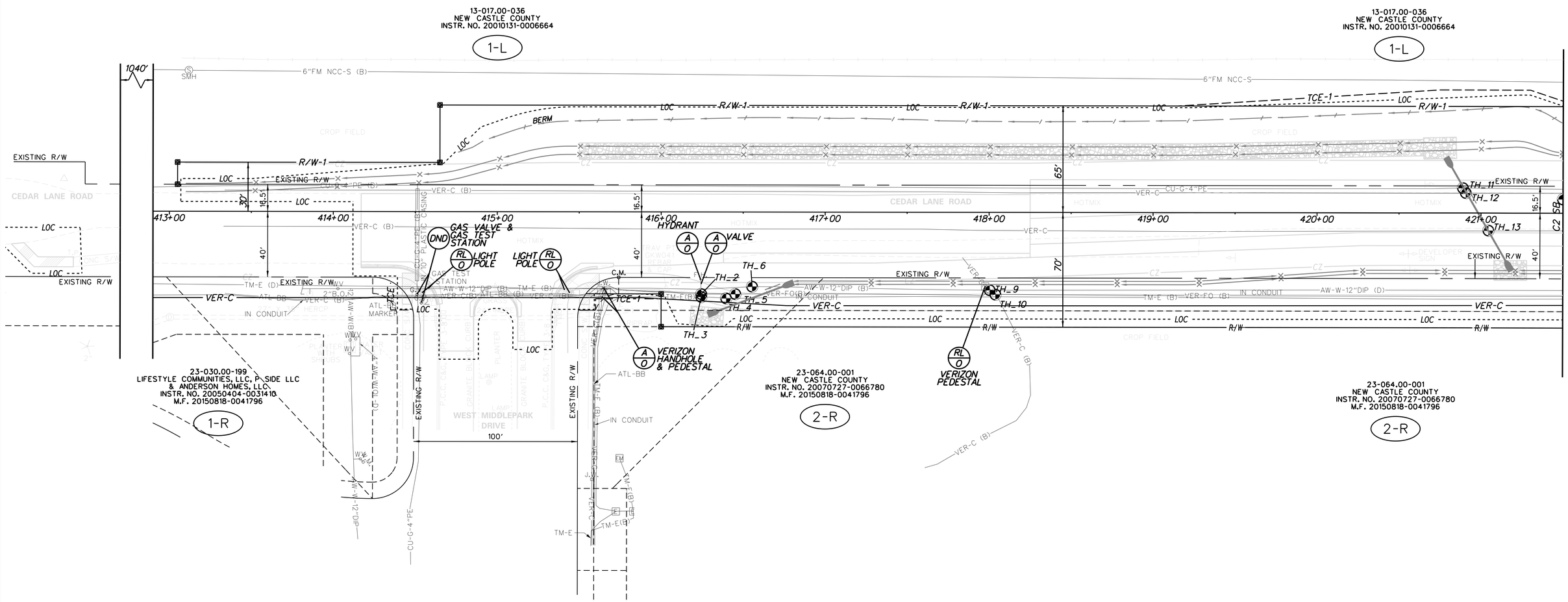
$DATE$ $TIME$ $FILE$ $USER$ \TRAFFIC\SIGNAL DESIGN\CEDAR LANE & MARL PIT RD LATEST.52516\FINAL DESIGN\LIGHTING DETAILS2.CEDAR LANE & MARL PIT RD.- FINAL.DGN

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
2	VER-C	416+24.51	50.11	58.42	2.70	4½" PLASTIC
2	VER-FO	416+24.51	50.11	58.42	2.70	(2)2½" PLASTIC
2	VER-C	416+24.51	50.11	58.42	3.01	1" CABLE
3	TM-E	416+24.48	51.83	58.28	2.83	(3) 1½" CABLE
4	TM-E	416+39.66	52.71	57.00	2.26	(3) 1½" CABLE
5	VER-C	416+45.27	50.06	57.10	1.90	4½" PLASTIC
5	VER-FO	416+45.27	50.06	57.10	1.90	(2)2½" PLASTIC
5	VER-C	416+45.27	50.06	57.10	2.16	1" CABLE
6	AW-W	416+55.50	45.51	57.28	3.20	12¾" DIP
9	VER-C	418+00.41	47.50	58.69	2.42	(4) 1" CABLE

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
9	VER-C	418+00.41	47.50	58.69	2.49	4¼" PLASTIC
9	VER-FO	418+00.41	47.50	58.69	2.86	(2) 2" PLASTIC
9	AW-W	418+00.41	47.50	58.69	3.72	12¾" DIP
10	VER-C	418+03.88	50.16	58.79	2.35	(4) 1" CABLE
10	VER-C	418+03.88	50.16	58.79	2.57	4¼" PLASTIC
10	VER-FO	418+03.88	50.16	58.79	2.63	(2) 2" PLASTIC
10	TM-E	418+03.88	50.16	58.79	2.85	(3)1½" CABLE
11	CU-G	420+88.96	-15.16	60.32	3.35	4½" PLASTIC
12	VER-C	420+90.70	-12.19	60.20	2.37	¾" CABLE
13	VER-C	421+04.55	10.68	60.26	2.90	1½" CABLE



ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

UTILITY RELOCATION PLAN

SECTION	SHEET NO.
PD	55

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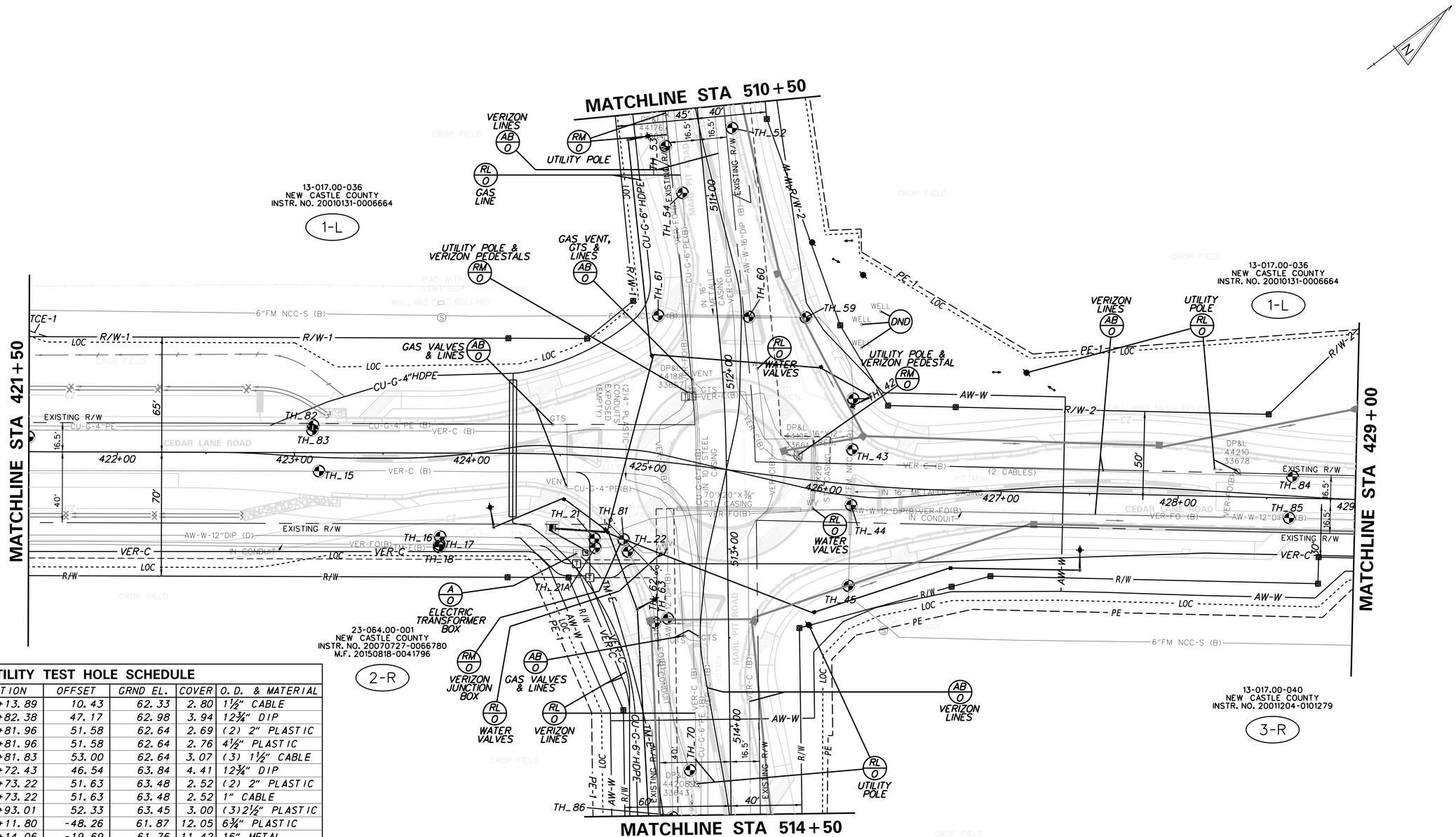

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
15	VER-C	423+13.89	10.43	62.33	2.80	1½" CABLE
16	AW-W	423+82.38	47.17	62.98	3.94	12¾" DIP
17	VER-FO	423+81.96	51.58	62.64	2.69	(2) 2" PLASTIC
17	VER-C	423+81.96	51.58	62.64	2.76	4½" PLASTIC
18	TM-E	423+81.83	53.00	62.64	3.07	(3) 1½" CABLE
21	AW-W	424+72.43	46.54	63.84	4.41	12¾" DIP
21A	VER-FO	424+73.22	51.63	63.48	2.52	(2) 2" PLASTIC
21A	VER-C	424+73.22	51.63	63.48	2.52	1" CABLE
22	VER-FO	424+93.01	52.33	63.45	3.00	(3)2½" PLASTIC
42	NCC-S	426+11.80	-48.26	61.87	12.05	6¾" PLASTIC
43	NCC-S	426+14.06	-19.69	61.76	11.42	16" METAL
44	VER-FO	426+16.29	11.59	60.02	1.21	2" PLASTIC
44	AW-W	426+16.29	11.59	60.02	4.69	12¾" DIP
44	NCC-S	426+16.29	11.59	60.02	8.27	16" METAL
45	NCC-S	426+18.70	57.17	62.45	11.23	6¾" PLASTIC
52	AW-W	510+63.20	-18.47	62.92	3.52	16¾" DIP
53	VER-FO	510+69.76	19.90	64.19	1.26	¾" CABLE
54	CU-G	510+96.95	12.91	63.34	4.10	6½" PLASTIC
59	NCC-S	425+77.99	-90.91	62.26	7.90	6¾" PLASTIC
60	AW-W	425+46.03	-87.23	62.56	3.19	16¾" DIP
60	NCC-S	425+46.03	-87.23	62.56	7.65	16" METAL
61	NCC-S	511+64.61	33.25	64.04	9.40	6¾" PLASTIC
62	VER-FO	513+40.90	41.49	63.59	3.21	(3)2½" PLASTIC

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
63	AW-W	513+38.61	34.24	63.80	5.48	12¾" DIP
70	VER-FO	514+24.52	22.84	63.82	2.01	(3)2½" PLASTIC
81	AW-W	424+89.79	45.76	63.67	5.22	12¾" DIP
82	CU-G	423+10.49	-15.38	62.88	3.18	4½" PLASTIC
83	VER-C	423+10.01	-12.76	62.37	2.46	¾" CABLE
84	VER-C	428+64.32	-12.13	57.84	3.78	1" CABLE
85	AW-W	428+62.93	11.25	57.74	3.87	12¾" DIP
86	AW-W	514+51.03	32.93	63.57	3.35	12¾" DIP

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

UTILITY RELOCATION PLAN

SECTION PD

SHEET NO. 56

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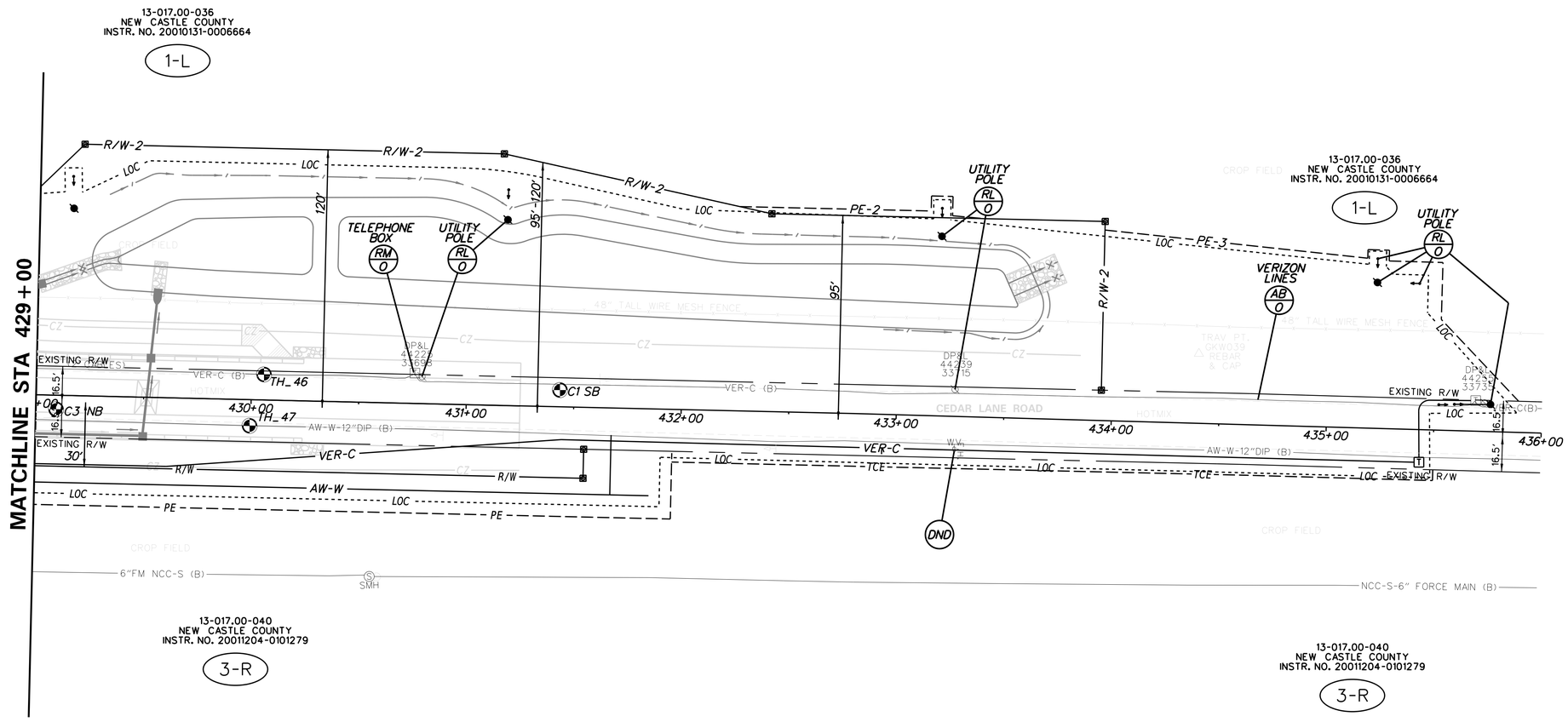
UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
46	VER-C	430+05.73	-11.86	56.55	3.66	1" CABLE
47	AW-W	429+99.55	12.15	56.36	4.32	12¾" DIP



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

UTILITY RELOCATION PLAN

SECTION
PD
SHEET NO.
57

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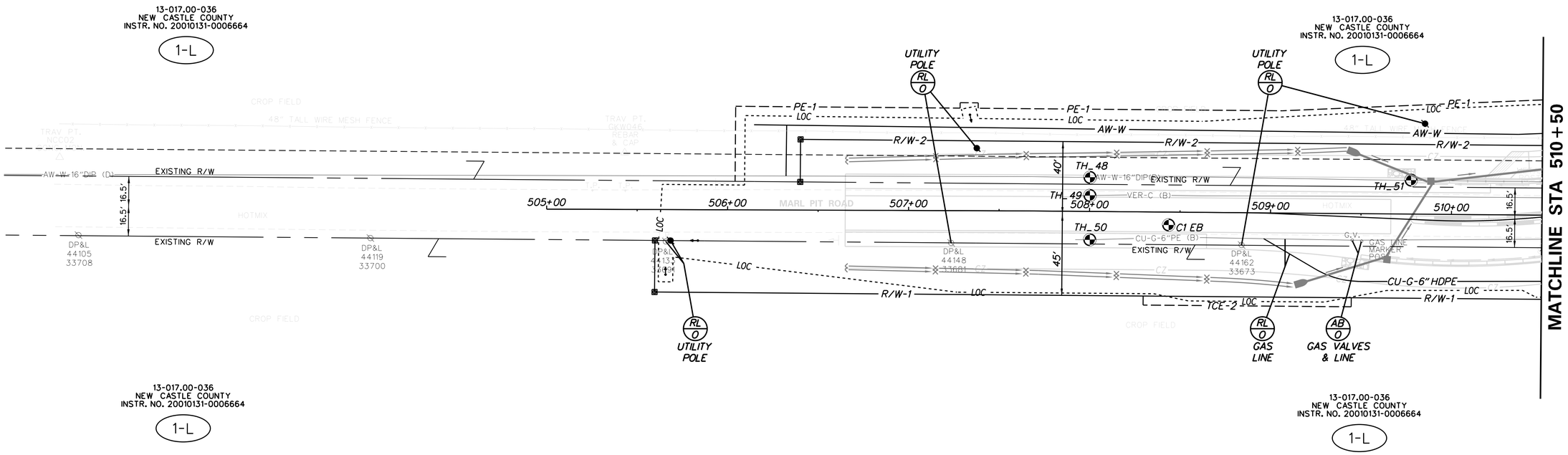
UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
48	AW-W	508+00.10	-18.80	60.76	3.88	16¾" DIP
49	VER-C	508+00.13	-8.81	62.08	2.61	½" CABLE
50	CU-G	508+00.25	15.62	61.48	2.93	6½" PLASTIC
51	AW-W	509+77.53	-18.76	61.91	3.75	16¾" DIP



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

UTILITY RELOCATION PLAN

SECTION
PD
SHEET NO.
58

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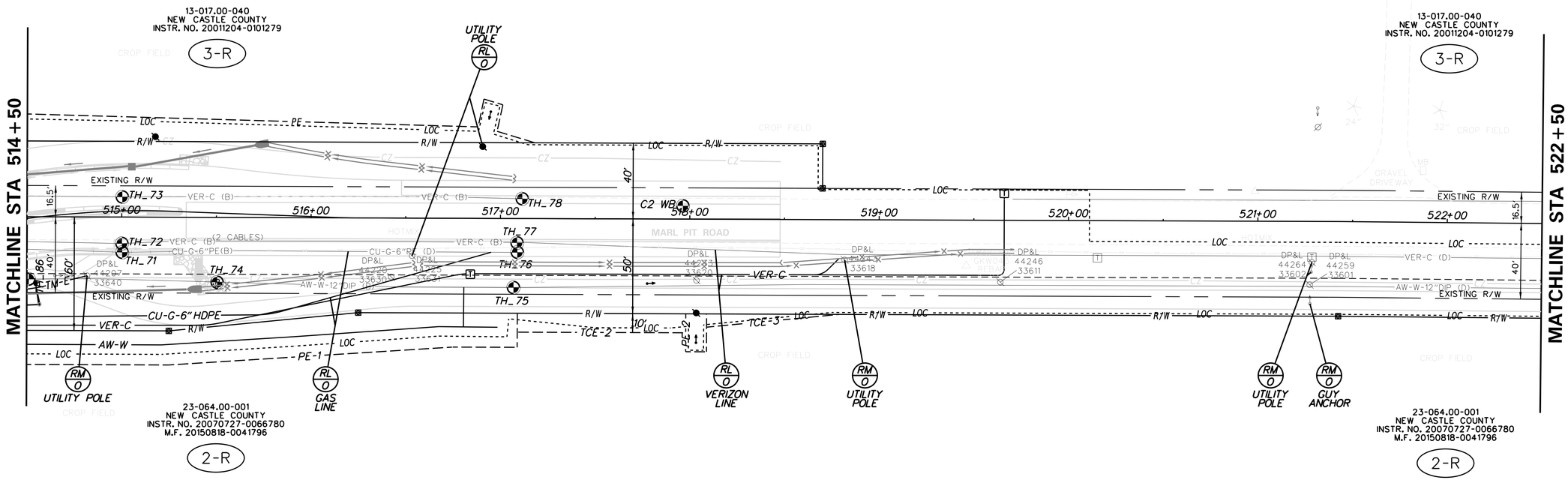
UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
71	CU-G	515+00.30	18.61	62.99	3.78	6½" PLASTIC
72	VER-C	515+00.15	13.92	63.89	2.81	1" CABLE
73	VER-C	515+00.27	-10.63	63.72	2.63	1½" CABLE
74	AW-W	515+50.50	34.21	63.00	3.93	12¾" DIP
75	AW-W	517+07.00	36.43	63.39	6.55	12¾" DIP
76	CU-G	517+08.97	17.82	62.11	5.46	6½" PLASTIC
77	VER-C	517+08.81	12.83	61.06	2.61	1" CABLE
78	VER-C	517+11.47	-10.43	60.76	2.66	1½" CABLE
86	AW-W	514+51.03	32.93	63.57	3.35	12¾" DIP



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

UTILITY RELOCATION PLAN

SECTION	SHEET NO.
PD	59

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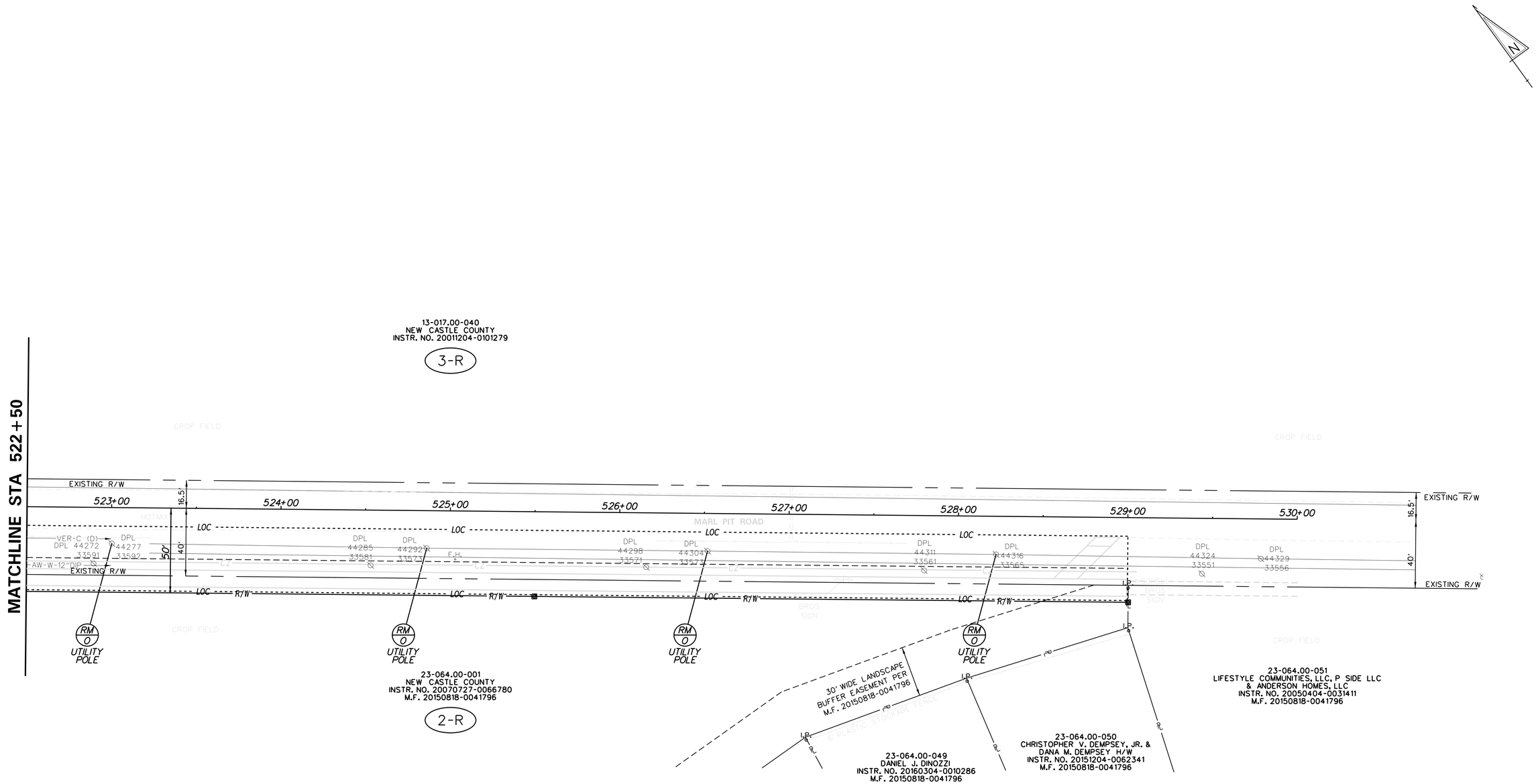

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ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

UTILITY RELOCATION PLAN

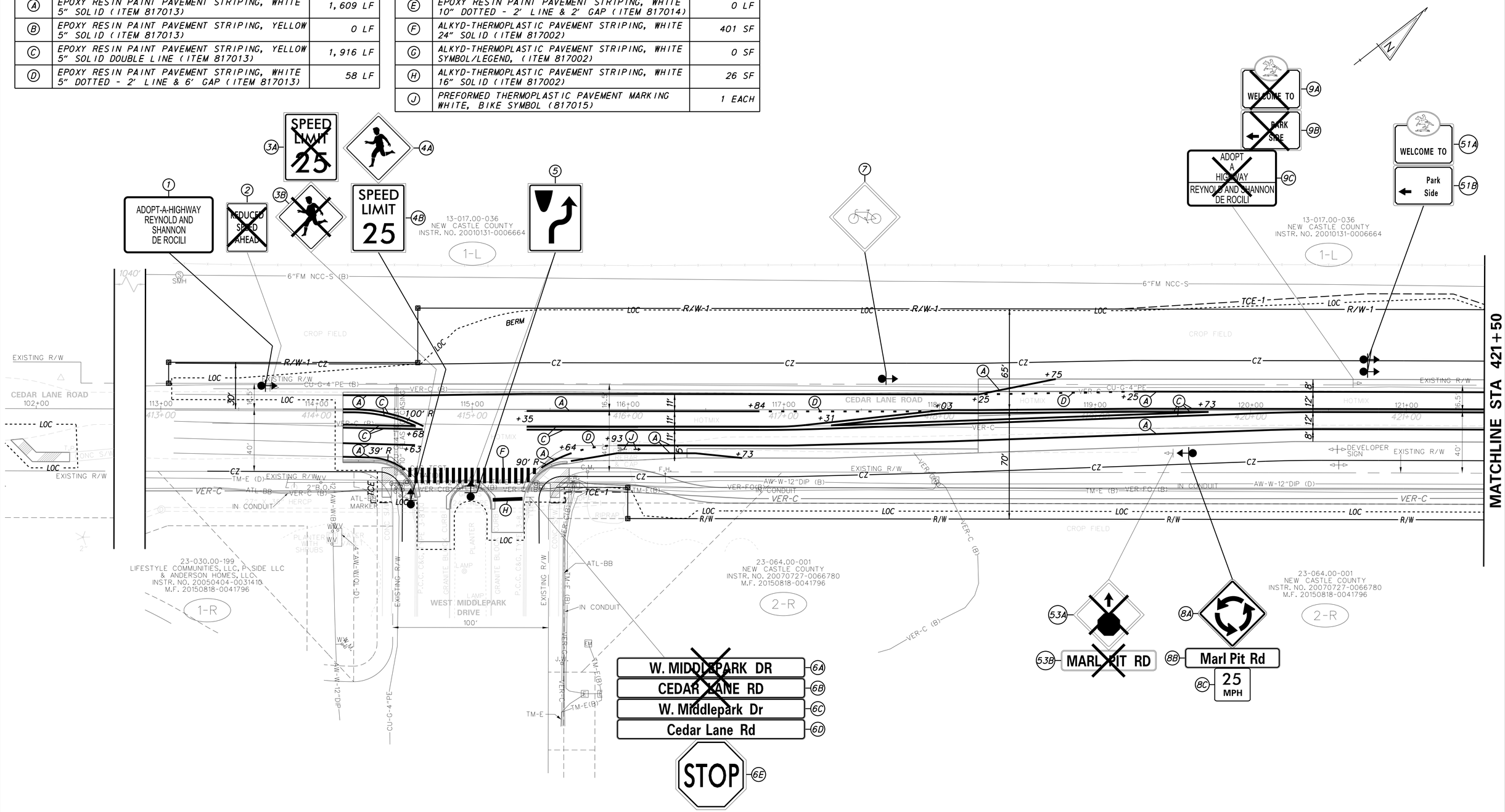
SECTION
PD
SHEET NO.
60

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 817013)	1,609 LF
B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 817013)	0 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 817013)	1,916 LF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 817013)	58 LF

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 2' GAP (ITEM 817014)	0 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM 817002)	401 SF
G	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	0 SF
H	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	26 SF
J	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	1 EACH



ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY	CHECKED BY:	T. BROOKS
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SS-01
SECTION
PD
SHEET NO.
61

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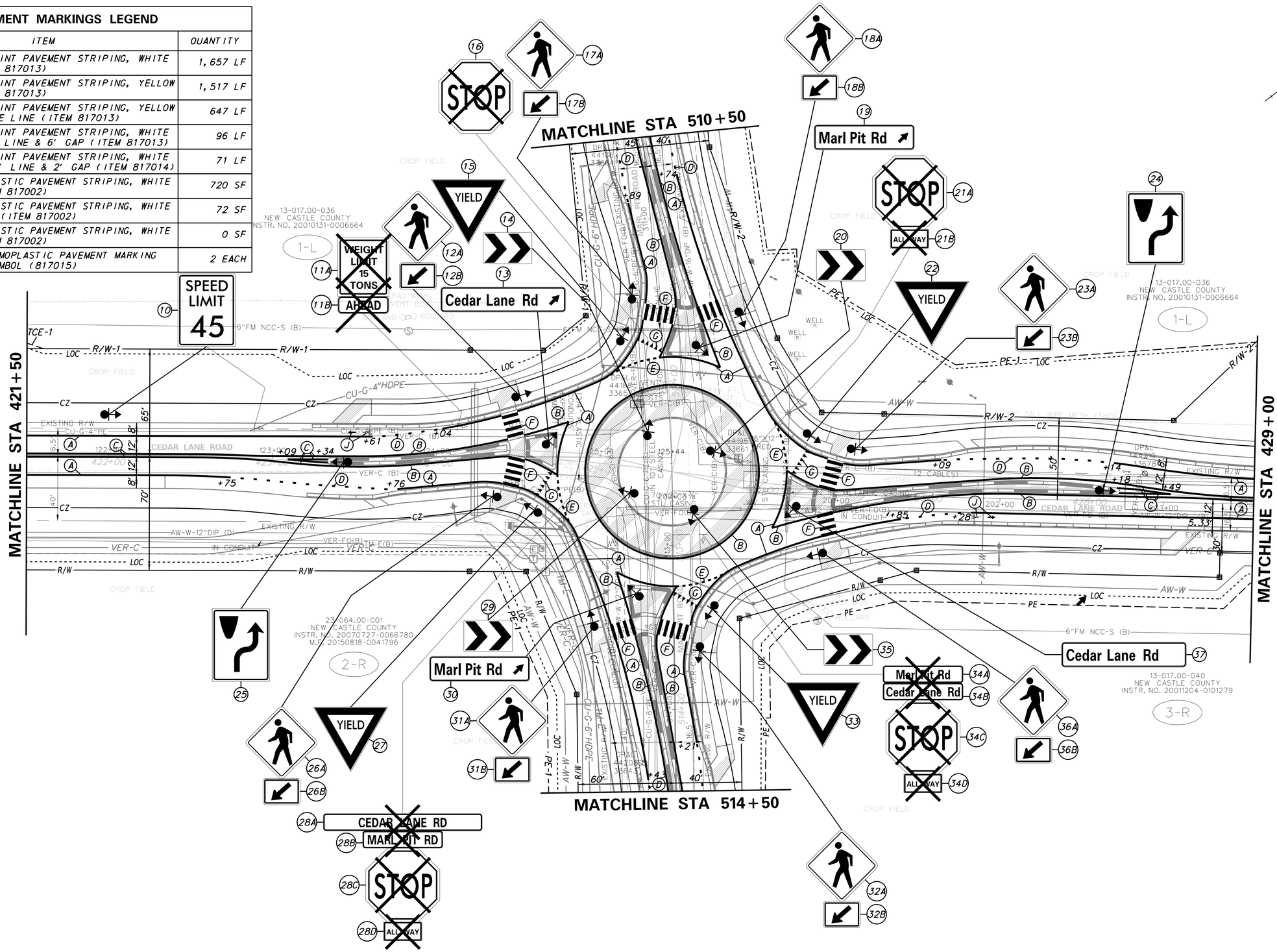
PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 817013)	1,657 LF
B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 817013)	1,517 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 817013)	647 LF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 817013)	96 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 2' GAP (ITEM 817014)	71 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM 817002)	720 SF
G	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	72 SF
H	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	0 SF
J	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	2 EACH



ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY: S. BHAYDE	
COUNTY		
NEW CASTLE	CHECKED BY: T. BROOKS	

SIGNING, STRIPING AND CONDUIT PLAN

SS-02

SECTION PD

SHEET NO. 62

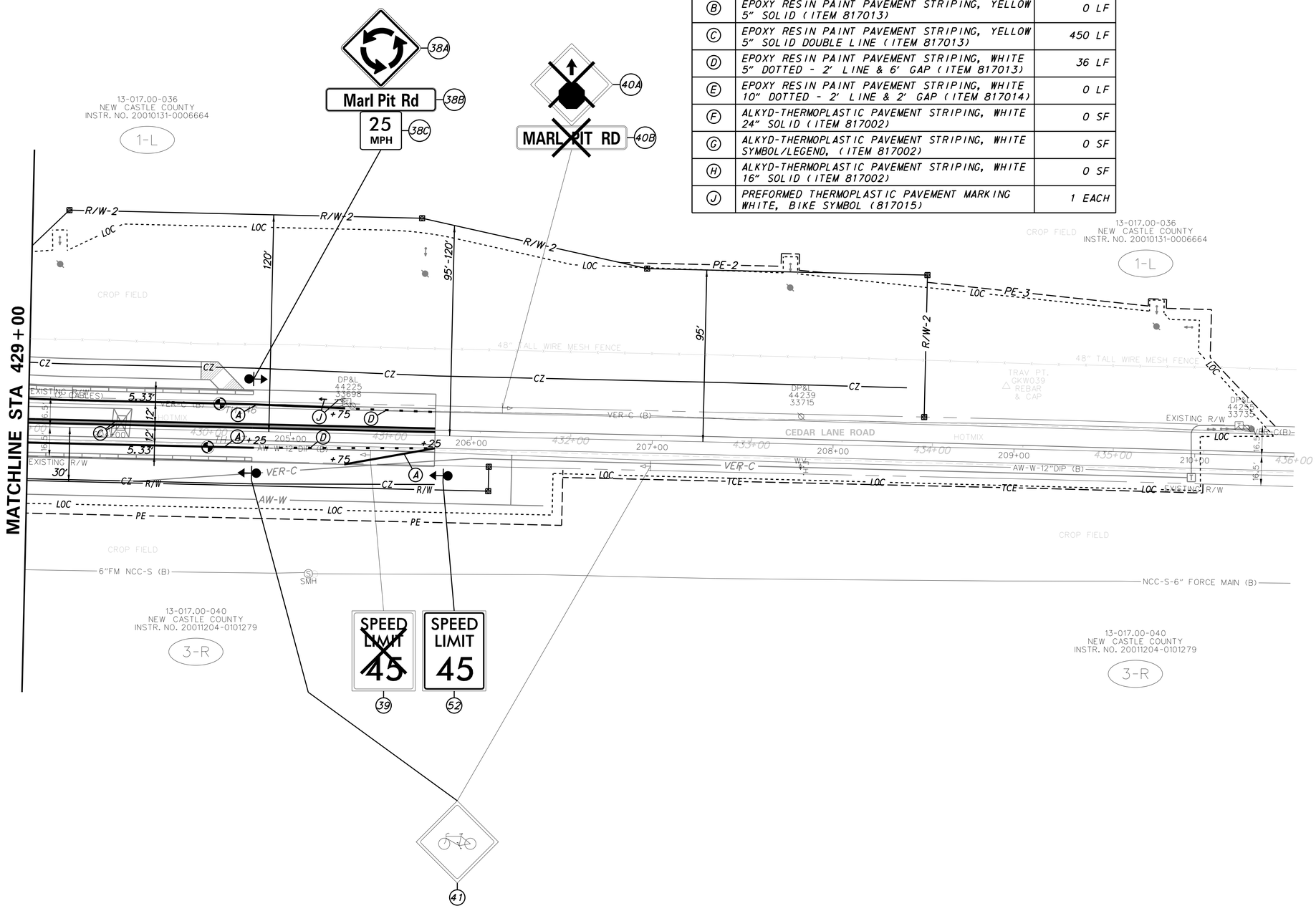
W:\MSV8_DEV\CELL\SB.CEL

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
46	VER-C	430+05.73	-11.86	56.55	3.66	1" CABLE
47	AW-W	429+99.55	12.15	56.36	4.32	12¾" DIP

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 817013)	351 LF
B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 817013)	0 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 817013)	450 LF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 817013)	36 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 2' GAP (ITEM 817014)	0 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM 817002)	0 SF
G	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	0 SF
H	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	0 SF
J	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	1 EACH



ADDENDA / REVISIONS	

SCALE 0 30 60 90 FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

SIGNING, STRIPING AND CONDUIT PLAN

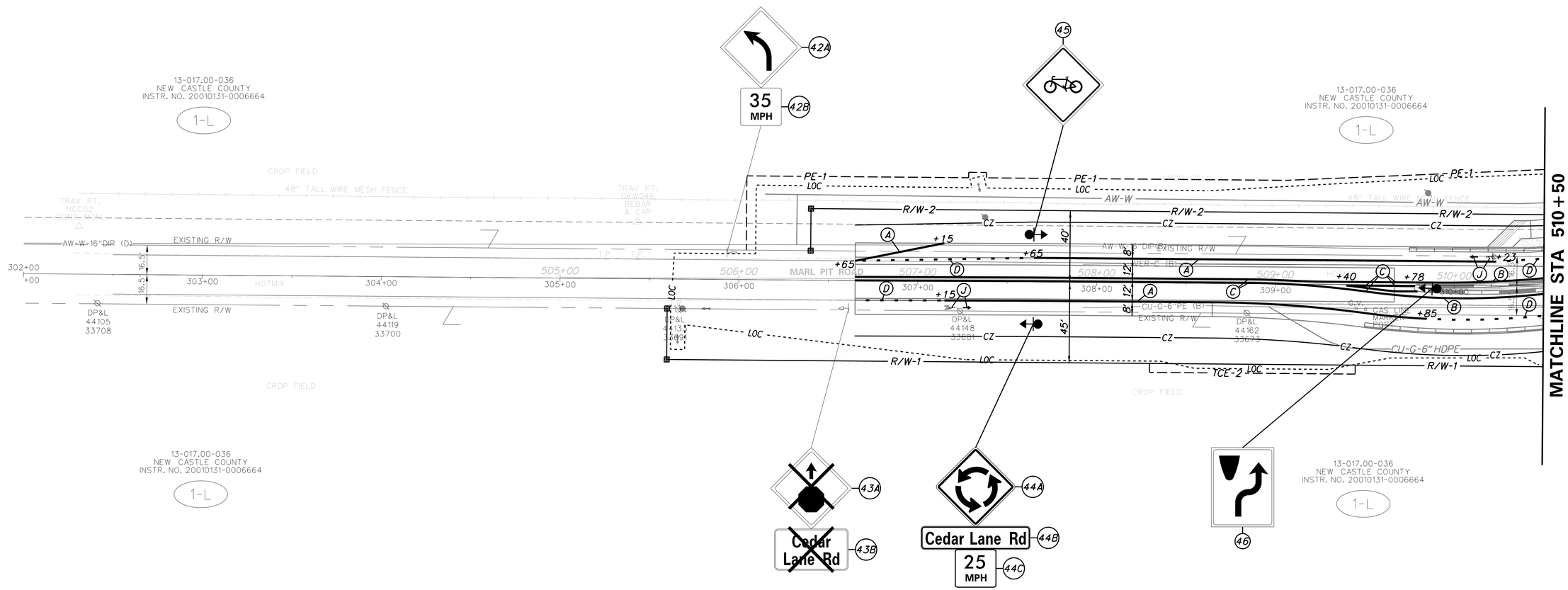
SS-03

SECTION	PD
SHEET NO.	63

W:\MSV8_DEV\CELL\SB.CEL

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 817013)	579 LF
B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 817013)	143 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 817013)	706 LF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 817013)	58 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 2' GAP (ITEM 817014)	0 LF

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM 817002)	0 SF
G	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	0 SF
H	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	0 SF
J	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	2 EACH



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

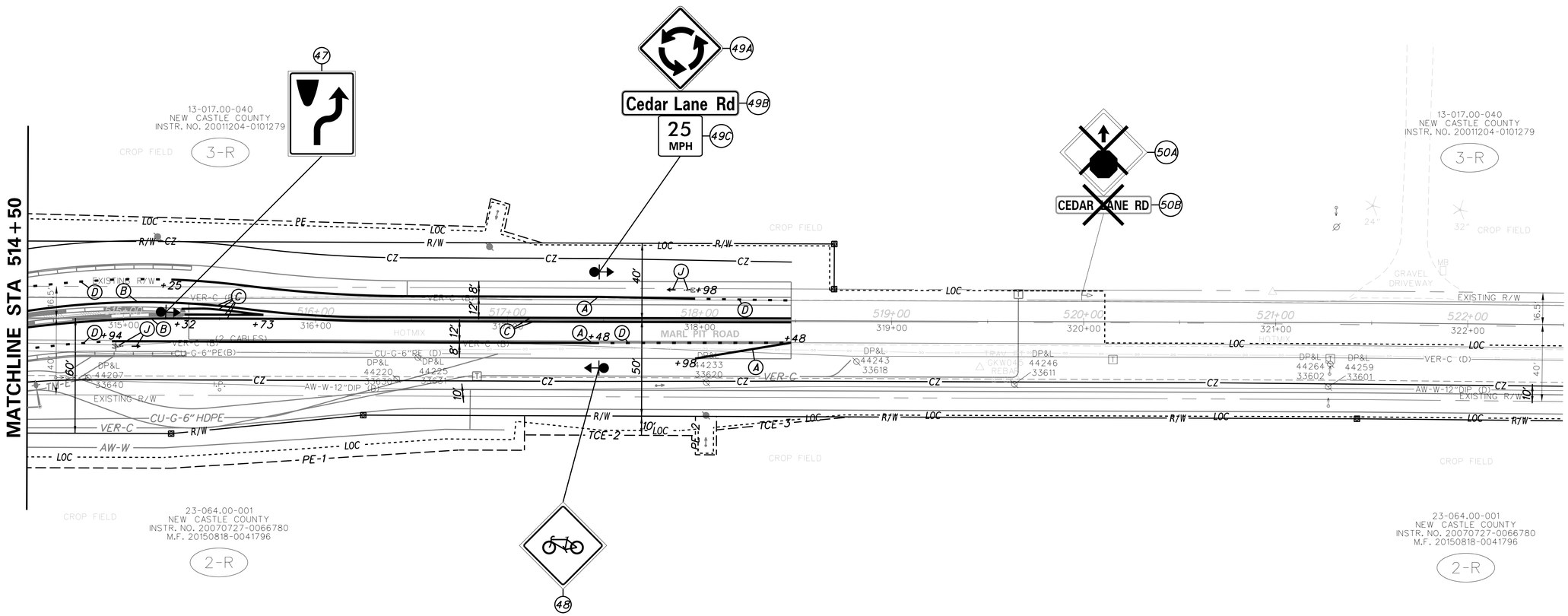
SIGNING, STRIPING AND CONDUIT PLAN

SS-04
SECTION
PD
SHEET NO.
64

W:\MSV8_DEV\CELL\SB.CEL

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 817013)	577 LF
B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID (ITEM 817013)	162 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 817013)	718 LF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 817013)	64 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 2' GAP (ITEM 817014)	0 LF

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM 817002)	0 SF
G	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	0 SF
H	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	0 SF
J	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (817015)	2 EACH



ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

SIGNING, STRIPING AND CONDUIT PLAN

SS-05

SECTION	SHEET NO.
PD	65

W:\MSV8_DEV\CELL\SB.CEL

PERMANENT SIGN SCHEDULE

#	SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	ITEM 819018 SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	Code X11 12' Post (W/Basepost)	ITEM 819016 4"HOLE, 0-6" (EACH)	ITEM 819017 4"HOLE, >6" (EACH)	REMARKS
									SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
1872	SS-1	1	D14-3-DE	1	ADOPT A HIGHWAY	24"	18"	3.0	NEW		1				SOIL	1			REYNOLD AND SHANNON DE ROCILI
	SS-1	2		1	Old Style "REDUCED SPEED AHEAD"	24"	30"		REMOVE	1									
42	SS-1	3A	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24"	30"		REMOVE	1									
1445	SS-1	3B	W21-11-DE	1	WATCH CHILDREN (Symbol)	30"	30"		REMOVE	1									
1445	SS-1	4A	W21-11-DE	1	WATCH CHILDREN (Symbol)	30"	30"	6.3	NEW		1				SOIL	1			
42	SS-1	4B	R2-1-25(24)	1	SPEED LIMIT (25 MPH - 24x30)	24"	30"	5.0	ADD TO ASSEMBLY		1								
311	SS-1	5	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24"	30"		REPOSITION	1	1				SOIL	1			
1673	SS-1	6A	D3-1(9)	1	STREET NAME (1 Line)	30"	9"		REMOVE	1									W MIDDLEPARK DR
1673	SS-1	6B	D3-1(9)	1	STREET NAME (1 Line)	30"	9"		REMOVE	1									CEDAR LANE RD
1674	SS-1	6C	D3-1(12)	2	STREET NAME (1 Line)	48"	12"	8.0	NEW		2								W Middlepark Dr
1674	SS-1	6D	D3-1(12)	2	STREET NAME (1 Line)	48"	12"	8.0	ADD TO ASSEMBLY		2								Cedar Lane Rd
4	SS-1	6E	R1-1(36)	1	STOP	36"	36"		REMAIN										
1165	SS-1	7	W11-1(36)	1	BICYCLE (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
852	SS-1	8A	W2-6(36)	1	CIRCULAR INTERSECTION - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1367	SS-1	8B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"	1.5	ADD TO ASSEMBLY		1								Marl Pit Rd
1285	SS-1	8C	W13-1P-25(18)	1	ADVISORY SPEED (25 MPH) 18x18	18"	18"	2.3	ADD TO ASSEMBLY		1								
1685	SS-1	9A	D3-2-DE1	1	WELCOME TO	36"	32"					REMOVE	8.0						
1686	SS-1	9B	D3-2-DE2	1	DEVELOPMENT NAME	36"	32"					REMOVE	8.0						(LeftArrow) PARK SIDE
	SS-1	9C		1	Old Style "ADOPT A HIGHWAY"	36"	32"		REMOVE	1									
58	SS-2	10	R2-1-45(24)	1	SPEED LIMIT (45 MPH - 24x30)	24"	30"		REPOSITION	1	1				SOIL	1			
618	SS-2	11A	R12-1(24)	1	WEIGHT LIMITS XX TONS - 24x30	24"	30"		REMOVE	1									15
	SS-2	11B		1	"AHEAD" plaque	30"	12"		REMOVE	1									Black Legend on White Background
1170	SS-2	12A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	12B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
1650	SS-2	13	D1-1d	1	CIRCULAR INTERSECTION DESTINATION (1 Line)	48"	18"	6.0	NEW		1				CONCRETE	1	1		Cedar Lane Rd (Right Upward Diagonal Arrow
410	SS-2	14	R6-4	1	ROUNDABOUT DIRECTIONAL (2 chevrons)	30"	24"	5.0	NEW		1				SOIL	1			
8	SS-2	15	R1-2(36)	1	YIELD	36"	36"	4.5	NEW		1				SOIL	1			
4	SS-2	16	R1-1(36)	1	STOP	36"	36"		REMOVE	1									
1170	SS-2	17A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	17B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
1170	SS-2	18A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	18B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
1650	SS-2	19	D1-1d	1	CIRCULAR INTERSECTION DESTINATION (1 Line)	42"	18"	5.3	NEW		1				CONCRETE	1	1		Marl Pit Rd (Right Upward Diagonal Arrow)
410	SS-2	20	R6-4	1	ROUNDABOUT DIRECTIONAL (2 chevrons)	30"	24"	5.0	NEW		1				SOIL	1			
4	SS-2	21A	R1-1(36)	1	STOP	36"	36"		REMOVE	1									
18	SS-2	21B	R1-3P(18)	1	ALL WAY(plaque)	18"	6"		REMOVE	1									
8	SS-2	22	R1-2(36)	1	YIELD	36"	36"	4.5	NEW		1				SOIL	1			
1170	SS-2	23A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	23B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
311	SS-2	24	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24"	30"	5.0	NEW		1				CONCRETE	1	1		
PAGE TOTALS								135		13	28		16	0		17	3	0	

ADDENDA / REVISIONS

NOT TO SCALE

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

SIGNING, STRIPING AND CONDUIT PLAN

SS-06

SECTION: PD

SHEET NO. 66

W:\MSV8_DEV\CELL\SB.CEL

PERMANENT SIGN SCHEDULE

NO.	SHEET NO.	PLAN IDENTIFIER	CODE	QTY.	DISCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	ITEM 819018 SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	Code X11 12' Post (W/Basepost)	ITEM 819016 4"HOLE, 0-6" (EACH)	ITEM 819017 4"HOLE, >6" (EACH)	REMARKS
									SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
311	SS-2	25	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24"	30"	5.0	NEW		1				CONCRETE	1	1		
1170	SS-2	26A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	26B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
8	SS-2	27	R1-2(36)	1	YIELD	36"	36"	4.5	NEW		1				SOIL	1			
1674	SS-2	28A	D3-1(12)	2	STREET NAME (1 Line)	42"	12"		REMOVE	2									Cedar Lane Rd
1674	SS-2	28B	D3-1(12)	2	STREET NAME (1 Line)	36"	12"		REMOVE	2									Marl Pit Rd
4	SS-2	28C	R1-1(36)	1	STOP	36"	36"		REMOVE	1									
18	SS-2	28D	R1-3P(18)	1	ALL WAY(plaque)	18"	6"		REMOVE	1									
410	SS-2	29	R6-4	1	ROUNDABOUT DIRECTIONAL (2 chevrons)	30"	24"	5.0	NEW		1				SOIL	1			
1650	SS-2	30	D1-1d	1	CIRCULAR INTERSECTION DESTINATION (1 Line)	42"	18"	5.3	NEW		1				CONCRETE	1	1		Marl Pit Rd (Right Upward Diagonal Arrow)
1170	SS-2	31A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	31B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
1170	SS-2	32A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	32B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
8	SS-2	33	R1-2(36)	1	YIELD	36"	36"	4.5	NEW		1				SOIL	1			
1674	SS-2	34A	D3-1(12)	2	STREET NAME (1 Line)	36"	12"		REMOVE	2									Marl Pit Rd
1674	SS-2	34B	D3-1(12)	2	STREET NAME (1 Line)	42"	12"		REMOVE	2									Cedar Lane Rd
4	SS-2	34C	R1-1(36)	1	STOP	36"	36"		REMOVE	1									
18	SS-2	34D	R1-3P(18)	1	ALL WAY(plaque)	18"	6"		REMOVE	1									
410	SS-2	35	R6-4	1	ROUNDABOUT DIRECTIONAL (2 chevrons)	30"	24"	5.0	NEW		1				SOIL	1			
1170	SS-2	36A	W11-2(36)	1	PEDESTRIAN (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1359	SS-2	36B	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24"	18"	3.0	ADD TO ASSEMBLY		1								
1650	SS-2	37	D1-1d	1	CIRCULAR INTERSECTION DESTINATION (1 Line)	48"	18"	6.0	NEW		1				CONCRETE	1	1		Cedar Lane Rd (Right Upward Diagonal Arrow
852	SS-3	38A	W2-6(36)	1	CIRCULAR INTERSECTION - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1367	SS-3	38B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"	1.5	ADD TO ASSEMBLY		1								Marl Pit Rd
1285	SS-3	38C	W13-1P-25(18)	1	ADVISORY SPEED (25 MPH) 18x18	18"	18"	2.3	ADD TO ASSEMBLY		1								
58	SS-3	39	R2-1-45(24)	1	SPEED LIMIT (45 MPH - 24x30)	24"	30"		REMOVE	1									
871	SS-3	40A	W3-1(30)	1	STOP AHEAD (Symbol) - 30x30	30"	30"		REMOVE	1									
1367	SS-3	40B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"		REMOVE	1									MARL PIT RD
1164	SS-3	41	W11-1(30)	1	BICYCLE (Symbol) - 30x30	30"	30"		REPOSITION	1	1								
723	SS-4	42A	W1-2_L(30)	1	CURVE (Left) - 30x30	30"	30"		REMAIN										
1291	SS-4	42B	W13-1P-35(18)	1	ADVISORY SPEED (35 MPH) 18x18	18"	18"		REMAIN										
871	SS-4	43A	W3-1(30)	1	STOP AHEAD (Symbol) - 30x30	30"	30"		REMOVE	1									
1368	SS-4	43B	W16-8aP	1	ADVANCE STREET NAME (2 - line plaque)	24"	18"		REMOVE	1									CEDAR LANE RD
852	SS-4	44A	W2-6(36)	1	CIRCULAR INTERSECTION - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1367	SS-4	44B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"	1.5	ADD TO ASSEMBLY		1								Cedar Lane Rd
1285	SS-4	44C	W13-1P-25(18)	1	ADVISORY SPEED (25 MPH) 18x18	18"	18"	2.3	ADD TO ASSEMBLY		1								
1165	SS-4	45	W11-1(36)	1	BICYCLE (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
311	SS-4	46	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24"	30"	5.0	NEW		1				CONCRETE	1	1		
					PAGE TOTALS			123		18	24		0	0		15	4	0	

ADDENDA / REVISIONS

NOT TO SCALE

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

SIGNING, STRIPING AND CONDUIT PLAN

SS–07

SECTION: PD

SHEET NO. 67

W:\MSV8_DEV\CELL\SB.CEL

PERMANENT SIGN SCHEDULE

NO.	SHEET NO.	PLAN IDENTIFIER	CODE	QTY.	DISCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	ITEM 819018 SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	Code X11 12' Post (W/Basepost)	ITEM 819016 4"HOLE, 0-6" (EACH)	ITEM 819017 4"HOLE, >6" (EACH)	REMARKS
									SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL					
311	SS-5	47	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30	24"	30"	5.0	NEW		1				CONCRETE	1	1		
1165	SS-5	48	W11-1(36)	1	BICYCLE (Symbol) - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
852	SS-5	49A	W2-6(36)	1	CIRCULAR INTERSECTION - 36x36	36"	36"	9.0	NEW		1				SOIL	1			
1367	SS-5	49B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"	1.5	ADD TO ASSEMBLY		1								Cedar Lane Rd
1285	SS-5	49C	W13-1P-25(18)	1	ADVISORY SPEED (25 MPH) 18x18	18"	18"	2.3	ADD TO ASSEMBLY		1								
871	SS-5	50A	W3-1(30)	1	STOP AHEAD (Symbol) - 30x30	30"	30"		REMOVE	1									
1367	SS-5	50B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"		REMOVE	1									CEDAR LANE RD
1685	SS-1	51A	D3-2-DE1	1	WELCOME TO	36"	32"	8.0				NEW		8.0	SOIL	2			
1686	SS-1	51B	D3-2-DE2	1	DEVELOPMENT NAME	36"	32"	8.0				ADD TO ASSEMBLY		8.0					(Left Arrow) Park Side
58	SS-3	52	R2-1-45(24)	1	SPEED LIMIT (45 MPH - 24x30)	24"	30"	5.0	NEW		1				SOIL	1			
871	SS-1	53A	W3-1(30)	1	STOP AHEAD (Symbol) - 30x30	30"	30"		REMOVE	1									
1367	SS-1	53B	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24"	9"		REMOVE	1									Marl Pit Rd
PAGE TOTALS								48		4	6		0	16		6	1	0	
JOB TOTALS								306		35	58		16	16		38	8	0	

ADDENDA / REVISIONS

NOT TO SCALE

CEDAR LANE ROAD AND MARL PIT ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201612001	DESIGNED BY:	S. BHAYDE
COUNTY		
NEW CASTLE	CHECKED BY:	T. BROOKS

SIGNING, STRIPING AND CONDUIT PLAN

SS-08

SECTION PD

SHEET NO. 68

W:\MSV8_DEV\CELL\SB.CEL