

GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY
UNITS

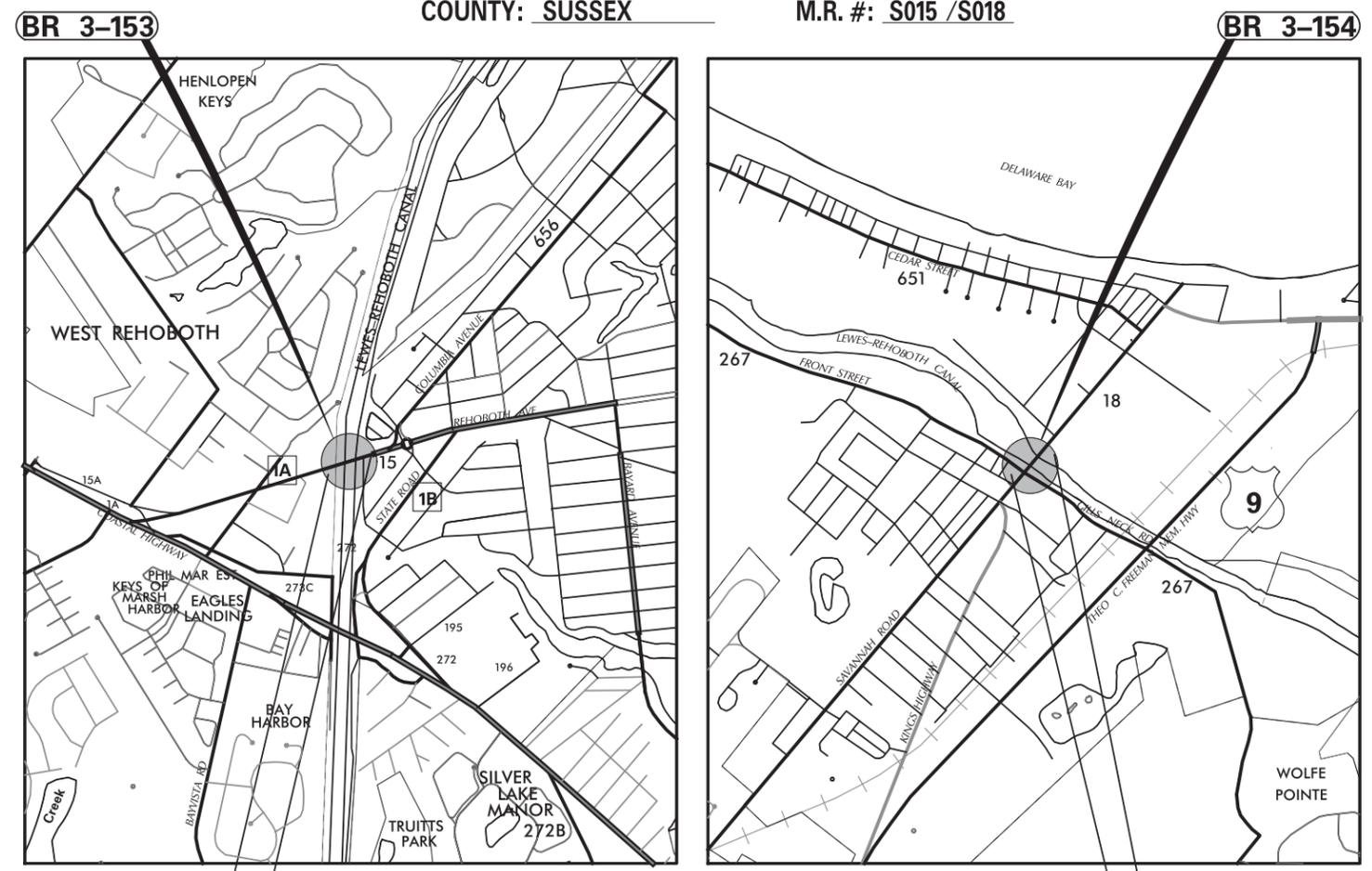


CONSTRUCTION PLANS FOR:

BR 3-154 ON US9 SAVANNAH ROAD & BR 3-153 ON SR1A REHOBOTH AVENUE OVER LEWES-REHOBOTH CANAL

CONSTRUCTION CONTRACT NUMBER: T201507602
FEDERAL AID PROJECT NUMBER: EBHOS-S018(13)

COUNTY: SUSSEX M.R. #: S015 /S018



BEGIN CONTRACT STATION 108+45 REHOBOTH AVENUE
END CONTRACT STATION 112+75 REHOBOTH AVENUE
SCALE 0 1000 2000 3000 FEET
BEGIN CONTRACT STATION 10+40 US 9B SAVANNAH ROAD
END CONTRACT STATION 14+10 US 9B SAVANNAH ROAD

DESIGN DESIGNATION			
FUNCTIONAL CLASS: URBAN MINOR ARTERIAL	D.H.V. PROJECTED: 1,716	YEAR: 2016	
TYPE OF CONSTRUCTION: BR 3-153 REHABILITATION	DESIGN SPEED: 25 M.P.H.		
A.A.D.T. CURRENT: 21,857	YEAR: 2014	TRUCKS: 10% PER DAY	
A.A.D.T. PROJECTED: 26,000	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60%	

FUNCTIONAL CLASS: URBAN MAJOR COLLECTOR	D.H.V. PROJECTED: 812	YEAR: 2016	
TYPE OF CONSTRUCTION: BR 3-154 REHABILITATION	DESIGN SPEED: 25 M.P.H.		
A.A.D.T. CURRENT: 9,898	YEAR: 2014	TRUCKS: 10% PER DAY	
A.A.D.T. PROJECTED: 14,000	YEAR: 2040	DIRECTION OF DISTRIBUTION: 58%	

INDEX OF SHEETS	
SHEET NO.	TITLE
1	TITLE SHEET
2	LEGEND SHEET
3	NOTES SHEET
4	TYPICAL SECTIONS
5-9	CONSTRUCTION PLANS & DETAILS
10-83	BR 3-153 - REHOBOTH AVENUE BRIDGE SHEETS
84-161	BR 3-154 - SAVANNAH ROAD BRIDGE SHEETS
162-164	ENVIRONMENTAL COMPLIANCE PLANS
165-174	CONSTRUCTION PHASING, MOT AND EROSION CONTROL PLANS
175-177	DETOUR PLANS
178-179	SIGNING, STRIPING AND CONDUIT PLANS
180	SIGNALIZATION PLAN

TOTAL SHEETS: 180			
APPROVED DESIGN EXCEPTIONS			
DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS	
DESCRIPTION	NAME & DATE
ADDENDUM 1 - RELOCATED TRANSFORMER PAD AT BR 3-154 SHEETS 115, 149, 160 AND 161.	RAJ 07-06-18

ASSOCIATED CONTRACTS	
CONTRACT NO.	CONTRACT NAME
82-073-05	BRIDGE 153 - REHOBOTH AVENUE OVER LEWES-REHOBOTH CANAL TUDOR ELECTRIC, CONDUIT AND LAYOUT SHOP DRAWINGS LINK CONTROLS SCHEMATICS SHOP DRAWINGS
80-023-02	REHOBOTH AVENUE BRIDGE AS-BUILT DRAWINGS, H&H BRIDGE 154 ON SR 9 (SAVANNAH ROAD) OVER LEWES-REHOBOTH CANAL ELECTRICAL CONDUIT AND LAYOUT SHOP DRAWINGS WESTINGHOUSE CONTROL SCHEMATIC SHOP DRAWINGS
T201704001	SAVANNAH ROAD BRIDGE AS-BUILT DRAWINGS, H&H US 9 (SAVANNAH ROAD) AT FRONT ST./GILLS NECK RD.
80-023-03	SAVANNAH ROAD BRIDGE - WALL ENCLOSURES AND RAILING

PREPARED BY
THE CONSULTING FIRM OF

HARDESTY & HANOVER
180 ADMIRAL COCHRANE DRIVE,
SUITE 555
ANNAPOLIS, MD 21401
(410) 573-1999



Rodney A. Jarrett 01/02/2018
RECOMMENDED DATE

RECOMMENDED

[Signature] 01/10/2018
SOUTH DISTRICT MAINTENANCE ENGINEER DATE

[Signature] 01/11/2018
SOUTH DISTRICT ENGINEER DATE

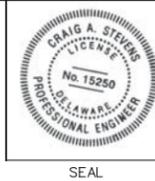
RECOMMENDED

[Signature]
SQUAD MANAGER, BRIDGE DESIGN
DATE 01/16/2018



RECOMMENDED

[Signature]
BRIDGE DESIGN ENGINEER
DATE 01/11/2018



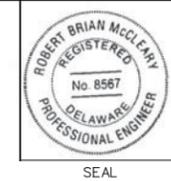
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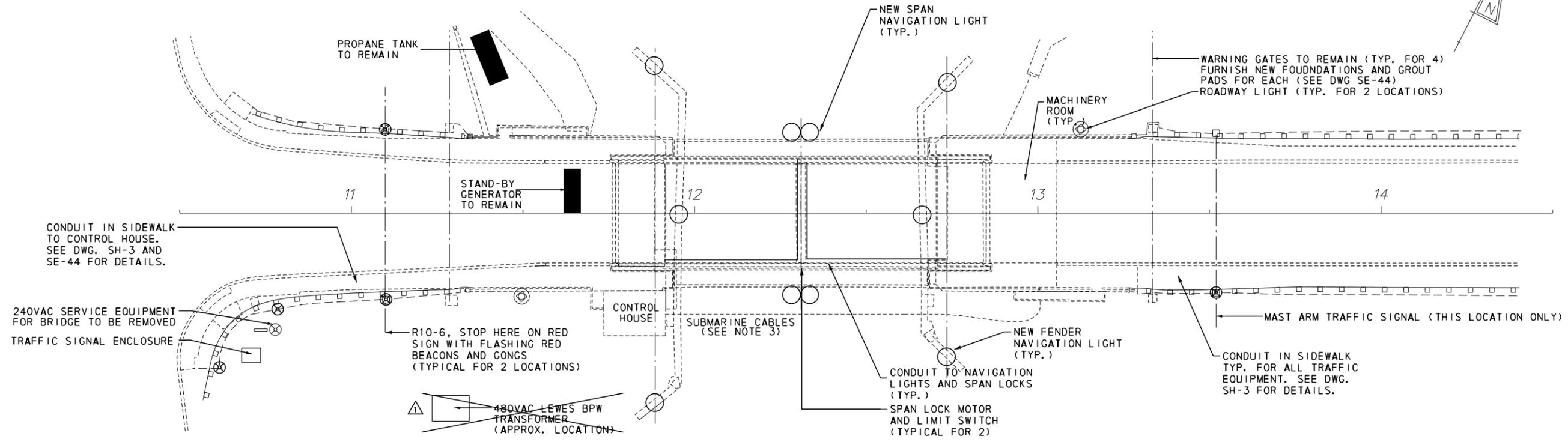
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ASSISTANT DIRECTOR, BRIDGE
DATE 01/11/2018



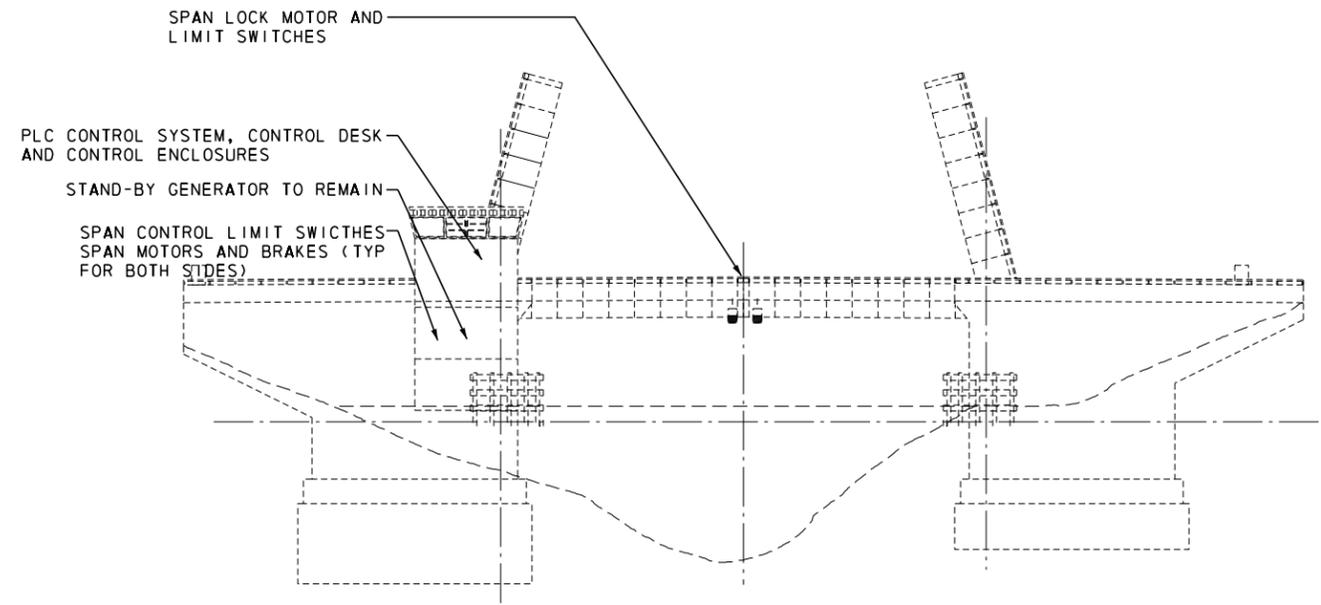
APPROVED

[Signature]
CHIEF ENGINEER
DATE 01/16/2018





PLAN



ELEVATION

- NOTES:**
- SEE DWG SE-2 FOR SCOPE OF WORK NOTES.
 - NOT ALL CONDUIT SHOWN ON THIS LAYOUT DWG.
 - THE EXISTING SUBMARINE CABLES CONSIST OF 3 CABLES WITH 35#10, 1 TP #18, 3#4 AWG CONDUCTORS EACH (105#10, 3-TP#18, 9#4 TOTAL)
 - ALL WORK INVOLVING BURYING THE CONDUITS BENEATH THE SIDEWALK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 831 OF THE STANDARD SPECIFICATIONS.
 - ALL ELECTRICAL WORK SHOWN FOR SAVANNAH RD BRIDGE SHALL BE PAID FOR UNDER THE ITEM "615504 BRIDGE ELECTRICAL SYSTEM."
 - NEW SERVICE TRANSFORMER NOT SHOWN, SEE DWG. SE-46 FOR LOCATION.

7/2/2018 M:\02889.04C\Fin_Des\CADD\30_Elec\EE01 - GPE.dgn

ADDENDUMS / REVISIONS	
△	MOVED TRANSFORMER (RAJ 7/6/18)

NOT TO SCALE

BR 3-154 ON US9 SAVANNAH ROAD & BR 3-153 ON SR1A REHOBOTH AVENUE OVER LEWES-REHOBOTH CANAL

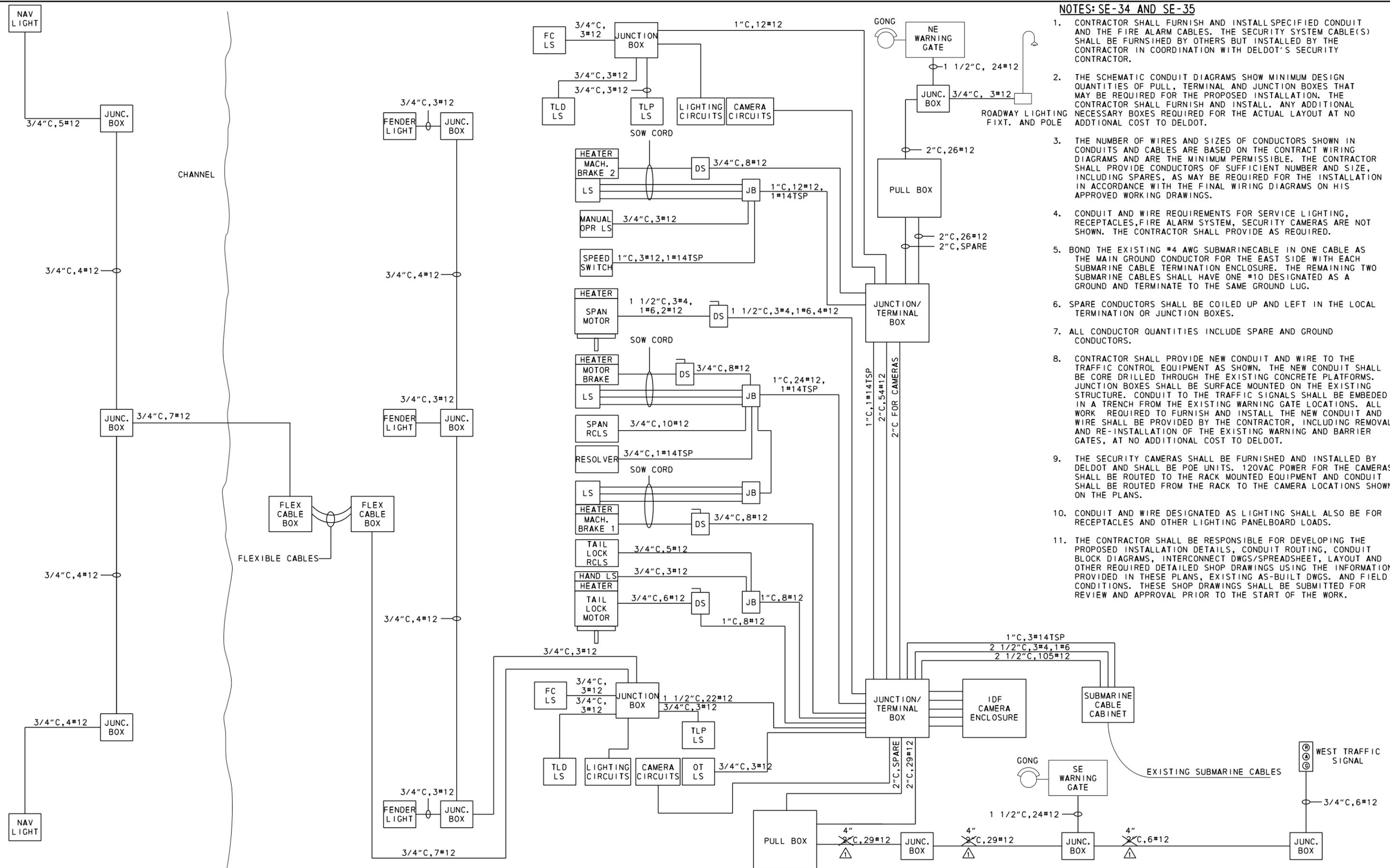
CONTRACT	BRIDGE NO.	3-154
T201507602	DESIGNED BY:	MJT
COUNTY	CHECKED BY:	AHN
SUSSEX		

ELECTRICAL GENERAL PLAN AND ELEVATION

SE-1
SHEET NO.
115
TOTAL SHTS.
180

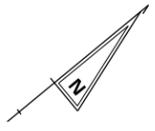
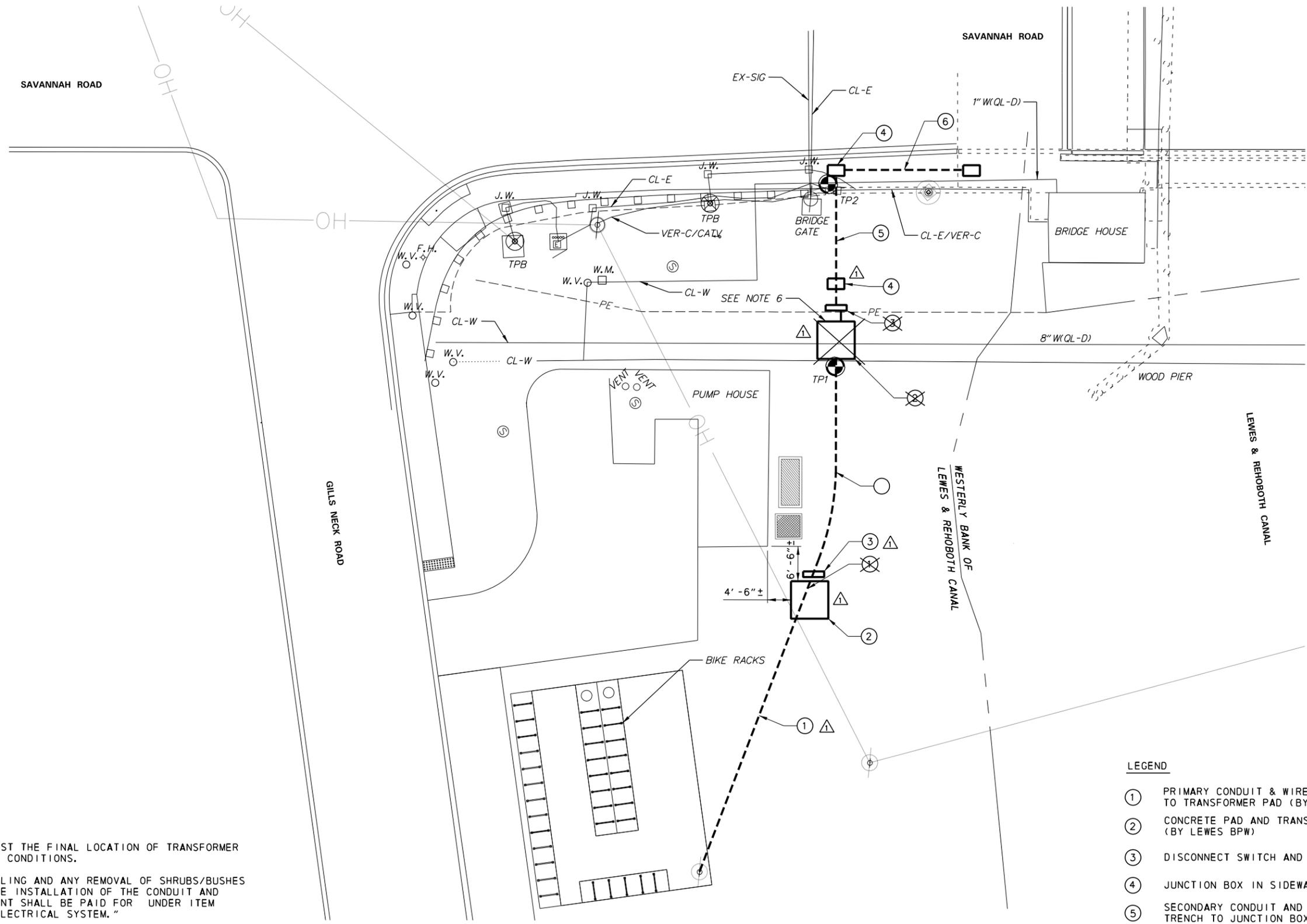
NOTES: SE-34 AND SE-35

1. CONTRACTOR SHALL FURNISH AND INSTALL SPECIFIED CONDUIT AND THE FIRE ALARM CABLES. THE SECURITY SYSTEM CABLE(S) SHALL BE FURNISHED BY OTHERS BUT INSTALLED BY THE CONTRACTOR IN COORDINATION WITH DELDOT'S SECURITY CONTRACTOR.
2. THE SCHEMATIC CONDUIT DIAGRAMS SHOW MINIMUM DESIGN QUANTITIES OF PULL, TERMINAL AND JUNCTION BOXES THAT MAY BE REQUIRED FOR THE PROPOSED INSTALLATION. THE CONTRACTOR SHALL FURNISH AND INSTALL ANY ADDITIONAL NECESSARY BOXES REQUIRED FOR THE ACTUAL LAYOUT AT NO ADDITIONAL COST TO DELDOT.
3. THE NUMBER OF WIRES AND SIZES OF CONDUCTORS SHOWN IN CONDUITS AND CABLES ARE BASED ON THE CONTRACT WIRING DIAGRAMS AND ARE THE MINIMUM PERMISSIBLE. THE CONTRACTOR SHALL PROVIDE CONDUCTORS OF SUFFICIENT NUMBER AND SIZE, INCLUDING SPARES, AS MAY BE REQUIRED FOR THE INSTALLATION IN ACCORDANCE WITH THE FINAL WIRING DIAGRAMS ON HIS APPROVED WORKING DRAWINGS.
4. CONDUIT AND WIRE REQUIREMENTS FOR SERVICE LIGHTING, RECEPTACLES, FIRE ALARM SYSTEM, SECURITY CAMERAS ARE NOT SHOWN. THE CONTRACTOR SHALL PROVIDE AS REQUIRED.
5. BOND THE EXISTING #4 AWG SUBMARINE CABLE IN ONE CABLE AS THE MAIN GROUND CONDUCTOR FOR THE EAST SIDE WITH EACH SUBMARINE CABLE TERMINATION ENCLOSURE. THE REMAINING TWO SUBMARINE CABLES SHALL HAVE ONE #10 DESIGNATED AS A GROUND AND TERMINATE TO THE SAME GROUND LUG.
6. SPARE CONDUCTORS SHALL BE COILED UP AND LEFT IN THE LOCAL TERMINATION OR JUNCTION BOXES.
7. ALL CONDUCTOR QUANTITIES INCLUDE SPARE AND GROUND CONDUCTORS.
8. CONTRACTOR SHALL PROVIDE NEW CONDUIT AND WIRE TO THE TRAFFIC CONTROL EQUIPMENT AS SHOWN. THE NEW CONDUIT SHALL BE CORE DRILLED THROUGH THE EXISTING CONCRETE PLATFORMS. JUNCTION BOXES SHALL BE SURFACE MOUNTED ON THE EXISTING STRUCTURE. CONDUIT TO THE TRAFFIC SIGNALS SHALL BE EMBEDDED IN A TRENCH FROM THE EXISTING WARNING GATE LOCATIONS. ALL WORK REQUIRED TO FURNISH AND INSTALL THE NEW CONDUIT AND WIRE SHALL BE PROVIDED BY THE CONTRACTOR, INCLUDING REMOVAL AND RE-INSTALLATION OF THE EXISTING WARNING AND BARRIER GATES, AT NO ADDITIONAL COST TO DELDOT.
9. THE SECURITY CAMERAS SHALL BE FURNISHED AND INSTALLED BY DELDOT AND SHALL BE POE UNITS. 120VAC POWER FOR THE CAMERAS SHALL BE ROUTED TO THE RACK MOUNTED EQUIPMENT AND CONDUIT SHALL BE ROUTED FROM THE RACK TO THE CAMERA LOCATIONS SHOWN ON THE PLANS.
10. CONDUIT AND WIRE DESIGNATED AS LIGHTING SHALL ALSO BE FOR RECEPTACLES AND OTHER LIGHTING PANELBOARD LOADS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING THE PROPOSED INSTALLATION DETAILS, CONDUIT ROUTING, CONDUIT BLOCK DIAGRAMS, INTERCONNECT DWGS/SPREADSHEET, LAYOUT AND OTHER REQUIRED DETAILED SHOP DRAWINGS USING THE INFORMATION PROVIDED IN THESE PLANS, EXISTING AS-BUILT DWGS. AND FIELD CONDITIONS. THESE SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO THE START OF THE WORK.



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<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS		NOT TO SCALE	BR 3-154 ON US9 SAVANNAH ROAD & BR 3-153 ON SR1A REHOBOTH AVENUE OVER LEWES-REHOBOTH CANAL	CONTRACT	BRIDGE NO.	3-154	CONDUIT BLOCK DIAGRAM - EAST	SE-35
	CHANGE CONDUIT SIZE (RAJ 7/6/18)				T201507602	DESIGNED BY: MJT			SHEET NO.
					COUNTY	CHECKED BY: AHN			149
					SUSSEX				TOTAL SHTS.
					180				



ELECTRICAL NOTES

1. LEWES BPW MAY ADJUST THE FINAL LOCATION OF TRANSFORMER PAD BASED ON FIELD CONDITIONS.
2. TRENCHING, BACKFILLING AND ANY REMOVAL OF SHRUBS/BUSHES AS REQUIRED FOR THE INSTALLATION OF THE CONDUIT AND ASSOCIATED EQUIPMENT SHALL BE PAID FOR UNDER ITEM "615504 - BRIDGE ELECTRICAL SYSTEM."
3. CONTRACTOR TO NOTIFY BPW AND VERIZON PRIOR TO THE START OF WORK.
4. CONDUIT TRENCH SHALL MEET DELDOT AND LEWES BPW STANDARDS.
5. SEE DWG SE-44 FOR CONDUIT ROUTING IN SIDEWALK.
6. CONTRACTOR TO TRENCH CONDUIT TO AVOID EXISTING WATER LINE.

LEGEND

- ① PRIMARY CONDUIT & WIRE IN UNDERGROUND TRENCH TO TRANSFORMER PAD (BY LEWES BPW)
- ② CONCRETE PAD AND TRANSFORMER WITH METER (BY LEWES BPW)
- ③ DISCONNECT SWITCH AND SUPPORT STAND
- ④ JUNCTION BOX IN SIDEWALK OR GROUND
- ⑤ SECONDARY CONDUIT AND WIRE IN UNDERGROUND TRENCH TO JUNCTION BOX
- ⑥ SECONDARY CONDUIT AND WIRE PLACED UNDER SIDEWALK
- TP# TEST POINTS (2) COMPLETED BY SO-DEEP ON JUNE 22, 2017

ELECTRICAL UTILITY LOCATION PLAN

7/6/2018 M:\028889\04\4000_Fin_Des\CADD\30_Elec\EE46 - Incoming Service Plan.dgn

<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS		<p>NOT TO SCALE</p>	<p>BR 3-154 ON US9 SAVANNAH ROAD & BR 3-153 ON SR1A REHOBOTH AVENUE OVER LEWES-REHOBOTH CANAL</p>	CONTRACT	BRIDGE NO.	<p>SAVANNAH ROAD ELECTRICAL INCOMING SERVICE PLAN</p>	SE-46
	<p>△ MOVED TRANSFORMER (RAJ 7/6/18)</p>				T201507602	3-154		SHEET NO.
					COUNTY	DESIGNED BY: M.TINE		160
					SUSSEX	CHECKED BY: AHN		TOTAL SHTS.
							180	

