

THIS ITEM HAS BEEN DIGITALLY
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Digitally signed by James M
Phillips
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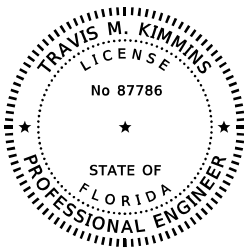
James M Phillips
ON THE DATE ADJACENT TO THE SEAL

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HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD.,
SUITE 310, TAMPA, FL 33634
JAMES M. PHILLIPS, III, P.E. NO. 36865

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B1-1	STRUCTURES KEY SHEET
B1-2	SIGNATURE SHEET
BQ1-1	SUMMARY OF QUANTITIES (1 OF 3)
BQ1-2	SUMMARY OF QUANTITIES (2 OF 3)
BQ1-3	SUMMARY OF QUANTITIES (3 OF 3)
B1-4	GENERAL NOTES (2 OF 2)
B1-5	PAY ITEM AND TEMPORARY TRAFFIC CONTROL NOTES



THIS ITEM HAS BEEN DIGITALLY
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Travis M Kimmins
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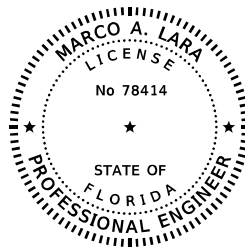
Travis M Kimmins
ON THE DATE ADJACENT TO THE SEAL

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HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD.,
SUITE 310, TAMPA, FL 33634
TRAVIS M. KIMMINS, P.E. NO. 87786

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B1-2	SIGNATURE SHEET
B1-22	SPAN DRIVE HYDRAULIC SCHEMATIC (5 OF 5)



THIS ITEM HAS BEEN DIGITALLY
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Marco A Lara
2025.02.05 13:31:39-05'00'

Marco A Lara
ON THE DATE ADJACENT TO THE SEAL

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HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD.,
SUITE 310, TAMPA, FL 33634
MARCO A. LARA, P.E. NO. 78414









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<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B1-2	SIGNATURE SHEET
B1-25	ELECTRICAL GENERAL NOTES
B1-27	ELECTRICAL PLAN AND ELEVATION
B1-28	ONE LINE DIAGRAM
B1-29	MCC DETAILS
B1-30	MCC MATERIALS LIST
B1-31	HYDRAULIC CONTROL PANEL LAYOUT
B1-35	LIGHTING SCHEDULE
B1-38	NAVIGATION LIGHT DETAILS
B1-39	BARRIER GATE DETAILS

BRIDGE NO. 124134

REVISIONS						DRAWN BY: CPO 08-24 CHECKED BY: JMP 08-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE SIGNATURE SHEET	REF. DWS, NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						DESIGNED BY: CPO 08-24 CHECKED BY: JMP 08-24	CR 78	LEE	453997-1-58-01 CN-1414-218	PROJECT NAME: MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B1-2




JAMES M. PHILLIPS III, P.E.
P.E. LICENSE NUMBER 36865
HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD, SUITE 310
TAMPA, FLORIDA 33634

SUMMARY OF STRUCTURE QUANTITIES											
SECTION	PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS	
					P	F	P	F			
GENERAL 	101-1	MOBILIZATION	BASCULE SPAN 7	LS		1.00		1.00			
	102-1	MAINTENANCE OF TRAFFIC	VARIOUS LOCATIONS	LS		1.00		1.00			
		104-11	FLOATING TURBIDITY BARRIER	VARIOUS LOCATIONS	LF		800.00		800.00	ESTIMATED 400 LF EACH SIDE	
STRUCTURAL	120-6	EMBANKMENT	BEGIN APPROACH SLAB	CY		12.00		12.00			
	305-1	BITUMINOUS CRACK & JOINT SEALING FOR ASPHALTIC CONCRETE ROADWAY	BEGIN & END APPROACH SLABS	LF		88.00		88.00			
	400-73	SPAN JACKING	APPROACH SPANS 1 & 14	LS 		1.00 		1.00 	IF REQUIRED		
	400-148	PLAIN NEOPRENE BEARING PADS	APPROACH SPANS 1 & 14	CF		1.60		1.60	IF REQUIRED		
	471-1-2-001	FENDER SYSTEM, PLASTIC MARINE LUMBER (PLANKS)	BASCULE SPAN 7	MB		0.20 		0.20 			
	471-1-2-002	FENDER SYSTEM, PLASTIC MARINE LUMBER (WALERS)	BASCULE SPAN 7	MB		0.90		0.90			
		512-1-1	MOVABLE BRIDGE CONTROL HOUSE, RENOVATE	BASCULE SPAN 7	EA		1.00		1.00	REPLACE DAMAGED LOUVER SYSTEMS	
	515-1-2-001	PIPE HANDRAIL POSTS - GUARDRAIL, ALUMINUM S /CABLES/HARDWARE)	VARIOUS LOCATIONS	LF		14.00		14.00			
	515-1-2-002	STAINLESS STEEL RAILING CABLE-FENDER SYSTEM	BASCULE SPAN 7	LF		563.00		563.00			
	515-2-7	PEDESTRIAN/BICYCLE RAILING, SPECIAL	BASCULE SPAN 7	LF		1001.00		1001.00			
	530-3 3	RUBBLE RIP-RAP	APPROACH SPANS 1 & 14	TN		14.00		14.00			
	530-5 11	GABION, MATTRESS, LESS THAN 1 FOOT THICKNESS	APPROACH SPAN 1	SY		28.00		28.00			

NOTES:
1. FOR PAY ITEM NOTES, SEE SHEET NO. B1-5.


BRIDGE NO. 124134

REVISIONS						JAMES M. PHILLIPS III, P.E. P.E. LICENSE NUMBER 36865 HARDESTY & HANOVER, LLC 5110 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: OPD 08-24 CHECKED BY: JMP 08-24 DESIGNED BY: OPD 08-24 CHECKED BY: JMP 08-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE:	REF. DWS, NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B01-1
1/25	PCR	 ADDED PAY ITEMS. DELETED PAY ITEM 512-1-1. UPDATED QUANTITIES.						CR 78	LEE	453997-1-58-01 CN-1414-218		

SUMMARY OF STRUCTURE QUANTITIES											
SECTION	PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS	
					P	F	P	F			
MOVABLE BRIDGE / MECHANICAL	465-2-122	MOVABLE BRIDGE MACHINERY & CASTING - REHABILITATION, FURNISH & INSTALL, SPHERICAL BEARINGS	BASCULE SPAN 7	EA		4.0		4			
	465-2-421	MOVABLE BRIDGE MACHINERY & CASTING - REHABILITATION, RECONDITION, PLAIN JOURNAL BEARINGS	BASCULE SPAN 7	EA		4.0		4			
	465-2-452	MOVABLE BRIDGE MACHINERY & CASTING-REHABILITATION, RECONDITION, HYDRAULIC CYLINDER	BASCULE SPAN 7	EA		2.0		2			
	465-2-454	MOVABLE BRIDGE MACHINERY & CASTING-REHABILITATION, RECONDITION, HYDRAULIC POWER PACK	BASCULE SPAN 7	EA		1.0		1			
	465-2-505	MOVABLE BRIDGE MACHINERY & CASTING - REHABILITATION, ADJUST & MODIFY, SPAN LOCKS	BASCULE SPAN 7	AS		2.0		2			
	465-2-508	MOVABLE BRIDGE MACHINERY & CASTING - REHABILITATION, ADJUST/MODIFY LIVE LOAD SHOES	BASCULE SPAN 7	LS		1.0		1			
	465-2-660	MOVABLE BRIDGE MACHINERY & CASTING-REHABILITATION, REMOVE & DISPOSE, OTHER MACHINERY COMPONENTS	BASCULE SPAN 7	LS		1.0		1			
		465-3-17	MOVABLE BRIDGE COUNTERWEIGHT, F&I, BALANCE BLOCKS	BASCULE SPAN 7	LS		1.0		1		
		465-3-50	MOVABLE BRIDGE COUNTERWEIGHT, ADJUST	BASCULE SPAN 7	EA		1.0		1	INCLUDE SPAN BALANCING TESTING ONLY TO CONFIRM PROPER BALANCE, NO ADJUSTMENTS ANTICIPATED.	
		465-3-96	MOVABLE BRIDGE COUNTERWEIGHT, CLEAN, POCKETS	BASCULE SPAN 7	EA		2.0		2		
		465-20	MOVABLE BRIDGE- PREVENTATIVE MAINTENANCE & ROUTINE REPAIR	BASCULE SPAN 7	LS		1.0		1		
		465-21	MOVABLE BRIDGE OPERATOR	BASCULE SPAN 7	LS		1.0		1		
		465-71-3	MOVABLE BRIDGE FUNCTIONAL CHECKOUT, PHASE C, COMPLETE	BASCULE SPAN 7	LS		1.0		1		
MOVABLE BRIDGE / CONTROL HOUSE	512-71-1	MOVABLE BRIDGE-PLUMBING SYSTEM, F&I (INCLUDES NEW HANGERS)	BASCULE SPAN 7	EA		1.0		1			

NOTES:
1. FOR PAY ITEM NOTES, SEE SHEET NO. B1-5.

BRIDGE NO. 124134

REVISIONS						DRAWN BY: CPO 08-24 CHECKED BY: JMP 08-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE SUMMARY OF QUANTITIES (2 OF 3)	REF. DWS. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
1/25	PCR	 REMOVED PAY ITEM NUMBERS 465-3-17 465-3-96. ADDED DESIGN NOTES.					CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	B01-2

JAMES M. PHILLIPS III, P.E.
P.E. LICENSE NUMBER 36865
HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD, SUITE 310
TAMPA, FLORIDA 33634

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SUMMARY OF STRUCTURE QUANTITIES										
SECTION	PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
					P	F	P	F		
MOVEABLE BRIDGE ELECTRICAL	508-2-1-001	MOVABLE BRIDGE GATE (FURNISH & INSTALL) (CLASS I 1 LANE)	BASCULE SPAN 7	AS		4.00		4.00	4 Traffic Gates w/ LED Arm ITS, 2 Gongs, Shop Drawing Submittal, Conduit Wire ETC.	
	508-2-1-002	MOVABLE BRIDGE GATE (FURNISH & INSTALL) (PEDESTRIAN)	BASCULE SPAN 7	AS		4.00		4.00	4 Ped. Gates w/ LED Arm ITS, Shop Drawing Submittal, Conduit Wire ETC.	
	1 508-2-5	MOVABLE BRIDGE GATE, ADJUST/MODIFY/REHAB	BASCULE SPAN 7	AS		1.00		1.00	Replace main crank arm shaft and associated components, Shop Drawing, ETC.	1
	1 508-2-6	MOVABLE BRIDGE GATE, REMOVE & DISPOSE	BASCULE SPAN 7	AS		8.00		8.00		
	1 508-3-5	MOVABLE BRIDGE SIGNAL (FURNISH & INSTALL)	BASCULE SPAN 7	AS		2.00		2.00	4 Traffic Lights w/ LEDs, Signs, Shop Drawing Submittal	
	508-4	MOVABLE BRIDGE ELECTRICAL EQUIPMENT, REHABILITATION	BASCULE SPAN 7	LS/LS		1.00		1.00	Conduit, Wiring, Disconnect Switches, Lighting Receptacles, Sump Pump, Submarine Cable Supports.	
	508-4-001	NAVIGATION LIGHTS (BRIDGE MOUNT)	BASCULE SPAN 7	EA		2.00		2.00	2 Bascule Lights w/ LEDs, 1 Horn, 1 Marine Radio/Antn, Shop Drawing Submittal.	
	508-4-002	NAVIGATION LIGHTS (FENDER MOUNT)	BASCULE SPAN 7	EA		6.00		6.00	6 Pier Lights w/ LEDs, Shop Drawing Submittal	
	508-4-003	CLEARANCE GAUGE LIGHTS	BASCULE SPAN 7	EA		2.00		2.00	2 Clearance Gauge, Signage, Shop Drawing Submittal. 1	
	508-4-005	CAMERA ASSEMBLY/SUPPORT	BASCULE SPAN 7	EA		4.00		4.00	4 Cameras, 4 Camera support, 2 mount & adj PTZ, 1 misc. 1	
	1 508-76-1	MOVABLE BRIDGE-REHAB, SPAN MOTORS & CONTROLLERS, F&I	BASCULE SPAN 7	LS		1.00		1.00	Auxiliary Motor, 2 - 60HP Motor, Shop Drawing. 1	
	1 508-76-4	MOVABLE BRIDGE-REHAB, SPAN MOTORS & CONTROLLERS, REMOVE	BASCULE SPAN 7	LS		1.00		1.00		
	1 508-82-5	MOVABLE BRIDGE CONTROL PANEL/MOTOR CONTROLLER	BASCULE SPAN 7	EA		1.00		1.00	MCC Motor Starters, Circuit Breakers, Transformers, Indicator Lights, Misc, Shop Drawing Submittal.	
	508-83-103	MOVABLE BRIDGE INTEGRATED DRIVE SYSTEM	BASCULE SPAN 7	AS		1.00		1.00	2 VSD Drives (100A), 2 OL Relays, Drive Cabinet Components, Testing and Setup, Shop Drawing Submittal, Misc.	1
	1 715-1-12	LIGHTING CONDUCTORS, F&I, INSULATED, NO. 8-6	BASCULE SPAN 7	LF		3105.00		3105.00	3105 ft Insulated #8 AWG Lighting Conductor	
	1 715-1-13	LIGHTING CONDUCTORS, F&I, INSULATED, NO 4 TO NO 2	BASCULE SPAN 7	LF		4482.00		4482.00	4482 ft Insulated #4 AWG Lighting Conductor	
	1 715-11-213	LUMINAIRE,F&I-REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM, ROADWAY	BASCULE SPAN 7	EA		4.00		4.00	4 Luminaires, Shop Drawing Submittal	
	1 715-515-240	LIGHT POLE COMPLETE- SPECIAL DESIGN, F&I, SINGLE ARM BRIDGE MOUNT-GALVANIZED STEEL, 40'	BASCULE SPAN 7	EA		3.00		3.00	3 Roadway Lights	

NOTES:
1. FOR PAY ITEM NOTES, SEE SHEET NO. B1-5.

BRIDGE NO. 124134

REVISIONS						JAMES M. PHILLIPS III, P.E. P.E. LICENSE NUMBER 36865 HARDESTY & HANOVER, LLC 510 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: OPD 08-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE:	SUMMARY OF QUANTITIES (3 OF 3)	REF, DWS, NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY: JMP 08-24				PROJECT NAME:		SHEET NO.
1/25	PCR	⚠️ UPDATED PAY ITEM NUMBERS AND DESIGN NOTES. ADDED PAY ITEMS. UPDATED QUANTITIES.					DESIGNED BY: OPD 08-24	ROAD NO. CR 78	COUNTY LEE	FINANCIAL PROJECT ID 453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS		B01-3
							CHECKED BY: JMP 08-24						

I. NAVIGATIONAL REQUIREMENTS

1. BASCULE SPAN HAS NOT BEEN OPERATED SINCE THE HURRICANE. INSPECT AND ENSURE ALL COMPONENTS ARE FUNCTIONAL BEFORE ATTEMPTING OPERATION.
2. A COPY OF THE CONSTRUCTION PLAN, SCHEDULE, AND SEQUENCE OF OPERATIONS, APPROVED BY THE ENGINEER, MUST BE SUBMITTED TO THE U.S.C.G. FOR APPROVAL 60 DAYS PRIOR TO STARTING WORK OVER OR IN THE WATERWAY.
3. NOTIFY THE U.S.C.G. SECTOR ST. PETERSBURG WATERWAYS MANAGEMENT AND U.S.C.G. DISTRICT 7 BRIDGE ADMINISTRATION VIA E-MAIL 10 DAYS PRIOR TO THE START OF CONSTRUCTION AND 90 DAYS PRIOR TO ANY ANTICIPATED CHANNEL RESTRICTIONS.
4. ANY CHANNEL RESTRICTIONS (HORIZONTAL AND/OR VERTICAL) MUST BE APPROVED BY THE U.S.C.G. PROVIDE 90 DAYS ADVANCED NOTICE.
5. THE BRIDGE IS CURRENTLY UNDER A NOTICE TO MARINERS INDICATING THAT IT IS UNABLE TO PROVIDE OPENINGS AS AUTHORIZED BY THE U.S.C.G.
6. INCLUDE ENGINEER IN ALL COMMUNICATION WITH U.S.C.G.
7. MAINTAIN FUNCTIONING NAVIGATION LIGHTING DURING CONSTRUCTION AND LIGHTING ON ALL IN-WATER CONSTRUCTION EQUIPMENT AND VESSELS. ADDITIONAL TEMPORARY NAVIGATION LIGHTING IS REQUIRED IF ANY EQUIPMENT BLOCKS MARINER'S VISUALIZATION OF TEMPORARY OR PERMANENT NAVIGATION LIGHT FIXTURES ON THE FENDER SYSTEM OR IN THE CHANNEL.
8. IF WEATHER CONDITIONS OR ANY OTHER CONDITIONS THREATEN THE SAFETY OF MARINE TRAFFIC AT ANY TIME DURING THE PROJECT, CEASE OPERATIONS AND CLEAR ALL CONSTRUCTION EQUIPMENT AND VESSELS FROM THE CHANNEL AS DIRECTED BY THE ENGINEER.
9. CONTACT INFORMATION FOR U.S.C.G:
SECTOR ST. PETERSBURG WATERWAYS MANAGEMENT:
(727) 824-7506, D07-SMB-TAMPA-WWM@USCG.MIL
DISTRICT 7 BRIDGE ADMINISTRATION:
MS. JENNIFER ZERCHER - (305) 415-6740, jennifer.n.zercher@uscg.mil

J. UTILITY LOCATIONS

1. ABOVE GROUND OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT.
2. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS SHOULD BE CONSIDERED APPROXIMATE ONLY.
3. UTILITIES SHALL REMAIN UNLESS NOTED OTHERWISE.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO DAMAGE OCCURS TO THE EXISTING UTILITIES AS A RESULT OF THE WORK.
5. THE FOLLOWING UTILITIES ARE WITHIN THE CONSTRUCTION ZONE:
GREATER PINE ISLAND WATER AUTHORITY MIKES MAILLAKAKIES 239-283-1073
LEE COUNTY UTILITIES
LEE COUNTY ELECTRIC COOPERATIVE (LCEC)

COMCAST
CENTURLINK
GRAVITY
FORCE MAIN
ITS

K. STAGING AND STORAGE AREAS

ANY PROPOSED STAGING OR STORAGE AREA CHANGES IN LEE COUNTY RIGHT-OF-WAY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. ANY LEE COUNTY RIGHT-OF-WAY USED BY THE CONTRACTOR MUST BE MAINTAINED BY THE CONTRACTOR AND THEN RETURNED TO ORIGINAL CONDITION AT THE END OF THE PROJECT AT THE CONTRACTOR'S EXPENSE AND AT NO COST TO THE COUNTY.


L. ABBREVIATIONS

1. SEE FDOT STANDARD PLANS ABBREVIATIONS SHEET FOR STANDARD ABBREVIATIONS.
2. ADDITIONAL ABBREVIATIONS AS DEFINED HEREIN ARE USED THROUGHOUT THE PLANS:
- | | |
|--------------------------------------|-----------------------------------|
| ADJ. - ADJACENT | OPP. - OPPOSITE |
| CJ - CONSTRUCTION JOINT | T&B - TOP AND BOTTOM |
| EF - EACH FACE | TSP - TECHNICAL SPECIAL PROVISION |
| EOR - ENGINEER OF RECORD | UNO - UNLESS NOTED OTHERWISE |
| MHC - MINIMUM HORIZONTAL CLEARANCE @ | - AT |
| MVC - MINIMUM VERTICAL CLEARANCE | |

M. MISCELLANEOUS NOTES

1. DIMENSIONS SHOWN IN THE PLANS WERE TAKEN FROM EXISTING DRAWINGS. VERIFY ALL EXISTING FIELD CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO START OF CONSTRUCTION AND ORDERING OF MATERIALS. BRING ANY DISCREPANCY TO THE ENGINEER'S ATTENTION IN WRITING IMMEDIATELY AFTER DISCOVERY.
2. PRIOR TO REPAIR OPERATIONS, REMOVE AND MAINTAIN ON SITE, ANY SIGNS THAT MAY BE AFFECTED BY CONSTRUCTION AND REPLACE THEM IN A MANNER SUITABLE TO THE ENGINEER IMMEDIATELY AFTER REPAIR OPERATIONS.
3. EXCEPT WHERE APPROVED BY THE ENGINEER, WORK SHALL NOT INTERFERE WITH TRAFFIC OR PEDESTRIAN USE OF THE BRIDGE OR APPROACH ROADWAYS.
4. CLEAN AND REMOVE ALL DEBRIS FROM THE ROADWAY AND SIDEWALKS IN THE PROJECT SITE ON A DAILY BASIS.
5. PARKING OF EQUIPMENT ON THE BASCULE SPAN IS PROHIBITED.
6. PROVIDE SAFE ACCESS TO ALL WORK AREAS FOR LEE COUNTY REPRESENTATIVES AND CEI INSPECTORS. THIS INCLUDES BOATS WITH OPERATORS PER FDOT STANDARD SPECIFICATIONS SECTION 5-9.1.
7. COORDINATE WORK WITH ALL OTHER CONTRACTORS WORKING ON FDOT, LEE COUNTY, TOWN OF MATLACHA, OR OTHER PROJECTS IN THE VICINITY.
8. SECURE EQUIPMENT PROPERLY AND AWAY FROM THE BRIDGE DURING SEVERE WEATHER OR WHEN UNATTENDED ON LANDSIDE OF THE BRIDGE.

BRIDGE NO. 124134

REVISIONS						JAMES M. PHILLIPS III, P.E. P.E. LICENSE NUMBER 36865 HARDESTY & HANOVER, LLC 510 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: OPD 08-24 CHECKED BY: JMP 08-24 DESIGNED BY: OPD 08-24 CHECKED BY: JMP 08-24			LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE: GENERAL NOTES (2 OF 2)		REF. CWS, NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:		SHEET NO.			
1/25	PCR	 REVISED NAVIGATIONAL REQUIREMENT NOTES AND ADDED UTILITY INFORMATION.					CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS		B1-4			

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PAY ITEM NOTES

1. PAY ITEMS FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL BID ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE BID ITEMS. COST FOR COMPLIANCE WITH ALL REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION FOR THIS PROJECT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR BID ITEMS IN THIS PROJECT.
2. UNLESS NOTED OTHERWISE, PAY ITEMS ARE INCLUSIVE OF ALL LABOR, MATERIALS, AND EQUIPMENT TO COMPLETE THE WORK AS DESCRIBED. NO SEPARATE PAYMENT WILL BE MADE FOR PREPARATION OF WORKING OR SHOP DRAWINGS, CONSTRUCTION PROCEDURES, TESTING OR DOCUMENTATION.
3. ITEM 102-1 INCLUDES ALL MAINTENANCE OF TRAFFIC (MOT) ACTIVITIES REQUIRED FOR THE DURATION OF CONSTRUCTION. SEE "TEMPORARY TRAFFIC CONTROL (TTC) NOTES" FOR FURTHER DETAILS.
4. ITEM 120-6 INCLUDES IN KIND REPLACEMENT OF MISSING EMBANKMENT FILL BELOW SIDEWALKS.
5. ITEM 305-1 INCLUDES REPAIR OF LOCATIONS EXHIBITING REFLECTIVE CRACKING ON APPROACH ROADWAY.
6. ITEM 400-148 INCLUDES ADJUSTMENT OF EXISTING DISPLACED PLAIN NEOPRENE BEARING PADS, INCLUDING NEW NEOPRENE, SEALANT, AND ANY REQUIRED JACKING.
- ~~7. ITEM 465-20 INCLUDES ROUTINE REPAIRS AND MAINTENANCE OF THE MOVEABLE BRIDGE FOR THE DURATION OF CONSTRUCTION PERIOD.~~
8. ITEM 465-2-122 INCLUDES IN-KIND REPLACEMENT OF SPHERICAL BEARINGS AT THE CARDANIC RINGS.
9. ITEM 465-2-421 INCLUDES RECONDITIONING OF PLAIN JOURNAL BEARINGS AT CARDANIC RINGS AND NEW GREASE FITTINGS.
10. ITEM 465-2-452 INCLUDES IN-KIND REPLACEMENT OF HYDRAULIC CYLINDER ASSOCIATED HARDWARE AND VALVES.
11. ITEM 465-2-454 INCLUDES IN-KIND REPLACEMENT OF HYDRAULIC HPU FLUID AND ASSOCIATED HARDWARE, HOSES, PIPING, MANIFOLDS (REHABILITATION), PUMPS, VALVES AND THERMAL SWITCHES.
12. ITEM 465-2-505 INCLUDES SHIMMING AND ADJUSTMENT OF SPAN LOCK GUIDES AND RECEIVERS.
13. ITEM 465-2-508 INCLUDES SHIMMING AND ADJUSTMENT OF LIVE LOAD BEARING ASSEMBLIES.
14. ITEM 465-2-660 INCLUDES REMOVAL OF SPHERICAL AND PLAIN JOURNAL BEARINGS, HYDRAULIC VALVES, HOSES, PIPING, PUMPS, THERMAL SWITCHES AND ASSOCIATED HARDWARE PART OF THE IN-KIND REPLACEMENT ITEM LIST.
- ~~15. ITEM 465-3-17 INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT FOR SPAN BALANCE TESTING.~~
- ~~16. ITEM 465-3-50 INCLUDES FURNISHING AND INSTALLATION OF COUNTERWEIGHT CAST IRON BLOCKS.~~
- ~~17. ITEM 465-3-96 INCLUDES ALL LABOR, MATERIALS AND EQUIPMENT FOR COUNTERWEIGHT POCKET CLEANING.~~
18. ITEM 465-20 INCLUDES ROUTINE REPAIRS AND MAINTENANCE OF THE MOVABLE BRIDGE FOR THE DURATION OF CONSTRUCTION PERIOD.
19. ITEM 465-21 INCLUDES MOVABLE BRIDGE OPERATOR.
20. ITEM 465-71-3 INCLUDES ALL MATERIALS AND LABOR REQUIRED FOR THE PREPARATION OF THE TESTING PROCEDURES, FORMS, AND THE TESTING OF THE OPERATING SYSTEM TO ENSURE THE PROPER FUNCTION AND COMMISSIONING OF THE NEW HYDRAULIC COMPONENTS.
21. ITEM 508-2-1 INCLUDES THE IN KIND REPLACEMENT OF THE BRIDGE TRAFFIC AND SIDEWALK GATE ASSEMBLIES.
22. ITEM 508-3-5 INCLUDES IN KIND REPLACEMENT OF MOVABLE BRIDGE TRAFFIC SIGNAL ASSEMBLIES AND MOVABLE BRIDGE AHEAD SIGNS.
23. ITEM 508-4 INCLUDES CONDUIT, WIRING, PULL BOXES, JUNCTION BOXES, GENERAL LIGHTING, RECEPTACLES, MAIN ELECTRICAL SERVICE EQUIPMENT, DISCONNECT SWITCHES, NAVIGATIONAL LIGHTING SYSTEM, CCTV SYSTEM, PA INTERCOM EQUIPMENT, SUPPORTS AND ASSOCIATED EQUIPMENT TO INTERFACE WITH EXISTING POWER AND CONTROL SYSTEMS. INCLUDES START-UP AND COMMISSIONING. CLEAN AND DRY CONDUITS AND BOXES REMOVING WATER, DIRT AND SAND.
24. ITEM 506-76-1 INCLUDES IN KIND REPLACEMENT OF MOVABLE BRIDGE MAIN SPAN AND AUXILIARY MOTORS.
25. ITEM 508-76-4 INCLUDES REMOVAL OF MAIN SPAN AND AUXILIARY MOTORS.
- ~~26. ITEM 508-78-1 INCLUDES IN KIND REPLACEMENT OF LIMIT SWITCHES AND TRANSDUCERS.~~
- ~~27. ITEM 508-78-4 INCLUDES REMOVAL OF LIMIT SWITCHES AND TRANSDUCERS.~~
28. ITEM 508-82-4 INCLUDES RECONDITIONING OF EXISTING MOTOR CONTROL CENTER, INCLUDING IN KIND REPLACEMENT OF MOTOR STARTERS, CONTRACTORS, TERMINAL BLOCKS, FUSES, CIRCUIT BREAKERS, SWITCHES, PILOT LIGHTS, TRANSFORMER, SURGE SUPPRESSORS, AND ASSOCIATED EQUIPMENT. CLEAN AND DRY COMPONENTS OF THE MCC REMOVING WATER, DIRT, AND SAND.
29. ITEM 508-83-103 INCLUDES IN KIND REPLACEMENT OF HYDRAULIC POWER UNIT CONTROL PANEL INTERNAL COMPONENTS AND DEVICES INCLUDING VARIABLE SPEED DRIVES, CIRCUIT BREAKERS, TERMINAL BLOCKS, RELAYS, STARTERS, ENCLOSURE, TRANSFORMER, PILOT LIGHTS, SWITCHES AND ASSOCIATED EQUIPMENT AS ONE COMPLETE ASSEMBLY.
- ~~30. ITEM 512-1-1 INCLUDES REMOVE AND DISPOSE THE EXISTING DAMAGED LOUVER SYSTEMS WITH ASSOCIATED COMPONENTS AND HARDWARE AND FURNISH AND INSTALL IN KIND NEW LOUVER SYSTEMS WITH ASSOCIATED COMPONENTS AND HARDWARE IN THE BASCULE PIER.~~
31. ITEM 512-71-1 INCLUDES THE IN KIND REPLACEMENT OF DAMAGED AND/OR MISSING UTILITY HANGERS WITH ASSOCIATED HARDWARE AND UTILITY LINES.
32. ITEM 515-1-2 INCLUDES THE IN KIND REPLACEMENT OF DAMAGED FENDER SYSTEM RAILING POSTS AND BRACES.
33. ITEM 515-2-7 INCLUDES THE IN KIND REPLACEMENT OF DAMAGED AND/OR MISSING BRIDGE PEDESTRIAN RAILING CABLES AND FENDER SYSTEM RAILING CABLES.
34. ITEM 530-3-3 INCLUDES THE IN KIND REPLACEMENT OF MISSING RUBBLE RIP-RAP.
35. ITEM 530-5-11 INCLUDES THE IN KIND REPLACEMENT OF MISSING EMBANKMENT FILL AT EXPOSED BULKHEAD TIE-BACKS AND FURNISH AND INSTALL NEW GABION MATTRESS SYSTEM.

TEMPORARY TRAFFIC CONTROL (TTC) NOTES

GENERAL TTC NOTES:


1. THE REGULATORY SPEED LIMITS FOR THE PROJECT WORK ZONE IS: 35 MPH
EXISTING POSTED SPEED: 35 MPH
2. LANE CLOSURES ARE NOT PERMITTED WITHOUT PRIOR APPROVAL FROM LEE COUNTY.
3. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED FOR 14 DAYS IN ADVANCE OF A LANE CLOSURE TO NOTIFY MOTORISTS OF THE IMPENDING TRAFFIC DISRUPTION.

TTC PHASING NOTES:

PHASE 1A

1. INSTALL ADVANCE WARNING SIGNS PER FDOT STANDARD PLANS INDEX NO. 102-613.
2. DURING ALLOWABLE LANE CLOSURE PERIODS, UTILIZING INDEX NO. 102-613, CLOSE THE WB/EB OUTSIDE LANE TO PERFORM WORK TASKS SHOWN IN THE PLANS.

BRIDGE NO. 124134

REVISIONS						JAMES M. PHILLIPS III, P.E. P.E. LICENSE NUMBER 36865 HARDESTY & HANOVER, LLC 510 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: OPD 08-24 CHECKED BY: JMP 08-24		LEE COUNTY DEPARTMENT OF TRANSPORTATION		SHEET TITLE: PAY ITEM AND TEMPORARY TRAFFIC CONTROL NOTES		REF. CWS, NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:		SHEET NO.	
1/25	PCR	 REVISED NOTES 15, 22, 29, AND DELETED 7, 16, 17, 26, 27, AND 30.					CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS		B1-5	

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HYDRAULIC SYSTEM COMPONENT TABLE

ITEM	MANUFACTURER	PART NUMBER	QUANTITY	DESCRIPTION
E*	-	-	1	RIGID PIPING (ACCUMULATOR LINE), 2" DIA. SCHEDULE 160, APPROX. 32" LONG
F*	-	-	1	RIGID PIPING (ROD LINE), FROM HPU MANIFOLD DOWN TO HPU ROOM FLOOR, 1½" DIA., APPROX. 61" LONG
G*	-	-	1	RIGID PIPING (BLIND LINE), FROM HPU MANIFOLD DOWN TO HPU ROOM FLOOR, 2" DIA., APPROX. 61" LONG
H*	-	-	1	RIGID PIPING (DRAIN LINE), FROM HPU MANIFOLD DOWN TO HPU ROOM FLOOR, 1½" DIA., APPROX. 86" LONG
F	-	-	1	RIGID PIPING (ROD LINE), FROM HPU ROOM FLOOR TO CB MANIFOLD, 1¼" DIA., APPROX. 582" LONG
G	-	-	1	RIGID PIPING (BLIND LINE), FROM HPU ROOM FLOOR TO CB MANIFOLD, 2" DIA., APPROX. 582" LONG
H	-	-	1	RIGID PIPING (DRAIN LINE), FROM HPU ROOM FLOOR TO CB MANIFOLD, 1½" DIA., APPROX. 582" LONG
K	-	-	2	RIGID PIPING (ROD LINE), FROM CB MANIFOLD TO CYLINDER MANIFOLD, 1" DIA., APPROX. 132" LONG
M	AEROQUIP (EATON)	GH493-16	2	FLEXIBLE HOSE (ROD LINE), FROM CB MANIFOLD TO CYLINDER MANIFOLD, 1" DIA., APPROX. 72" LONG
N	-	-	2	RIGID PIPING (BLIND LINE), FROM CB MANIFOLD TO CYLINDER MANIFOLD, 1¼" DIA., APPROX. 132" LONG
P	AEROQUIP (EATON)	GH493-20	2	FLEXIBLE HOSE (BLIND LINE), FROM CB MANIFOLD TO CYLINDER MANIFOLD, 1¼" DIA., APPROX. 72" LONG
Q	-	-	2	RIGID PIPING (DRAIN LINE), FROM CB MANIFOLD TO CYLINDER MANIFOLD, 1" DIA., APPROX. 132" LONG
R	AEROQUIP (EATON)	GH493-16	2	FLEXIBLE HOSE (DRAIN LINE), FROM CB MANIFOLD TO CYLINDER MANIFOLD, 1" DIA., APPROX. 72" LONG
T	-	-	2	RIGID PIPING (BLIND LINE), FROM CYLINDER MANIFOLD TO CYLINDER BLIND END, 1½" DIA., APPROX. 80" LONG

NOTES:

1. SEE REF. DWG. NO. BM-4 AND BM-5 FOR IDENTIFIED ITEMS ON THE HYDRAULIC SCHEMATICS.
2. ALL QUANTITIES SHOWN REFLECT TOTAL ESTIMATED QUANTITIES NEEDED FOR REPAIR. CONTRACTOR TO FIELD VERIFY ALL MANUFACTURERS, MODELS, PRESSURE RATINGS AND QUANTITIES LISTED. REPORT ANY DISCREPANCIES TO THE ENGINEER.
3. ALL SHOWN ITEMS TO MEET ASSOCIATED CRITERIA OR ENGINEER APPROVED EQUAL.
4. CLEAN, INSPECT AND COAT WITH LONG TERM 304/316 STAINLESS STEEL RUST INHIBITOR THE RIGID PIPING SHOWN IN THE TABLE. MARK LOCATION AND REPORT TO THE COUNTY, ANY PIPING COMPONENTS THAT CANNOT BE CLEANED, OR WHERE CLEANING RESULTED IN A WALL THICKNESS REDUCTION OF 5% OR MORE. TAKE PRECAUTIONS SUCH THAT ONLY CORROSION IS REMOVED FROM THE SURFACES, LEAVING GOOD MATERIAL INTACT. SUBMIT CLEANING PROCEDURE(S) FOR REVIEW AND APPROVAL. DO NOT USE POWER TOOLS FOR CLEANING OF PIPE.

BRIDGE NO. 124134

REVISIONS						DRAWN BY: VR - 01-24 CHECKED BY: TMK - 01-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE SPAN DRIVE HYDRAULIC SCHEMATIC (5 OF 5)	REF. DWS. NO. BM-8
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
1/25	VR	△ REVISED NOTE 4.				DESIGNED BY: VR - 01-24 CHECKED BY: TMK - 01-24	CR 78	LEE	453997-1-58-01 CN-1414-218	PROJECT NAME: MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B1-22

TRAVIS M. KIMMINS, P.E.
P.E. LICENSE NUMBER 87786
HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD, SUITE 310
TAMPA, FLORIDA 33634

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SCOPE OF ELECTRICAL WORK:

1. ELECTRICAL POWER SERVICE


- A. REPLACE EXISTING ELECTRICAL SERVICE, FEEDERS 300A, METER CAN AND DISCONNECT SWITCHES. THE EXISTING SERVICE ORIGINATES AT THE FUSED DISCONNECT LOCATED AT THE EAST END OF THE BRIDGE AT THE SOUTH SIDE OF THE ROADWAY AND TERMINATES AT THE MAIN DISCONNECT (MD) SWITCH.

-  B. ROUTE ELECTRICAL SERVICE CONDUCTORS AS SPECIFIED IN THE PLANS. FURNISH AND INSTALL NEW SERVICE CONDUCTORS IN EXISTING CONDUIT OF THE NORTH APPROACH TO THE ELECTRICAL ROOM MAIN DISCONNECT. CLEAN AND REMOVE DEBRIS, SAND, AND WATER FROM EXISTING CONDUIT AND JUNCTION BOXES. REPLACE 400A MAIN DISCONNECT SWITCH IN THE GENERATOR ROOM.

2. ELECTRICAL POWER SYSTEM

- A. REPLACE SELECT COMPONENTS IN THE EXISTING MOTOR CONTROL CENTER (MCC) AS SHOWN ON THE PLANS.
- B. EXISTING MOTOR CONTROL CENTER, RATED 600A HORIZONTAL BUS, 600V WITH GROUND TO REMAIN. OPERATING VOLTAGE SHALL BE 480V, THREE-PHASE. REFURBISH OR REPLACE EXISTING TIN-PLATED BUSES WITHIN IN THE MCC.
- C. REPLACE ELECTRICAL DISTRIBUTION DEVICES FOR SPECIFIC MOTOR CONTROL, HOUSED IN INDIVIDUAL, REMOVABLE CUBICLES. THESE CUBICLES SHALL CONTAIN; CIRCUIT BREAKER OR CIRCUIT PROTECTOR, NEMA MOTOR STARTER WITH THREE-PHASE OVERLOAD RELAY AND THRU-DOOR RESET, TERMINAL BLOCK FOR INTERFACE WIRING, PILOT LIGHTS AND "HAND-OFF-AUTO" SWITCH.
- D. REPLACE LIGHTING AND ROADWAY LIGHTING TRANSFORMERS AS SHOWN IN THE PLANS AND SPECIFICATIONS.

3. TRAFFIC GATES AND SIGNALS

- A. REPLACE TRAFFIC GATES (FOUR TOTAL) AND SIDEWALK GATES (FOUR TOTAL) AT LOCATIONS SHOWN ON THE PLANS. FURNISH SEMAPHORE TYPE TRAFFIC GATES WITH VERTICAL TO HORIZONTAL GATE ARM MOVEMENT TO MATCH EXISTING. REPLACE EXISTING HORIZONTAL SWING TYPE SIDEWALK GATES.
- B. REPLACE MAST ARM MOUNTED TRAFFIC SIGNAL ASSEMBLIES AND DRAWBRIDGE SIGNS.
-  C. REPLACE MAIN CRANK ARM SHAFT, CONNECTING ROD, AND ASSOCIATED COMPONENTS AS IDENTIFIED ON THE MAJOR PARTS LIST.

4. CCTV

- A. REPLACE ALL WIRELESS CLOSED CIRCUIT CAMERAS.
- B. REPLACE ALL CAMERA MOUNTING BRACKETS WITH INTEGRAL RADIO TRANSMITTER TO MOUNT ON SIGNAL POLE IN KIND.

5. SPAN DRIVE SYSTEM

- A. REPLACE EXISTING ELECTRO-HYDRAULIC OPERATING SYSTEM INCLUDING TWO INVERTER DUTY PUMP MOTORS, VARIABLE SPEED MOTOR CONTROLLERS, AUXILIARY MOTOR STARTERS, CONTROL RELAYS, PANEL SWITCHES AND INDICATOR LIGHTS.
- B. REPLACE VARIABLE SPEED DRIVE (VSD) OF FLUX VECTOR, MICROPROCESSOR-CONTROLLED TYPE. MOTORS SHALL BE ABLE TO PRODUCE FULL LOAD TORQUE AT ANY SPEED UTILIZING VOLTAGE AND FREQUENCY CONTROL.
- C. REPLACE THE SPAN DRIVES, RELATED COMPONENTS AND BACK PANEL LOCATED IN THE EXISTING FREE-STANDING, STAINLESS STEEL ENCLOSURES (HPU-CP). STAINLESS STEEL ENCLOSURE TO REMAIN.
- D. THE SPAN DRIVES SHALL PROVIDE OVERLOAD PROTECTION FOR THE MOTORS WITH SHORT-CIRCUIT PROTECTION PROVIDED BY CIRCUIT BREAKER.
- E. INTERFACE THE VARIABLE SPEED DRIVE, (VSD), TO THE HYDRAULIC POWER UNIT (HPU).
- F. PERFORM SHOP TESTING OF THE MOTOR/DRIVE AND DEMONSTRATE FULL COMPLIANCE WITH THE TECHNICAL SPECIAL PROVISIONS.
- G. NEW DRIVE AND HYDRAULIC CONTROL SYSTEM TO PERFORM EXACTLY THE SAME AS THE EXISTING DRIVE SYSTEM

6. LIGHTING

- A. PROVIDE LIGHTING EQUIPMENT AS INDICATED IN THE PLANS. ANY DEVIATIONS FROM THE PLANS FOR FIXTURE LOCATION, TYPE, ETC. SHALL BE REQUESTED IN WRITING FOR APPROVAL BY THE ENGINEER.
- B. ALL LIGHTING ELECTRICAL SERVICE AND WIRING SHALL BE IN ACCORDANCE WITH THE PLANS AND THE NATIONAL ELECTRICAL CODE, 2023 (NEC).
- C. REPLACE SELECT LIGHTING FIXTURES WITH LED TYPE LUMINAIRE OF THE SPECIFIED WATTAGE, COLOR, AND TYPE.



- D. REPLACE ROADWAY LIGHT POLES AND LUMINAIRES AS SHOWN ON THE PLANS. ROADWAY LIGHT POLES TO BE REPLACED IN KIND WITH 40' POLES AND MONGOOSE TYPE LUMINAIRE OR APPROVED EQUAL. FIELD VERIFY. EXISTING ANCHOR BOLTS AND EXISTING PEDESTAL/CONCRETE FOUNDATION TO REMAIN. CONNECT TO EXISTING CIRCUITS. REPLACE ROADWAY LIGHTING CONDUCTORS. EXISTING CONDUIT TO REMAIN. CLEAN AND REMOVE DIRT, DEBRIS AND ACCUMULATED WATER FROM WITHIN EXISTING CONDUIT. DECOMMISSION AND DISCONNECT EXISTING CIRCUITS FOR ROADWAY LIGHT POLES 1 & 2 NO LONGER IN SERVICE. REFER TO AS-BUILTS FOR ADDITIONAL INFORMATION.

- E. REPLACE GENERAL LIGHTING IN THE BASCULE PIERS AND THE CONTROL TOWER AS SHOWN IN THE PLANS. GENERAL LIGHTING FOR THE HOUSE AND PIERS SHALL BE FED FROM A CIRCUIT-BREAKER EQUIPPED LIGHTING PANEL.

7. NAVIGATIONAL AIDS

- A. REPLACE ALL SPAN MOUNTED LED CLEARANCE LIGHTS, FENDER MOUNTED LED PIER LIGHTS, AND FENDER MOUNTED HID CLEARANCE GAUGE LIGHTS. REPLACE ALL CONDUIT, WIRING AND JUNCTION BOXES OF NAVIGATION LIGHTING SYSTEM.
- B. EXISTING NAVIGATION LIGHTING UPS BATTERY BACK-UP SYSTEM TO BE REMAIN. REPLACE AIR HORN AND COMPRESSOR, VHF MARINE RADIO AND ANTENNA, AND COMPLETE WIRELESS EQUIPPED WEATHER STATION AND INDOOR DISPLAY.

8. SUMP PUMP

- A. REPLACE SUMP PUMP AND SUMP PUMP CONTROLLER. REPLACE SUMP PUMP CONDUIT, FLEXIBLE CABLE, WIRING, AND JUNCTION BOX FROM SUMP PUMP TO SUMP PUMP CONTROLLER.

9. SUBMARINE CABLES

- A. REPLACE SUBMARINE CABLE AND CONDUIT SLEEVE SUPPORTS. RESEAL BOTH ENDS OF SUBMARINE CABLE CONDUIT SLEEVES.

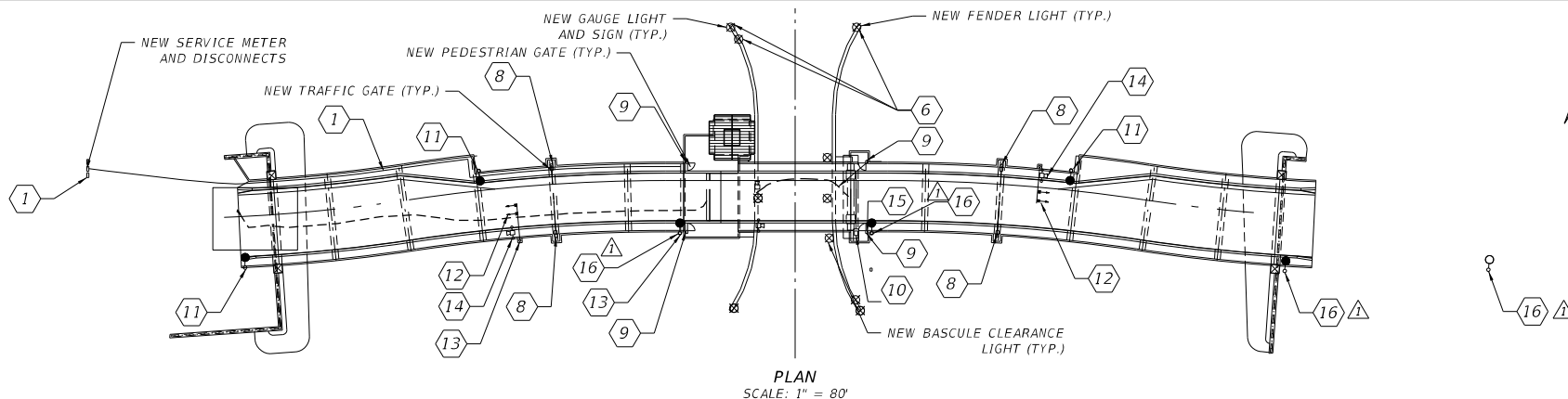
ELECTRICAL GENERAL NOTES

1. CONFORM TO ALL AASHTO, NEC, UL, IEEE AND NEMA CODES STANDARDS AND PRACTICES.
2. ELECTRICAL DEVICES AND EQUIPMENT ARE SHOWN SYMBOLICALLY ON THE PLANS. THE USE OF SYMBOLS AND NOTATIONS (OR THE OMISSION THEREOF) DO NOT RELIEVE THE CONTRACTOR FROM FURNISHING A COMPLETE AND FULLY FUNCTIONAL SYSTEM. FIELD LOCATE DEVICES AND EQUIPMENT TO FACILITATE ACCESSIBILITY WITH RESPECT TO OPERATION AND MAINTENANCE CONDITIONS.
3. ALL MOUNTING HARDWARE AND FABRICATED SUPPORTING FRAMEWORKS SHALL BE 300 SERIES STAINLESS STEEL. ALL EXTERIOR BOXES SHALL BE S.S. NEMA 4X TYPE. ALL EXTERIOR MOTORS, BRAKES, ETC. SHALL BE TOTALLY ENCLOSED AND WATERPROOF. WHERE SPECIFIED, MATERIALS SHALL NOT BE SUBSTITUTED UNLESS REQUESTED IN WRITING AND APPROVED BY THE ENGINEER. UNAPPROVED MATERIALS WILL BE REMOVED AND APPROVED MATERIALS INSTALLED AT NO ADDITIONAL COST TO THE DEPARTMENT.
4. MINIMUM CONDUIT SIZE IS ¾ INCH. ALL WIRES SHALL BE THHW, THW, OR XHHW UNLESS OTHERWISE NOTED. MINIMUM WIRE SIZE IS #12 AWG FOR CONTROL AND #10 AWG FOR POWER.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF A COMPLETE, INTEGRATED, GROUNDING AND BONDING SYSTEM FOR ALL NEW EQUIPMENT AND DEVICES TO BE REPLACED PER NEC (ART. 250).

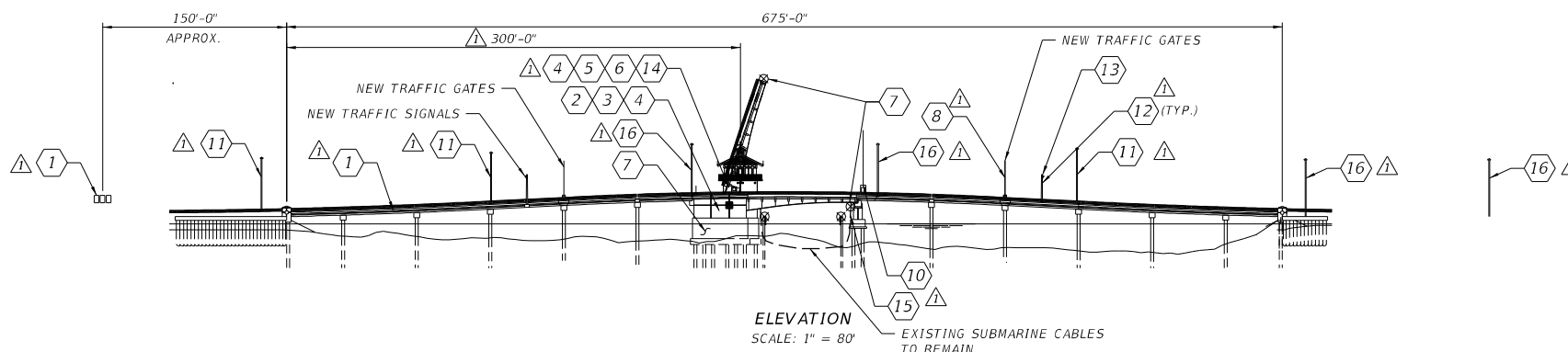
BRIDGE NO. 124134

REVISIONS						MARCO A. LARA, P.E. P.E. LICENSE NUMBER 78414 HARDESTY & HANOVER, LLC 510 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: PR 06-24 CHECKED BY: MAL 06-24 DESIGNED BY: PR 06-24 CHECKED BY: MAL 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE: ELECTRICAL GENERAL NOTES	REF. DWG. NO. BE - 1
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO. COUNTY FINANCIAL PROJECT ID				
1/25	PCR	 UPDATED SCOPE ITEM NOTES.						CR 78	LEE	453997-1-58-01 CN-1414-218	PROJECT NAME: MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B1-25

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PLAN
SCALE: 1" = 80'



ELEVATION
SCALE: 1" = 80'

- 1 REMOVE EXISTING SERVICE METER AND DISCONNECT SWITCHES. FURNISH AND INSTALL NEW METER CAN, DISCONNECT SWITCHES, MAIN SERVICE FEEDERS, AND MOUNTING HARDWARE. CLEAN AND REMOVE DIRT, DEBRIS AND WATER FROM WITHIN THE EXISTING CONDUITS TO REMAIN.
- 2 REMOVE EXISTING MAIN SPAN MOTORS. FURNISH AND INSTALL NEW VARIABLE FREQUENCY DRIVE MOTORS.
- 3 REMOVE EXISTING AUXILIARY PUMP MOTOR. FURNISH AND INSTALL NEW AUXILIARY PUMP MOTOR.
- 4 REMOVE EXISTING MOTOR DRIVES AND ASSOCIATED COMPONENTS. FURNISH AND INSTALL NEW VARIABLE FREQUENCY DRIVES, STARTERS, CONTACTORS, RELAYS, SURGE SUPPRESSION DEVICES, AND ASSOCIATED COMPONENTS. DRIVE CABINET ENCLOSURE TO REMAIN.
- 5 REMOVE SELECT ELECTRICAL COMPONENTS FROM EXISTING MOTOR CONTROL CENTER. FURNISH AND INSTALL NEW COMPONENTS IN MCC BUCKETS INCLUDING STARTERS, TERMINAL BLOCKS, CIRCUIT BREAKERS, SURGE SUPPRESSORS, SWITCHES, TRANSFORMERS, AND ASSOCIATED COMPONENTS. MOTOR CONTROL CENTER ENCLOSURE TO REMAIN.
- 6 REMOVE EXISTING NAVIGATION LIGHTING SYSTEM. FURNISH AND INSTALL NEW FENDER LIGHTS, GAUGE LIGHTS, BASCULE SPAN CLEARANCE LIGHTS, CONDUIT, WIRING, JUNCTION BOXES AND ASSOCIATED COMPONENTS.
- 7 REMOVE SELECT LIGHT FIXTURES, RECEPTACLES, CONDUIT, WIRING AND JUNCTION BOXES. FURNISH AND INSTALL NEW LIGHT FIXTURES, EMERGENCY LIGHTS, CONDUIT, WIRING, LIGHT SWITCHES, AND JUNCTION BOXES IN PIT AREA.
- 8 REMOVE EXISTING TRAFFIC GATES, ASSOCIATED WIRING AND CONDUIT. FURNISH AND INSTALL NEW TRAFFIC GATE ASSEMBLIES, GATE ARM LIGHTS, STROBE LIGHTS, GONG, CONDUIT, WIRING AND ASSOCIATED COMPONENTS.
- 9 REMOVE EXISTING PEDESTRIAN GATES, ASSOCIATED WIRING AND CONDUIT. FURNISH AND INSTALL NEW PEDESTRIAN GATE ASSEMBLIES, GATE LIGHTS, BELLS, CONDUIT, WIRING, PEDESTRIAN GATE SIGN, AND ASSOCIATED COMPONENTS.
- 10 REPLACE BARRIER GATE ARM, LIGHTS, AND TIP LIMIT SWITCH. REPAIR MAIN ARM SHAFT AND ROD. ADJUST EXISTING PASSIVE ANCHORAGE AND ROTARY CAM LIMIT SWITCH.
- 11 REMOVE EXISTING BASE, FURNISH AND INSTALL NEW ROADWAY LIGHT POLE WITH GFCI RECEPTACLE, LUMINAIRE, BASE AND WIRING. EXISTING ANCHOR BOLTS AND EXISTING PEDESTAL/CONCRETE FOUNDATION TO REMAIN. CONNECT TO EXISTING CIRCUITS.
- 12 REMOVE EXISTING TRAFFIC SIGNAL ASSEMBLIES AND DELIVER SALVAGED MATERIAL TO LEE COUNTY. FURNISH AND INSTALL NEW TRAFFIC SIGNAL ASSEMBLIES, CONDUIT, WIRING, JUNCTION BOXES AND ASSOCIATED COMPONENTS. ADD DRAWBRIDGE AHEAD SIGN. EXISTING MAST ARMS TO REMAIN. SEE FDOT STANDARD INDEX T508-T01.
- 13 REMOVE EXISTING CCTV SYSTEM. FURNISH AND INSTALL NEW CCTV CAMERAS, CONDUIT, WIRING, JUNCTION BOXES AND ASSOCIATED COMPONENTS AND MOUNTING BRACKETS.
- 14 REMOVE EXISTING PA SYSTEM AT LOCATIONS ON THE PLANS. FURNISH AND INSTALL NEW PA INTERCOM DEVICES, CONDUIT, WIRING, JUNCTION BOXES AND ASSOCIATED COMPONENTS AND MOUNTING BRACKETS.
- 15 REPAIR AND REPLACE EXISTING SUBMARINE CABLE SLEEVE SUPPORTS. RESEAL SUBMARINE CABLE CONDUIT SLEEVES AT BOTH ENDS.
- 16 REPLACE ROADWAY LIGHT LUMINAIRE AND WIRING. EXISTING POLE TO REMAIN.

BRIDGE NO. 124134

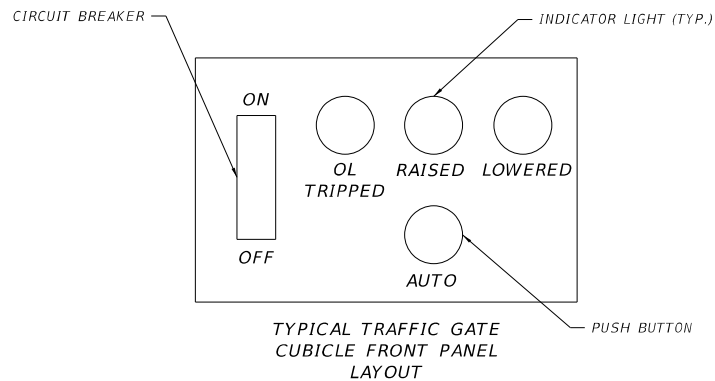
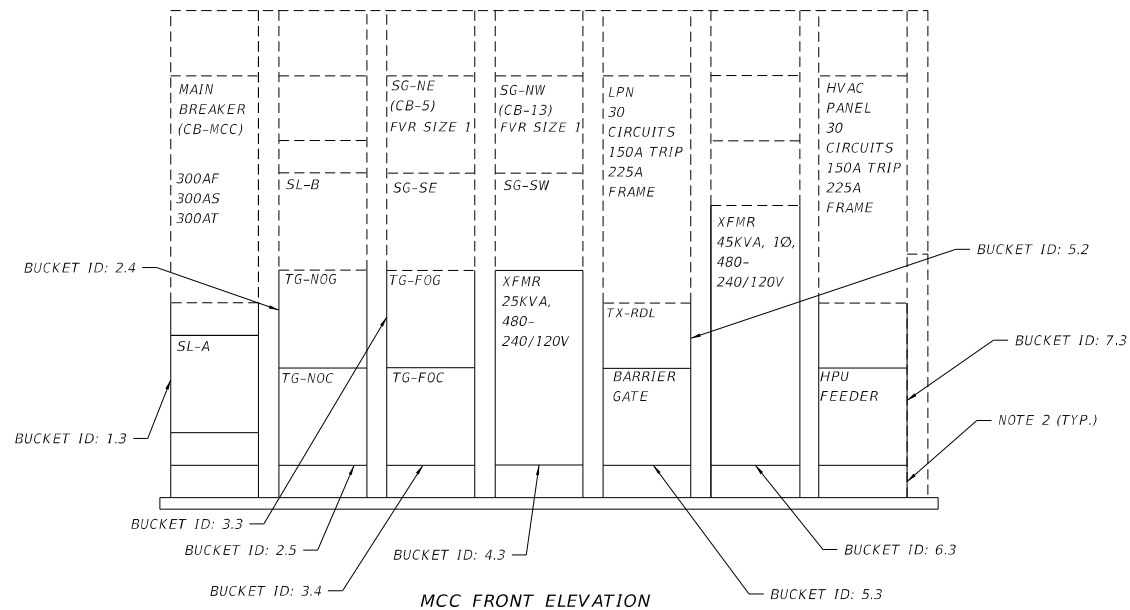
REVISIONS				DATE	BY	DESCRIPTION	MARCO A. LARA, P.E. P.E. LICENSE NUMBER 78414 HARDESTY & HANOVER, LLC 510 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: PR: 06-24 CHECKED BY: MAL: 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE	REF. CWS, NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
1/25	PCR	1. REVISED CALLOUT NUMBERS. 2. REVISED NOTE 12.							CR 78	LEE	453997-1-58-01 CN-1414-218	ELECTRICAL PLAN AND ELEVATION	BE-3
												MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO.
													B1-27

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NOTES:

1. REFER TO MOTOR CONTROL CENTER MATERIALS LIST ON REF. DWG NO. BE-6 FOR MCC BUCKET ID LIST AND COMPONENTS TO BE REPLACED.
2. REFURBISH AND RECONDITION EXISTING MOTOR CONTROL CENTER. CLEAN AND REMOVE DIRT/DEBRIS AND SURFACE CORROSION WITHIN INTERIOR AND EXTERIOR OF MOTOR CONTROL CENTER BUCKETS AND BASE. REPLACE INTERNAL COMPONENTS (BUS BARS, ETC.) AS NEEDED.
3. MAIN BREAKERS, PANELBOARDS, SELECT BUCKETS, AND MCC ENCLOSURE TO REMAIN.

BRIDGE NO. 124134

REVISIONS						DRAWN BY: PR: 06-24 CHECKED BY: MAL: 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE MCC DETAILS	REF. DWG. NO. BE-5
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
1/25	PCR	△ REVISED NOTE 3					CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B1-29

MARCO A. LARA, P.E.
P.E. LICENSE NUMBER 78414
HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD, SUITE 310
TAMPA, FLORIDA 33634

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MCC MATERIALS LIST

BUCKET ID	DESCRIPTION	TYPE	CONTENTS PER BUCKET				
			QTY	Part Number	MANUFACTURER	DESCRIPTION	
6.3	45KVA-XFMR	TRANSFORMER	1	Custom XFMR	EATON	45KVA, 1PH, 440/480V, 125A PRI., 150A SEC.	
4.3	25KVA-XFMR	TRANSFORMER	1	Custom XFMR	EATON	45KVA, 1PH, 440/480V, 70A PRI., 100A SEC.	
2.4	TG-NOG	FVR, CB, SIZE 1, 1HP, TYPE F216	13	XBUT6	EATON	TERMINAL BLOCK 8.2MM (1 UNIT)	
2.5	TG-NOG		1	XBACUT10	EATON	TERMINAL BLOCK END COVER (1 UNIT)	
3.1	SG-NE		2	XBAES35T	EATON	TERMINAL BLOCK END BLOCK (1 UNIT)	
3.2	SG-SE		2	XBMZB8	EATON	TERMINAL MARKER SHEETS 8.2MM (STRIP OF 10)	
3.3	TG-FOG		1	HMCP015E0C	EATON	HMCP CB, 3P, 15A TRIP	
3.4	TG-FOC		1	AN59DNOASE005	EATON	3 POLE, FVR STARTER, SIZE 1 (=HMCP) W/ RESET BUTTON	
			2	C320TS1	EATON	TRANSIENT SUPPRESSOR 24-120V, COIL MOUNT	
4.1	SG-NW		1	10250T181LRP06	EATON	I.L. LED 30MM W/ TRANS RD	
4.2	SG-SE		1	10250T181LRP06	EATON	I.L. LED 30MM W/ TRANS GRN	
5.3	BG		1	10250T181LRP06	EATON	I.L. LED 30MM W/ TRANS AMB	
			1	10250T22LB	EATON	S.S. 30MM MAINT. BLACK LEVER 3 POS W/ CAM 3	
1.3	SL-A		FVR, CB, SIZE 1, 5HP, TYPE F216	13	XBUT6	EATON	TERMINAL BLOCK 8.2MM (1 UNIT)
2.3	SL-B			1	XBACUT10	EATON	TERMINAL BLOCK END COVER (1 UNIT)
				2	XBAES35T	EATON	TERMINAL BLOCK END BLOCK (1 UNIT)
		2		XBMZB8	EATON	TERMINAL MARKER SHEETS 8.2MM (STRIP OF 10)	
		1		HMCP015E0C	EATON	HMCP CB, 3P, 15A TRIP	
		1		AN59DNOASE005	EATON	3 POLE, FVR STARTER, SIZE 1 (=HMCP) W/ RESET BUTTON	
		2		C320TS1	EATON	TRANSIENT SUPPRESSOR 24-120V, COIL MOUNT	
		1		10250T181LRP06	EATON	I.L. LED 30MM W/ TRANS RD	
		1		10250T181LRP06	EATON	I.L. LED 30MM W/ TRANS GRN	
		1		10250T181LRP06	EATON	I.L. LED 30MM W/ TRANS AMB	
		1		10250T22LB	EATON	S.S. 30MM MAINT. BLACK LEVER 3 POS W/ CAM 3	
7.3	HPUCP FEEDER	CB		1	HFD3225	EATON	HFD TYPE CIRCUIT BREAKER, 225A TRIP
5.2	RDWY LGT FEEDER	CB		1	HFD3020	EATON	HFD TYPE CIRCUIT BREAKER, 20A TRIP

NOTES:

1. REFER TO MCC DETAILS ON REF. DWG. NO. BE-5 FOR ADDITIONAL DETAILS.

2. ALL QUANTITIES SHOWN REFLECT ESTIMATED QUANTITIES REQUIRED FOR THE REPAIR. CONTRACTOR TO FIELD VERIFY ALL MANUFACTURER'S MODELS AND QUANTITIES LISTED. REPORT ANY DISCREPANCIES TO THE ENGINEER.

3. ALL COMPONENTS SHOWN TO MEET ASSOCIATED CRITERIA OR ENGINEER APPROVAL EQUAL.

BRIDGE NO. 124134







REVISIONS						MARCO A. LARA, P.E. P.E. LICENSE NUMBER 78414 HARDESTY & HANOVER, LLC 5110 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DRAWN BY: PR: 06-24 CHECKED BY: MAL: 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE MCC MATERIALS LIST		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME	SHEET NO.	
1/25	PCR	UPDATED MATERIALS LIST				CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	B1-30			

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THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 6G05-23.004, F.A.C.

LIGHTING FIXTURE SCHEDULE			
TYPE	DESCRIPTION	LAMPS	MOUNTING
	INDUSTRIAL ENCLOSED, FLUORESCENT, WATERTIGHT, GASKETED, ACRYLIC LENS, STAINLESS STEEL LATCHES, 120V, 4 FT.	2-F40 WW-RS	SURFACE MOUNT CEILING
	OUTDOOR FLOODLIGHT, MH, CAST ALUMINUM HOUSING, POLYCARBONATE VANDAL SHIELD, WATERTIGHT, GASKETED, STAINLESS STEEL HARDWARE, 120V.	1-100W METAL HALIDE	POLE MOUNT WITH ADJUST. TILT/SWIVEL
	CEILING MOUNT, VAPOR TIGHT, CORROSION RESISTANT FIXTURE WITH JUNCTION BOX, POLYCARBONATE GLOBE AND GUARD, BRASS SCREW SHELL LAMPHOLDER AND 120V, 26W FLUORESCENT LAMP.	1-26W FLUOR-ESCENT	CEILING MOUNT
	EMERGENCY LIGHT WITH BATTERY PACK (90 MIN.), SELF-CONTAINED, FULLY AUTOMATIC, 120V.	2-15W HALOGEN	WALL MOUNT
	100 WATT, LUMINAIRE, FLAT GLASS FULL-CUTOFF NARROW TYPE 1 DISTRIBUTION, WIRED FOR 120 VOLT OPERATION, MOUNTING HEIGHT, 40 FEET ON HAPCO ALUMINUM POLE. TILT 10 DEGREES. HOLOPHANE MONGOOSE.	100 WATT	POLE MOUNT
	250 WATT, LUMINAIRE, FLAT GLASS FULL-CUTOFF NARROW TYPE 1 DISTRIBUTION, WIRED FOR 120 VOLT OPERATION, MOUNTING HEIGHT, 45 FEET ON HAPCO ALUMINUM POLE. TILT 10 DEGREES. HOLOPHANE MONGOOSE.	250 WATT	POLE MOUNT

GENERAL NOTES:

1. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL EQUIPMENT SPECIFICATION AND DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THE PROJECT. THESE MUST SPECIFICALLY INCLUDE:

- LUMINAIRE PHOTOMETRICS
- POLE STRENGTH CALCULATIONS
- ANCHOR BOLT SPECIFICATIONS AND BOLT CIRCLE DIAMETER

2. UTILITY OWNERS:

LEE COUNTY ELECTRIC COOPERATIVE
4980 BAYLINE DRIVE
NORTH FORT MYERS FL 33917
239-656-2300

3. POLES, LUMINAIRES AND BASES SHALL BE FABRICATED IN ACCORDANCE WITH ASSHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", AND SHALL HAVE BEEN TESTED BY FHWA APPROVED METHODS. CERTIFICATION FOR TESTS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.

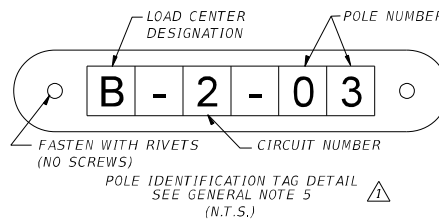
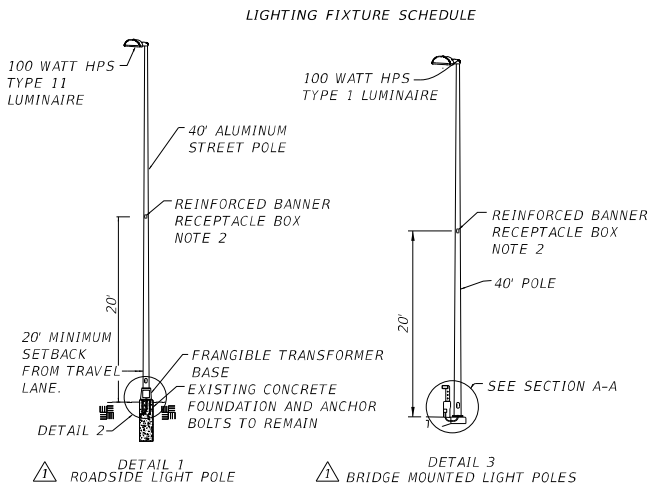
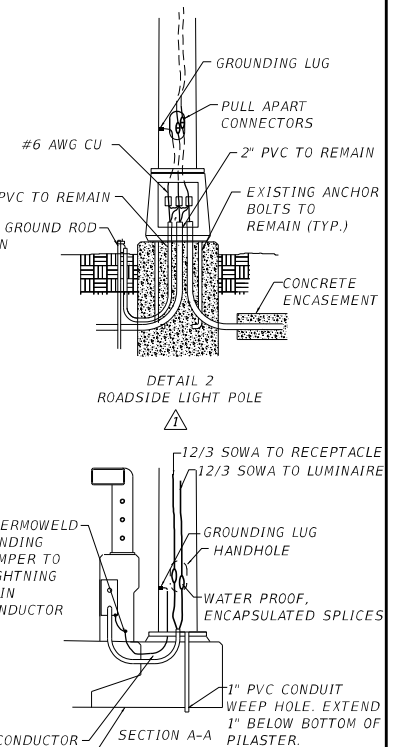
4. ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE AND THE STATE OF FLORIDA DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL COMPONENTS SHALL BE PROPERLY GROUNDED AND BONDED PER THE NEC REQUIREMENTS.

5. FURNISH AND INSTALL AN ALUMINUM IDENTIFICATION TAG ON EACH ROADWAY LIGHT POLE. TAGS SHALL BE 2"X12" IN SIZE WITH BLACK LETTERS ON YELLOW BACKGROUND, ATTACHED WITH RIVETS (NOT SCREWS). NUMBERS SHALL BE AS SHOWN ON THE POLE DATA SHEET. SEE POLE IDENTIFICATION TAG DETAIL. COST OF TAGS SHALL BE INCLUDED IN THE PAY ITEM FOR LIGHT POLE COMPLETE.

6. PULLING INSTRUCTIONS: CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURER'S REQUIREMENTS. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL BE LESS THAN RECOMMENDED BY THE NEC OR NESC FOR CABLE USED.

7. ALL ELECTRICAL EQUIPMENT SHALL BE NEW, OF CURRENT MODEL, FROM A SINGLE MANUFACTURER. UL LISTED OR LABELED, SUITABLE FOR THE INTENDED APPLICATION AND INSTALLED IN ACCORDANCE WITH NFPA 70 (NEC).

8. SPLICES AND CONNECTIONS SHALL BE MADE IN TRANSFORMER BASES AND EMBEDDED PULL BOXES. THE CONNECTION MADE AT THESE POINTS SHALL BE COMBINATION SPLICES AND FUSE HOLDER FEEDS TO LIGHTS AND RECEPTACLES SHALL BE PROTECTED WITH EDCO SHAI203 SURGE SUPPRESSORS.



POLE DATA

POLE NO.	CKT.	DIST. OR ARM	LUM. WATTAGE	M.H.	NOTES	TYPE
1	B-1	TOP	250	45'	NOTE 4	NO LONGER IN SERVICE
2	B-2	TOP	250	45'	NOTE 4	NO LONGER IN SERVICE
3	B-1	TOP	100	40'	NOTES 2 & 3	COMPLETE POLE
4	B-2	TOP	100	40'	NOTE 2	COMPLETE POLE
5	B-1	TOP	100	40'	NOTE 2	LUMINAIRE ONLY
6	B-2	TOP	100	40'	NOTE 2	LUMINAIRE ONLY
7	B-1	TOP	100	40'	NOTE 2	COMPLETE POLE
8	B-2	TOP	100	40'	NOTE 2	LUMINAIRE ONLY
9	B-1	TOP	250	45'	NOTE 2	LUMINAIRE ONLY

EXISTING PEDESTAL, ANCHOR BOLTS AND CONDUIT TO REMAIN

NOTES:

- FURNISH LIGHT FIXTURES WITH IN-KIND REPLACEMENTS.
 - PROVIDE 20A GFCI RECEPTACLE WITH SPRING LOADED COVER PLATE AND WEATHER PROOF ENCLOSURE FOR FULL TIME CONNECTED PLUG. CONNECT TO EXISTING CIRCUITS.
 - ROADSIDE POLE WITH FRANGIBLE, TRANSFORMER TYPE BASE.
 - DECOMMISSION AND DISCONNECT EXISTING CIRCUITS FOR ROADWAY LIGHT POLES 1 & 2 NO LONGER IN SERVICE.
- ROADWAY LIGHTING DESIGN CRITERIA:**
- | | |
|-------------------------------|--------------------|
| AASHTO ROADWAY CLASSIFICATION | LOCAL INTERMEDIATE |
| AVERAGE INTENSITY | 0.5 F.C. |
| UNIFORMITY RATIO AVG./MIN | 6:1 OR LESS |
| MAX./MIN RATIO | 10:1 OR LESS |
| WIND SPEED | 110 MPH |

BRIDGE NO. 124134

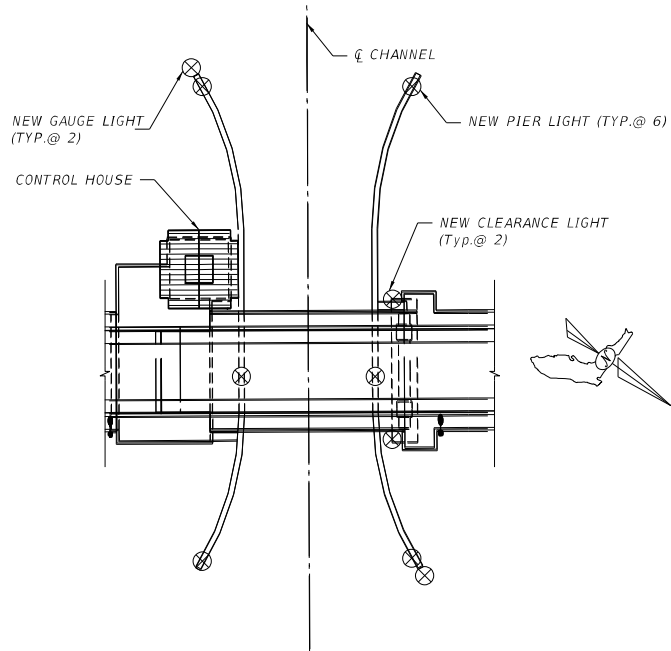
REVISIONS						DRAWN BY: PR: 06-24 CHECKED BY: MIL: 06-24 DESIGNED BY: PR: 06-24 CHECKED BY: MIL: 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE LIGHTING SCHEDULE	REF. DWS. NO. BE-11
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
1/25	PCR	ADDED NOTES, DETAILS, AND TABLES					CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	B1-35

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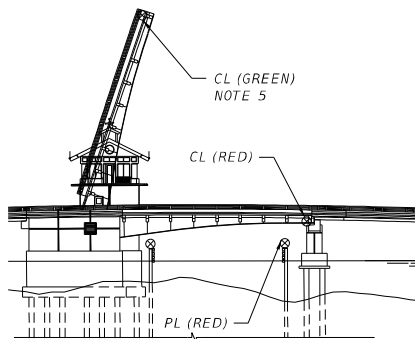
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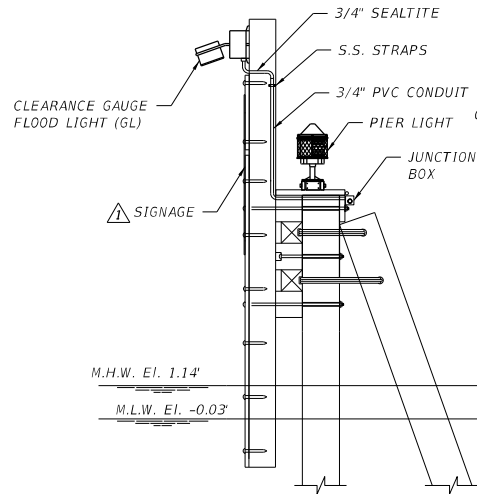
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PLAN

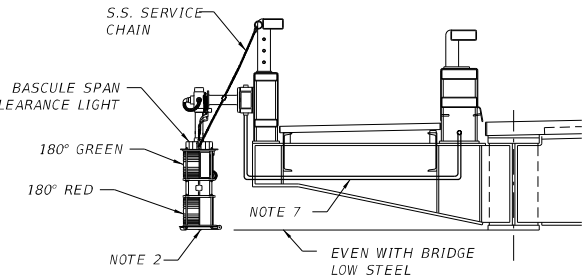


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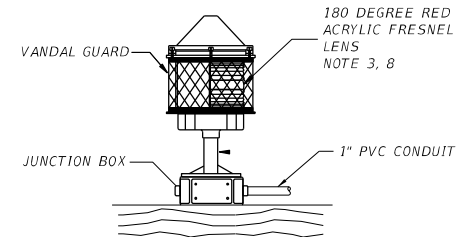


TYPICAL CONDUIT AND GAUGE LIGHT (GL)

(2 Locations)



CLEARANCE LIGHTS (CL)
(SOUTH SIDE LEAF SHOWN, NORTH SIDE SIMILAR)
(2 LOCATIONS)



PIER LIGHTS (PL)
(6 Locations)

NOTES:

1. COMPLY WITH CODE OF FEDERAL REGULATIONS, 33 NAVIGATION AND NAVIGABLE WATERS PART 118, BRIDGE LIGHTING AND OTHER SIGNALS.
2. REPLACE CL - CLEARANCE LIGHT RED 180° LENS, GREEN 180° LENS; LENS: 110 VOLT FIXTURES EQUIPPED WITH SHOCK RESISTANT LED LAMPS. APPROVED LAMPS ARE B&B ROADWAY 0177-LED-R AND 0177-LED-G OR APPROVED EQUAL. EQUIP WITH A PIVOT MOUNT AND A S.S. RETRIEVAL CHAIN. HANGER STEM SHALL BE LONG ENOUGH SO THAT LANTERN IN LOWERED POSITION HANGS NEAR BOTTOMS OF GIRDER AT THE TIP. LANTERN SHALL BE LATCHABLE IN DOWN & UP POSITION. APPROVED UNITS ARE B & B ROADWAY MS-66-SERIES AND MSC301-SERIES, RESPECTIVELY, OR EQUAL. ALL CLEARANCE LIGHTS SHALL MEET U.S. COAST GUARD REQUIREMENTS FOR VISABILITY.
3. REPLACE PL - RED LED LAMPS, TAMPER RESISTANT, CAST ALUM. END. APPROVED UNITS ARE B & B ROADWAY MS53-SERIES OR APPROVED EQUAL. LAMPS ARE B&B ROADWAY 0177-LED-R. PROVIDE TAMPER RESISTANT ACCESS HATCHES. ALL PIER LIGHTS SHALL MEET U.S. COAST GUARD REQUIREMENTS FOR VISABILITY.
4. REPLACE GL - CLEARANCE GAUGE FLOOD LIGHT - 35W HPS, 110V, WET LOCATION, DIE CAST ALUM. ENCL. CAST ALUM. J.B., HEAVY DUTY. APPROVED UNITS ARE B & B ROADWAY GL-35-115V OR APPROVED EQUAL.
5. REPLACE VERTICAL CLEARANCE GAUGE AND "CLEARANCE AT CENTER" SIGNS.

6. SHOCK RESISTANT LED LAMPS SHALL BE RATED FOR AN MTBF OF 100,000 HOURS. THEY SHALL CONSIST OF 48 INDIVIDUAL LED BEAMS ARRANGED IN FOUR TIERS. LAMP LENS SHALL BE UV POLYCARBONATE. CANDELA OUTPUT SHALL BE NOT LESS THAN 78 FOR RED AND 270 FOR GREEN. LAMP SHALL HAVE AN INTEGRAL SURGE SUPPRESSOR WITH A CLAMPING VOLTAGE RATING OF NOT LESS THAN 380V @ 2A. THE LAMP LENS AND TIERS SHALL BE FILLED WITH A SHOCK OBSORBING MATERIAL THAT IS OPTICALLY INERT. LAMPS SHALL HAVE BEEN TESTED FOR A MINIMUM OF SIX MONTHS IN MOVABLE BRIDGE APPLICATIONS.
7. PROVIDE SUBMITTAL TO INCLUDE STAINLESS STEEL MOUNTING HARDWARE AND BRACKETS. PROVIDE LOCATIONS. MOUNT CL FIXTURE 2'-0" MIN. TO 3'-0" MAX. FROM TIP OF LEAF. INSTALL 3/4" PGRS CONDUIT, PROVIDE PENETRATIONS.
8. REPLACE ALL CONDUIT, JUNCTION BOXES, MOUNTING SUPPORTS, FOR COMPLETE NAVIGATION LIGHTING SYSTEM.

BRIDGE NO. 124134

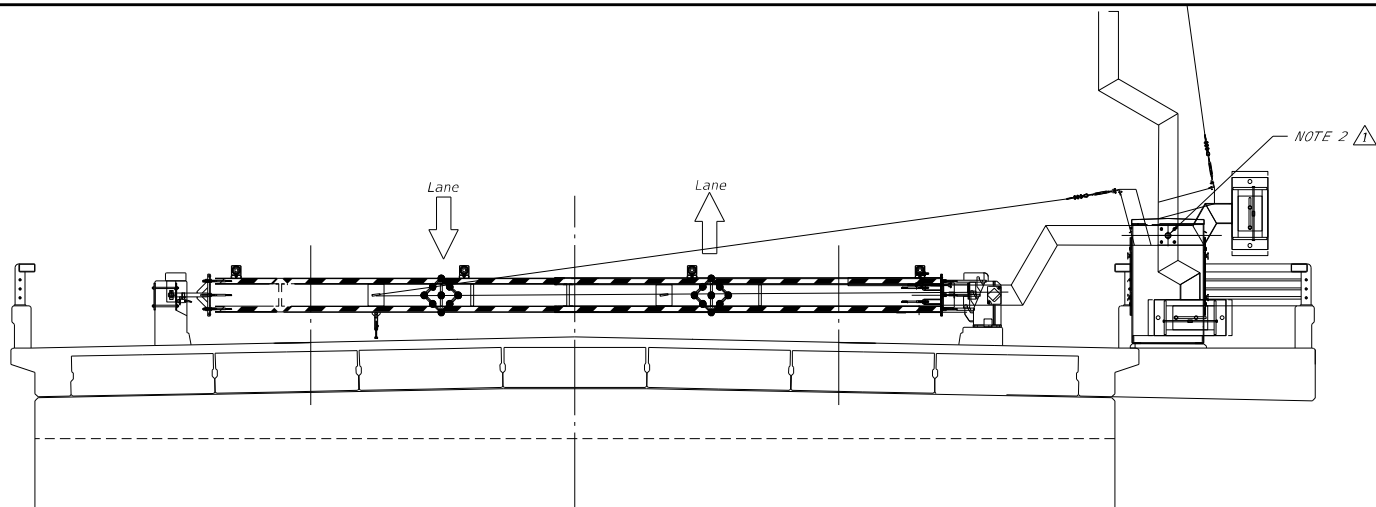
REVISIONS						DRAWN BY: PR: 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE NAVIGATION LIGHT DETAILS	REF. CWS, NO. BE-14
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION						
1/25	PCR	△ ADDED SIGNAGE TO GAUGE LIGHT DETAIL				CHECKED BY: MIL: 06-24	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B1-38
					MARCO A. LARA, P.E. P.E. LICENSE NUMBER 78414 HARDESTY & HANOVER, LLC 510 EISENHOWER BLVD, SUITE 310 TAMPA, FLORIDA 33634	DESIGNED BY: PR: 06-24	CR 78	LEE	453997-1-58-01 CN-1414-218		
						CHECKED BY: MIL: 06-24					

SUSERS

SDATES

STHES

SFILES



⚠ ELEVATION AT GATE

MAJOR PARTS LIST ⚠

QTY	STD PART #	DESCRIPTION
1	BR6-P048	CRANK, MAIN ARM SHAFT
1	BR6-P033	ROD, CONNECTING 1.250 4150 HR NEALLOY
1	BV4-P021	HAND CRANK, MANUAL OPERATION
1	BV4-P022	DRILL CRANK, MANUAL OPERATION
1	BRGRE-1.25-FRH	ROD END, RH SPHERICAL 1.25"-12
1	BRGRE-1.25-FLH	ROD END, LH SPHERICAL 1.25"-12
1	NUT1.2-12-JAM LH	1 1/4"-12 LH JAM NUT
2	NUT1.2-12-NY	1.25"-12 NUT W/ NYLON INSERT
1	BLT1.25-12X3.5	1.25"-12 X 3.5 HHCS (MAIN ARM CRANK)
12	BLTGA.5-13X1.25	1/2"-13 X 1.25 GALV. HHCS (BRG MTG PL)
3	BLT.5-13X1.5-5	1/2"-13 X 1.5 HHCS (MAIN ARM CRANK)
1	NUT1.2-12-JAM	1 1/4"-12 RH JAM NUT

NOTES:

- ⚠ 1. ADJUST AND REPAIR EXISTING PASSIVE ANCHORAGE. COORDINATE WITH INSTALLATION OF NEW BARRIER GATE ARM AND LIMIT SWITCH.
- ⚠ 2. BARRIER DOWN LIMIT SWITCH LOCATED ON TIP OF ARM TO SENSE ANCHOR.
3. MAKE ADJUSTMENTS TO EXISTING ROTARY LIMIT SWITCH FOR OPERATION OF BARRIER GATE. REFER TO AS-BUILT PLANS FOR LIMIT SWITCH DEVELOPMENT.
- ⚠ 4. REPLACE MAIN CRANK ARM SHAFT, CONNECTING ROD, AND ASSOCIATED COMPONENTS AS IDENTIFIED ON THE MAJOR PARTS LIST. BARRIER GATE HOUSING AND GATE ARM TO REMAIN.
5. FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REPLACED OR REPAIRED.

BRIDGE NO. 124134

REVISIONS						DRAWN BY: PR 06-24 CHECKED BY: MAL 06-24	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE BARRIER GATE DETAILS	REF. CWS, NO. BE-15
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
1/25	PCR	⚠ UPDATED DETAILS AND SCOPE OF WORK					CR 78	LEE	453997-1-58-01 CN-1414-218	MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS	SHEET NO. B1-39

MARCO A. LARA, P.E.
P.E. LICENSE NUMBER 78414
HARDESTY & HANOVER, LLC
5110 EISENHOWER BLVD, SUITE 310
TAMPA, FLORIDA 33634

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