

COMPONENTS OF CONTRACT PLANS SET
BRIDGE REPAIR PLANS

CITY OF TAMPA TRANSPORTATION AND STORMWATER SERVICES DEPARTMENT

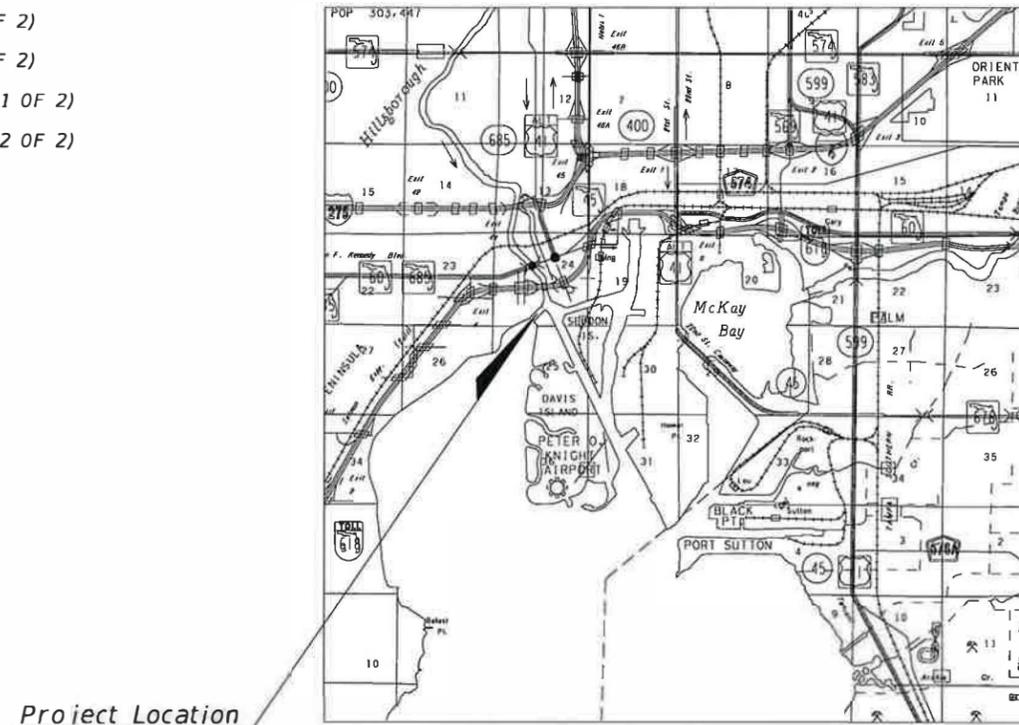
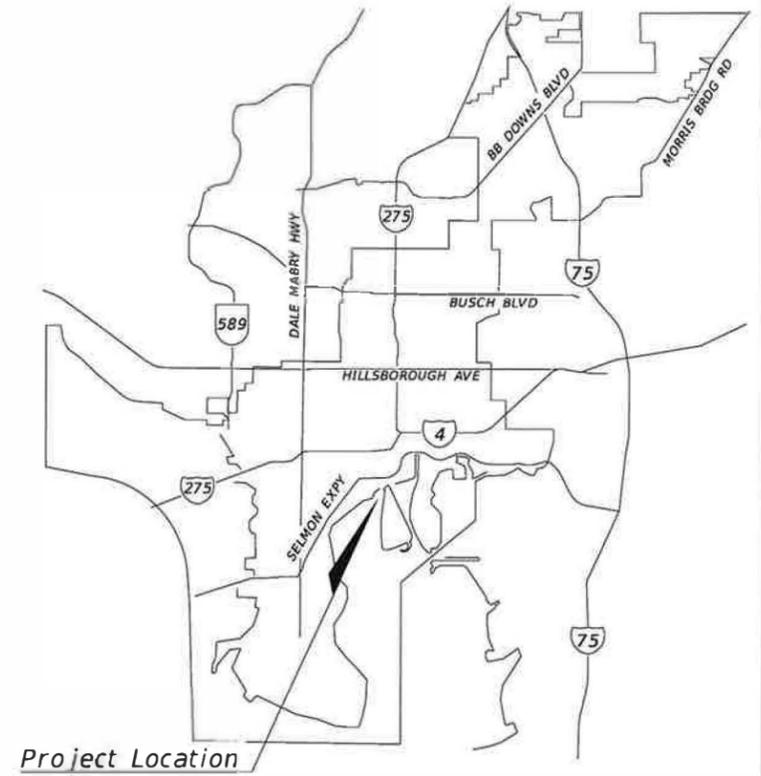
CONTRACT PLANS

OLD DAVIS ISLANDS BRIDGE OVER
UPPER HILLSBOROUGH BAY

BRIDGE NO. 105606

INDEX OF BRIDGE REPAIR PLANS

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10	UTILITY TROUGH REPAIR DETAILS (1 OF 2)
11	UTILITY TROUGH REPAIR DETAILS (2 OF 2)



ENGINEER OF RECORD:
JAMES A. APPLER, P.E.

P.E. NO.: 76076
COMPANY NAME: VOLKERT, INC.
ADDRESS: 1408 N. WESTSHORE BLVD., SUITE 600
CITY, STATE, ZIP: TAMPA, FLORIDA, 33607
CONTRACT NO.: E6C65
VENDOR NO.: 63-0247014
CERTIFICATE OF AUTHORIZATION NO.: 4641

CITY OF TAMPA PROJECT MANAGER:
ATLAF BUKHARI, P.E.

GOVERNING STANDARDS AND SPECIFICATIONS
FLORIDA DEPARTMENT OF TRANSPORTATION FY
2017-18 DESIGN STANDARDS AND REVISED
INDEX DRAWING AS APPENDED HEREIN, AND
FY 2017-18 STANDARD SPECIFICATIONS FOR
ROAD AND BRIDGE CONSTRUCTION, AS
AMENDED BY CONTRACT DOCUMENTS AND THE
CITY OF TAMPA.

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
19-C-00044	18	1

GENERAL NOTES

1. PROJECT LOCATION

BRIDGE NUMBER 105606 IS LOCATED BETWEEN DAVIS ISLAND BLVD & BAYSHORE BLVD OVER UPPER HILLSBOROUGH BAY AND CARRIES PLANT AVE OVER THE UPPER HILLSBOROUGH BAY.

2. DESIGN SPECIFICATIONS:

- A. FDOT STRUCTURES MANUAL, JANUARY 2018
- B. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION
- C. AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION

3. DESIGN LOADING AND METHOD:

LIVE LOADS: HL-93 FOR JACKING
HS-20 FOR CONNECTION AND MEMBER DESIGN
PEDESTRIAN LOADING: 75 PLF

DEAD LOADS: SIDEWALK 352 PLF
WALL 504 PLF

4. SCOPE OF WORK:

- A. CLEAN AND COAT ALL STRUCTURAL STEEL AS DETAILED IN THIS PLAN SET
- B. STRUCTURAL STEEL REPAIR OF BEAMS 10-2, 10-3, 10-4 & 10-5
- C. STRUCTURAL STEEL REPAIR OF EXISTING UTILITIES SUPPORT

5. CONSTRUCT STAGING AND WORK AREAS:

- A. CONSTRUCTION ACCESS IS LIMITED UNLESS APPROVED BY THE ENGINEER, DELIVERY OF MATERIAL AND EQUIPMENT WILL REQUIRE THE USE OF WATER BORNE CRAFT AND OFF SITE STAGING AREA PROVIDED BY THE CONTRACTOR.
- B. NO ADDITIONAL COMPENSATION WILL BE PAID FOR SPECIAL DELIVERY REQUIREMENTS OR THE OFF SITE STAGING AREA.

6. MISCELLANEOUS:

- A. POLLUTION PREVENTION CONTROL:
 - 1. PRIOR TO ANY WORK ACTIVITIES ON THE STEEL BEAMS, AND BEARING PLATES, A POLLUTION CONTROL PLAN MUST BE APPROVED BY THE ENGINEER.
 - 2. THE CONTRACTOR SHALL MAINTAIN APPROPRIATE SKIMMERS AND ABSORBENT MATERIALS AT THE WORK AREA FOR IMMEDIATE DEPLOYMENT IN THE EVENT OF AN ACCIDENTAL SPILL.
 - 3. THE CONTRACTOR SHALL TAKE ALL RESPONSIBLE PRECAUTIONS TO PREVENT UNAUTHORIZED MATERIALS FROM ENTERING THE WATERWAY. THE CONTRACTOR SHALL IMMEDIATELY REMOVE DEBRIS THAT FALLS IN WATER AND GROUND AT HIS OWN EXPENSE.
 - 4. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL CONSTRUCTION MATERIALS FROM THE PROJECT SITE.
 - 5. ALL WASTE MATERIALS COLLECTED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS. A CONTAINMENT AND DISPOSAL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO START OF WORK.

B. MAINTENANCE OF VEHICULAR TRAFFIC:

- 1. LANE CLOSURES ON THE ROADWAY AND DETOUR OF TRAFFIC IS NOT ALLOWED.

C. EXISTING STRUCTURES:

- 1. ALL DIMENSIONS SHOWN WERE TAKEN FROM ORIGINAL CONSTRUCTION PLANS AND REHABILITATION DRAWINGS, UNLESS OTHERWISE NOTED, AND MAY NOT REPRESENT THE AS-BUILT CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND CONDITIONS REQUIRED TO PERFORM THE REPAIR WORK PRIOR TO ORDERING MATERIALS AND STARTING THE REPAIR WORK. ANY DISCREPANCIES FROM THE DIMENSIONS SHOWN IN THE CONTRACT PLANS OR FAILURE BY THE CONTRACTOR TO VERIFY DIMENSIONS SHALL NOT BE JUSTIFICATION FOR ADDITIONAL COMPENSATION. SHOP DRAWINGS SHALL REFLECT ACTUAL FIELD DIMENSIONS.
- 2. EQUIPMENT OR MATERIAL SHALL NOT BE TIED TO OR PLACED UPON ANY PART OF THE EXISTING BRIDGE DURING CONSTRUCTION ACTIVITIES WITHOUT PRIOR APPROVAL OF THE ENGINEER

7. EXISTING BRIDGE PLANS:

- A. "BX" SHEETS ARE APPLICABLE EXISTING BRIDGE PLANS AND ARE PROVIDED FOR INFORMATION ONLY.

8. PAY ITEM NOTES:

- A. QUANTITIES ARE AN ESTIMATE. THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE QUANTITIES BEYOND THE LIMITS ESTABLISHED BY SECTION 4-3 OF THE FDOT STANDARD SPECIFICATIONS WITHOUT PRICE ADJUSTMENTS AS DIRECTED BY THE ENGINEER

9. STEEL PAINTING NOTES:

- A. THIS PROJECT REQUIRES THE REMOVAL & REPLACEMENT OF THE EXISTING COATINGS AS DETAILED IN THESE PLANS, INCLUDING EXPOSED SURFACES OF BEARING ASSEMBLIES. ALL WORK SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS AND THESE PLANS.
- B. HAZARDOUS MATERIALS HAVE BEEN IDENTIFIED IN THE EXISTING PAINT SYSTEMS. IN ADDITION TO THE REQUIREMENTS OF FDOT SPECIFICATIONS, THE CONTRACTOR SHALL ALSO IMPLEMENT ALL STANDARDS ASSOCIATED WITH OCCUPATION SAFETY AND HEALTH ADMINISTRATION (OSHA) REGARDING HEXAVALENT CHROMIUM, LEAD, CADMIUM AND ARSENIC.
- C. ERECT, USE AND MAINTAIN CONTAINMENT SYSTEMS AS DESCRIBED IN SSPC GUIDE 6. THE CONTAINMENT SHALL FACILITATE COLLECTION AND CLEAN-UP OF ALL PAINT, PAINT CHIPS, CLEANING AGENTS OR OTHER DEBRIS AS FOLLOWS:
 - 1. DURING PRE-CLEANING (PRESSURE WASHING) OPERATIONS, PROVIDE A MINIMUM CLASS 2W CONTAINMENT.
 - 2. DURING ABRASIVE BLAST CLEANING, PROVIDE A MINIMUM CLASS 1A CONTAINMENT.
 - 3. DURING COATING OPERATIONS, PROVIDE A CONTAINMENT SYSTEM PER REQUIREMENTS OF THE FDOT SPECIFICATIONS.

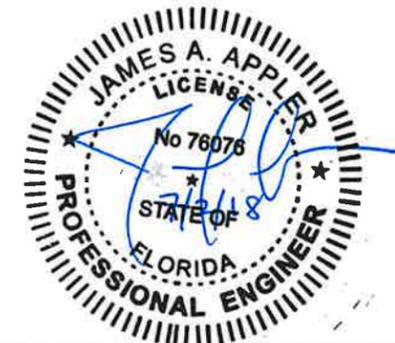
- D. PRE-CLEANING: PRE-CLEANING SHALL BE CONDUCTED TO REMOVE SURFACE CONTAMINANTS IN ACCORDANCE WITH FDOT SPECIFICATIONS 561.
- E. SURFACE PREPARATION SHALL BE SSPC SP 10.
- F. ALL COATINGS SHALL BE FROM THE APPROVED PRODUCTS LIST (APL).
- G. COATING MATERIALS:
 - 1. PRIMER COAT: ORGANIC ZINC RICH EPOXY
 - 2. INTERMEDIATE COAT: EPOXY MID COAT
 - 3. TOP COAT: ALIPHATIC POLYURETHANE
 - 4. CLEAR COAT: POLYURETHANE CLEAR COAT WITH DISSIPATING DYE, FASCIA BEAMS, OUTSIDE FACE AND BOTTOM SURFACE, ONLY
 - 5. STRIPE COATING AND CAULKING: IN ACCORDANCE WITH FDOT SPECIFICATIONS 560.
- H. ALL STRUCTURAL STEEL COATING SHALL TAKE PLACE AFTER STRUCTURAL STEEL HAS BEEN REPAIRED.
- I. FOR ADDITIONAL COATING REQUIREMENTS SEE THE SP561 OF THE CONTRACT DOCUMENTS.

10. STRUCTURAL STEEL NOTES:

- A. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50 UNLESS NOTED OTHERWISE.
- B. WELDING SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE ANSI/AASHTO/AWS D1.5 WELDING CODE. WELD MATERIAL SHALL BE E70XX.
- C. ANCHOR BOLTS SHALL BE ASTM A307. GALVANIZE BOLTS IN ACCORDANCE WITH ASTM F2329.
- D. CONNECTION BOLTS SHALL BE ASTM A325.
- E. A PRE-WORK MEETING IS REQUIRED PRIOR TO BEGINNING JACKING.
- F. AN INSPECTION BY THE ENGINEER IS REQUIRED PRIOR TO & AFTER JACKING HAS TAKEN PLACE.

11. PAY ITEM NOTES:

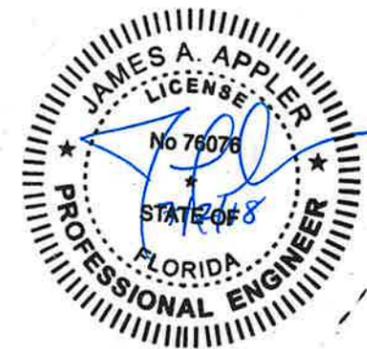
- A. ALL COSTS ASSOCIATED TO COMPLETE THE WORK AS SHOWN IN THESE PLANS AND LISTED IN THE PAY ITEMS, SHALL BE INCLUDED IN THE LISTED PAY ITEMS. NO EXTRA PAYMENT WILL BE ALLOWED FOR ITEMS INCIDENTAL TO THE WORK BEING COMPLETED.



ENGINEER OF RECORD: VOLKERT 1408 N. Westshore Blvd., Suite 600 Tampa, Florida 33607 Certificate of Authorization No. 4641 James A. Appler P.E. No. 76076	DRAWN: KBD DATE: 5/18 DESIGNED: EWB DATE: 5/18 CHECKED: EWB DATE: 5/18 REVIEWED: DATE: APPROVED: JAA DATE: 5/18 APPROVED: DATE: ND. DATE: REVISION: BY:	CITY OF TAMPA TRANSPORTATION AND STORMWATER SERVICES DEPARTMENT	GENERAL NOTES REPAIRS TO BRIDGE 105606 OVER UPPER HILLSBOROUGH BAY	FIELD BOOK ATLAS SHEET FILE NO. JOB NO. SCALE SHEET	INDEX NO 2
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SUMMARY OF STRUCTURE QUANTITIES - BRIDGE 105606

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY
400-140-2	NEOPRENE PAD REPLACEMENT, ABUTMENT	EA	4
460-1-1	STRUCT STEEL- REHAB, CARBON	LB	1304
460-1-13	STRUCTURAL STEEL REHAB- BOLTS, NUTS, WASHERS & PLATES	LB	128
460-112	ANCHOR BOLT REPLACEMENT	EA	10
561-1	COATING EXISTING STRUCTURAL STEEL	LS/TN	1/27.2



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**CITY OF TAMPA
 TRANSPORTATION AND STORMWATER
 SERVICES DEPARTMENT**

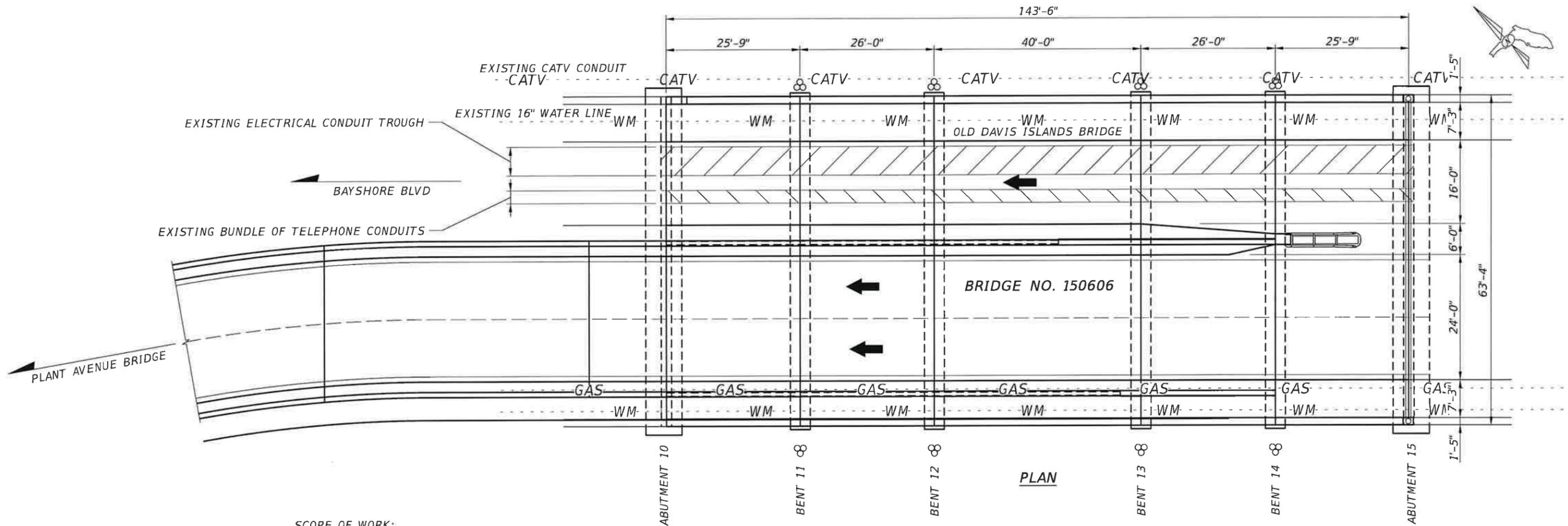
**SUMMARY OF QUANTITIES
 REPAIRS TO BRIDGE 105606
 OVER UPPER HILLSBOROUGH BAY**

FIELD BOOK	
ATLAS SHEET	
FILE NO.	INDEX NO.
JOB NO.	3
SCALE	
SHEET	

DATE

TIME

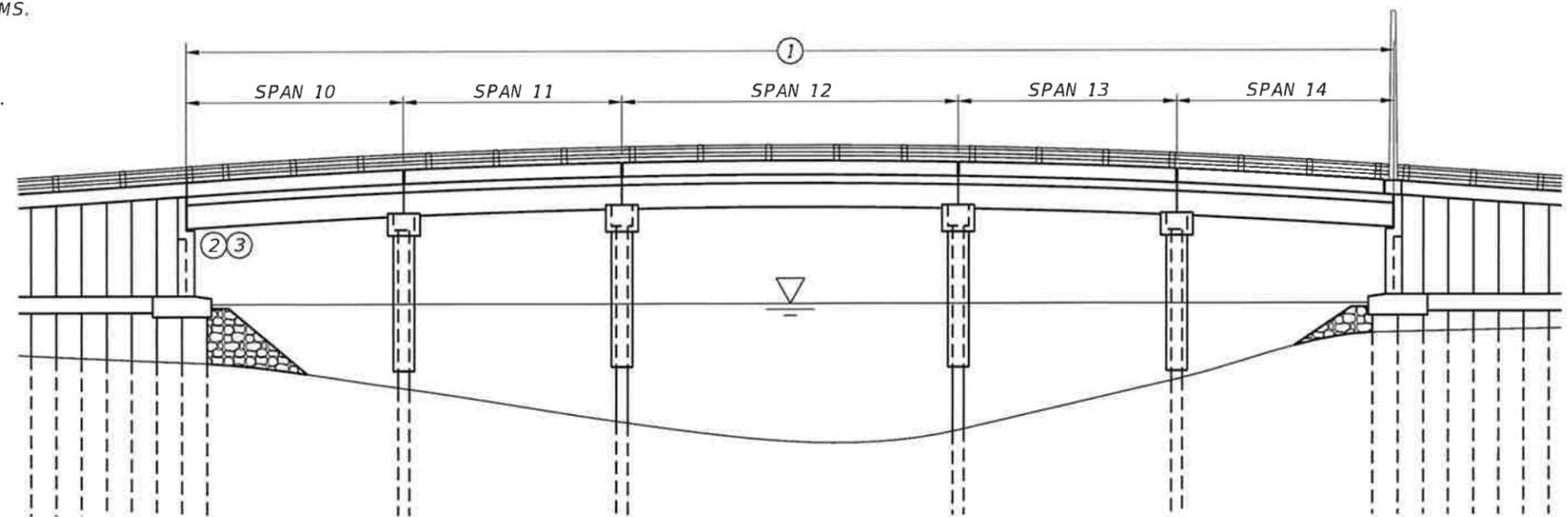
FILE



PLAN

SCOPE OF WORK:

- ① CLEAN AND COAT EXISTING STEEL BEAMS.
- ② STEEL GIRDER REPAIRS.
- ③ ELECTRICAL CONDUIT TROUGH REPAIRS.



ELEVATION
(LOOKING NORTHEAST)



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APPROVED	JAA	DATE	5/18		
APPROVED		DATE			

CITY OF TAMPA
TRANSPORTATION AND STORMWATER
SERVICES DEPARTMENT

PLAN AND ELEVATION
REPAIRS TO BRIDGE 105606
OVER UPPER HILLSBOROUGH BAY

FIELD BOOK	
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JOB NO.	4
SCALE	
SHEET	

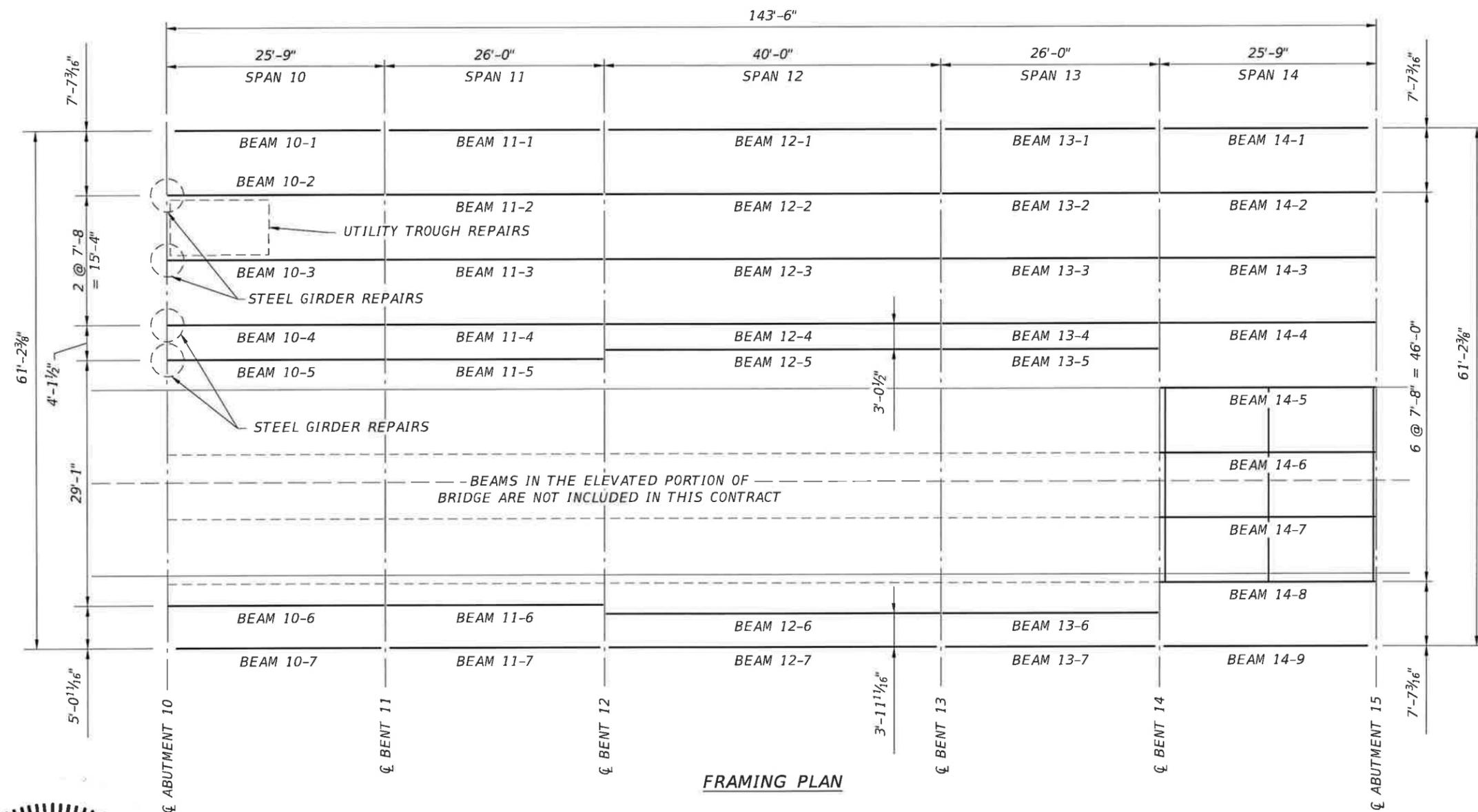
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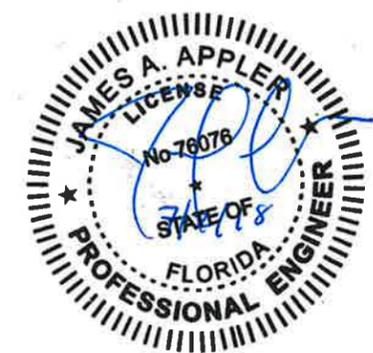
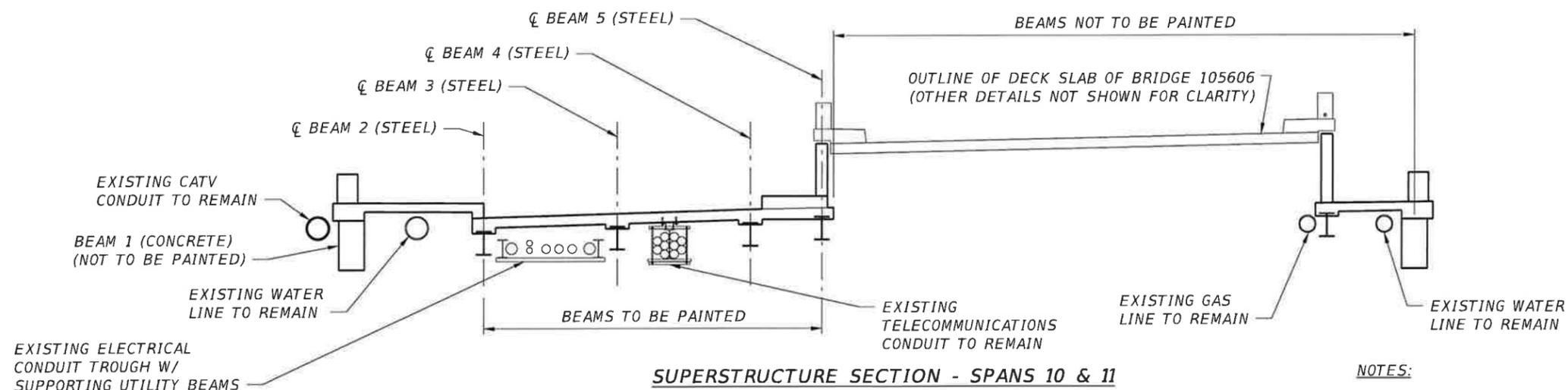
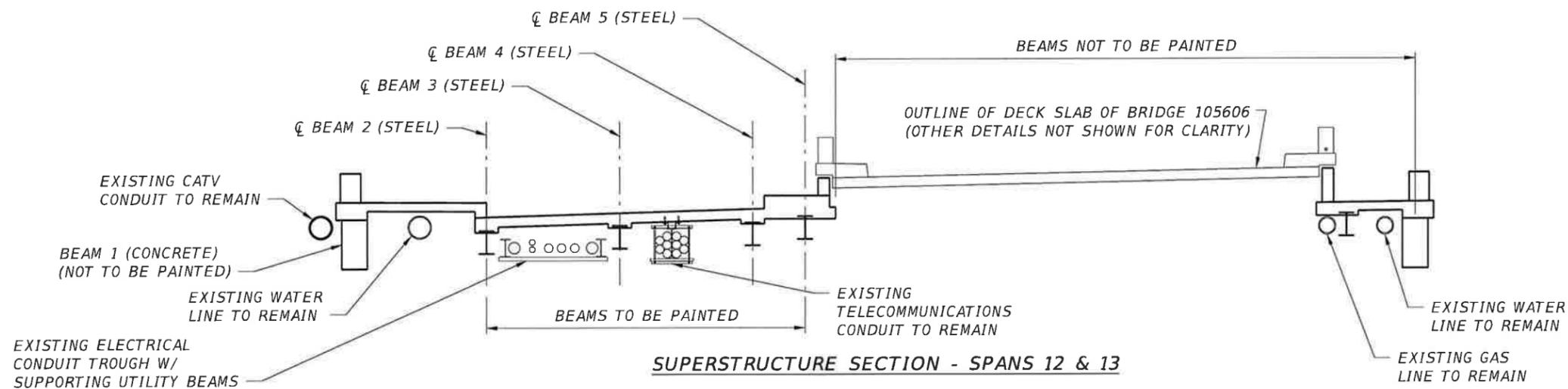
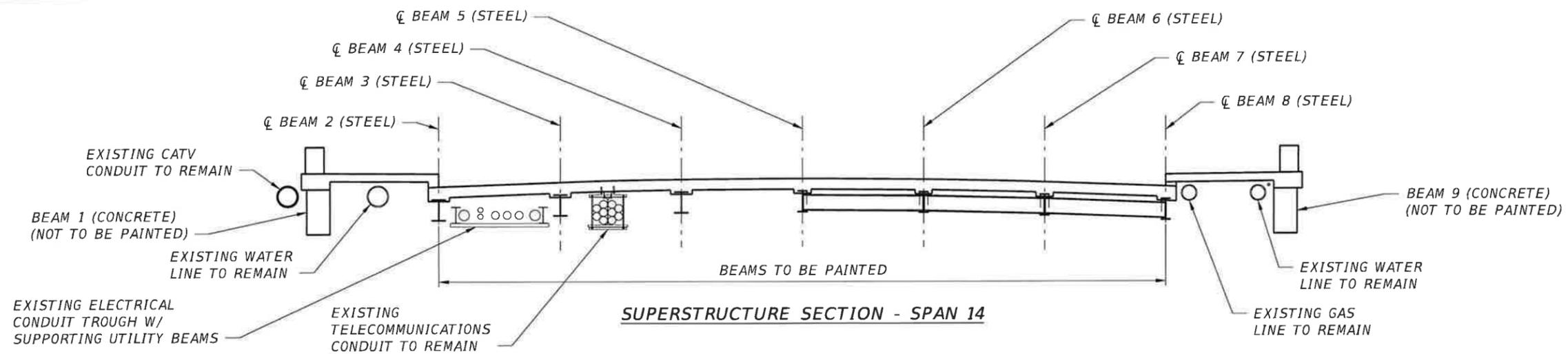
FRAMING PLAN



NOTES:

- 1. BEAMS 10-1, 11-1, 12-1, 13-1, 14-1, 10-7, 11-7, 12-7, 13-7 AND 14-9 ARE CONCRETE. ALL OTHER BEAMS ARE STEEL.

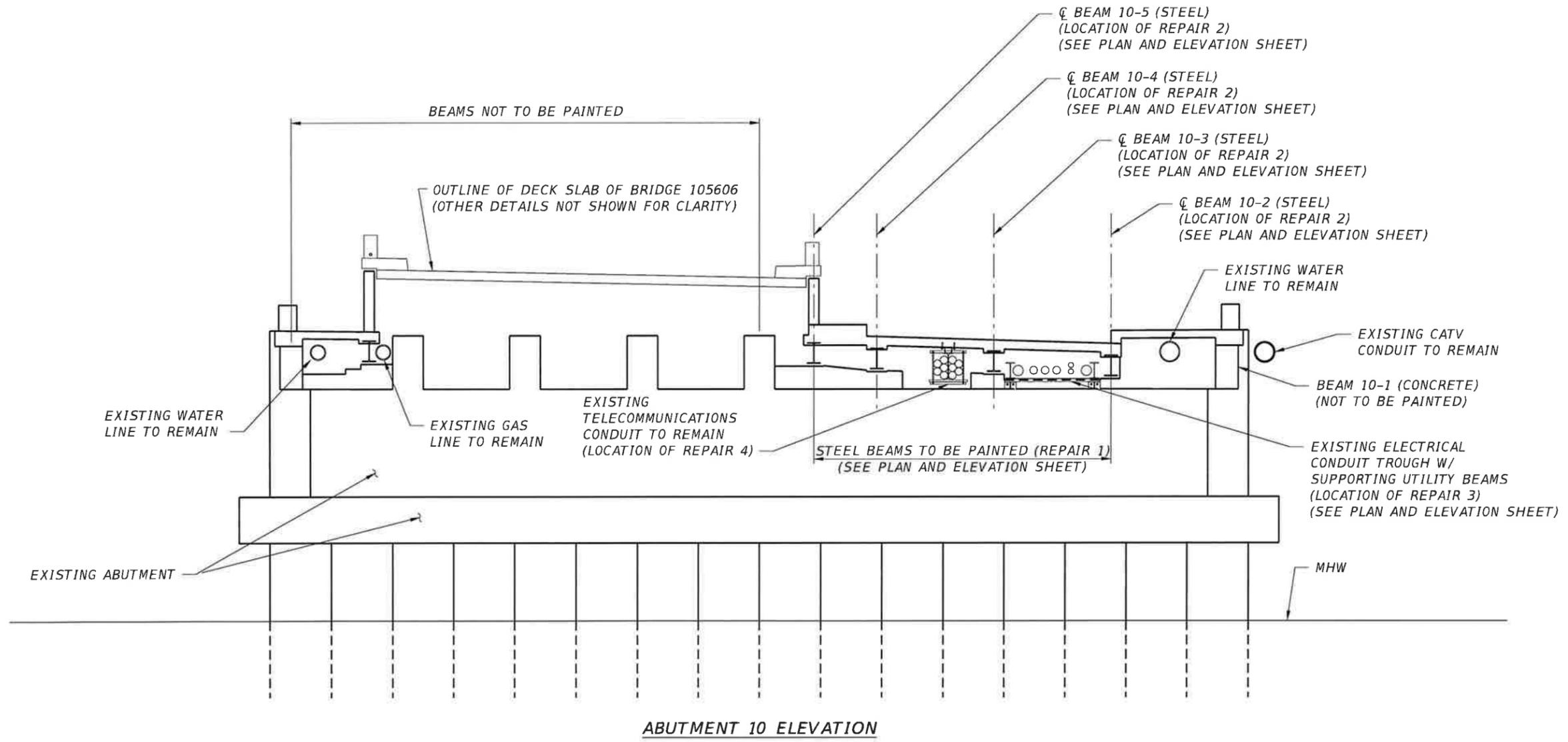
ENGINEER OF RECORD VOLKERT 1408 N. Westshore Blvd., Suite 600 Tampa, Florida 33607 Certificate of Authorization No. 4641 James A. Appler P.E. No. 76076	DRAWN: KBD DATE: 5/18 DESIGNED: EWB DATE: 5/18 CHECKED: EWB DATE: 5/18 REVIEWED: DATE: APPROVED: JAA DATE: 5/18 APPROVED: DATE: NO. DATE: REVISION: BY:	CITY OF TAMPA TRANSPORTATION AND STORMWATER SERVICES DEPARTMENT	FIELD BOOK ATLAS SHEET FILE NO. JOB NO. SCALE SHEET	FRAMING PLAN REPAIRS TO BRIDGE 105606 OVER UPPER HILLSBOROUGH BAY	INDEX NO. 5
	DATE *TIME*	*DATE* *TIME*	*DATE* *TIME*	*DATE* *TIME*	*DATE* *TIME*



NOTES:

1. FOR LOCATIONS OF REPAIRS AND OTHER INFORMATION NOT SHOWN, SEE PLAN AND ELEVATION, FRAMING PLAN AND ABUTMENT ELEVATION.
2. FOR INFORMATION ON PAINTING OF STEEL BEAMS, SEE GENERAL NOTES.

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	DATE *TIME*			JOB NO. 6 SCALE SHEET



NOTES:

1. FOR LOCATIONS OF REPAIRS AND OTHER INFORMATION NOT SHOWN, SEE PLAN AND ELEVATION, FRAMING PLAN AND SUPERSTRUCTURE SECTION.
2. FOR DETAILS OF LISTED REPAIRS, SEE REPAIR DETAILS SHEETS 8 THRU 11.
3. FOR INFORMATION ON PAINTING OF STEEL BEAMS, SEE GENERAL NOTES.

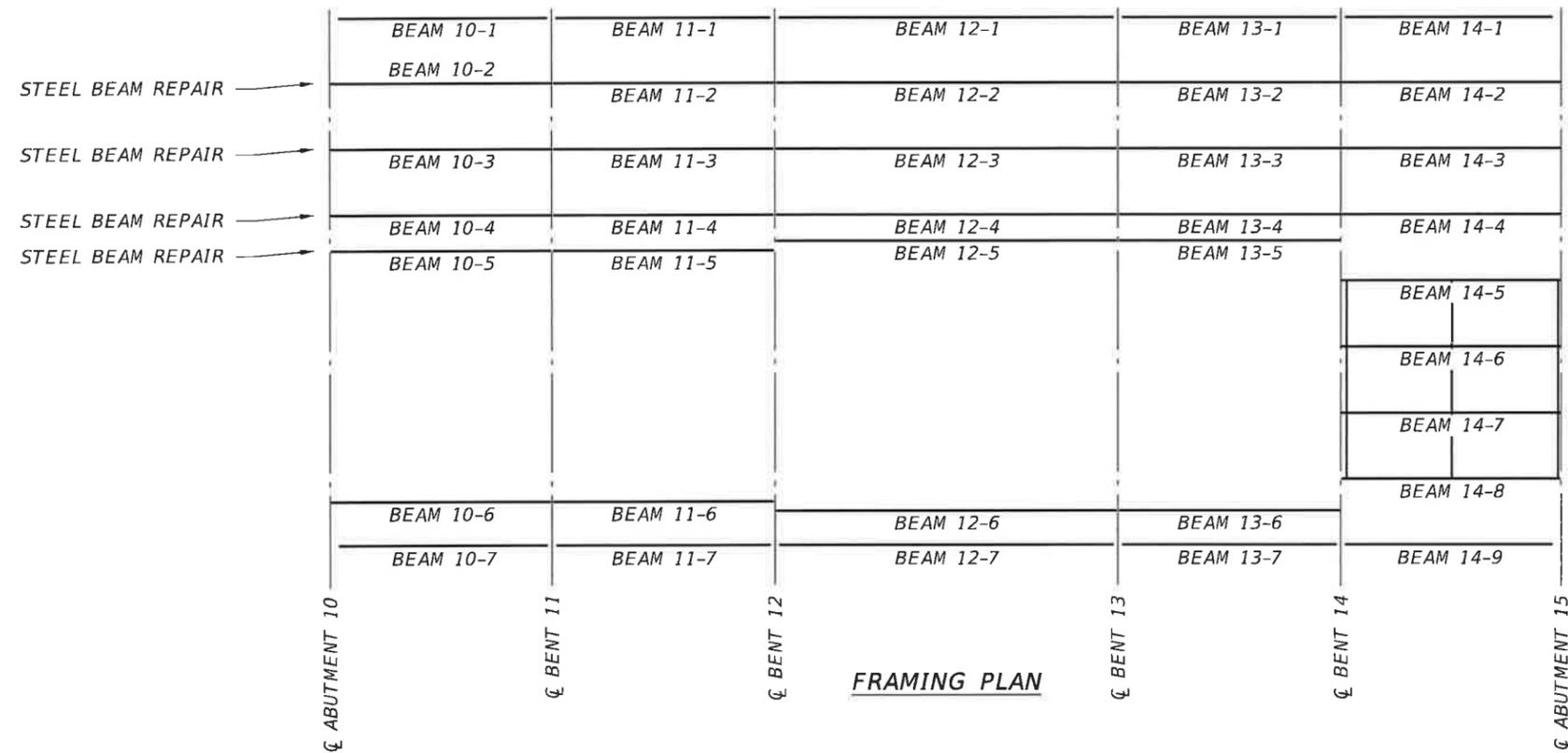
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CITY OF TAMPA
 TRANSPORTATION AND STORMWATER
 SERVICES DEPARTMENT

ABUTMENT ELEVATION
 REPAIRS TO BRIDGE 105606
 OVER UPPER HILLSBOROUGH BAY

FIELD BOOK:	
ATLAS SHEET:	
FILE NO.:	INDEX NO.
JOB NO.:	7
SCALE:	
SHEET:	

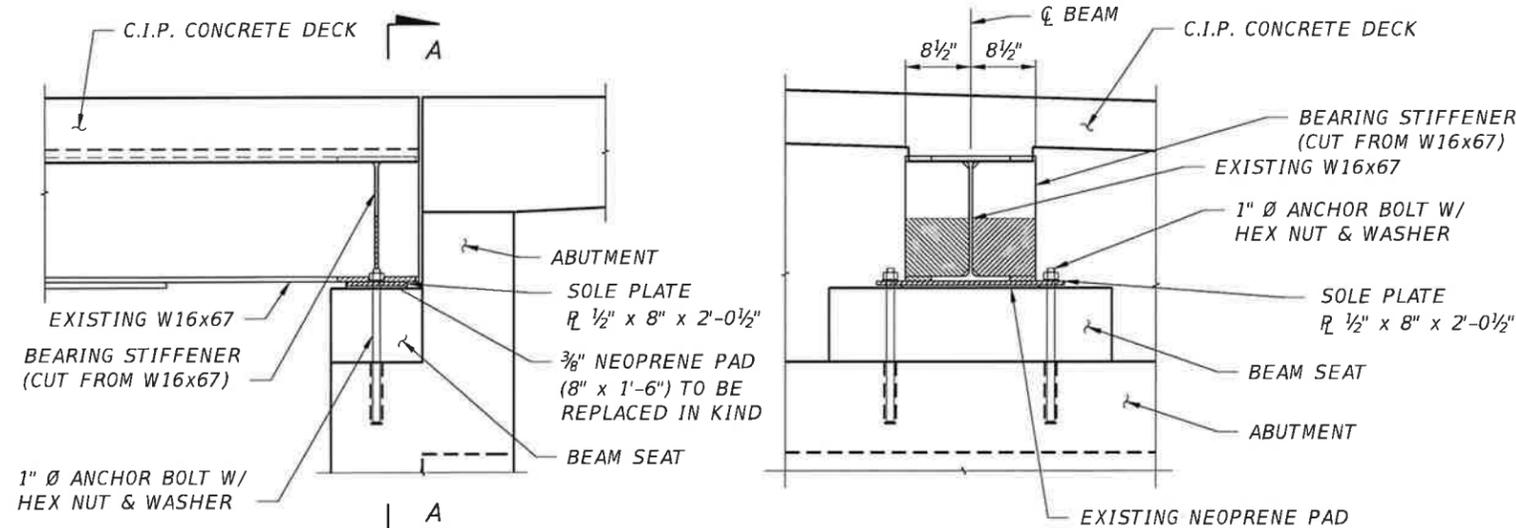


PAY ITEM 400-140-2 NEOPRENE PAD REPLACEMENT - ABUTMENT	
LOCATION	EA
BEAM 10-2 BEARING	1
BEAM 10-3 BEARING	1
BEAM 10-4 BEARING	1
BEAM 10-5 BEARING	1

PAY ITEM 460-1-1 STRUCTURAL STEEL - REHAB - CARBON	
LOCATION	WEIGHT
BEAM 10-2 BEARING	149.9 LBS
BEAM 10-3 BEARING	149.9 LBS
BEAM 10-4 BEARING	149.9 LBS
BEAM 10-5 BEARING	149.9 LBS

PAY ITEM 460-1-13 STRUCTURAL STEEL - REHAB - BOLTS, NUTS, WASHERS AND PLATES	
LOCATION	WEIGHT
BEAM 10-2 BEARING	15.0 LBS
BEAM 10-3 BEARING	15.0 LBS
BEAM 10-4 BEARING	15.0 LBS
BEAM 10-5 BEARING	15.0 LBS

PAY ITEM 460-112 ANCHOR BOLT REPLACEMENT	
LOCATION	EA
BEAM 10-2 BEARING	2
BEAM 10-3 BEARING	2
BEAM 10-4 BEARING	2
BEAM 10-5 BEARING	2



ELEVATION AT ABUTMENT 10

SECTION A-A

EXISTING CONDITION

= AREA OF DETERIORATION

NOTES:

- REPAIRS TO BE COMPLETED ON BEAMS 10-2, 10-3, 10-4 & 10-5. SEE FRAMING PLAN FOR LOCATIONS.
- ELEVATIONS AND SECTIONS SHOWN ARE FOR BEAMS 10-3 & 10-4. BEAMS 10-2 & 10-5 SIMILAR.



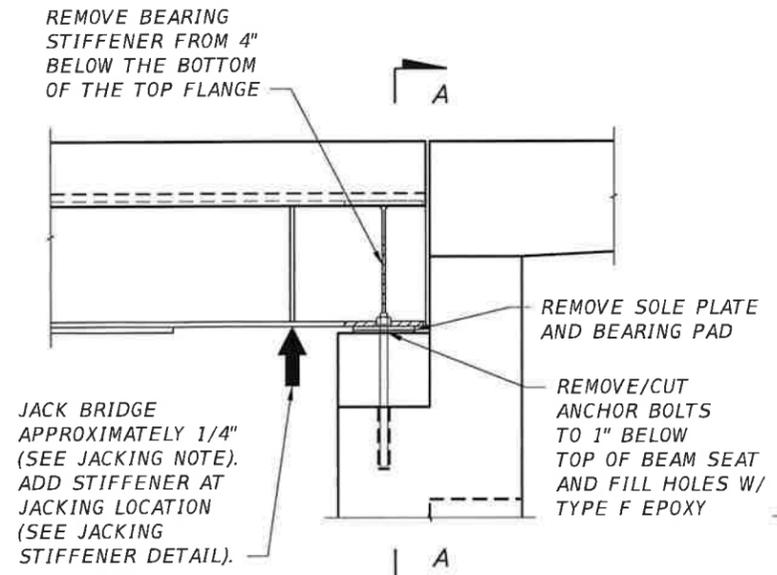
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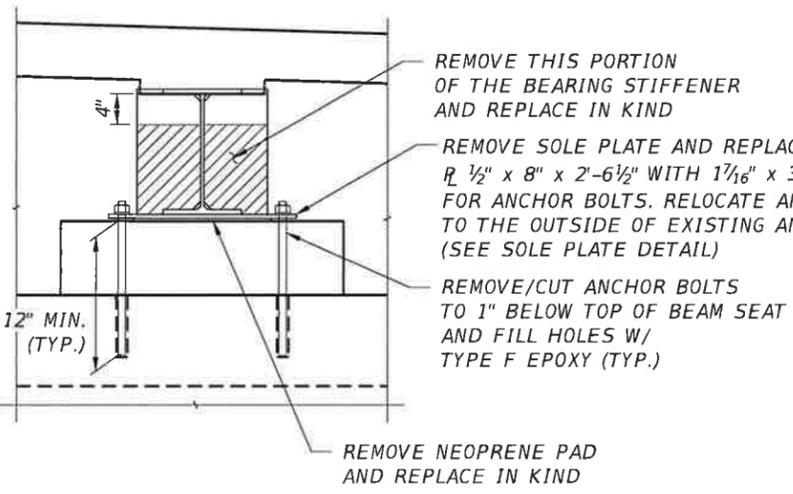
CITY OF TAMPA
TRANSPORTATION AND STORMWATER
SERVICES DEPARTMENT

BEARING REPAIR DETAILS (1 OF 2)
REPAIRS TO BRIDGE 105606
OVER UPPER HILLSBOROUGH BAY

FIELD BOOK	
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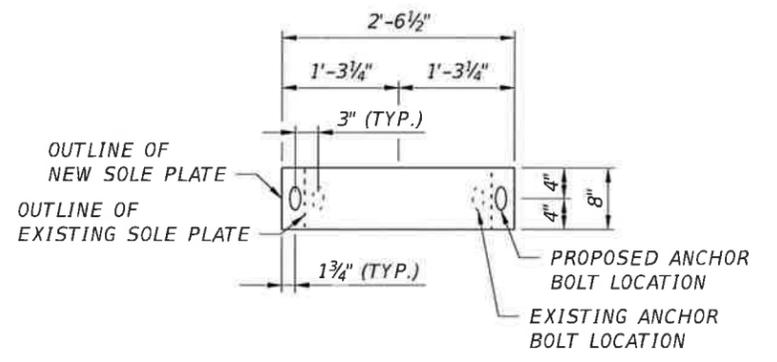
ELEVATION AT ABUTMENT 10



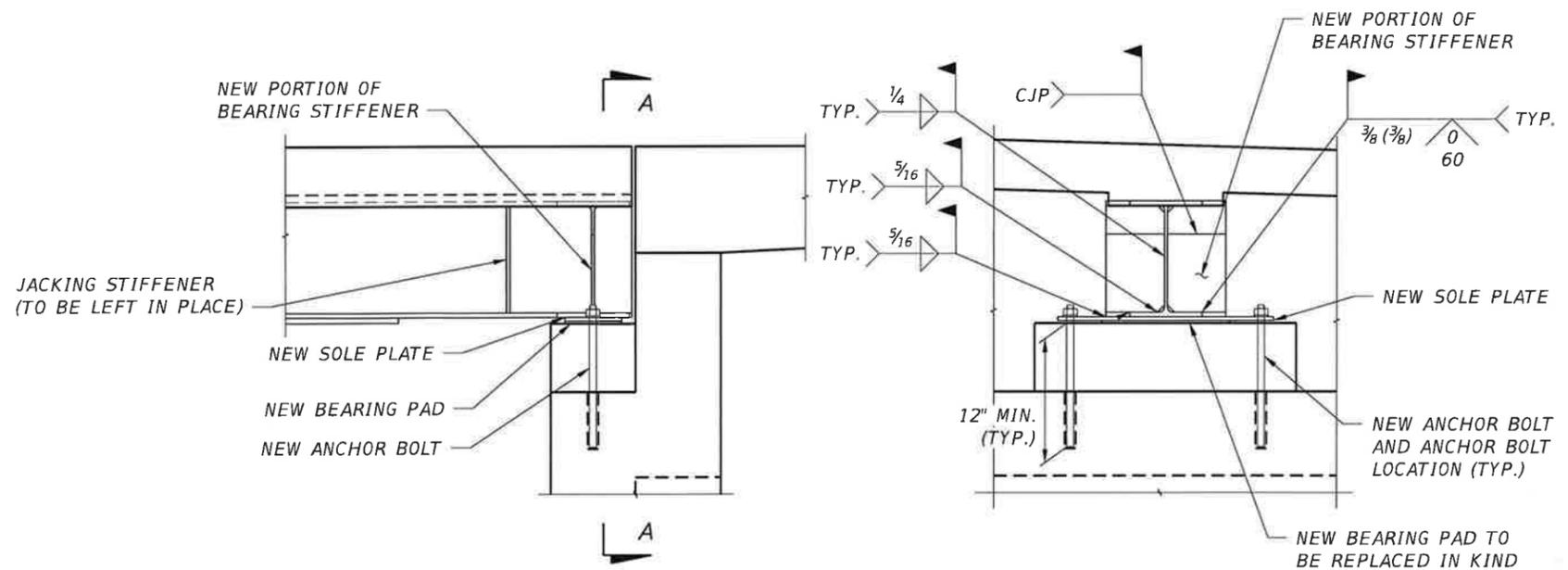
SECTION A-A

PROPOSED REPAIRS

JACKING NOTE:
 USE JACK CAPABLE OF LIFTING AND HOLDING BY LOCKING OFF JACK A WORKING LOAD OF 35 TONS AT EACH BEAM.
 PROVIDE FALSEWORK IN ACCORDANCE WITH A DESIGN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER
 REGISTERED IN FLORIDA TO SUPPORT THIS LOAD AT EACH BEAM. LIVE LOAD MAY REMAIN ON BRIDGE DURING JACKING.



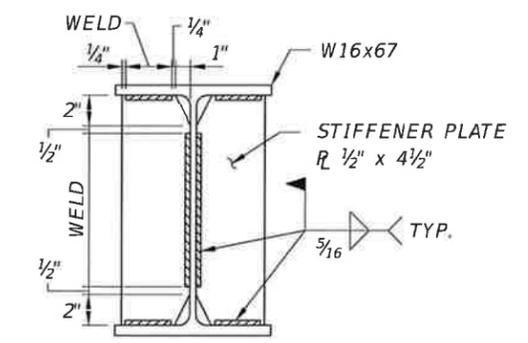
SOLE PLATE DETAIL
(PLAN VIEW)



ELEVATION AT ABUTMENT 10

SECTION A-A

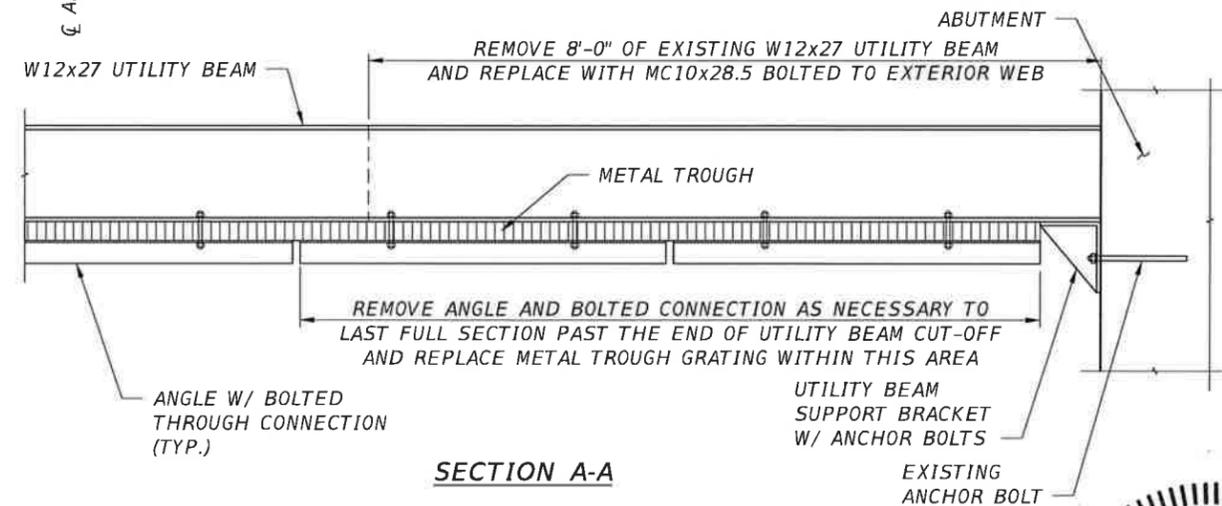
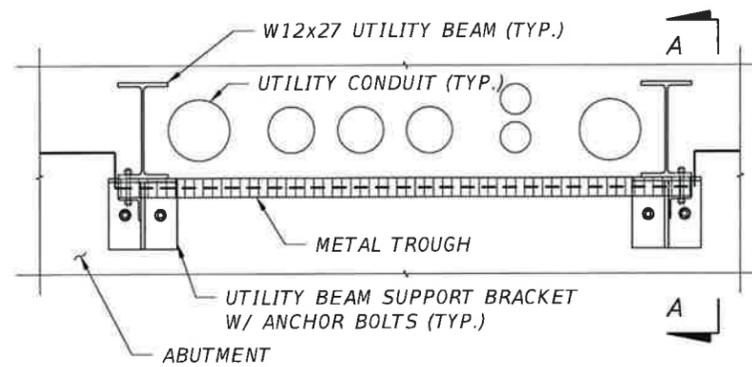
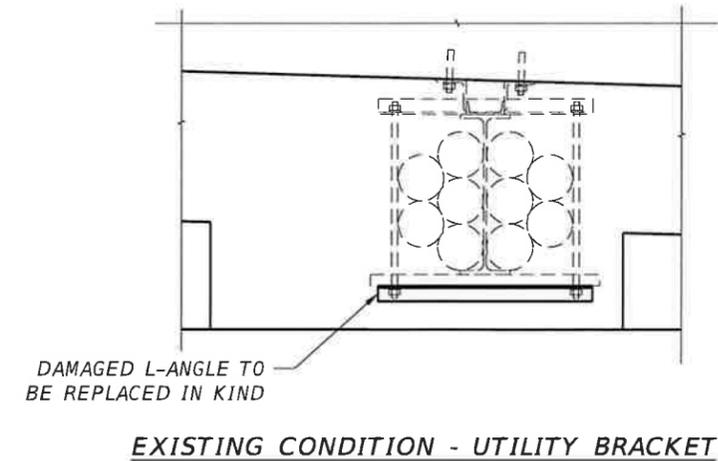
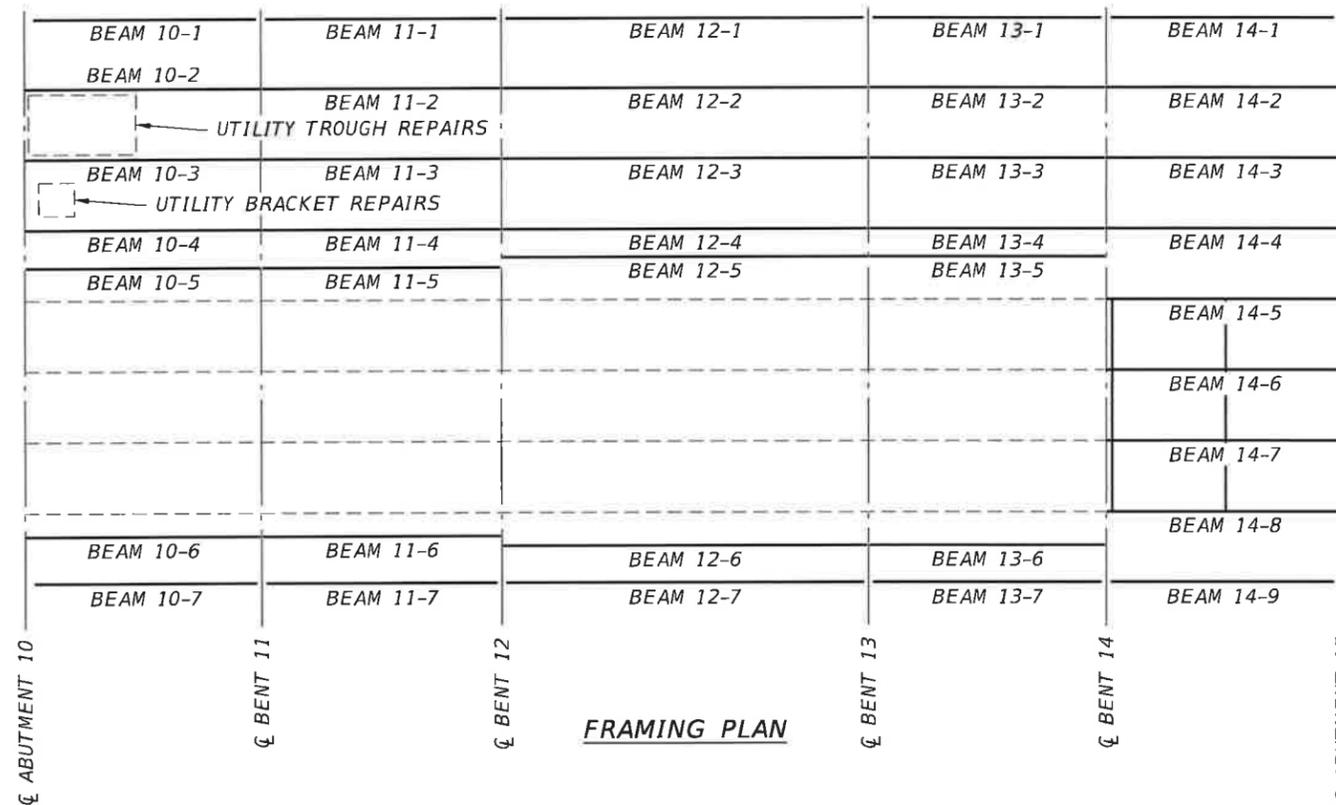
FINAL CONDITION



JACKING STIFFENER DETAIL



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	DATE: TIME:			9

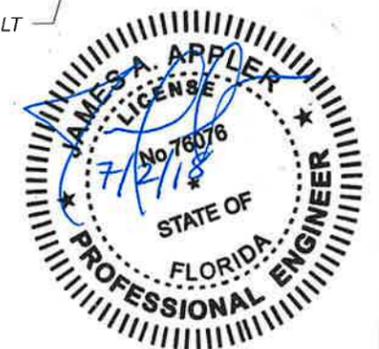


EXISTING CONDITION - UTILITY TROUGH

PAY ITEM 460-11 STRUCTURAL STEEL - REHAB - CARBON	
LOCATION	WEIGHT
UTILITY SUPPORT BEAM	370.4 LBS
GRATING	256.0 LBS
SUPPORT BRACKET	50.0 LBS
UTILITY BRACKET	28.2 LBS

PAY ITEM 460-13 STRUCTURAL STEEL - REHAB - BOLTS, NUTS, WASHERS AND PLATES	
LOCATION	WEIGHT
UTILITY SUPPORT BEAM	67.6 LBS

PAY ITEM 460-112 ANCHOR BOLT REPLACEMENT	
LOCATION	EA
SUPPORT BRACKET	2



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CITY OF TAMPA
 TRANSPORTATION AND STORMWATER
 SERVICES DEPARTMENT

UTILITY TROUGH
 REPAIR DETAILS (1 OF 2)
 REPAIRS TO BRIDGE 105606
 OVER UPPER HILLSBOROUGH BAY

FIELD BOOK:	
ATLAS SHEET:	
FILE NO.:	INDEX NO.
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SCALE:	
SHEET	10

