

MECHANICAL SCOPE OF WORK

THE SCOPE OF WORK OF THIS PROJECT SHALL INCLUDE BUT NOT BE LIMITED TO:

1. FIELD SURVEY AND VERIFICATION
- a.

THE CONTRACTOR SHALL PERFORM A FIELD SURVEY TO DETERMINE ALL EXISTING DIMENSIONS OF THE RAMP AND APPROACHES TO LOCATE ALL MECHANICAL EQUIPMENT TO BE REPAIRED OR REPLACED. THE FIELD SURVEY SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM RAMP MECHANICAL SYSTEM REPAIR PAY ITEM.
2. HYDRAULIC EQUIPMENT
- a.

REPLACEMENT OF CORRODED HYDRAULIC FITTINGS AND TUBING.

b.

REPLACEMENT OF CORRODED HYDRAULIC TUBING SUPPORTS WITH SECTION LOSS EXCEEDING 20%.

c.

FLUSHING OF THE HYDRAULIC SYSTEM.

d.

REPLACEMENT OF HYDRAULIC FLUID FILTERS.
3. LUBRICATION EQUIPMENT
- a.

SUPPORTING AND RE-ROUTING OF ERRANT GREASE LINES.

b.

INSTALLATION OF LUBRICATION LINE MANIFOLD AND SUPPORT.

GENERAL MECHANICAL NOTES

SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS, INFORMATION, AND REQUIREMENTS RELATED TO THE WORK INDICATED ON THESE PLANS.

MODEL NUMBERS AND DETAILS OF STANDARD COMPONENTS ARE BASED ON MANUFACTURERS CATALOG DATA CURRENT TO THE TIME THE DRAWINGS WERE PREPARED. THE MODELS SPECIFIED ARE ONLY TO ESTABLISH A STANDARD FOR QUALITY AND TO DEFINE PERFORMANCE REQUIREMENTS. EQUIVALENT MODELS FROM OTHER MANUFACTURERS MAY BE SUBSTITUTED AT THE OPTION OF THE CONTRACTOR AND WITH THE APPROVAL OF THE ENGINEER.

ALL FASTENER SIZES SHALL BE VERIFIED. FASTENERS SHALL BE TENSIONED IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTION 440-8.

ALL HOLES SHALL BE DRILLED FULL SIZED UNLESS NOTED OTHERWISE.

ALL HARDWARE NOTED AS STAINLESS STEEL (SS) SHALL BE TYPE 316.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE AND VERIFY THE RELATIONSHIP AND ASSEMBLY OF ALL PARTS FOR A COMPLETE WORKING SYSTEM. ALL REQUIRED MACHINING, RIGGING, LUBRICATION, PAINTING, TESTING AND ASSEMBLY SHALL BE CONSIDERED PART OF THE WORK.

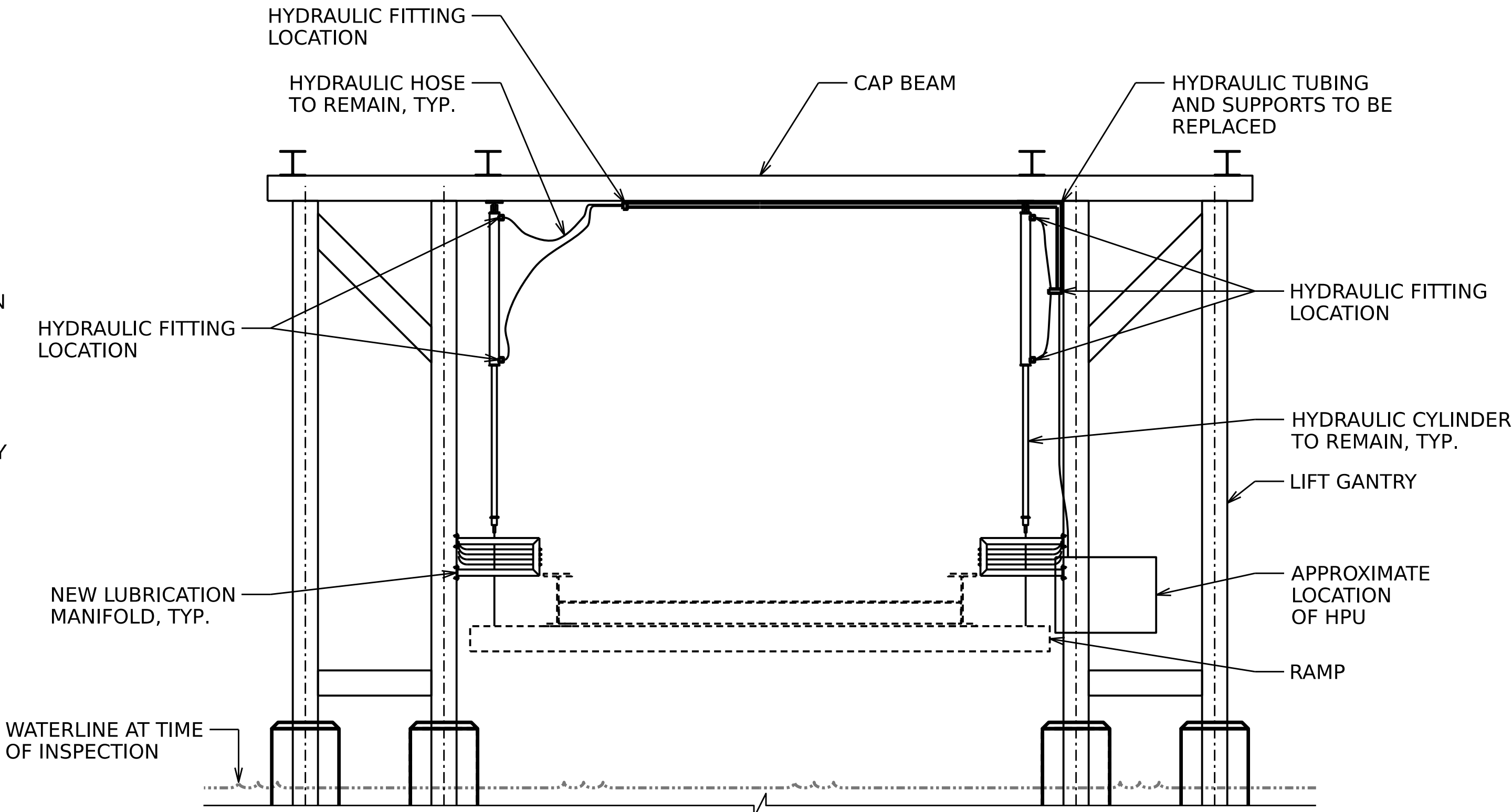
ALL WORK SHALL BE DONE WITH NO INTERFERENCE TO FACILITY OPERATIONS UNLESS AUTHORIZED BY THE DEPARTMENT IN ADVANCE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING RAMP OPERATIONS WITH NCDOT FOR ALL WORK THAT REQUIRES SHUT DOWN OF THE MECHANICAL OPERATING SYSTEMS (EG. HYDRAULIC TUBE AND FITTING REPLACEMENT). THE BRIDGE CAN BE MANUALLY OPERATED VIA ELECTRIC HOISTS CURRENTLY ON-SITE. OPERATION VIA ELECTRIC HOISTS SHALL BE COORDINATED WITH THE DEPARTMENT INCLUDING THE NUMBER AND DURATION OF ALL MECHANICAL SYSTEM OUTAGES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MINIMIZING LEAKAGE THROUGHOUT THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL DOCUMENT THE HPU FLUID LEVEL PRIOR TO THE START OF WORK AND SHALL BE RESPONSIBLE FOR MAINTAINING THAT LEVEL OR BETTER FOR THE DURATION OF THE WORK.

THE CONTRACTOR SHALL PROVIDE A SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN FOR REVIEW AND APPROVAL.

AFTER COMPLETION OF THE MECHANICAL WORK AND PRIOR TO FINAL ACCEPTANCE, THE HYDRAULIC FLUID SHALL BE TESTED AND CLEANED TO A MINIMUM CLEANLINESS LEVEL OF ISO 16/14/12 AND ALL FILTERS FOR THE RAMP HYDRAULIC SYSTEM SHALL BE REPLACED AND SHALL HAVE THE REPLACEMENT DATE CLEARLY INDICATED ON THE FILTER.



HYDRAULIC REPAIRS ELEVATION

LOOKING SOUTH
SEE HYDRAULIC REPAIRS DETAIL SHEET FOR INFORMATION ON REPAIR REQUIREMENTS
LOCATIONS OF EXISTING HYDRAULIC EQUIPMENT SHOWN ARE APPROXIMATE

ESTIMATED SUMMARY OF QUANTITIES

HYDRAULIC TUBING	LIN. FT.: 50
HYDRAULIC FITTINGS	NO.: 10

ESTIMATED QUANTITIES ARE PROVIDED FOR BIDDING PURPOSES. ACTUAL QUANTITIES SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE INCLUDED WITHIN THE LUMP SUM PAY ITEM "RAMP MECHANICAL REPAIR WORK".

PROJECT NO. **15BPR.164**
BEAUFORT COUNTY
TERMINAL: **BAYVIEW**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

MECHANICAL NOTES

REVISIONS						SHEET NO. M2-01
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	--	--	3	--	--	TOTAL SHEETS 34
2	--	--	4	--	--	



Stephen Grabowski



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

DES BY: C. MORRIS	DATE : 11/2025	DWG BY: B. PETERSON	DATE : 11/2025
DES CHK: S. GRABOWSKI	DATE : 11/2025	CHK BY: S. GRABOWSKI	DATE : 11/2025