



TURNING MACHINERY REHABILITATION NOTES:

- FOR A GENERAL DESCRIPTION OF WORK FOR EACH OF THE COMPONENTS SHOWN ON THIS SHEET, PLEASE REFER TO THE TURNING MACHINERY TABLE SHOWN ON SHEET NO. M-6.
- THE CONTRACTOR SHALL PROVIDE AN AUXILIARY OPERATING SYSTEM THAT SHALL FUNCTION TO OPEN AND CLOSE THE SWING SPAN WHILE THE TURNING MACHINERY IS BEING REHABILITATED. THE SUGGESTED SYSTEM MAY REQUIRE STAGING OF THE RACK REPLACEMENT EFFORT TO MAINTAIN OPERABILITY OF THE SWING SPAN. AFTER THE REHABILITATION EFFORT IS COMPLETED, THE SYSTEM SHALL REMAIN AND BE USED IN PLACE OF THE ORIGINAL CAPSTAN.
- IN GENERAL, THE REHABILITATION DESIGN OF THE TURNING MACHINERY INCLUDES IN-KIND REPLACEMENT OF ORIGINAL COMPONENTS, REHABILITATION OF ORIGINAL COMPONENTS AND NEW COMPONENTS. FOR IN-KIND REPLACEMENT AND REHABILITATION OF ORIGINAL COMPONENTS, THE CONTRACTOR SHALL BASE HIS/HER SHOP DRAWINGS OFF THE ORIGINAL SHOP DRAWING DETAILS. THE CONTRACTOR SHALL ALSO FIELD VERIFY THE ACCURACY OF THE ORIGINAL SHOP DRAWINGS FOR THESE COMPONENTS AND UPDATE HIS/HER SHOP DRAWINGS AS NEEDED TO REFLECT THE AS-BUILT CONDITION.
- ALL IN-KIND REPLACEMENT, REHABILITATED AND NEW COMPONENTS MAKING UP THE TURNING MACHINERY ASSEMBLY SHALL BE PROVIDED WITH NEW SHIMS AND HIGH STRENGTH HARDWARE, UNLESS OTHERWISE SHOWN OR REQUIRED WITHIN THE SPECIFICATIONS.
- PRIOR TO REPLACING RACK SECTIONS, THE CONTRACTOR SHALL CONFIRM THAT EXISTING EMBEDDED RACK LUGS, ASSOCIATED HARDWARE AND EXISTING ANCHOR BOLTS REMAIN IN SATISFACTORY CONDITION. ANY SIGNS OF SECTION LOSS, DETERIORATION OR OTHER FINDINGS THAT MIGHT AFFECT PROPER INSTALLATION AND SERVICE OF NEW RACK SECTIONS SHALL BE REPORTED TO THE ENGINEER. THE ENGINEER MAY REQUIRE REPLACEMENT OF ANY EXISTING MECHANICAL ELEMENT OR SUPPORT DEEMED UNACCEPTABLE AS A RESULT OF THIS INSPECTION. THE ENGINEER SHALL BE THE FINAL JUDGE OF A COMPONENTS CONDITION.
- REPLACEMENT RACK SECTIONS SHALL BE INSTALLED SUCH THAT THEIR ENDS FULLY MATE, THEY FORM A CONCENTRIC CIRCLE AROUND THE EXISTING CENTER PIVOT, THEIR TOOTH FACES REMAIN VERTICAL, THEIR TOP SURFACES LEVEL AND THEIR ELEVATIONS CONSISTENT. THE FULLY ASSEMBLED RACK SHALL BE INSTALLED WITH A CONCENTRICITY TOLERANCE OF 1/32 INCH WITH RESPECT TO THE CENTER PIVOTS BOTTOM DISC. THE FULLY ASSEMBLED RACK SHALL BE SET AND SECURED AT AN ELEVATION THAT COMPLEMENTS THE FINAL ELEVATION OF THE SWING SPAN AND MATING RACK PINIONS.
- EXISTING TURNING MACHINERY SUPPORTS SHALL BE REMOVED AND REPLACED WITH NEW SUPPORTS.
- SHAFT COLLARS ASSEMBLED ON SUPPORTED SHAFT SHALL BE ALIGNED FOR A CLEARANCE OF 0.015" (PER COLLAR) WITH BEARING 143A.

PROJECT NO. B-5936
TYRRELL COUNTY
 BRIDGE NO: 7

DRAWN BY: JAG/MS DATE: 8/8/2016
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DWG NUMBER 71 TOTAL DWGS 90

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO. M-4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 23
2			4			

DocuSigned by:
 Scott Reynolds
 BFC65720F14B0
 9/14/2016

Hardesty & Hanover
 engineering that moves you

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TURNING MACHINERY ASSEMBLY

ALLIGATOR RIVER SWING SPAN