

- CERTIFICATIONS FOR SUBCONTRACTORS
- CPM SCHEDULE SUBMISSION COORDINATING BETWEEN DISCIPLINES AND **SUBCONTRACTRS**
- AUXILIARY OPERATING SYSTEM AND EQUIPMENT*
- A. CALCULATIONS B. TEMPORARY OPERATION NARRATIVE AND OPERATING PROCEDURE
- C. COMPONENT CUT SHEETS
- D. LAYOUT DRAWINGS E. MACHINERY AND ELECTRICAL DETAILS
- DEMOLITION PLAN
 - A. REMOVAL PLAN AND FINAL DISPOSITION OF CONTAMINATED MATERIALS B. ASBESTOS REMEDIATION AND FLOOR TILE REMOVAL IN OPERATOR ROOM
- C. MECHANICAL AND ELECTRICAL DEMOLITION PLAN SURFACE PREPARATION AND EPOXY OVERLAY
- CENTER PIVOT ASSEMBLY
- A. SURVEY RESULTS WITH PROPOSED NEW SPAN ELEVATION AND POSITION
- B. SPAN JACKING PLAN AND SUPPORTING CALCULATIONS C. PROCEDURE/DETAIL DRAWINGS FOR REHABILITATION OF EXISTING PIVOT BEARING
- TURNING MACHINERY
- - A. LAYOUT AND DETAIL DRAWINGS FOR NEW RACK SECTIONS
- B. DETAIL DRAWINGS FOR NEW PINION
- C. PROCEDURE/DETAIL DRAWINGS FOR REHABILITATION OF EXISTING BEARINGS
- D. DETAIL DRAWINGS FOR BEVEL GEARING DEMOLITION PLAN E. DETAIL DRAWINGS FOR BRAKES AND BRAKE WHEELS
- F. DETAIL DRAWINGS FOR NEW SHAFTS AND COUPLINGS
- G. DETAIL DRAWINGS AND CUT SHEETS FOR NEW SPEED REDUCER
- END AND CENTER WEDGE OPERATING MACHINERY
- A. PROCEDURE/DETAIL DRAWINGS FOR REHABILITATION OF EXISTING WORM GEAR
- HOUSING B. PROCEDURE/DETAIL DRAWINGS FOR REHABILITATION OF EXISTING CRANK SHAFT
- C. PROCEDURE/DETAIL DRAWINGS OF EXISTING WEDGES AND GUIDES
- D. PROCEDURE/DETAIL DRAWINGS OF CONNECTION RODS
- E. PROCEDURE/DETAIL DRAWINGS OF EXISTING SHAFT JACK
- F. PROCEDURE/DETAIL DRAWINGS FOR REHABILITATION OF EXISTING BEARINGS G. COMPONENT CUT SHEETS AND DETAIL DRAWINGS FOR NEW BUSHINGS
- H. PROCEDURE/DETAIL DRAWINGS FOR REPLACEMENT OF EXISTING COUPLINGS
- ELECTRICAL CONTROL SYSTEM SUBMITTALS
 - A. WIRING DIAGRAMS AND CONTROL SCHEMATIC DRAWINGS
 - B. COMPONENT CUT SHEETS AND LAYOUT DRAWINGS FOR SPAN DRIVE, SPAN MOTOR, AND WEDGE MOTOR INCLUDING TEST REPORTS.
- C. COMPONENT CUT SHEETS AND DETAIL DRAWINGS FOR MOTOR, BRAKE, AND
- MACHINERY BRAKES D. COMPONENT CUT SHEETS AND LAYOUT DRAWINGS FOR MOTOR CONTROL CENTER,
- CONTROL DESK, AND CONTROL ENCLOSURES
- E. COMPONENT CUT SHEETS, LAYOUT DRAWINGS, AND INSTALLATION DETAILS FOR

DATE: <u>8/8/2016</u>

DATE: <u>8/8/2016</u>

DATE: <u>8/8/2016</u>

DISCONNECT SWITCHES

DRAWN BY: OIV

CHECKED BY: MJT

DESIGN ENGINEER OF RECORD: SAR

- SUBMARINE CABLE
 - A. COMPONENT CUT SHEETS
- **B. INSTALLATION PROCEDURE**
- C. LAYOUT AND DETAILED INSTALLATION DRAWINGS STAND- BY GENERATOR AND ATS
- A. COMPONENT CUT SHEETS
- B. LAYOUT DRAWINGS INCOMING SERVICE EQUIPMENT
- A. COMPONENT CUT SHEETS
- **B. INSTALLATION AND LAYOUT DRAWINGS** CONDUIT AND WIRE
- A. COMPONENT CUT SHEETS
- B. CONDUIT BLOCK DIAGRAM AND SCHEDULE
- C. CONDUIT INSTALLATION DRAWINGS
- REST PIER ACCESS SYSTEM CONTROL HOUSE ROOF, DOORS, WINDOW, TILES, PAINTING, AND FLAG POLE
- LIMIT SWITCHES
- A. COMPONENT CUT SHEETS B. INSTALLATION DETAILS
- C. MOUNTING BRACKET AND SUPPORT DETAILS
- WARNING AND BARRIER GATE MODIFICATIONS A. COMPONENT CUT SHEETS
- B. LAYOUT AND DETAILED INSTALLATION DRAWINGS
- COMPONENT CUT SHEETS AND LAYOUT DRAWINGS FOR HVAC AND LIGHTING **EQUIPMENT**
- SEPTIC TANK SUPPORT PLATFORM
- CLEANING AND PAINTING OF SECOND FLOOR HANDRAILS
- FINAL ACCEPTANCE TESTING PROCEDURE
- 22. AS- BUILT DRAWINGS AND O&M MANUALS

*PROPOSED DESIGN OF AUXILIARY SYSTEM SHALL BE STAMPED BY A LICENSED ENGINEER IN THE STATE OF NORTH CAROLINA

- A. SURVEY AND INITIAL WORK
- 1. SURFACE PREPARATION AND EPOXY OVERLAY ON MOVABLE SPAN AND 1
- APPROACH SPAN ON EACH SIDE (SPAN 115A AND SPAN 115B) 2. VERIFY FIELD CONDITIONS AND MEASUREMENTS.
- B. INSTALL TEMPORARY/AUX SYSTEM
- 1. INSTALL/IMPLEMENT AUXILIARY OPERATING SYSTEM. 2. START DEMOLITION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT
- C. POWER DISTRIBUTION. DEMOLITION. CONTROL HOUSE RENOVATIONS
- 1. REPLACE EXISTING STAND- BY GENERATOR, ATS, MAIN CIRCUIT BREAKER AND
- ASSOCIATED CONDUIT AND WIRE. 2. REMOVE EXISTING SUBMARINE CABLES ROUTED TO PIVOT PIER AND ALL ASSOCIATED
- ENCLOSURES. MAINTAIN EXISTING END PIER SUBMARINE CABLE AND ENCLOSURE.
- 3. INSTALL NEW CONTROL HOUSE ROOF AND REPLACE DOORS AND WINDOWS 4. INSTALL REST PIER ACCESS SYSTEM
- 5. UPGRADE EXISTING UTILITY SERVICE, METER, TRANSFORMER, AND INSTALL ASSOCIATED CONDUIT AND WIRE.

D. TURNING MACHINERY, DEMOLITION, CONTROL HOUSE RENOVATIONS

- 1. REMOVE EXISTING MCC, CONTROL DESK, AND CONTROL EQUIPMENT FROM CONTROL
- 2. REPLACE CONTROL HOUSE FLOOR TILES AND PAINT INTERIOR AND EXTERIOR OF CONTROL HOUSE.
- 3. INSTALL NEW CONTROL DESK, MCC, DRIVES, PLC ENCLOSURES AND ASSOCIATED CONDUIT AND WIRE INSIDE THE CONTROL HOUSE.
- 4. REHABILITATE CENTER PIVOT BEARING (REQUIRES TEMPORARY SHUTDOWN TO NAVIGATION)
- 5. REHABILITATE TURNING MACHINERY
- E. SUBMARINE CABLES AND CONTROL SYSTEM
- 1. INSTALL NEW SUBMARINE CABLES
- 2. INSTALL NEW REMOTE PLC ENCLOSURE ON PIVOT PIER
- 3. INSTALL NEW LIMIT SWITCHES AND ASSOCIATED CONDUIT AND WIRE.

F. WEDGE MACHINERY AND TRAFFIC CONTROL

- 1. REHABILITATE WEDGE MACHINERY AND INSTALL ASSOCIATED CONDUIT AND WIRE (REQUIRES TEMPORARY MEANS TO LIFT/SUPPORT SPAN).
- 2. REHABILITATE WARNING GATES (REQUIRES SINGLE LANE CLOSURE)
- 3. REHABILITATE BARRIER GATES (REQUIRES SINGLE LANE CLOSURE)

G. LIGHTING, HEATING AND PAINTING

- 1. INSTALL HVAC, LIGHTING, AND ASSOCIATED CONDUIT AND WIRE IN THE CONTROL
- 2. CLEAN AND PAINT ALL NEW OPERATING EQUIPMENT AND STRUCTURAL STEEL
- 3. REHABILITATE CENTERING DEVICE

H. TESTING

- 1. PERFORM FINAL ADJUSTMENTS OF THE MECHANICAL AND ELECTRICAL SYSTEMS
- 2. FINALIZE O&M MANUALS
- 3. PERFORM START- UP AND COMMISSIONING

SEAL POPE

036065

FINAL UNLESS ALL

I. ALTERNATIVE

1. THE CONTRACTOR HAS THE OPTION TO PROPOSE AN ALTERNATE CONSTRUCTION SEQUENCE FOR THE APPROVAL OF THE ENGINEER.

> B-5936 PROJECT NO. **TYRRELL** COUNTY **BRIDGE NO:**

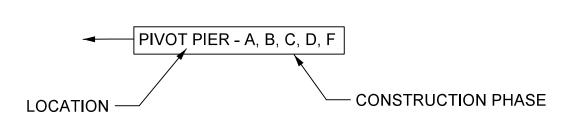
> > STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROPOSED CONSTRUCTION **SEQUENCE**

> **ALLIGATOR RIVER SWING SPAN**

SHEET NO. REVISIONS G-3 BY: DATE: NO DOCUMENT NOT CONSIDERED TOTAL SHEETS SIGNATURES COMPLETED

LEGEND



Scott Reynolds 9/14/2016 &Hanover engineering that moves you

TOTAL DWGS

DWG NUMBER 90