Overview: SAS Superstructure
Overview: Tensioned Tower Base Anchor Rods
Water-Jetting In Field: Borescoping Water-Jetted Inspection Hole
Reduced-Height Grout Repair Mockups: 6 Rods

01/10/2015
Full-Size Grout Repair Mockups: Repair Grout on Left
Grouting Process and Product is Improving

Highly Dependent upon the presence of fines. Contractor has experienced success in removing many fines, but not always
Trial Fine Aggregate Removal: Vacuum and Compressed Air Lines
Base Plate
Free of Fines
Grout at Bottom
Free of Fines
Fine & Coarse Aggregate
**General Notes:**

1. Rod Pieces 4b and 1a shall be cleaned with MEK to remove all contaminants and lubricants from the rod threads. Use mineral spirits, hexane, and/or ultrasonic cleaning as alternates. If needed, a nylon bristle brush should be used at the threaded areas. 

2. Rod Pieces 4b and 1a shall be wet fluorescent magnetic particle examination tested for surface cracks. Then, as detailed in Sheets TA-02 through TA-09, the following tests shall be performed on these pieces:

   - **Analysis of Galvanizing**
     - A. Microscopical Thickness of Galvanizing
     - B. Chemical Analysis of Galvanizing
   - **Mechanical Testing**
     - A. Reduced Section Tensile
     - B. Hardness Testing of Cross Section
     - C. Charpy Impact Testing

3. Prior to cutting samples from the extracted rods for testing, photo document the surface condition of the rod. Observe and document if white or red rust is detected:
   - Confirm composition of corrosion product (if any) using SEM-EDX.
   - Characterize corrosion product (if any) using XRD (X-Ray diffraction) to further confirm the source of water.

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**TESTING PROGRAM TOWER ANCHOR RODS (TA-01)**

File Name: Testing Program Tower Anchor Rods (TA-01)

Date: 2015-01-15

Rev. 01 2015-01-21
TEST SPECIMEN LOCATIONS – Piece 4b

LEGEND:

- TEST SPECIMEN

NOTE:

- All samples shall be labeled, preserved and shipped back to the Department (METS) after completion of the testing.