

Inspector Quanlist Report 20250519

Diary Number: _____

Inspector Name: _____

TRACS Number: _____

Date: _____

Division VI: Structures

Title: Post Tensioning

| | |
|------------------------|-----------------------|
| Structure Name: | Structure Number: |
| Sequence Number: | Steel Rolls Open On: |
| Date Structure Poured: | Date Strands Started: |

| Attribute Numbers | Yes, No N/A | Narratives | References |
|-------------------|-------------|---|---|
| 0. | | Has a pre-activity meeting been held to discuss the pre-stressing or post tensioning activities? | See Project Special Provisions for pre-activity meeting requirements |
| 1. | | Shop drawings and calculations for pre-stressing or post tensioning are submitted per subsection 105.03? | 2021 Standard Specifications 602-3.01 (A) pg. 603 |
| 2. | | Shop drawings include: Details for jacking sequence, anchoring devices, blockout dimensions, and all other data pertaining to the post tensioning system or operation? | 2021 Standard Specifications 602-3.01 (A) pg. 603 |
| 3. | | Shop drawings include: Lay-out dimensions for locating the ducts along the tendon path (not exceed 15-foot intervals), vent locations and details of the vents are included on the drawings? | 2021 Standard Specifications 602-3.01 (C) pg. 605 |
| 4. | | All jacks and gauges were calibrated as a unit and are accompanied by a certification calibration chart for the system including a graph showing the gauge pressure in pounds per square inch & the force in thousands of pounds through the entire range of tensioning? | 2021 Standard Specifications 602-3.01 (A) pg. 603 602-3.06 (A) pg. 608 |
| 5. | | Certification for the jacking system is not more than 2 years between jack calibrations? | 2021 Standard Specifications 602-3.01 (A) pg. 603 |
| 6. | | Was all steel tensioned with a hydraulic jack used for steel tensioning; each jack is equipped with a pressure gauge or load cell to determine the jacking force? | 2021 Standard Specifications 602-3.06 (A) pg. 608 |
| 7. | | Do all jack gauges have either a reading dial of at least six inches in diameter, or a digital display indicator? | 2021 Standard Specifications 602-3.06 (A) pg. 608 |
| 8. | | Is the digital display indicator readable by normal vision at a distance of 10 feet? | 2021 Standard Specifications 602-3.06 (A) pg. 608 |
| 9. | | Have certified calibration charts for hydraulic jacks and pressure gauges been checked before and during jacking with ADOT load cells? (If the jacks are in error, the operation is immediately stopped until a new certified calibration is performed by the contractor) | 2021 Standard Specifications 602-3.06 (A) pg. 608 |

Inspector Quanlist Report 20250519

| | | | |
|-----|--|---|--|
| 10. | | Is the tensioning process being conducted so that the force being applied and the elongation of the steel may be measured at all times? (Not to exceed 78 percent of the minimum ultimate tensile strength of the pre-stressing steel). | 2021 Standard Specifications 602-3.06 (A) pg. 608 |
| 11. | | If the actual elongation and the theoretical elongation differ by more than 5%, was the operation checked and corrected before proceeding with the tensioning? | 2021 Standard Specifications 602-3.06 (A) pg. 608 |
| 12. | | Is a record (document) of the pre-stressing force and elongations being kept at all times and submitted to the engineer for review and approval? | 2021 Standard Specifications 602-3.06 (A) pg. 608 |
| 13. | | Each lot of anchorage assemblies and bar couplers to be installed at the job site is tagged and numbered? | 2021 Standard Specifications 602-3.03 pg. 606 |
| 14. | | Samples of each manufacturer's reels of strand or coils of wire, or bars have been submitted for testing along with the certificates of compliance? | 2021 Standard Specifications 602-3.03 pg. 606 |
| 15. | | Do high tensile seven wire strands conform to the requirements of AASHTO M 203 for grade 270? | 2021 Standard Specifications 602-2.01 pg. 602 |
| 16. | | Approved strength tests are received prior to installation, all unidentified prestressing steel, anchorage assemblies or bar couplers recovered at the job site were rejected? | 2021 Standard Specifications 602-3.03 pg. 606 |
| 17. | | A cutting torch was not used on pre-stressing steel? | 2021 Standard Specifications 602-3.06 (C) pg. 612 |
| 18. | | Are the bars of each size (each mill heat), wire from each coil, & all strands from each manufactured reel that is shipped to the job site have been assigned an individual lot number and tagged in a manner that each lot can be accurately identified at the job site? | 2021 Standard Specifications 602-3.03 pg. 606 |
| 19. | | Does the anchorage device hold the prestressing steel without exceeding the anticipated set at a load, producing a stress of not less than 95 percent of the guaranteed minimum tensile strength of the prestressing steel? | 2021 Standard Specifications 602-3.04 pg. 607 |
| 20. | | Are the duct enclosures for post tensioning rigid, galvanized, ferrous metal? | 2021 Standard Specifications 602-2.02 pg. 603 |
| 21. | | Are the duct enclosures for pre-stressing steel mortar-tight and accurately placed at the locations shown on the project plans or approved by the Engineer? | 2021 Standard Specifications 602-3.05 pg. 607 |
| 22. | | Duct installations for pre-stressing steel are securely fastened to prevent movement or displacement during concreting activities. Are the ducts placed within $\pm 1/4$ inch of the dimensions shown on the approved shop drawings? | 2021 Standard Specifications 602-3.05 pg. 607 |
| 23. | | Prior to closing the slabs of the box girder cells (Deck), have aerostatic or hydrostatic tests been conducted to check for leakage in the duct system and to prevent the grout from getting into the box girder cells? | 2021 Standard Specifications 602-3.05 pg. 607 |
| 24. | | For ducts that are to be completely encased in concrete: were the ducts tested by means of a charging pressure of 40 lbs per square inch and retained for 5 minutes? (20 psi after 5 minutes is acceptable) | 2021 Standard Specifications 602-3.05 pg. 607 |

Inspector Quanlist Report 20250519

| | | | |
|-----|--|---|--|
| 25. | | For ducts not completely encased in concrete; Were the exposed areas sealed with an epoxy compound, then tested at 20 psi for 5 minutes? (10 psi after 5 minutes is acceptable) | 2021 Standard Specifications 602-3.05 pg. 607 |
| 26. | | Are leaks repaired and ducts retested prior to closing slab ducts, are they blown dry with oil free compressed air? | 2021 Standard Specifications 602-3.05 pg. 607 |
| 27. | | Have the duct ends been covered to prevent the entry of water or debris after installation? | 2021 Standard Specifications 602-3.05 pg. 607 |
| 28. | | Steel is protected from damage by abrasion, rust or corrosion, and is free of dirt, rust, oil, grease or other deleterious substances when installed and when tensioned. | 2021 Standard Specifications 602-3.06 (A) pg. 612 |
| 29. | | No employees (except those essential to the post-tensioning operations) are permitted to be behind the jack during tensioning operations? | OSHA 1926.701 (c) (1) |
| 30. | | Was pre-stressing steel for post-tensioning installed in the ducts after completion of concrete curing? | 2021 Standard Specifications 602-3.06 (C) pg.608 |
| 31. | | Was the stressing and grouting completed within 10 calendar days? (rust formed during the 10 days will not be cause for rejection) | 2021 Standard Specifications 602-3.06 (C) pg.608 |
| 32. | | Is the Quantlist Minimum Frequency being followed, on the first girder, plus once per anchorage to anchorage of structure? | Construction Bulletin 07-01 |