DIRECTED TO - DISTRICT ADMINISTRATORS

Beginning with the December advertisement the Department began including the following Special Provision Copied Note (407d) governing stud shear connectors on structural steel erection in all proposals released for bidding:

SECTION 407.04(j) STUD SHEAR CONNECTORS is amended to replace the last sentence with the following:

Studs shall be field welded after structural steel is erected and metal decking or other walking or working surface is in place, however, structural steel with shop applied studs may be erected provided erection is performed in accordance with the requirements of Section 110.05.

12-16-02(SPCN)

Subsequently, Section 110.05 Construction Safety and Health Standards was revised and began appearing in projects advertised for bidding in January of this year with the following Special Provision Copied Note to emphasize the Department’s commitment to safety for Contractor personnel employed on VDOT construction and maintenance projects.

(c110d0b-0103) SECTION 110.05 CONSTRUCTION SAFETY AND HEALTH STANDARDS of the Specifications is amended to add the following paragraph:

Additionally at a minimum, all Contractor personnel shall comply with the following, unless otherwise determined unsafe or inappropriate in accordance with OSHA regulations:

1. Hard hats shall be worn while participating in or observing all types of field work when outside of a building or outside of the cab of a vehicle, and exposed to, participating in or supervising construction.
2. Respiratory protective equipment shall be worn whenever an individual is exposed to any item listed in the OSHA Standards as needing such protection unless it is shown the employee is protected by engineering controls.

3. Adequate eye protection shall be worn in the proximity of grinding, breaking of rock and/or concrete, while using brush chippers, striking metal against metal or when working in situations where the eyesight may be in jeopardy.

4. Safety vest shall be worn by all exposed to vehicular traffic and construction equipment.

5. Standards and guidelines of the current Virginia Work Area Protection Manual shall be used when setting, reviewing, and removing traffic controls.

6. Flag persons shall be certified according to the Virginia Flagger Certification Program.

7. No person shall be permitted to position themselves under any raised load or between hinge points of equipment without first taking steps to support the load by the placing of a safety bar or blocking.

8. Explosives shall be purchased, transported, stored, used and disposed of by a Virginia State Certified Blaster in possession of a current criminal history record check and a commercial driver's license with hazardous materials endorsement and a valid medical examiner's certificate. All Federal, State, and local regulations pertaining to explosives shall be strictly followed.

9. All electrical tools shall be adequately grounded or double insulated. Ground Fault Circuit Interrupter (GFCI) protection must be installed in accordance with the National Electrical Code (NEC) and current Virginia Occupational Safety and Health agency (VOSH). If extension cords are used, they shall be free of defects and designed for their environment and intended use.

10. No person shall enter a confined space without training, permits, and authorization.

11. Fall protection is required whenever an employee is exposed to a fall six feet or greater.

11-22-02 (SPCN)

On March 22, 2002 OSHA issued supplemental guidelines for structural steel erection to offer relief to highway bridge construction activities. The FHWA and OSHA agreed that if the Contractor provided 100% conventional fall protection for all workers, including those installing connectors and decking 10 feet or greater above the ground level, the presence of shop-installed shear connectors on steel beams delivered to the field would be considered a de minimus violation of the standard. A de minimus violation is one that has no direct or immediate relationship to safety or health and for which no citations are issued by a compliance officer. One hundred percent conventional fall protection, as defined in §1926.32(s) Code of Federal Regulations, can be accomplished by providing fall protection systems, including guardrail systems, personal fall arrest systems, or safety nets. Such devices or systems must be in place and fully functional prior to and during the performing of any construction activities over open areas above the appropriate threshold height limit.

In Virginia, however, the Virginia Safety and Health program (VOSH) standards continued to apply in steel erection where fall protection must be provided when working 10 feet or greater above ground level.
In order to unify safety requirements on fall protection, the Department has chosen to apply the same height restriction of 6 feet or greater on all VDOT construction and maintenance projects for both VDOT and Contractor personnel. Please note item no. 11 in the Special Provision Copied Note above.

Therefore, the Department will not reject or deny permission to erect steel beams or girders that arrive on the jobsite with factory or shop applied shear connectors or studs, provided the Contractor furnishes 100% convention fall protection to all of his personnel performing bridgework such as, connectors, welders, deckers, etc. working 6 feet or more above the ground level. The Contractor assumes responsibility for any violation of this ruling, and where not adhered to by the Contractor, the Department will not permit or authorize the erection of steel structural members with shop attached shear studs.

WSKjr\c:

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Virginia Road and Transportation Builders Association
Old Dominion Highway Contractors Association
Virginia Asphalt Association
Virginia Aggregates Association Inc.
American Concrete Pavement Association
Virginia Ready-Mixed Concrete Association
Precast Concrete Association of Virginia