



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219-2000

Stephen C. Brich, P.E.
COMMISSIONER

To: County Administrators and City/Town Managers

From: Julie R Brown, Director Local Assistance Division

2/6/2019

SOURCE INSPECTIONS AT FABRICATION FACILITIES

We have recently made some updates to the Locally Administered Projects (LAP) Manual that were communicated in December. We do want to specifically highlight one of the revisions related to the requirement for source inspections at fabrication sites for prefabricated concrete and structural steel. An issue was identified last year specific to inspections of structural steel for use in a pedestrian bridge not occurring at the source/plant during fabrication of the steel element. All structural steel, pre-stressed concrete, and metal poles are required to be inspected at the source/plant by the owner or owner's representative during fabrication. Inspection for structural steel and metal poles must be performed by an AWS certified inspector. Inspection for prestressed concrete components must be performed by a certified PCI level II or level III (higher level) inspector. It is important to note that there is no differentiation or exception made for pedestrian bridges regarding VDOT's requirements for projects that are federally funded or that will be VDOT maintained or in the use of AASHTO standards which all state funded, locally maintained projects must meet.

This issue was highlighted in the Spring 2018 LAD Division Newsletter which is posted on our external webpage at the following link http://www.virginiadot.org/business/resources/local_assistance/Spring_2018.pdf. To clarify and better highlight the source inspection requirement, updates were also made to the LAP Manual sections 13.2.2, 13.2.3 and Table 1 within this section, and also to the C-25 form (Source of Materials) in December.

VDOT Materials Division's Structures section has a consultant contract for third party QA inspection at fabrication plants (Source Inspections) for structural steel elements available for LPA (locality) use. LPA's also have the option to hire a qualified third party inspection agency to perform Source Inspections at the fabrication facility. However, when an LPA hires a consultant to provide inspection services on their behalf, the consultant must be hired to perform QA inspection at the fabrication site. Welding inspections must be performed by a Certified Welding Inspector (CWI) at the fabrication site before welding, during welding, and after welding. It is unacceptable to wait until the steel structure arrives at the project location to perform inspections.

It is strongly recommended that LPA's request VDOT to perform these inspections since VDOT will typically have the inspectors on call at or near the source plants. If the LPA chooses to use their own consultant services, the LPA must submit the inspector's qualifications and the C-25 form to the VDOT Construction Project Monitor (CPM) for review and approval. Regardless of whether the LPA wants to secure their own consultant or have VDOT provide the on-site inspection at the fabrication facility, the

C-25 indicating the fabrication facility must be provided well in advance of the scheduled fabrication to ensure there is sufficient time for review and approval of the inspector.

There have been past situations of a structure fabricated with no source inspection taking place at the fabrication facility and the LPA then requesting the structures section of the VDOT Materials Division to accept a visual inspection after fabrication. This is neither acceptable nor appropriate since no one can verify what occurred during fabrication if the appropriate inspections were not occurring at the appropriate time.

The takeaway... all fabricated steel and other fabricated items such as pre-stressed concrete elements and metal poles, as noted on Table 1 in Section 13.2.3 of the LAP Manual require inspections at the production facility that must occur during fabrication to meet federal and/or AASHTO standards. VDOT is experienced with these requirements and will perform these source inspections for LPAs at project cost. Visual Inspection after the welding is complete at the project site is not sufficient. If you have these fabricated structures as part of your project, please ensure all parties are aware of the applicable requirements. Failure to ensure these source inspections occur will impact VDOT's ability to accept a structure or participate in the cost.

A summary of the sources for these requirements is attached for your reference. Questions regarding source inspections can be directed to your Project Coordinator or your District's Construction Project Monitor and they will coordinate with the appropriate VDOT staff as needed.

We have recently made some updates to the Locally Administered Projects (LAP) Manual that were communicated in December. We do want to specifically highlight one of the revisions related to the requirement for source inspections at fabrication sites for prefabricated concrete and structural steel.

An issue was identified last year specific to inspections of structural steel for use in a pedestrian bridge not occurring at the source/plant during fabrication of the steel element. All structural steel, pre-stressed concrete, and metal poles are required to be inspected at the source/plant by the owner or owner's representative during fabrication. Inspection for structural steel and metal poles must be performed by an AWS certified inspector. Inspection for prestressed concrete components must be performed by a certified PCI level II or level III (higher level) inspector. It is important to note that there is no differentiation or exception made for pedestrian bridges regarding VDOT's requirements for projects that are federally funded or that will be VDOT maintained or in the use of AASHTO standards which all state funded, locally maintained projects must meet.

This issue was highlighted in the Spring 2018 LAD Division Newsletter which is posted on our external webpage at the following link http://www.virginiadot.org/business/resources/local_assistance/Spring_2018.pdf. To clarify and better highlight the source inspection requirement, updates were also made to the LAP Manual sections 13.2.2, 13.2.3 and Table 1 within this section, and also to the C-25 form (Source of Materials) in December.

VDOT Materials Division's Structures section has a consultant contract for third party QA inspection at fabrication plants (Source Inspections) for structural steel elements available for LPA (locality) use. LPA's also have the option to hire a qualified third party inspection agency to perform Source Inspections at the fabrication facility. However, when an LPA hires a consultant to provide inspection services on their behalf, the consultant must be hired to perform QA inspection at the fabrication site. Welding inspections must be performed by a Certified Welding Inspector (CWI) at the fabrication site before welding, during welding, and after welding. It is unacceptable to wait until the steel structure arrives at the project location to perform inspections.

It is strongly recommended that LPA's request VDOT to perform these inspections since VDOT will typically have the inspectors on call at or near the source plants. If the LPA chooses to use their own consultant services, the LPA must submit the inspector's qualifications and the C-25 form to the VDOT Construction Project Monitor (CPM) for review and approval. Regardless of whether the LPA wants to secure their own consultant or have VDOT provide the on-site inspection at the fabrication facility, the C-25 indicating the fabrication facility must be provided well in advance of the scheduled fabrication to ensure there is sufficient time for review and approval of the inspector.

There have been past situations of a structure fabricated with no source inspection taking place at the fabrication facility and the LPA then requesting the structures section of the VDOT Materials Division to accept a visual inspection after fabrication. This is neither acceptable nor appropriate since no one can verify what occurred during fabrication if the appropriate inspections were not occurring at the appropriate time.

The takeaway... all fabricated steel and other fabricated items such as pre-stressed concrete elements and metal poles, as noted on Table 1 in Section 13.2.3 of the LAP Manual require inspections at the production facility that must occur during fabrication to meet federal and/or AASHTO standards. VDOT is experienced with these requirements and will perform these source inspections for LPAs at project cost. Visual Inspection after the welding is complete at the project site is not sufficient. If you have these fabricated structures as part of your project, please ensure all parties are aware of the applicable requirements. Failure to ensure these source inspections occur will impact VDOT's ability to accept a structure or participate in the cost.

Questions regarding source inspections can be directed to your Project Coordinator or District's Construction Project Monitor and they will coordinate with the appropriate VDOT staff as needed.

Julie R. Brown

Director, Local Assistance Division

Virginia Department of Transportation

804-786-7314 Cell (804) 840-4391