

GENERAL NOTES



General Items

1. All materials and construction shall conform to the Vermont Agency of Transportation's Standard Specifications for Construction, dated 2006, and its latest revisions, and the American Association of State Highway and Transportation Officials (AASHTO) Standard Specification for Highway Bridges, Seventeenth Edition, and its latest revisions.
2. Bridge is designed for MS22.5 Live Load.
3. The Contractor shall take all precautions necessary to prevent siltation or pollution, especially the discharge of raw concrete, into any brook, stream or river.
4. All dimensions are horizontal or vertical and are given at 20°C unless otherwise noted.

Demolition

5. The existing bridge superstructure, including any part of the substructure which is outside the limits of unclassified channel excavation and structure excavation, shall be removed under Item 529J5, Removal of Structure. This shall include costs, labor, materials and equipment necessary to safely remove and dispose of the items listed in Notes 6 and 7. It shall also include any costs associated with protection of the Lemon Fair River from contamination during demolition. Bridge pavement shall be removed under Item 529J0, Removal of Bridge Pavement.
6. The existing structural steel is painted with a material that may contain lead. The removed structural steel is the property of the contractor. The contractor shall indemnify and hold the state, its officers, and employees harmless concerning the contractor's use or disposition of the structural steel. The Contractor will inform the Engineer of their plans to dispose of or retain the structural steel prior to its removal.
7. The bridge abutments shall be removed 600 mm below the existing ground at the face of the existing abutments and the bridge pier shall be removed to the mudline.

Stone Fill

8. The Stone Fill, Type II shall be placed in front of the abutments to the limits shown on the plans prior to erection of girders.

Concrete

9. No traffic shall be allowed on the new deck until the cure period is up and the 28-day design strength is attained, as evidenced by test cylinders cured under field conditions.
10. All exposed edges of concrete shall be chamfered 25 mm by 25 mm or as otherwise indicated on the plans.
11. Joints and score marks in concrete shall be constructed as indicated on the plans or as directed by the Engineer.
12. All reinforcing steel shall be detailed and fabricated using procedures and tolerances in accordance with applicable publications of the Concrete Reinforcing Steel Institute (CRSI).
13. Reinforcing placement tolerances shall be:
Spacing: ± 25 mm
Clearance: ± 5 mm
14. Minimum cover for reinforcing steel shall be 50 mm along the back faces of walls against earth, 60 mm along the top surface of the deck, 40 mm along the bottom surface of the deck and 75 mm elsewhere, unless noted otherwise.
15. Water repellent, silane shall be applied to all exposed concrete surfaces except the underside of the deck between the drip beads. Payment shall be made under Item 514J0 Water Repellent, Silane.
16. The approach slabs shall be constructed with Concrete, High Performance Class B, unless noted otherwise.
17. The deck, curb, abutments, pile caps and wingwalls shall be constructed with Concrete, High Performance Class A.

Structural Steel

18. All structural steel shall be detailed and fabricated using procedures and tolerances in accordance with applicable publications of the American Institute of Steel Construction (AISC).
19. Any connections that are not detailed on the plans shall be detailed by the Fabricator and submitted to the Structures Engineer for approval.
20. All steel paid under Item 506.55 "Structural Steel, Plate Girder" shall conform to AASHTO designation M 270M / M 270 Grade 345W unless noted otherwise on the plans.
21. All welding shall conform to the provisions of Subsection 506J0.
22. Any holes in the webs of the fascia beams/girders that are not otherwise filled, shall be filled with either button head or hex head bolts. These bolts shall be tightened in accordance with Subsection 506J9.
23. All field connection shall be made with 22 mm diameter AASHTO designation M 164M Type III bolts in 24 mm diameter holes.
24. The Charpy V-notch test is required for members designated as such and only for such members, as specified in Subsection 714.01.
25. The contractor is required to determine the necessary Fleming brackets or similar false work. Fleming brackets shall not be placed at a spacing greater than 1.2 m.
26. After the superstructure has been erected, elevations shall be taken along the top of the beams/girders, as directed by the Resident Engineer, for use in determining the finished grade.

Temporary Bridge

27. Traffic will be maintained on a two-way temporary bridge located upstream of the existing structure.
28. The roadway approaches to the temporary bridge shall be paved. Refer to the Detour Typical Sections, Layouts, Profile and Cross-Sections.
29. The removal and/or resetting of traffic signs, as deemed necessary by the Resident Engineer, will be considered incidental to Item 64J0, Traffic Control.

Bearing Notes

30. The bearings shall be paid for under Item 53J4, Bearing Device Assembly, Integral Abutment. There will be a total of 10 bearing assemblies for this project. A bearing device assembly consists of 2 anchor bolts, a single steel leveling bearing plate, 2 sets of 2 steel plate washers and all corresponding nuts as shown in these plans.
31. The Contractor shall set the elevation of each leveling plate and ensure the plate is level, prior to tightening the supporting nuts and prior to placement of girders.

Pile Notes

32. The piles shall be HP 360X132.
33. The piles shall be embedded in the ground a minimum of 25 meters below the pile cap and shall be driven to an ultimate resistance of 1912 KN. To prevent damage to the piles, pile shoes shall be required and shall conform to Section 505 of the specifications.
34. Pile testing and sequence: A minimum of one dynamic pile test shall be conducted on the first pile driven for each subsequent unit. More tests may be required by the engineer.
35. For estimate purpose, pile tip elevations were assumed as shown on the boring logs. The actual pile length may vary.

DATUM

VERTICAL NAVD88
HORIZONTAL NAD83(92)

PROJECT NAME: CORNWALL
PROJECT NUMBER: BRS 0172(6)

FILE NAME: z85e042brdde+.dgn PLOT DATE: 2/17/2010
PROJECT LEADER: MARTHA EVANS-MONGEON DRAWN BY: D. RITACCO
DESIGNED BY: M. CRUZ CHECKED BY: M. CRUZ
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