

Proposed Bridge Improvement Project

HUNTINGTON BF 0211(32)

Abutments & Approach Slabs on FAS Route 0211 Bridge #8

The concrete waste blocks shall be of adequate number and size so as not to permit opening of the joint between the wingwall and pile cap/cheekwall and to prevent transverse movement. The waste blocks shall be in-place until the rebar splice sleeves have achieved the required capacity.

Concrete:

Mix Designation: P50TER

1. Specified Mix Design	5000 PSI
2. Proposed Mix Design	5000 PSI
3. Stripping Strength	3000 PSI
4. Handling Strength	3000 PSI
5. Shipping Strength	5000 PSI
6. Install Strength	5000 PSI
7. Traffic Loading	5000 PSI

Fabrication Tolerances:

1. Width	±1/4"
2. Height	±1/4"
3. Length	±1/2"
4. Rebar Cover	3" Min. (Unless Noted Otherwise)
5. Rebar Spacing	±1"
6. Rebar Clearance	±1/4"
7. Insert Placement	±1/4"
8. Pile Sleeve Placement	±1/2"

Per email from Matt Wheeler on 4/27/2017 in regards to the horizontal load: Q: "For the installation of Wingwalls 1 & 2, you're planning on applying a horizontal load to join the pieces prior to grouting the splice sleeves and securing in-place with waste blocks. We're interested in the planned method of applying the horizontal load to ensure that this has been considered and will adequately close the joint."
A: "The load will be applied to the wingwalls via come-alongs and or/jacks. Excavation machinery will not be applied to close this joint."

Reinforcing:

General Notes:

1. Reinforcing Steel - ASTM A615, Grade 60, Level I, Epoxy Coated.
2. Perimeter bar tied at every intersection. Internal bars spaced less than 12" on center tied every other intersection.
3. NMB Rebar Splice Sleeves to be epoxy coated.
4. Two test bars of each size shall be randomly selected for testing. State shall indicate with an asterisk which group of bars they want to select from and extra bars will be ordered for the indicated groups.
5. Repairing of damaged portions of coating to be repaired in accordance with subsection 507.04.
6. Minimum Exposed Length for Protruding Bars(Used in rebar splice sleeves):
#5 = 4 1/4"
#6 = 5"
7. ▲ Indicates bars to be cut to length in field, if needed.
8. Three test samples, of each bar size, will be provided for the NMB rebar splice sleeves. These sleeves will be grouted in the field and handed over to the state.

Tolerances:

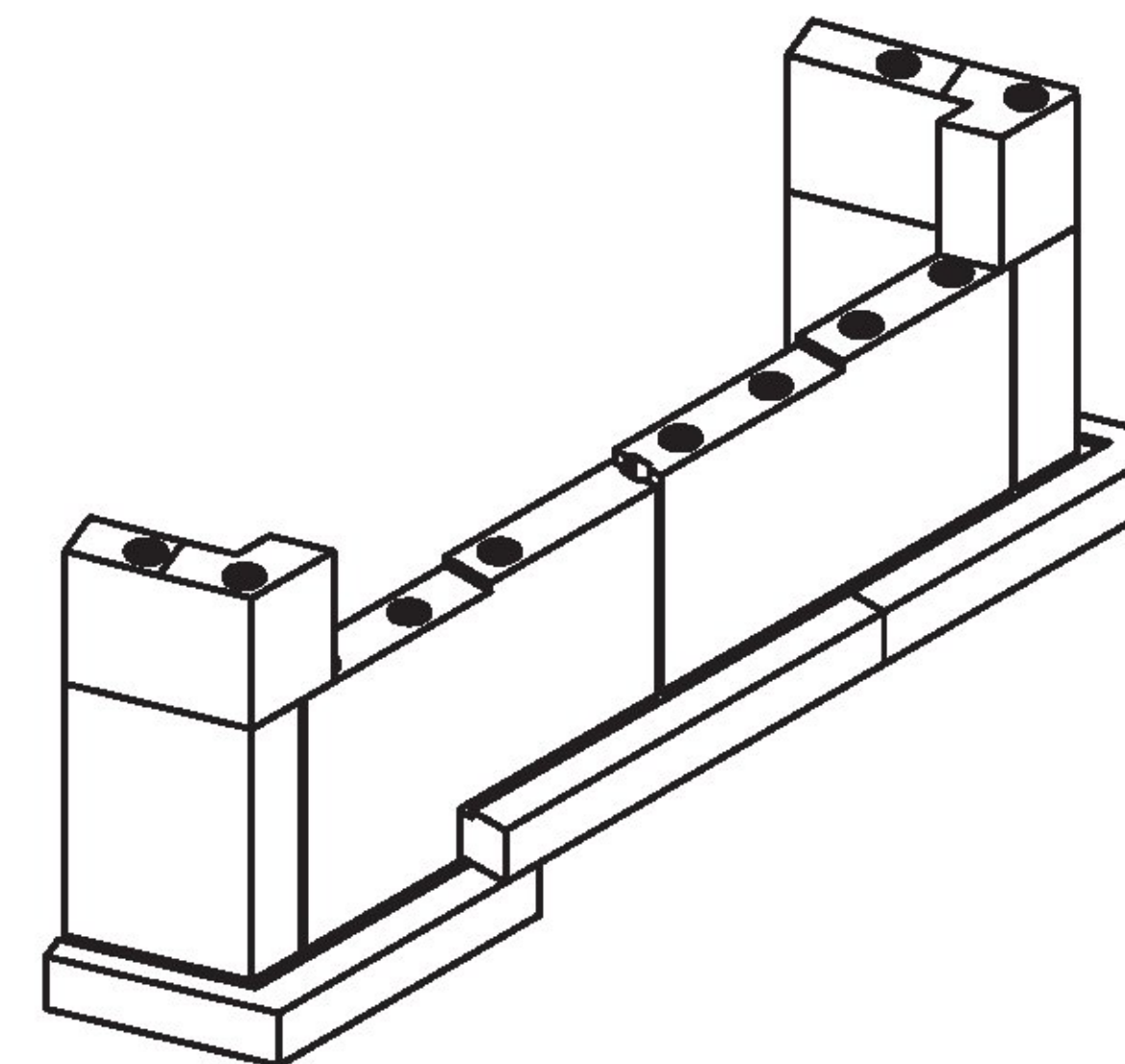
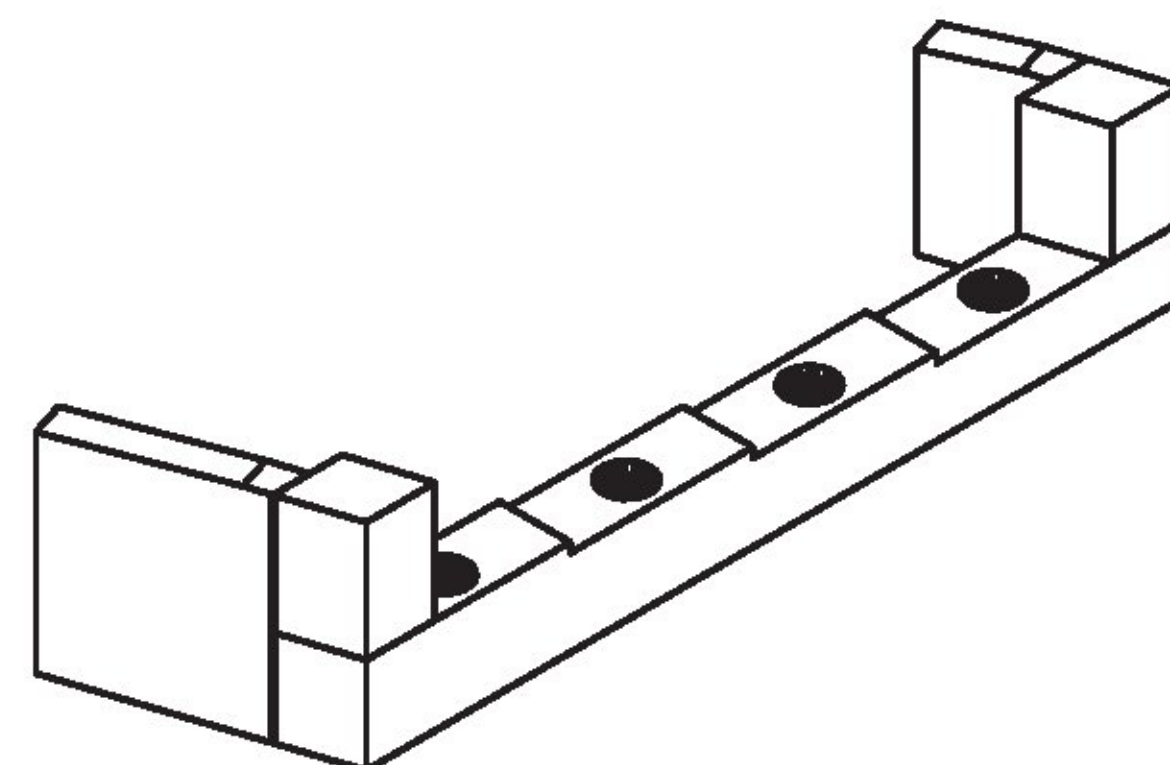
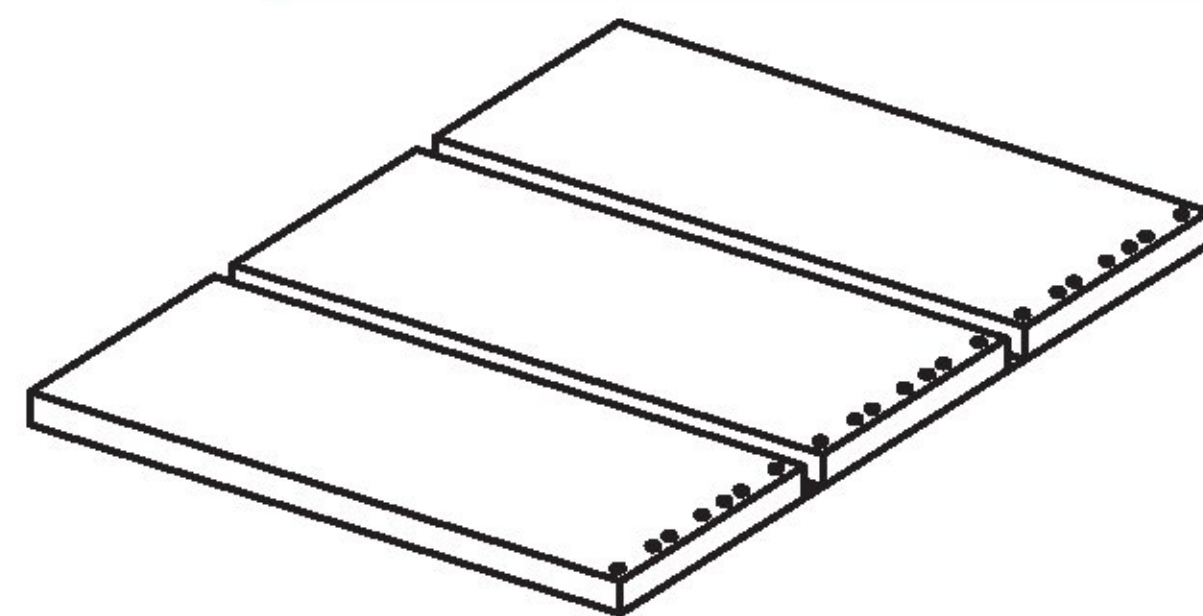
1. Spacing ±1"
2. Clearance ±1/4"
3. Clear Cover 3" U.N.O.

Lap Lengths:

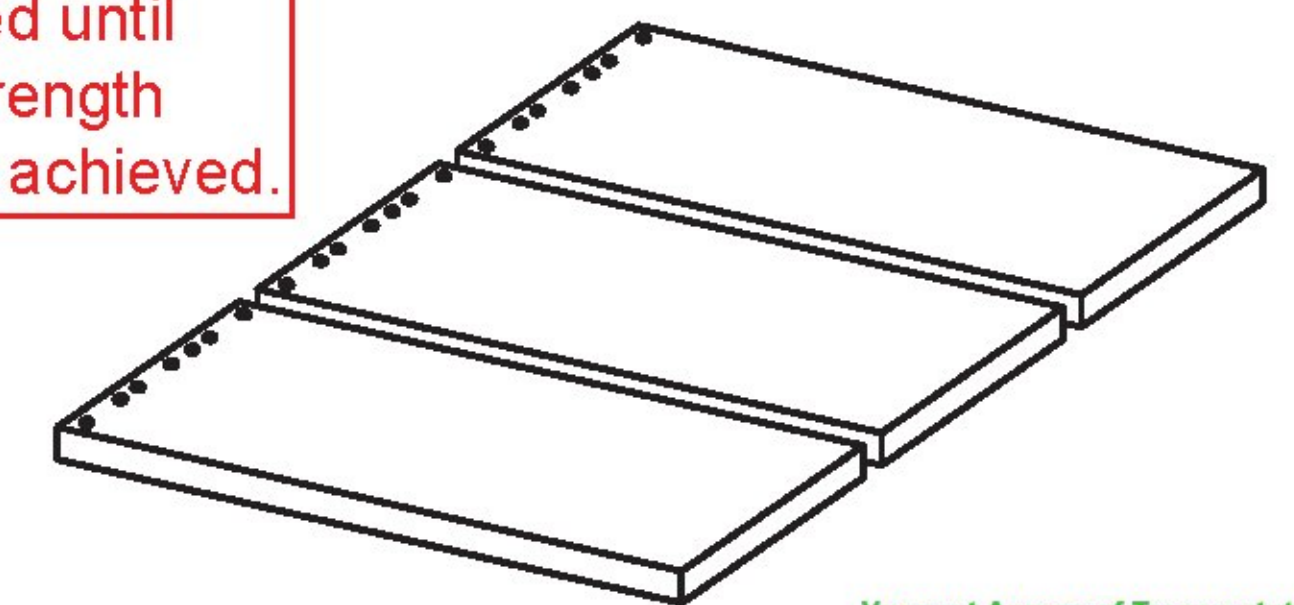
Per Contract Plans:
2'-2" Lap Unless Noted Otherwise

General Notes:

1. All lifting anchor pockets, shear keys, and grout sleeves in footings to be grouted after install (by site contractor) with type IV mortar per note 43, sheet 6 of contract plans.
2. All rebar spacing chairs to be plastic.
3. All exposed edges to be chamfered 1" U.N.O.
4. Silane sealer applied at plant on all exposed surfaces after pieces have reached 14 days old.
5. All lifting anchors and pile cavity sleeves to be galvanized.
6. All tie wire to be epoxy coated.
7. Approach Slab Install: Gravel subgrade tolerance $\pm \frac{1}{8}$ " to insure continuous contact with the underside of approach slab. Scarify top $\frac{1}{8}$ " of material with rake to allow for uniform settlement from dead load of approach slab.
8. All lift anchors are to be galvanized and will remain in place and grouted by site contractor with VAOT approved material.
9. When installing Wingwall 1 & 2 a horizontal load shall be applied to close the gap between adjoining pieces, and held in place by waste block, throughout grouting and curing process of NMB splice sleeves.
10. Precast Footings for Abutment 2 shall be set to grade by use of shim packs. See detail on sheet 20.
11. Refer to sheet 6 and sheet 12 for indication of match cast joints. When match casting joints, a 1" grout bed is not used.
12. Curing: After pouring, cover all formwork with poly/blankets. When and where practical, leave all edge forms in place and pieces covered with damp burlene for 72 hours min and move on to casting adjacent pieces. If formwork needs to be removed prior to 72 hours, these pieces shall be covered with damp burlene until the 72 hour period has expired. Pieces shall not be exposed to temperatures below 36°F prior to reaching design strength.



Per 540.08(a)(1), cure shall be maintained until design strength has been achieved.



Vermont Agency of Transportation
RECEIVED
CK'D BY _____ OK'D BY Rob Young
April 21, 2017
RESUBMIT NO _____ Approved AsNoted
BY Rob Young DATE 04/28/2017

CONTRACTORS VISPE:	LEGEND: (A) Oxford A750-7 (D) 3" Pipe (G) 3" x 24" Plastic Corrugated Sleeve (B) P52:20T x 10" Lift (E) 24" Galv. Corrugated Steel Pipe (H) P53 Lift w/ Tension Bar (C) 4" Pipe (F) 15" Galv. Corrugated Steel Pipe (I) 1" Chamfer	PRECAST CONCRETE ABUTMENT SHOP DRAWINGS (SDI JOB #18544) SUPERVISOR: E. Barendse DETAILER: I. ADAMS CHECKER: E. Barendse ENGINEER: CONCRETE ENG. SOLUTIONS	PROJ. NAME: HUNTINGTON PROJECT #: BF 0211(32) LOCATION: HUNTINGTON, VT	INSTALLER: S.D. IRELAND CONCRETE WILLISTON, VT 05495 Ph: (802) 863-6222 04/20/17	FABRICATOR: 193 INDUSTRIAL AVE. WILLISTON, VT 05495 Ph: (802) 863-6222 OVERVIEW	1/29
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