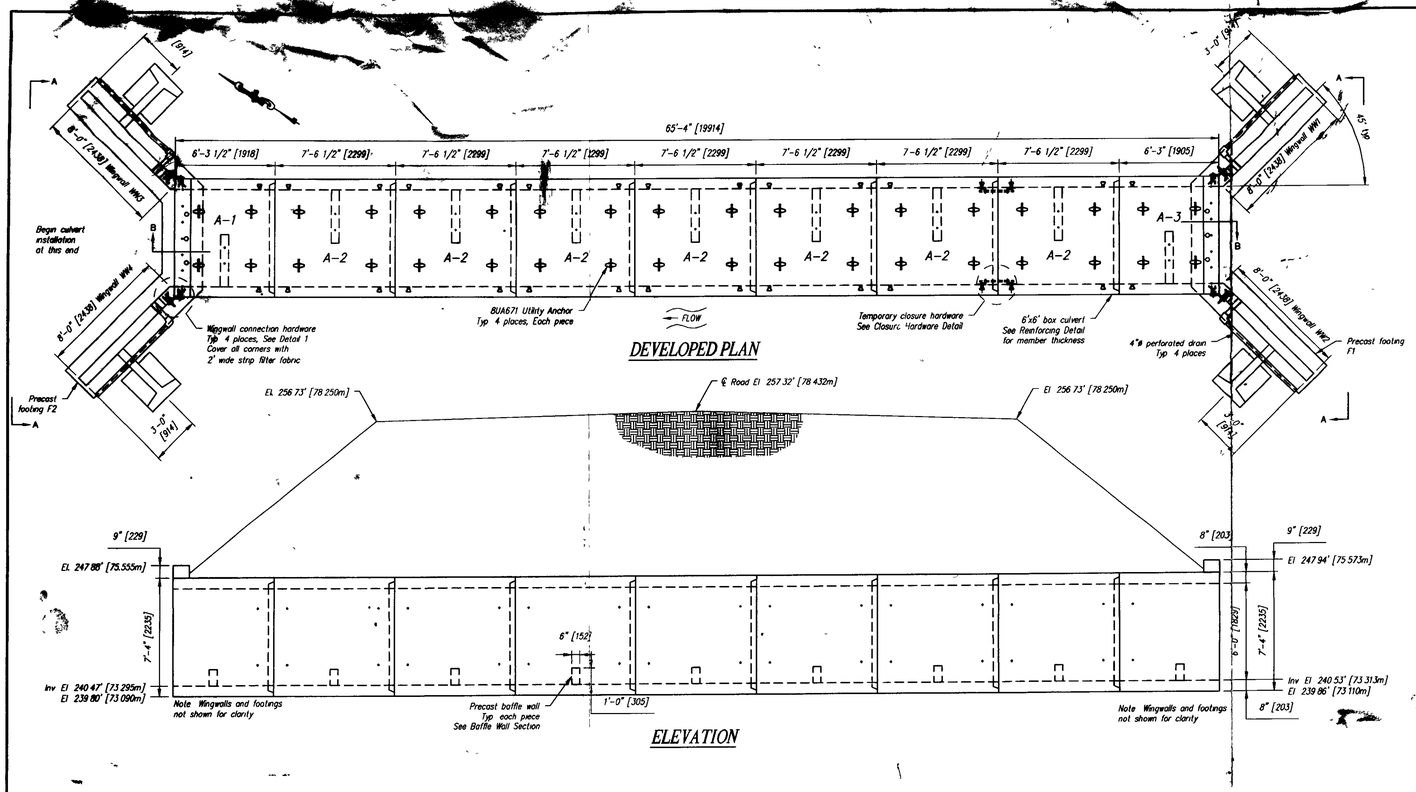


WINGWALL NOTES

GENERAL NOTES

1 The wingwalls have been designed for general site conditions. The project engineer shall be responsible for the structure's suitability to the existing site conditions and for the hydraulic evaluation -- including scour and confirmation of soil conditions.

2 Prior to construction, contractor must verify all elevations shown through the engineer

DESIGN DATA

Design Method: Load factor per AASHTO Specification
Assumed Allowable Soil Bearing 3000 PSF (Verify)— OK
Wingwalls designed for Earth Pressure Only

MATERIALS

–Precast units shall be constructed and installed in accordance with CON/SPAN Specifications.
–Concrete for Footings and Wingwalls shall have a minimum compressive strength of 4000 psi.
–Reinforcing steel for Footings and Wingwalls shall conform to ASTM A615, A616 or A617–Grade 60.

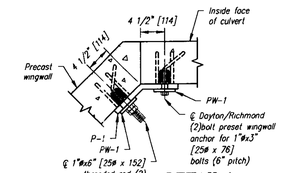
CULVERT GENERAL NOTES

1 Structure designed and built in accordance with AASHTO "Standard Specifications for Highway Bridges" and ASTM C1433
2 Design Parameters
- Live load. AASHTO HS20
- Earth Cover 8' to 10' (Designed for 6' to 10')
- Concrete Design strength f'c = 5000 psi; Unit weight = 150 pcf
- Reinforcing. ASTM A615 (rebar), grade 60; ASTM A185 (WWF) fy = 60 ksi
- Soil Unit weight = 120 pcf; Minimum lateral pressure coefficient 25; Maximum lateral pressure coefficient 50
- Cover to reinforcing 1 1/2" u n o

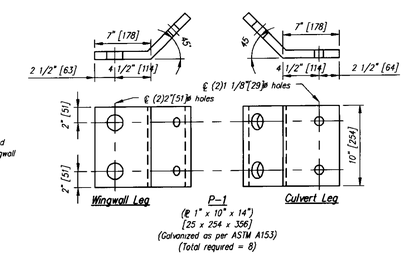
3 Dimensions include a joint gap Actual culvert piece length is ½" shorter (i e A–2 = 7'–6")
4 No dampproofing supplied by CSI
5 DBS are Dowel Bar Splicers and DI are Dowel Ins
6 Precast headwall not designed for impact load

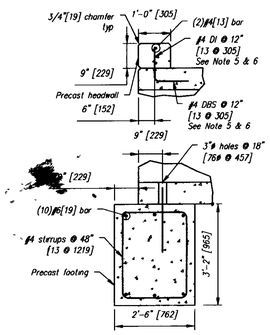
CULVERT PIECE SCHEDULE (MX-FA5000SC)					
MARK	QTY	LENGTH	YDS	WEIGHT	
A-1	1	6 25 '	4 47	9 06	TONS
A-2	7	7 50 '	5 25	10 82	TONS
A-3	1	6.25 '	4 70	9 51	TONS

WINGWALL PIECE SCHEDULE (MX-FA5000SC)					
MARK	QTY	LENGTH	YDS	WEIGHT	
WW1	1	8 00 '	1.63	3 30	TONS
WW2	1	8 00 '	1 63	3 30	TONS
WW3	1	8 00 '	1 63	3 30	TONS
WW4	1	8 00 '	1 63	3 30	TONS
F1	1	23 42 '	6 87	13 91	TONS
F2	1	23 42 '	6 87	13 91	TONS

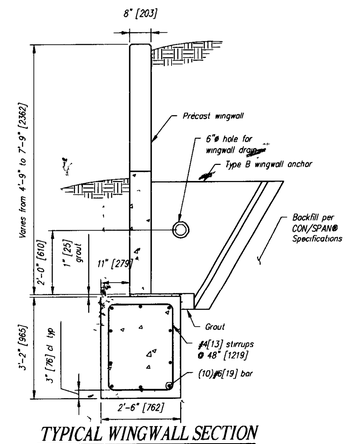


DETAIL 1

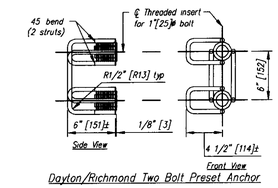




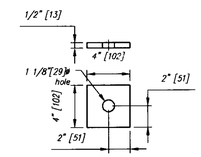
SECTION B

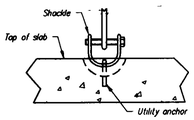


TYPICAL WINGWALL SECTION

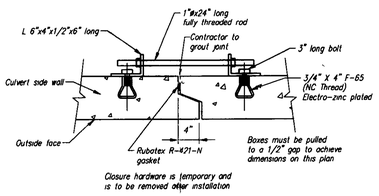


Dayton/Richmond Two Bolt Preset Anchor

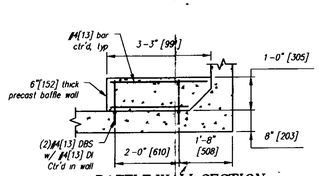




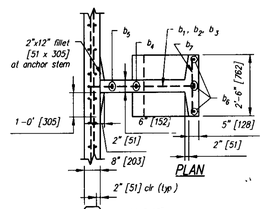
LIFTING DETAIL



CLOSURE HARDWARE DETAIL

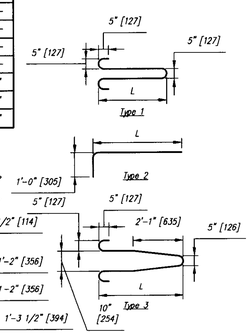


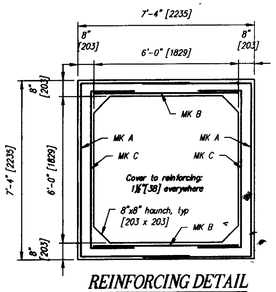
BAFFLE WALL SECTION



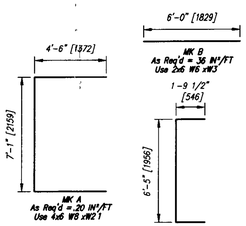
BAR LIST					
MARK	QTY	SIZE	L	TYPE	LENGTH
b_1	1	#5	2'-10"	1	——
b_2	1	#5	3'-6"	3	——
b_3	1	#5	4'-2"	1	——
b_4	2	#5	3'-8"	2	——
b_5	2	#5	——	Str	3'-2"
b_6	4	#5	——	Str	4'-2"
b_7	7	#5	——	Str	2'-2"

Note "Str" denotes straight bar
Standard clearance = 2" [51]

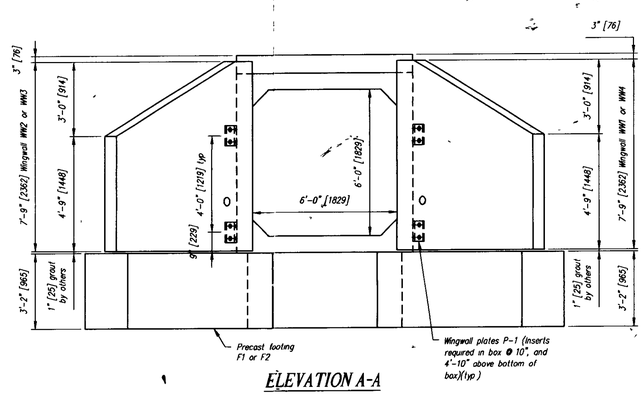




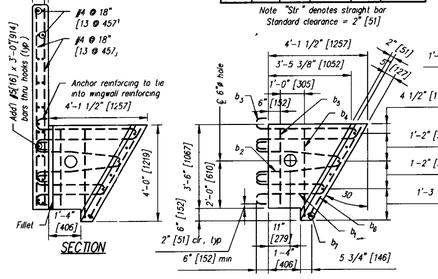
REINFORCING DETAIL



BENDING SCHEDULE



ELEVATION A-A



PRECAST ANCHOR TYPE B

Contractor is to verify that all information shown on drawings has been thoroughly checked, complies with the contract documents and is adequate to meet the field conditions Some dimensions and details may differ slightly from contract drawings to accommodate the manufacturing or design process Approval of this drawing indicates that any deviation from the contract documents has been reviewed and found to be acceptable Production will not commence until receipt of signed, approved shop drawings

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Rev	Date	DESCRIPTION	By
5			
4			
3			
2			
1			

REVISIONS

This drawing is based upon information provided from the following documents and/or sources

Engineer	VAOT
Project No	STP RS 0301(1)SA
Drawings	Highgate–Franklin Sheets 225, 227, 229, 232, 233, 234 & 235
Specifications	Higate–Franklin STP RS 0301 (1) SA – Pages 5 (schedule of items) Section 540 – Precast Concrete Box Pages 56 through 60
Other Sources	

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9 Commercial St Hudson, NH 03051
Phone 603-889-4163
Fax 603-889-2417

STATE AGENCY
VAOT
STP RS 0301(1)SA

Drawn By	M SCOTT	Date 07/18/2005
Checked By	C VICK	Date 07/29/2005
Approved By		Date

J A McDONALD, INC
HIGHGATE–FRANKLIN
HIGHGATE CENTER, VT

D — BOX CULVERT LAYOUT AND DETAILS FOR STA 2+483 00 — REV 0
Drawing No C17655–LO1
Quantity 1 | Project No STP RS 0301(1)SA | SHEET 1 OF 2

500 - Box Culvert