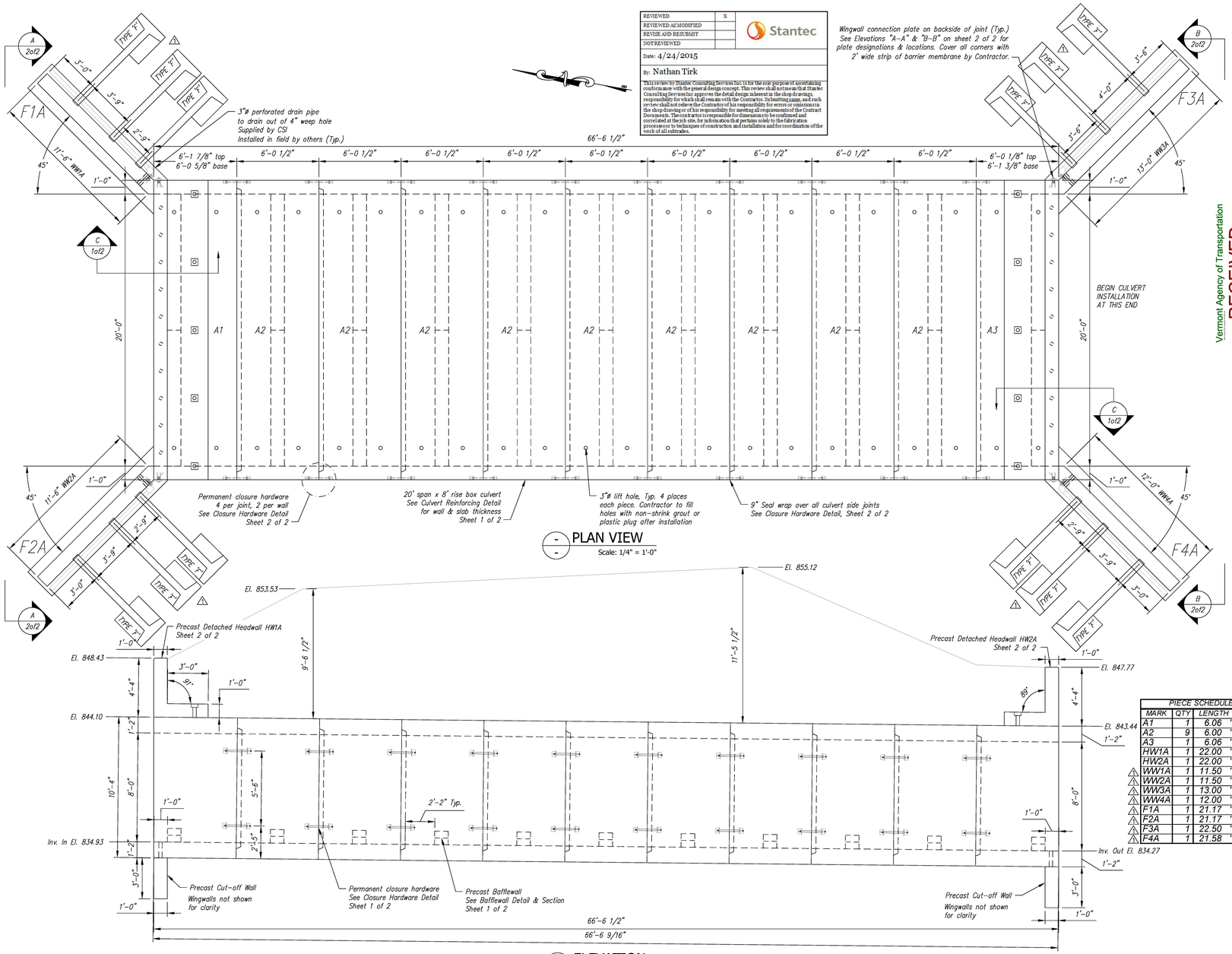
REVIEWED	X
REVIEWED AS MODIFIED	
REVISE AND RESUBMIT	
NOT REVIEWED	

Stantec

Date: 4/24/2015

By: Nathan Tirk

This review by Stantec Consulting Services Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that Stantec Consulting Services Inc approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor. Submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawing or of his responsibility for meeting all requirements of the Contract Documents. The contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to the fabrication processes or to techniques of construction and installation and for coordination of the work of all subtrades.



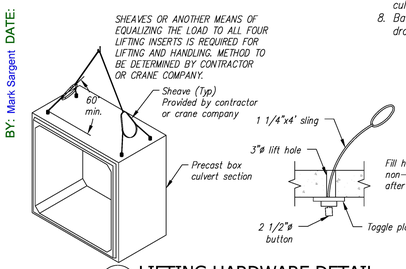
WINGWALL GENERAL NOTES:

1. Reference standard:
   AASHTO LRFD Specifications
2. Design Parameters:
   Soil Bearing: 4300 psf
   Earth Cover: 5' to 7.5'
   Concrete: Design strength f'c = 5000 psi
   Unit weight = 150 pcf
   Reinforcing: ASTM A615 (rebar), grade 60, Black
   Soil: Unit weight = 140 pcf
   Minimum lateral pressure coefficient .25
   Maximum lateral pressure coefficient .50
   Cover to reinforcing: 2" u.n.o.
3. 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.
4. Prior to construction, contractor must verify all elevations shown through the engineer.

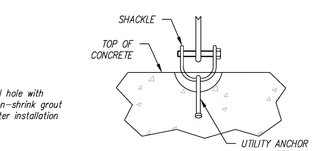
GENERAL NOTES:

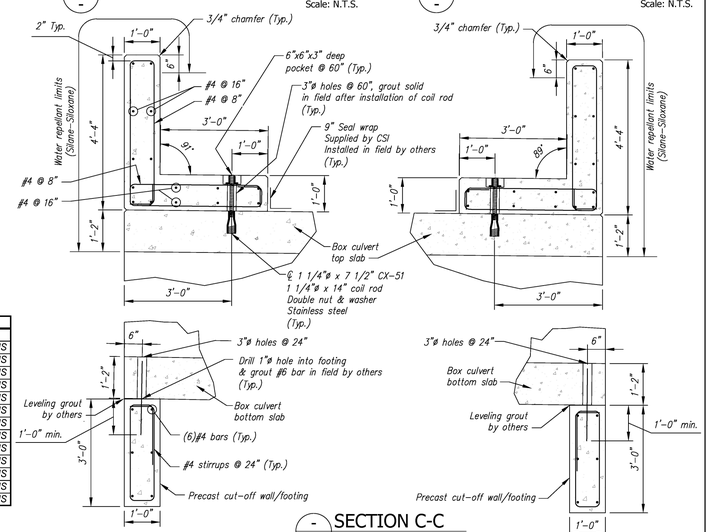
1. Reference Standards:
   AASHTO "LRFD Bridge Design Specifications"
   ASTM C1577
2. Design Parameters:
   Live load: HL–93
   Earth Cover: 9' to 12'
   Concrete: Design strength f'c = 5000 psi
   Unit weight = 150 pcf
   Reinforcing: ASTM A615 (rebar) GR 60, Black
   Soil: Unit weight = 140 pcf
   Minimum lateral pressure coefficient .25
   Maximum lateral pressure coefficient .50
   Cover to reinforcing: 2" headwalls
   1 1/2" elsewhere u.n.o.
3. Dimensions include a joint gap. Actual culvert piece length is ½" shorter (i.e. A2 = 6'–0").
4. No dampproofing or waterproofing supplied by CSI.
5. DBS are Dowel Bar Splicers and DI are Dowel Ins. Both are supplied by CSI. DI's are to be installed and cut/bent in the field by others as required.
6. Headwalls are not designed for impact load.
7. Water repellant (Silxane Siloxane) by CSI on all exposed faces of culvert, headwalls, and wingwalls to 1' inside culvert ends.
8. Baffle wall details taken from Sheet 12 of 55 of the contract drawings.

Vermont Agency of Transportation
RECEIVED
ON: April 30, 2015
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 5/7/2015



LIFTING HARDWARE DETAIL
Scale: N.T.S.

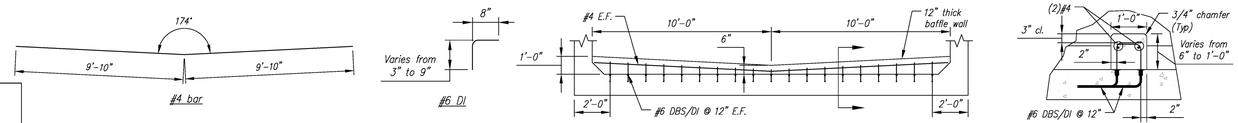




FOOTING LIFTING DETAIL
Scale: N.T.S.

SECTION C-C
Scale: N.T.S.

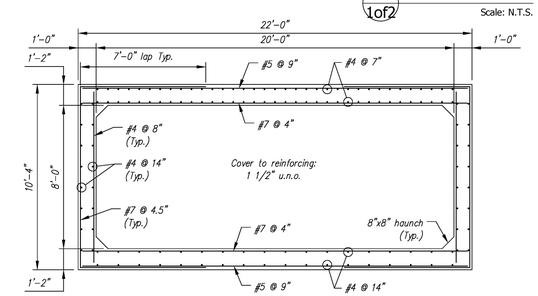
PIECE SCHEDULE (MX-FA5000SC30)					
MARK	QTY	LENGTH	YDS	WEIGHT	
A1	1	6.06 '	16.08	32.56	TONS
A2	9	6.00 '	15.70	31.79	TONS
A3	1	6.06 '	15.62	31.63	TONS
HW1A	1	22.00 '	5.98	12.11	TONS
HW2A	1	22.00 '	5.98	12.11	TONS
⚠ WW1A	1	11.50 '	7.09	14.36	TONS
⚠ WW2A	1	11.50 '	7.09	14.36	TONS
⚠ WW3A	1	13.00 '	7.90	16.00	TONS
⚠ WW4A	1	12.00 '	7.44	15.07	TONS
⚠ F1A	1	21.17 '	4.57	9.25	TONS
⚠ F2A	1	21.17 '	4.57	9.25	TONS
⚠ F3A	1	22.50 '	4.99	10.10	TONS
⚠ F4A	1	21.58 '	4.71	9.54	TONS



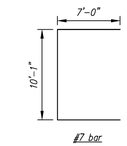
BAFFLE WALL BENDING SCHEDULE
Scale: N.T.S.

BAFFLE WALL DETAIL
Scale: N.T.S.

BAFFLE WALL SECTION
Scale: N.T.S.



CULVERT REINFORCING DETAIL
Scale: 3/8" = 1'-0"



BENDING SCHEDULE
Scale: N.T.S.

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.

This drawing contains information proprietary to CONCRETE SYSTEMS, INC. This drawing is disclosed with the understanding that it will be retained in confidence and its use limited solely to the purpose for which it is disclosed. It is understood that no reproduction of this drawing is authorized without permission from CONCRETE SYSTEMS, INC. and that it will be returned to CONCRETE SYSTEMS, INC. upon request.

Stamp for structural design only

Rev.	Date	DESCRIPTION	By
5			
4			
3			
2			
1	01APR2015	CONSPAN WW ANCHORS WERE TYPE 'D', WWs WERE 10" THK, WW & FTG WEIGHTS UPDATED	RY

REVISIONS

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

Engineer: STATE OF VT AOT PROGRAM DEVELOPMENT
Project No: STPCULV30
Drawings: VT/AOT PROPOSED INPROVEMENT BRIDGE PROJECT
SHEETS 1 THRU 24 & 32 OF 55
Specifications: ----

Other Sources: ----

CSI
Concrete Systems Inc.
9 Commercial St., Hudson, NH,03051
Phone 603-889-4163
Fax 603-889-2417

STATE AGENCY
VTrans Working to Get You There

Drawn By	Date
R. YEAGER	09MAR2015
Reviewed By	Date
B. KOLAWOLE	02APR2015
Approved By	Date

J A MCDONALD, INC.
VT/AOT BRIDGE – STEEL CULVERT REPLACEMENT
BRIDGE #6, VT ROUTE 58, IRASBURG, VT

D — Drawing No. C22283–L01A — 20' SPAN x 8' RISE BOX CULVERT LAYOUT — REV 1

Quantity: 1 | Project No: STPCULV30 | SHEET 1A OF 2A