KUBRICKY CONSTRUCTION CORP.
269 BALLARD ROAD

WILTON, NY 12831
518 792-5864

KUBRICKY CONSTRUCTION CORP.
A PROUD MEMBER OF THE D.A. COLLINS™ COMPANIES

Rutland City BRF 3000 (2014036)
SUBMITTAL 47.2

Issued 05/22/15
Respond by 05/29/15

To

Timothy Pockette, PE

Topic	900.645 Precast Flapper Valve Headwall RESUBMITTAL 2
Status	For Approval
Spec section	900.645
Responsibility	(16) River Street
Received from submitter	5/21/15
Sent to approver	5/22/15
Required from approver	5/29/15

From

Volker H.D. Burkowski

Signed by _____ Date 5/22/15

Proceed as Indicated _____ Date _____
Owner Authorized Representative

S.D. Ireland Companies
Precast Division

193 Industrial Ave. Williston, VT 05495
P.O. Box 2286 South Burlington, VT 05407
p: 802-863-6222 f: 802-860-1528
www.sdireland.com

Attention:	Niall Buxton	Date:	5/20/2015
Company:	Champlain Constr	Job Name:	Rutland City BRF 3000(16) River St
Address:		Job Number:	SDI 15790
City, St, Zip:		Regarding:	Headwall revised submittal
Ph: / Fax:			

WE ARE SENDING:
- [ ] Quote
- [ ] Details
- [ ] Other: _____
- [x] Submittals
- [ ] Prints
- [ ] Plans
- [ ] Specifications
- [ ] Copy Of Letter
- [ ] Change Order
- [ ] Samples
- [ ] Revised Submittals

Copies	Date	Pages	Description
1	5/20/2015	1	Transmittal Cover
1	5/20/2015	7	Project Cover pg, Dorr Dr. headwall location, headwall detail,
			mix design, lift devices

These Are Submitted as Checked Below:
- [x] For Approval
- [ ] Approved as Submitted
- [ ] Resubmit __ Copies for Approval
- [x] For Your Use
- [ ] Approved as Noted
- [ ] Submit__ Copies for Distribution
- [x] As Requested
- [x] Returned for Corrections
- [ ] Return __ Corrected Prints
- [x] For Review and Comment
- [ ] Prints Returned After Loan to Us
- [ ] For Bids Due: _____
- [ ] Other:

Notes/Remarks:

This submittal replaces 28 April 15 submittal.

Thank you.

Tim Dudley, S D Ireland Precast Div, 802-863-6222, ext 253,
tdudley@sdireland.com

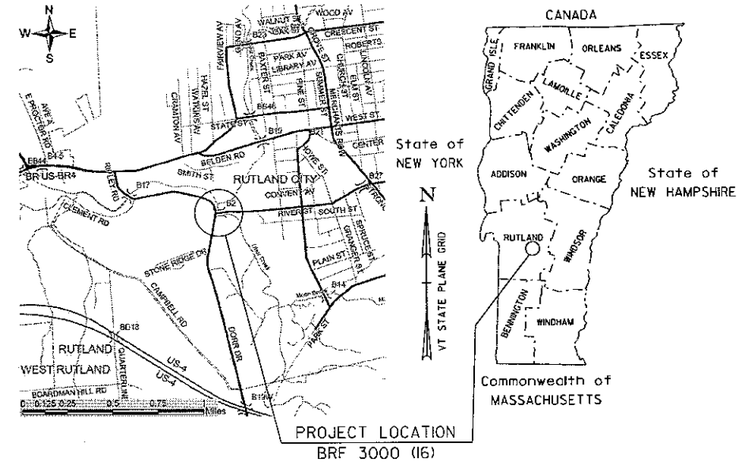
Copy To: _____

Signed: _____

If enclosures are not as noted, kindly notify us at once.

PROJECT DESCRIPTION : CONSTRUCT NEW TWO SPAN GIRDER BRIDGE ON THE NORTH SIDE OF THE EXISTING TWO SPAN TRUSS BRIDGE. TH-8 REQUIRES REALIGNMENT AND ROADWORK RELATIVE TO THE BRIDGE. TH-10 REQUIRES REALIGNMENT AND ROADWORK. EXISTING BRIDGE WILL BE REMOVED AFTER PROPOSED BRIDGE IS CONSTRUCTED.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

CITY OF RUTLAND
COUNTY OF RUTLAND

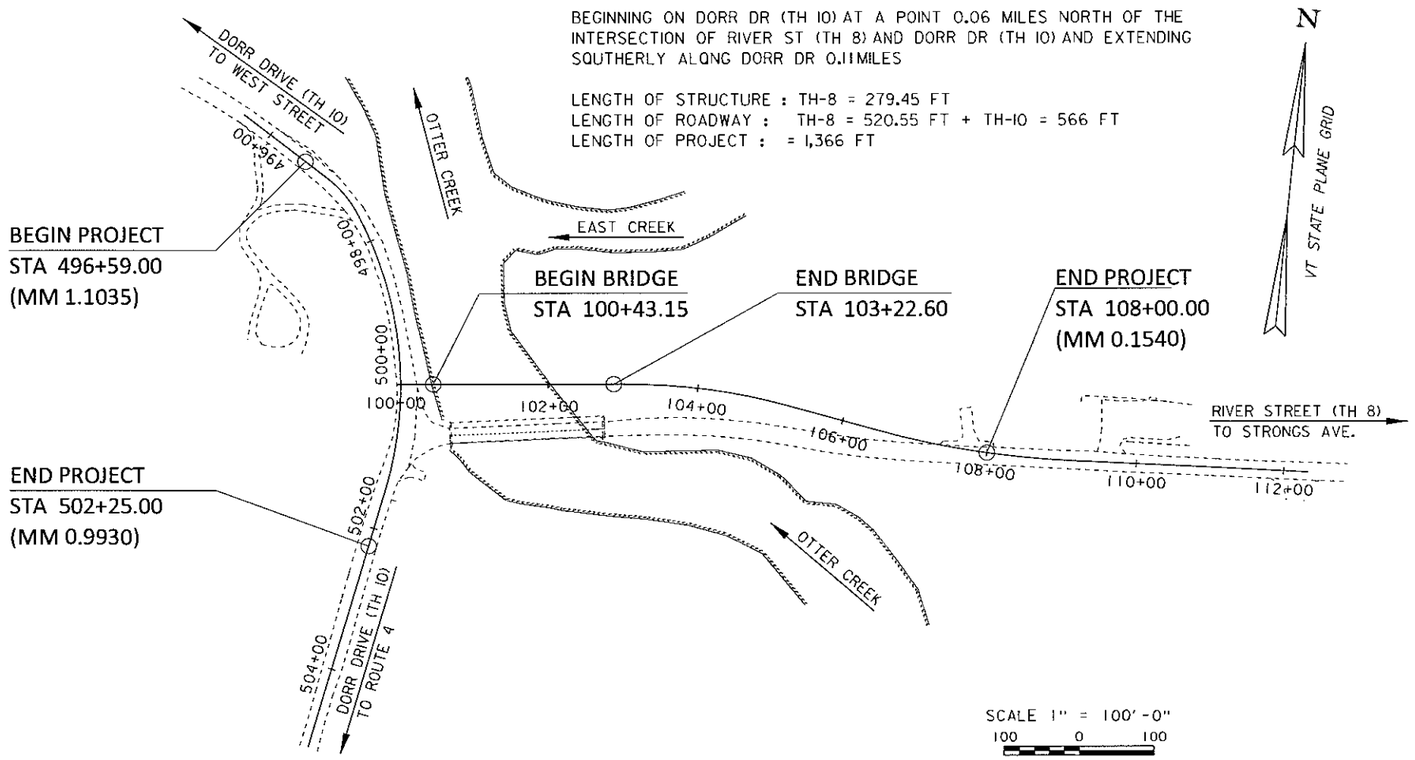
ROUTE NO : TH 8 (RIVER STREET) Urban Collector - FAU 3052
TH 10 (DORR DRIVE) Urban Collector- FAU 3008

BRIDGE NO : 2 (TH 8)

BEGINNING AT THE INTERSECTION OF DORR DR (TH 10) AND RIVER ST (TH 8) AND EXTENDING EASTERLY ALONG RIVER ST (TH 8), 0.15 MILES.

BEGINNING ON DORR DR (TH 10) AT A POINT 0.06 MILES NORTH OF THE INTERSECTION OF RIVER ST (TH 8) AND DORR DR (TH 10) AND EXTENDING SOUTHERLY ALONG DORR DR 0.11 MILES

LENGTH OF STRUCTURE : TH-8 = 279.45 FT
LENGTH OF ROADWAY : TH-8 = 520.55 FT + TH-10 = 566 FT
LENGTH OF PROJECT : = 1,366 FT



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	L. ORVIS
SURVEYED DATE :	MARCH 2000
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (92)

PROJECT MANAGER : CAROLYN CARLSON	
PROJECT NAME :	RUTLAND CITY
PROJECT NUMBER :	BRF 3000 (16)
SHEET 122 OF 245 SHEETS	

ALL FENCE ITEMS
SEE ROADWAY LAYOUTS

ELECTRICAL CONDUIT
SEE UTILITY PLANS

SPECIAL PROVISION (C-900 PVC, ALL-INCLUSIVE) (12" SEWER OVERFLOW)
500+92.5 TO 501+29.4 LT (OVERFLOW)

SPECIAL PROVISION (FLAPPER VALVE AND HEADWALL)
500+92.5 LT

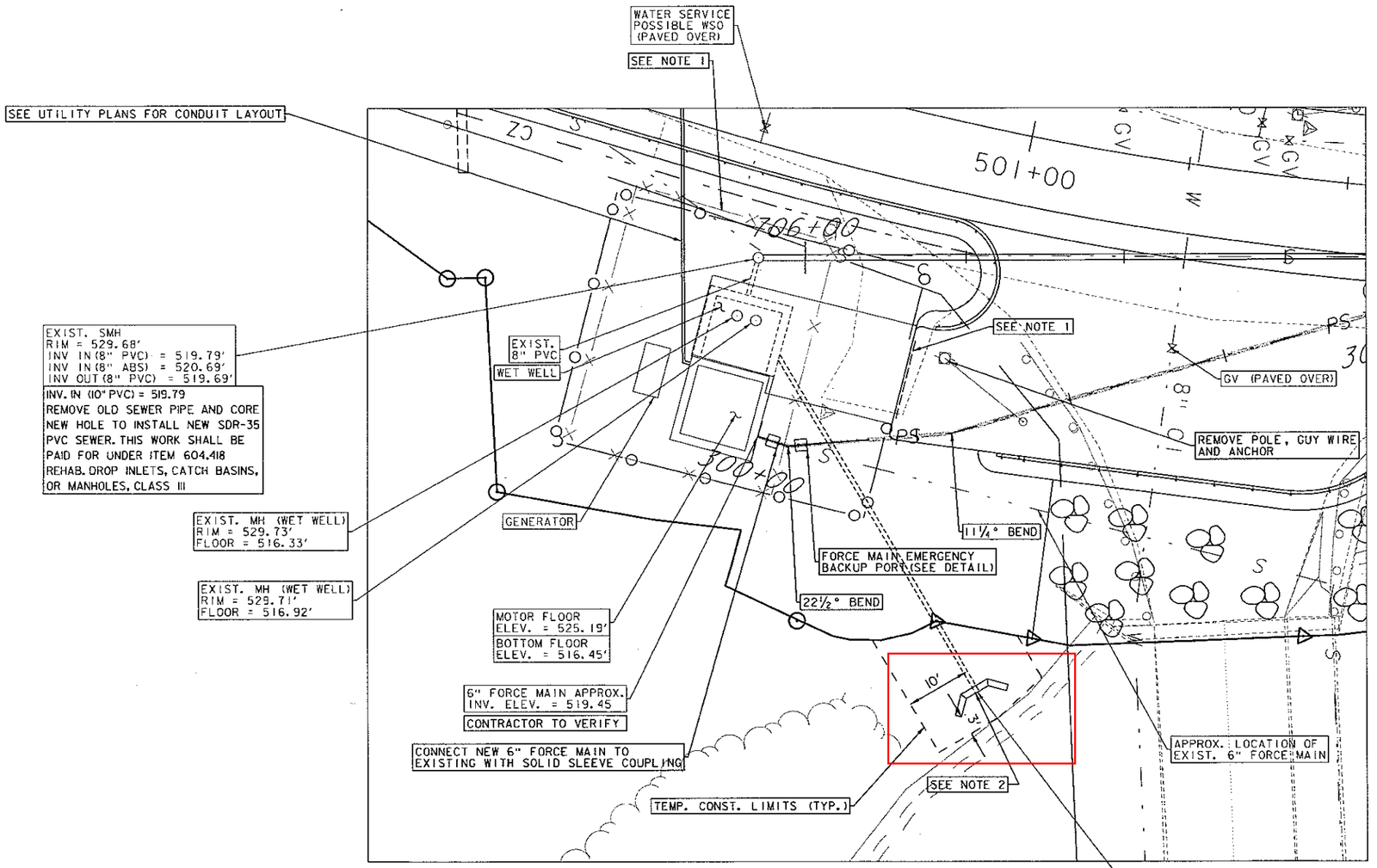
SPECIAL PROVISION (EMERGENCY BACKUP PORT)
501+23.3 LT

GATE VALVE WITH VALVE BOX
501+23.3 LT (6") (2) (FOR EMERGENCY BACKUP PORT)

REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS III CAST IRON COVER WITH FRAME, SEWER
501+36.1 LT

SPECIAL PROVISION (TRANSITE PIPE REMOVAL)
500+92.5 TO 501+29.4 LT

VT STATE PLANE GRID



NOTES:

1. CONTRACTOR TO REMOVE ALL EXISTING FENCE AND SWING GATE. INSTALL NEW CHAIN-LINK FENCE AND NEW 16' SLIDE GATE. SEE ROADWAY LAYOUTS. SUBMIT WORKING DRAWING FOR SLIDE GATE CONFIGURATION.

2. REMOVE EXISTING OVERFLOW PIPE AND CLEANOUT AND INSTALL NEW 12" C-900 PVC OVERFLOW PIPE WITH NEW FLAPPER VALVE AND HEADWALL. MATCH PROFILE. CONNECT TO EXISTING PIPE WITH SOLID SLEEVE COUPLING APPROX. 2' TO 4' OUTSIDE WET WELL. SEE FLAPPER VALVE AND HEADWALL DETAIL.

0 10 20
(SCALE 1" = 10')

STATE OF VERMONT DAVID A. LEWIS NO. 015.0005418 Civil LICENSED PROFESSIONAL ENGINEER

WATER AND SEWER PLANS

CONSULTING ENGINEERS
540 Commercial Street, Manchester, NH 03101
(603) 668-8223 • Fax: (603) 668-8802
cld@cldengineers.com • www.cldengineers.com
Maine • New Hampshire • Vermont

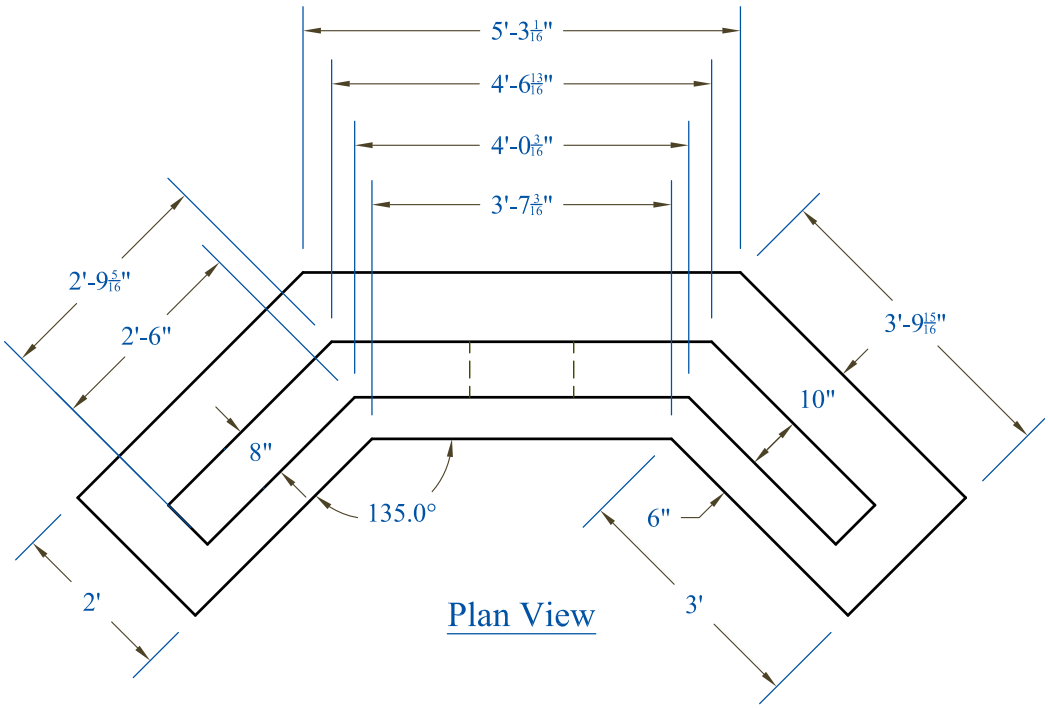
PROJECT NAME: RUTLAND CITY
PROJECT NUMBER: BRF 3000 (16)

FILE NAME: z94J092bdrswr.dgn
PROJECT LEADER: C. BEAN
DESIGNED BY: D. LEWIS
DORR DRIVE PUMP STATION PLAN

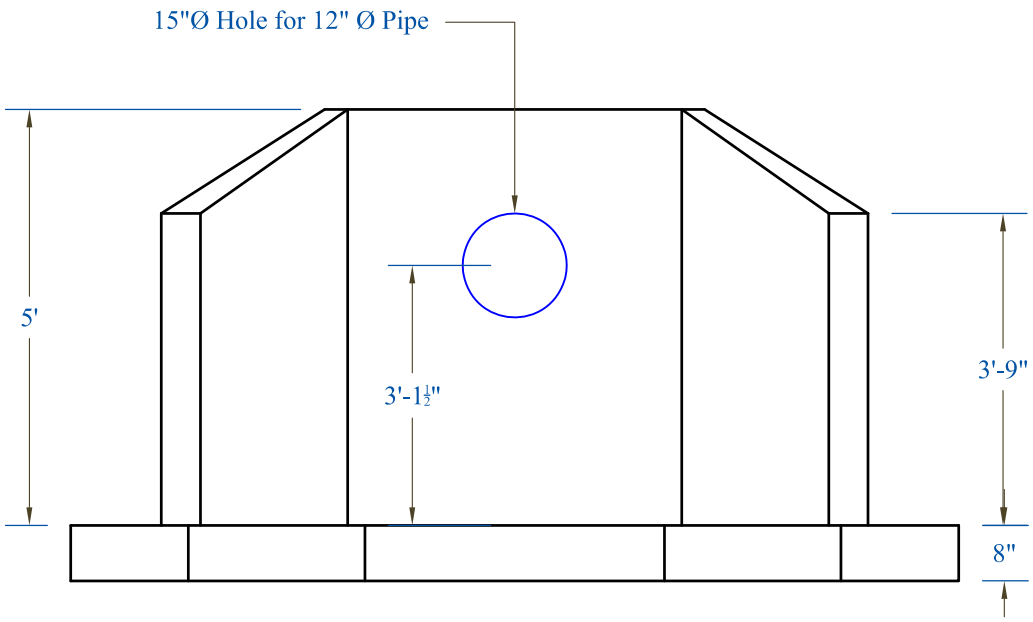
PLOT DATE: 6/17/2014
DRAWN BY: W. GORDON
CHECKED BY: S. REICHERT
SHEET 14 OF 22

Precast Headwall

Custom



Plan View



Elevation View

6800 lbs.

Job #: 15790
Company: Champlain Constr.
Project: River St. BRF3000(16)
Address: Rutland, VT
Date: 02/03/15
Scale: N.T.S.

Design Notes:

-Concrete Minimum 5000 psi at 28 days

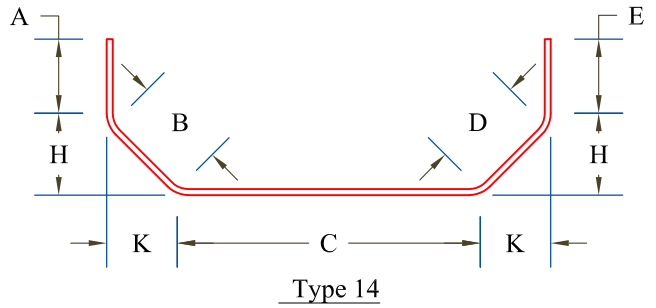
-Grade 60 Steel Reinforcing

IA

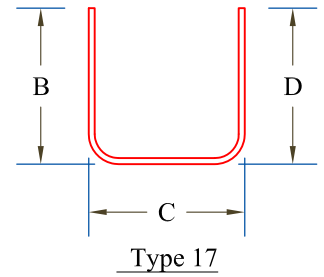
193 Industrial Ave, Williston, VT 05495 PO Box 2286, South Burlington, VT 05407 Phone: (802) 658-0201 www.SDIreland.com

Steel Schedule for Reinforced Concrete Headwall

Mark	Size	Spacing	Length	Type	A	B	C	D	E	H	K
W501	#5	12"	Varies	Str.							
W502	#5	12"	Varies	Str.							
W503	#5	12"	2'-7 $\frac{1}{2}$"	17		1'-9"	10 $\frac{1}{2}$"	-----			
W504	#5	12"	3'-1 $\frac{1}{2}$"	17		1'-11$\frac{1}{2}$"	1'-2"	-----			
W505	#5	12"	1'-8"	Str.							
W506	#5	N/A	8'-0"	14	9"	9"	9"	9"	9"	6 3/8"	6 3/8"
W507	#5	12"	4'-4"	17		2'-0"	4"	2'-0"			

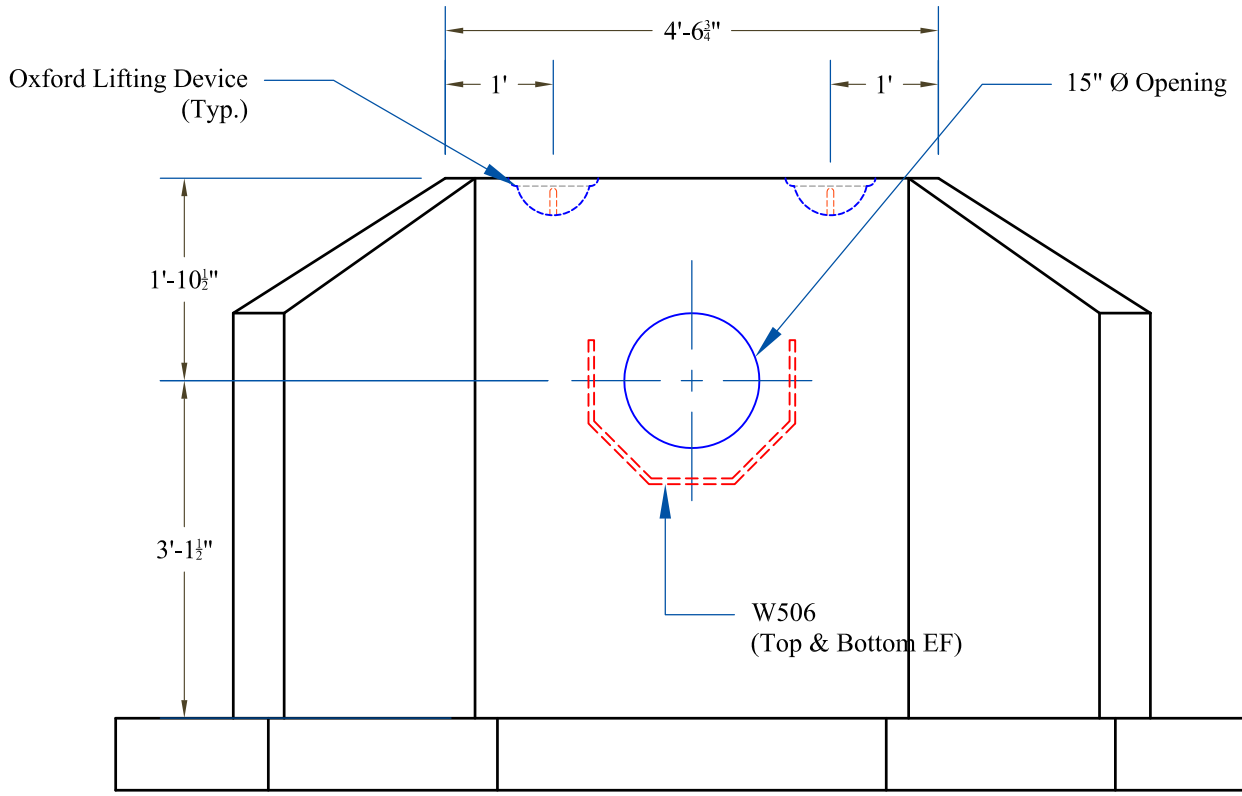


Type 14

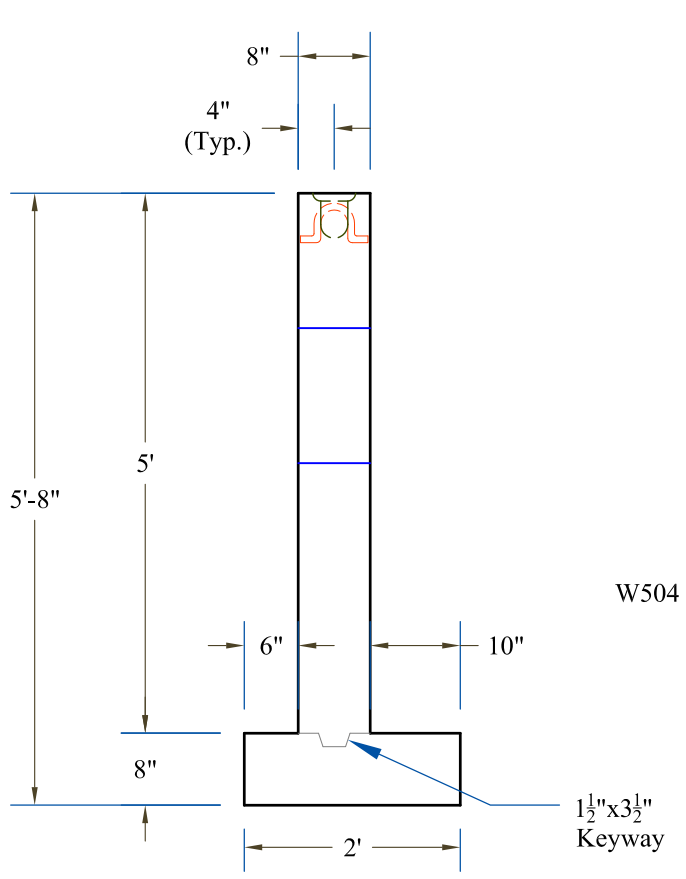


Type 17

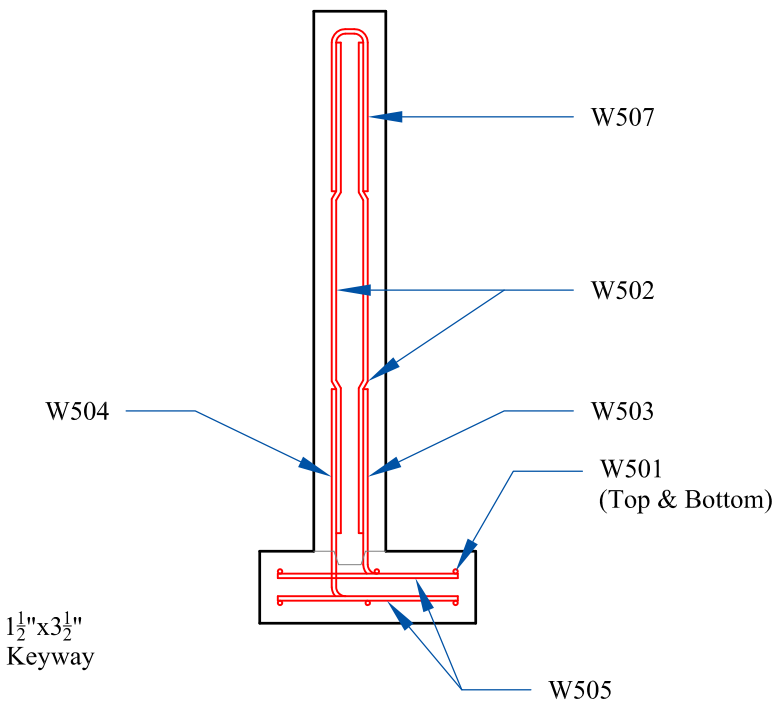
Note: 2" Clear Unless Noted Otherwise.



Elevation View



Section View



Rebar Reinforcing

SD Ireland Precast Division

193 Industrial Ave, Williston, VT 05495

P.O. Box 2286, South Burlington, VT 05407

Phone: (802) 658-0201 www.SDIreland.com

Note:
This shop drawing represents S.D. ireland's interpretation of the architects plans and specifications as well as our contract requirements for this project.

Prior to manufacture and production from this drawing all; dimensions, methods of construction, and existing conditions must be checked, revised and approved by S.D. Ireland's client.

General Notes:
1) All lengths stated are actual lengths.
2) All lengths stated to be verified in the field by others:
-Not the responsibility of S.D. Ireland
3) All loose anchorage to be supplied by others:
-Not the responsibility of S.D. Ireland

Legend:

- Grade 60 blk rebar
- Concrete P50TER SCC for general precast

IA

Rev.	Date	By	Description

Project Name:	Rutland BRF 3000(16)		
Project Location:	Rutland,VT		
Drawing Title:	Precast Headwall		
Job #:	15790	Date:	
Scale:	N.T.S.	Page:	

S.D. Ireland
Concrete Construction Corporation
802-863-6222 • Fax: 802-860-1528
www.sdireland.com

CONCRETE MIX DESIGN

5000 psi

SCC

SDI MIX CODE: P50TER

DATE: April 08, 2015 **PLANT:** Burlington, VT

PROJECT: **General DOT Precast - 2015**

FINE AGGREGATE: ASTM C 33	Source:	Hinesburg Sand & Gravel
	Specific Gravity:	2.68 (Abs.: 1.25%)
	Fineness Modulus:	2.65 ±
COARSE AGGREGATE: ASTM C 33	Source:	S.D. Ireland, Brownell Quarry
	Specific Gravity:	2.77(Abs.: 0.43%)
	Description	3/4" 100% Crushed Stone (Size #67)
CEMENT:	Ternary Blend Cement; Lefarge North America Lakes and Seaway Re St. Constant, Quebec (22% Slag, 5% Silica Fume, 73% Type II Cement) (Sp.Gvty: 2.976)	
ADMIXTURES:	Water Reducer (HRWR): Glenium 7500; BASF Admixtures Air Entraining Agent: Darex II AEA; Grace Concrete Chemicals	

CONSTITUENTS (LBS. /YD³)

		Abs.Vol.
Coarse Aggregate (SSD)	1660	9.60
Fine Aggregate (SSD)	1198	7.17
Cement	705	3.80
Water	292	4.68
Air Content (Entrained)	6.5%	1.76
Total	3855	27.00ft³

MIX PROPERTIES/ REQUIREMENTS

Water Cement Ratios: 0.41 (0.44 max)
Entrained Air Content: 5.0 % – 9.0%
Dry Unit Weight: 143 ± pcf
Spread: 21" to 27"
Concrete Temperatures: 50 – 85°F
VSI= ≤1

ADMIXTURE(S) DOSEAGE (OZ. /YD³)

Glenium 7500 (HRWR)	46 – 53
Darex II AEA	2.0

RECENT STRENGTH GAIN

See Separate Report

Approved by James Wild, UVM Composite Materials Engineer 4/10/15

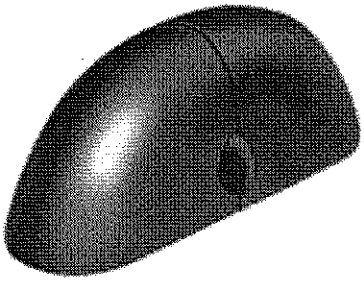
*Admixture dosage rates are subject to change.

OXFORD Industrial Technologies, LLC

PO Box 736 • Stevenson, CT 06491
www.oxfordtechusa.com
Phone: (203) 268-6030
Fax: (203) 445-1240
info@oxfordtechusa.com

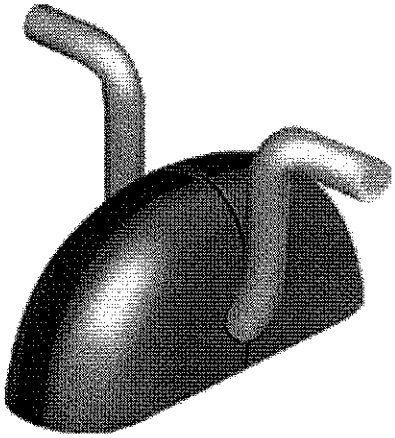
Oxford Lift System®

B-500 Block Out — Makes a 7" L x 2" W x 3"H Void



Patented

B-750 Block Out — Makes a 8" L x 3" W x 4"H Void



Patented

< back next >

Home | B-500 & B-750 | S-150 | S-300 | Lift Anchor & Order Form | Concrete Products
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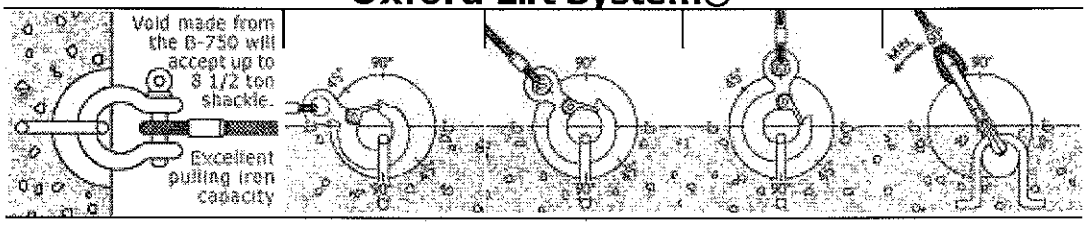
info@oxfordtechusa.com

Oxford Lift System®



Anchor Product Code	Slab Min. Inches	Safe Working Load @ 90 degree Shear-0 degree Pull	Safe Working Load @ 90 degree Shear-45 degree Pull	Safe Working Load @ 90 degree Tension-90 degree Pull	Safe Working Load @ 90 degree Shear-60 degree Pull
A 500-3	4.00"	4,500	4,000	3,500	4,000
A 500-4	5.00"	8,000	5,500	4,000	5,000
A 500-5	6.00"	10,500	6,500	5,000	5,500
A 750-5	6.00"	12,500	8,000	7,000	7,000
A 750-7	8.00"	15,000	12,500	10,000	10,000

Note: Safe Working Load provides a factor of safety of approximately 4:1

Test Results are based on a minimum concrete compressive strength of 4,000 psi.

<back next>

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