

GENERAL NOTES:

APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.

THIS VAULT AND INCLUDED EXTENSIONS, COVERS ETC.
ARE DESIGNED FOR AASHTO H20 LOADING IN
ACCORDANCE WITH ASTM SPECIFICATIONS. THE
VARIOUS STRUCTURES ARE MANUFACTURED IN
ACCORDANCE WITH ASTM AND ACI SPECIFICATIONS.
INSTALLATION SHALL BE PER ASTM C891-90.

ALL PRECAST MANHOLE PRODUCTS AND ACCESSORIES
WILL BE PRODUCED FROM CUSTOMER **APPROVED**
DRAWINGS. PRIOR TO CUSTOMER APPROVAL
ALL DRAWINGS WILL BE STAMPED/SIGNED BY A
LICENSED ENGINEER OF THE STATE OF CALIFORNIA.

MATERIALS:

CONCRETE: fc=7,000 psi, 28 DAYS COMPRESSIVE
STRENGTH. 5LBS PROPEX NOVAMESH 950 PER C/Y.
RHEOPEL PLUS INTEGRAL WATER REPELLANT.

REINFORCEMENT: REBAR PER ASTM A-706
GRADE 60.

STEEL: ASTM A-36, HOT DIP GALVINIZED AFTER
FABRICATION

GALVINIZING: ASTM A-123 AND A153

**REINFORCEMENT FABRICATION SHALL BE IN ACCORD-
ANCE WITH ACI AND CSRI SPECIFICATIONS. WELDING
REINFORCEMENT SHALL BE ACCORDANCE WITH AWS D1.4.**

DISCLAIMERS:

PRECAST CONCRETE UNDERGROUND STRUCTURES SHALL
BE INSTALLED PER ASTM C-891. THE EXCAVATION SUB
GRADE SHALL BE COMPACTED TO 90% COMPACTION
OR PER THE PROJECT GEOTECHNICAL REPORT AND A
MINIMUM OF FOUR INCHES OF 3/4" CRUSHED ROCK
SHALL BE PLACED ON TOP OF SUB GRADE. THE
EXCAVATION SHALL BE AT LEAST 12" LARGER THAN THE
OUTSIDE DIMENSION OF THE STRUCTURE AND THE
SUB GRADE SHALL BE LEVEL. IMPROPERLY PREPARED
EXCAVATION MAY CAUSE DAMAGE TO THE STRUCTURE
AND VOID THE WARRANTY.

THE PRECAST STRUCTURES SHALL BE DESIGNED AND
MANUFACTURED IN ACCORDANCE WITH ASTM
SPECIFICATIONS IN PARTICULAR ASTM C-857
AND ASTM C-858 AS APPLICABLE. THE DRAWINGS MAY
BE CHANGED BASED ON INFORMATION PROVIDED BY
SDG&E AT A LATER DATE DUE TO FIELD CONDITIONS
OR ENGINEERING REQUISITES.

A-1106F&C FRAME & COVER

3332CT TRAFFIC COVER

3332NT NECKING

3332- 6" INTERSECTION

3332- 9" INTERSECTION

3332- 12" INTERSECTION
(INDICATE INTERSECTIONS NECESSARY
TO ACCOMODATE SPECIFIC JOBSITE
ELEVATIONS.)

230KV-TOP SECTION

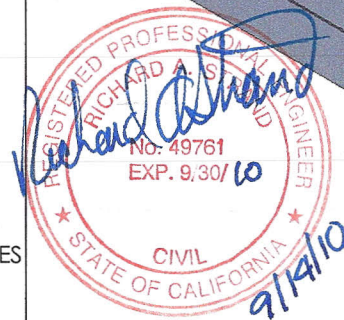
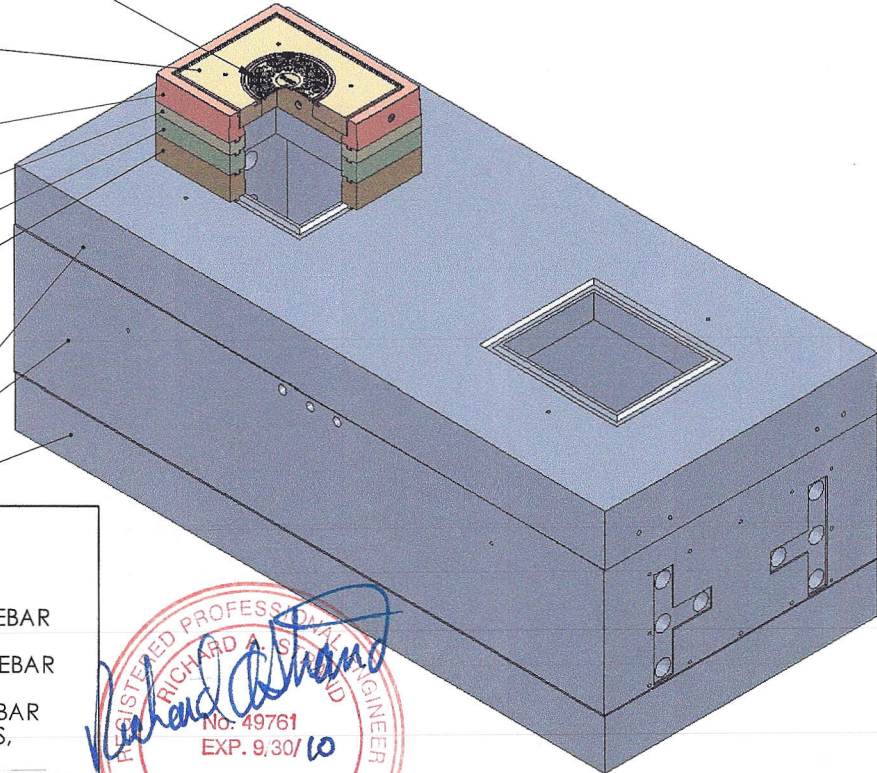
230KV-INTER SECTION

230KV-BASE SECTION

TABLE OF CONTENTS:

- SHEET 1-** COVER
- SHEET 2-** 230 KV BASE VAULT
- SHEET 3-** 230 KV BASE VAULT REBAR
- SHEET 4-** 230 KV INTER VAULT
- SHEET 5-** 230 KV INTER VAULT REBAR
- SHEET 6-** 230 KV TOP VAULT
- SHEET 7-** 230 KV-TOP VAULT REBAR
- SHEET 8-** DETAILS-TERMINATORS,
COIL INSERTS & SUMP
- SHEET 9-** DETAILS-PULLING IRONS
- SHEET 10-** DETAILS-UNISTRUT & SHIPLAP
- SHEET 11-** DETAILS-INSTALLATION GUIDES
- SHEET 12-** 3332 INTER 12
- SHEET 13-** 3332 INTER 12 REBAR
- SHEET 14-** 3332NT NECKING
- SHEET 15-** 3332NT REBAR
- SHEET 16-** 3332CT TRAFFIC COVER
- SHEET 17-** 3332CT REBAR
- SHEET 18-** 3332 NECKING ASSEMBLY W/
A1106 FRAME AND COVER

REVISION HISTORY-BY SHEET																				
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	DRAWN BY	DATE
REV.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	WBL	9/7/2010



	APPROVAL	DATE
DETAILER:	WBL	3/17/09
PROJ MGR:		
PLANT MGR:		
GEN MGR:		
QUALITY:		
CUSTOMER APPROVAL:		



2735 Cactus Road
San Diego, CA 92154

**NPCA
CERTIFIED
PLANT**

DO NOT SCALE DRAWING

SHEET 1 OF 18

MARK: **230KV- 3 SECTION VAULT**

CUSTOMER: **SAN DIEGO GAS & ELECTRIC**

PROJECT:

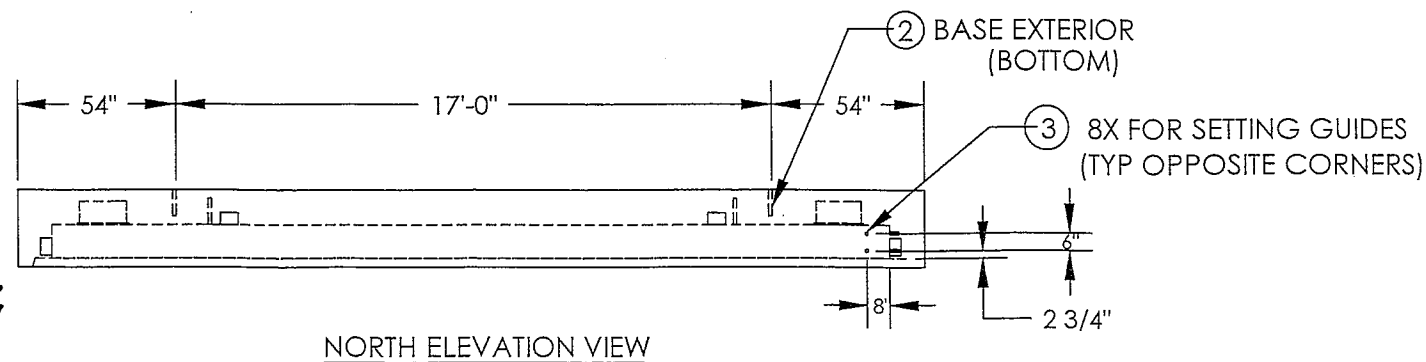
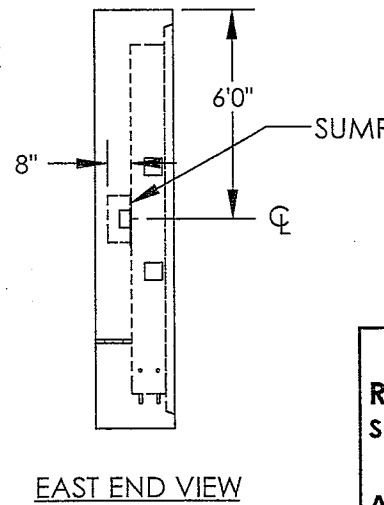
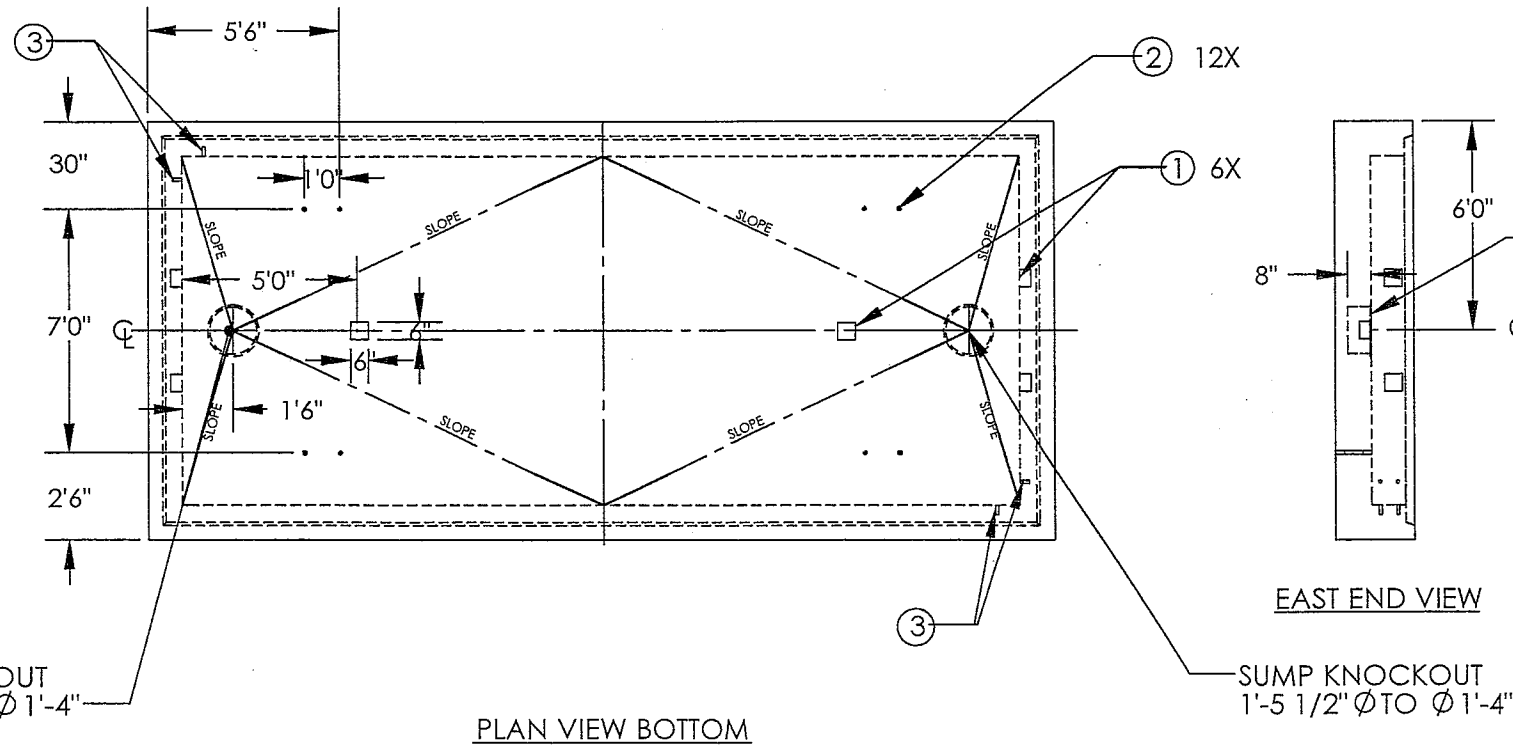
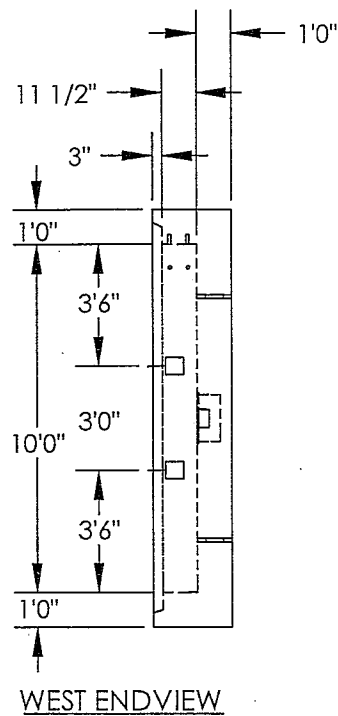
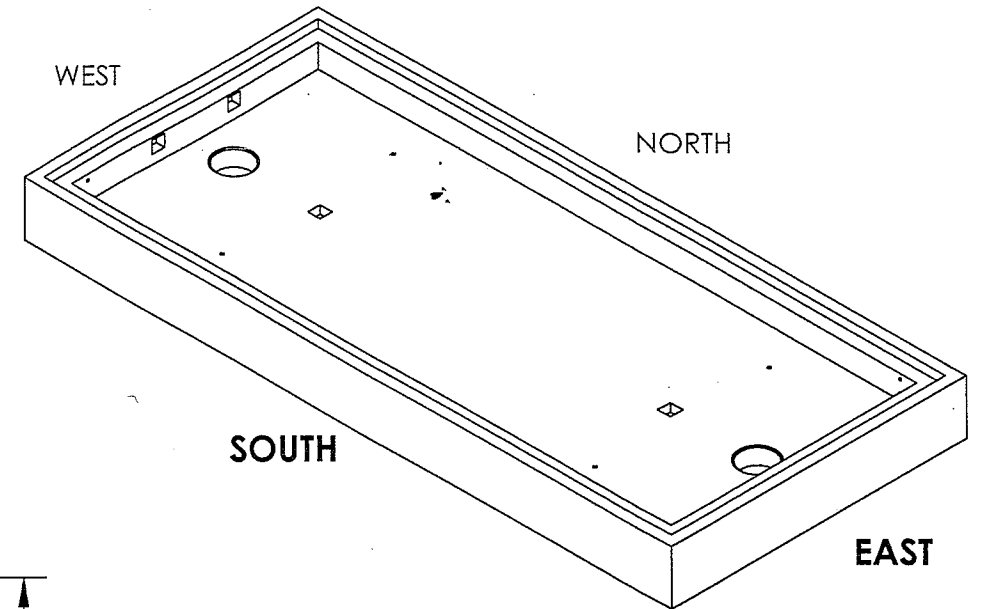
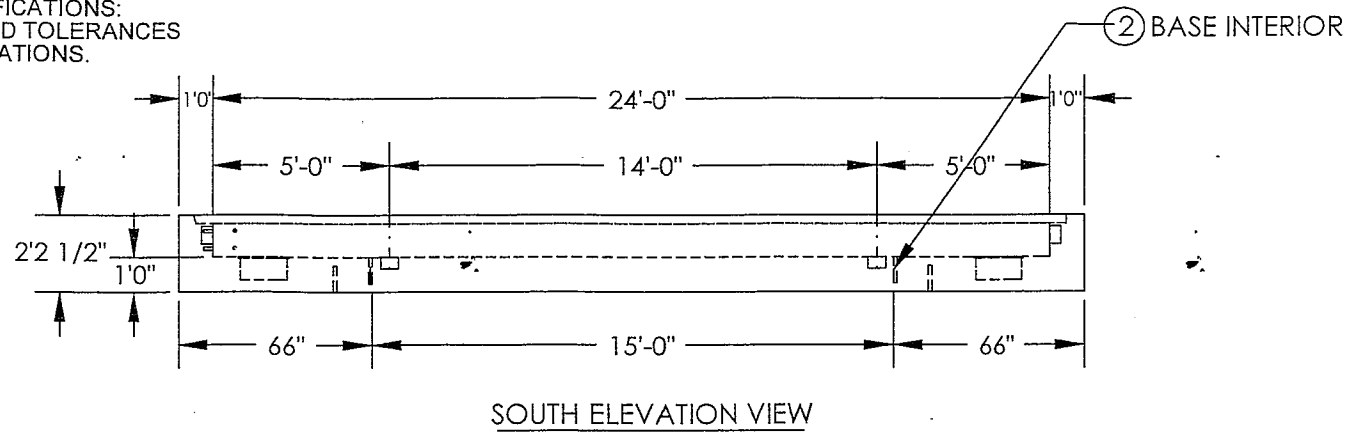
REV.

0

GENERAL NOTES:

1. APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.
2. MATERIAL: CONCRETE
WEIGHT: 57,339 LBS
CUBIC YARD: 14.335
COLOR: NATURAL GREY
PSI: 7000
FINISH: SMOOTH FORM-

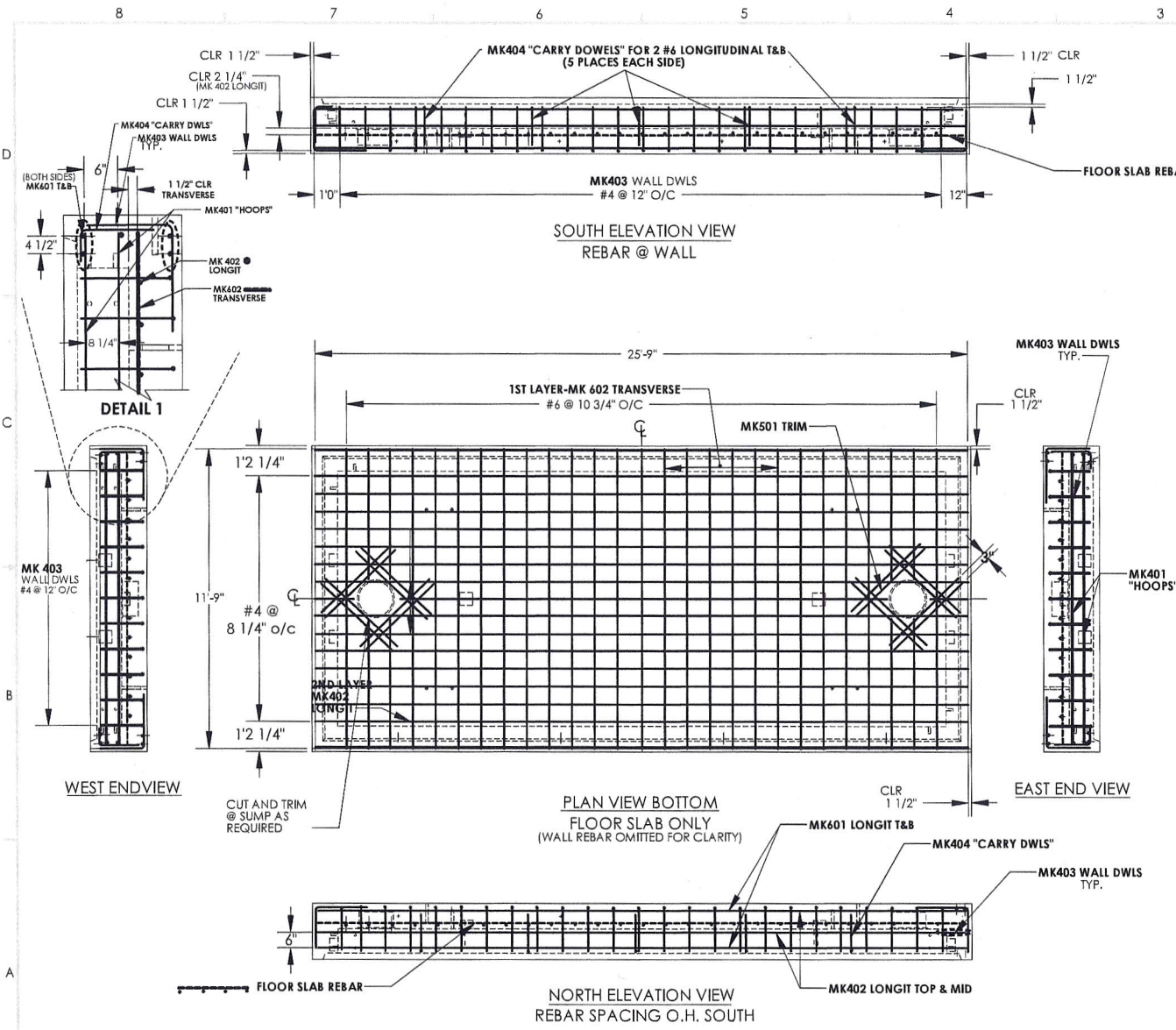
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING	10/6/09	



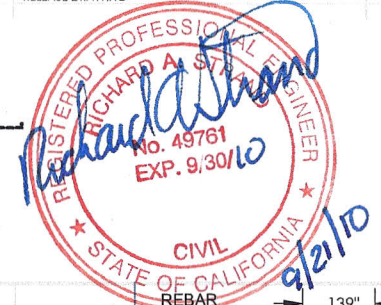
JOB SPECIFIC NOTES:				
RACKING: NONE REQUIRED IN BASE				
SPECIAL COATINGS: HYDROCODE 700B @ EXTERIOR				
THOROSEAL - BASE & FINISH COAT INTERIOR				
ADD MIXTURES: BASF RHEOPEL PLUS TO MIX AS WATERPROOFING				
ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	CHECK
3	8	ZI1/2PLAS	1/2" PLASTIC INSERT	
2	8	CX-51	8 TON X 9 1/2" OPEN COIL GALV.	
1	6	ZIPULLIRON	PULLING IRONS GALAVINIZED	
PARTS LIST				
APPROVALS		DATE	US CONCRETE PRECAST GROUP	
DETAILER: WBL		2/27/09	2735 Cactus Road San Diego, CA 92154 NPCA CERTIFIED PLANT PART #	
PROJ MGR:		9/6/10		
PLANT MGR:		9/8/10		
GEN MGR:				
QUALITY: SB		9/8/10		
CUSTOMER APPROVAL:				
			DO NOT SCALE DRAWING	SHEET 2 OF 18

***MARK EACH UNIT WITH IT'S PRODUCTION NUMBER; EX. T-1, M-1, B-1.**

MARK: 230KV-B-1 (230KV BASE SECTION)	QTY: 1 EACH	SALES ORDER/JOB #	CUSTOMER: SAN DIEGO GAS & ELECTRIC	PROJECT:	REV. 0
---	--------------------	-------------------	---	----------	---------------



REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	CHECK
#6 27		MK602	REBAR #6, 3/4" DIA 139"	
#6 8		MK601	REBAR #6, 3/4" DIA 306"	
#5 16		MK501	REBAR #5, 5/8" DIA 45"	
#4 10		MK404	REBAR #4, 1/2" DIA 8" 19"	
#4 72		MK403	REBAR #4, 1/2" DIA 20" 24"	
#4 19		MK402	REBAR #4, 1/2" DIA 307"	
#4 4		MK401	REBAR #4, 1/2" DIA 24" 139" 24"	

APPROVALS	DATE	PARTS LIST	
DETAILER: WBL	5/06/09	 2735 Cactus Road San Diego, CA 92154 NPCA CERTIFIED PLANT	
PROJ MGR:		PART #	
PLANT MGR:			
GEN MGR:			
QUALITY:			
CUSTOMER APPROVAL:			

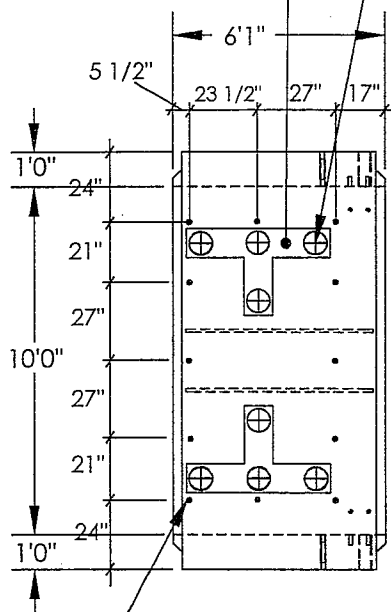
MARK: **230KV-B-1 (230KV BASE REBAR)** QTY: **1 EACH** SALES ORDER/JOB # _____ CUSTOMER: **SAN DIEGO GAS & ELECTRIC** PROJECT: _____

DO NOT SCALE DRAWING SHEET 3 OF 18 REV. 0

GENERAL NOTES:

1. APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.
2. MATERIAL: CONCRETE
WEIGHT: 60,402 LBS
CUBIC YARD: 15.10
COLOR: NATURAL GREY
PSI: 7000
FINISH: SMOOTH FORM-

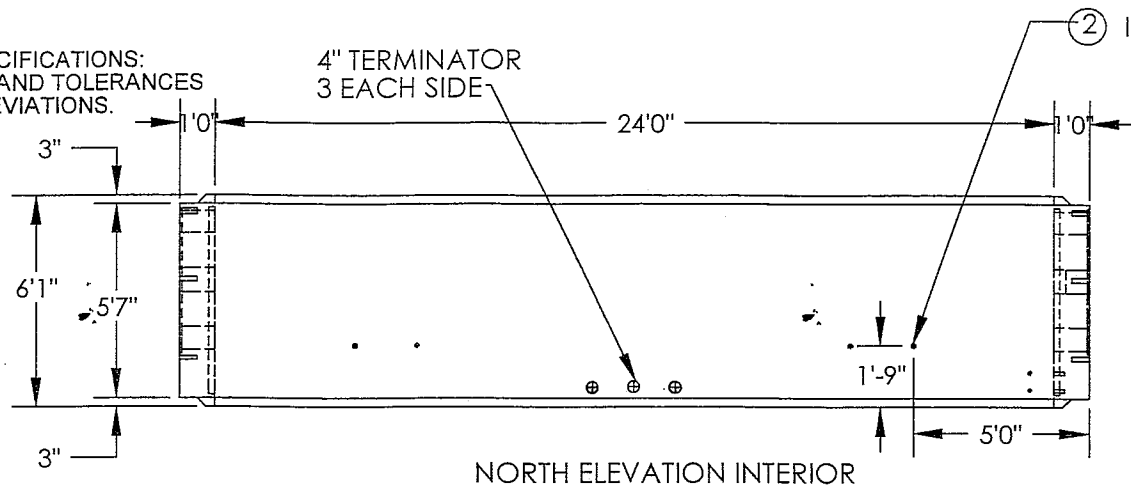
8" TERMINATORS
8 EACH END (2 SPARE)
1/4" INSET @
TERMINATORS



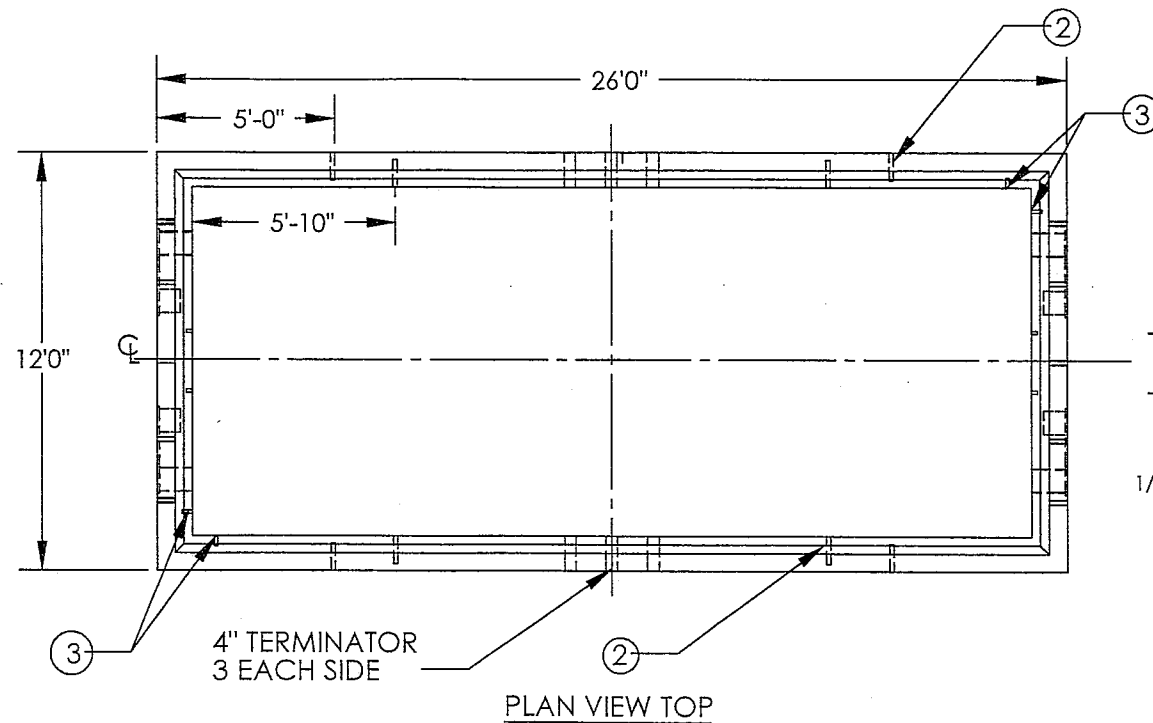
WEST END EXTERIOR

Ø 1 1/2" X 6" HOLES;
12 PLACES EACH END
FOR #10 REBAR @ TIME
OF INSTALLATION

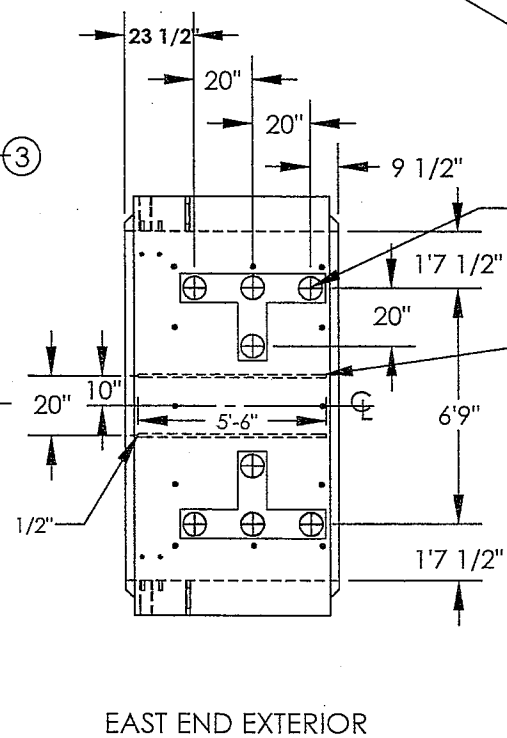
*MARK EACH UNIT WITH
IT'S PRODUCTION NUMBER;
EX. T-1, M-1, B-1.



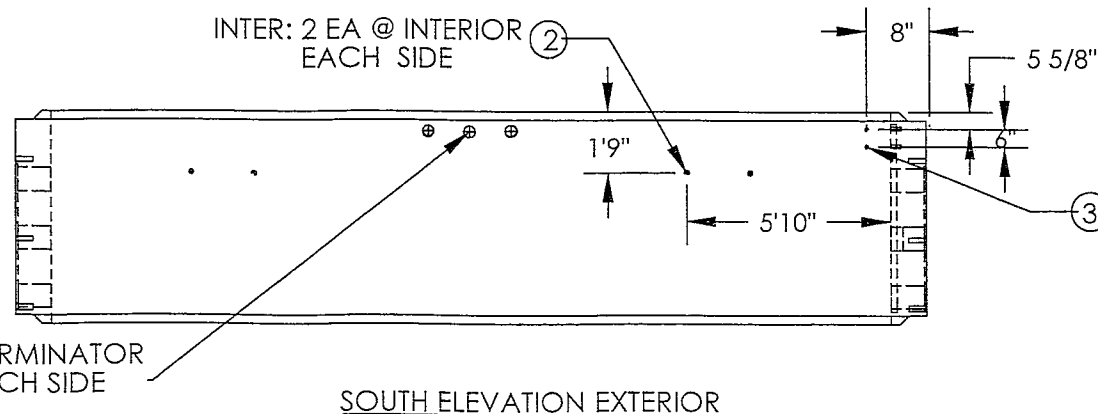
NORTH ELEVATION INTERIOR



PLAN VIEW TOP



EAST END EXTERIOR



SOUTH ELEVATION EXTERIOR

② INTER: 2 EA @ EXTERIOR
EACH SIDE

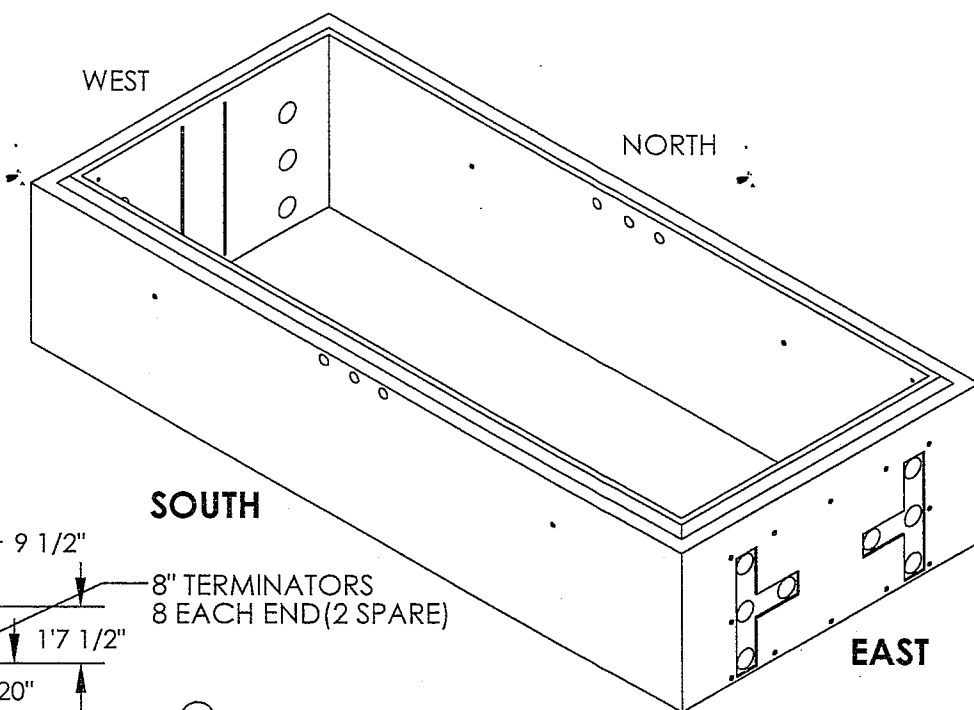
4" TERMINATOR
3 EACH SIDE

③ 4" TERMINATOR
3 EACH SIDE

INTER: 2 EA @ INTERIOR
EACH SIDE ②

③ INTERIOR
8X FOR SETTING GUIDES
(TYP OPPOSITE CORNERS)

REVISION HISTORY			
REV.	DESCRIPTION	APPROVED	DATE
0	RELEASE DRAWING		



ISOMETRIC VIEW

JOB SPECIFIC NOTES:

RACKING: NONE REQUIRED IN BASE

SPECIAL COATINGS: HYDROCID 700B @ EXTERIOR
THOROSEAL - BASE & FINISH COAT INTERIOR

ADMIXTURES: BASF RHEOPEL PLUS TO MIX AS WATERPROOFING

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	CHECK
3	8	Z11/2PLAS	1/2" PLASTIC INSERT	
2	8	CX-51	8 TON X 9 1/2" OPEN COIL GALV.	
1	4	UNISTRUT	1" X 5'-6" UNISTRUT STAINLESS CONCRETE INSERT P3270X SS	

PARTS LIST

APPROVALS	DATE
DETAILER: WBL	8/17/09
PROJ MGR:	9/8/10
PLANT MGR:	9/8/10
GEN MGR:	
QUALITY: SB	8/10
CUSTOMER APPROVAL:	

US CONCRETE 2735 Cactus Road
San Diego, CA 92154
NPCA CERTIFIED PLANT
PRECAST GROUP
PART #

DO NOT SCALE DRAWING SHEET 4 OF 18

MARK: 230KV-INTER 1 (230KV INTER SECTION)	QTY: 1 EACH	SALES ORDER/JOB #	CUSTOMER: SAN DIEGO GAS & ELECTRIC	PROJECT:	REV. 0
---	-----------------------	-------------------	--	----------	------------------

GENERAL NOTES:

1 1/2" CLR

1 1/2"

1 1/2"

MK702
#7 @ 5 3/4" O/C
INSIDE FACE

MK501

#5 @ 12 3/4" O/C
127 1/2"

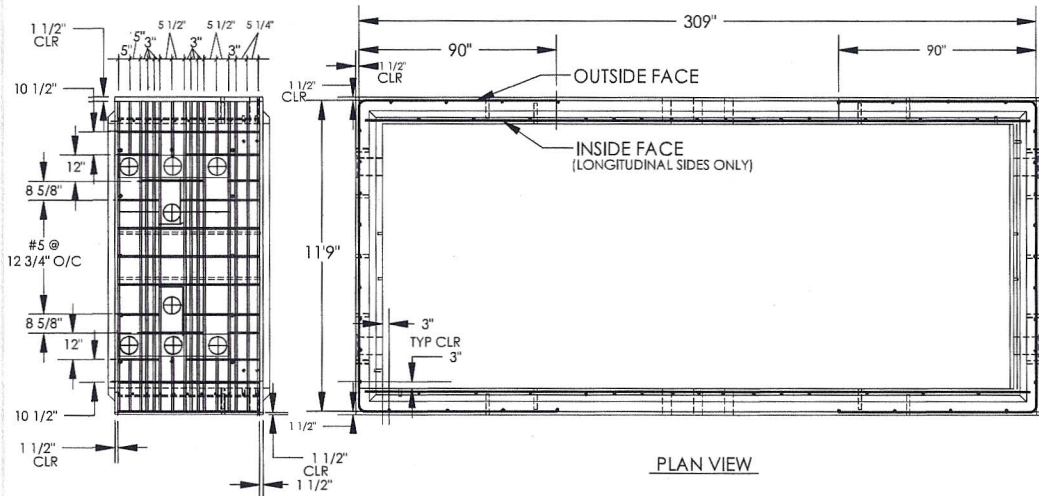
1 1/2" CLR

MK701
#7 @ REQ. SPACING
OUTSIDE FACE
(SEE WEST VIEW)

1 1/2" CLR

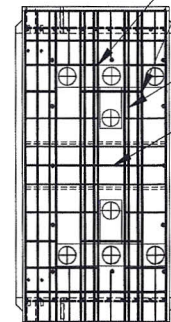
SOUTH ELEVATION VIEW
REBAR @ WALL

REVISION HISTORY			
REV.	DESCRIPTION	APPROVED	DATE
0	RELEASE DRAWING		



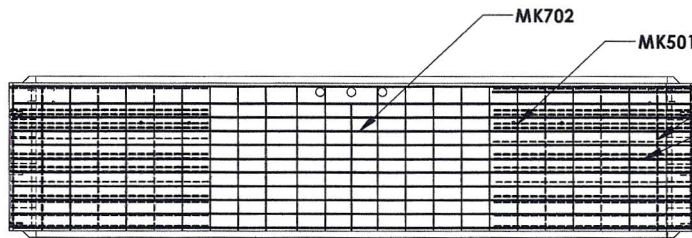
PLAN VIEW

CUT VERTS @ TERMINATORS TO
"INTERUPT" SURROUNDING BAR
(BOTH ENDS)



EAST END VIEW
OUTSIDE CURTAIN
(O.H. WEST VIEW)

WEST ENDVIEW
OUTSIDE CURTAIN



NORTH ELEVATION VIEW
REBAR SPACING O.H. SOUTH

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	CHECK
#7	24	MK702	REBAR #7, 7/8" DIA	
			INSIDE FACE HORIZONTALS	
			306"	
#7	34	MK701	REBAR #7, 7/8" DIA	
			OUTSIDE FACE HORIZONTALS	
			90" 140" 90"	
#5	68	MK501	REBAR #5, 5/8" DIA	
			INSIDE AND OUTSIDE FACE VERTS	
			63"	

PARTS LIST

APPROVALS DATE: 5/13/09

DETAILER: WBL

PROJ MGR:

PLANT MGR:

GEN MGR:

QUALITY:

CUSTOMER APPROVAL:

US CONCRETE PRECAST GROUP NPCA CERTIFIED PLANT

2735 Cactus Road
San Diego, CA 92154

PART #

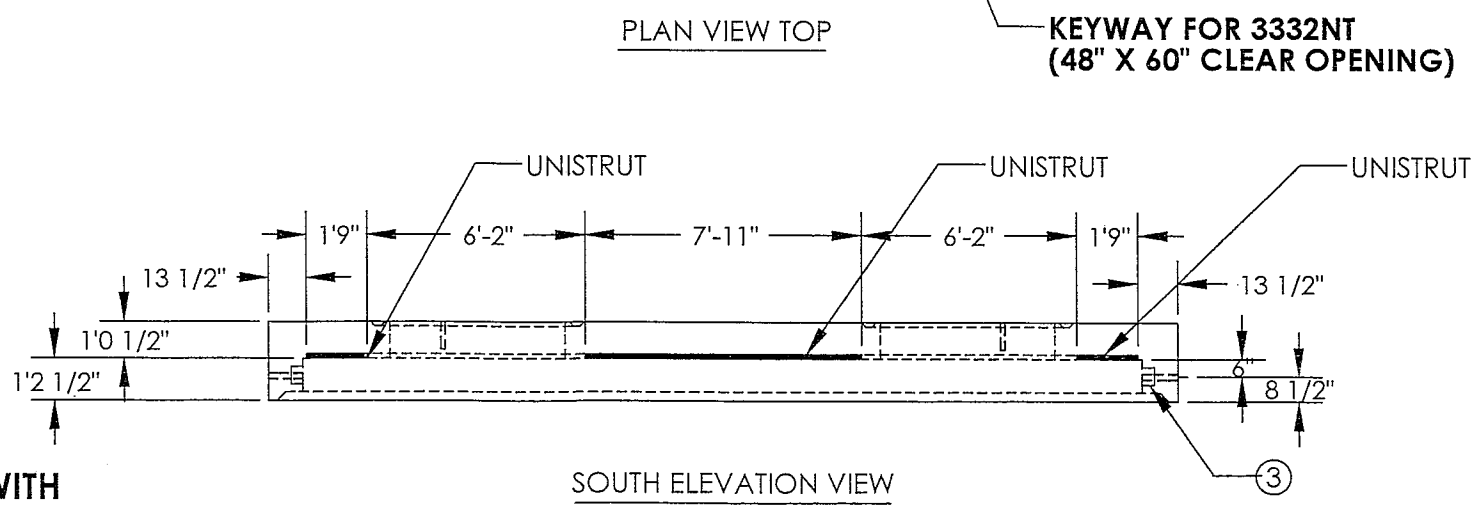
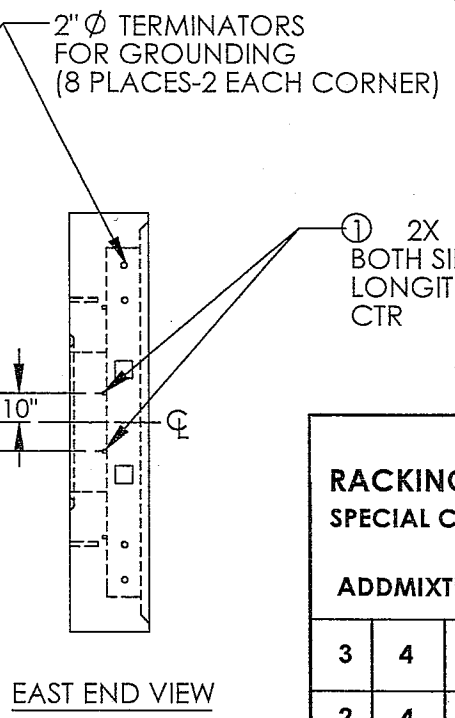
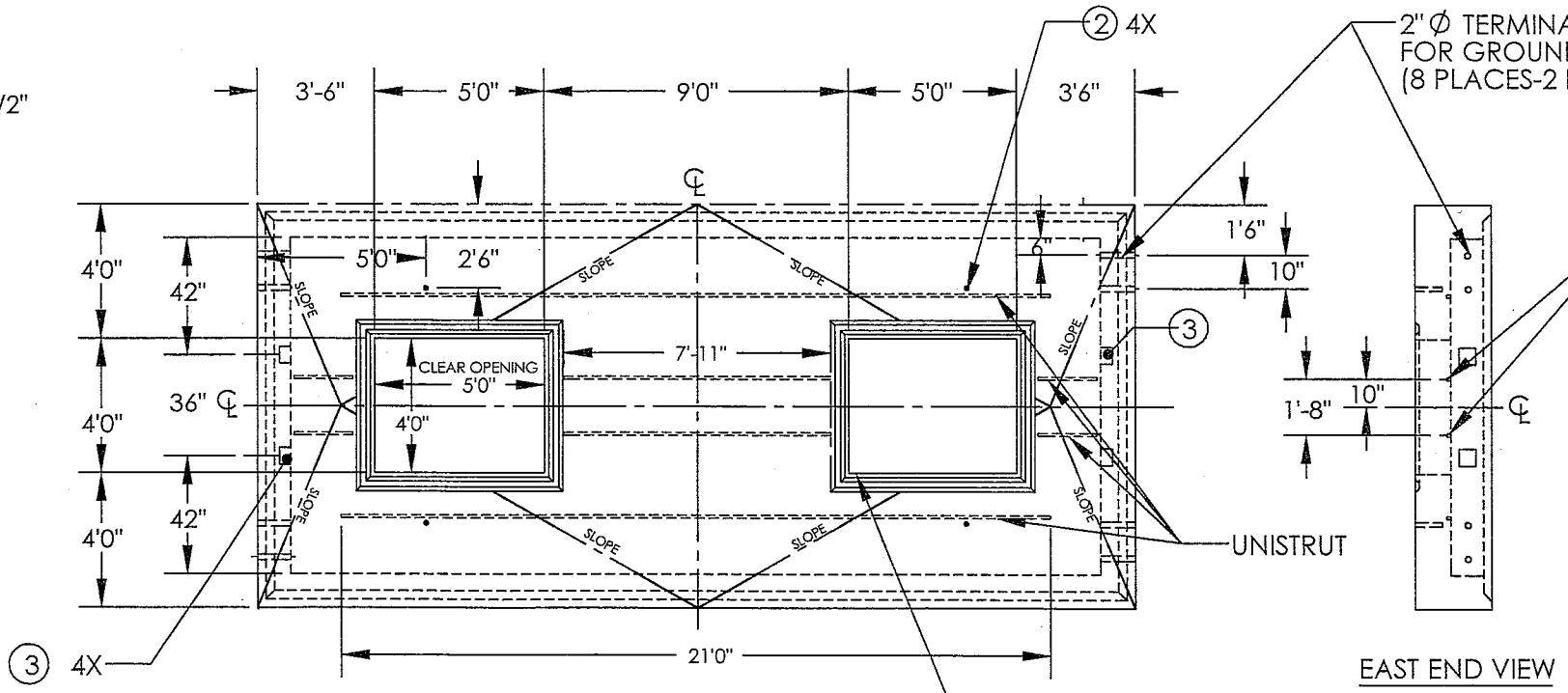
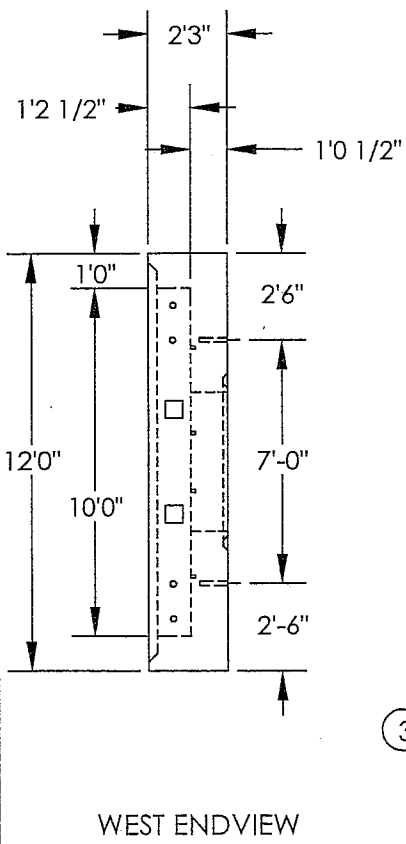
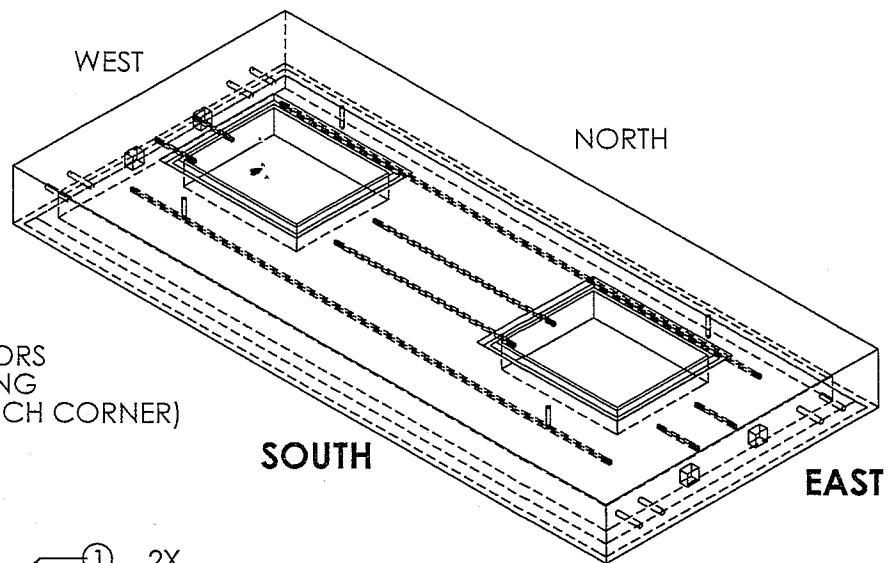
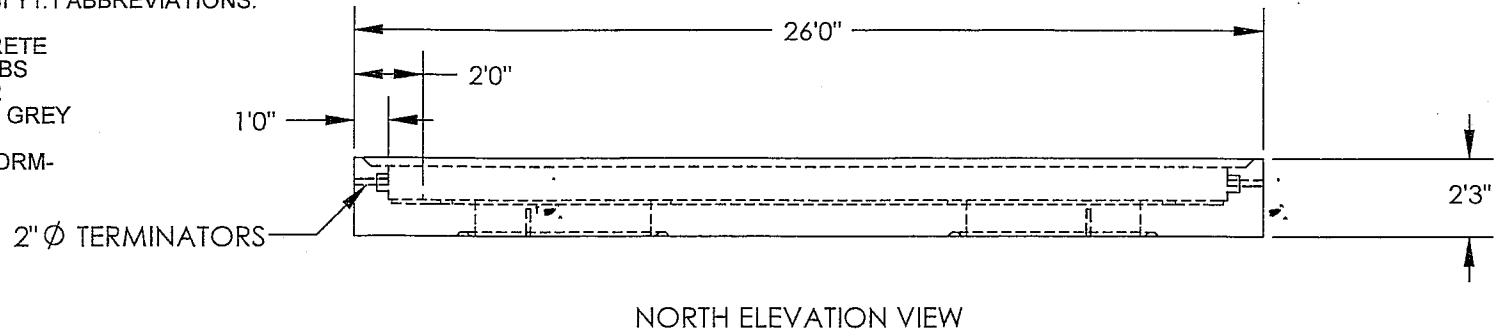
DO NOT SCALE DRAWING SHEET 5 OF 18

MARK: 230KV-INTER-1 (230KV INTERSECTION REBAR)	QTY: 1 EACH	SALES ORDER/JOB #	CUSTOMER: SAN DIEGO GAS & ELECTRIC	PROJECT:	REV. 0
--	-------------	-------------------	------------------------------------	----------	--------

GENERAL NOTES:

1. APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.
2. MATERIAL: CONCRETE
WEIGHT: 52,889 LBS
CUBIC YARD: 13.22
COLOR: NATURAL GREY
PSI: 7000
FINISH: SMOOTH FORM-

REVISION HISTORY			
REV.	DESCRIPTION	APPROVED	DATE
0	RELEASE DRAWING		



JOB SPECIFIC NOTES:
RACKING: NONE REQUIRED IN BASE
SPECIAL COATINGS: HYDROCID 700B @ EXTERIOR
 THOROSEAL - BASE & FINISH COAT INTERIOR
ADMIXTURES: BASF RHEOPEL PLUS TO MIX AS WATERPROOFING

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	CHECK
3	4	ZIPULLIRON	PULLING IRONS GALAVINIZED	
2	4	CX-51	8 TON X 9 1/2" OPEN COIL GALV.	
1	2	UNISTRUT	1" X 21'-0" UNISTRUT STAINLESS CONCRETE INSERT P3270X SS	
1	2	UNISTRUT	1" X 7'-11" UNISTRUT STAINLESS CONCRETE INSERT P3270X SS	
1	4	UNISTRUT	1" X 1'-9" UNISTRUT STAINLESS CONCRETE INSERT P3270X SS	

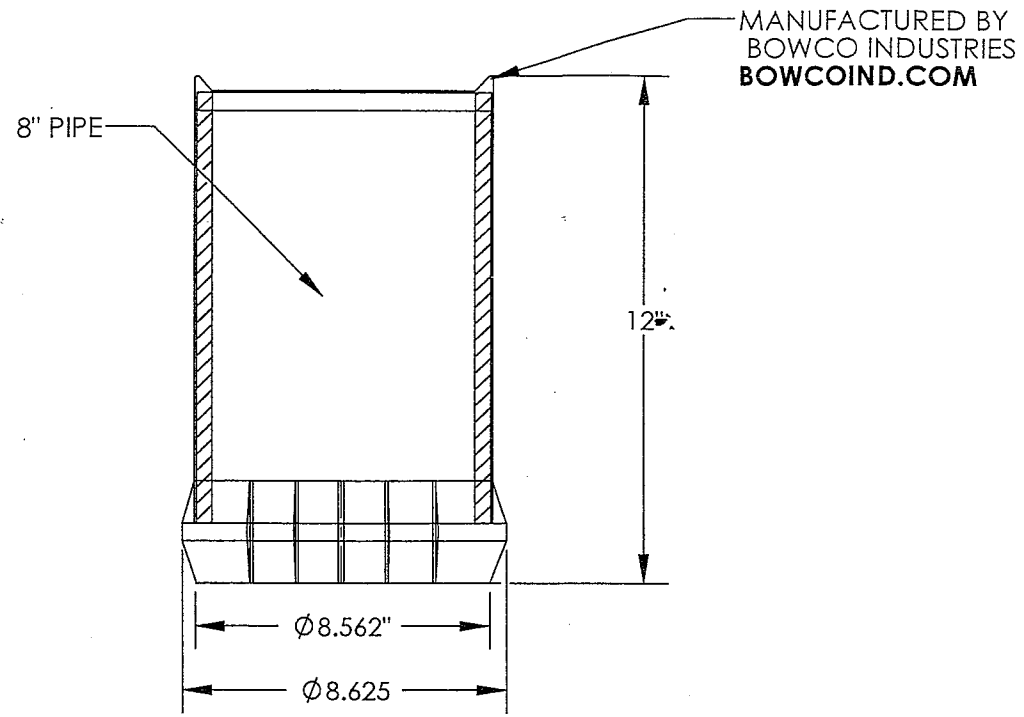
APPROVALS		DATE	2735 Cactus Road San Diego, CA 92154 NPCA CERTIFIED PLANT PRECAST GROUP PART #
DETAILER:	WBL	8/17/09	
PROJ MGR:		9/8/10	
PLANT MGR:		4/8/10	
GEN MGR:			
QUALITY:	SB	9/8/10	
CUSTOMER APPROVAL:			

*MARK EACH UNIT WITH IT'S PRODUCTION NUMBER; EX. T-1, M-1, B-1.

MARK: 230KV-T-1 (230KV TOP SECTION)	QTY: 1 EACH	SALES ORDER/JOB #	CUSTOMER: SAN DIEGO GAS & ELECTRIC	PROJECT:	REV. 0
--	--------------------	-------------------	---	----------	---------------

8 7 6 5 4 3 2 1

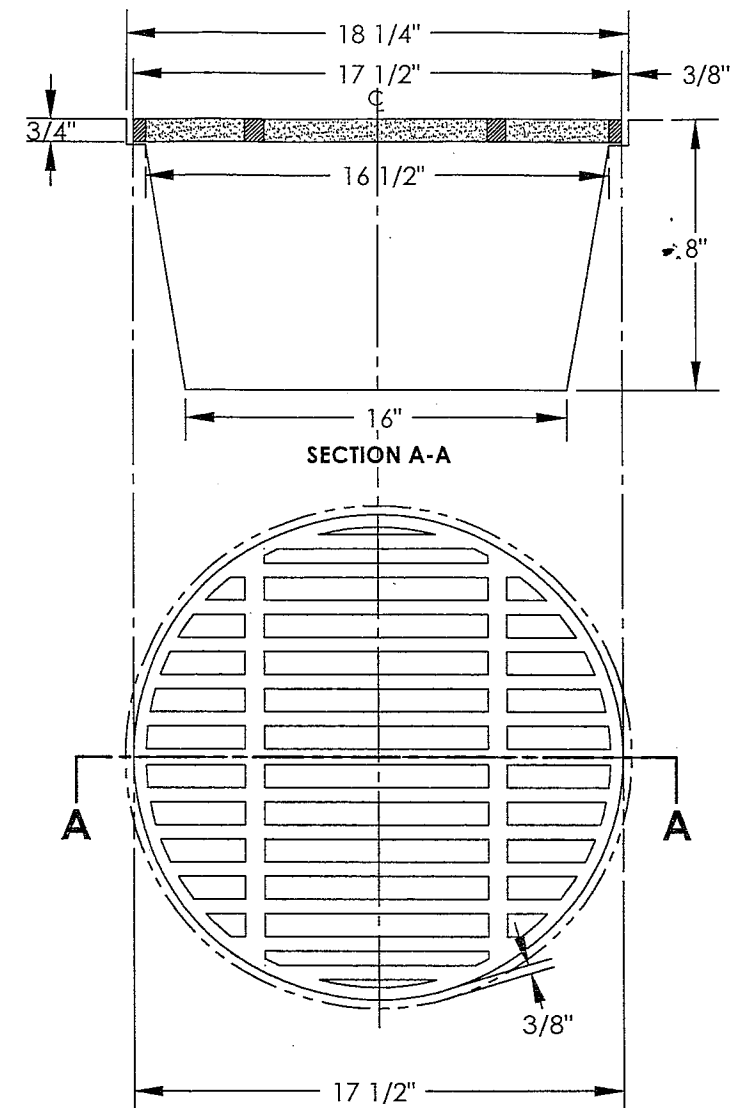
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



MANUFACTURED BY
BOWCO INDUSTRIES
BOWCOIND.COM

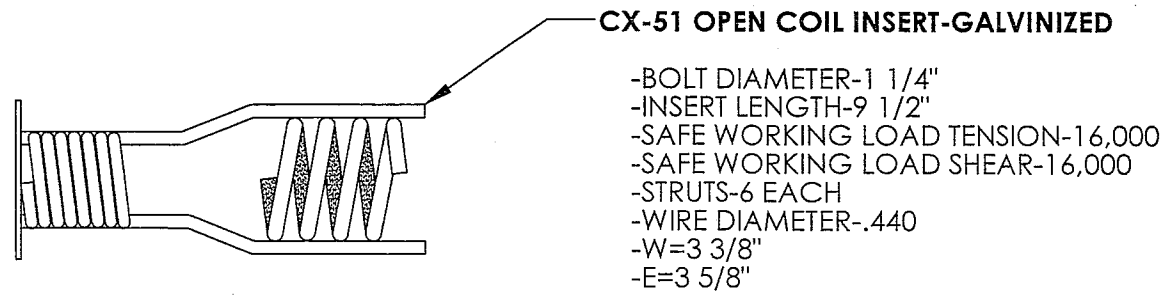
8" TERMINATORS

1



SUMP GRATE AND HOLE

2



CX-51 OPEN COIL INSERT-GALVINIZED
 -BOLT DIAMETER-1 1/4"
 -INSERT LENGTH-9 1/2"
 -SAFE WORKING LOAD TENSION-16,000
 -SAFE WORKING LOAD SHEAR-16,000
 -STRUTS-6 EACH
 -WIRE DIAMETER-.440
 -W=3 3/8"
 -E=3 5/8"

MINIMUM EDGE DISTANCE 12"

CX-51 OPEN COIL INSERT

3

APPROVALS	DATE
DETAILER: WBL	5/1/09
PROJ MGR: <i>[Signature]</i>	9/8/10
PLANT MGR: <i>[Signature]</i>	9/8/10
GEN MGR:	
QUALITY: SB	9/8/10
CUSTOMER APPROVAL:	

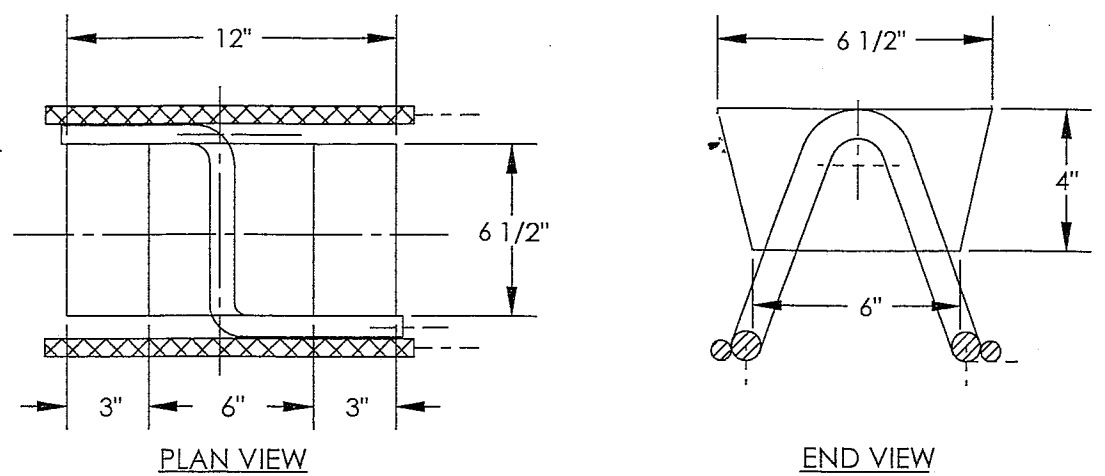
US CONCRETE **PRECAST GROUP**
 2735 Cactus Road
 San Diego, CA 92154
 NPCA CERTIFIED PLANT

PART # 8" TERMINATORS
 CX-51 OPEN COIL INSERT
 SUMP GRATE AND HOLE

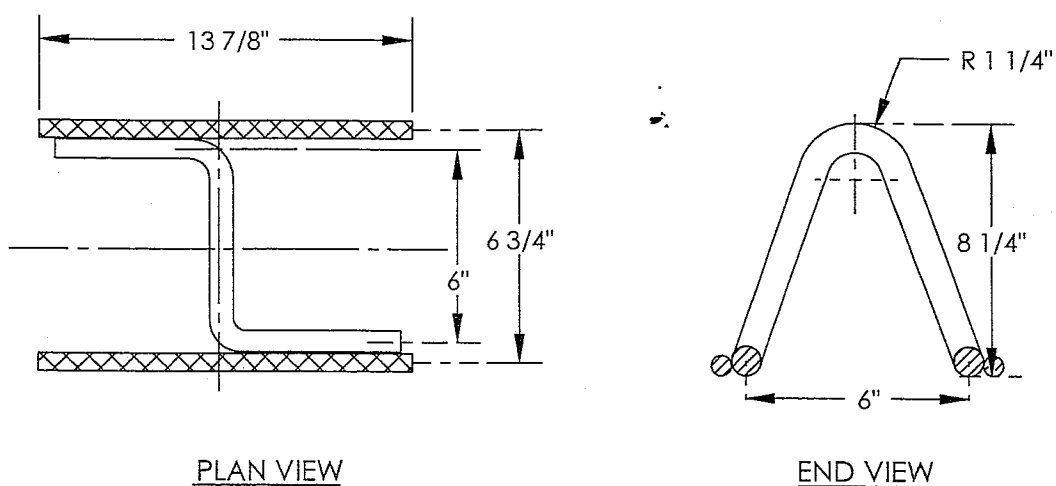
DO NOT SCALE DRAWING

8 7 6 5 4 3 2 1

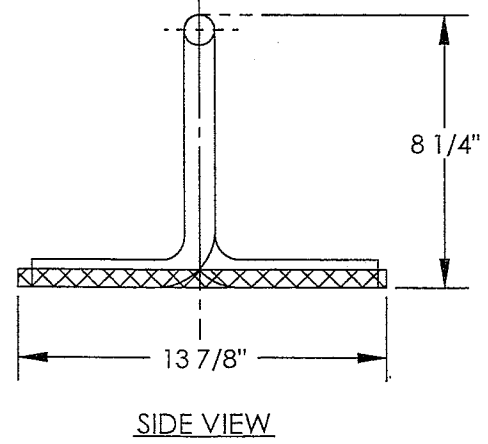
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



PULLING IRON BLOCKOUT



PULLING IRON



APPROVALS	DATE
DETAILER: WBL	8/13/09
PROJ MGR: [Signature]	9/8/09
PLANT MGR: [Signature]	4/9/10
GEN MGR:	
QUALITY: [Signature]	4/8/10
CUSTOMER APPROVAL:	

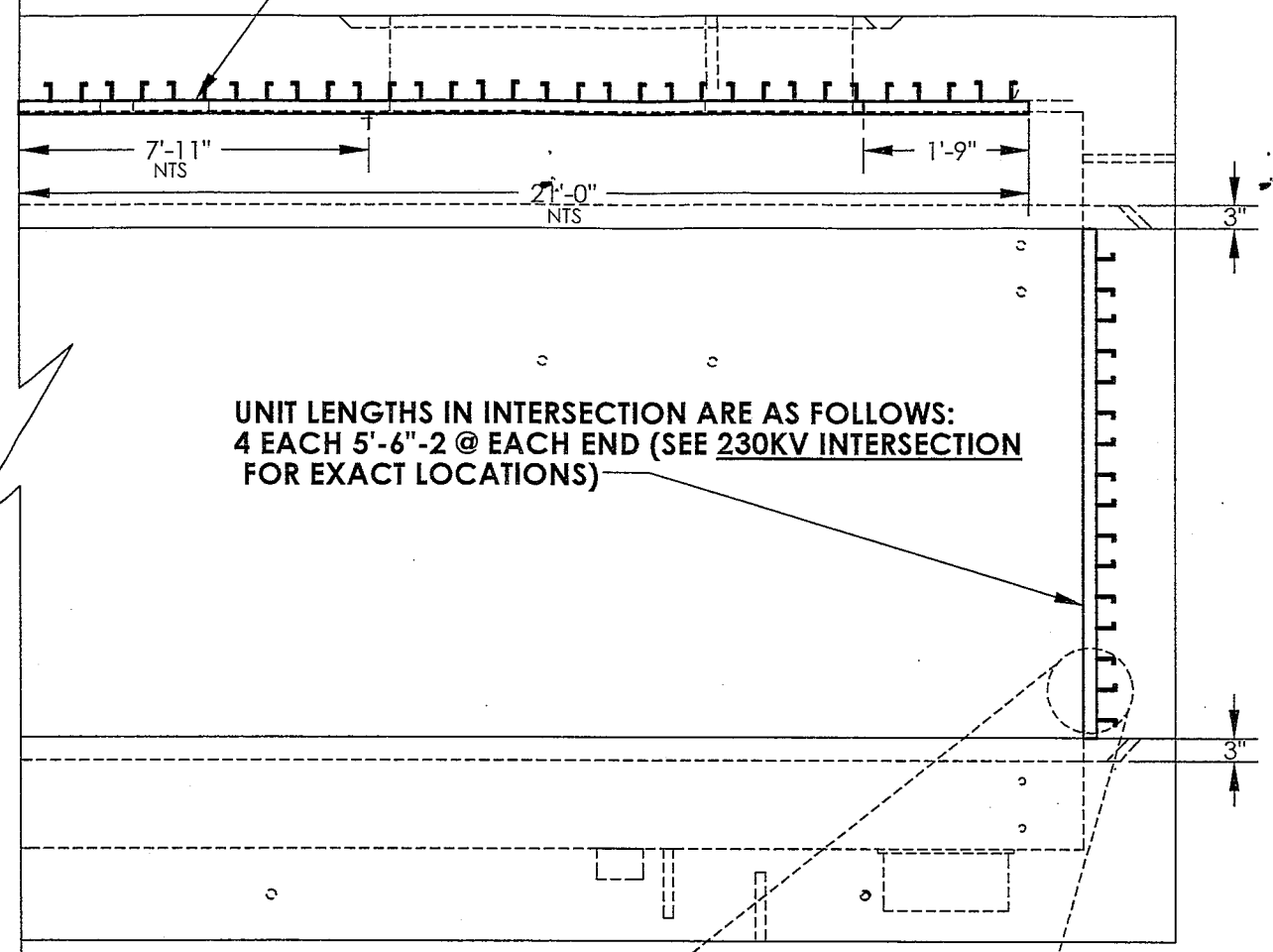
US CONCRETE PRECAST GROUP
 2735 Cactus Road
 San Diego, CA 92154
 NPCA CERTIFIED PLANT

PART #
 DO NOT SCALE DRAWING SHEET 9 OF 18

8 7 6 5 4 3 2 1

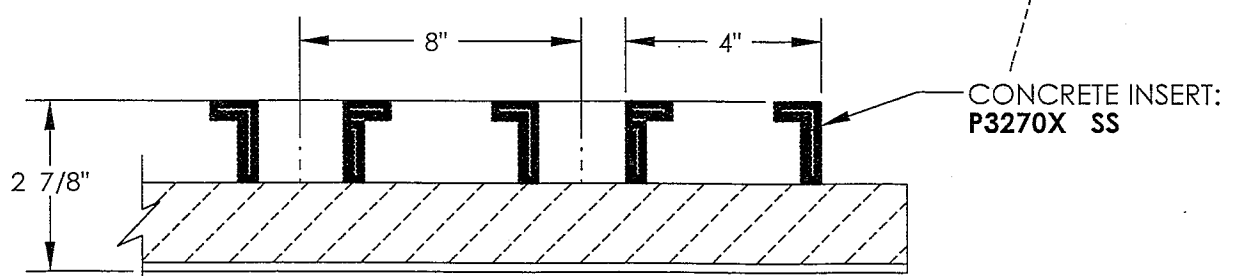
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		

UNIT LENGTHS IN LID ARE AS FOLLOWS:
 4 EACH 1'-9"; 2 EACH 7'-11" & 2 EACH 21'-0"
 (SEE 230KV TOP SECTION FOR EXACT LOCATIONS)



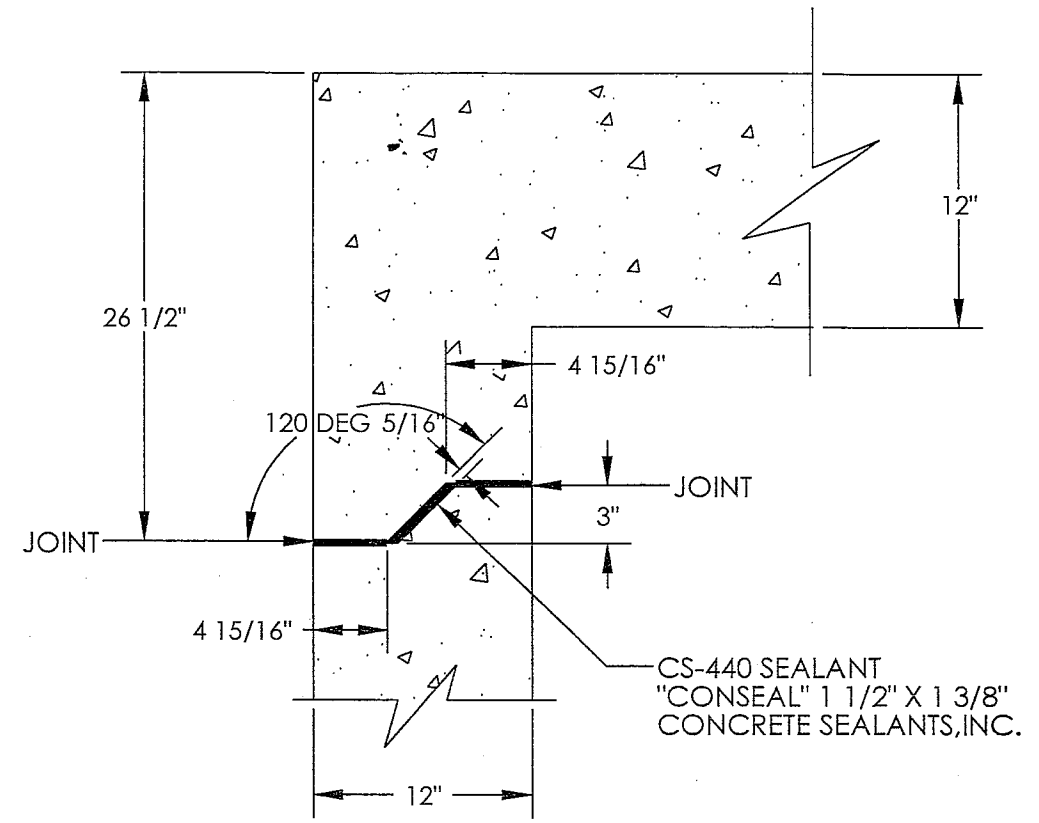
UNIT LENGTHS IN INTERSECTION ARE AS FOLLOWS:
 4 EACH 5'-6"-2 @ EACH END (SEE 230KV INTERSECTION
 FOR EXACT LOCATIONS)

LONGITUDINAL SECTION VIEW



UNISTRUT STAINLESS STEEL

UNISTRUT CORPORATION
 35660 CLINTON STREET
 WAYNE, MICHIGAN 48184
 (734) 721-4040



SHIPLAP JOINT
 NTS

APPROVALS	DATE
DETAILER: WBL	4/13/09
PROJ MGR: <i>[Signature]</i>	9/8/10
PLANT MGR: <i>[Signature]</i>	9/8/10
GEN MGR:	
QUALITY: SB	9/8/10
CUSTOMER APPROVAL:	

US CONCRETE PRECAST GROUP

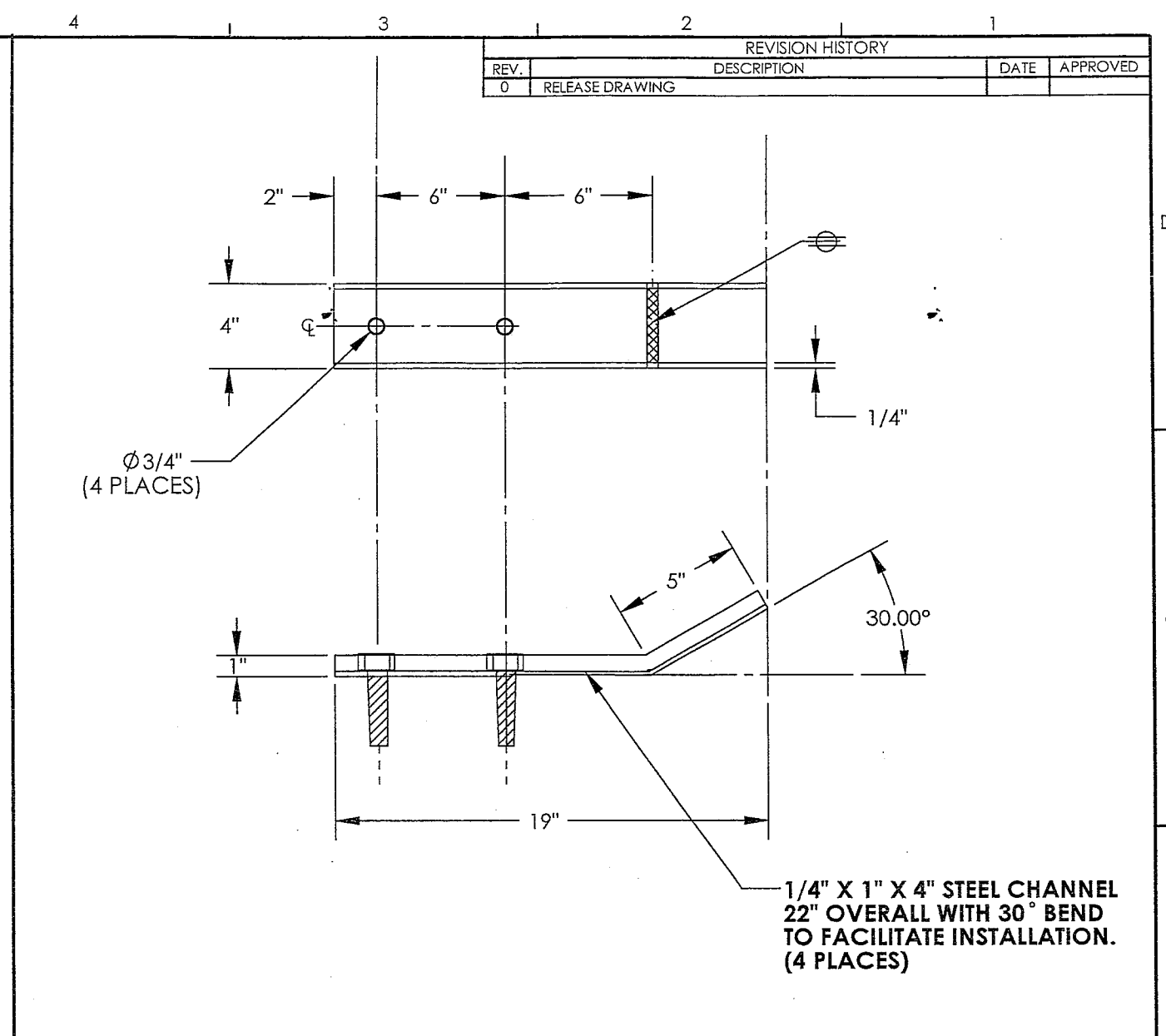
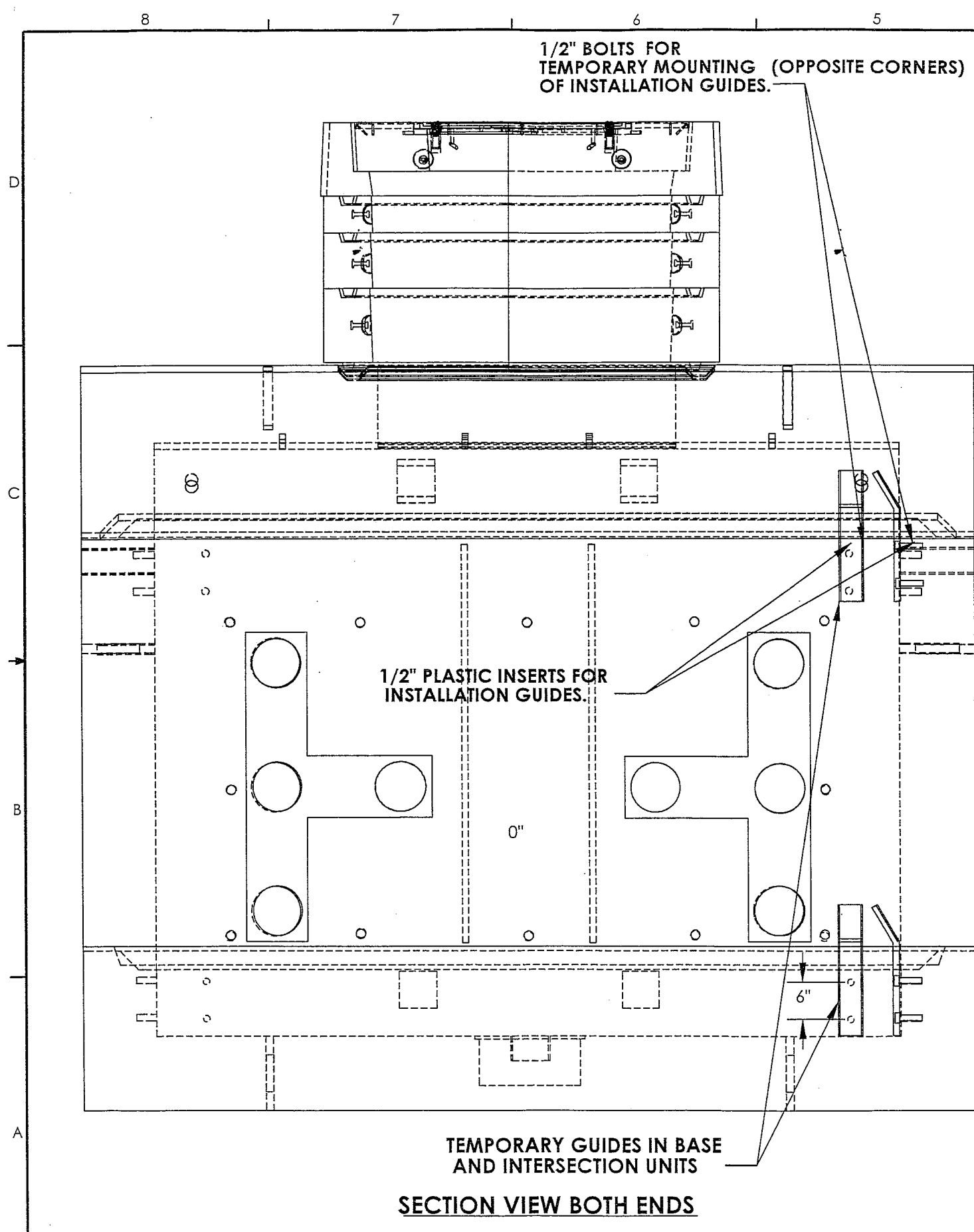
2735 Cactus Road
 San Diego, CA 92154

NPCA CERTIFIED PLANT


PART #

DO NOT SCALE DRAWING

SHEET 10 OF 18



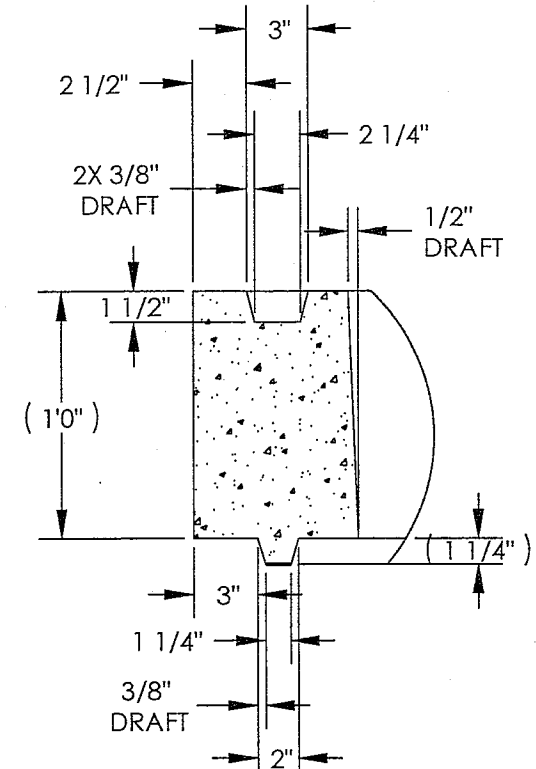
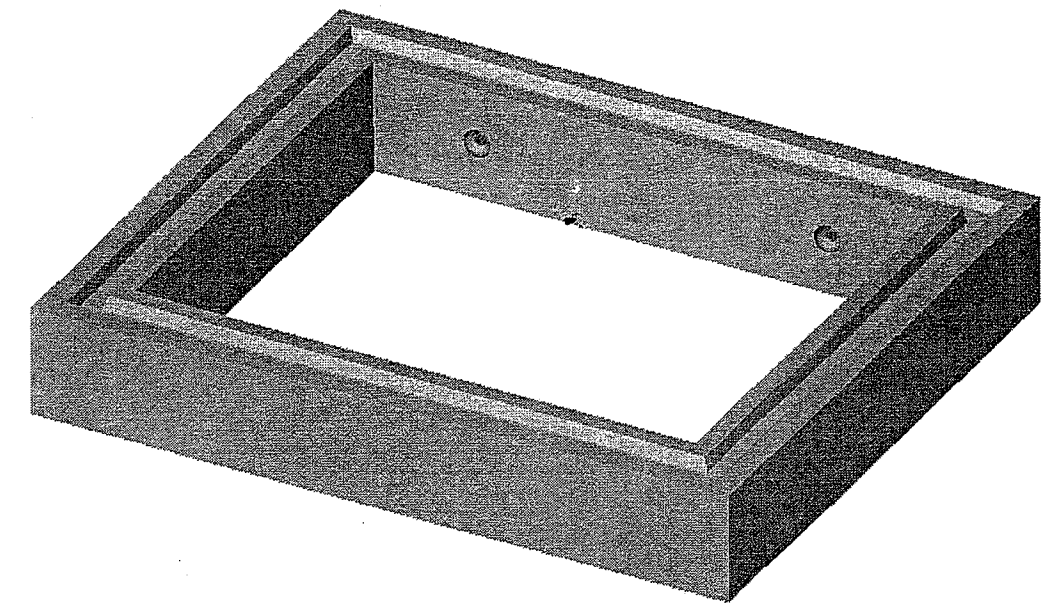
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		

TEMPORARY INSTALLATION GUIDES		1
APPROVALS	DATE	 <p>2735 Cactus Road San Diego, CA 92154</p> <p>US CONCRETE PRECAST GROUP NPCA CERTIFIED PLANT</p>
DETAILER: WBL	5/5/09	
PROJ MGR: <i>[Signature]</i>	9/8/10	
PLANT MGR: <i>[Signature]</i>	9/8/10	
GEN MGR:		
QUALITY: SB	9/8/10	PART # INSTALLATION GUIDES
CUSTOMER APPROVAL:		
DO NOT SCALE DRAWING		11 of 18

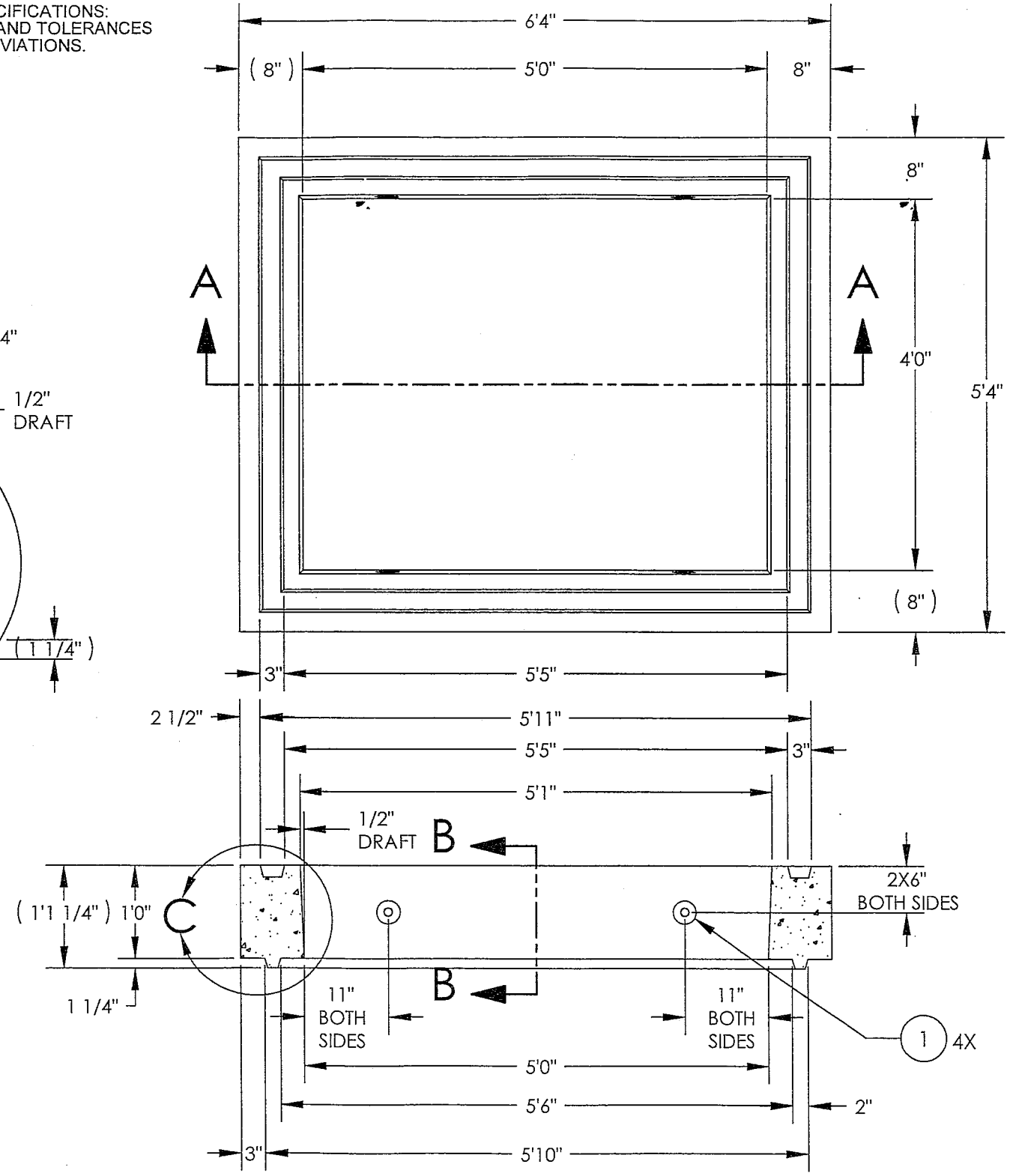
NOTES: UNLESS OTHERWISE SPECIFIED

1. APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.
2. MATERIAL: CONCRETE
CUBIC YARD: .49
WEIGHT: 1,945 LBS
PSI: 7000
FINISH: FORM

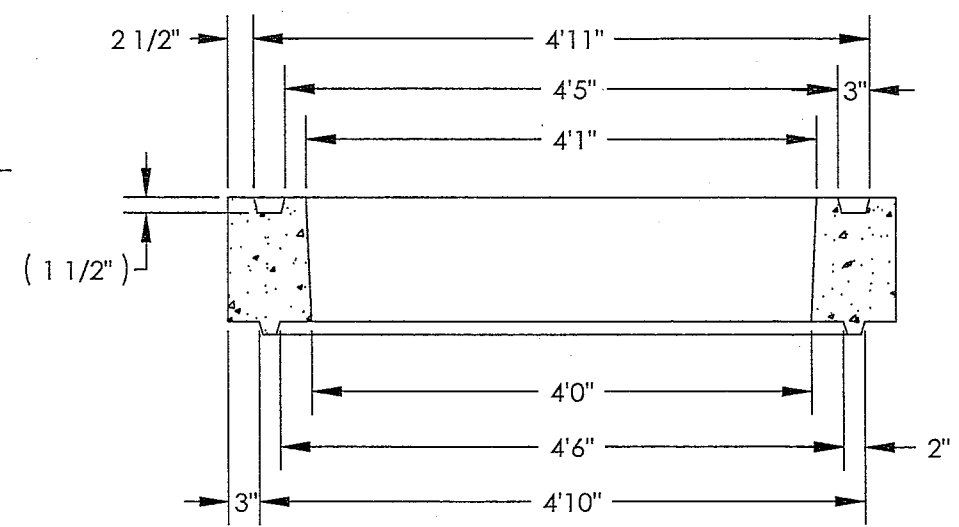
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



**DETAIL C
4X**



SECTION A-A



SECTION B-B

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

MARK	QTY
------	-----

NPCA CERTIFIED PLANT

MATERIAL	FINISH
DO NOT SCALE DRAWING	

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	NOTE
1	4	Z11/2TX23/4SL	2 TON X 2 3/4" SWIFT LIFT GALVANIZED	

PARTS LIST

CUSTOMER: _____

US CONCRETE PRECAST GROUP

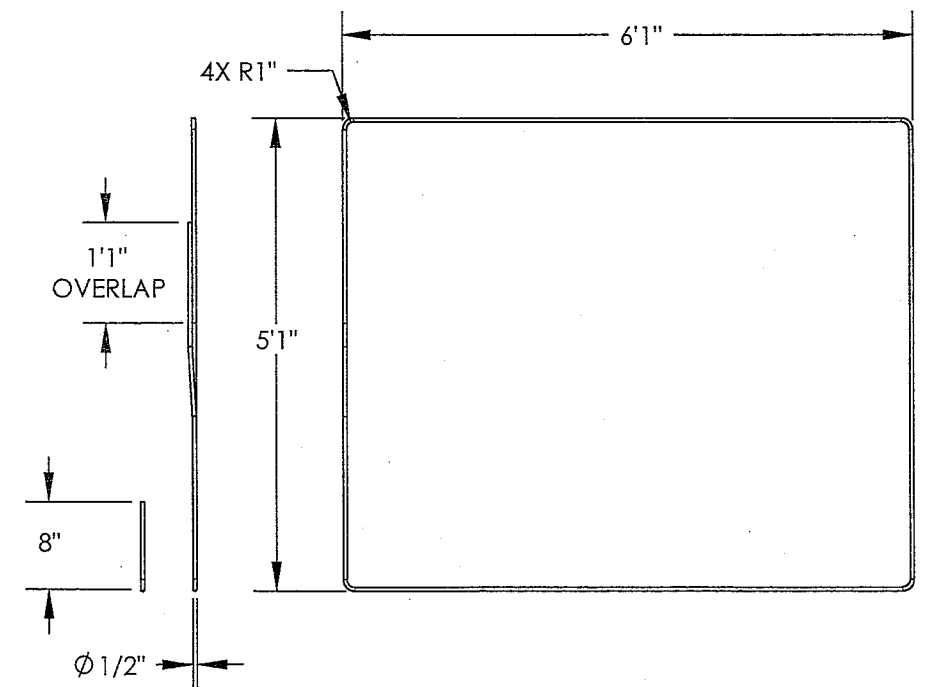
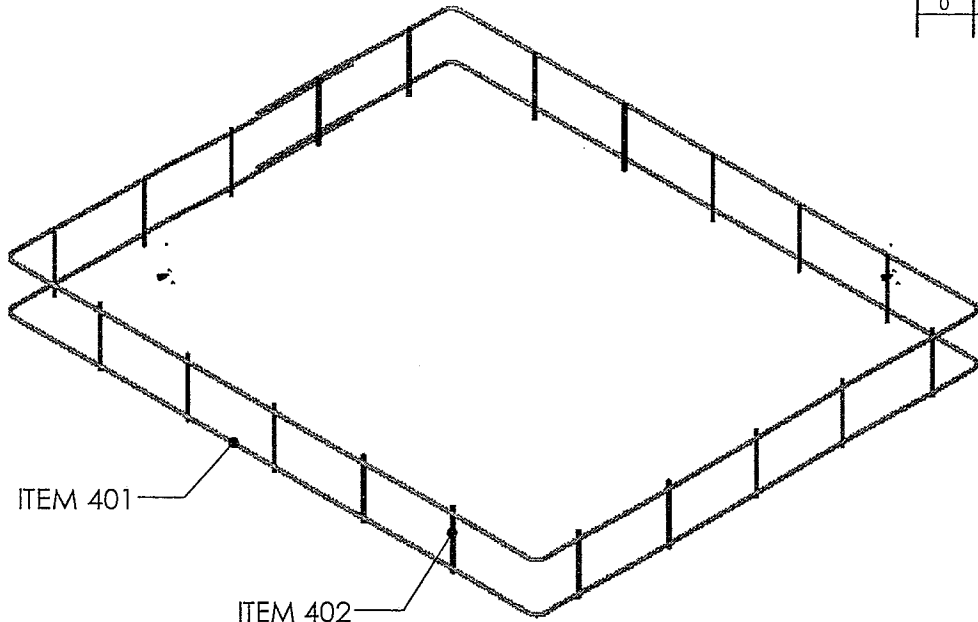
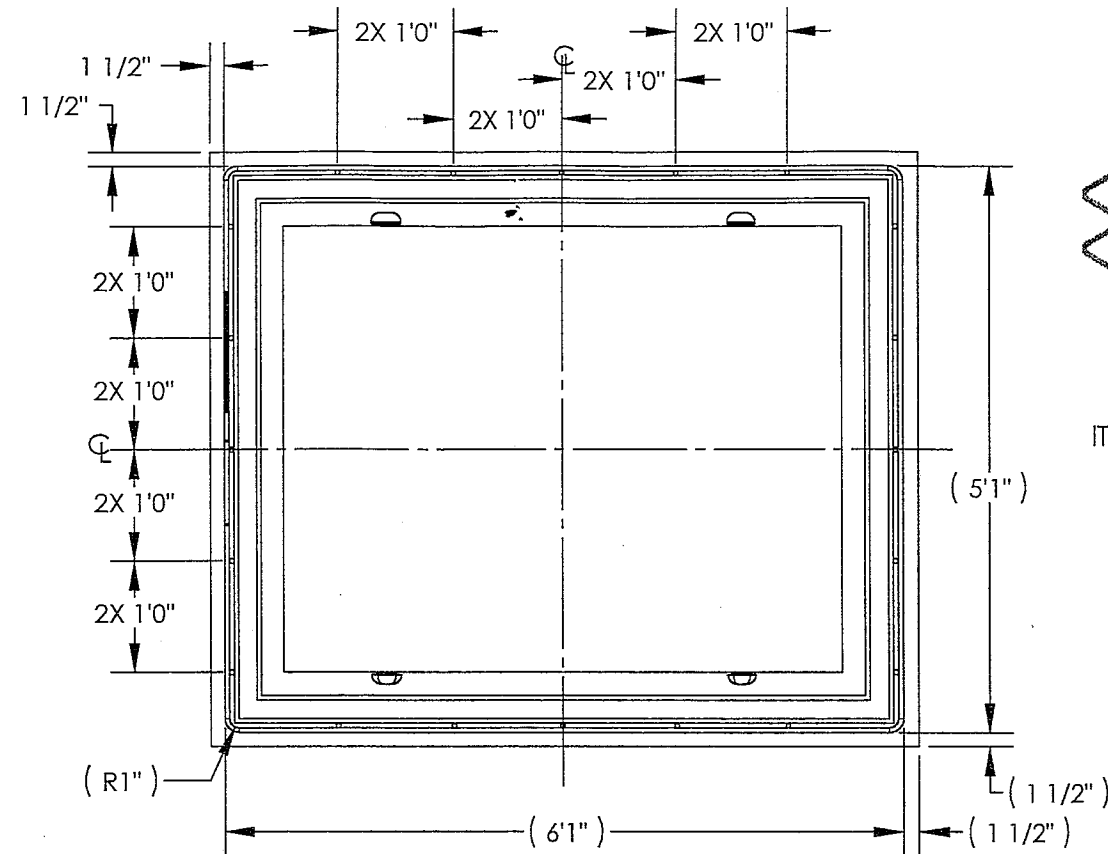
INTERMEDIATE SECTION 12"

APPROVALS	DATE	SIZE	DWG. NO.	REV.
DRAWN ED NUNEZ	7-11-06	B	3332INTER12	0
CHECKED <i>[Signature]</i>	2/9/10	SCALE: 1:1		
PROJ MGR <i>[Signature]</i>	9/8/10			
GEN MGR				
QUALITY <i>[Signature]</i>	9/8/10			

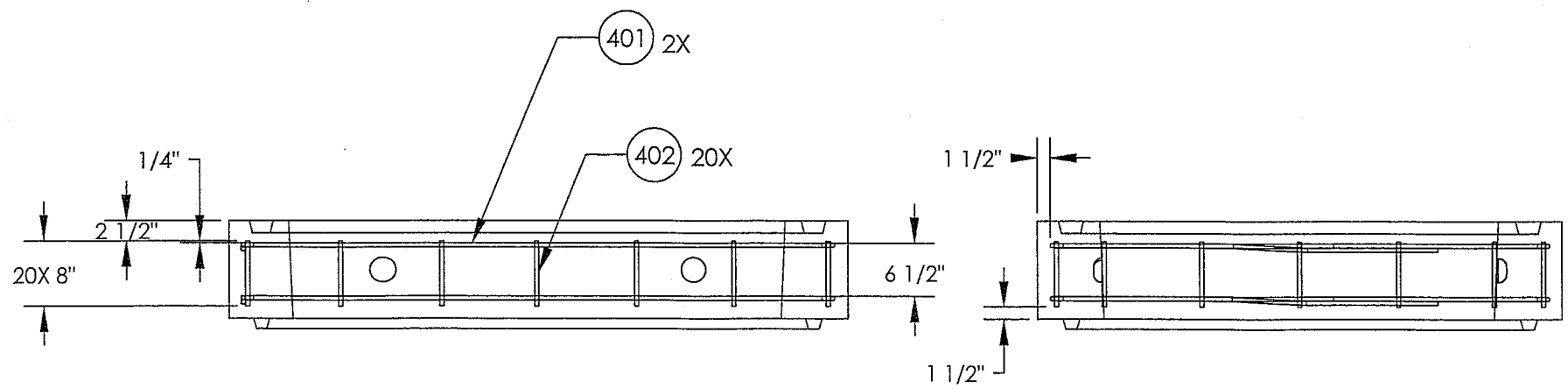
SHEET 12 OF 18

NOTES: UNLESS OTHERWISE SPECIFIED

REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



ITEM 401
2X



ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	NOTE
402	20	ZR#4	REBAR #4, 1/2" DIA X 8" LONG	
401	2	ZR#4	REBAR #4, 1/2" DIA	

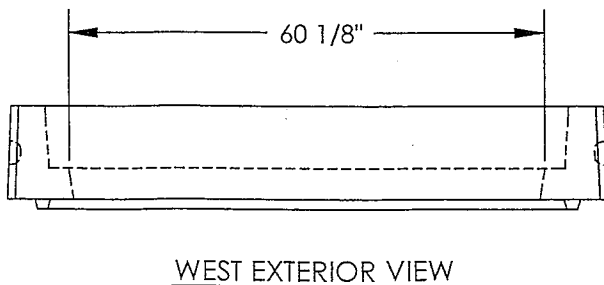
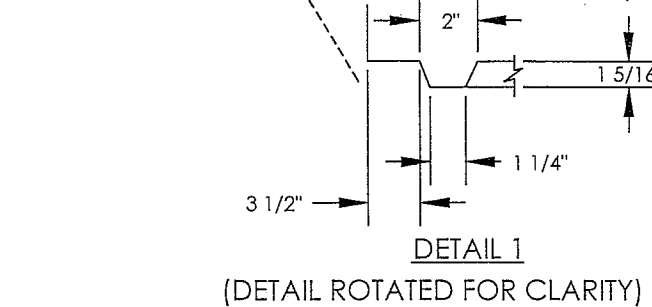
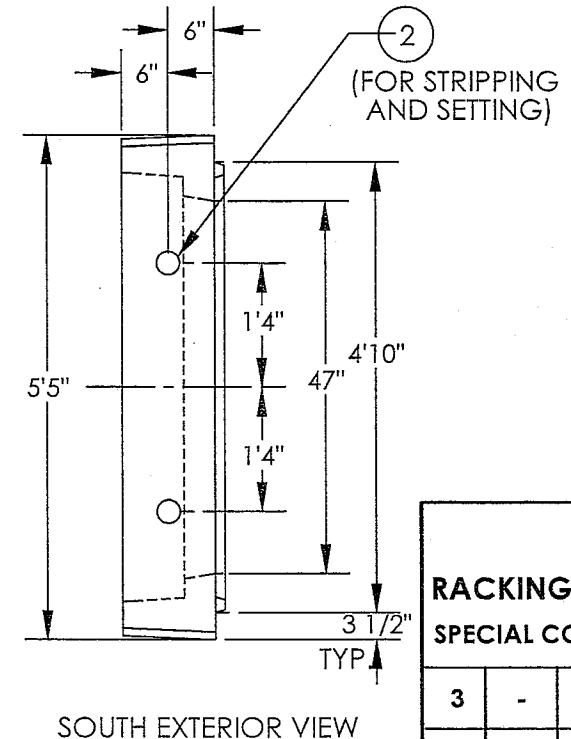
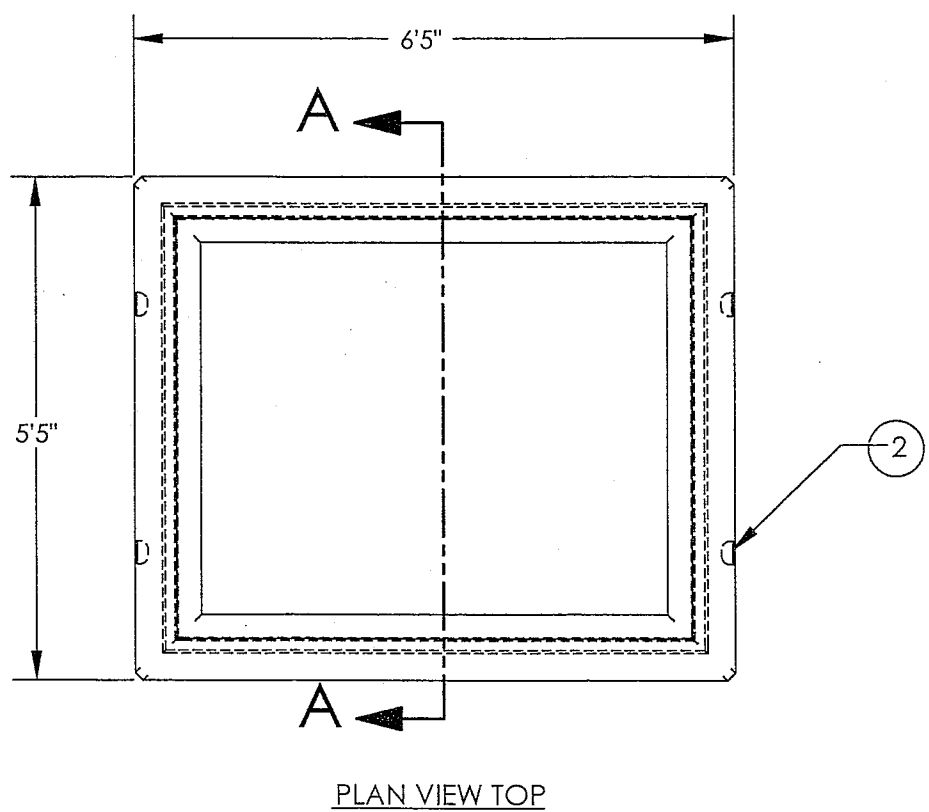
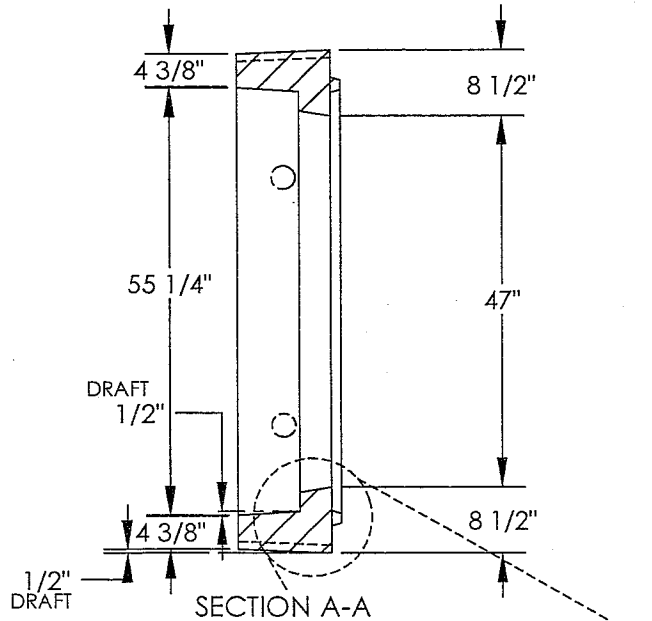
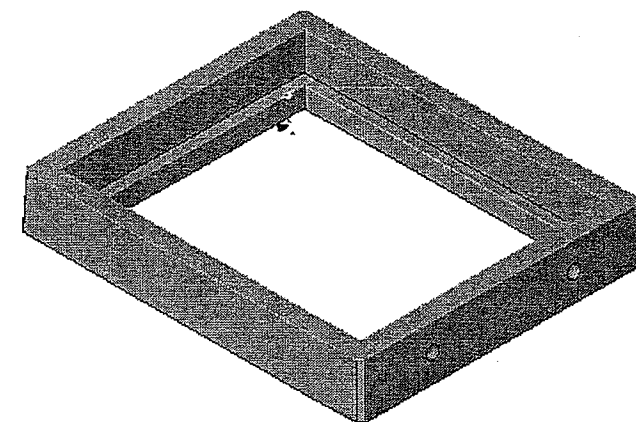
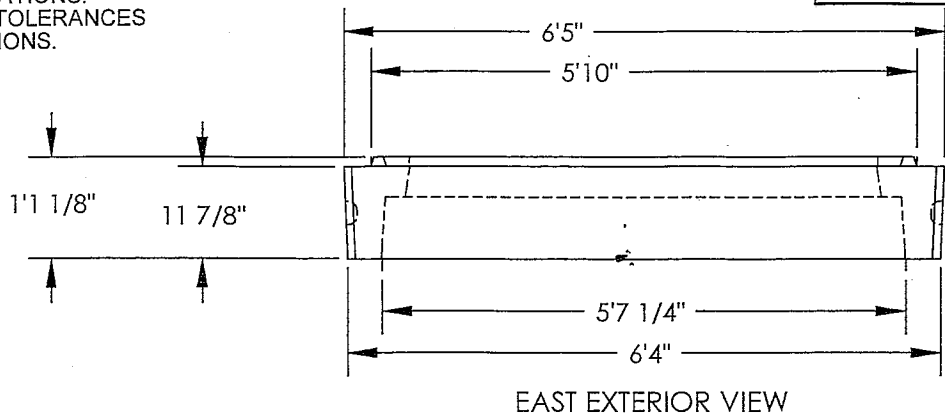
APPROVALS		DATE		2735 Cactus Road San Diego, CA 92154 NPCA CERTIFIED PLANT
DRAWN	ED NUNEZ	7-11-06		
CHECKED				
PROJ MGR	<i>[Signature]</i>	9/8/10		
GEN MGR	<i>[Signature]</i>	9/8/10		
QUALITY	SB	9/8/10	SIZE DWG. NO. B 3332INTER12	REV. 0
MARK	QTY		SCALE: 1:1	SHEET 13 OF 18

GENERAL NOTES:

1. APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.
2. MATERIAL: CONCRETE
WEIGHT: 1,597 LBS
CUBIC YARD: .399
COLOR: NATURAL
PSI: 5000
FINISH: SMOOTH FORM-

This document is the property of U.S. Concrete Precast Group. It is not to be copied, transferred, or used in any manner other than to convey information and intent. It is assumed that the receiving party to this document will not use it in any manner other than the best interest of U.S. Concrete. Copyright U.S. Concrete; All Rights Reserved.

REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



JOB SPECIFIC NOTES:

RACKING: NONE REQUIRED
SPECIAL COATINGS: NONE REQUIRED

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION	CHECK
3	-	NOT USED		
2	4	ZI2TX23/4SL	2 TON X 2 3/4 SWIFT LIFT GALV.	
1	-	NOT USED		

PARTS LIST

APPROVALS	DATE	US CONCRETE PRECAST GROUP	
DETAILER: WBL	5/28/10	2735 Cactus Road San Diego, CA 92154	
PROJ MGR:	9/2/10	NPCA CERTIFIED PLANT	
PLANT MGR:	9/9/10	PART #	
GEN MGR:		3332NT	
QUALITY: SB	9/8/10		
CUSTOMER APPROVAL:			

DO NOT SCALE DRAWING SHEET 14 OF 18

MARK: **3332NT (48" X 60" X 12" TRAFFIC NECKING)** QTY: SALES ORDER/JOB # CUSTOMER: PROJECT: REV. **0**

8

7

6

5

4

3

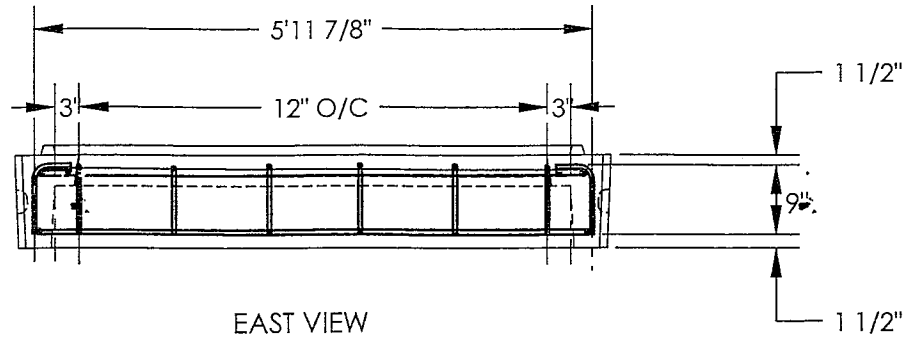
2

1

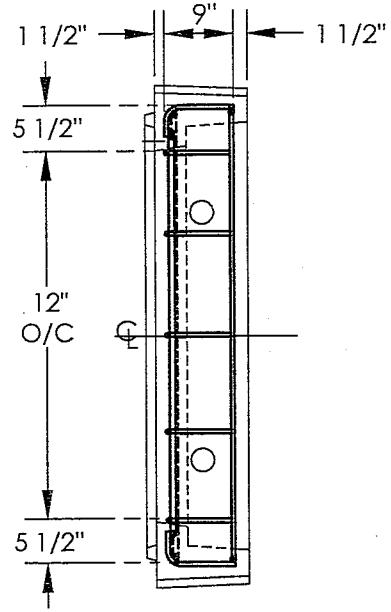
GENERAL NOTES:

This document is the property of U.S. Concrete Precast Group. It is not to be copied, transferred, or used in any manner other than to convey information and intent. It is assumed that the receiving party to this document will not use it in any manner other than the best interest of U.S. Concrete. Copyright U.S. Concrete; All Rights Reserved.

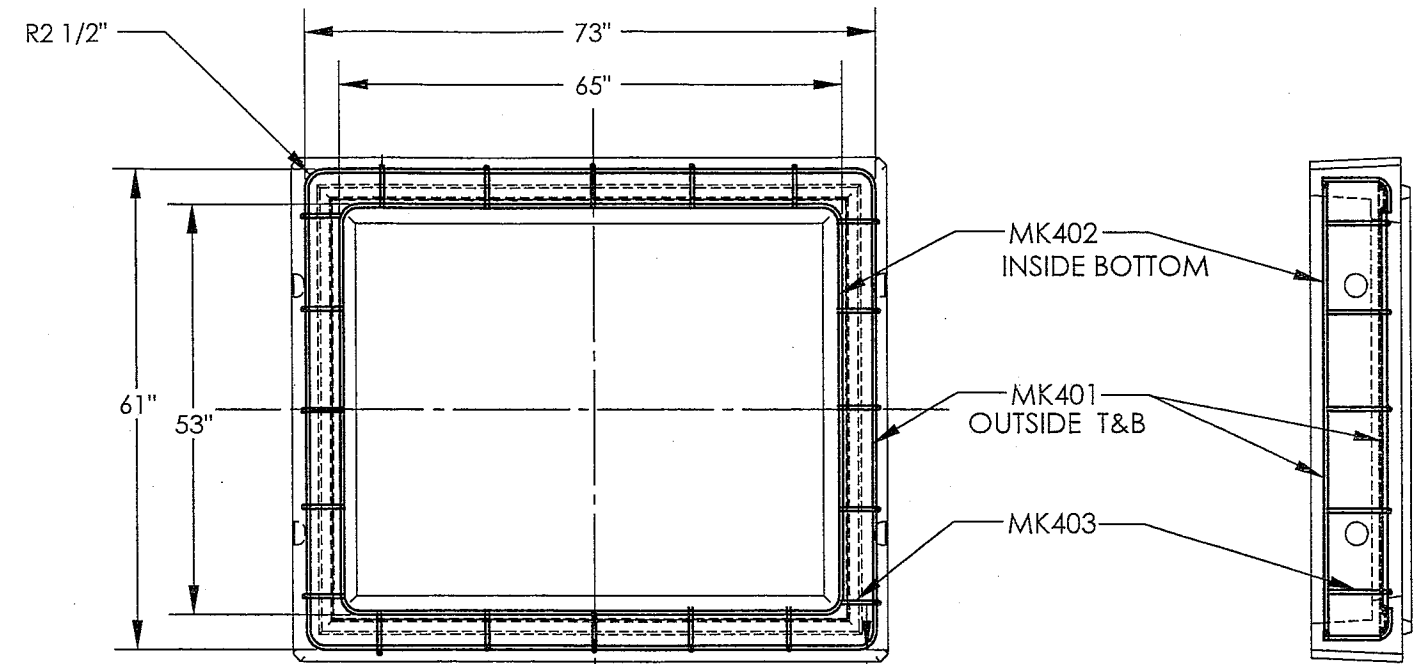
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



EAST VIEW



NORTH VIEW



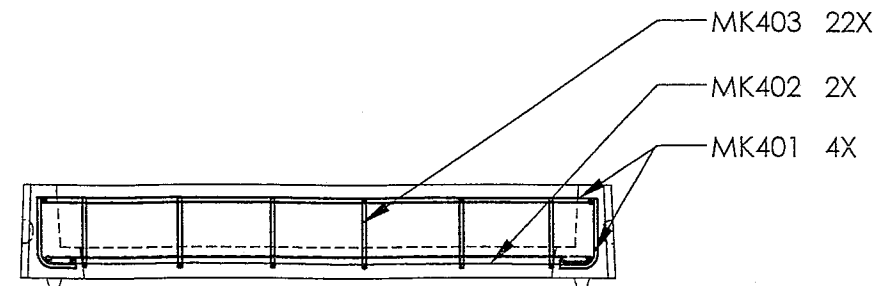
PLAN VIEW TOP



SOUTH VIEW

(SEE NORTH VIEW FOR REBAR PLACEMENT O.H.)

2\"/>



WEST VIEW

(SEE EAST VIEW FOR REBAR PLACEMENT O.H.)



ITEM NO.	QTY RECD	PART OR IDENTIFYING NO.	DESCRIPTION	NOTE
403	22	ZR#3	9\"/>	
402	2	ZR#2	53\"/>	
401	4	ZR#1	24\"/>	

PARTS LIST

- MK403 22X
- MK402 2X
- MK401 4X

APPROVALS	DATE
DETAILER: WBL	3/10/10
PROJ MGR: [Signature]	7/9/10
PLANT MGR: [Signature]	6/8/10
GEN MGR:	
QUALITY: SB	9/8/10
CUSTOMER APPROVAL:	

US CONCRETE 2735 Cactus Road
 San Diego, CA 92154
 NPCA CERTIFIED PLANT
 PRECAST GROUP

PART # 3332NT

DO NOT SCALE DRAWING SHEET 15 OF 18

MARK: 3332NT (48" X 60" X 12" NECKING REBAR)	QTY:	SALES ORDER/JOB #	CUSTOMER:	PROJECT:	REV. 0
--	------	-------------------	-----------	----------	--------

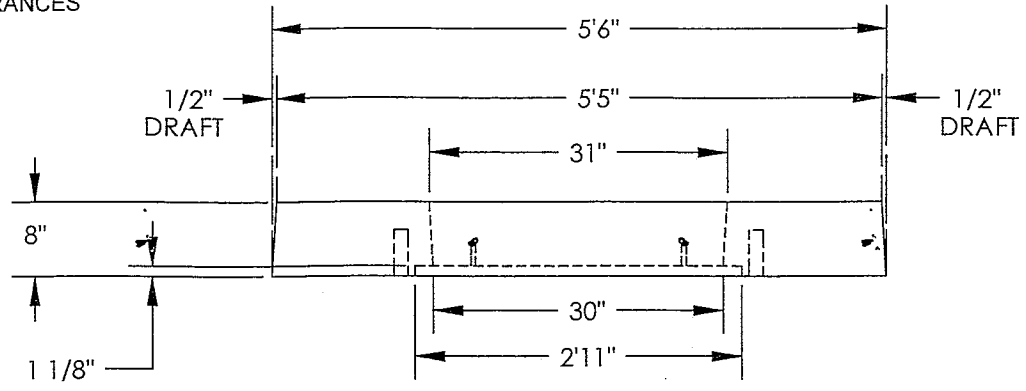
8 7 6 5 4 3 2 1

GENERAL NOTES:

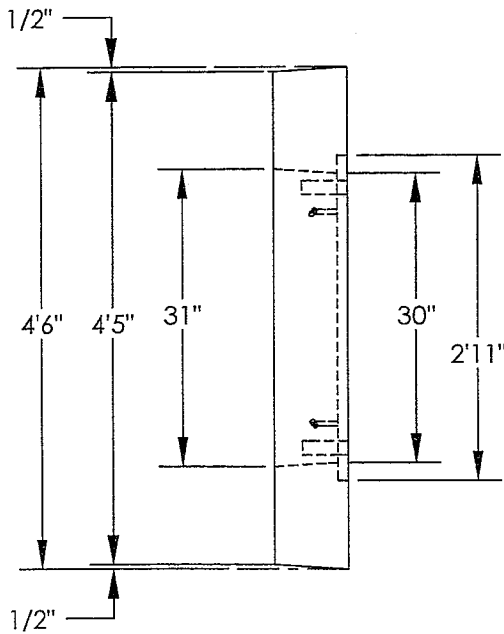
1. APPLICABLE STANDARDS / SPECIFICATIONS:
ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
MIL-STD-12-12 ANSI Y1.1 ABBREVIATIONS.
2. MATERIAL: CONCRETE
WEIGHT: 1,879 LBS
CUBIC YARD: .47
COLOR: NATURAL
PSI: 5000
FINISH: SMOOTH FORM-

This document is the property of U.S. Concrete Precast Group. It is not to be copied, transferred, or used in any manner other than to convey information and intent. It is assumed that the receiving party to this document will not use it in any manner other than the best interest of U.S. Concrete. Copyright U.S. Concrete. All Rights Reserved.

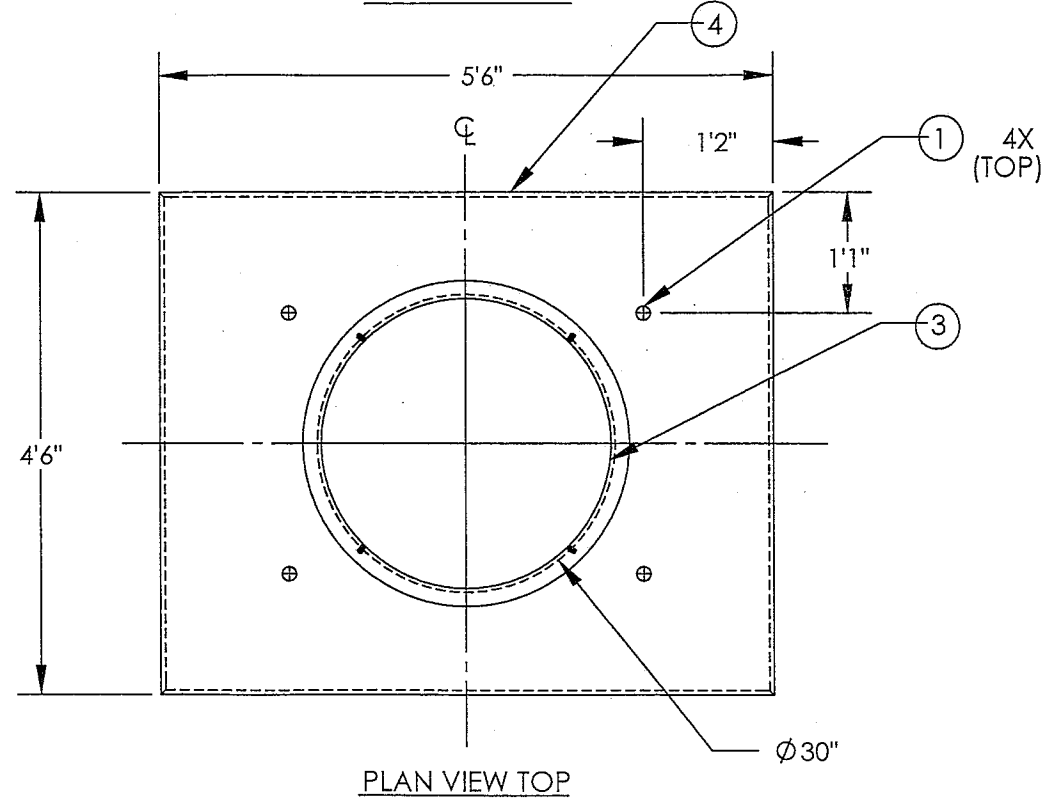
REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		



EAST EXTERIOR VIEW



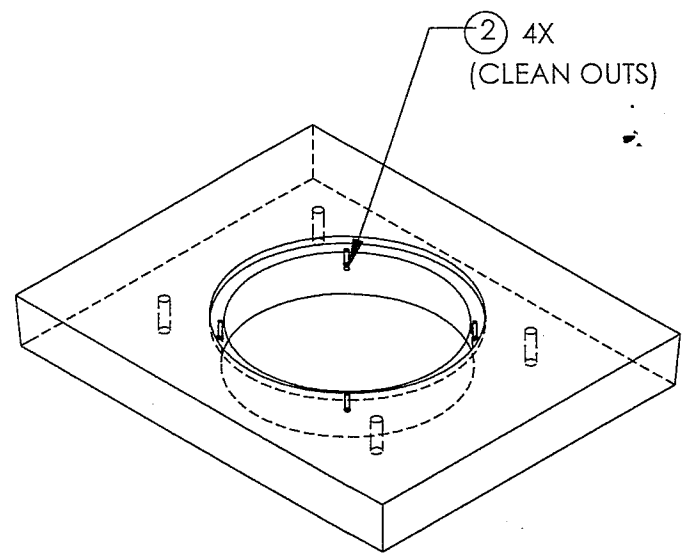
NORTH EXTERIOR VIEW



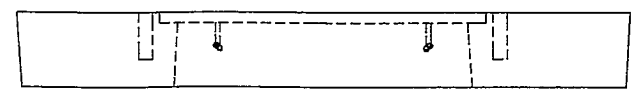
PLAN VIEW TOP



SOUTH EXTERIOR VIEW



ISOMETRIC TOP VIEW



WEST EXTERIOR VIEW

JOB SPECIFIC NOTES:

RACKING: NONE REQUIRED

SPECIAL COATINGS: NONE REQUIRED

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION
4	1	ZS1X1X1/4A	1 X 1 X 1/4 ANGLE IRON FRAME
3	1	ZFA1106	A1106 CAST IRON FRAME ONLY
2	-	NOT USED	
1	4	ZI2TX23/4SL	2 TON 2 3/4 SWIFT LIFT GALVANIZED

PARTS LIST

APPROVALS	DATE
DETAILER: WBL	8/28/10
PROJ MGR:	9/8/10
PLANT MGR:	9/8/10
GEN MGR:	
QUALITY: SP	9/8/10
CUSTOMER APPROVAL:	

US CONCRETE PRECAST GROUP
 2735 Cactus Road
 San Diego, CA 92154
 NPCA CERTIFIED PLANT

PART #
3332CT

DO NOT SCALE DRAWING SHEET 16 OF 18

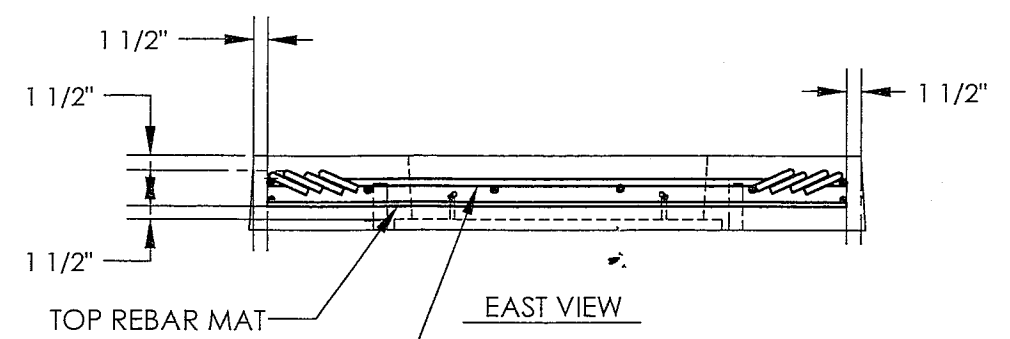
MARK: 3332CT (54" X 66" x 8" TRAFFIC COVER)	QTY:	SALES ORDER/JOB #	CUSTOMER:	PROJECT:	REV. 0
---	------	-------------------	-----------	----------	------------------

8 7 6 5 4 3 2 1

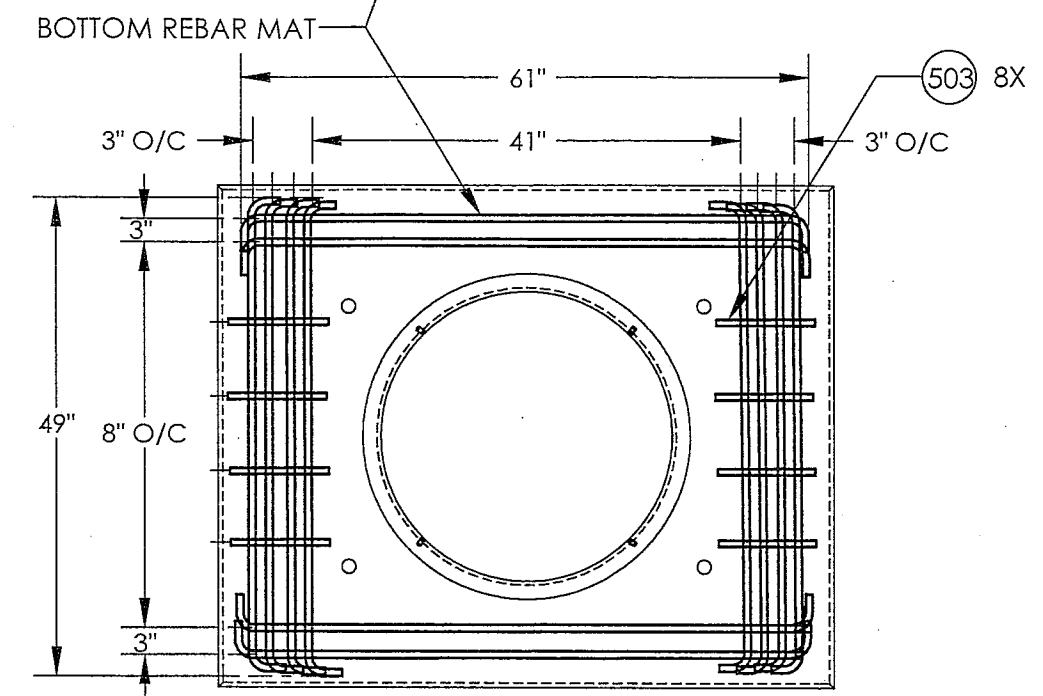
This document is the property of U.S. Concrete Precast Group. It is not to be copied, transferred, or used in any manner other than to convey information and intent. It is assumed that the receiving party to this document will not use it in any manner other than the best interest of U.S. Concrete. Copyright U.S. Concrete; All Rights Reserved.

REVISION HISTORY			
REV.	DESCRIPTION	DATE	APPROVED
0	RELEASE DRAWING		

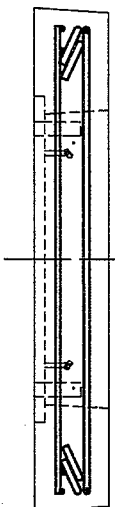
GENERAL NOTES:



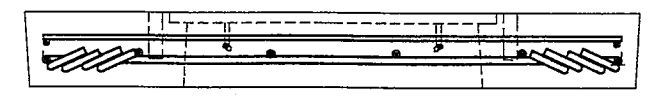
EAST VIEW



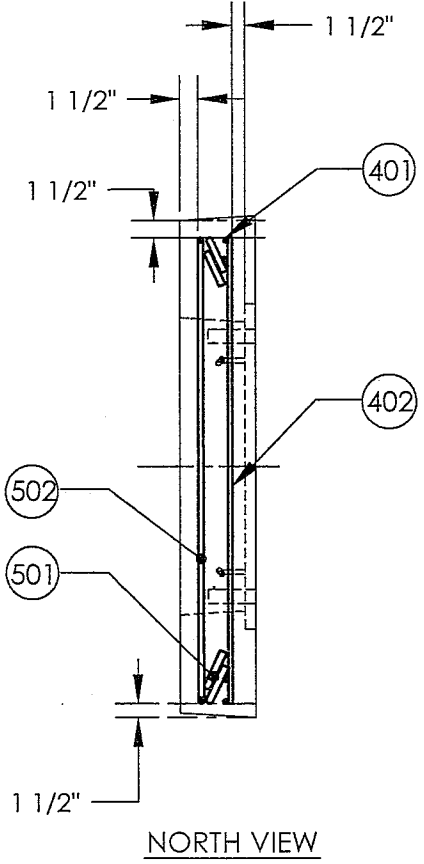
PLAN VIEW TOP
(TOP MAT NOT SHOWN FOR CLARITY)



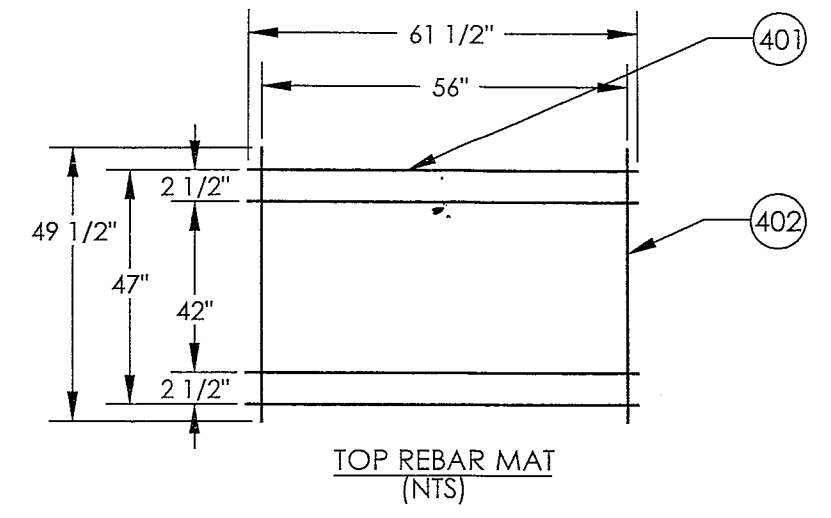
SOUTH VIEW
(SEE NORTH VIEW FOR REBAR PLACEMENT O.H.)



WEST VIEW
(SEE EAST VIEW FOR REBAR PLACEMENT O.H.)



NORTH VIEW



TOP REBAR MAT
(NTS)

ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	DESCRIPTION
402	2	ZR#4	49 1/2" REBAR #4, 1/2" DIA
401	4	ZR#4	61 1/2" REBAR #4, 1/2" DIA
503	8	ZR#5	11" REBAR #5, 5/8" DIA
502	4	ZR#5	49" REBAR #5, 5/8" DIA
501	8	ZR#5	61" REBAR #5, 5/8" DIA

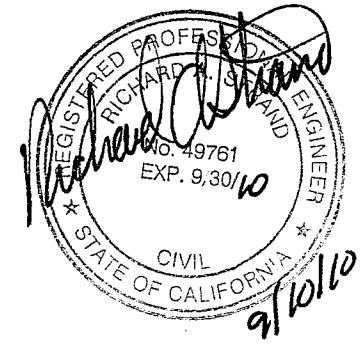
PARTS LIST

APPROVALS	DATE
DETAILER: WBL	6/2/10
PROJ MGR:	9/9/10
PLANT MGR:	6/10/10
GEN MGR:	
QUALITY: SB	9/8/10
CUSTOMER APPROVAL:	

US CONCRETE PRECAST GROUP
 2735 Cactus Road
 San Diego, CA 92154
 NPCA CERTIFIED PLANT

PART #
3332CT

DO NOT SCALE DRAWING SHEET 17 OF 18

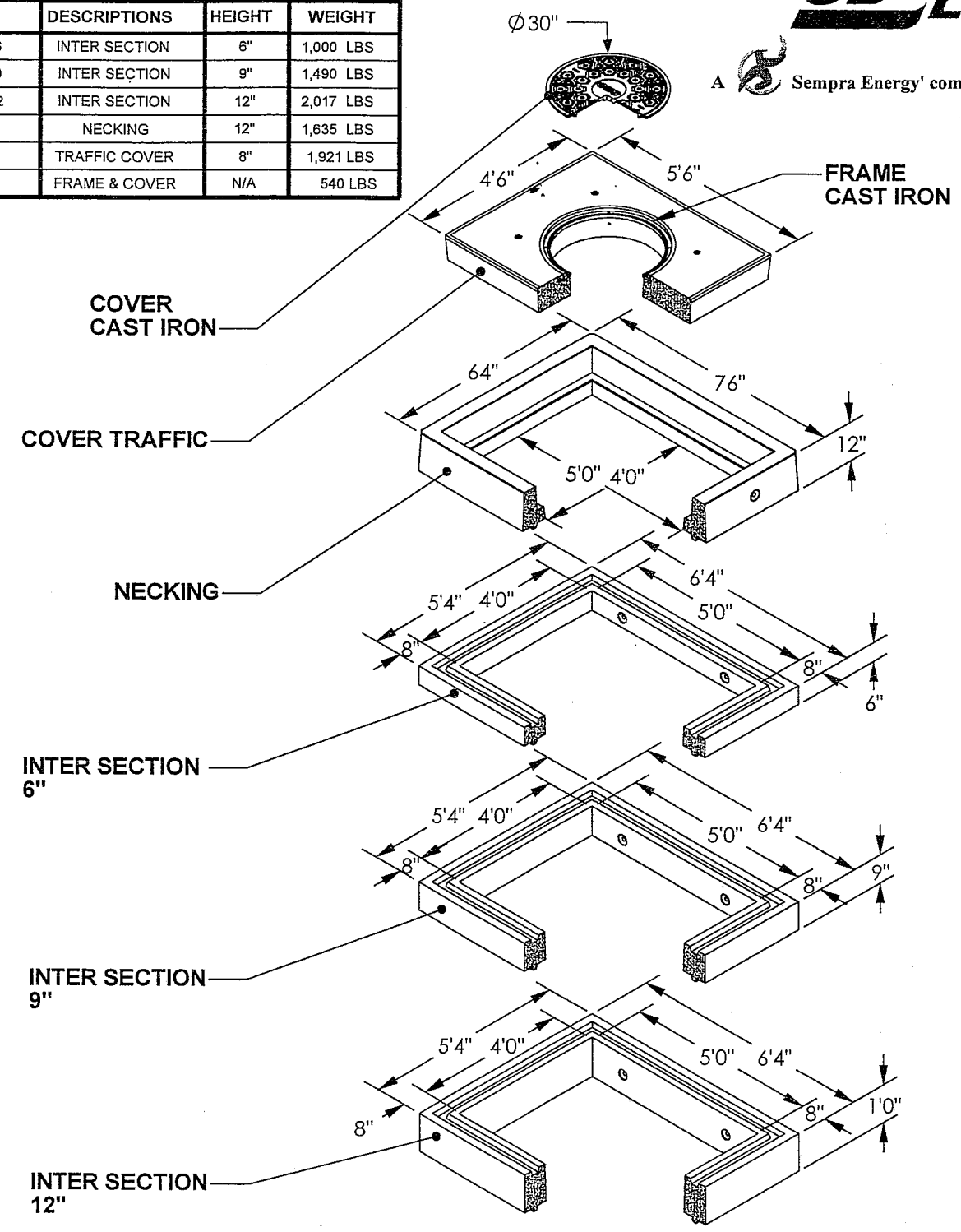


MARK: 3332CT (54" X 66" X 8" REBAR)	QTY:	SALES ORDER/JOB #	CUSTOMER:	PROJECT:	REV. 0
--	------	-------------------	-----------	----------	---------------

CONFIGURATION BLOCK			
PART NO.	DESCRIPTIONS	HEIGHT	WEIGHT
3332INTER6	INTER SECTION	6"	1,000 LBS
3332INTER9	INTER SECTION	9"	1,490 LBS
3332INTER12	INTER SECTION	12"	2,017 LBS
3332NT	NECKING	12"	1,635 LBS
3332CT	TRAFFIC COVER	8"	1,921 LBS
A-1106F&C	FRAME & COVER	N/A	540 LBS



A Sempra Energy company



US CONCRETE PRECAST GROUP
 2735 Cactus Road
 San Diego, CA 92154
 Phone: (619) 240-8000
 Fax: (619) 661-1038

DESCRIPTION: VAULT NECKING & COVER	
WEIGHT: SEE DRAWINGS	PART NO:
CONCRETE: 6,000 PSI	3332
WWW.SDPC.COM	
NPCA CERTIFIED PLANT	