



# Weaver

CONSTRUCTION MANAGEMENT

3679 S Huron Street, Suite 404 Englewood, Colorado 80110  
Phone: (303) 789-4111 FAX: (303) 789-4310

## SUBMITTAL TRANSMITTAL

June 11, 2012

**Submittal No: 05500-016**

PROJECT: **Harold Thompson Regional WRF**  
Birdsall Rd.  
Fountain, CO 80817  
Job No. 2908

ENGINEER: **GMS, Inc.**  
611 No. Weber St., #300  
Colorado Springs, CO 80903  
719-475-2935 Roger Sams

OWNER: **Lower Fountain Metropolitan  
Sewage Disposal District**  
901 S. Santa Fe Ave.  
Fountain, CO 80817  
719-382-5303 James Heckman

CONTRACTOR: **CSM Industrial Contractors**  
614 Cliff Street  
Westcliffe, CO 81252  
719-783-2867

SUBJECT: P&D Building - Pump Room Stairs

SPEC SECTION: 05500 - Misc. Metals

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: \_\_\_ YES  X  NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver Construction Management and, unless indicated otherwise, has been found to be in conformance with the intent of the contract documents.

Contractor's Stamp:

Date: 6/11/12

Reviewed by: Tyler Ammerman

(x) Reviewed Without Comments

( ) Reviewed With Comments

Engineer's Stamp:

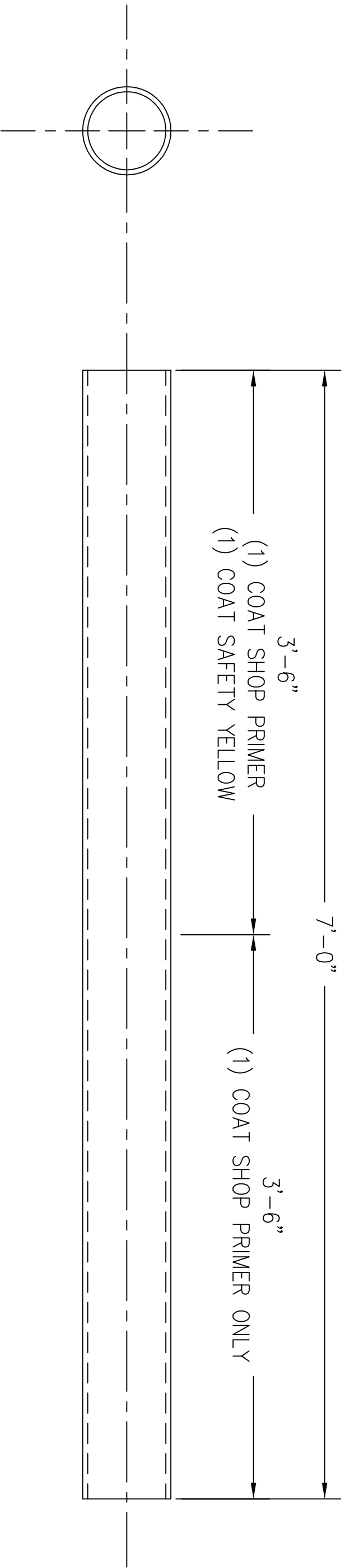
ENGINEER'S  
COMMENTS: \_\_\_\_\_



**PROJECT: Fountain: P& D Bldg; Pump Room Stairs**

**SHOP DRAWINGS DATED/VERSION: 02/2012, Rev A 04/15/12, M. Murphy**

SHEET	1	Fixed Bollard Detail	
SHEET	1	Framing Plan, Plan View	Pump Room Stairs
SHEET	2	Framing Plan, Plan View	Pump Room Stairs
SHEET	3	Detail	Upper Stair Stringer 1A
SHEET	4	Detail	Upper Stair Stringer 1B
SHEET	5	Detail	Upper Stair Stringer 2A
SHEET	6	Detail	Upper Stair Stringer 2B
SHEET	7	Detail	Lower Stair Stringer 3A
SHEET	8	Detail	Lower Stair Stringer 3B
SHEET	9	Details	Misc. Platform
SHEET	10	Detail	Grating Plan
SHEET	11	Details	Grating
SHEET	12	Details	Connections
SHEET	13	Details	Misc. Grating Support
SHEET	14	Details	Connection Clips
SHEET	15	Details	Misc. Grating Support
SHEET	16	Details	Misc. Grating Support



BOLLARD DETAIL


MATERIAL: 6" SCHEDULE 80 PIPE  
 (2) REQUIRED

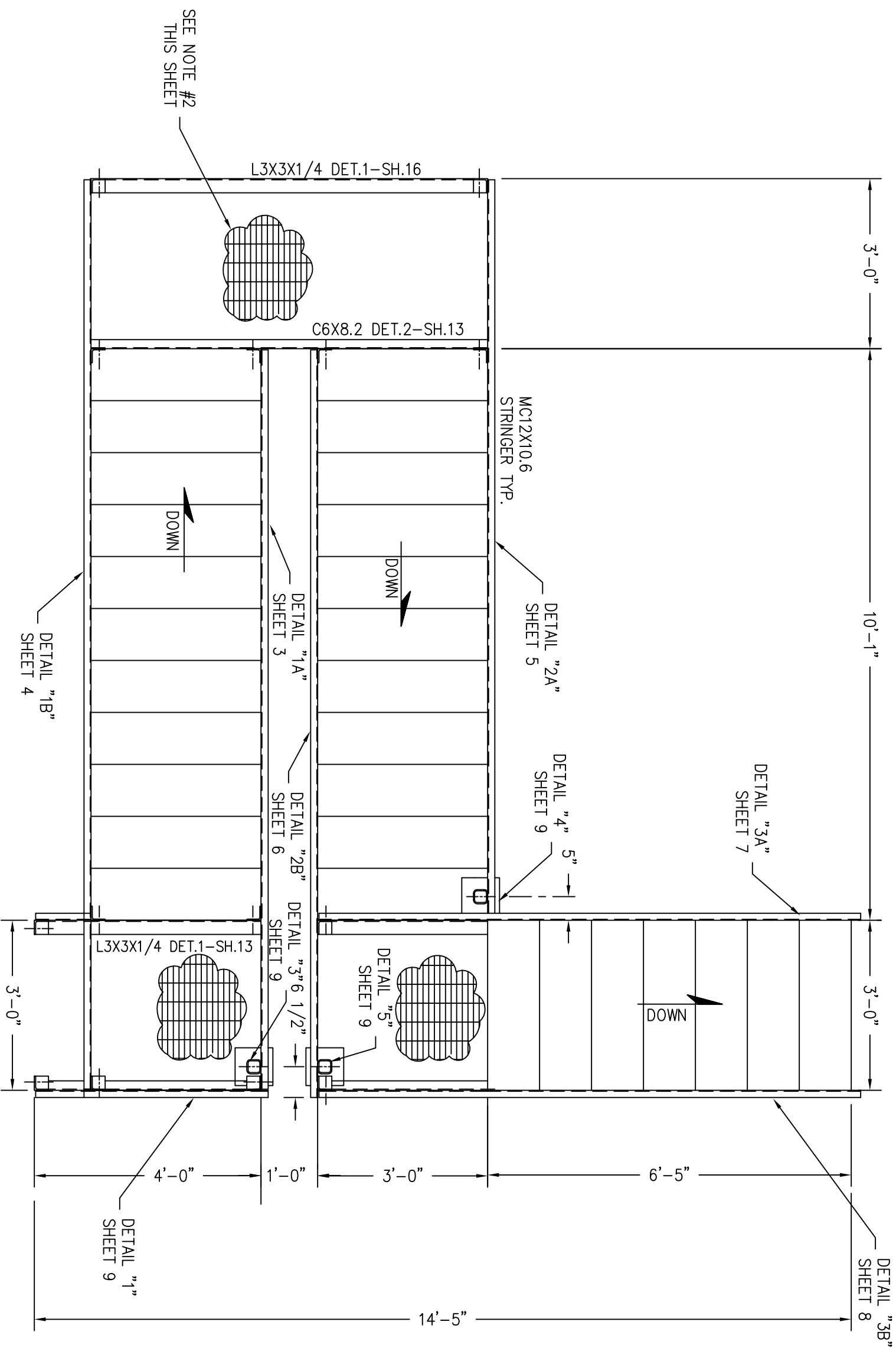
**PROGRESS  
 PRINT**

NOT VALID FOR CONSTRUCTION  
 DATE: 4/4/2012 REV. NO. A  
 CSM INDUSTRIAL

GENERAL NOTES:  
 1. FINISH AS NOTED

REVISION 2	REVISION 1

 (719)-783-2867		PROJECT	DATE
		FOUNTAIN CO METRO SEWER DIST.	2/2012
AREA	DRAWN BY	M. MURPHY	
DETAIL	DWG.		
FIXED BOLLARD DETAILS	SCALE	1-1/2" = 1'-0"	
REF. DWG.	SHEET	1	
DL-3			



**GENERAL NOTES:**  
 1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED  
 OR AS NOTED.  
 2. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR  
 WITH 1-1/2" X 3/16" BANDING. REFERENCE SHEET 10.  
 3. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR  
 WITH CORRATED NOSING.

**PROGRESS PRINT**  
 NOT VALID FOR CONSTRUCTION  
 DATE: 4/15/2012 REV. NO. A  
 CSM INDUSTRIAL

**GENERAL NOTES:**

1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED  
 OR AS NOTED.

**PUMP ROOM STAIR PLAN VIEW**

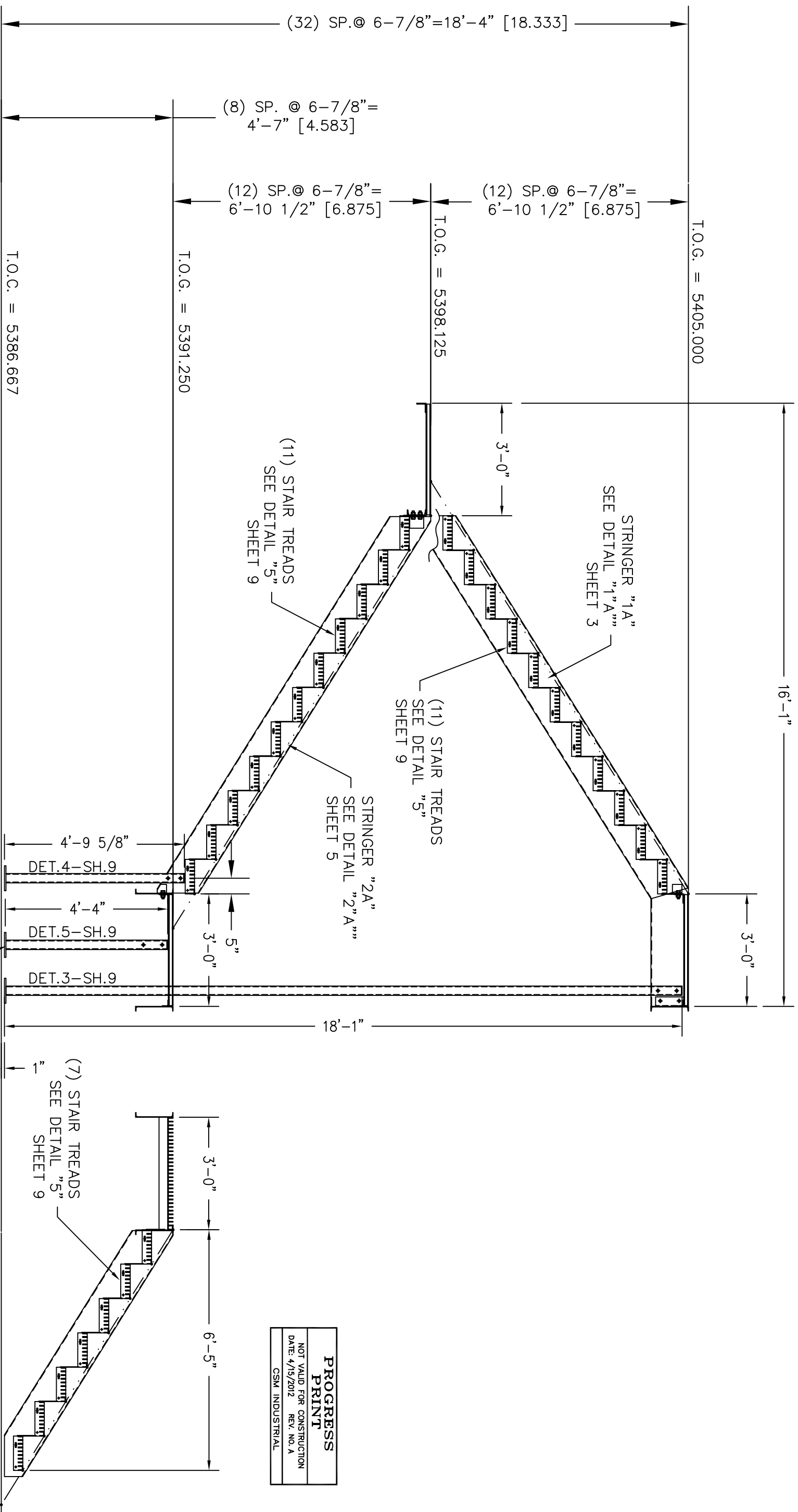
2. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR  
 WITH 1-1/2" X 3/16" BANDING. REFERENCE SHEET 10.

3. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR  
 WITH CORRATED NOSING.

REVISION	2	REVISION	1

**Industrial CSM Constructors**  
 (719)-783-2867

PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRAWN BY	M.MURPHY
DETAIL	FRAMING PLAN - PLAN VIEW	DWG.	
REF.DWG.	PD-9 & PD-9A	SCALE	1/2" = 1'-0"
		SHEET	1



- GENERAL NOTES:**
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR WITH 1-1/2" X 3/16" BANDING.
  3. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR WITH CORRATED NOSING.

PUMP ROOM STAIR ELEVATION VIEW

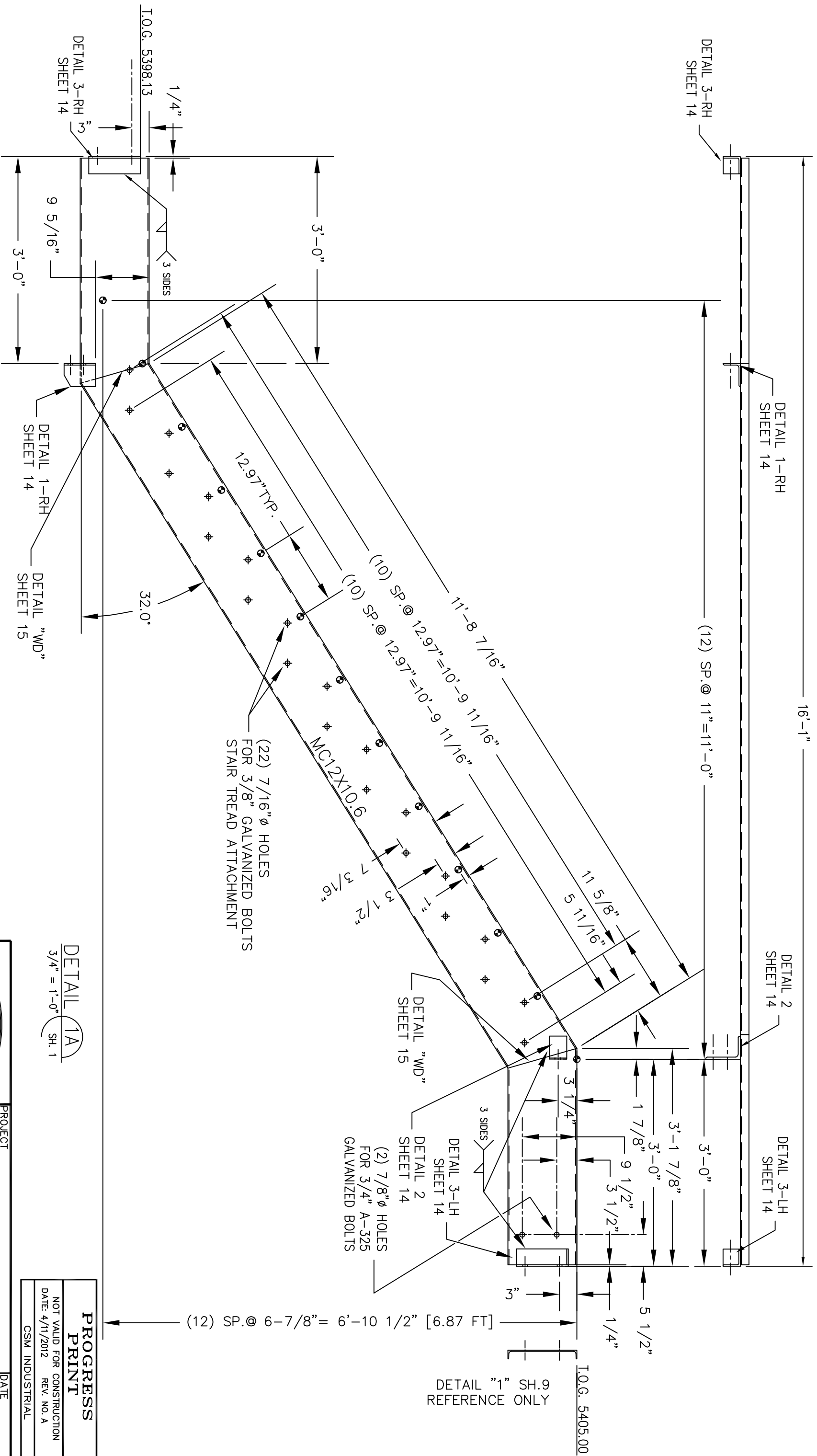
NOT SHOWN IN INSTALLED LOCATION

**PROGRESS PRINT**  
 NOT VALID FOR CONSTRUCTION  
 DATE: 4/15/2012 REV. NO. A  
 CSM INDUSTRIAL

REVISION 2	REVISION 1

**Industrial CSM Constructors**  
 (719)-783-2867

PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	STAIRWAY ELEVATION VIEW	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	3/8" = 1'-0"
		SHEET	2



DETAIL 1A  
3/4" = 1'-0" SH. 1

**PROGRESS PRINT**  
NOT VALID FOR CONSTRUCTION  
DATE: 4/11/2012 REV. NO. A  
GSM INDUSTRIAL

**GENERAL NOTES:**

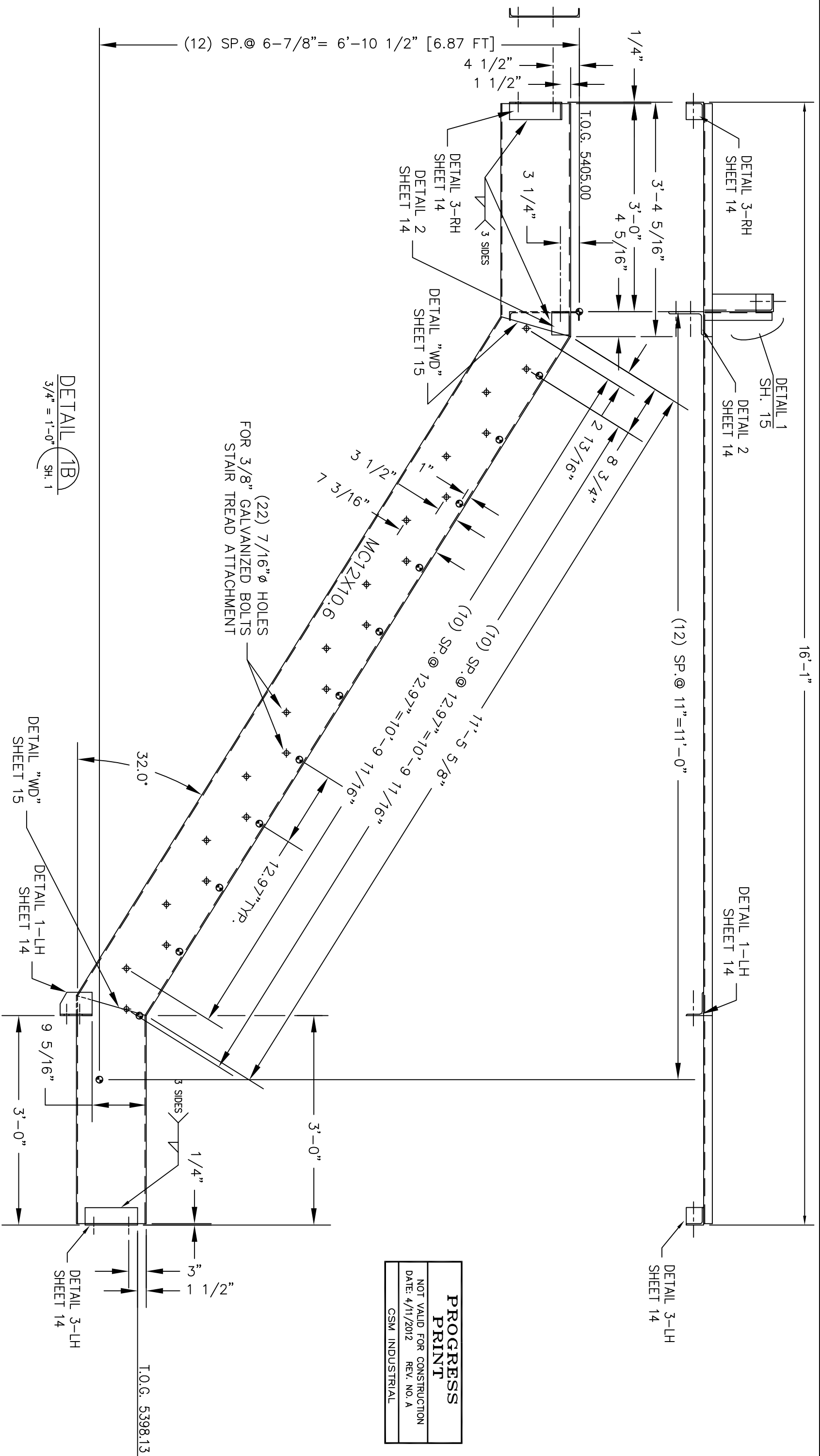
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
2. MATERIAL = MC12X10.6 OR AS NOTED

REVISION 2	REVISION 1

**Industrial Constructors**  
**GSM**  
(719)-783-2867

PROJECT	FOUNTAIN CQ METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	UPPER STAIR STRINGER 1A DETAIL	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	3/4" = 1'-0"
		SHEET	3

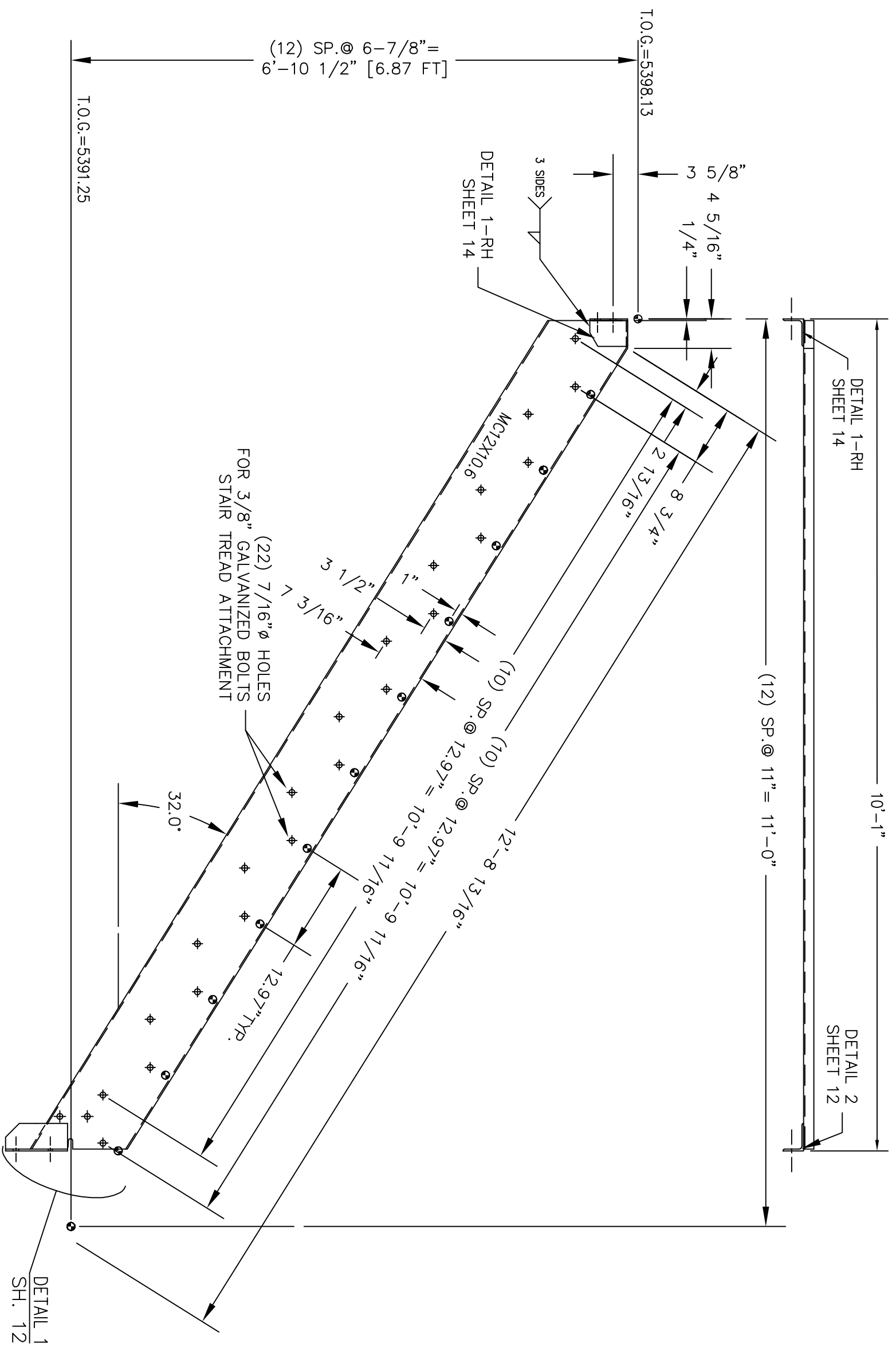
DETAIL "1" SH.9 - REFERENCE ONLY



**PROGRESS PRINT**  
 NOT VALID FOR CONSTRUCTION  
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- GENERAL NOTES:**
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. MATERIAL = MC12X10.6 OR AS NOTED

		PROJECT: FOUNTAIN CO METRO SEWER DIST AREA: PLATFORM-STAIRS @ PUMP ROOM REF. DWG: PD-9 & PD-9A SCALE: 3/4" = 1'-0"	DATE: 2/2012 DRAWN BY: M. MURPHY DWG. SHEET: 4
REVISION 2	REVISION 1		



DETAIL 2A  
 3/4" = 1'-0" SH. 1

**GENERAL NOTES:**

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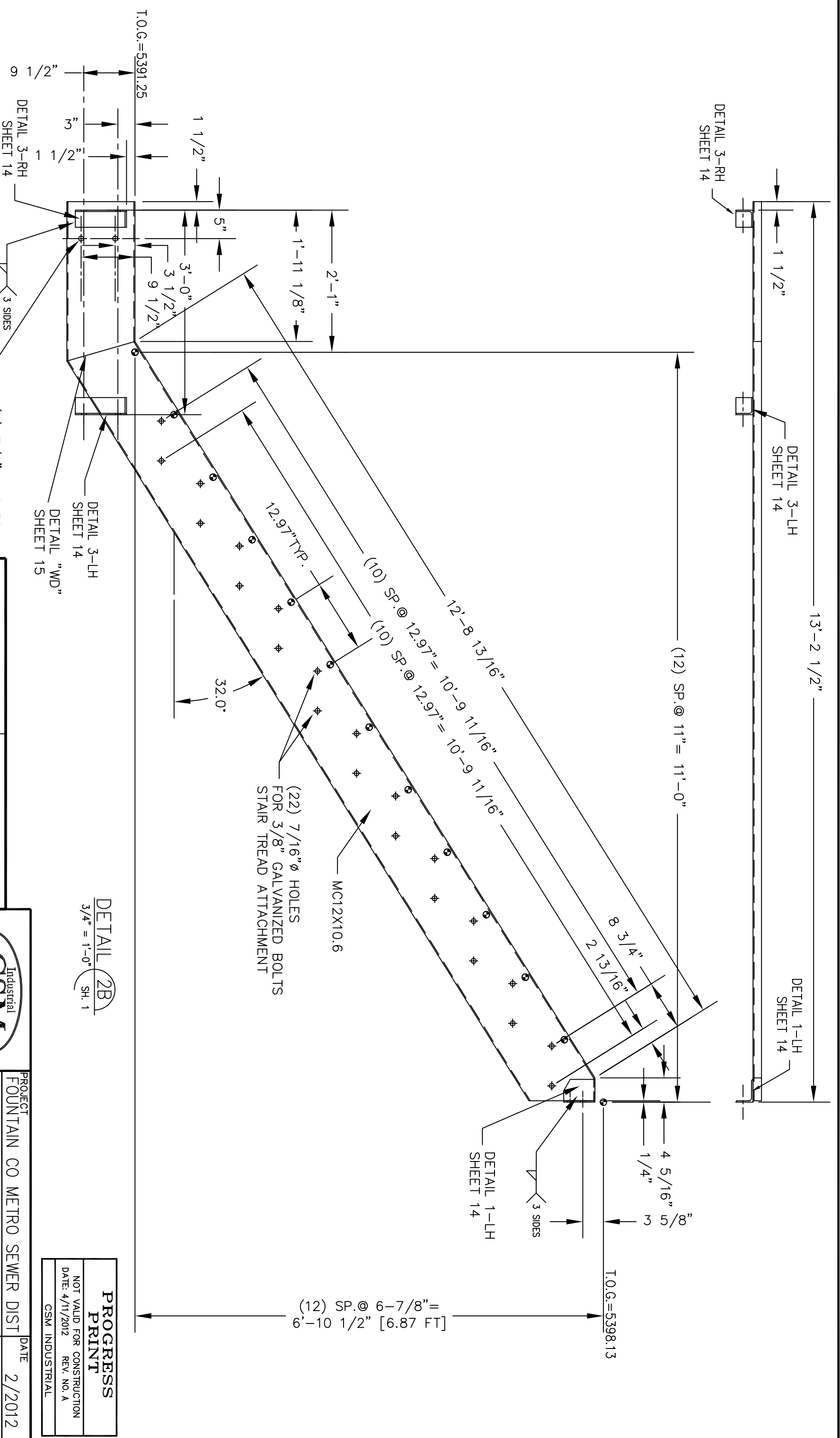
PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN.BY	M.MURPHY
DETAIL	UPPER STAIR STRINGER 2A DETAIL	DWG.	
REF.DWG.	PD-9 & PD-9A	SCALE	3/4" = 1'-0"
		SHEET	5



REVISION 2

REVISION 1





GENERAL NOTES:  
 1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.  
 2. MATERIAL = MC12X10.6 OR AS NOTED

(2) 7/8" Ø HOLES FOR 3/4" A-325 GALVANIZED BOLTS FOR SUPPORT LEG MK-5, SH. 9

(22) 7/16" Ø HOLES FOR 3/8" GALVANIZED BOLTS STAIR TREAD ATTACHMENT

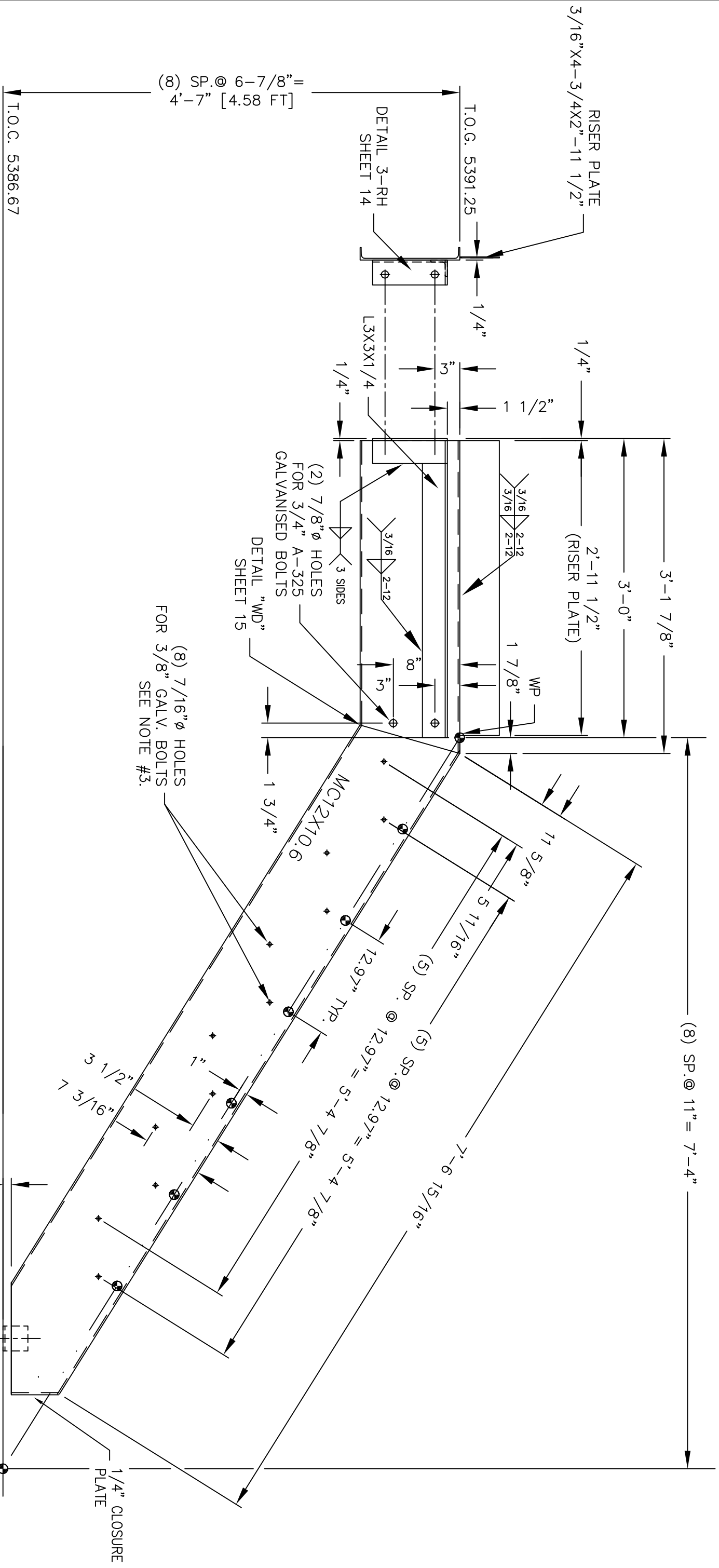
DETAIL (2B)  
 3/4" = 1'-0" SH. 1

**PROGRESS PRINT**  
 NOT VALID FOR CONSTRUCTION  
 DATE: 4/11/2012 REV. NO. A  
 CSM INDUSTRIAL

REVISION	2	1

Industrial Constructors  
**CSM**  
 (719)-783-2867

PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	UPPER STAIR STRINGER 2B DETAIL	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	3/4" = 1'-0"
		SHEET	6

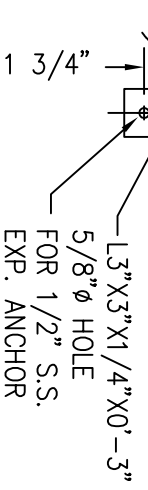


(8) SP. @ 6-7/8" = 4'-7" [4.58 FT]

(8) 7/16" Ø HOLES FOR 3/8" GALV. BOLTS SEE NOTE #3.

DETAIL 3A  
1/2" = 1'-0" SH:1

**PROGRESS PRINT**  
NOT VALID FOR CONSTRUCTION  
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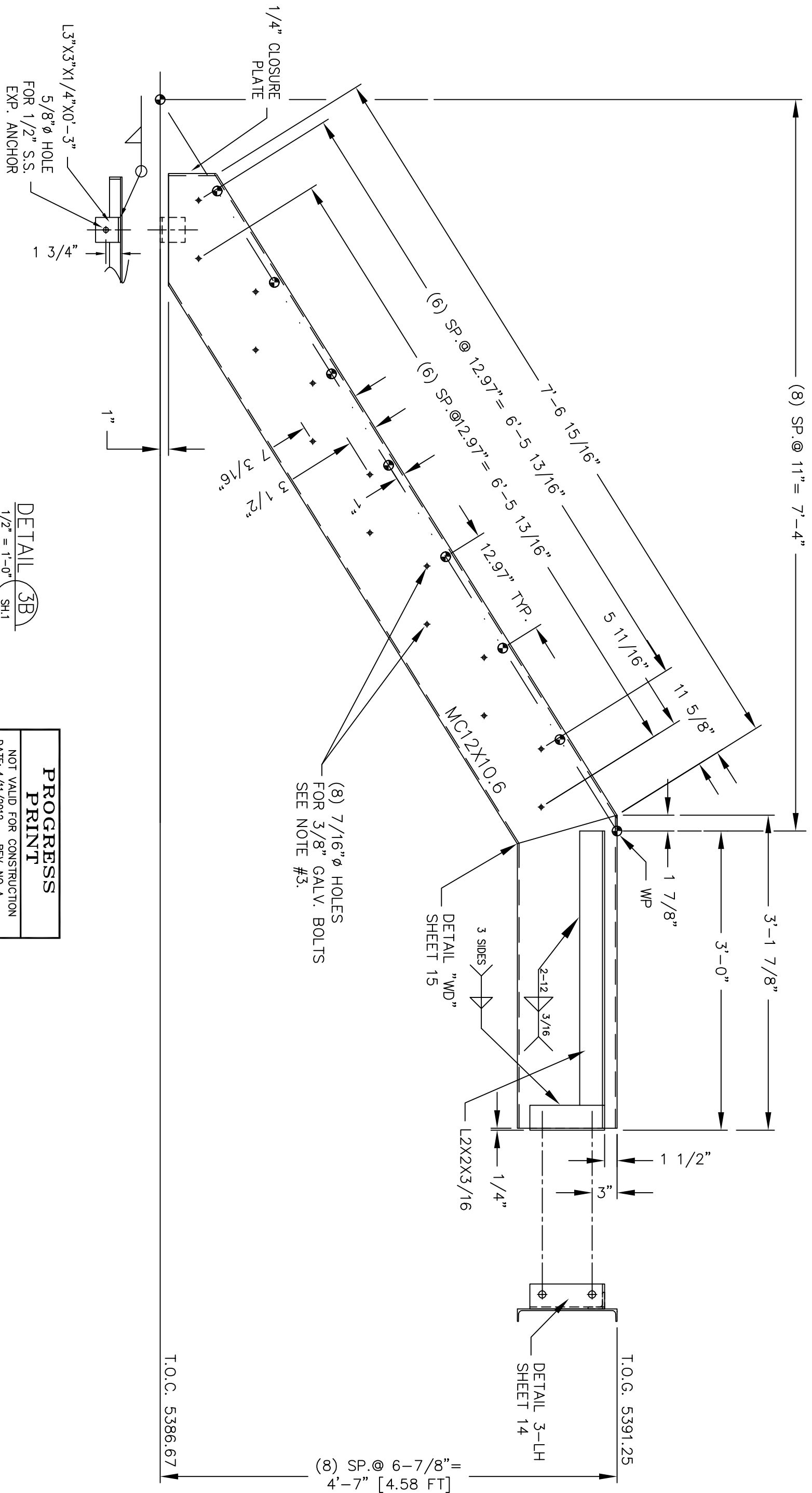


- GENERAL NOTES:
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR WITH 1-1/2" X 3/16" BANDING.
  3. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR WITH CORRATED NOSING. SEE DETAIL "1" SHEET 3

REVISION 2	REVISION 1



PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	LOWER STAIR STRINGER "3A"	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	1" = 1'-0"
		SHEET	7



DETAIL 3B  
1/2" = 1'-0" SH:1

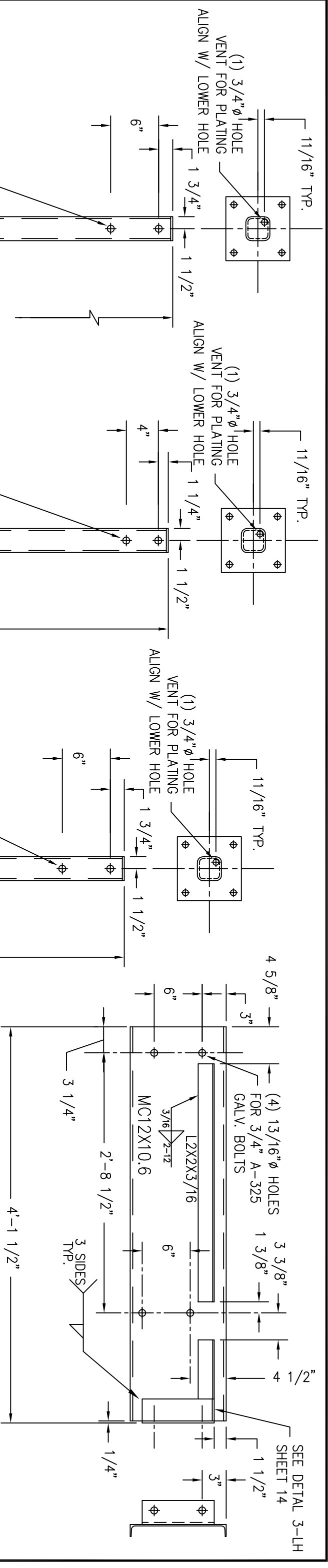
**PROGRESS PRINT**  
NOT VALID FOR CONSTRUCTION  
DATE: 4/11/2012 REV. NO. A  
CSM INDUSTRIAL

- GENERAL NOTES:
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  2. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR WITH 1-1/2" X 3/16" BANDING.
  3. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR WITH CORRATED NOSING. SEE DETAIL "1" SHEET 3

REVISION 2	REVISION 1

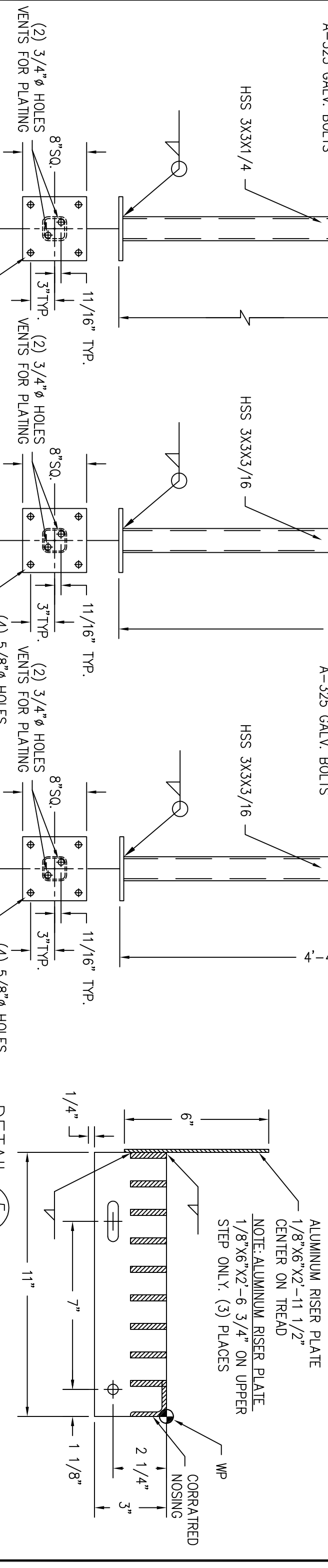


PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	LOWER STAIR STRINGER "3B"	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	1" = 1'-0"
		SHEET	8



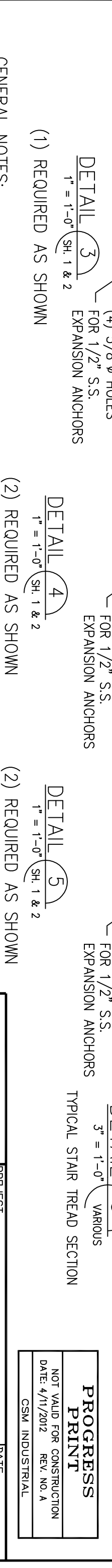
DETAIL 1  
1" = 1'-0" SH. 1

(1) REQUIRED AS SHOWN



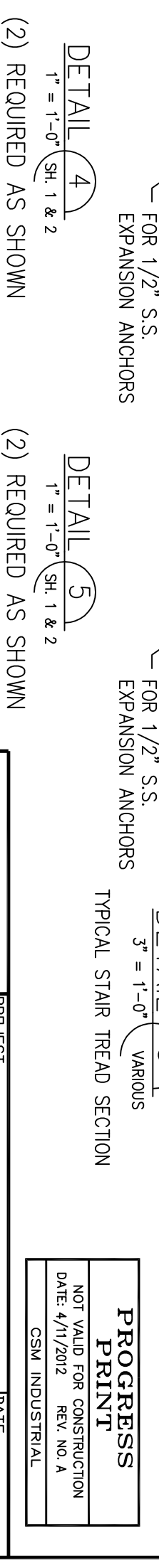
DETAIL 2  
1" = 1'-0" SH. 1 & 2

(2) REQUIRED AS SHOWN



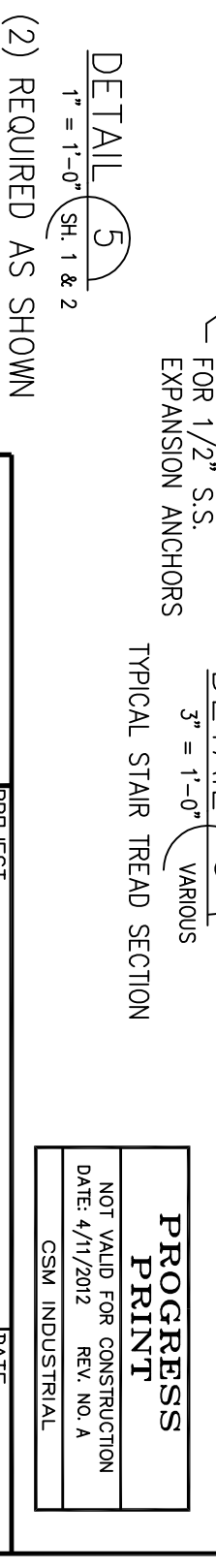
DETAIL 3  
1" = 1'-0" SH. 1 & 2

(1) REQUIRED AS SHOWN



DETAIL 4  
1" = 1'-0" SH. 1 & 2

(2) REQUIRED AS SHOWN



DETAIL 5  
1" = 1'-0" SH. 1 & 2

(2) REQUIRED AS SHOWN

DETAIL 5  
3" = 1'-0" VARIOUS

TYPICAL STAIR TREAD SECTION

<b>PROGRESS PRINT</b>	
NOT VALID FOR CONSTRUCTION	DATE: 4/11/2012
REV. NO. A	C.S.M. INDUSTRIAL

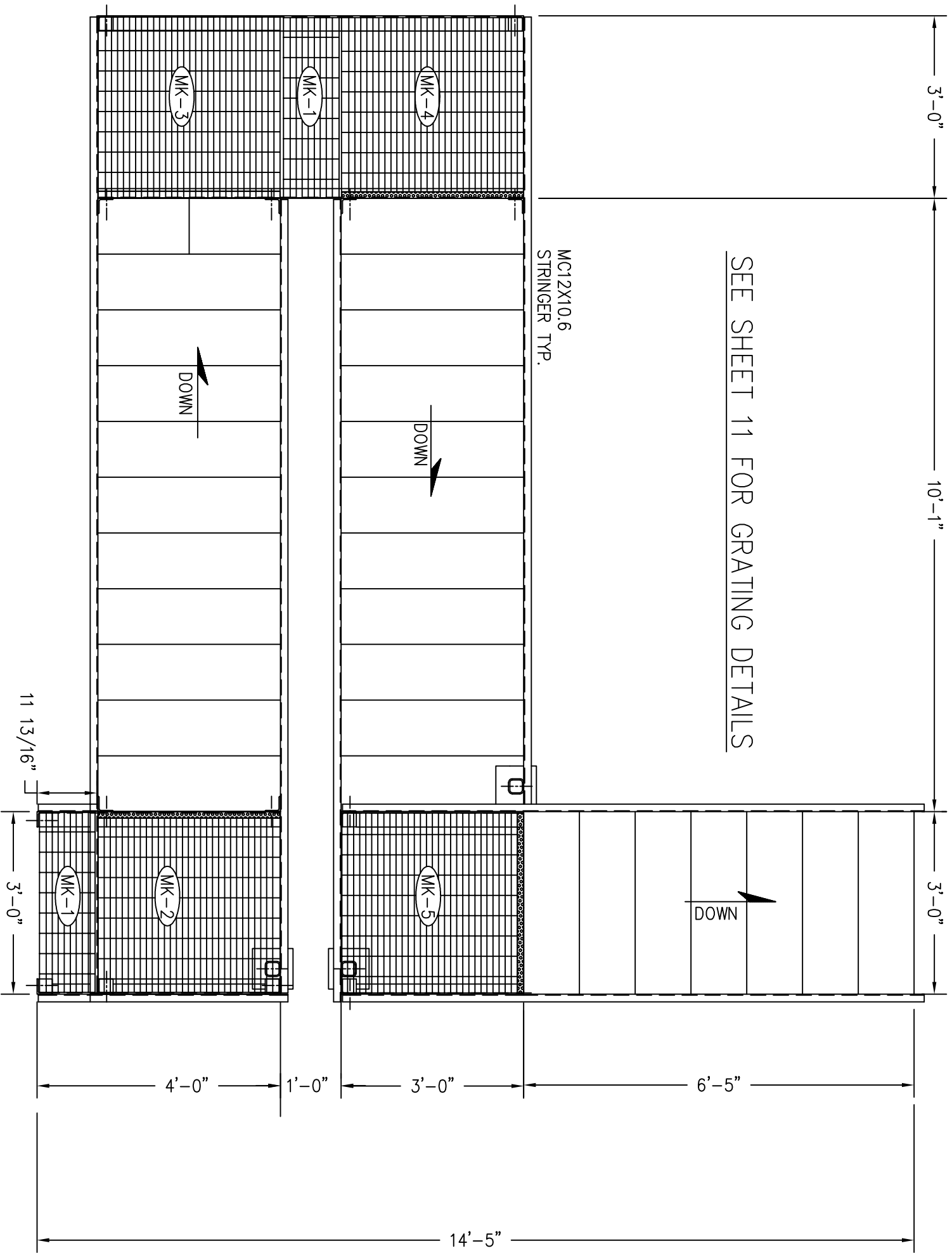
- GENERAL NOTES:**
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. MATERIAL = MC12X10.6 OR AS NOTED

REVISION	DESCRIPTION
REVISION 2	
REVISION 1	

**Industrial Constructors**

PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRAWN BY	M. MURPHY
DETAIL	MISC. DETAILS	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	1" = 1'-0"
		SHEET	9

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**PROGRESS  
PRINT**

NOT VALID FOR CONSTRUCTION  
DATE: 4/15/2012 REV. NO. A  
CSM INDUSTRIAL

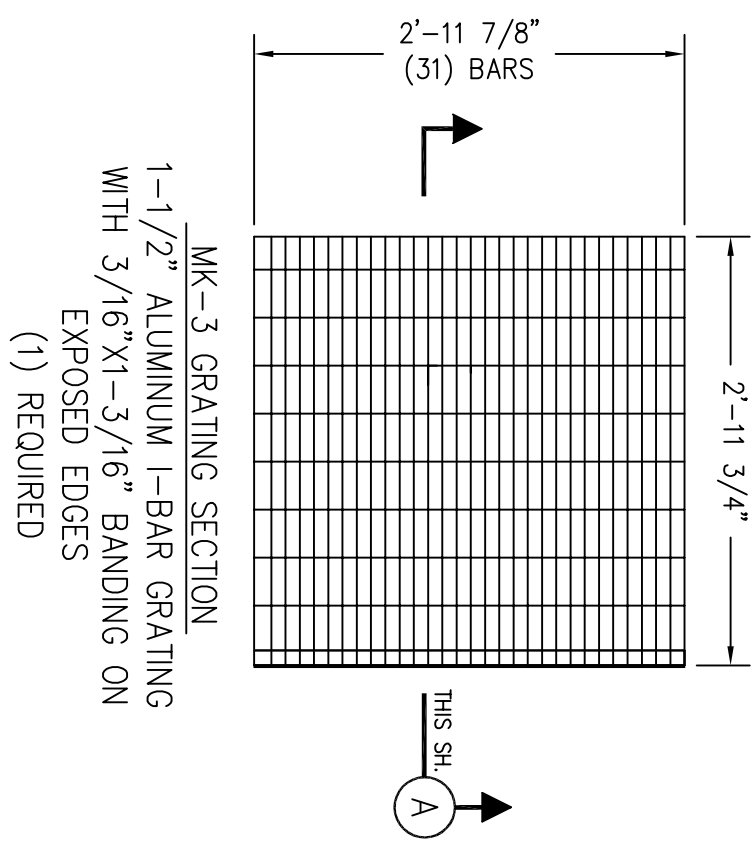
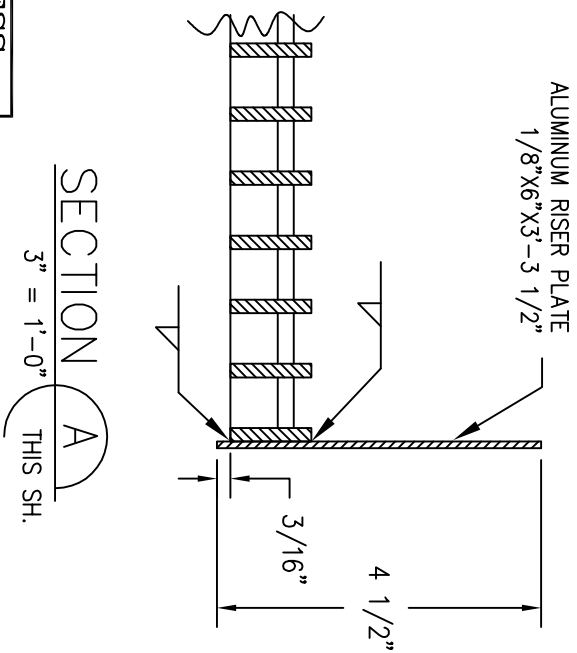
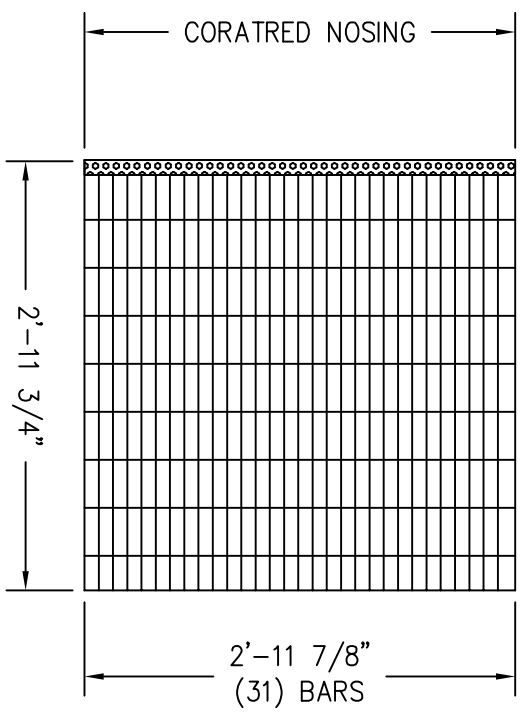
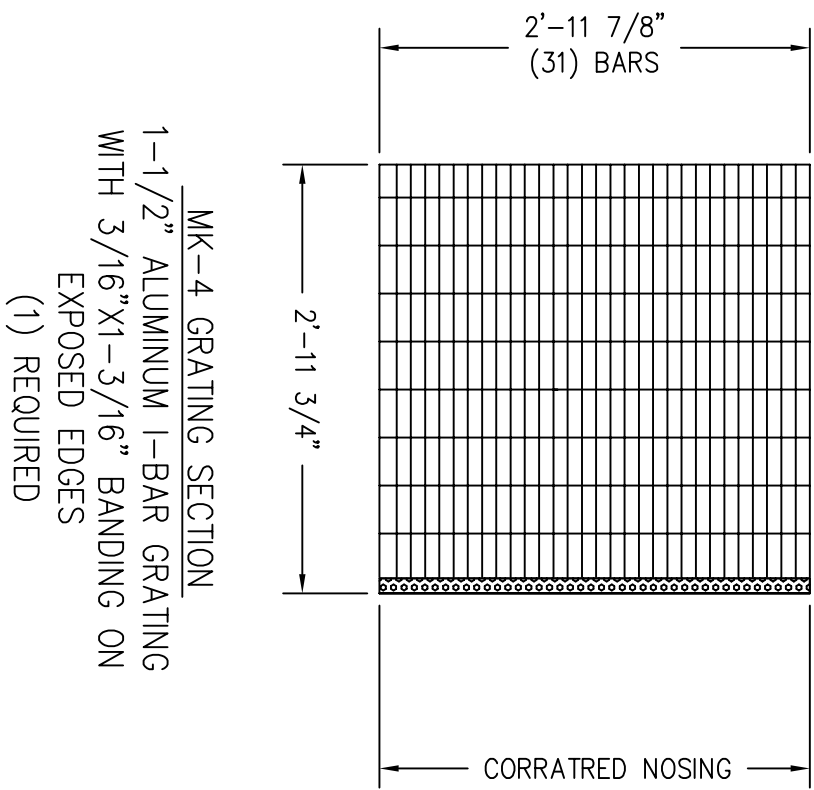
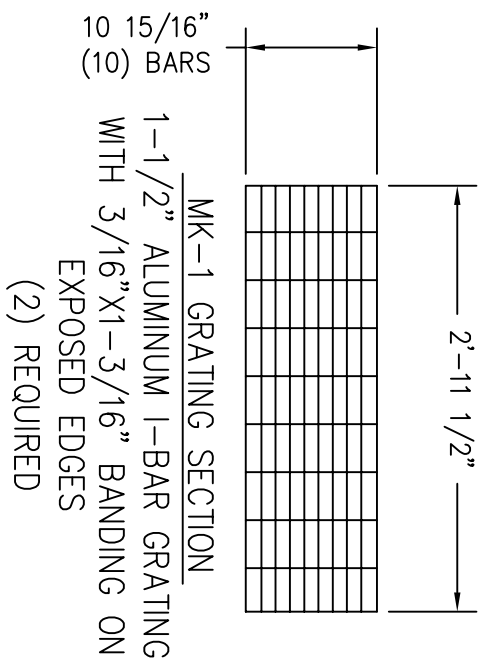
**PUMP ROOM STAIR PLAN VIEW**

- GENERAL NOTES:**
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR WITH 1-1/2" X 3/16" BANDING.
  3. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR WITH CORRATED NOSING.

REVISION	DESCRIPTION
2	
1	



PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRAWN BY	M. MURPHY
DETAIL	GRATING PLAN	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	1/2" = 1'-0"
		SHEET	10



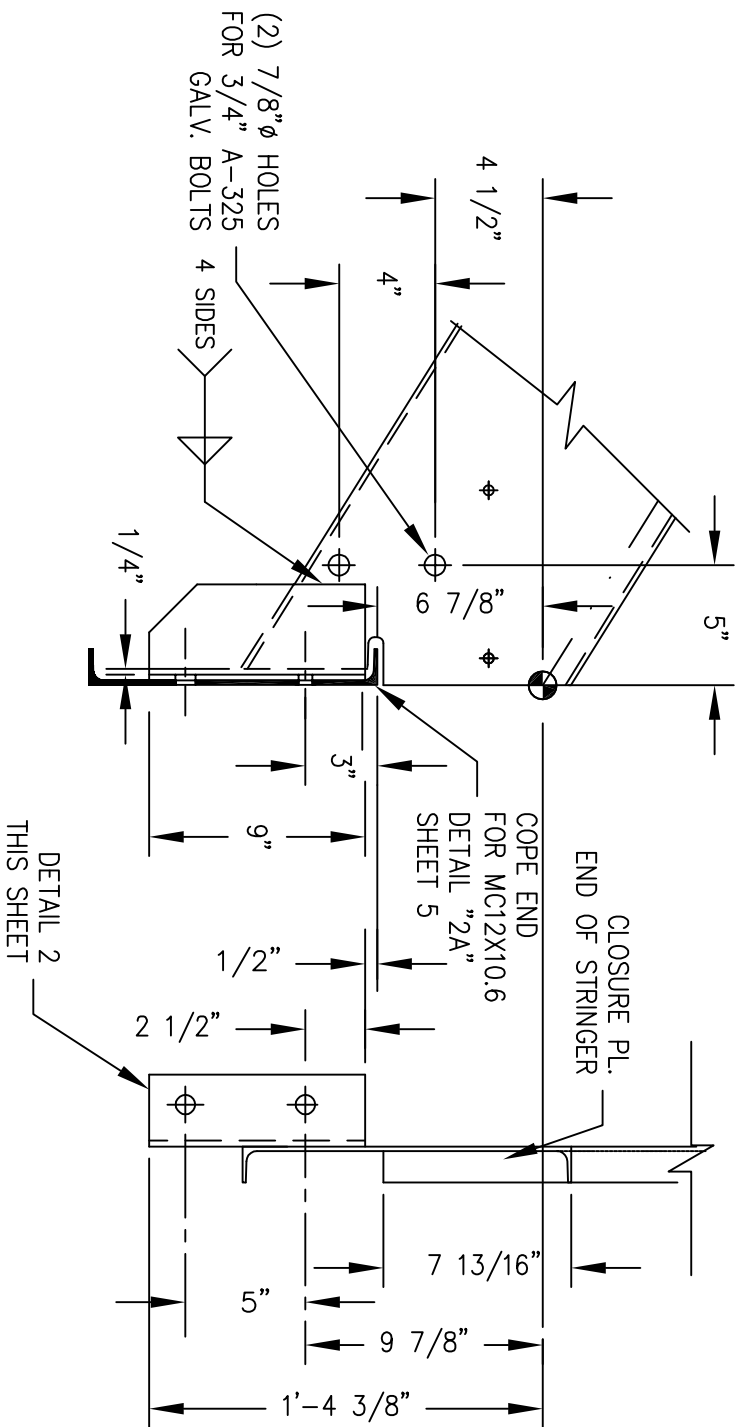
- GENERAL NOTES:
1. ALL GRATING SECTIONS TO BE 1-1/2" ALUMINUM I-BAR WITH 1-1/2" X 3/16" BANDING.
  2. FABRICATED STAIR TREADS TO BE 1-1/2" ALUMINUM I-BAR WITH CORRATED NOSING.
  3. ATTACH GRATING WITH DREXEL TYPE DX-2 SADDLE ANCHORS OR APPROVED EQUAL.
  4. SEE DETAIL 5 SHEET 9 FOR TYPICAL STAIR DETAILS.

**PROGRESS PRINT**  
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DATE: 4/11/2012 REV. NO. A  
CSM INDUSTRIAL

REVISION 2	REVISION 1

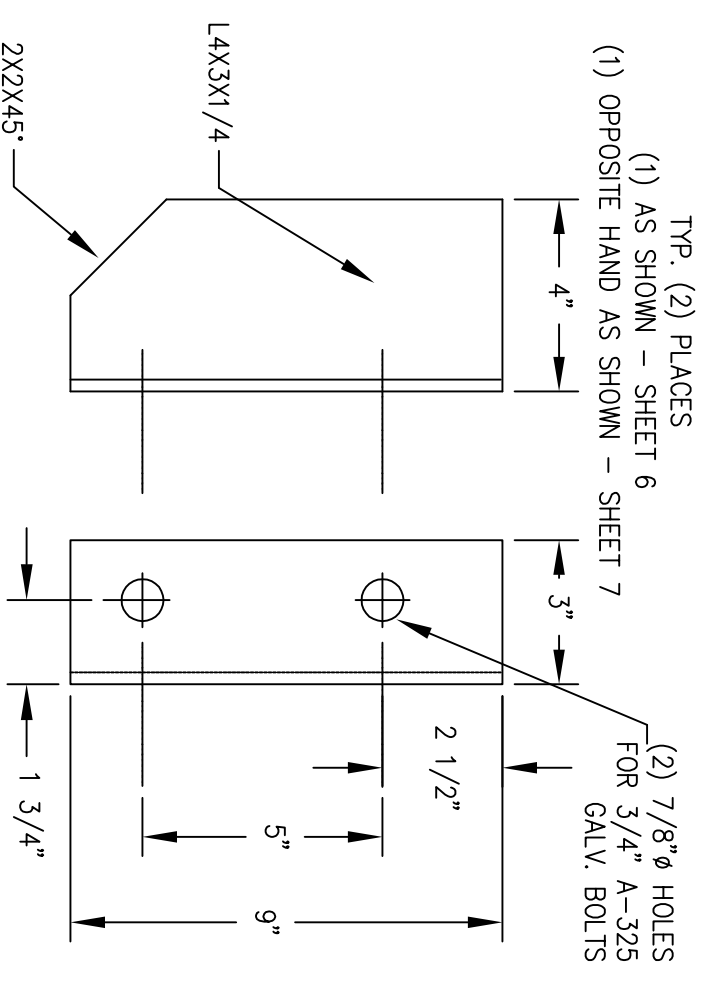


PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	GRATING DETAILS	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	3/4" = 1'-0"
		SHEET	11



DETAIL 1  
1'-1/2" = 1'-0" SH. ?

(1) AS SHOWN - SHEET 5



DETAIL 2  
3" = 1'-0" THIS SH.

(1) REQUIRED

- GENERAL NOTES:
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. MATERIAL = AS NOTED

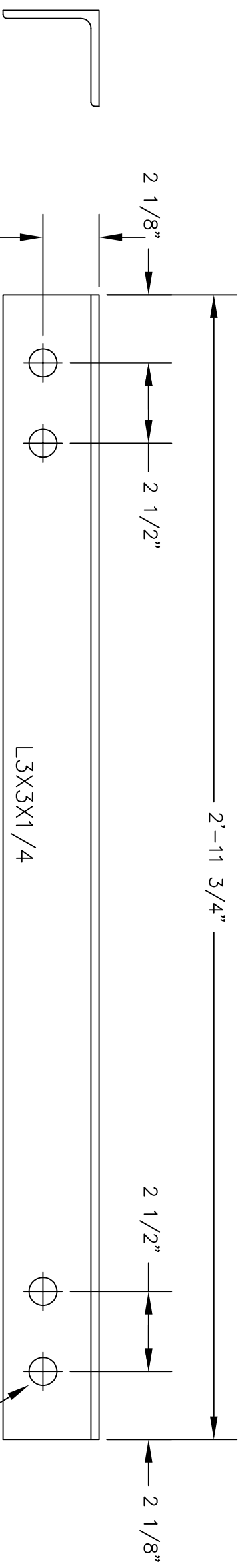
REVISION 2	REVISION 1



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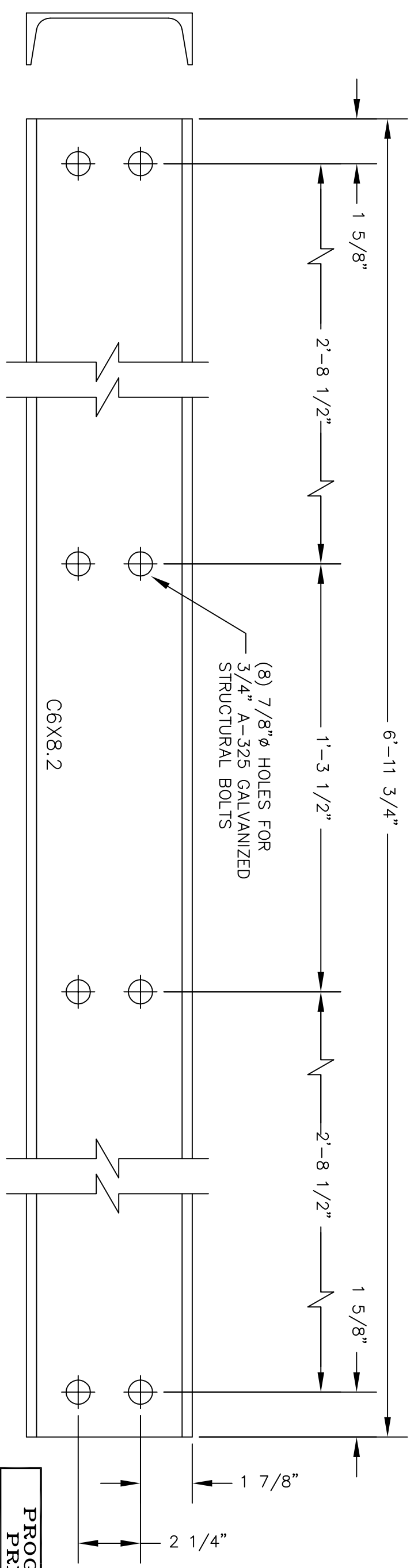
PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY
DETAIL	CONNECTION DETAILS	DWG.	
REF. DWG.	PD-9 & PD-9A	SCALE	1'-1/2" = 1'-0"
		SHEET	12

<b>PROGRESS PRINT</b>
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DATE: 4/11/2012 REV. NO. A
CSM INDUSTRIAL



DETAIL 1  
 3" = 1'-0" SH.1.  
 (1) REQUIRED

(4) 7/8"  $\phi$  HOLES FOR  
 3/4" A-325 GALVANIZED  
 STRUCTURAL BOLTS



DETAIL 2  
 3" = 1'-0" SH.1.  
 (1) REQUIRED

(8) 7/8"  $\phi$  HOLES FOR  
 3/4" A-325 GALVANIZED  
 STRUCTURAL BOLTS

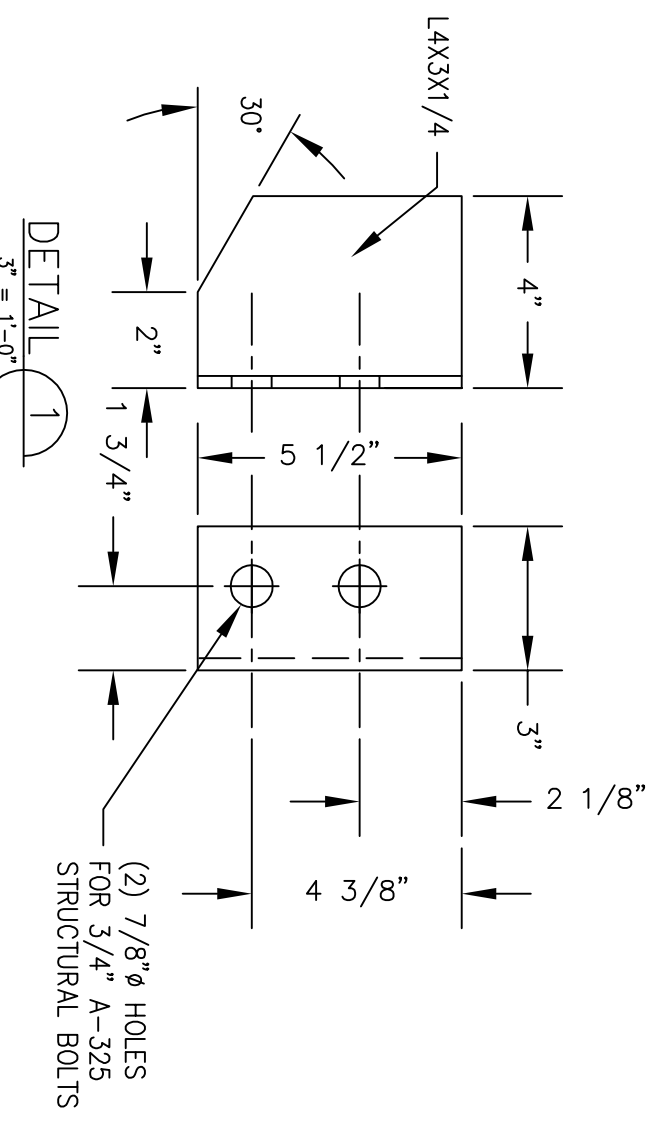
**PROGRESS  
 PRINT**  
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 CSM INDUSTRIAL

- GENERAL NOTES:  
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 OR AS NOTED.  
 2. MATERIAL = AS NOTED

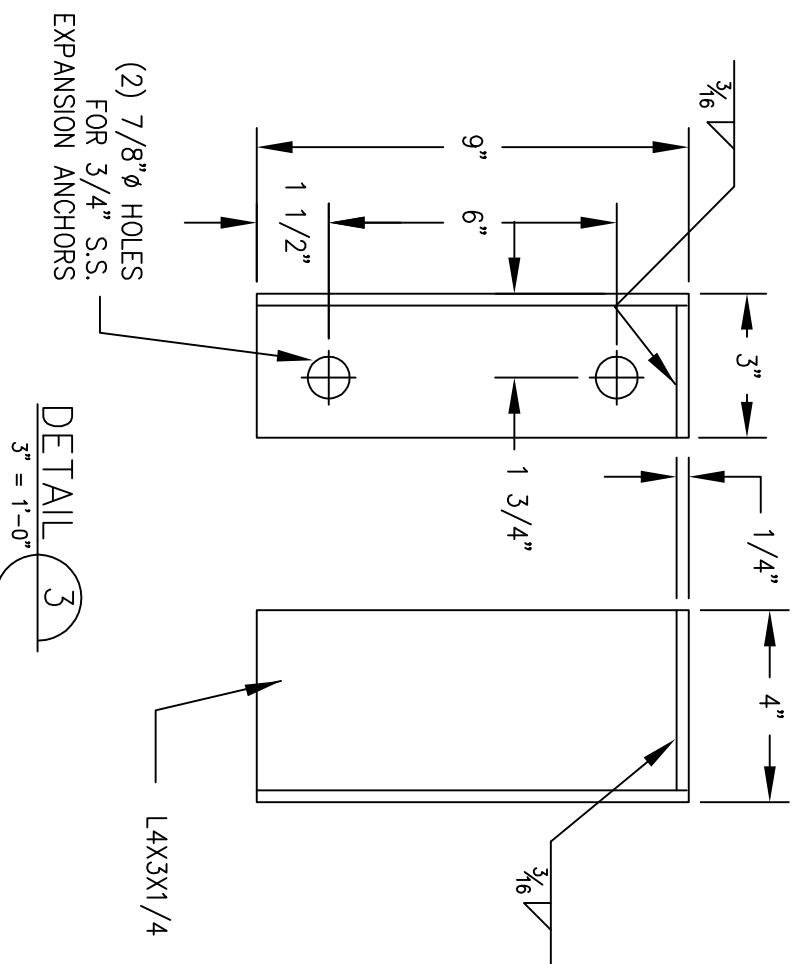
REVISION	DESCRIPTION
REVISION 2	
REVISION 1	

		PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012
		AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN. BY	M. MURPHY
REF. DWG.	PD-9 & PD-9A	SCALE	3" = 1'-0"	SHEET	13
DETAIL	MISC. GRATE SUPPORT DET.				



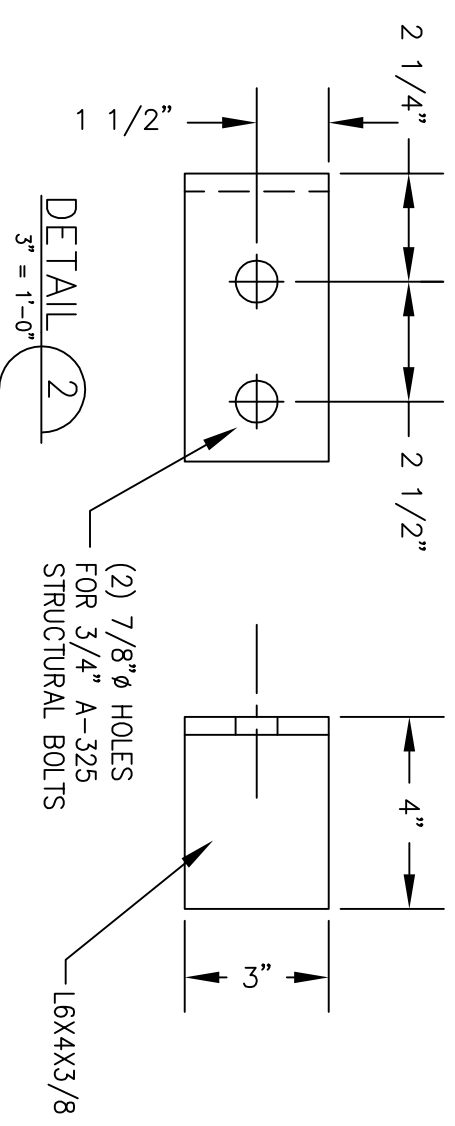


LH (LEFT HAND) AS SHOWN - (3) REQUIRED  
RH (RIGHT HAND) OPPOSITE AS SHOWN - (3) REQUIRED



LH (LEFT HAND) AS SHOWN - (4) REQUIRED  
RH (RIGHT HAND) OPPOSITE AS SHOWN - (3) REQUIRED


- GENERAL NOTES:
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. MATERIAL = AS NOTED

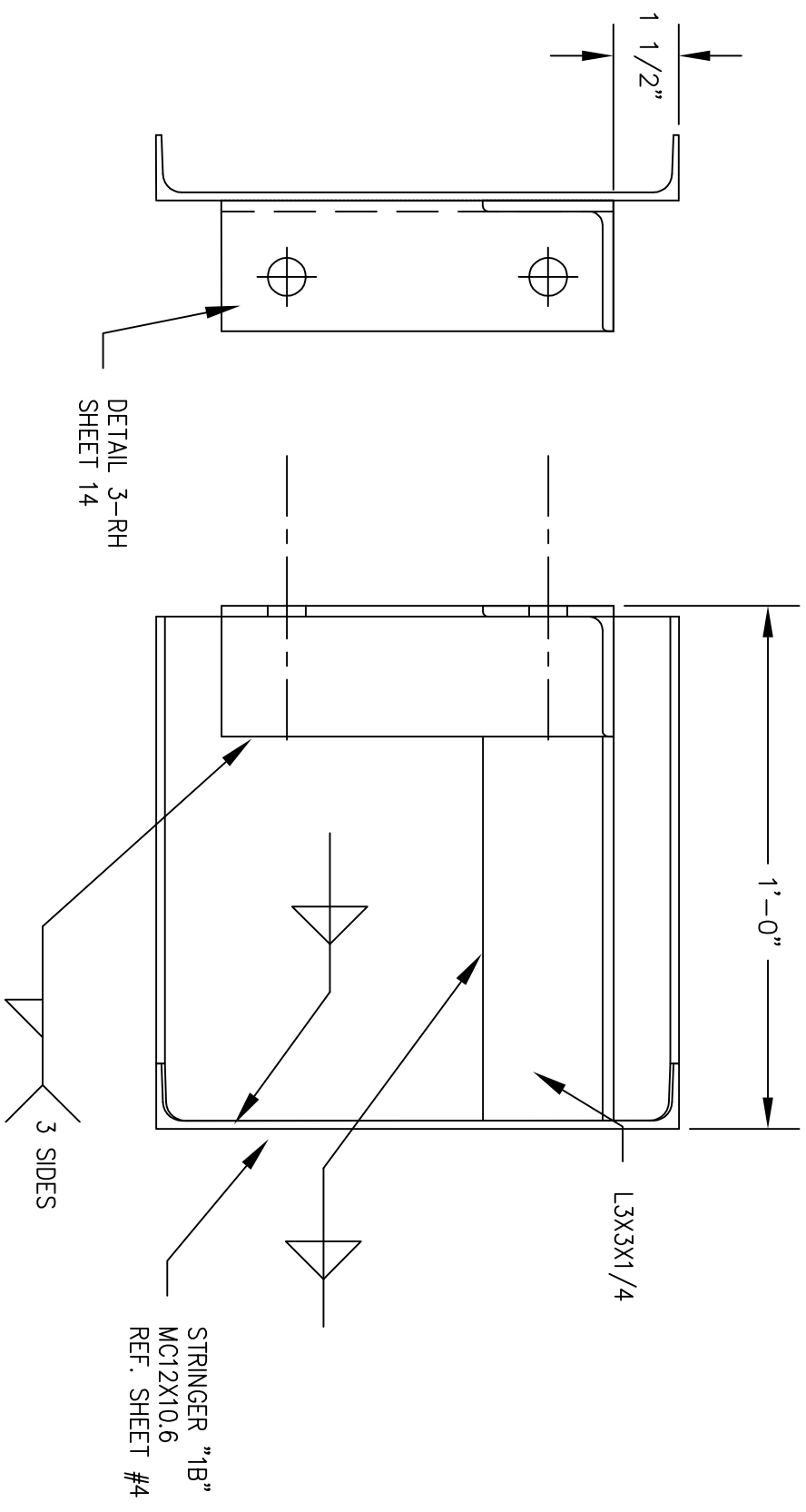


(2) REQUIRED

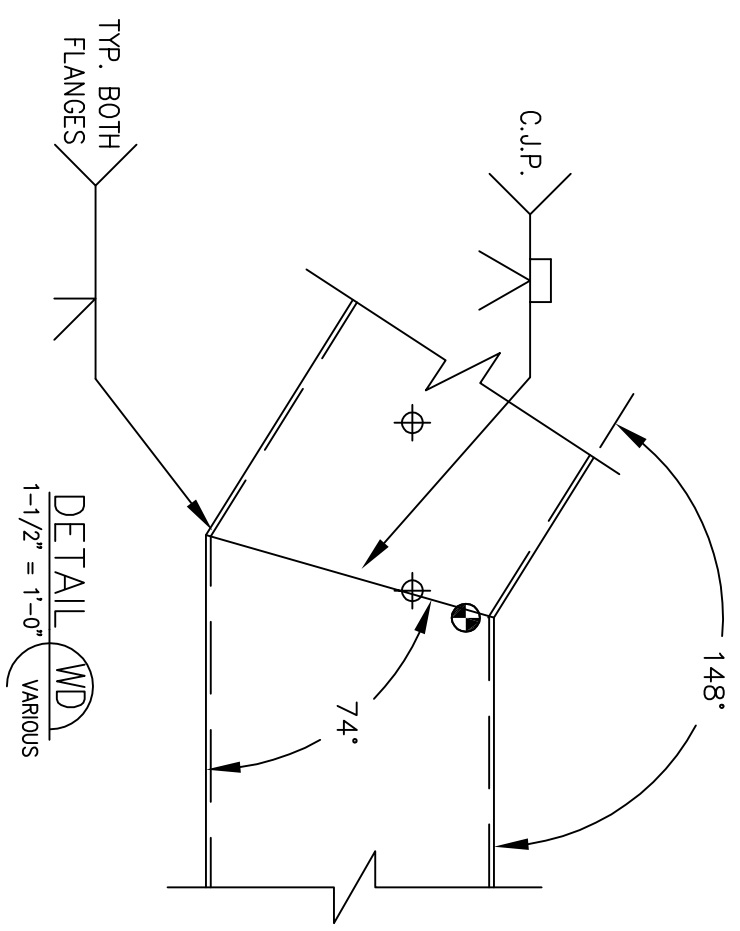
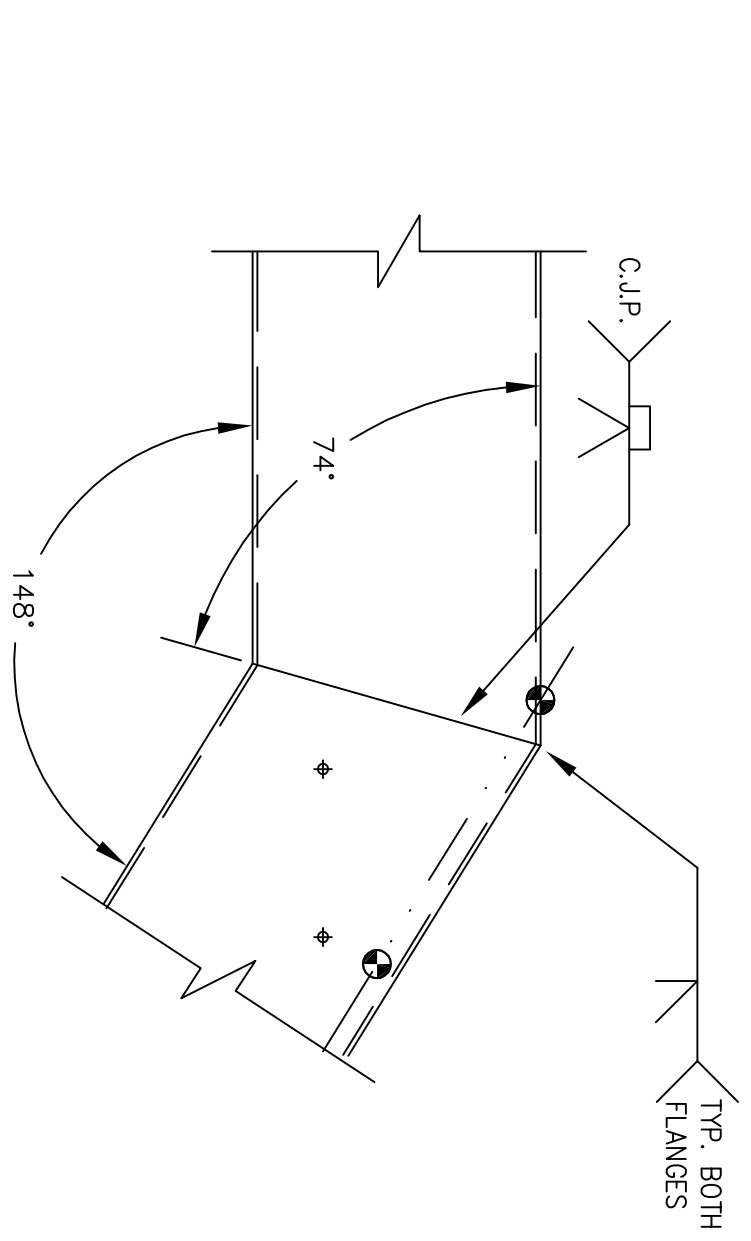
**PROGRESS PRINT**  
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DATE: 4/11/2012 REV. NO. A  
CSM INDUSTRIAL

REVISION 2	REVISION 1

 (719)-783-2867	PROJECT	FOUNTAIN CO METRO SEWER DIST	DATE	2/2012	
	AREA	PLATFORM-STAIRS @ PUMP ROOM	DRWN BY	M. MURPHY	
DETAIL	CONNECTION CLIP DETAILS	DWG:			
REF. DWG.	PD-9 & PD-9A	SCALE	3" = 1'-0"	SHEET	14



DETAIL 1  
3" = 1'-0" SH. 1



DETAIL WD  
1-1/2" = 1'-0" VARIOUS

**PROGRESS PRINT**  
NOT VALID FOR CONSTRUCTION  
DATE: 4/11/2012 REV. NO. A  
CSM INDUSTRIAL

- GENERAL NOTES:
1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.
  2. MATERIAL = AS NOTED

PROJECT		DATE	
FOUNTAIN CO METRO SEWER DIST		4/2012	
AREA		DRWN BY	
PLATFORM-STAIRS @ PUMP ROOM		M. MURPHY	
DETAIL		DWG.	
MISC. DETAILS			
REF. DWG.	SCALE	SHEET	
PD-9 & PD-9A	1 - 1/2" = 1'-0"	15	

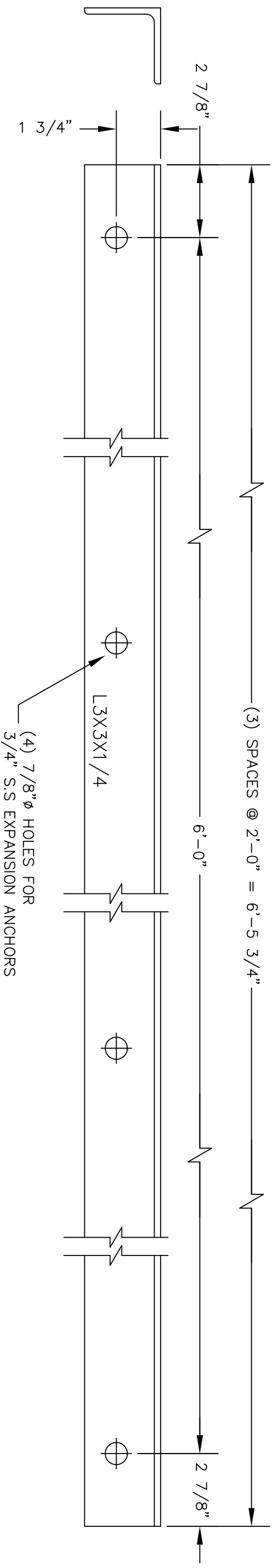


(719)-783-2867

REVISION 2

REVISION 1

( ) REQUIRED



DETAIL 1  
 3" = 1'-0" SH.1.  
 (1) REQUIRED

**PROGRESS PRINT**  
 NOT VALID FOR CONSTRUCTION  
 DATE: 4/11/2012 REV. NO. A  
 CSM INDUSTRIAL

		<b>PROJECT</b> FOUNTAIN CO METRO SEWER DIST	<b>DATE</b> 2/2012
AREA PLATFORM-STAIRS @ PUMP ROOM		<b>DRWN. BY</b> M.MURPHY	
DETAIL MISC. GRATE SUPPORT DET.		<b>DWG.</b>	
<b>REF. DWG.</b> PD-9 & PD-9A	<b>SCALE</b> 3" = 1'-0"	<b>SHEET</b> 16	
<b>REVISION 2</b>	<b>REVISION 1</b>		

GENERAL NOTES:  
 1. ALL STRUCTURAL COMPONENTS HOT DIPPED GALVANIZED OR AS NOTED.  
 2. MATERIAL = AS NOTED