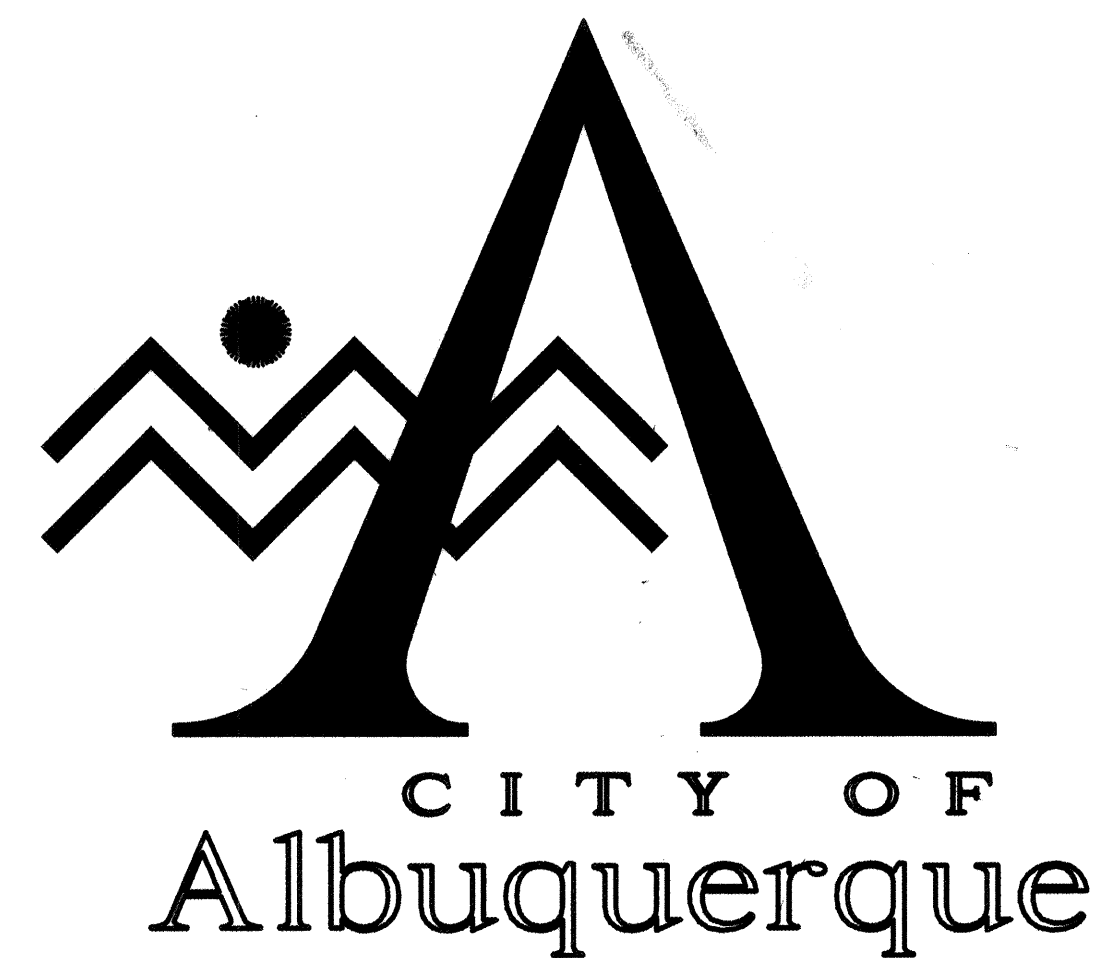


CITY OF ALBUQUERQUE

CHLORINE INJECTION VAULTS MODIFICATIONS

WATER SYSTEM REHABILITATION



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3	C-2	LOMAS AND LOVE-SITE PLANS
4	C-3	BURTON AND CHARLES WELLS-SITE PLANS
5	C-4	LEYENDECKER AND PONDEROSA-SITE PLANS
6	C-5	SANTA BARBARA AND VOL ANDIA-SITE PLANS
7	C-6	RIDGECREST/CHARLES WELLS 5-SITE PLANS
8	C-7	LOVE NO. 8 AND THOMAS NO. 5-SITE PLANS
△ 8A	C-8	THOMAS AND WALKER - SITE PLANS
9	M-1	MECHANICAL DETAILS
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13	S-1	STRUCTURAL PLANS AND DETAILS

ABBREVIATIONS

BRG	AT	NTS	NOT TO SCALE
CCP	BEARING	OC	ON CENTER
CI	CONCRETE CYLINDER PIPE	OD	OUTSIDE DIAMETER
C	CAST IRON PIPE	PJF	PREMOLDED JOINT FILLER
CONT	CENTERLINE	PP	PLATE
CPLG	CONTINUOUS	RCP	POWER POLE
DIA	COUPLING	REQD	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON PIPE	SCH,SCHED	REQUIRED
EA	EACH	SIM	SCHEDULE
EF	EACH FACE	SST	SIMILAR
EW	EACH WAY	STL	STAINLESS STEEL
EXST	EXISTING	T&B	STEEL
FLG	FLANGE	TS	TOP AND BOTTOM
GALV	GALVANIZED	TYP	TUBE SHAPE
L	ANGLE	W	TYPICAL
MAX	MAXIMUM	W/	WATER
MB	MACHINE BOLT	Ø	WITH
MH	MANHOLE		DIAMETER
MIN	MINIMUM		

LAYOUT PLAN LEGEND

---	EXISTING STRUCTURE
---	PROPERTY LINE
---	EXISTING PIPELINE
---	FENCE LINE
---	GATE VALVE
---	BUTTERFLY VALVE
---	TREES AND SHRUBS

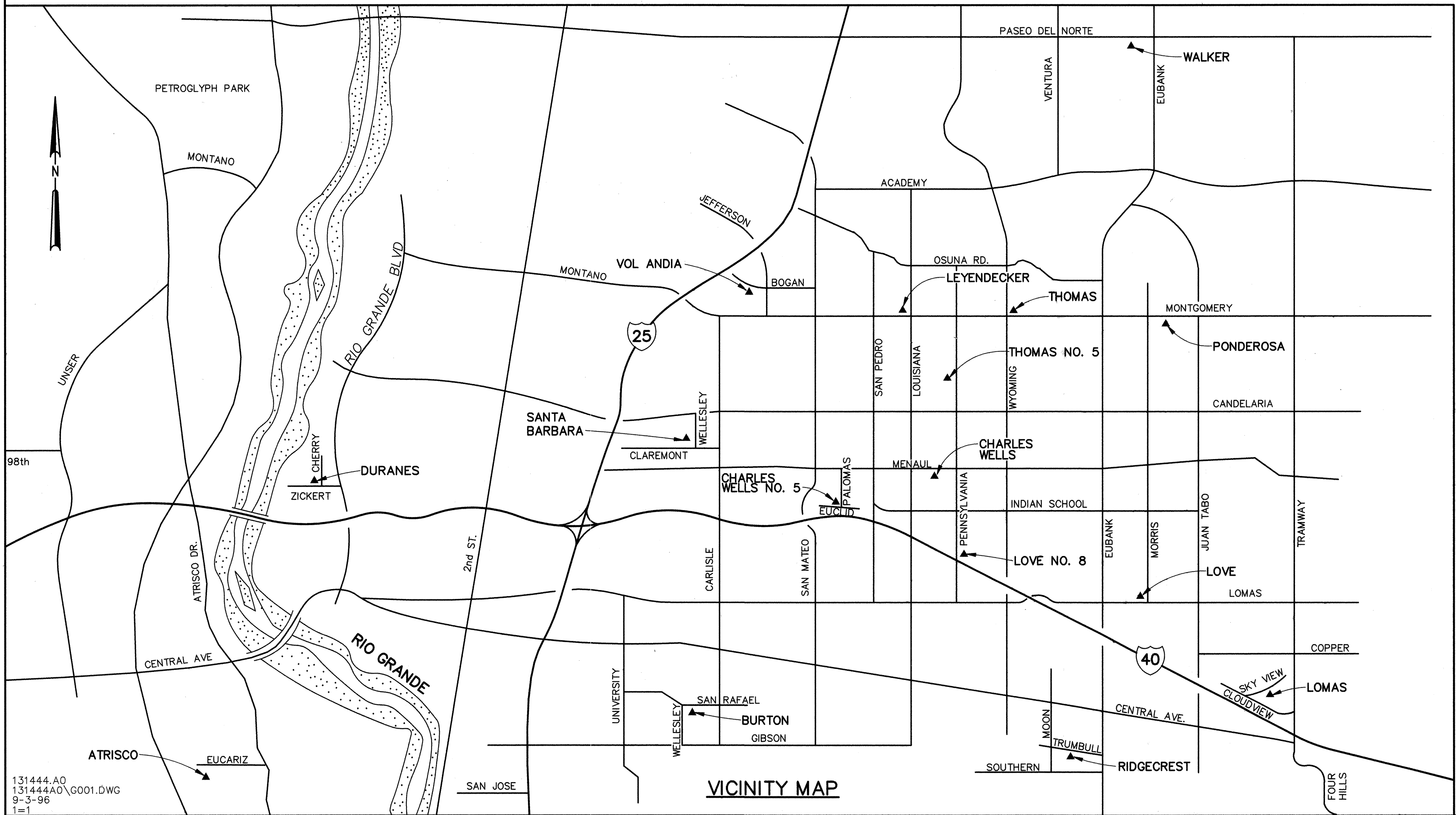
RECORD DRAWINGS

Revisions Drawn by: M. Brewer Date: July 1996

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER: *Arthur J. Stuart*
DATE: 9/20/96

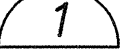
CH2M HILL
6001 Indian School Rd, NE
Suite 350
Albuquerque, New Mexico
87110
(505) 884-5600



VICINITY MAP

SHEETS ADDED FOR RECORD DRAWINGS		APPROVED FOR CONSTRUCTION	
REV	SHEETS	CITY ENGINEER	DATE
ENGINEERS' STAMP & SIGNATURE	APPROVALS	ENGINEER	DATE
THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND REPLOTED FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS. THE ORIGINAL DRAWINGS BEAR THE SEAL AND SIGNATURE OF BARBARA L. CROCKETT, P.E. NO. 10873, DATED 11/14/95	DRC Chairman Transportation Water/Wastewater Hydrology Parks Const. Mngmt.		
City Project No. 4783.91		Sheet 1 Of 13 DRAWING NO. G-1	



1. DEMOLISH EXISTING CHLORINE INJECTION MANHOLE IN IT'S ENTIRETY AND CONSTRUCT NEW CHLORINE INJECTION MANHOLE, SEE 
2. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM NEW CHLORINE INJECTION MANHOLE TO THE EXISTING CHLORINE BUILDING. SLOPE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE MANHOLE.
3. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM NEW CHLORINE INJECTION MANHOLE TO THE EXISTING CHLORINE BUILDING. SLOPE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE.
4. INSTALL NEW 1" SCH 80 PVC CHLORINE SOLUTION PIPING FROM THE EXISTING CHLORINE EDUCTOR TO THE NEW CARRIER PIPE LOCATION. TERMINATE PIPING 18" ABOVE FINISH FLOOR AT THE CARRIER PIPE LOCATION. INSTALL 1" PVC BALL VALVE, PVC INSERT FITTING TO TRANSITION PVC PIPE TO TUBING, AND CONNECT 1" CHLORINE SOLUTION TUBING.
5. REPLACE ASPHALT PAVEMENT DISTURBED BY THE CONSTRUCTION OF THE CHLORINE INJECTION MANHOLE AND CARRIER PIPING.


ATRISCO - SITE PLAN
SCALE: 1"=30'



NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE INJECTION VAULT TO THE EXISTING CHLORINE BUILDING. SLOPE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO THE VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE VAULT.
2. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE INJECTION VAULT TO THE EXISTING CHLORINE BUILDING. SLOPE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO THE VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 3/4" FLUORIDE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE VAULT.
3. INSTALL NEW 1" SCH 80 PVC CHLORINE SOLUTION PIPING FROM THE EXISTING CHLORINE EDUCTOR TO THE NEW CARRIER PIPE LOCATION. TERMINATE PIPING 48" ABOVE FINISH FLOOR OF THE CARRIER PIPE LOCATION. INSTALL 1" PVC BALL VALVE, PVC INSERT FITTING TO TRANSITION PVC PIPE TO TUBING AND CONNECT 1" CHLORINE SOLUTION TUBING.



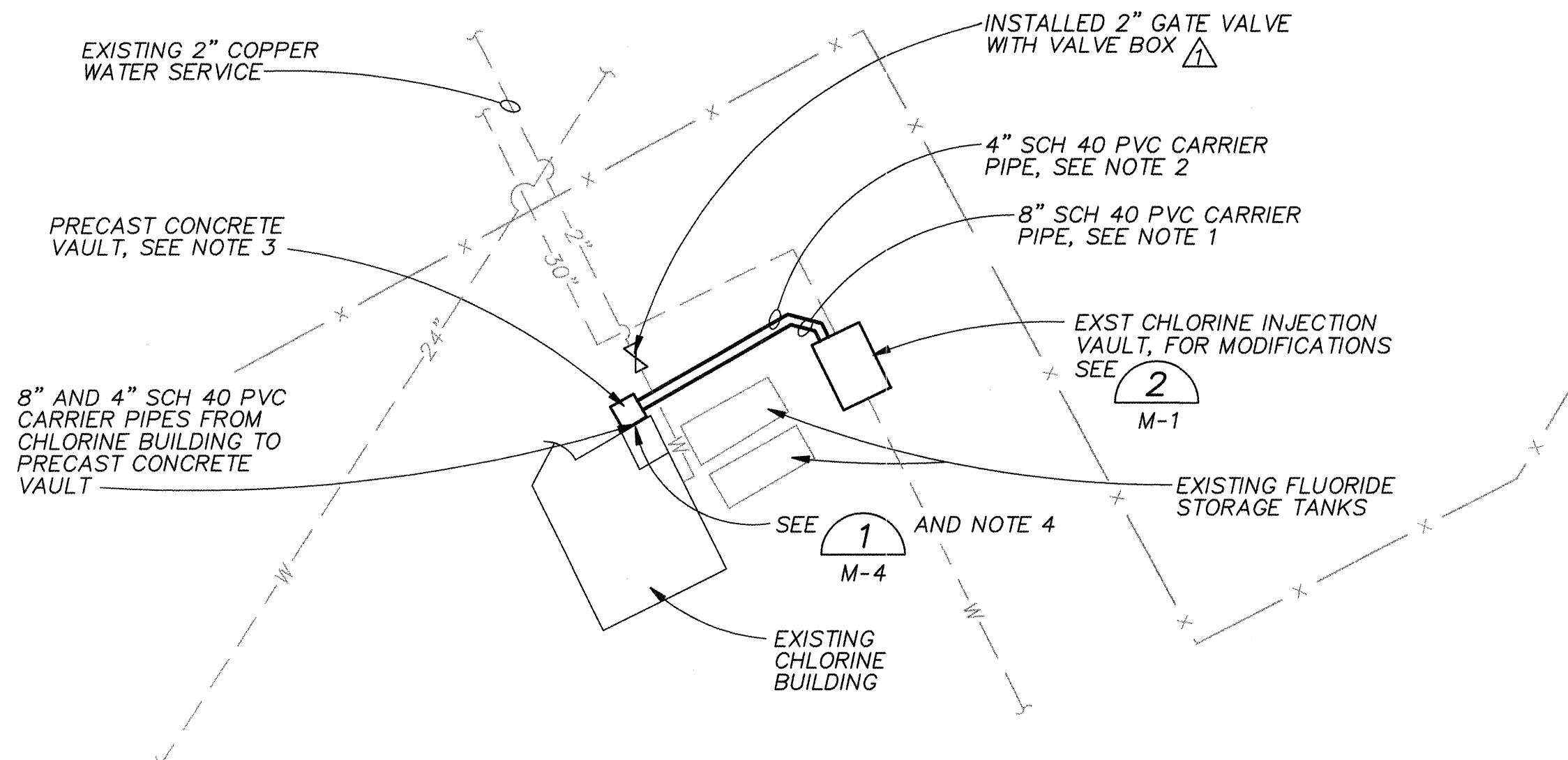
VERIFY SCALES
BAR IS ONE INCH ON
ORIGINAL DRAWING
0  1"
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *Arthur J. Stuard*
DATE *9/28/96*

Revisions Drawn by M. Brewer Date SEPT. 1996

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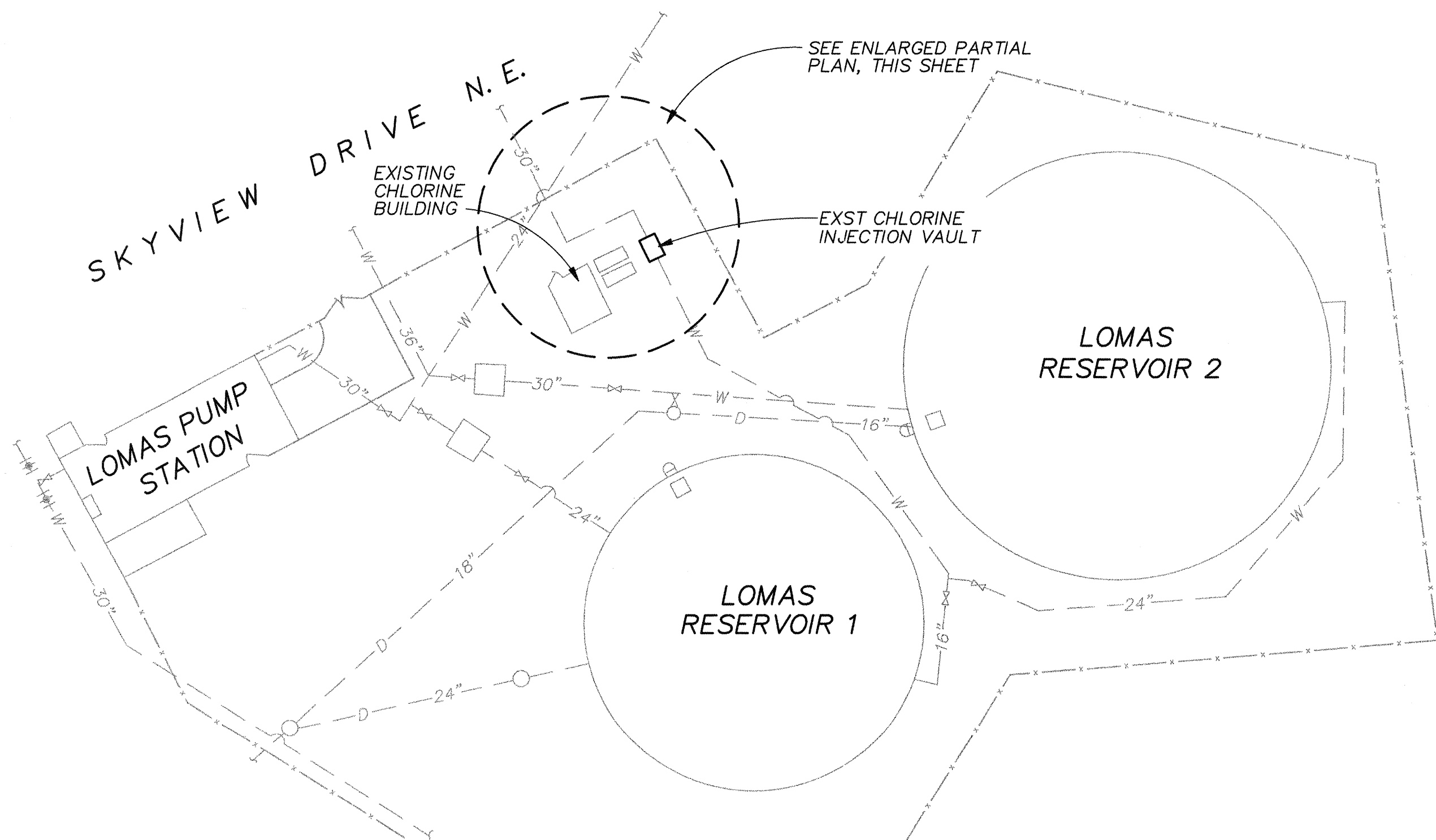


ENLARGED PARTIAL PLAN-LOMAS

SCALE: 1"=20'

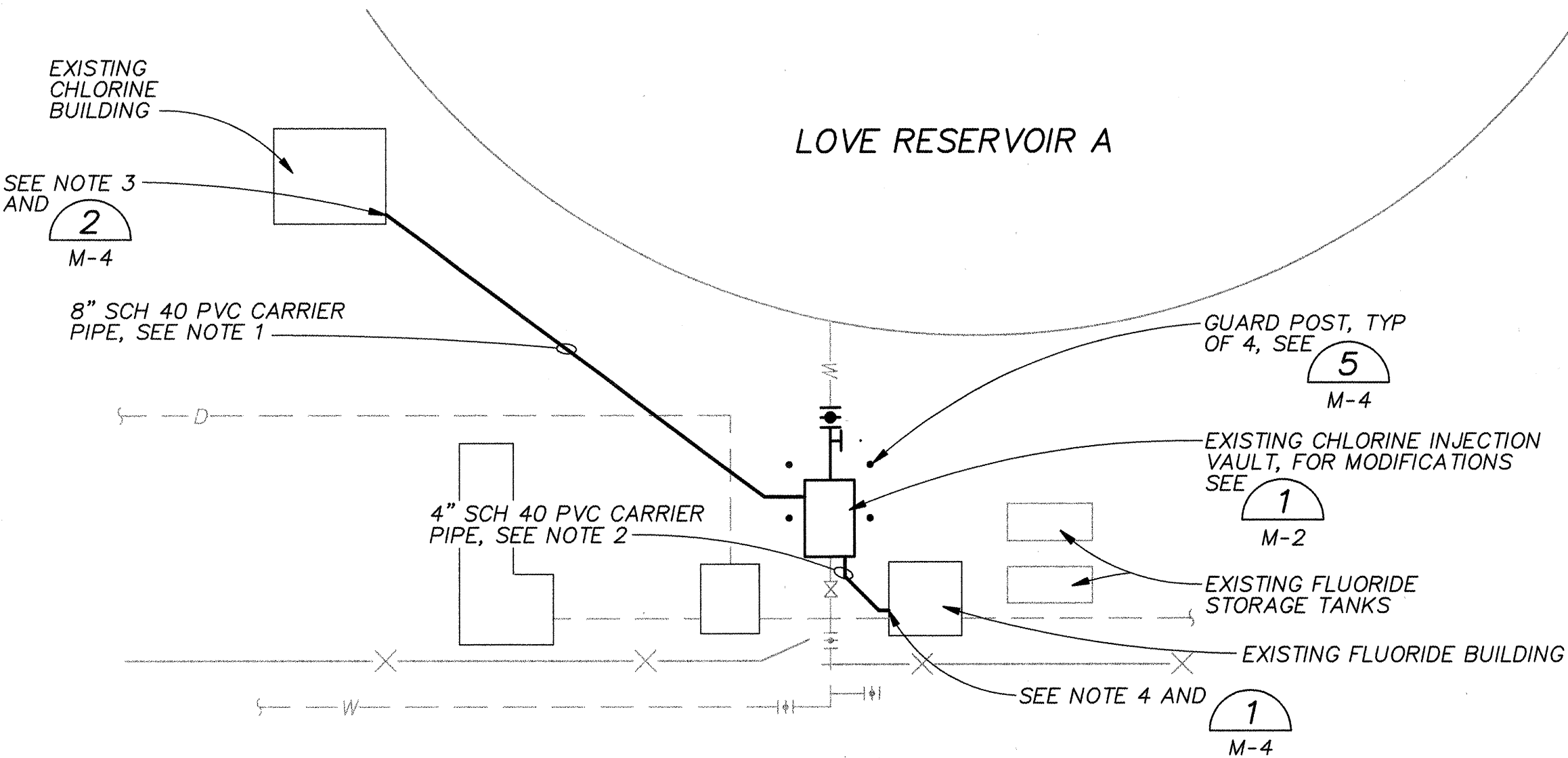
NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM PRECAST CONCRETE VAULT INTO THE EXISTING CHLORINE INJECTION VAULT. SLOPE CARRIER PIPE DOWN FROM THE PRECAST CONCRETE VAULT TO THE EXISTING CHLORINE INJECTION VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING CONTINUOUS THROUGH THE PRECAST CONCRETE VAULT TO THE EXISTING CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE EXISTING CHLORINE INJECTION VAULT.
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3. PRECAST CONCRETE VAULT SHALL INCLUDE BASE AND COVER AND SHALL HAVE A MINIMUM INSIDE DIMENSION OF 3'-11" x 3'-11". VAULT BASE SECTION SHALL BE MODEL NO. 504-BW AS MANUFACTURED BY UTILITY VAULT COMPANY OR EQUAL. VAULT COVER SHALL BE A LOCKING STEEL TYPE MODEL NO. 55-332P AS MANUFACTURED BY UTILITY VAULT COMPANY OR EQUAL.
4. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.



LOMAS - SITE PLAN

SCALE: 1"=50'

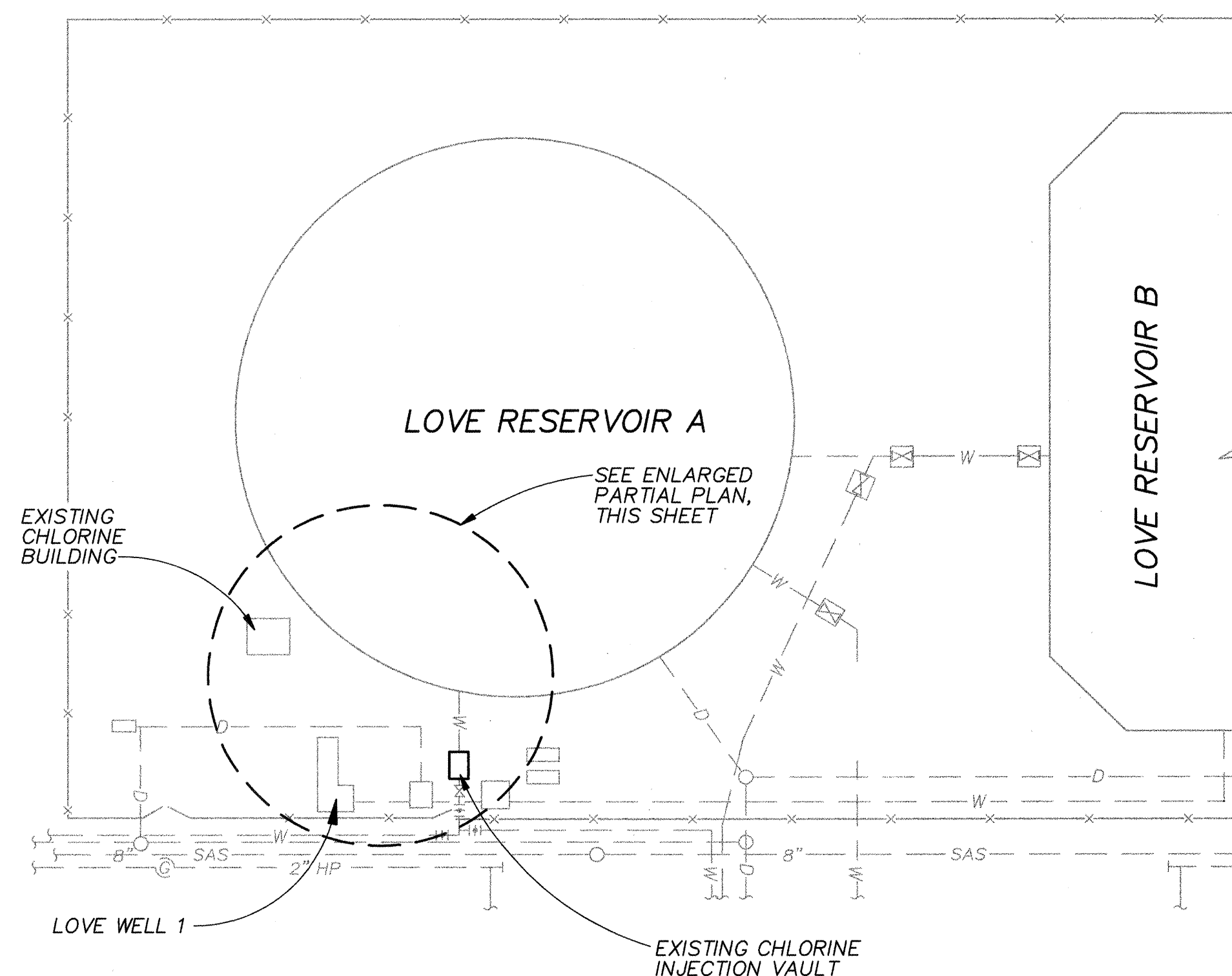


ENLARGED PARTIAL PLAN-LOVE

SCALE: 1"=20'

NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE EXISTING CHLORINE INJECTION VAULT. SLOPE CARRIER PIPE DOWN FROM THE EXISTING CHLORINE BUILDING TO THE VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE EXISTING CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE VAULT.
2. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM TO THE EXISTING FLUORIDE BUILDING TO THE EXISTING CHLORINE INJECTION VAULT. SLOPE CARRIER PIPE DOWN FROM THE EXISTING FLUORIDE BUILDING TO THE VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 3/8" FLUORIDE SOLUTION TUBING FROM THE EXISTING FLUORIDE BUILDING TO THE EXISTING CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE VAULT.
3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO EXISTING FLUORIDE METERING PUMP INSIDE THE FLUORIDE BUILDING.



LOVE - SITE PLAN

SCALE: 1"=50'

RECORD DRAWINGS

Revisions Drawn by M. Brewer Date SEPT. 1996
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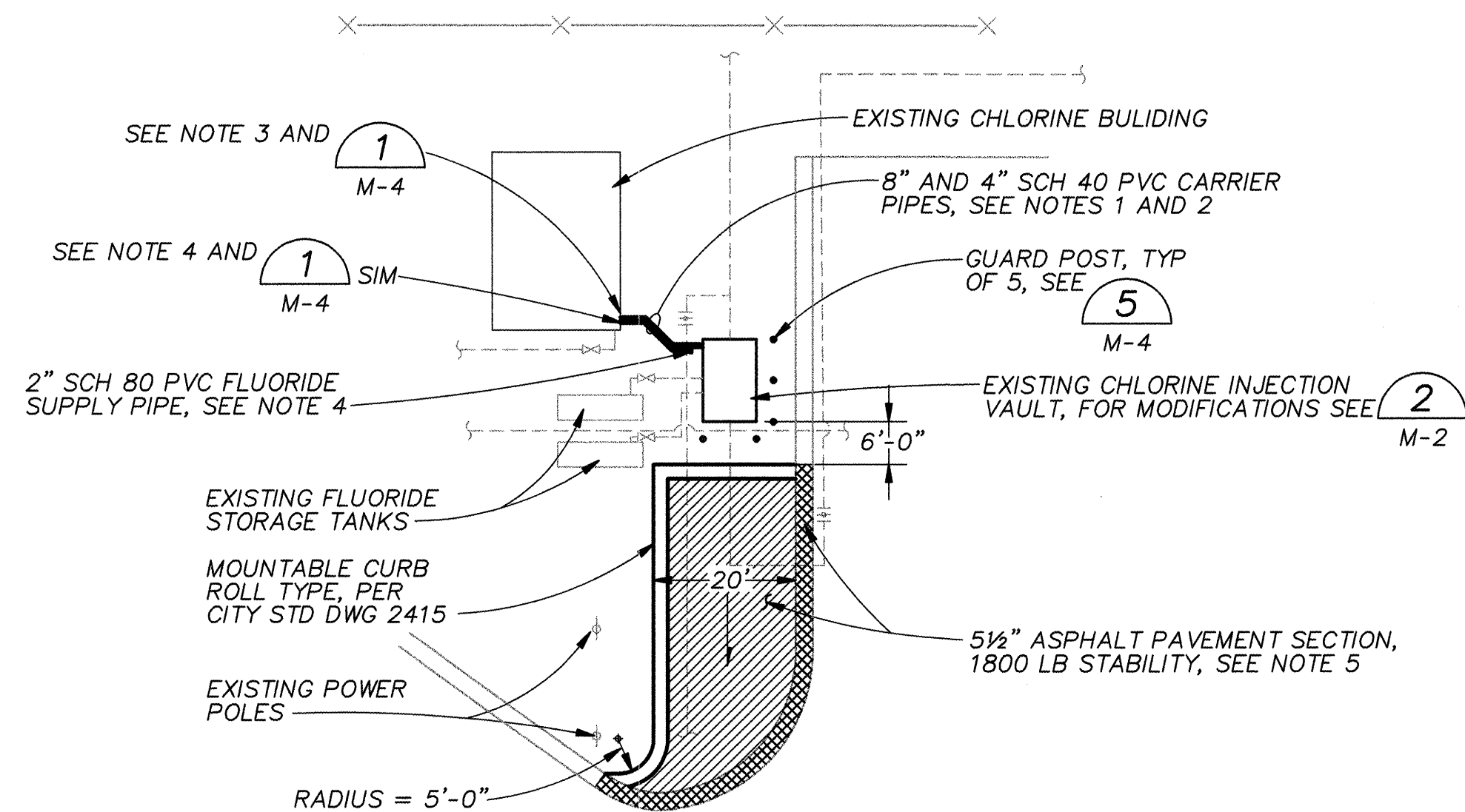
APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER William J. Stuart
DATE 9/29/96

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CH2M HILL
6001 Indian School Rd, N.E.
Suite 350
Albuquerque, New Mexico 87110
(505) 884-5600

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS LOMAS AND LOVE - SITE PLANS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO.	4783.91	Zone Map No.	J-21,K-22
		SHEET	3 OF 13
		DRAWING NO.	C-2

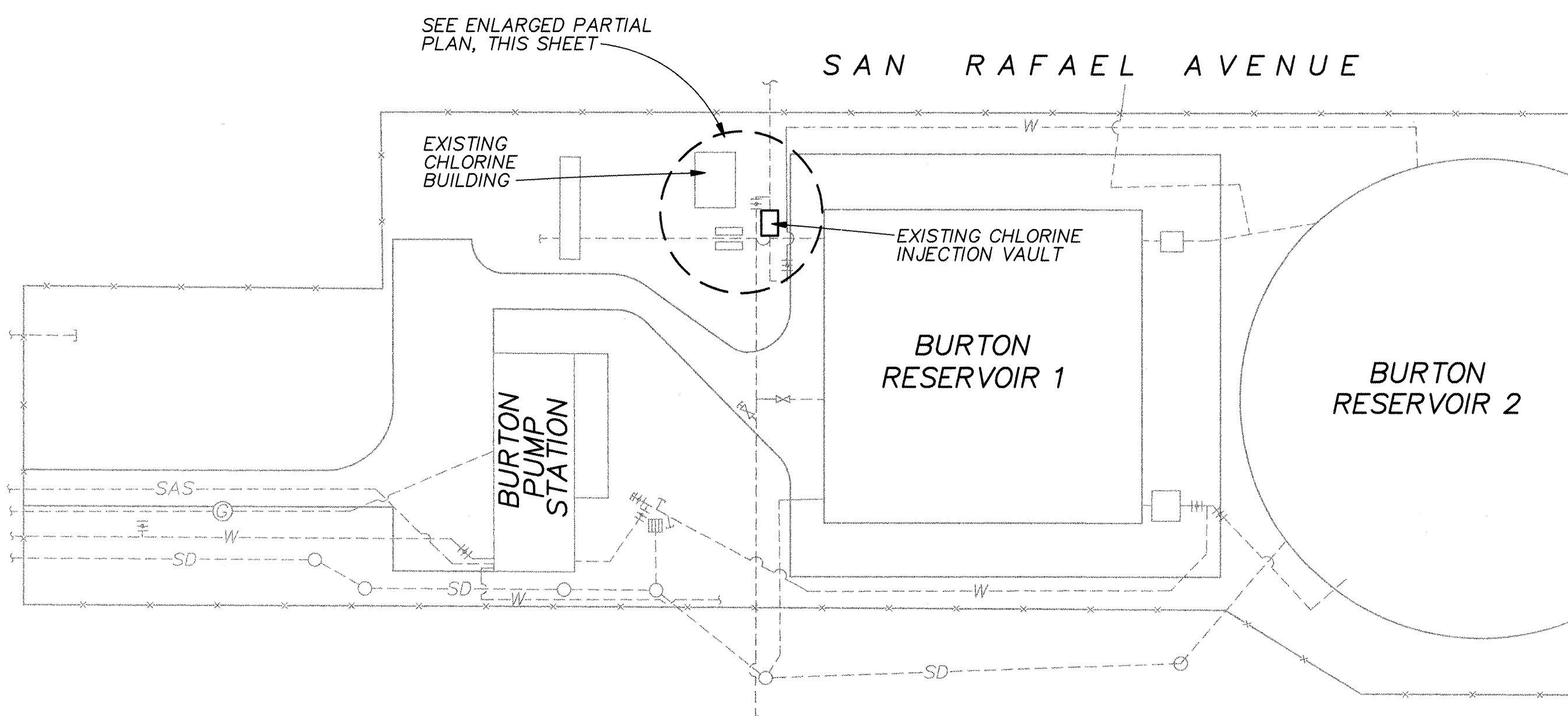
WELLESLEY AVENUE



ENLARGED PARTIAL PLAN-BURTON
SCALE: 1"=20'

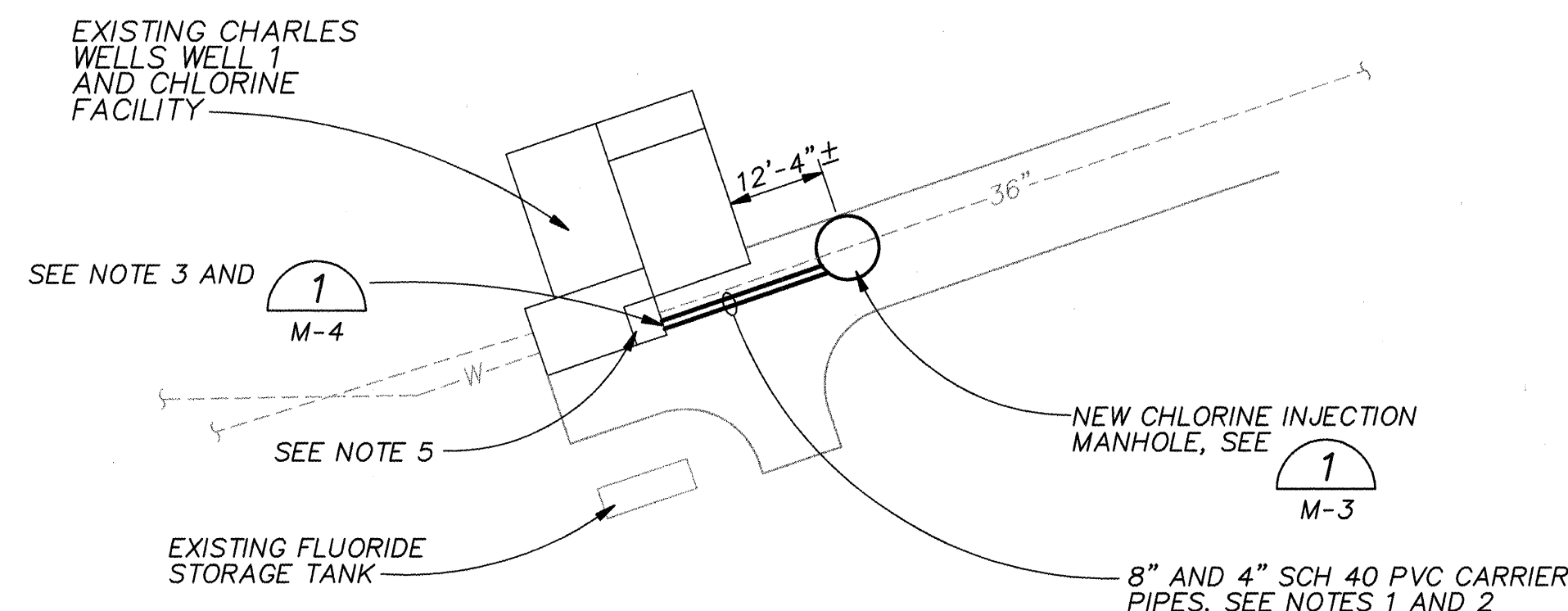
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3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. INSTALLED NEW 2" SCH 80 PVC PIPE AND CAPPED 4' WEST AND 4' SOUTH OF NW CORNER OF EXISTING INJECTION VAULT FOR FUTURE USE.
5. REMOVE EXISTING CURB AND GUTTER AND LANDSCAPE GRAVEL. PREPARE SUBGRADE, PLACE AND COMPACT 6" THICK LAYER OF BASE COARSE, AND 5 1/2" OF ASPHALT PAVEMENT TO MATCH THE EXISTING PAVEMENT GRADE.



BURTON - SITE PLAN
SCALE: 1"=50'

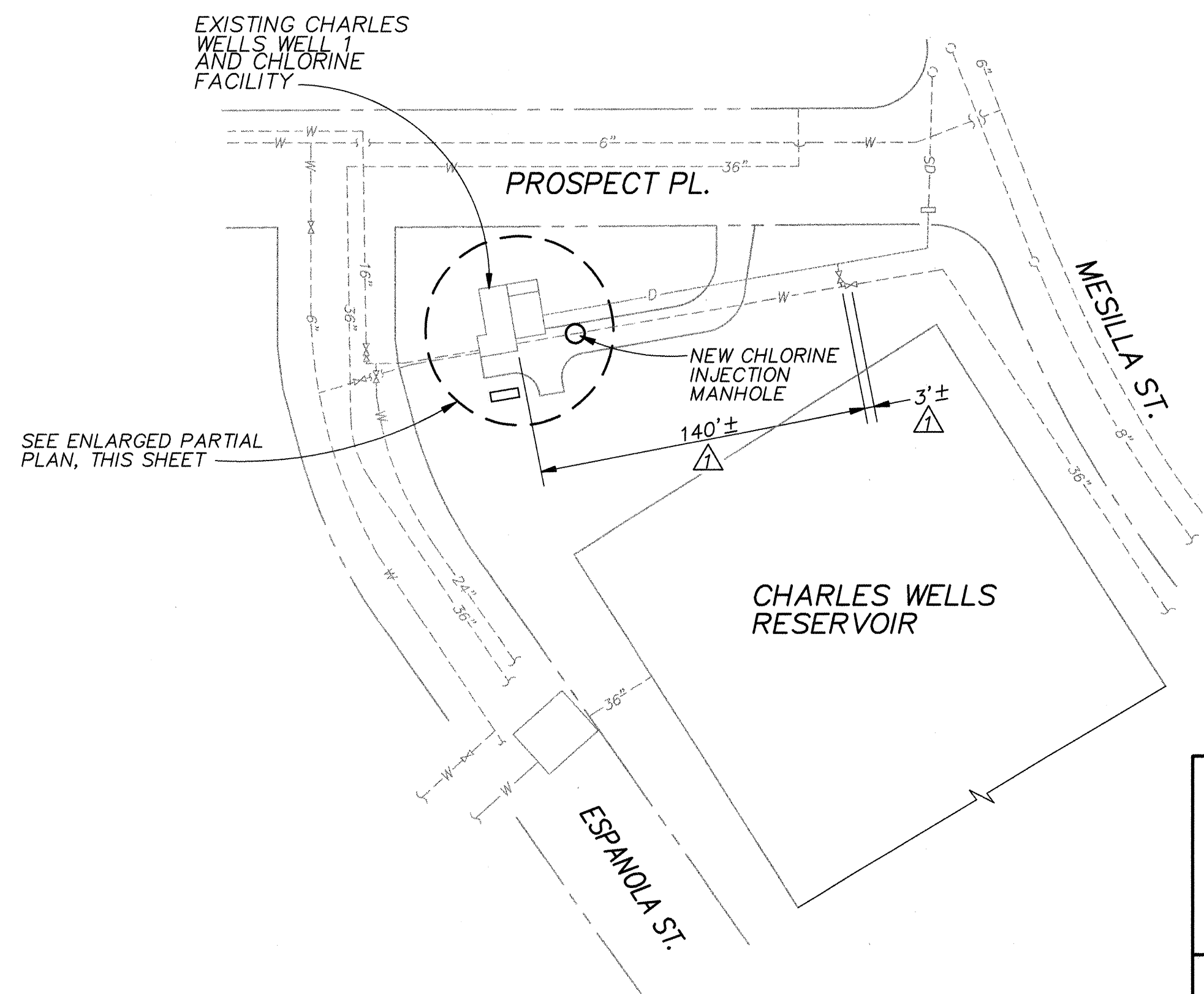
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1=50
9-3-96



ENLARGED PARTIAL PLAN-CHARLES WELLS
SCALE: 1"=20'

NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
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3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. REPLACE ASPHALT PAVEMENT DISTURBED BY THE CONSTRUCTION OF THE CHLORINE INJECTION MANHOLE AND CARRIER PIPING.
5. REMOVE EXISTING PROPELLER METER ELEMENT AND INSTALL BLIND FLANGE. PLUG EXISTING PIPE TAPS AND REPAIR PIPE LINING AS DIRECTED BY THE ENGINEER.



CHARLES WELLS - SITE PLAN
SCALE: 1"=50'

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER: *Arthur J. Stewart*
DATE: *9/26/96*

RECORD DRAWINGS
Revisions Drawn by M. Brewer Date SEPT. 1996
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

CH2M HILL
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87110
(505) 884-5600

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

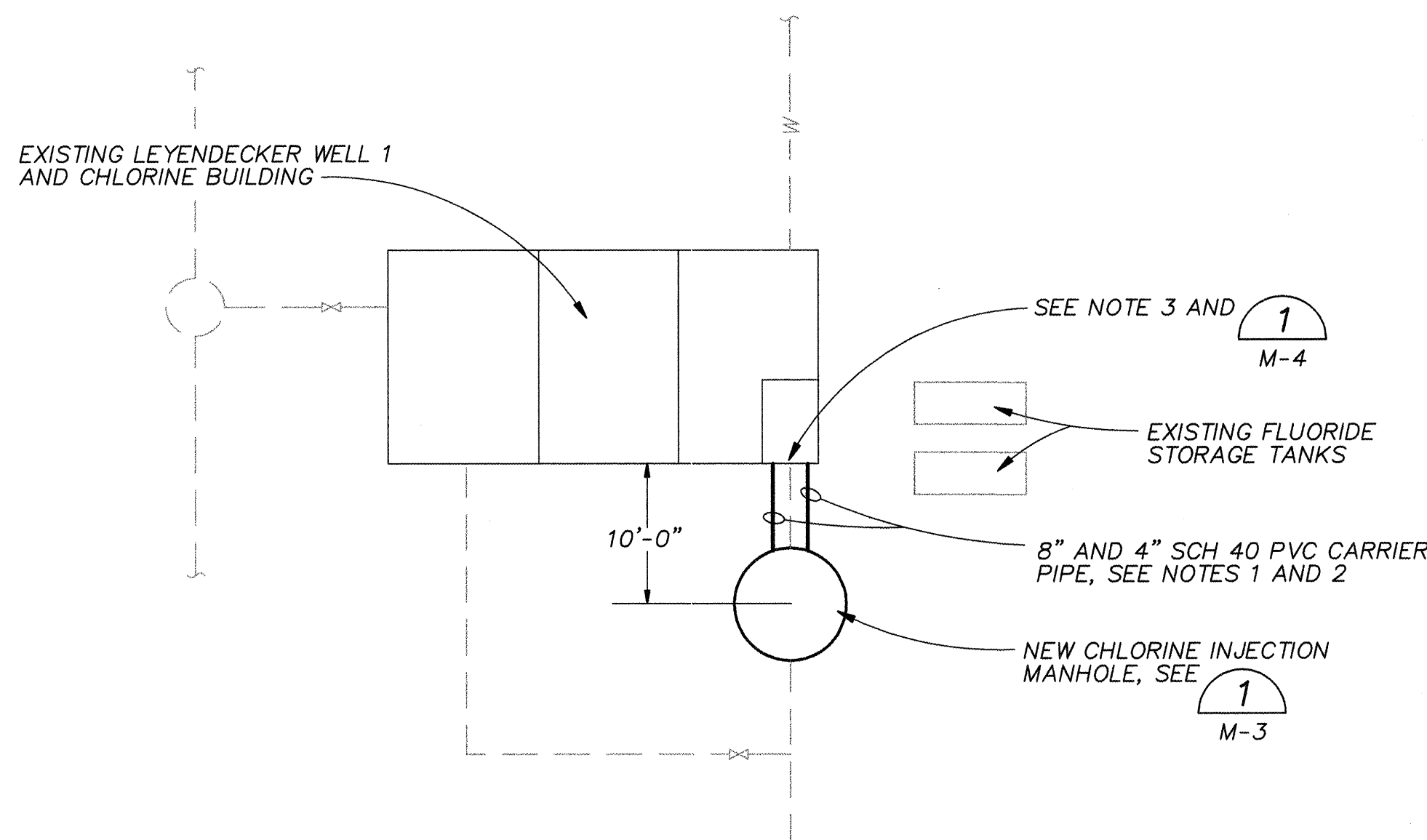
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS
BURTON AND CHARLES WELLS - SITE PLANS

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.

CITY PROJECT NO. **4783.91** Zone Map No. SHEET **4** OF **13**
H-19,L-16 DRAWING NO. **C-3**

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		CONFIRMED LOCATION OF EXISTING		REVISIONS		DESIGNED BY		DRAWN BY		CHECKED BY	
CONTRACTOR				FIELD NOTES		THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND REPLOTTED FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.		GATE VALVES ON COLLECTOR LINE		REMARKS		DATE 10-95		R. GONZALES		B. CROCKETT	
WORKING				BY						BY							
INSPECTOR'S				DATE								DATE 10-95					
FIELD REFERENCE BY																	
DATE																	
VERIFICATION BY																	
DATE																	
DRAWINGS																	
DATE																	
CORRECTED BY																	
MICRO FILM INFORMATION																	
RECORDED BY																	
DATE																	
NO.																	

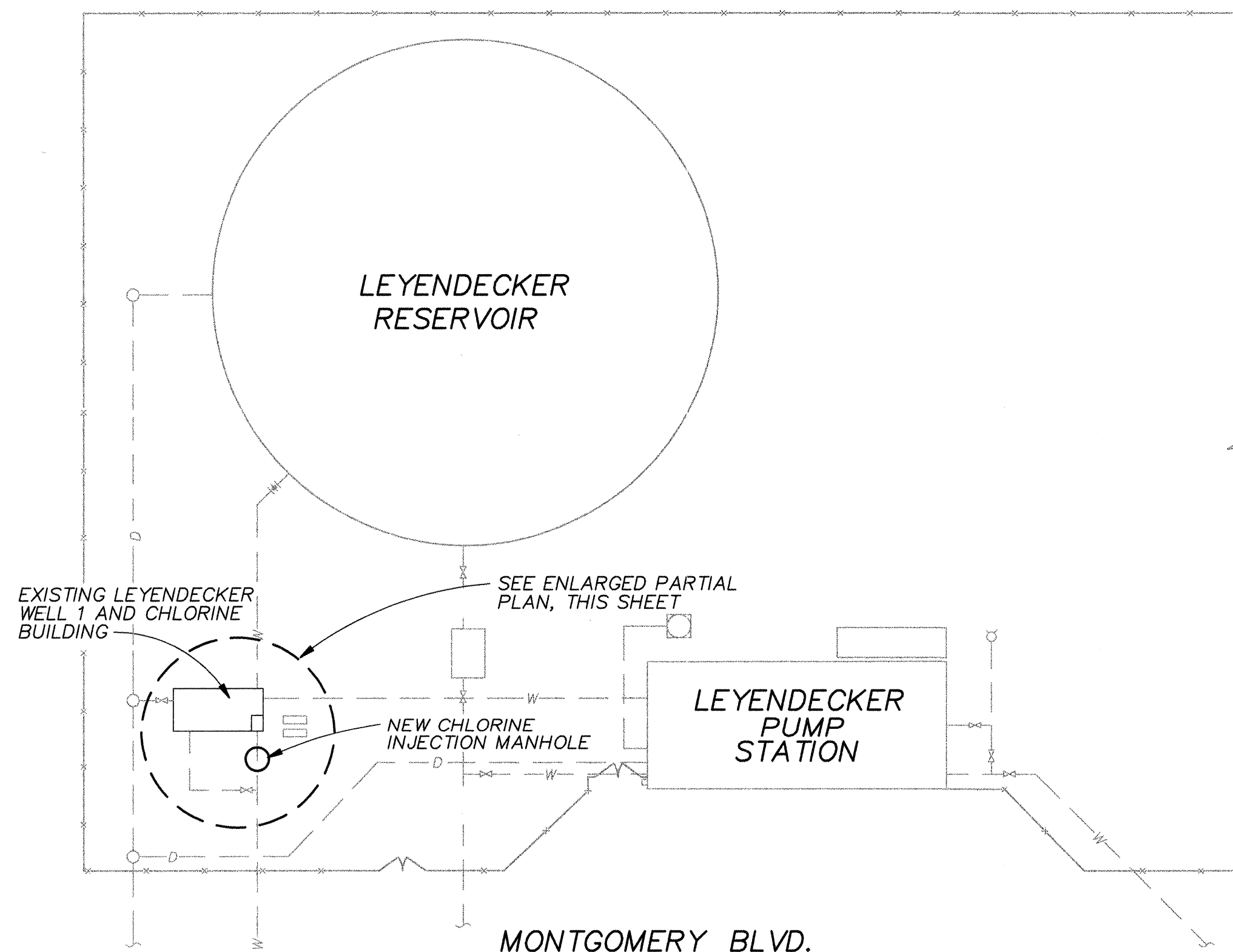
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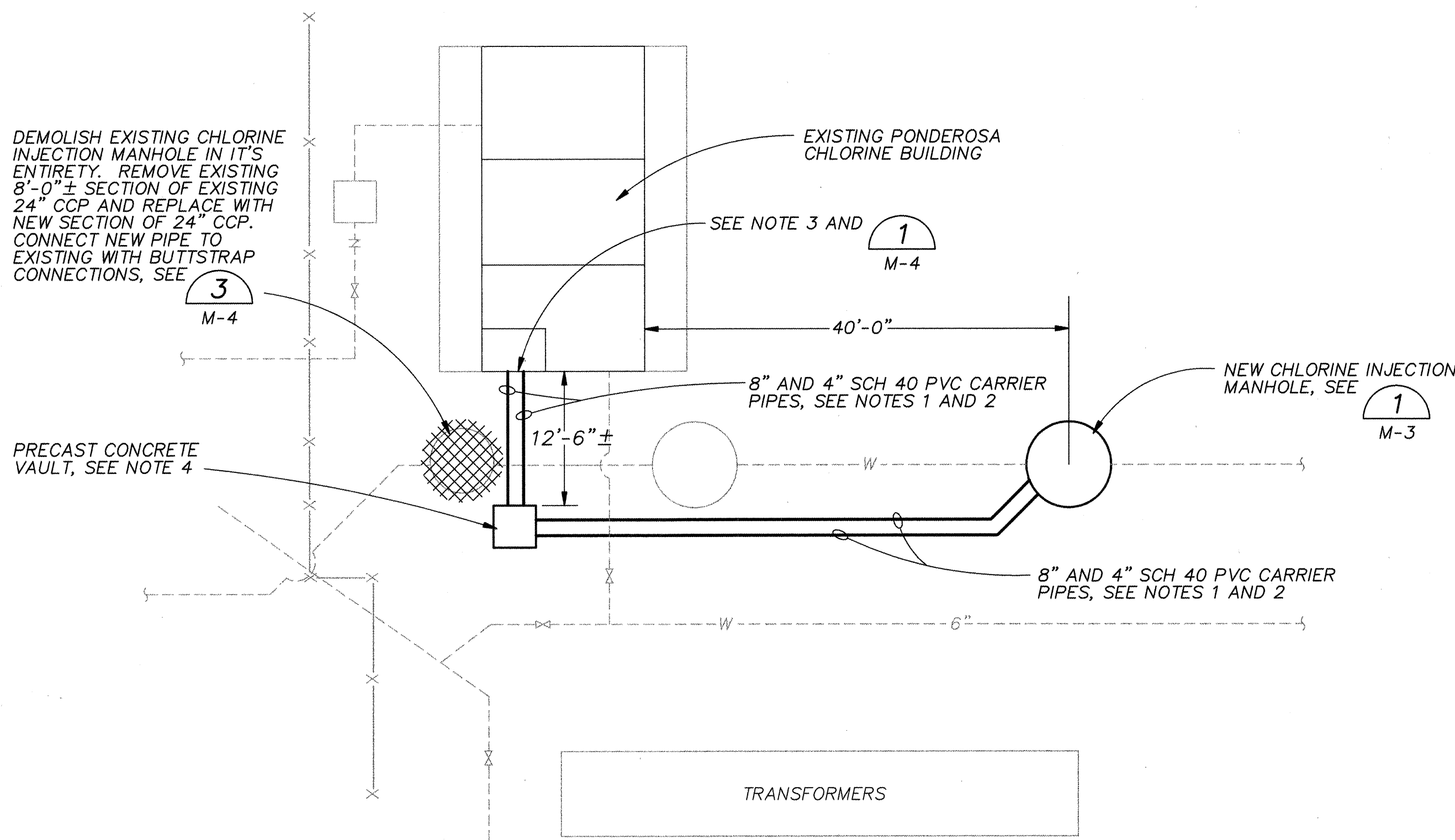
ENLARGED PARTIAL PLAN-LEYENDECKER
SCALE: 1"=10'

NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE THE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
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3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.



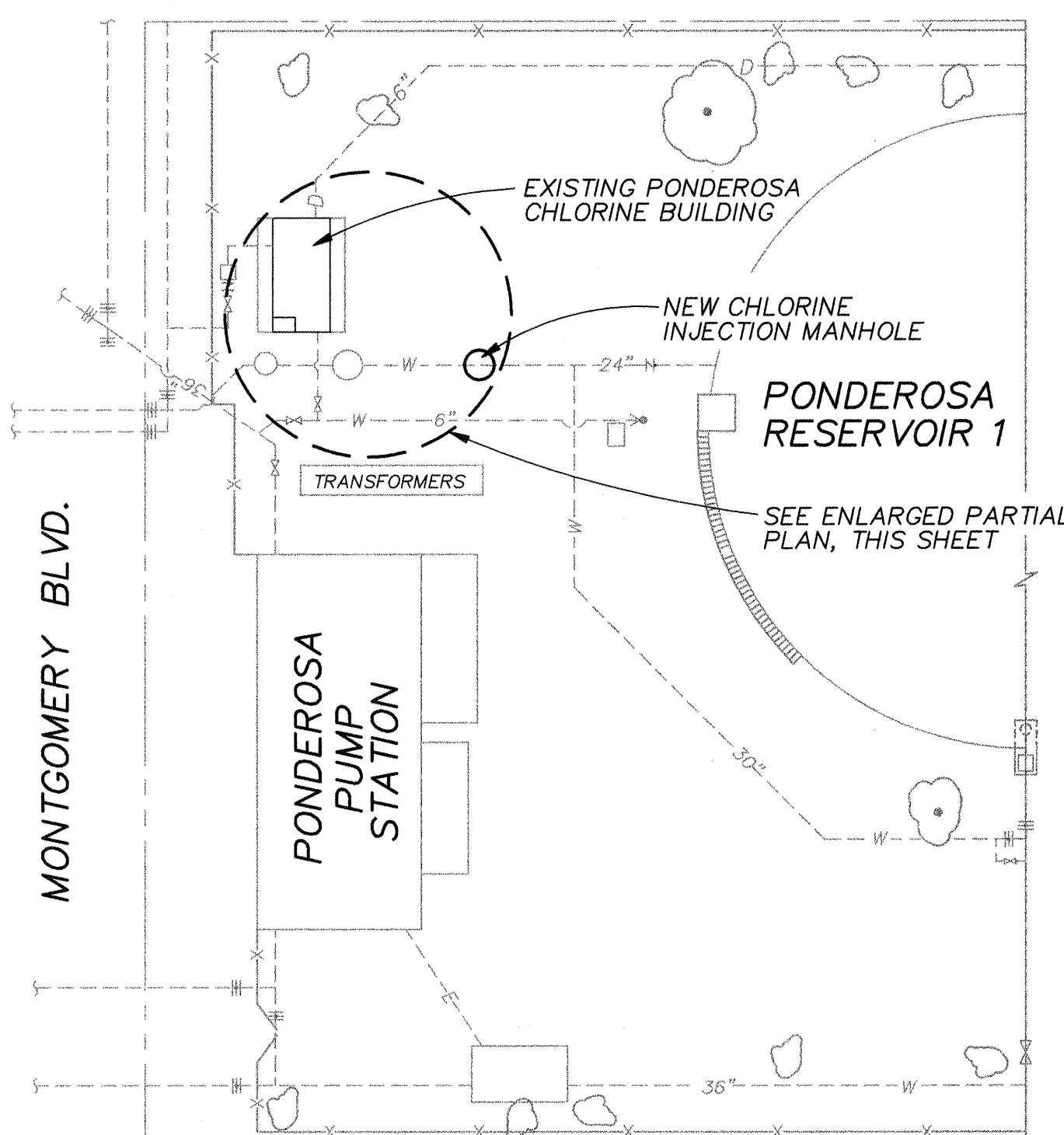
LEYENDECKER - SITE PLAN
SCALE: 1"=40'



ENLARGED PARTIAL PLAN-PONDEROSA
SCALE: 1"=10'

NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE PRECAST CONCRETE VAULT TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE THE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING CONTINUOUS THROUGH THE PRECAST CONCRETE VAULT TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
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3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. PRECAST CONCRETE VAULT SHALL INCLUDE BASE AND COVER AND SHALL HAVE A MINIMUM INSIDE DIMENSION OF 3'-11" x 3'-11". VAULT BASE SECTION SHALL BE MODEL NO. 504-BW AS MANUFACTURED BY UTILITY VAULT COMPANY OR EQUAL. VAULT COVER SHALL BE A LOCKING STEEL TYPE, MODEL NO. 55-332P AS MANUFACTURED BY UTILITY VAULT COMPANY OR EQUAL.



PONDEROSA - SITE PLAN
SCALE: 1"=40'

RECORD DRAWINGS

Revisions Drawn by: M. Brewer Date: SEPT. 1996

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APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER: *John J. Stuart*
DATE: 9/29/96

VERIFY SCALES
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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

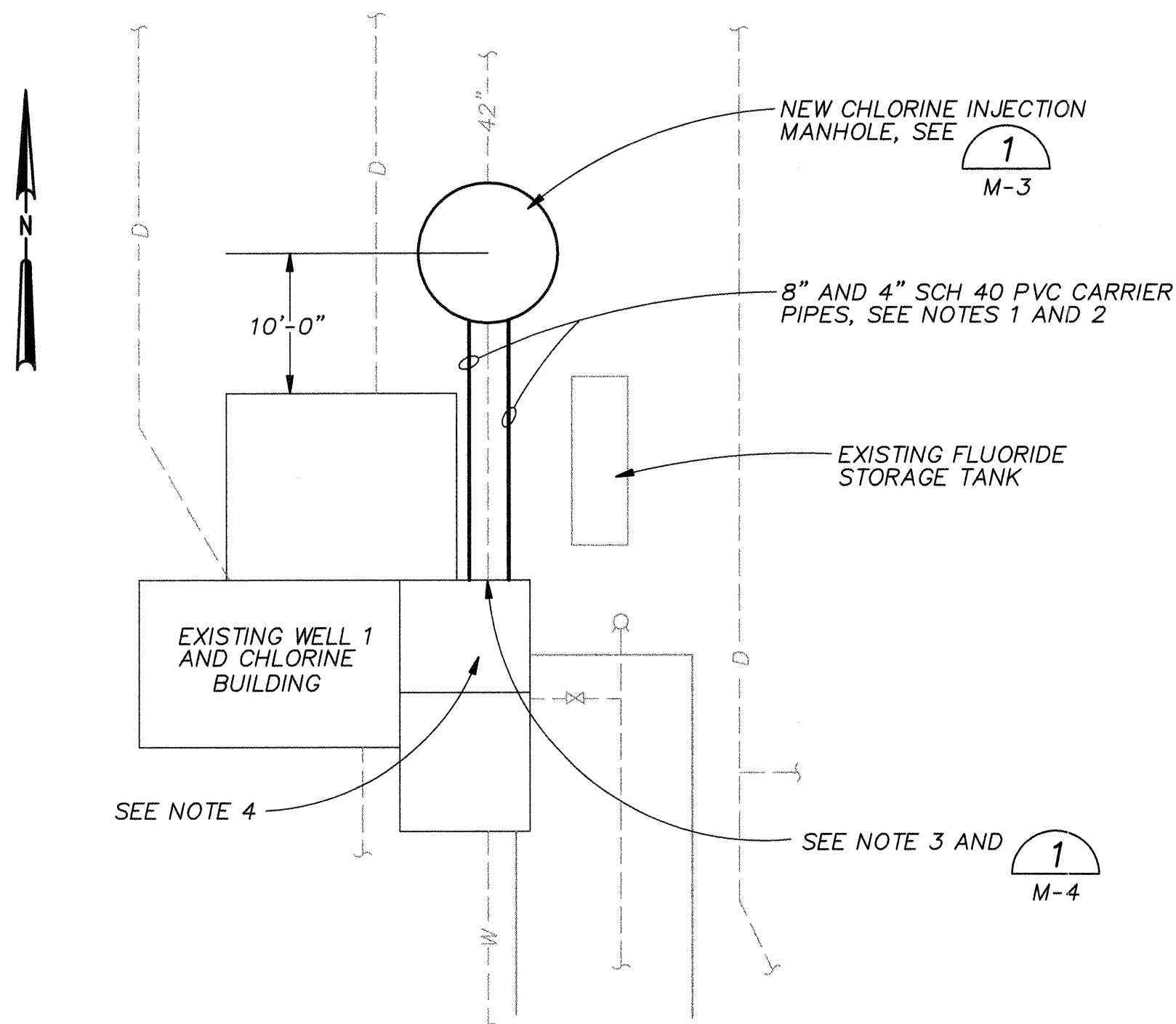
CH2M HILL
6001 Indian School Rd, N.E.
Suite 350
Albuquerque, New Mexico 87110
(505) 884-5600

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS
LEYENDECKER AND PONDEROSA-SITE PLANS

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.

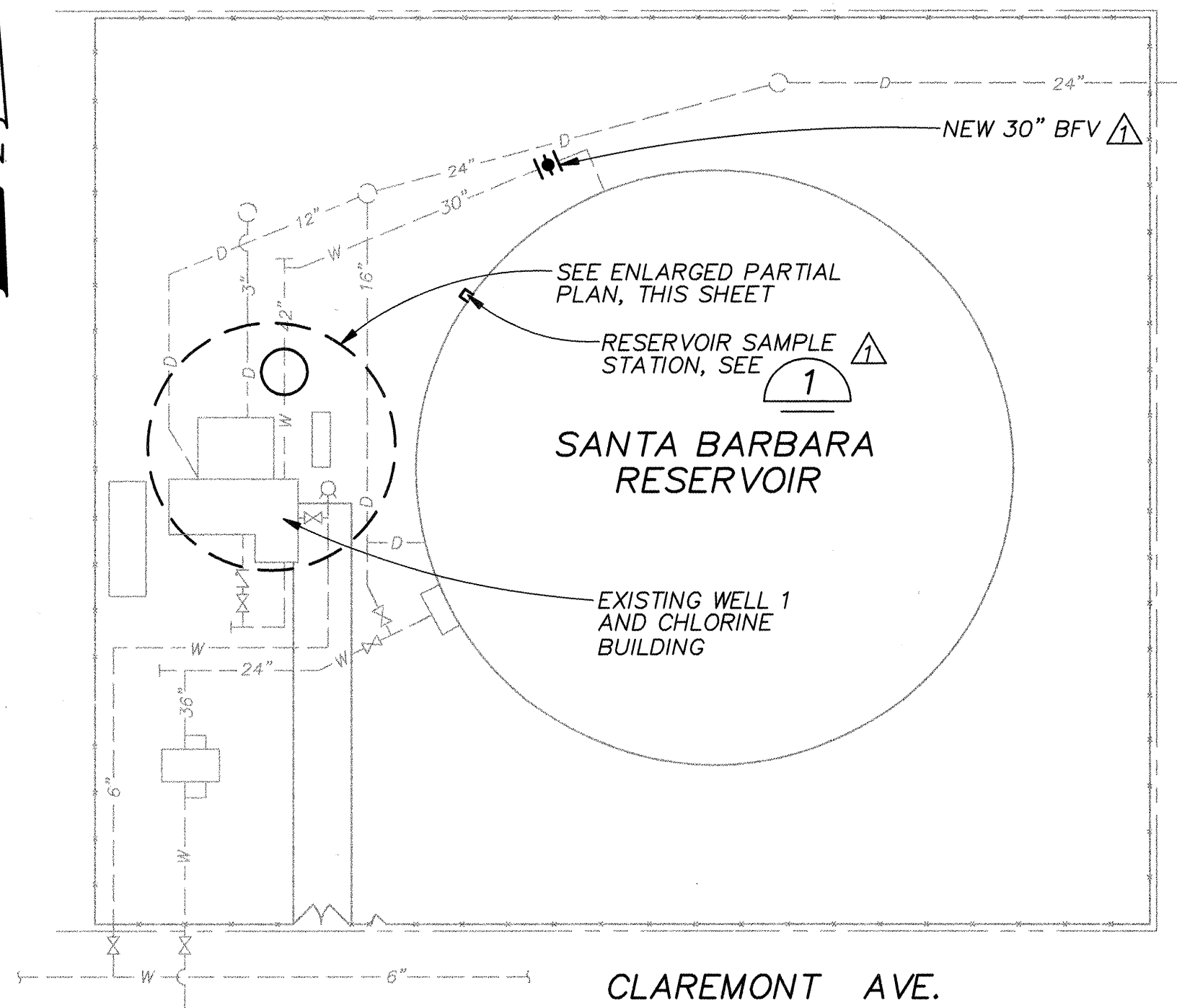
CITY PROJECT NO. **4783.91** Zone Map No. SHEET **5** OF **13**
F-18.6-21 DRAWING NO. C-4



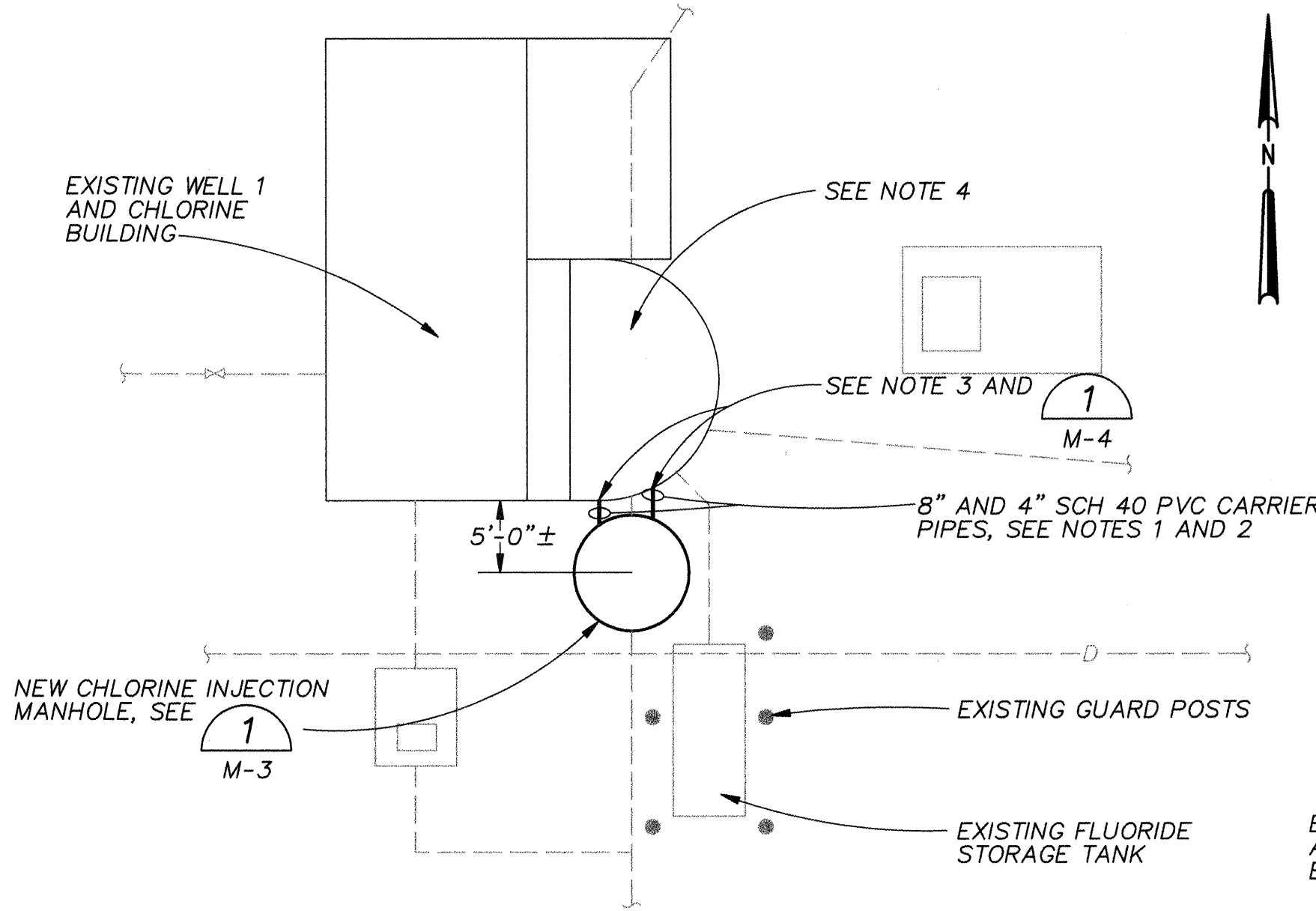
ENLARGED PARTIAL PLAN-SANTA BARBARA
SCALE: 1"=10'

NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE THE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
2. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE THE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 3/8" FLUORIDE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. REMOVE EXISTING PROPELLER METER ELEMENT AND INSTALL BLIND FLANGE. PLUG EXISTING PIPE TAPS AND REPAIR PIPE LINING AS DIRECTED BY THE ENGINEER.



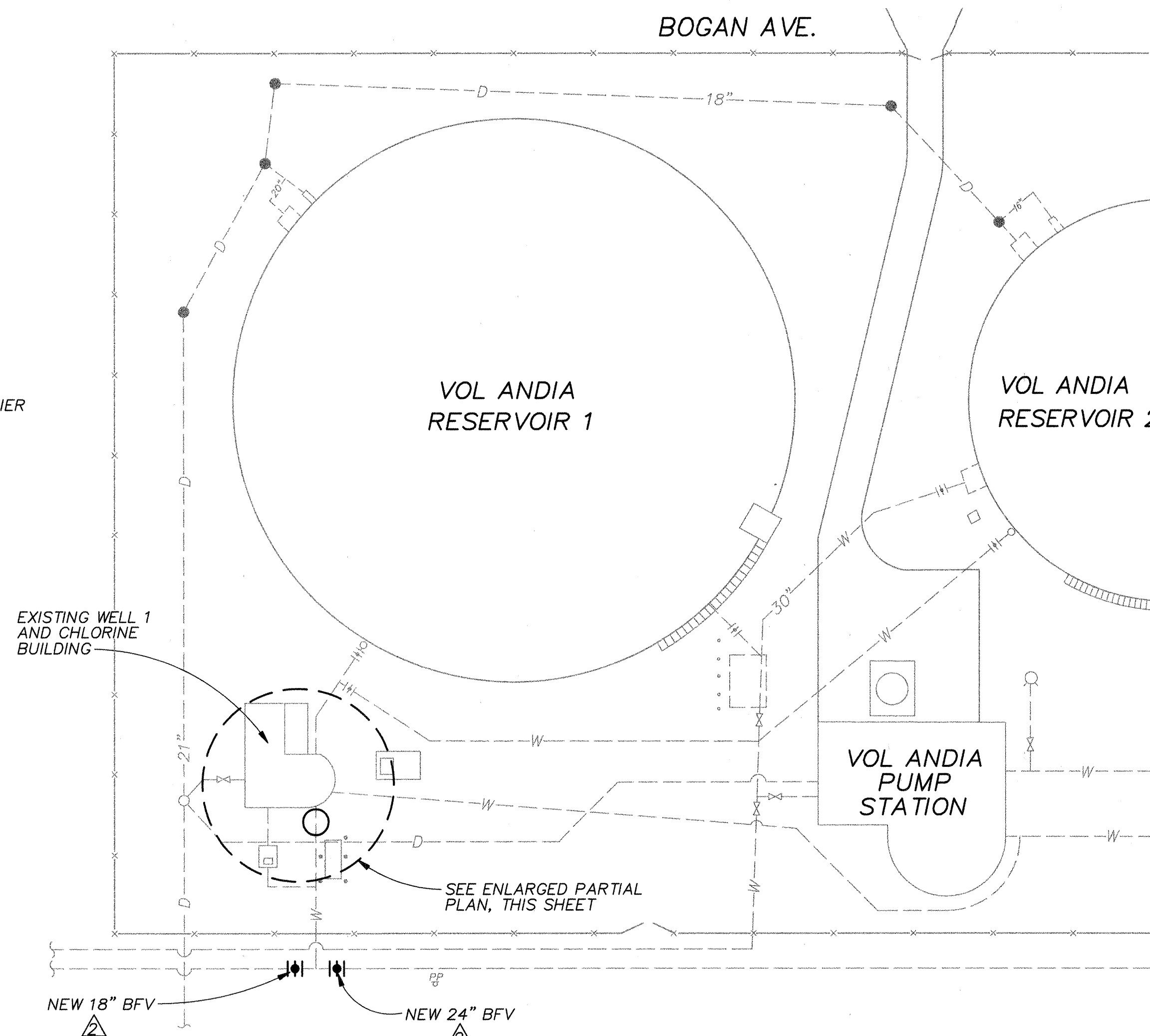
SANTA BARBARA - SITE PLAN
SCALE: 1"=30'



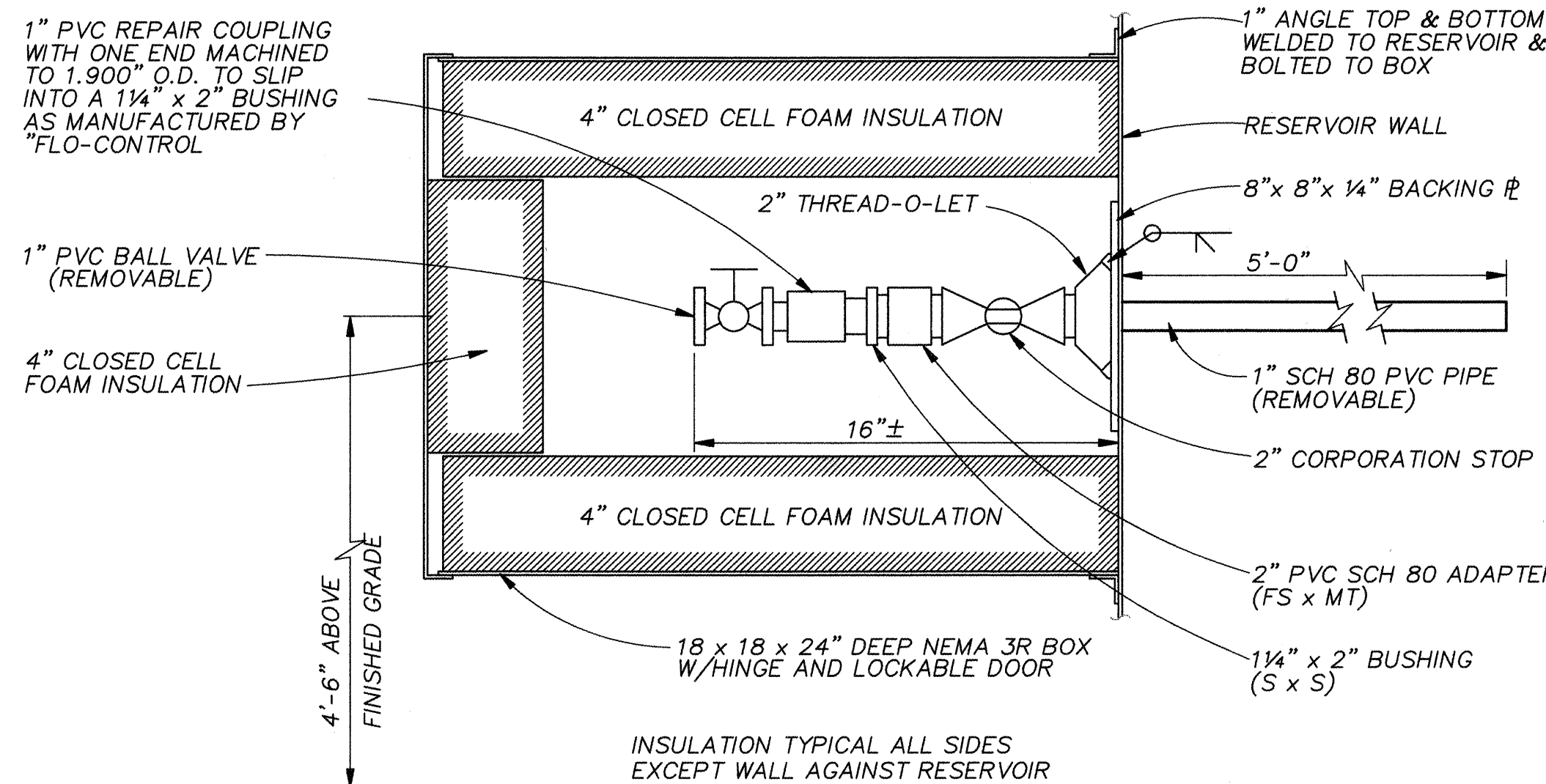
ENLARGED PARTIAL PLAN-VOL ANDIA
SCALE: 1"=10'

NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE THE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
2. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE THE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 3/8" FLUORIDE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. REMOVE EXISTING BLIND FLANGE AT TOP OF PIPE. PLUG EXISTING PIPE TAPS AND REPAIR PIPE LINING AS DIRECTED BY THE ENGINEER. REINSTALL BLIND FLANGE WITH NEW BOLTS AND GASKET.



VOL ANDIA - SITE PLAN
SCALE: 1"=30'



SAMPLING STATION DETAIL
NTS

RECORD DRAWINGS

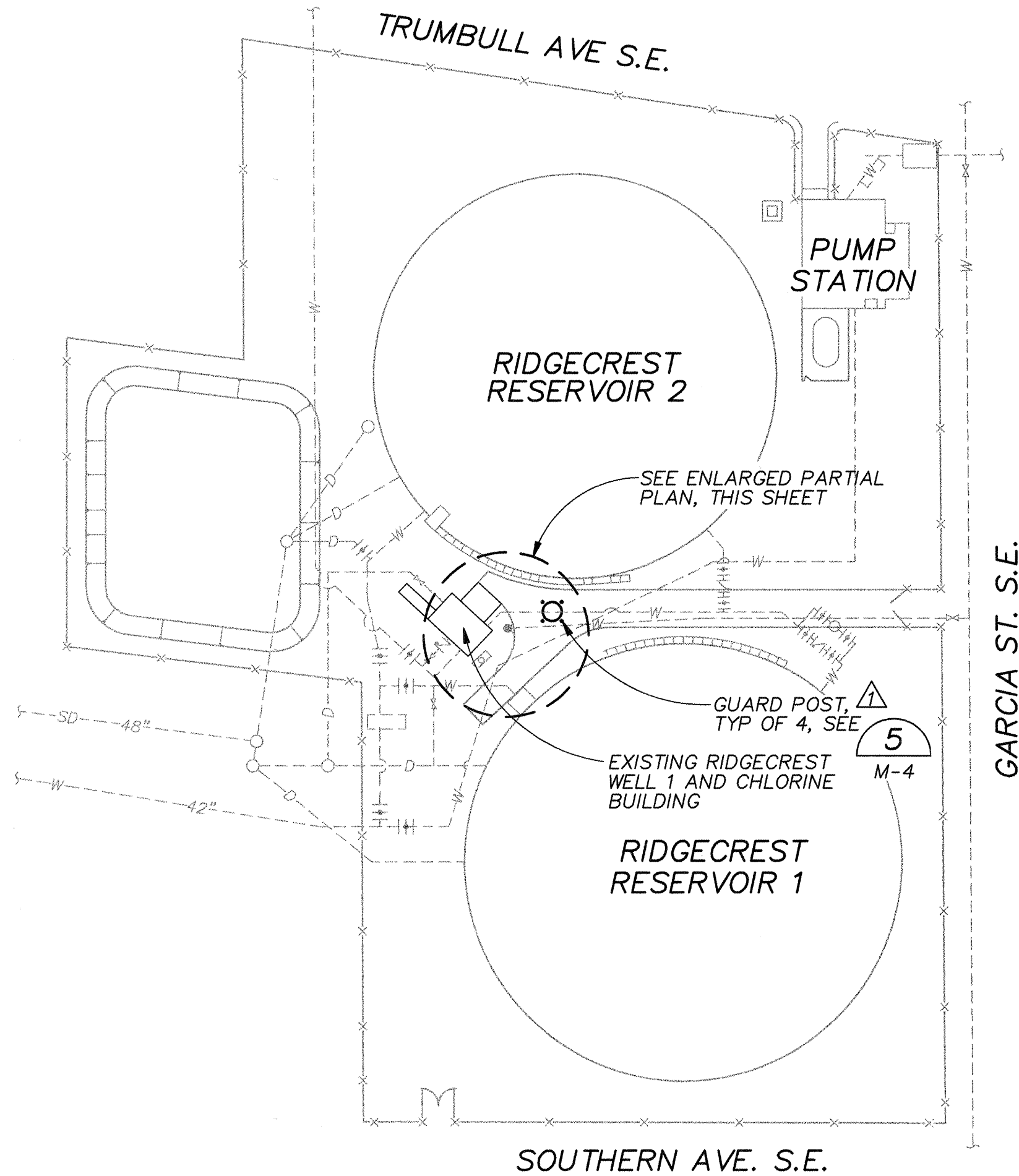
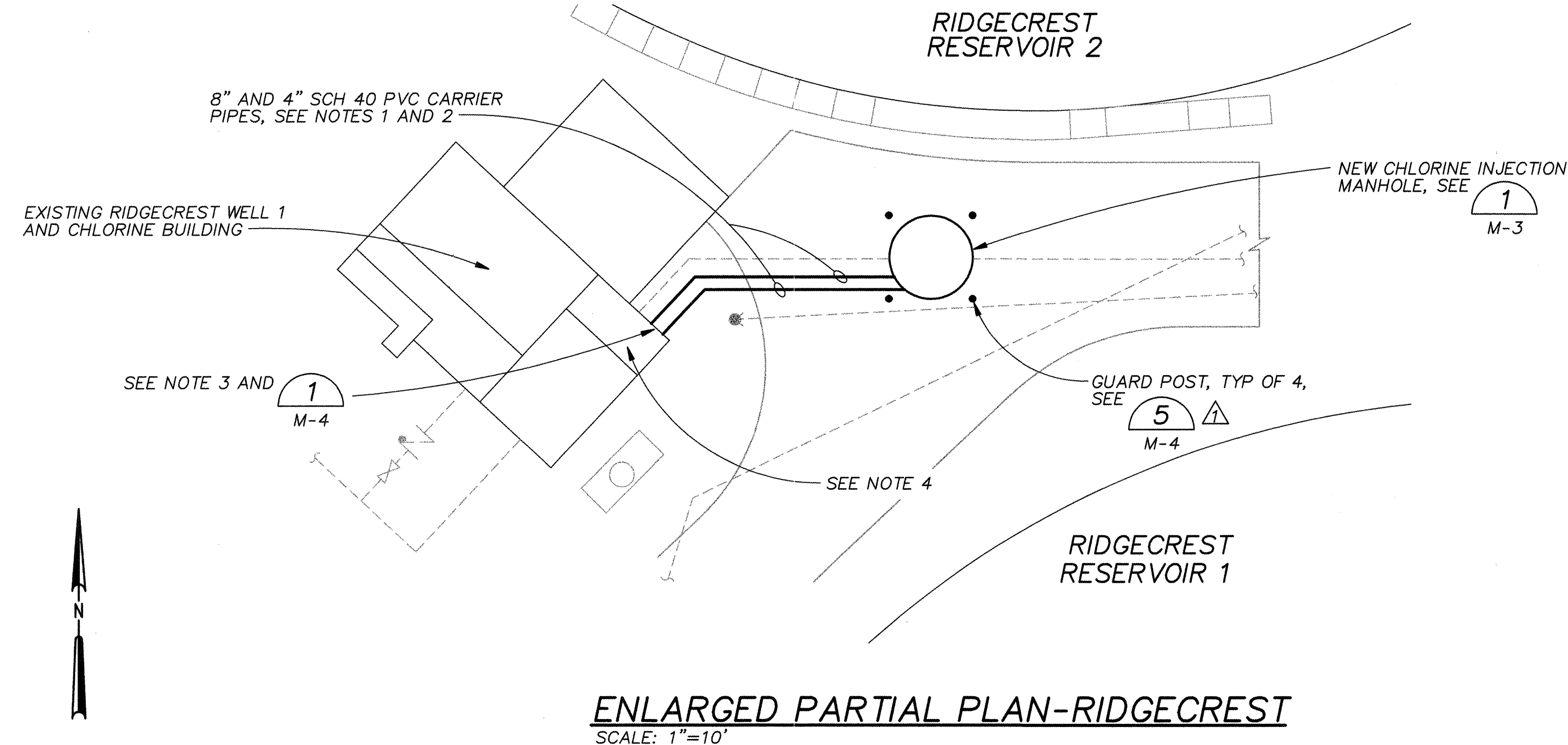
Revisions Drawn by M. Brewer Date SEPT. 1996
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER *[Signature]*
DATE 9/29/96

VERIFY SCALES
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

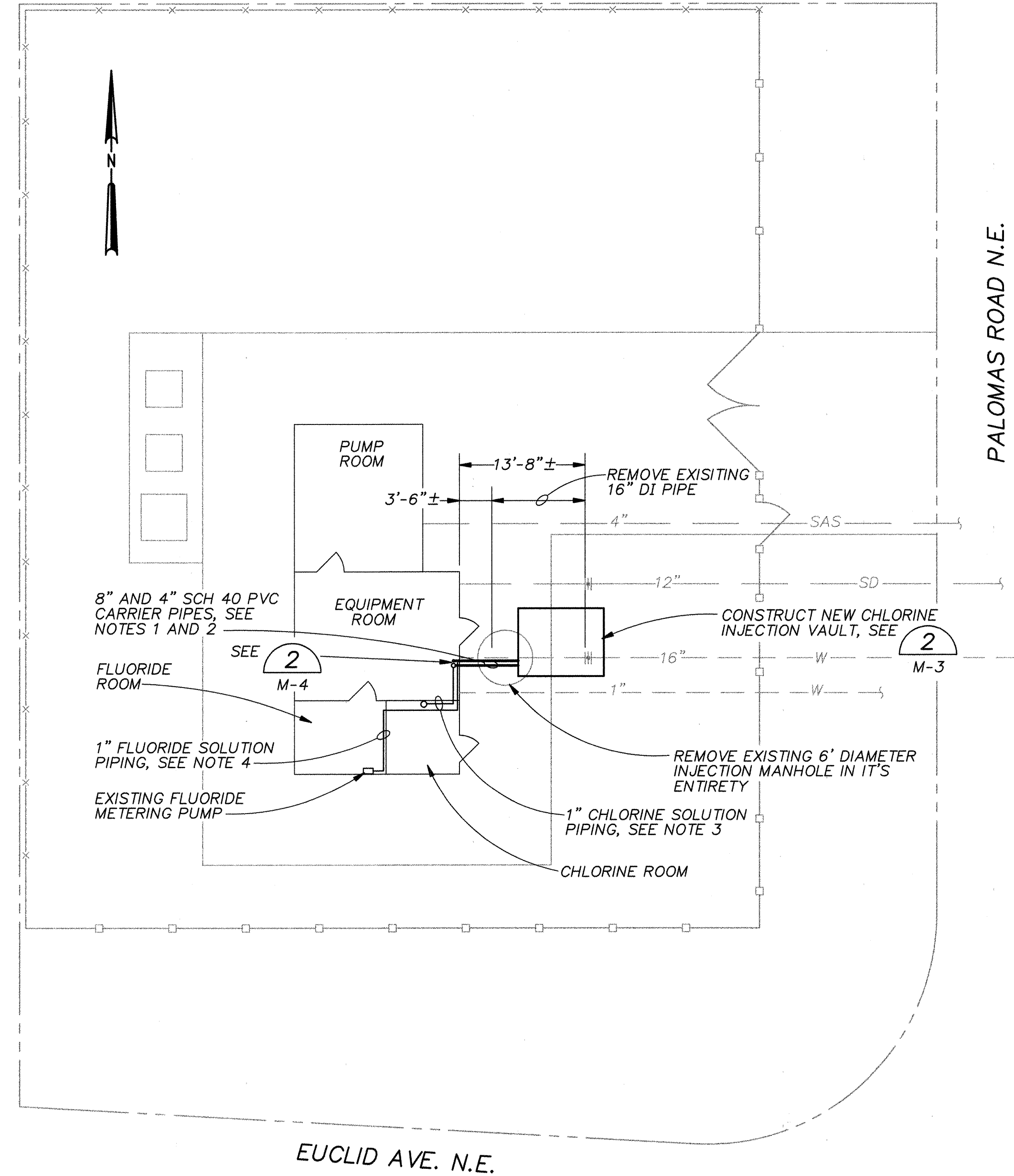
CH2MHILL
6001 Indian School Rd, N.E.
Suite 350
Albuquerque, New Mexico
87110
(505) 884-5600

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS SANTA BARBARA AND VOLANDIA-SITE PLANS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO.	4783.91	Zone Map No.	SHEET 6 OF 13 F-17,H-16 DRAWING NO. C-5



NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
2. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. SLOPE CARRIER PIPE DOWN FROM THE CHLORINE BUILDING TO THE MANHOLE. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 3/8" FLUORIDE SOLUTION TUBING FROM THE EXISTING CHLORINE BUILDING TO THE NEW CHLORINE INJECTION MANHOLE. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE MANHOLE.
3. CONNECT NEW 1" CHLORINE SOLUTION TUBING TO EXISTING 1" CHLORINE SOLUTION PIPING INSIDE THE CHLORINE BUILDING. CONNECT NEW 3/8" FLUORIDE SOLUTION TUBING TO THE EXISTING FLUORIDE METERING PUMP INSIDE THE CHLORINE BUILDING. PROVIDE PVC INSERT FITTING TO TRANSITION FROM PVC PIPE TO TUBING AS REQUIRED.
4. REMOVE EXISTING PROPELLER METER ELEMENT AND INSTALL BLIND FLANGE. PLUG EXISTING PIPE TAPS AND REPAIR PIPE LINING AS DIRECTED BY THE ENGINEER.
5. REPLACE ASPHALT PAVEMENT DISTURBED BY THE CONSTRUCTION OF THE CHLORINE INJECTION MANHOLE AND CARRIER PIPING.



NOTES:

1. INSTALL 8" SCH 40 PVC CARRIER PIPE FROM THE EXISTING WELL BUILDING TO THE NEW CHLORINE INJECTION VAULT. SLOPE THE CARRIER PIPE DOWN FROM WELL BUILDING TO THE VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 1" CHLORINE SOLUTION TUBING FROM THE EXISTING WELL BUILDING TO THE NEW CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE VAULT.
2. INSTALL 4" SCH 40 PVC CARRIER PIPE FROM THE EXISTING WELL BUILDING TO THE NEW CHLORINE INJECTION VAULT. SLOPE THE CARRIER PIPE DOWN FROM WELL BUILDING TO THE VAULT. PROVIDE 24" MINIMUM COVER OVER CARRIER PIPE. INSTALL 3/8" FLUORIDE SOLUTION TUBING FROM THE EXISTING WELL BUILDING TO THE NEW CHLORINE INJECTION VAULT. PROVIDE MINIMUM 6'-0" FREE LENGTH OF TUBING INSIDE THE VAULT.
3. INSTALL NEW 1" SCH 80 PVC CHLORINE SOLUTION PIPING FROM THE EXISTING CHLORINE EDUCTOR TO THE NEW CARRIER PIPE LOCATION. TERMINATE PIPING 18" ABOVE FINISH FLOOR AT THE CARRIER PIPE LOCATION. SEAL WALL PENETRATION INTO CHLORINE ROOM. INSTALL 1" PVC BALL CHECK VALVE AND 1" PVC BALL VALVE. PVC INSERT FITTING TO TRANSITION PVC PIPE TO TUBING AND CONNECT 1" CHLORINE SOLUTION TUBING.
4. INSTALL NEW 1" SCH 80 PVC FLUORIDE SOLUTION PIPING FROM THE EXISTING FLUORIDE METERING PUMP TO THE NEW CARRIER PIPE LOCATION. TERMINATE PIPING 18" ABOVE FINISH FLOOR AT THE CARRIER PIPE LOCATION. SEAL WALL PENETRATION INTO FLUORIDE ROOM. INSTALL 1" PVC BALL CHECK VALVE AND 1" PVC BALL VALVE. PVC INSERT FITTING TO TRANSITION PVC PIPE TO TUBING AND CONNECT 3/8" FLUORIDE SOLUTION TUBING.
5. REMOVE AND REPLACE EXISTING STAMPED PATTERN, COLORED CONCRETE PAVEMENT AS REQUIRED FOR DEMOLITION AND CONSTRUCTION OF THE NEW CHLORINE INJECTION VAULT AND CARRIER PIPES.

RECORD DRAWINGS

Revisions Drawn by: M. Brewer Date: SEPT. 1996

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APPROVAL OF RECORD DRAWINGS

PROJECT ENGINEER: *Arthur J. Stueck*

DATE: 9/20/96

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

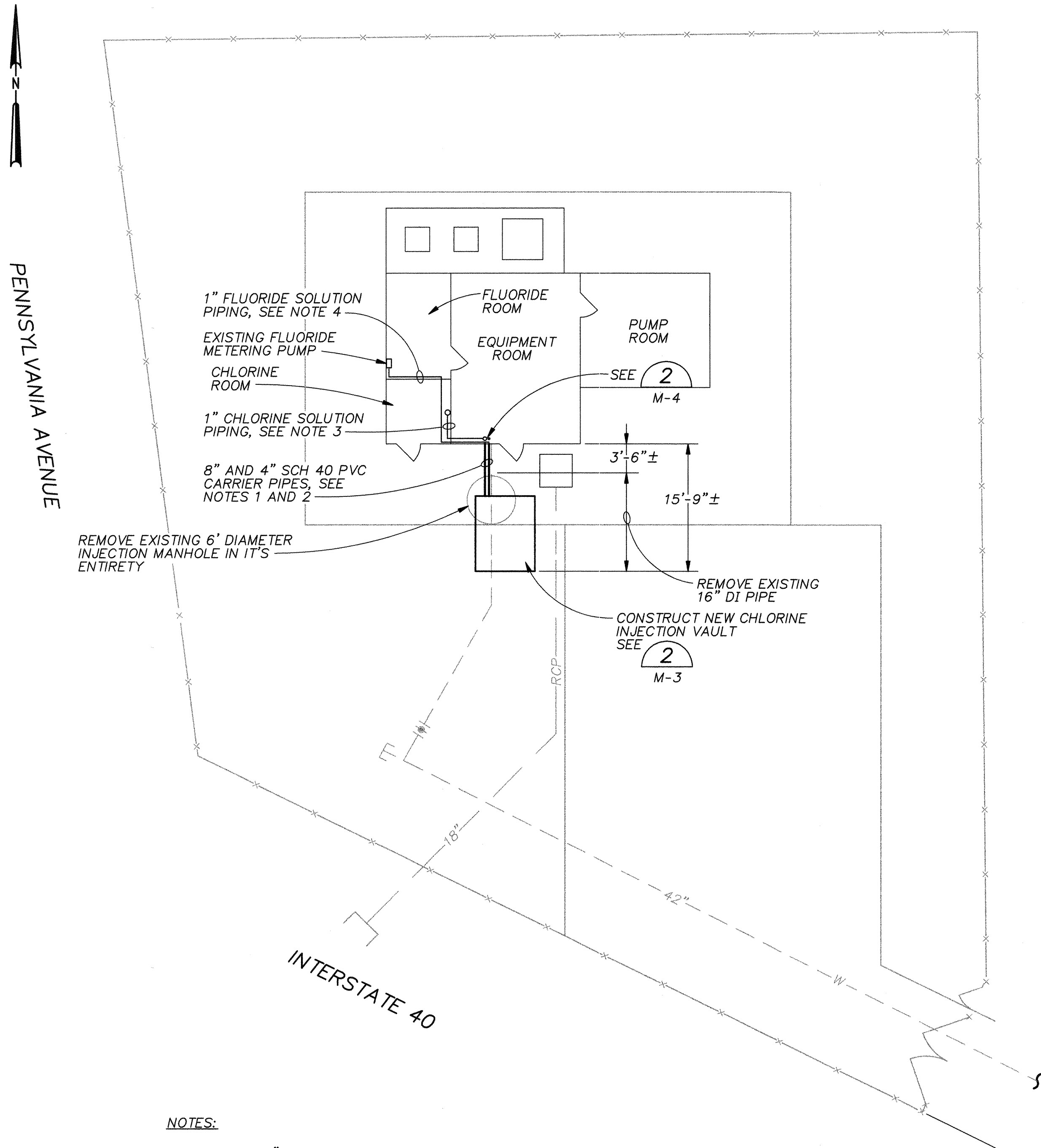
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6001 Indian School Rd, N.E.
Suite 350
Albuquerque, New Mexico 87110
(505) 884-5600

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS RIDGECREST/CHARLES WELLS 5-SITE PLANS	
Design Review Committee	City Engineer Approval
CITY PROJECT NO. 4783.91	Zone Map No. SHEET 7 OF 13 J-19,L-20 DRAWING NO. C-6

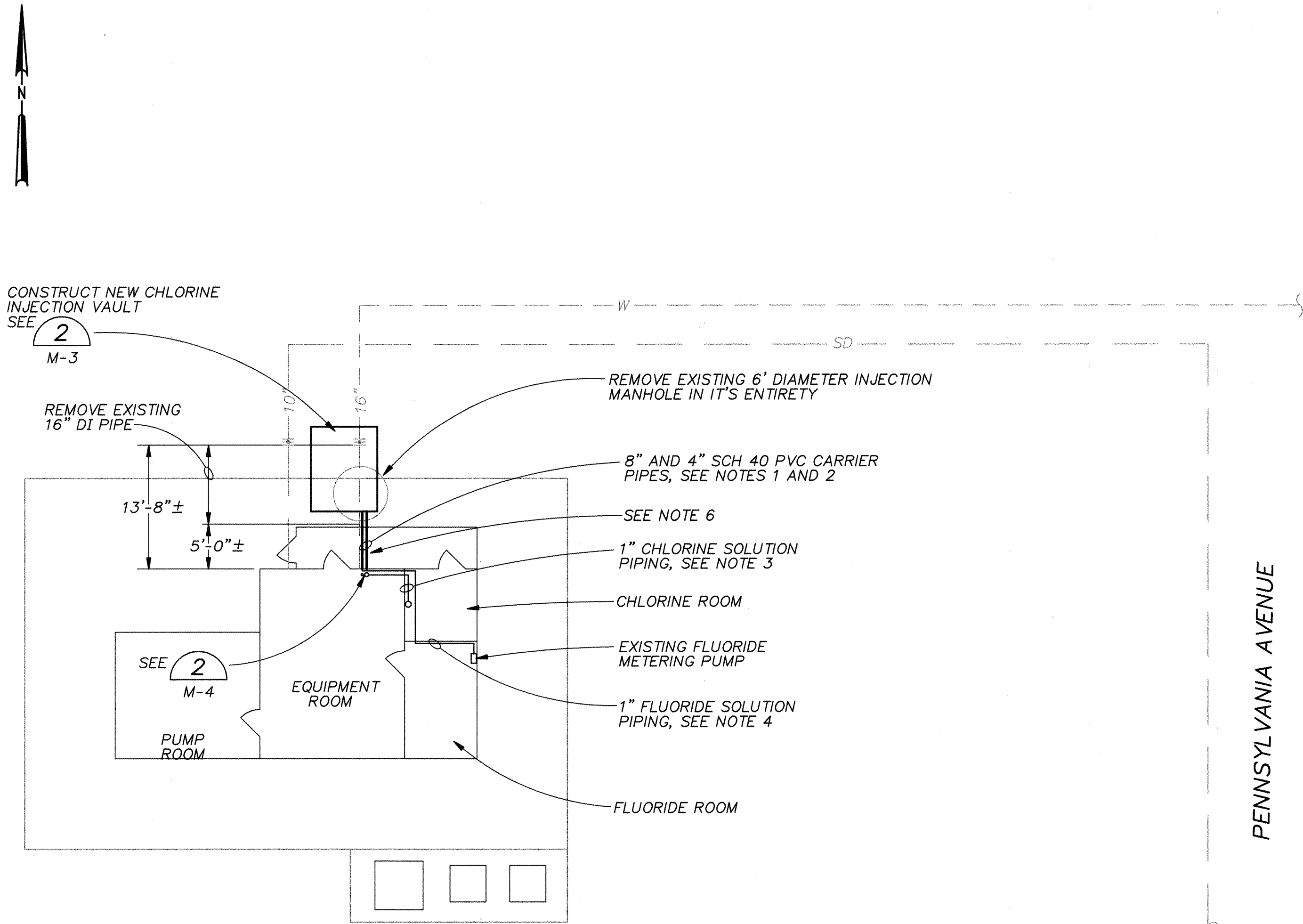


NOTES:

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4. INSTALL NEW 1" SCH 80 PVC FLUORIDE SOLUTION PIPING FROM THE EXISTING FLUORIDE METERING PUMP TO THE NEW CARRIER PIPE LOCATION. TERMINATE PIPING 18" ABOVE FINISH FLOOR AT THE CARRIER PIPE LOCATION. SEAL WALL PENETRATION INTO FLUORIDE ROOM. INSTALL 1" PVC BALL CHECK VALVE AND 1" PVC BALL VALVE, PVC INSERT FITTING TO TRANSITION PVC PIPE TO TUBING AND CONNECT 3/8" FLUORIDE SOLUTION TUBING.
5. REMOVE AND REPLACE EXISTING STAMPED PATTERN, COLORED CONCRETE PAVEMENT AS REQUIRED FOR DEMOLITION AND CONSTRUCTION OF THE NEW CHLORINE INJECTION VAULT AND CARRIER PIPES.

LOVE NO. 8 - SITE PLAN

SCALE: 1"=10'



NOTES:

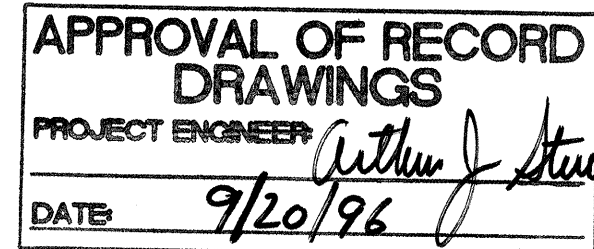
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5. REMOVE AND REPLACE EXISTING STAMPED PATTERN, COLORED CONCRETE PAVEMENT AS REQUIRED FOR DEMOLITION AND CONSTRUCTION OF THE NEW CHLORINE INJECTION VAULT AND CARRIER PIPES.
6. REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK AS REQUIRED FOR INSTALLATION OF THE 8" AND 4" CARRIER PIPES. TUNNEL BENEATH OR CORE DRILL FOOTING OF THE BLOCK SCREEN WALL FOR INSTALLATION OF THE CARRIER PIPES.

THOMAS NO. 5 - SITE PLAN

SCALE: 1"=10'

RECORD DRAWINGS

Revisions Drawn by M. Brewer Date SEPT. 1996
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VERIFY SCALES
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87110
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS
LOVE NO.8 AND THOMAS NO.5 - SITE PLANS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

CITY PROJECT NO. **4783.91** Zone Map No. **G-19,J-19** SHEET **8** OF **13**
DRAWING NO. **C-7**


131444.A0
131444A0/CO08.DWG
1=30
9-3-96



Revisions Drawn by M. Brewer Date SEPT. 1996

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APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *Arthur J. Stuart*
DATE 9/20/96

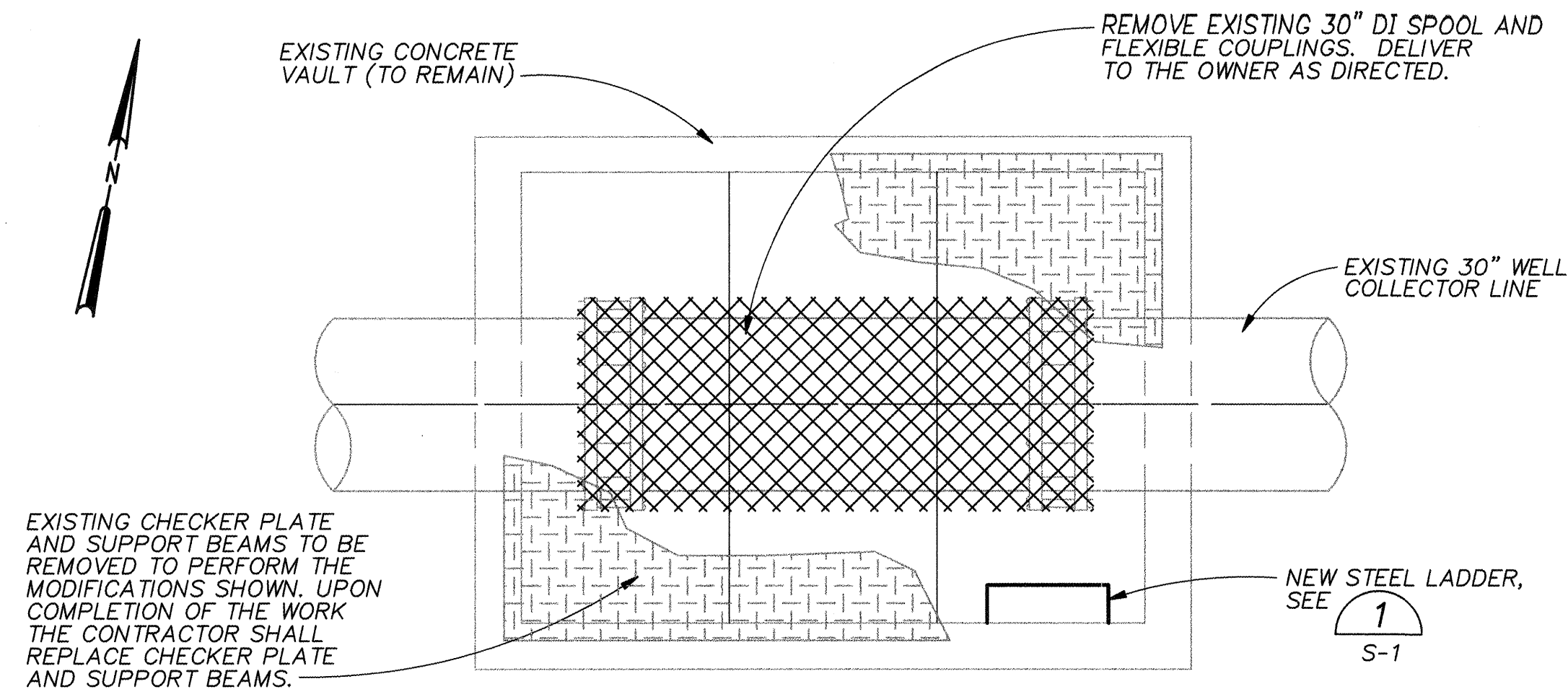
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SCALES ACCORDINGLY.



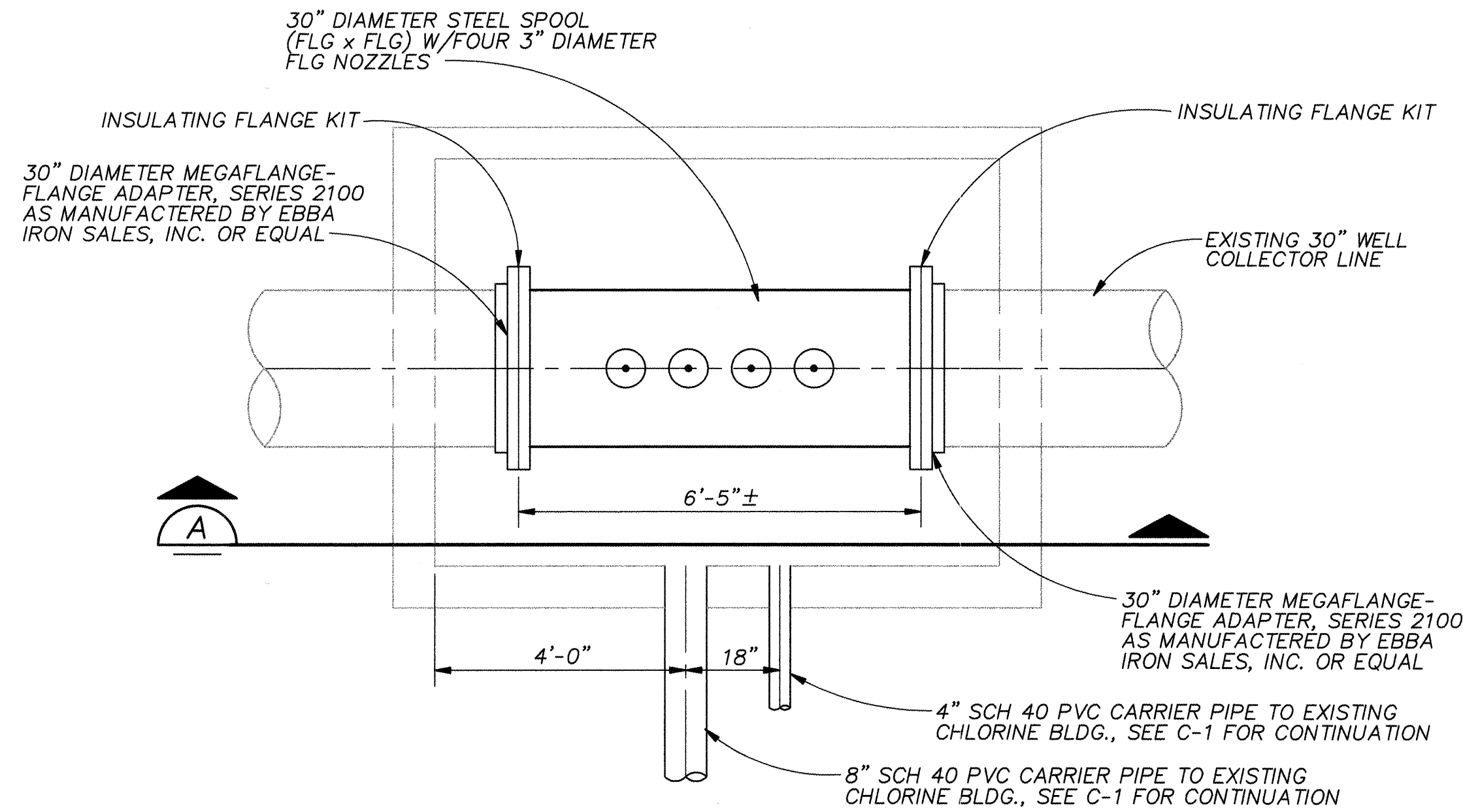
CHEMILL
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Suite 350
Albuquerque, New Mexico
87110
(505) 884-5600

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

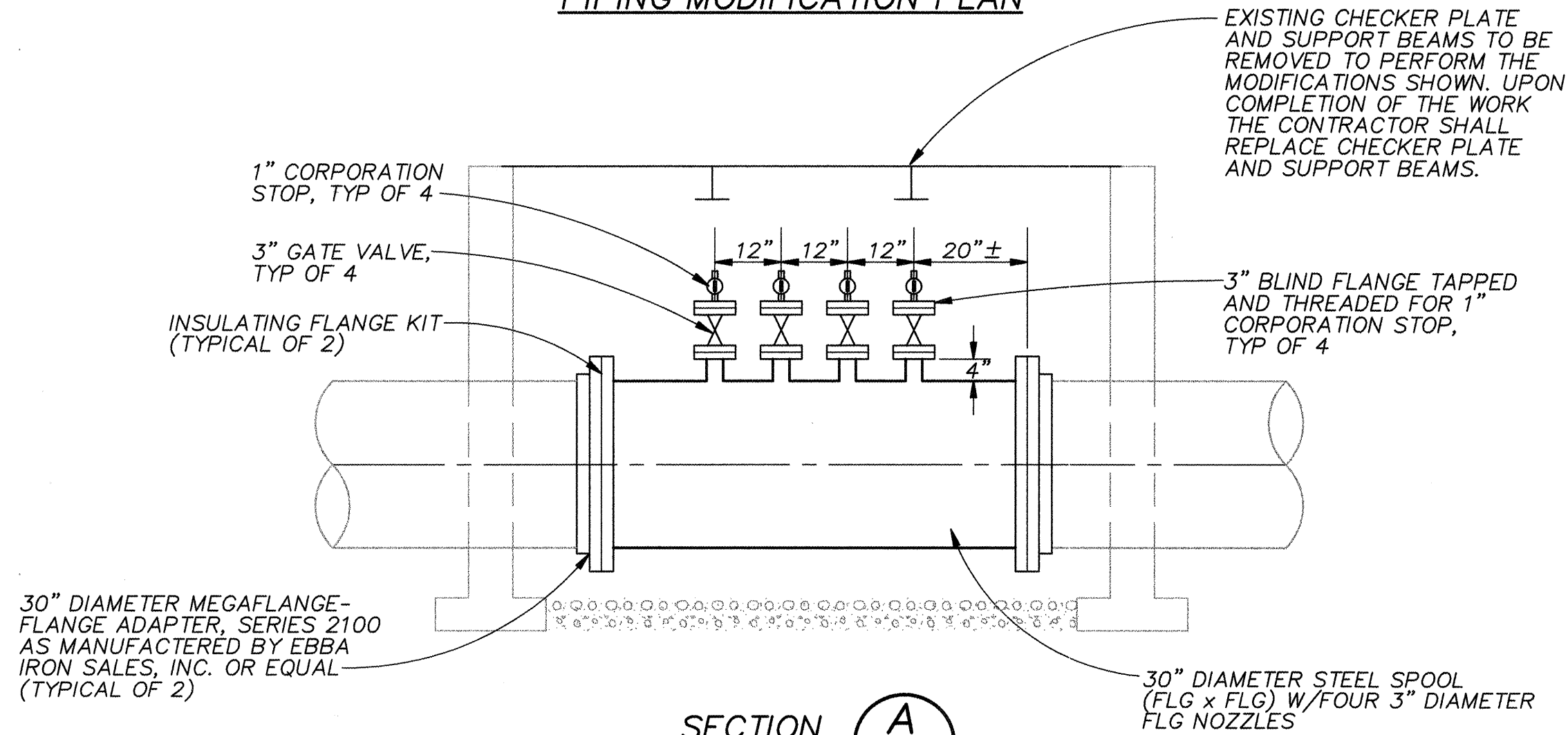
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO. 4783.91		Zone Map No. F-20.D-21	SHEET 8A OF 13 DRAWING NO. C-8	



DEMOLITION PLAN



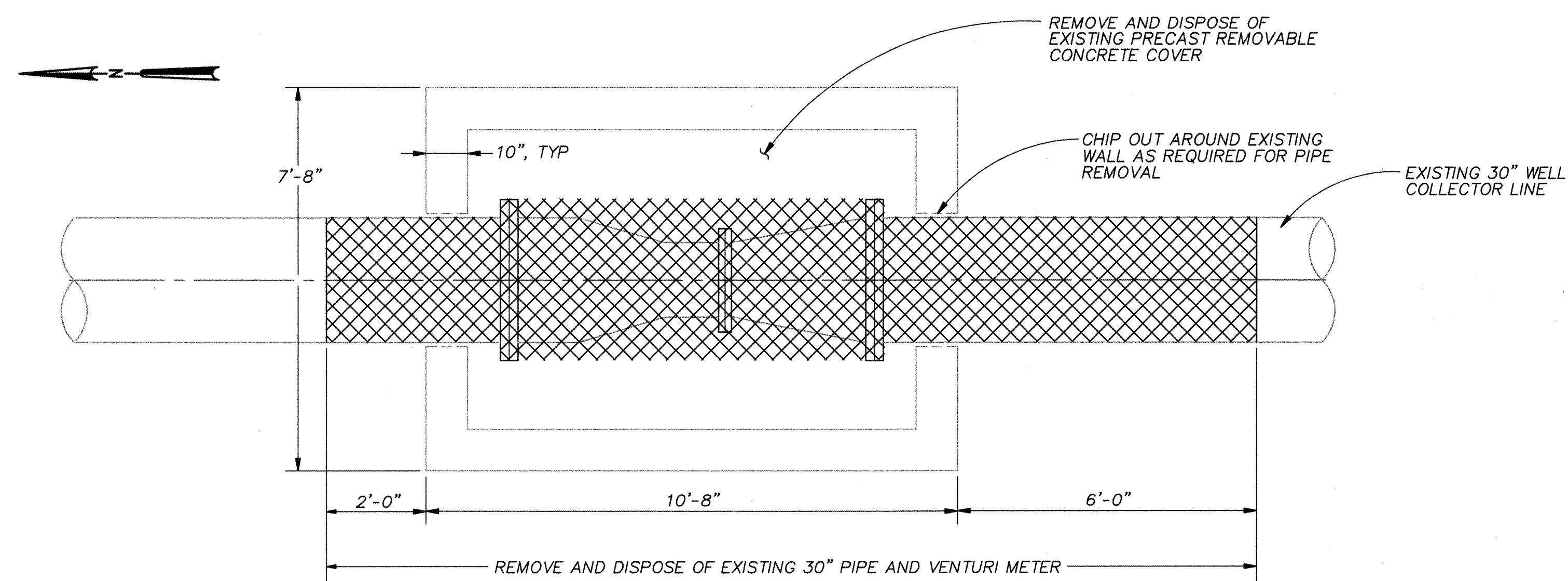
PIPING MODIFICATION PLAN



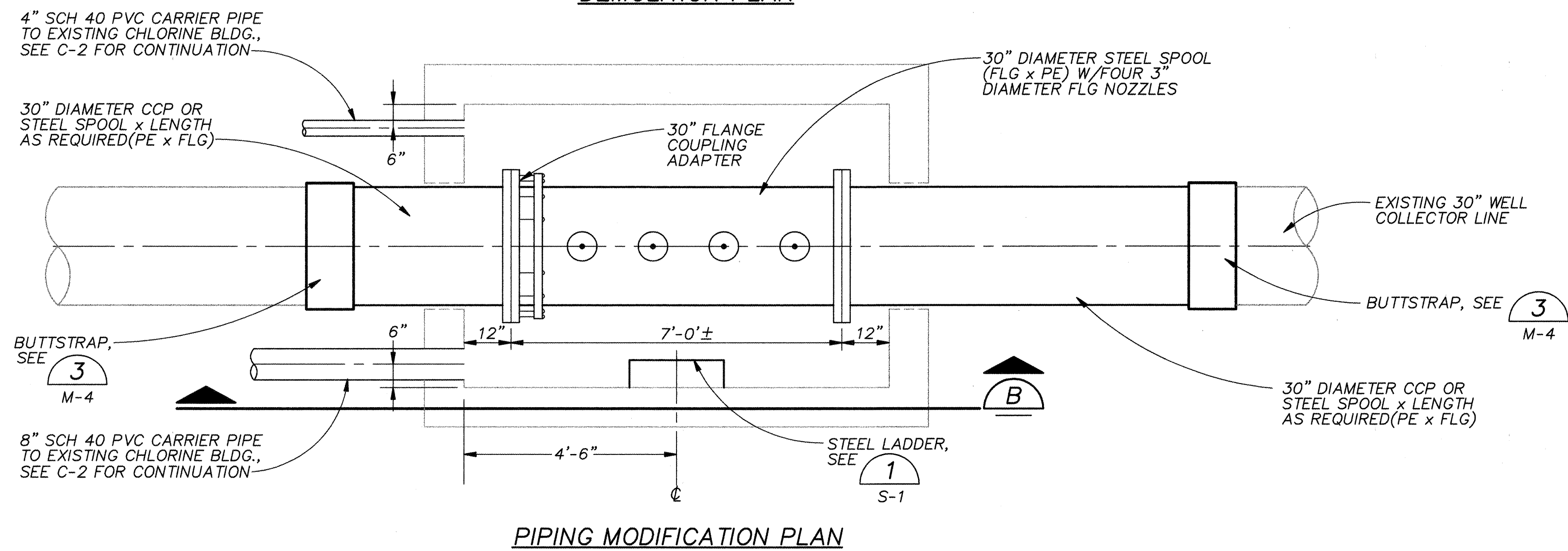
NOTES:

- CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE MATERIALS, PIPE DIAMETER AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS.
- PAINT EXISTING STEEL LADDER, CHECKER PLATE AND SUPPORT BEAMS AS SPECIFIED IN SECTION PAINTING.

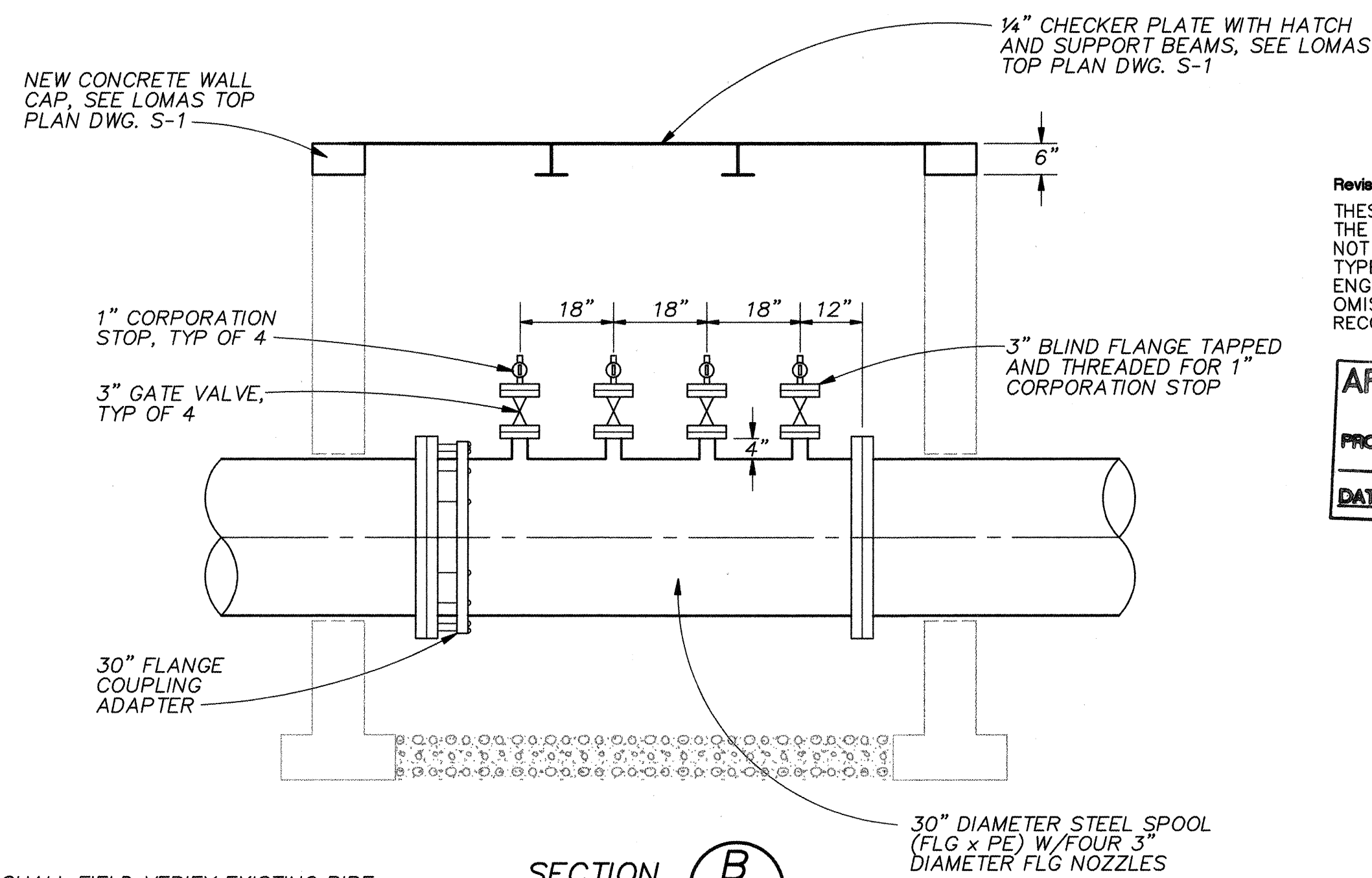
DURANES CHLORINE INJECTION VAULT 1
1/2" = 1'-0" C-1



DEMOLITION PLAN



PIPING MODIFICATION PLAN



NOTES:

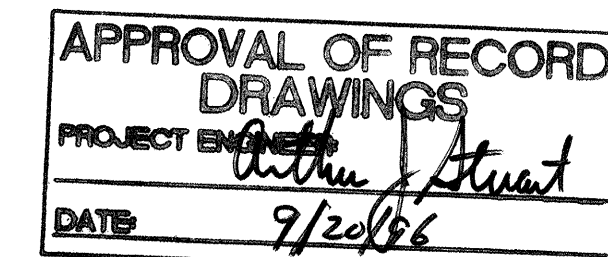
- CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE MATERIALS, PIPE DIAMETER AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS.
- PAINT STEEL LADDER, CHECKER PLATE AND SUPPORT BEAMS AS SPECIFIED IN SECTION PAINTING.

LOMAS CHLORINE INJECTION VAULT 2
1/2" = 1'-0" C-2

RECORD DRAWINGS

Revisions Drawn by M. Brewer Date SEPT. 1996

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VERIFY SCALES

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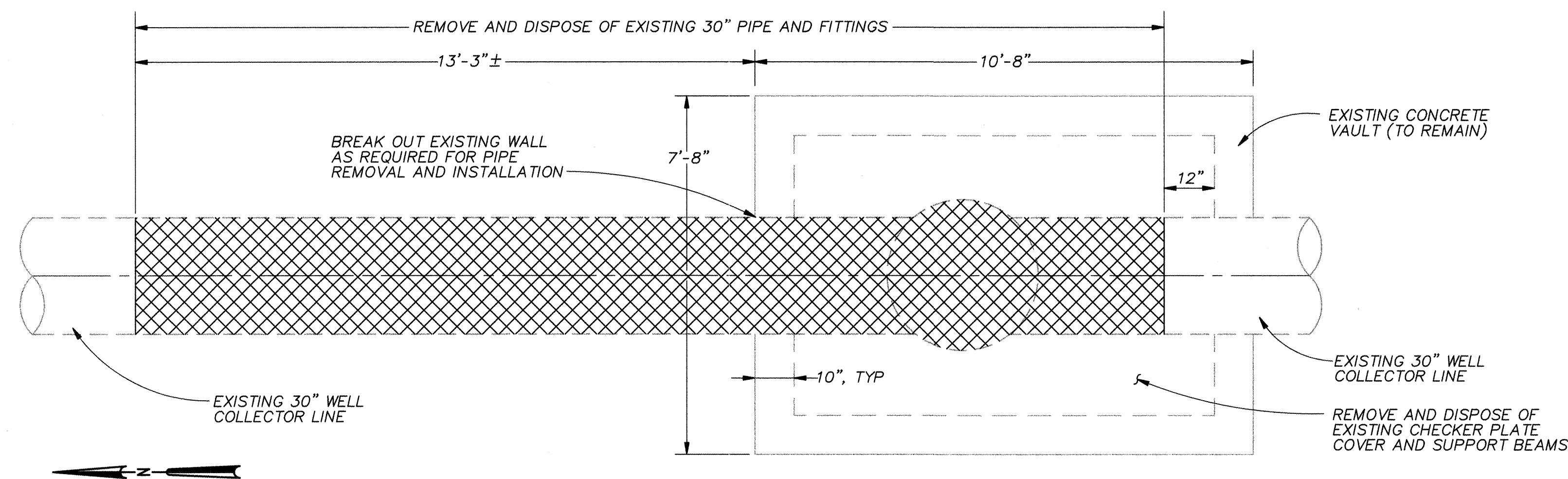
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

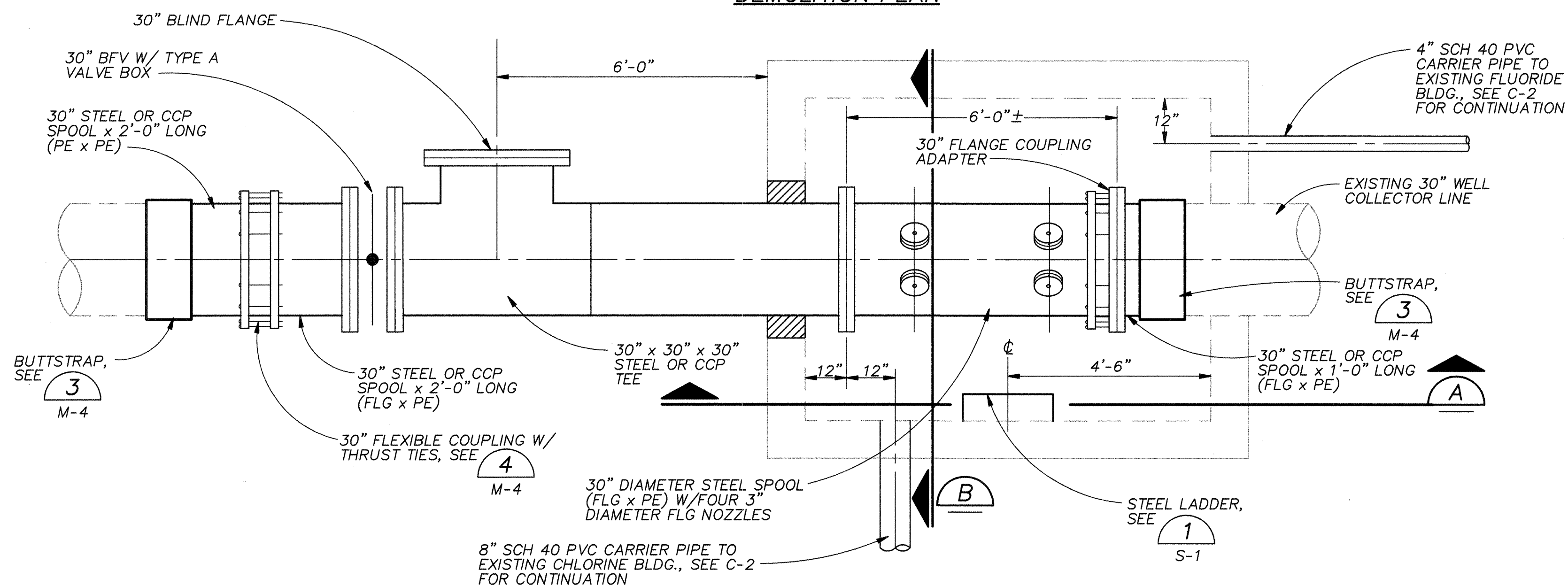


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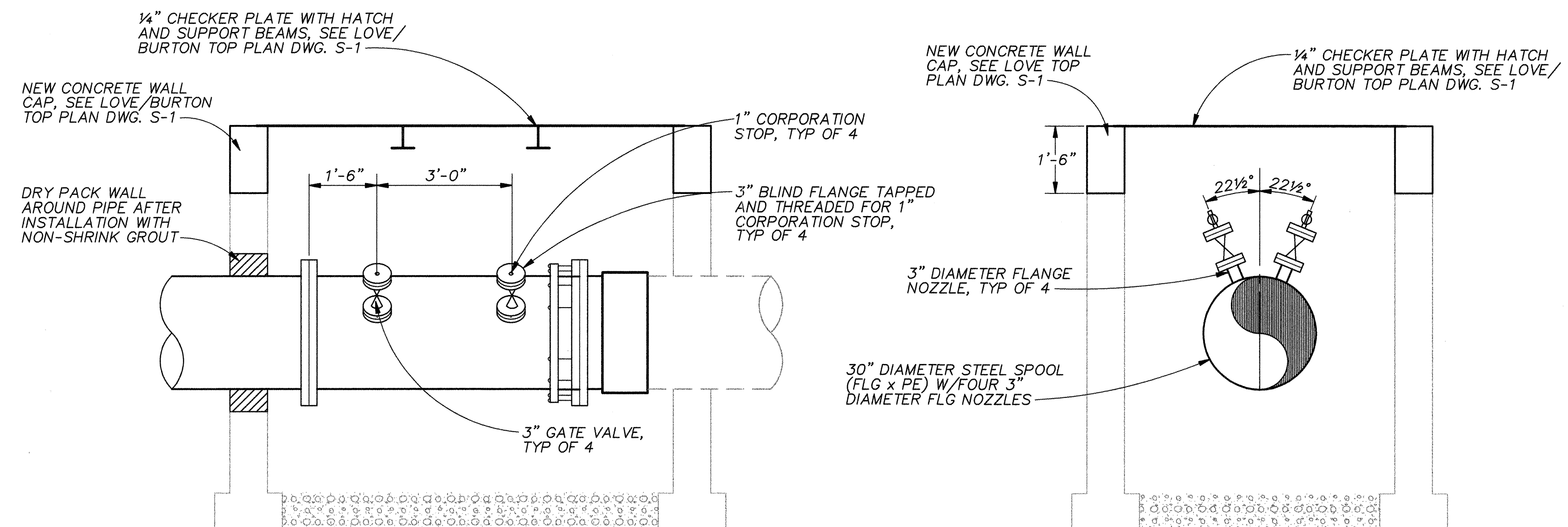
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS	
MECHANICAL DETAILS	
Design Review Committee	City Engineer Approval
Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO. 4783.91	Zone Map No. SHEET 9 OF 13 DRAWING NO. M-1



DEMOLITION PLAN



PIPING MODIFICATION PLAN



SECTION A

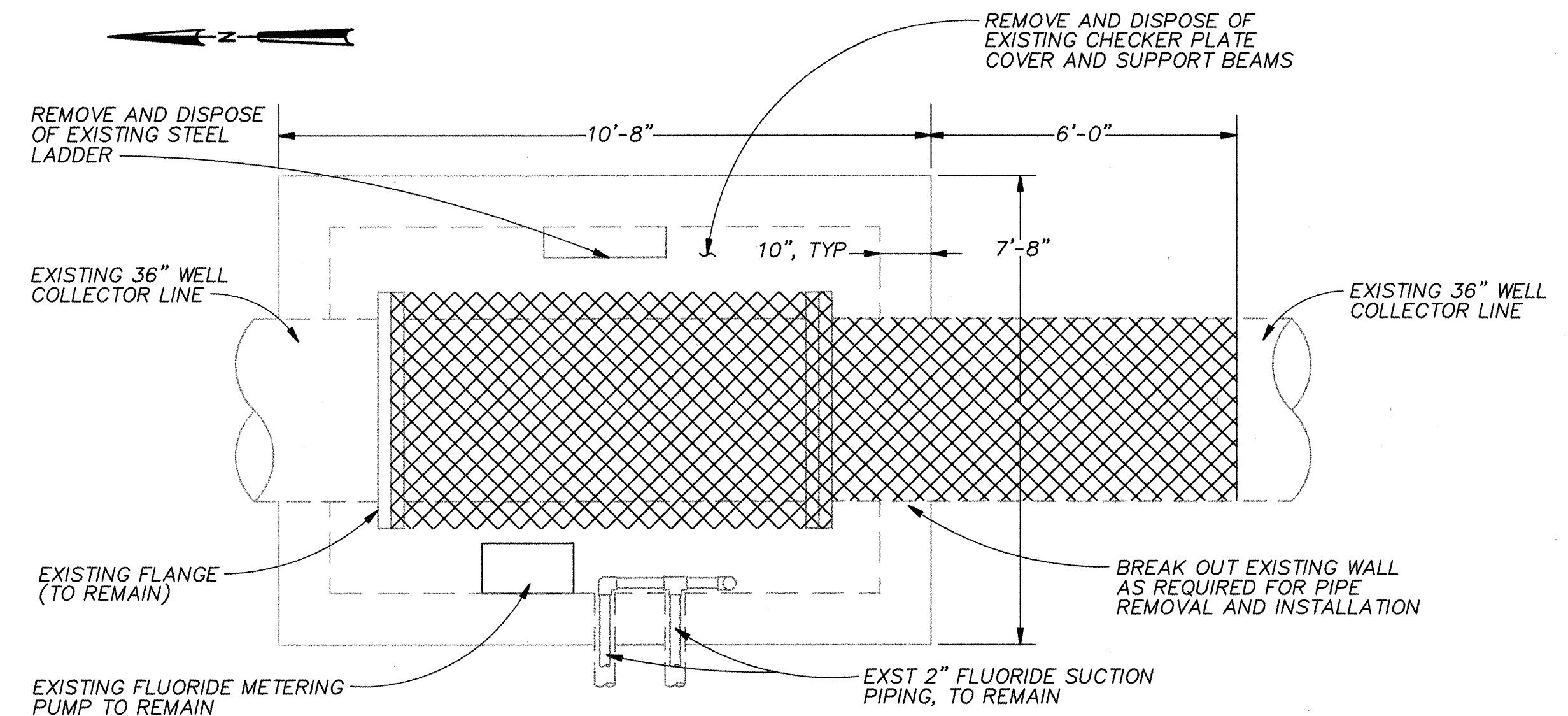
SECTION B

NOTES

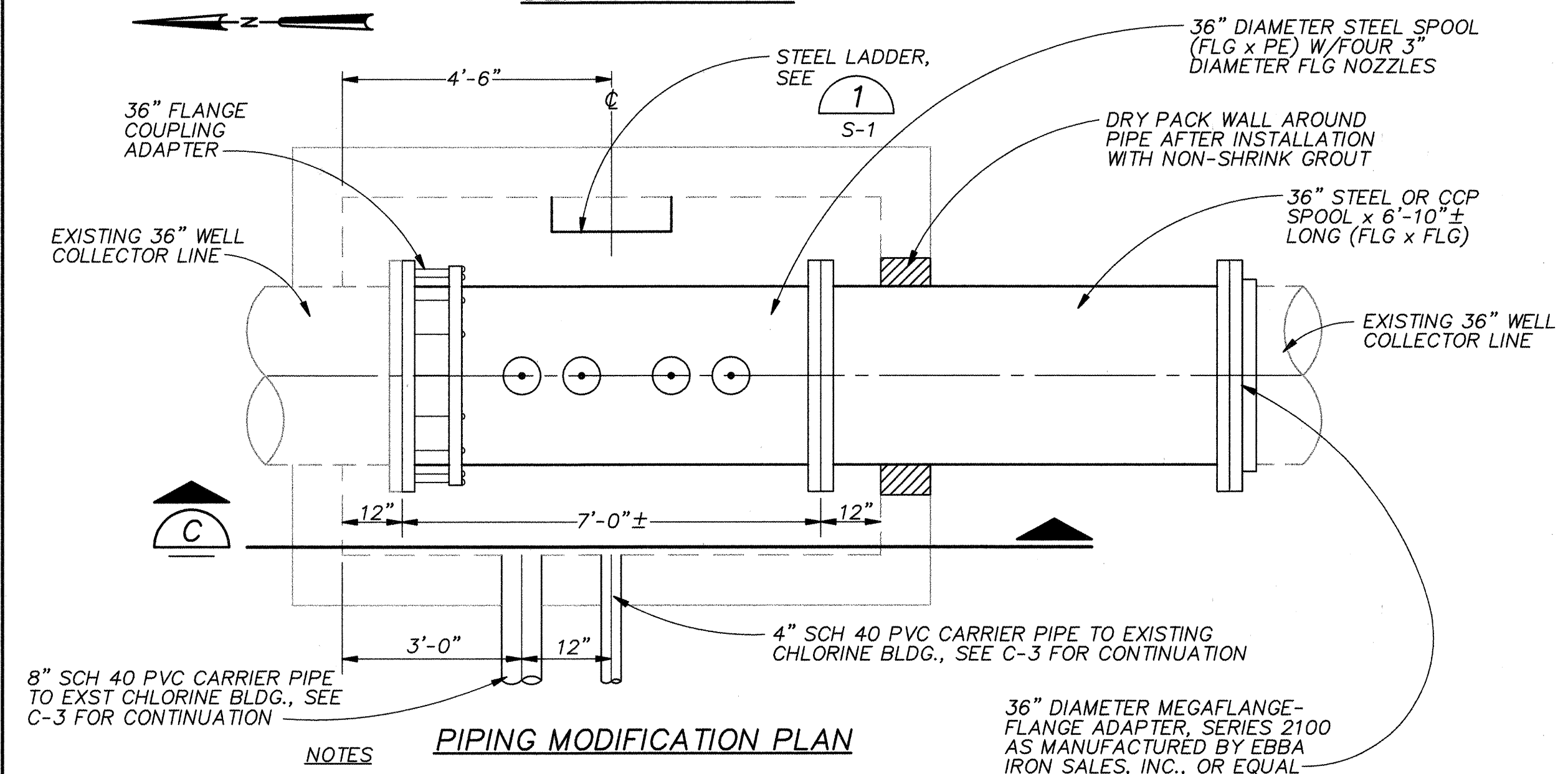
1. CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE MATERIALS, PIPE DIAMETER AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS.
2. PAINT STEEL LADDER, CHECKER PLATE AND SUPPORT BEAMS AS SPECIFIED IN SECTION PAINTING.

LOVE CHLORINE INJECTION VAULT 1

APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *Arthur J. Stuenkel*
DATE *9/20/96*



DEMOLITION PLAN



PIPING MODIFICATION PLAN

1. CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE MATERIALS, PIPE DIAMETER AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS.
2. PAINT STEEL LADDER, CHECKER PLATE AND SUPPORT BEAMS AS SPECIFIED IN SECTION PAINTING.


RECORD DRAWINGS

Revisions Drawn by M. Brewer Date SEPT. 1996

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VERIFY SCALES

BAR IS ONE INCH ON
ORIGINAL DRAWING

0  1"

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

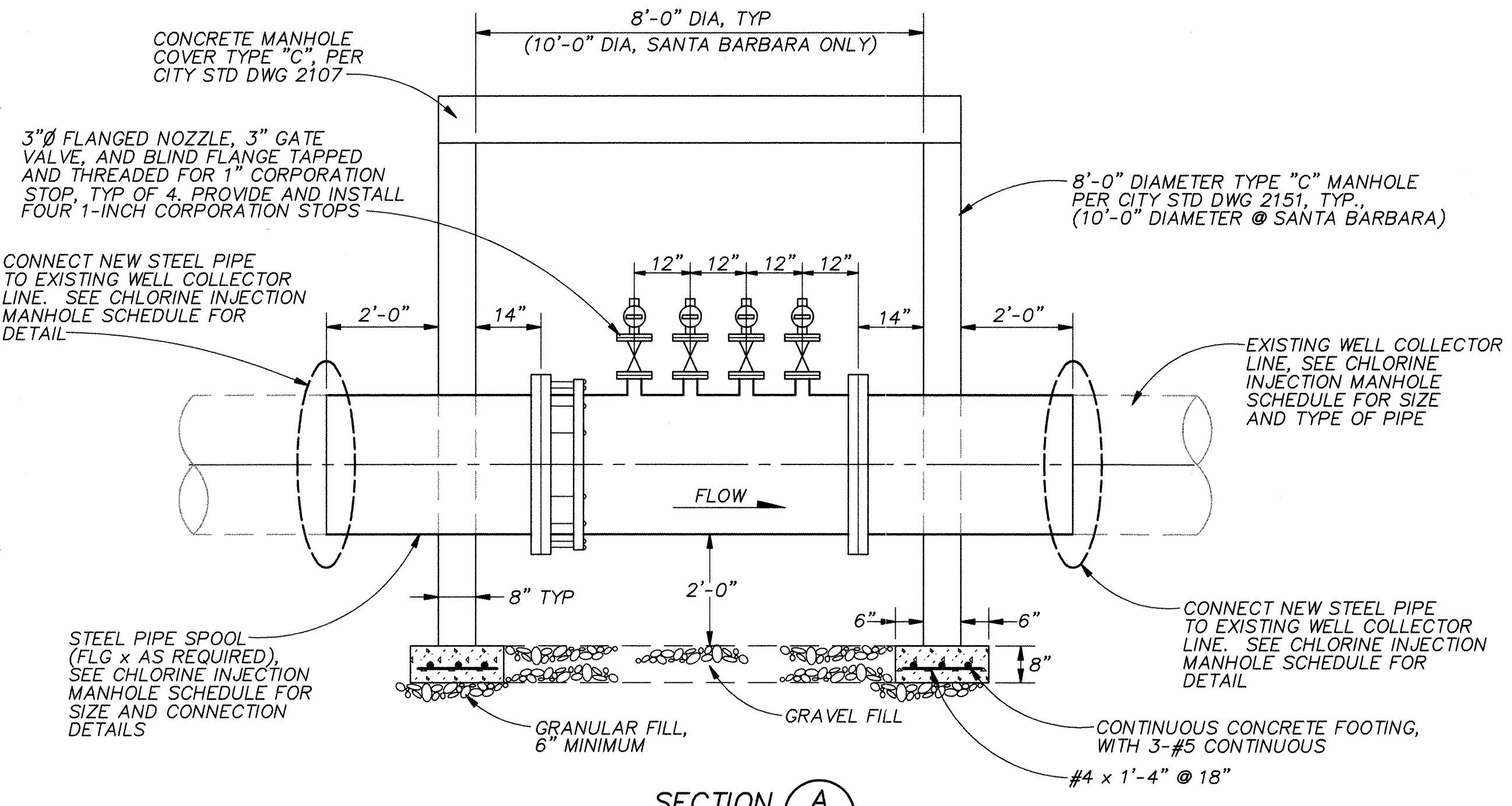
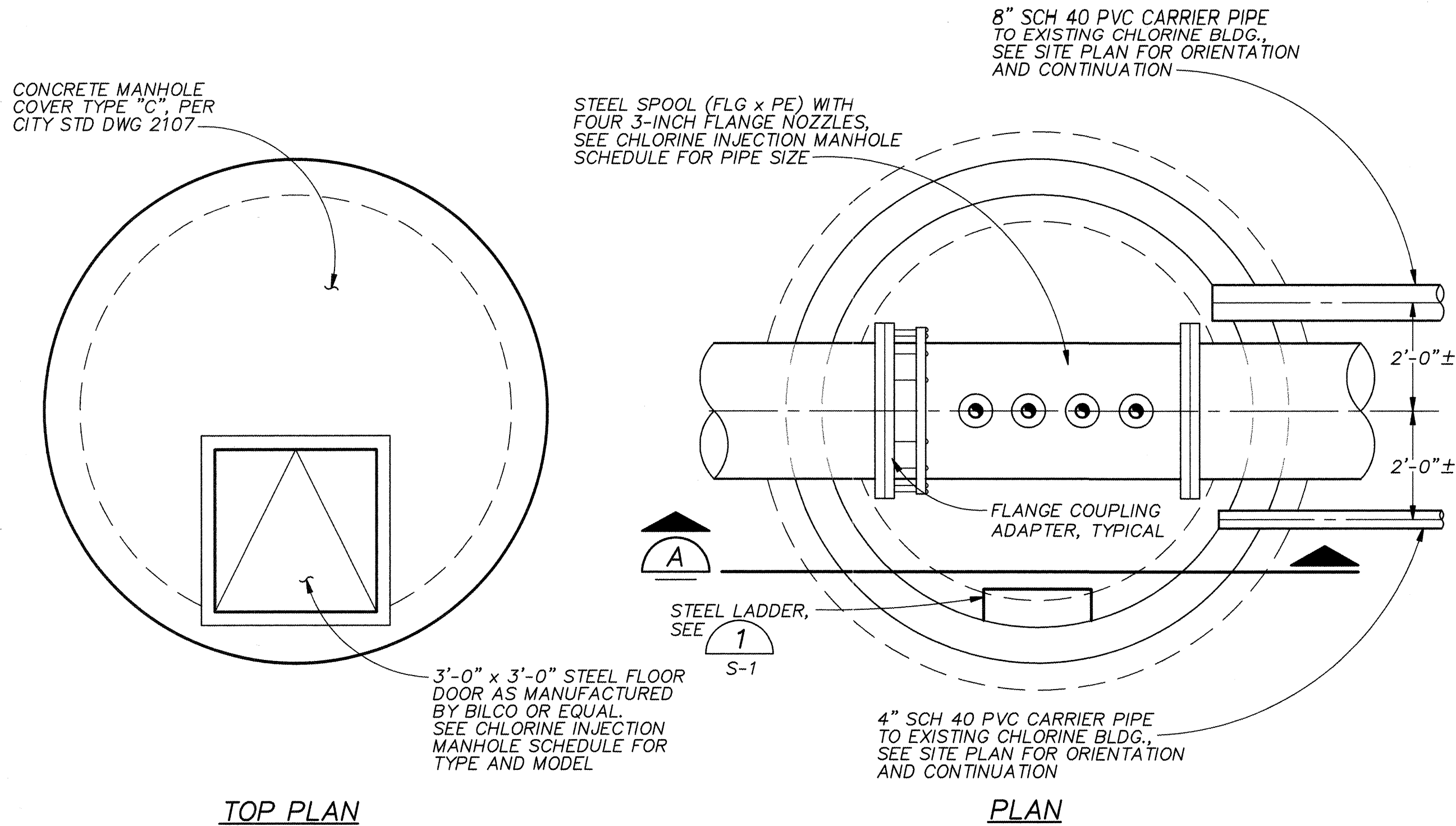


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Suite 350
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS
MECHANICAL DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO. 4783.91		Zone Map No.	SHEET 10 OF 13 DRAWING NO. M-2	

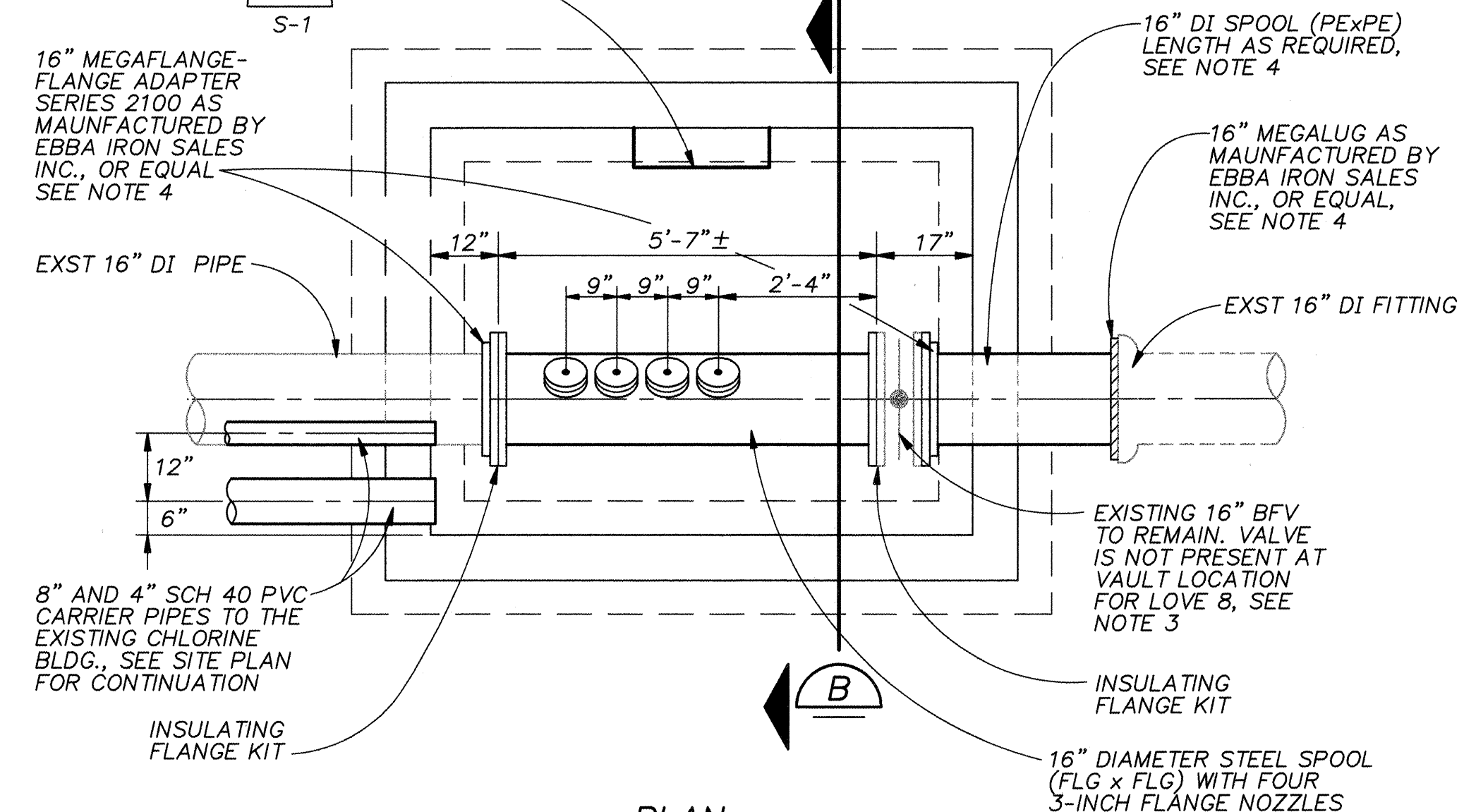
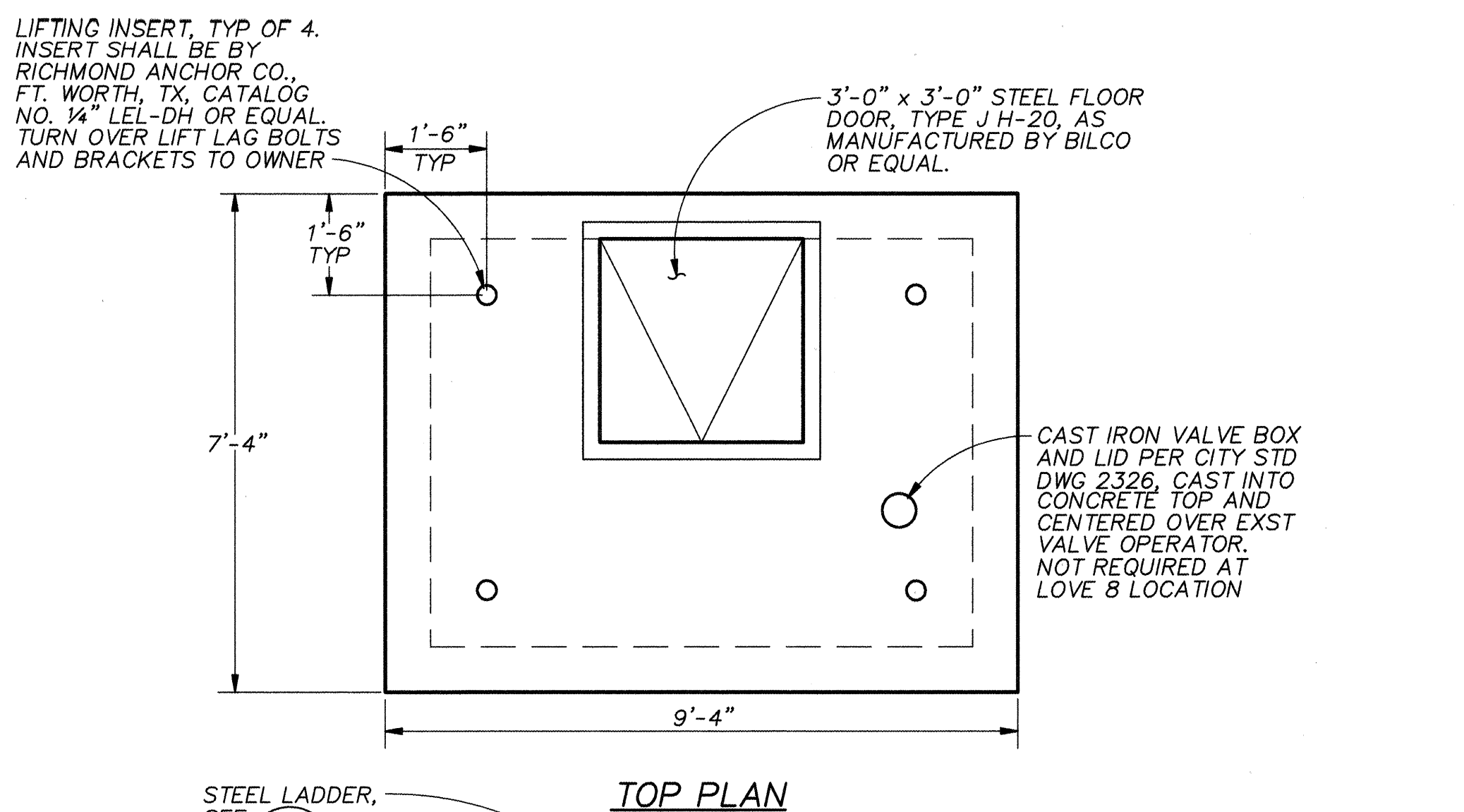


NOTES:

- CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE MATERIALS, PIPE DIAMETER AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS.
- PAINT STEEL LADDER AND HATCH AS SPECIFIED IN SECTION PAINTING.
- HEIGHT OF MANHOLE VARIES, TYPICALLY 8'-0" TO 10'-0".

CHLORINE INJECTION MANHOLE SCHEDULE					
LOCATION	PIPE SIZE	PIPE TYPE	CONNECTION DETAIL	TOP OF VAULT ELEVATION	HATCH TYPE
ATRISCO	36-INCH	CCP	<u>A</u>	2'-0" ABOVE EXST GRADE	TYPE Q
CHARLES WELLS	36-INCH	DI	<u>B</u>	MATCH EXISTING GRADE	TYPE J H-20
LEYENDECKER	24-INCH	CCP	<u>A</u>	3'-0" ABOVE EXST GRADE	TYPE Q
PONDEROSA	30-INCH	CCP	<u>A</u>	MATCH EXISTING GRADE	TYPE J H-20
SANTA BARBARA	42-INCH	CCP	<u>A</u>	12" ABOVE EXISTING GRADE	TYPE J H-20
VOL ANDIA	36-INCH	CCP	<u>A</u>	3'-0" ABOVE EXST GRADE	TYPE Q
RIDGECREST	36-INCH	CCP	<u>A</u>	2'-0" ABOVE EXST GRADE	TYPE J H-20
THOMAS	36-INCH	CCP	<u>A</u>	MATCH EXISTING GRADE	TYPE J H-20

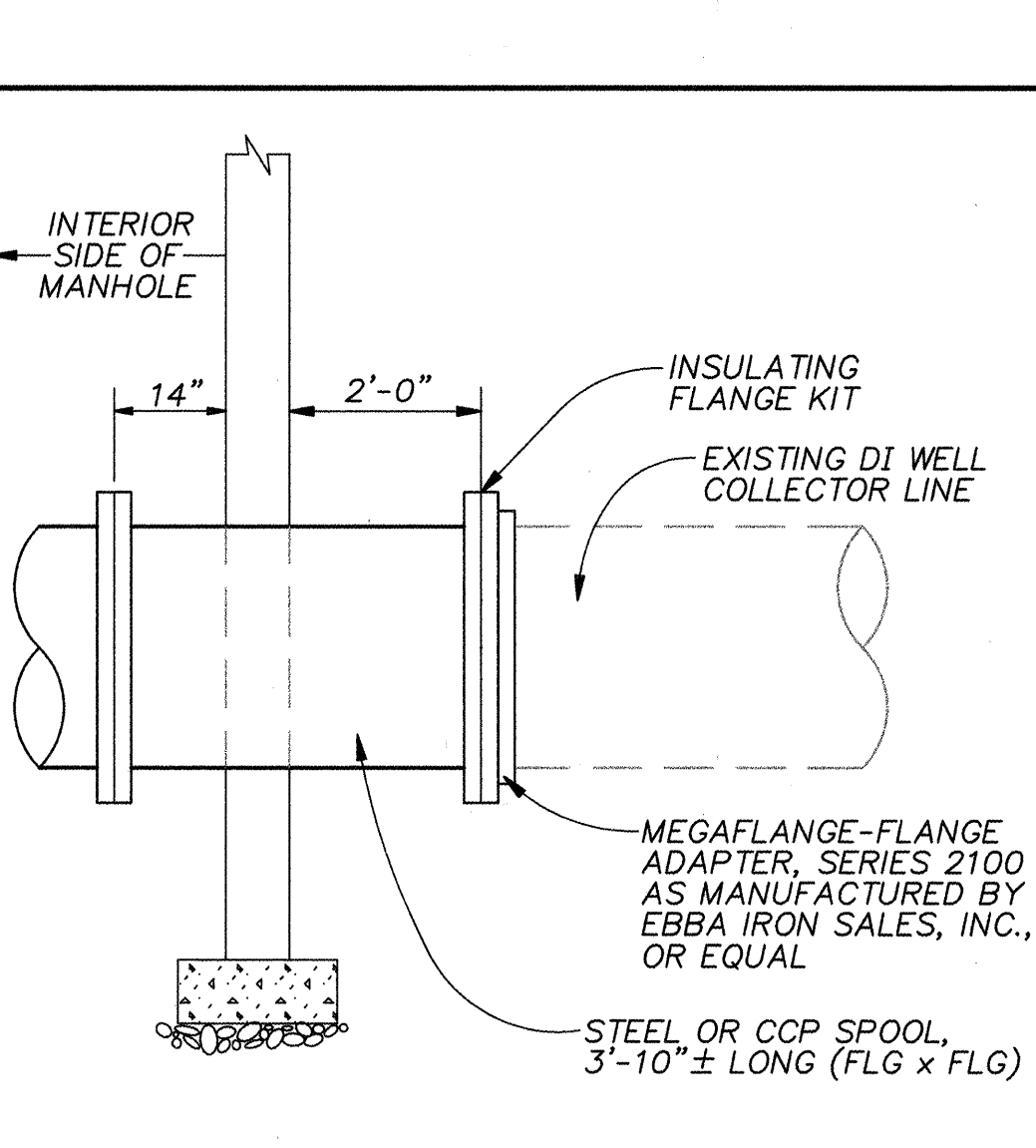
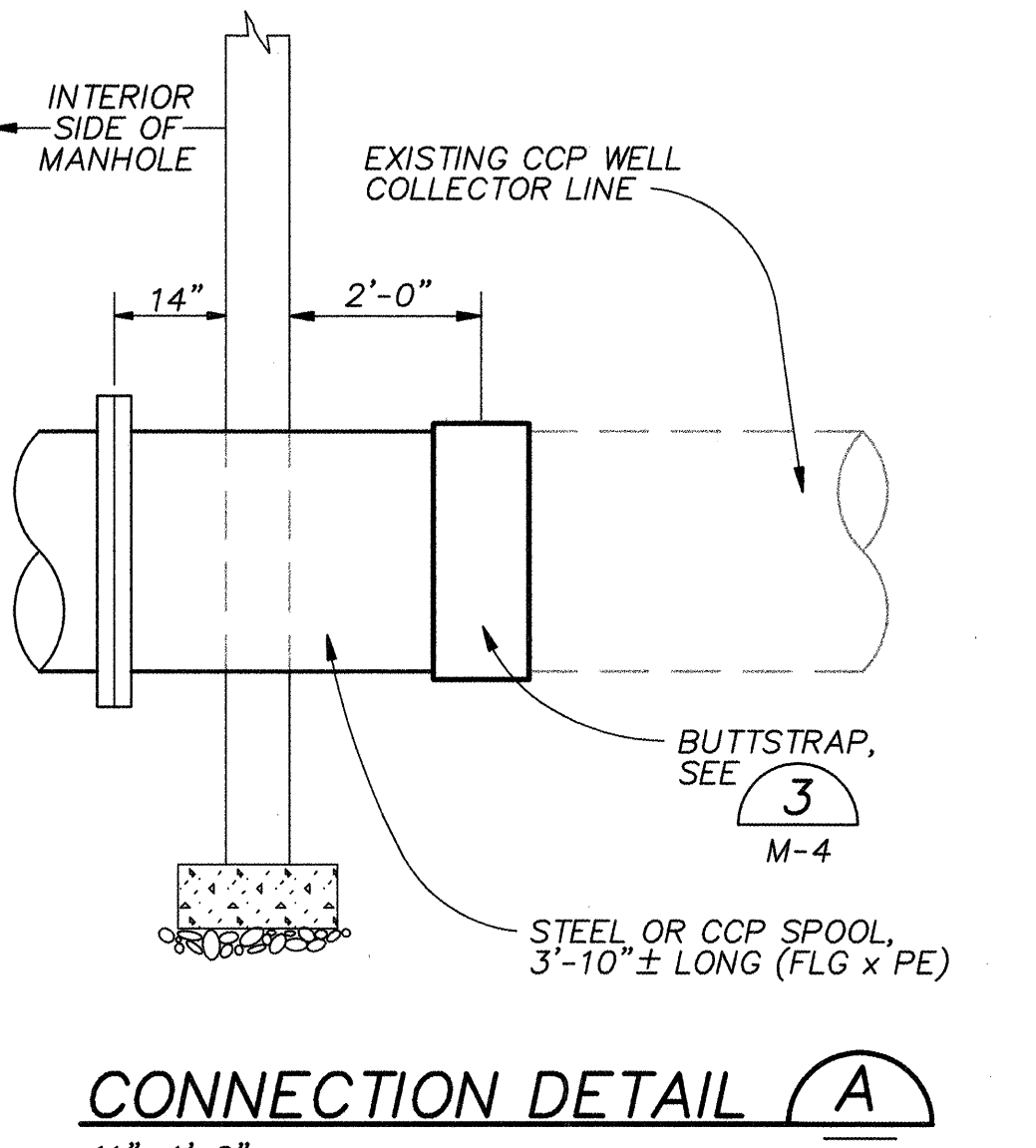
CHLORINE INJECTION MANHOLE 1
1/2"=1'-0" C-3, 4, 5, 6 & 8



NOTES:

- CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE MATERIALS, PIPE DIAMETER AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS.
- PAINT STEEL LADDER AND HATCH AS SPECIFIED IN SECTION PAINTING.
- AT LOVE 8 CUT EXISTING 16" DI PIPE AS REQUIRED AND PROVIDE MEGAFLANGE-FLANGE ADAPTER W/ INSULATING FLANGE KIT FOR CONNECTION TO 16" STEEL SPOOL INSIDE THE VAULT.
- AT THOMAS 5 AND CHARLES WELLS 5, REMOVE EXST 16" DI SPOOLS AND FLEXIBLE COUPLINGS AND INSTALL NEW 16" SPOOL (PEXPE), LENGTH AS REQUIRED WITH MEGALUG AND MEGAFLANGE-FLANGE ADAPTER AS SHOWN.

CHLORINE INJECTION VAULT 2
1/2"=1'-0" C-6 & 7



RECORD DRAWINGS

Revisions Drawn by: M. Brewer Date: SEPT. 1996

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VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

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APPROVAL OF RECORD DRAWINGS

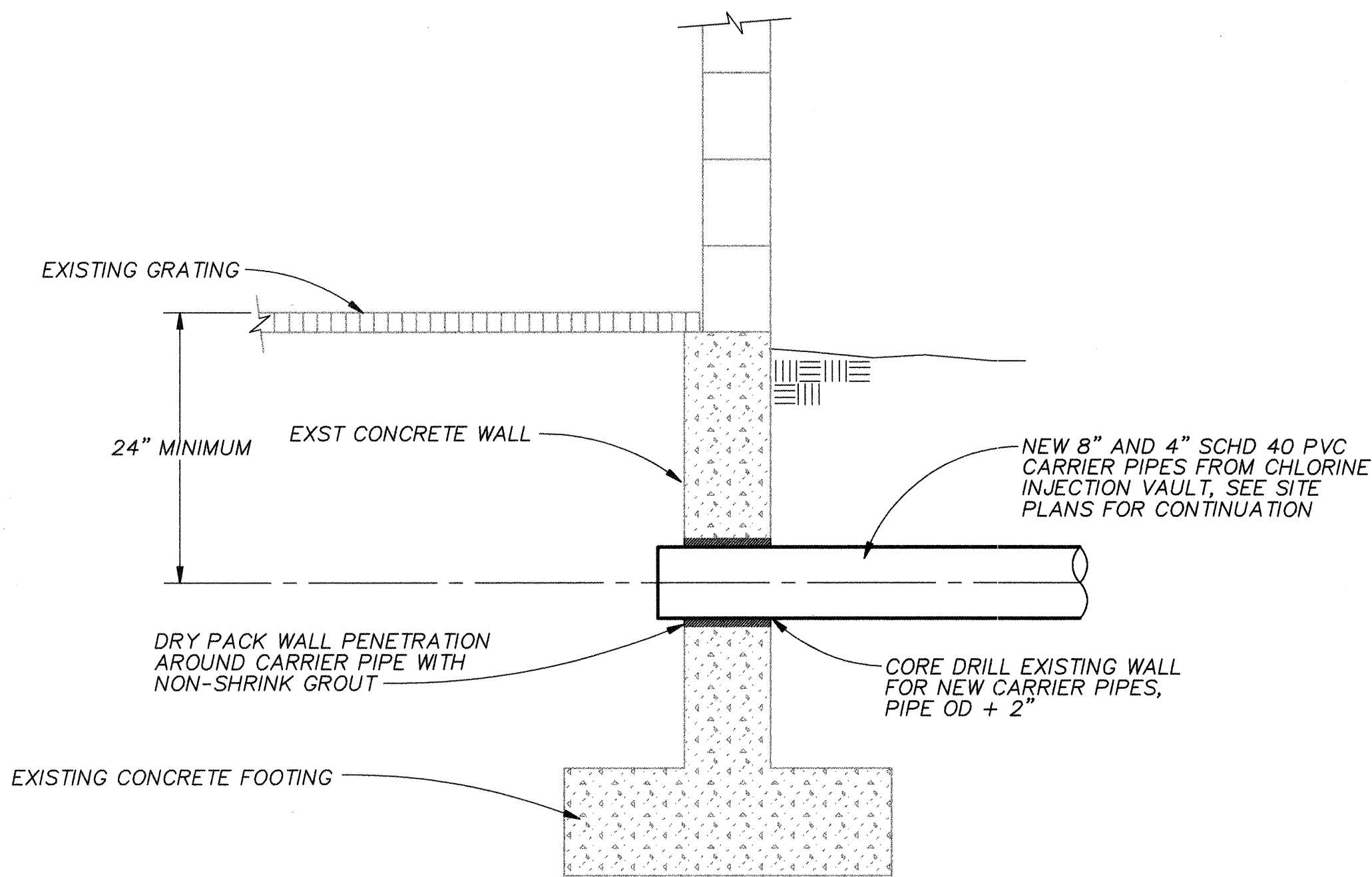
PROJECT ENGINEER

DATE: 9/20/96

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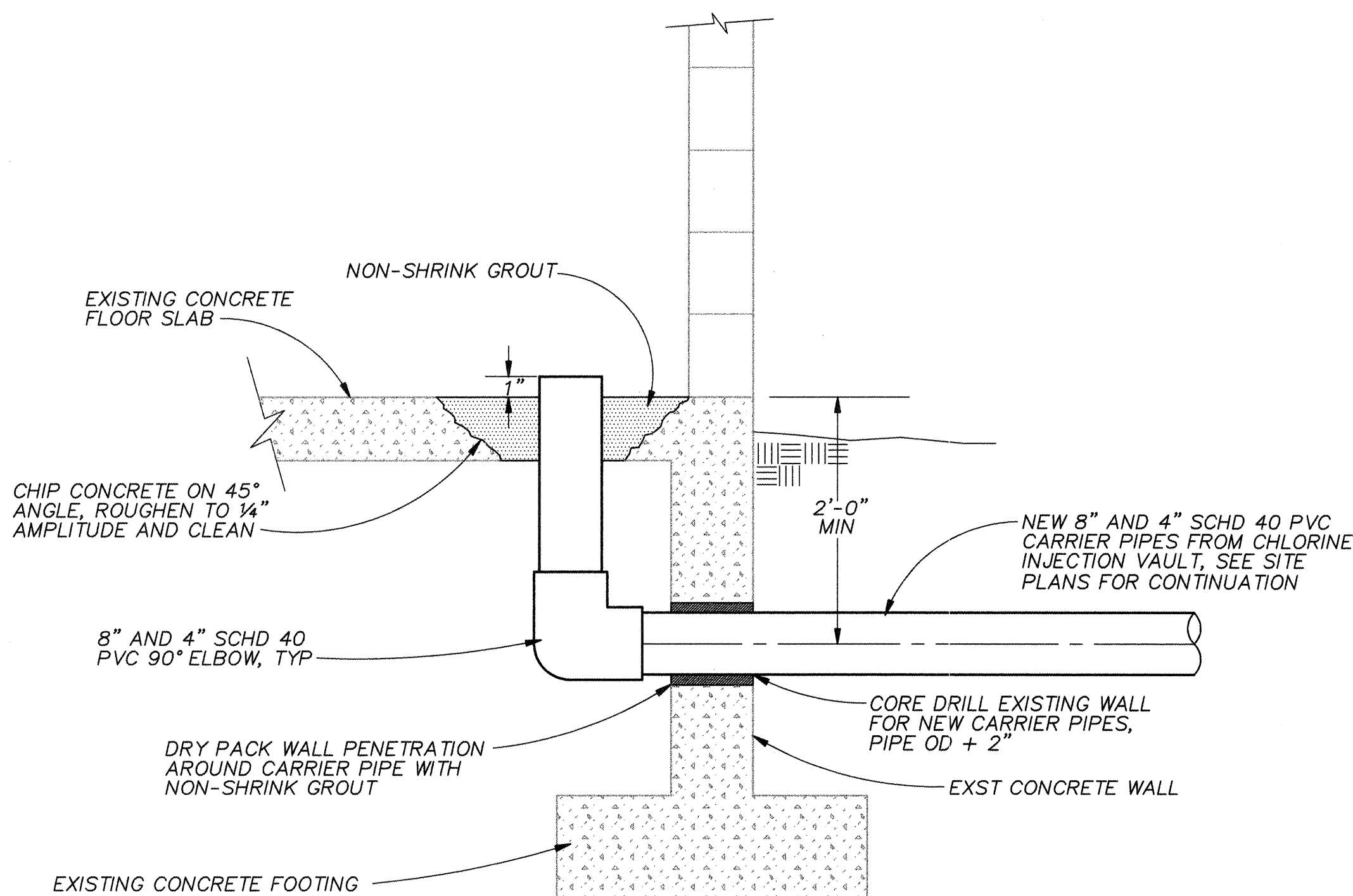
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS			
MECHANICAL DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO. 4783.91		Zone Map No.	SHEET 11 OF 13 DRAWING NO. M-3



NOTES:

1. SLOPE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO CHLORINE INJECTION VAULT OR MANHOLE.
2. SEE SITE PLANS FOR LOCATION OF PIPE PENETRATION INTO BUILDING, VAULTS AND GENERAL ROUTING.

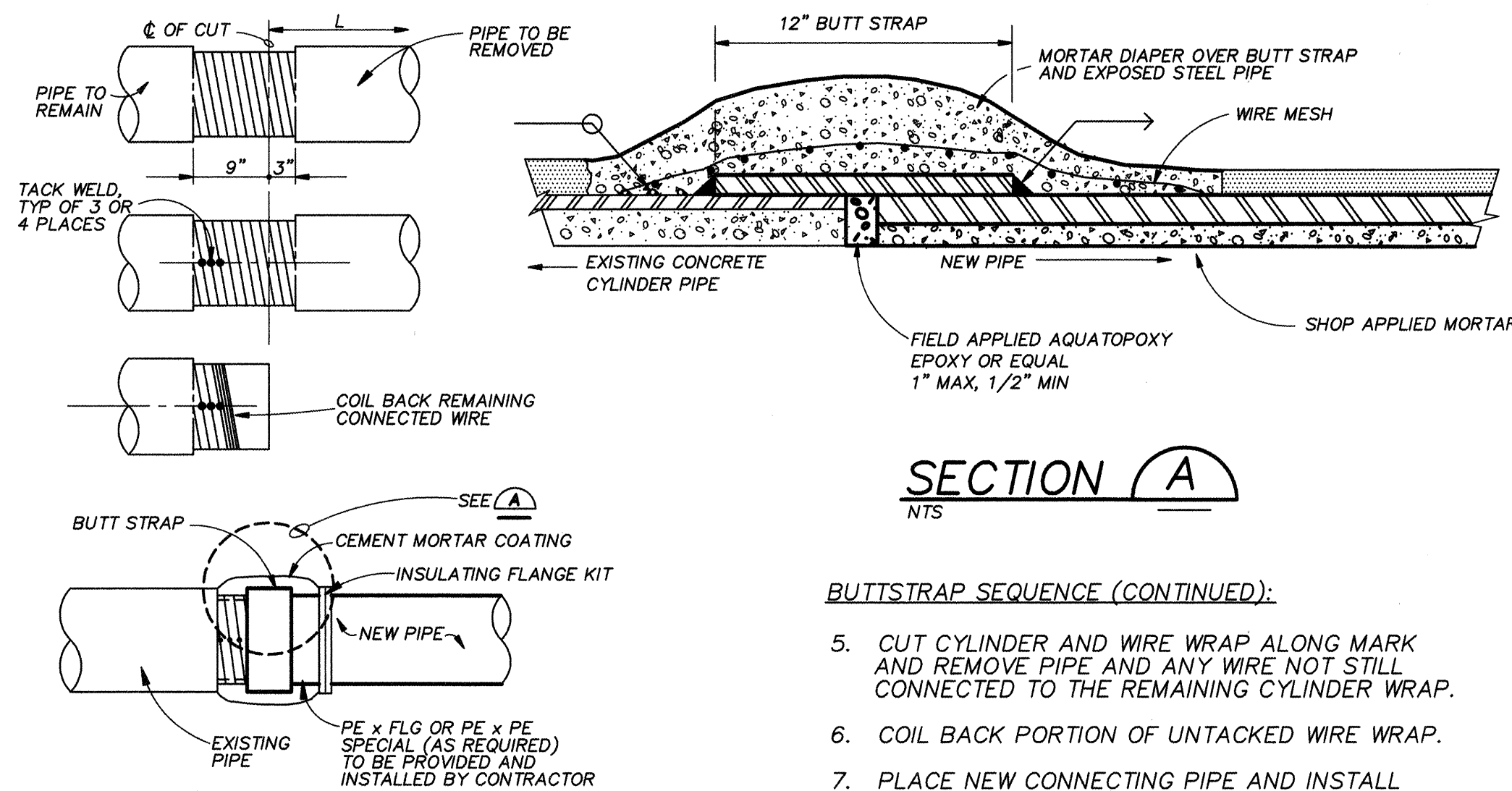
DETAIL 1
NTS C-2,3,4,5&6



NOTES:

1. SLOPE CARRIER PIPE DOWN FROM CHLORINE BUILDING TO CHLORINE INJECTION VAULT OR MANHOLE.
2. SEE SITE PLANS FOR LOCATION OF PIPE PENETRATION INTO BUILDING, VAULTS AND GENERAL ROUTING.

DETAIL 2
NTS C-1,2,6&7



BUTTSTRAP SEQUENCE:

1. DETERMINE LENGTH "L" OF PIPE TO BE REMOVED AND MARK ON PIPE.
2. CAUTIOUSLY CHIP OFF THE COATING 9" FROM THE MARKED POINT OF PIPE TO REMAIN, THEN CHIP OFF THE COATING OF THE PORTION OF PIPE TO BE REMOVED 3" FROM THE MARKED POINT.
3. MARK THE CUT LOCATION ON THE EXPOSED WIRE WRAPPED CYLINDER.
4. TACK WELD EXPOSED WIRE ALONG A HORIZONTAL LINE ON THREE OR FOUR CIRCUMFERENTIAL WRAPS OF THE PIPE TO REMAIN 6" IN FROM THE CUT MARK.

SECTION A
NTS

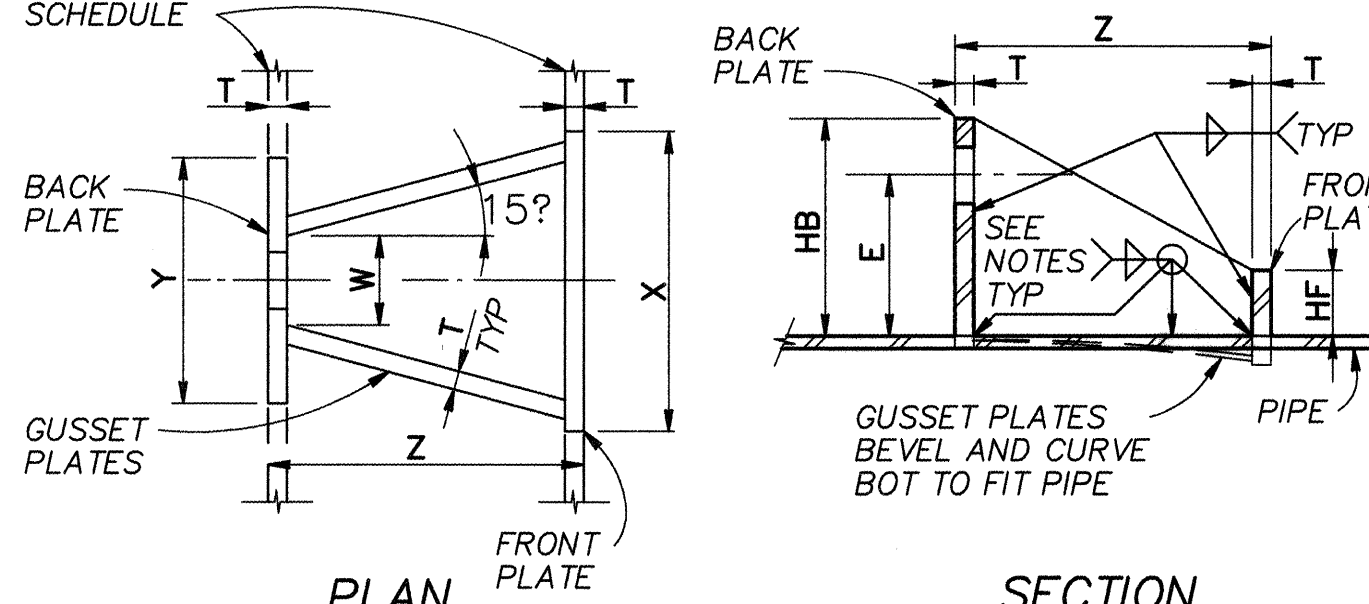
BUTTSTRAP SEQUENCE (CONTINUED):

5. CUT CYLINDER AND WIRE WRAP ALONG MARK AND REMOVE PIPE AND ANY WIRE NOT STILL CONNECTED TO THE REMAINING CYLINDER WRAP.
6. COIL BACK PORTION OF UNTACKED WIRE WRAP.
7. PLACE NEW CONNECTING PIPE AND INSTALL BOTTOM HALF OF 12" BUTT STRAP AND WELD.
8. EPOXY LINE THE INSIDE BOTTOM OF THE BUTT STRAP.
9. PLACE THE TOP HALF OF THE BUTT STRAP ON THE PIPE AND WELD.
10. EPOXY LINE THE TOP HALF OF THE BUTT STRAP.
11. PULL TAUGHT THE REMAINING WIRE WRAP (STEP 6) BACK TO WITHIN 1" OF BUTT STRAP OVERLAP AND TACK WELD.
12. PLACE CEMENT MORTAR COATING OVER BUTT STRAP AND EXPOSED WIRE WRAPPED CYLINDER IN ACCORDANCE WITH AWWA C303 USING 2 X 4 X 13 GA WELDED WIRE FABRIC HELD 3/8" FROM THE STEEL.

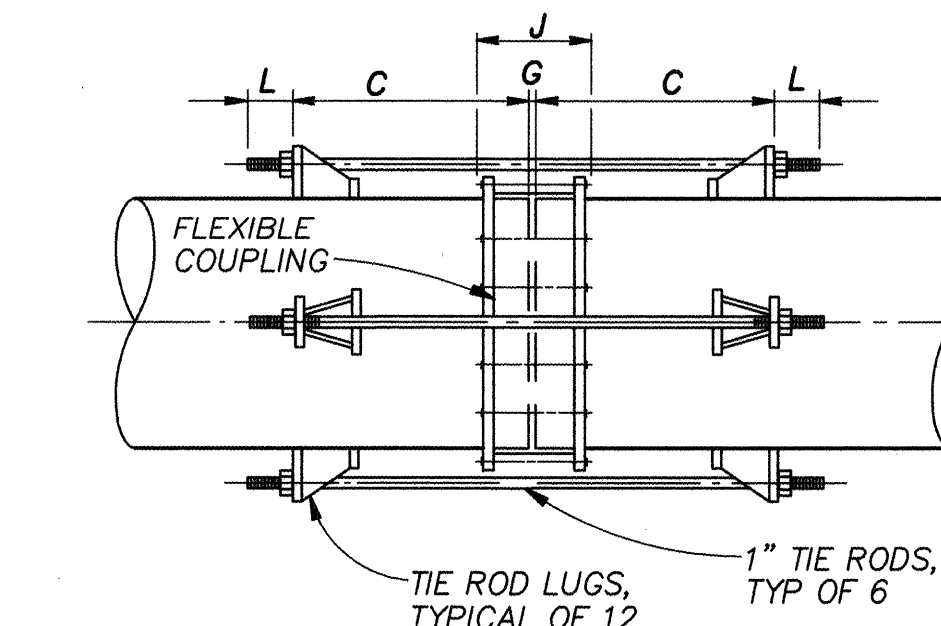
BUTTSTRAP DETAIL 3
NTS

LUG SCHEDULE										
STUD DIA	LUG TYPE	T	W	X	Y	Z	HB	E	HF	L
1	II	1/2	1-3/4	5-3/4	Cont	6	4-1/2	3-1/4	2	4

CUT CONTINUOUS PLATES TO UNIFORM HT CONT AROUND PIPE, SEE SCHEDULE



TIE ROD LUG
NTS



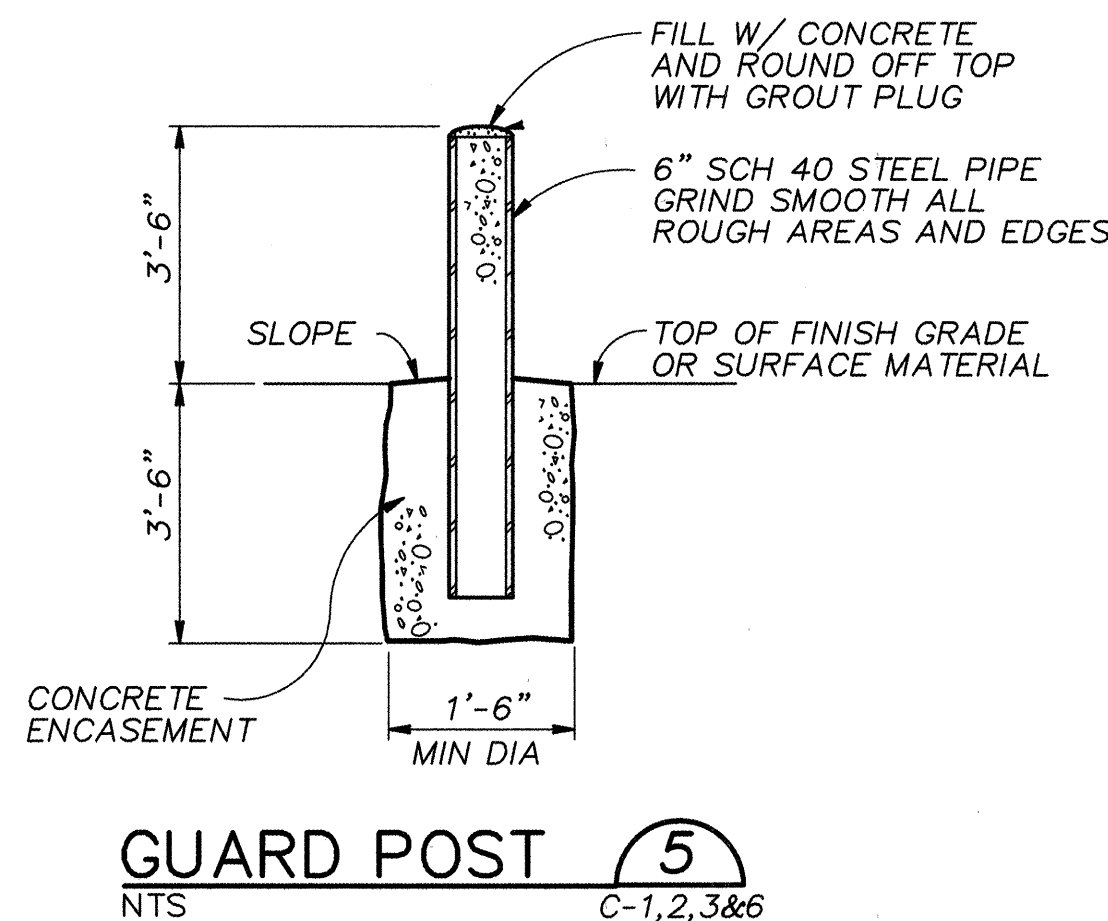
THRUST TIE DETAIL FOR STEEL PIPE 4
NTS M-2

NOTES:

1. THE MIDDLE RING LENGTH OF THE FLEXIBLE COUPLING SHALL BE AS SPECIFIED.
2. THE CONTRACTOR SHALL DETERMINE THE LENGTH "J" (COUPLING BOLT LENGTH) FROM MANUFACTURER'S CATALOGS USING THE SPECIFIED MIDDLE RING LENGTH.
3. "G" = MANUFACTURER'S RECOMMENDED SPACE BETWEEN ENDS OF PIPE.
4. "C" = J+Z+1 INCH, (ROUND THIS VALUE UP TO NEXT EVEN INCH), MINIMUM. (FOR Z DIMENSIONS, SEE LUG SCHEDULE.)
5. TIE ROD LENGTH = 2L+2C+G.

NOTES:

1. LUG SCHEDULE DIMENSIONS IN INCHES.
2. TIE RODS SHALL CONFORM TO ASTM A193 GRADE B7.
3. NUTS SHALL CONFORM TO ASTM A194 2H.
4. PLATE SHALL CONFORM TO ASTM A283 GRADE D.
5. TIE ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL TIE RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.
6. TIE ROD LUGS SHALL BE SPACED EQUALLY AROUND PIPE.
7. FILLET WELDS SHALL MEET THE MINIMUM REQUIREMENTS OF THE AISC SPECIFICATION EXCEPT AS FOLLOWS: FILLET WELDS SHALL BE 1/4-INCH MINIMUM EXCEPT WHEN WELDING 3/16-INCH PLATE WHERE THEY SHALL BE 3/16-INCH.
8. LUG TYPE I IS AS SHOWN IN DETAIL. LUG TYPE II HAS A CONTINUOUS BACK PLATE AROUND PIPE.
9. FOR ALL BURIED ASSEMBLIES, COAT ALL TIE RODS, AND EXPOSED STEEL WITH 16 MILS OF BITUMASTIC.



GUARD POST 5
NTS C-1,2,3&6

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER: *Arthur J. Stunt*
DATE: 9/26/96

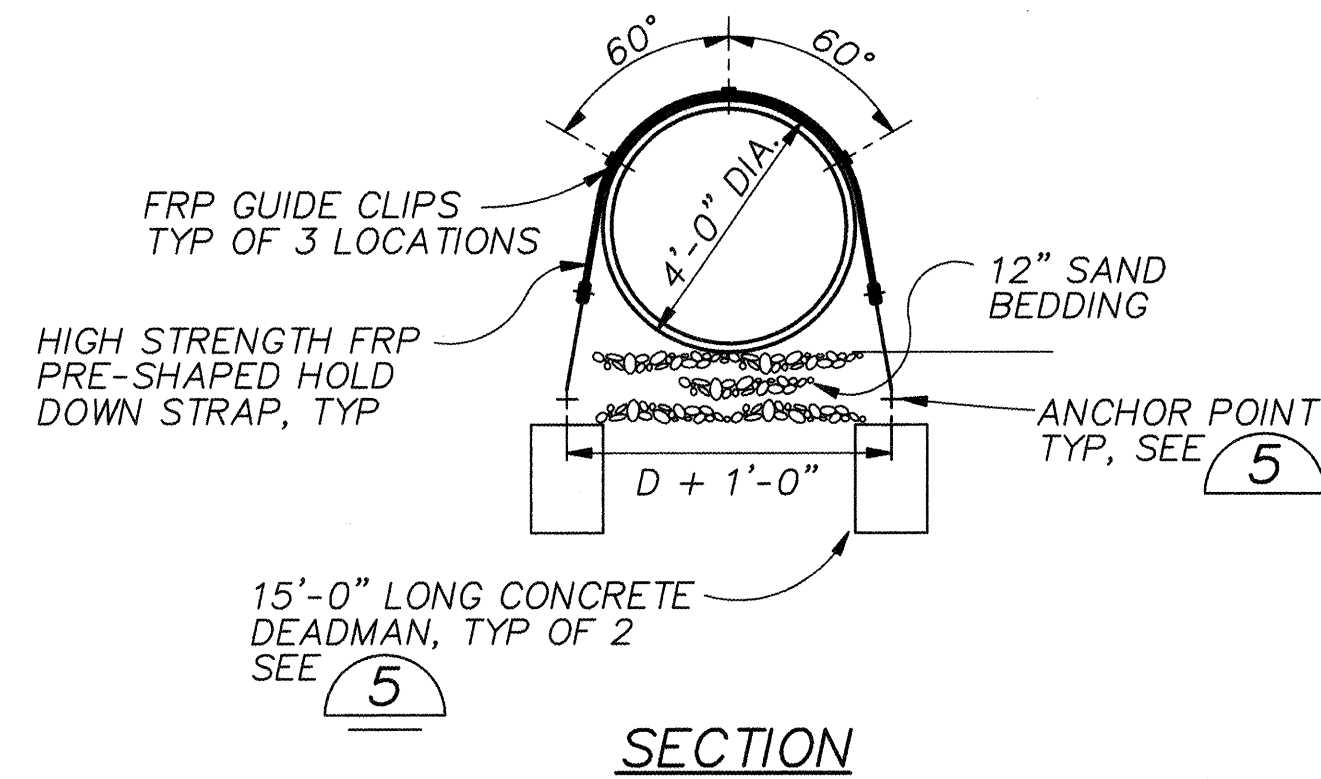
RECORD DRAWINGS

Revisions Drawn by: M. Brewer Date: SEPT. 1996
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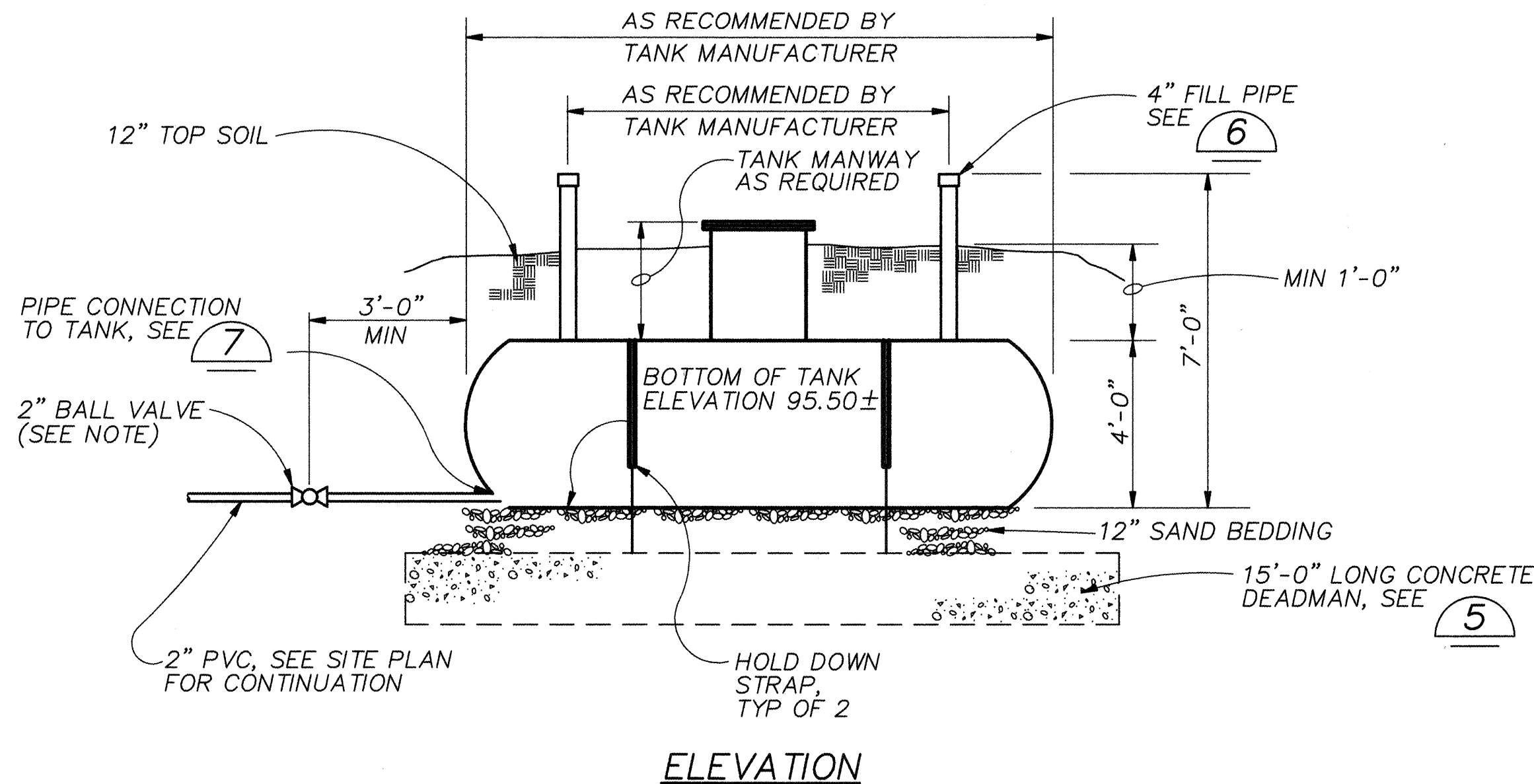
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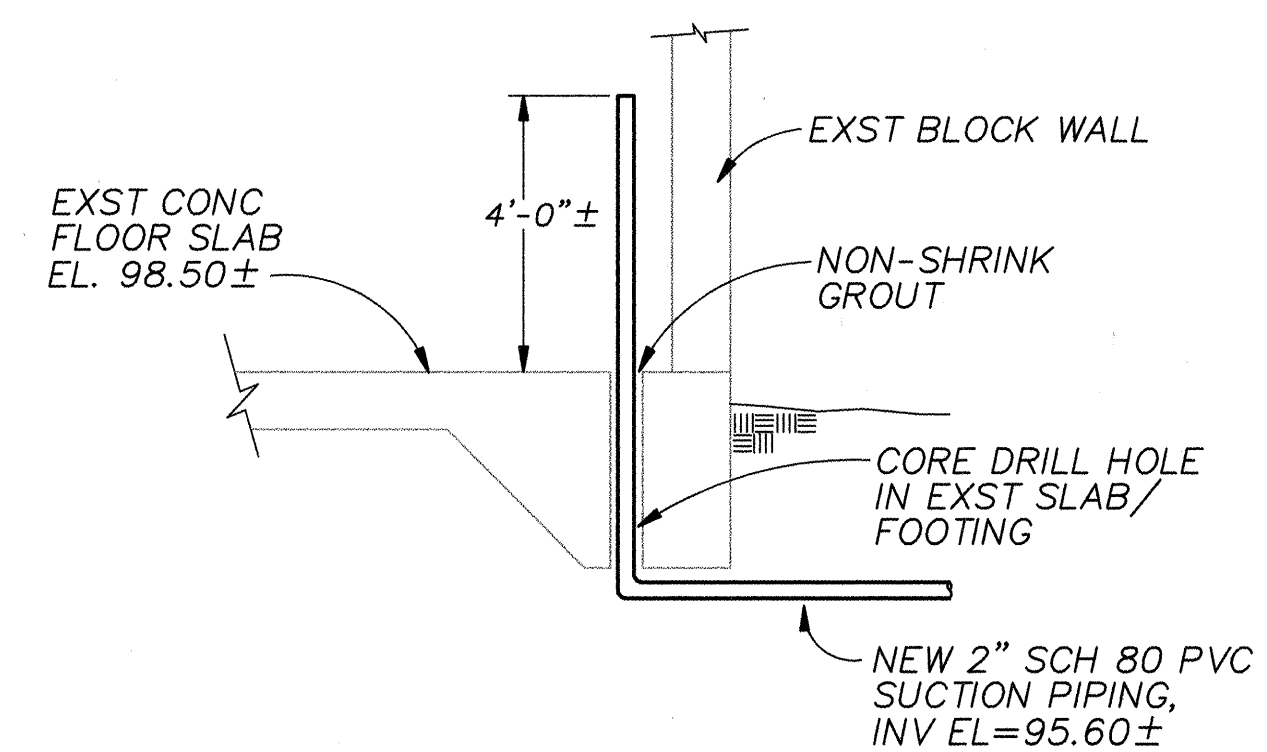
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS MECHANICAL DETAILS	
Design Review Committee	City Engineer Approval
Mo./Day/Yr.	Mo./Day/Yr.
CITY PROJECT NO. 4783.91	Zone Map No. SHEET 12 OF 13 DRAWING NO. M-4



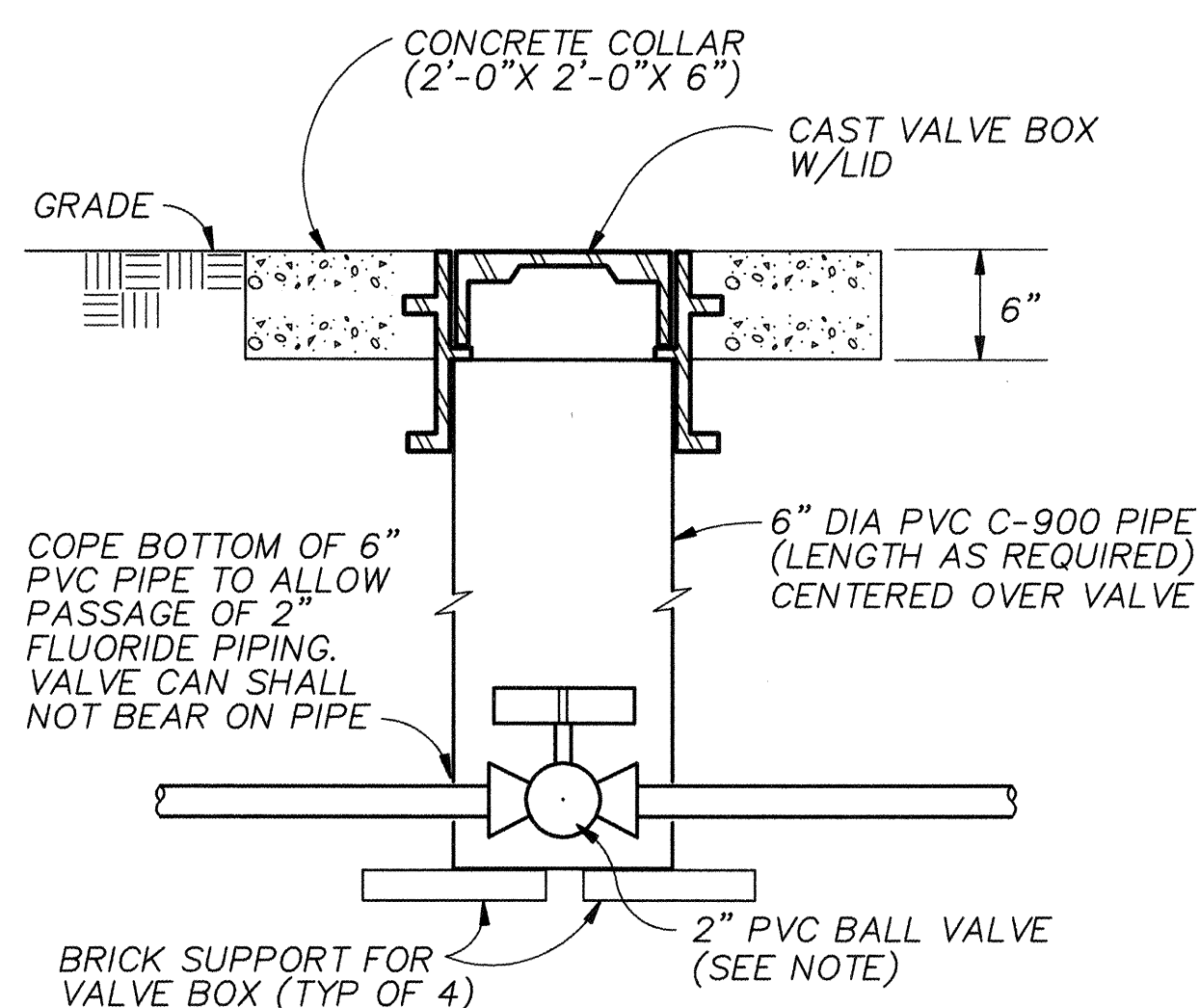
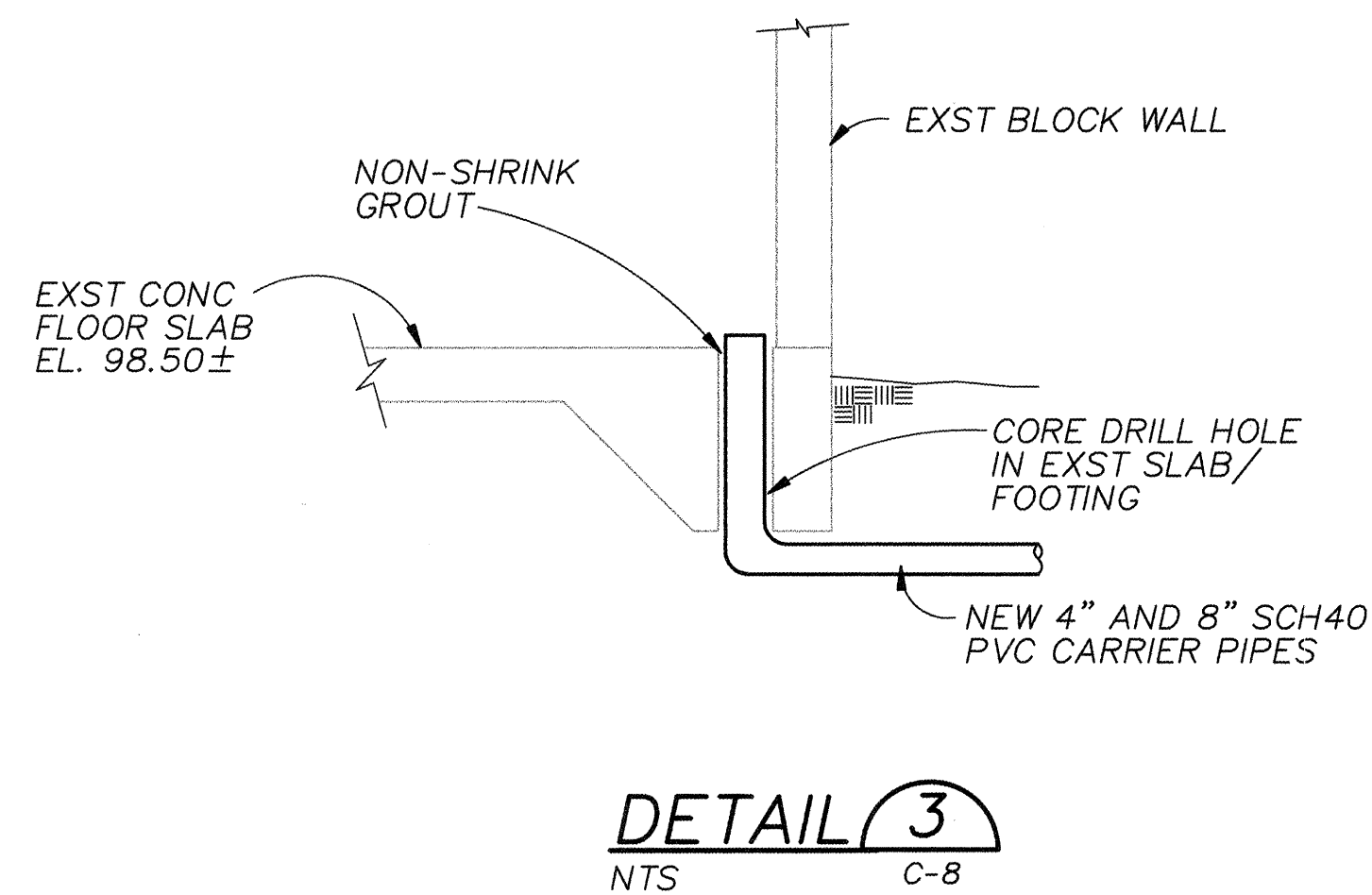
NOTE: BALL VALVE SHALL BE PVC RATED 150 psi @ 105° F. WITH ASTM D1784, TYPE I, GRADE 1 POLYVINYL CHLORIDE BODY, BALL, AND STEM. VALVE SHALL BE END ENTRY, DOUBLE UNION DESIGN, WITH SOLVENT WELD SOCKET ENDS, OR SINGLE UNION BALL VALVE WITH FLANGED ENDS DRILLED TO 150-POUND ANSI STANDARD. VALVE SHALL HAVE REPLACEABLE ELASTOMER SEATS AND VITON OR TEFLON O-RING STEM SEAL. VALVE SHALL BE PROVIDED WITH "I" NUT ACTUATOR FOR BURIED SERVICE OPERATION. VALVE SHALL BE CHEMTROL TRUE-BLOC OR EQUAL.



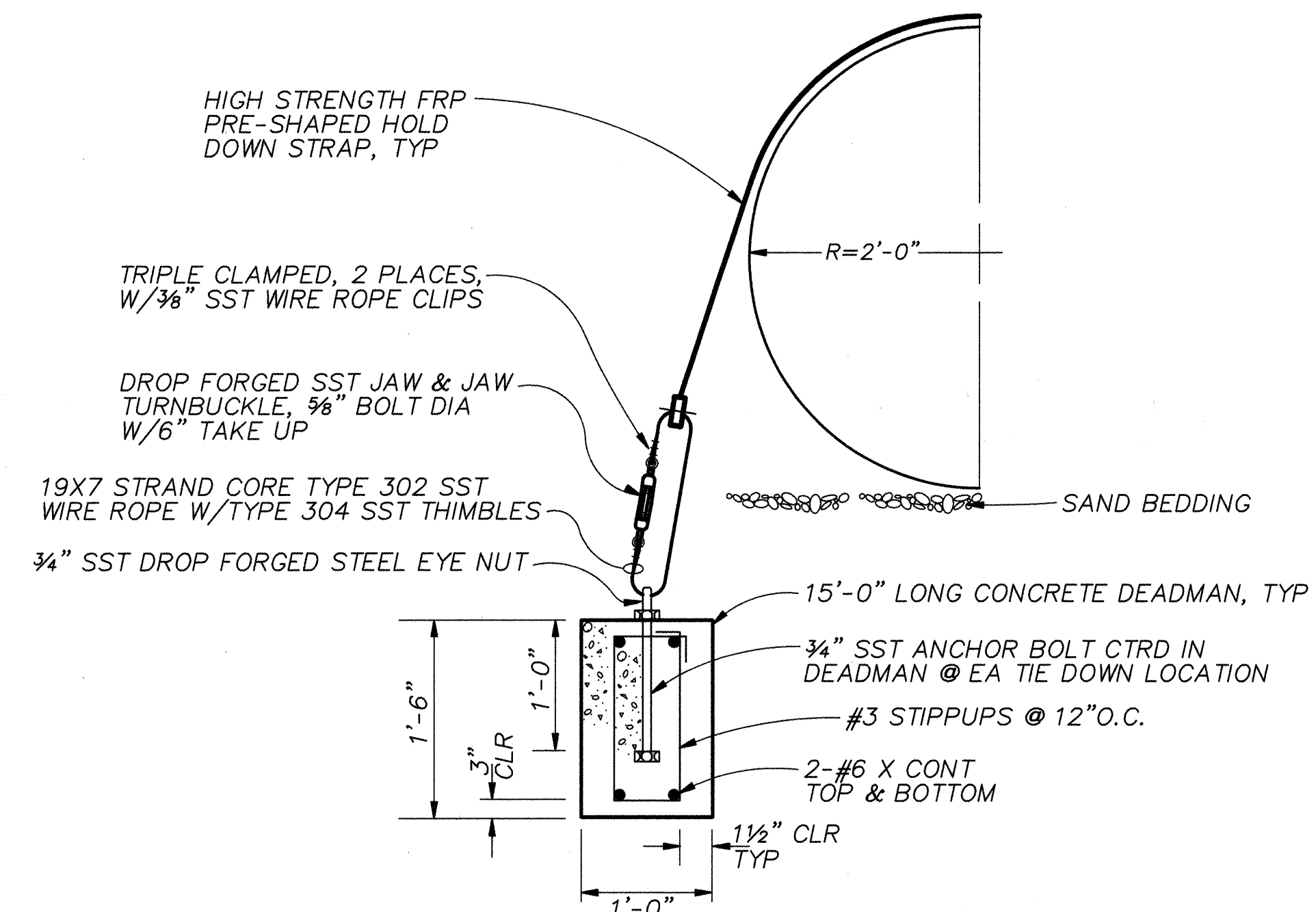
FLUORIDE TANK DETAIL 1
NTS C-8



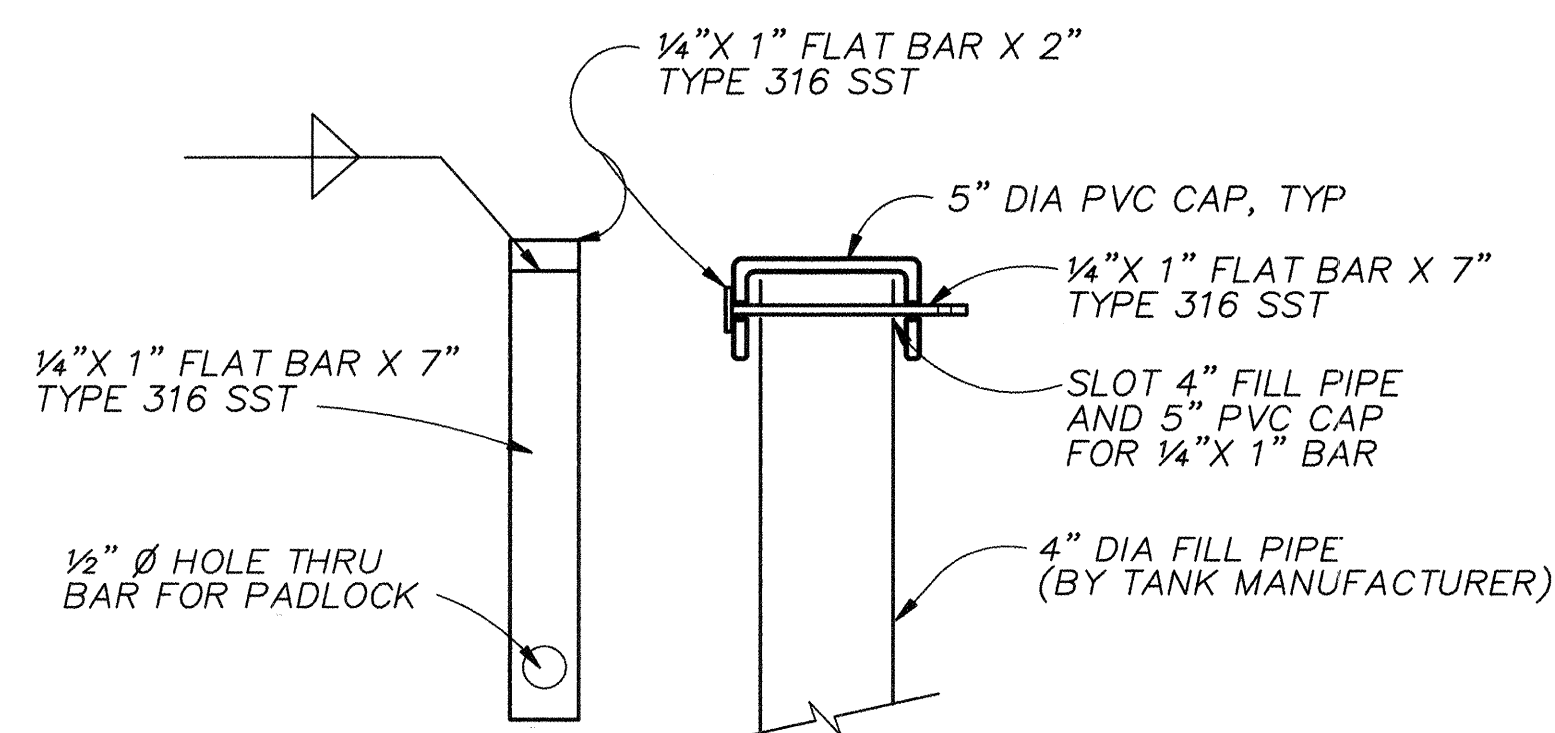
DETAIL 2
NTS C-8



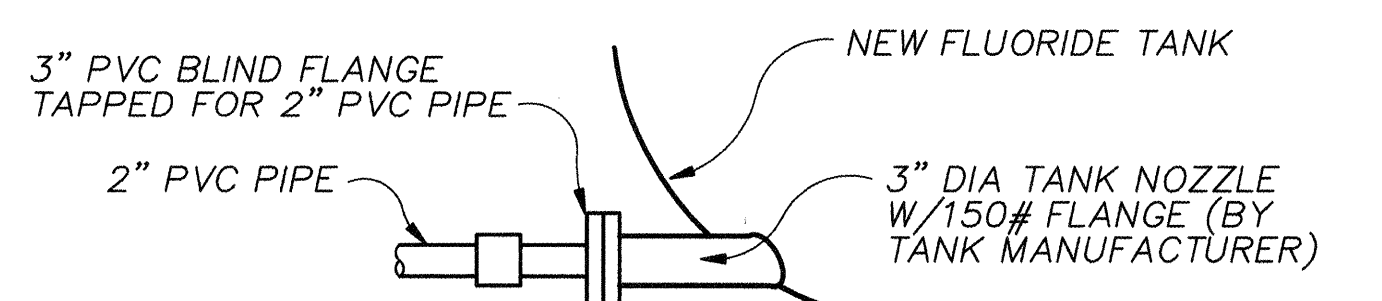
VALVE BOX DETAIL (4)



DETAIL 5
NTS

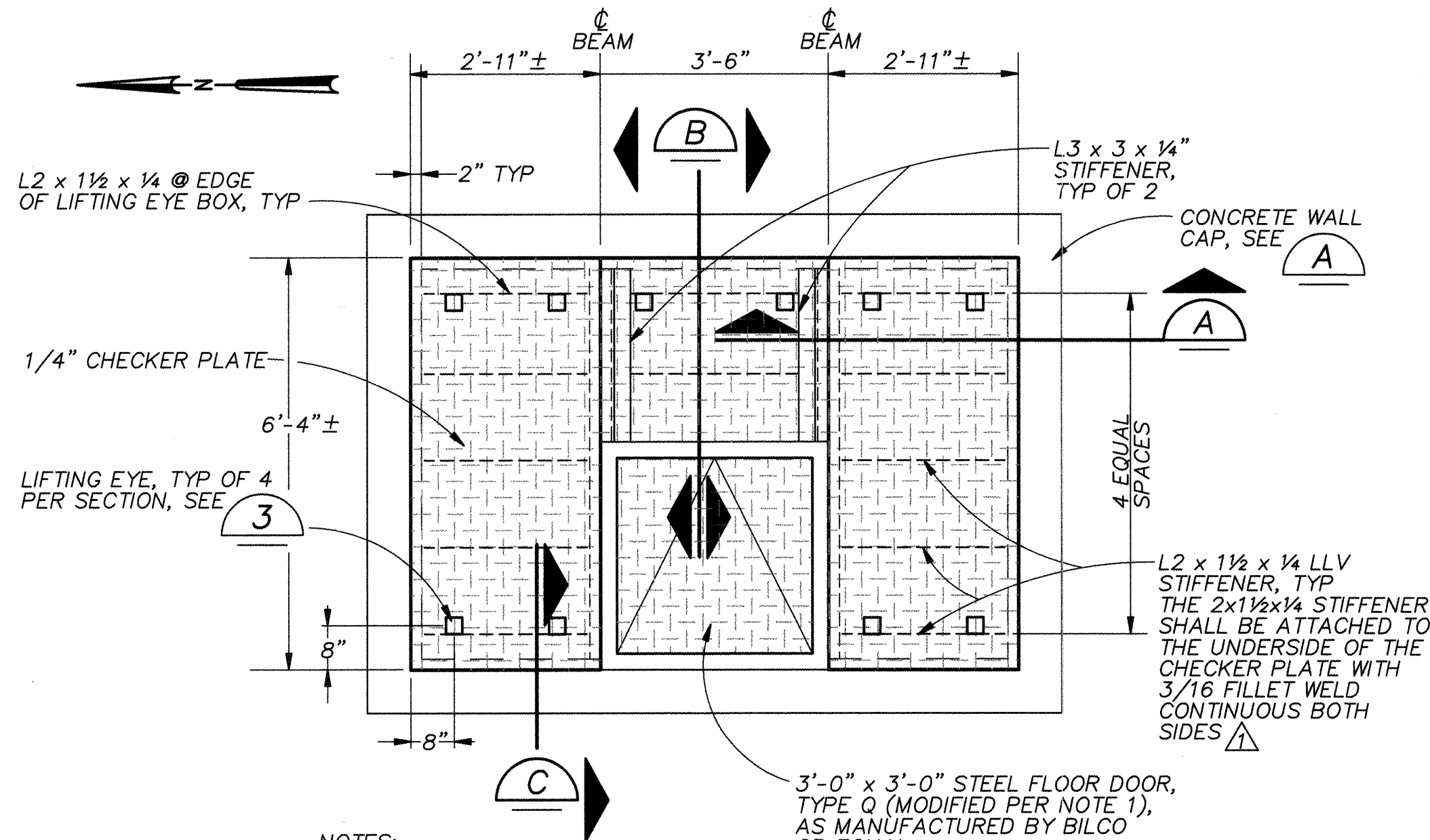


FILL PIPE DETAIL 6
NTS



PIPE CONNECTION DETAIL 7
NTS

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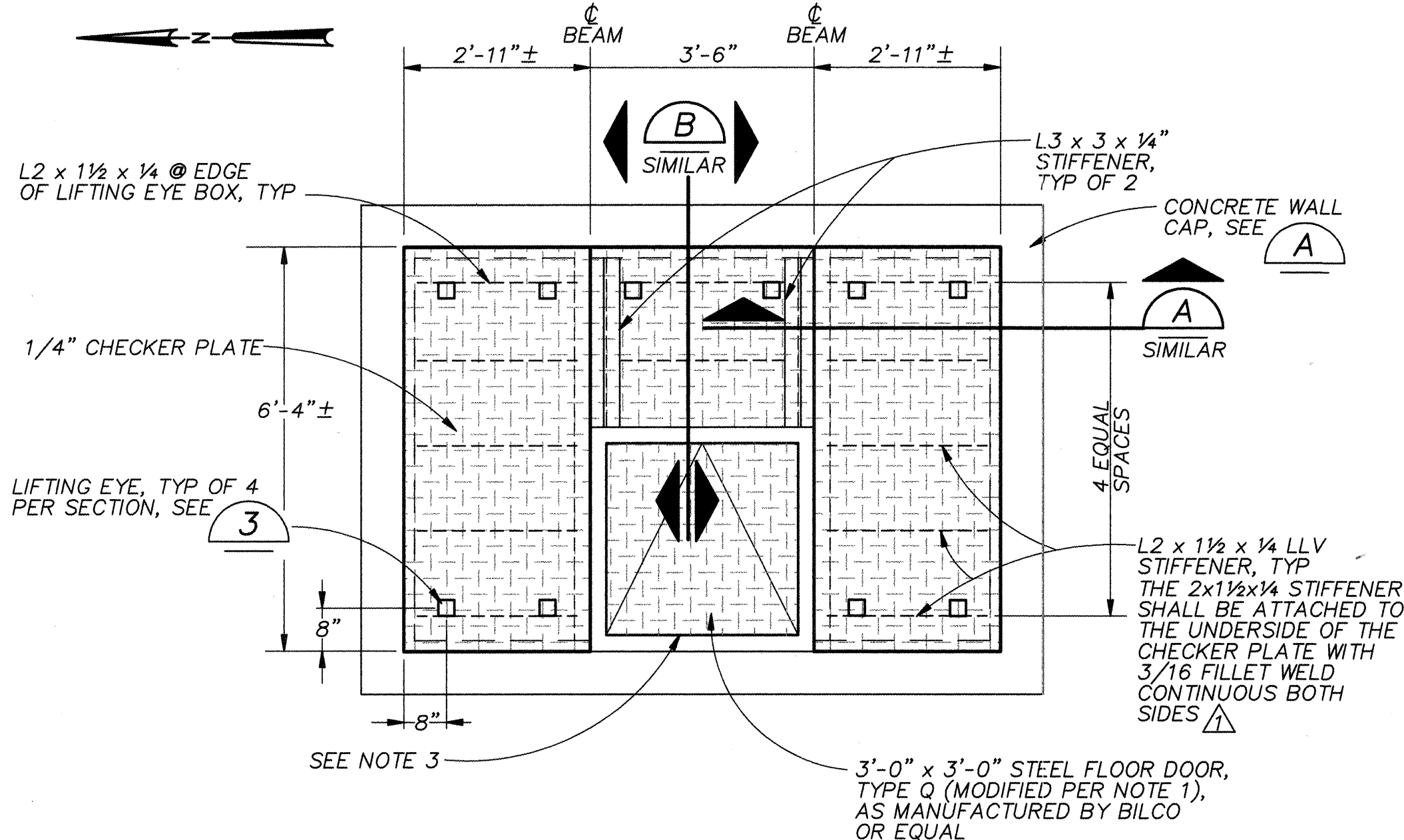


NOTES:

- 3'-0" x 3'-0" STEEL FLOOR DOOR SHALL BE MODIFIED AS FOLLOWS:
 - OMIT STRAP ANCHORS
 - COPE ANGLE FRAME CORNERS
 - WELD L3"x3"x1/4" TO HINGE SIDE OF FRAME SO THAT TOP LEG OF THE ANGLE IS 1/4" BELOW TOP OF ANGLE FRAME
- FINISH PAINT CHECKER PLATE, STRUCTURAL STEEL SUPPORTS, LADDER AND FLOOR AS SPECIFIED UNDER SECTION PAINTING.
- CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF EXISTING CONCRETE VAULT PRIOR TO ORDERING OR FABRICATION OF MATERIALS.

LOMAS TOP PLAN

1/2" = 1'-0"

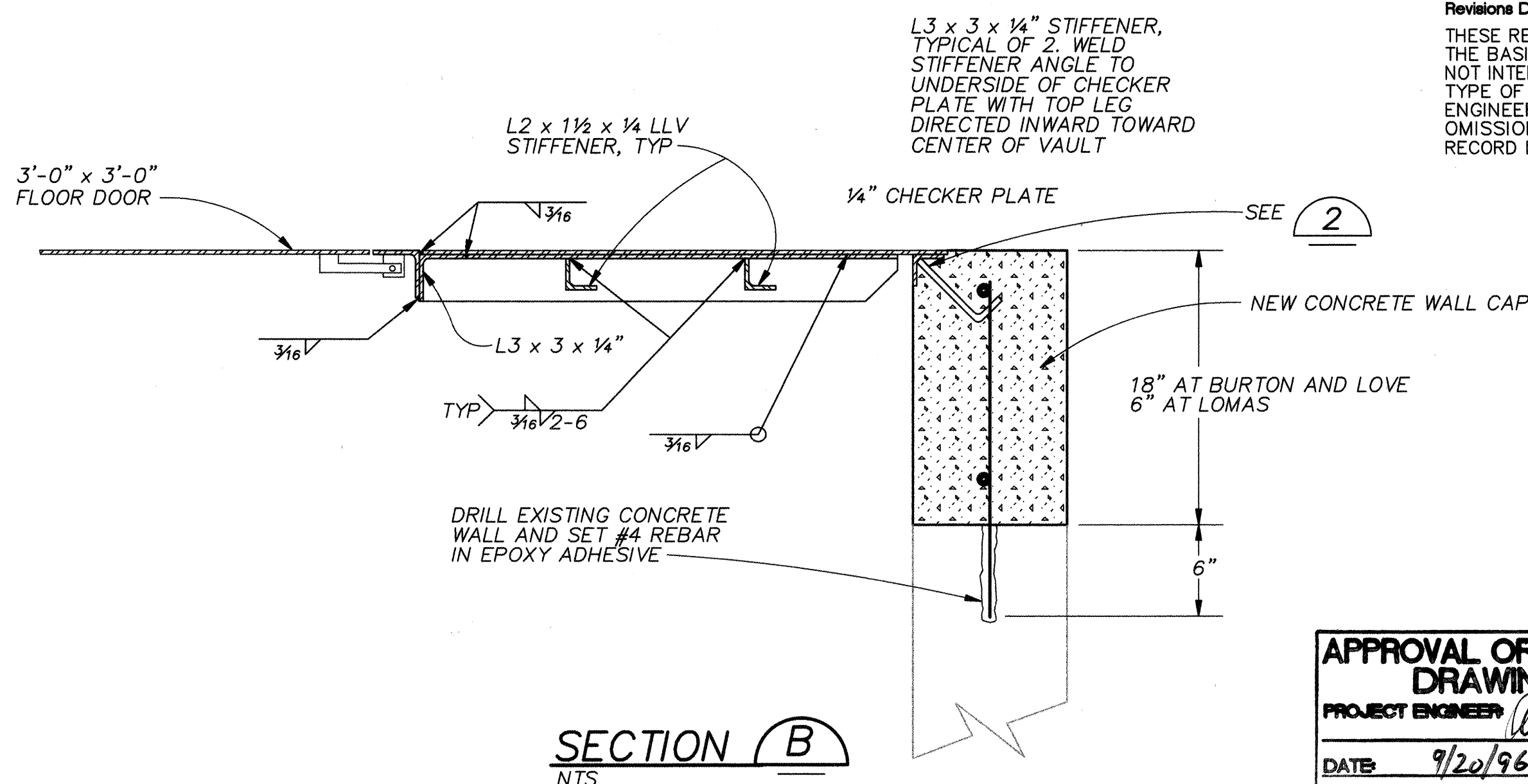
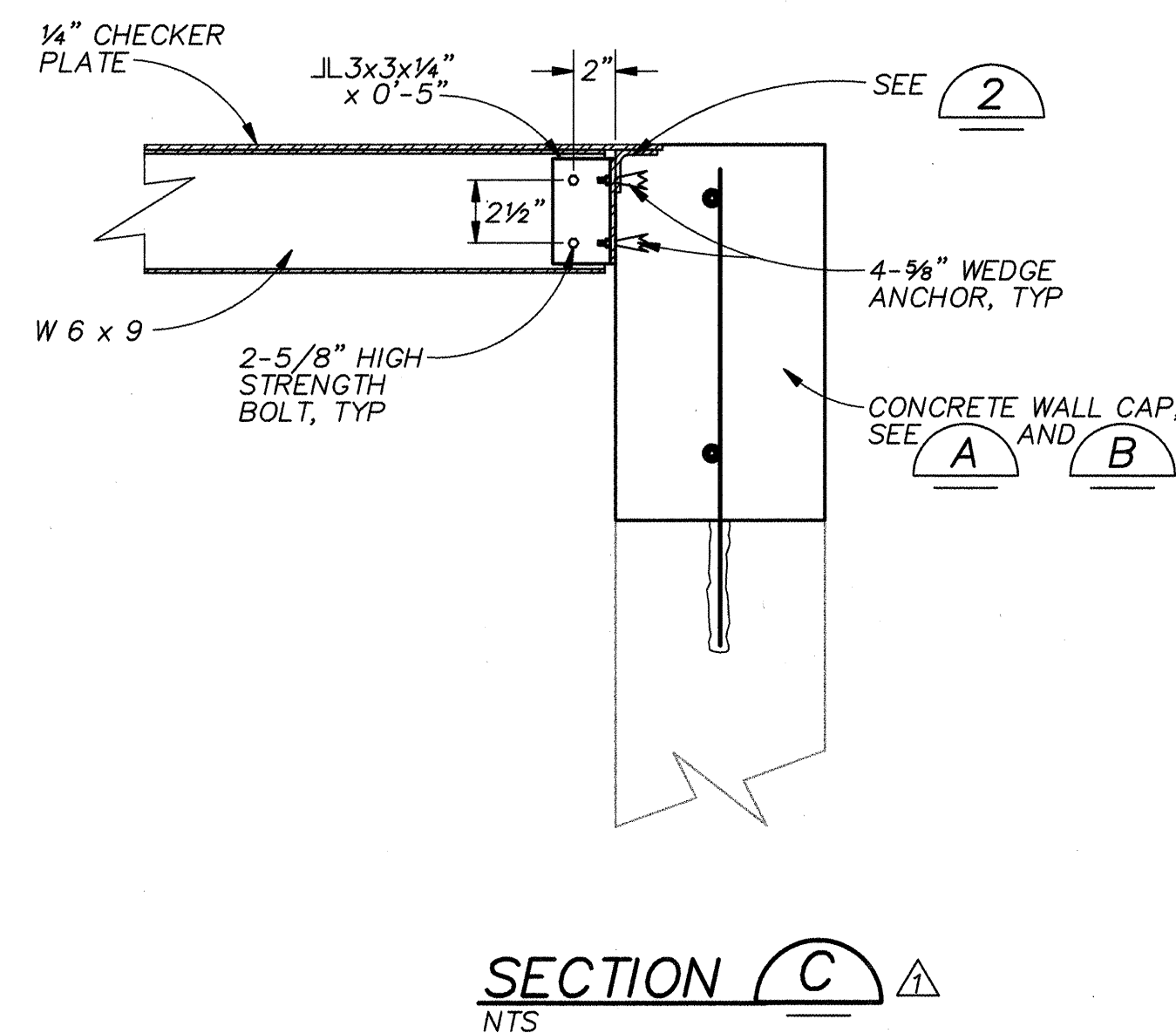
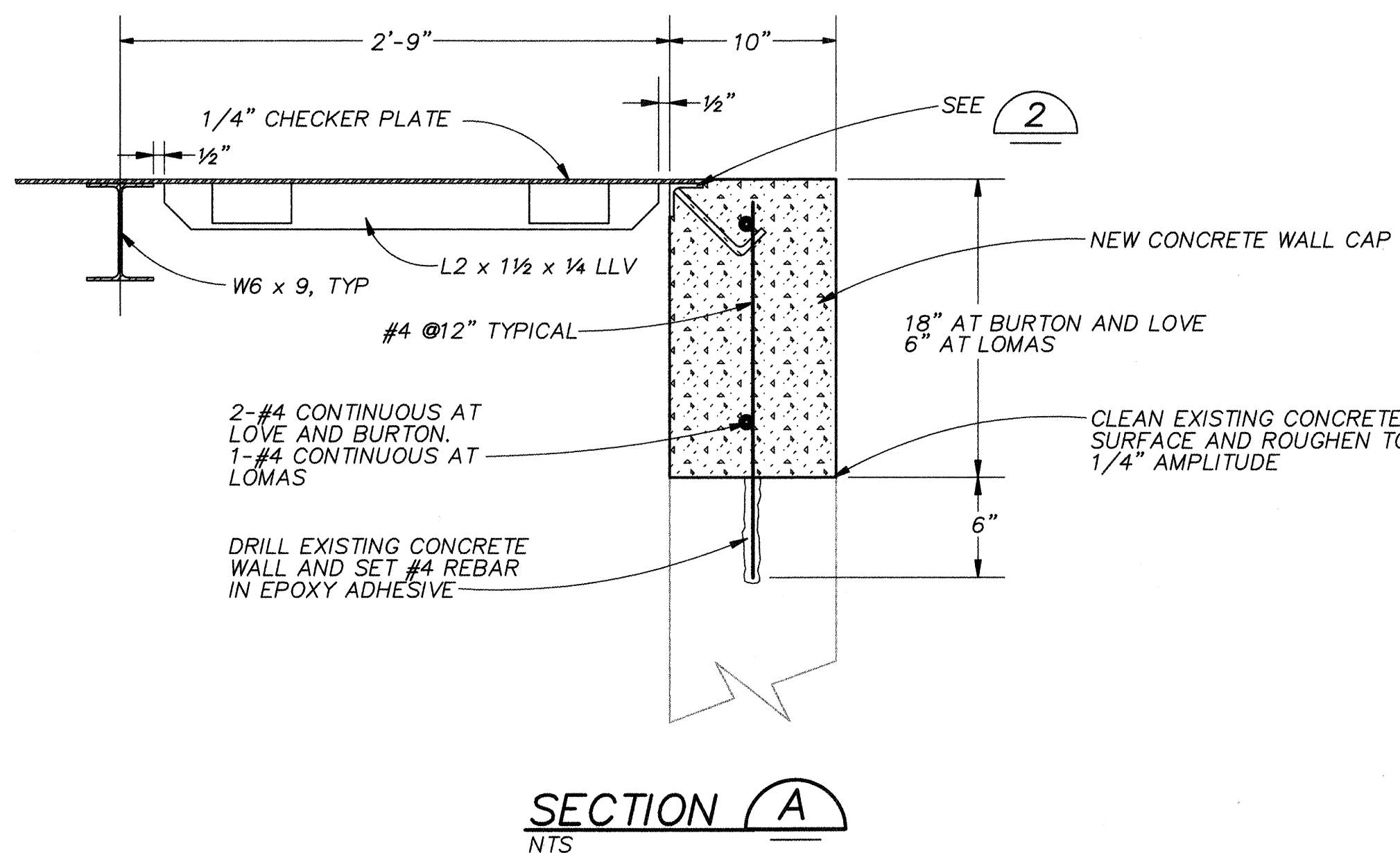
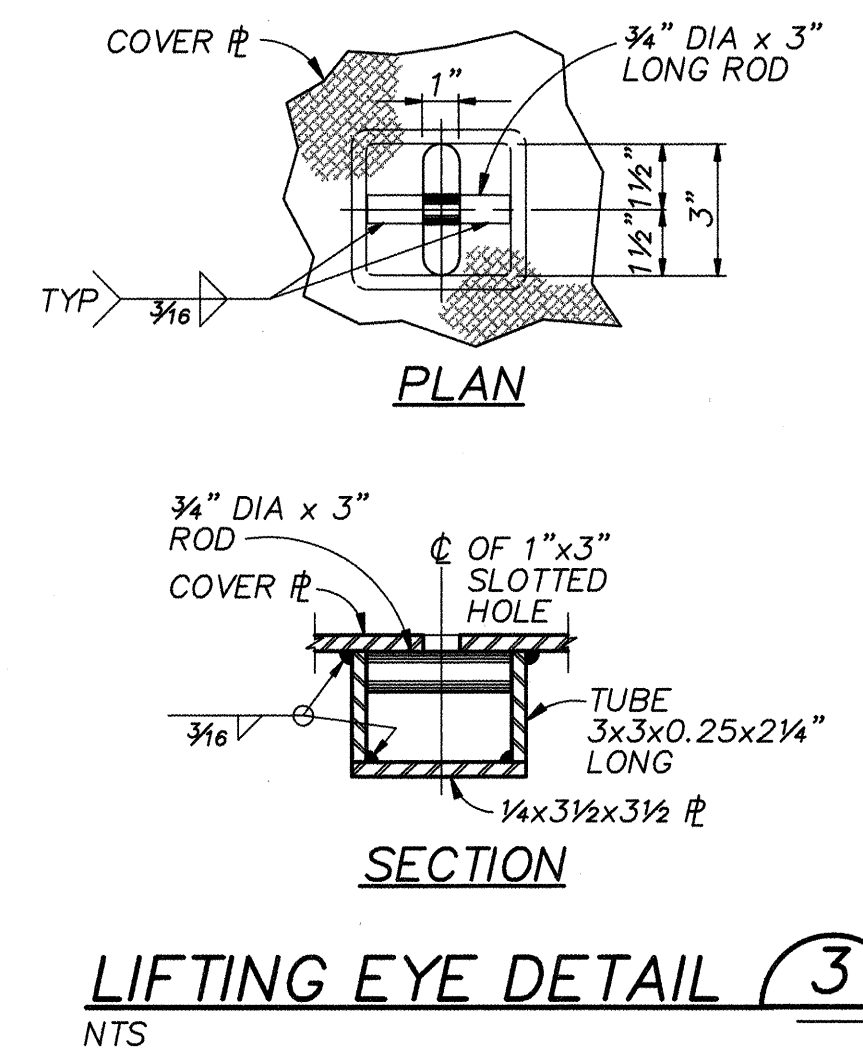
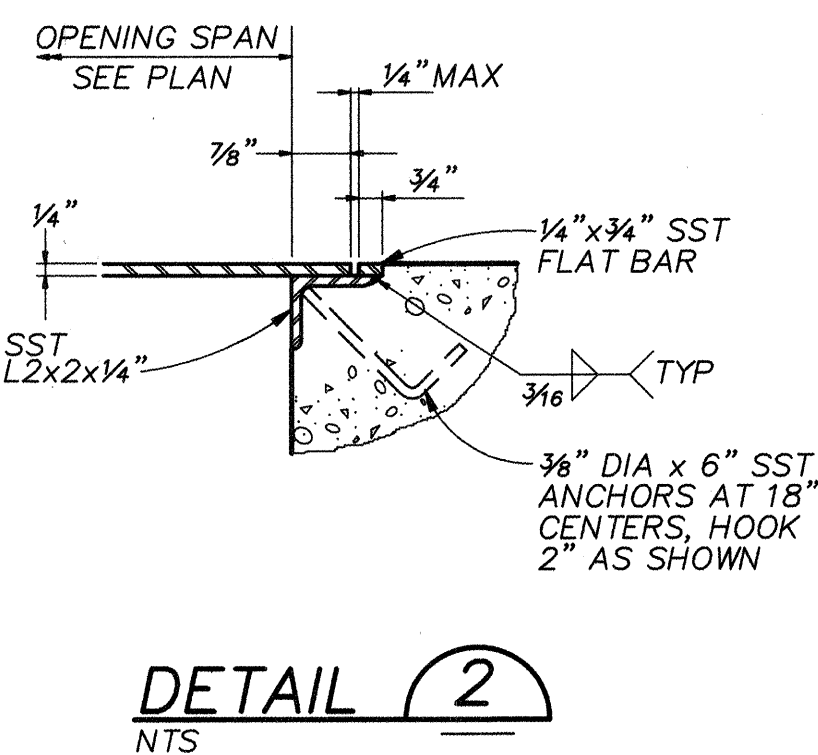
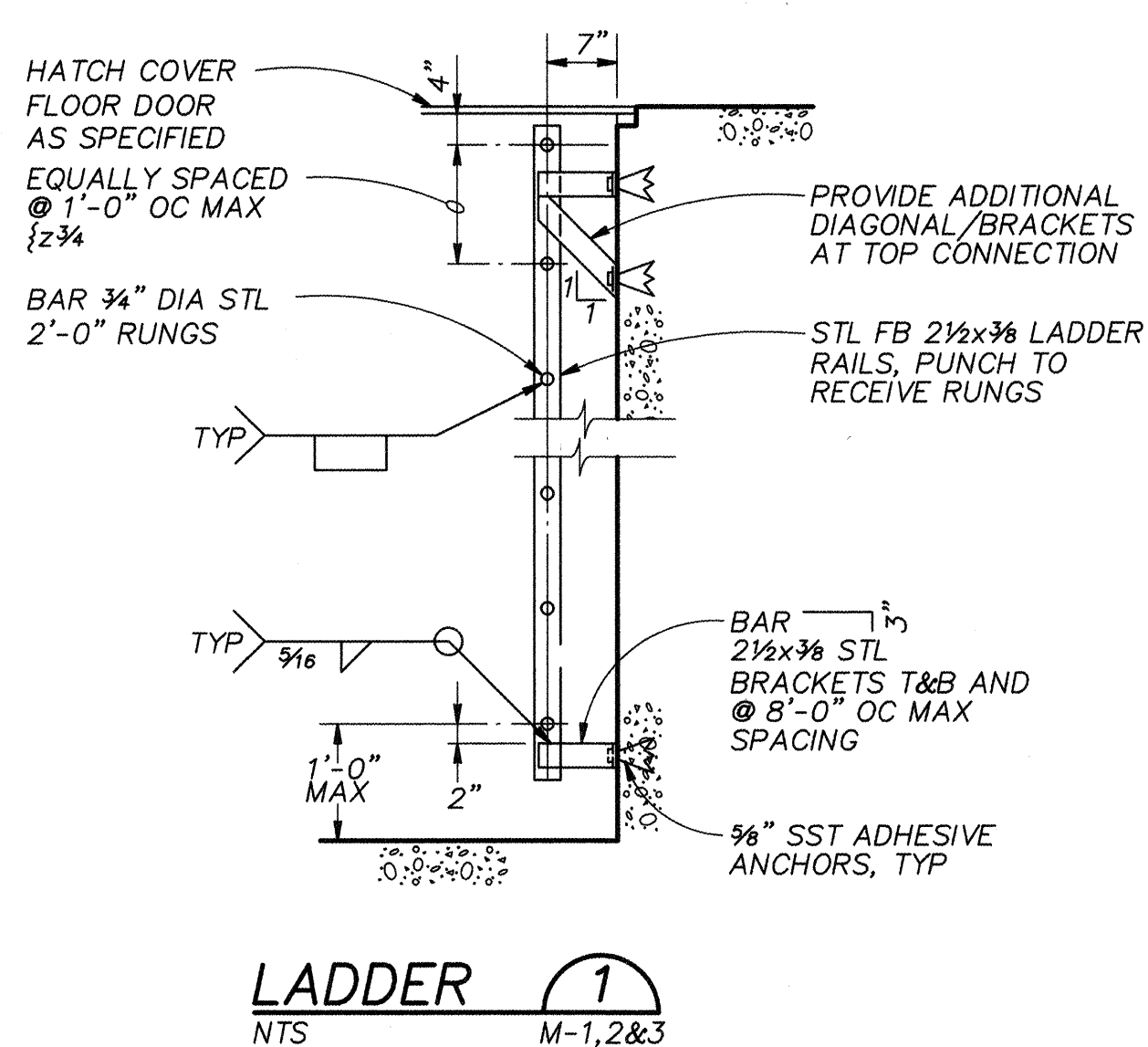


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- PLAN SHOWN IS FOR LOVE. BURTON IS A MIRROR IMAGE WITH FLOOR DOOR ON OPPOSITE SIDE OF VAULT.
- CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF EXISTING CONCRETE VAULT PRIOR TO ORDERING OR FABRICATION OF MATERIALS.

LOVE/BURTON TOP PLAN

1/2" = 1'-0"



RECORD DRAWINGS

Revisions Drawn by M. Brewer Date SEPT. 1996

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
TITLE: CHLORINE INJECTION VAULTS MODIFICATIONS
STRUCTURAL PLANS AND DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

CITY PROJECT NO. **4783.91** Zone Map No. SHEET **13** OF **13**
DRAWING NO. **S-1**