CITY OF ALBUQUERQUE CONCRETE RESERVOIRS REHABILITATION WATER SYSTEM REHABILITATION

PASEO DEL NORTE

ACADEMY

VOL ANDIA

CLAREMONT

LEYENDECKER

CHARLES WELLS NO. 5

BURTON

NO. 1

RESERVOIR

VICINITY MAP

GIBSON

MONTANO

BARBARA-

SAN JOSE

OSUNA RD.

RESERVOIR

-THOMAS

THOMAS NO.

INDIAN SCHOOL

LOVE NO. 8

CENTRAL AVE

RIDGECREST

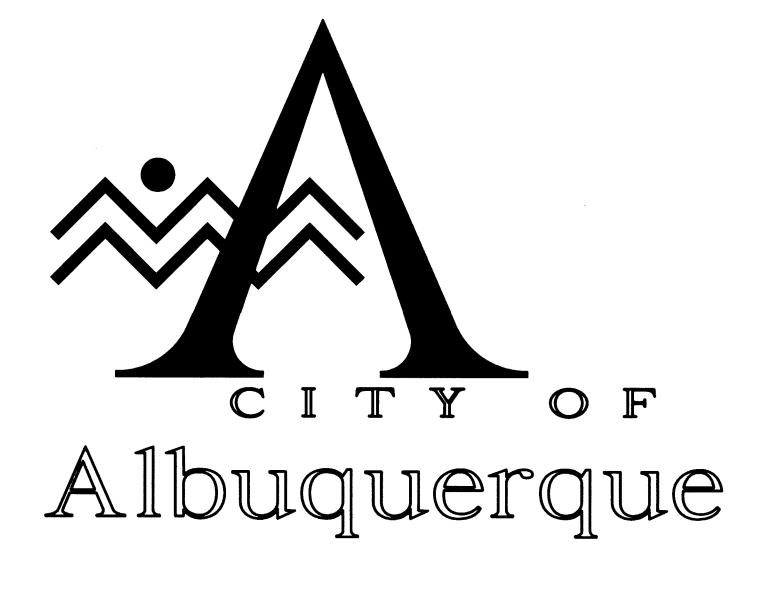
MONTGOMERY

PONDEROSA

CANDELARIA

-LOVE RESERVOIR NO. 3

-LOMAS RESERVOIR NO. 1 AND 2



DURANES

ZICKERT

RESERVOIR

PETROGLYPH PARK

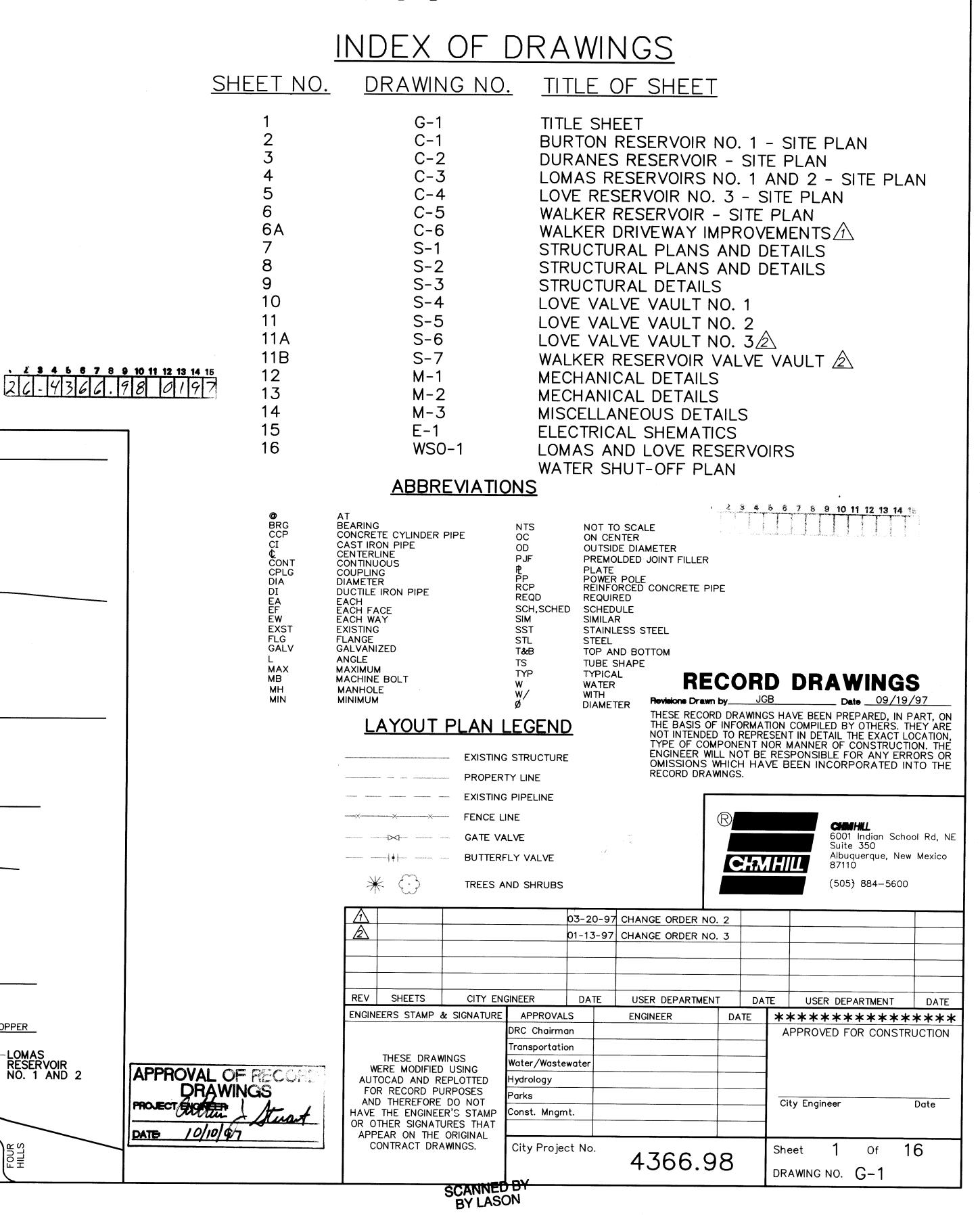
MONTANO

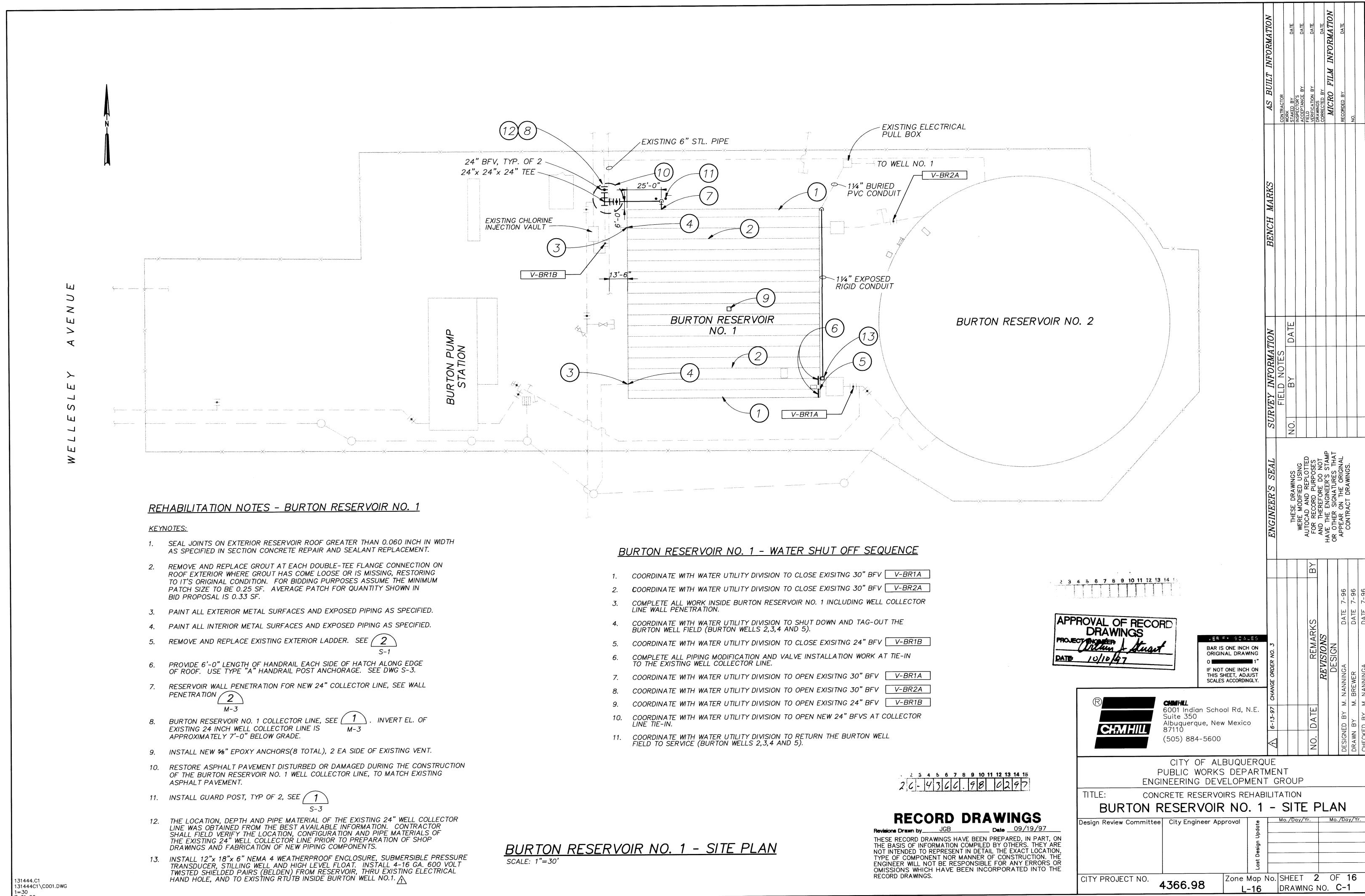
CENTRAL AVE

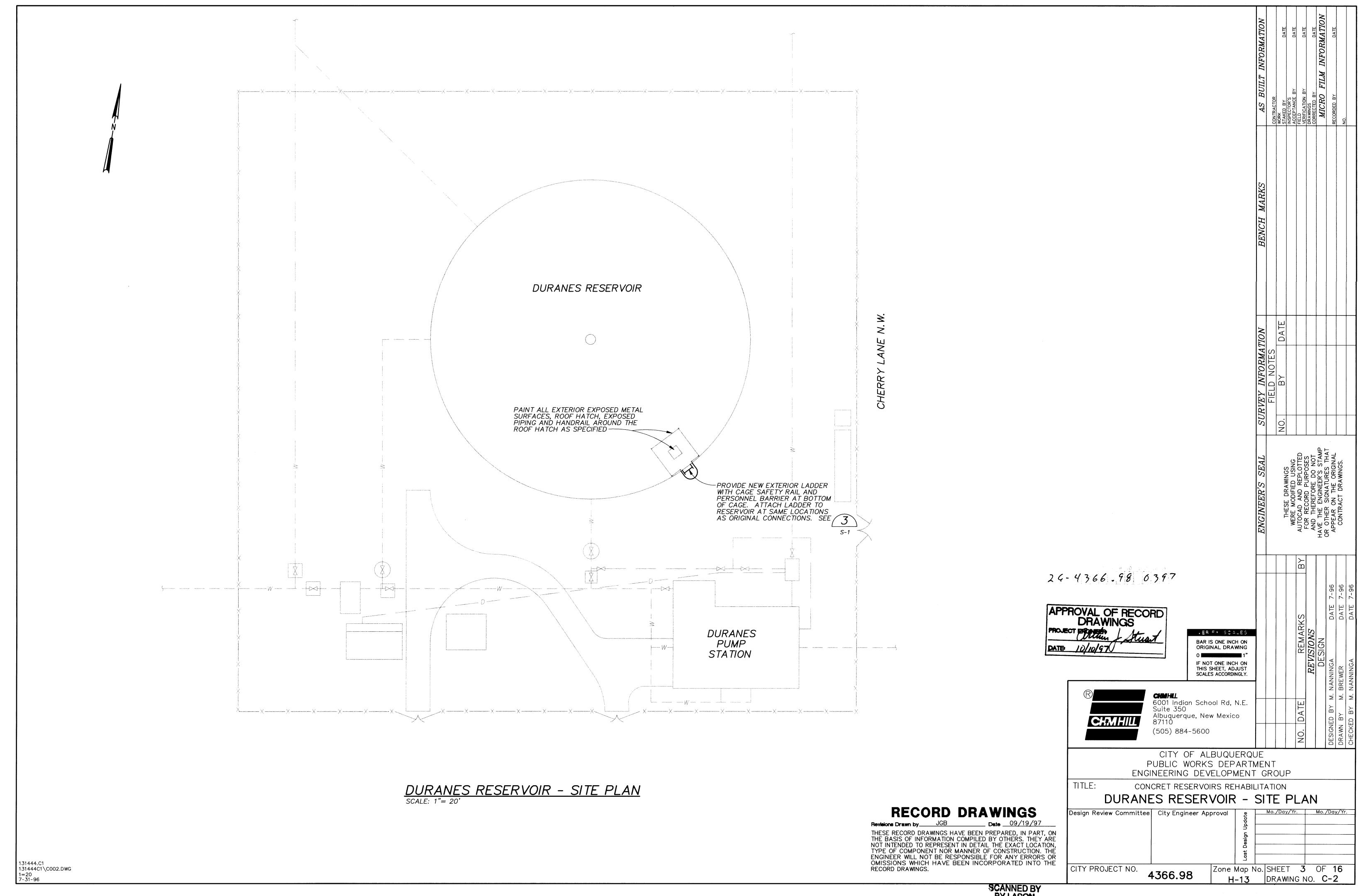
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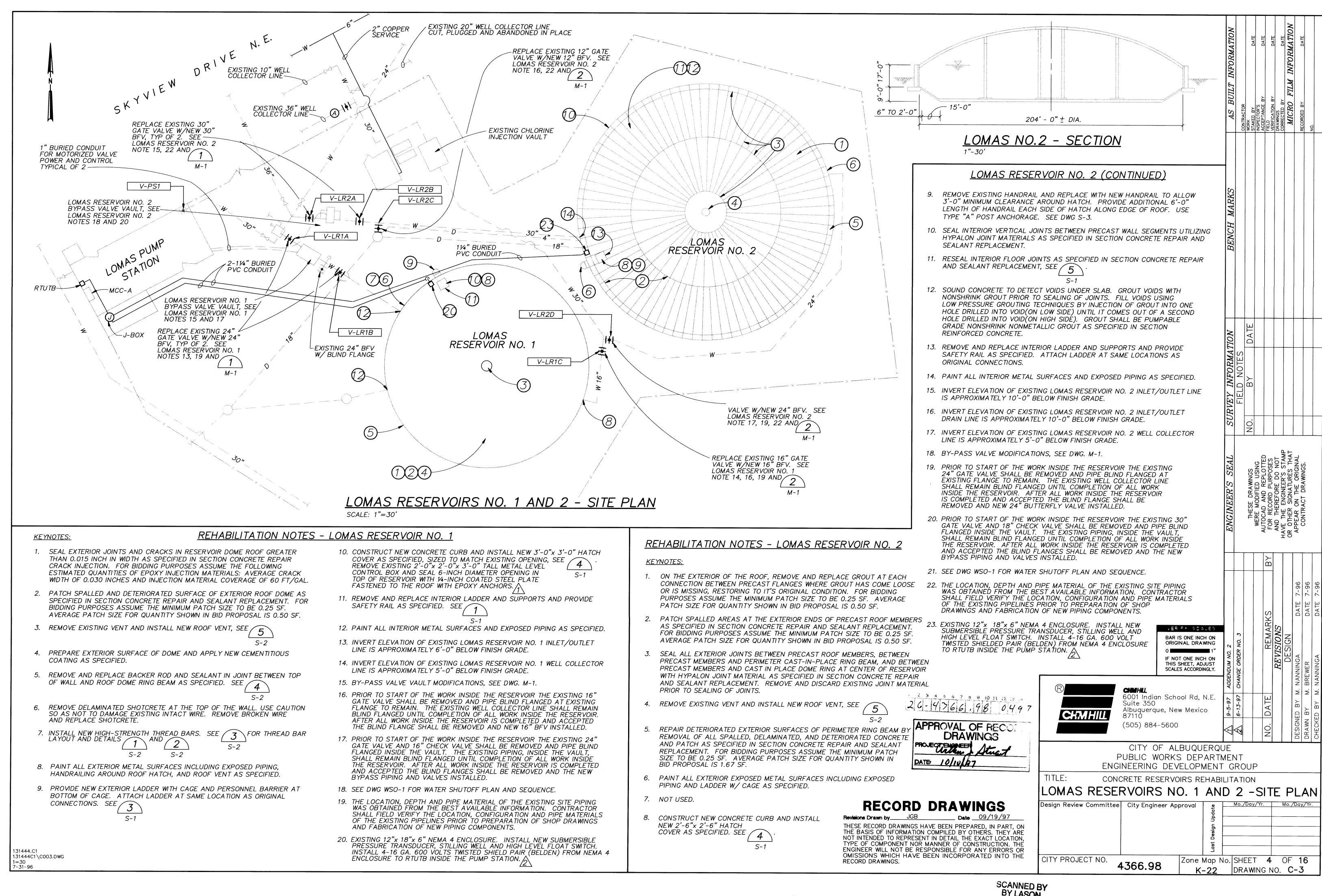
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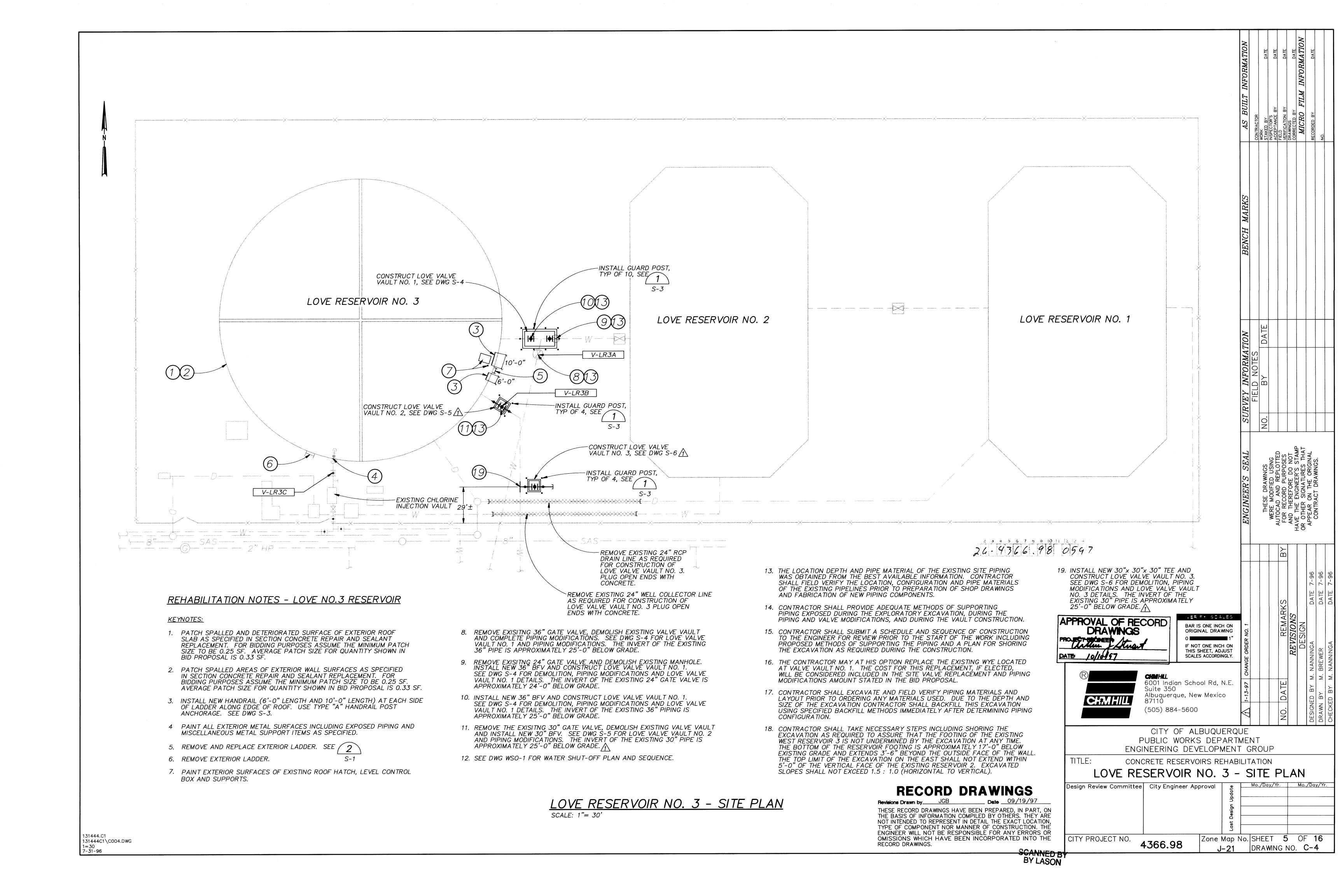
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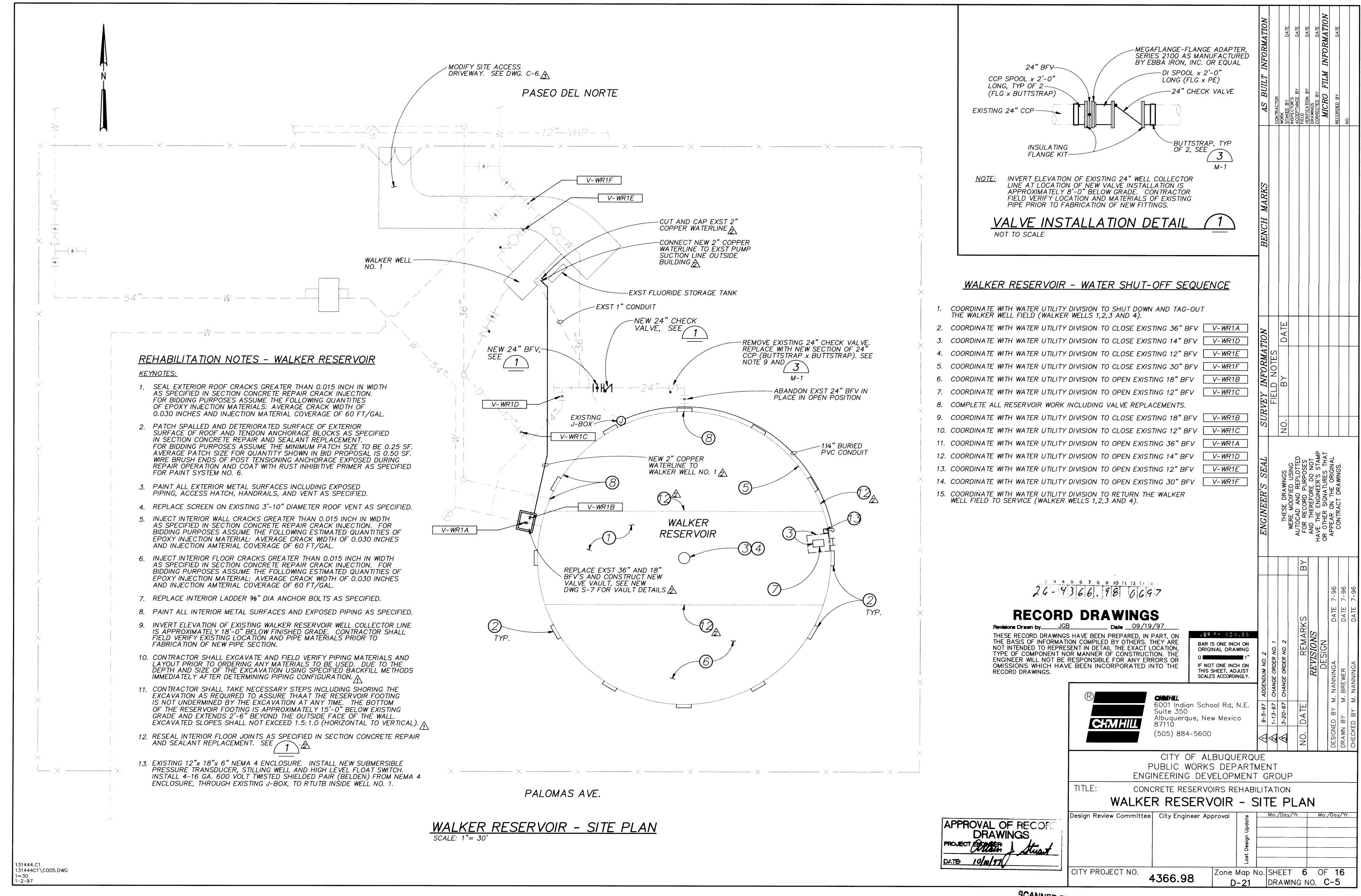


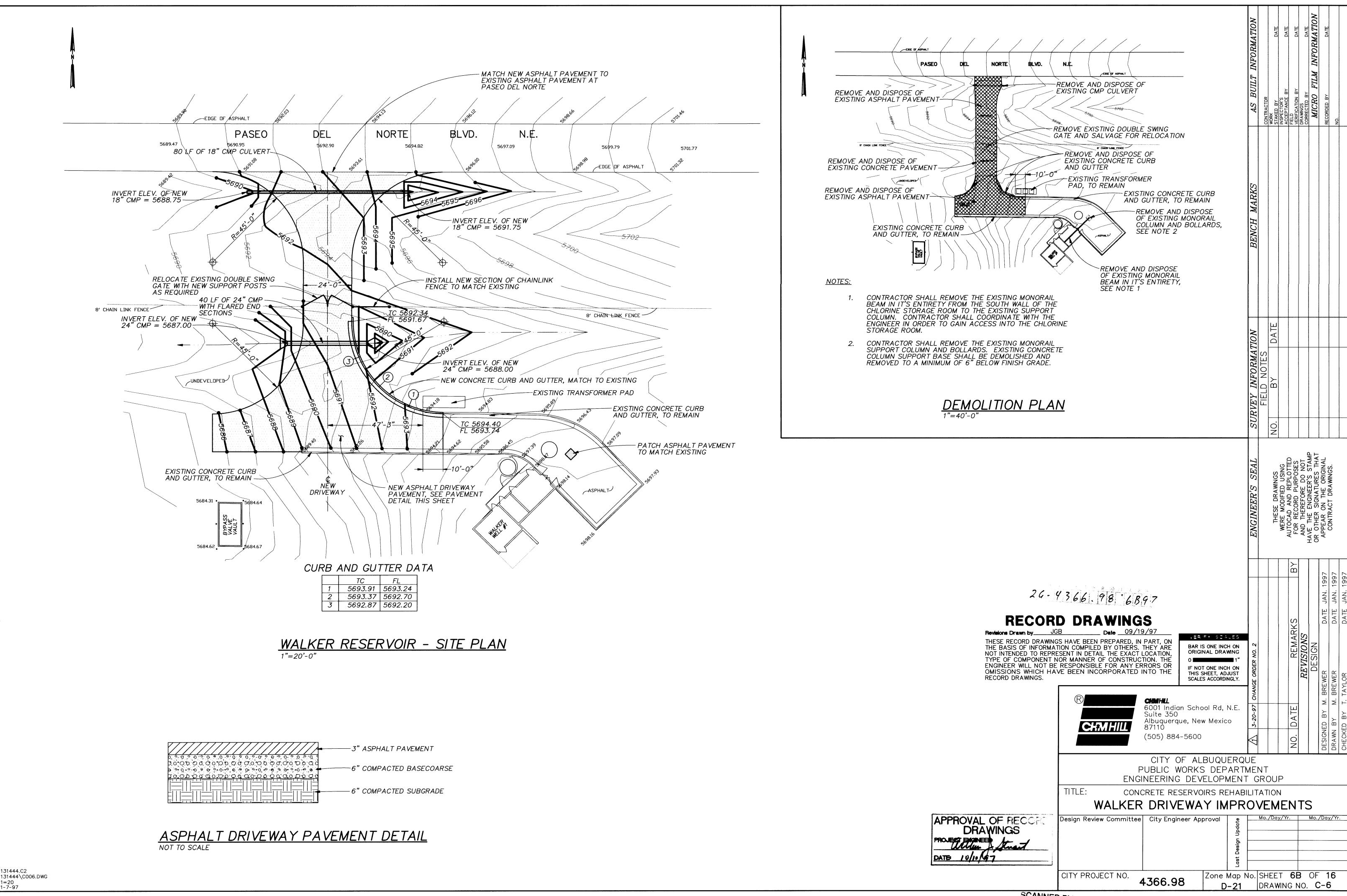


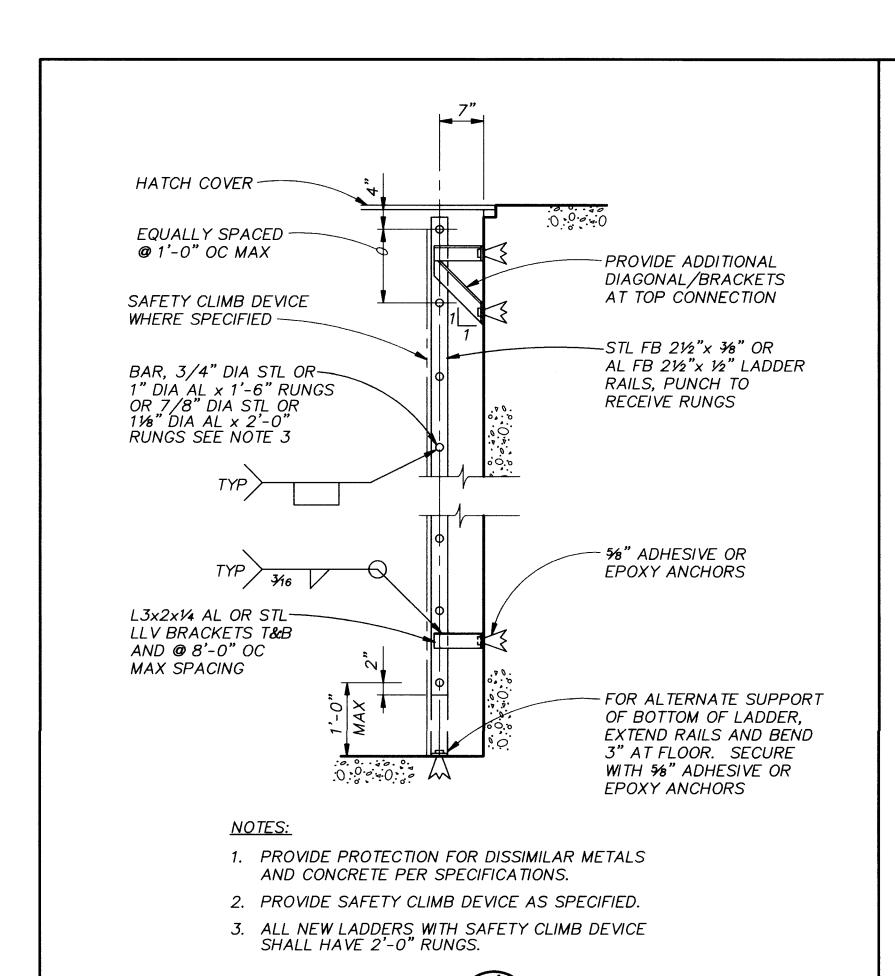


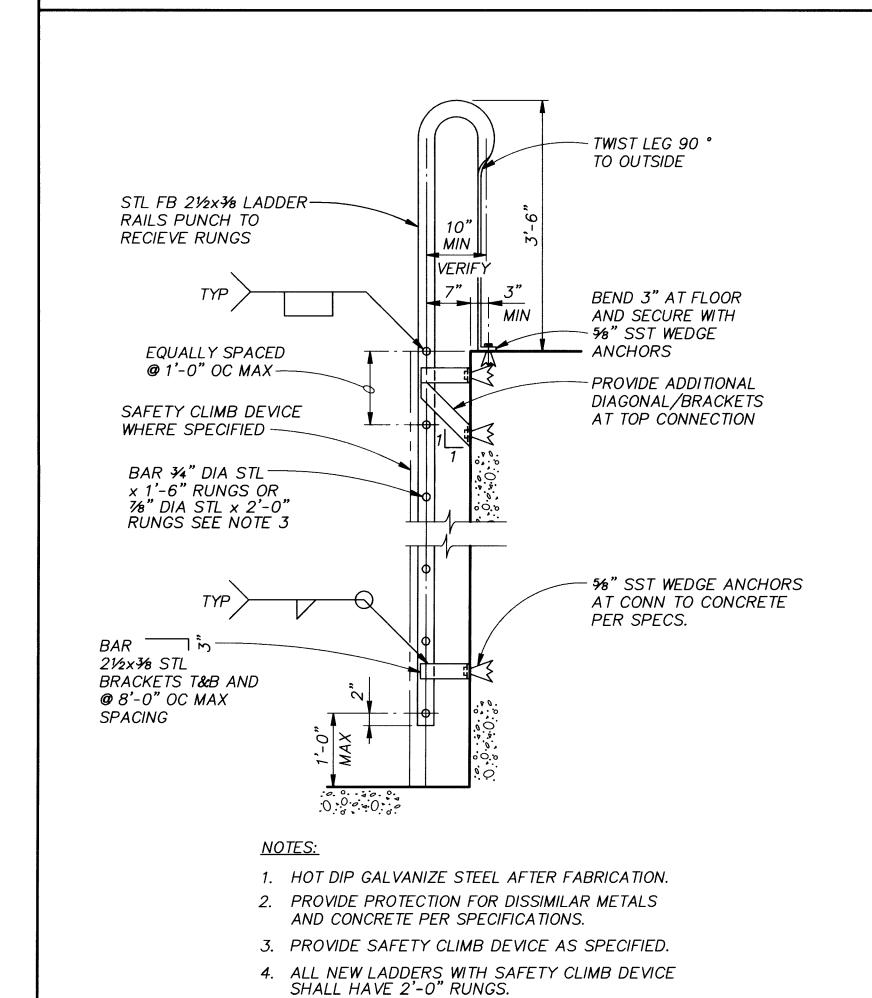








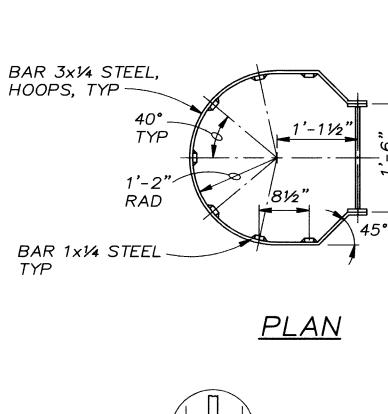




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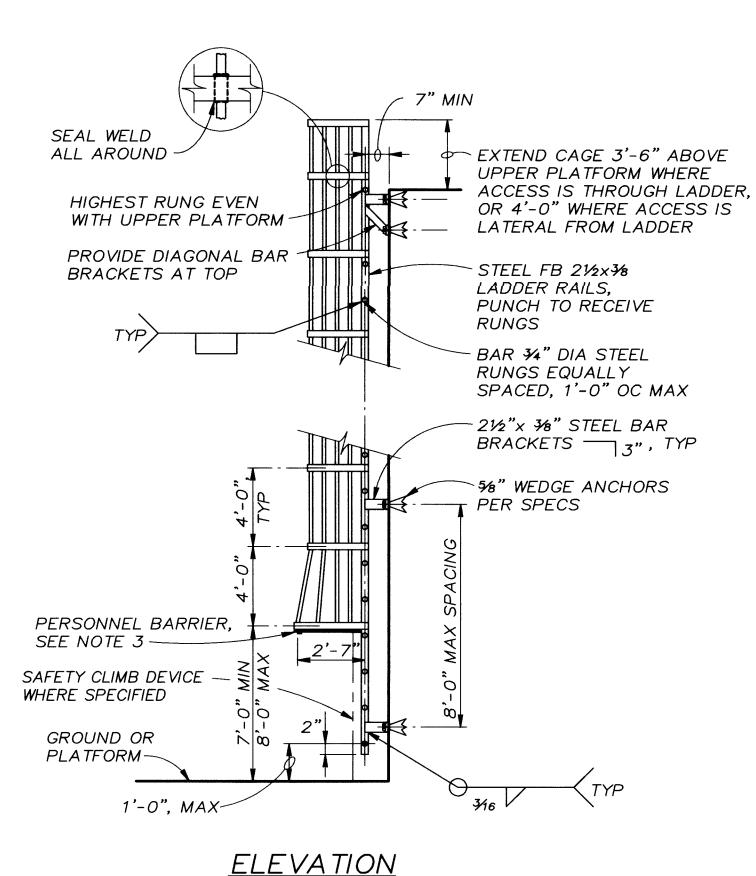
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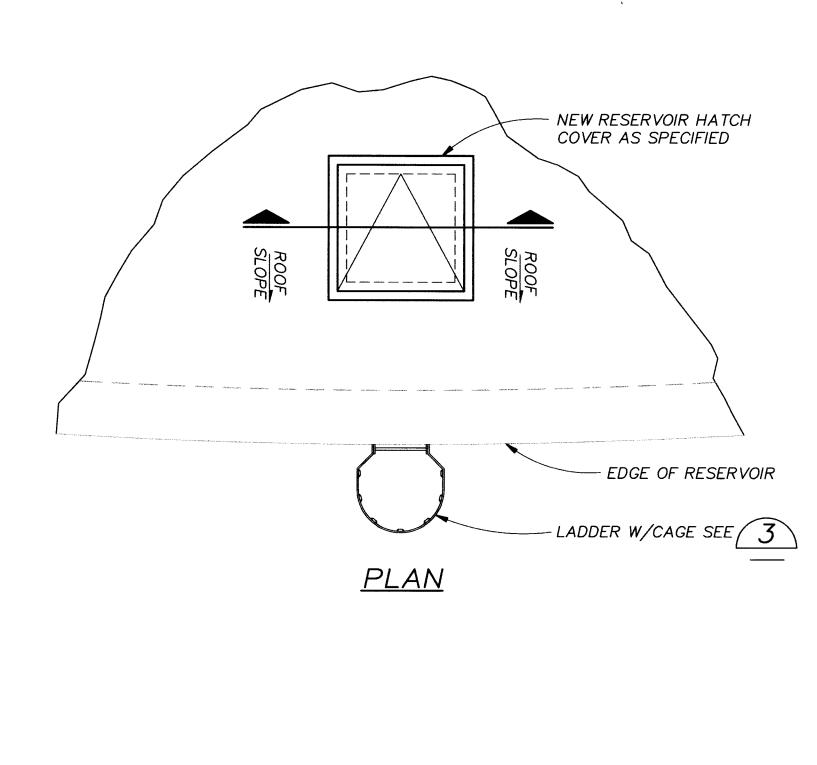
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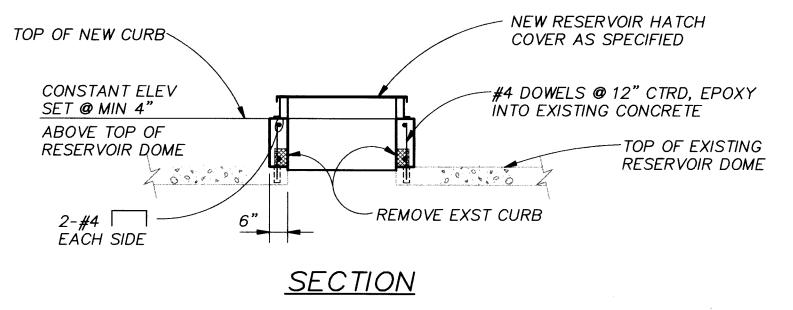


NOTES:

- 1. HOT DIP GALVANIZED STEEL AFTER FABRICATION.
- 2. PROVIDE SEAL WELDS AT ALL INTERFACES WHERE LARGER STRUCTURAL WELDS ARE REQUIRED.
- 3. PROVIDE PERSONNEL BARRIER TO PREVENT UNAUTHORIZED ACCESS W/HASP AND LOCKING DEVICE. BARRIER SHALL BE CONSTRUCTED OF 0.813" x 1.75" REGULAR MESH EXPANDED METAL SIMILAR TO CATALOG NO. 9300T48 BY McMASTER-CARR, BANDED WITH 1/8" x 2" STEEL BAR OR PLATE. BARRIER SHALL PIVOT HORIZONTALLY CLEAR OF LADDER AND SECURED IN THIS POSITION WHEN ACCESS IS REQUIRED. BARRIER SHALL BE GALVANIZED AFTER FABRICATION AND PAINTED WITH LADDER AND CAGE. SUBMIT DETAILS FOR ENGINEER'S REVIEW.









26-4366.98 0797



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DATE 7-DATE 7-

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

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

TITLE: CONCRETE RESERVOIRS REHABILITATION STRUCTURAL PLANS AND DETAILS

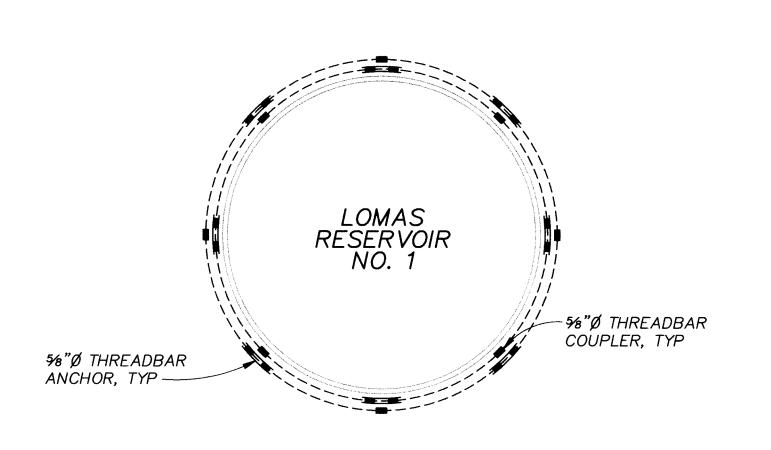
Design Review Committee | City Engineer Approval <u>g</u> | Mo./Day/Yr. | Mo./Day/Yr. Zone Map No. SHEET 7 OF 16 CITY PROJECT NO. 4366.98 DRAWING NO. S-1

REPAIR DETERIORATED JOINT AS SPECIFIED PRIOR TO REPLACING -SEALANT AS SEALANT~ SPECIFIED CHEMICAL CURE JOINT FLOOR SLAB-FILLER SIKA - 2C OR EQUAL BOND BREAKER TAPE EXST. WATER STOP (MAY NOT EXIST ON ALL RESERVOIRS)

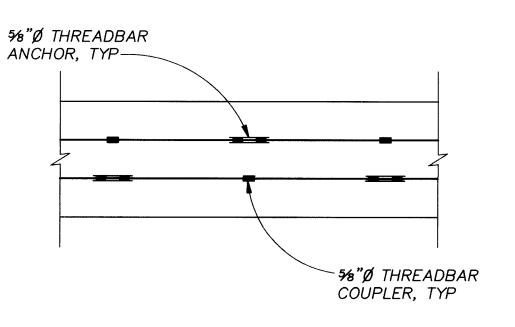
NOTES:

- 1. REMOVE EXST. DETERIORATED JOINT FILLER AND REPLACE AS SHOWN.
- 2. APPLY BOND BREAKER TAPE PRIOR TO APPLYING NEW SEALANT PER MANUFACTURER'S INSTRUCTION.
- 3. APPLY NEW SEALANT AS SHOWN. RATIO w/d SHALL NOT BE LESS THAN 2.0.
- 4. JOINT WIDTH "W" SHALL BE ASSUMED TO BE 3/4".

PROJECT ENGLEER Stuart	APPROVAL OF RECORD DRAWINGS
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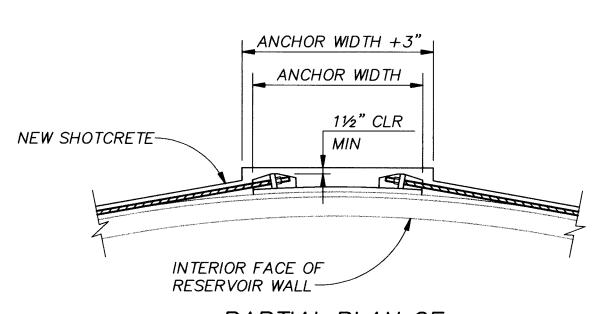


RESERVOIR PLAN

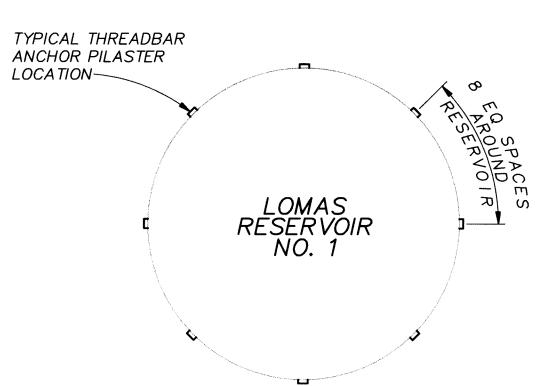


PARTIAL THREADBAR ELEVATION

THREADBAR INSTALLATION DETAIL

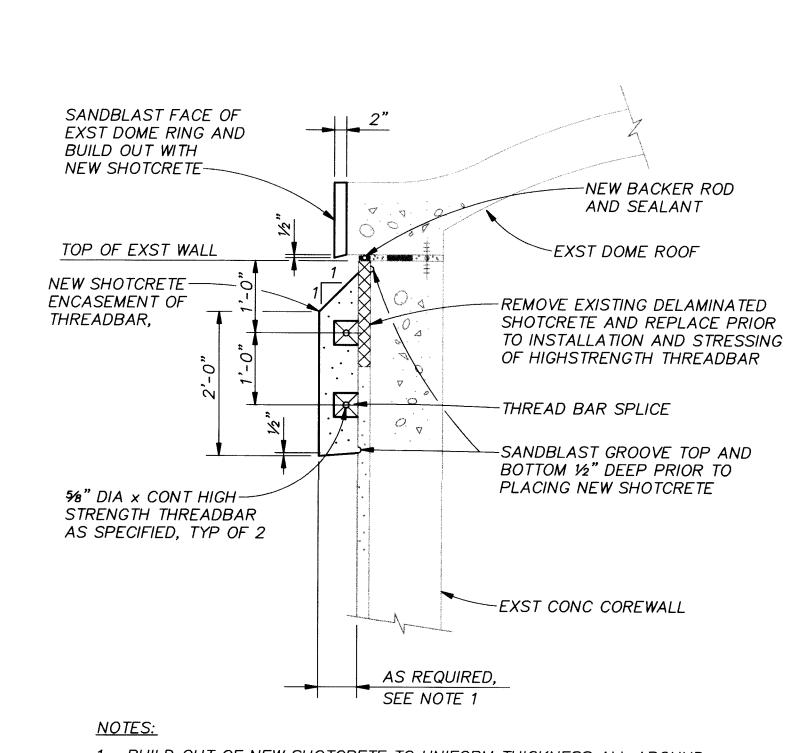


PARTIAL PLAN OF SHOTCRETE OVER ANCHOR PLATES



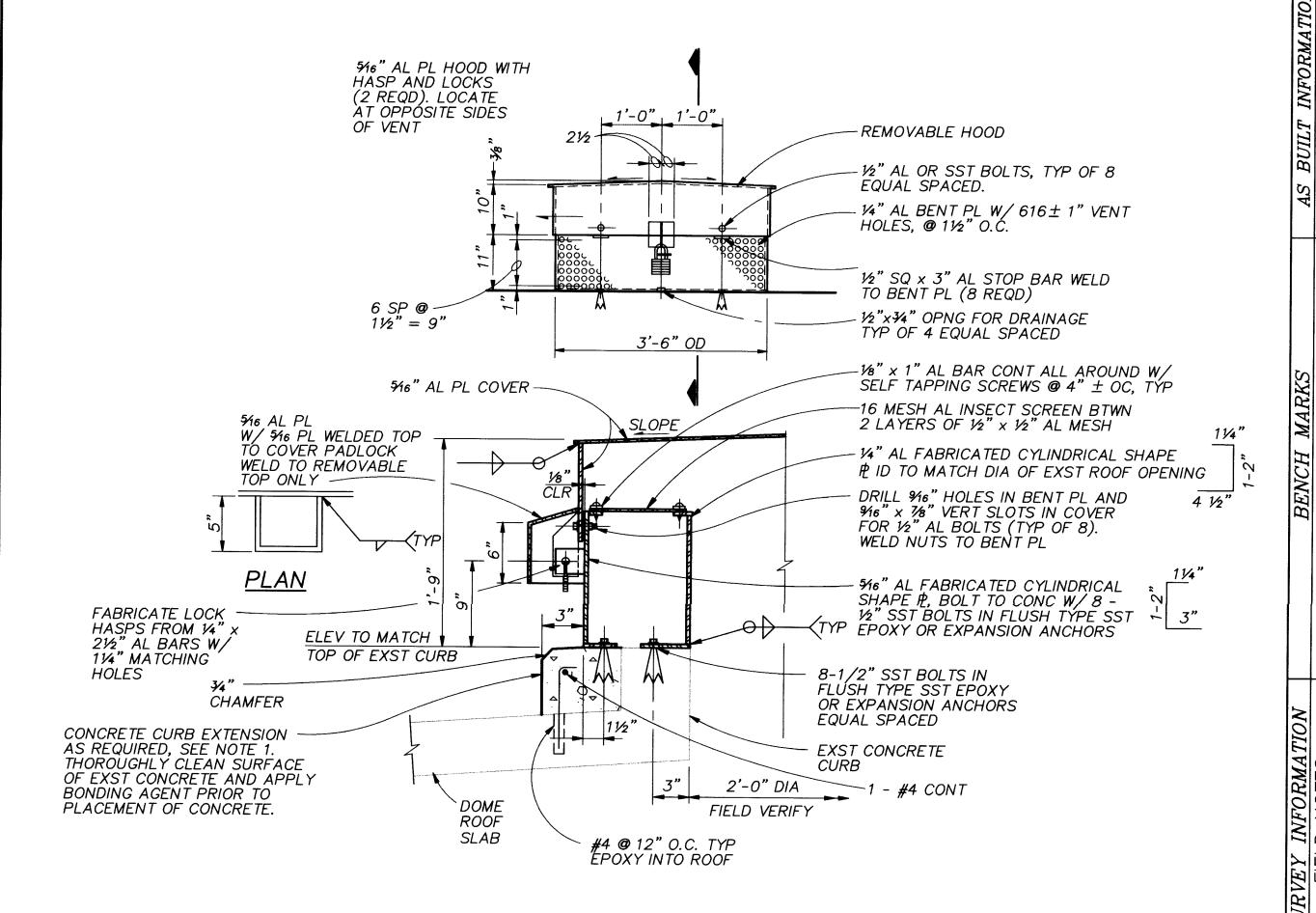
PILASTER LAYOUT PLAN

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1. BUILD OUT OF NEW SHOTCRETE TO UNIFORM THICKNESS ALL AROUND ADEQUATE TO PROVIDE A MINIMUM OF 11/2 INCHES OF COVER OVER THREADBAR SPLICE.





SECTION

NOTES:

ACTUAL CONFIGURATION AT EACH RESERVOIR MAY VARY. CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS PRIOR TO FABRICATION OF VENT. AT CONTRACTORS OPTION EXTERIOR PERFORATED ALUMINUM PLATE MAY BE EXTENDED DOWN TO TOP OF EXISTING ROOF IN LIEU OF ADDING ON TO

- 2. COAT ALL ALUMINUM IN CONTACT WITH CONCRETE AS SPECIFIED.
- 3. SHOW DETAILS ON SHOP DRAWING DESIGN LAYOUT TO VERIFY PADLOCK ROOM AND OPERATION TO ALLOW REMOVAL OF HOOD.

ROOF VENT 5

26.4366.98 0897

RECORD DRAWINGS

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DATE 7-96 DATE 7-96 DATE 7-96



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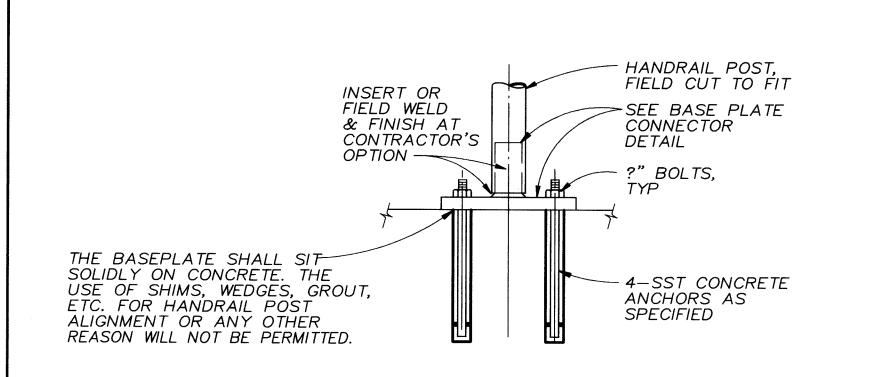
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

CONCRETE RESERVOIRS REHABILITATION STRUCTURAL PLANS AND DETAILS

APPROVAL OF RECORD DRAWINGS

Design Review Committee | City Engineer Approval | <u>@</u> <u>Mo./Day/Yr.</u> <u>Mo./Day/Yr.</u> Mo./Day/Yr. CITY PROJECT NO. Zone Map No. SHEET 8 OF 16 4366.98 DRAWING NO. S-2

RESERVOIR DOME ROOF EXST. JOINT FILLER MATERIAL -REMOVE & REPLACE -EXISTING BOND BREAKER & SEALANT. EXST. CORE WALL EXST. SHOTCRETE -1. BACKER ROD SHALL BE SIZED AND INSTALLED AS RECOMMENDED BY SEALANT MANUFACTURER. 2. USE CAUTION IN REMOVING OLD SEALANT SO AS NOT TO DAMAGE EXISTING JOINT FILLER MATERIAL. *FIELD VERIFY



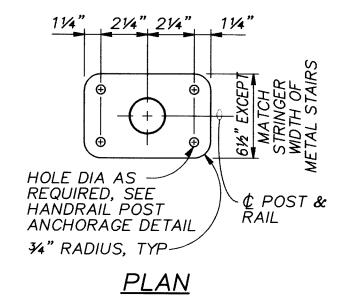
ELEVATION

NOTE:

PROVIDE PROTECTION FOR DISSIMILAR METALS
METALS AND CONCRETE PER SPECIFICATIONS.

TYPE "A"

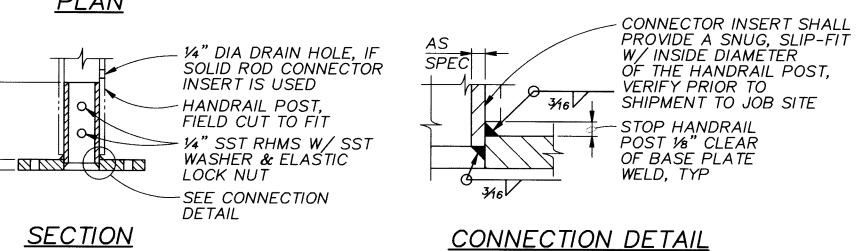
HANDRAIL POST ANCHORAGE



NOTES:

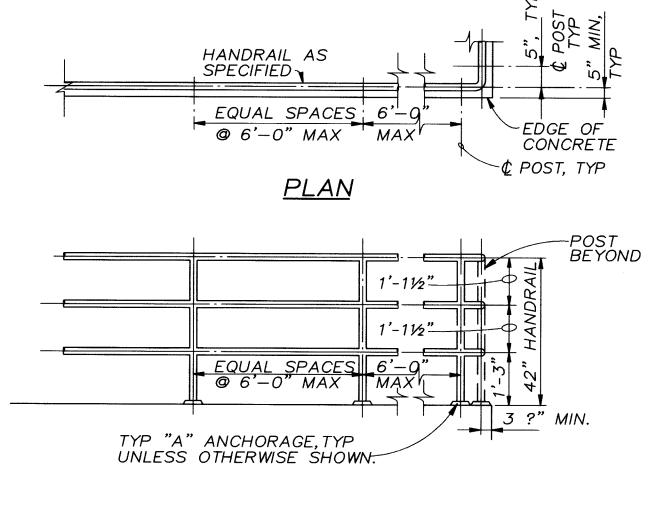
1. USE GALVANIZED STEEL POST CONNECTORS FOR GALVANIZED STEEL HANDRAILS.

2. AT CONTRACTOR'S OPTION VERTICAL POST TOLERANCE MAY BE OBTAINED BY CUTTING POST IN FIELD TO FIT AND WELDING POST TO BASE PLATE WITHOUT THE CONNECTOR INSERT. GRIND WELDS SMOOTH AND APPLY GALVANIZING REPAIR TO WELD AREA OR BUFF THE STAINLESS STEEL TO MATCH POST FINISH.



TYPE A

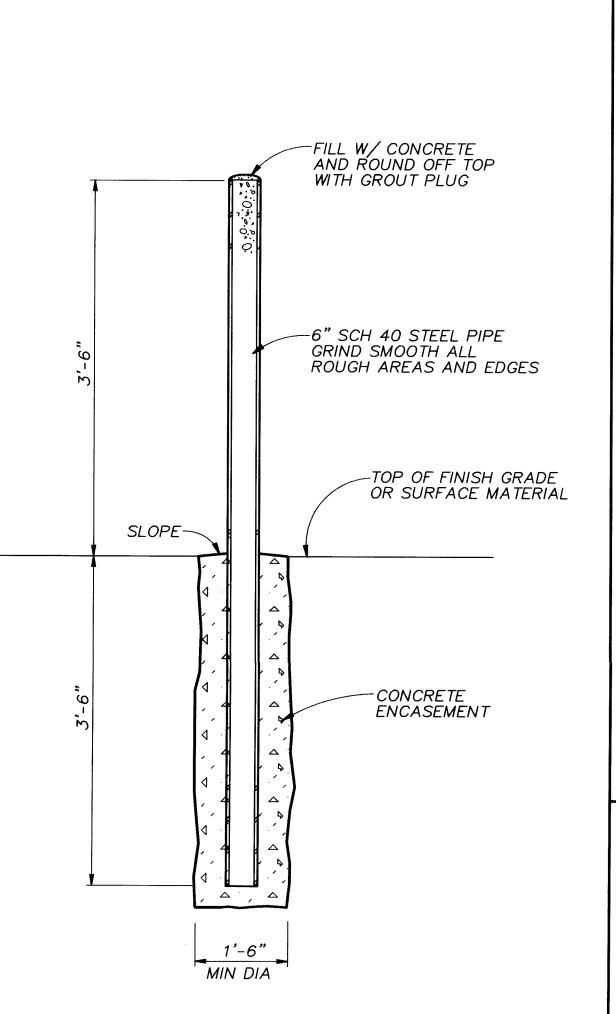
HANDRAIL POST CONNECTOR FOR BOLTED BASE PLATE



ELEVATION

THREE-RAIL HANDRAIL

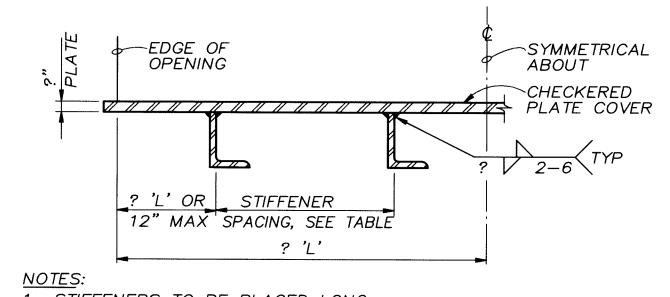
HANDRAIL DETAIL



GUARD POST (1)

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 STIFFENERS TO BE PLACED LONG LEG VERTICAL.
 STIFFENER TO BE PARALLEL TO THE SHORT EDGE OF OPENING.

NOTES:

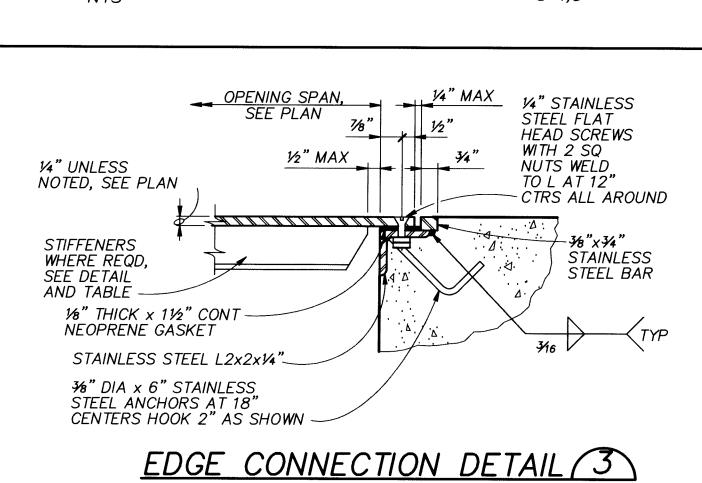
	TABLE	
SHORT SPANS	STIFFENER SIZES	MAXIMUM SPACING
3'-0"	L2x1?x?	1'-6"
3'-6"	L2x1?x?	1'-6"
4'-0"	L2x1?x?	1'-3"
4'-6"	L2?x1?x?	1'-6"
5'-0"	L2?x1?x?	1'-3"

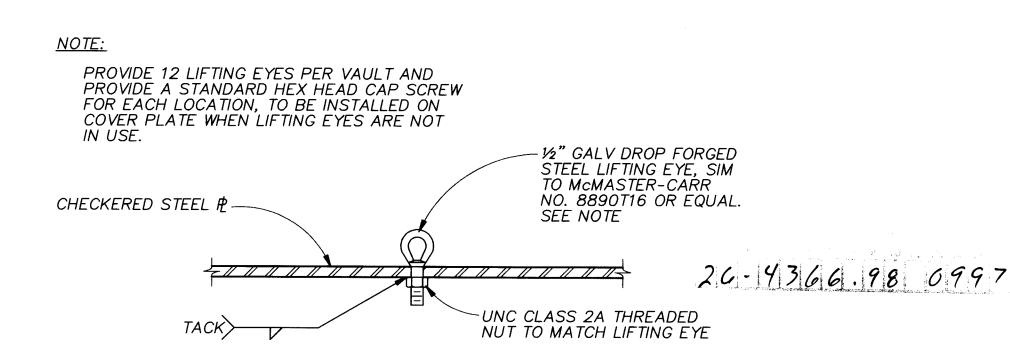
COVER STIFFENERS

- 1. COVER PLATE TYPES AND STIFFENERS
- ARE GALVANIZED STEEL PLATES AND ANGLES.

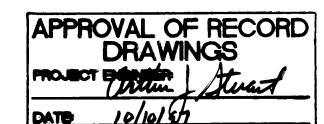
 2. ALL COVER PLATES TO HAVE APPLICABLE LIFTING EYES AS SHOWN IN LIFTING EYE DETAILS.

CHECKERED PLATE COVER 2









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CITY PROJECT NO.

BAR IS ONE INCH ON ORIGINAL DRAWING

1"

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

DATE 7-9 DATE 7-9

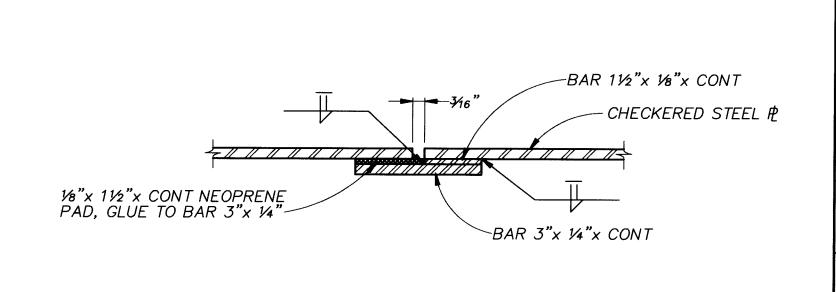
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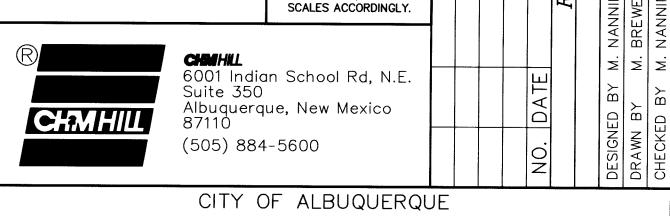
MAATIO

'AΠΕ

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DETAIL 5
NTS S-4,5



PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

TITLE: CONCRETE RESERVOIRS REHABILITATION

STRUCTURAL DETAILS

4366.98

STRUCTURAL DETAILS

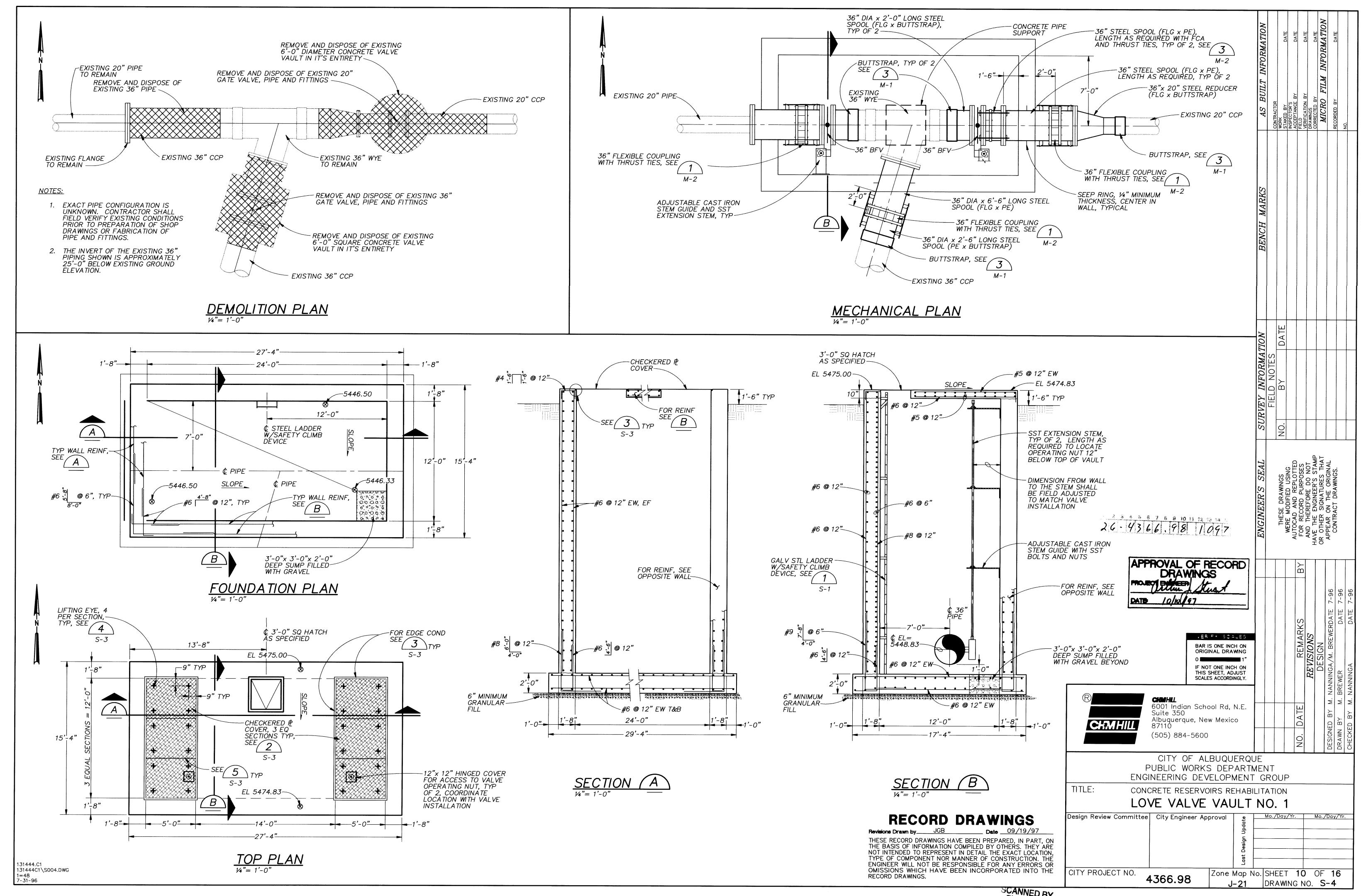
Design Review Committee City Engineer Approval

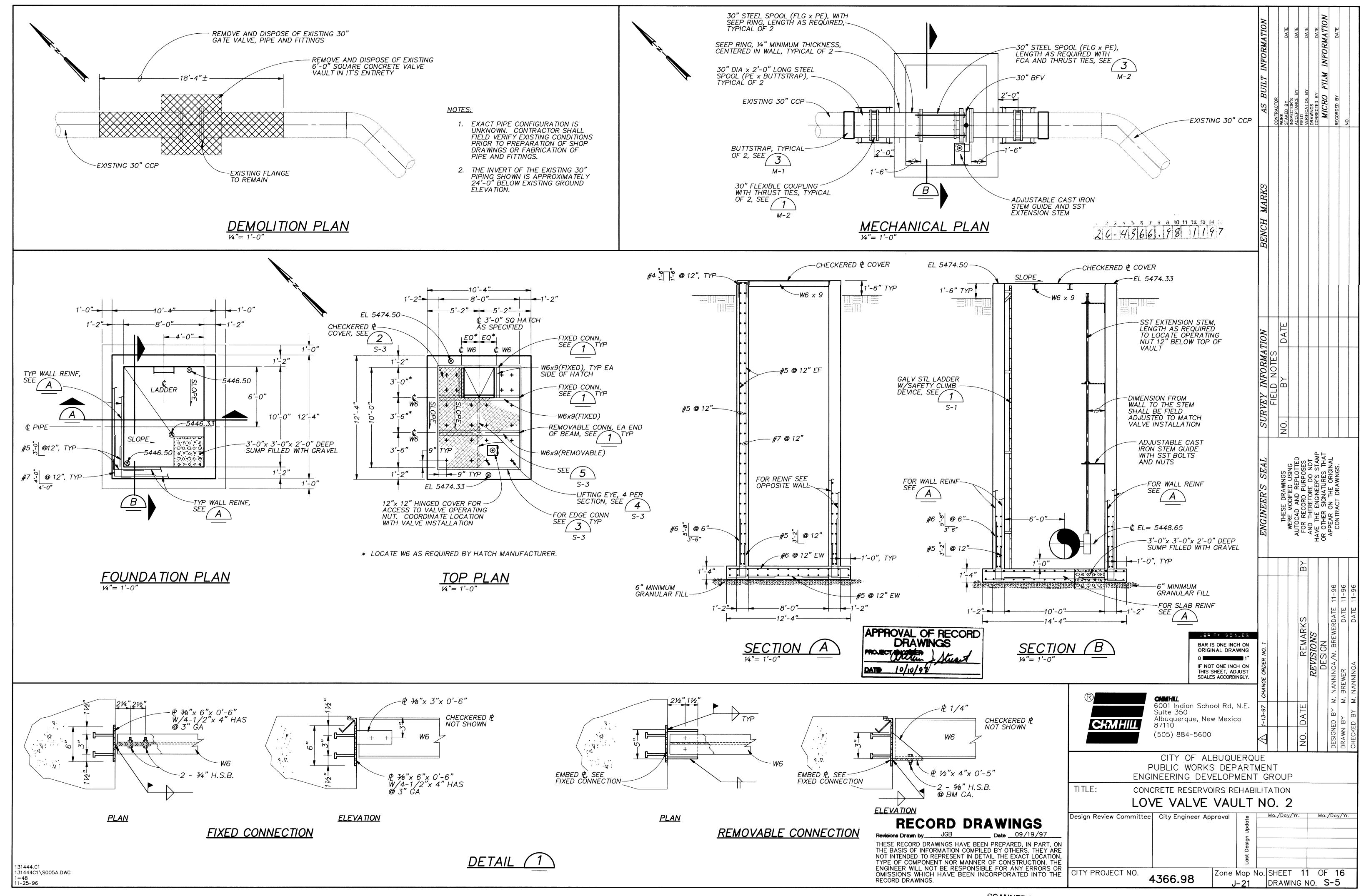
Sign Review City Engineer City Engineer Approval

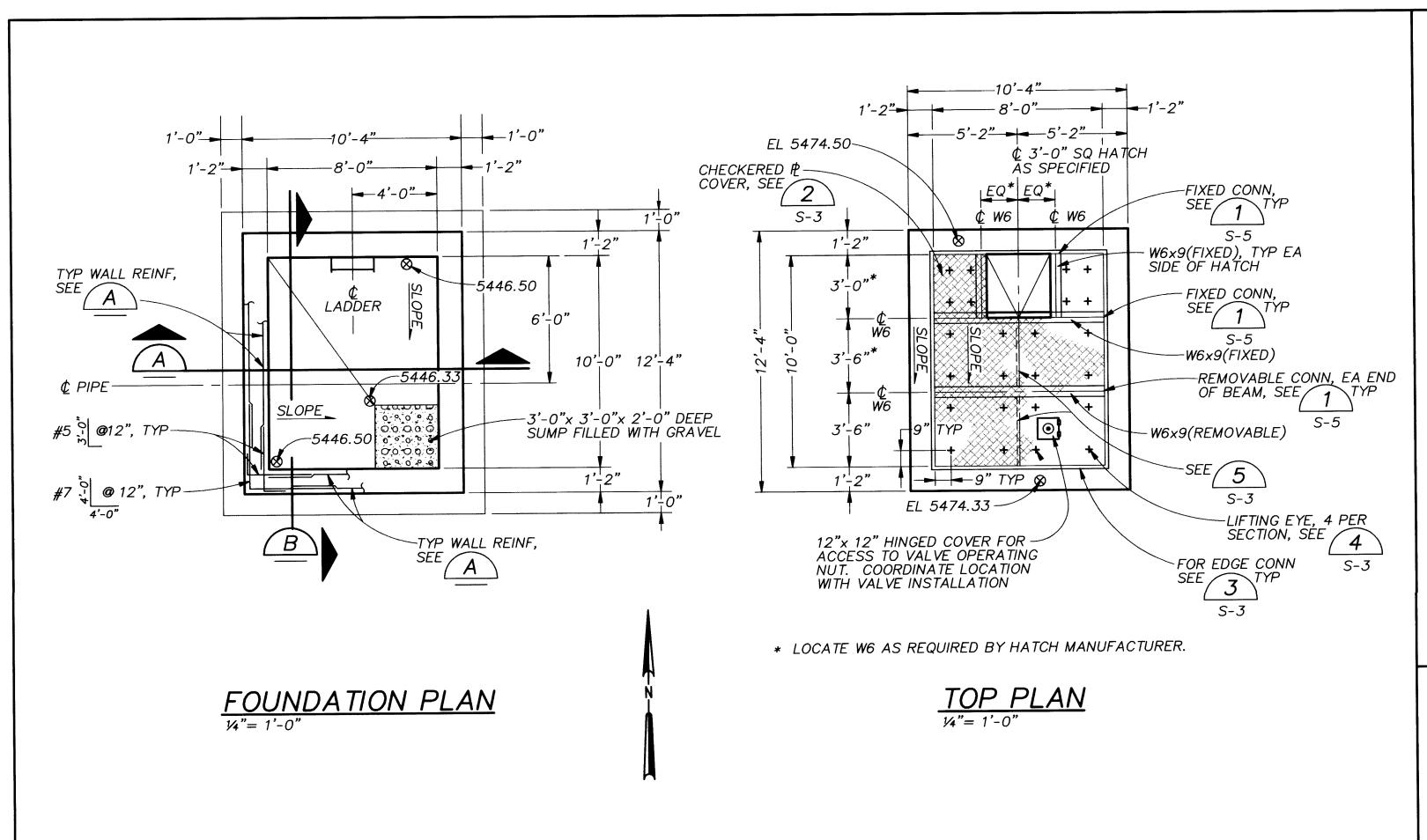
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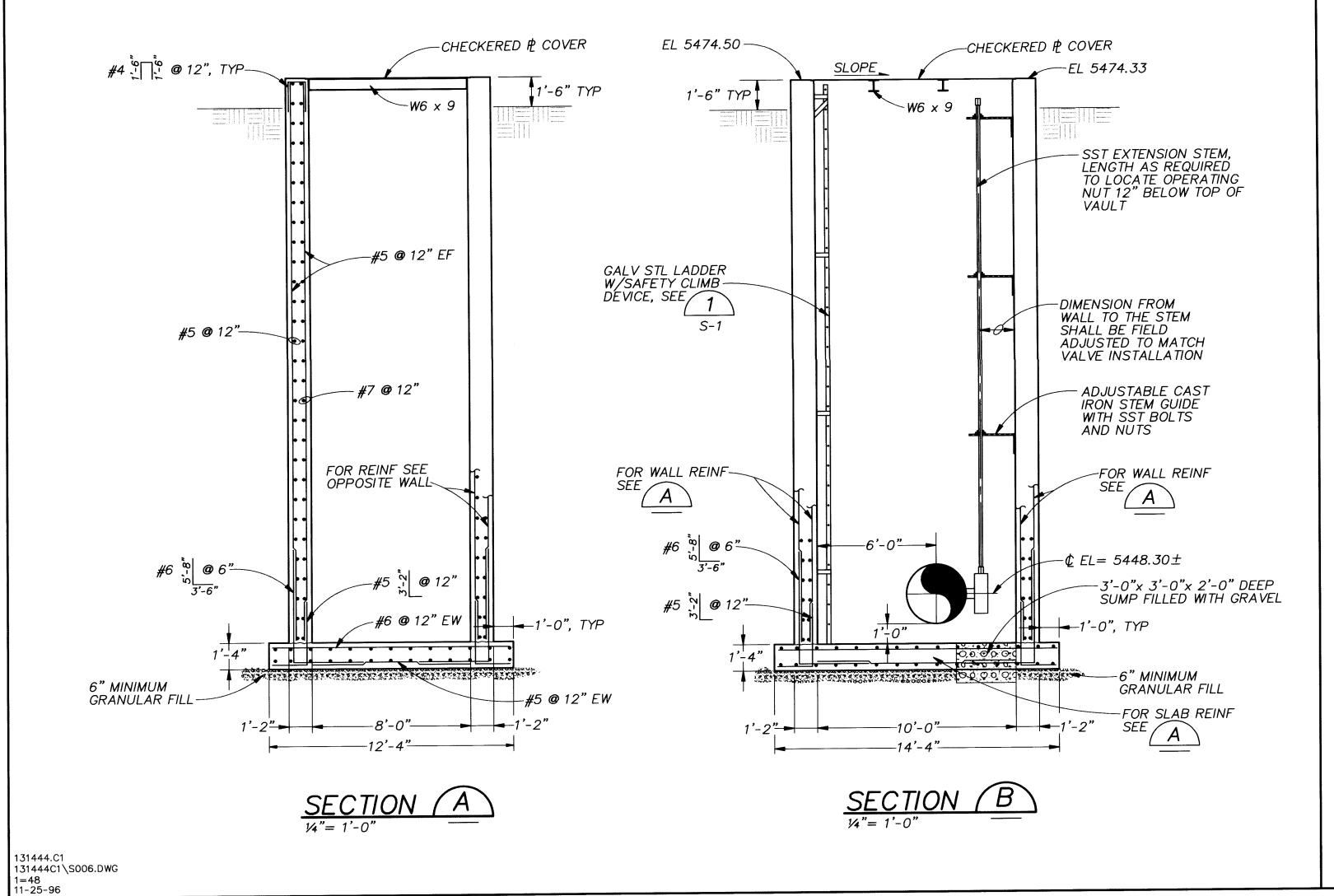
Zone Map No. SHEET 9 OF 16

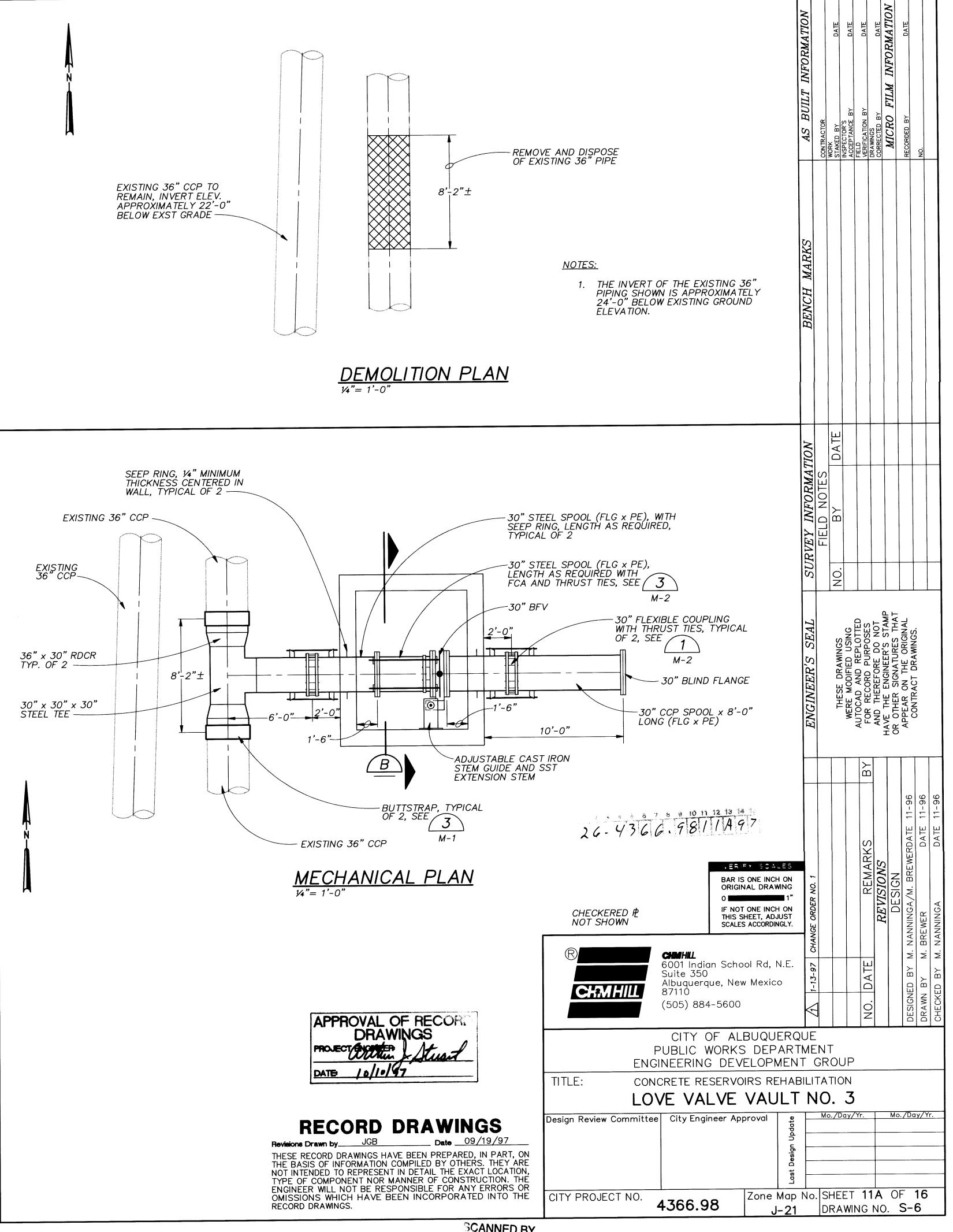
DRAWING NO. S-3

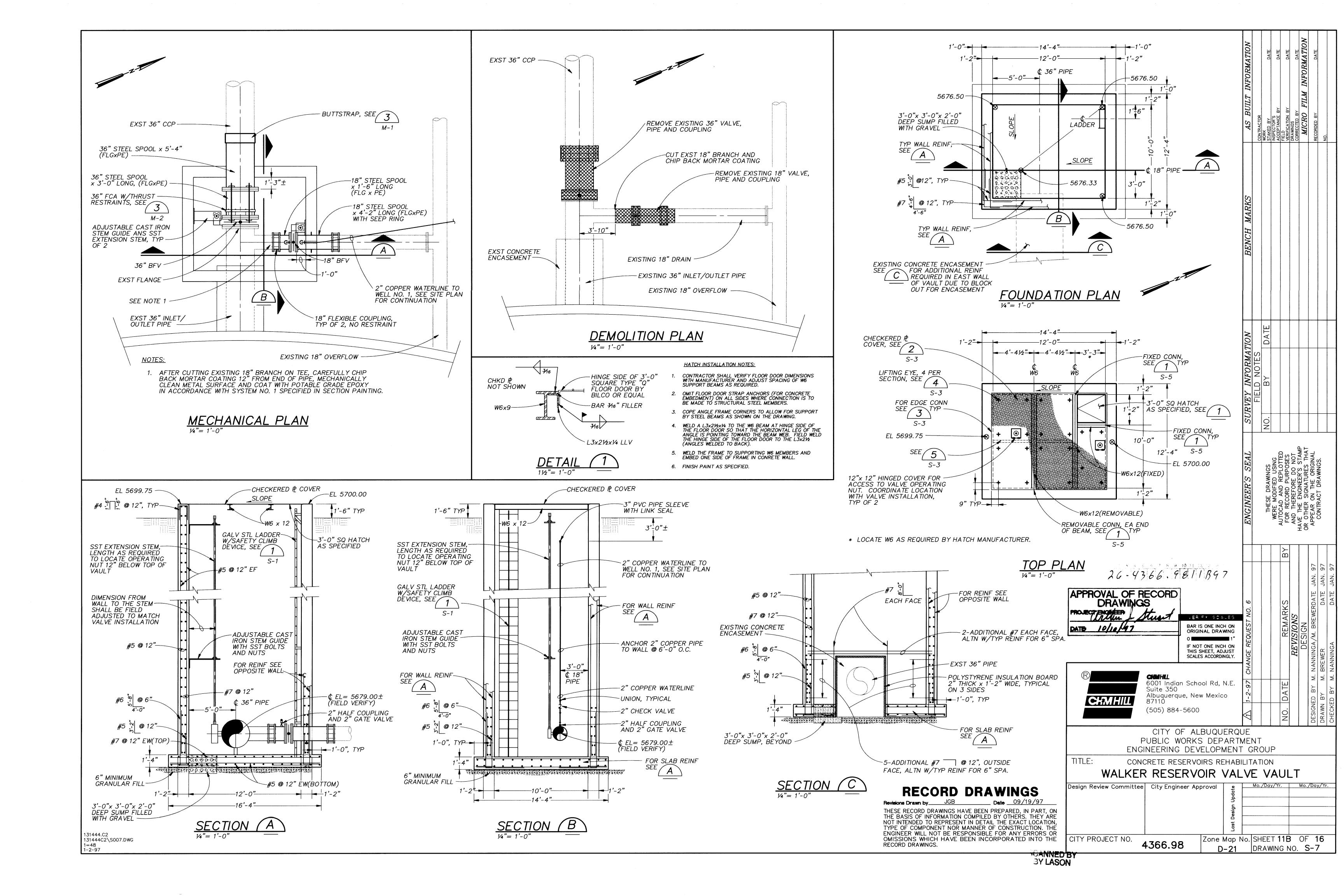


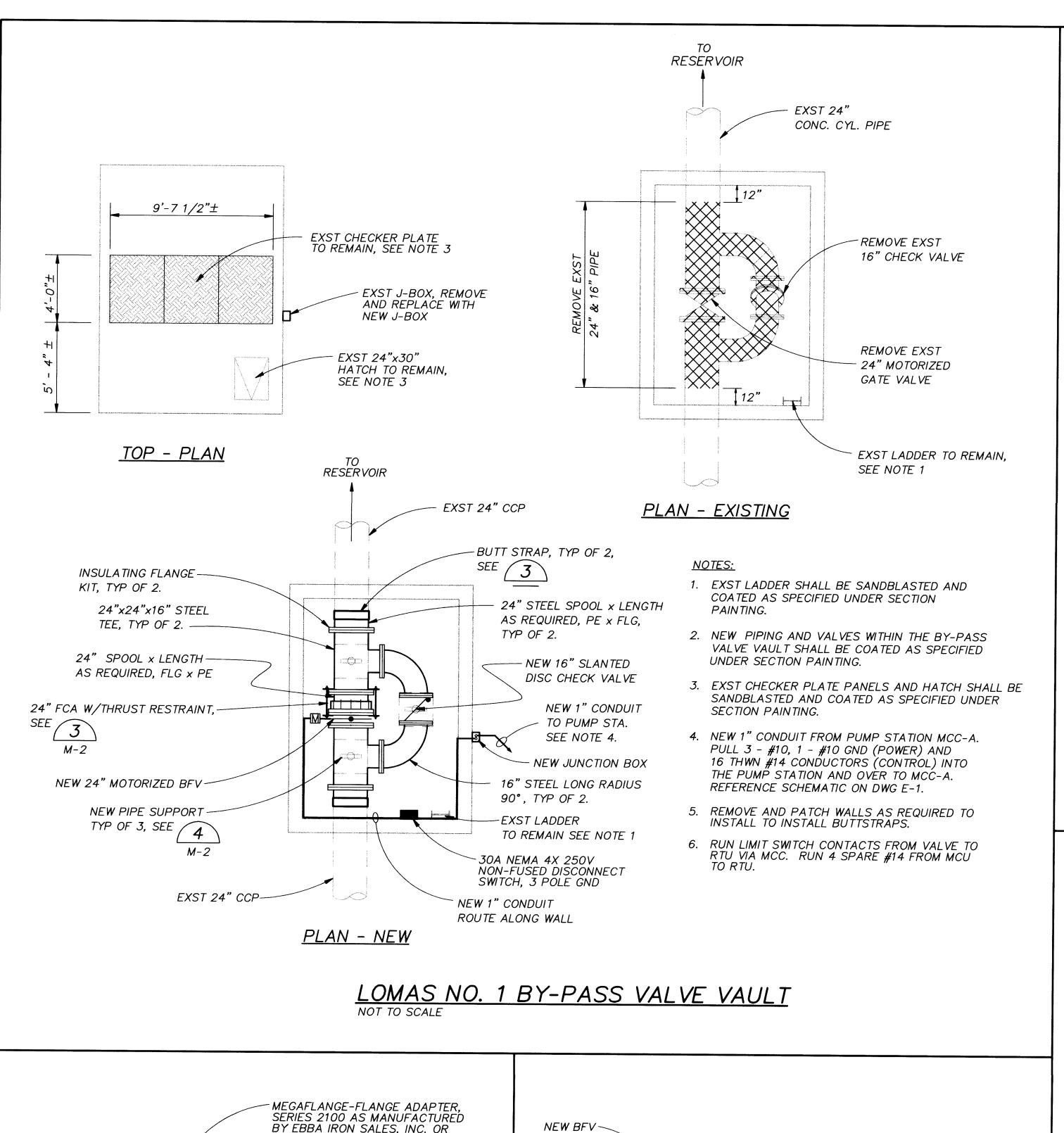


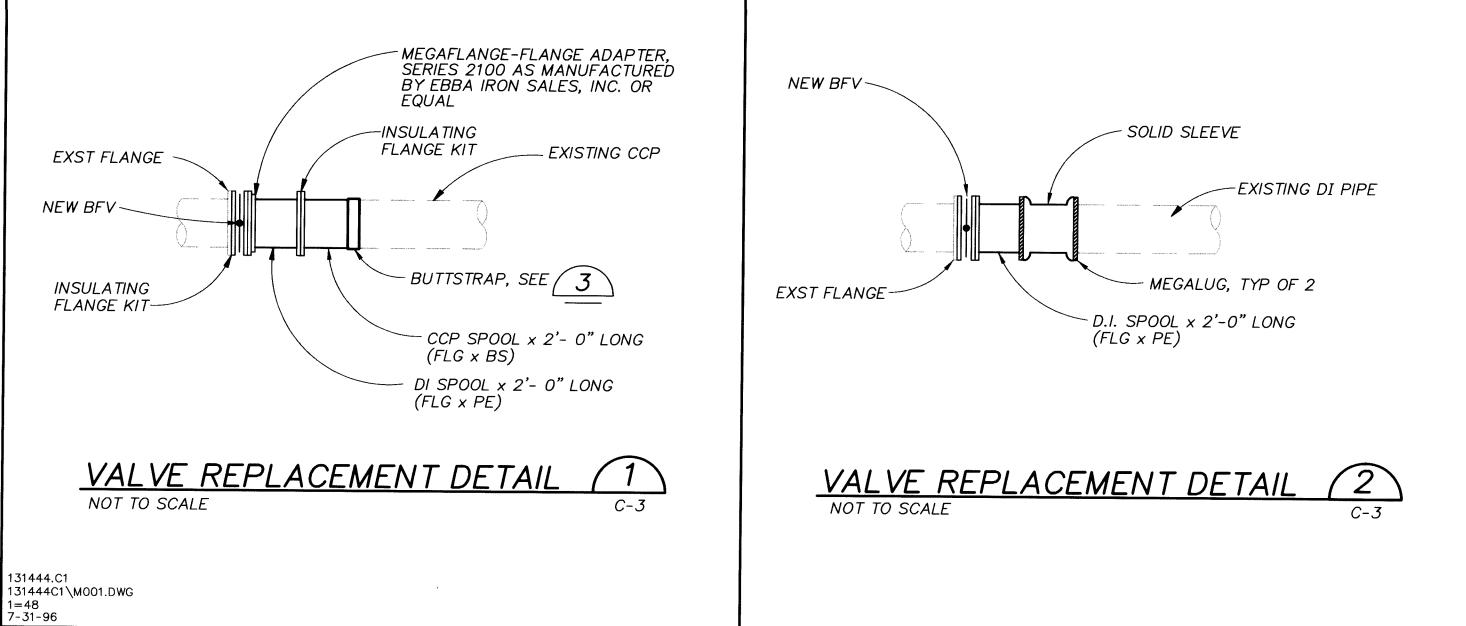


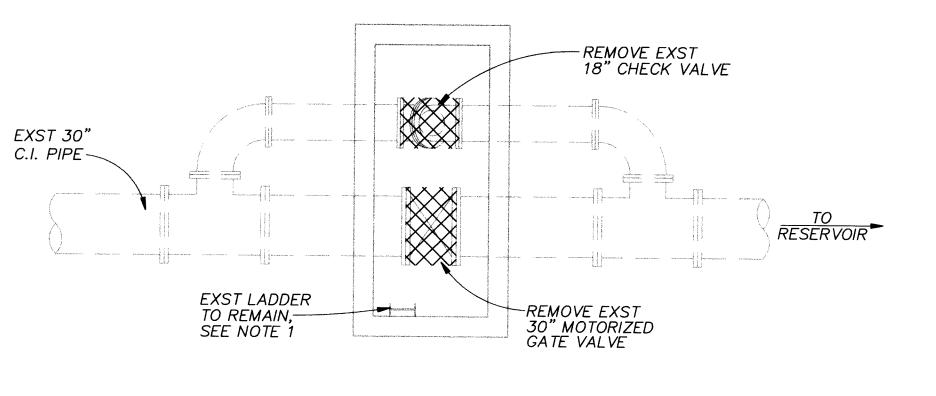




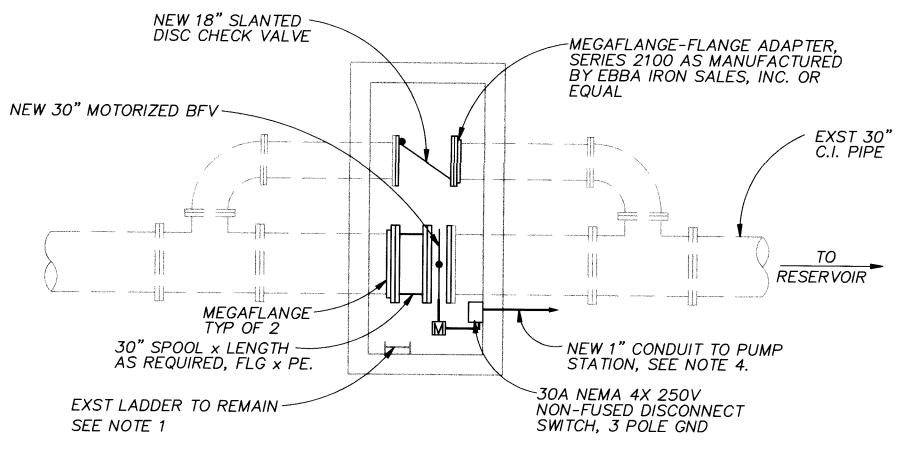








PLAN - EXISTING



<u>PLAN - NEW</u>

CEMENT MORTAR COATING

BUTTSTRAP SEQUENCE:

1. DETERMINE LENGTH "L" OF PIPE TO BE

2. CAUTIOUSLY CHIP OFF THE COATING 9"

FROM THE MARKED POINT OF PIPE TO

REMAIN, THEN CHIP OFF THE COATING

3. MARK THE CUT LOCATION ON THE EXPOSED WIRE WRAPPED CYLINDER.

TO REMAIN 6" IN FROM THE CUT MARK.

4. TACK WELD EXPOSED WIRE ALONG A HORIZONTAL LINE ON THREE OR FOUR CIRCUMFERENTIAL WRAPS OF THE PIPE

OF THE PORTION OF PIPE TO BE REMOVED

REMOVED AND MARK ON PIPE.

3" FROM THE MARKED POINT.

LOMAS NO. 2 BY-PASS VALVE VAULT NOT TO SCALE

NOTES:

1. EXST LADDER SHALL BE SANDBLASTED AND COATED AS SPECIFIED UNDER SECTION PAINTING.

5' - 1" ±

TOP - PLAN

- 2. NEW PIPING AND VALVES WITHIN THE BY-PASS VALVE VAULT SHALL BE COATED AS SPECIFIED UNDER SECTION PAINTING.
- 3. EXST CHECKER PLATE PANELS AND HATCH SHALL BE SANDBLASTED AND COATED AS SPECIFIED UNDER SECTION PAINTING.

EXST CHECKER

PLATE TO REMAIN, SEE NOTE 3

DATE
DATE
DATE
TATI

- 4. NEW 1" CONDUIT FROM PUMP STATION MCC-A. PULL 3 - #10, 1 - #10 GND (POWER) AND 16 THWN #14 CONDUCTORS (CONTROL) INTO THE PUMP STATION AND OVER TO MCC-A. REFERENCE SCHEMATIC ON DWG E-1.
- 5. RUN LIMIT SWITCH CONTACTS FROM VALVE TO RTU VIA MCC. RUN 4 SPARE #14 FROM MCU

RECORD DRAWINGS

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12" BUTT STRAP PIPE TO BE REMOVED MORTAR DIAPER OVER BUTT STRAP AND EXPOSED STEEL PIPE PIPE TO REMAIN TACK WELD, TYP OF 3 OR < 4 PLACES (EXISTING CONCRETE CYLINDER PIPE SHOP APPLIED MORTAR FIELD APPLIED AQUATOPOXY EPOXY OR EQUAL 1" MAX, 1/2" MIN COIL BACK REMAINING CONNECTED WIRE SECTION (A

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.
- 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 CLINDER IN ACCORDANCE WITH AWWA C303 USING

2 X 4 X 13 GA WELDED WIRE FABRIC HELD 3/8" FROM THE STEEL.

APPROVAL OF RECORD DRAWINGS VER FY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING

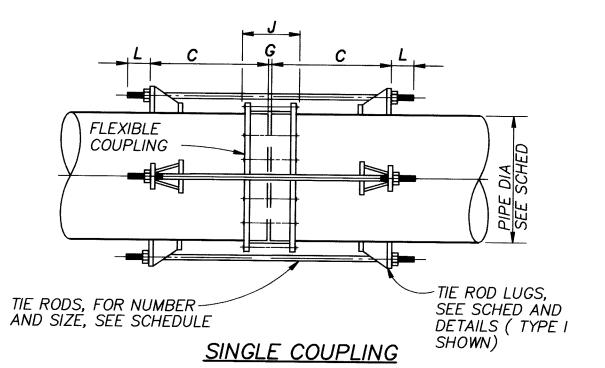
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DATE DATE DATE

PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP TITLE: CONCRETE RESERVOIRS REHABILITATION

MECHANICAL DETAILS Design Review Committee | City Engineer Approval Mo./Day/Yr. Mo./Day/Yr. CITY PROJECT NO. Zone Map No. SHEET 12 OF 16 4366.98 DRAWING NO. M-1

BUTTSTRAP DETAIL (3)



*SEE NOTES TIE ROD SCHEDULE									
TES1	PRESSURE	25	PSI	50 PSI		100 PSI		150 PSI	
PIPE DIA.	_		RODS	TIE RODS		TIE RODS		TIE R	ODS
(IN.)	THICKNESS (IN.)*	DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D
16	3/16	5/8	2	5/8	2	3/4	2	7/8	2
24	1/4	5/8	2	3/4	2	7/8	4	1	4
30	1/4	5/8	4	3/4	4	7/8	6	1	6
36	1/4	3/4	4	7/8	4	1	6	1	8

LENGTH AS SHOWN FLEXIBLE COUPLING -TIE ROD LUGS, SEE SCHED AND TIE RODS, FOR NUMBER DETAILS (TYPE I AND SIZE, SEE SCHEDULE SHOWN)

DOUBLE COUPLING

- 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 CATÀLOGS USING THE SPECIFIED MIDDLE RING LENGTH.
- 3. "G" = MANUFACTURER'S RECOMMENDED SPACE BETWEEN
- 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.
- 6. LOCATE TIE RODS IN THE HORIZONTAL POSITION WHEN ONLY TWO ARE SPECIFIED.

TYPICAL THRUST TIE DETAIL FOR STEEL PIPE (1)

			L	UG SCHE	DULE						1
STUD DIA	LUG TYPE	T	W	X	Y	Z	HB	Ε	HF	L	
5/8	I	3/8	1-3/8	4-1/16	4-1/2	3-3/8	3-7/8	3	1-3/4	3	
3/4	I	3/8	1-1/2	5	4-1/2	5	4-1/8	3-1/8	1-3/4	3	
7/8	I	1/2	1-5/8	5-1/2	4-1/2	5-1/8	4-1/4	3-1/8	1-3/4	4	
1	П	1/2	1-3/4	5-3/4	Cont	6	4-1/2	3-1/4	2	4	

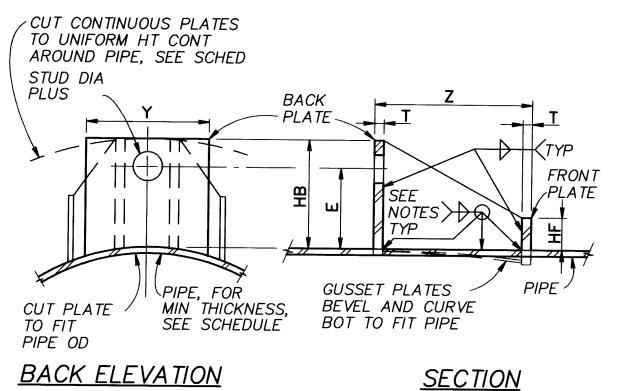
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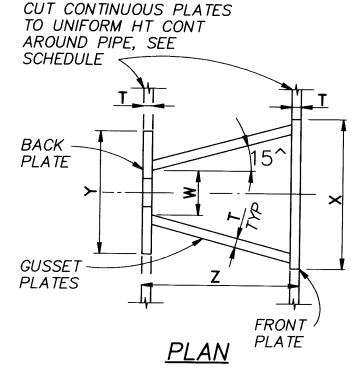
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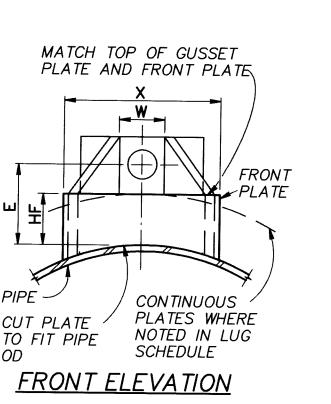
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- 1. LUG SCHEDULE DIMENSIONS IN INCHES.
- 2. TIE RODS SHALL CONFORM TO ASTM A193 GRADE B7.
- 3. NUTS SHALL CONFORM TO ASTM A194 GRADE 2H. 4. PLATE SHALL CONFORM TO ASTM A283 GRADE D.
- 5. TIE ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES 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.

- TIE ROD LUGS SHALL BE SPACED EQUALLY AROUND PIPE. FILLET WELDS SHALL MEET THE MINIMUM REQUIREMENTS OF THE AISC SPECIFICATION EXCEPT AS FOLLOWS: FILLETWELDS SHALL BE 1/4-INCH MINIMUM EXCEPT WHEN WELDING 3/16-INCH PLATE WHERE THEY SHALL BE 3/16-INCH.
- 8. CATHODIC PROTECTION FOR FLEXIBLE COUPLINGS REQUIRED WHERE NOTED ON PLANS OR IN THE SPECIFICATIONS.
- CONTRACTOR SHALL USE DATA FOR ONLY THOSE PIPE SIZES AND TEST PRESSURES SPECIFIED IN THIS CONTRACT.
- 10. LUG TYPE I IS AS SHOWN IN DETAIL. LUG TYPE II HAS A CONTINUOUS BACK PLATE AROUND PIPE. LUG TYPE III HAS CONTINUOUS FRONT AND BACK PLATES AROUND PIPE.
- 11. TIE RODS SHALL NOT BE ATTACHED TO A PIPE WHEN THE WALL THICKNESS IS LESS THAN THE MINIMUM SHOWN ON THE TIE ROD
- 12. THE MINIMUM PIPE WALL THICKNESSES SHOWN ARE TO ENSURE PROPER PERFORMANCE OF THE THRUST TIE LUG. PIPE WALL THICKNESSES GREATER THAN SHOWN IN THE TABLE MAY BE REQUIRED AND MAY BE BE SHOWN ELSEWHERE OR SPECIFIED ELSEWHERE TO RESIST INTERNAL
- 13. FOR ALL BURIED ASSEMBLIES, COAT ALL TIE RODS AND EXPOSED STEEL WITH 16 MILS OF BITUMASTIC.



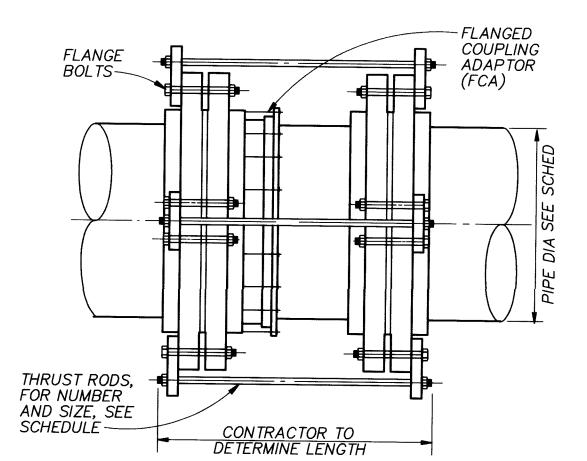


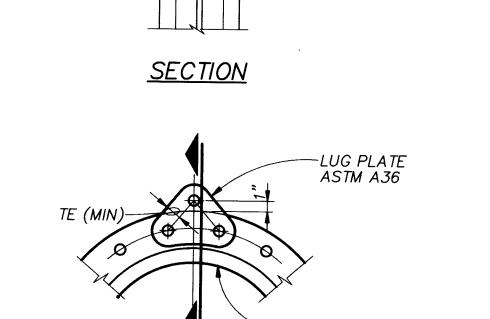


TIE ROD LUG (2)

NOTES:

- 1. THRUST RODS SHALL CONFORM TO ASTM A193 GRADE B7.
- 2. NUTS FOR THRUST RODS SHALL CONFORM TO ASTM A194
- 3. LUG PLATES SHALL CONFORM TO ASTM A-36.
- 4. THRUST ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.
- 5. LUG PLATES SHALL BE EQUALLY SPACED AROUND PIPE.
- 6. PROVIDE CATHODIC PROTECTION FOR COUPLINGS AS NOTED ON PLANS OR IN SPECIFICATIONS.
- 7. CONTRACTOR SHALL USE SCHEDULE DATA FOR ONLY THOSE PIPE SIZES AND TEST PRESSURES SPECIFIED IN THIS CONTRACT.
- 8. FOR ALL BURIED ASSEMBLIES, COAT ALL THE RODS AND EXPOSED STEEL WITH 16 MILS OF BITUMASTIC.





-THRUST RODS ASTM 193 GR B7

FLANGE BOLTS, ASTM A307

OR ASTM A193-B7

AWWA CLASS E OR

ANSI B16.5 FORGED STEEL FLANGES:

SA 105 CARBON STEEL

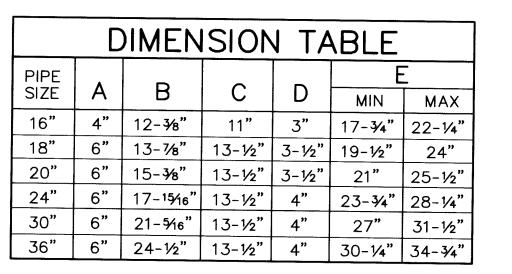
FRONT ELEVATION

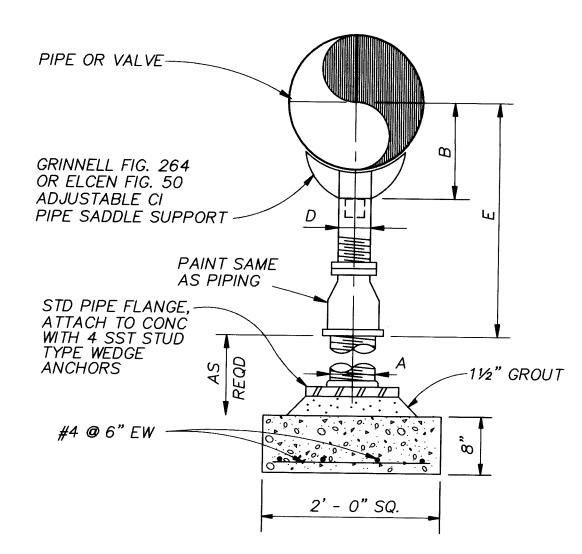
<u>LUG</u>

PIPE DIA.	TEST PRESSURE	THRUST RODS	FLANGE	FLA	NGE L	30LTS	LUG	PLATE
(IN.)	(PSI)	(#-DIA)	CLASS	NO.	DIA.	MATL	TL	TE
24"	<i>25</i>	4 - 1/8"	ANSI 150	20	11/4"	A307	3/4"	15/8"
<i>30</i> "	25	4 - 1/8"	ANSI 150	28	11/2"	A307	3/4"	13/4"
<i>36"</i>	25	4 - 1/8"	ANSI 150	32	11/2"	A307	3/4"	13/4"

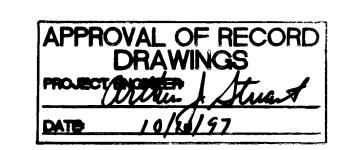
THRUST ROD AND LUG PLATE SCHEDULE

FLANGE LUG DETAIL/SCHEDULE (3)









RECORD DRAWINGS

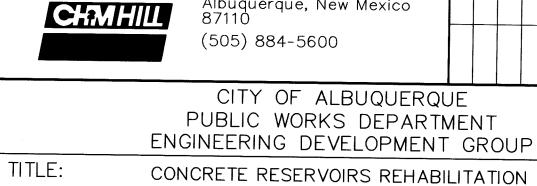
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. 2365578910117212 26-4366.98

VER FY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. $\Sigma \mid \Sigma \mid$ 6001 Indian School Rd, N.E. Suite 350 Albuquerque, New Mexico 87110

DRAWING NO. M-2

INFORMATION
D NOTES
BY | DATE

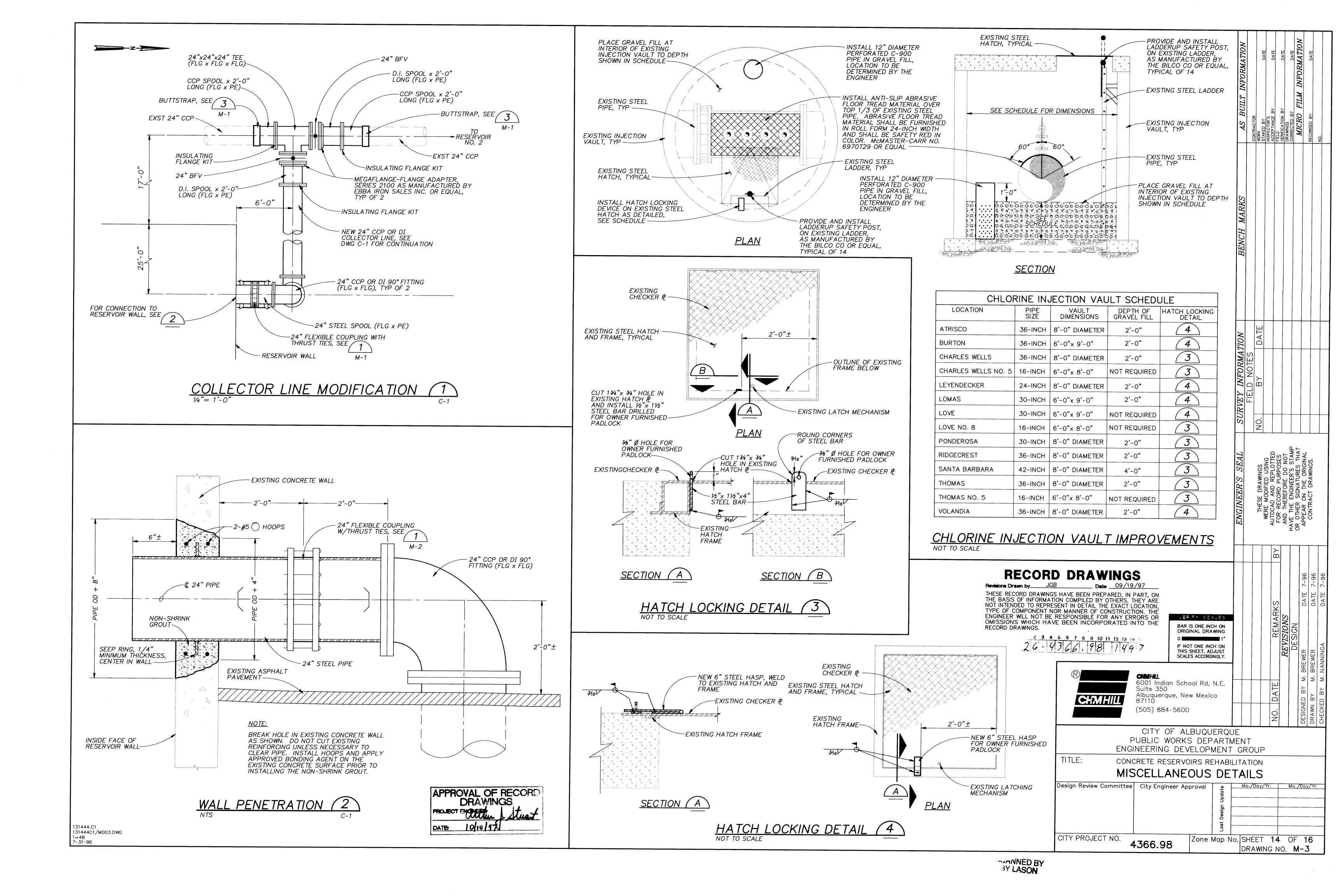


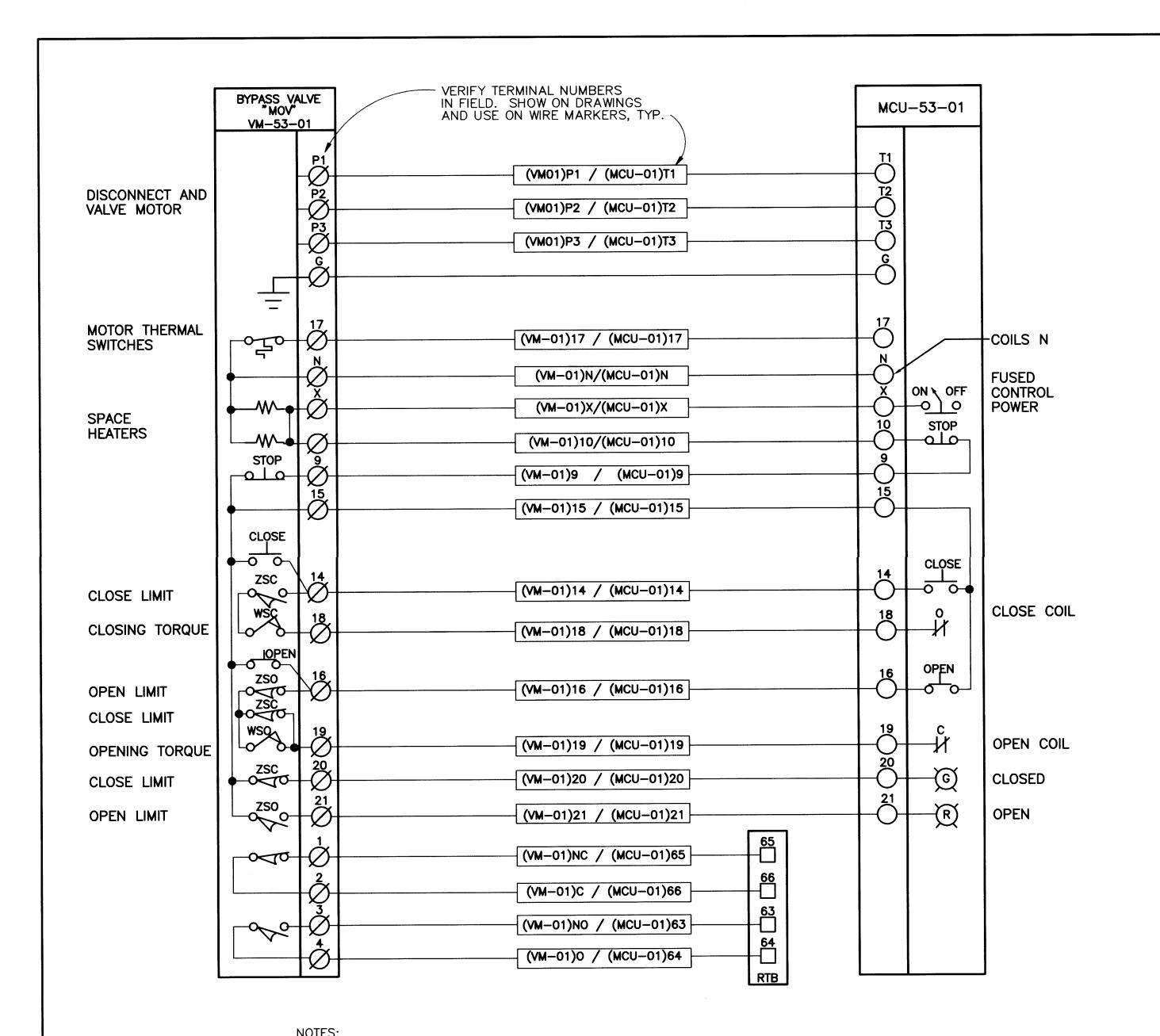
Design Review Committee | City Engineer Approval

CONCRETE RESERVOIRS REHABILITATION MECHANICAL DETAILS

CITY PROJECT NO. Zone Map No. SHEET 13 OF 16 4366.98







1. CONTRACTOR WILL PROVIDE WIRE BETWEEN MOTOR TERMINALS AND MOTOR DISCONNECT.

BY-PASS VALVE PARTIAL INTERCONNECTION

THERMAL SW'S. MECH. INTLK. T2 O **OPEN** IN VAULT VLV TB 10 VLV AT MCU M VLVEXTEND TO RTB FOR CONNECTION

NOTES:

1. WIRING IN VALVES AND WIRING IN MCU IS SHOWN SOLID. FIELD WIRING IS SHOWN DASHED.

BY-PASS VALVE SCHEMATIC

BY OWNER

RECORD DRAWINGS

26-4366.98 1597

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CORBIN & Associates ,ER FY SÇALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CHMHILL

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

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

DRAWING NO. E-1

TITLE: CONCRETE RESERVOIRS REHABILITATION ELECTRICAL SCHEMATICS

Design Review Committee | City Engineer Approval

Zone Map No. SHEET 15 OF 16 CITY PROJECT NO. 4366.98

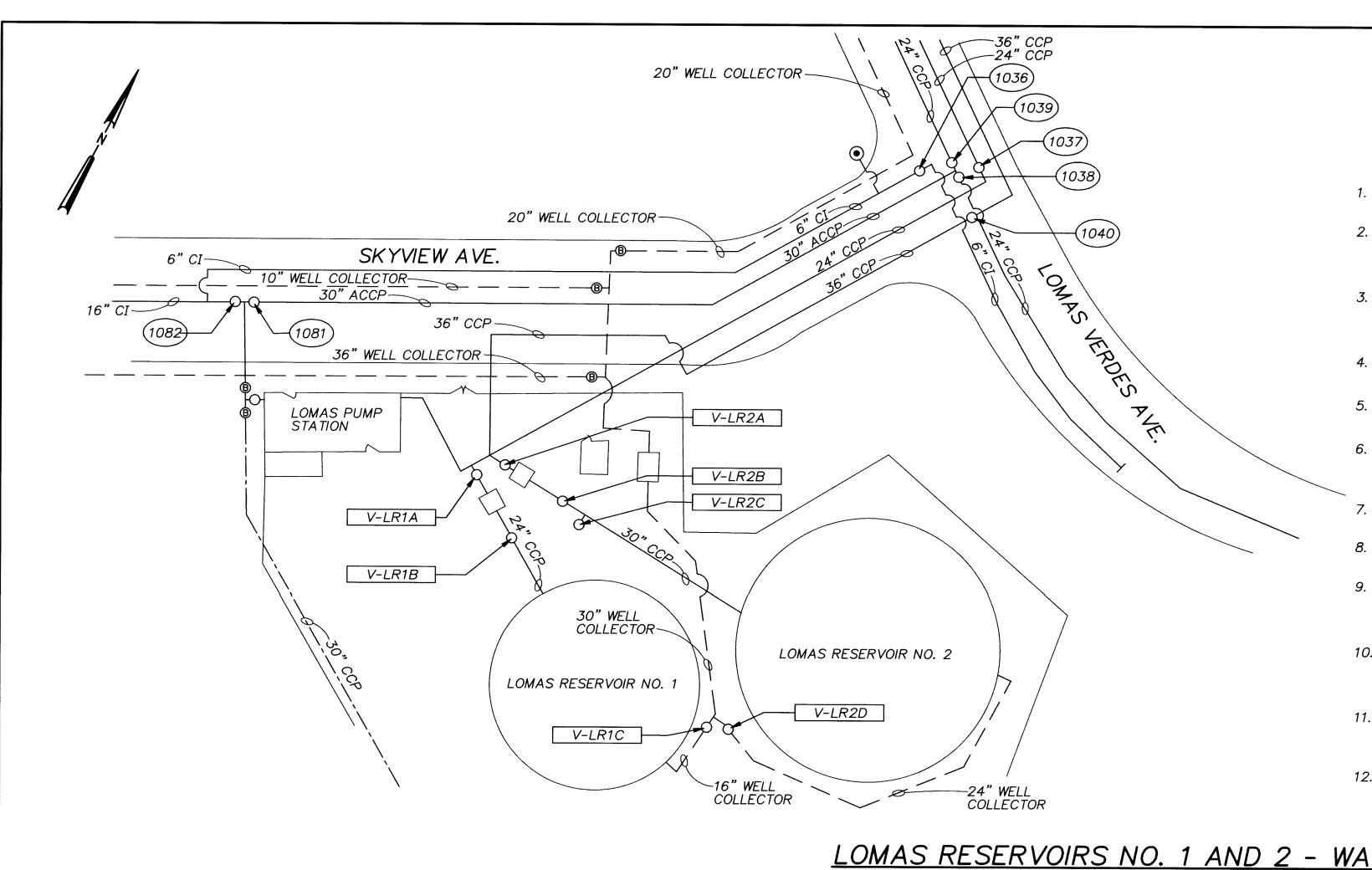
AS-BUILT	WIRE TAGS
CUBICLE 3A IN THE 480V MCC VALVE 1 WRE TAG NUMBERS	CUBICLE 3B IN THE 480V MCC VALVE 2 WIRE TAG NUMBERS
(VM-A) P1/MCU-3A) T1 - PHASE A POWER	(VM-B) P1/MCU-3B) T1 - PHASE A POWER
(VM-A) P2/MCU-3A) T2 - PHASE B POWER	(VM-B) P2/MCU-3B) T2 - PHASE B POWER
(VM-A) P3/MCU-3A) T3 - PHASE C POWER	(VM-B) P3/MCU-3B) T3 - PHASE C POWER
(VM-A) 1/MCU-3A) CPB - CLOSE PUSH BUTTON	(VM-B) 1/MCU-3B) CPB - CLOSE PUSH BUTTON
(VM-A) 2/MCU-3A) OPB - OPEN PUSH BUTTON	(VM-B) 2/MCU-3B) OPB - OPEN PUSH BUTTON
(VM-A) 3/MCU-3A) SPB - STOP PUCH BUTTON	(VM-B) 3/MCU-3B) SPB - STOP PUCH BUTTON
(VM-A) 4/MCU-3A) RC - REMOTE COMMON	(VM-B) 4/MCU-3B) RC - REMOTE COMMON
(VM-A) LS5/(MCU-3A) NOCS - TORQUE SWITCH OPEN	(VM-B) LS5/MCU-3B) NOCS - TORQUE SWITCH OPEN
(VM-A) LS1/(MCU-3A) NCCS - TORQUE SWITCH CLOSE	(VM-B) LS1/MCU-3B) NCCS - TORQUE SWITCH CLOSE
(VM-A) LS4/(MCU-3A) NOOS - LIMIT SWITCH OPEN	(VM-B) LS4/MCU-3B) NOOS - LIMIT SWITCH OPEN
(VM-A) LS8/(MCU-3A) NOCS - LIMIT SWITCH CLOSE	(VM-B) LS8/MCU-3B) NOCS - LIMIT SWITCH CLOSE

208V, 3ø

131444.C1 131444C1/E001.DWG 1=**4**8 7-**3**1-96

SCANNED BY BY LASON

APPROVAL OF RECORD
DRAWINGS



EUBANK

(853)

_____36" CCP

−20" CCP

(855)

(1191)

(1192)

(1200)-

131444.C1

131444C1\WSO1.DWG

WATER SHUT-OFF SEQUENCE

LOMAS RESERVOIR NO. 2

- COORDINATE WITH WATER UTILITY DIVISION TO SHUT DOWN AND TAG OUT THE LOMAS WELL FIELD (LOMAS WELLS NO. 1,5 AND 6).
- 2. COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING 36" GATE VALVE (1040) AT INTERSECTION OF SKYVIEW AVE. AND LOMAS VERDES AVE.
- 3. COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING 24" GATE VALVE (1037) AT INTERSECTION OF SKYVIEW AVE. AND LOMAS VERDES AVE.
- 4. COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING 30" GATE VALVE V-LR2B
- 5. COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING 24" GATE VALVE V-LR1B
- 6. REMOVE EXISTING 30" AND 24" GATE VALVES V-LR2A AND V-LR1A AND INSTALL NEW 30" AND 24" BFV V-LR2A AND V-LR1A
- REMOVE EXISTING VALVES INSIDE LOMAS RESERVOIR NO. 2 BYPASS VALVE VAULT AND INSTALL BLIND FLANGES.
- REMOVE EXISTING 24" GATE VALVE V-LR2D AND INSTALL BLIND FLANGE.
- COORDINATE WITH WATER UTILITY DIVISION TO OPEN EXISTING 36" GATE VALVE (1040) AT INTERSECTION OF SKYVIEW AVE. AND LOMAS VERDES AVE.
- 10. COORDINATE WITH WATER UTILITY DIVISION TO OPEN EXISTING 24" GATE VALVE (1037) AT INTERSECTION OF SKYVIEW AVE. AND LOMAS VERDES AVE.

LOVE

RESERVOIR

- 11. COORDINATE WITH WATER UTILITY DIVISION TO OPEN EXISTING 24" BFV V-LR1B AND NEW 24" BFV V-LR1A AND RETURN LOMAS RESERVOIR NO. 1 TO SERVICE.
- 12. COORDINATE WITH WATER UTILITY DIVISION TO RETURN THE LOMAS WELL FIELD (LOMAS WELLS NO. 1,5 AND 6) TO SERVICE.

''(882)

LOMAS RESERVOIR NO. 1

DATE
DATE
DATE
MATTI

- 1. COMPLETE ALL WORK INSIDE LOMAS RESERVOIR NO.2 INCLUDING DISINFECTION, BYPASS VALVE VAULT MODIFICATIONS AND SITE VALVE REPLACEMENTS.
- 2. COORDINATE WITH WATER UTILITY DIVISION TO SHUT DOWN AND TAG OUT THE LOMAS WELL FIELD (LOMAS WELLS NO. 1,5 AND 6).
- 3. REMOVE BLIND FLANGE AND INSTALL NEW 24" BFV V-LR2D
- 4. REMOVE EXISTING 16" GATE VALVE V-LR1C AND INSTALL BLIND FLANGE.
- 5. COORDINATE WITH WATER UTILITY DIVISION TO RETURN THE LOMAS WELL FIELD (LOMAS WELLS NO. 1,5 AND 6) TO SERVICE.
- 6. COORDINATE WITH WATER UTILITY DIVISION TO CLOSE NEW 12" BFV V-LR2C
- 7. COORDINATE WITH WATER UTILITY DIVISION TO OPEN NEW 30" BFVS V-LR2A AND V-LR2B AND NEW 30" MOTORIZED BFV IN THE LOMAS RESERVOIR NO. 2 BYPASS VALVE VAULT.
- COORDINATE WITH WATER UTILITY DIVISION TO CLOSE NEW 24" BFV V-LR1A
- REMOVE EXISTING VALVES INSIDE LOMAS RESERVOIR NO. 1 BYPASS VALVE VAULT AND INSTALL BLIND FLANGES.
- 10. COMPLETE ALL WORK INSIDE LOMAS RESERVOIR NO.1 INCLUDING DISINFECTION, BYPASS VALVE VAULT MODIFICATIONS AND SITE VALVE REPLACEMENTS.
- 11. COORDINATE WITH WATER UTILITY DIVISION TO SHUT DOWN AND TAG OUT THE LOMAS WELL FIELD (LOMAS WELLS NO. 1,5 AND 6).
- 12. REMOVE BLIND FLANGE AND INSTALL NEW 16" BFV V-LR1C
- 13. COORDINATE WITH WATER UTILITY DIVISION TO RETURN THE LOMAS WELL FIELD (LOMAS WELLS NO. 1,5 AND 6) TO SERVICE.
- 14. COORDINATE WITH WATER UTILITY DIVISION TO OPEN NEW 24" BFVS V-LR1A AND V-LR1B AND NEW 24" MOTORIZED BFV IN THE LOMAS RESERVOIR NO. 1 BYPASS VALVE VAULT.

26-4366.98 1697

LOMAS RESERVOIRS NO. 1 AND 2 - WATER SHUT-OFF PLAN

LOVE RESERVOIR

NO. 2

20" CCP -

V-LR3B

V-LR3A

LOVE

RESERVOIR

NO. 3

(864)

V-LR3C

(862)

[12]

LOVE RESERVOIR NO. 3 - WATER SHUT-OFF PLAN

(812)

BETTS PL

36" CCP

20" CCP -

20" CCP WELL COLLECTOR

LOMAS BLVD.

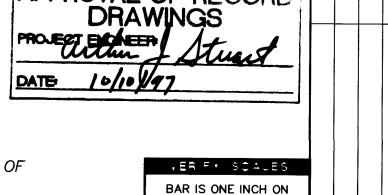
WATER SHUT-OFF SEQUENCE

LOVE RESERVOIR NO. 3

- 1. COORDINATE WITH WATER UTILITY DIVISION TO SHUT DOWN AND TAG OUT THE LOVE WELL FIELD (LOVE WELLS NO. 1,3,4,5,6 AND 7).
- 2. COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING 36" GATE VALVES (853), (854) AND (855) AT INTERSECTION OF LOMAS BLVD. AND EUBANK BLVD
- COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING 20" GATE VALVE (1200) AT INTERSECTION OF LOMAS BLVD. AND EUBANK BLVD.
- COORDINATE WITH WATER UTILITY DIVISION TO CLOSE EXISTING *30" BFV V-LR3C*
- COMPLETE ALL SITE VALVE REPLACEMENTS AND VALVE VAULT CONSTRUCTION.
- 6. COORDINATE WITH WATER UTILITY DIVISION TO OPEN EXISTING 36" GATE VALVES (853), (854) AND (855) AT INTERSECTION OF LOMAS BLVD. AND EUBANK BLVD.
- 7. COORDINATE WITH WATER UTILITY DIVISION TO OPEN 20" EXISTING GATE VALVE (1200) AT INTERSECTION OF LOMAS BLVD. AND EUBANK BLVD.
- 8. COORDINATE WITH WATER UTILITY DIVISION TO OPEN EXISTING 30" BFV V-LR3C
- COORDINATE WITH WATER UTILITY DIVISION TO OPEN NEW 36" BFV TO LOVE RESERVOIR NO. 3 AND CLOSE NEW 36" BFV TO LOVE RESERVOIR NO. 2 INSIDE THE NEW LOVE VALVE VAULT
- 10. COORDINATE WITH WATER UTILITY DIVISION TO OPEN NEW 30" BFV TO LOVE RESERVOIR NO. 3 INSIDE THE NEW LOVE VALVE VAULT NO. 2
- 11. COORDINATE WITH WATER UTILITY DIVISION TO RETURN THE LOVE WELL FIELD (LOVE WELLS NO. 1,3,4,5,6 AND 7) TO SERVICE.

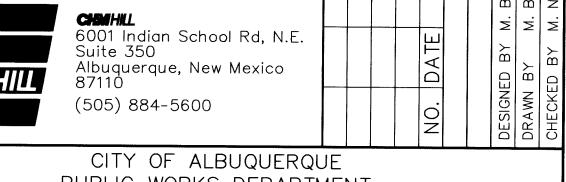
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APPROVAL OF RECORD





ORIGINAL DRAWING

IF NOT ONE INCH ON

THIS SHEET, ADJUST

PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP CONCRETE RESERVOIRS REHABILITATION

LOMAS AND LOVE RESERVOIRS WATER SHUT-OFF PLAN Design Review Committee | City Engineer Approval CITY PROJECT NO. Zone Map No. SHEET 16 OF 16 4366.98 J-21,K-22 DRAWING NO. WSO-1

SCANNED BY BY LASON

TITLE: