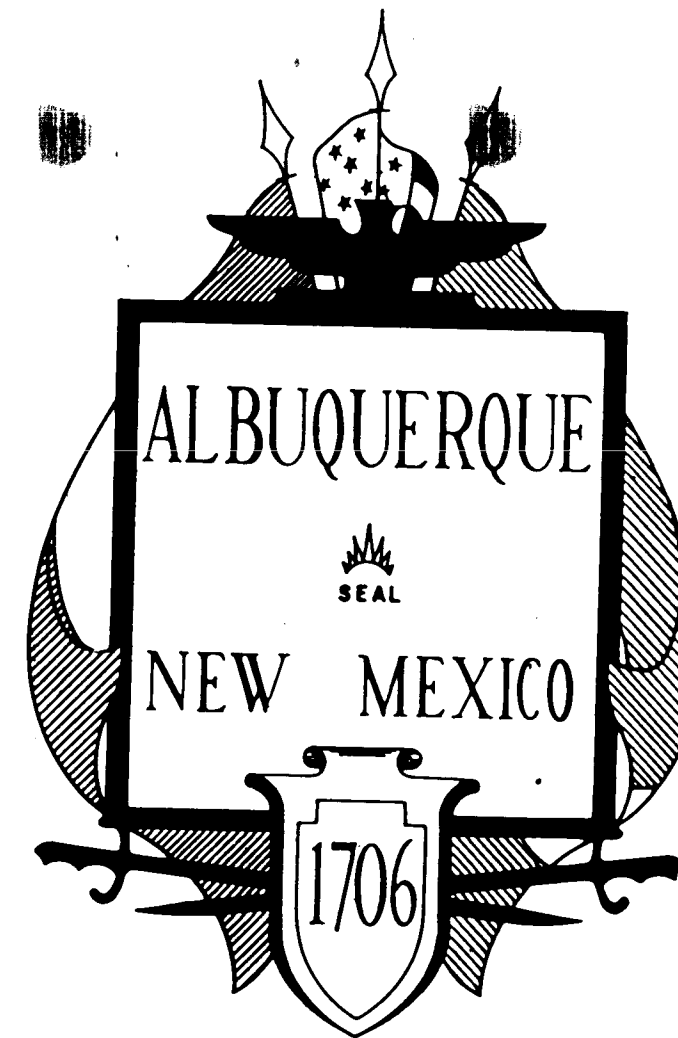




CITY OF ALBUQUERQUE , NEW MEXICO  
WATER RESOURCES DEPARTMENT

# WASTEWATER TREATMENT FACILITY

## IMPROVEMENTS – PHASE IIB – 3

CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES

APPROVED BY  
*David R. Brozman*  
DAVID R. BROSMAN, P.E.  
MANAGER, LIQUID WASTE SYSTEMS DIVISION  
WATER RESOURCES DEPARTMENT

| RECORD DRAWING                                                                                                                                                                                                                                                |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                            | DRAFTED BY:<br>MCA |
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|    |    |    |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 26 | 36 | 94 | 0 | 1 | 8 | 8 |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|     |      |           |          |      |                     |                 |                    |          |      |               |                     |                 |      |               |                                 |                            |                          |                                      |             |                |      |          |        |
|-----|------|-----------|----------|------|---------------------|-----------------|--------------------|----------|------|---------------|---------------------|-----------------|------|---------------|---------------------------------|----------------------------|--------------------------|--------------------------------------|-------------|----------------|------|----------|--------|
| NO. | DATE | REVISIONS | APPROVED | DATE | DESIGNED <i>LMR</i> | DRAWN <i>RA</i> | CHECKED <i>LMR</i> | APPROVED | DATE | MOLZEN-CORBIN | STANLEY CONSULTANTS | A JOINT VENTURE | NONE | GRAPHIC SCALE | CITY OF ALBUQUERQUE, NEW MEXICO | SOLIDS HANDLING FACILITIES | PHASE II B-3, CONTRACT 1 | INTERIM SLUDGE DEWATERING FACILITIES | TITLE SHEET | M-C NO. 832221 | G-01 | 1 of 112 | 8C NO. |
|-----|------|-----------|----------|------|---------------------|-----------------|--------------------|----------|------|---------------|---------------------|-----------------|------|---------------|---------------------------------|----------------------------|--------------------------|--------------------------------------|-------------|----------------|------|----------|--------|



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| G-04 | YARD PIPING PLAN          |
| G-05 | YARD PIPING PLAN          |
| G-06 | YARD PIPING PLAN          |
| G-07 | YARD PIPING DETAILS       |
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| G-10 | PAVING PLAN               |
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| H-06 | DEWATERING BUILDING - HVAC EQUIPMENT SCHEDULES                               |
| H-07 | ODOR CONTROL AREA - PLAN AND DETAILS                                         |
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| S-11 | DEWATERING BUILDING - MISCELLANEOUS SECTIONS AND DETAILS           |
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| M-08 | DEWATERING BUILDING - PROCESS EQUIPMENT - SECTIONS                                                     |
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| M-10 | DEWATERING BUILDING - PROCESS EQUIPMENT - SECTIONS AND DETAILS                                         |
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|------|---------------------------------------|
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| I-02 | P & ID SLUDGE SUPPLY                  |
| I-03 | P & ID POLYMER SUPPLY                 |
| I-04 | P & ID CENTRIFUGE NO. 1               |
| I-05 | P & ID CENTRIFUGE NO. 2               |
| I-06 | P & ID CENTRIFUGE NO. 3               |
| I-07 | P & ID STORAGE BINS AND STANDBY PUMPS |
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| I-09 | LOOP DIAGRAMS                         |
| I-10 | LOOP DIAGRAMS                         |
| I-11 | LOOP DIAGRAMS                         |
| I-12 | LOOP DIAGRAMS                         |
| I-13 | LOOP DIAGRAMS                         |
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| I-19 | INTEGRATED CONTROL PANEL 2            |
| I-20 | PCU MODULE LAYOUT                     |

|     |      |           |          |                     |
|-----|------|-----------|----------|---------------------|
|     |      |           |          | DESIGNED <u>LMR</u> |
|     |      |           |          | DRAWN <u>RA</u>     |
|     |      |           |          | CHECKED <u>LMR</u>  |
|     |      |           |          | APPROVED _____      |
|     |      |           |          | APPROVED _____      |
| NO. | DATE | REVISIONS | APPROVED | DATE                |



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

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26 36 94 02 88



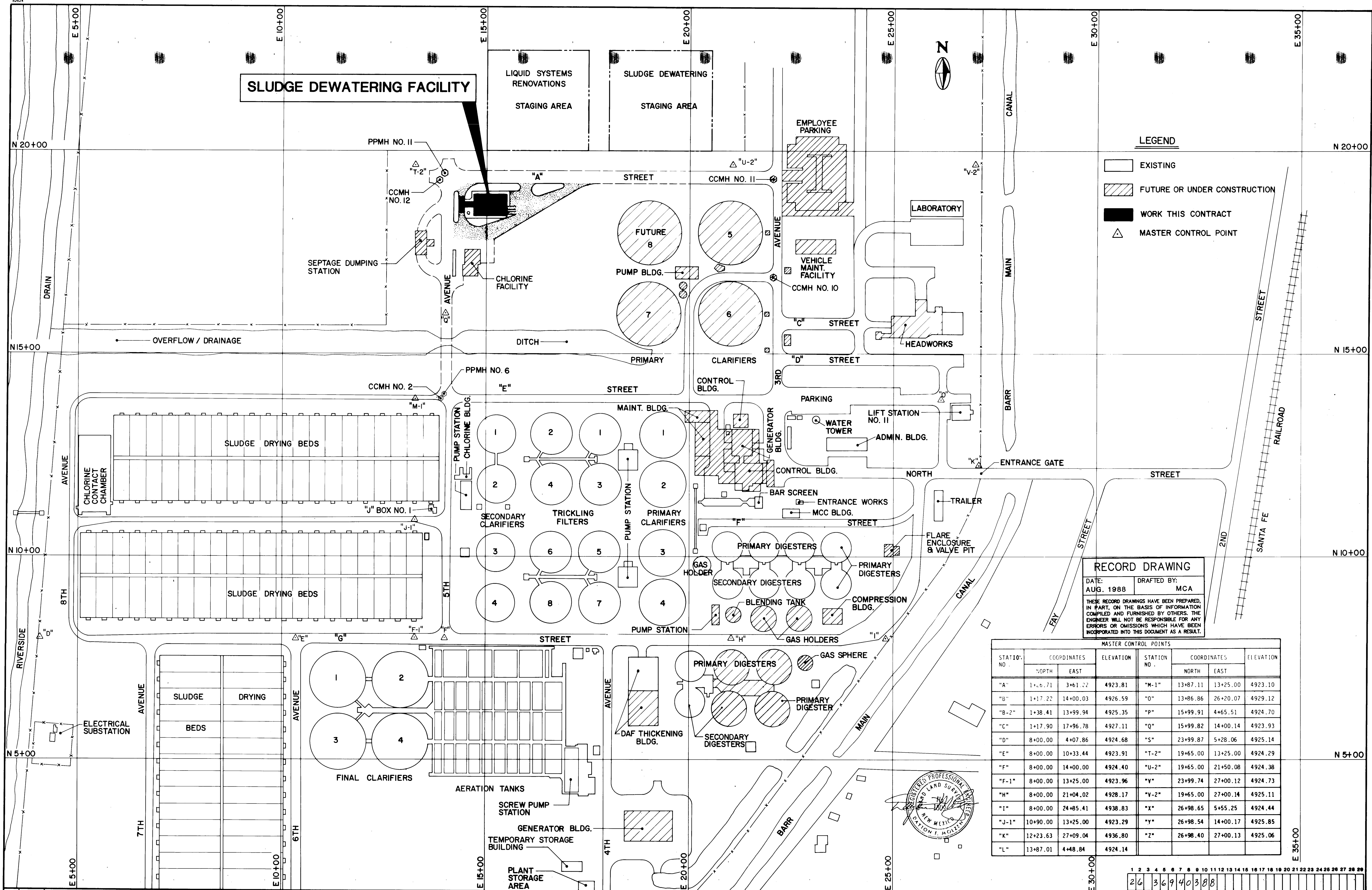
M-C NO. 832221

**INTERIM SLUDGE DEWATERING FACILITIES**  
**DRAWINGS INDEX**

**G-02** 2 of 12

SC NO.





- LEGEND**
- EXISTING
  - FUTURE OR UNDER CONSTRUCTION
  - WORK THIS CONTRACT
  - MASTER CONTROL POINT

**RECORD DRAWING**

DATE: AUG. 1988 DRAFTED BY: MCA

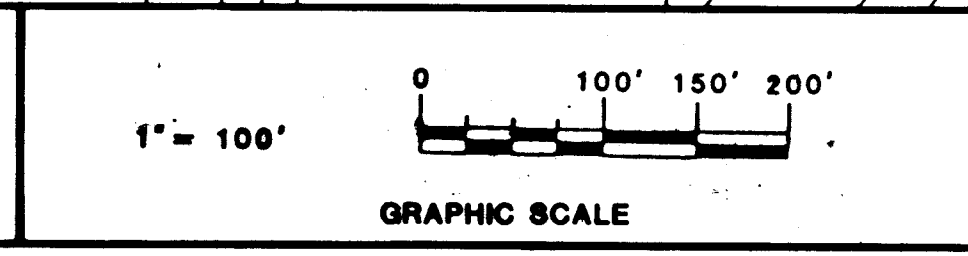
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| MASTER CONTROL POINTS |             |          |           |             |             |          |           |
|-----------------------|-------------|----------|-----------|-------------|-------------|----------|-----------|
| STATION NO.           | COORDINATES |          | ELEVATION | STATION NO. | COORDINATES |          | ELEVATION |
|                       | NORTH       | EAST     |           |             | NORTH       | EAST     |           |
| "A"                   | 1+06.71     | 3+61.22  | 4923.81   | "M-1"       | 13+87.11    | 13+25.00 | 4923.10   |
| "B"                   | 1+17.22     | 14+00.03 | 4926.59   | "O"         | 13+86.86    | 26+20.07 | 4929.12   |
| "B-2"                 | 1+38.41     | 13+99.94 | 4925.35   | "P"         | 15+99.91    | 4+65.51  | 4924.70   |
| "C"                   | 1+17.90     | 17+96.78 | 4927.11   | "Q"         | 15+99.82    | 14+00.14 | 4923.93   |
| "D"                   | 8+00.00     | 4+07.86  | 4924.68   | "S"         | 23+99.87    | 5+28.06  | 4925.14   |
| "E"                   | 8+00.00     | 10+33.44 | 4923.91   | "T-2"       | 19+65.00    | 13+25.00 | 4924.29   |
| "F"                   | 8+00.00     | 14+00.00 | 4924.40   | "U-2"       | 19+65.00    | 21+50.08 | 4924.38   |
| "F-1"                 | 8+00.00     | 13+25.00 | 4923.96   | "V"         | 23+99.74    | 27+00.12 | 4924.73   |
| "H"                   | 8+00.00     | 21+04.02 | 4928.17   | "V-2"       | 19+65.00    | 27+00.14 | 4925.11   |
| "I"                   | 8+00.00     | 24+85.41 | 4938.83   | "X"         | 26+98.65    | 5+55.25  | 4924.44   |
| "J-1"                 | 10+90.00    | 13+25.00 | 4923.29   | "Y"         | 26+98.54    | 14+00.17 | 4925.85   |
| "K"                   | 12+23.63    | 27+09.04 | 4936.80   | "Z"         | 26+98.40    | 27+00.13 | 4925.06   |
| "L"                   | 13+87.01    | 4+48.84  | 4924.14   |             |             |          |           |

| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED: LMR  
DRAWN: RA  
CHECKED: LMR  
APPROVED: \_\_\_\_\_  
DATE: \_\_\_\_\_

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
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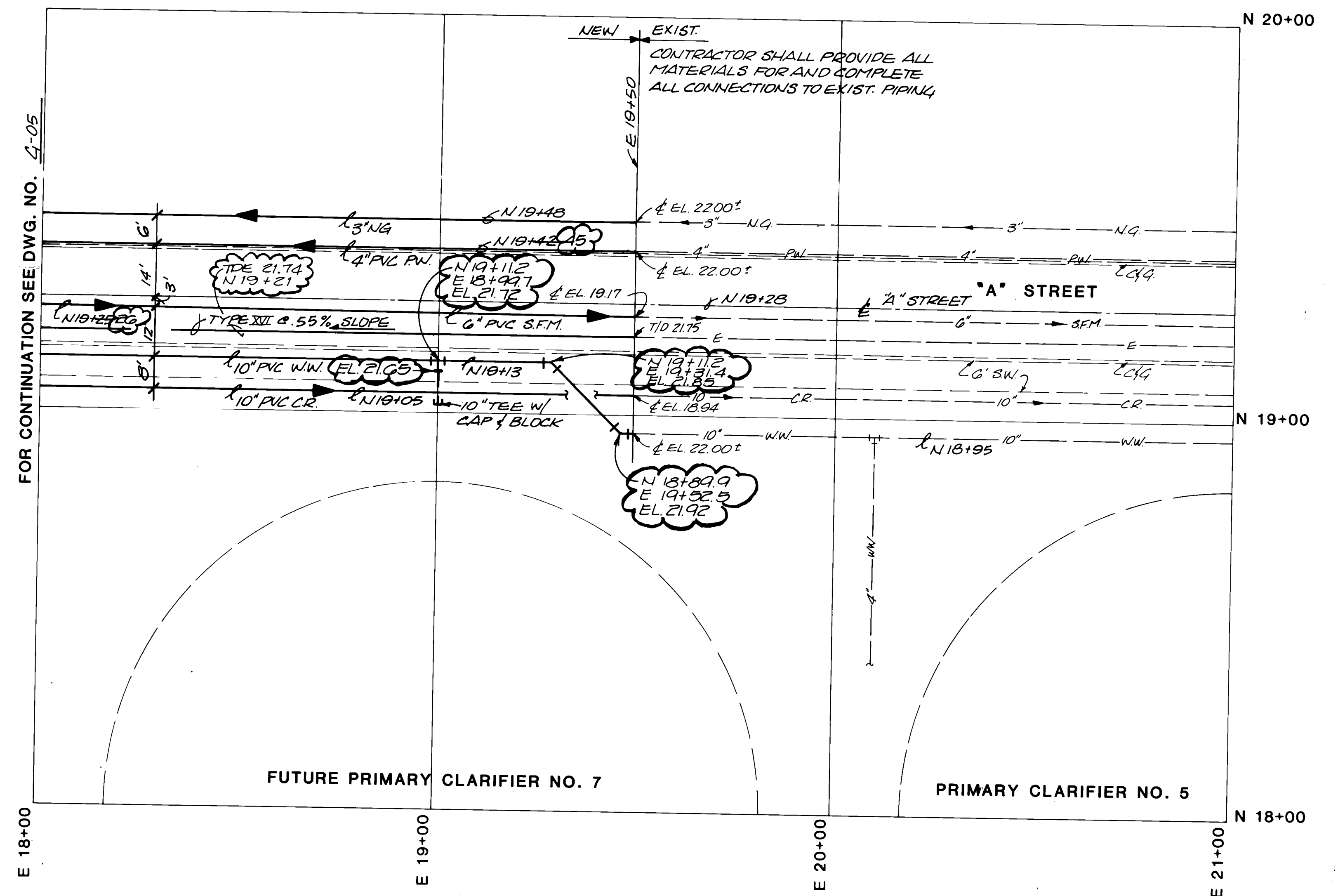
CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**SITE PLAN**

M-C NO. 832221  
**G-03** 3 of 112  
SC NO.



|                 |                                    |
|-----------------|------------------------------------|
| C.R.            | CENTRATE RETURN                    |
| CCMH            | CONTROL AND COMMUNICATION MANHOLE  |
| CL <sub>2</sub> | CHLORINE                           |
| C.M.P.          | CORRUGATED METAL PIPE              |
| D.S.            | DIGESTED SLUDGE                    |
| DR              | DRAIN LINE                         |
| T               | ELECTRICAL TRANSFORMER             |
| F.E.            | FINAL EFFLUENT                     |
| F.H.            | FIRE HYDRANT                       |
| G.V.            | GATE VALVE                         |
| H.W.            | HOUSE WATER                        |
| M.H.            | MANHOLE                            |
| N.G.            | NATURAL GAS                        |
| P.C.O.          | PRESSURE CLEANOUT                  |
| P.V.            | PLUG VALVE                         |
| P.W.            | POTABLE WATER                      |
| PPMH            | PRIMARY POWER MANHOLE              |
| R.C.P.          | REINFORCED CONCRETE PIPE           |
| S.F.M.          | SEPTAGE FORCEMAIN                  |
| S.S.            | STORM SEWER                        |
| T/D             | TOP OF ELECTRICAL DUCT - (TYPE VI) |
| UGE             | UNDERGROUND ELECTRICAL             |
| W.W.            | WASHWATER                          |



|     |      |  |  |  |  |           |  |  |  |          |      |
|-----|------|--|--|--|--|-----------|--|--|--|----------|------|
|     |      |  |  |  |  |           |  |  |  | DESIGNED | LMR  |
|     |      |  |  |  |  |           |  |  |  | DRAWN    | CJD  |
|     |      |  |  |  |  |           |  |  |  | CHECKED  | LMR  |
|     |      |  |  |  |  |           |  |  |  | APPROVED |      |
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CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

|                                                                                                                                                                                                                                                       |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| RECORD DRAWING                                                                                                                                                                                                                                        |                    |
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# INTERIM SLUDGE DEWATERING FACILITIES

## YARD PIPING PLAN

|                |          |
|----------------|----------|
| A-C NO. 832221 |          |
| G-04           | 4 of 112 |
| SC NO.         |          |



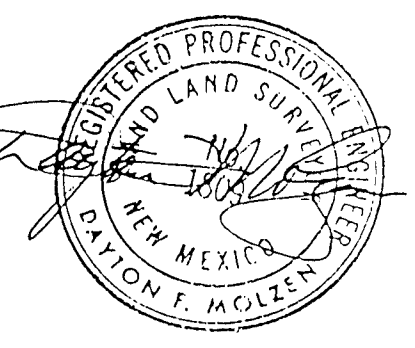


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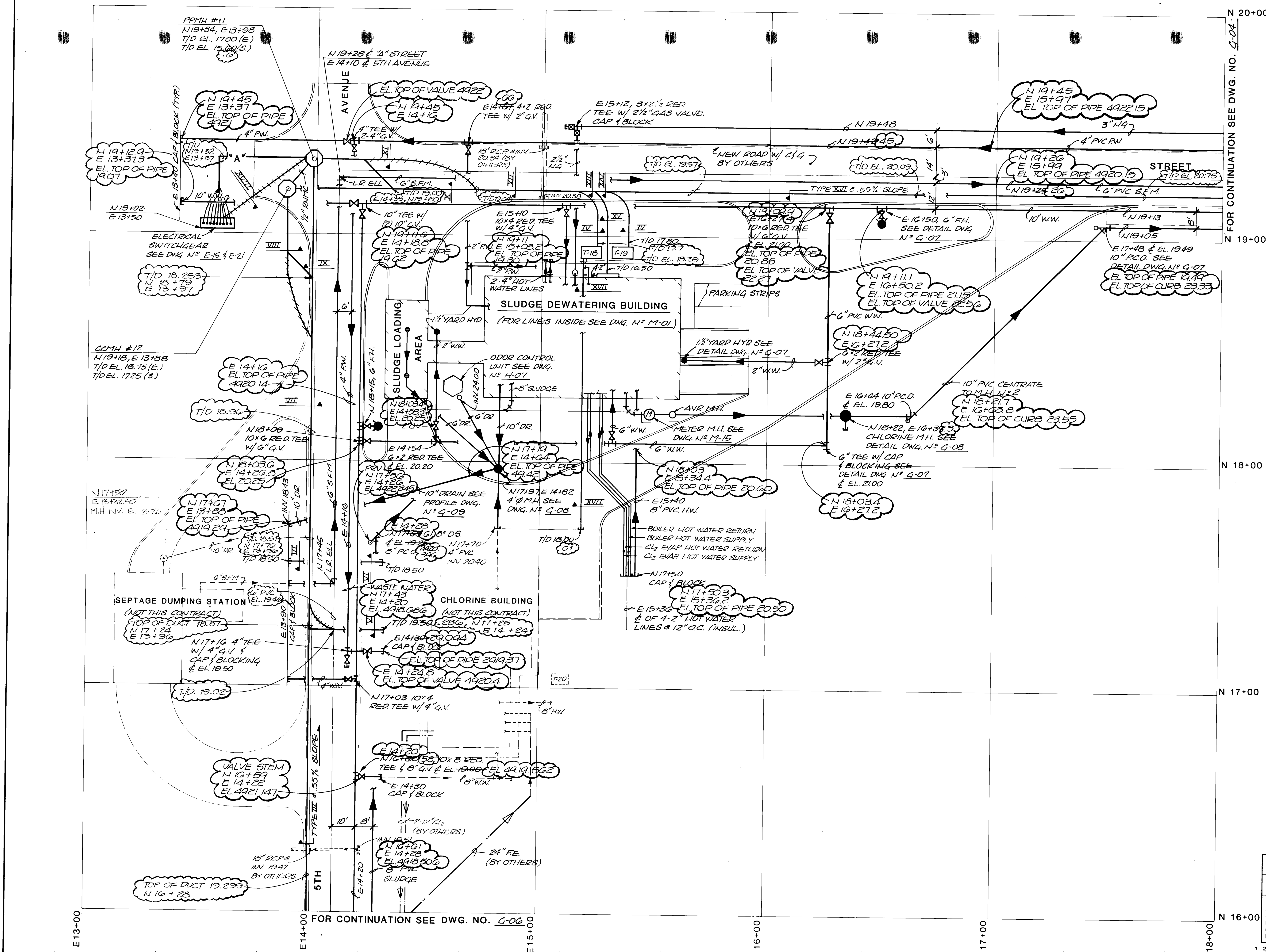
|                 |                                   |
|-----------------|-----------------------------------|
| C.R.            | CENTRATE RETURN                   |
| CCMH            | CONTROL AND COMMUNICATION MANHOLE |
| CL <sub>2</sub> | CHLORINE                          |
| C.M.P.          | CORRUGATED METAL PIPE             |
| D.S.            | DIGESTED SLUDGE                   |
| DR              | DRAIN LINE                        |
| T               | ELECTRICAL TRANSFORMER            |
| F.E.            | FINAL EFFLUENT                    |
| F.H.            | FIRE HYDRANT                      |
| G.V.            | GATE VALVE                        |
| H.W.            | HOUSE WATER                       |
| M.H.            | MANHOLE                           |
| N.G.            | NATURAL GAS                       |
| P.C.O.          | PRESSURE CLEANOUT                 |
| P.V.            | PLUG VALVE                        |
| P.W.            | POTABLE WATER                     |
| PPMH            | PRIMARY POWER MANHOLE             |
| R.C.P.          | REINFORCED CONCRETE PIPE          |
| S.F.M.          | SEPTAGE FORCEMAIN                 |
| S.S.            | STORM SEWER                       |
| T/D             | TOP OF ELECTRICAL DUCT - (TYP) VI |
| UGE             | UNDERGROUND ELECTRICAL            |
| W.W.            | WASHWATER                         |

NOTES:  
FOR ELEC. DUCT BANKS SEE DWG. N° E-18  
FOR ELEC. M.H. SEE DWG. N° E-19

| RECORD DRAWING                                                                                                                                                                                                                                                |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
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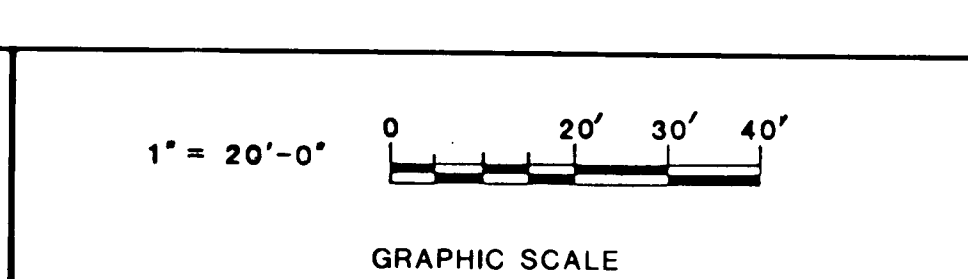
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| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 45 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |



| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED: LMR  
DRAWN: RRA  
CHECKED: LMR  
APPROVED: [Signature]  
DATE: [Blank]

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

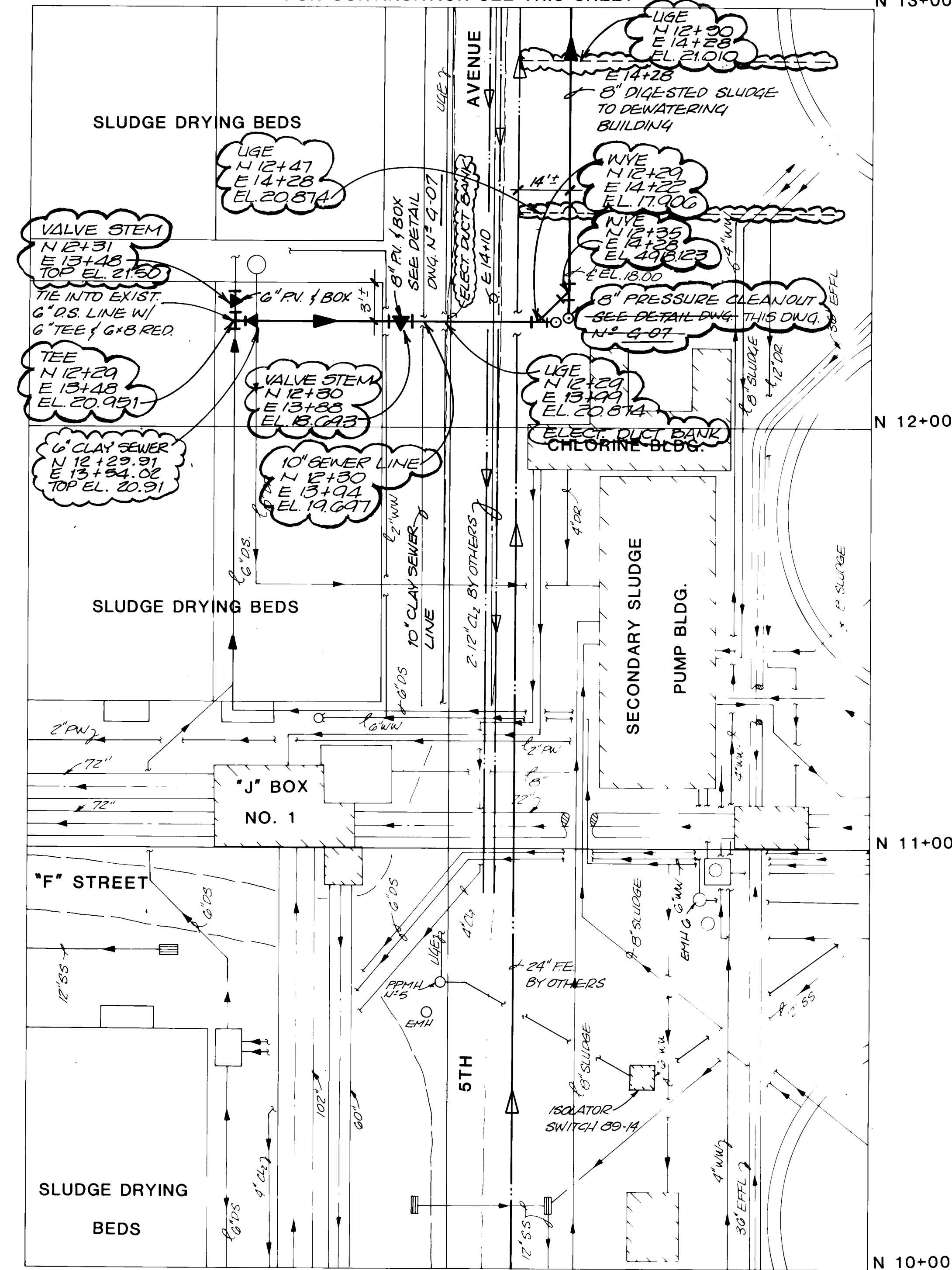
**INTERIM SLUDGE DEWATERING FACILITIES**  
YARD PIPING PLAN





FOR CONTINUATION SEE THIS SHEET

N 13+00

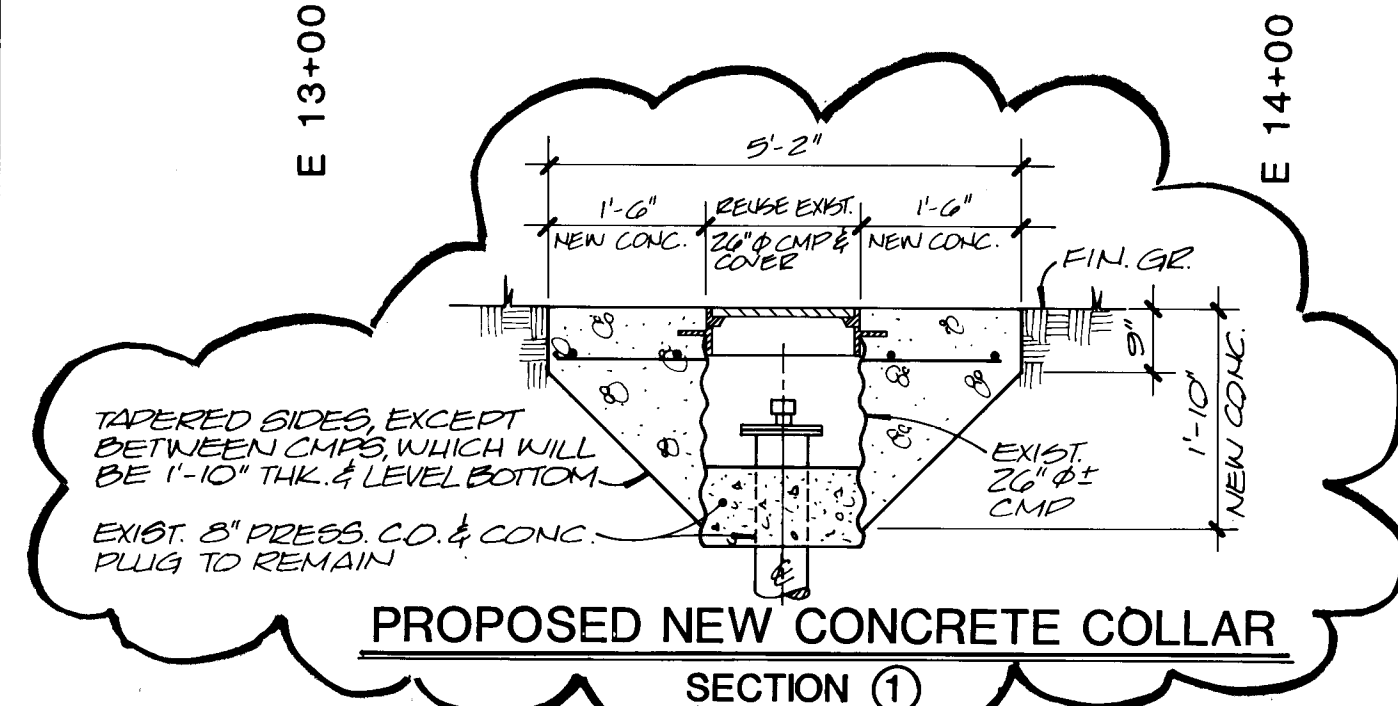


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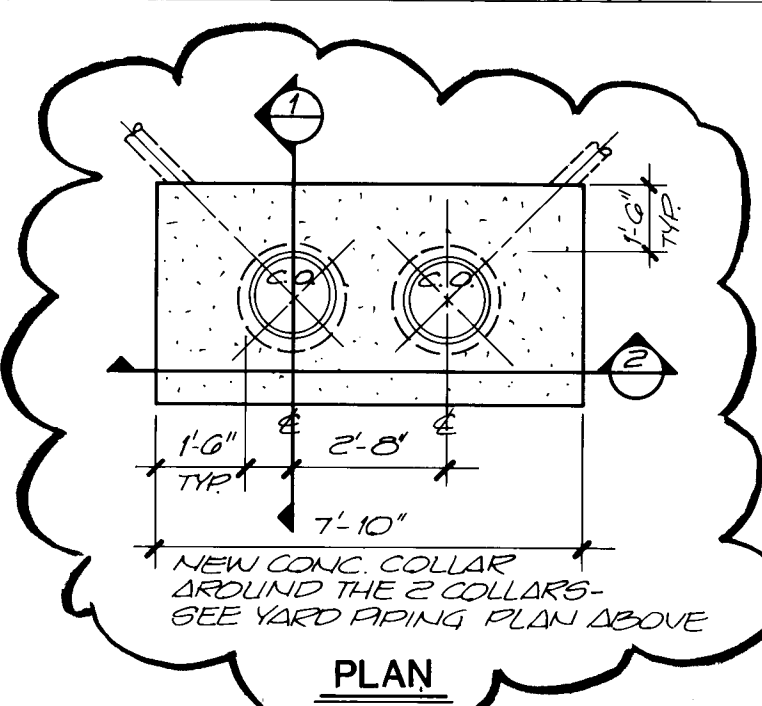
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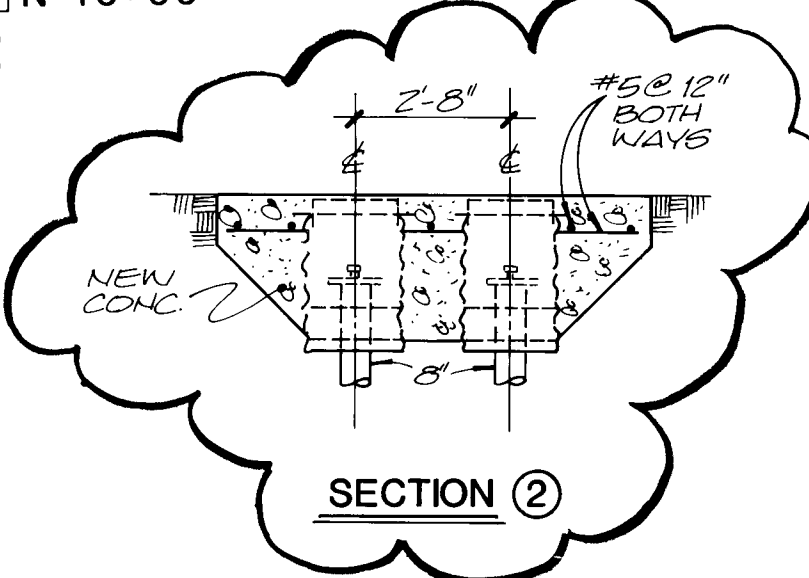
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SECTION 1



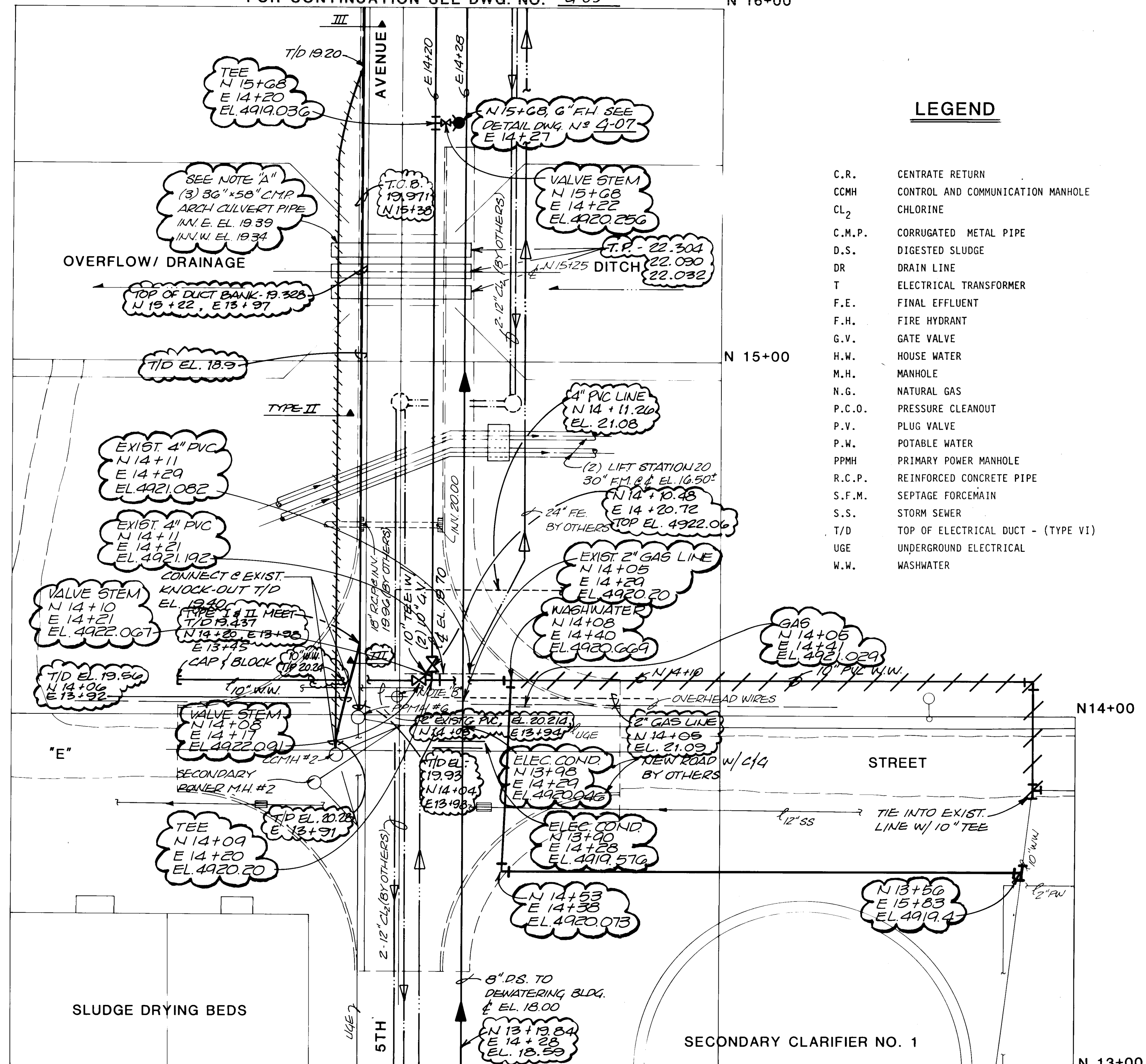
PLAN



SECTION 2

FOR CONTINUATION SEE DWG. NO. 4-05

N 16+00



E 13+00

E 14+00

E 15+00

N 13+00

NOTES:

- "A" AT CONTRACTORS OPTION, CMP PIPES MAY BE TEMP REMOVED TO INSTALL NEW BURIED UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE FUNCTION OF DITCH DURING CONST. CMP PIPES SHALL BE RESTORED TO EXIST. ALIGNMENT, INVERT ELEV. & BEDDING AS SHOWN ON DETAIL DWG. N-4-07
- "B" DISCONNECT & REMOVE EXIST. LIGHT POLE, SPLICE CABLE W/ SUBMERSIBLE SPLICE KIT, COORDINATE OUTAGE W/ CITY

RECORD DRAWING

DATE: AUG. 1988 DRAFTED BY: MCA

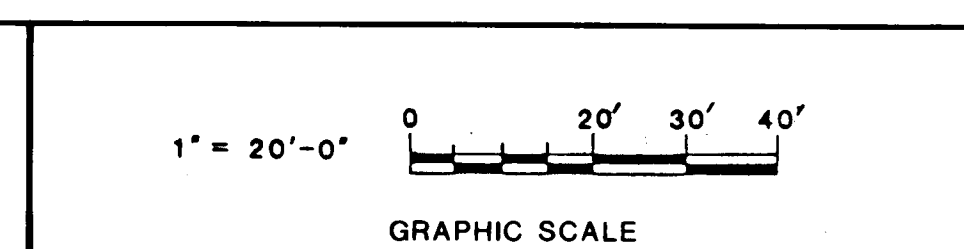
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|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 2 | 6 | 3 | 6 | 9 | 4 | 5 | 6 | 8 | 8  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|          |     |
|----------|-----|
| DESIGNED | LMR |
| DRAWN    | LMR |
| CHECKED  | LMR |
| APPROVED |     |
| APPROVED |     |
| DATE     |     |

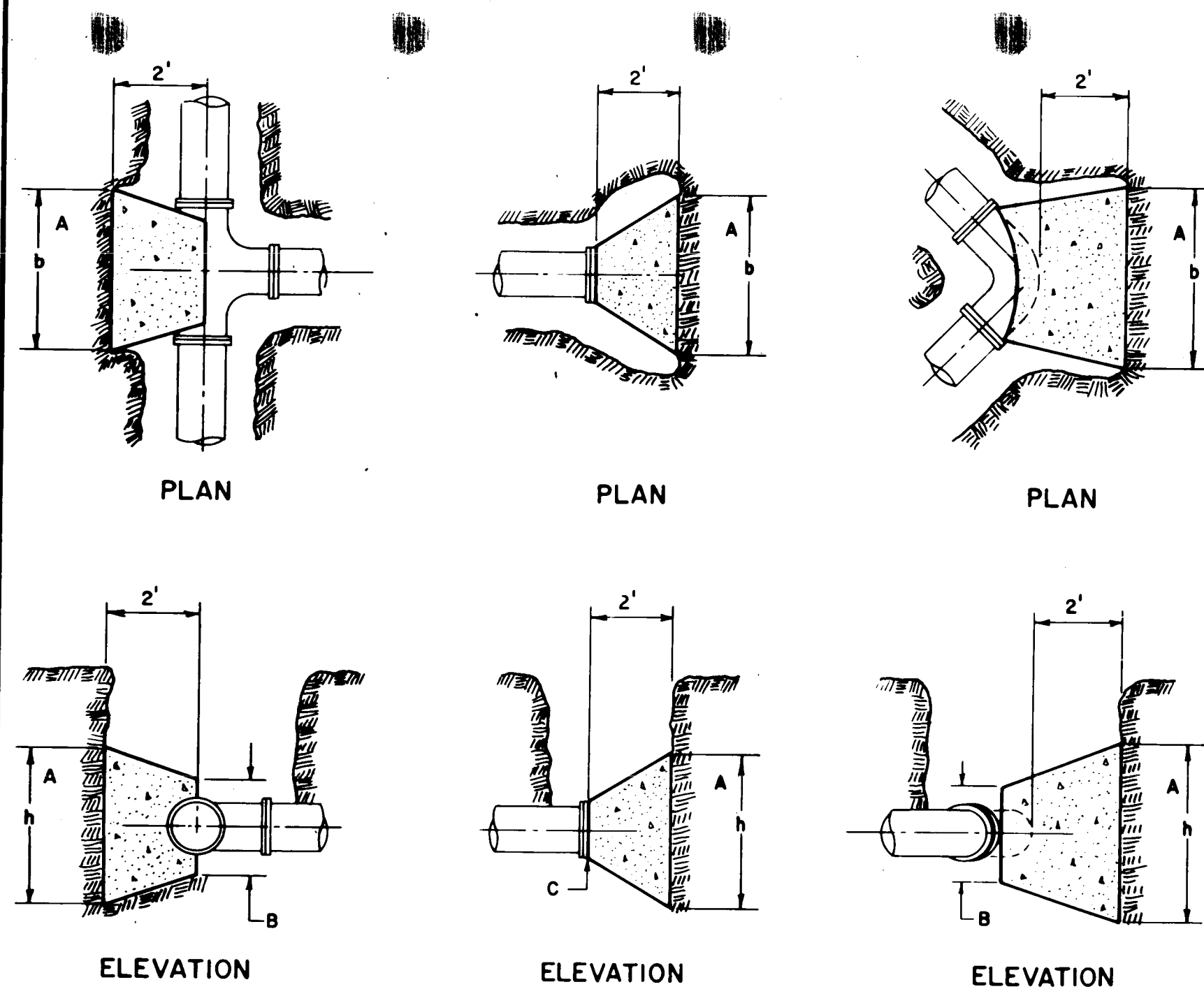
MOLZEN-CORBIN  
STANLEY CONSULTANTS  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
YARD PIPING PLAN  
M-C NO. 832221  
G-06 6 of 112  
SC NO.

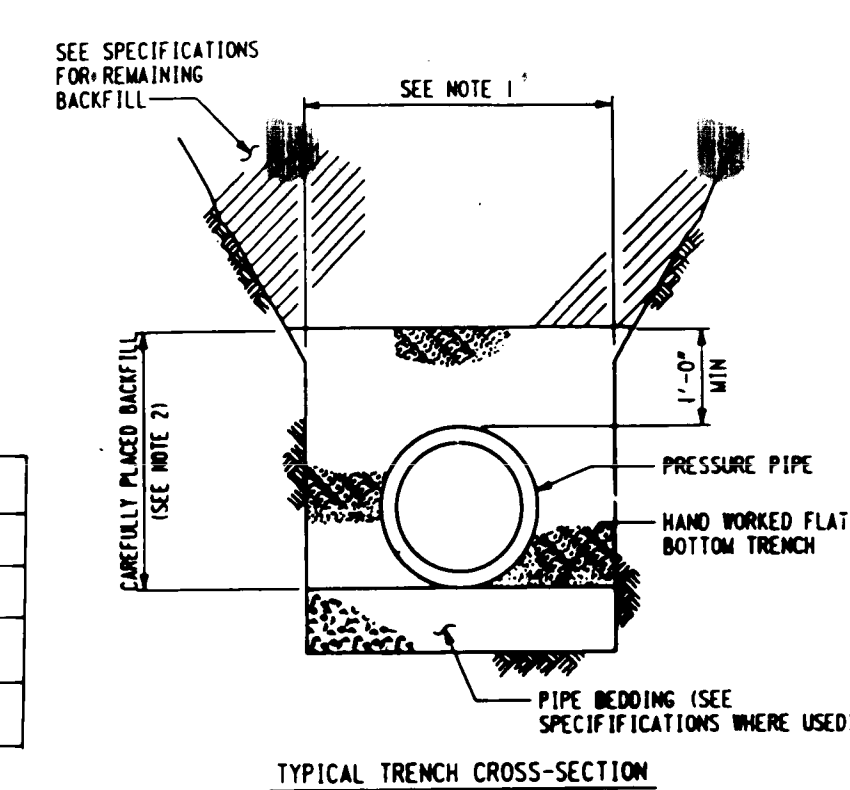
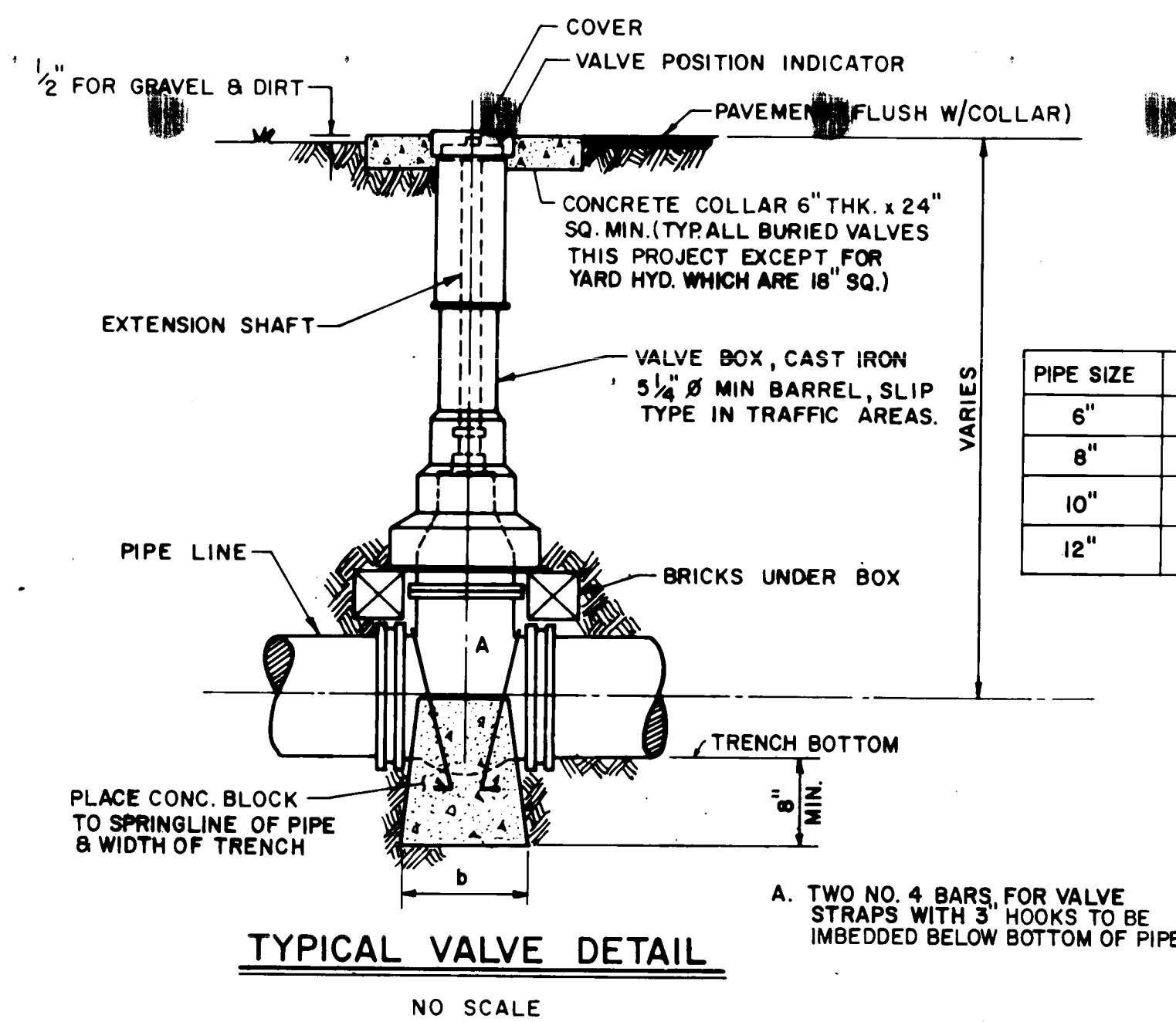




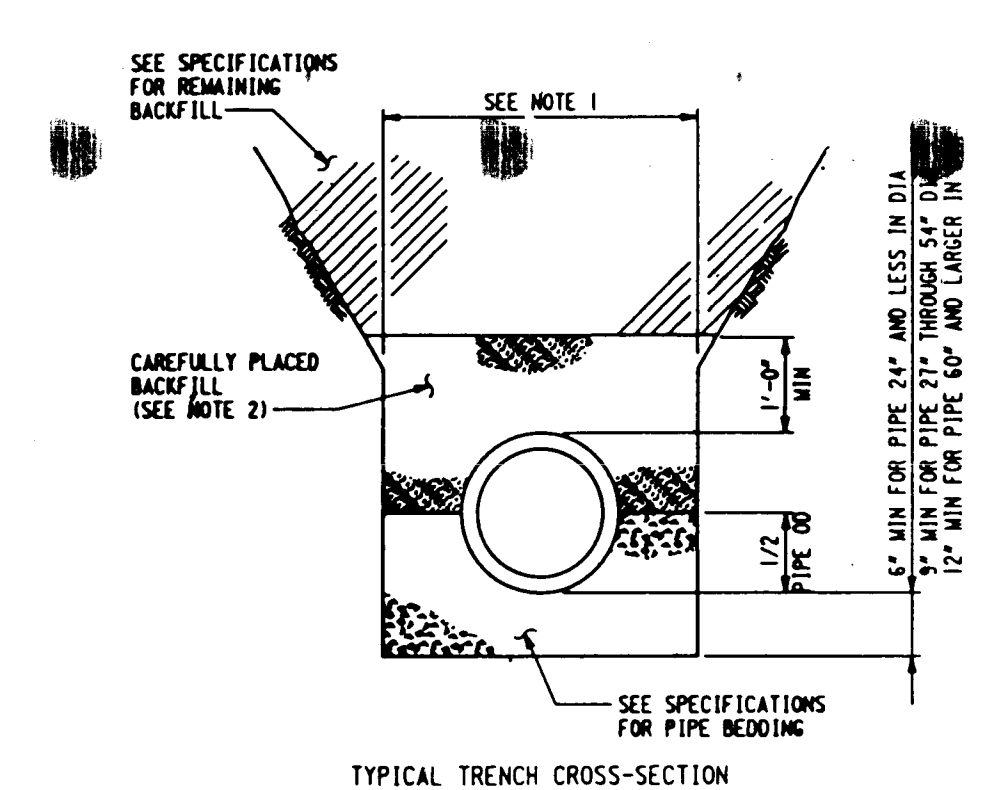
**CONCRETE BLOCKING DETAILS**  
NO SCALE

| PIPE<br>SIZE | ELBOW<br>ANGLE | ELBOW<br>(b) DIM. | ELBOW<br>(h) DIM. | TEE OR<br>PLUG<br>(b) DIM. | TEE OR<br>PLUG<br>(h) DIM. |
|--------------|----------------|-------------------|-------------------|----------------------------|----------------------------|
| 4"           |                |                   |                   | 2'                         | 1'                         |
| 4"           | 90° 45°        | 2'                | 2'                |                            |                            |
| 4"           | 22½ 11¼        | 2'                | 2'                |                            |                            |
| 6"           |                |                   |                   | 2'                         |                            |
| 6"           | 90° 45°        | 2'                | 2'                |                            |                            |
| 6"           | 22½ 11¼        | 2'                | 2'                |                            |                            |
| 8"           |                |                   |                   | 3'                         | 3'                         |
| 8"           | 90°            | 3'                | 3'                |                            |                            |
| 8"           | 45°            | 2'                | 2'                |                            |                            |
| 8"           | 22½ 11¼        | 2'                | 2                 |                            |                            |
| 10"          |                |                   |                   | 3'                         | 3'                         |
| 10"          | 90°            | 3'-6"             | 3'-6"             |                            |                            |
| 10"          | 45°            | 3'                | 3'                |                            |                            |
| 10"          | 22½ 11¼        | 2'                | 2'                |                            |                            |
| 12"          |                |                   |                   | 3'-6"                      | 3'-6"                      |
| 12"          | 90°            | 4'                | 4'                |                            |                            |
| 12"          | 45°            | 3'-6"             | 3'-6"             |                            |                            |
| 12"          | 22½ 11¼        | 2'                | 2'                |                            |                            |
| 14"          |                |                   |                   | 4'                         | 4'                         |
| 14"          | 90°            | 5'                | 5'                |                            |                            |
| 14"          | 45°            | 3'-6"             | 3'-6"             |                            |                            |
| 14"          | 22½ 11¼        | 2'                | 2'                |                            |                            |

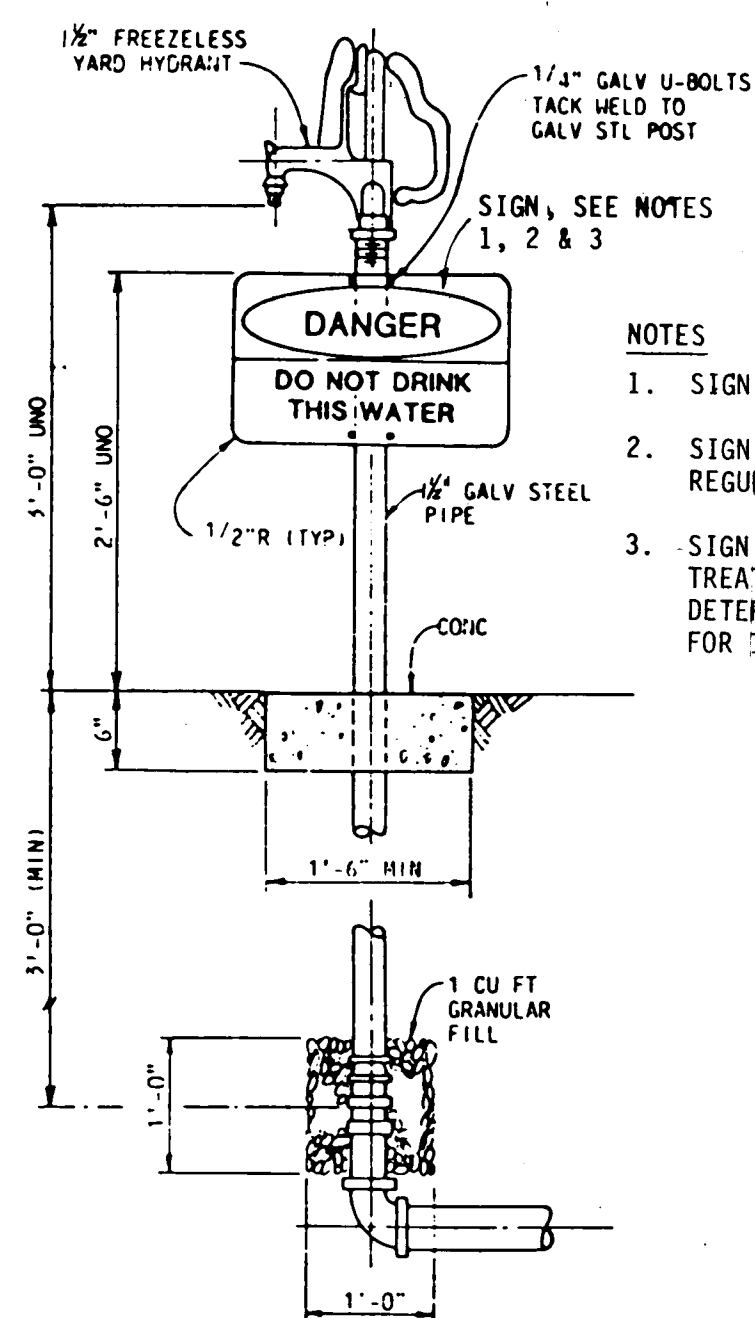
**CONSTRUCTION NOTES:**  
A. UNDISTURBED EARTH.  
B. O.D. OF PIPE + 8".  
C. O.D. OF CAP OR PLUG,  
MIN. 12" x 12".



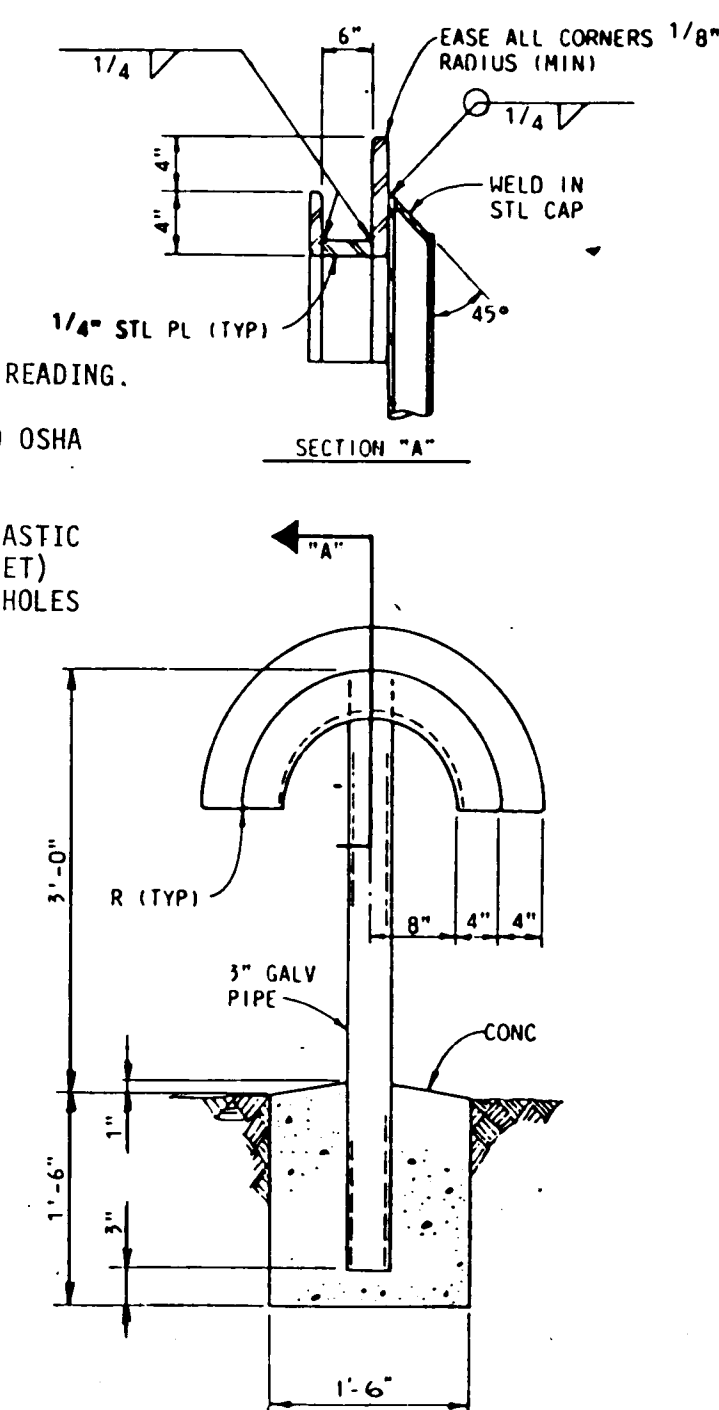
### PRESSURE PIPE BEDDING DETAIL



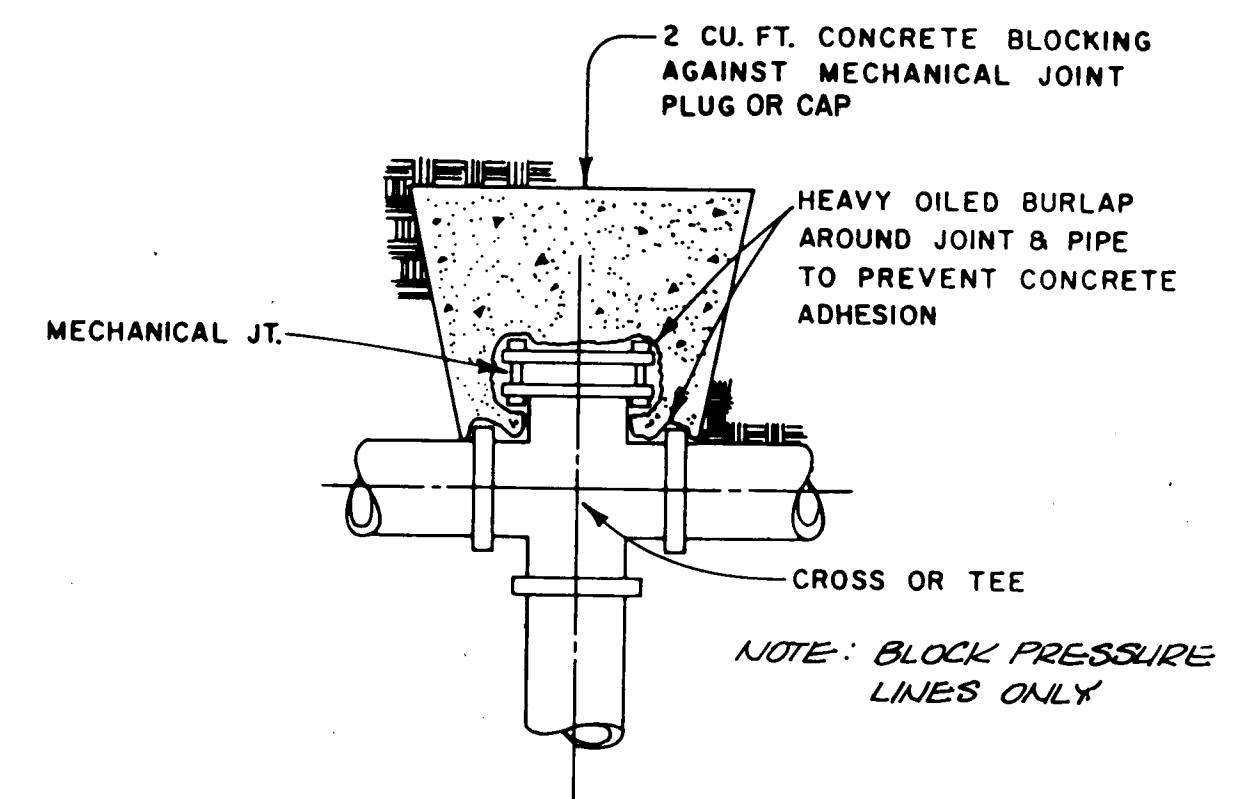
### NON-PRESSURE PIPE BEDDING DETAIL



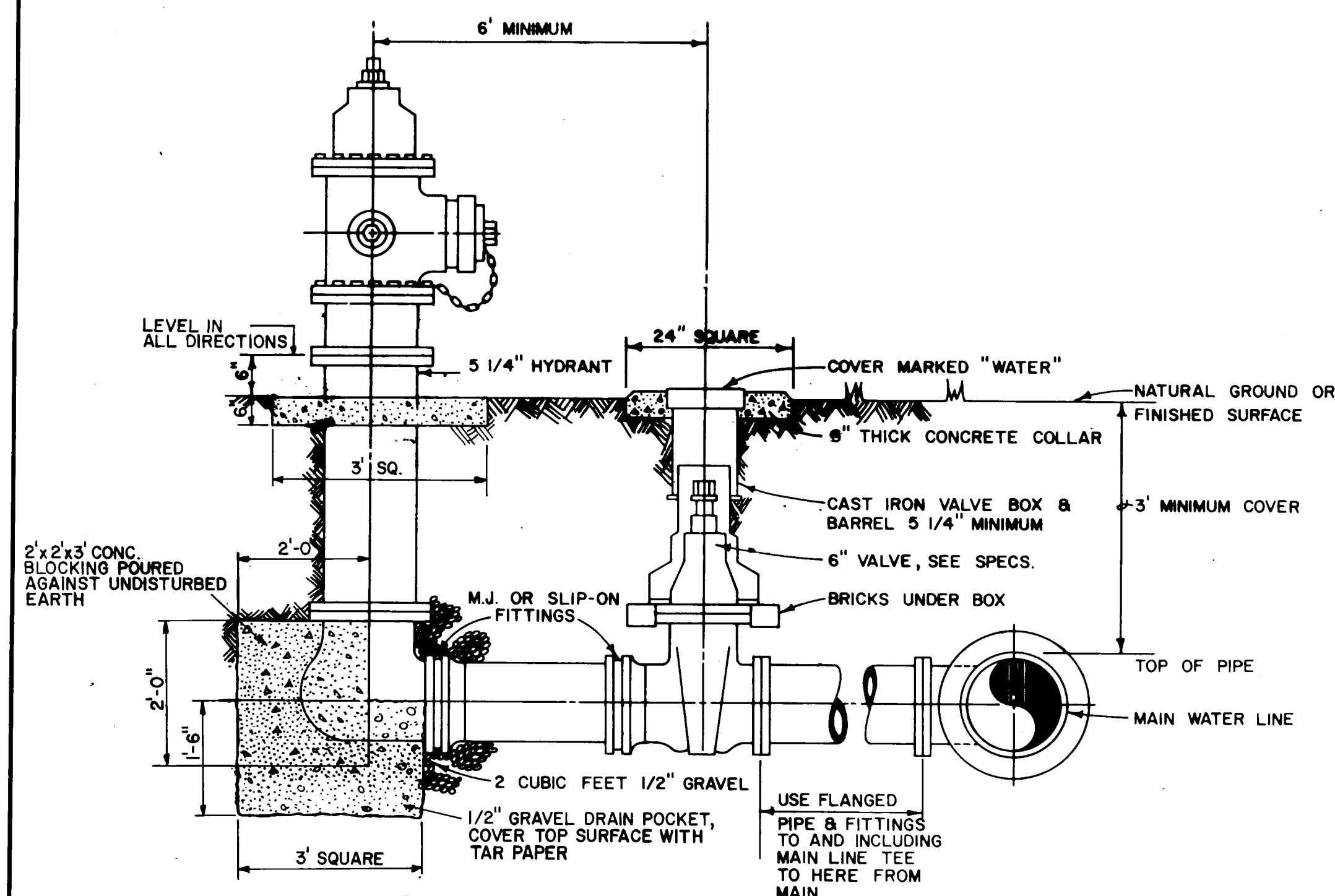
### YARD HYDRANT DETAIL



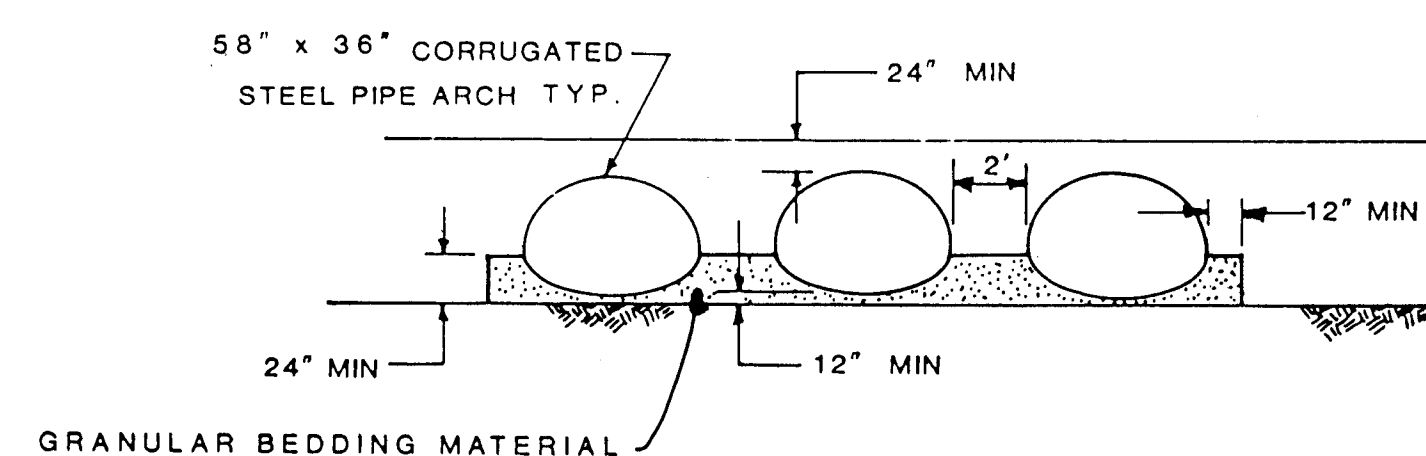
### HOSE RACK DETAIL



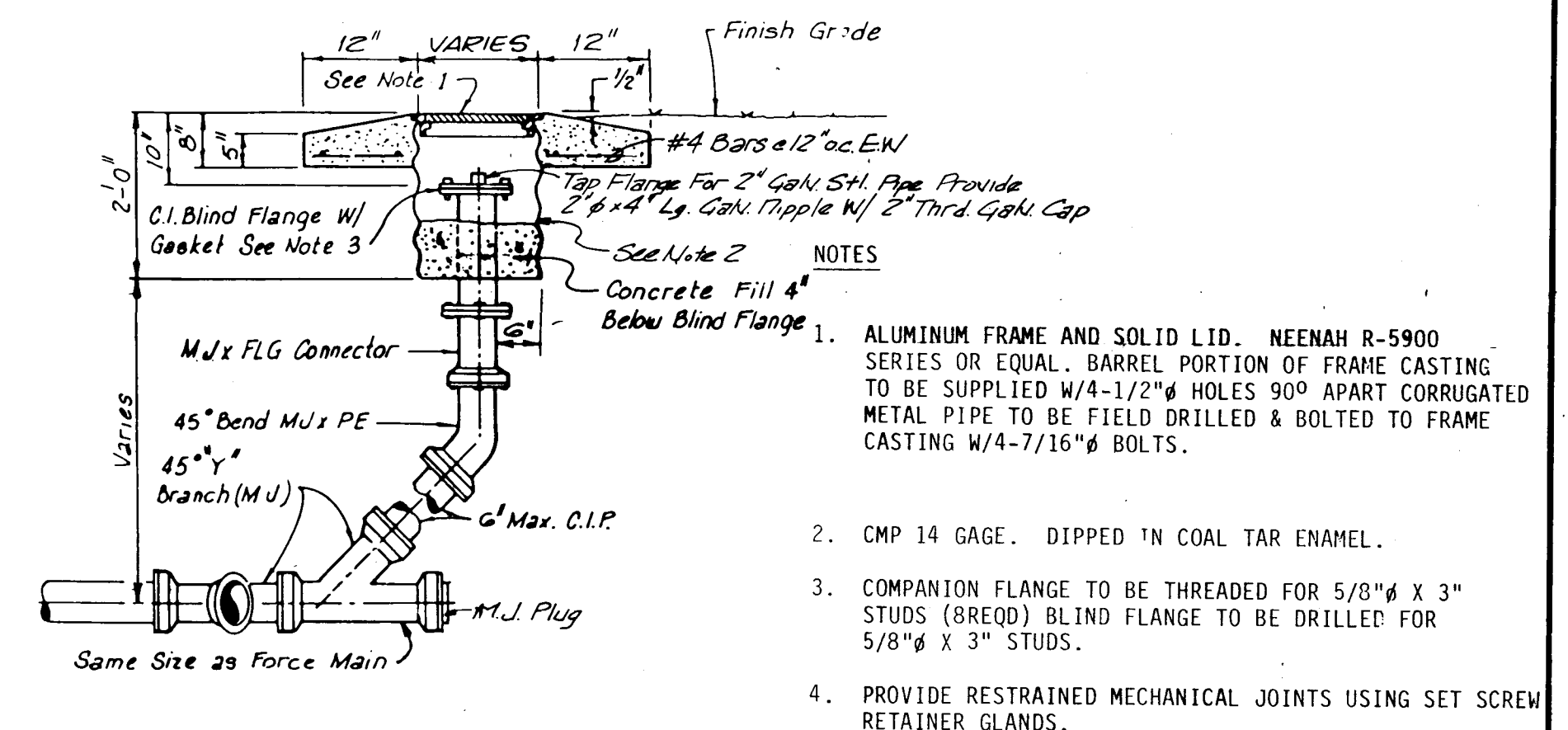
### CAP AND BLOCKING DETAIL



### FIRE HYDRANT DETAIL



**C.M.P. REPLACEMENT DETAIL**

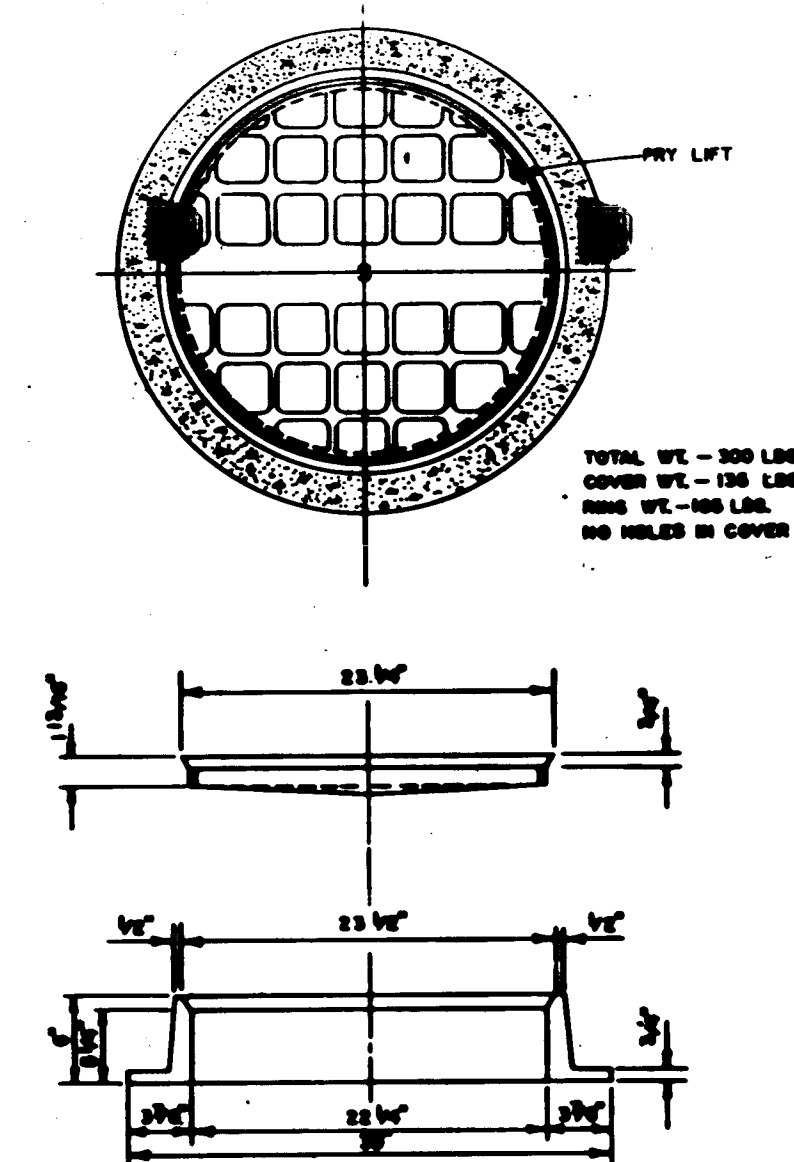


PRESSURE TYPE YARD CLEAN OUT DETAIL

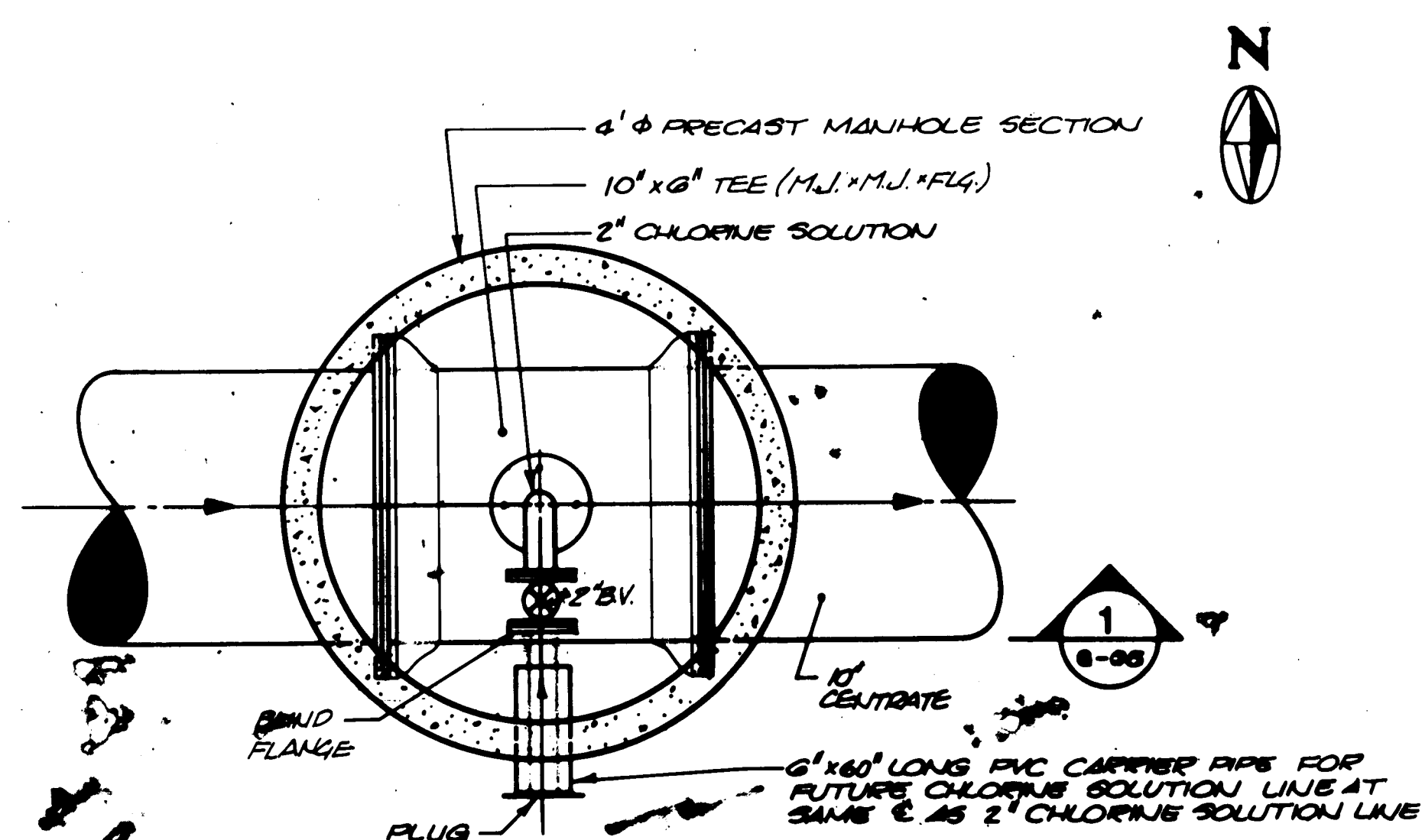
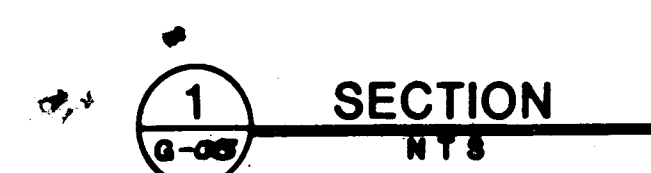
| RECORD DRAWING                                                                                                                                                                                                                                                           |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                                       | DRAFTED BY:<br>MCA |
| <p>THESE RECORD DRAWINGS HAVE BEEN PREPARED IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT OF SUCH INFORMATION.</p> |                    |



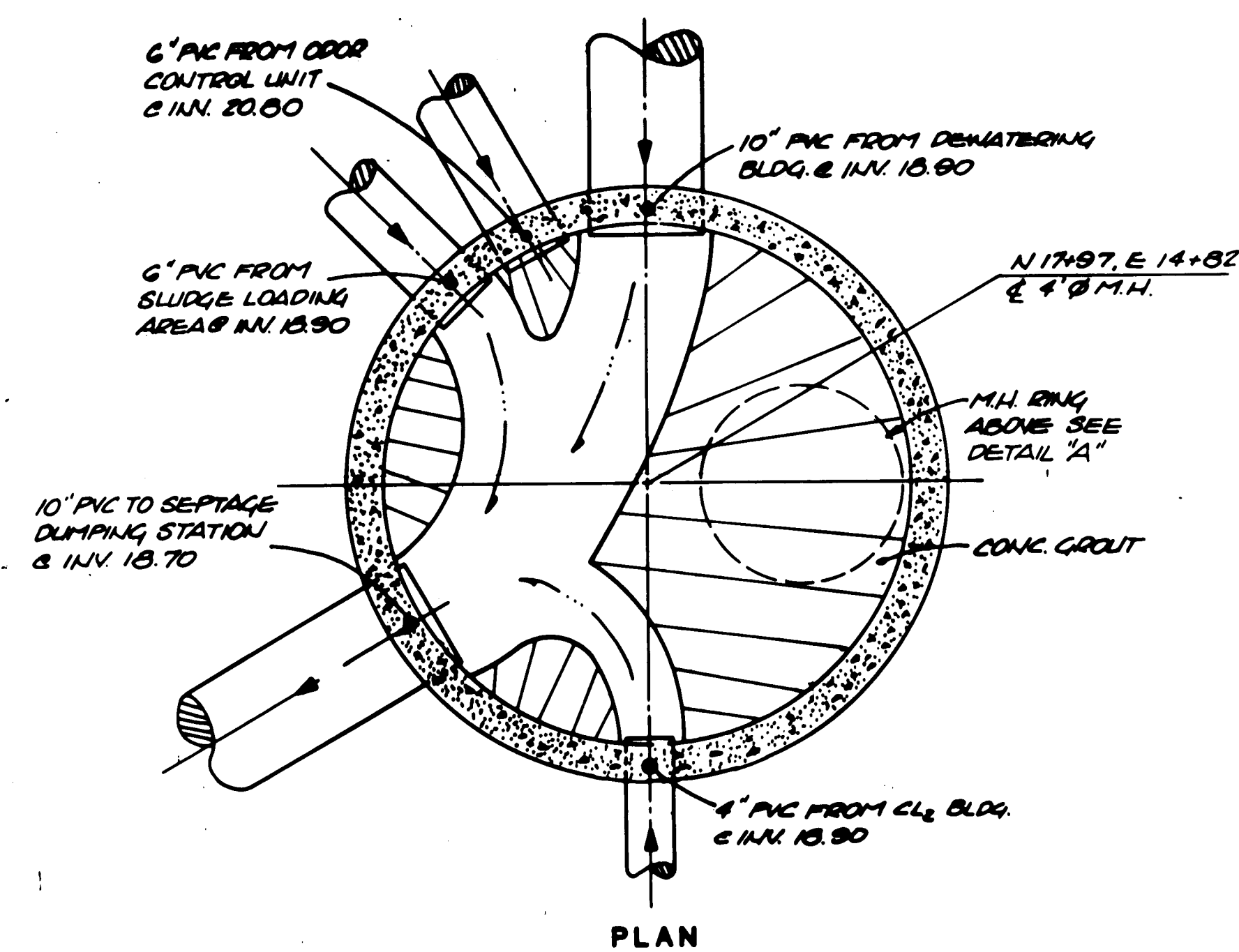




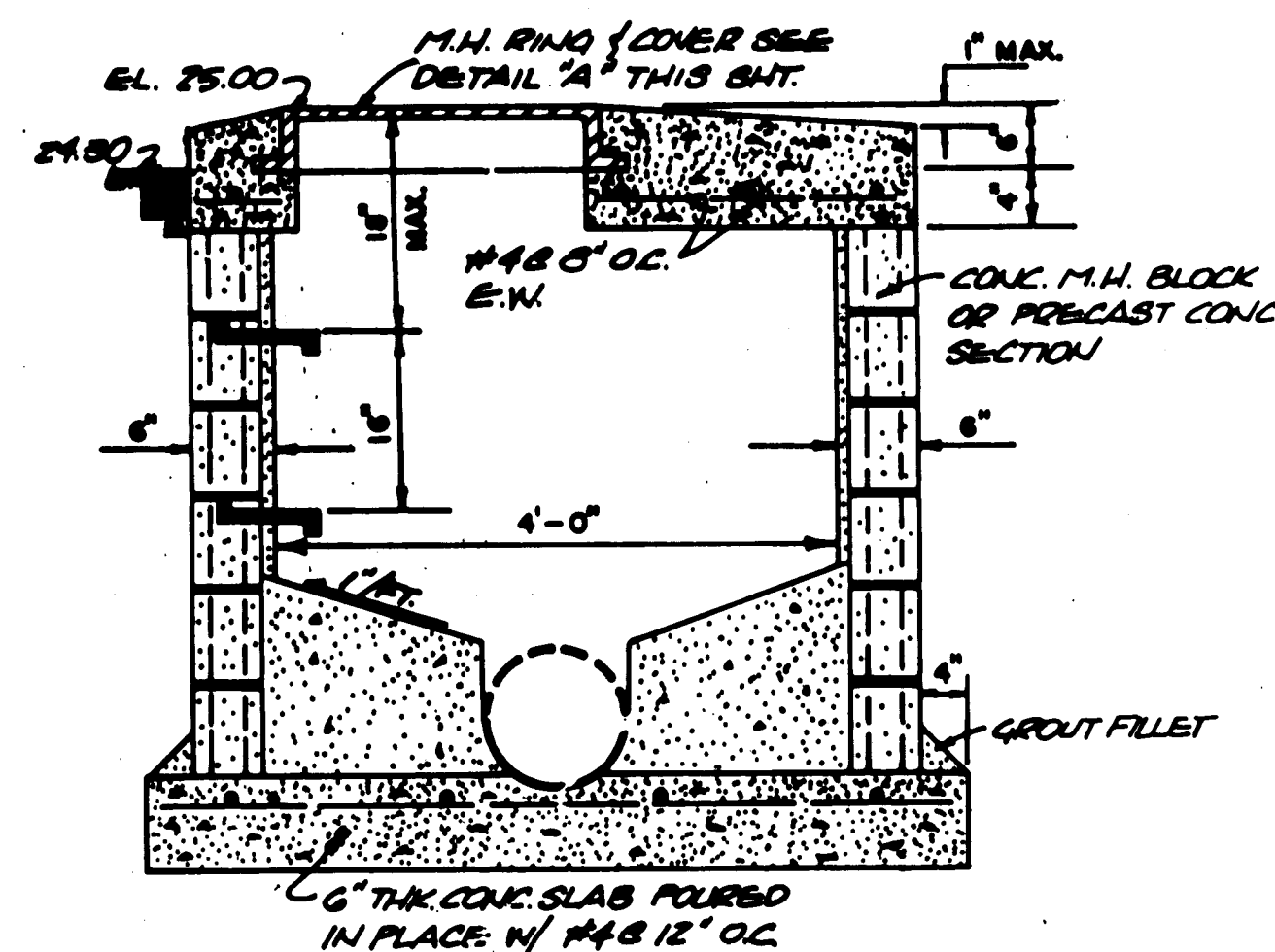
**DETAIL "A"**



### CHLORINE DIFFUSER MANHOLE PLAN



## PLAN



## SECTION

## MANHOLE DETAIL

|            |             |                  |                 |
|------------|-------------|------------------|-----------------|
|            |             |                  |                 |
|            |             |                  |                 |
|            |             |                  |                 |
|            |             |                  |                 |
| <b>NO.</b> | <b>DATE</b> | <b>REVISIONS</b> | <b>APPROVED</b> |

DESIGNED LMR  
DRAWN RA  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

**NONE**

**GRAPHIC SCALE**



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B- , CONTRACT

## INTERIM SLUDGE DEWATERING FACILITIES

M-C NO. 832221

**G-08** 8 of 112

SC NO.



A circular professional seal for a Registered Professional Engineer in the State of New Mexico. The seal contains the text "REGISTERED PROFESSIONAL ENGINEER", "STATE OF NEW MEXICO", and "DAYTON F. MOLZEN". In the center, it says "No. 1009". The seal is signed with a cursive signature across it.

|     |      |  |           |  |          |                     |
|-----|------|--|-----------|--|----------|---------------------|
|     |      |  |           |  |          | DESIGNED <u>LMR</u> |
|     |      |  |           |  |          | DRAWN <u>BA</u>     |
|     |      |  |           |  |          | CHECKED <u>LMR</u>  |
|     |      |  |           |  |          | APPROVED _____      |
|     |      |  |           |  |          | APPROVED _____      |
| NO. | DATE |  | REVISIONS |  | APPROVED | DATE                |

DESIGNED LMR  
DRAWN DA  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1" = 10'-0" HORIZ  
1" = 5'-0" VERT

0 10 15 20  
0 5 10

GRAPHIC SCALE

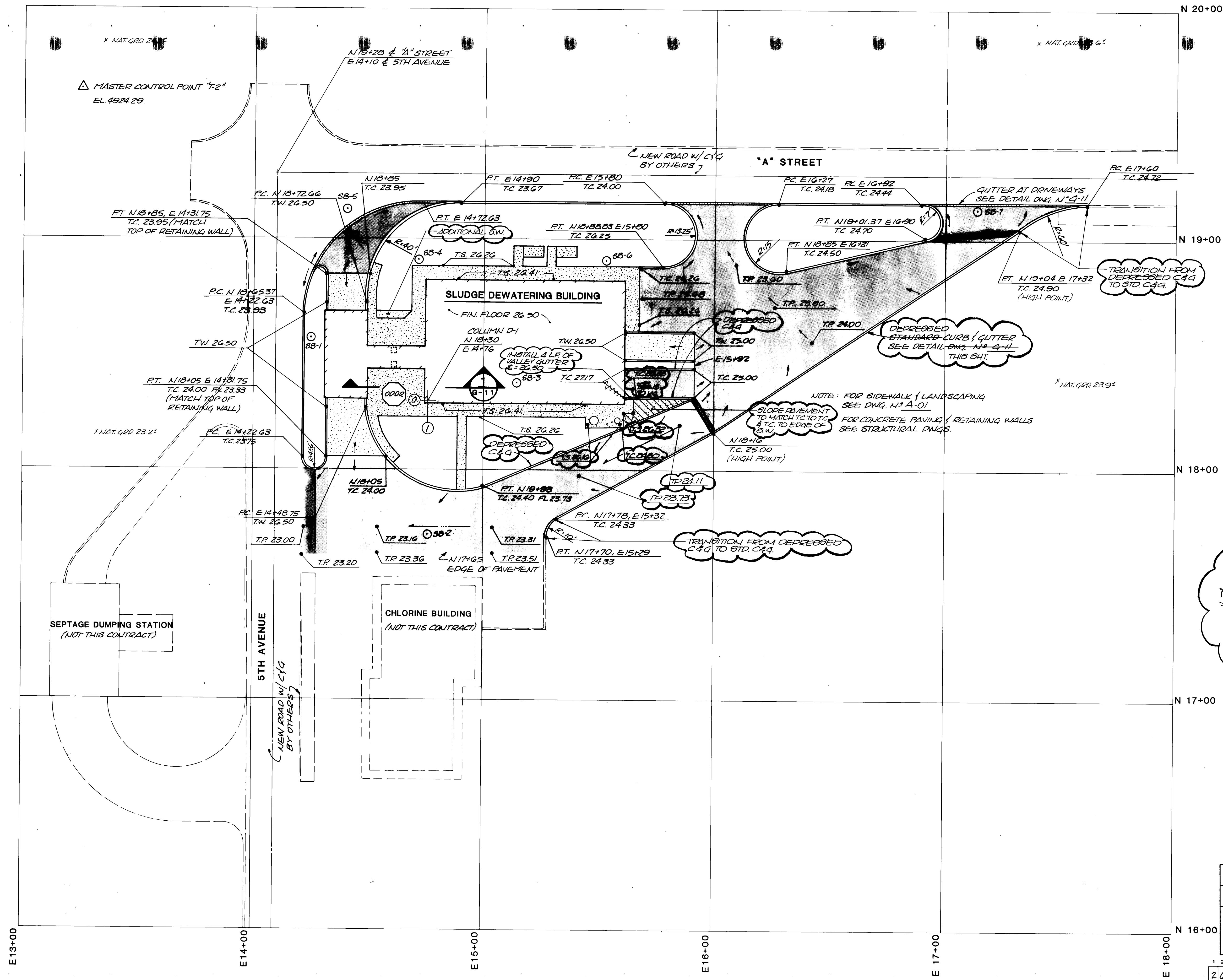


CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

## INTERIM SLUDGE DEWATERING FACILITIES

|                |          |
|----------------|----------|
| M-C NO. 832221 |          |
| G-09           | 9 of 112 |
| 8C NO.         |          |



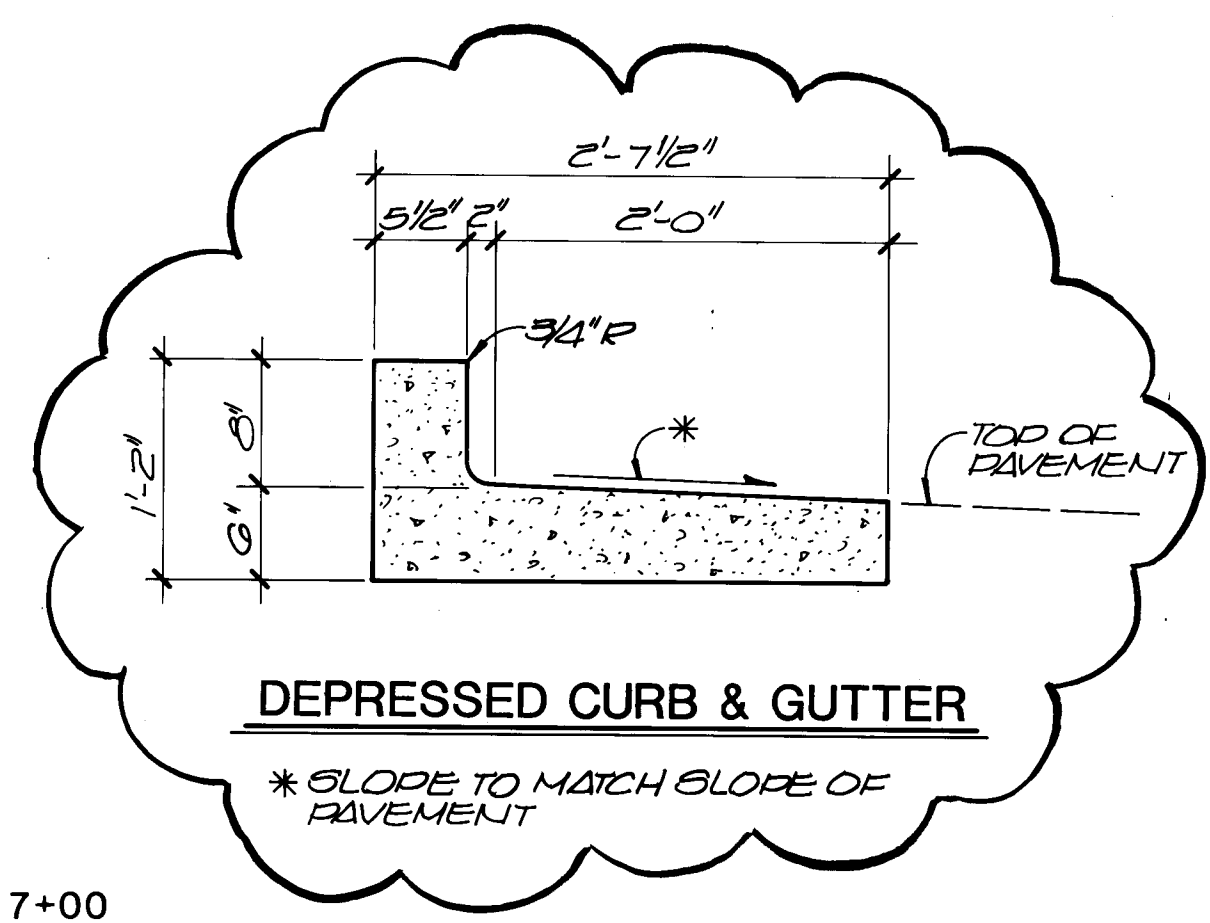


**LEGEND**

P.C. POINT OF CURVATURE  
P.T. POINT OF TANGENCY  
C. & G. GURB AND GUTTER  
FL. FLOWLINE  
T.C. TOP OF CURB  
T.P. TOP OF PAVEMENT  
T.S. TOP OF SIDEWALK  
T.W. TOP OF WALL

SOIL BORINGS SB-1 THROUGH SB-7 TAKEN OCTOBER 11 & 12 BY SHB CONSULTING GEOTECHNICAL ENGINEERS

ASPHALT PAVING  
CONCRETE  
SIDEWALK



**RECORD DRAWING**

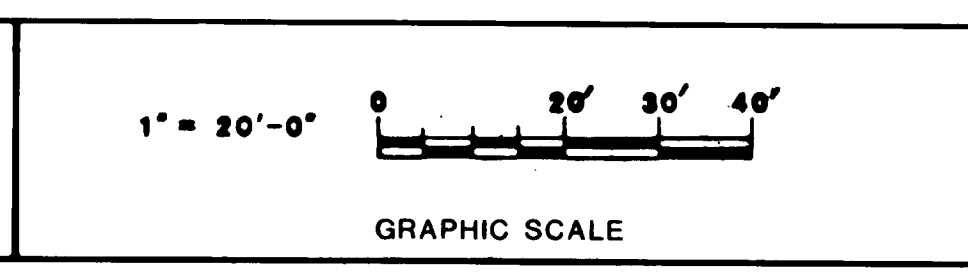
DATE: AUG. 1988  
DRAFTED BY: MCA

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| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |
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|     |      |           |          |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

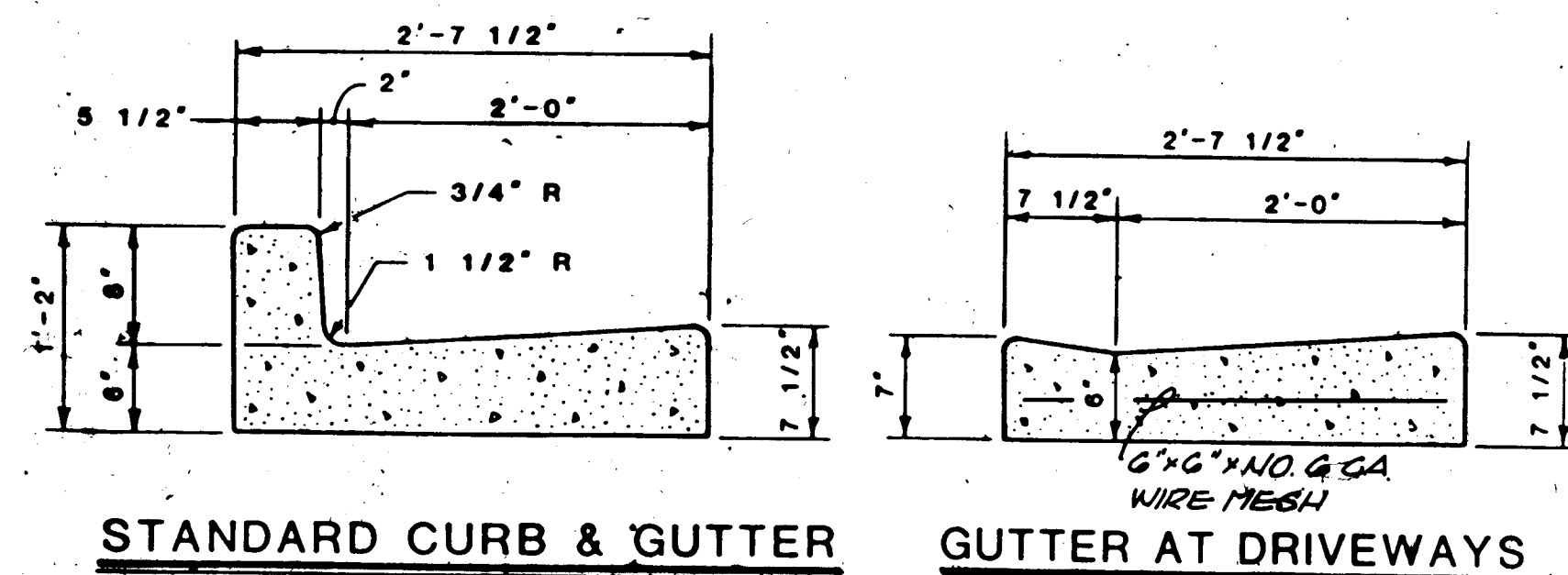
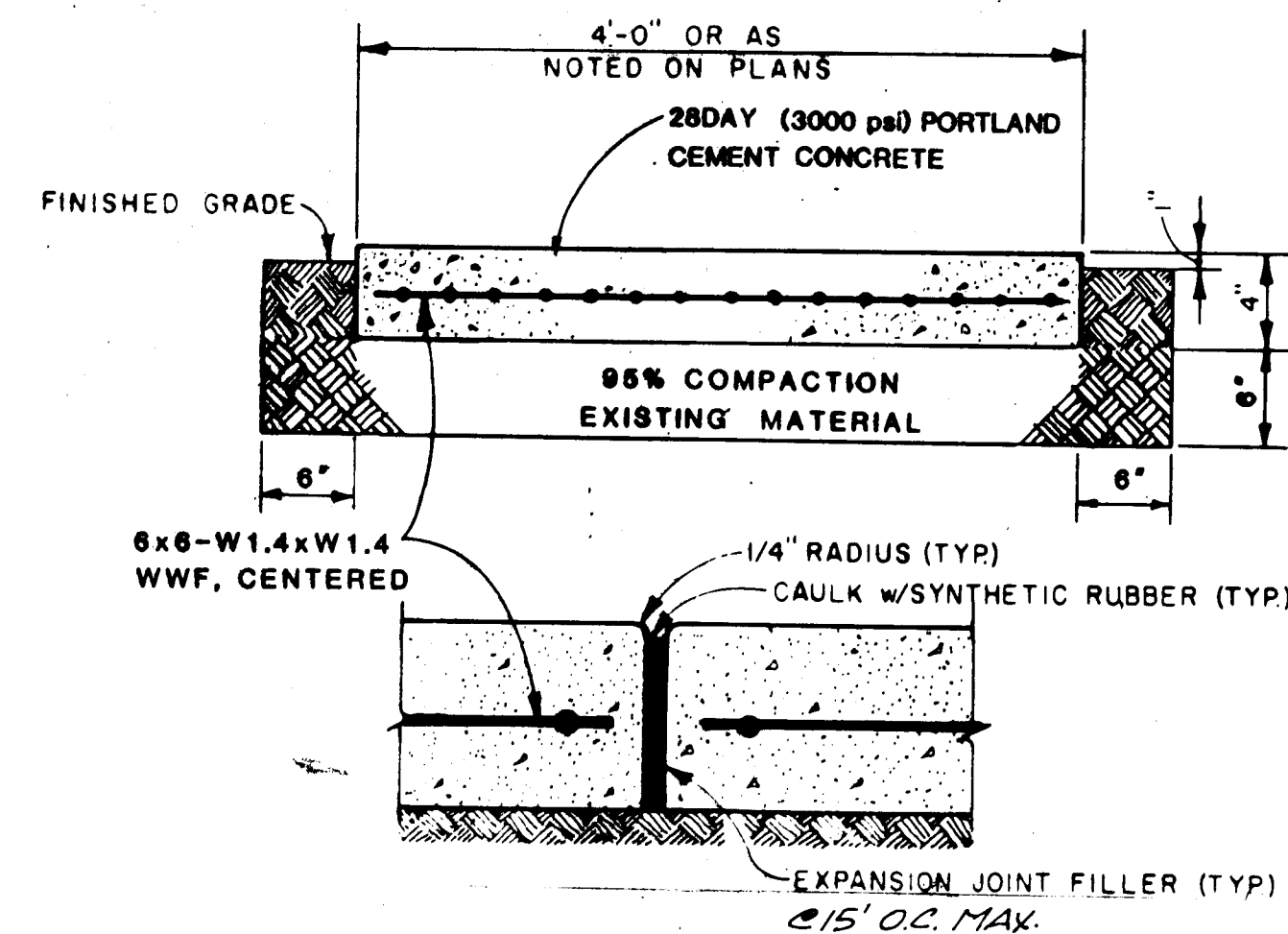
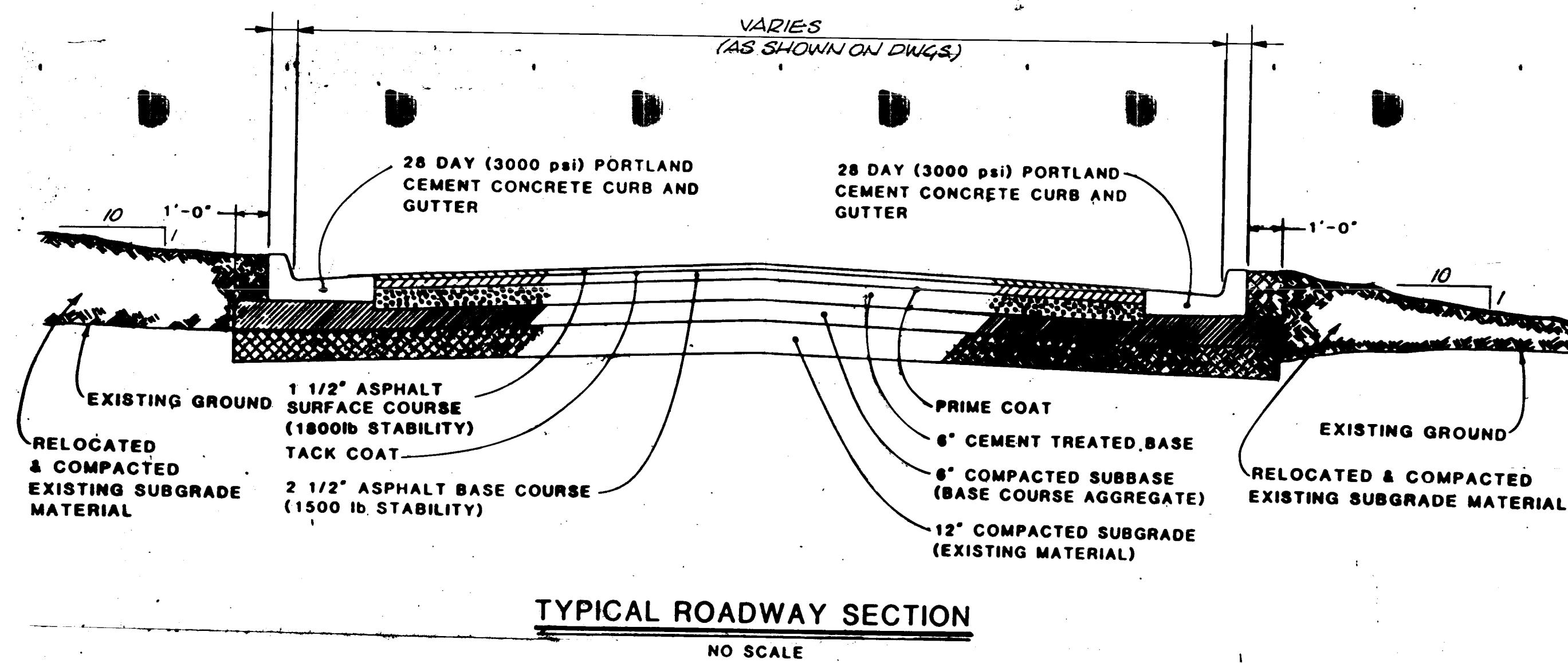


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**PAVING PLAN**

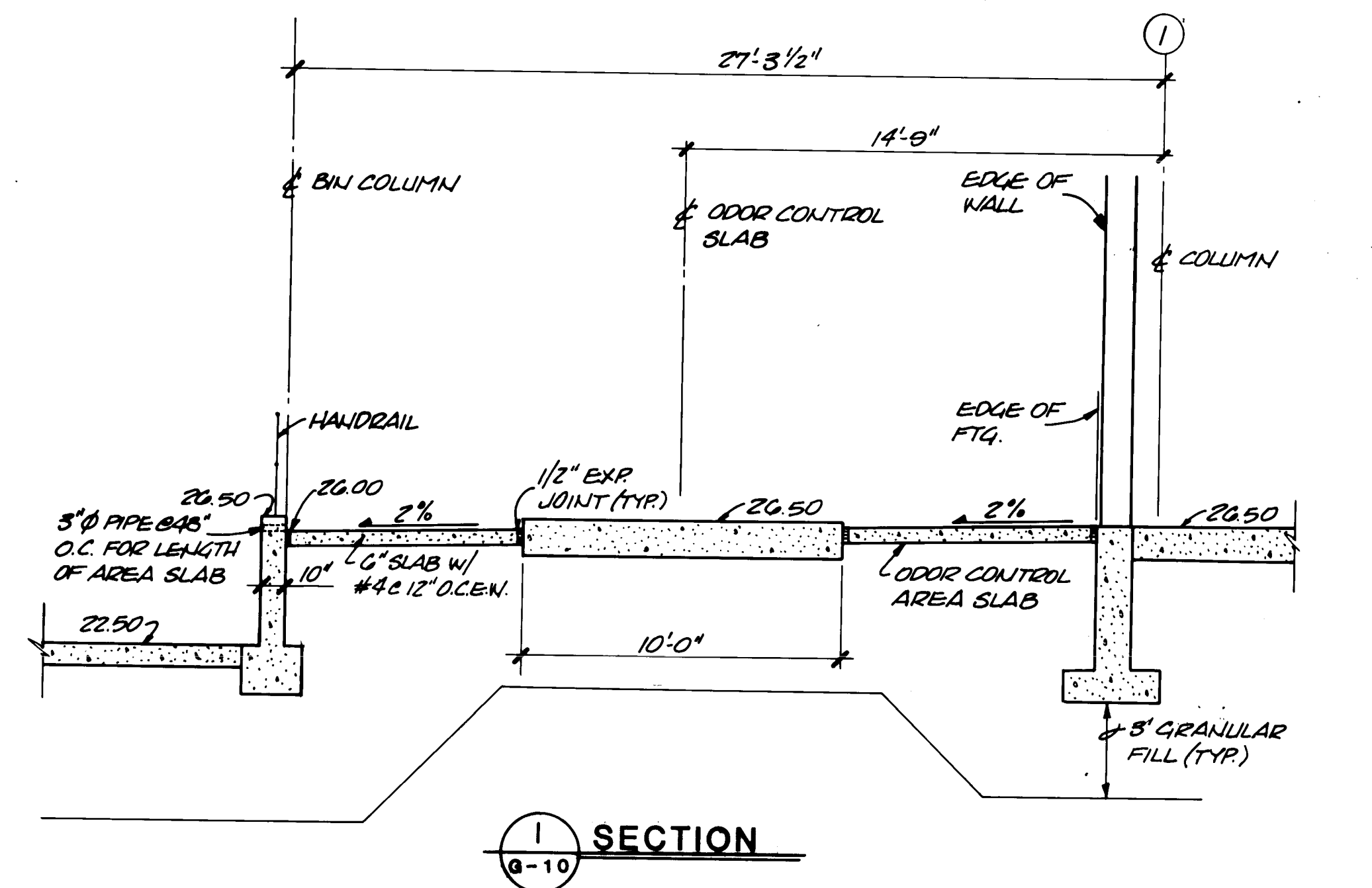
M-C NO. 832221  
**G-10** 10 of 12  
SC NO.





## NOTES:

1. PROVIDE CONTRACTION JOINTS IN THE CURB AND GUTTER 6'-0" O.C. MAXIMUM AND 1/2" PREMOLDED EXPANSION JOINTS AT 48'-0" O.C. MAXIMUM. ALSO PROVIDE 1/2" PREMOLDED EXPANSION JOINTS AT CURB RETURNS AND EACH SIDE OF DRIVEWAYS.
2. ALL EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE EDGED WITH A 1/4" OR 3/8" EDGING TOOL.



NOTE: REFER TO STRUCTURAL DWGS FOR STRUCTURAL REINFORCING

| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |

DESIGNED *LJR*  
DRAWN *RA*  
CHECKED *LJR*  
APPROVED  
APPROVED  
DATE



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
PAVING SECTIONS AND DETAILS

| RECORD DRAWING                                                                                                                                                                                                                                                |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                            | DRAFTED BY:<br>MCA |
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|    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 26 | 36 | 94 | 11 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

M-C NO. 102121

G-11 11-11

SC NO.



| PIPE JOINTS & FITTINGS                   |                                                                                     |                                                                                     |                                                                                     |
|------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DESCRIPTION                              | SCHEMATIC                                                                           | THREE LINE                                                                          | ONE LINE & ISOMETRIC                                                                |
| FLANGE                                   |                                                                                     |    |    |
| GROOVED COUPLING                         |                                                                                     |    |    |
| MECHANICAL JOINT                         |                                                                                     |    |    |
| SCREWED JOINT                            |                                                                                     |    |    |
| SLIP-ON JOINT                            |                                                                                     |    |    |
| WELDED JOINT                             |                                                                                     |    |    |
| QUICK CONNECT FLEXIBLE HOSE              |    |    |    |
| HARNESS TYPE COUPLING                    |    |    |    |
| SLEEVE TYPE COUPLING                     |   |   |   |
| UNION                                    |  |  |  |
| FLEXIBLE CONNECTOR                       |  |  |  |
| CONCENTRIC REDUCER                       |  |  |  |
| ECCENTRIC REDUCER                        |  |  |  |
| BLIND FLANGE                             |  |  |  |
| METER                                    |  |  |  |
| STRAINER                                 |  |  |  |
| PRESSURE GAUGE                           |  |  |  |
| THERMOMETER                              |  |  |  |
| FLEXIBLE REDUCER ECCENTRIC               |  |  |  |
| CLEANOUT (CO)                            |  |  |  |
| FLUSHING CONNECTION WITH ISOLATION VALVE |  |  |  |

| VALVE SYMBOLS                     |                           |                          |                           |                          |
|-----------------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| DESCRIPTION                       | ONE LINE                  |                          | THREE LINE                |                          |
|                                   | STEM PERP TO PLANE OF DWG | STEM PRL TO PLANE OF DWG | STEM PERP TO PLANE OF DWG | STEM PRL TO PLANE OF DWG |
| GATE VALVE (GV)                   |                           |                          |                           |                          |
| PLUG VALVE (PV)                   |                           |                          |                           |                          |
| BUTTERFLY VALVE (BFV)             |                           |                          |                           |                          |
| BALL VALVE (BV)                   |                           |                          |                           |                          |
| SWING CHECK VALVE (SCV)           |                           |                          |                           |                          |
| BALL CHECK VALVE (BCV)            |                           |                          |                           |                          |
| SOLENOID VALVE (SV)               |                           |                          |                           |                          |
| AIR CHECK VALVE (ACV)             |                           |                          |                           |                          |
| PRESSURE REDUCING VALVE (PRV)     |                           |                          |                           |                          |
| KNIFE GATE VALVE (KV)             |                           |                          |                           |                          |
| DIAPHRAGM VALVE (DV)              |                           |                          |                           |                          |
| THREE WAY VALVE (TWV)             |                           |                          |                           |                          |
| FOURWAY VALVE (FWV)               |                           |                          |                           |                          |
| AUTO AIR AND VACUUM RELEASE (AVR) |                           |                          |                           |                          |
| AUTO AIR RELEASE (AR)             |                           |                          |                           |                          |
| GLOBE VALVE (GL)                  |                           |                          |                           |                          |
| PRESSURE RELIEF                   |                           |                          |                           |                          |
| GAS VALVE                         |                           |                          |                           |                          |
| CORPORATION STOP (CS)             |                           |                          |                           |                          |
| VEE BALL VALVE (VB)               |                           |                          |                           |                          |
| ELECTRIC ACTUATOR ON VALVE        |                           |                          |                           |                          |
| THERMAL FLUID BALL VALVE (TBV)    |                           |                          |                           |                          |
| BACKPRESSURE SUSTAINING VALVE     |                           |                          |                           |                          |
| PRESSURE RELIEF (ANGLE TYPE)      |                           |                          |                           |                          |

|          |                                   |
|----------|-----------------------------------|
| C.P.     | CENTRATE RETURN                   |
| CCMH     | CONTROL AND COMMUNICATION MANHOLE |
| CL       | CHLORINE                          |
| C.M.P.   | CORROGATED METAL PIPE             |
| D.S.     | DIGESTED SLODGE                   |
| D.F.     | DRAIN FLOW                        |
| D.T.     | DRAIN TRANSFORMER                 |
| E.F.     | FINAL EFFLUENT                    |
| F.H.     | FIRE HYDRANT                      |
| G.V.     | GATE VALVE                        |
| H.W.     | HOUSE WATER                       |
| M.H.     | MANHOLE                           |
| N.G.     | NATURAL GAS                       |
| P.C.O.   | PRESSURE CLEANOUT                 |
| P.V.     | PLUG VALVE                        |
| P.W.     | POTABLE WATER                     |
| P.P.M.H. | PRIMARY POWER MANHOLE             |
| R.C.P.   | REINFORCED CONCRETE PIPE          |
| R.P.M.   | REVERSE FREELIMB                  |
| S.P.     | SEWAGE PUMP                       |
| T.D.     | TYPE OF ELECTRICAL DUCT TYPE      |
| USE      | USE OF ELECTRICAL                 |
| W.W.     | WASTEWATER                        |

[illegible]

| DESCRIPTION             | SYMBOLS                                                                             |
|-------------------------|-------------------------------------------------------------------------------------|
| FLOOR DRAIN (FD)        |  |
| CLEAN OUT (CO)          |  |
| EQUIPMENT DRAIN (ED)    |  |
| NON-FREEZE YARD HYDRANT |  |
| FIRE HYDRANT            |  |

|  |                               |
|--|-------------------------------|
|  | COMPACTED<br>EARTH            |
|  | EXISTING EARTH                |
|  | CONCRETE                      |
|  | CONCRETE BLOCK                |
|  | CONCRETE<br>WEARING<br>COURSE |
|  | BRICK                         |
|  | SAND                          |
|  | GRANULAR FILL                 |
|  | GRATING                       |
|  | CHECKERED<br>PLATE            |
|  | STEEL                         |
|  | ALUMINUM                      |
|  | CAST IRON                     |




SHEET NUMBER OF WHERE SECTION IS SHOWN

SECTION NUMBER




SHEET NUMBER OF WHERE SECTION IS SHOWN

SECTION NUMBER

| RECORD DRAWING                                                                                                                                                                                                                                                           |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                                       | DRAFTED BY:<br>MCA |
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[illegible][illegible]

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

NONE

GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

## INTERIM SLUDGE DEWATERING FACILITIES

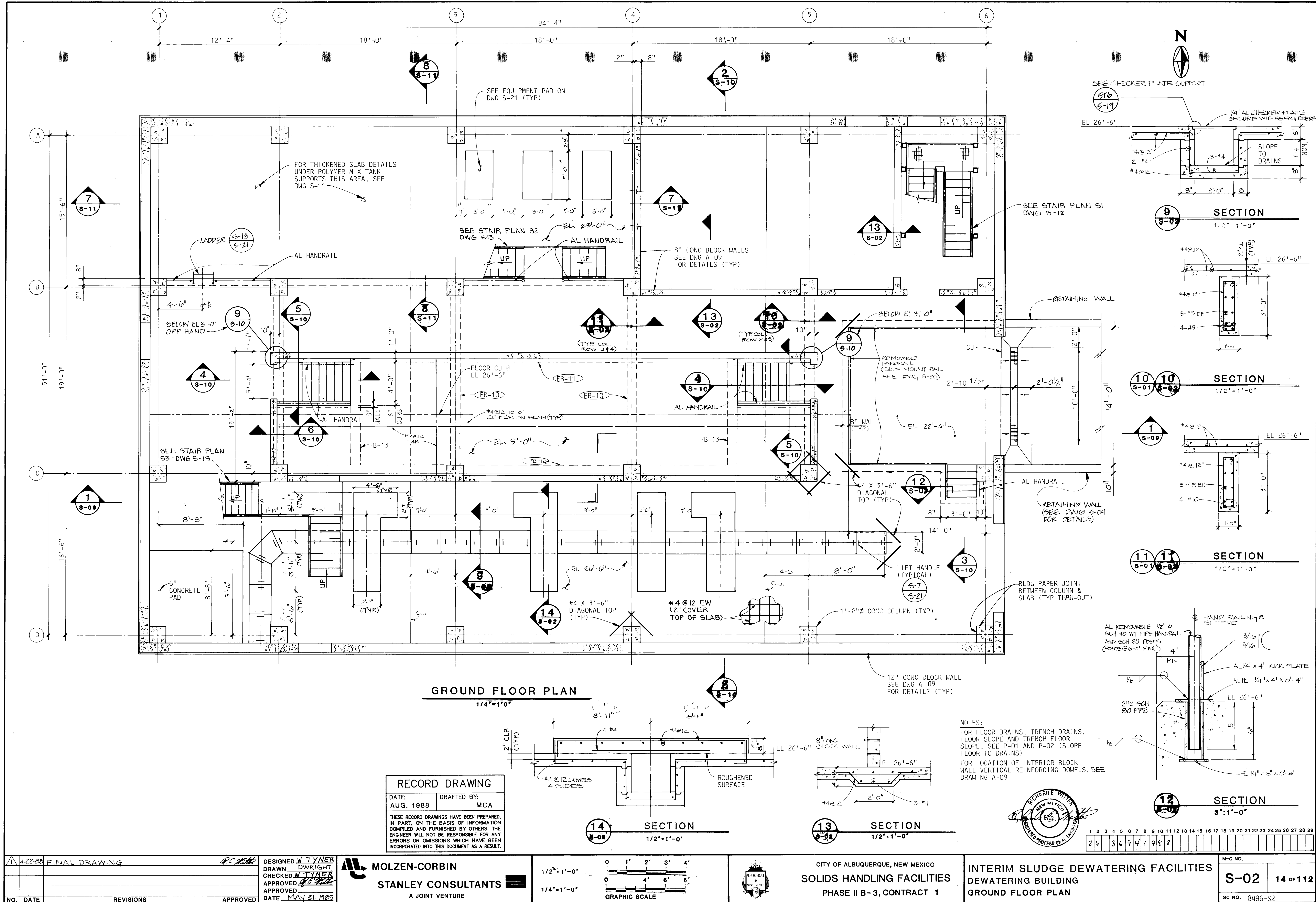
### STANDARD SYMBOLS

|                |           |
|----------------|-----------|
| M-C NO. 832221 |           |
| G-12           | 12 OF 112 |
| SC NO.         |           |

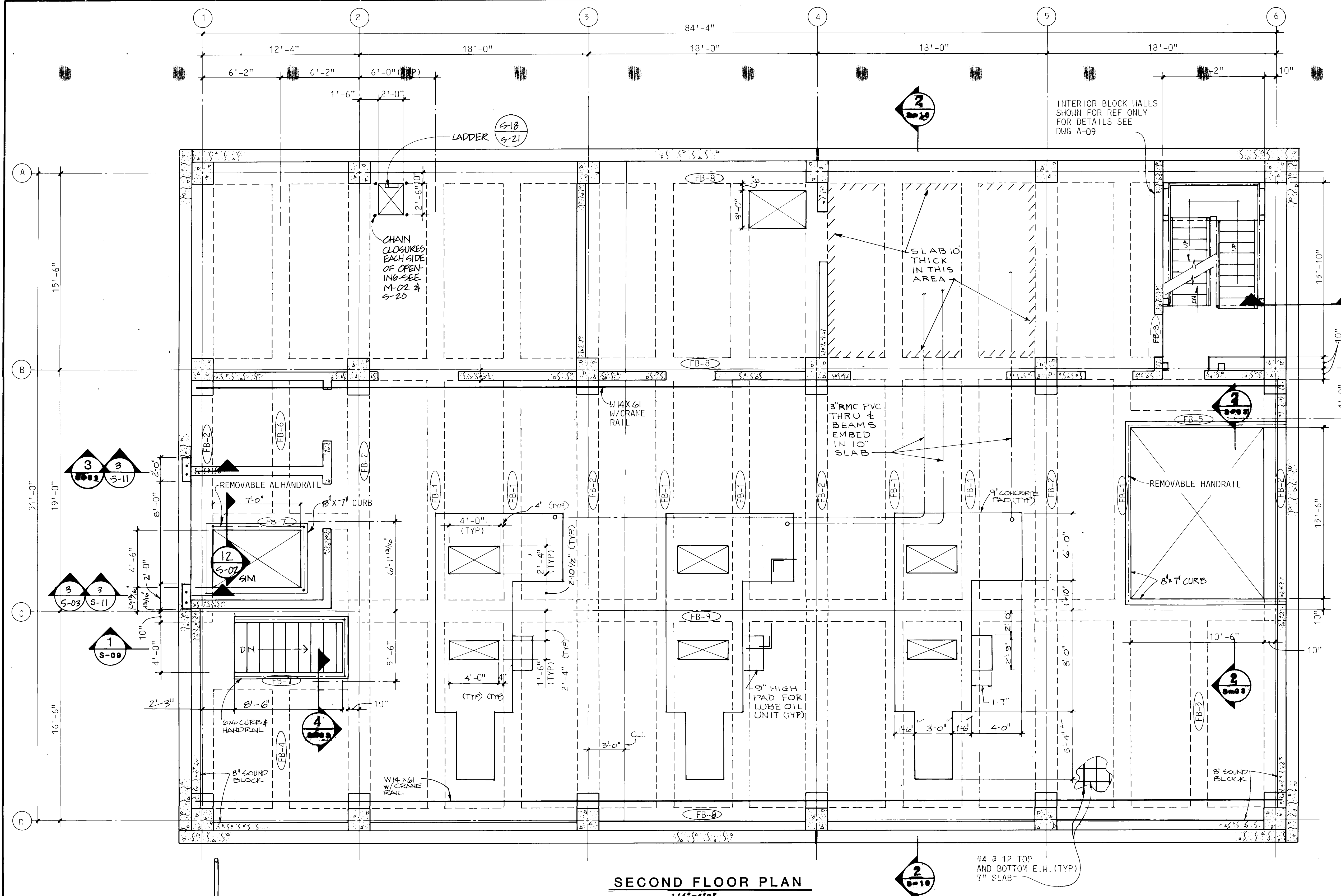




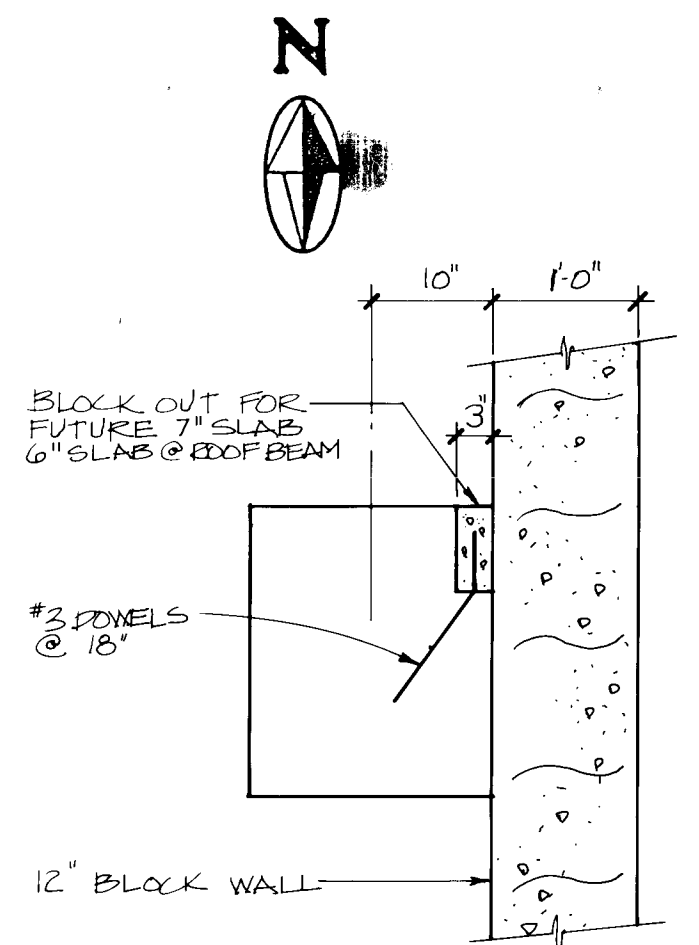




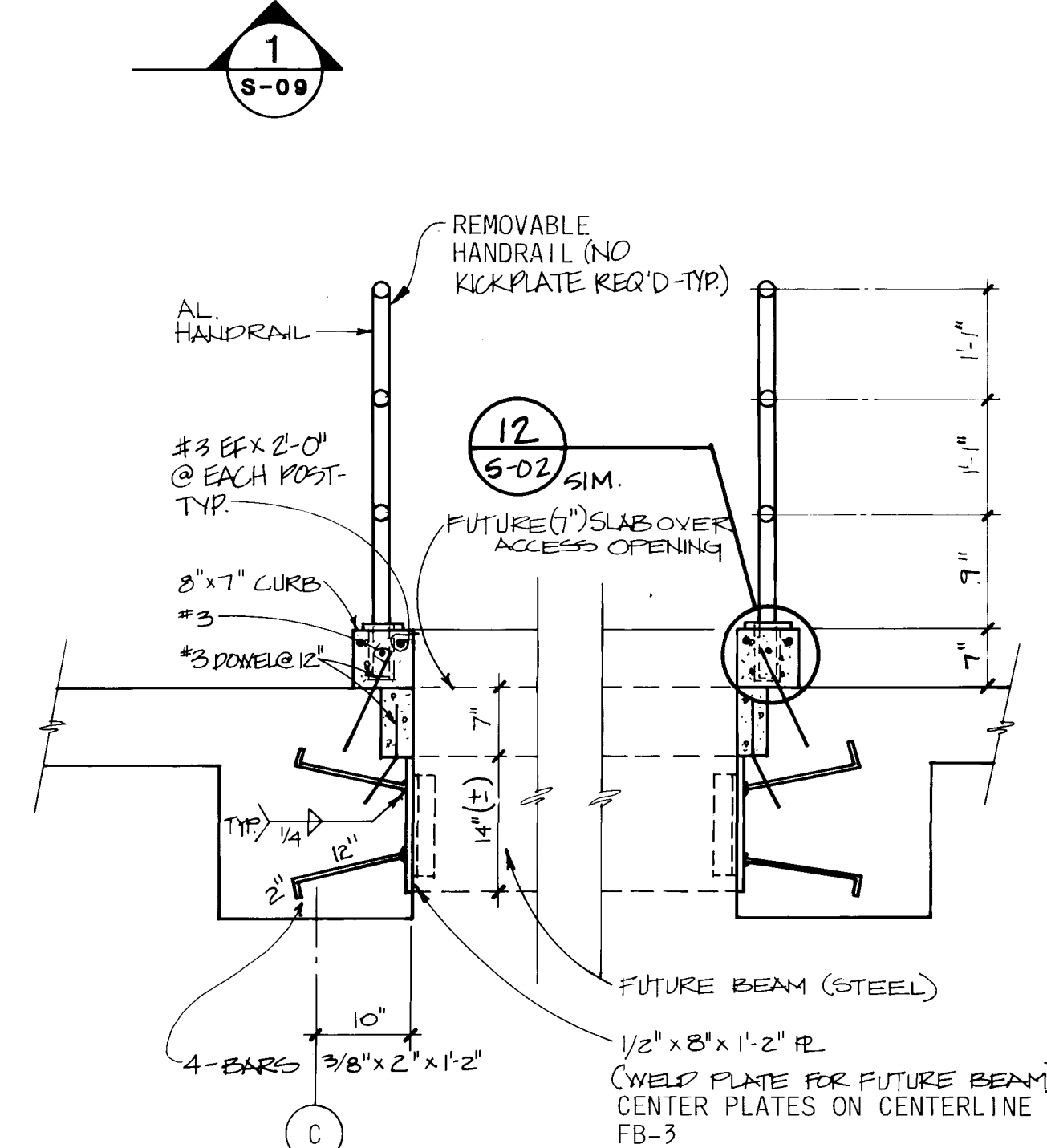




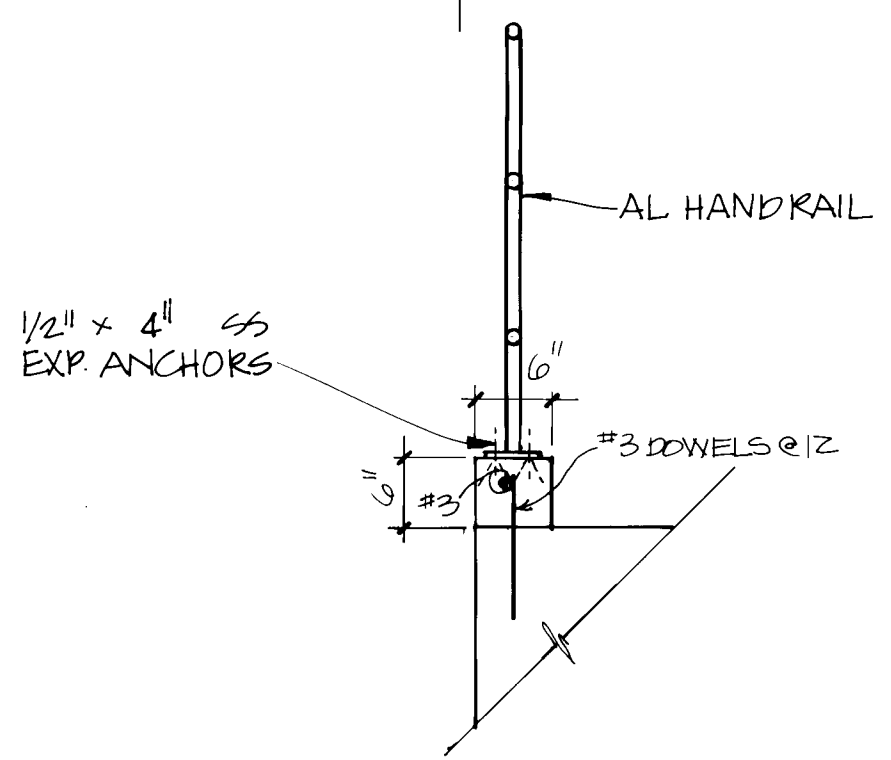
**SECOND FLOOR PLAN**  
1/4" = 1'-0"



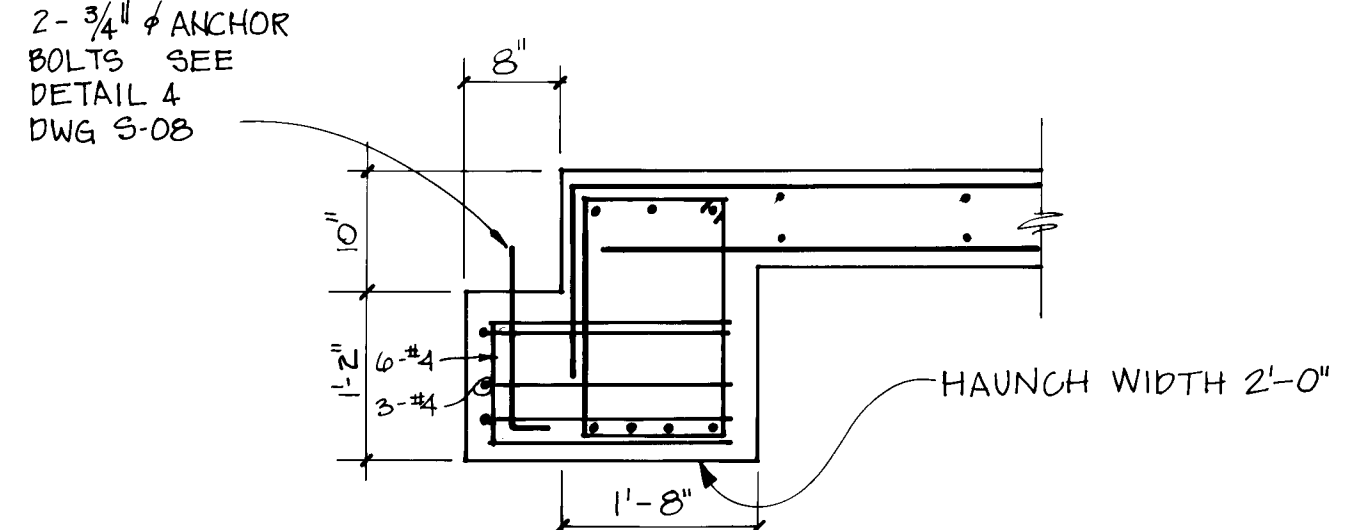
**SECTION 1**  
3/4" = 1'-0"



**SECTION 2**  
3/4" = 1'-0"



**SECTION 4**  
3/4" = 1'-0"



**SECTION 3**  
3/4" = 1'-0"

- NOTES:**
- FOR FLOOR DRAINS AND FLOOR SLOPE LINES, SEE DRAWING P-02.
  - SEE DRAWING H-03 FOR BOILER ROOM FLOOR PENETRATIONS.
  - FOR LOCATION OF SOUND BLOCK AND INTERIOR BLOCK WALL VERTICAL REINFORCING DOWELS, SEE DRAWING A-09.

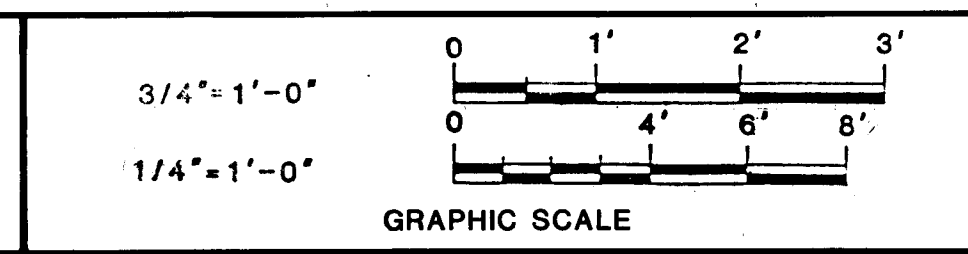
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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                             | DRAFTED BY:<br>MCA |
| THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. |                    |



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|--------|---------------|-----------|
| 422-08 | FINAL DRAWING | APPROVED  |
| NO.    | DATE          | REVISIONS |
|        |               | APPROVED  |

DESIGNED BY TYNER  
DRAWN BY TYNER  
CHECKED BY TYNER  
APPROVED BY TYNER  
DATE MAY 31, 1988

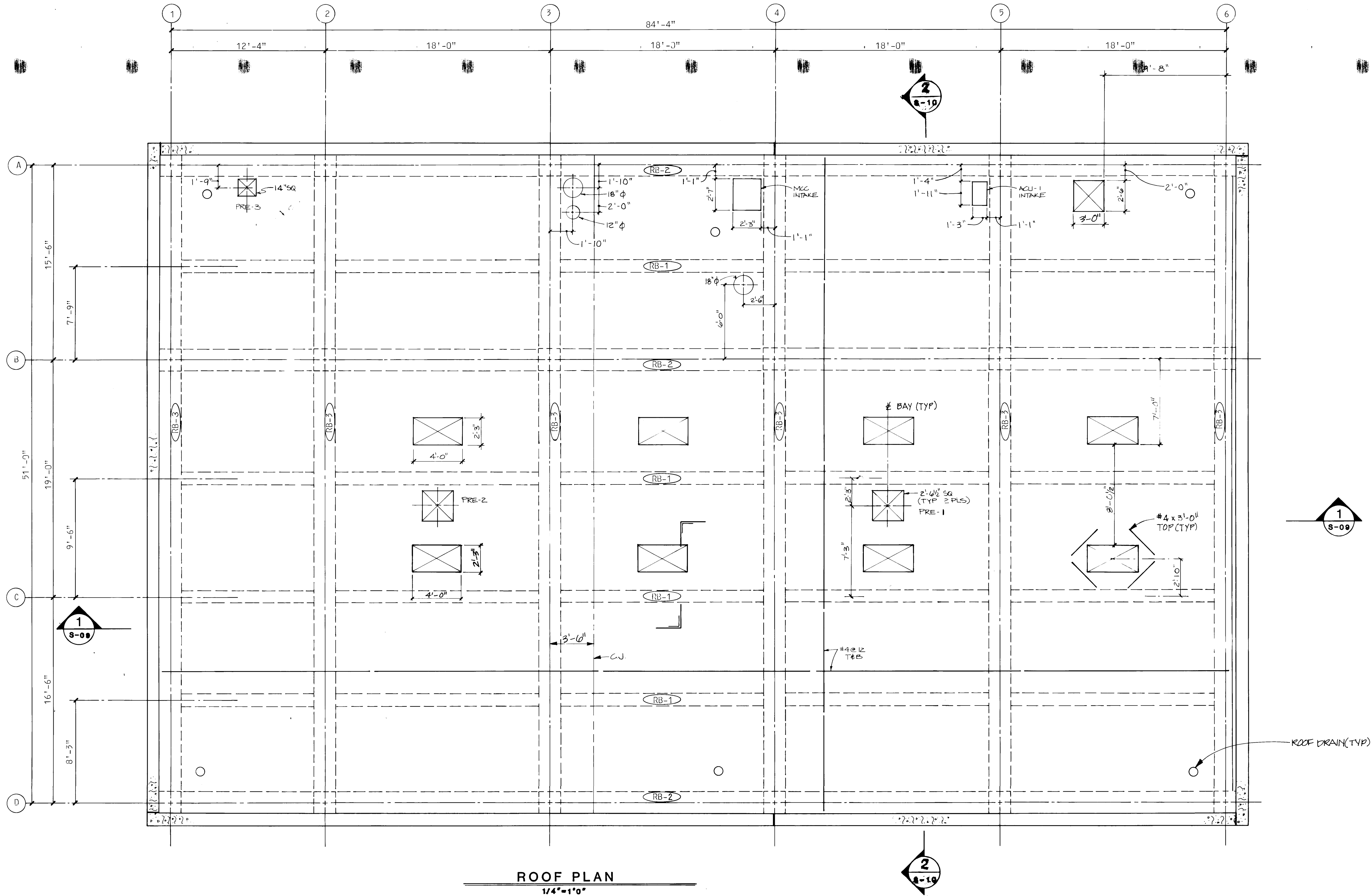
**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

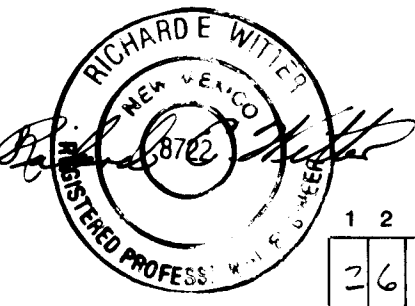
**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
SECOND FLOOR PLAN  
M-C NO. S-03 15 OF 112  
SC NO. 8496-S3





NOTE:  
SEE DRAWING A-06 FOR ROOF SLOPE AND ROOF DRAIN LOCATIONS. SEE DRAWING H-02 FOR HVAC EQUIPMENT AND ROOF PENETRATIONS.

| RECORD DRAWING                                                                                                                                                                                                                                                |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                            | DRAFTED BY:<br>MCA |
| <small>THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.</small> |                    |

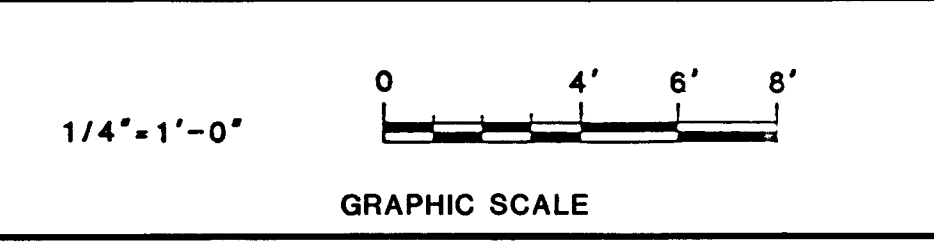


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| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 16 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| 4-22-88 | FINAL DRAWING |           |
|---------|---------------|-----------|
| NO.     | DATE          | REVISIONS |
|         |               |           |
|         |               |           |

DESIGNED **W. TYNER**  
 DRAWN **DWRIGHT**  
 CHECKED **W. TYNER**  
 APPROVED **[Signature]**  
 DATE **MAY 31, 1985**

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

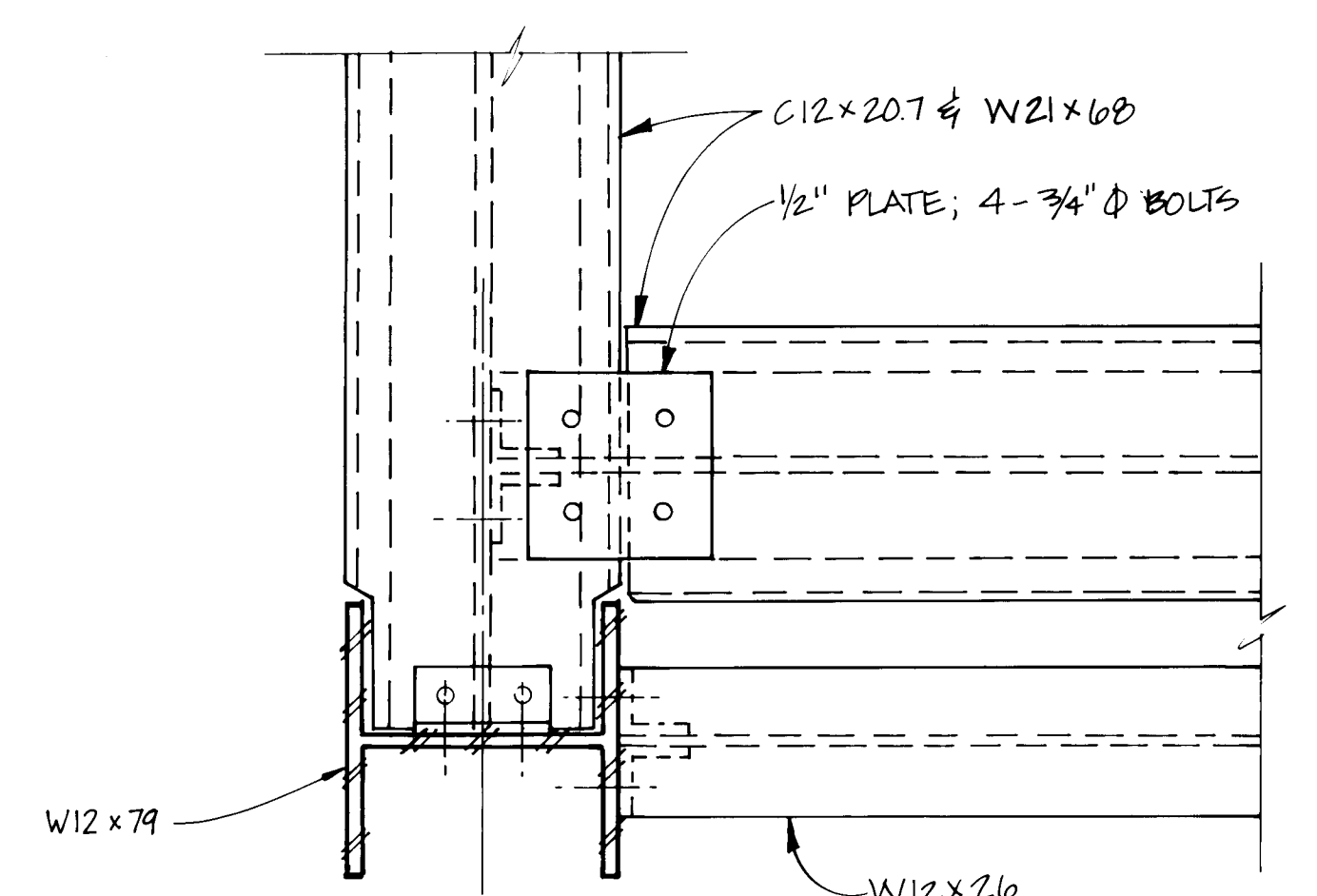
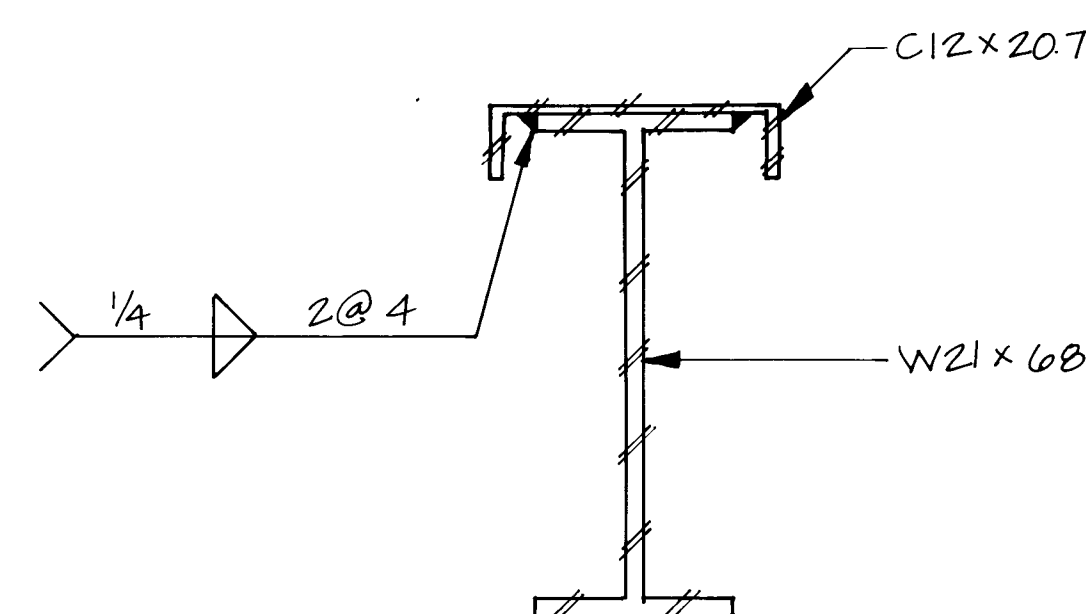
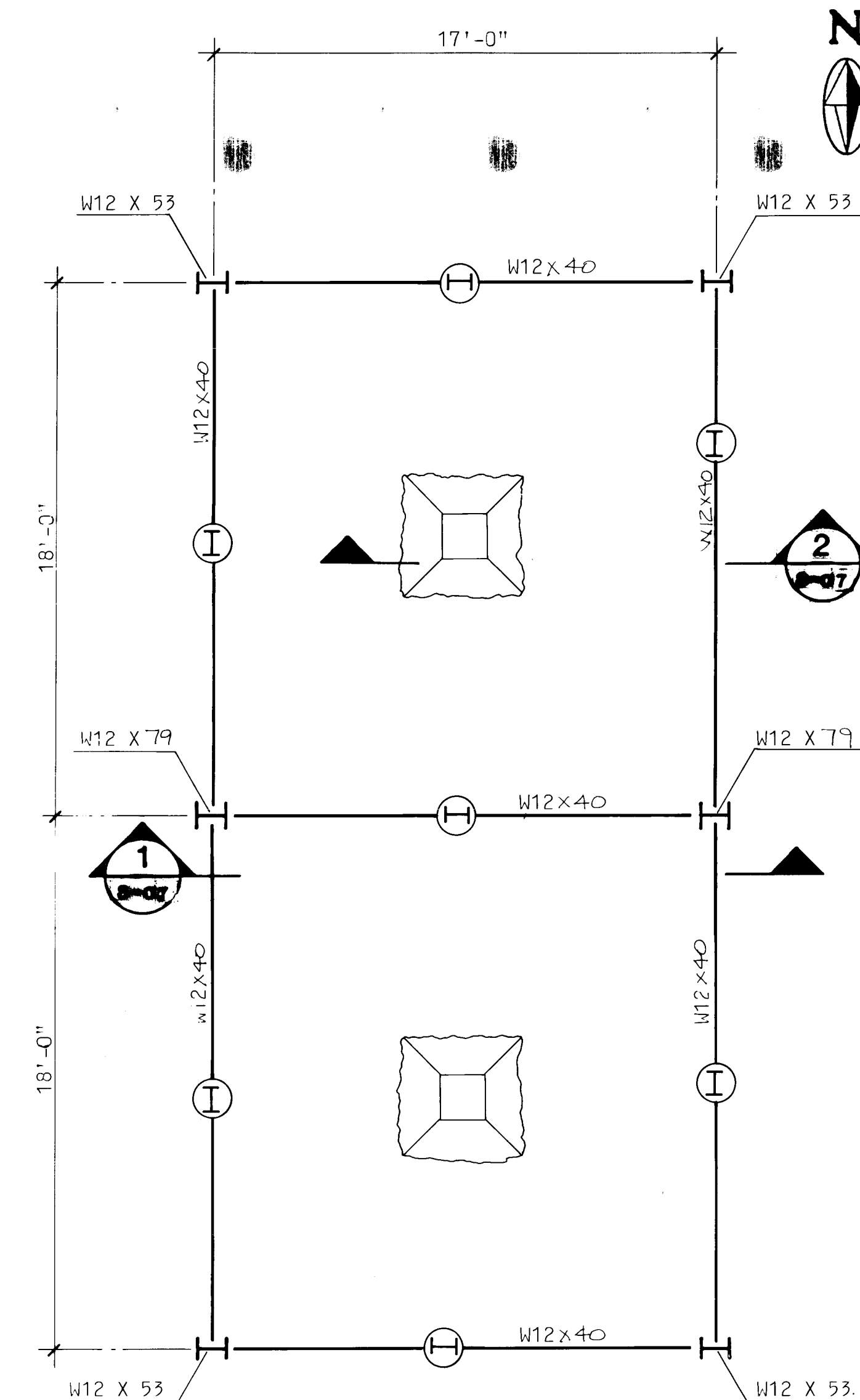
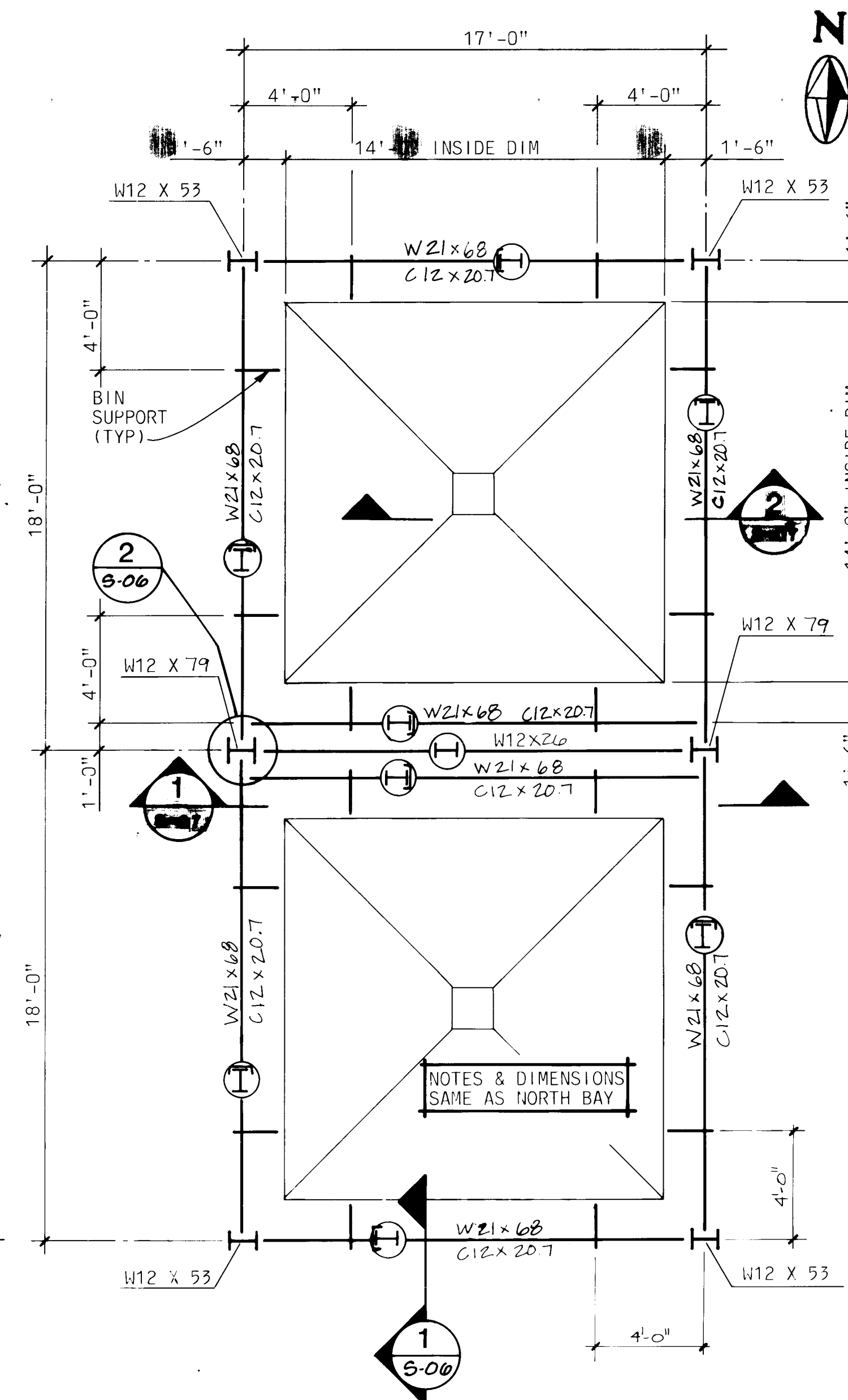
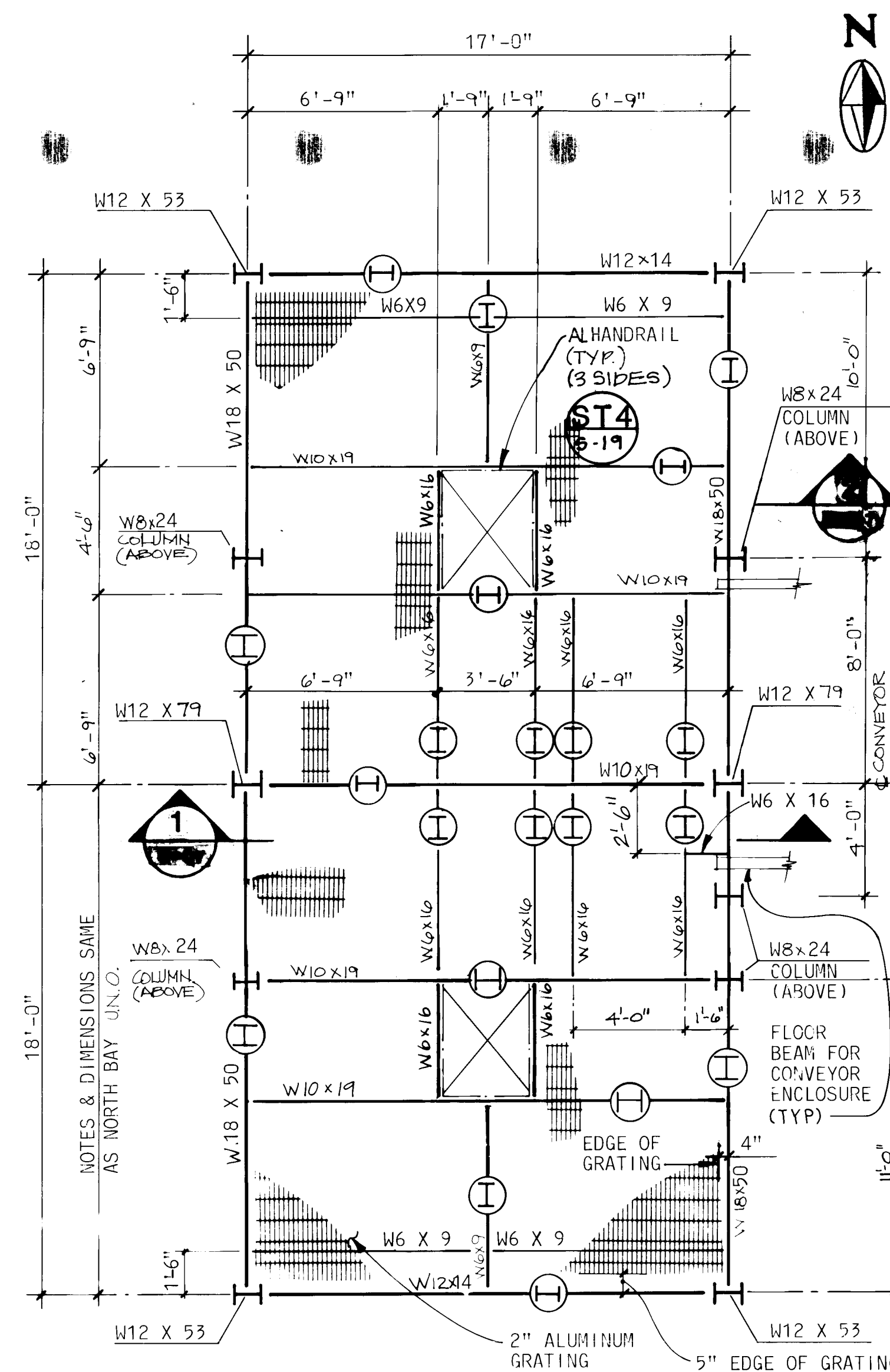
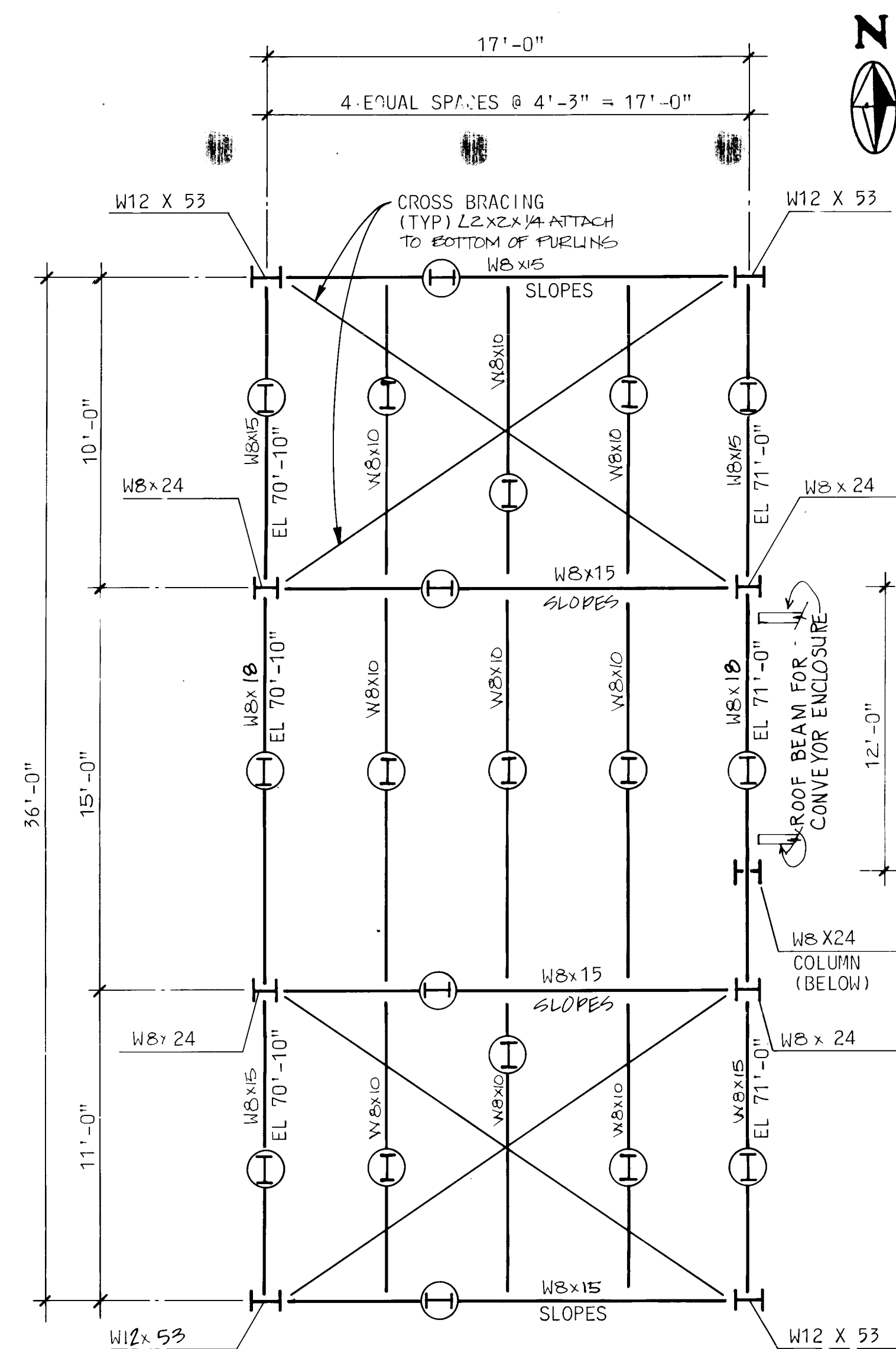
**INTERIM SLUDGE DEWATERING FACILITIES**  
 DEWATERING BUILDING  
**ROOF PLAN**

M-C NO. **S-04** 16 OF 112  
 SC NO. 8496-S4









|                                                                                                                                                                                                                                                                          |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| RECORD DRAWING                                                                                                                                                                                                                                                           |                    |
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                                       | DRAFTED BY:<br>MCA |
| <p>THESE RECORD DRAWINGS HAVE BEEN PREPARED IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT OF SUCH INFORMATION.</p> |                    |

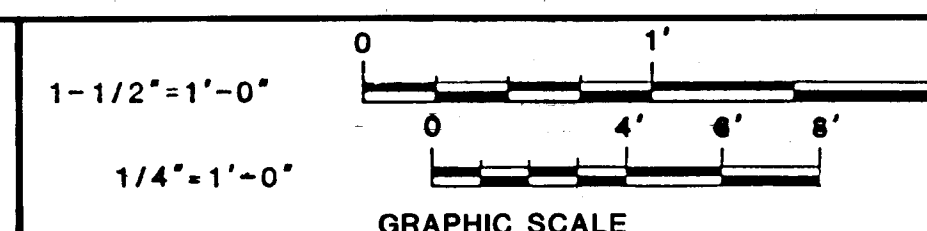
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|     | A-22-88 | FINAL DRAWING |         |
|-----|---------|---------------|---------|
|     |         |               |         |
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|     |         |               |         |
| NO. | DATE    | REVISIONS     | APPROVE |

DESIGNED W TYNER  
DRAWN B.G. JARRETT  
CHECKED W TYNER  
APPROVED B.C. Webb  
APPROVED \_\_\_\_\_  
DATE MAY 31, 1985



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

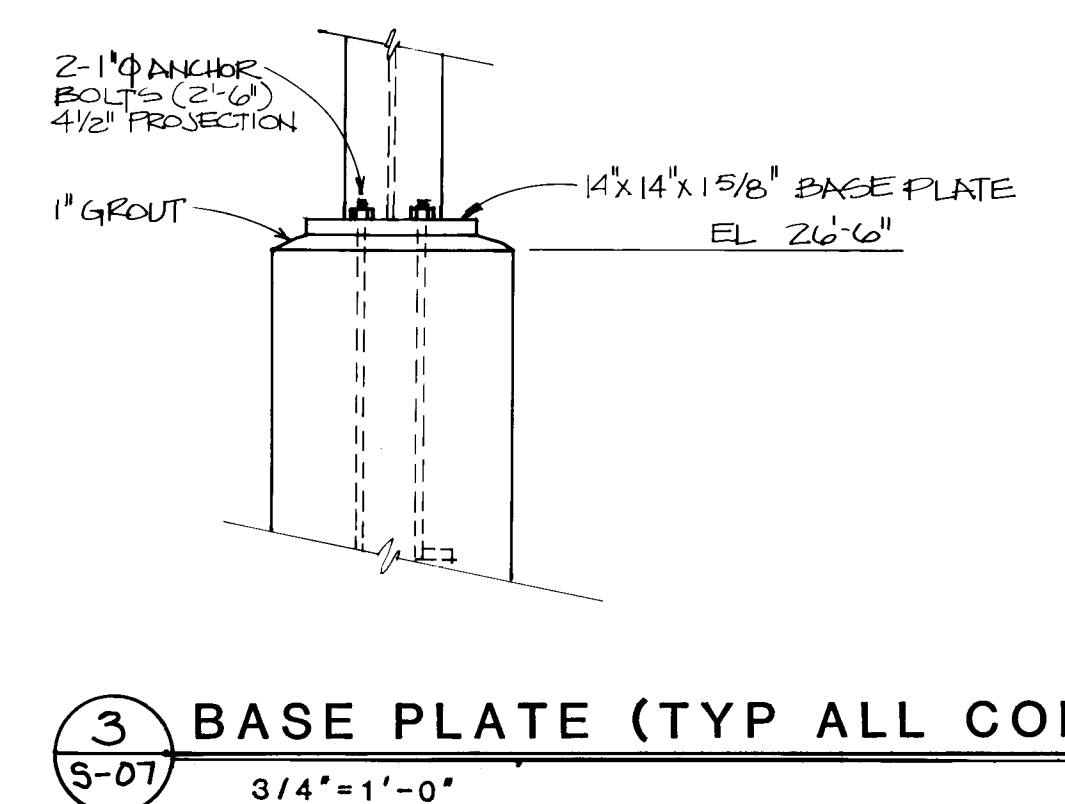
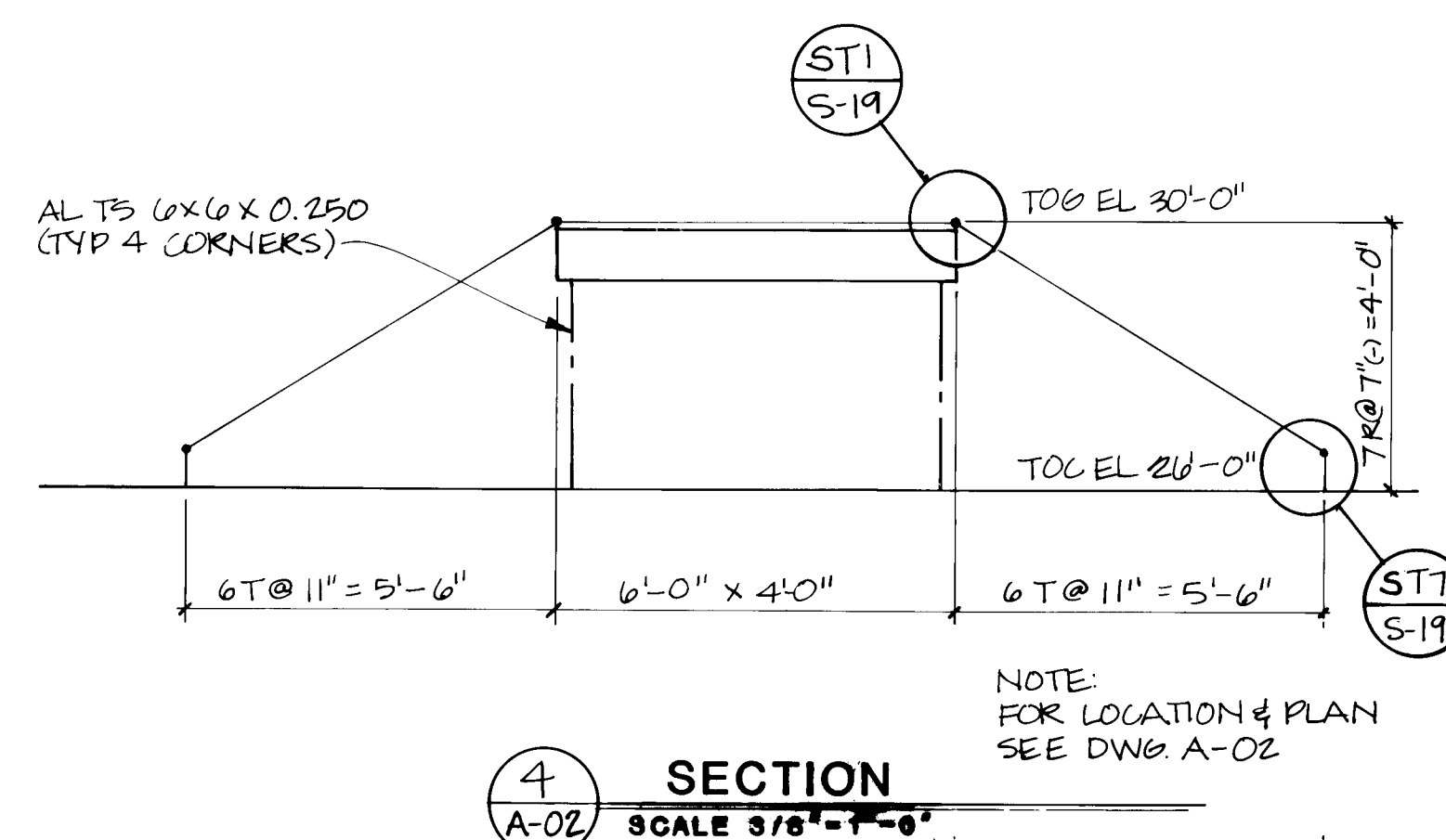
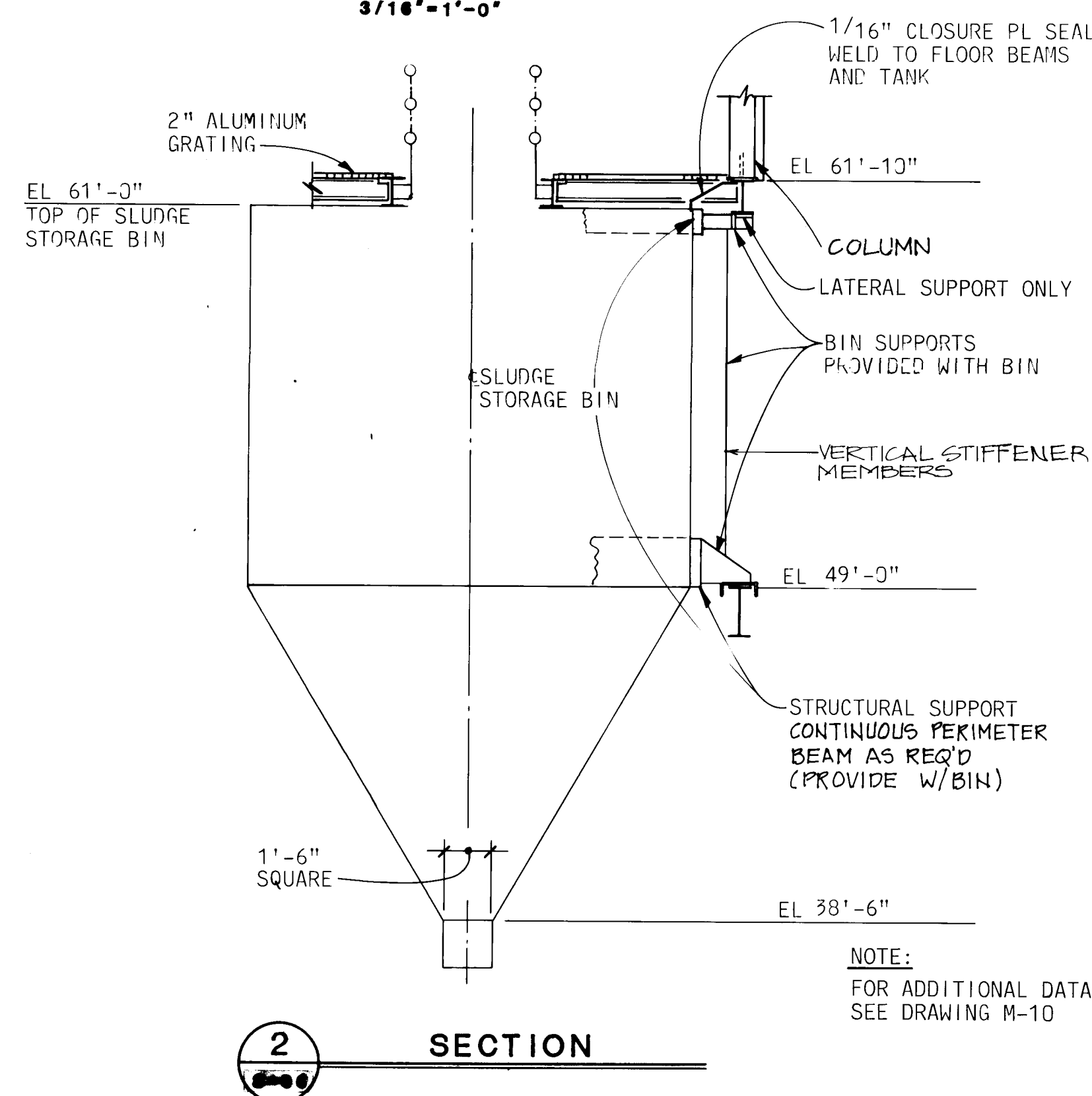
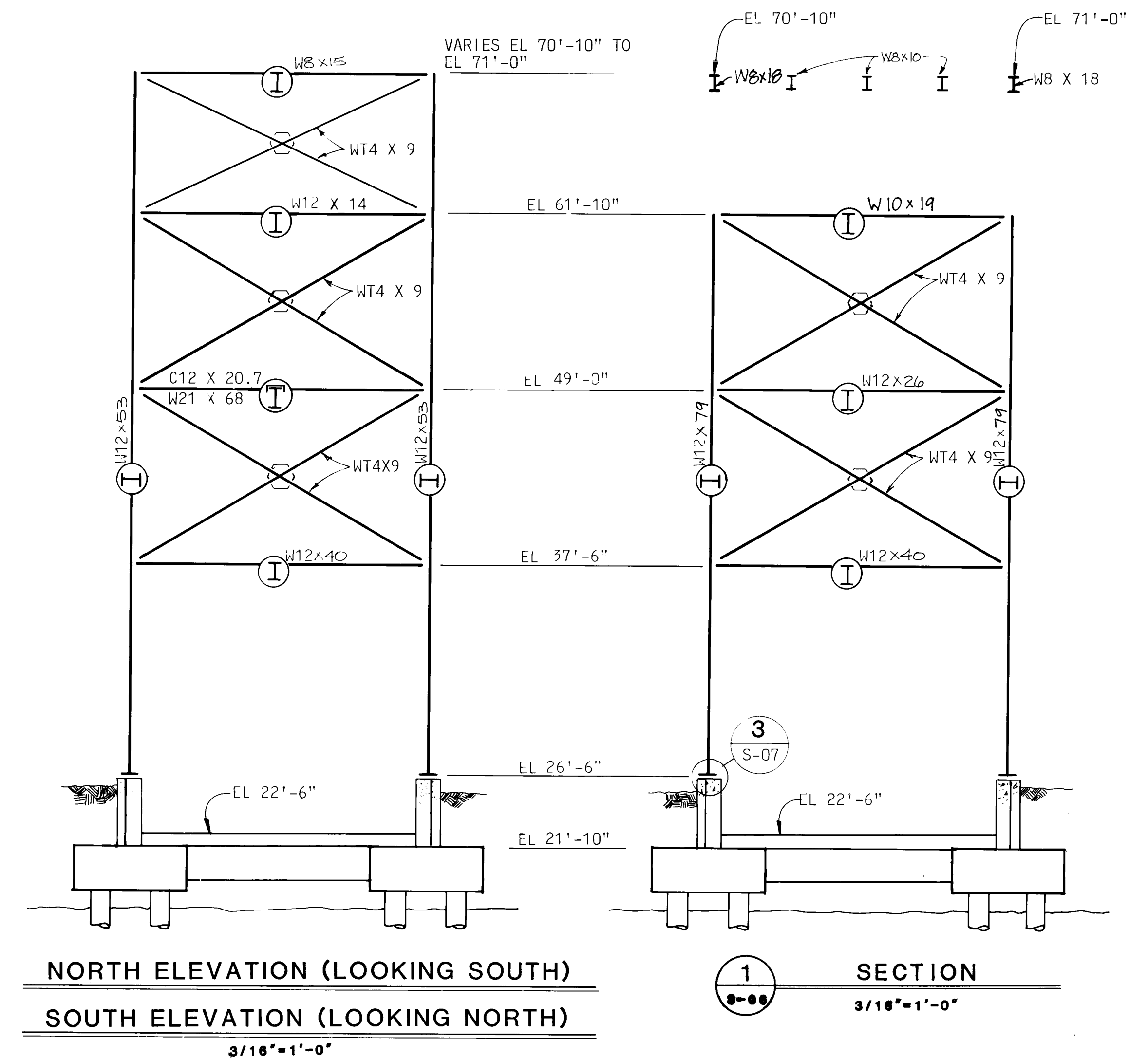
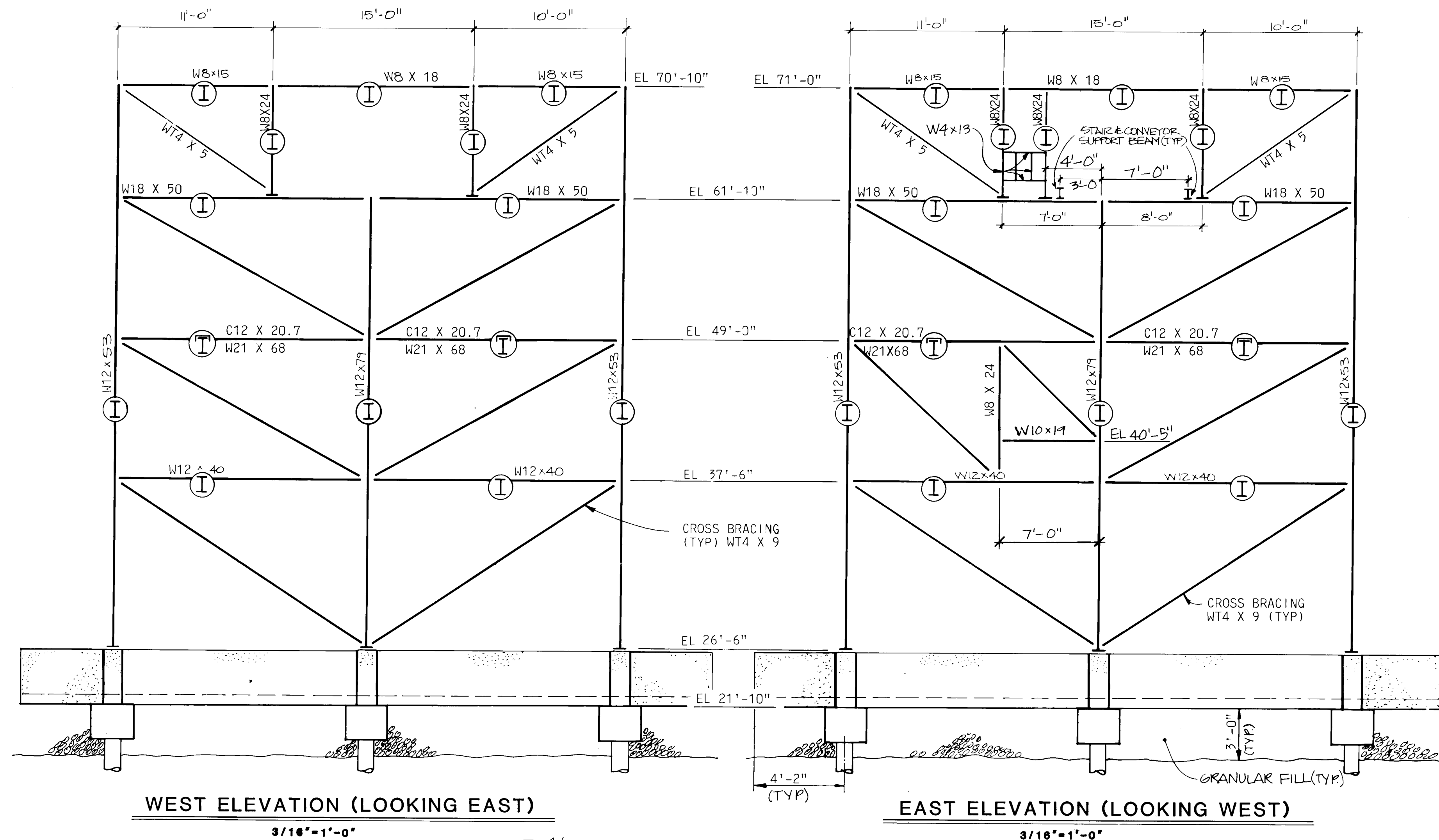


CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
SLUDGE LOADING AREA  
FRAMING PLANS

|                |                  |
|----------------|------------------|
| M-C NO.        |                  |
| <b>S-06</b>    | <b>18 OF 112</b> |
| SC NO. 8496-S6 |                  |





NOTES:  
1. SEE DWG H-07 FOR 18" Ø PIPE SUPPORT DETAILS.

**RECORD DRAWING**  
DATE: AUG. 1988  
DRAFTED BY: MCA  
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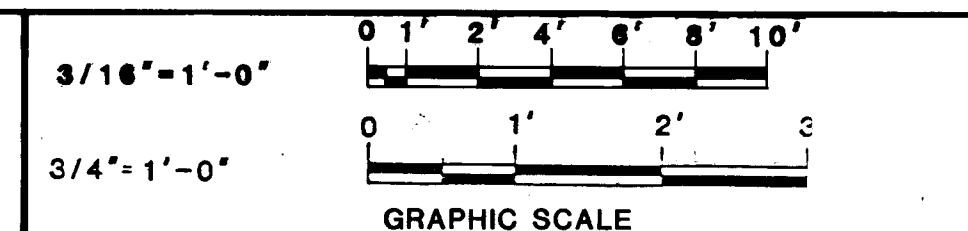


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| 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 9 | 4 | 1 | 9 | 8 | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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|---------|---------------|-----------|
| 4-22-88 | FINAL DRAWING |           |
| NO.     | DATE          | REVISIONS |
|         |               | APPROVED  |

DESIGNED BY: TYNER  
DRAWN BY: G. JARRETT  
CHECKED BY: TYNER  
APPROVED BY: TYNER  
DATE: MAY 31, 1985

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**SLUDGE LOADING AREA**  
**FRAMING ELEVATIONS**  
M-C NO. **S-07** 19 OF 112  
SC NO. 8496-S7





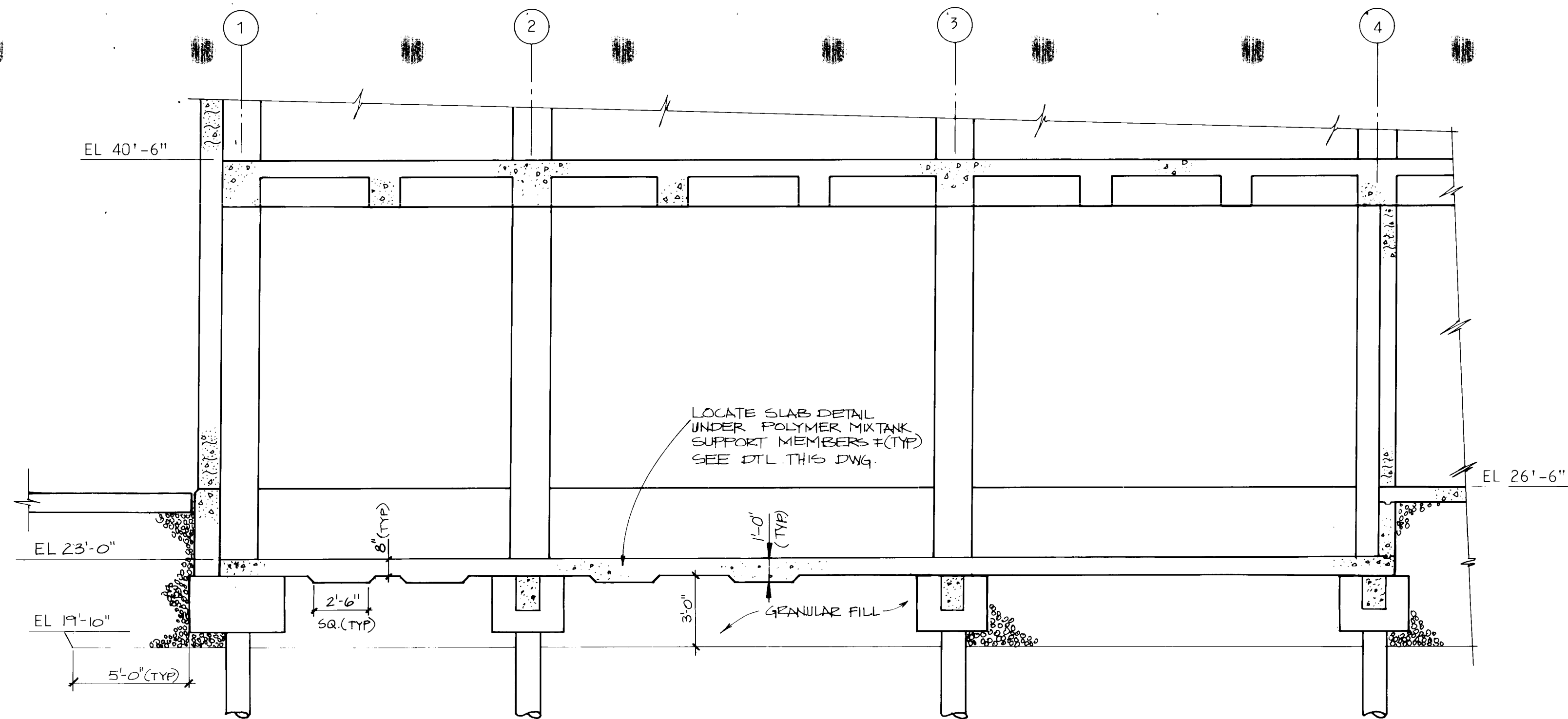




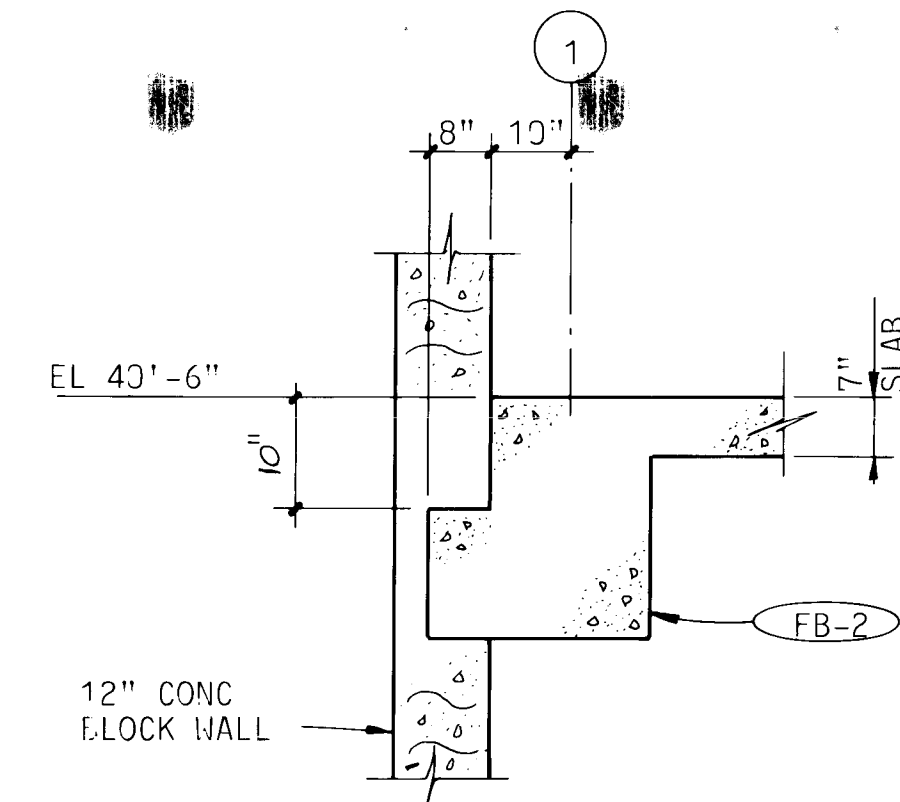




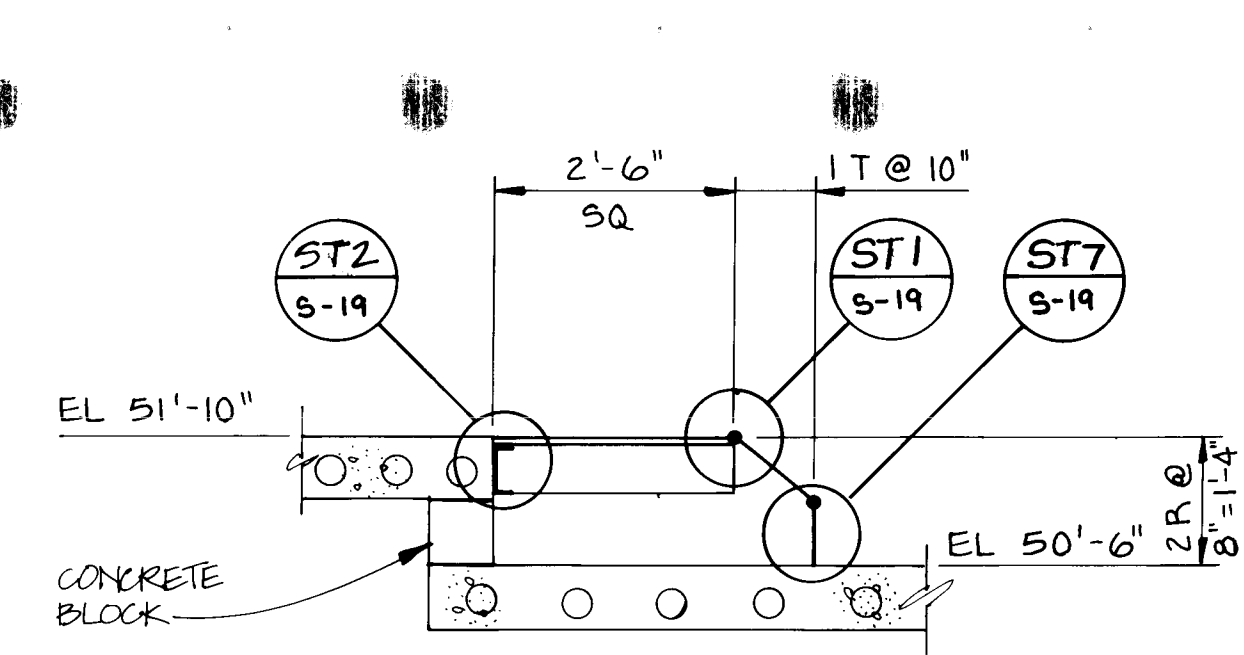




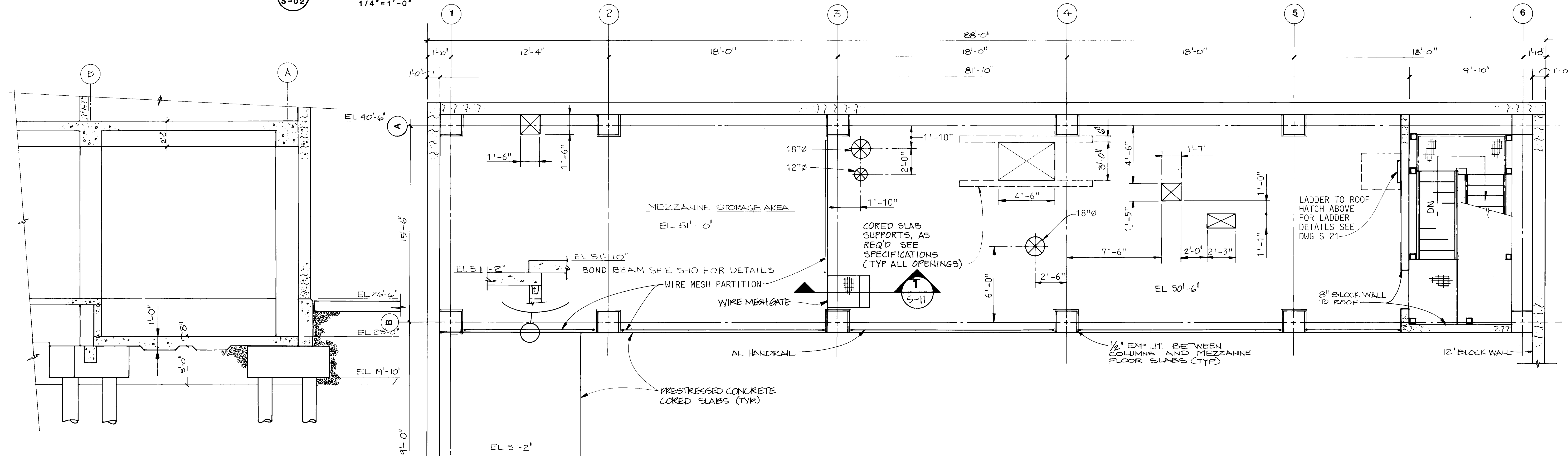
**7 SECTION**  
S-02  
1/4"=1'-0"



**3 SECTION**  
S-03  
1/2"=1'-0"

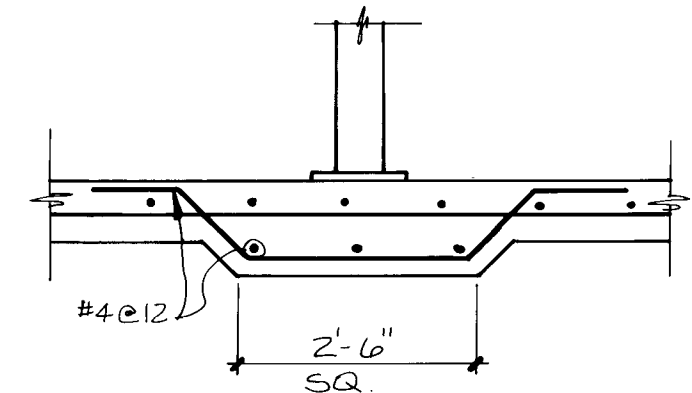


**1 SECTION**  
S-11  
1/2"=1'-0"



**8 SECTION**  
S-02  
1/4"=1'-0"

**MEZZANINE FLOOR PLAN**  
1/4"=1'-0"



**SLAB DETAIL UNDER POLYMER MIXTANK**  
1/2"=1'-0"

**NOTES:**  
SEE DRAWING H-02 FOR HVA EQUIPMENT, DUCTS AND FLOOR PENETRATIONS.

**RECORD DRAWING**  
DATE: AUG. 1988  
DRAFTED BY: MCA  
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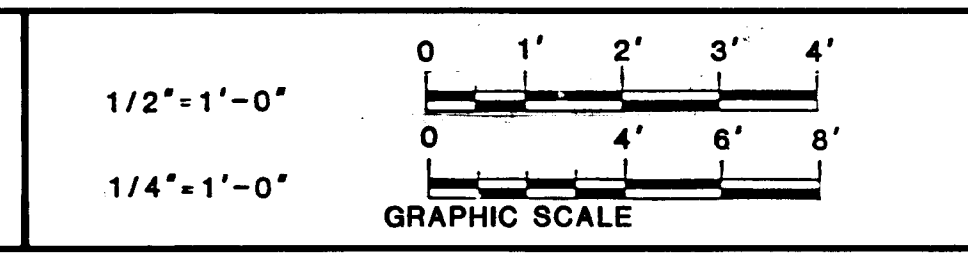


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| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 23 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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|---------|---------------|-----------|
| 4-22-88 | FINAL DRAWING |           |
| NO.     | DATE          | REVISIONS |
|         |               | APPROVED  |

DESIGNED BY **TYNER**  
DRAWN BY **DWRIGHT**  
CHECKED BY **TYNER**  
APPROVED BY **TYNER**  
DATE **MAY 31, 1985**

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



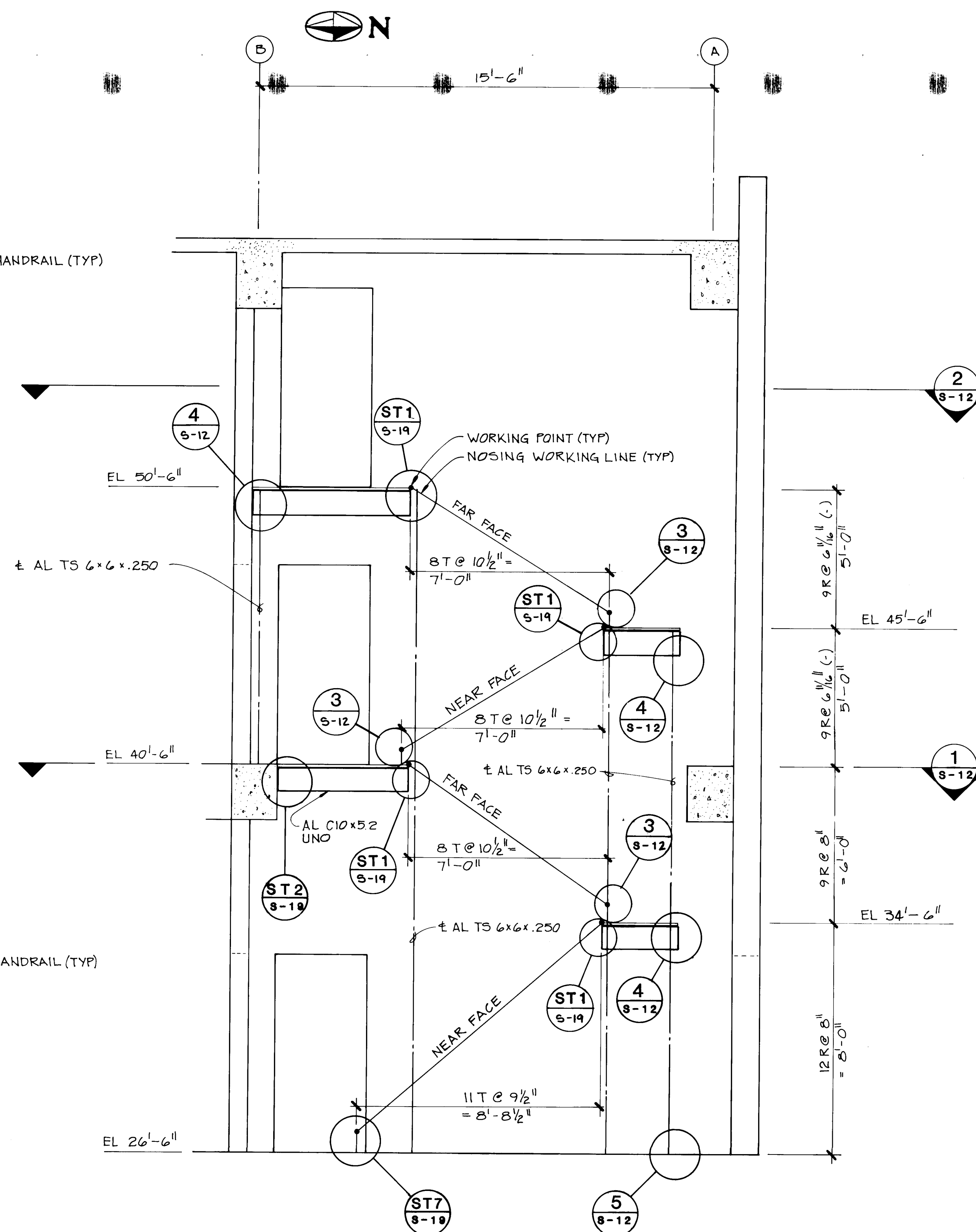
CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
MISCELLANEOUS SECTIONS & DETAILS  
M-C NO. **S-11** 23 of 112  
SC NO. 8496-S11



1 SECTION  
8-12

2 SECTION  
3-12



ELEVATION-STAIRS S1

3  
S-12

DETAIL

NTS

4 DETAIL  
S-12 NTS

5  
S-12

DETAIL

NTS

NOTES :

1. USE 1 3/4" X 3/16" AL GRATING TREADS WITH ABRASIVE AL NOSING. CONNECTIONS MAY BE MODIFIED TO SUIT SPECIAL CONDITIONS. BOLTED CONNECTIONS MAY BE SUBSTITUTED FOR WELDED CONNECTIONS (SUBJECT TO ERECTORS AND ENGINEERS REVIEW).
2. SECURE ALL GRATING TO FRAMING MEMBERS.
3. FOR HANDRAIL DETAILS SEE SHEET S-20.

RECORD DRAWING

|                    |                    |
|--------------------|--------------------|
| DATE:<br>AUG. 1988 | DRAFTED BY:<br>MCA |
|--------------------|--------------------|

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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

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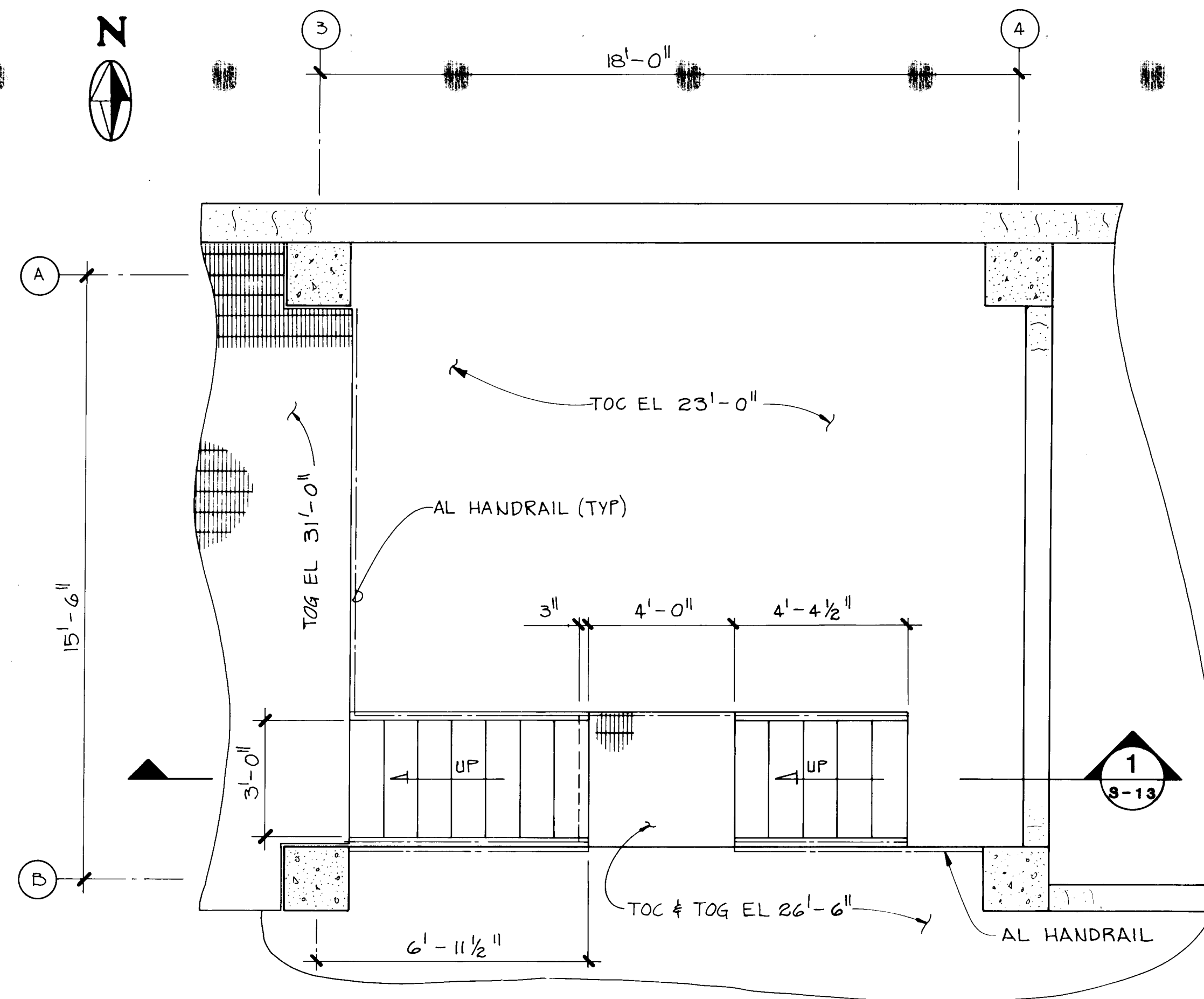
M-C NO.

**S-12**

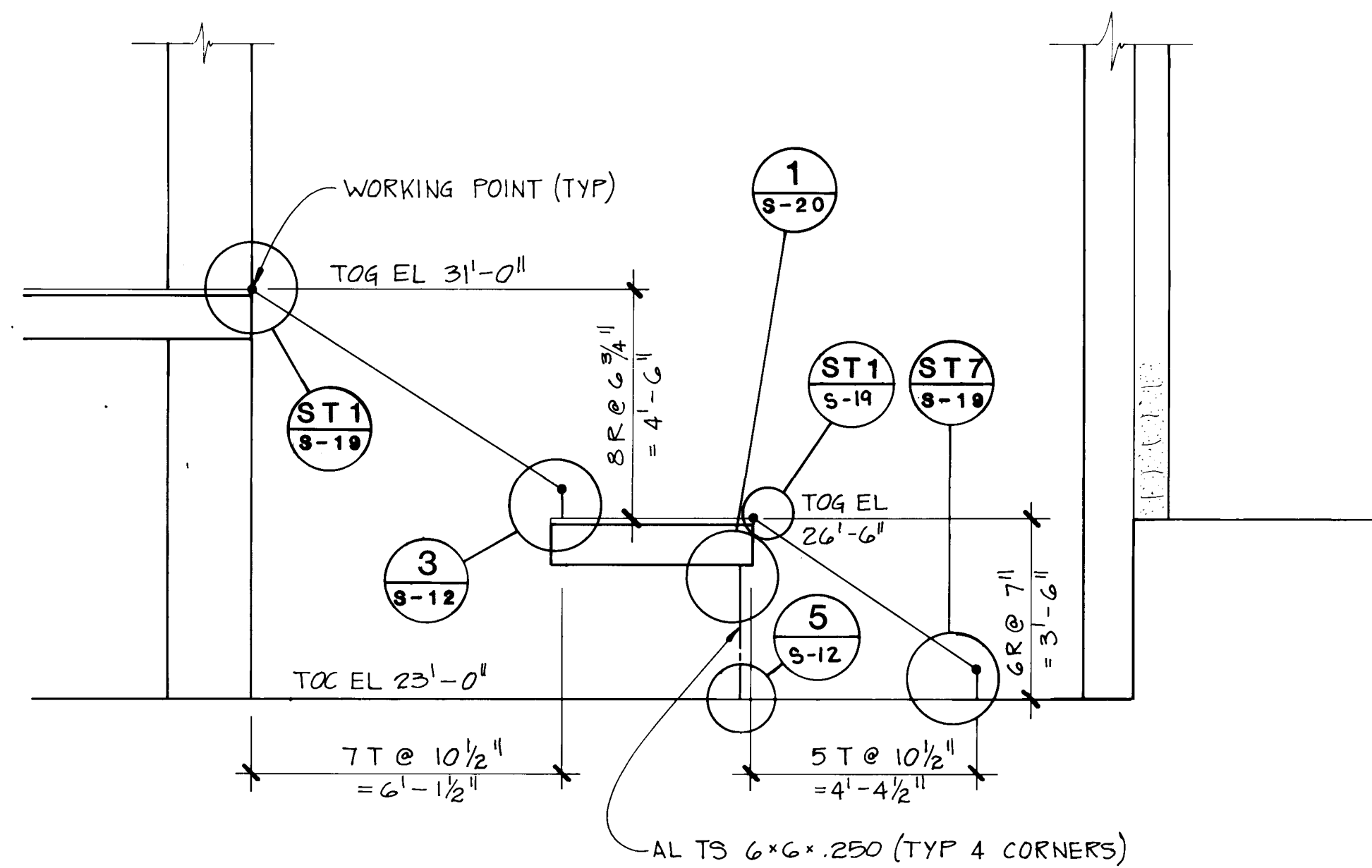
24 OF 112

SC NO. 3496-312

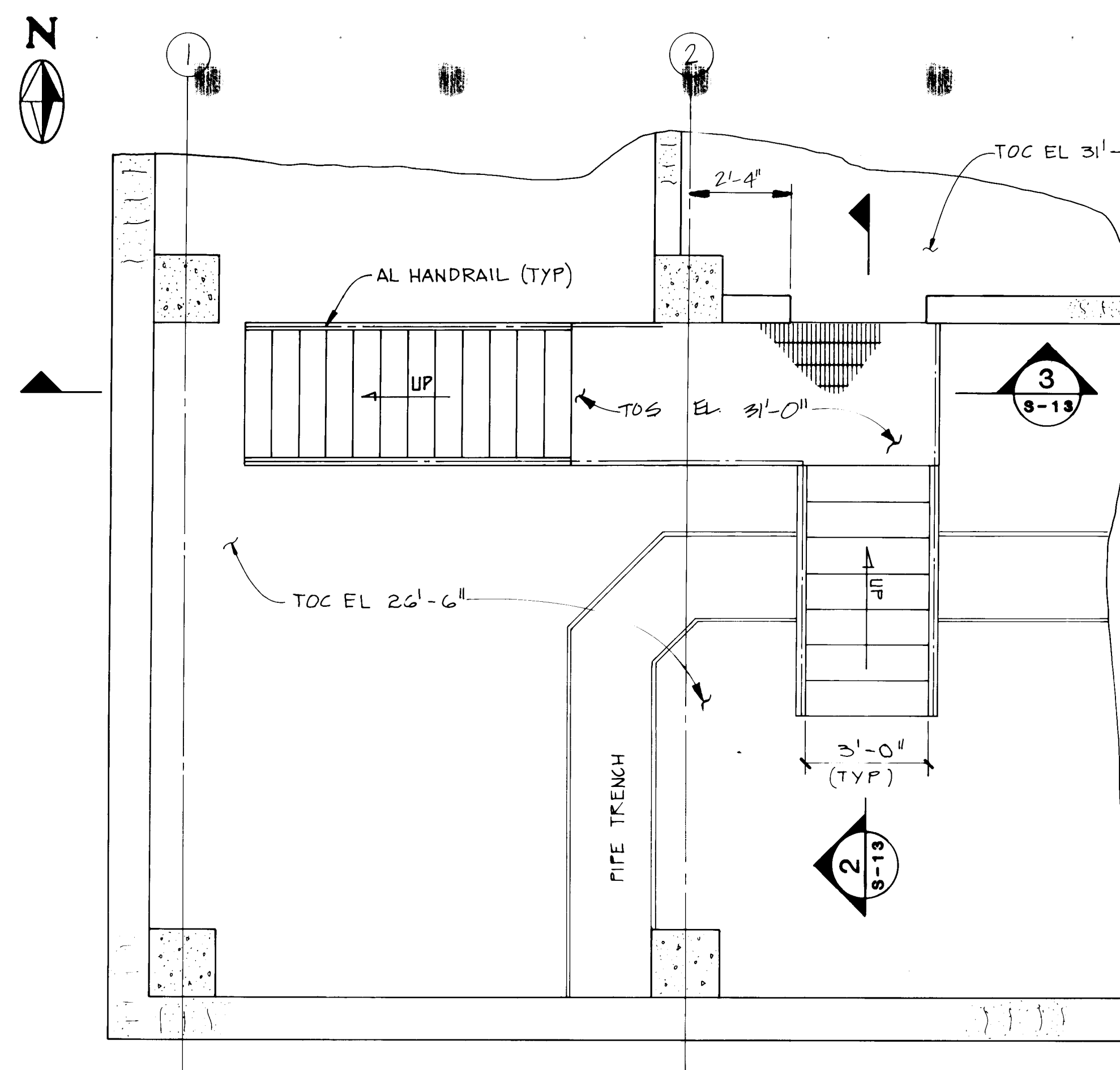




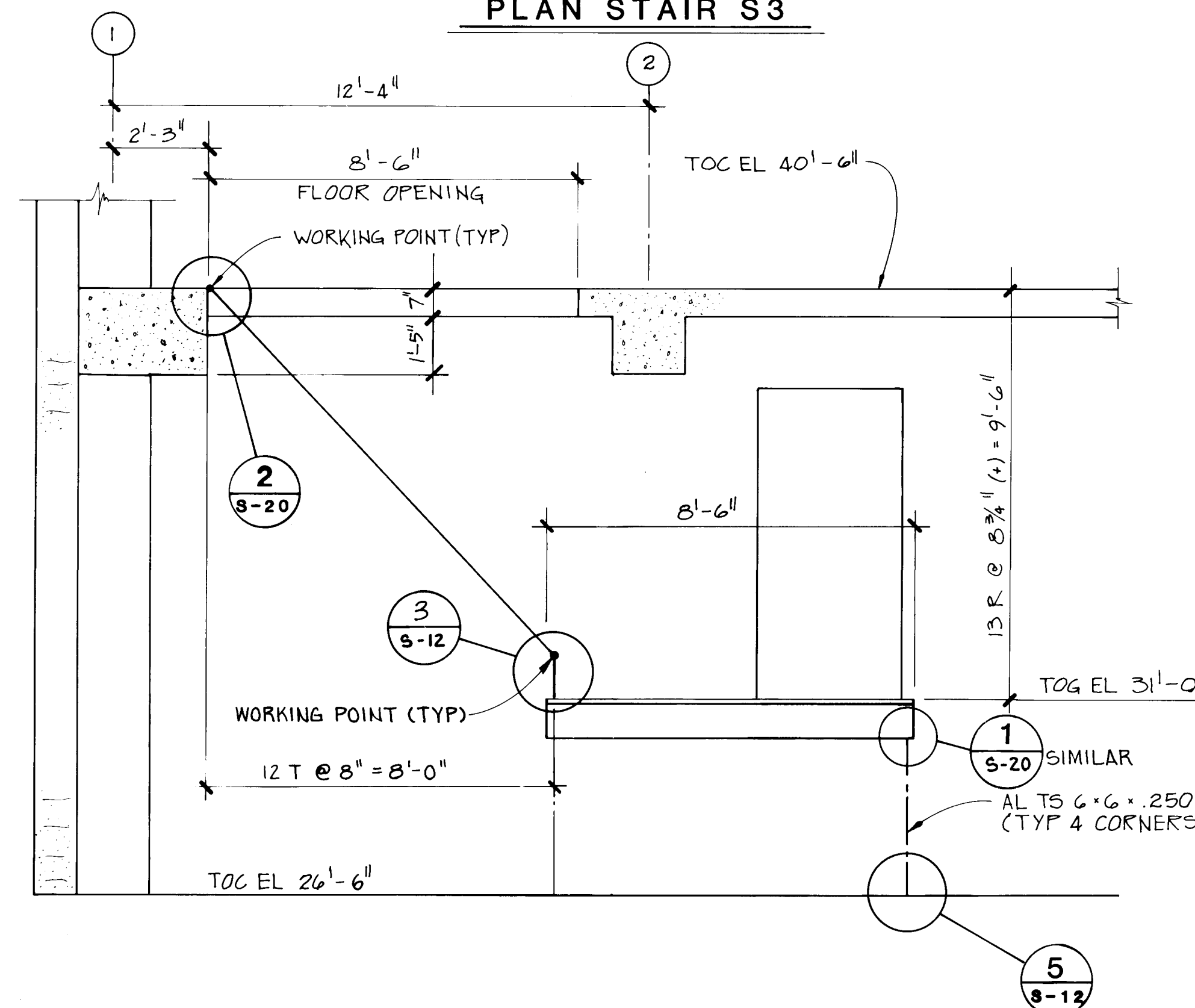
PLAN STAIR S2



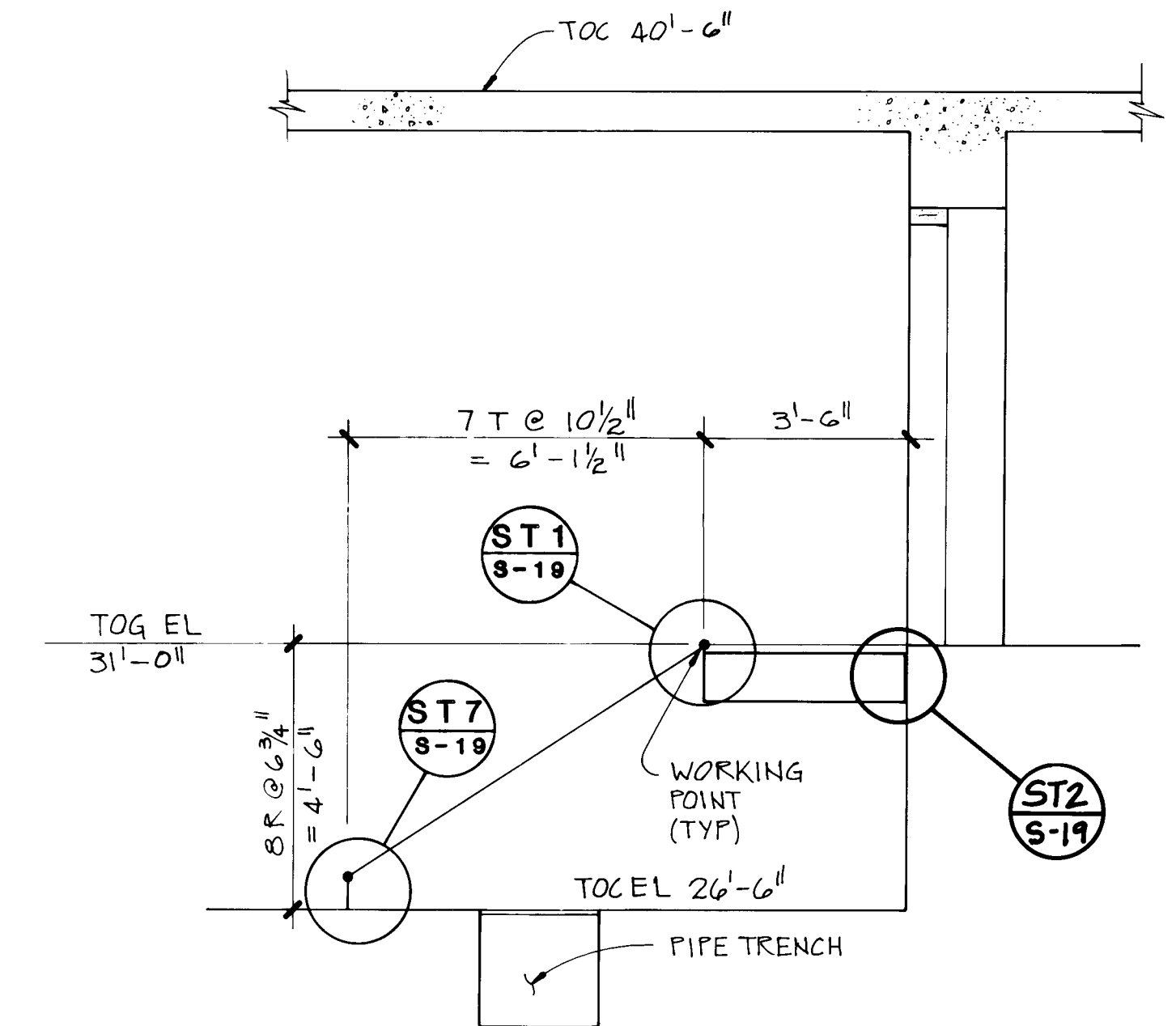
1  
SECTION



PLAN STAIR S3



3  
SECTION



2  
SECTION

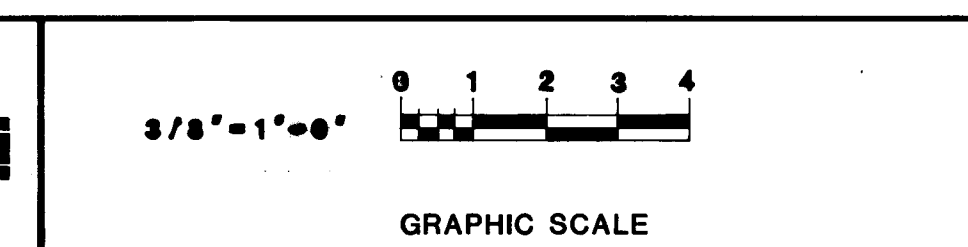
- NOTES:
- USE 1 3/4" x 3/16" AL GRATING TREADS WITH ABRASIVE AL NOSING. CONNECTIONS MAY BE MODIFIED TO SUIT SPECIAL CONDITIONS. BOLTED CONNECTIONS MAY BE SUBSTITUTED FOR WELDED CONNECTIONS (SUBJECT TO ERECTORS AND ENGINEERS REVIEW).
  - SECURE ALL GRATING TO FRAMING MEMBERS.
  - FOR HANDRAIL DETAILS SEE SHEET S-20.

| RECORD DRAWING                                                                                                                                                                                                                                 |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                             | DRAFTED BY:<br>MCA |
| THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. |                    |

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|-----|---------|---------------|----------|
| NO. | DATE    | REVISIONS     | APPROVED |
| 1   | 4-22-88 | FINAL DRAWING | W. TYNER |

DESIGNED W. TYNER  
DRAWN D. P. SHARP  
CHECKED W. TYNER  
APPROVED W. TYNER  
DATE MAY 31, 1988

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

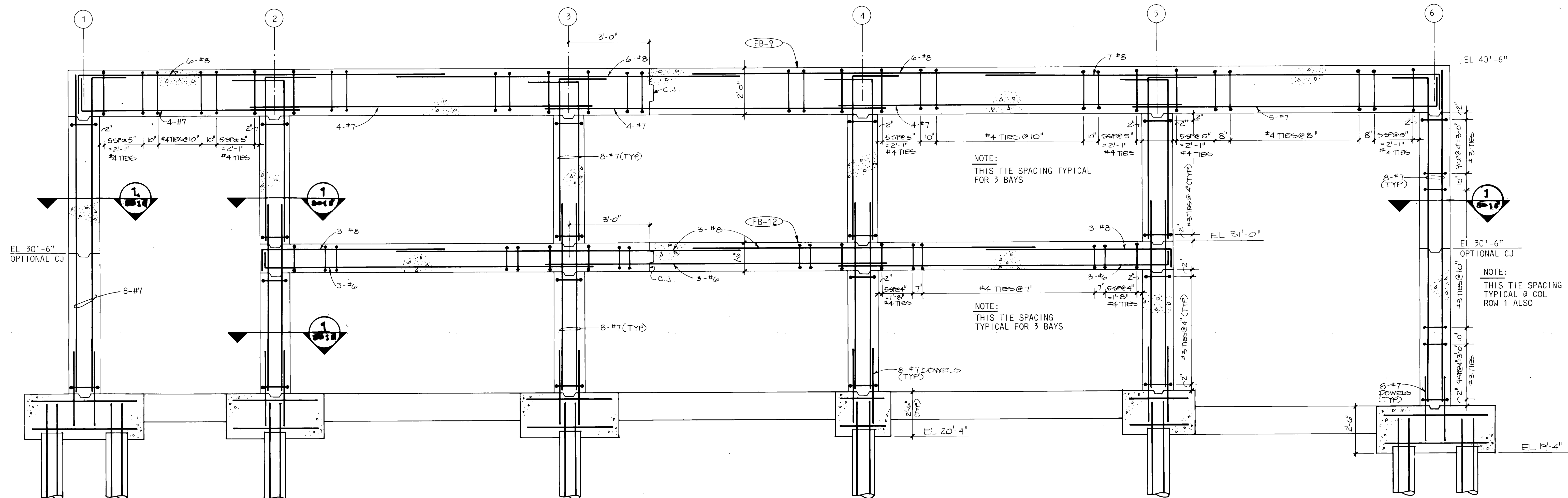
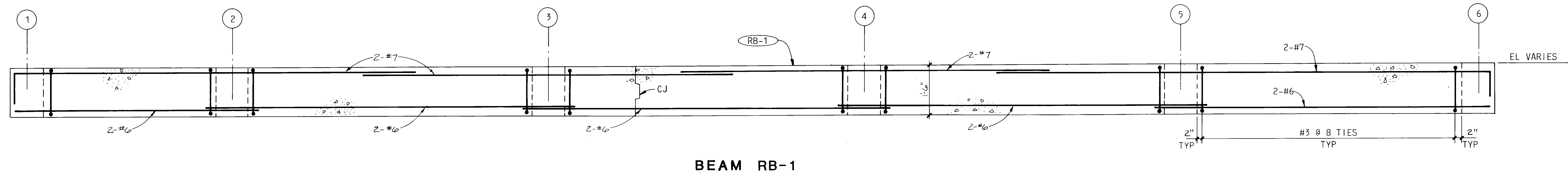
INTERIM SLUDGE DEWATERING FACILITIES  
**DEWATERING BUILDING**  
PLATFORM AND STAIR DETAILS-SHEET 2

M-C NO.  
**S-13** 25 OF 112  
SC NO. 8496-S13

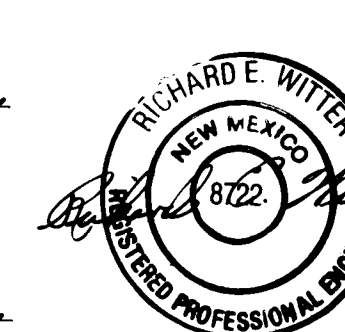
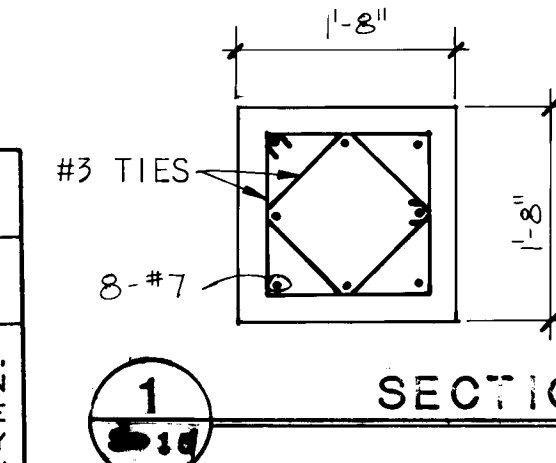


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|-----------------|-----------|
| M-C NO.         |           |
| S-14            | 26 of 112 |
| SC NO. 8496-S14 |           |





**RECORD DRAWING**  
 DATE: AUG. 1988  
 DRAFTED BY: MCA  
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NOTES:  
 SEE S-01 FOR PILE CAP REINFORCING

|    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 27 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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| 4-22-88 | FINAL DRAWING |           |
|         |               |           |
|         |               |           |
| NO.     | DATE          | REVISIONS |
|         |               |           |

DESIGNED W. TYNER  
 DRAWN DWRIGHT  
 CHECKED W. TYNER  
 APPROVED [Signature]  
 DATE MAY 31, 1985

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

NO SCALE  
 GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

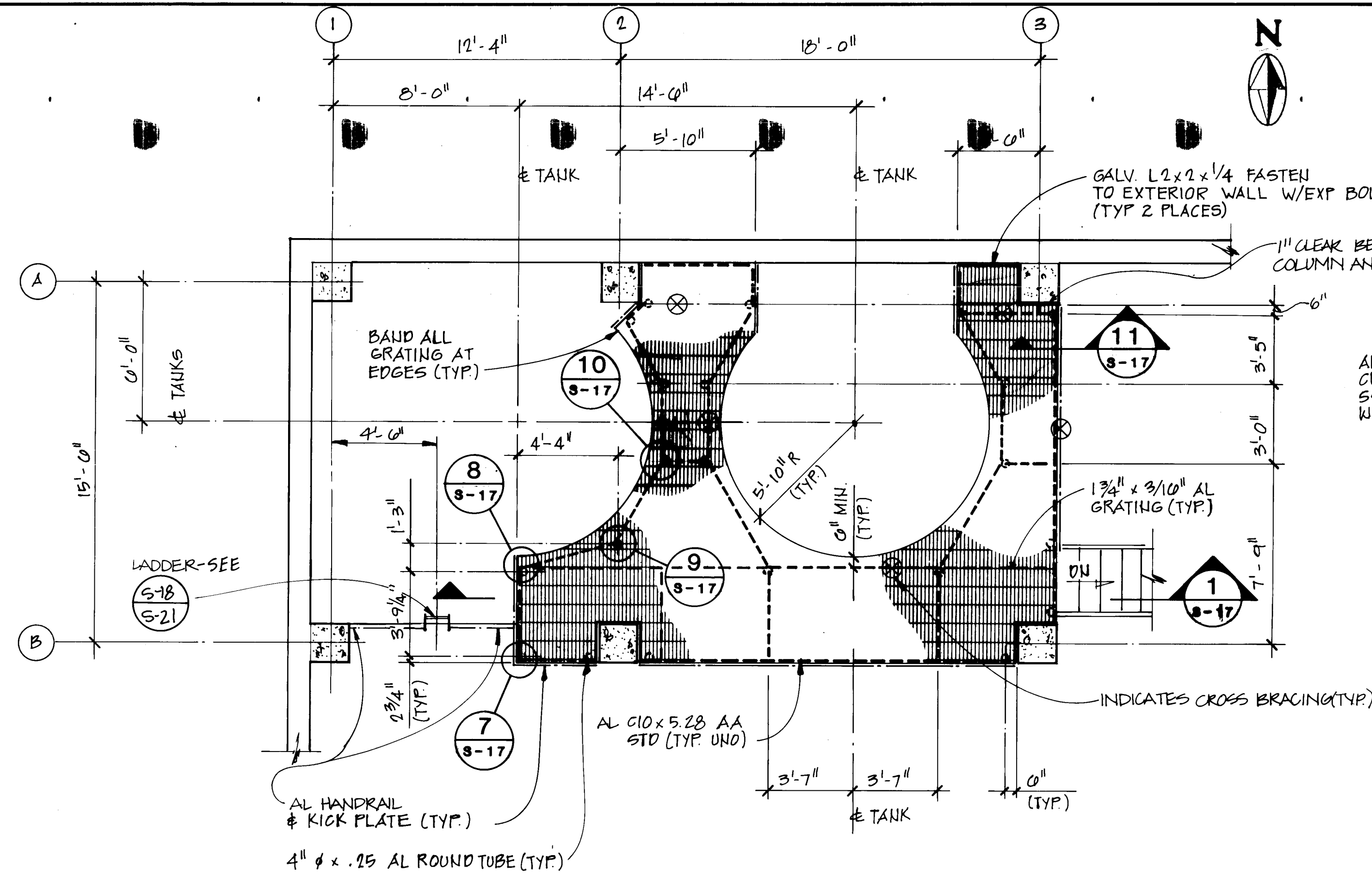
**INTERIM SLUDGE DEWATERING FACILITIES**  
 DEWATERING BUILDING  
 FRAME SECTION - BEAMS RB-1 & FB-9, 12

M-C NO.  
**S-15**  
 27 OF 112  
 SC NO. 8496-S15



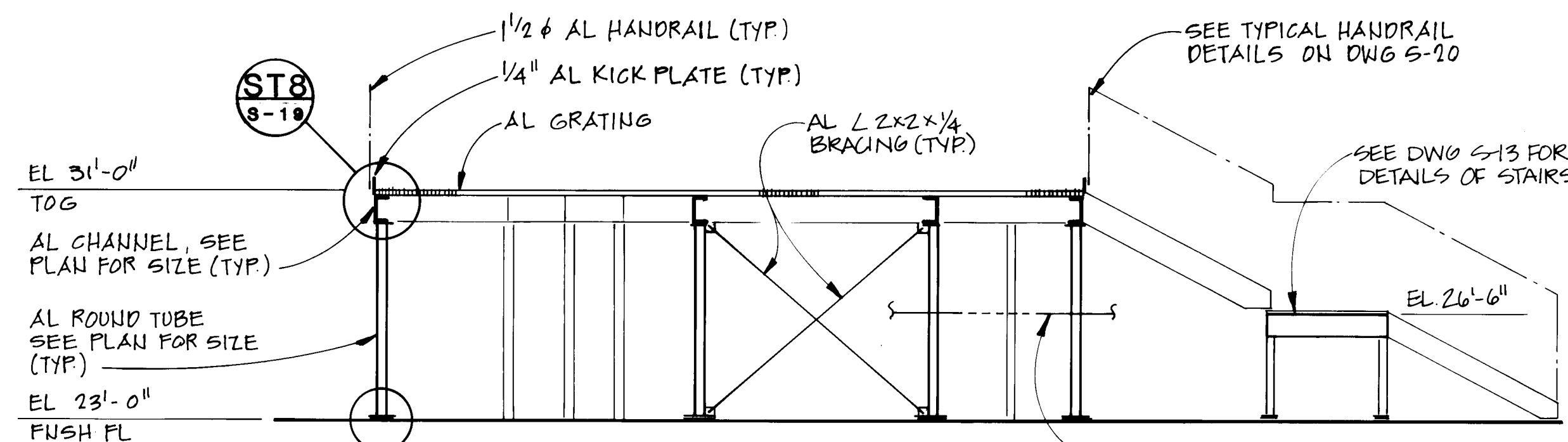






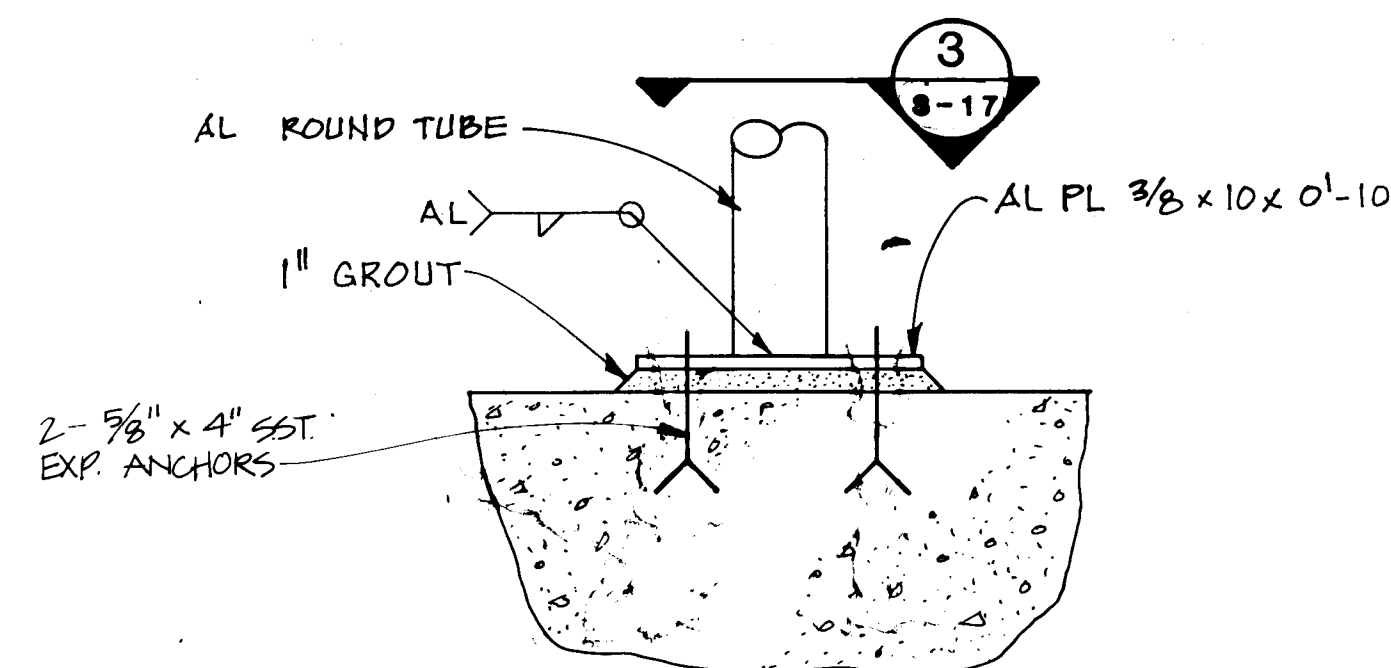
POLYMER TANK PLATFORM PLAN

1/4"=1'-0"



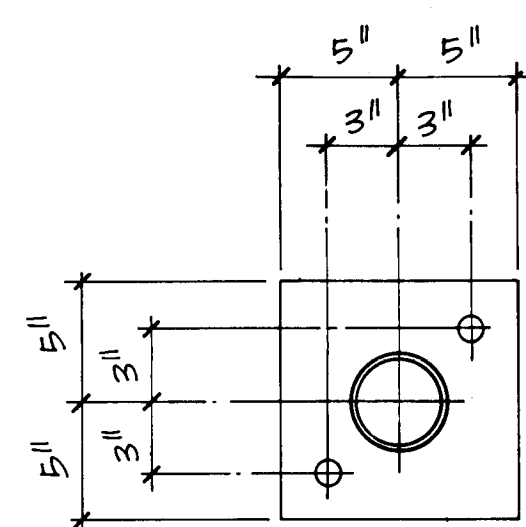
SECTION 1

1/4"=1'-0"



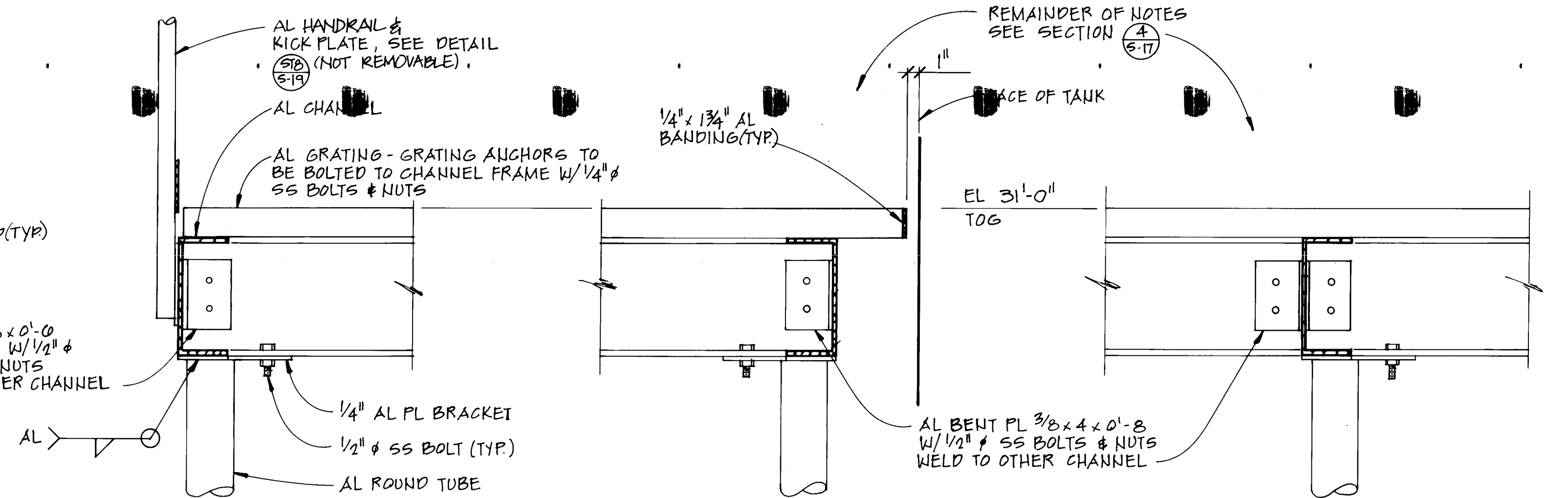
DETAIL 2

1-1/2"=1'-0"



SECTION 3

1-1/2"=1'-0"



SECTION 4

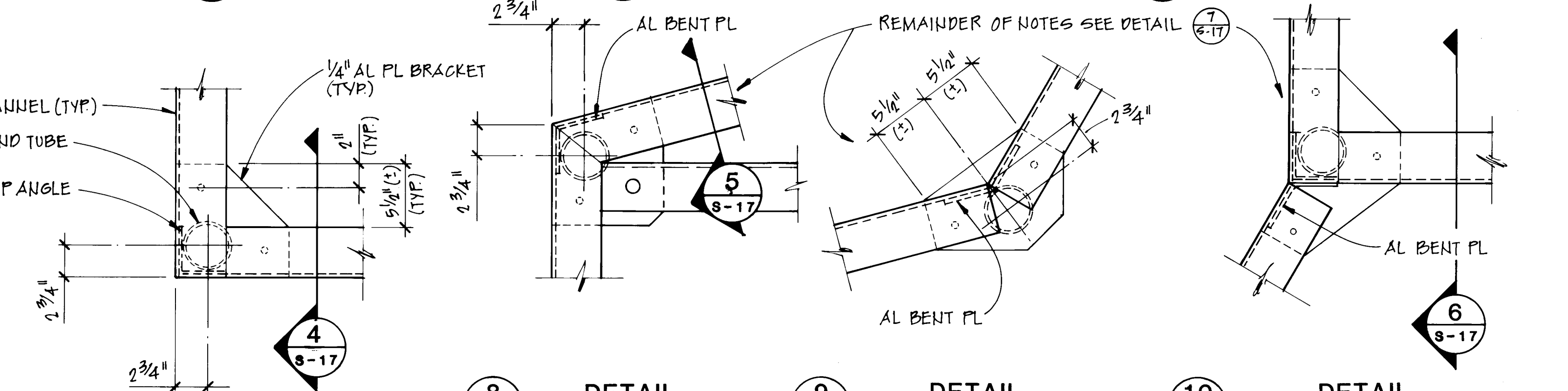
1-1/2"=1'-0"

SECTION 5

1-1/2"=1'-0"

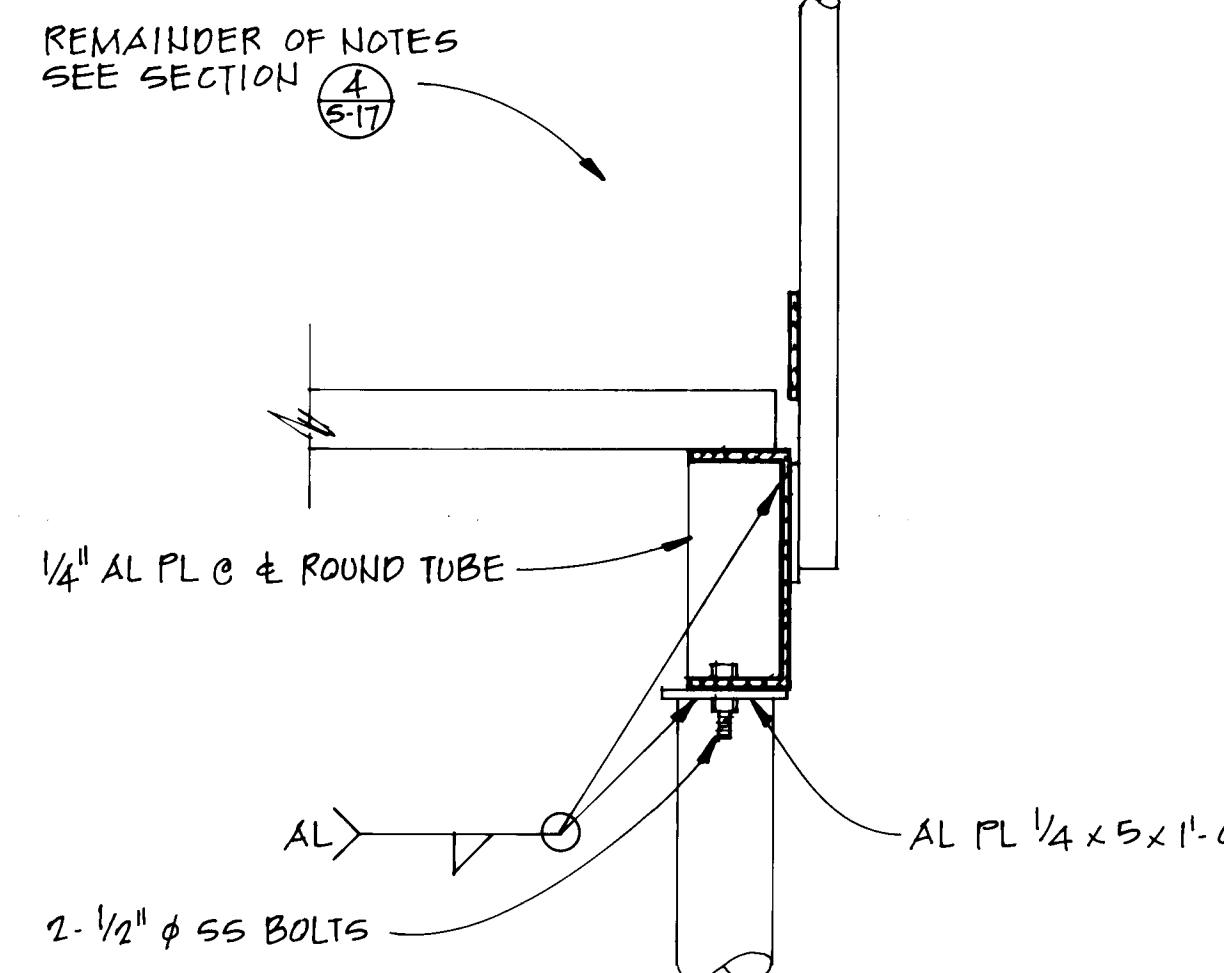
SECTION 6

1-1/2"=1'-0"



DETAIL 7

1-1/2"=1'-0"



SECTION 11

1-1/2"=1'-0"

RECORD DRAWING

DATE: AUG. 1988 DRAFTED BY: MCA

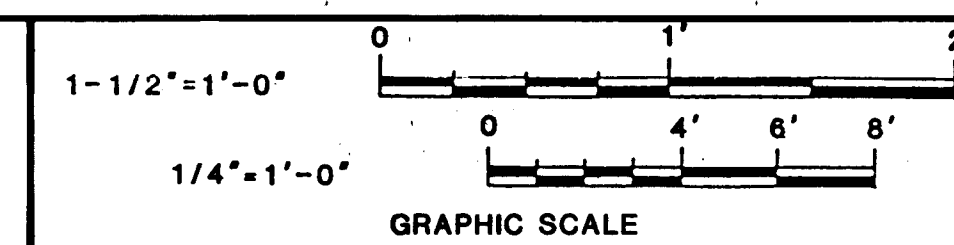
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|    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 26 | 36 | 94 | 29 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|     |         |               |          |
|-----|---------|---------------|----------|
| NO. | DATE    | REVISIONS     | APPROVED |
| 1   | 4-22-88 | FINAL DRAWING |          |
| 2   |         |               |          |
| 3   |         |               |          |

|                          |                     |
|--------------------------|---------------------|
| DESIGNED BY: W. TYNER    | MOLZEN-CORBIN       |
| DRAWN BY: THUMSTON       | STANLEY CONSULTANTS |
| CHECKED BY: TYNER        | A JOINT VENTURE     |
| APPROVED BY: [Signature] |                     |
| DATE: MAY 31, 1988       |                     |



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

|                                                                                                                    |                                                        |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| INTERIM SLUDGE DEWATERING FACILITIES<br>DEWATERING BUILDING<br>POLYMER TANK PLATFORM PLAN, SECTION,<br>AND DETAILS | M-C NO.<br><b>S-17</b><br>29 OF 112<br>SC NO. 8496-S17 |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|



STRUCTURAL

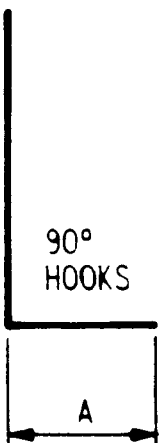
STEEL NOTES:

1. STRUCTURAL STEEL SHALL BE ASTM A-36 AND ALUMINUM ALLOY 6061-T6.
2. DIMENSIONS: TO CENTERLINES OF COLUMNS AND BEAMS, BACKS OF CHANNELS AND ANGLES AND TOP SURFACES OF BEAMS AND TUBES, UNLESS OTHERWISE SHOWN.
3. ELEVATIONS: REFER TO TOP SURFACE OF FLANGE OF MEMBER, UNLESS OTHERWISE SHOWN.
4. FRAMING MEMBERS NOTED BY DEPTH AND WEIGHT SHALL CONFORM TO THE AISC SPECIFICATION. FRAMING MEMBERS NOTED BY DEPTH ONLY ARE FULLY SIZED ON ANOTHER PLAN OR ELEVATION DRAWING.
5. UNLESS NUMBER OF BOLTS ARE SPECIFICALLY CALLED OUT ON PLANS, DETAILS OF BOLTED CONNECTIONS ARE NOT INTENDED TO SHOW EXACT NUMBER OF BOLTS, BUT ARE SYMBOLIC ONLY. DESIGN CONNECTION FOR NUMBER OF BOLTS REQUIRED BY SPECIFICATION. USE MINIMUM OF 2 BOLTS IN ANY CONNECTION.
6. DETAILING OF MEMBERS AND CONNECTIONS ARE NOT INTENDED TO BE COMPLETE. CONTRACTOR SHALL COMPLETE DETAILS ON SHOP DRAWINGS SUBMITTED FOR OWNER REVIEW.
7. CONTRACTOR SHALL PROVIDE AS MUCH WELDING AS PRACTICAL IN THE SHOP. CONTRACTOR'S SHOP DRAWINGS SHALL DISTINGUISH BETWEEN FIELD AND SHOP WELDING AND DETAILS SHALL BE PROVIDED TO SHOW FIELD WELDING.

| LAP SPLICES AND EMBEDMENT LENGTHS - INCHES (CLASS B) |            |            |            |            |
|------------------------------------------------------|------------|------------|------------|------------|
| BAR SIZES NO                                         | LAP SPLICE |            | EMBEDMENT  |            |
|                                                      | TOP BARS * | OTHER BARS | TOP BARS * | OTHER BARS |
| 3                                                    | 16         | 12         | 13         | 12         |
| 4                                                    | 22         | 16         | 17         | 12         |
| 5                                                    | 27         | 20         | 21         | 15         |
| 6                                                    | 33         | 24         | 25         | 18         |
| 7                                                    | 41         | 30         | 32         | 23         |
| 8                                                    | 55         | 39         | 42         | 30         |
| 9                                                    | 69         | 49         | 53         | 38         |
| 10                                                   | 88         | 63         | 67         | 48         |
| 11                                                   | 108        | 77         | 83         | 59         |

\* TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST IN THE MEMBER BELOW THE REINFORCEMENT.

| STANDARD REBAR HOOKS |        |
|----------------------|--------|
| BAR SIZES            | A      |
| #3                   | 6      |
| #4                   | 8      |
| #5                   | 10     |
| #6                   | 1'-0"  |
| #7                   | 1'-2"  |
| #8                   | 1'-4"  |
| #9                   | 1'-7"  |
| #10                  | 1'-10" |
| #11                  | 2'-0"  |



CONCRETE AND REINFORCING STEEL NOTES:

1. CONCRETE STRENGTH AT 28 DAYS:  
FILL CONCRETE \_\_\_\_\_ 2,500 PSI  
ALL OTHER CONCRETE \_\_\_\_\_ 4,000 PSI
2. EXPOSED CONCRETE CORNER CHAMFER: 3/4" UNLESS OTHERWISE SHOWN.
3. KEYWAY DIMENSIONS: DEPTH 1 1/2" WIDTH 1/3 THAT OF MEMBER UNLESS OTHERWISE SHOWN.
4. ALL CONSTRUCTION JOINTS SHALL HAVE KEYWAYS UNLESS SHOWN OTHERWISE.
5. CONSTRUCTION JOINTS AS SHOWN MAY BE VARIED TO SUIT PLACING SEQUENCE PROVIDED THE LOCATION OR DELETION OF CONSTRUCTION JOINTS IS APPROVED BY OWNER.
6. CONCRETE SHALL NOT BE LOADED UNTIL IT HAS CURED SUFFICIENTLY AND HAS BEEN PROPERLY SUPPORTED TO WITHSTAND THE LOAD TO BE IMPOSED.
7. MAIN REINFORCING CONCRETE COVER UNLESS OTHERWISE SHOWN: 2" WITH FOLLOWING EXCEPTION: 3" WHEN DEPOSITED AGAINST EARTH; 3/4" FOR WALLS AND SLABS NOT EXPOSED TO EARTH, WEATHER, OR CONTINUOUSLY MOIST ATMOSPHERE.
8. MINIMUM BAR SPLICE: CLASS B AS SHOWN IN TABLE, UNLESS OTHERWISE SHOWN.
9. REINFORCING CONTINUOUS AROUND ALL CORNERS UNLESS OTHERWISE SHOWN.
10. WELDING OF REINFORCING BARS AT CROSSING POINTS NOT PERMITTED.
11. REINFORCING STEEL SHALL BE SHIFTED TO CLEAR EMBEDDED ITEMS: OBTAIN OWNERS APPROVAL.
12. REINFORCING STEEL: ASTM A615, GRADE 60.
13. REINFORCING BARS SHALL BE CONTINUOUS THRU CONSTRUCTION JOINTS, AND NON-CONTINUOUS THRU EXPANSION JOINTS.
14. TOP REINFORCING IN SLABS, BEAMS AND GRADE BEAMS MAY BE SPLICED IN MIDSPAN BETWEEN SUPPORTS. BOTTOM REINFORCING MAY BE SPLICED OVER OR NEAR SUPPORTS.
15. EMBEDMENT LENGTHS SHALL BE IN ACCORDANCE WITH THE TABLE SHOWN UNLESS OTHERWISE INDICATED.
16. THE TABLE SHOWN ON THIS SHEET SHALL BE USED IN DETERMINING LAP SPLICE LENGTHS WHERE LENGTHS ARE NOT OTHERWISE INDICATED. SPLICE LENGTHS SHALL BE BASED ON THE SMALLER BAR BEING LAPPED.

GENERAL

LOADING

1. ROOF LOADS:  
LIVE LOAD : 20 PSF  
MECHANICAL LOAD: 15 PSF.
2. CRANE LOAD (CENTRIFUGE ROOM): 10 TON.
3. FLOOR LIVE LOAD 150 PSF OR EQUIPMENT WEIGHTS.
4. STAIRS: LIVE LOAD 100 PSF
5. WIND LOAD 70 MPH, EXPOSURE C.
6. EARTHQUAKE LOAD SEISMIC ZONE 2.
7. POLYMER STORAGE ROOM: LIVE LOAD 250 PSF
8. MEZZANINE CORED SLABS: LIVE LOAD 100 PSF
9. HOIST LOAD (POLYMER STORAGE ROOM): 1 TON

RECORD DRAWING

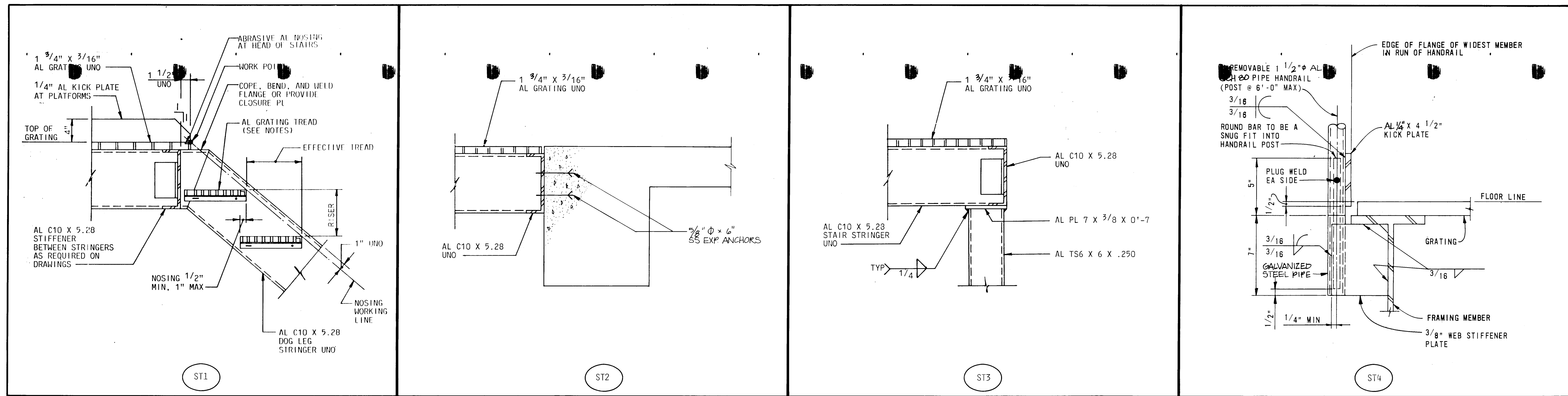
DATE: AUG. 1988  
DRAFTED BY: MCA

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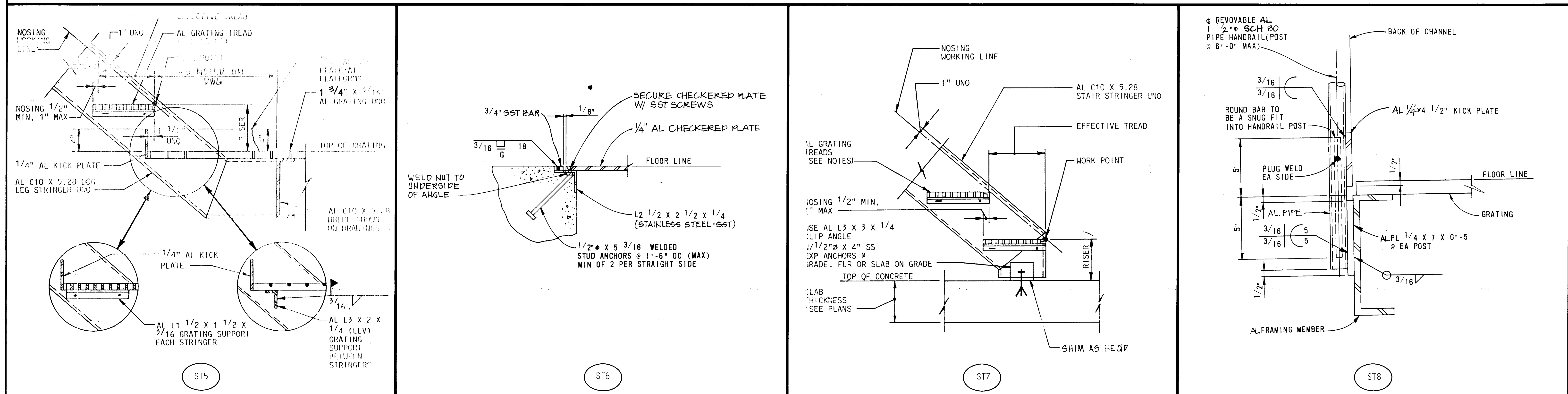
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|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 30 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|         |               |                                                                                         |                                                         |                           |                                                                                           |                                                       |                                                 |
|---------|---------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|
| 4-22-88 | FINAL DRAWING | DESIGNED W. TYNER<br>DRAWN DWRIGHT<br>CHECKED W. TYNER<br>APPROVED<br>DATE MAY 31, 1985 | MOLZEN-CORBIN<br>STANLEY CONSULTANTS<br>A JOINT VENTURE | NO SCALE<br>GRAPHIC SCALE | CITY OF ALBUQUERQUE, NEW MEXICO<br>SOLIDS HANDLING FACILITIES<br>PHASE II B-3, CONTRACT 1 | INTERIM SLUDGE DEWATERING FACILITIES<br>GENERAL NOTES | M-C NO.<br>S-18<br>30 of 112<br>SC NO. 8496-S18 |
| NO.     | DATE          | REVISIONS                                                                               | APPROVED                                                |                           |                                                                                           |                                                       |                                                 |





TOP OF STAIR SUPPORT DETAILS



NOTES:

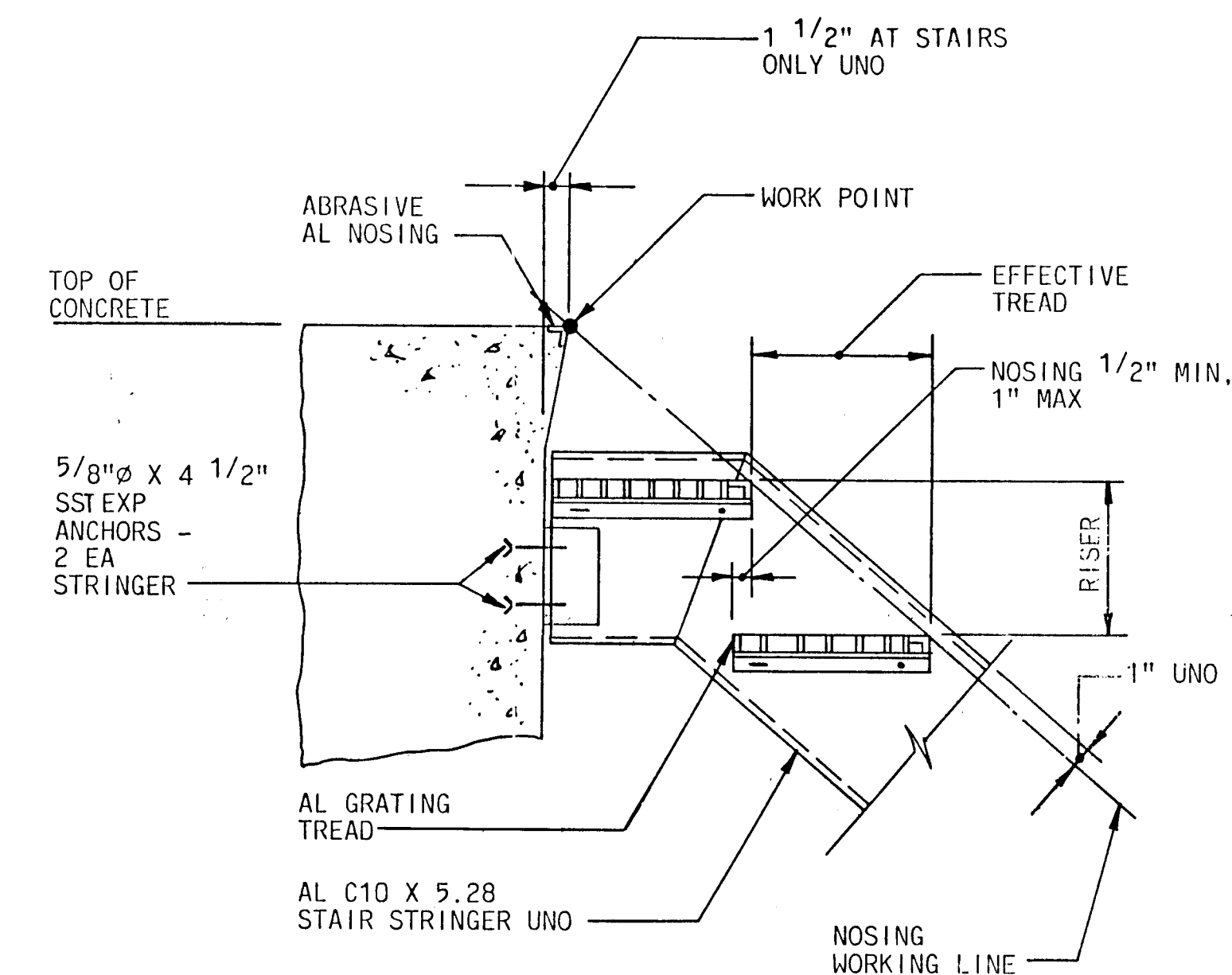
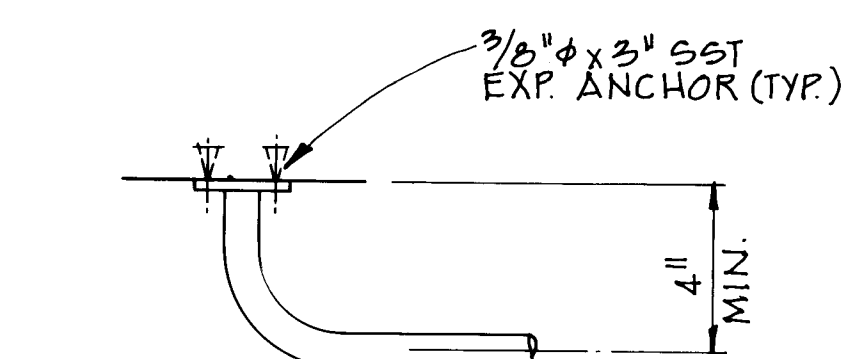
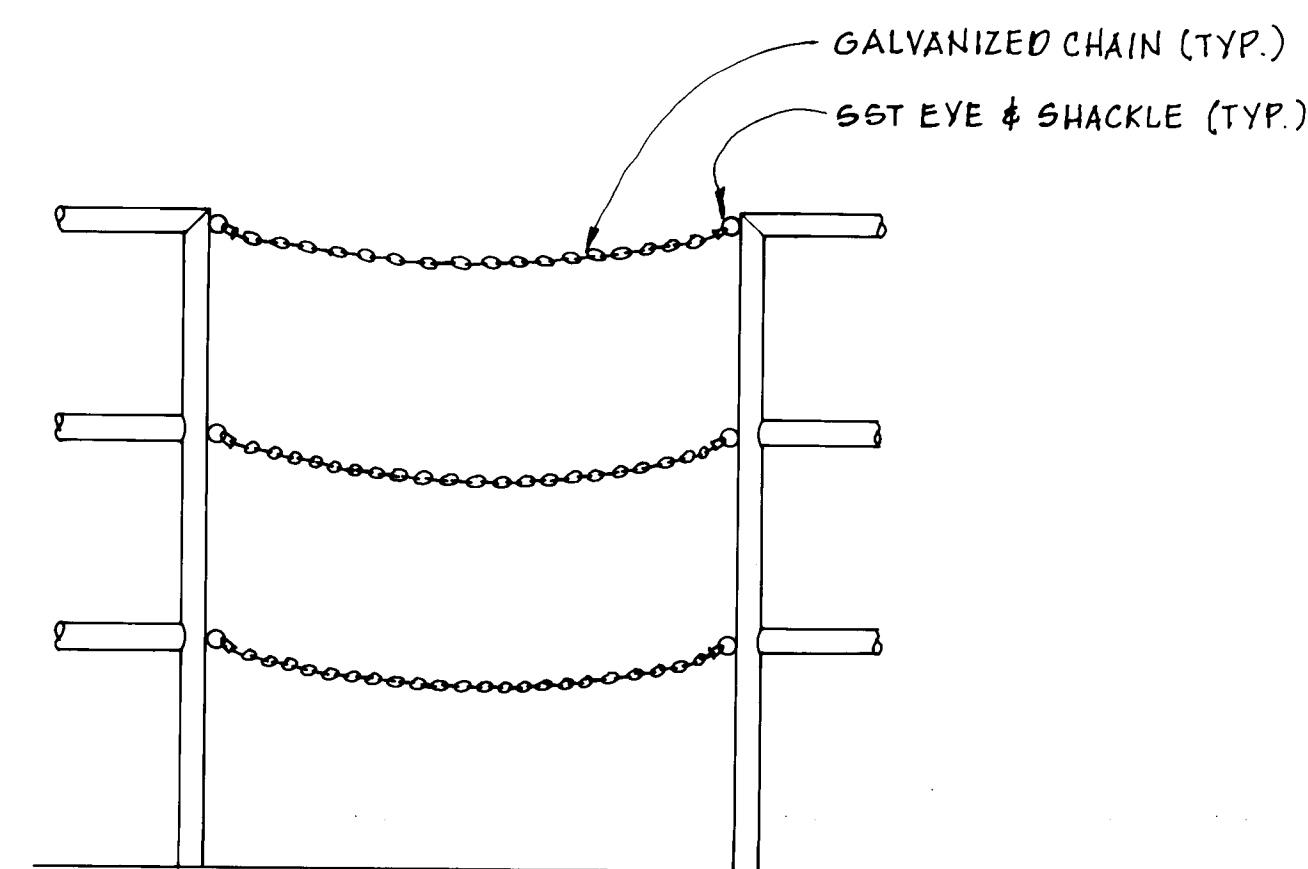
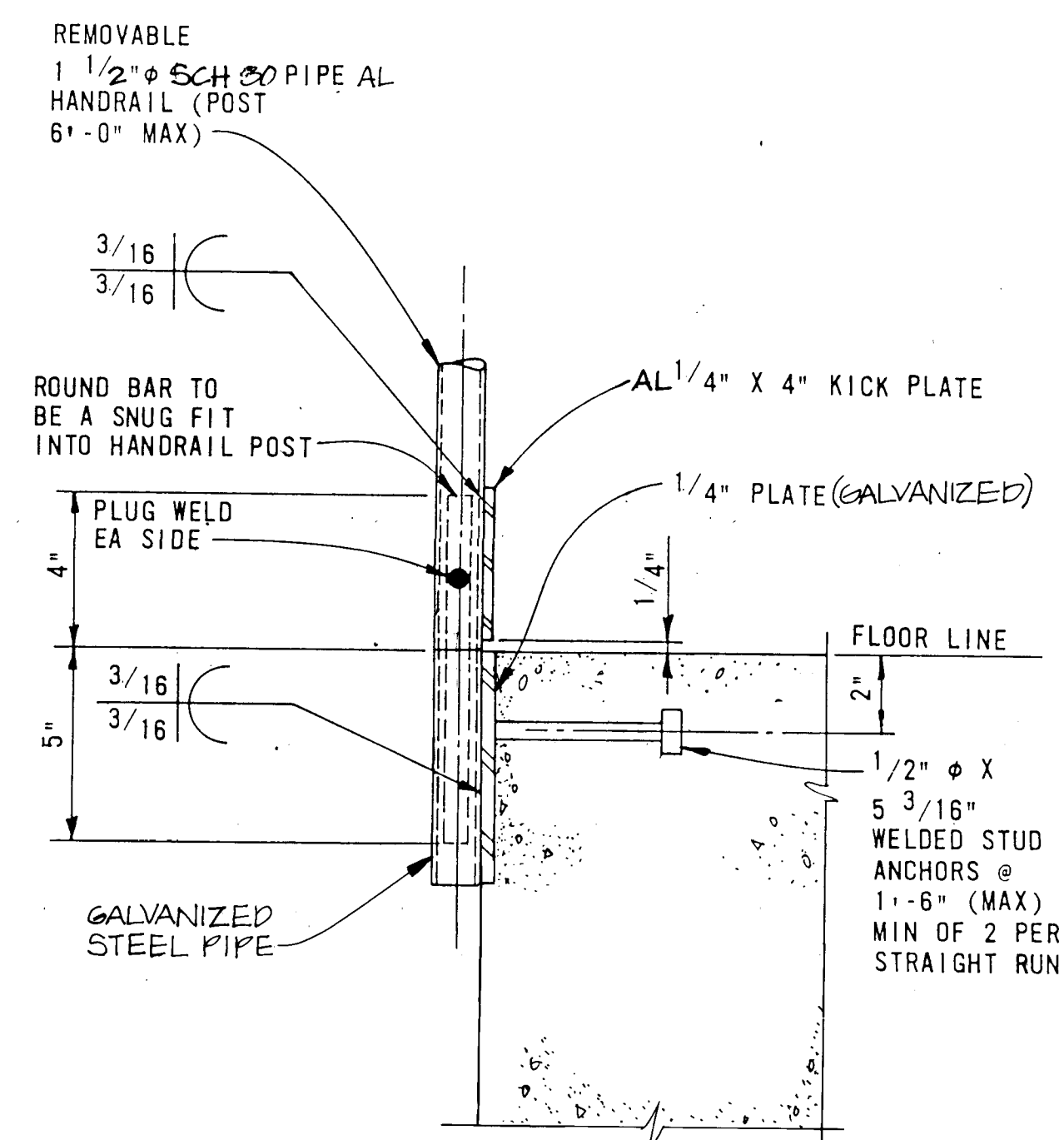
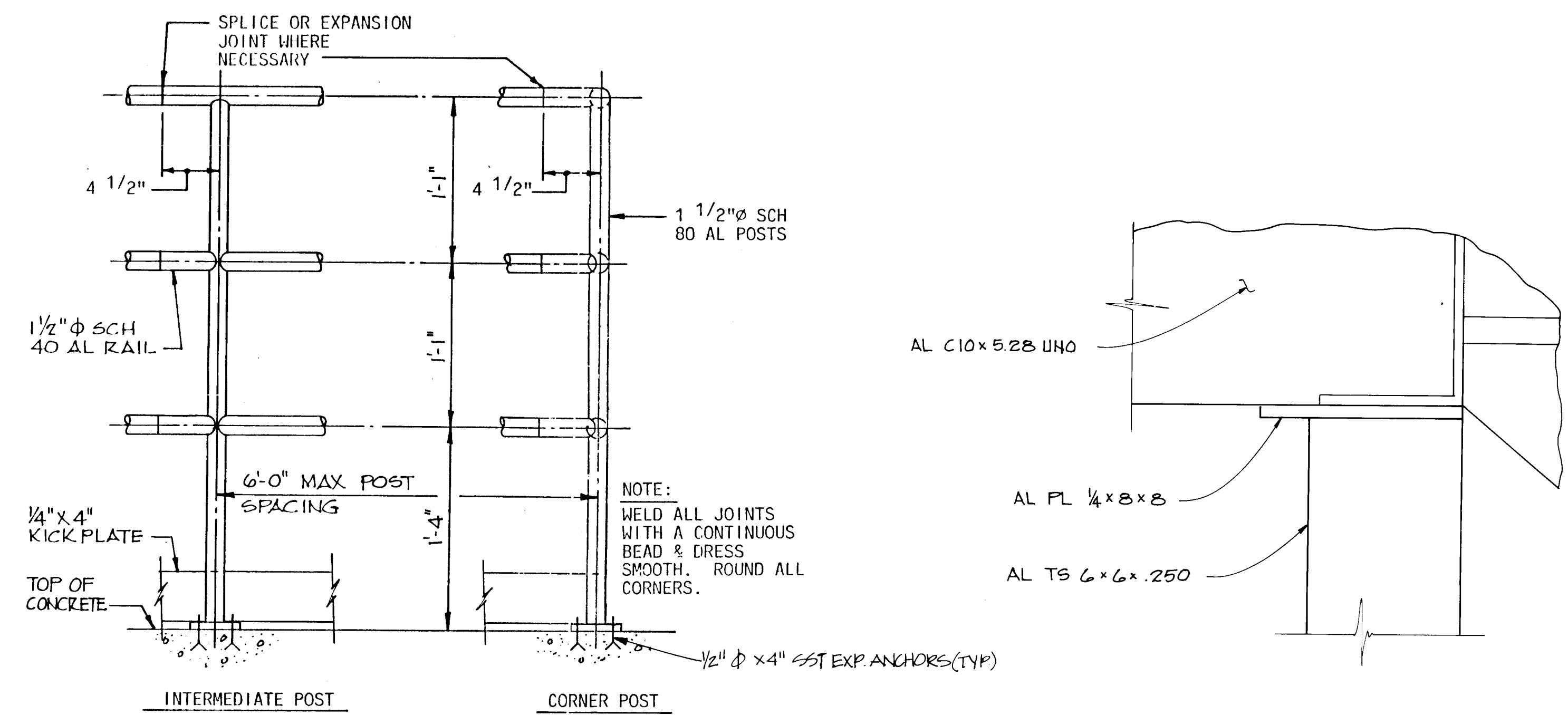
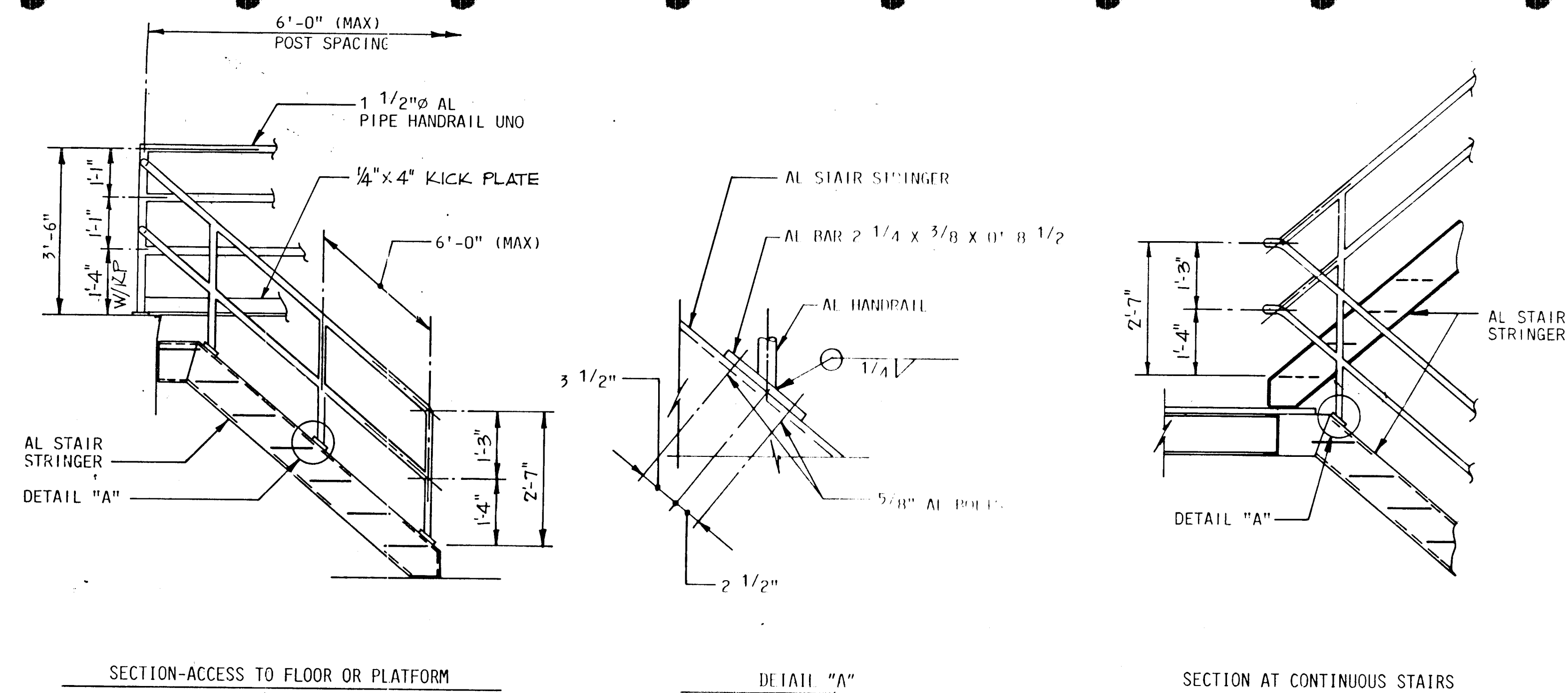
- USE 1 3/4" X 3/16" AL GRATING TREADS WITH ABRASIVE AL NOSING.
- SECURE ALL GRATING TO FRAMING MEMBERS.

|    |    |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 26 | 36 | 9 | 4 | 3 | 1 | 8 | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| RECORD DRAWING                                                                                                                                                                                                                                 |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                             | DRAFTED BY:<br>MCA |
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1  
8-13

DETAIL

2 DETAIL  
8-13

RECORD DRAWING

|                    |                    |
|--------------------|--------------------|
| DATE:<br>AUG. 1988 | DRAFTED BY:<br>MCA |
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[illegible]

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|-----|---------|---------------|----------------------|
| △   | 4-22-88 | FINAL DRAWING | R.C. <del>Thib</del> |
|     |         |               |                      |
|     |         |               |                      |
|     |         |               |                      |
| NO. | DATE    | REVISIONS     | APPROVED             |

DESIGNED W TYNER  
DRAWN DWRIGHT  
CHECKED W TYNER  
APPROVED J.C. [Signature]  
APPROVED \_\_\_\_\_  
DATE MAY 31, 1985



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

**NO SCALE**

**GRAPHIC SCALE**

CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-B, CONTRACT 1

## INTERIM SLUDGE DEWATERING FACILITIES STANDARD HANDRAIL DETAILS

|                 |                  |
|-----------------|------------------|
| M-C NO.         |                  |
| <b>S-20</b>     | <b>32 of 112</b> |
| SC NO. 8496-S20 |                  |







N 20+00



"A" STREET

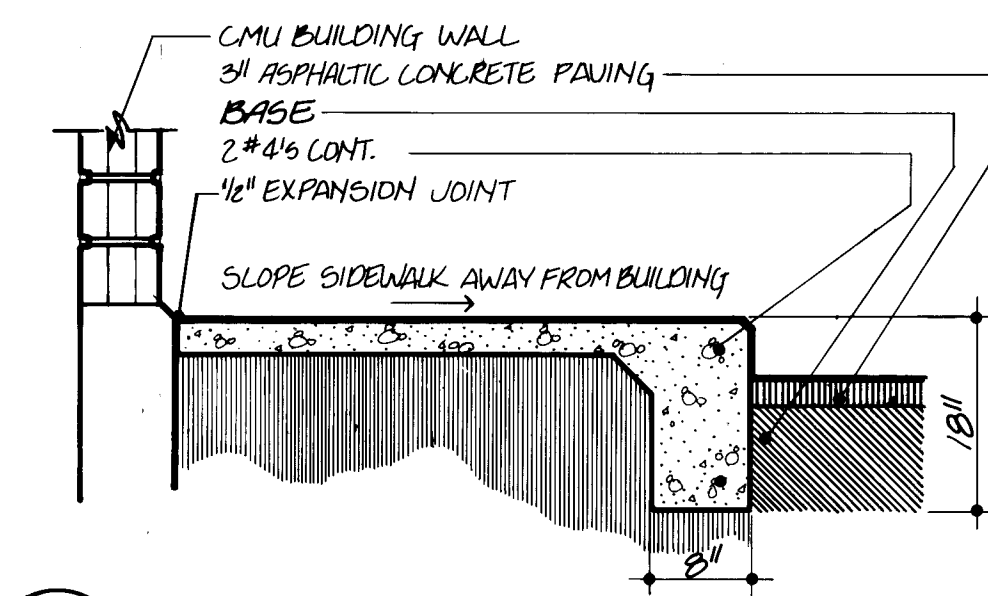
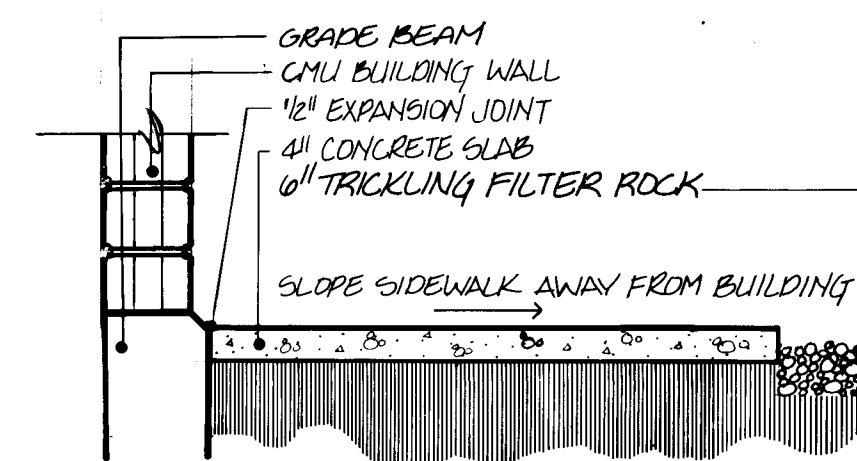
N 19+00

SLUDGE DEWATERING BUILDING

N 18+00

SEPTAGE DUMPING STATION  
(NOT IN THIS CONTRACT)

5TH AVENUE

CHLORINE BUILDING  
(NOT IN THIS CONTRACT)1 TURNDOWN SIDEWALK  
A-01  
SCALE: 1/2" = 1'-0"2 TYPICAL SIDEWALK  
A-01  
SCALE: 1/2" = 1'-0"N 17+00 FOR SIDEWALK REINFORCING AND BASE  
DETAILS SEE SHEET 4-11NOTE: COMPACT 6" LAYER OF TRICKLING FILTER ROCK  
WHERE SHOWN. THE TOP OF THE ROCK LAYER  
SHALL BE 2" BELOW SIDEWALKS, TOPS OF  
RETAINING WALLS, TOPS OF CURBS, MANHOLES &  
VALVE BOXES.

## RECORD DRAWING

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N 16+00

SLUDGE DEWATERING FACILITY

BUILDING SIGN

FRACTURE FACE BLOCK  
METAL LETTERS: BOTH SIDES OF SIGN  
SEE SPEC  
FLUTED BLOCKINDICATES 6" WASHED TRICKLING  
FILTER ROCK AVAILABLE FROM  
OWNER AT PLANT STOCKPILE AREA.  
  
ROCK SUPPLIED BY OWNER,  
WASHED BY CONTRACTOR  
  
FINISH GRADE OF TRICKLING FILTER  
ROCK TO BE 2" BELOW SIDEWALKS,  
CURB & GUTTER

1" = 20'

0 20' 40'  
GRAPHIC SCALECITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
LANDSCAPE PLAN

M-C NO. 832221

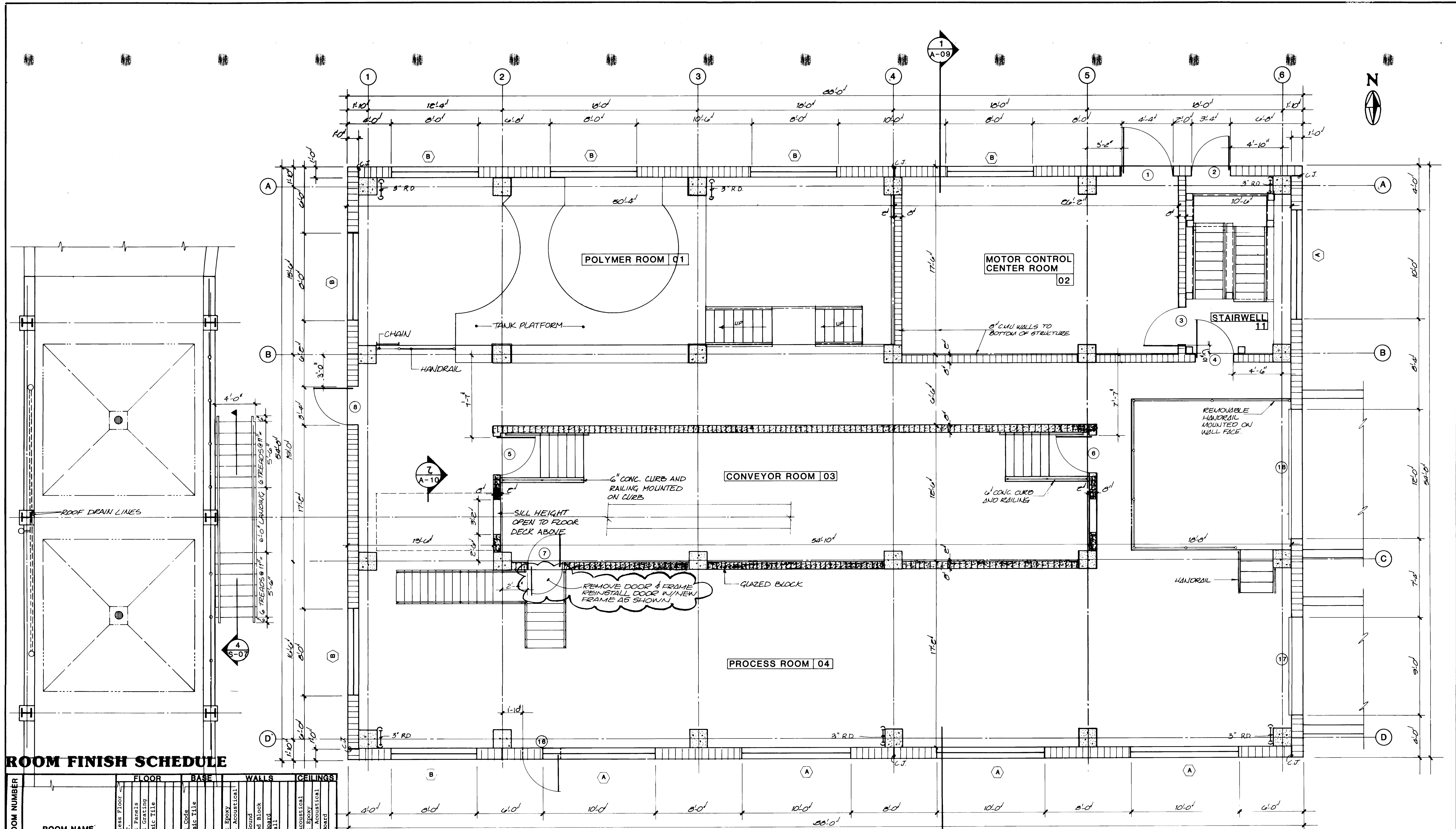
A-01 34 of 112

SC NO.

DESIGNED: WDS  
DRAWN: WDS  
CHECKED: WDS  
APPROVED: WDS  
DATEMOLZEN-CORBIN  
STANLEY CONSULTANTS  
A JOINT VENTURE

NO. DATE REVISIONS APPROVED





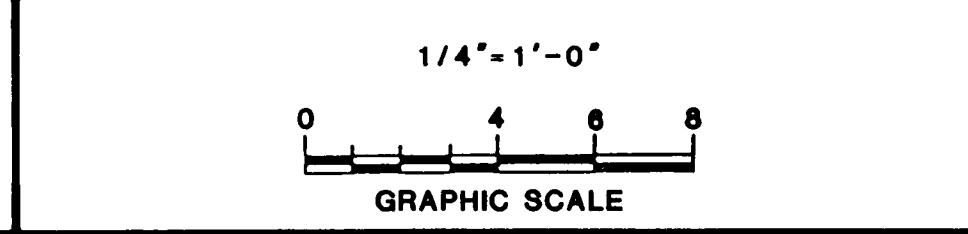
# ROOM FINISH SCHEDULE

| ROOM NUMBER | ROOM NAME                  | FLOOR          | BASE         | WALLS            | CEILINGS         |
|-------------|----------------------------|----------------|--------------|------------------|------------------|
|             |                            | Seamless Floor |              |                  |                  |
|             |                            | V.A.T.         |              |                  |                  |
|             |                            | Metal Grating  |              |                  |                  |
|             |                            | Metal Grating  |              |                  |                  |
|             |                            | Ceramic Tile   |              |                  |                  |
|             |                            |                | Vinyl Code   |                  |                  |
|             |                            |                | Ceramic Tile |                  |                  |
|             |                            |                |              | Paint Epoxy      |                  |
|             |                            |                |              | Trid. Acoustical |                  |
|             |                            |                |              | Trid. Acoustical |                  |
|             |                            |                |              | 6" Sound         |                  |
|             |                            |                |              | Classed Block    |                  |
|             |                            |                |              | FRP Board        |                  |
|             |                            |                |              | Drywall          |                  |
|             |                            |                |              |                  | 2x4 Acoustical   |
|             |                            |                |              |                  | Paint Epoxy      |
|             |                            |                |              |                  | Trid. Acoustical |
|             |                            |                |              |                  | FRP Board        |
| 01          | Polymer Room               | ●              |              | ●                | ●                |
| 02          | Motor Control Room         | ●              |              | ●                | ●                |
| 03          | Conveyor Room              | ●              |              | ●                | ●                |
| 04          | Process Room               | ●              |              | ●                | ●                |
| 05          | Polymer & Feed Room        | ●              | ●            | ●                | ●                |
| 06          | Boiler Room                | ●              | ●            | ●                | ●                |
| 07          | Toilet                     | ●              | ●            | ●                | ●                |
| 08          | Operations & Control Rm.   | ●              | ●            | ●                | ●                |
| 09          | Centrifuge Room            | ●              | ●            | ●                | ●                |
| 10          | Conveyor Entry Room        | ●              | ●            | ●                | ●                |
| 11          | Stairwell                  | ●              | ●            | ●                | ●                |
| 12          | Stair & Conveyor Enclosure | ●              | ●            | ●                | ●                |
| 13          | Sludge Bin Room            | ●              | ●            | ●                | ●                |

| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |

DESIGNED *[Signature]*  
 DRAWN *[Signature]*  
 CHECKED *[Signature]*  
 APPROVED *[Signature]*  
 DATE

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE



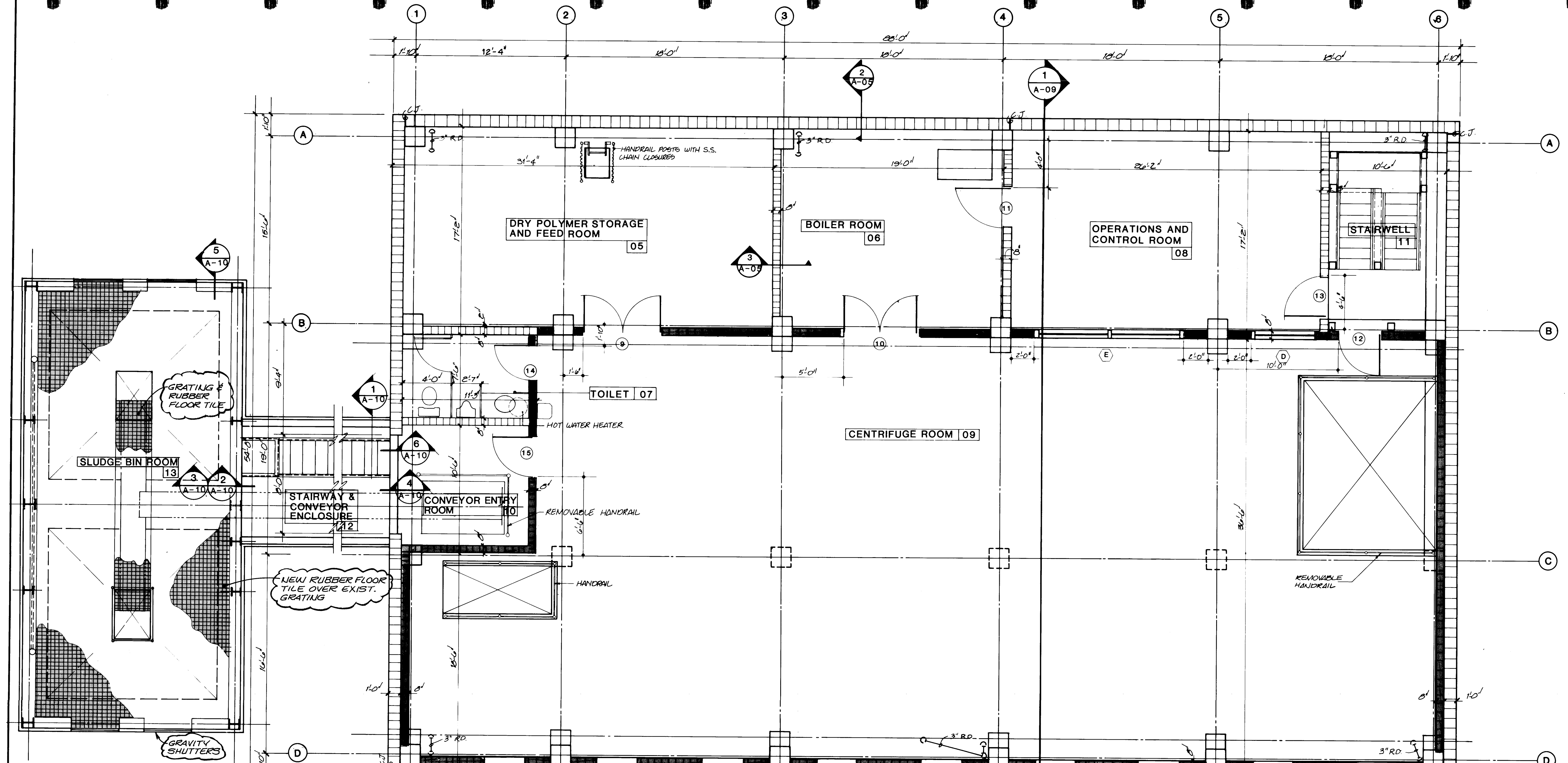
**RECORD DRAWING**  
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CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
 DEWATERING BUILDING  
 GROUND FLOOR PLAN

M-C NO. 832221  
**A-02**  
 35 OF 112  
 SC NO.





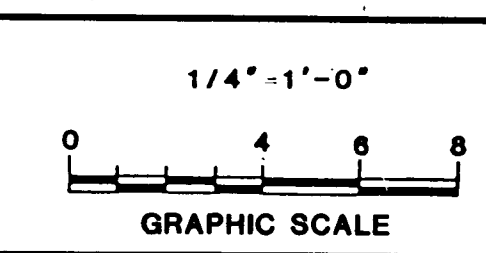
**ROOM FINISH SCHEDULE**

| ROOM NUMBER | ROOM NAME                  | FLOOR          | BASE       | WALLS       | CEILINGS       |
|-------------|----------------------------|----------------|------------|-------------|----------------|
| 01          | Polymer Room               | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 02          | Motor Control Room         | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 03          | Conveyor Room              | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 04          | Process Room               | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 05          | Polymer & Feed Room        | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 06          | Boiler Room                | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 07          | Toilet                     | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 08          | Operations & Control Rm.   | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 09          | Centrifuge Room            | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 10          | Conveyor Entry Room        | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 11          | Stairwell                  | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 12          | Stair & Conveyor Enclosure | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |
| 13          | Sludge Bin Room            | Seamless Floor | Vinyl Code | Paint Epoxy | 2x4 Acoustical |

| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED WS  
 DRAWN DV  
 CHECKED WS  
 APPROVED WS  
 DATE   

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE



**RECORD DRAWING**  
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CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

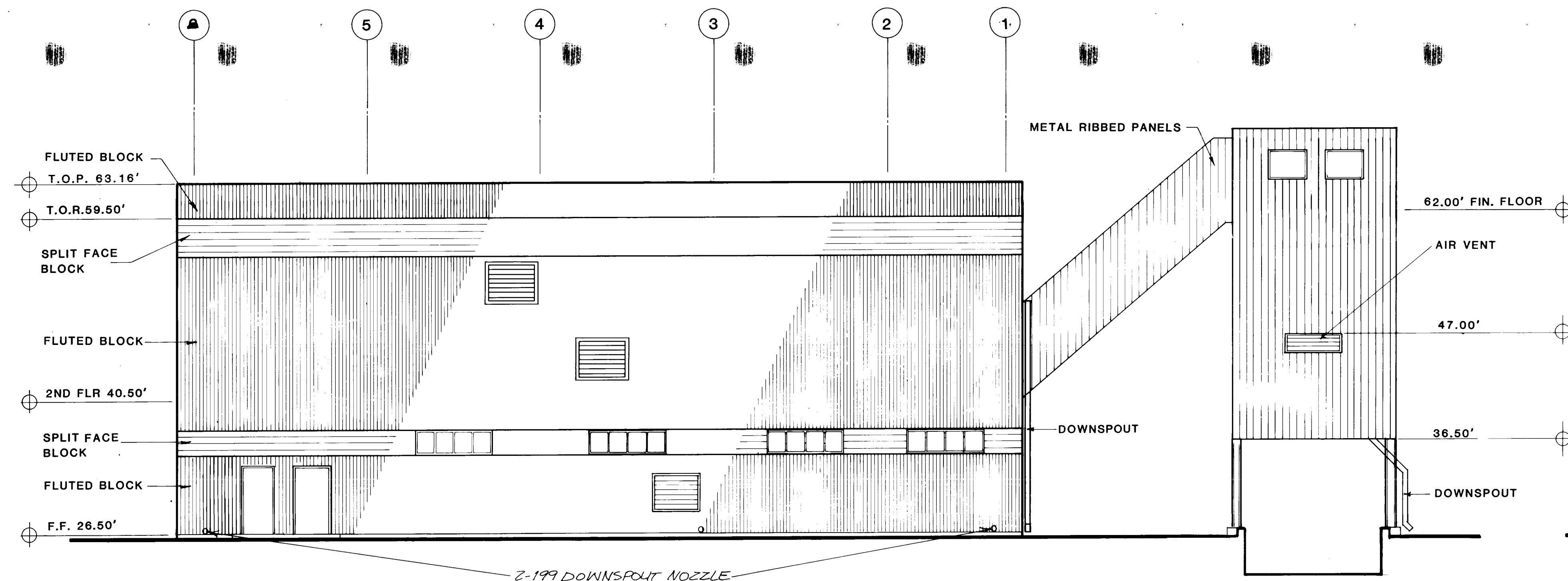
**INTERIM SLUDGE DEWATERING FACILITIES**  
 DEWATERING BUILDING  
 SECOND FLOOR PLAN

M-C NO. 832221  
**A-03** 36 of 112  
 SC NO.

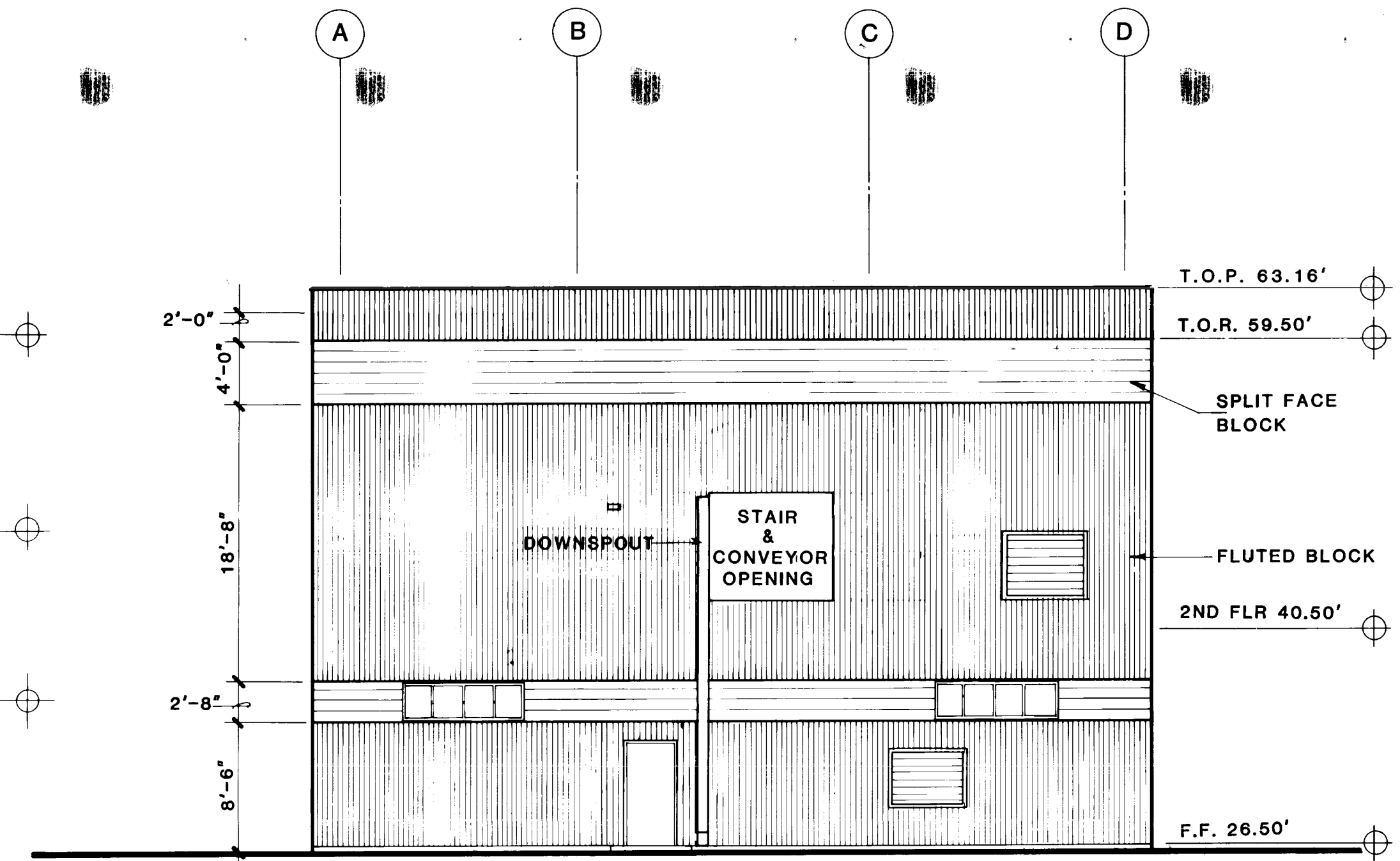
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| 26 | 36 | 94 | 36 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |



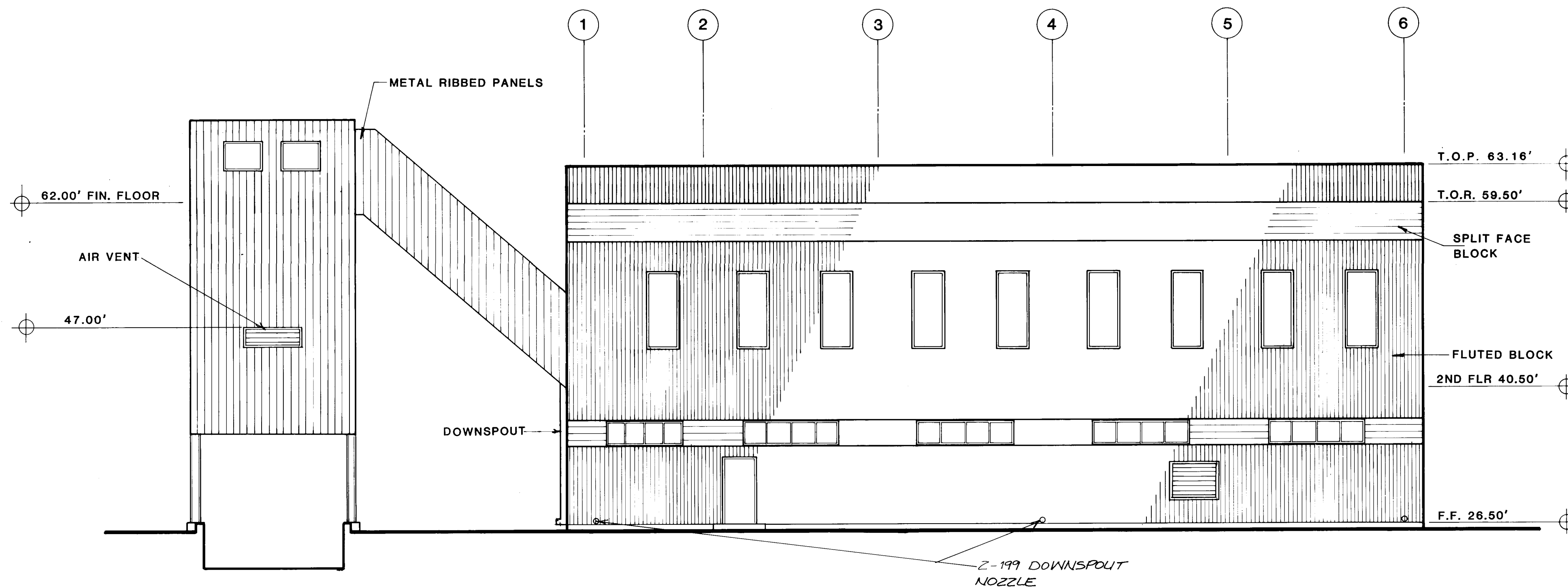




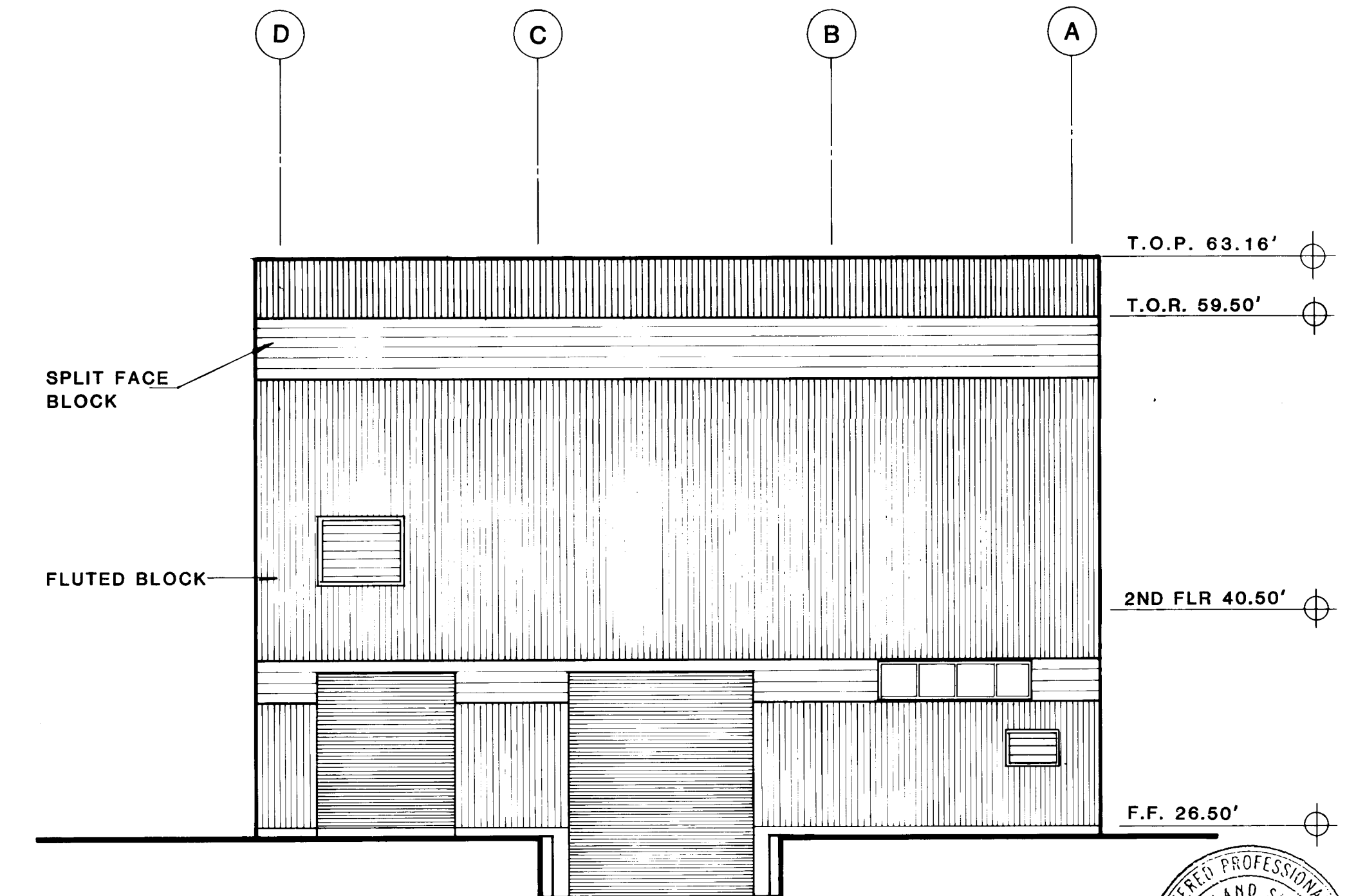
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION

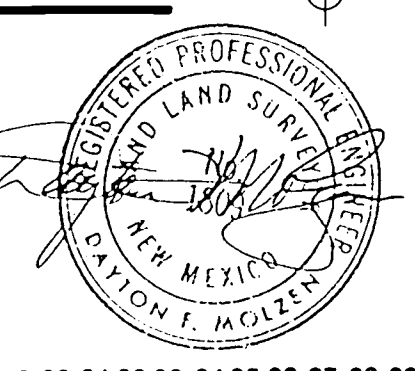


EAST ELEVATION

RECORD DRAWING

DATE: AUG. 1988 DRAFTED BY: MCA

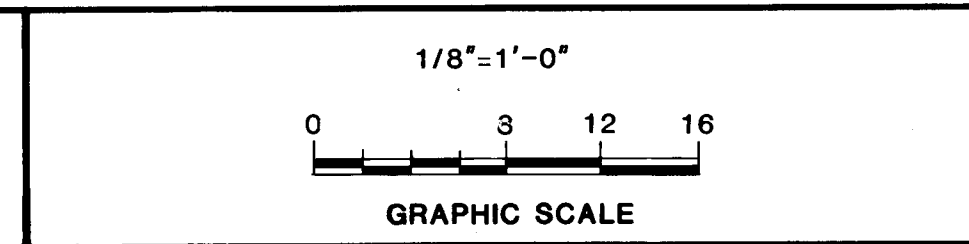
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|----------|------|
| DESIGNED | W.C. |
| DRAWN    | R.C. |
| CHECKED  | W.C. |
| APPROVED |      |
| DATE     |      |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

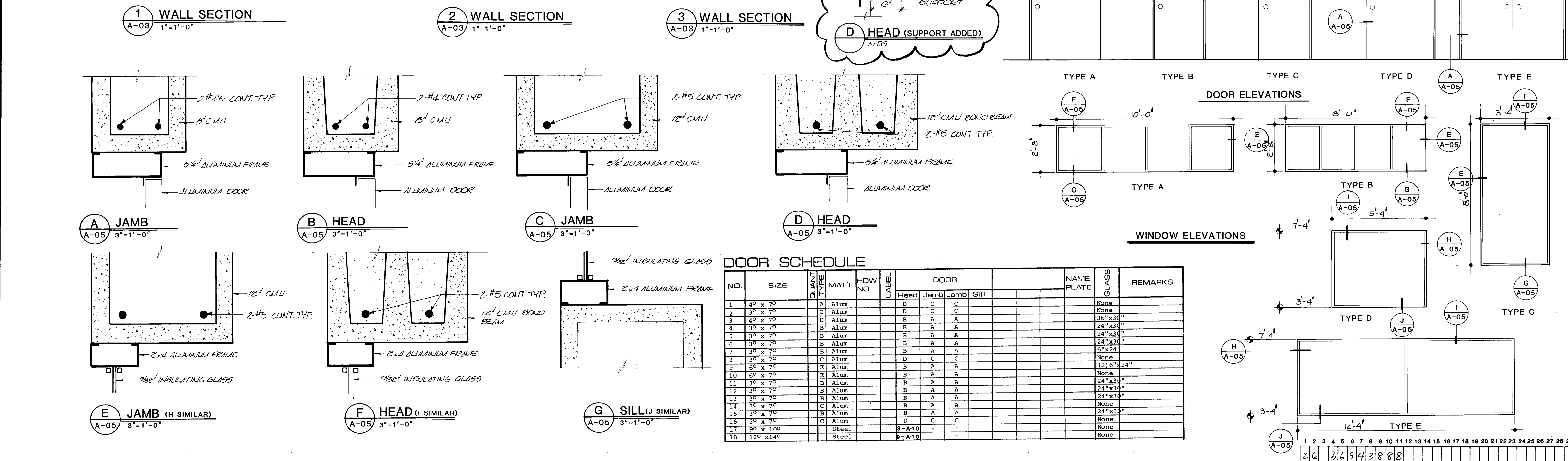
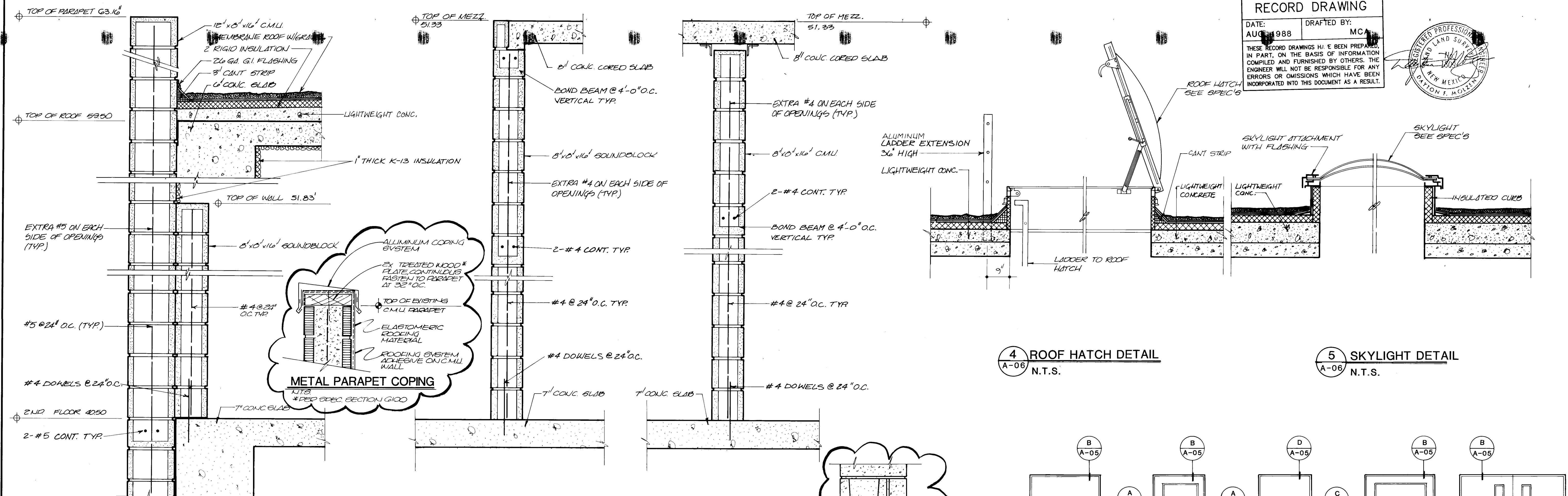


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

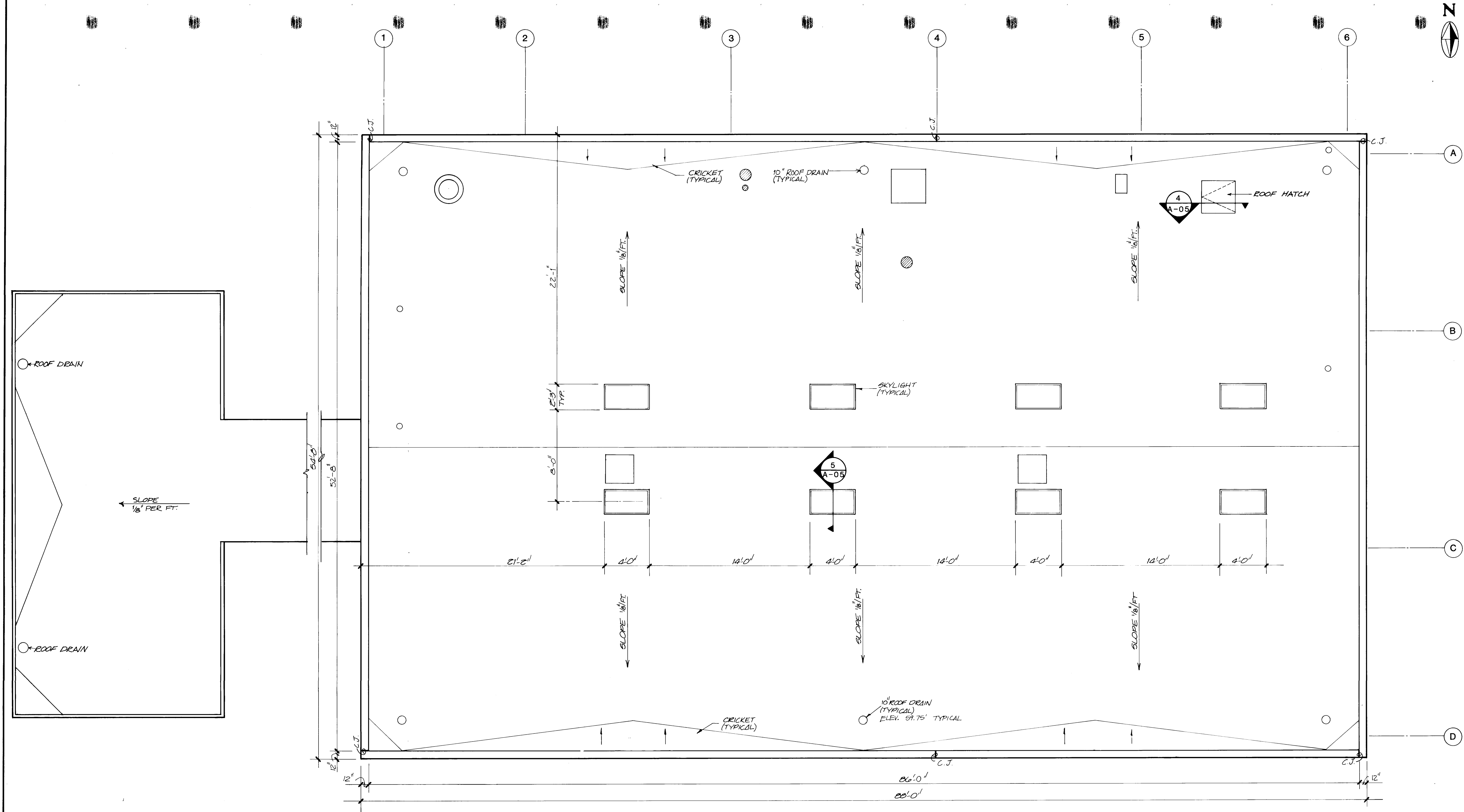
**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
ELEVATIONS

M-C NO. 832221  
**A-04** 37 of 112  
SC NO.









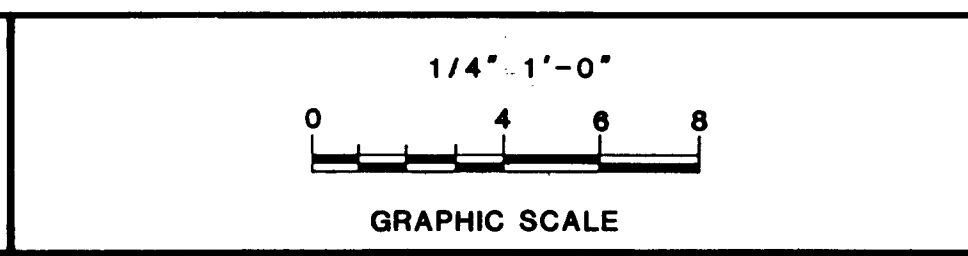
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| 26 | 36 | 94 | 39 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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| DESIGNED <i>W.S.</i> |      |
| DRAWN <i>R.A.</i>    |      |
| CHECKED <i>W.S.</i>  |      |
| APPROVED             |      |
| APPROVED             |      |
| NO.                  | DATE |
| REVISIONS            |      |
| APPROVED             |      |
| DATE                 |      |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

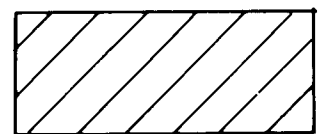
**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
ROOF PLAN

**A-06**  
39 of 112

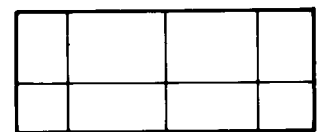
M-C NO. 832221  
SC NO.



LEGEND:



FRP PANELS



2x4 ACOUSTICAL LAY IN  
TILE CEILING



1" THICK K-13 SPRAYED  
INSULATION

NOTES:

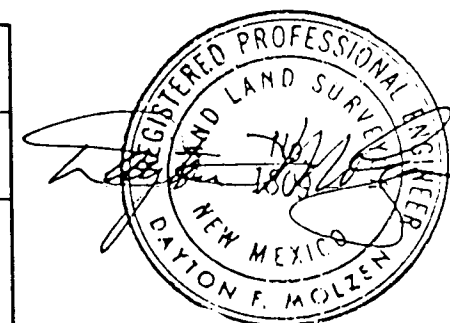
- CEILING AREA ON LOWER LEVEL  
TO RECEIVE EPOXY PAINT
- CEILING ON MEZZININE AREA  
TO RECEIVE EPOXY PAINT
- ALL AREAS WITH NO INDICATIONS  
RECEIVE EPOXY PAINT

RECORD DRAWING

DATE:  
AUG. 1988

DRAFTED BY:  
MCA

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29  
26 36 94 40 88

| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED *W.B.*  
DRAWN *W.B.*  
CHECKED *W.B.*  
APPROVED  
DATE

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/4" = 1'-0"  
0 4 8  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

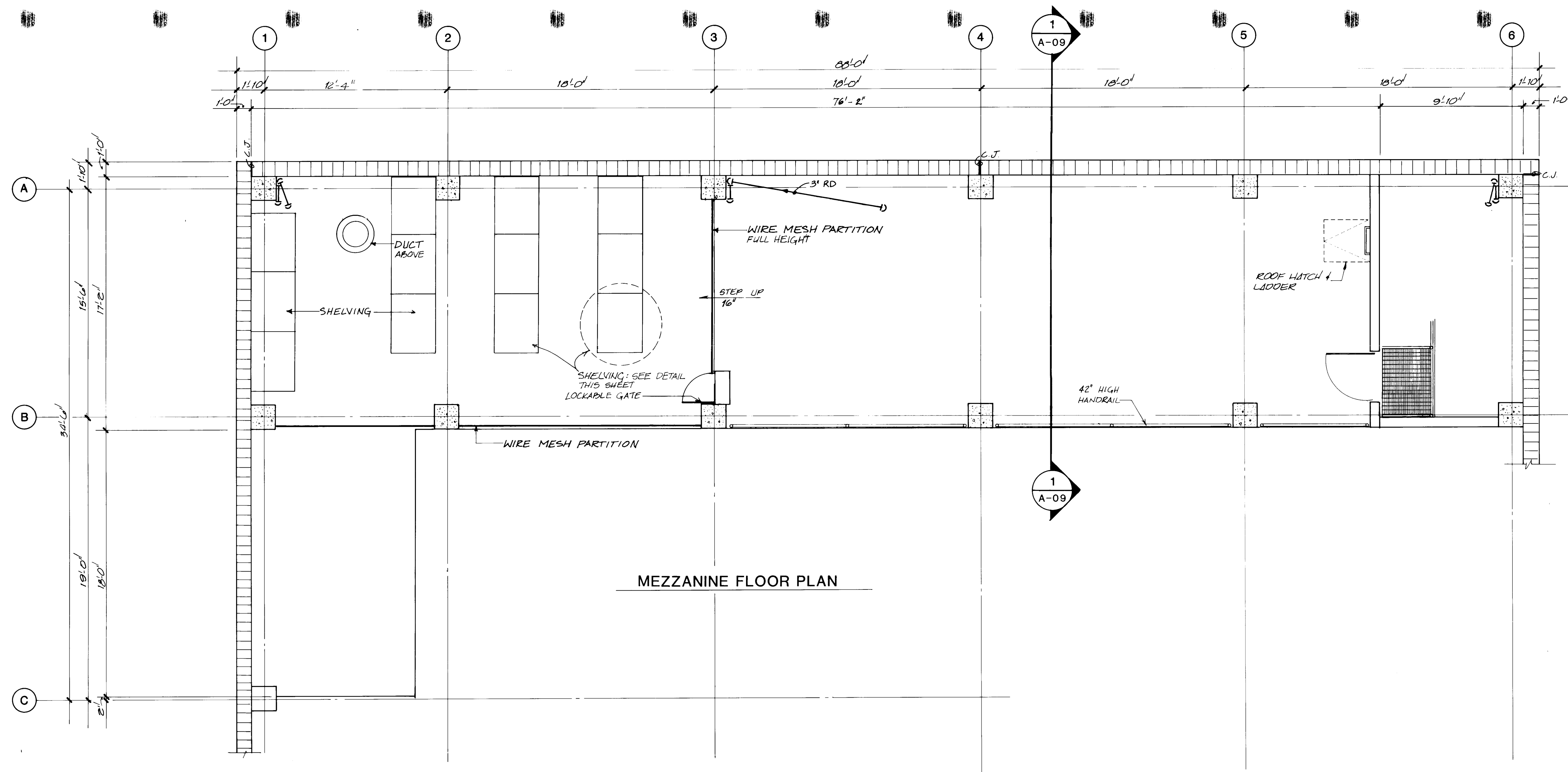
**INTERIM SLUDGE DEWATERING FACILITIES**  
**DEWATERING BUILDING**  
**SECOND FLOOR REFLECTED CEILING PLAN**

M-C NO. 832221

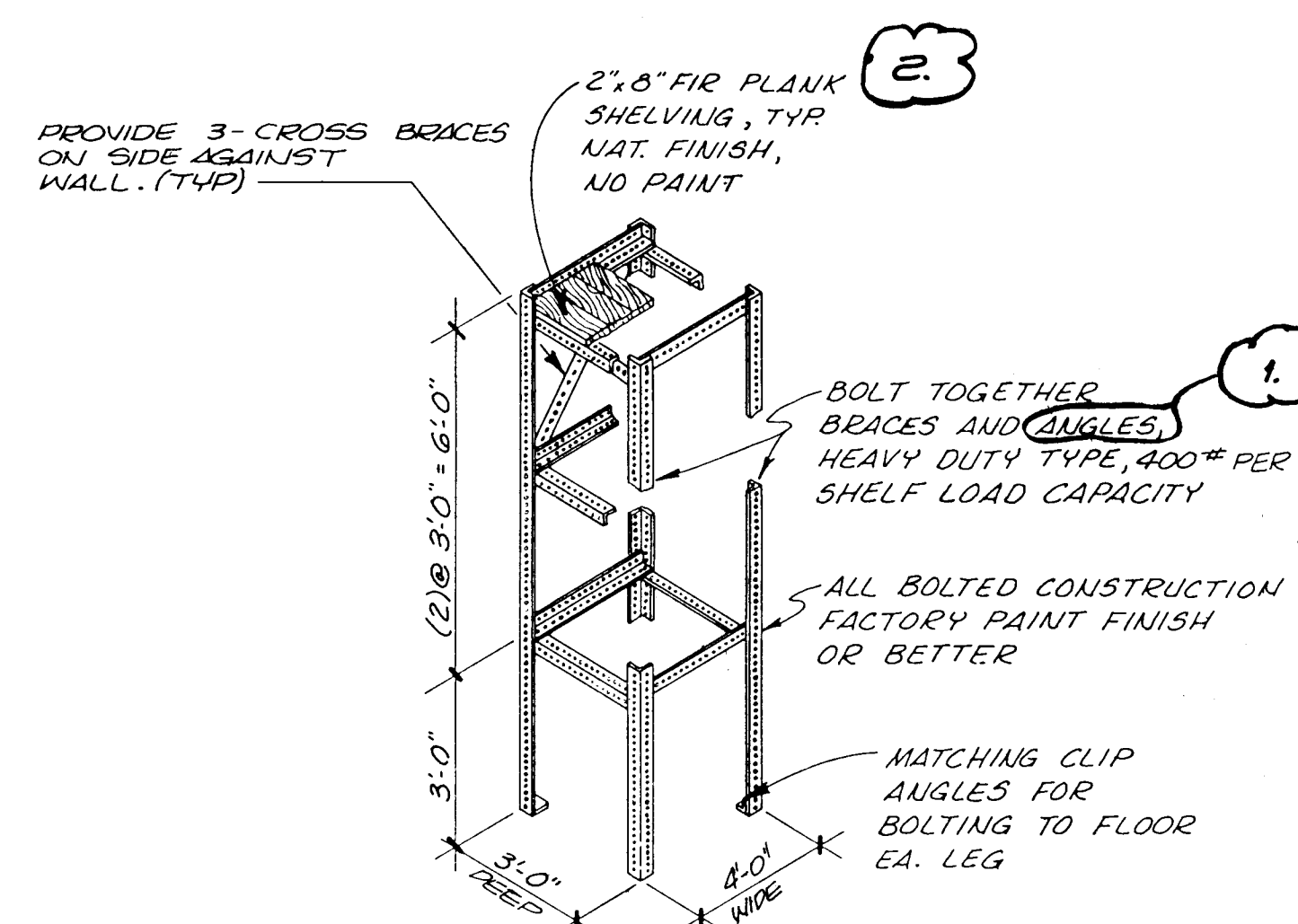
**A-07** 40 OF 112

SC NO.





MEZZANINE FLOOR PLAN



STORAGE SHELVING DETAIL \*

## SHELVING RENOVATIONS

1. ON ALL 4'-0" WIDE SIDES OF SHELVES, REMOVE HORIZ. L'S & REASSEMBLE W/LEGS TURNED DOWN.
2. REPLACE 3' LG PLANKS W/4' LG PLANKS

\* REASON FOR CHANGE: TO ALLOW EASIER ACCESS TO & FROM SHELVES W/O ANGLE PROTRUDING UP.

## RECORD DRAWING

DATE: AUG. 1988  
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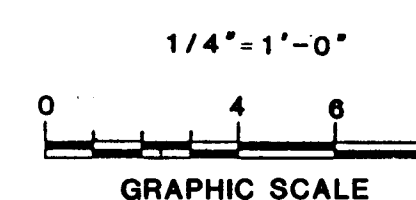
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| 26 |   |   | 36 | 94 | 41 | 88 |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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| DESIGNED | WJ |
| DRAWN    | WJ |
| CHECKED  | WJ |
| APPROVED |    |
| APPROVED |    |
| DATE     |    |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

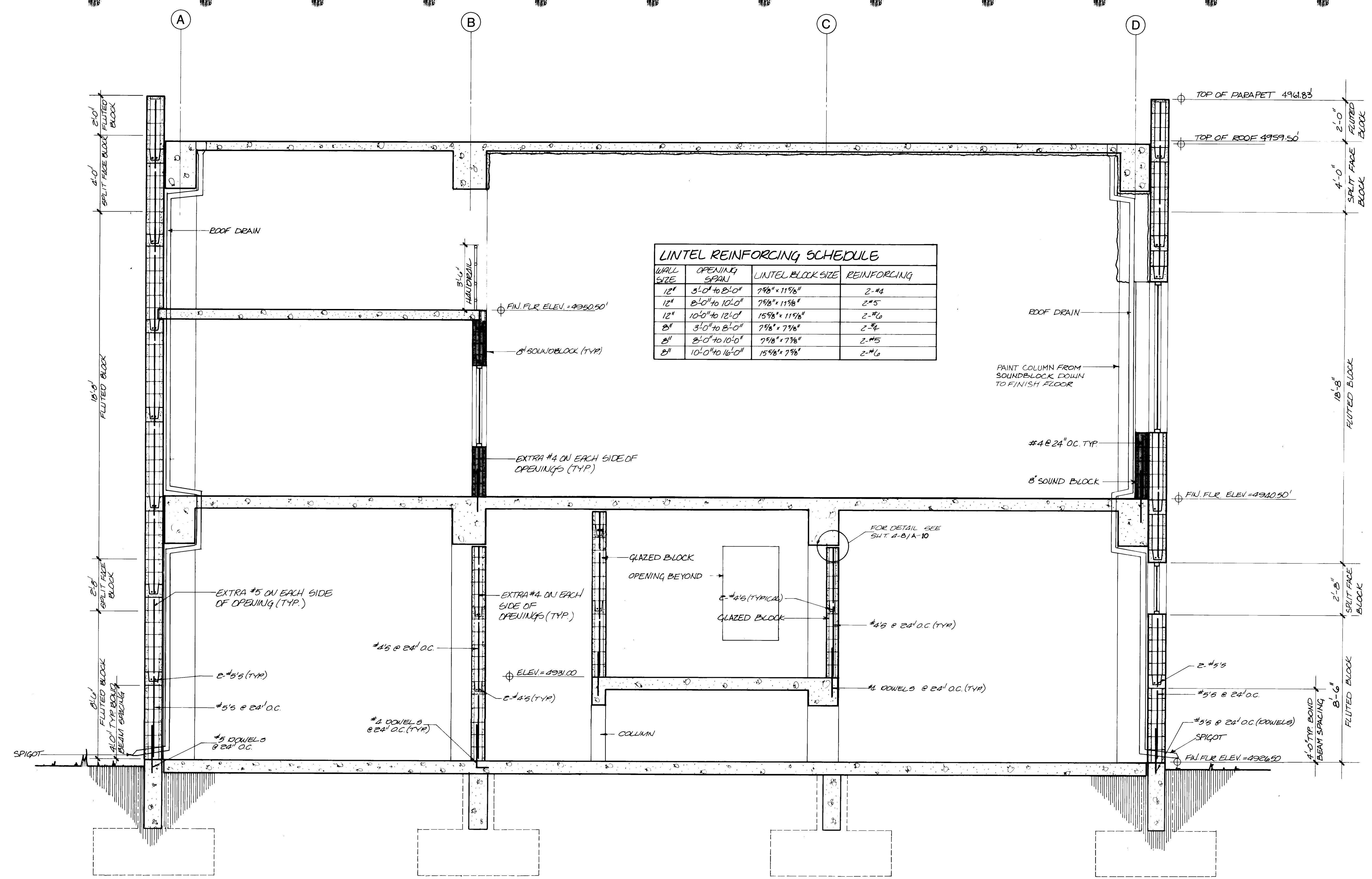


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
MEZZANINE FLOOR PLAN

M-C NO. 832221  
**A-08** 41 of 12  
SC NO.





1 BUILDING SECTION  
A-02 A-03

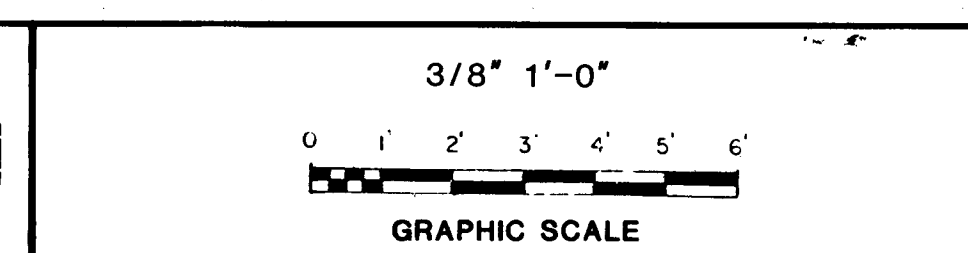
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DATE: AUG. 1988  
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DESIGNED: *W.D.*  
DRAWN: *W.D.*  
CHECKED: *W.D.*  
APPROVED: *W.D.*  
DATE:

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

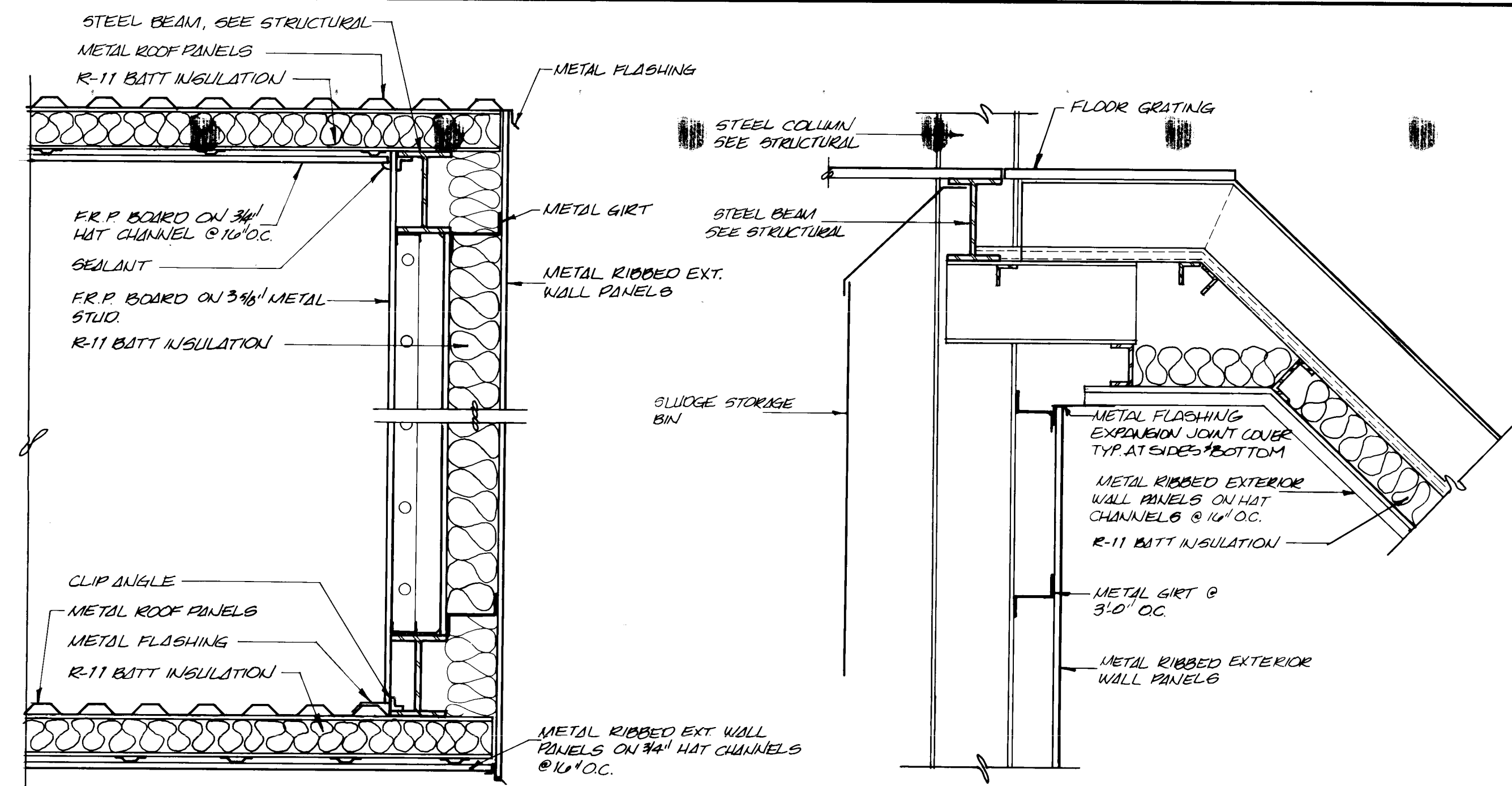


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

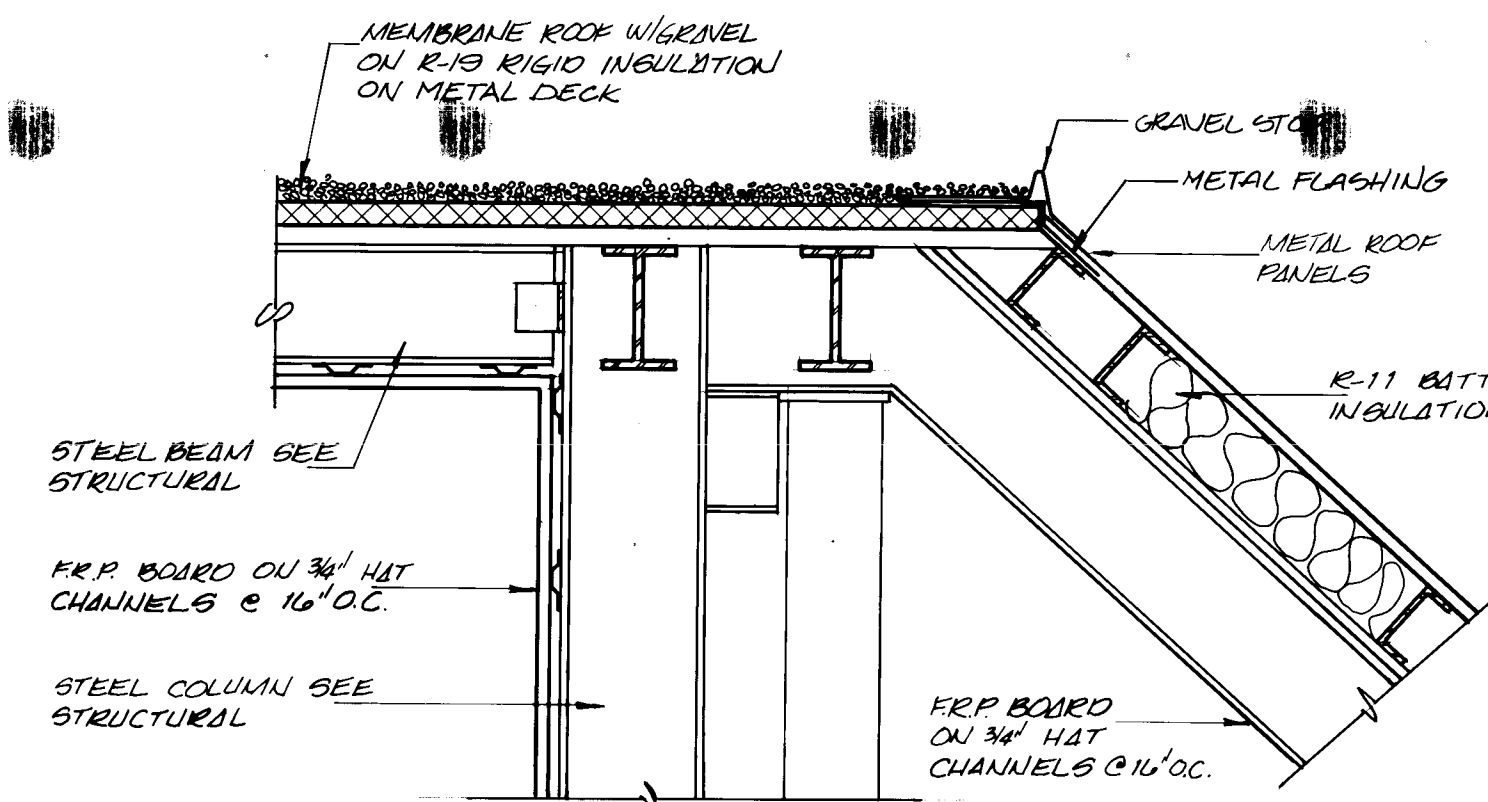
**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
BUILDING SECTION

M-C NO. 832221  
**A-09** 42 of 112  
SC NO.

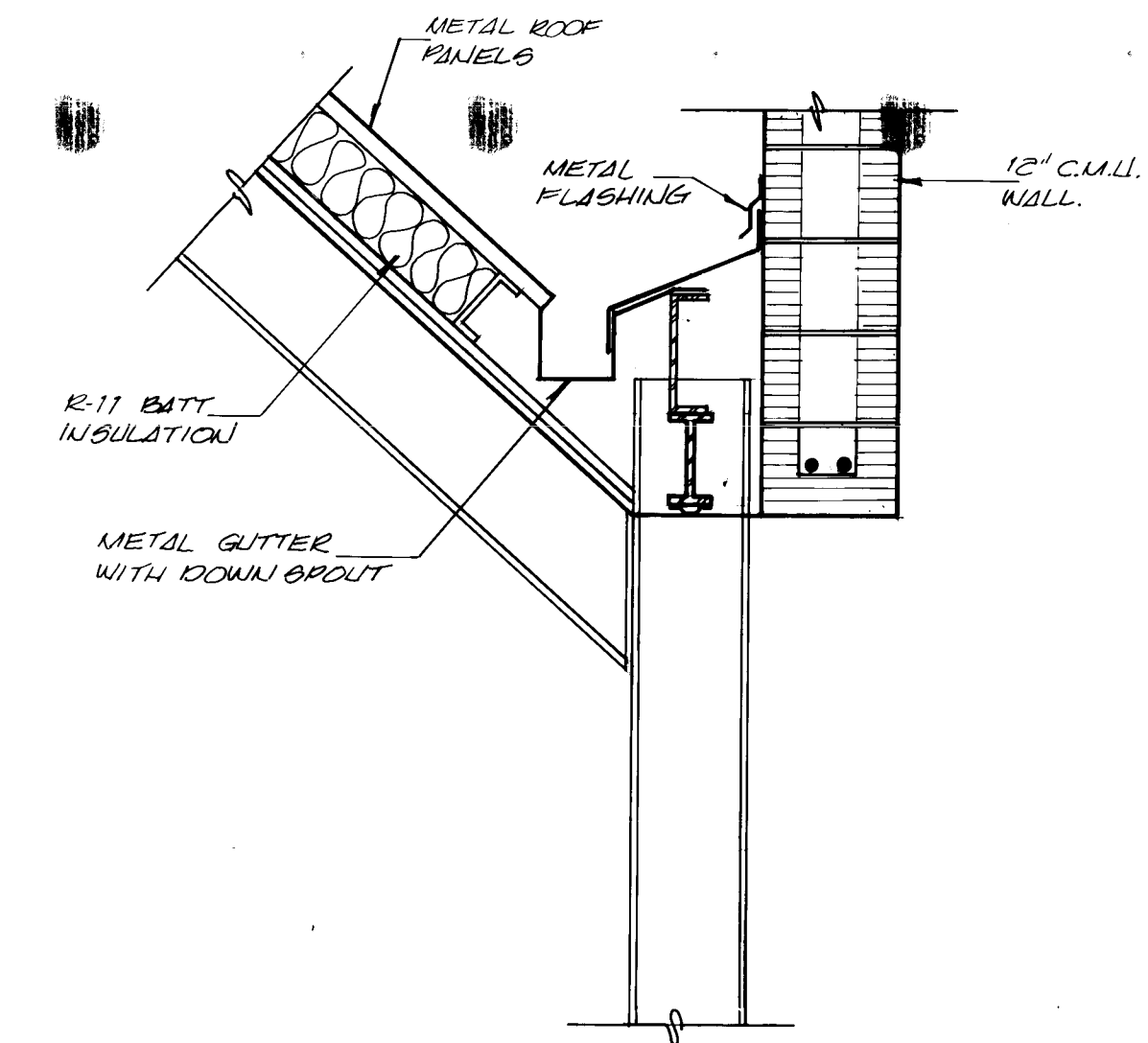




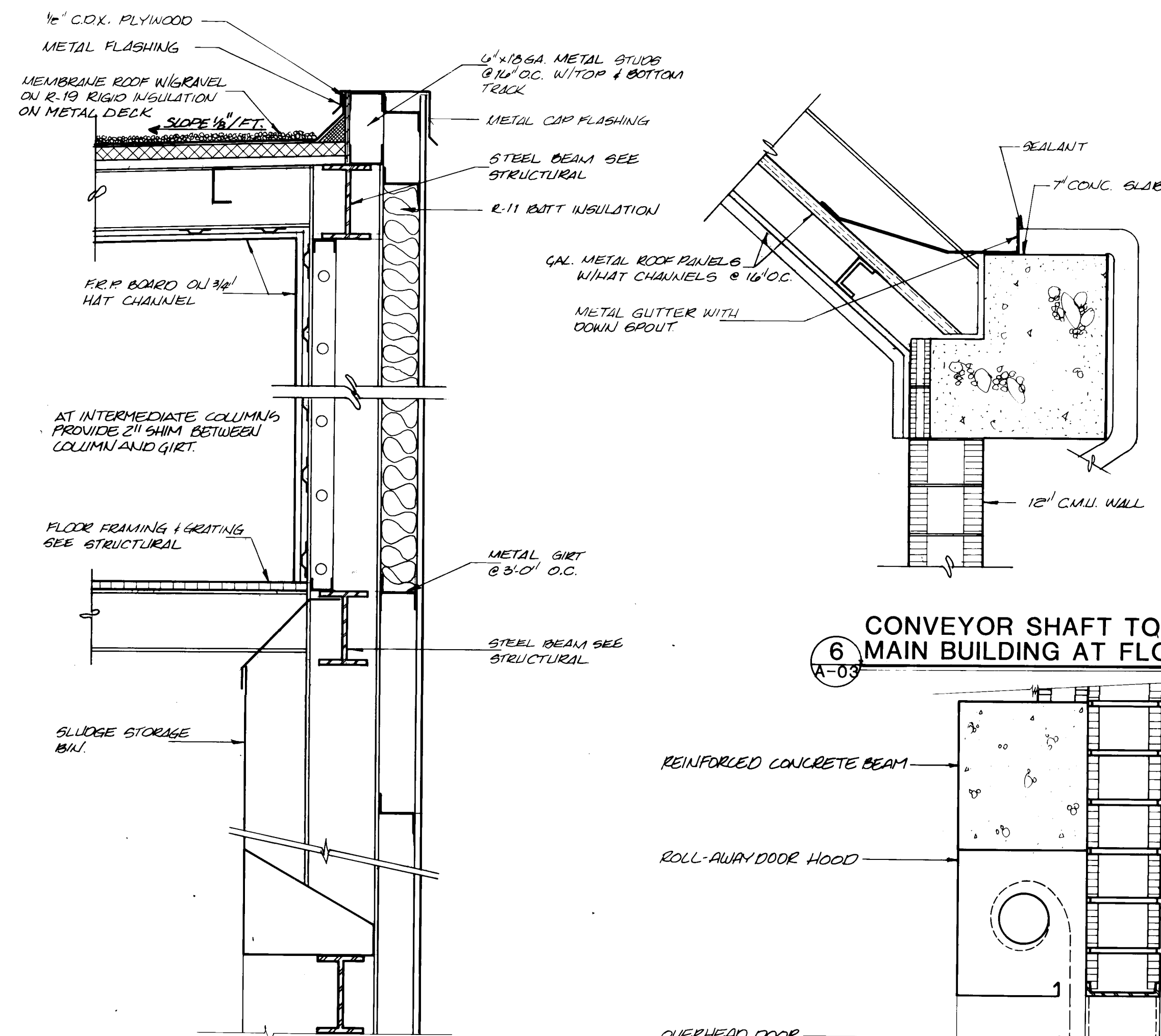
1 SECTION THRU CONVEYOR SHAFT  
A-03



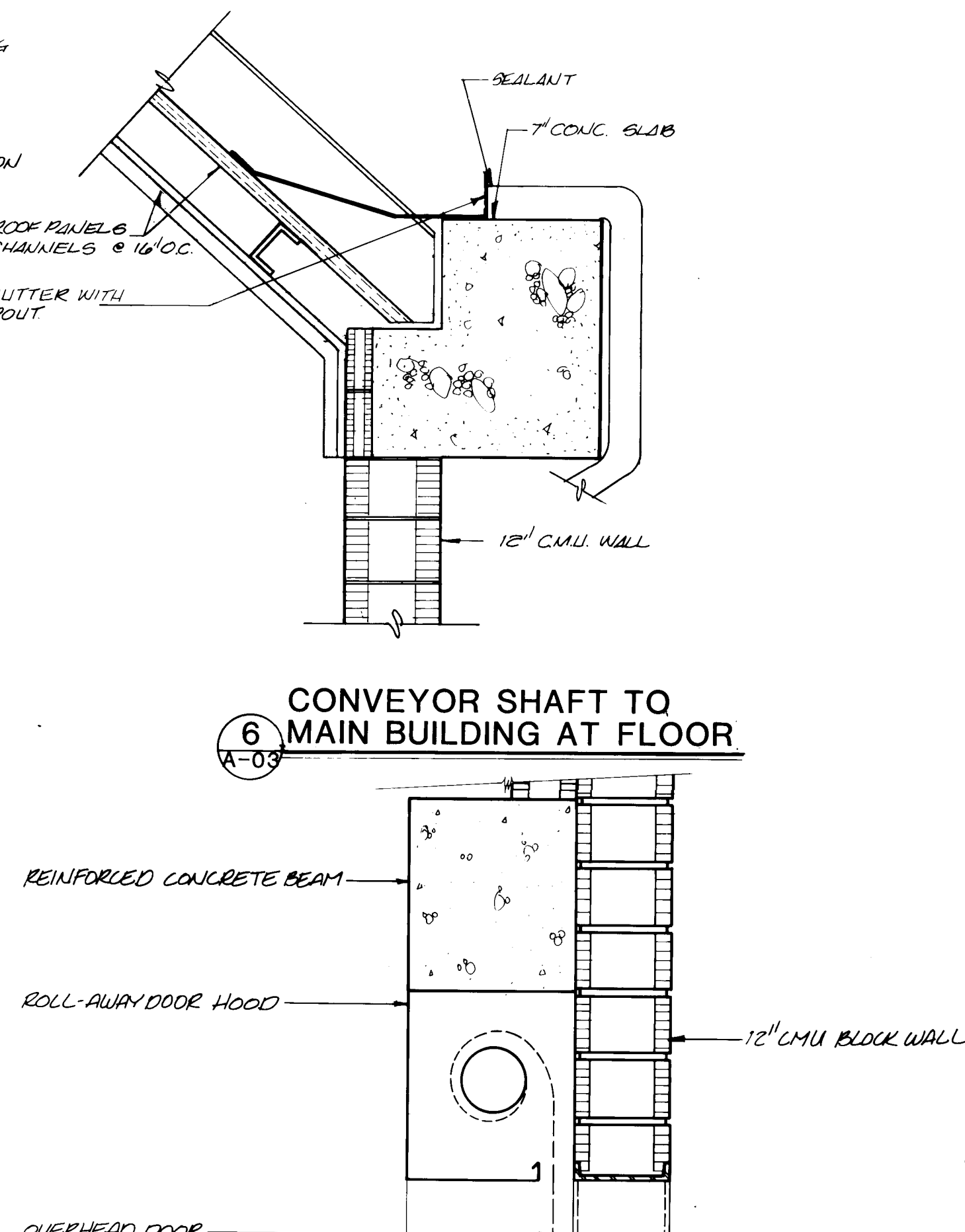
3 CONVEYOR SHAFT AT ROOF  
TO STORAGE BIN  
A-03



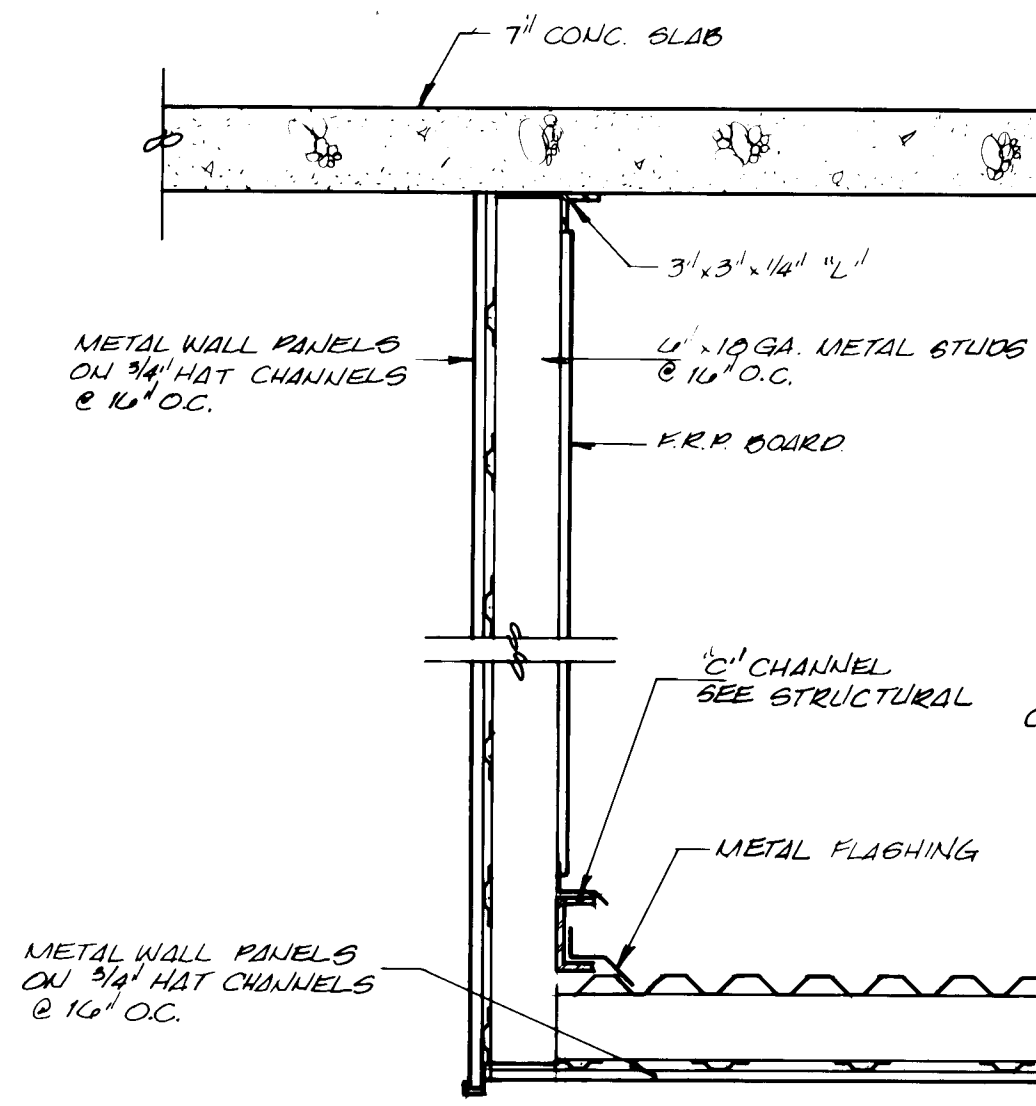
4 CONVEYOR SHAFT TO  
MAIN BUILDING AT ROOF  
A-03



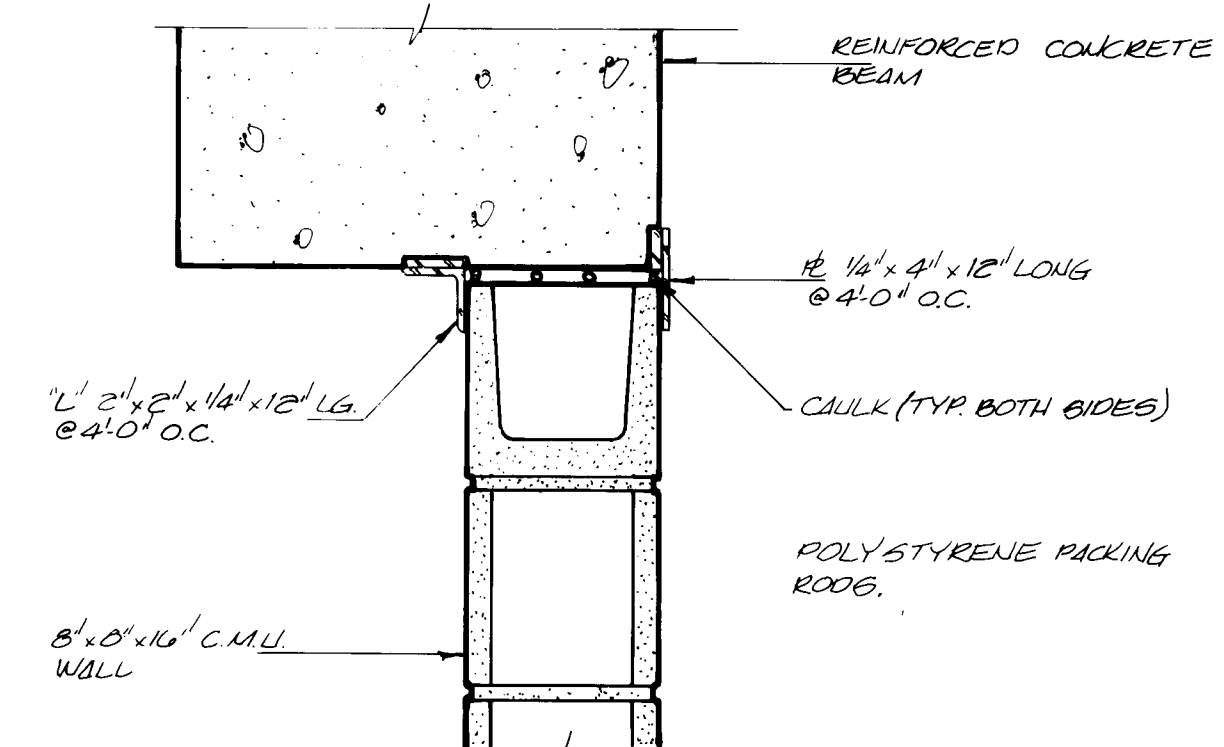
5 WALL SECTION AT STORAGE BIN  
A-03



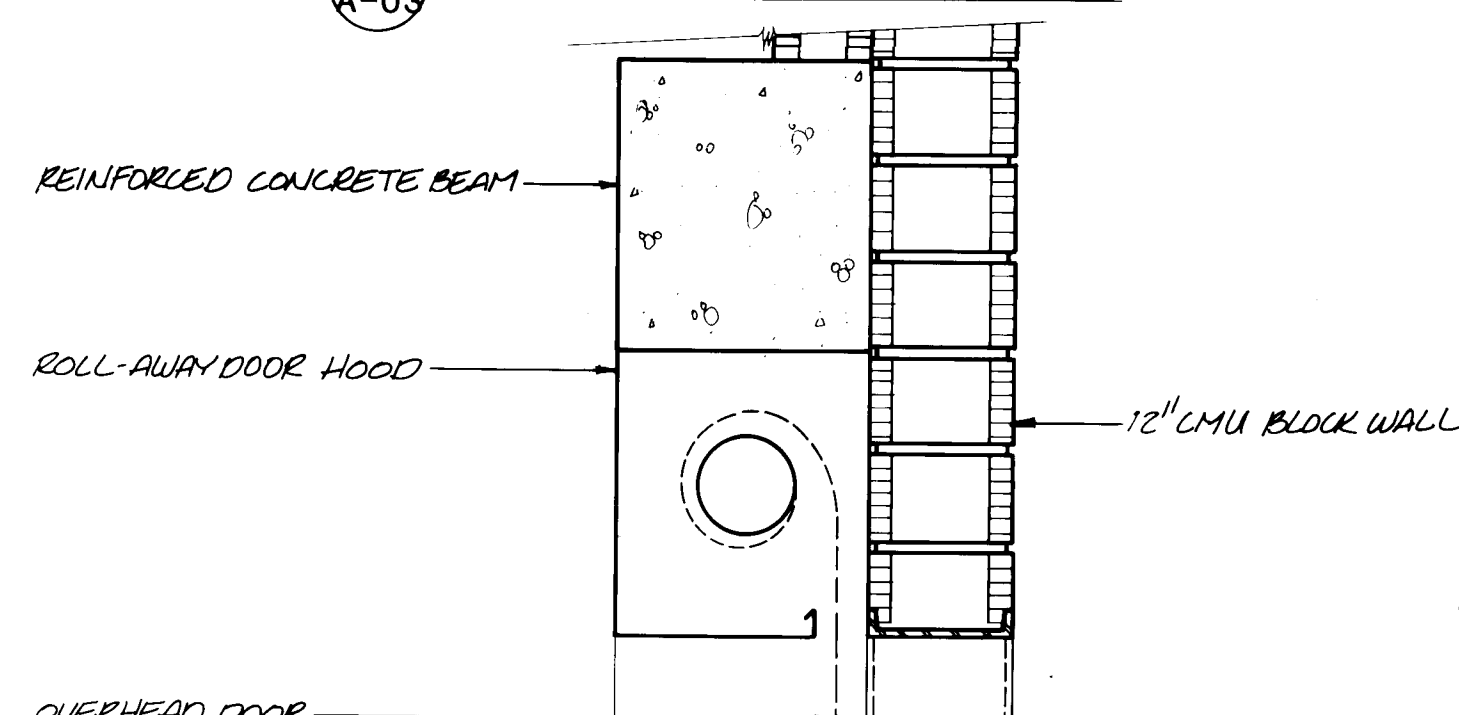
6 CONVEYOR SHAFT TO  
MAIN BUILDING AT FLOOR  
A-03



7 INTERIOR CONVEYOR ENCLOSURE  
A-02



8 TOP OF WALL CONNECTION  
A-09



9 OVERHEAD DOOR HEAD  
A-09

# RECORD DRAWING

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26 36 94 43 88

M-C NO. 832221

INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
DETAILS

A-10 43 of 112

SC NO.

DESIGNED: JCB  
DRAWN: JCB  
CHECKED: JCB  
APPROVED: JCB  
DATE: JCB

MOLZEN-CORBIN

STANLEY CONSULTANTS

A JOINT VENTURE

3/4" = 1'-0"  
0 1 2 3  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

| NO. | DATE | REVISIONS | APPROVED |
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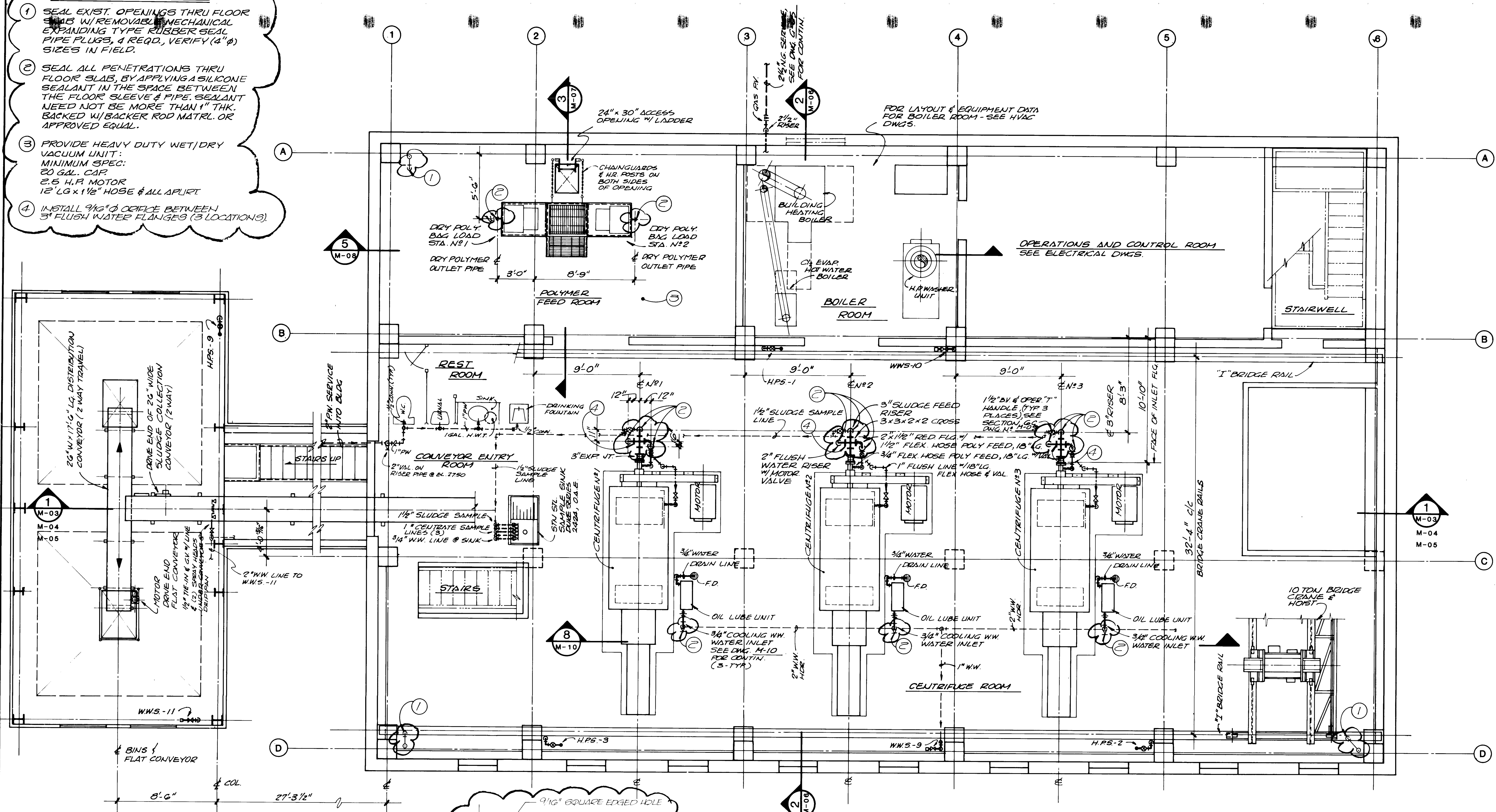


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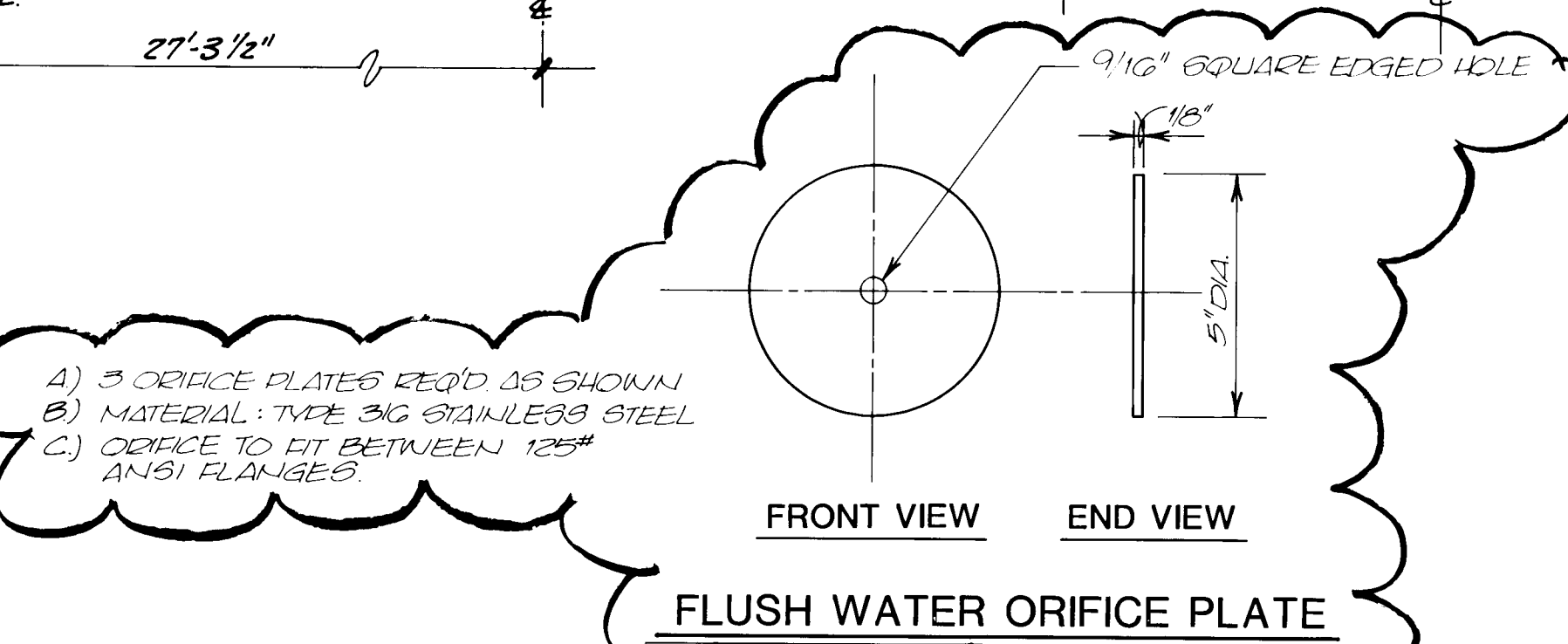


CHANGE ORDER NOTES:

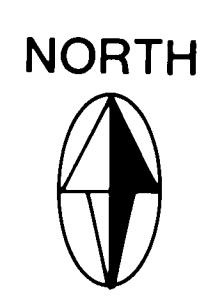
- 1 SEAL EXIST. OPENINGS THRU FLOOR SLAB W/ REMOVABLE MECHANICAL EXPANDING TYPE RUBBER SEAL PIPE PLUGS, 4 REQD, VERIFY (4"Ø) SIZES IN FIELD.
- 2 SEAL ALL PENETRATIONS THRU FLOOR SLAB, BY APPLYING A SILICONE SEALANT IN THE SPACE BETWEEN THE FLOOR SLEEVE & PIPE. SEALANT NEED NOT BE MORE THAN 1" THK. BACKED W/ BACKER ROD MATRL. OR APPROVED EQUAL.
- 3 PROVIDE HEAVY DUTY WET/ DRY VACUUM UNIT: MINIMUM SPEC: 20 GAL. CAP 2.5 H.P. MOTOR 12' LG x 1 1/2" HOSE & ALL APURT.
- 4 INSTALL 3/16" Ø ORIFICE BETWEEN 3" FLUSH WATER FLANGES (3 LOCATIONS).



NOTE: FOR SLUDGE BIN STRUCTURE SEE DWG. S-05 & S-06 & S-07



OPERATIONS & CONTROL SECOND FLOOR - PLAN  
1/4" = 1'-0"



RECORD DRAWING

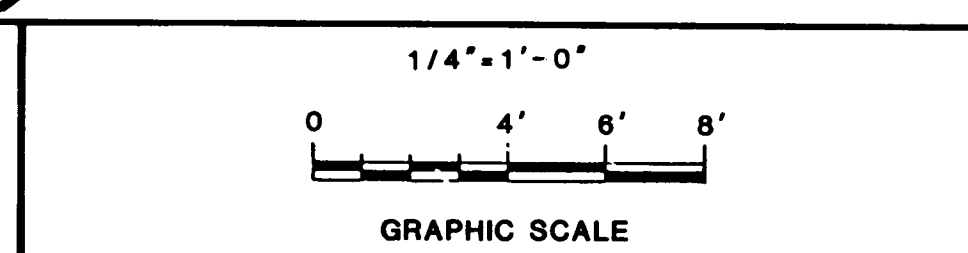
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DRAFTED BY: MCA  
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| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED LMR  
DRAWN SPINELLO  
CHECKED LMR  
APPROVED  
APPROVED

MOLZEN-CORBIN  
STANLEY CONSULTANTS  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
PROCESS EQUIPMENT AND PIPING-  
SECOND FLOOR PLAN

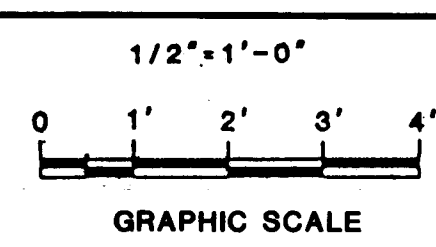
M-C NO. 832221  
M-02 45 of 112  
SC NO.



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DESIGNED LMR GS  
 DRAWN SPINELLO  
 CHECKED LME  
 APPROVED  
 APPROVED  
 DATE

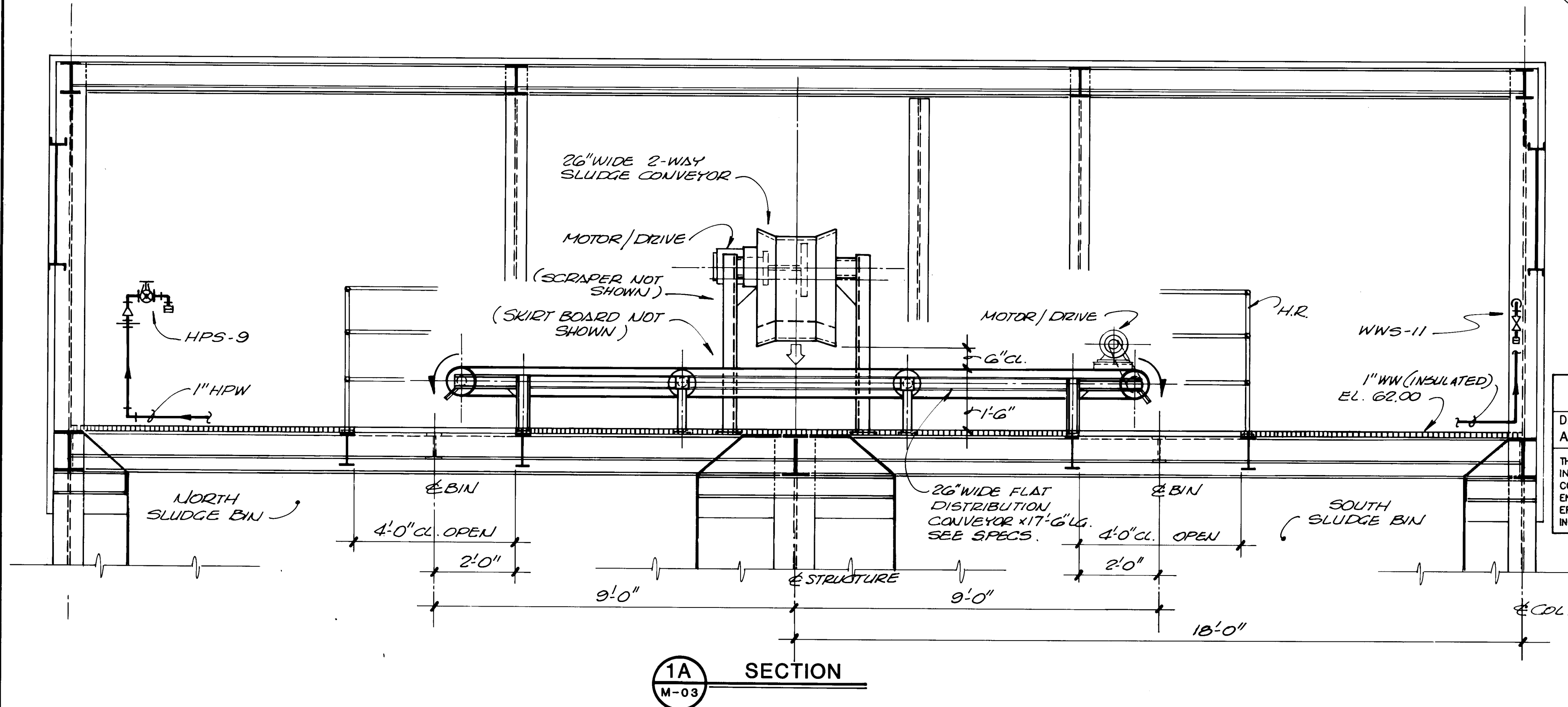
**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
 DEWATERING BUILDING  
 PROCESS EQUIPMENT - SECTIONS

M-C NO. 832221  
**M-03** 46 of 112  
 SC NO.

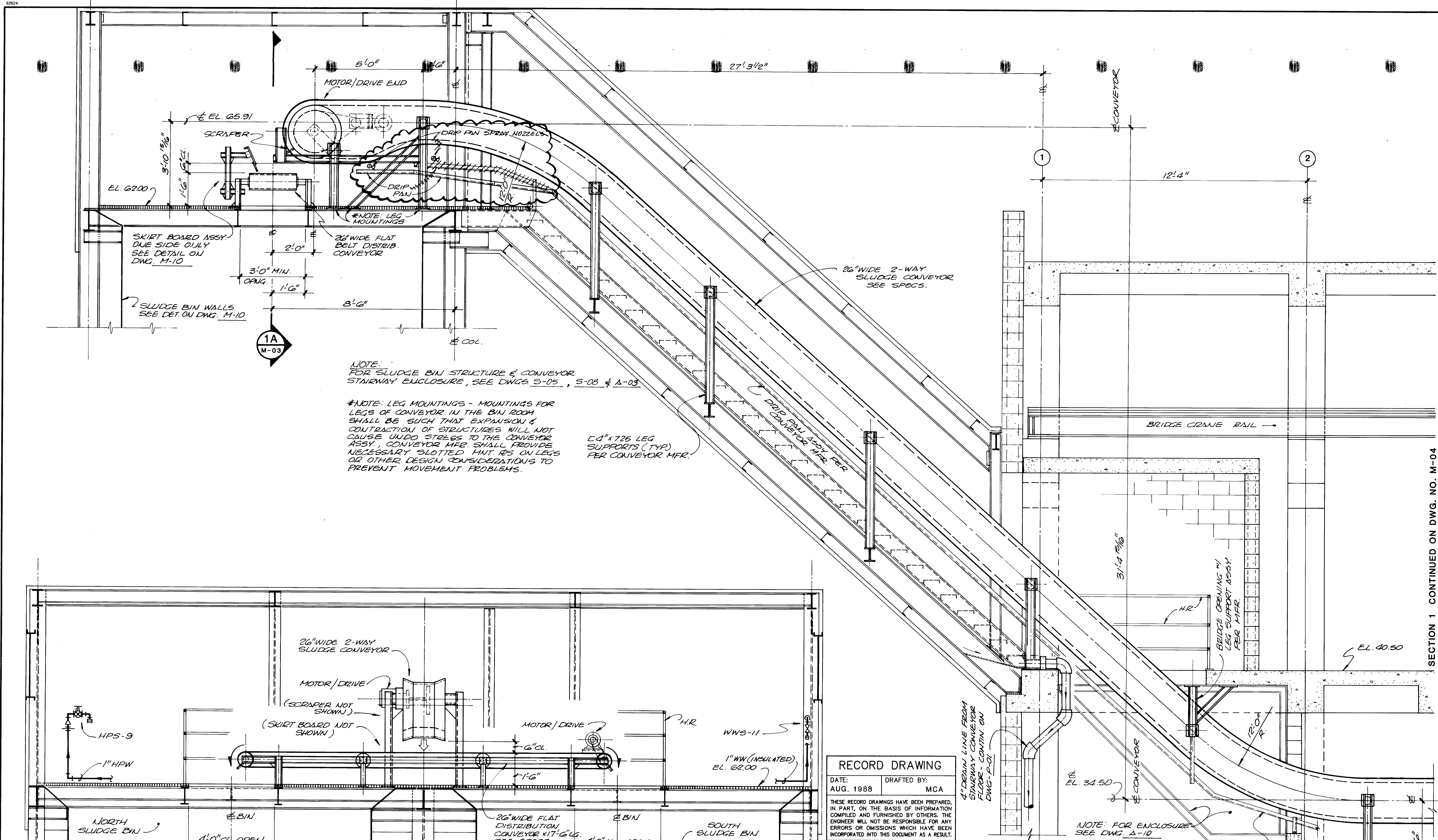


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**1 SECTION**  
 M-01 M-02  
 PARTIAL



|    |    |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
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| 26 | 36 | 9 | 4 | 4 | 6 | 8 | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |



SECTION 1 CONTINUED ON DWG. NO. M-04

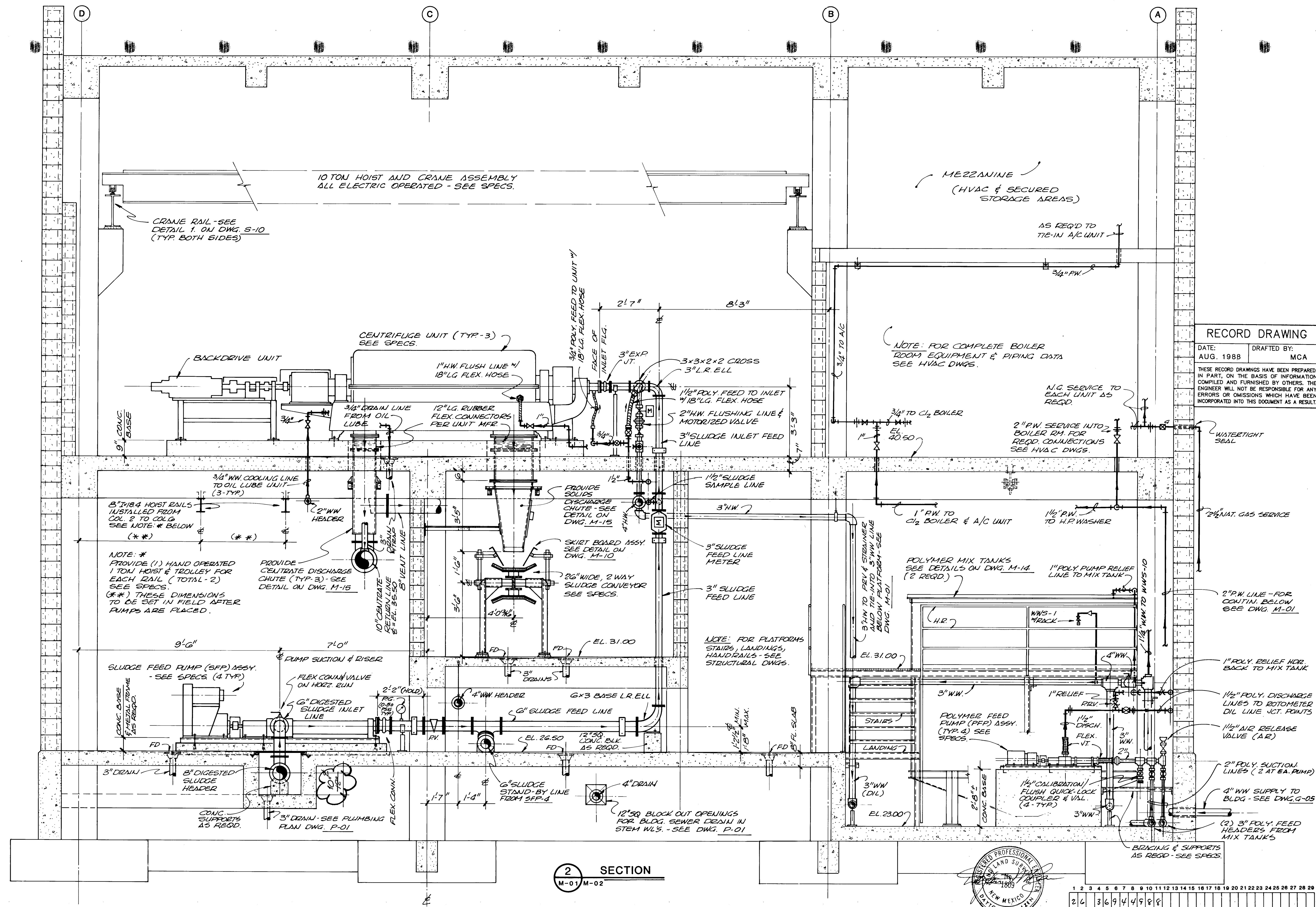




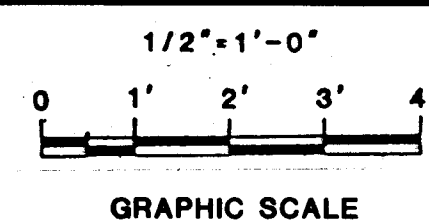








2 SECTION  
 M-01 M-02



DESIGNED L.M.R. G.S.  
 DRAWN SPINELLO  
 CHECKED L.M.R.  
 APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE



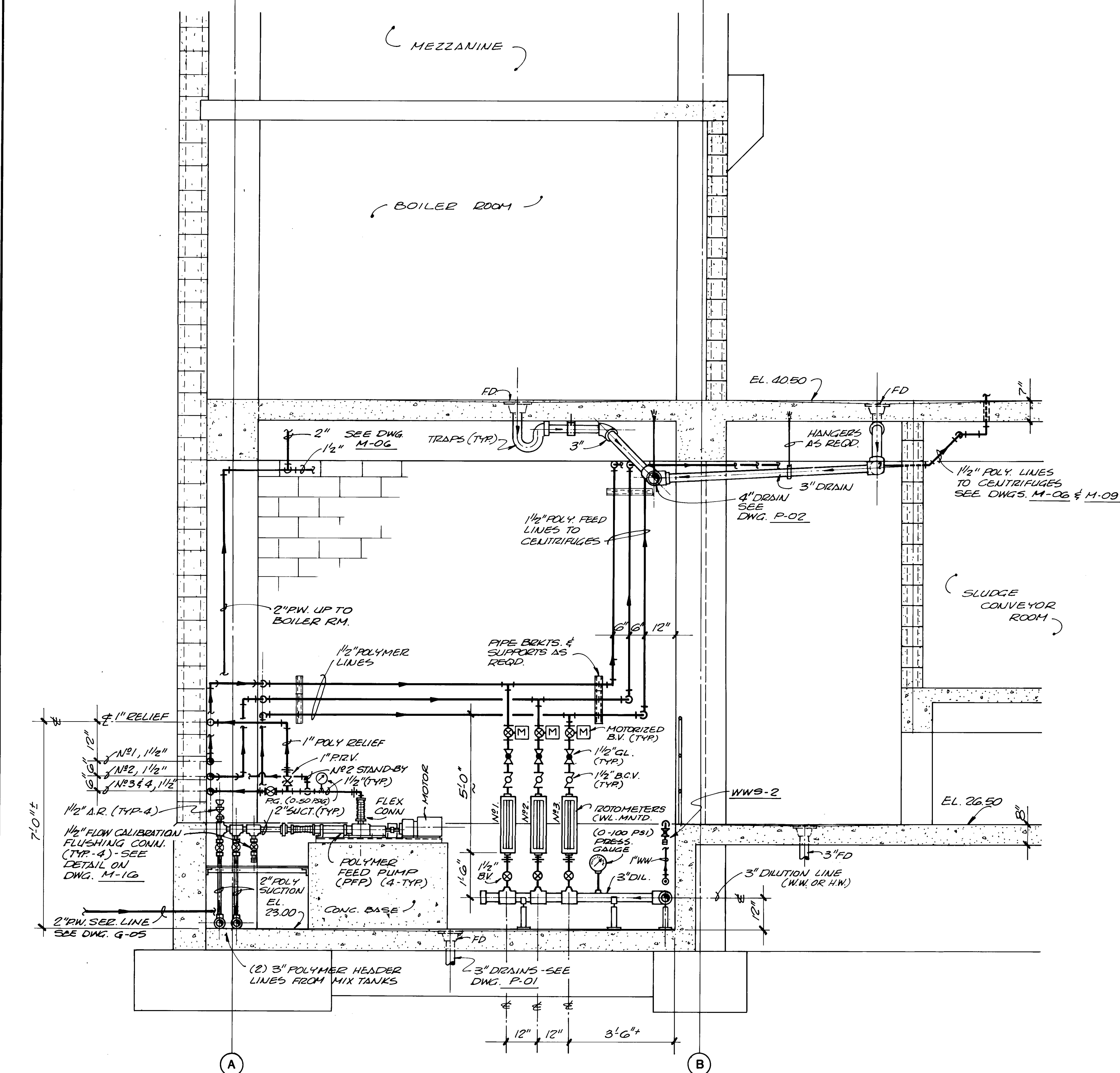
CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**DEWATERING BUILDING**  
**PROCESS EQUIPMENT - SECTION**

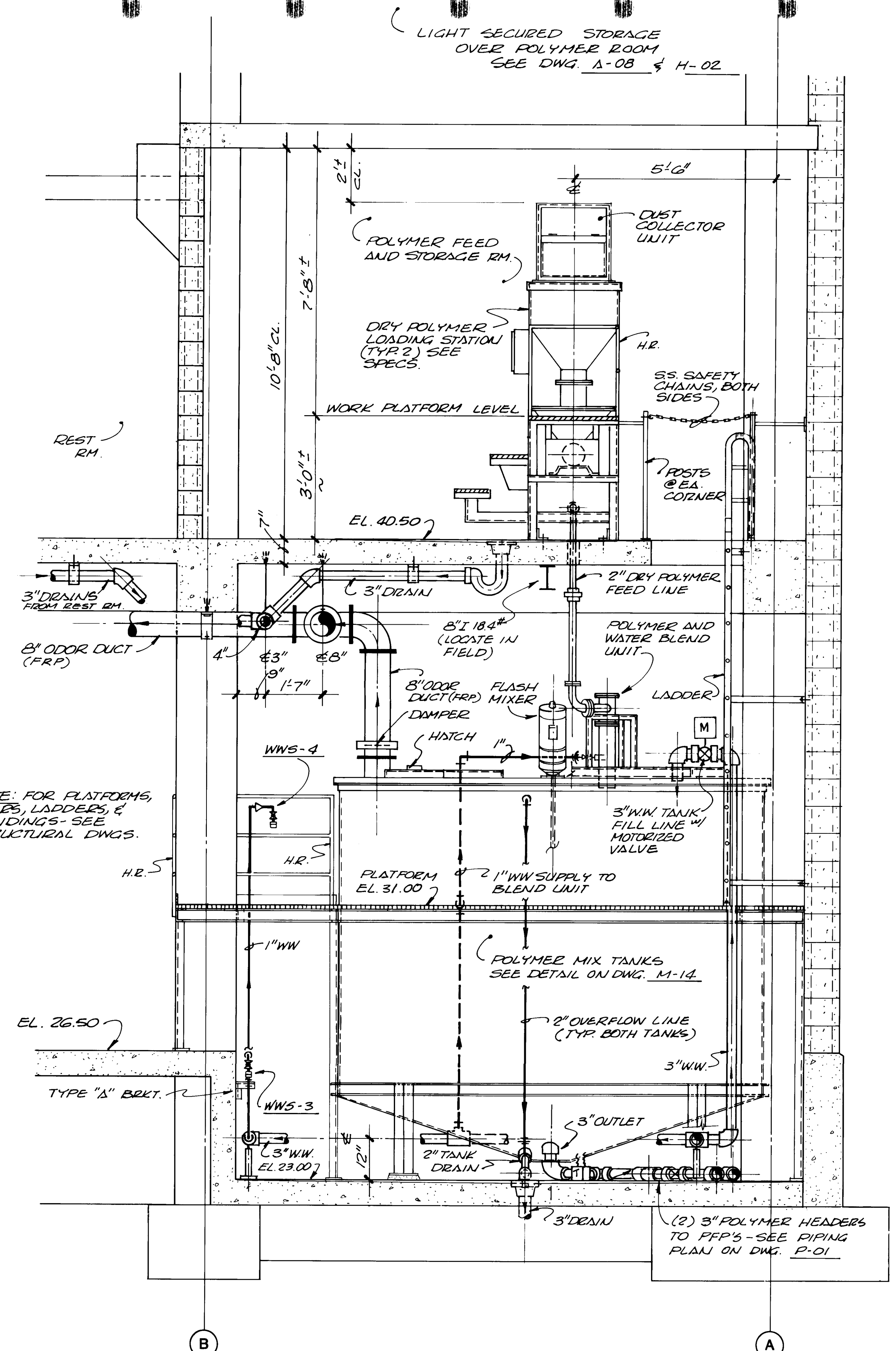
M-C NO. 832221  
**M-06** 49 of 12  
 SC NO.

| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
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|     |      |           |          |
|     |      |           |          |





4 SECTION



3 SECTION  
M-02 M-01

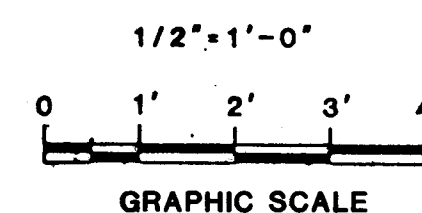
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| RECORD DRAWING                                                                                                                                                                                                                                                               |                    |
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                                           | DRAFTED BY:<br>MCA |
| <p>THESE RECORD DRAWINGS HAVE BEEN PREPARED<br/> IN PART, ON THE BASIS OF INFORMATION<br/> COMPILED AND FURNISHED BY OTHERS. THE<br/> ENGINEER WILL NOT BE RESPONSIBLE FOR ANY<br/> ERRORS OR OMISSIONS WHICH HAVE BEEN<br/> INCORPORATED INTO THIS DOCUMENT AS A RESULT</p> |                    |

[illegible][illegible]

DESIGNED LMRG  
DRAWN SPINELLO  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**   
A JOINT VENTURE

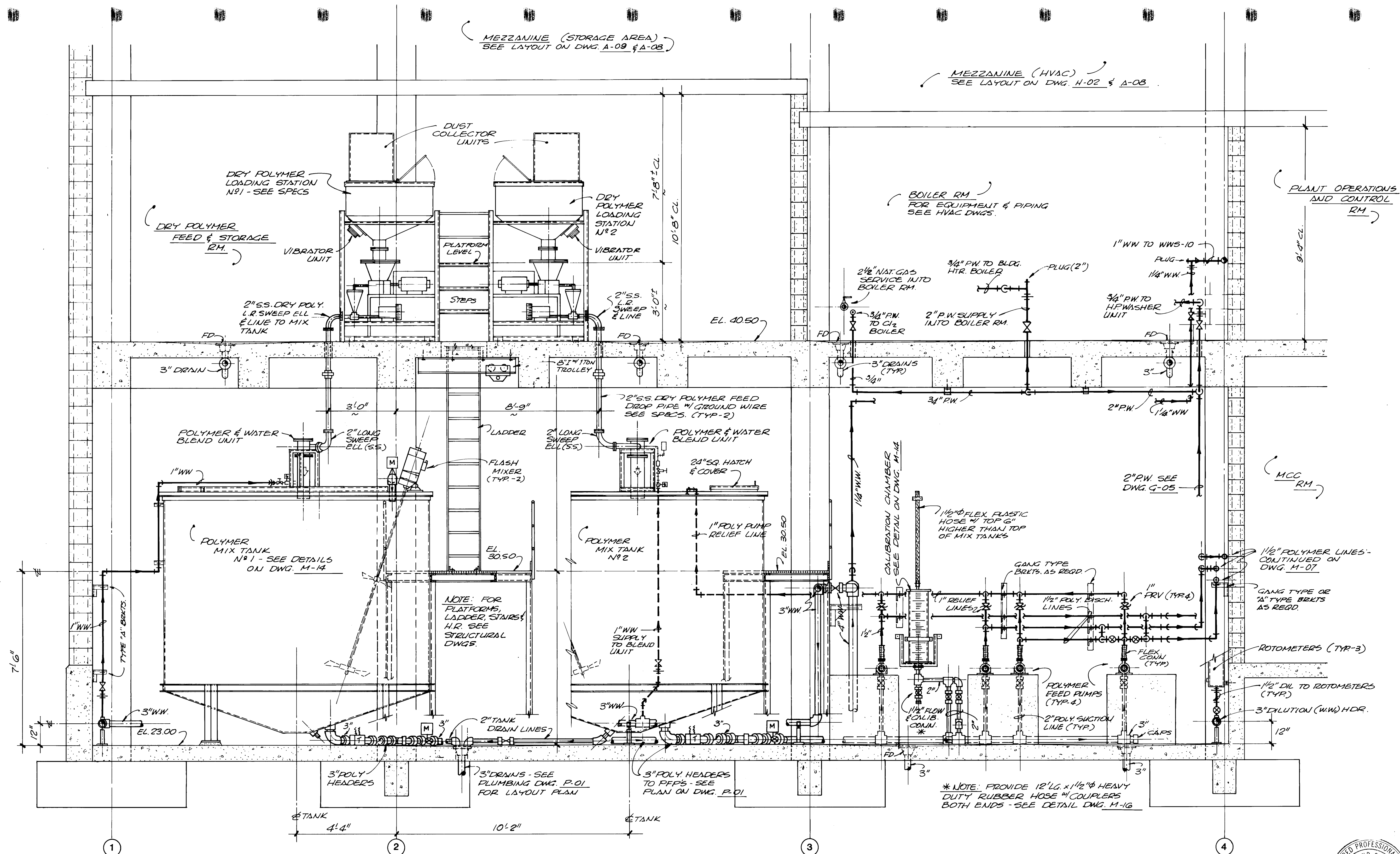


CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
PROCESS EQUIPMENT - SECTIONS

|                |           |
|----------------|-----------|
| M-C NO. 832221 |           |
| M-07           | 50 of 112 |
| SC NO.         |           |





5 SECTION

RECORD DRAWING

|                    |                    |
|--------------------|--------------------|
| DATE:<br>AUG. 1988 | DRAFTED BY:<br>MCA |
|--------------------|--------------------|

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.

[illegible]

DESIGNED LMR G'S  
DRAWN SPINELLO  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/2" = 1'-0"



0 1' 2' 3'

GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
PROCESS EQUIPMENT - SECTION

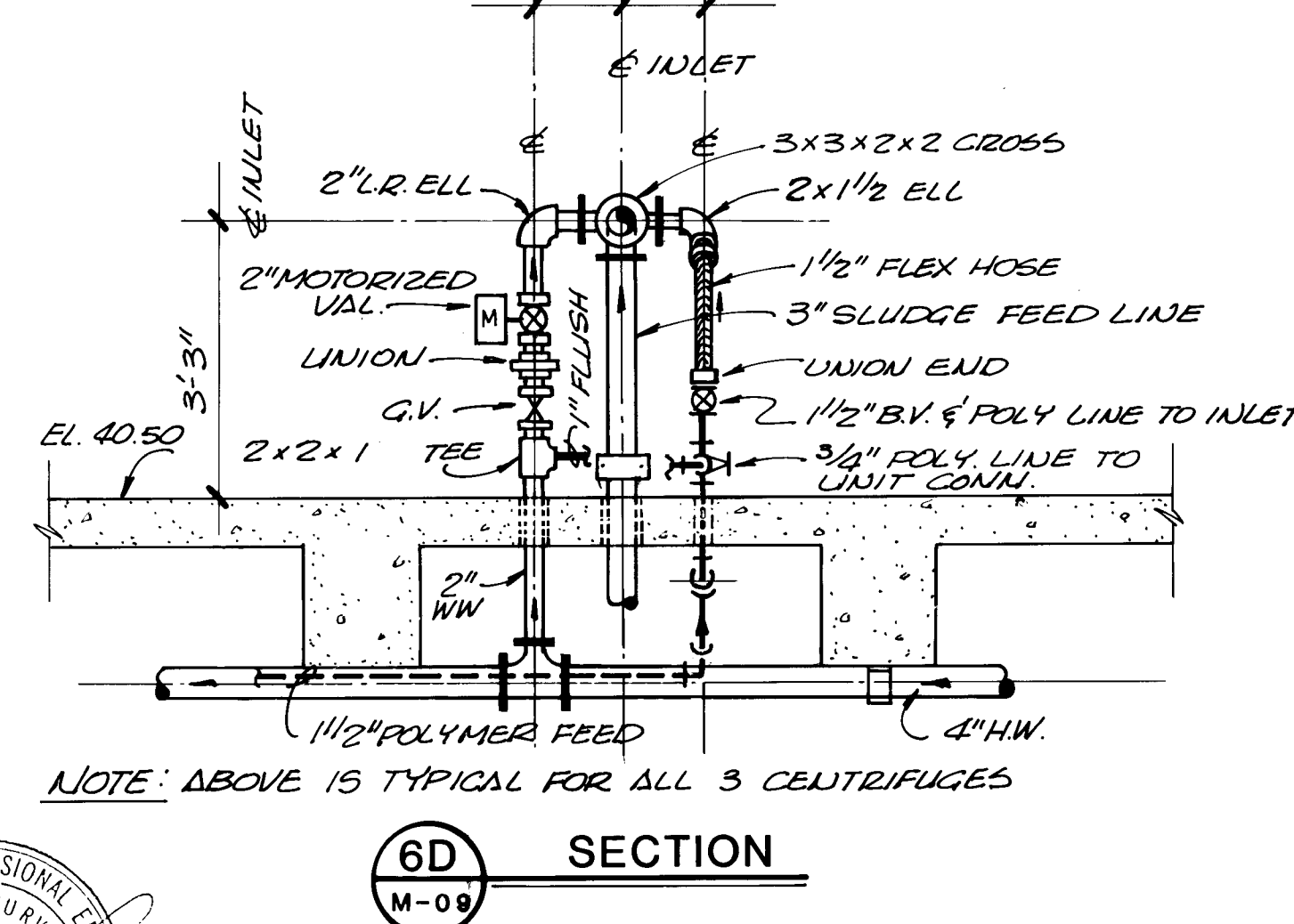
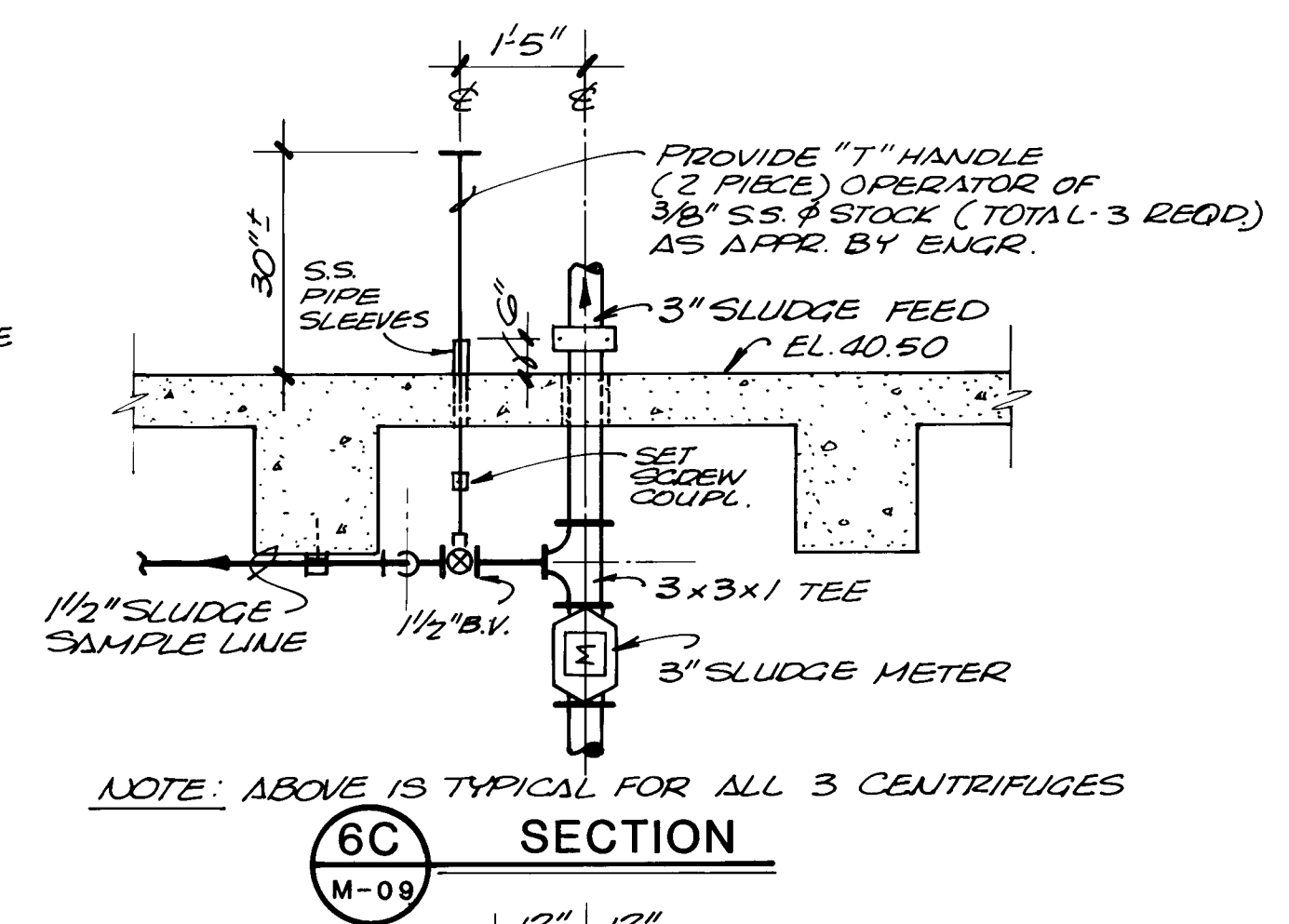
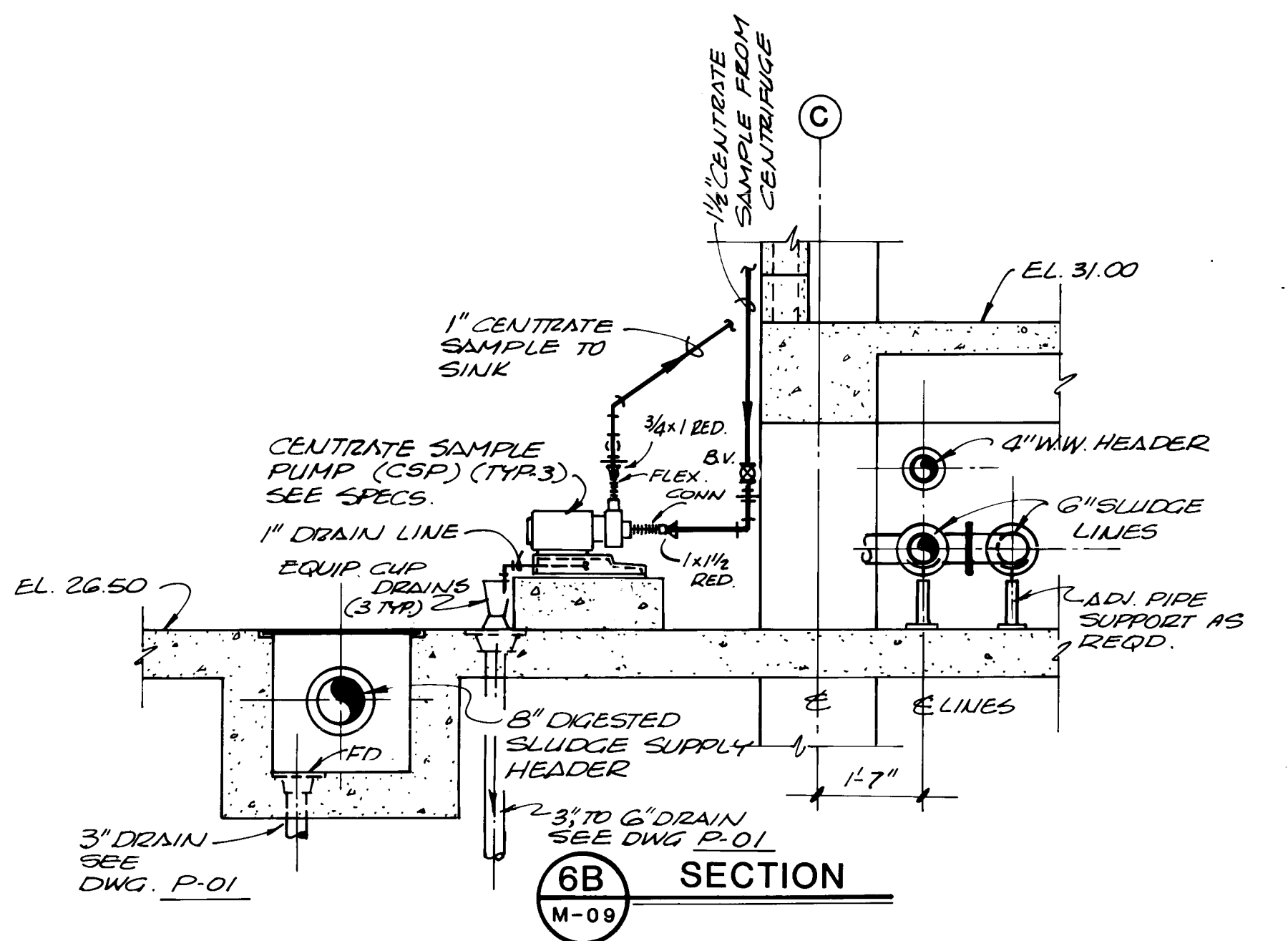
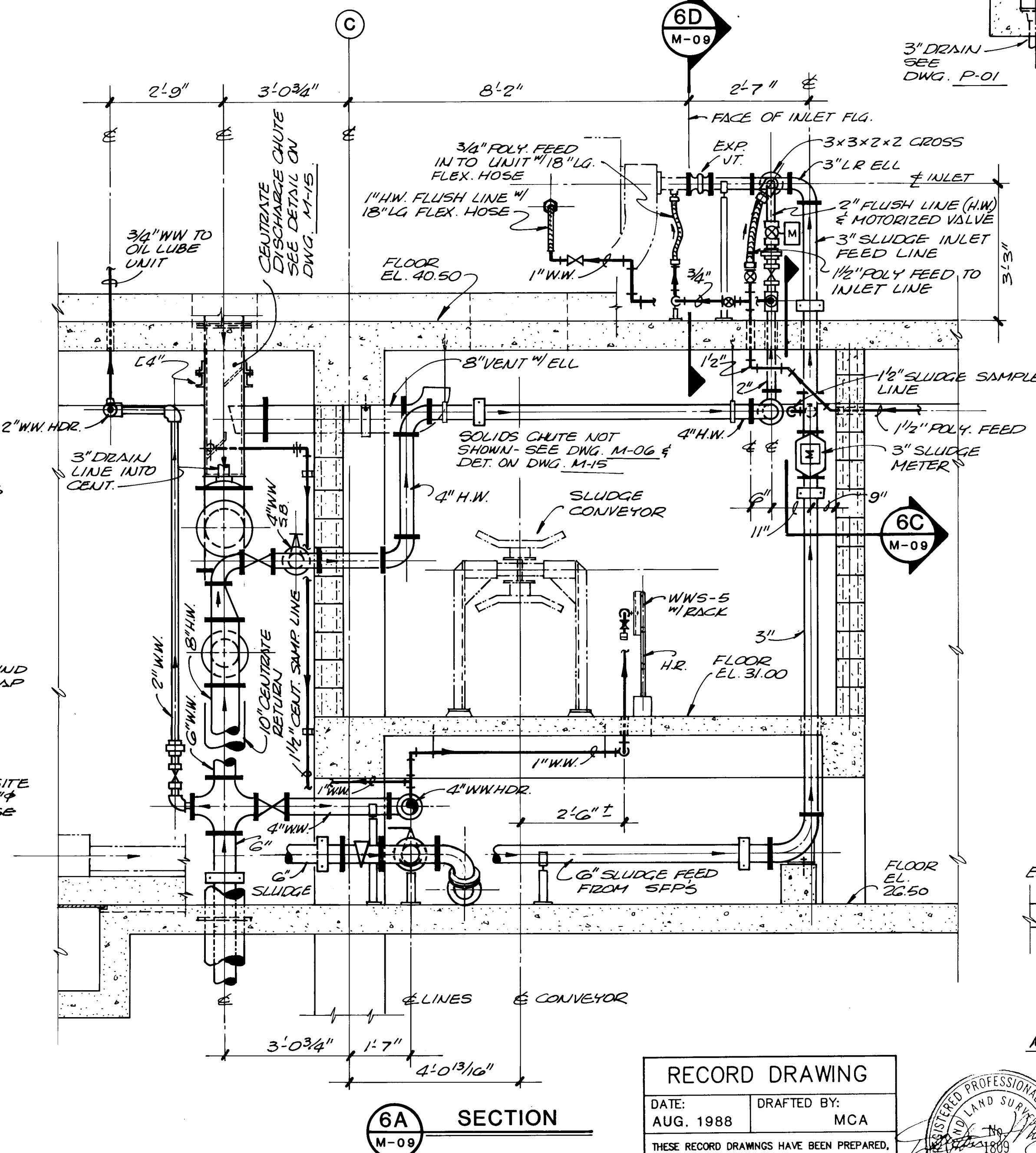
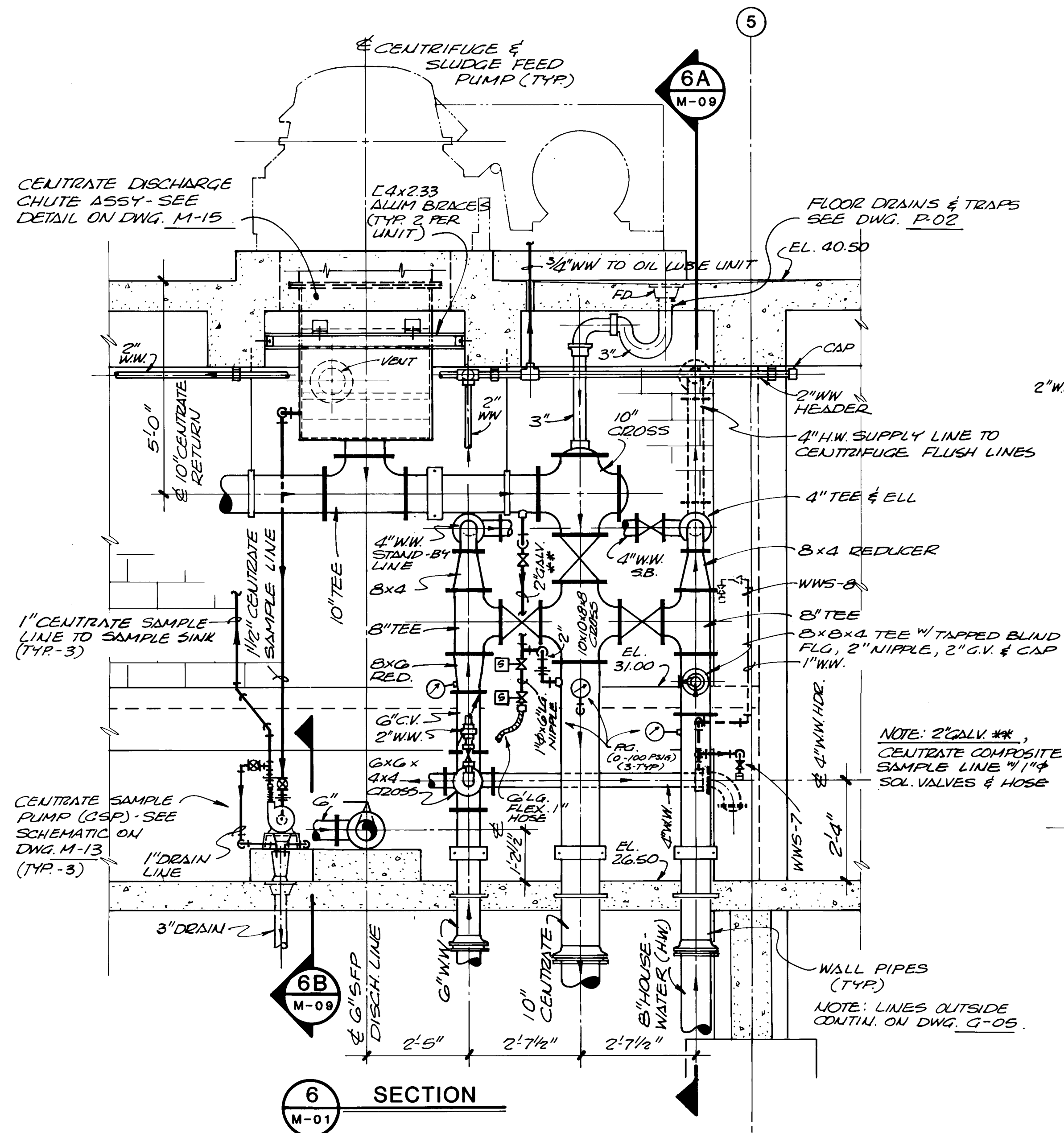
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| M-C NO. 832221 |
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M-08 51 of 112

SC NO.

| NO | DATE | REVISIONS | APPROVED |
|----|------|-----------|----------|
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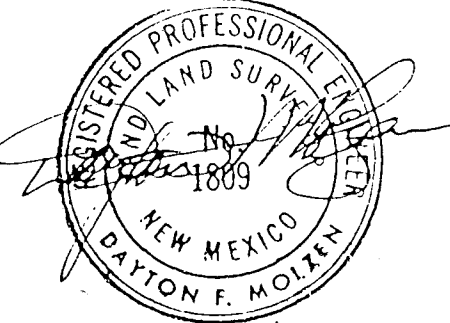


RECORD DRAWING

DATE: AUG. 1988

DRAFTED BY: MCA

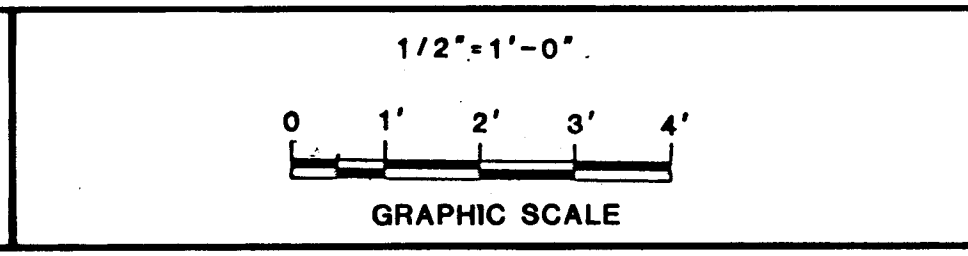
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.



| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |

DESIGNED: LMR G'S  
DRAWN: SPINELLO  
CHECKED: LMR  
APPROVED: [Signature]  
DATE: [Blank]

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO

**SOLIDS HANDLING FACILITIES**

PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**

DEWATERING BUILDING

PROCESS EQUIPMENT - SECTIONS

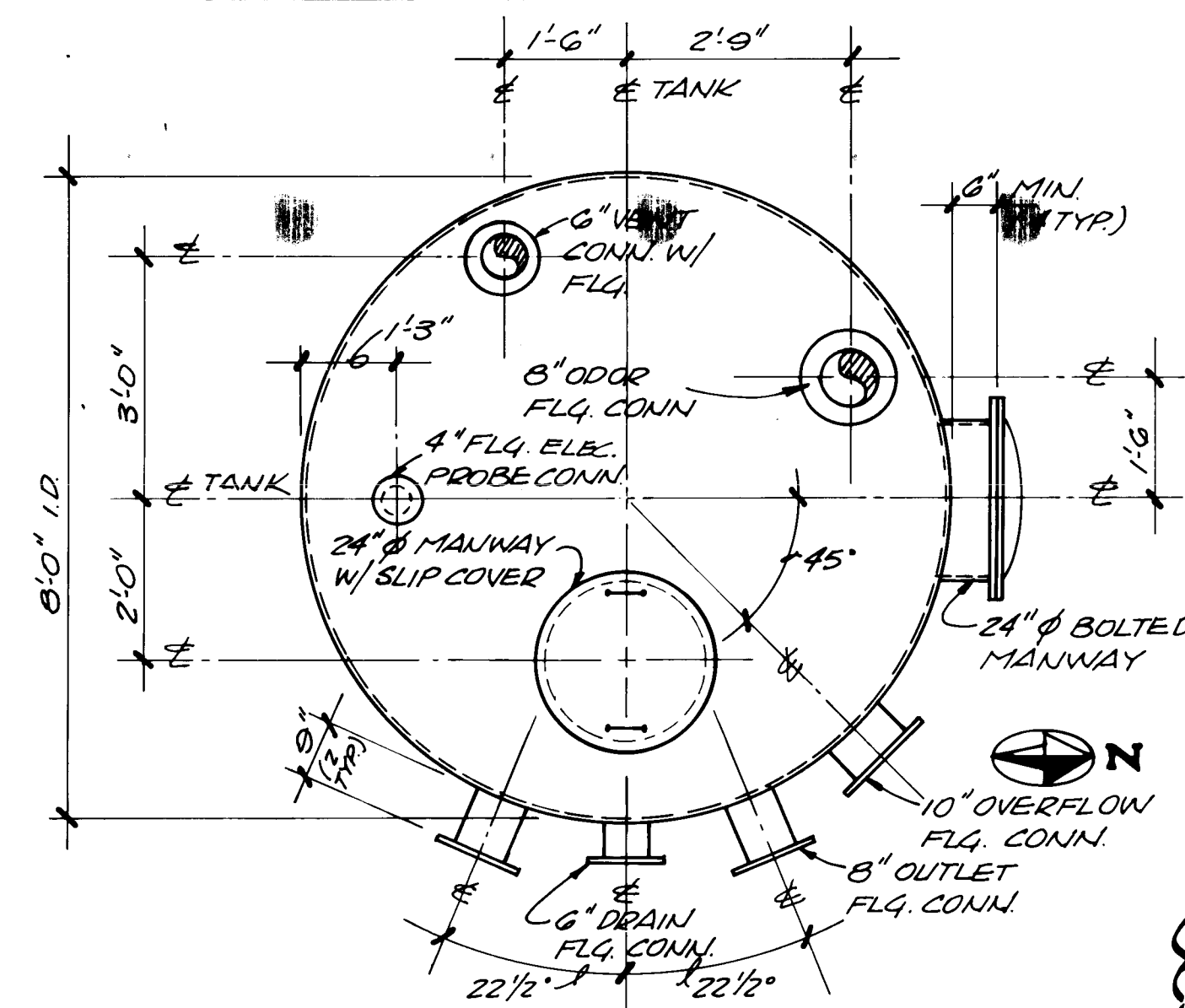
M-C NO. 832221

**M-09** 52 of 112

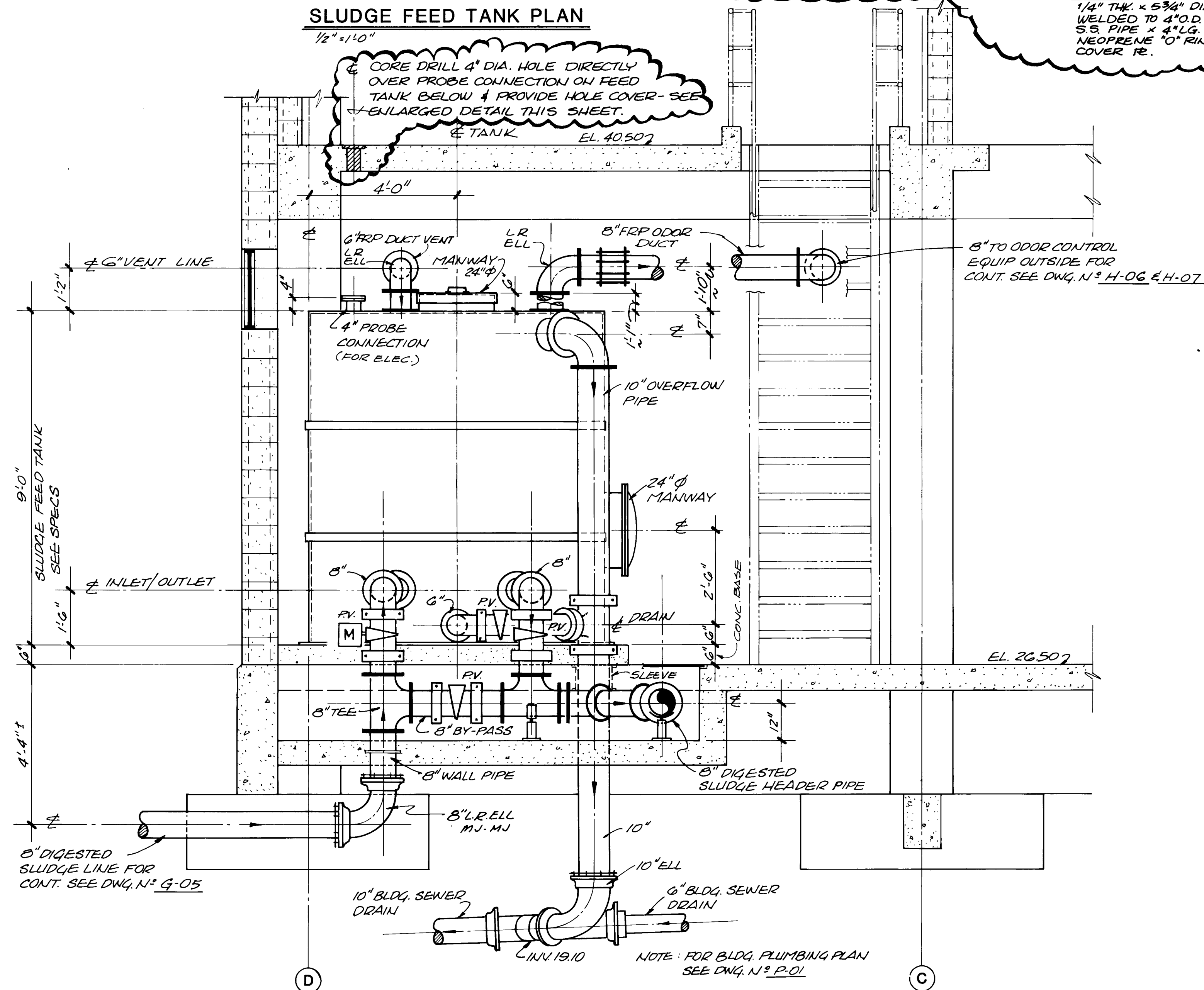
SC NO.



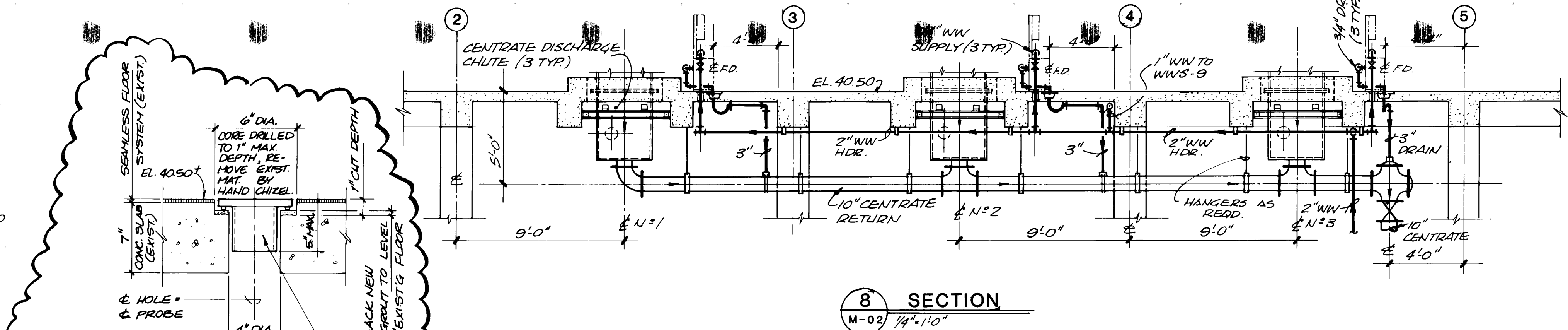
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|     |      |  |           |  | DESIGNED <u>LMP G'S</u> |
|     |      |  |           |  | DRAWN <u>SPINELLO</u>   |
|     |      |  |           |  | CHECKED <u>LMP</u>      |
|     |      |  |           |  | APPROVED _____          |
|     |      |  |           |  | APPROVED _____          |
|     |      |  |           |  | DATE _____              |
| NO. | DATE |  | REVISIONS |  | APPROVED                |



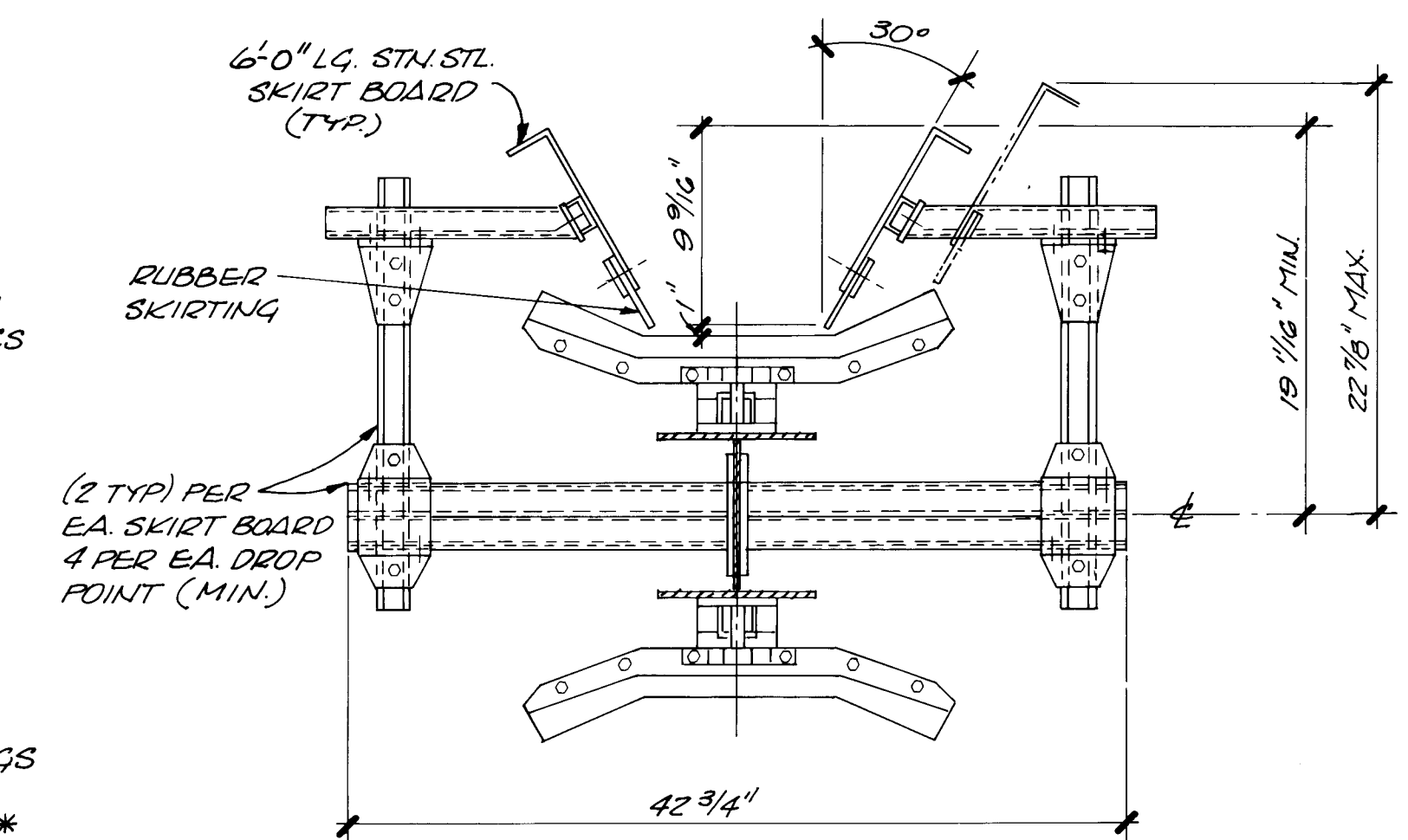
### SLUDGE FEED TANK PLAN



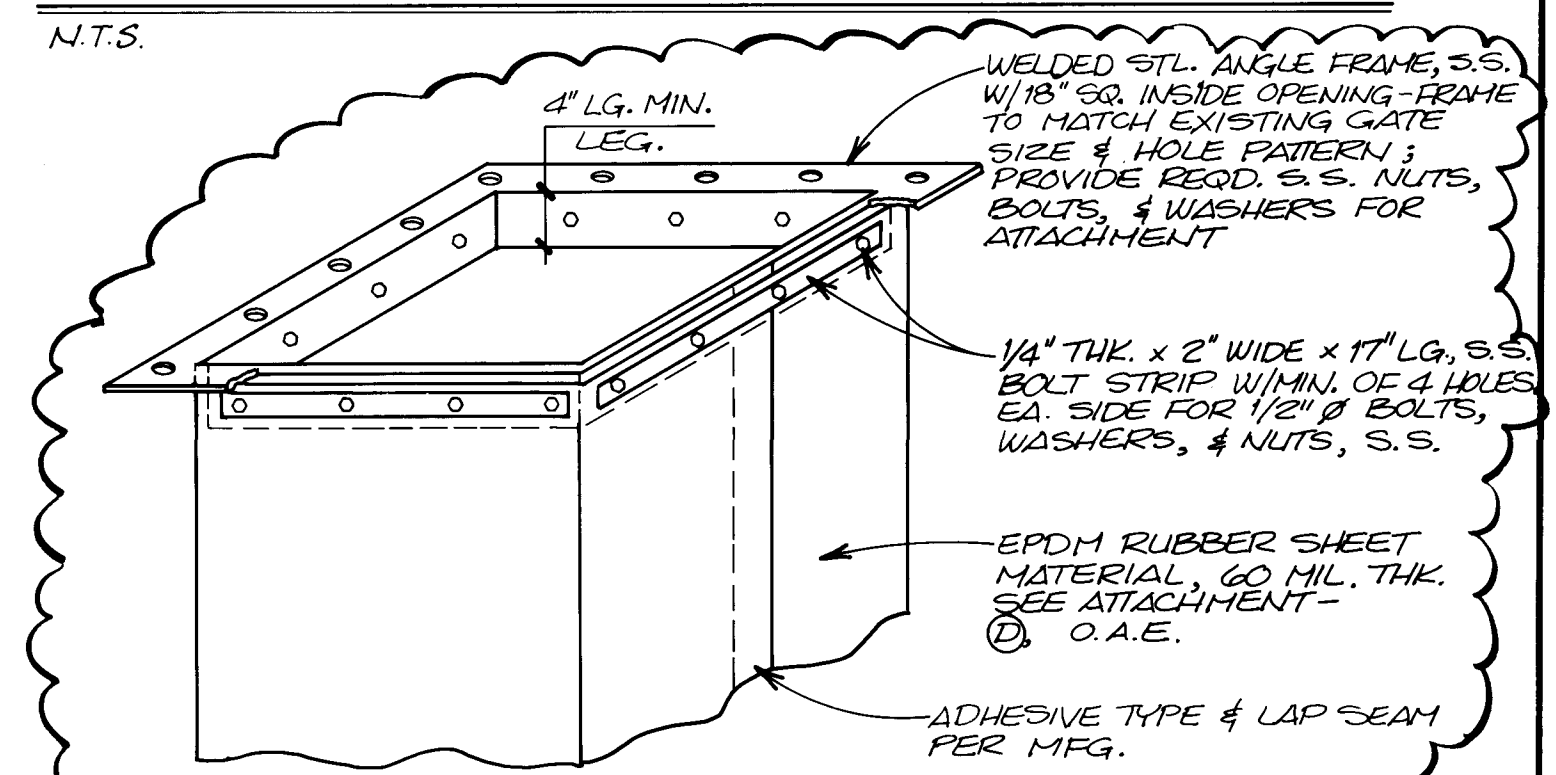
7 SECTION



8 SECTION



TYPICAL SKIRT BOARD CROSS SECTION DETAIL



NOTE:  
TWO (2) COMPLETE SOCK UNITS REQD. & INSTALLED.

TOP OF SOCK - DETAIL

| RECORD DRAWING                                                                                                                                                                                                                                        |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                    | DRAFTED BY:<br>MCA |
| <p>THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.</p> |                    |

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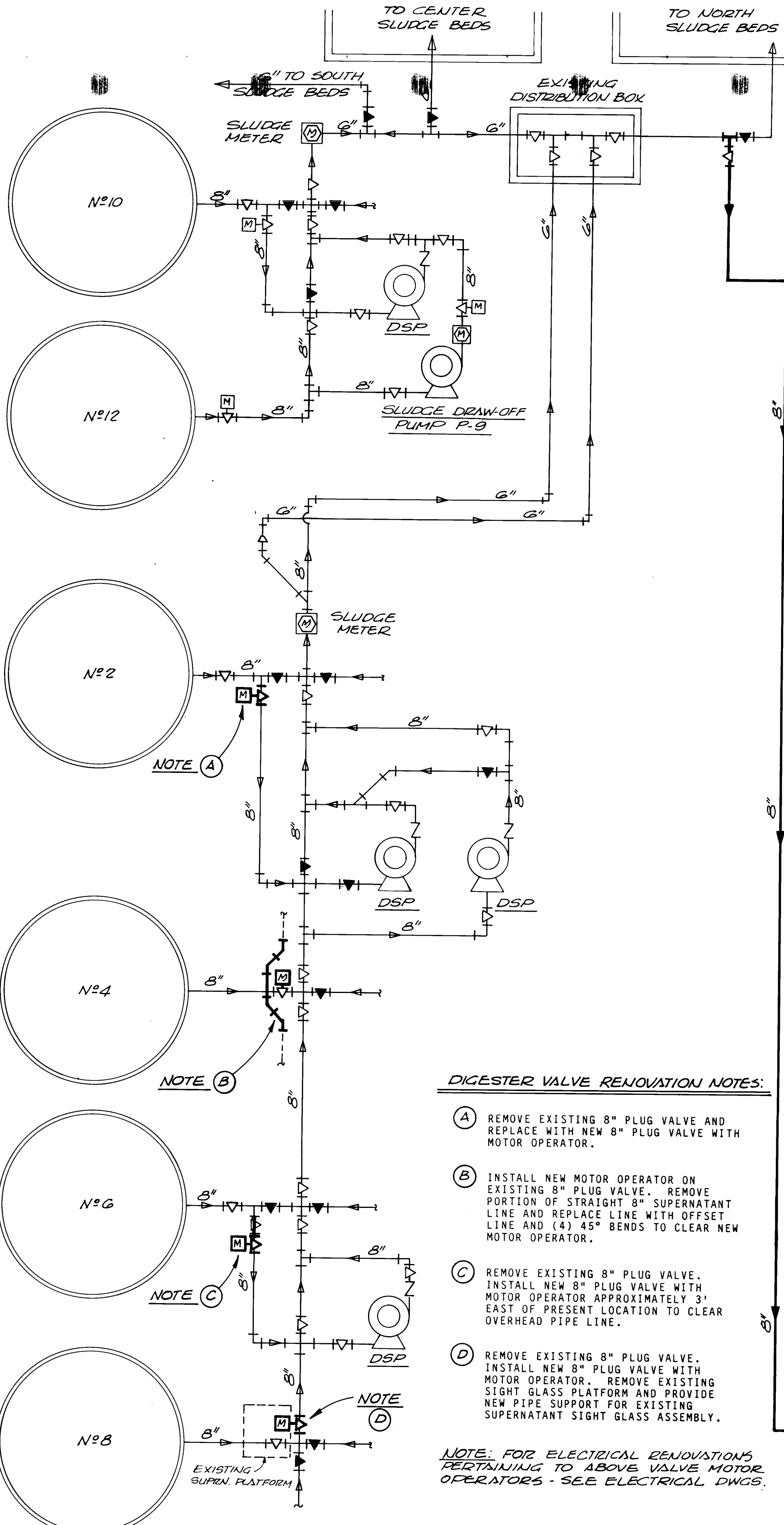
DESIGNED LMR G.S  
DRAWN SPINELLO  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



EXISTING SECONDARY DIGESTERS

EXISTING SECONDARY DIGESTERS

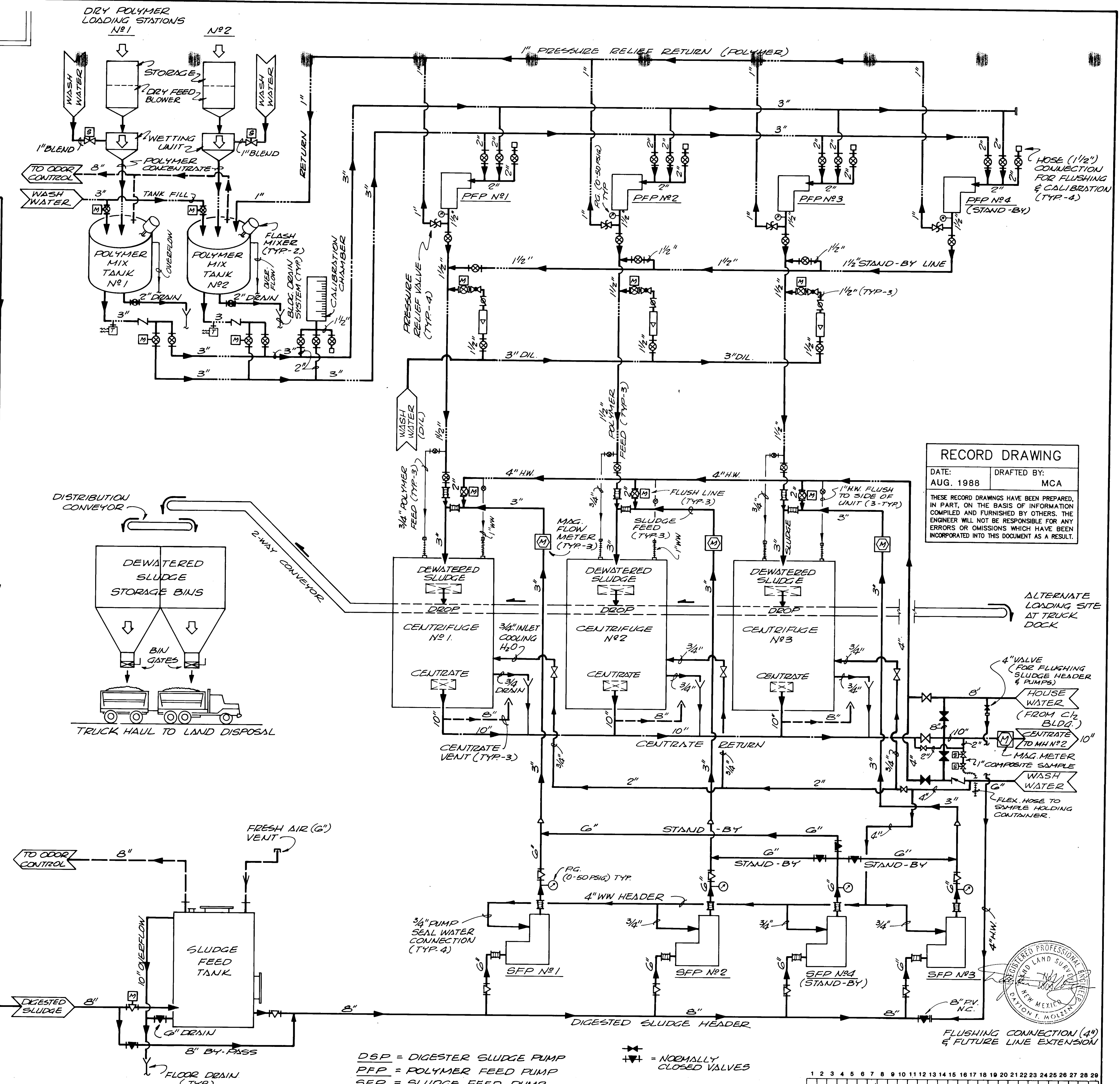
| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |



DESIGNED LMR G.S.  
DRAWN SPINELLO  
CHECKED LMR  
APPROVED  
DATE

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

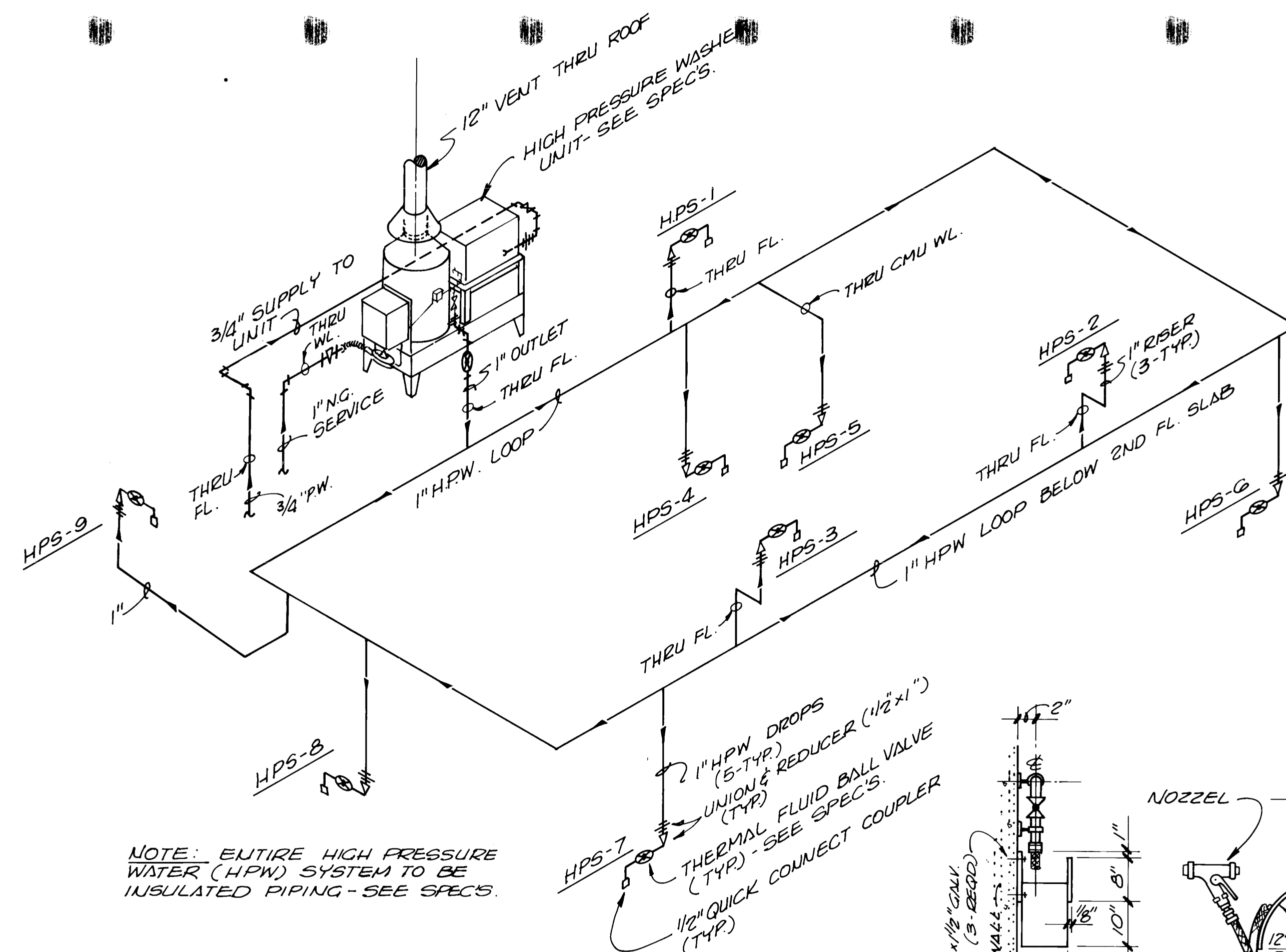
**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
PROCESS EQUIPMENT SCHEMATIC AND DIGESTER  
VALVE ROOM - VALVE RENOVATIONS

M-C NO. 832221  
**M-11**  
54 of 112  
SC NO.



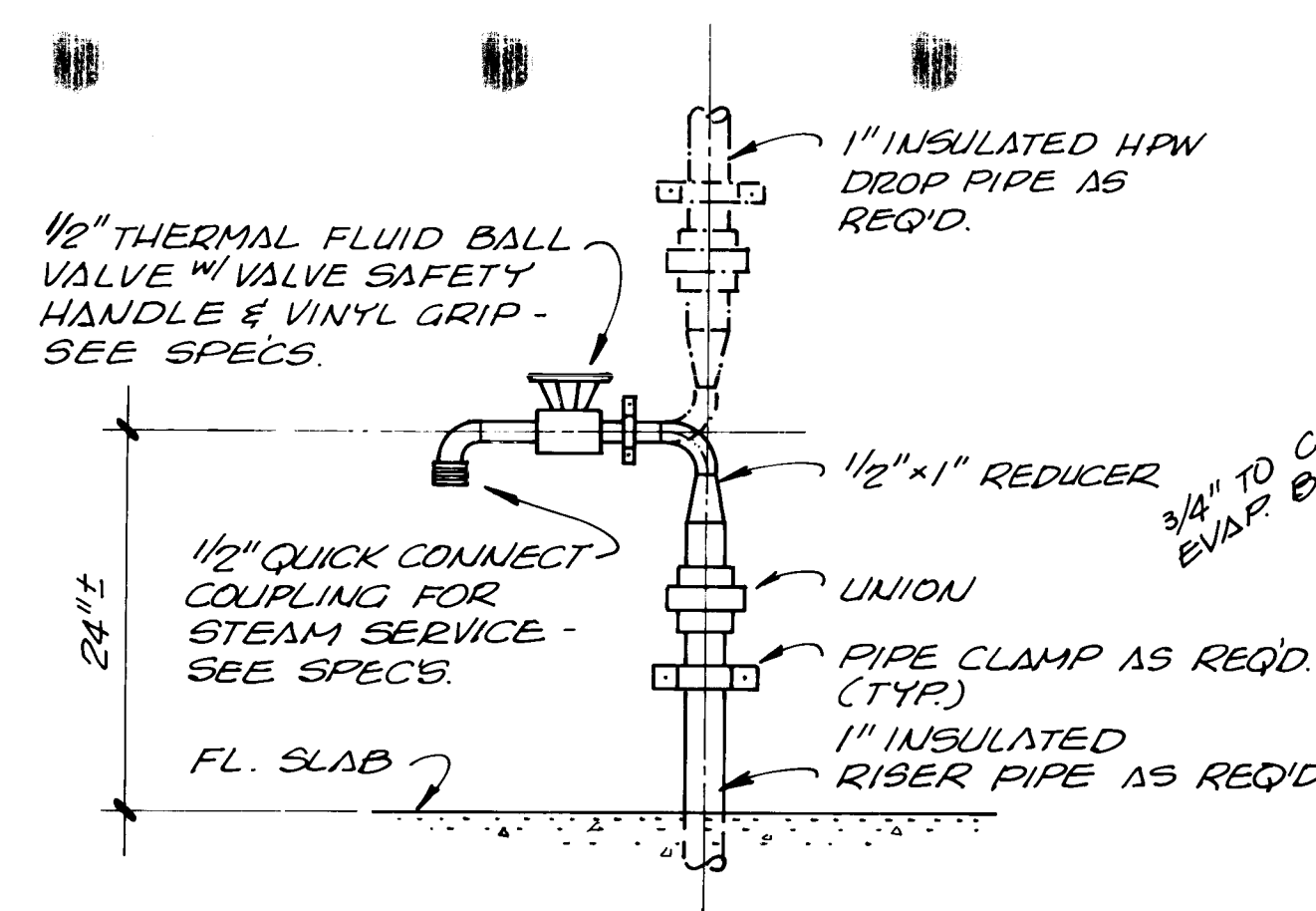






## HIGH PRESSURE HOT WATER SYSTEM – SCHEMATIC

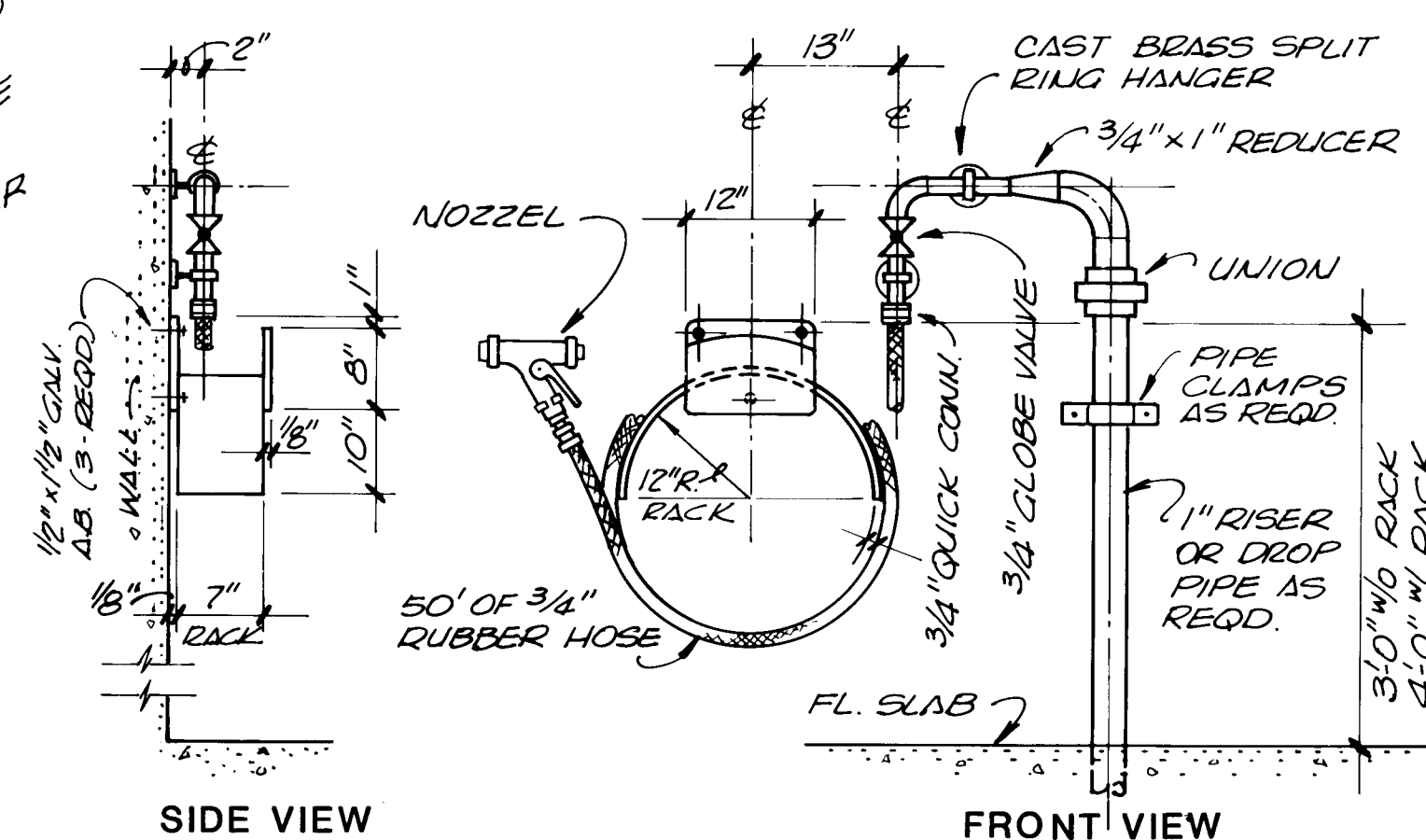
N.T.S



## HIGH PRESSURE

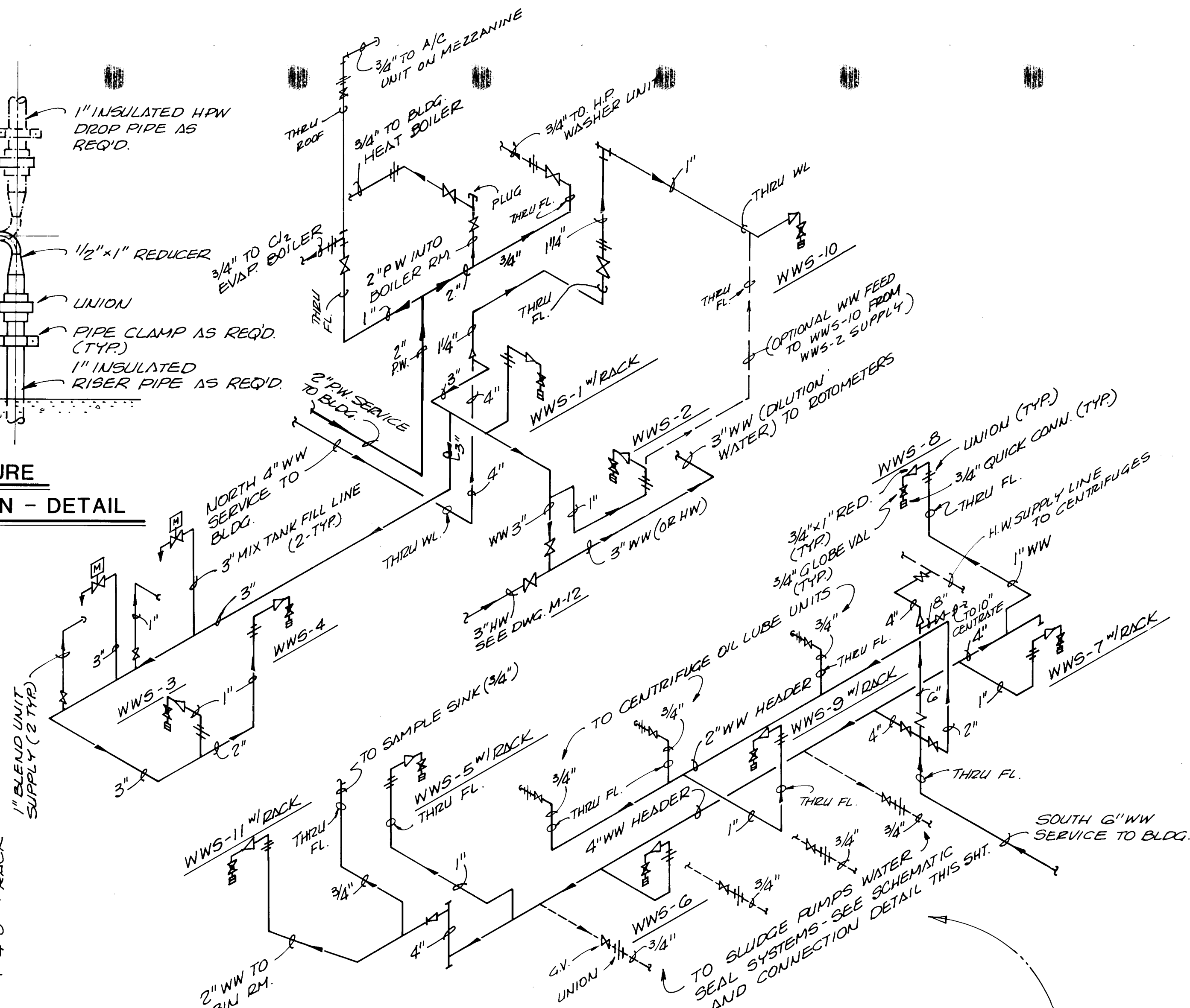
### HOT WATER STATION - DETAIL

N.T.S



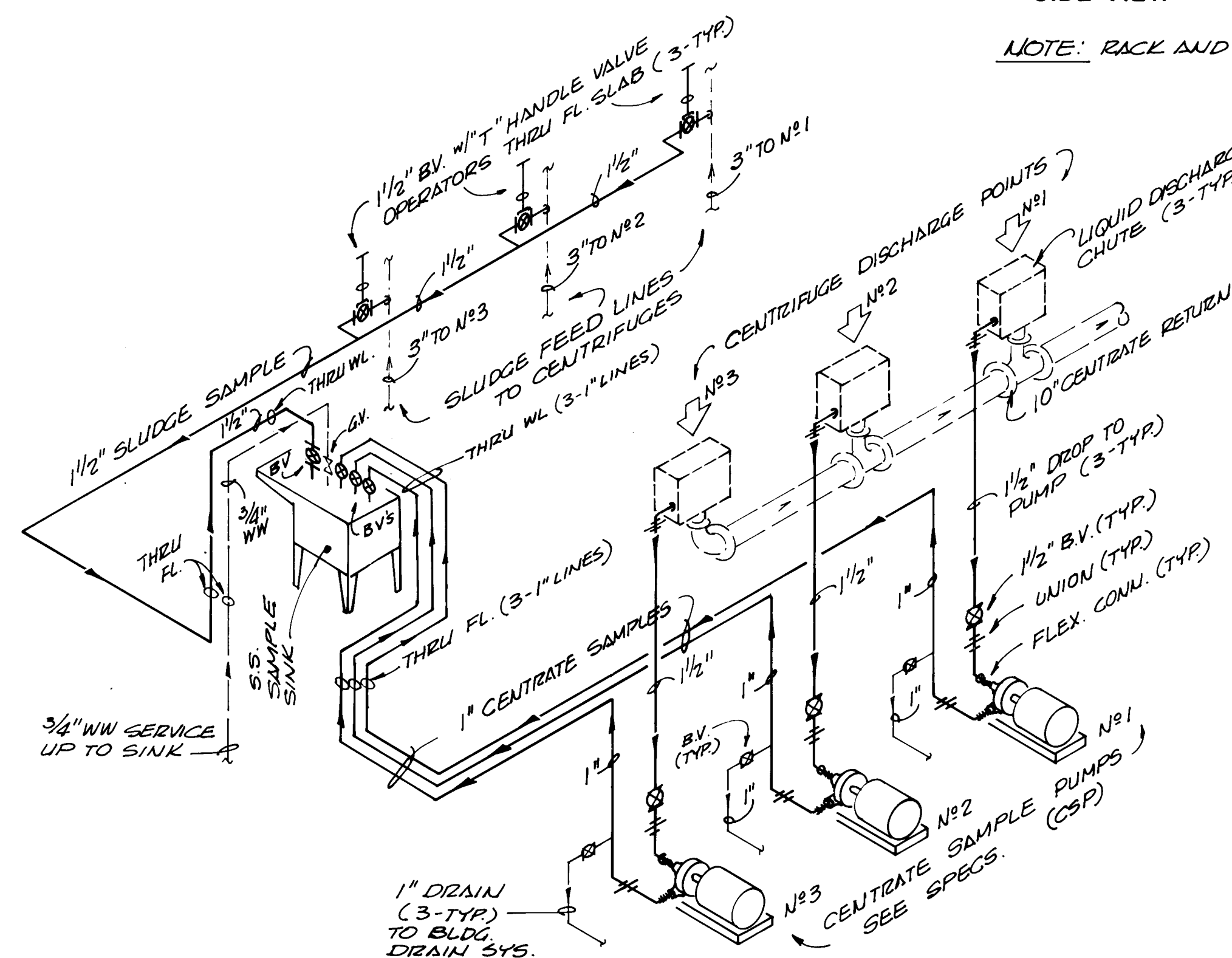
## WASHWATER STATION DETAIL

NTS



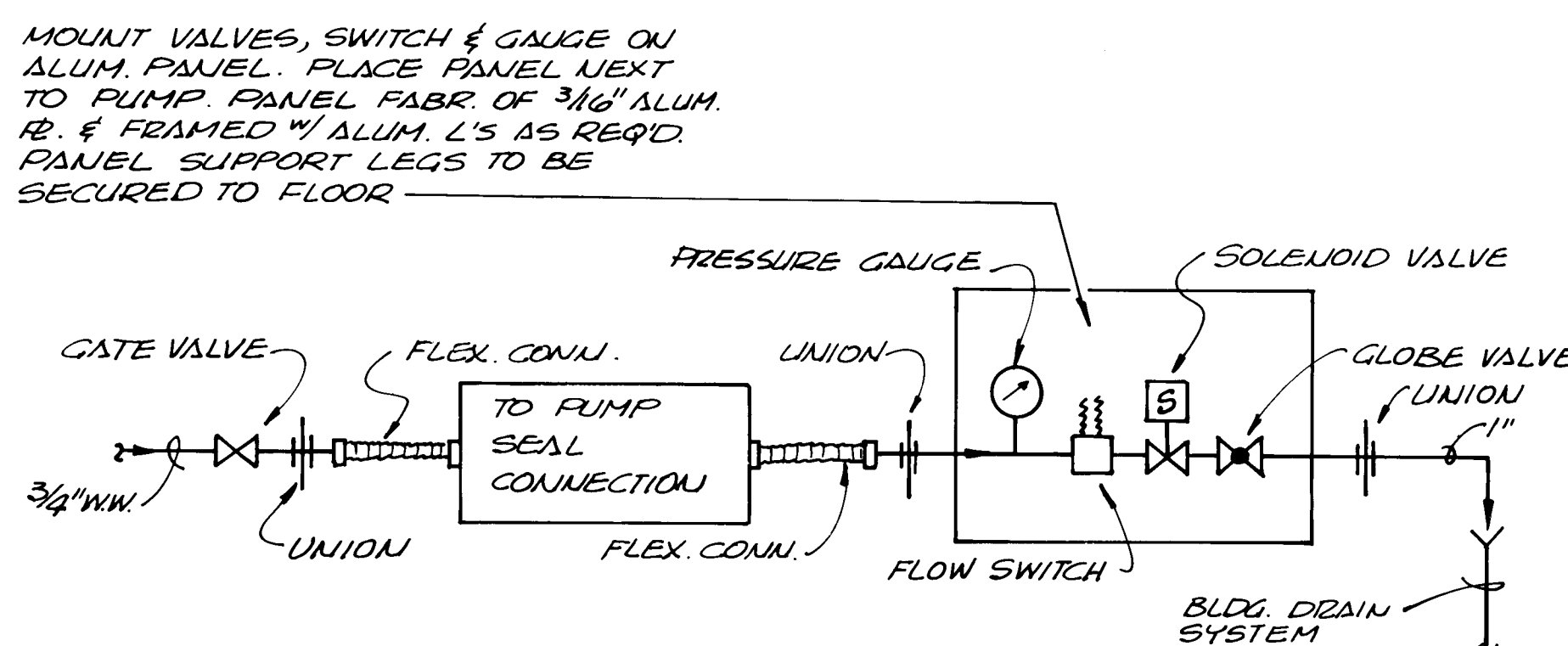
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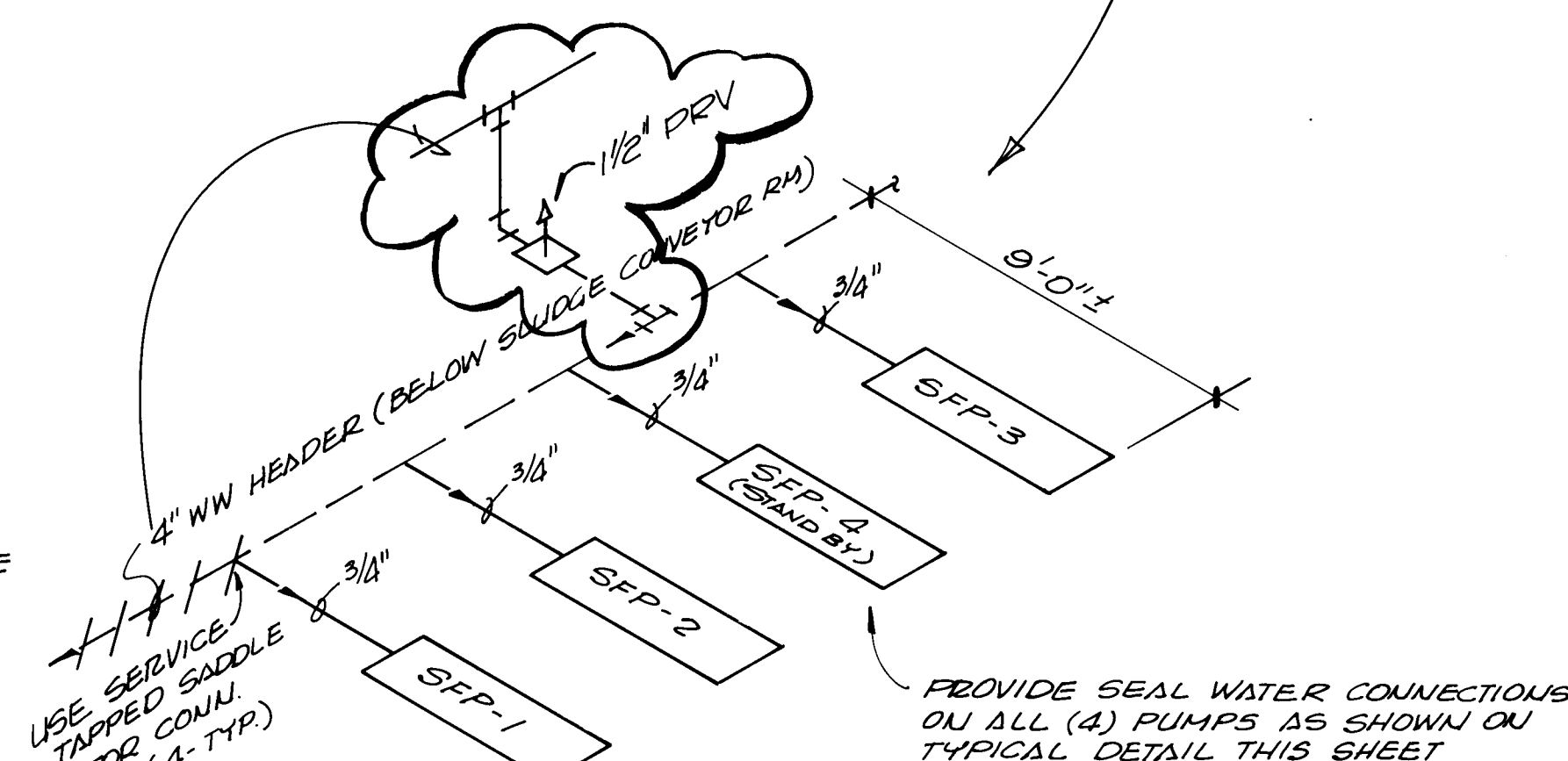
## SAMPLE LINES – SCHEMATIC

N.T.S



### TYPICAL SEALWATER CONNECTION - DETAIL

N.T.:



### PUMP SEALWATER SYSTEM – SCHEMATIC

 $\Delta/T$ [illegible]

|     |      |           |          |
|-----|------|-----------|----------|
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |
| NO. | DATE | REVISIONS | APPROVED |

DESIGNED LG G.S.  
DRAWN SPINELLO  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

NONE

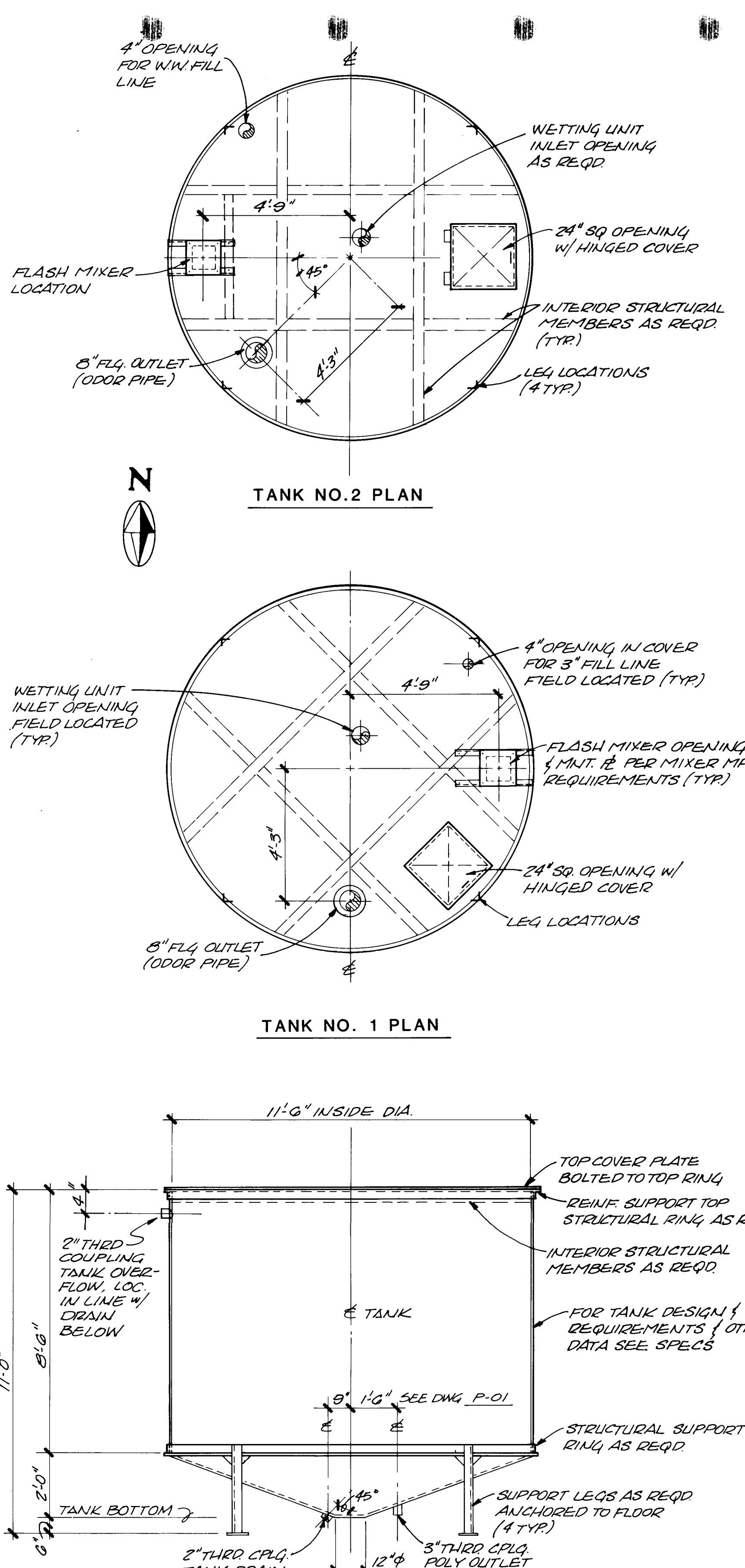
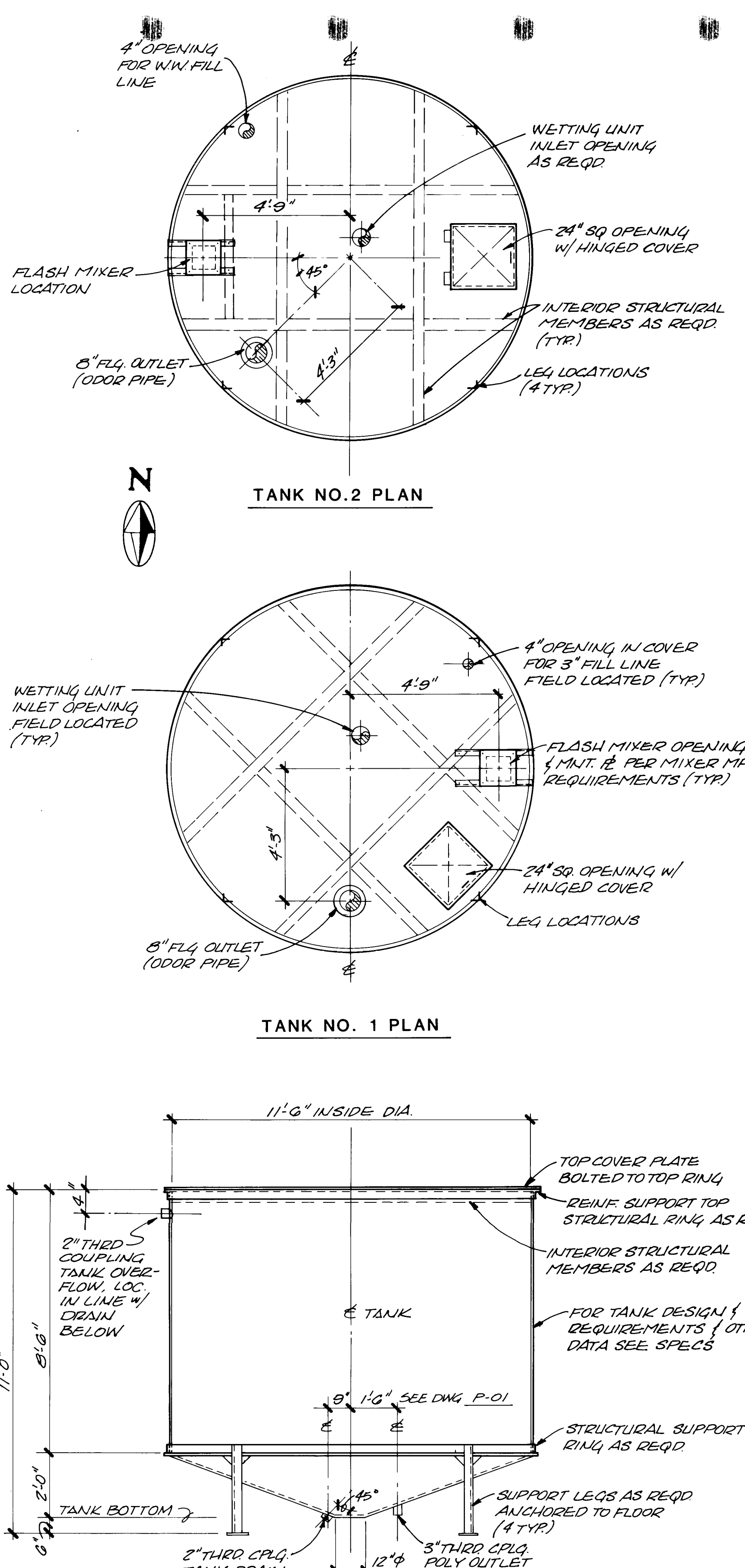
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

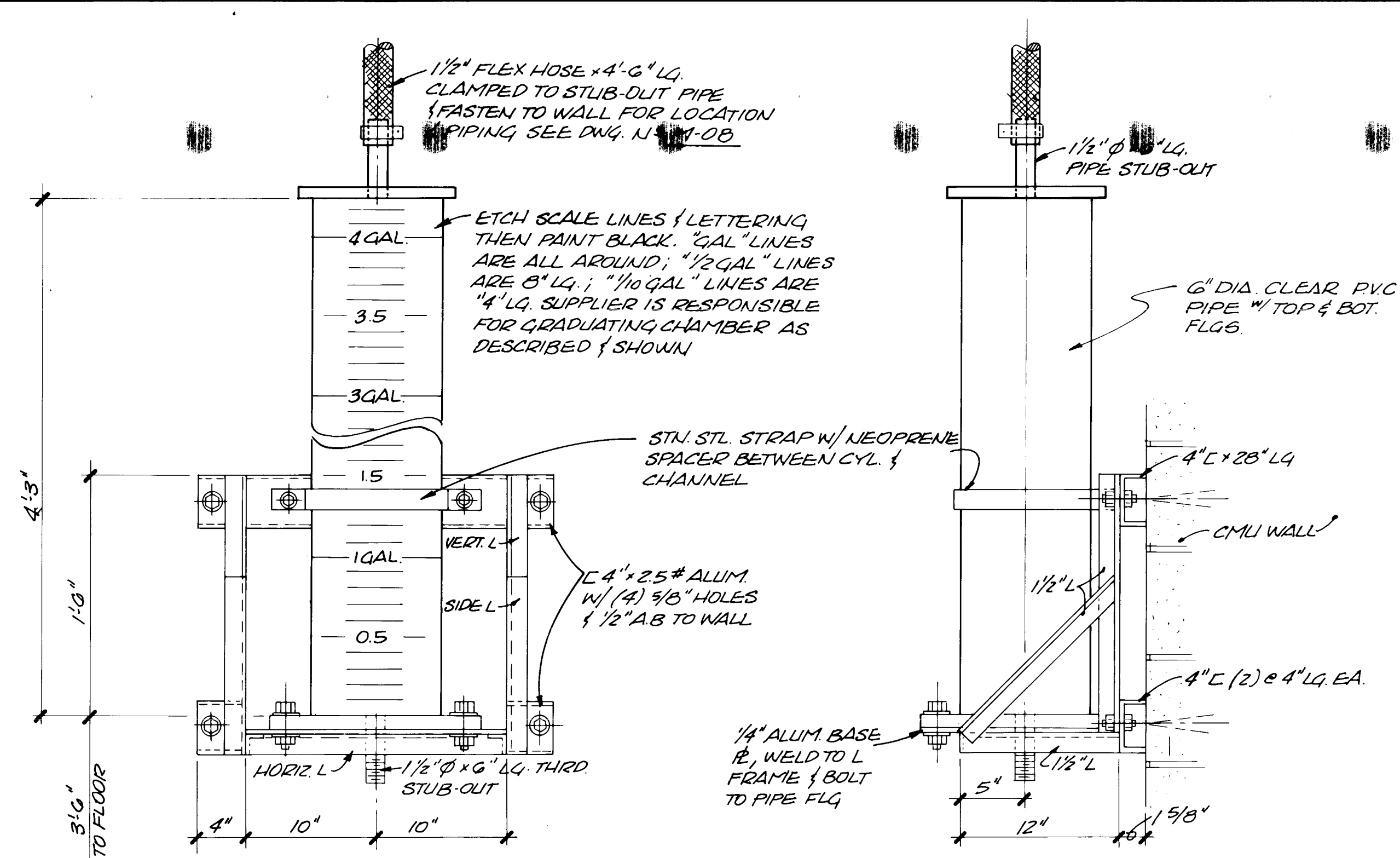
**INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
PROCESS EQUIPMENT -SCHEMATICS AND DETAILS**

|                |           |
|----------------|-----------|
| M-C NO. 832221 |           |
| M-13           | 56 OF 112 |
| SC NO.         |           |

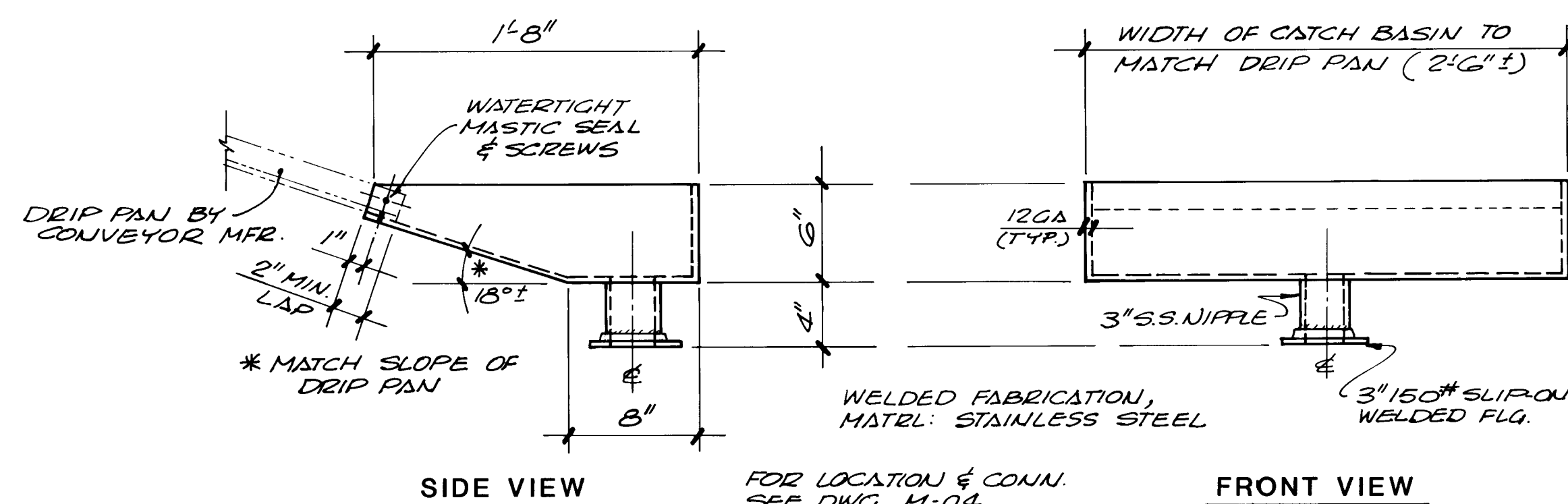




POLYMER MIXING TANK DETAILS (2 REQD.)  
N.T.S.



### PUMP CALIBRATION CHAMBER DETAIL



DRIP PAN CATCH BASIN DETAIL

| RECORD DRAWING                                                                                                                                                                                                                                        |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                    | DRAFTED BY:<br>MCA |
| <p>THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.</p> |                    |

[illegible][illegible]

DESIGNED LMR G'S  
DRAWN DA G3  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B- , CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
PROCESS EQUIPMENT -POLYMER MIX TANK AND  
CALIBRATION CHAMBER AND MISC. DETAILS

|                |           |
|----------------|-----------|
| M-C NO. 832221 |           |
| M-14           | 57 of 112 |
| SC NO.         |           |



[illegible]

DESIGNED SPINELLO  
DRAWN DA G'S  
CHECKED LMR  
APPROVED \_\_\_\_\_  
APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_



## MOLZEN-CORBIN

**STANLEY CONSULTANTS**

## A JOINT VENTURE

NONE

### GRAPHIC SCALE



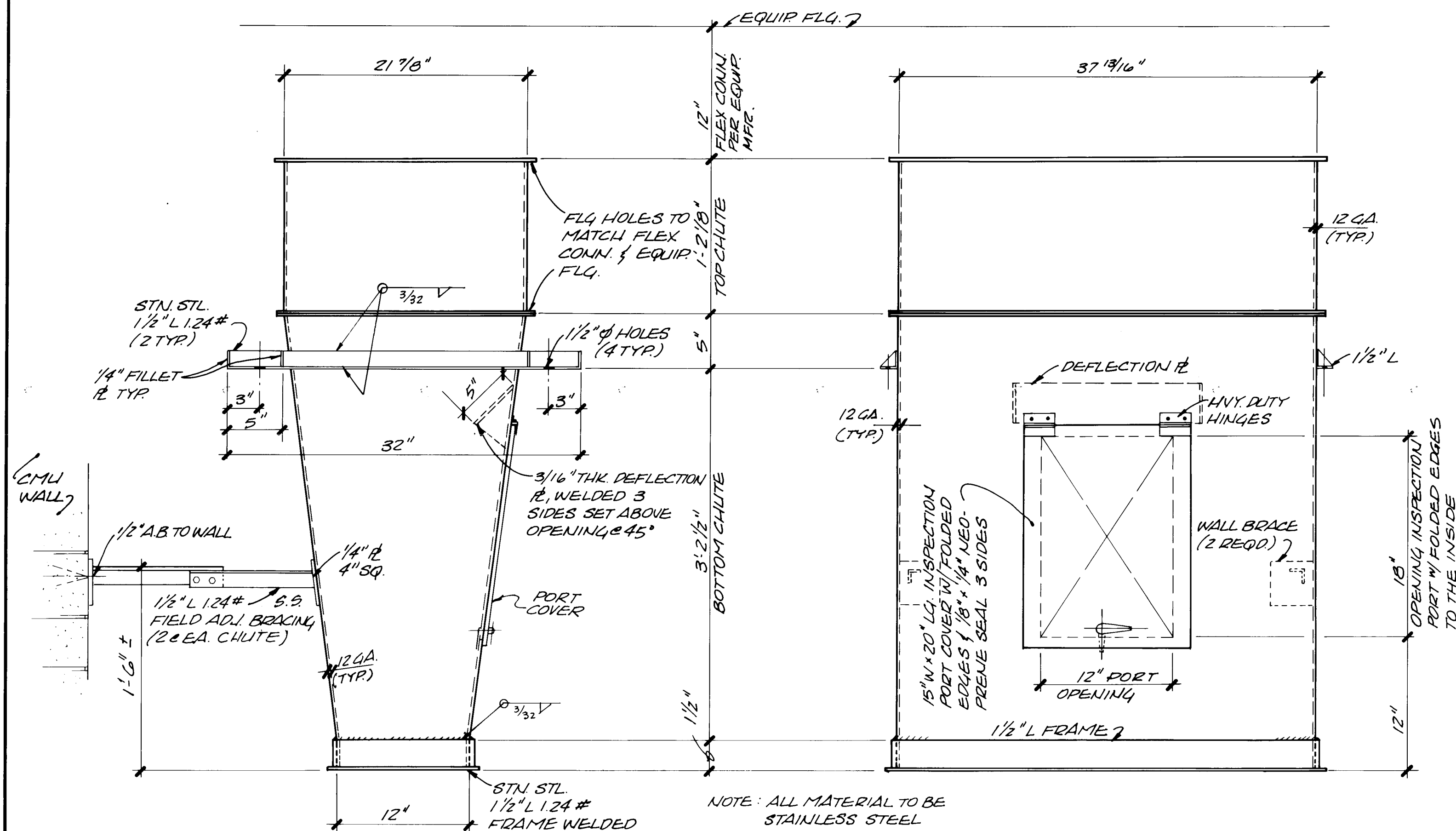
CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

|                                                                                                                                                                 |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>INTERIM SLUDGE DEWATERING FACILITIES<br/> DEWATERING BUILDING<br/> PROCESS EQUIPMENT -CENTRIFUGE SOLIDS AND<br/> LIQUIDS CHUTE AND METER MANHOLE DETAILS</p> |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

M-C NO. 832221

M-15 58 of 112

SC NO.

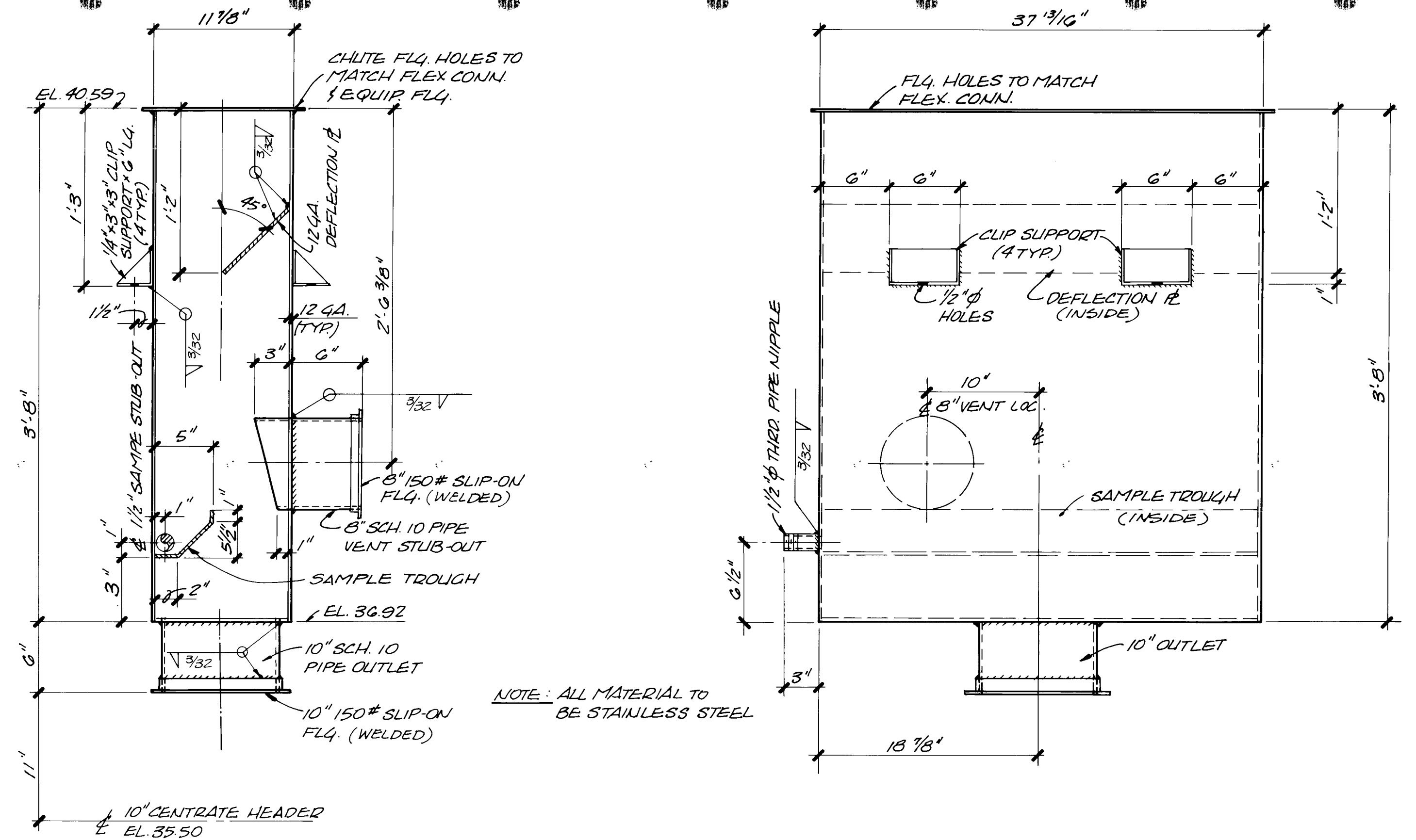


**SIDE VIEW**

FRONT VIEW

SOLIDS DISCHARGE CHUTE DETAIL (3 REQD.)

N.T.S.

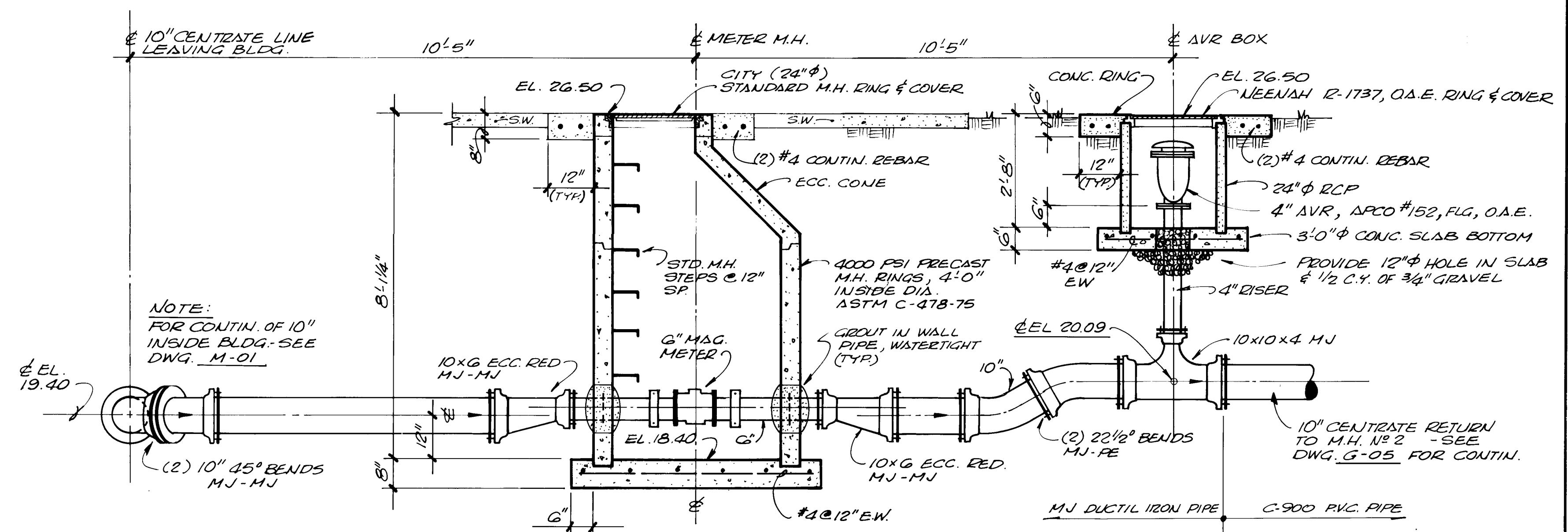


**SIDE VIEW**

BACK VIEW

CENTRATE DISCHARGE CHUTE DETAIL (3 REQD.)

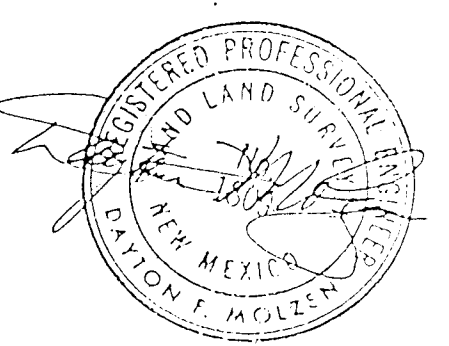
N.T.S.



ILLUSTRATIVE SECTION LOOKING NORTH

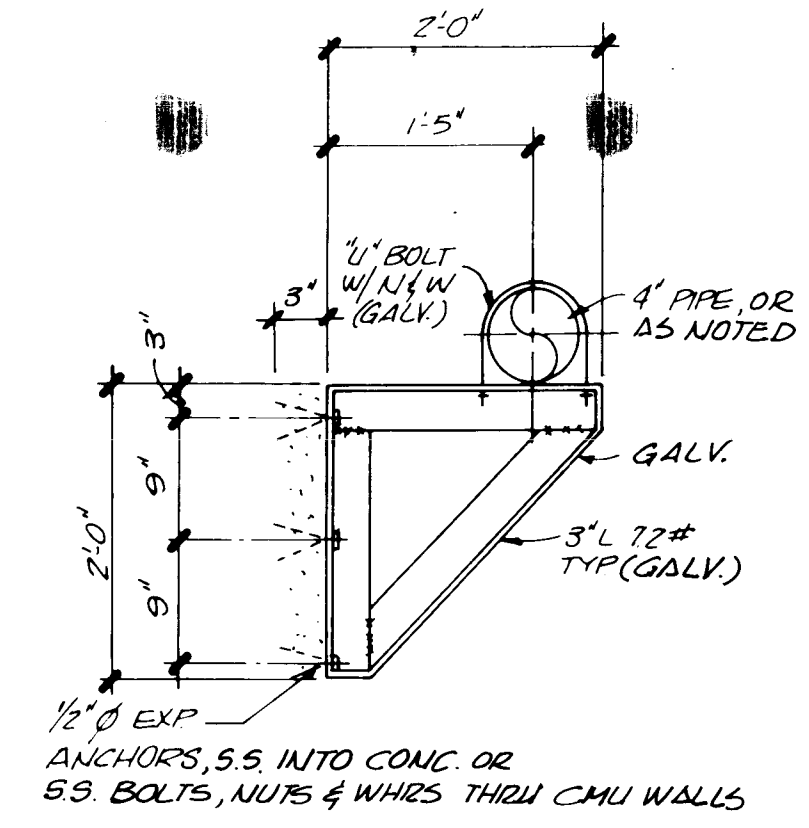
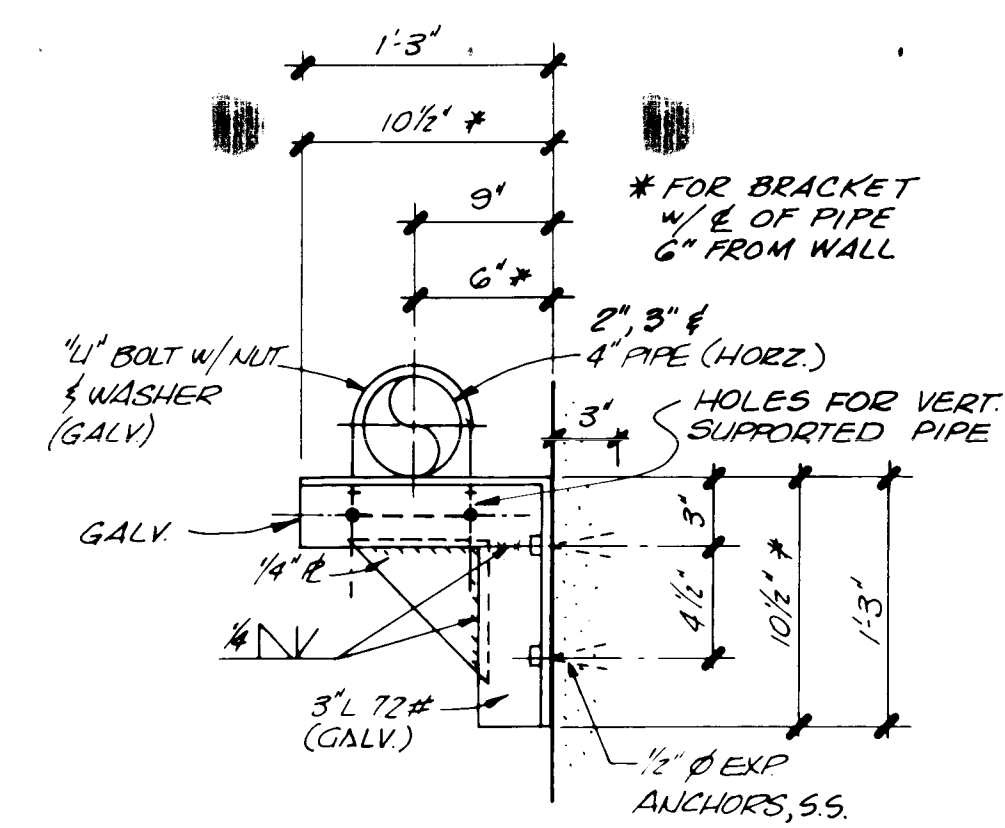
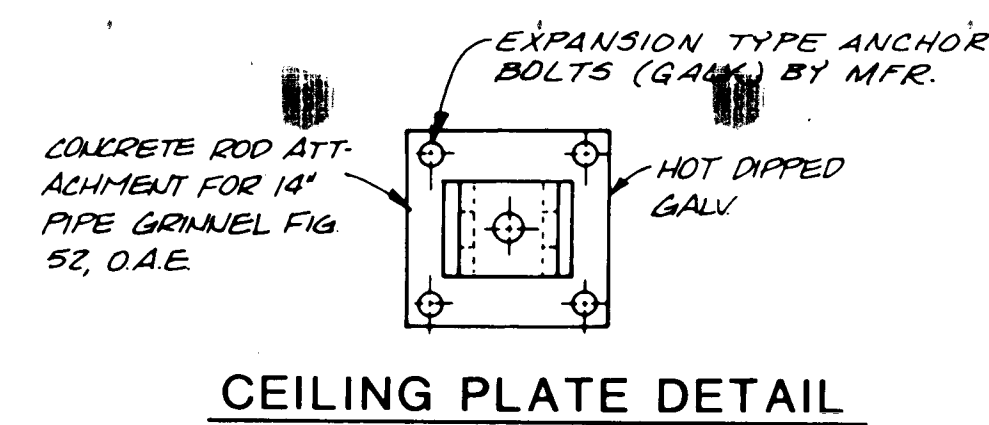
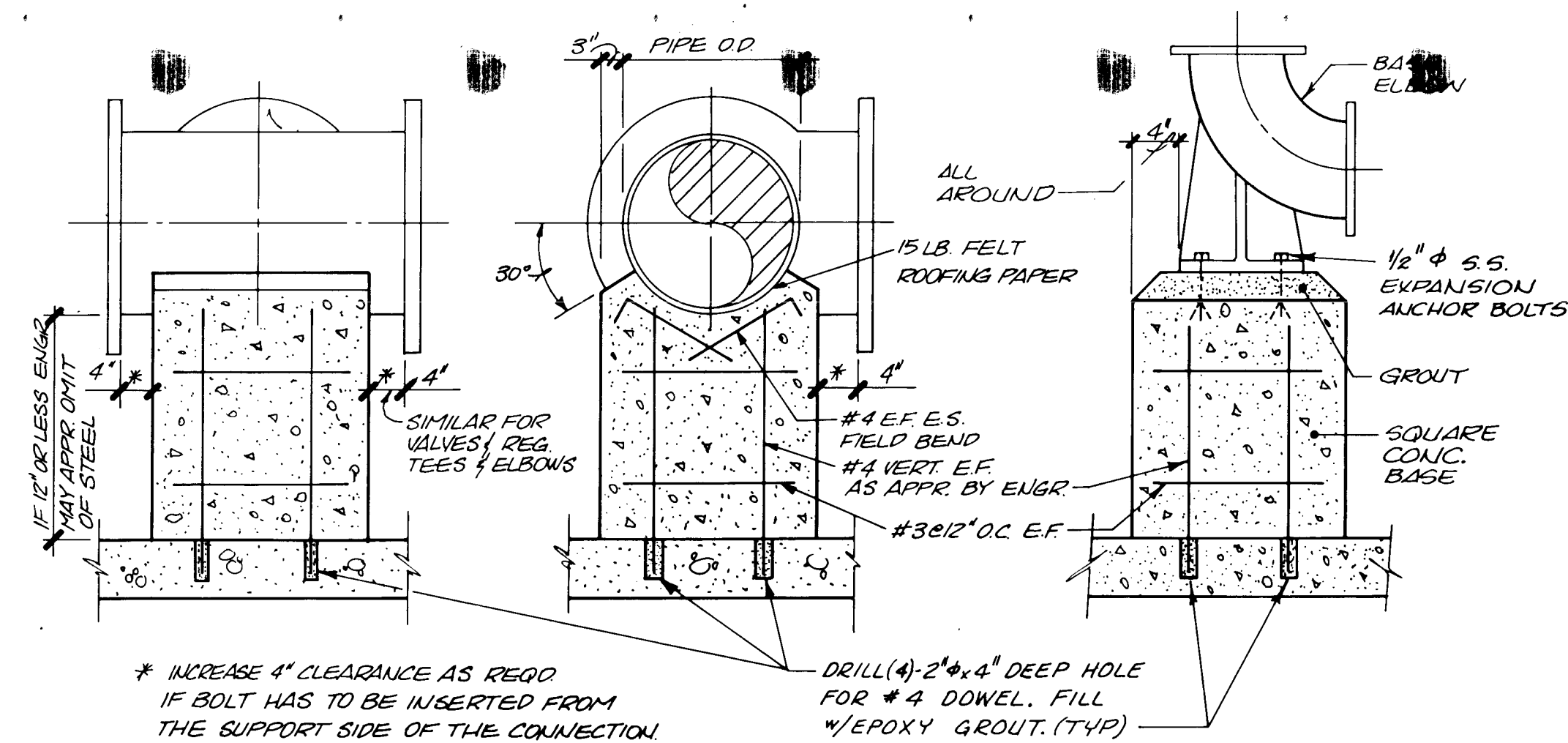
CENTRATE RETURN METER MANHOLE - DETAIL

N.T.S.

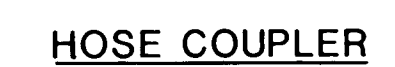
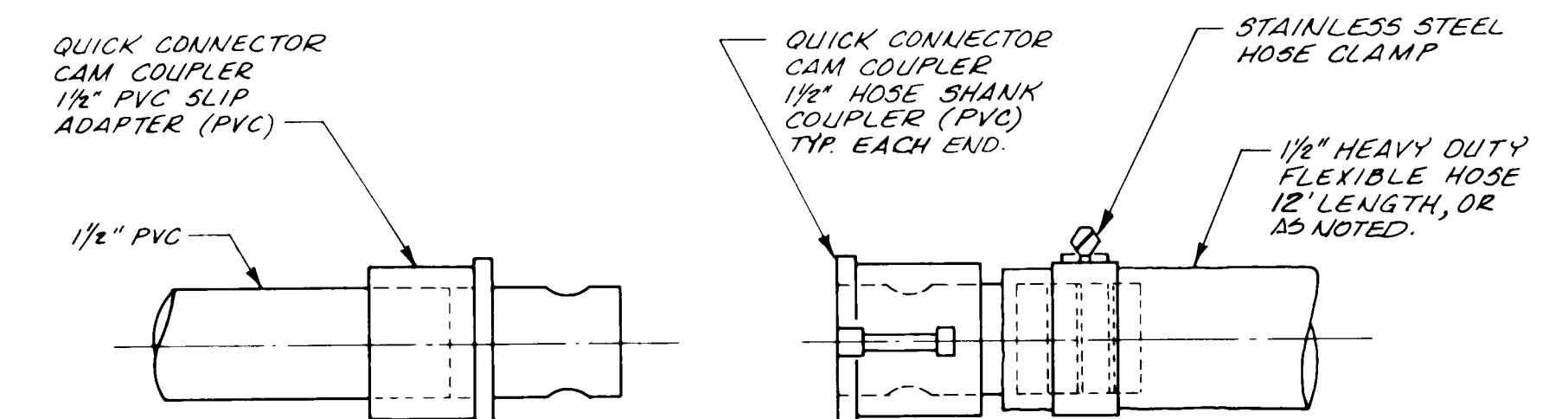
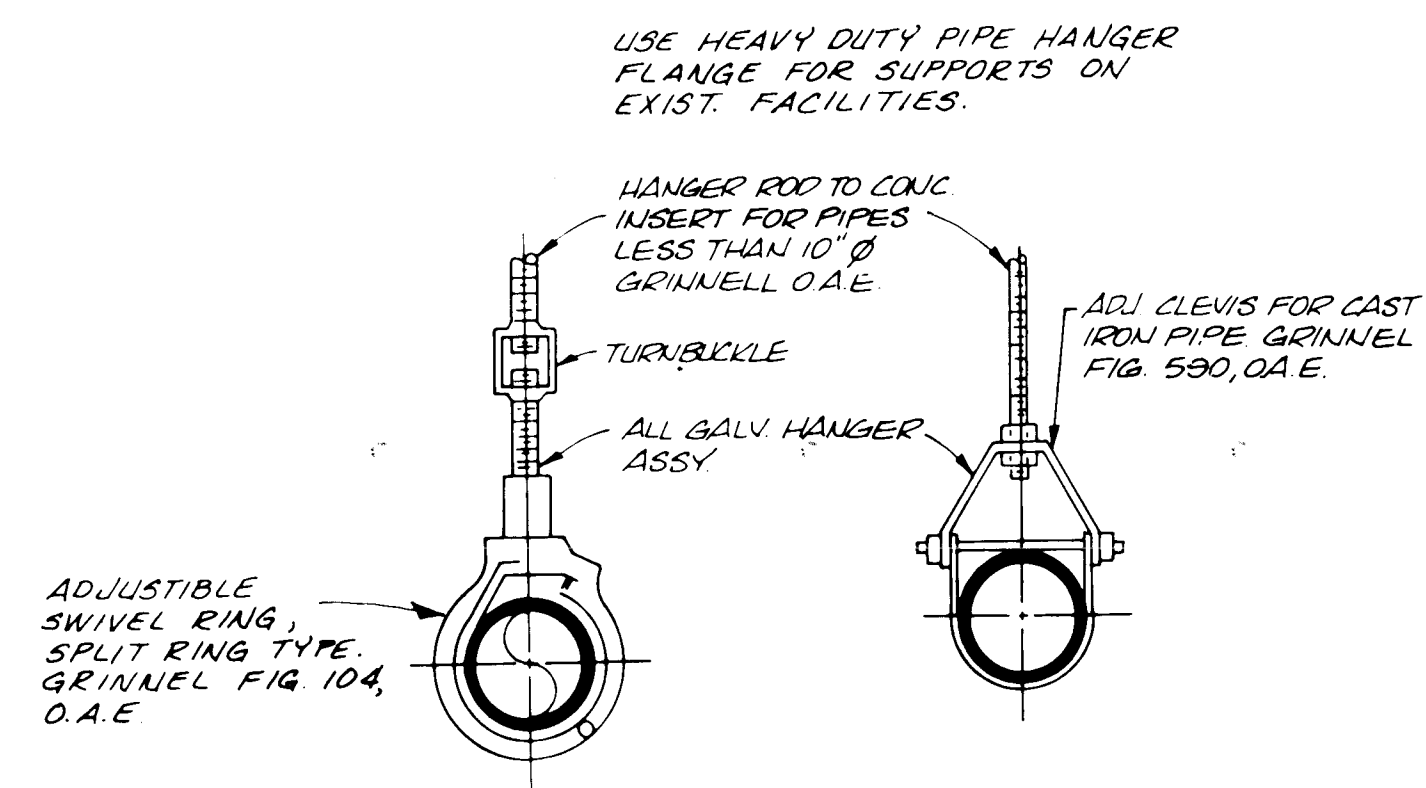
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|                                                                                                                                                                                                                                                     |                    |
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| RECORD DRAWING                                                                                                                                                                                                                                      |                    |
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                  | DRAFTED BY:<br>MCA |
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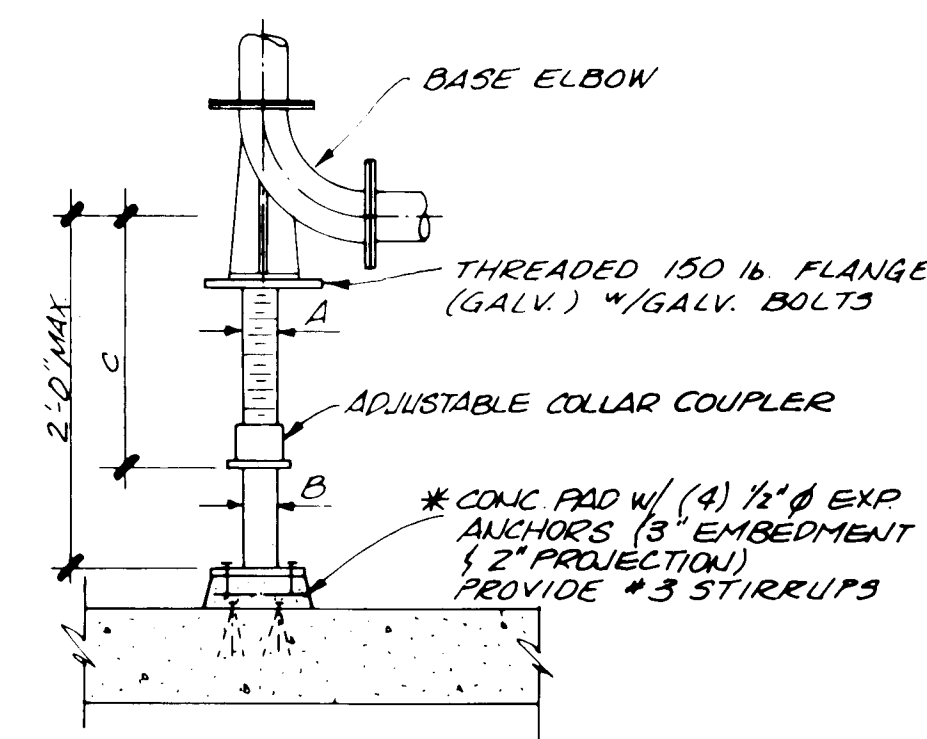
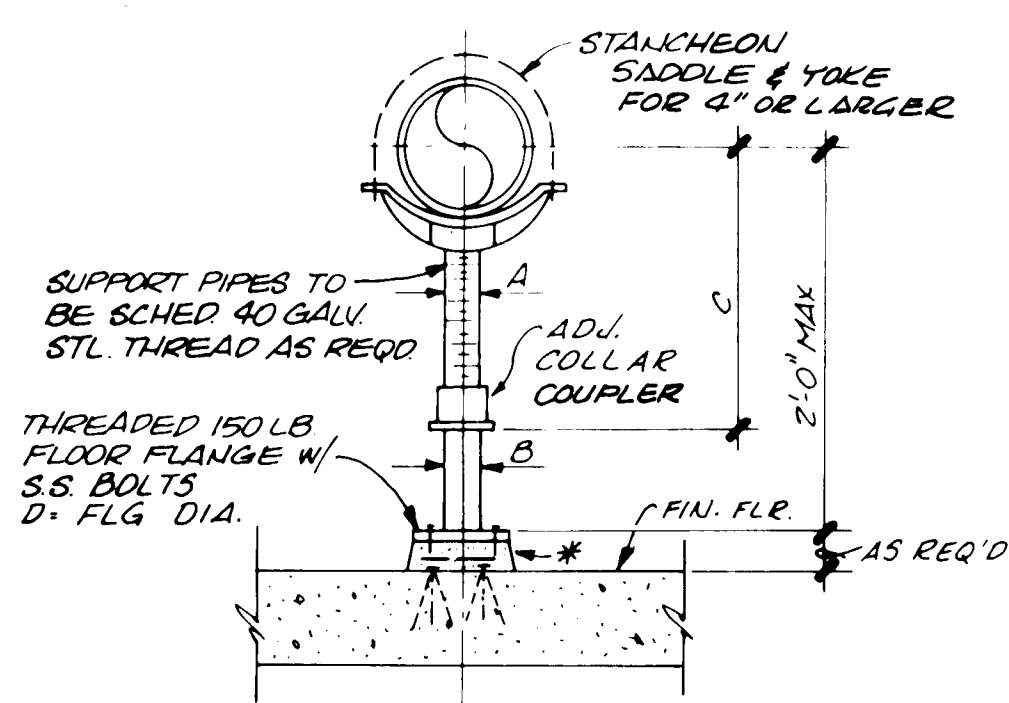
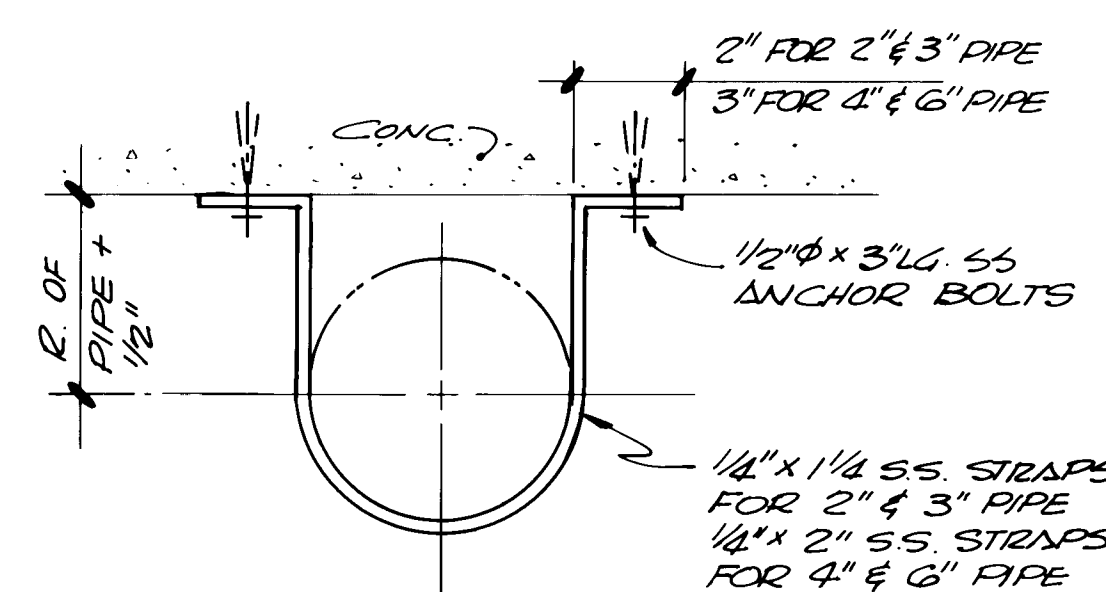




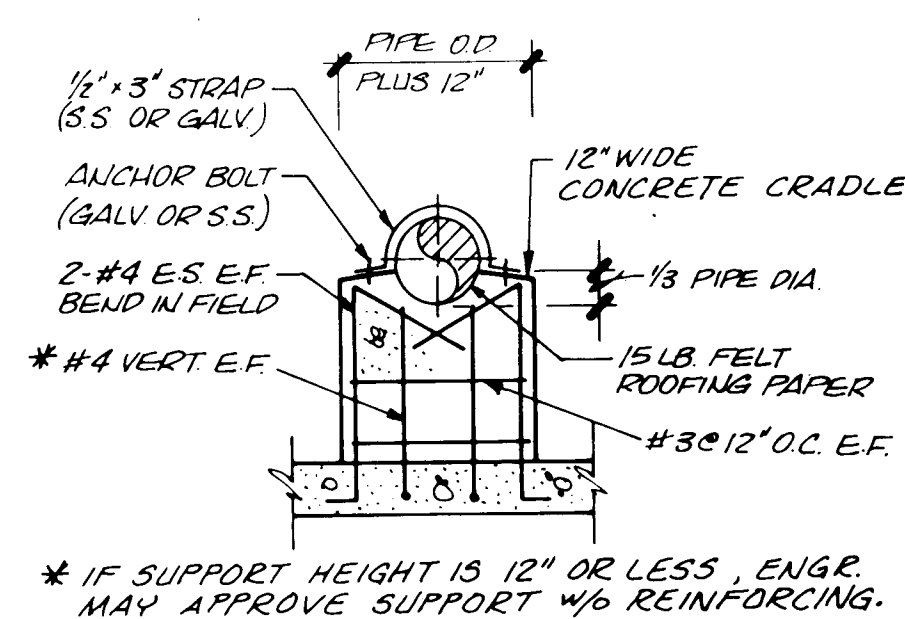
### WALL BRACKET DETAILS



DETAIL A - QUICK LOCK CONNECTOR  
NTS



| NOM.<br>PIPE $\phi$ | $\Delta$<br>$\phi$ | B<br>$\phi$ | D<br>$\phi$ | C<br>MIN. | C<br>MAX. |
|---------------------|--------------------|-------------|-------------|-----------|-----------|
| UP TO<br>3 1/2"     | 1 1/2"             | 2 1/2"      | 9"          | 8"        | 13"       |
| 4"                  | 2 1/2"             | 3"          | 9"          | 9 1/4"    | 14"       |
| 6"                  | 2 1/2"             | 3"          | 9"          | 10 1/2"   | 15"       |
| 8"                  | 2 1/2"             | 3"          | 9"          | 11 3/4"   | 16"       |
| 10"                 | 2 1/2"             | 3"          | 9"          | 13 1/2"   | 18"       |



|     |      |           |          |                    |
|-----|------|-----------|----------|--------------------|
|     |      |           |          | DESIGNED           |
|     |      |           |          | DRAWN <u>DA GS</u> |
|     |      |           |          | CHECKED            |
|     |      |           |          | APPROVED           |
|     |      |           |          | APPROVED           |
| NO. | DATE | REVISIONS | APPROVED | DATE               |



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

NONE

GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
DEWATERING BUILDING  
PROCESS EQUIPMENT -MISC. DETAILS

|                |           |
|----------------|-----------|
| M-C NO. 832221 |           |
| M-16           | 59 OF 112 |
| SC NO.         |           |



|                                          |                                       |  |                                       |                           |                   |                           |
|------------------------------------------|---------------------------------------|--|---------------------------------------|---------------------------|-------------------|---------------------------|
| PIPE                                     | MATERIAL, ASTM                        |  | A106 B                                |                           |                   |                           |
|                                          | MINIMUM PIPE SIZE TO BE USED          |  | 1"                                    |                           |                   |                           |
|                                          | PIPE SIZES (INCLUSIVE)                |  | WALL THICKNESS                        |                           |                   |                           |
|                                          | 1" - 8"                               |  | SCH. 80                               |                           |                   |                           |
| JOINTS                                   | MINIMUM WALL THICKNESS                |  | SCH. 100                              |                           |                   |                           |
|                                          | 10" - 24"                             |  |                                       |                           |                   |                           |
|                                          |                                       |  |                                       |                           |                   |                           |
|                                          |                                       |  |                                       |                           |                   |                           |
| FLANGES                                  | TYPE OF JOINT                         |  | SCREWED                               | SOCKET WELDED             | BUTT WELDED       | FLANGED                   |
|                                          | USE FOR PIPE SIZE(INCL)               |  | NONE                                  | 1" - 2"                   | 2 1/2" AND LARGER | 2 1/2" AND LARGER         |
|                                          | MATERIAL, ASTM                        |  |                                       |                           |                   | A105 OR A181 11           |
|                                          | PRESSURE CLASS, ANSI                  |  |                                       |                           |                   | 900                       |
| FITTINGS                                 | FACING                                |  |                                       |                           |                   | 1/4" RAISED FACE SERRATED |
|                                          | GASKETS                               |  |                                       |                           |                   | FLEXITALLIC STYLE CG      |
|                                          | BOLT STUDS, ASTM                      |  |                                       |                           |                   | A193 B7                   |
|                                          | NUTS, ASTM                            |  |                                       |                           |                   | A194 2H                   |
| VALVES-RISING STEM                       | MATERIAL, ASTM                        |  | A234 WPB                              | A234 WPB OR WPW           | A216 WCB          |                           |
|                                          | PRESSURE CLASS, ANSI                  |  | 3000                                  | ---                       | 1500              |                           |
|                                          | MINIMUM WALL THICKNESS                |  | ---                                   | SAME AS PIPE              |                   | ---                       |
|                                          | WELDING END                           |  | ---                                   | M-500, M-501 OR M-502 (1) |                   | ---                       |
| NOTES                                    | UNIONS                                |  | ---                                   | ---                       | ---               |                           |
|                                          | BODY MATERIAL, ASTM                   |  | A105 OR A181 11                       | A105 OR A216 WCB          | A105 OR A216 WCB  |                           |
|                                          | PRESSURE CLASS, ANSI                  |  | 1500                                  | 900                       | 900               |                           |
|                                          | BONNET TYPE                           |  | INTEGRAL OR SEAL WELDED               | BOLTED                    | BOLTED            |                           |
|                                          | INTERNALS AND TRIM                    |  | A182 F6 W/ STELLITIZED SEAT AND DISC. |                           |                   |                           |
|                                          | BYPASS REQUIRED ON VALVES LARGER THAN |  | ---                                   | 4"                        | 4"                |                           |
|                                          |                                       |  |                                       |                           |                   |                           |
|                                          |                                       |  |                                       |                           |                   |                           |
| (1) NO SACKING RING 3 1/2" AND SMALLER.  |                                       |  |                                       |                           |                   |                           |
| MECHANICAL STANDARD PIPING DESIGN TABLE  |                                       |  |                                       |                           |                   |                           |
| POWER PIPING CLASS P1450A 1550 PSIG 650F |                                       |  |                                       |                           |                   |                           |
| SCALE NONE                               |                                       |  |                                       |                           |                   |                           |
| NO. M-1860                               |                                       |  |                                       |                           |                   |                           |
| REV 0                                    |                                       |  |                                       |                           |                   |                           |

|                                                        |                                                                                                                                                                                                                                                                             |                                                                                |  |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--|
| PIPE                                                   | MATERIAL                                                                                                                                                                                                                                                                    | ASTM A106-A SEAMLESS CARBON STEEL                                              |  |
|                                                        | SIZE                                                                                                                                                                                                                                                                        | 1/2" NOMINAL PIPE SIZE                                                         |  |
|                                                        | MINIMUM THICKNESS                                                                                                                                                                                                                                                           | 0.147" (SCHEDULE 80)                                                           |  |
| JOINTS                                                 | TYPE                                                                                                                                                                                                                                                                        | SOCKET WELDED                                                                  |  |
|                                                        |                                                                                                                                                                                                                                                                             |                                                                                |  |
| FITTINGS                                               | TYPE                                                                                                                                                                                                                                                                        | ASTM A105-11 FORGED STEEL, SOCKET WELDING, 3000 LB. W.O.G.                     |  |
|                                                        |                                                                                                                                                                                                                                                                             |                                                                                |  |
|                                                        | UNIONS                                                                                                                                                                                                                                                                      | ASTM A105-11, FORGED STEEL, SOCKET WELDING, GROUND JOINT 6000 LB. W.O.G.       |  |
| VALVES-RISING STEM                                     | TYPE                                                                                                                                                                                                                                                                        | FORGED STEEL, NEEDLE, OUTSIDE SCREW AND YOKE, EDWARD FIG. 952Y-953Y, OR EQUAL. |  |
|                                                        | BODY MATERIAL                                                                                                                                                                                                                                                               | ASTM A105-11 CARBON STEEL                                                      |  |
|                                                        | PRESSURE CLASS                                                                                                                                                                                                                                                              | 6000 LB. W.O.G.                                                                |  |
|                                                        | BONNET TYPE                                                                                                                                                                                                                                                                 | INTEGRAL                                                                       |  |
|                                                        | INTERNAL                                                                                                                                                                                                                                                                    | STEM AND DISC - ASTM A182-F6 STAINLESS. SEAT-STELLITIZED.                      |  |
|                                                        | ENDS                                                                                                                                                                                                                                                                        | SOCKET WELDING                                                                 |  |
|                                                        |                                                                                                                                                                                                                                                                             |                                                                                |  |
|                                                        |                                                                                                                                                                                                                                                                             |                                                                                |  |
| NOTES                                                  | (1) USE MATERIAL SPECIFIED IN THIS DESIGN TABLE ONLY FOR LOW TEMPERATURE PIPING BETWEEN ISOLATING VALVE AT MAIN PIPING OR EQUIPMENT AND INSTRUMENTS OR CONTROLS. THIS TABLE DOES NOT APPLY TO INSTRUMENT PIPING FROM PRESSURE SOURCE TO AND INCLUDING FIRST SHUT-OFF VALVE. |                                                                                |  |
|                                                        | (2) CAN BE USED FOR PRESSURES UP TO 2000 PSIG AT TEMPERATURES OF 650 F AND BELOW.                                                                                                                                                                                           |                                                                                |  |
|                                                        | (3) PRESSURES AND TEMPERATURES SHOWN HEREON REFER TO MAIN LINE SERVICE CONDITIONS.                                                                                                                                                                                          |                                                                                |  |
|                                                        |                                                                                                                                                                                                                                                                             |                                                                                |  |
| 2-WAL P&T<br>DESIGNED BY<br>CHECKED BY<br>DATE 1-24-67 |                                                                                                                                                                                                                                                                             | 1-4-BUACD<br>APPROVED<br>DATE 1-24-67                                          |  |
| MECHANICAL STANDARD<br>PIPING DESIGN TABLE             |                                                                                                                                                                                                                                                                             | INSTRUMENT AND CONTROL<br>PIPING CLASS I 1500<br>1500 PSIG<br>800 F            |  |
|                                                        |                                                                                                                                                                                                                                                                             | SCALE NONE<br>NO. M-1905                                                       |  |

| NOMINAL INSULATION THICKNESS (INCHES)                                                                                                                             |                    |                    |                    |                    |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| NOMINAL PIPE SIZE (INCHES)                                                                                                                                        | 100°-300°F CLASS A | 300°-500°F CLASS B | 500°-700°F CLASS C | 700°-875°F CLASS D | 875°-1200°F CLASS E |
| 1/2                                                                                                                                                               | 1                  | 1                  | 1 1/2              | 2                  | 2 1/2               |
| 3/4                                                                                                                                                               | 1                  | 1 1/2              | 2                  | 2                  | 2 1/2               |
| 1                                                                                                                                                                 | 1                  | 1 1/2              | 2                  | 2 1/2              | 3                   |
| 1 1/4                                                                                                                                                             | 1                  | 1 1/2              | 2 1/2              | 3                  | 3                   |
| 1 1/2                                                                                                                                                             | 1                  | 2                  | 2 1/2              | 3                  | 3 1/2               |
| 2                                                                                                                                                                 | 1 1/2              | 2                  | 2 1/2              | 3 1/2              | 3 1/2               |
| 2 1/2                                                                                                                                                             | 1 1/2              | 2                  | 3                  | 3 1/2              | 4                   |
| 3                                                                                                                                                                 | 1 1/2              | 2 1/2              | 3                  | 4                  | 4 1/2               |
| 4                                                                                                                                                                 | 1 1/2              | 2 1/2              | 3 1/2              | 4                  | 4 1/2               |
| 5                                                                                                                                                                 | 2                  | 3                  | 4                  | 4 1/2              | 5                   |
| 6                                                                                                                                                                 | 2                  | 3                  | 4                  | 5                  | 5 1/2               |
| 8                                                                                                                                                                 | 2                  | 3 1/2              | 4 1/2              | 5                  | 6                   |
| 10                                                                                                                                                                | 2 1/2              | 3 1/2              | 4 1/2              | 5 1/2              | 6                   |
| 12 & OVER                                                                                                                                                         | 2 1/2              | 3 1/2              | 4 1/2              | 5 1/2              | 6                   |
| EQUIPMENT                                                                                                                                                         | 2 1/2              | 4                  | 5 1/2              | 6                  | 7                   |
| NOTES                                                                                                                                                             |                    |                    |                    |                    |                     |
| 1. INSULATION THICKNESSES SHOWN ABOVE ARE MINIMUM BLOCK THICKNESSES AND DO NOT INCLUDE FINISHING OR SEALING COATS. FOR FINISH COAT OR JACKET. SEE SPECIFICATIONS. |                    |                    |                    |                    |                     |
| 2. ON OUTDOOR EQUIPMENT & PIPING, INSULATION THICKNESS SHOWN ABOVE SHALL BE INCREASED 1/2 INCH.                                                                   |                    |                    |                    |                    |                     |
| 3. ANTI-SWEAT (CLASS S):                                                                                                                                          |                    |                    |                    |                    |                     |
| FOR PIPE                                                                                                                                                          |                    |                    |                    |                    |                     |
| 30" AND LESS: SECTIONAL PIPE INSULATION, 1 INCH THICK. OVER 30": EMULSION INSULATION, 3/8 INCH FINAL THICKNESS.                                                   |                    |                    |                    |                    |                     |
| FOR IRREGULAR SURFACES (WATER BOXES, ETC.):                                                                                                                       |                    |                    |                    |                    |                     |
| EMULSION INSULATION, 3/8 INCH FINAL THICKNESS.                                                                                                                    |                    |                    |                    |                    |                     |
| FOR REGULAR SURFACES (TANKS, COOLER, ETC.):                                                                                                                       |                    |                    |                    |                    |                     |
| SECTIONAL OR BLOCK INSULATION, 1 INCH THICK.                                                                                                                      |                    |                    |                    |                    |                     |
| MECHANICAL STANDARD PIPING DESIGN TABLE                                                                                                                           |                    |                    |                    |                    |                     |
| PIPING AND EQUIPMENT INSULATION THICKNESS                                                                                                                         |                    |                    |                    |                    |                     |
| SCALE NONE                                                                                                                                                        |                    |                    |                    |                    |                     |
| NO. M-1002                                                                                                                                                        |                    |                    |                    |                    |                     |
| REV 0                                                                                                                                                             |                    |                    |                    |                    |                     |

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|-----------------------------------------------------------------------------------------------|----------------------------------------------------|--|--------------------------------------------|-----------------------------------------|
| PIPE                                                                                          | MATERIAL                                           |  | ASTM A74 CAST IRON                         |                                         |
|                                                                                               | SIZES (INCLUSIVE)                                  |  | 2" - 15"                                   |                                         |
|                                                                                               | THICKNESS (1)                                      |  | SERVICE WEIGHT (SV)                        |                                         |
|                                                                                               | TYPE (2)                                           |  | HUB AND SPIGOT<br>CAULKED                  | HUB AND PLAIN END<br>COMPRESSION - TYPE |
| JOINTS                                                                                        | JOINT<br>MATERIAL                                  |  | LEAD, ASTM B29 AND<br>JUTE OR OAKUM, OILED | NEOPRENE GASKET<br>CISPI HSN 75         |
|                                                                                               | MATERIAL                                           |  | ASTM A74                                   | ASTM A74                                |
| FITTINGS                                                                                      | MINIMUM WALL (1)                                   |  | SERVICE WEIGHT (SV)                        | SERVICE WEIGHT (SV)                     |
|                                                                                               | (1) AS APPROVED BY STATE AND LOCAL PLUMBING CODES. |  |                                            |                                         |
| (2) PUSH-ON COMPRESSION - TYPE JOINTS MAY BE USED WHEN PERMITTED BY STATE AND<br>LOCAL CODES. |                                                    |  |                                            |                                         |
| NOTES                                                                                         |                                                    |  |                                            |                                         |
|                                                                                               |                                                    |  |                                            |                                         |
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| MECHANICAL STANDARD<br>PIPING DESIGN TABLE |  | SOIL WASTE AND VENT PIPING<br>CLASS SP-CISV HUB & SPIGOT<br>FOR DRAINAGE SERVICE ONLY |  | SCALE NONE |  |
|                                            |  |                                                                                       |  | NO. M-1776 |  |
|                                            |  |                                                                                       |  | REV 0      |  |

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| STANLEY CONSULTANTS |  |
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|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                 | MATERIAL, ASTM               |               | A120 OR A53A GALVANIZED                            |                            |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                 | MINIMUM PIPE SIZE TO BE USED |               | 3/8"                                               |                            |
| PIPE                                                                                                                                                                                                                                                                                                                                                                                    | MINIMUM WALL THICKNESS                                                                          | PIPE SIZES (INCLUSIVE)       |               | WALL THICKNESS                                     |                            |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                 | 3/8" - 24"                   |               | STANDARD WEIGHT                                    |                            |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                 |                              |               |                                                    |                            |
| JOINTS                                                                                                                                                                                                                                                                                                                                                                                  | TYPE OF JOINT                                                                                   | SCREWED                      | SOCKET WELDED | BUTT WELDED                                        | FLANGED                    |
|                                                                                                                                                                                                                                                                                                                                                                                         | USE FOR PIPE SIZE (INCL)                                                                        | 3/8" - 2"                    | NONE          | NONE                                               | 2 1/2"-24"                 |
| FLANGES                                                                                                                                                                                                                                                                                                                                                                                 | MATERIAL, ASTM                                                                                  |                              |               |                                                    | A181 11 GALVANIZED         |
|                                                                                                                                                                                                                                                                                                                                                                                         | PRESSURE CLASS, ANSI                                                                            |                              |               |                                                    | 150                        |
|                                                                                                                                                                                                                                                                                                                                                                                         | FACING                                                                                          |                              |               |                                                    | FLAT                       |
|                                                                                                                                                                                                                                                                                                                                                                                         | GASKETS                                                                                         |                              |               |                                                    | PULL FACE 1/16" RED RUBBER |
|                                                                                                                                                                                                                                                                                                                                                                                         | BOLT STUDS, ASTM                                                                                |                              |               |                                                    | A307 B                     |
| FITTINGS                                                                                                                                                                                                                                                                                                                                                                                | NUTS, ASTM                                                                                      |                              |               |                                                    | A307 B HEX. HD.            |
|                                                                                                                                                                                                                                                                                                                                                                                         | MATERIAL, ASTM                                                                                  | A197 GALVANIZED              |               |                                                    | A126 GALVANIZED            |
|                                                                                                                                                                                                                                                                                                                                                                                         | PRESSURE CLASS, ANSI                                                                            | 150                          |               |                                                    | 125                        |
|                                                                                                                                                                                                                                                                                                                                                                                         | MINIMUM WALL THICKNESS                                                                          | ---                          |               |                                                    | ---                        |
|                                                                                                                                                                                                                                                                                                                                                                                         | WELDING END                                                                                     | ---                          |               |                                                    | ---                        |
| VALVES-RISING STEM                                                                                                                                                                                                                                                                                                                                                                      | UNIONS                                                                                          | GROUND JOINT SCREWED         |               |                                                    | ---                        |
|                                                                                                                                                                                                                                                                                                                                                                                         | BODY MATERIAL, ASTM                                                                             | B62 BRONZE                   |               |                                                    | A126 CAST IRON             |
|                                                                                                                                                                                                                                                                                                                                                                                         | PRESSURE CLASS, ANSI                                                                            | 125                          |               |                                                    | 125                        |
|                                                                                                                                                                                                                                                                                                                                                                                         | BONNET TYPE                                                                                     | SCREWED                      |               |                                                    | BOLTED                     |
|                                                                                                                                                                                                                                                                                                                                                                                         | INTERNAL AND TRIM                                                                               | BRONZE OR COMP. (1)          |               |                                                    | RENEWABLE BRONZE           |
| NOTES                                                                                                                                                                                                                                                                                                                                                                                   | BYPASS REQUIRED ON VALVES LARGER THAN                                                           |                              | ---           |                                                    | ---                        |
|                                                                                                                                                                                                                                                                                                                                                                                         | (1) GATE VALVES-BRONZE SEAT AND DISC; GLOBE VALVES-BRONZE SEAT WITH RENEWABLE COMPOSITION DISC. |                              |               |                                                    |                            |
| <div><div><div></div><div></div><div></div></div><div><div>DESIGNED BY</div><div>CHIEF ENGINEER</div><div>APPROVED BY</div><div>DATE</div></div><div><div>DATE</div><div>BY</div><div>APP</div><div>DATE</div></div><div><div>DATE</div><div>BY</div><div>APP</div><div>DATE</div></div></div> <div><div>REVISIONS</div><div>DATE</div><div>BY</div><div>APP</div><div>DATE</div></div> |                                                                                                 |                              |               |                                                    |                            |
| MECHANICAL STANDARD PIPING DESIGN TABLE                                                                                                                                                                                                                                                                                                                                                 |                                                                                                 |                              |               | GENERAL SERVICE PIPING CLASS ST125G 125 PSIG 220 F |                            |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                 |                              |               | SCALE NONE NO. M-1720 REV                          |                            |

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| PIPE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SIZES (INCLUSIVE)                                                                             | 3" - 48"                                                                       |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MINIMUM THICKNESS                                                                             | ANSI A21.50. LAYING CONDITION TYPE . DEPTH OF COVER SHOWN ON DRAWINGS (NOTE 1) |  |  |  |
| JOINTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                                                                                 | (1) ALL THREADED PIPE SHALL BE SEAMLESS (TYPE S).<br>(2) USE FLAT FACE FLANGES FOR MATING WITH 125 POUND CAST IRON FLANGES OF VALVES OR EQUIPMENT.<br>(3) GLOBE VALVES - ASBESTOS COMPOSITION DISCS FOR COLD WATER, AIR OR GAS SERVICE;<br>ALL OTHER SERVICES - BRONZE SEATS AND DISCS.<br>(4) 125 POUND CAST IRON VALVES LIMITED TO 12" MAXIMUM SIZE. FOR 14" AND LARGER<br>SIZES USE ANSI 150 POUND CAST STEEL VALVES, ASTM A216-WCB.<br>(5) NO BACKING RING 3-1/2" AND SMALLER. |                                                   |                                          |                                         |                                |
| <div>1-GENERAL</div> <div>REVISIONS</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> <div>DATE</div> <div>BY</div> <div>APP</div> 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| PIPE AND INSULATION SCHEDULE                      |                       |                     |                       |         |                     |                     |                                                                                       |
|---------------------------------------------------|-----------------------|---------------------|-----------------------|---------|---------------------|---------------------|---------------------------------------------------------------------------------------|
| PIPE                                              |                       |                     |                       |         | INSULATION          |                     | REMARKS                                                                               |
| SERVICE                                           | MATERIAL              | MECHANICAL STANDARD | WORKING PRESSURE PSIG | TEMP OF | INSULATION MATERIAL | MECHANICAL STANDARD |                                                                                       |
| POLYMER                                           | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 75-100                | AMBIENT | ---                 | ---                 |                                                                                       |
| POTABLE WATER                                     | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 55-85                 | 55      |                     |                     | BECOMES GALVANIZED STEEL 5 FT. OUTSIDE BUILDING                                       |
|                                                   | GALVANIZED STEEL (1)  |                     | 55-85                 | 55      | ELASTOMERIC         | ---                 | SEE SPECIFICATIONS FOR INSUL. THICKNESS                                               |
| WASHWATER                                         | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 55-85                 | 55      |                     |                     | SEE NOTE (2)                                                                          |
| WASHWATER (4 INCHES AND LARGER INSIDE BUILDING)   | DUCTILE IRON (1)      | M-1735              | 55-85                 | 55      | ---                 | ---                 |                                                                                       |
| WASHWATER (3 INCHES AND SMALLER INSIDE BUILDING)  | GALVANIZED STEEL      | M-1720              | 55-85                 | 55      |                     |                     |                                                                                       |
| HOUSEWATER                                        | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 10                    | 55      | ---                 | ---                 | SEE NOTE (2)                                                                          |
| HOUSEWATER (4 INCHES AND LARGER INSIDE BUILDING)  | DUCTILE IRON (1)      | M-1735              | 10                    | 55      | ---                 | ---                 |                                                                                       |
| HOUSEWATER (3 INCHES AND SMALLER INSIDE BUILDING) | GALVANIZED STEEL      | M-1720              | 10                    | 55      | ---                 | ---                 |                                                                                       |
| HIGH PRESSURE/HOT WATER                           | CARBON STEEL          | M-1905<br>M-1860    | 1000                  | 200     | FIBERGLASS          | M-1002              |                                                                                       |
| DIGESTER SLUDGE                                   | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 50                    | 105     | ---                 | ---                 | SEE NOTE (2)                                                                          |
| SLUDGE FEED TO CENTRIFUGE                         | DUCTILE IRON (1)      | M-1735              | 50                    | 105     | ---                 | ---                 |                                                                                       |
|                                                   | DUCTILE IRON          | M-1735              | 20                    | 105     | ---                 | ---                 | INCL. OVERFLOW & DRAIN PIPING ON SLUG FEED TANK FROM AIR RELEASE BOX TO EXISTING PIPE |
| CENTRATE                                          | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 10                    | 100     | ---                 | ---                 |                                                                                       |
|                                                   | DUCTILE IRON (1)      | M-1735              | 10                    | 100     |                     |                     |                                                                                       |
| CHLORINE EVAPORATOR                               | CARBON STEEL          | M-1800              | 75                    | 200     | FIBERGLASS          | M-1002              |                                                                                       |
| HOT WATER ABOVE GRADE                             |                       |                     |                       |         |                     |                     |                                                                                       |
| CHLORINE EVAPORATOR HOT WATER BELOW GRADE         | REINFORCED FIBERGLASS | SEE SECTION 15260   | 75                    | 200     | POLYURETHANE FOAM   | ---                 | SEE SPECIFICATIONS FOR THICKNESS                                                      |
| EQUIPMENT DRAIN LINES                             | GALVANIZED STEEL      | M-1720              | ---                   | ---     | ---                 | ---                 |                                                                                       |
| CARBON ADSORBER VESSEL DRAIN                      | POLYVINYL CHLORIDE    | SEE SECTION 15050   | ---                   | ---     | ---                 | ---                 |                                                                                       |
| FLOOR DRAIN SYSTEM                                | CAST IRON (1)         | M-1776              | ---                   | ---     | ---                 | ---                 | TO EXTEND FIVE (5) FEET FROM BUILDING BELOW GRADE                                     |
| EXTERIOR DRAIN SYSTEM                             | POLYVINYL CHLORIDE    | SEE SECTION 15050   | ---                   | ---     | ---                 | ---                 |                                                                                       |
|                                                   |                       | SEE SECTION 15050   |                       |         |                     |                     |                                                                                       |
| SAMPLE SINK SYSTEM                                | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 20                    | 55      | ---                 | ---                 |                                                                                       |
| CHLORINE SOLUTION LINE                            | POLYVINYL CHLORIDE    | SEE SECTION 15050   | 20                    | 55      | ---                 | ---                 |                                                                                       |
| NATURAL GAS                                       | CARBON STEEL          | M-1800              | 5                     | AMBIENT | ---                 | ---                 |                                                                                       |
| BUILDING HEATING - WATER ABOVE GRADE              | CARBON STEEL          | M-1800              | 75                    | 180     | FIBERGLASS          | M-1002              |                                                                                       |
| BUILDING HEATING - WATER BELOW GRADE              | REINFORCED FIBERGLASS | SEE SECTION 15260   | 75                    | 180     | POLYURETHANE FOAM   | -                   | SEE SPECIFICATION FOR THICKNESS                                                       |

- (1) ENCASE PIPE BELOW GRADE WITH 8 MIL. POLYETHYLENE TUBE CONFORMING TO ANSI A21.5. PROVIDE ELECTRICAL CONTINUITY IN ACCORDANCE WITH MECHANICAL STANDARD M-655.
- (2) PIPING BELOW STRUCTURE AND PIPING WITHIN 5-FEET OF STRUCTURE TO BE DUCTILE IRON.
- (3) INSULATION WHERE NOTED ON DRAWINGS.

| PUMP SCHEDULE              |                    |               |                |            |          |       |       |       |                              |                   |
|----------------------------|--------------------|---------------|----------------|------------|----------|-------|-------|-------|------------------------------|-------------------|
| Designation on Drawings    | Pump Type          | Flow Rate GPM | Head Ft. Water | Motor Data |          |       |       |       | Remarks                      | Equipment Tag No. |
|                            |                    |               |                | HP (1)     | Max. RPM | Volts | Phase | Hertz |                              |                   |
| Sludge Feed Pump SFP-1     | Progressing Cavity | 200-75        | 50             | 7.5        | 1200     | 460   | 3     | 60    | Variable Speed               |                   |
| Sludge Feed Pump SFP-2     | Progressing Cavity | 200-75        | 50             | 7.5        | 1200     | 460   | 3     | 60    | Variable Speed               |                   |
| Sludge Feed Pump SFP-3     | Progressing Cavity | 200-75        | 50             | 7.5        | 1200     | 460   | 3     | 60    | Variable Speed               |                   |
| Sludge Feed Pump SFP-4     | Progressing Cavity | 200-75        | 50             | 7.5        | 1200     | 460   | 3     | 60    | Variable Speed, Standby Pump |                   |
| Polymer Feed Pump PFP-1    | Progressing Cavity | 12-2          | 50             | 1.0        | 1200     | 230   | 3     | 60    | Variable Speed               |                   |
| Polymer Feed Pump PFP-2    | Progressing Cavity | 12-2          | 50             | 1.0        | 1200     | 230   | 3     | 60    | Variable Speed               |                   |
| Polymer Feed Pump PFP-3    | Progressing Cavity | 12-2          | 50             | 1.0        | 1200     | 230   | 3     | 60    | Variable Speed               |                   |
| Polymer Feed Pump PFP-4    | Progressing Cavity | 12-2          | 50             | 1.0        | 1200     | 230   | 3     | 60    | Variable Speed, Standby Pump |                   |
| Centrate Sample Pump CSP-1 | Horiz. Centrifugal | 5             | 25             | 1/3        | 1750     | 230   | 3     | 60    | Constant Speed               |                   |
| Centrate Sample Pump CSP-2 | Horiz. Centrifugal | 5             | 25             | 1/3        | 1750     | 230   | 3     | 60    | Constant Speed               |                   |
| Centrate Sample Pump CSP-2 | Horiz. Centrifugal | 5             | 25             | 1/3        | 1750     | 230   | 3     | 60    | Constant Speed               |                   |

(1)Estimated horsepower. Actual horsepower shall meet specified operating conditions and manufacturer's requirements.

RECORD DRAWING

DATE: AUG. 1988

DRAFTED BY: MCA

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.



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|----|----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 9 | 4 | 6 | 1 | 8 | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|     |      |           |                  |
|-----|------|-----------|------------------|
|     |      |           | DESIGNED LG. LMR |
|     |      |           | DRAWN LG. GS     |
|     |      |           | CHECKED LMR      |
|     |      |           | APPROVED         |
|     |      |           | DATE             |
| NO. | DATE | REVISIONS | APPROVED         |

MOLZEN-CORBIN

STANLEY CONSULTANTS

A JOINT VENTURE

NONE

GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO

SOLIDS HANDLING FACILITIES

PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES

DEWATERING BUILDING

PROCESS EQUIPMENT- PUMP AND PIPE SCHEDULES

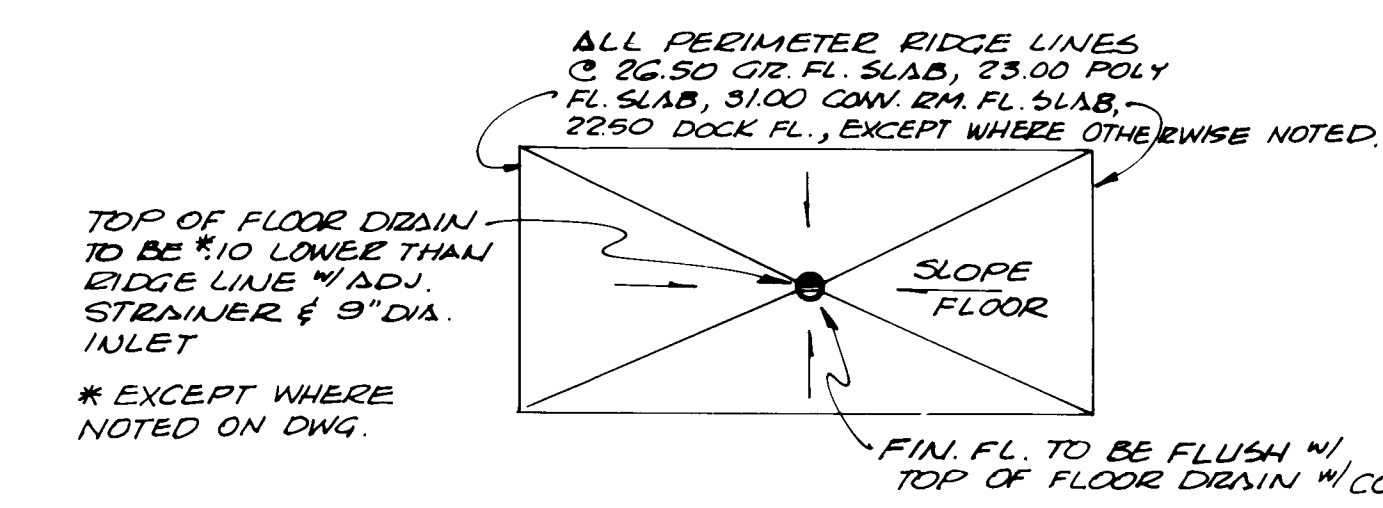
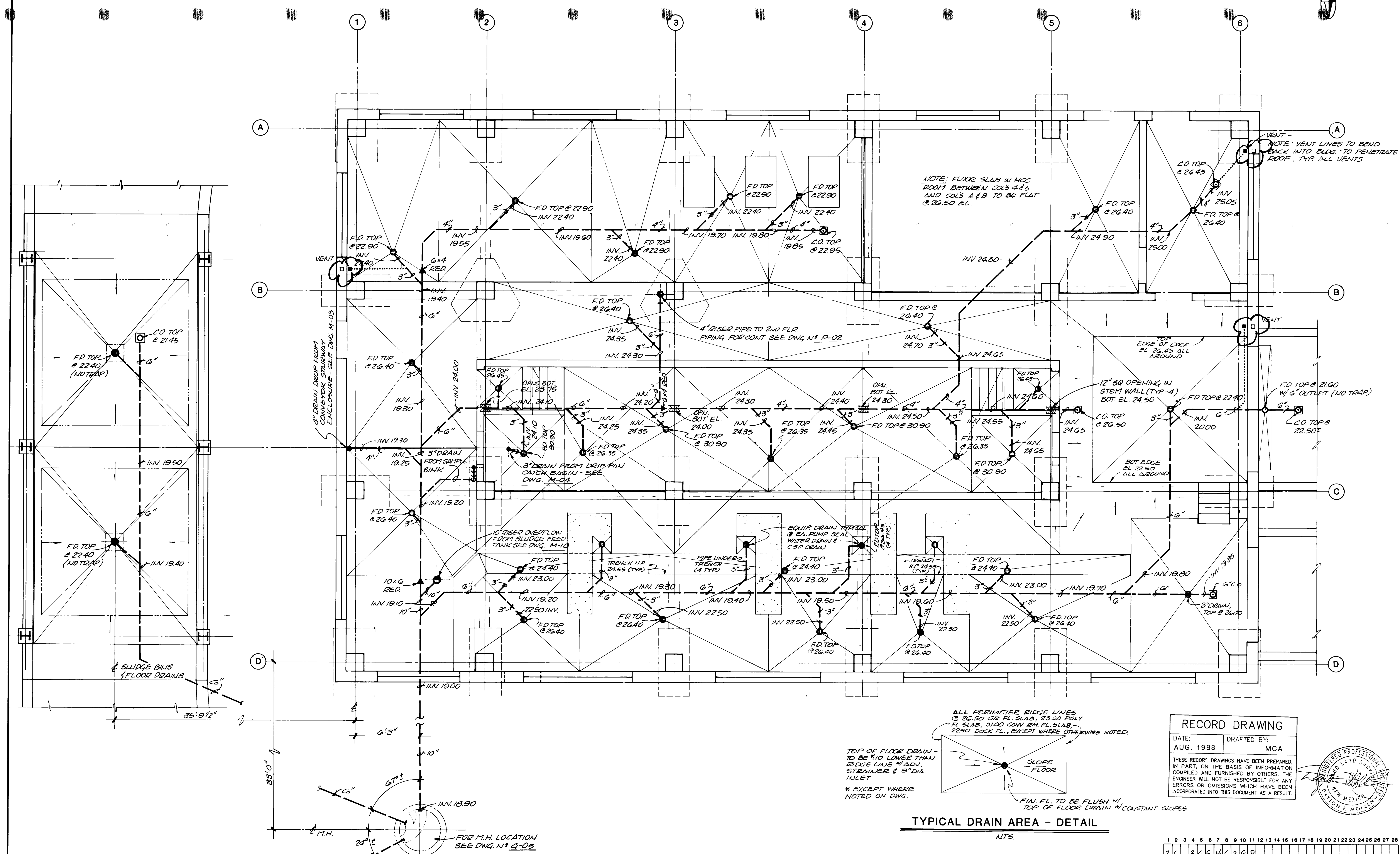
M-C NO. 832221

M-18

61 of 112

SC NO.

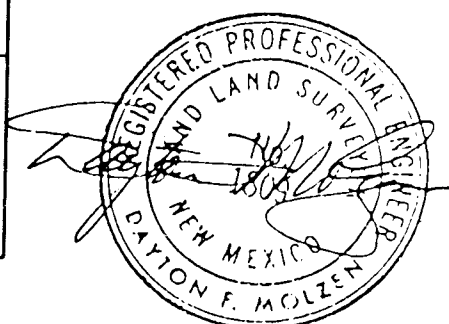




**RECORD DRAWING**

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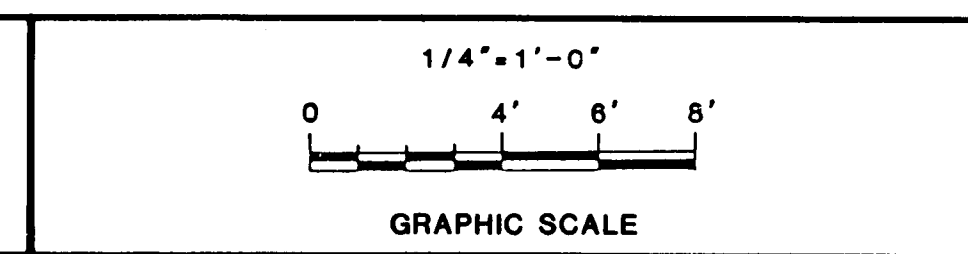
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DESIGNED **LJR GS**  
DRAWN **SPINELLO**  
CHECKED **LJR**  
APPROVED **LJR**  
DATE

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

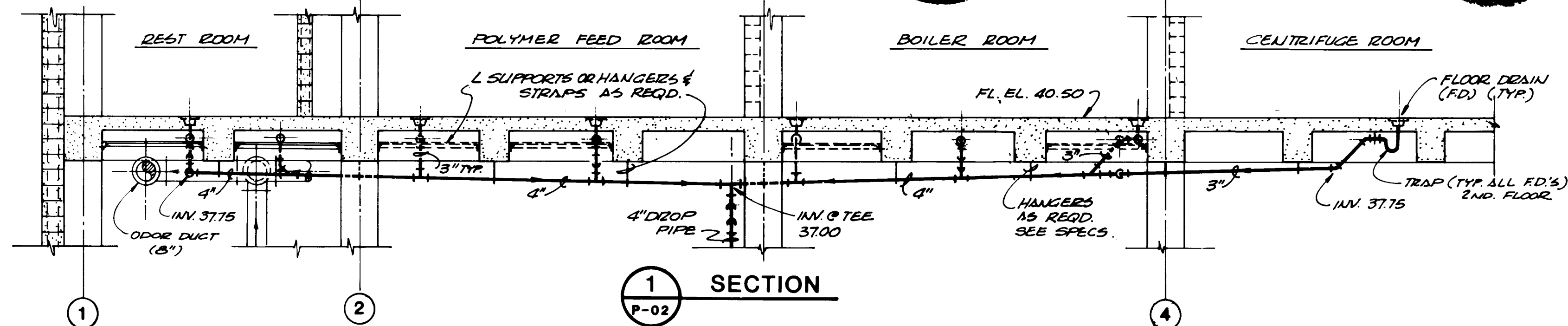
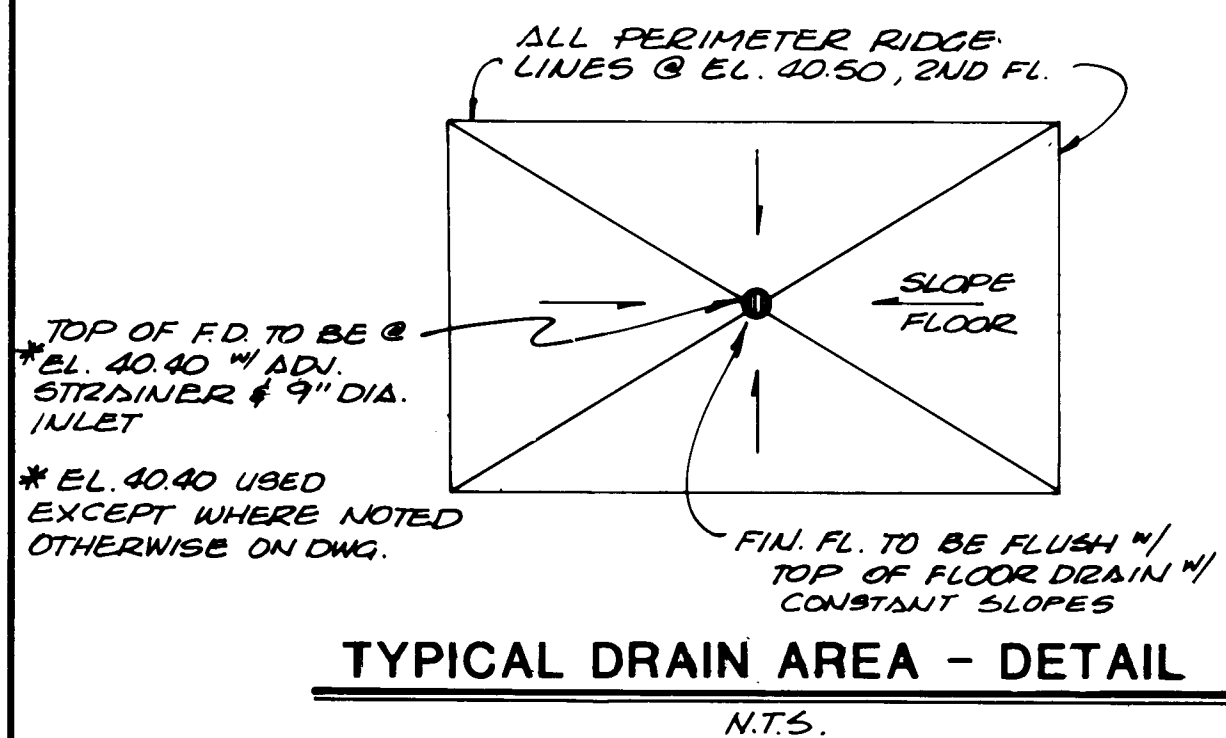
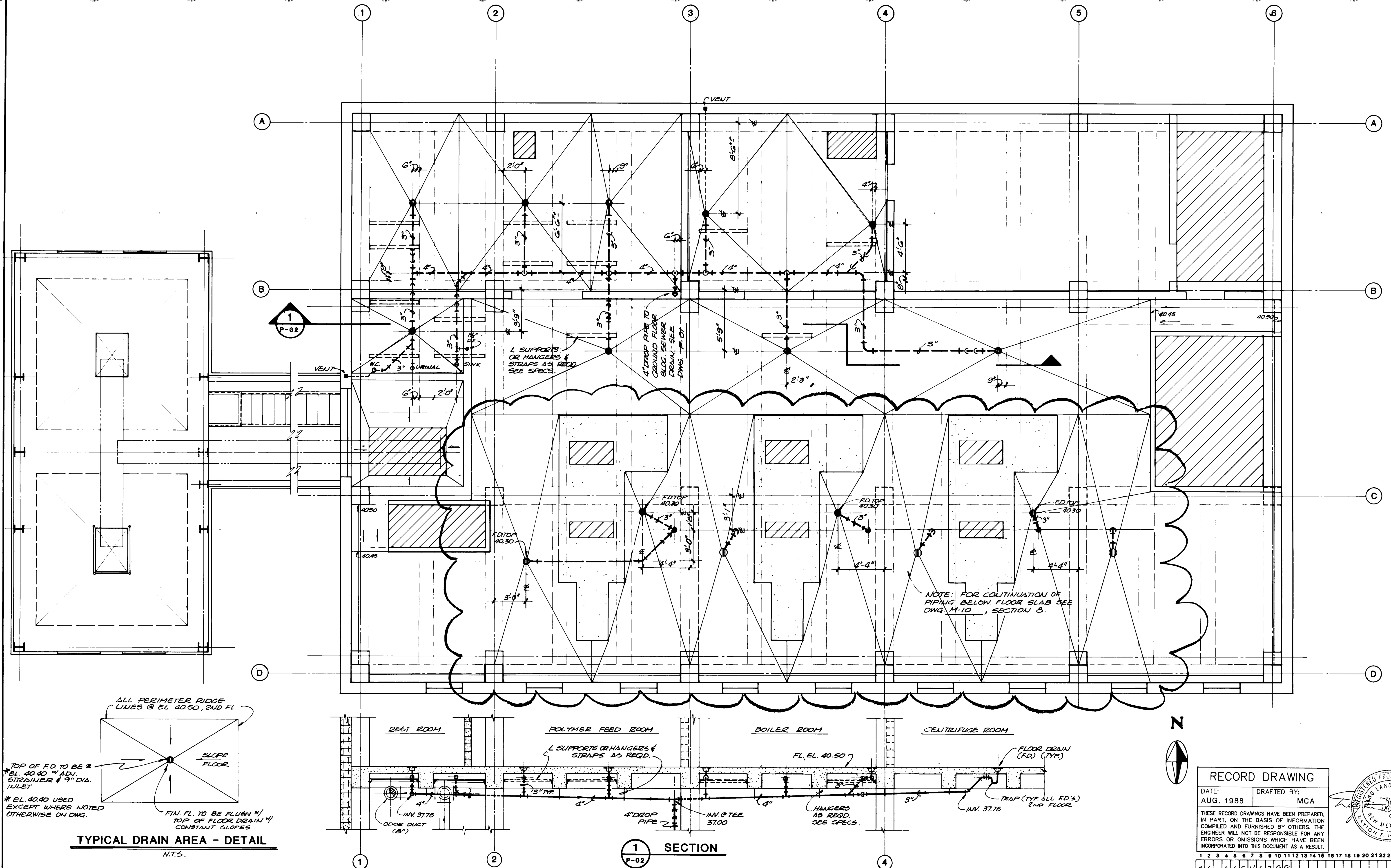


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
DEWATERING BUILDING  
BUILDING PLUMBING SYSTEM - GROUND FLOOR  
PLAN

|                |             |           |
|----------------|-------------|-----------|
| M-C NO. 832221 | <b>P-01</b> | 62 of 112 |
| SC NO.         |             |           |





# RECORD DRAWING

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DESIGNED: LMR G.S.  
DRAWN: SPINELLO  
CHECKED: LMR  
APPROVED: \_\_\_\_\_  
DATE: \_\_\_\_\_

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/4" = 1'-0"  
GRAPHIC SCALE  
0 4' 8'

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**DEWATERING BUILDING**  
**BUILDING PLUMBING SYSTEM - SECOND FLOOR**  
**PLAN AND SECTION**

M-C NO. 832221  
**P-02** 63 of 112  
SC NO.



LINE SYMBOLS

PROCESS LINE

PROCESS FLOW ARROW

ELECTRICAL SIGNAL

COMPUTER SIGNAL

PROCESS FLOW ENTERING OR LEAVING DRAWING

SIGNAL LINE ENTERING OR LEAVING DRAWING

FLOW ELEMENTS

MAGNETIC FLOWMETER

VENTURI

EQUIPMENT

CENTRIFUGAL BLOWER

SFP  
PFP

POSITIVE DISPLACEMENT PUMP

CHEMICAL SEAL

EXPANSION JOINT

CENTRIFUGAL PUMP

VALVES

BALL VALVE

GATE VALVE

GLOBE VALVE

PRESSURE RELIEF VALVE

PLUG VALVE, NORMALLY OPEN

PLUG VALVE, NORMALLY CLOSED

QUICK COUPLER

INSTRUMENTATION

FOR DESCRIPTION, SEE TABLE BELOW

FIELD DEVICE

PANEL FRONT DEVICE

PCU CRT DISPLAYED FUNCTION

PCU SOFTWARE FUNCTION

LOGIC INTERLOCK

UNSPECIFIED FUNCTION

SL  
STOP LOCKOUT PUSHBUTTON STATION

S/S  
START-STOP PUSHBUTTON STATION

S/SL  
START-STOP LOCKOUT PUSHBUTTON STATION

HOA  
HAND-OFF-AUTO SELECTOR SWITCH

OP/CL  
OPEN-CLOSE PUSHBUTTON STATION

OP/CL/SL  
OPEN-CLOSE-STOP LOCKOUT PUSHBUTTON STATION

F/B/SL  
FORWARD-BACKWARD-STOP LOCKOUT PUSHBUTTON STATION

S/N/SL  
SOUTH-NORTH-STOP LOCKOUT PUSHBUTTON STATION

CCP  
CENTRIFUGE CONTROL PANEL

ICP  
INTERGRATED CONTROL PANEL

T/J

TYPE "J" THERMOCOUPLE

| FIRST LETTER |                                    | SUCCEEDING LETTERS    |                             |                                                      |
|--------------|------------------------------------|-----------------------|-----------------------------|------------------------------------------------------|
|              | MEASURED OR INITIATING VARIABLE    | MODIFIER              | READOUT OR PASSIVE FUNCTION | OUTPUT FUNCTION                                      |
| A            | ANALYSIS                           |                       | ALARM                       | MODIFIER                                             |
| B            | BURNER FLAME                       |                       | USER'S CHOICE               | USER'S CHOICE                                        |
| C            | CONDUCTIVITY (ELECTRICAL)          |                       |                             | CLOSED                                               |
| D            | DENSITY (MASS) OR SPECIFIC GRAVITY | DIFFERENTIAL          |                             |                                                      |
| E            | VOLTAGE (EMF)                      |                       | PRIMARY ELEMENT             |                                                      |
| F            | FLOW RATE                          | RATIO (FRACTION)      |                             | FORWARD                                              |
| G            | GAGING (DIMENSIONAL)               |                       | GLASS                       |                                                      |
| H            | HAND (MANUALLY INITIATED)          |                       |                             | HIGH                                                 |
| I            | CURRENT (ELECTRICAL)               |                       | INDICATE                    |                                                      |
| J            | POWER                              | SCAN                  |                             |                                                      |
| K            | TIME OR TIME - SCHEDULE            |                       |                             |                                                      |
| L            | LEVEL                              |                       | LIGHT (PILOT)               | LOW                                                  |
| M            | MOTOR                              |                       |                             |                                                      |
| N            | INDICATOR                          |                       |                             |                                                      |
| O            | USER'S CHOICE                      |                       | ORIFICE (RESTRICTION)       | OPEN                                                 |
| P            | PRESSURE OR VACUUM                 |                       | POINT (TEST CONNECTION)     |                                                      |
| Q            | QUANTITY OR EVENT                  | INTEGRATE OR TOTALIZE |                             |                                                      |
| R            | RADIOACTIVITY                      |                       | RECORD OR PRINT             | RUN                                                  |
| S            | SPEED OR FREQUENCY                 | SAFETY                |                             | SWITCH                                               |
| T            | TEMPERATURE                        |                       |                             | TRANSMIT                                             |
| U            | MULTIVARIABLE                      |                       | MULTIFUNCTION               | MULTIFUNCTION                                        |
| V            | VIBRATION                          |                       |                             | VALVE, DAMPER, OR LOUVER                             |
| W            | TORQUE                             |                       | WELL                        |                                                      |
| X            | UNCLASSIFIED                       |                       |                             | UNCLASSIFIED                                         |
| Y            | USER'S CHOICE                      |                       |                             | RELAY OR COMPUTE                                     |
| Z            | POSITION                           |                       |                             | DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT |

RECORD DRAWING

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AUG. 1988

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MCA

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DRAWN STAFF

CHECKED ST

APPROVED ST

DATE 5-85

MOLZEN-CORBIN

STANLEY CONSULTANTS

A JOINT VENTURE

NONE

GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO

SOLIDS HANDLING FACILITIES

PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES

INSTRUMENTATION LEGEND

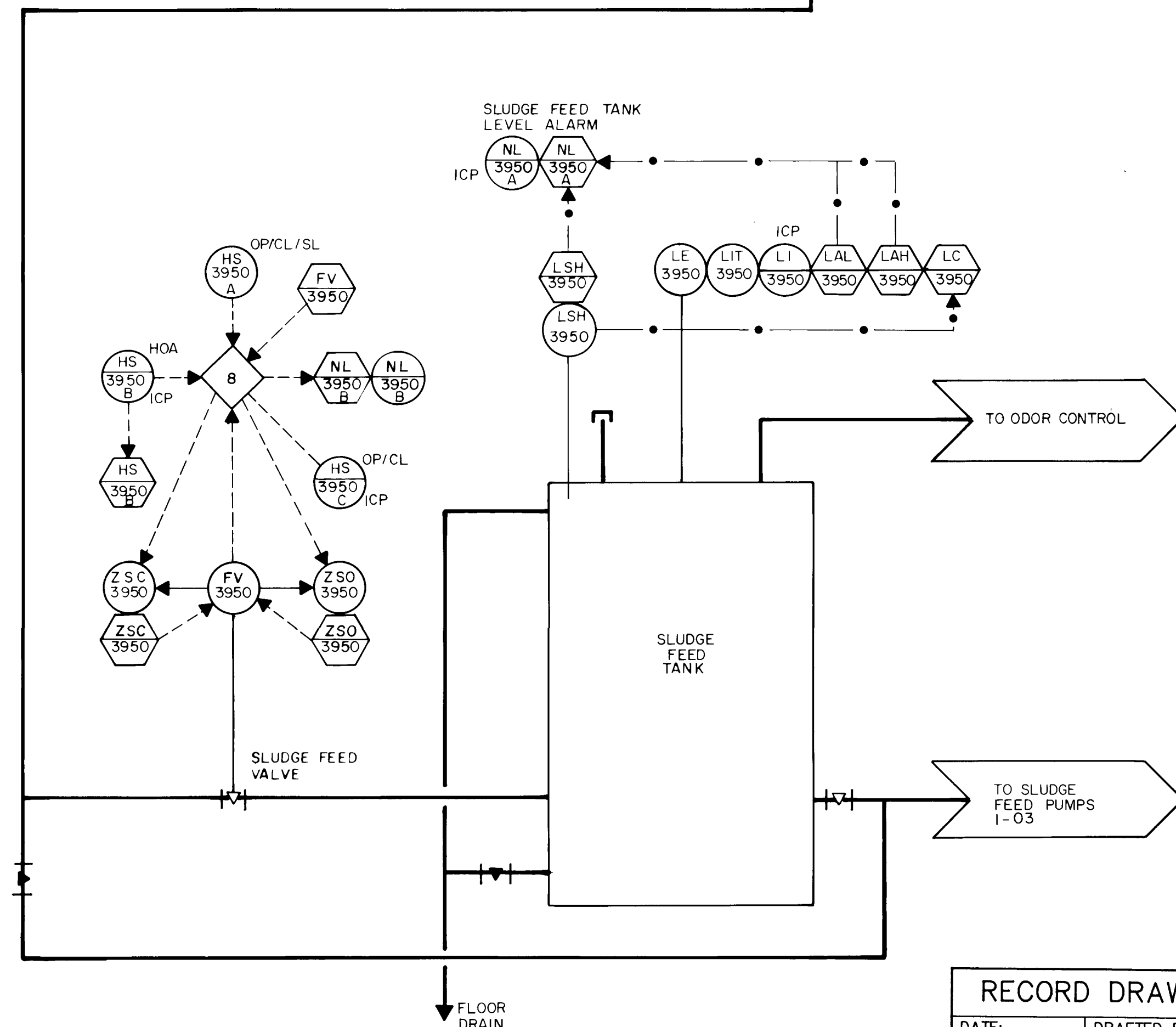
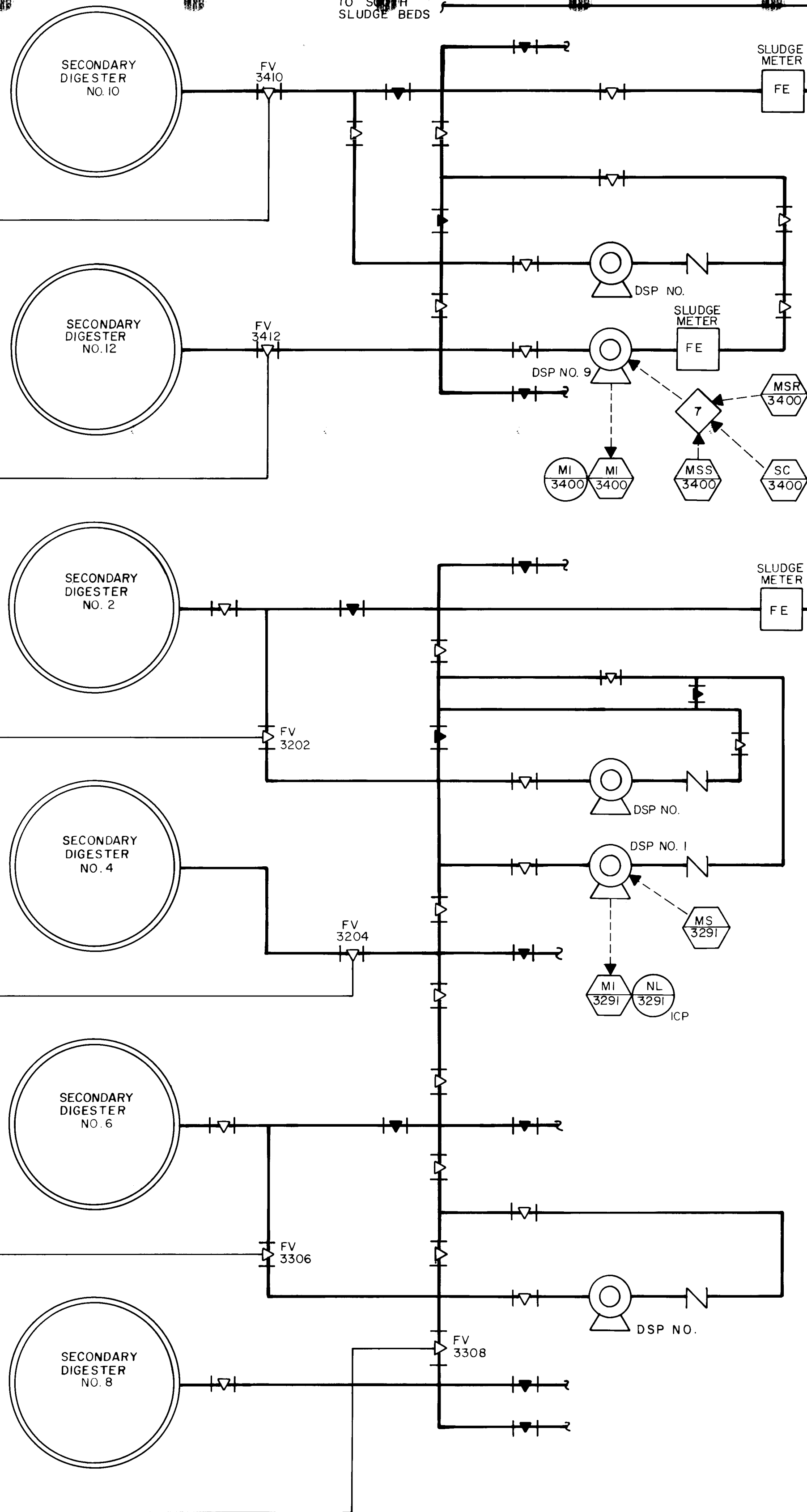
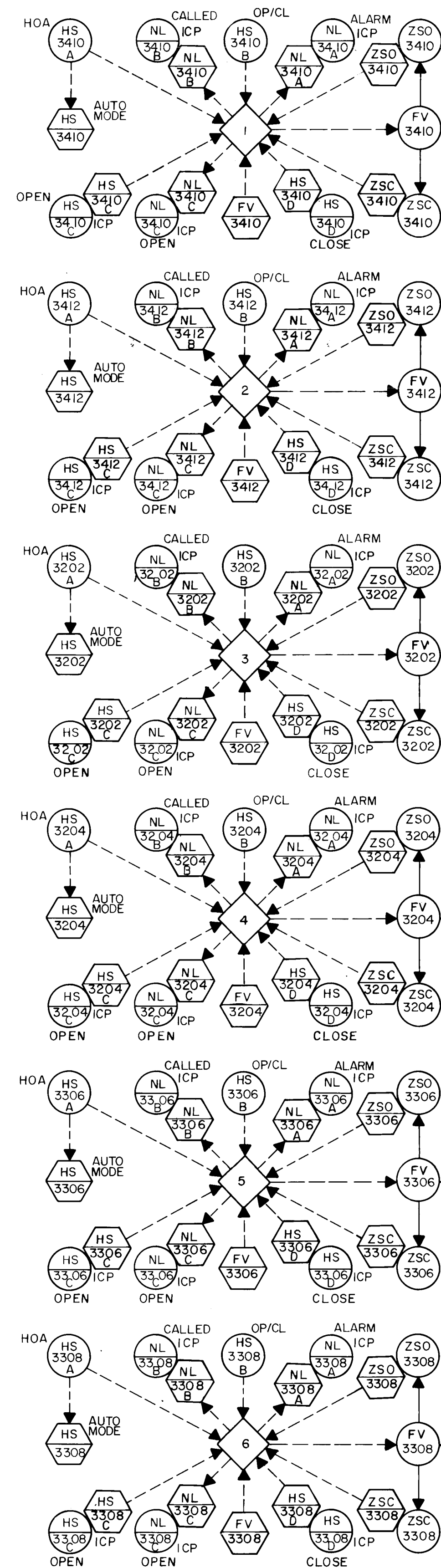
M-C NO. 8-32221

I-01

64 of 112

SC NO.





### GENERAL NOTES

ELECTRICAL THIS CONTRACT:

1. FV3202, FV3204, FV3306, FV3308: COMPLETE.
2. FV3950 COMPLETE.
3. SLUDGE FEED TANK COMPLETE.
4. ALARM AND INDICATING LIGHTS AND OPEN/CLOSE PUSHBUTTONS ON ICP FOR FV3410 AND FV3412.
5. INDICATING LIGHTS ON ICP FOR DSP NO. 1 AND DSP NO. 9.

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| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED SS  
DRAWN G. DENSMORE  
CHECKED    
APPROVED    
DATE 5-85

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

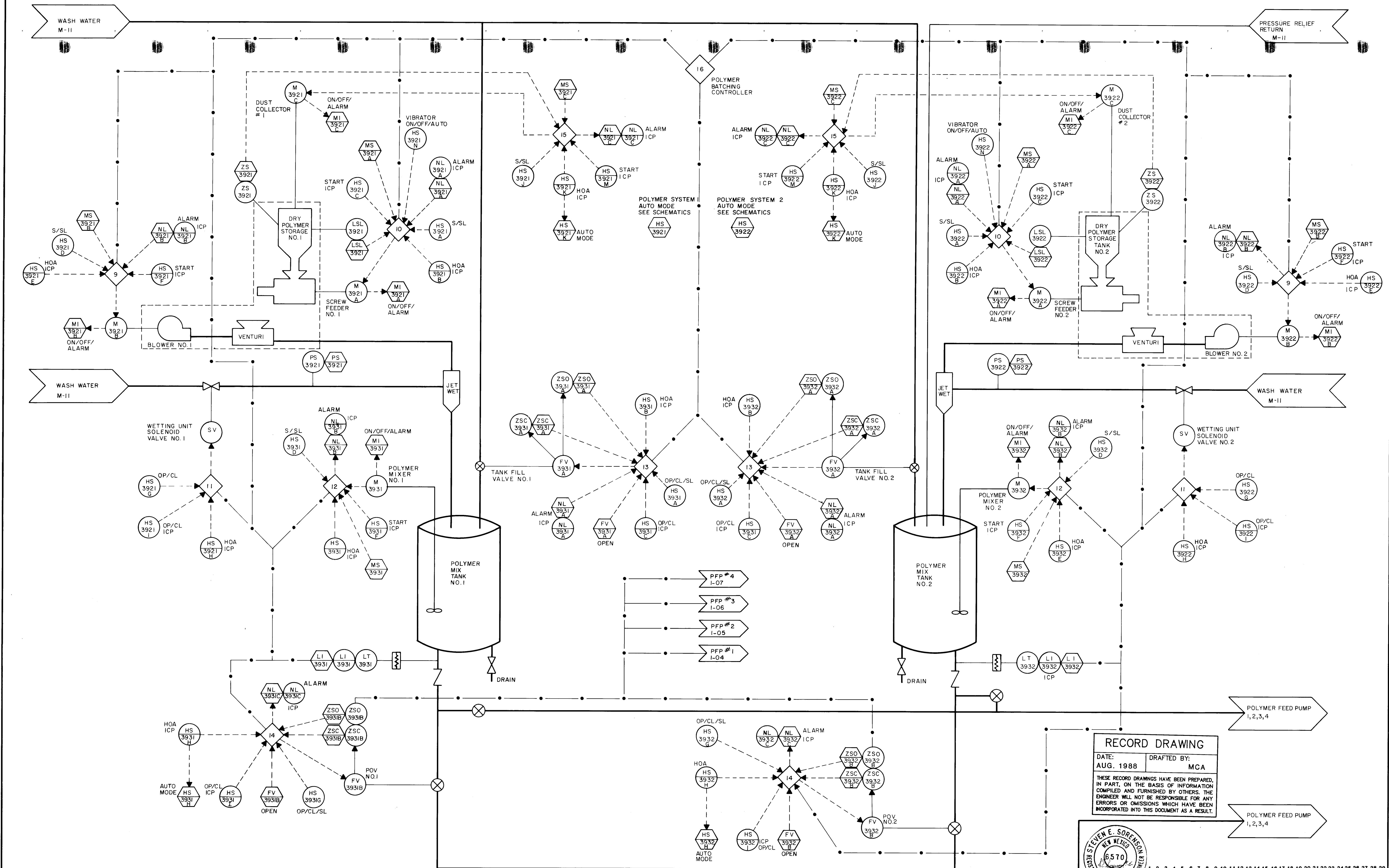
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CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
P&ID SLUDGE SUPPLY

M-C NO. 832221  
**I-02** 65 of 112  
SC NO.





| NO. | DATE | REVISIONS | APPROVED |
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DESIGNED BY  
DRAWN BY  
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APPROVED BY  
DATE 5-85

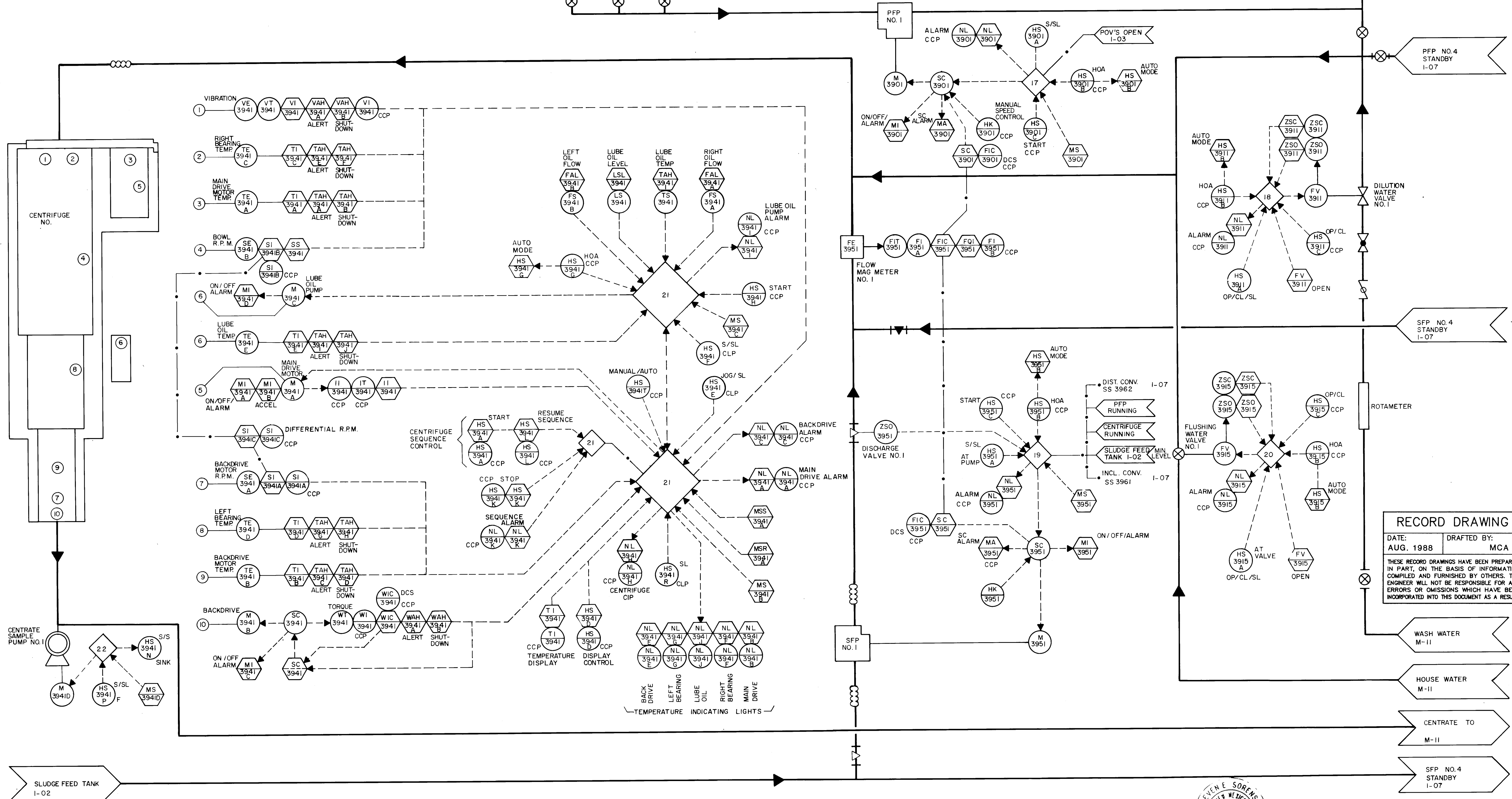
**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
P & ID POLYMER SUPPLY  
I-03 66 of 112  
SC NO.





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DESIGNED SS  
DRAWN G. DENSMORE  
CHECKED \_\_\_\_\_  
APPROVED [Signature]  
APPROVED \_\_\_\_\_  
DATE 5-85



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

# INTERIM SLUDGE DEWATERING FACILITIES

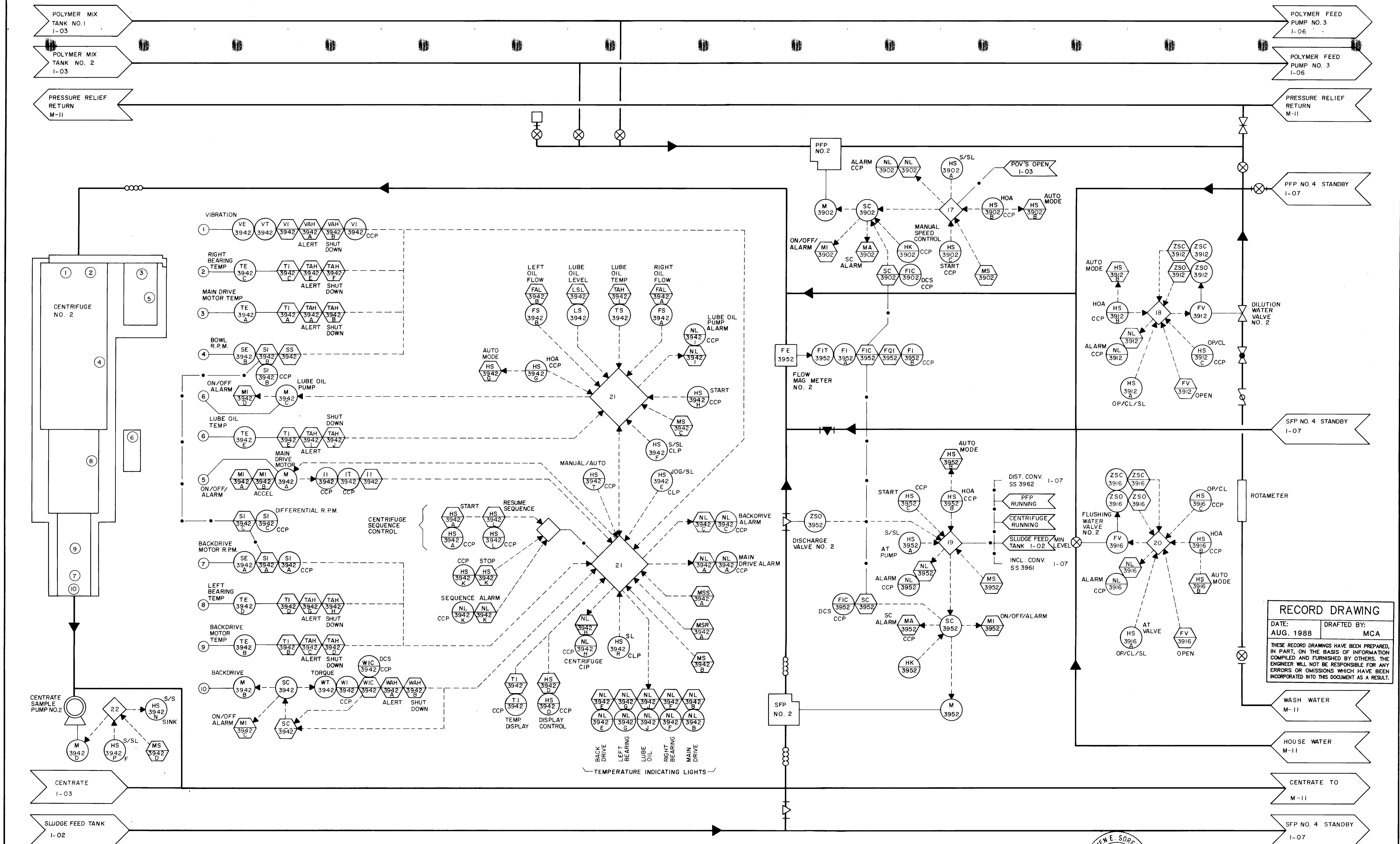
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M-C NO. 832221

I-04 67 of 112

SC NO





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DESIGNED SS  
DRAWN STAFF  
CHECKED [Signature]  
APPROVED [Signature]  
DATE 5-85

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

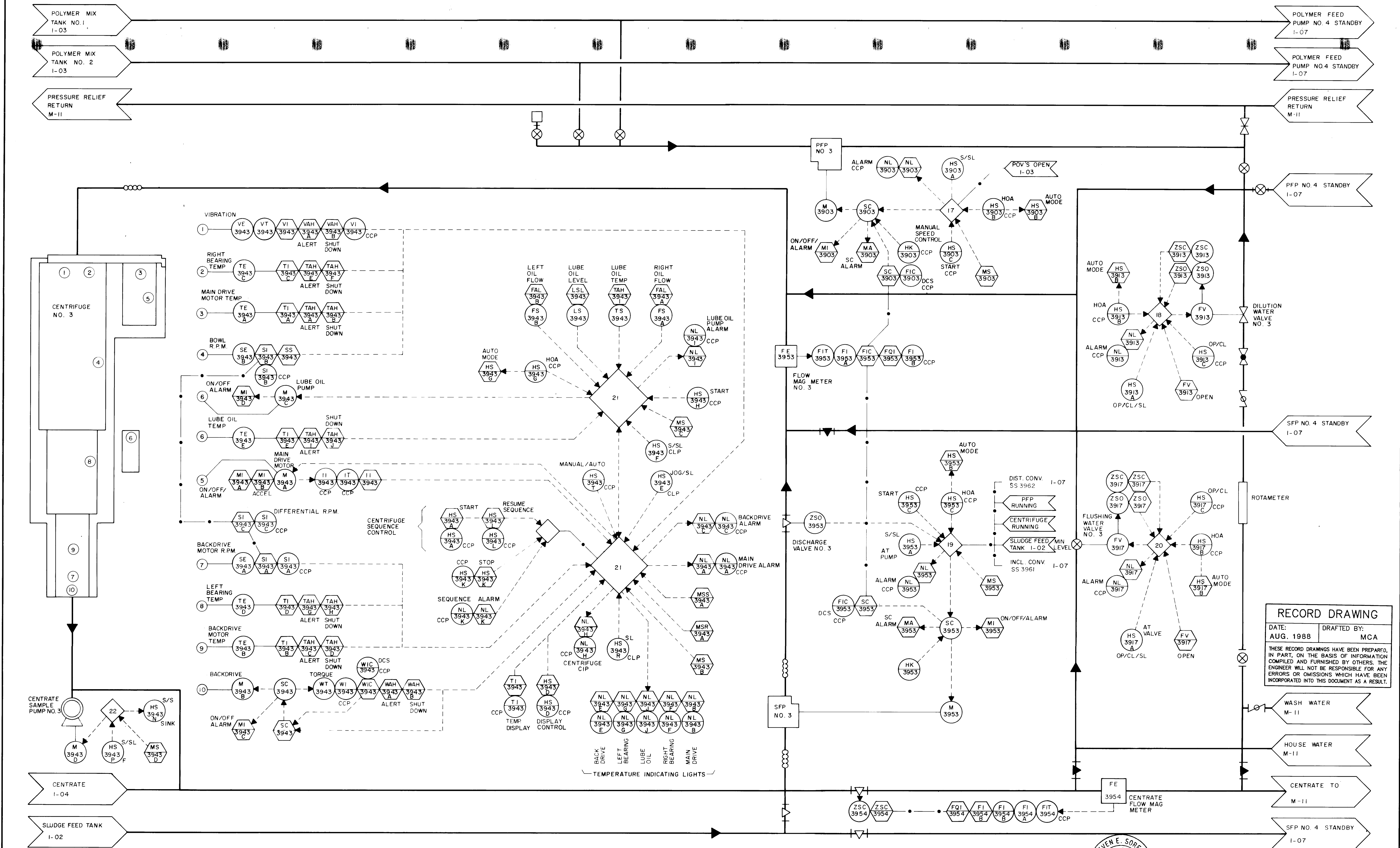
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CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
P & ID CENTRIFUGE NO.2

M-C NO. 832221  
I-05  
68 of 112  
SC NO.





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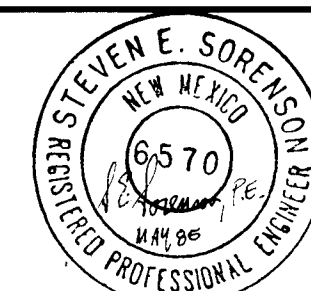
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WASH WATER M-II

HOUSE WATER M-II

CENTRATE TO M-II

SFP NO. 4 STANDBY I-07



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

26 36 94 69 88

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DATE 5-85

**MOLZEN-CORBIN**

**STANLEY CONSULTANTS**

A JOINT VENTURE

NONE

GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO

**SOLIDS HANDLING FACILITIES**

PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**

P & ID CENTRIFUGE NO. 3

M-C NO. 832221

**I-06** 69 of 112

SC NO.



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**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

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GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

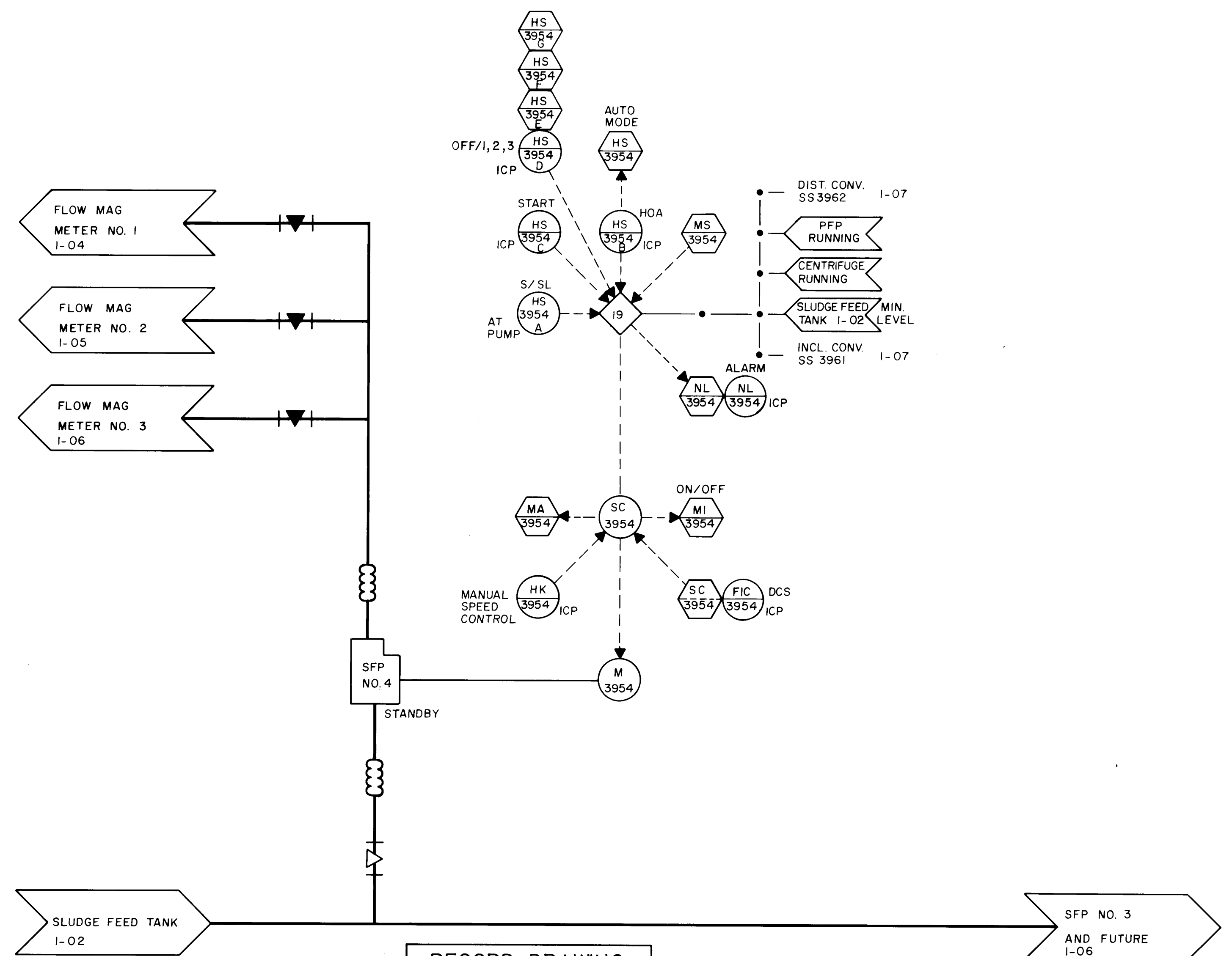
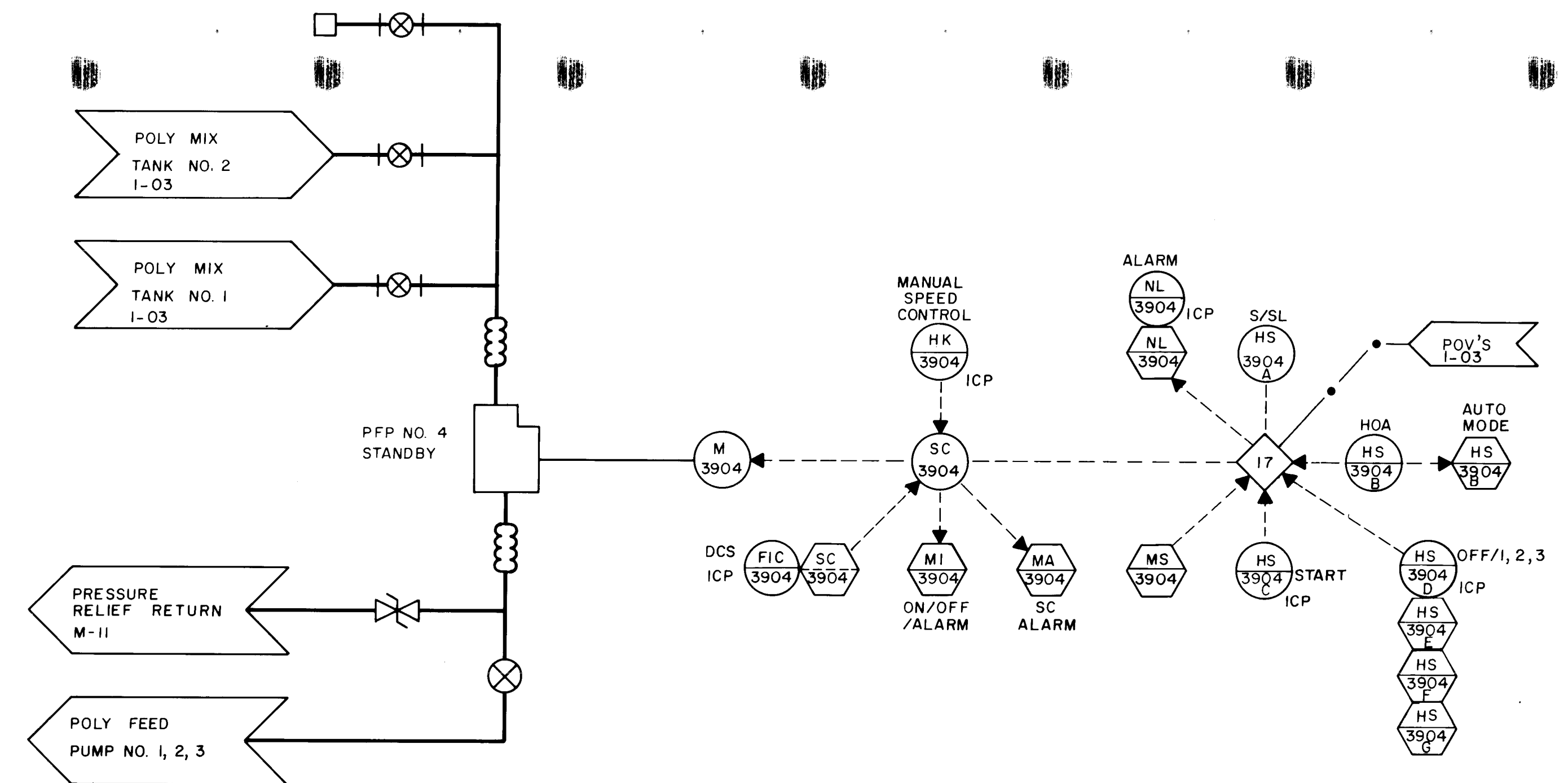
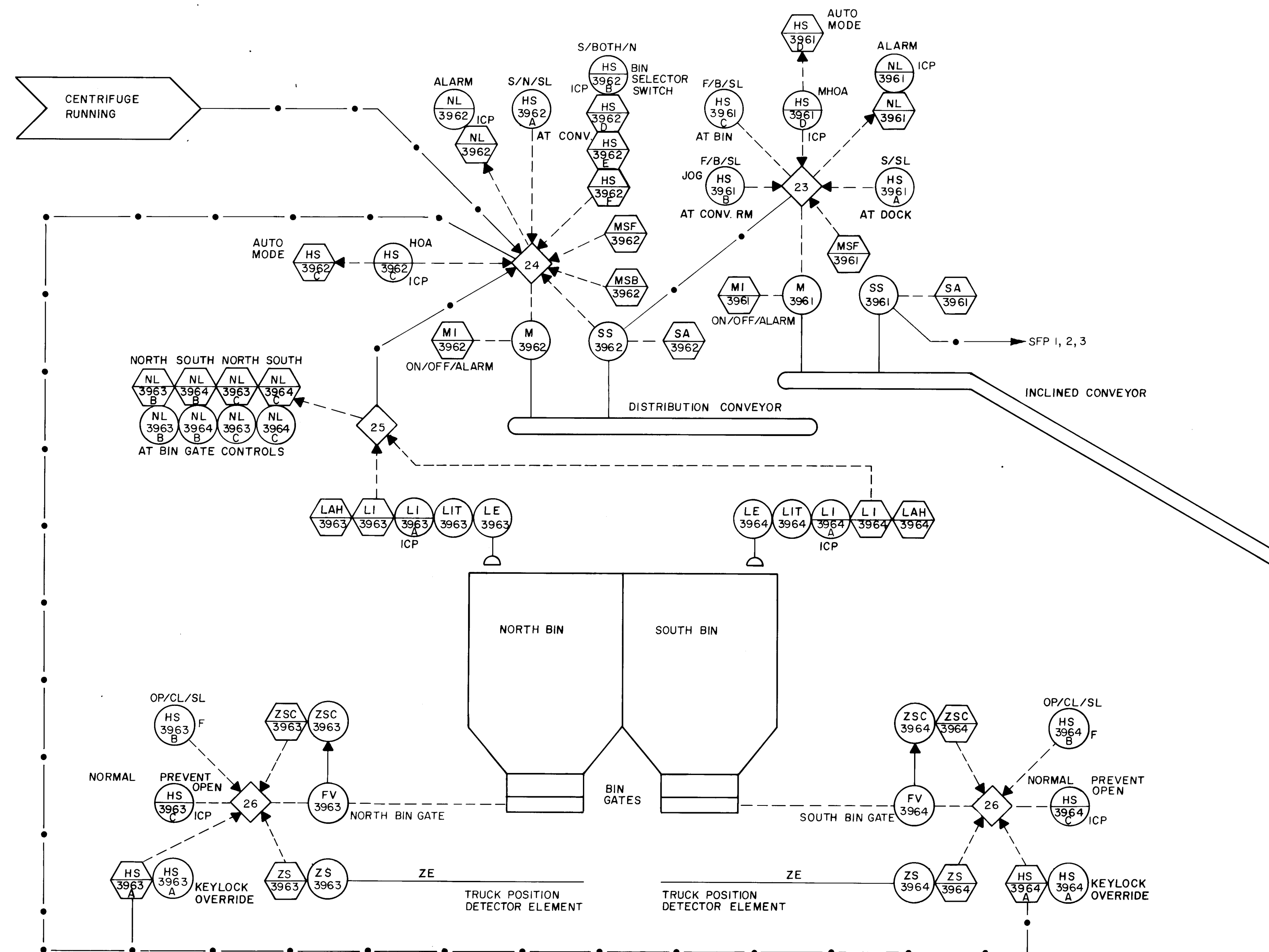
## INTERIM SLUDGE DEWATERING FACILITIES

### P&ID STORAGE BINS AND STANDBY PUMPS

M-C NO. 832221

4-07 70 of 112

SC NO.



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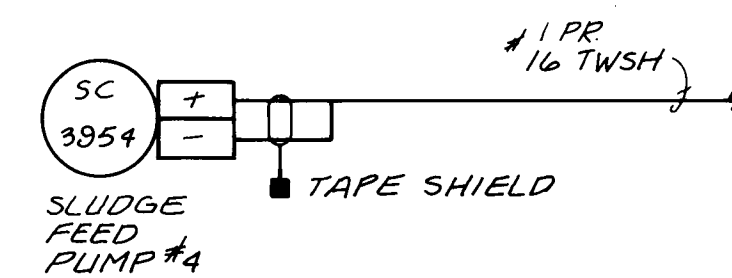
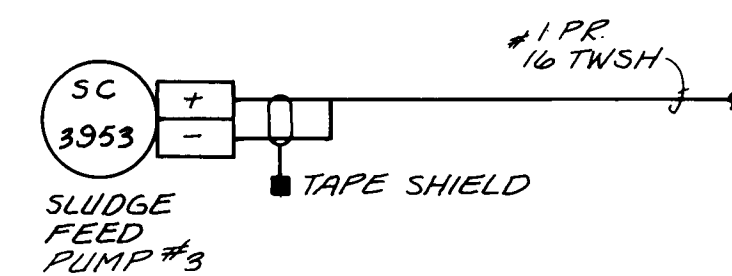
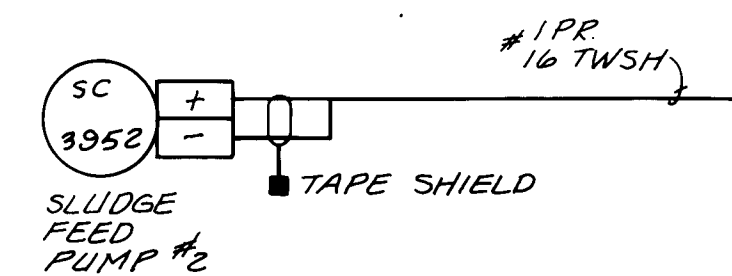
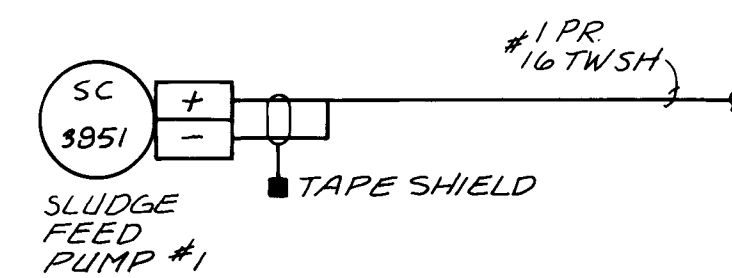
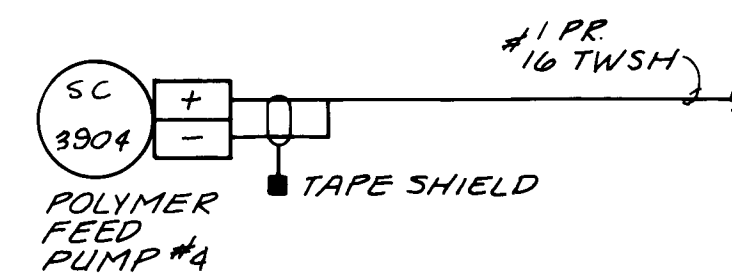
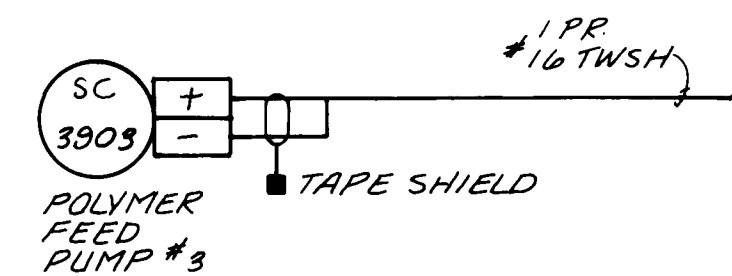
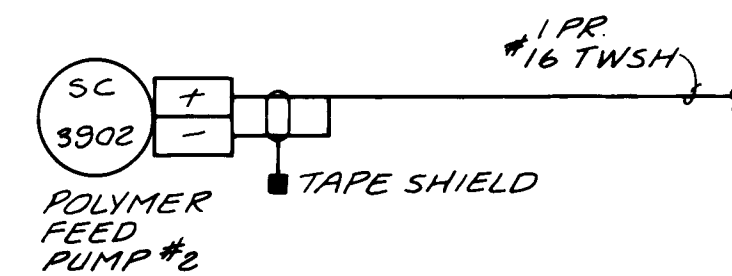
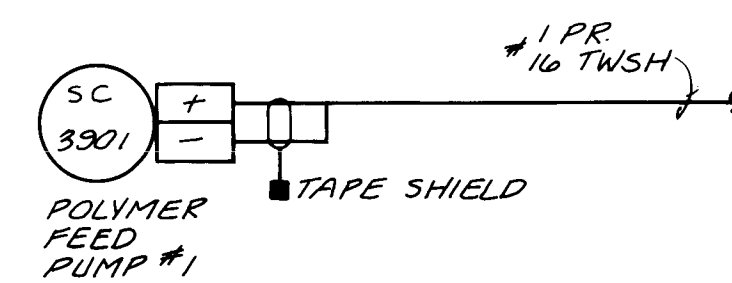
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DEWATERING BLDG.-PROCESS AREA

DEWATERING ICP

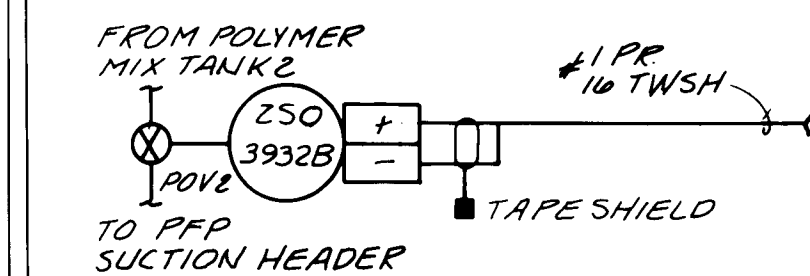
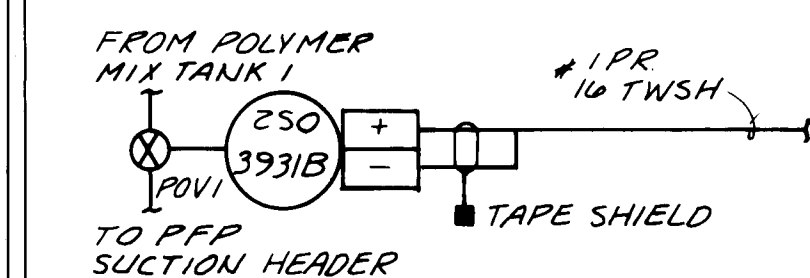
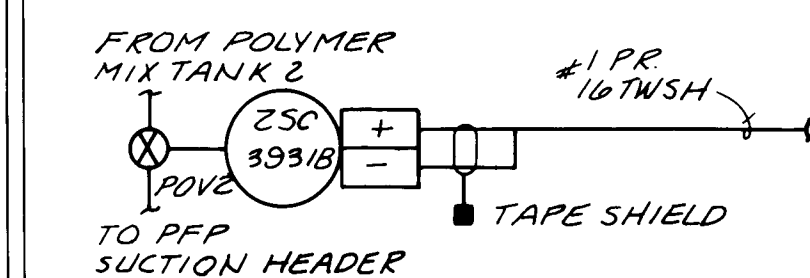
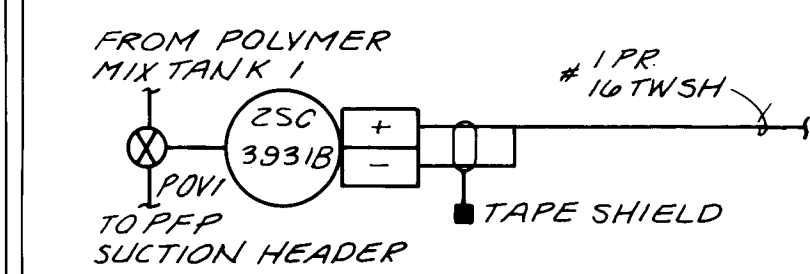
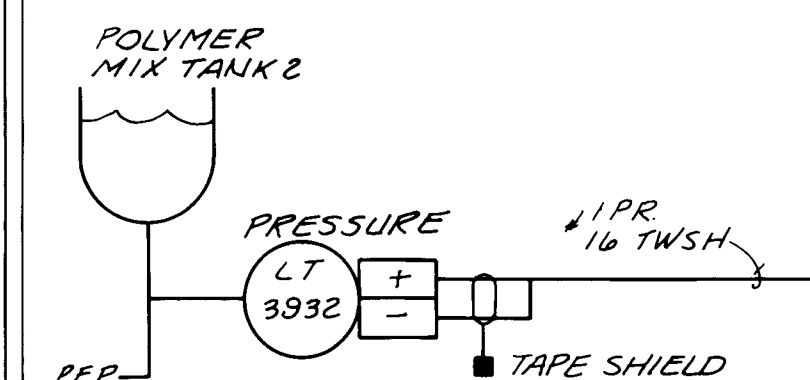
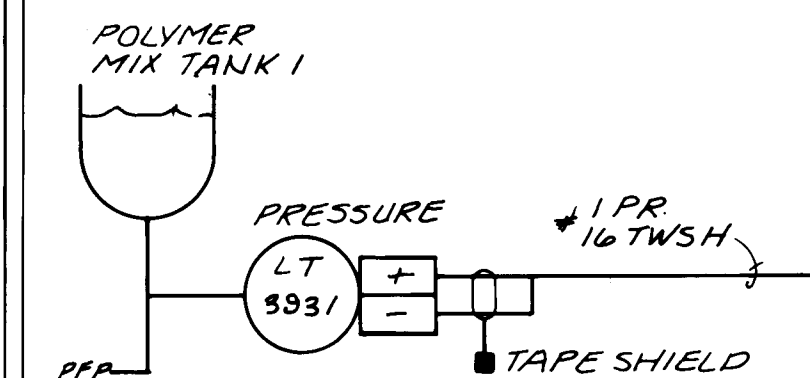
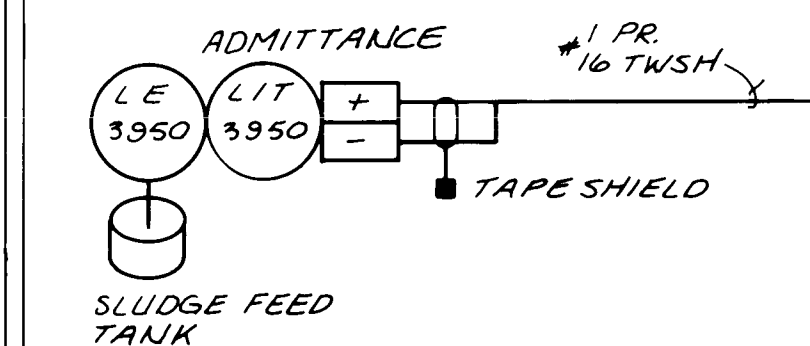
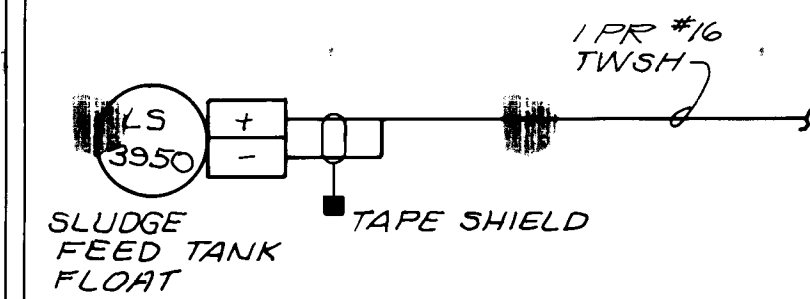
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DEWATERING BLDG.-PROCESS AREA

DEWATERING ICP

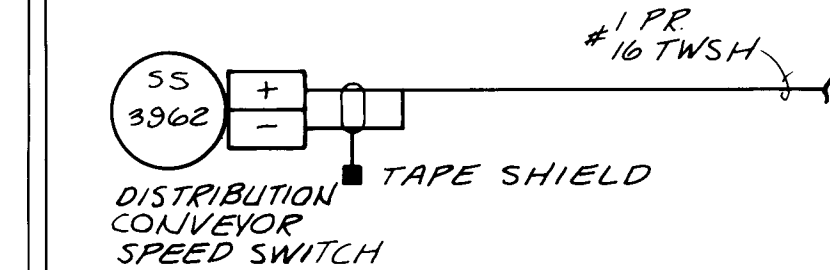
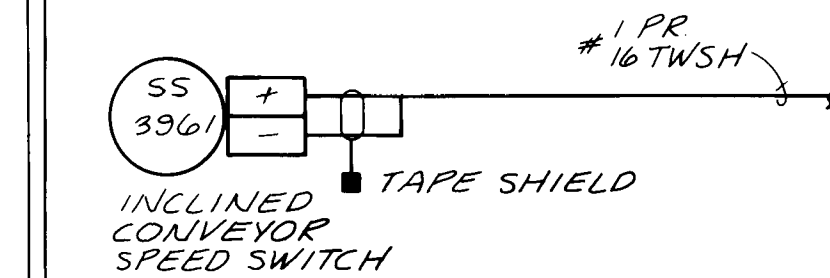
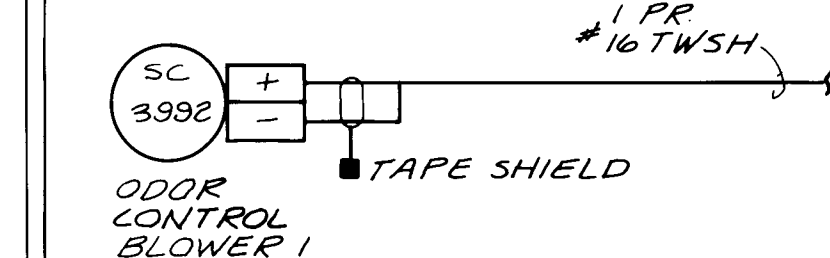
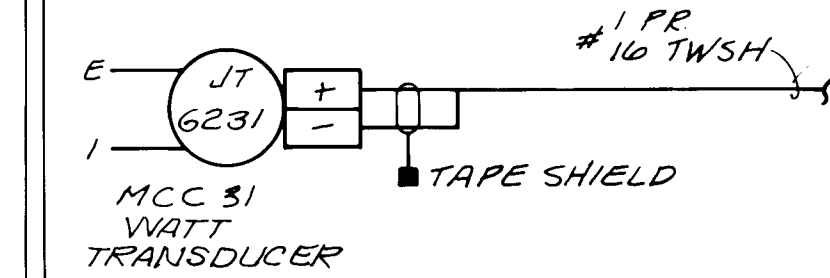
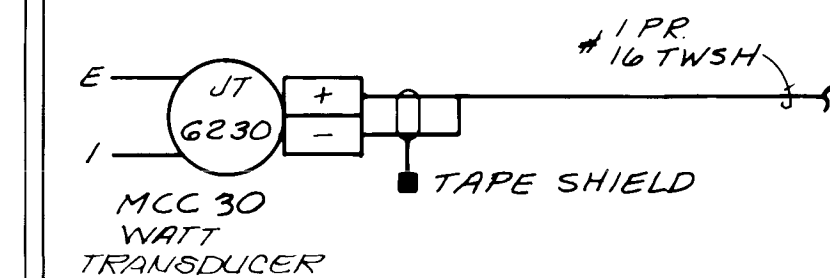
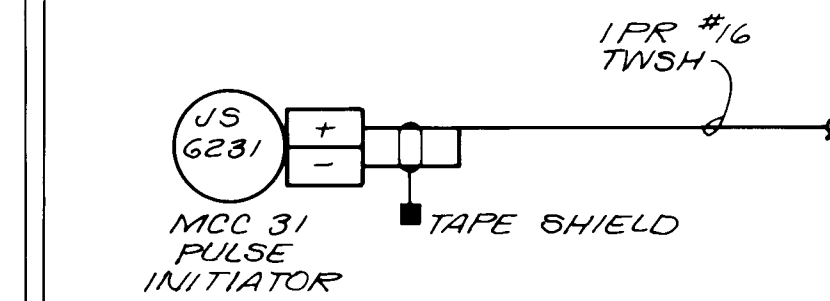
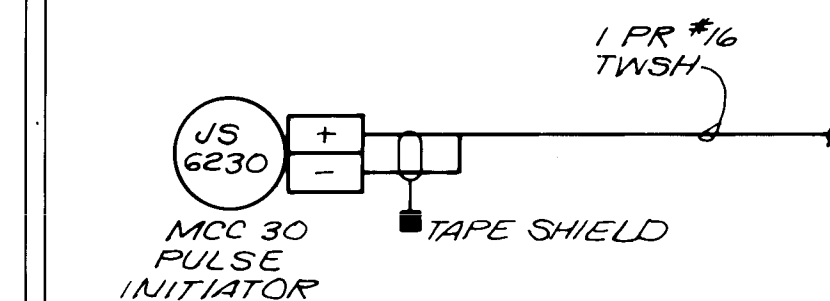
PCU I/O

KEEP EACH SHIELD ISOLATED  
AND CARRY THROUGH ON  
TERMINAL BOARD TYPICALPROVIDE ALL TERMINAL STRIPS  
WITH TAG NUMBERS AND TB  
POINTS WITH NUMBER IN  
SUBMITTAL GROUP BY FUNCTION.MAKE ALL CONNECTIONS  
TO PCU TYPICAL  
SHOW TB POINTS ON  
SUBMITTALS AND BY  
MARKING IN "PCU I/O"  
COLUMNS OF RECORD  
DRAWINGS TYPICAL  
AND AS REQUIRED IN  
SECTION 15372.

DEWATERING BLDG.-PROCESS AREA

DEWATERING ICP

PCU I/O



## RECORD DRAWING

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DATE 5-85



MOLZEN-CORBIN

STANLEY CONSULTANTS

A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

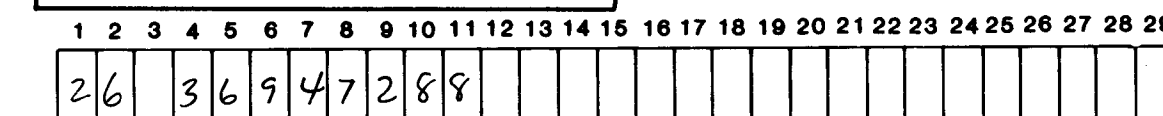
INTERIM SLUDGE DEWATERING FACILITIES  
LOOP DIAGRAMS

M-C NO. 832221

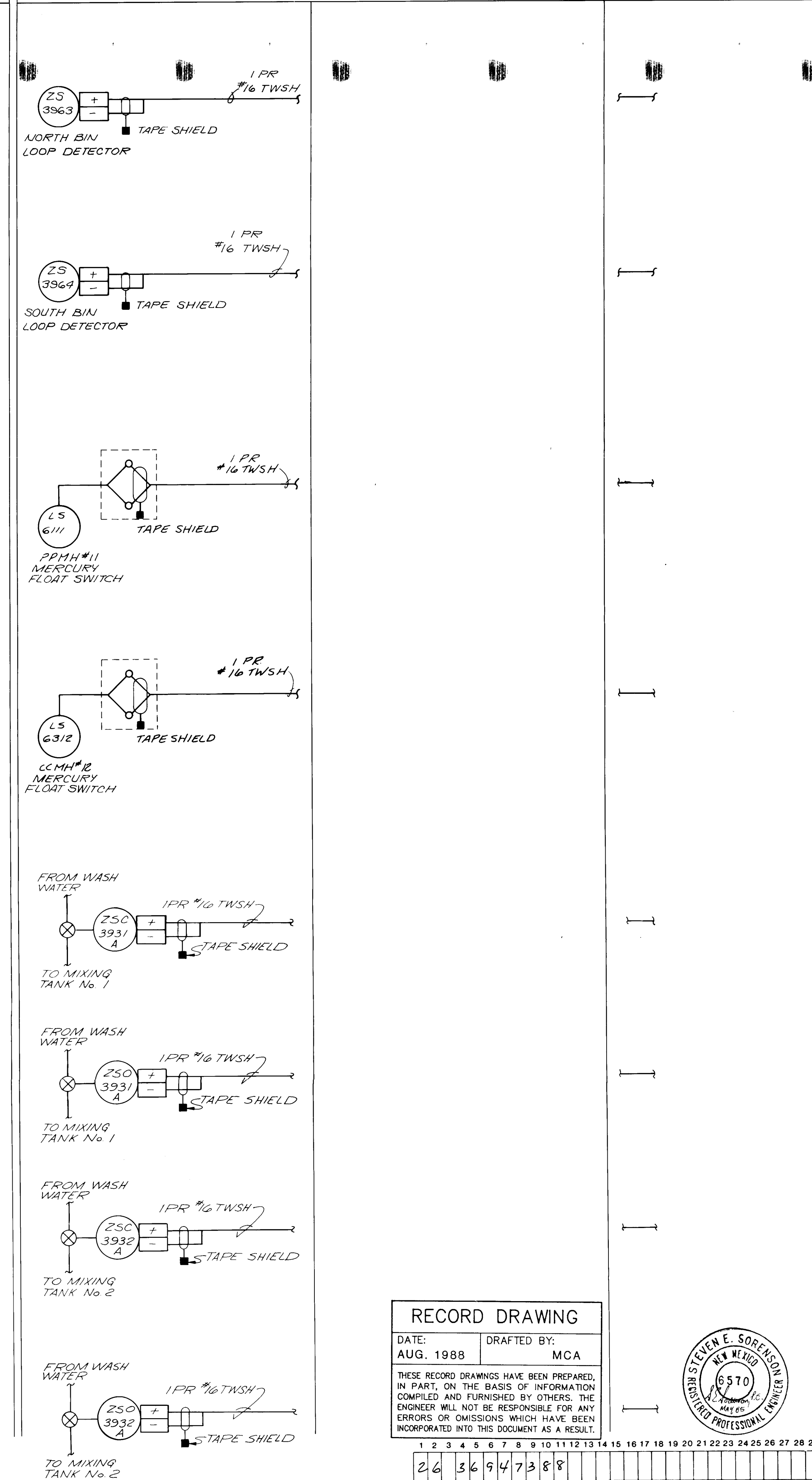
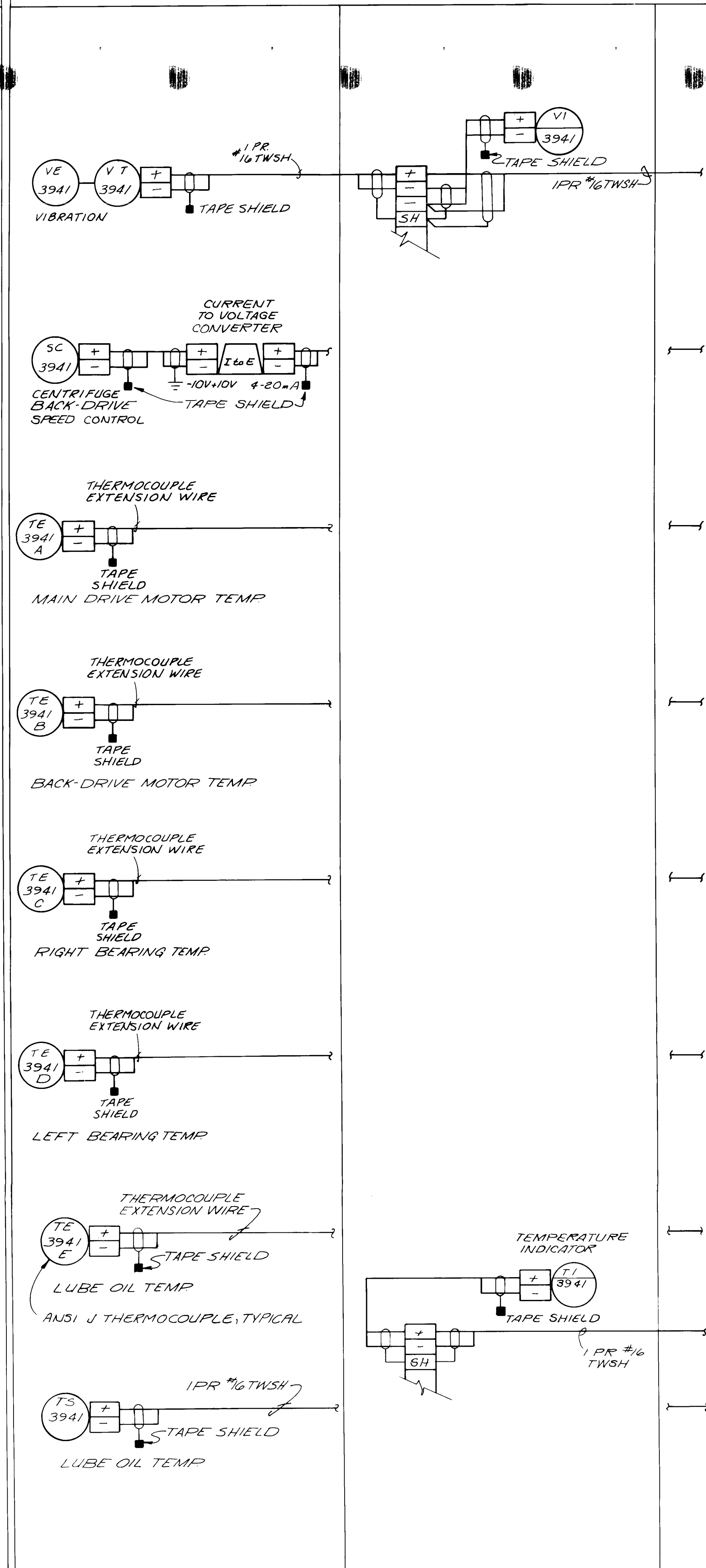
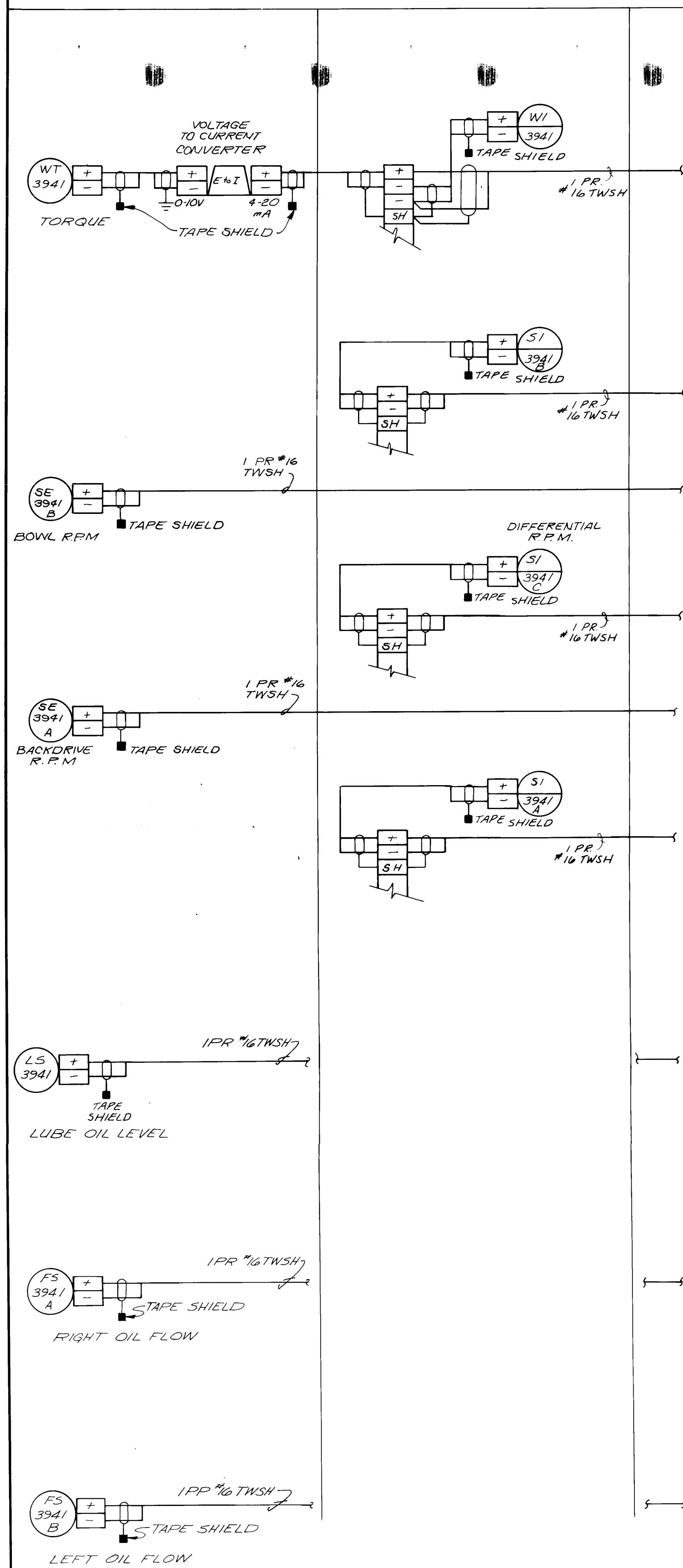
I-08 71 OF 112

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APPROVED  
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MOLZEN-CORBIN  
STANLEY CONSULTANTS  
A JOINT VENTURE

NONE  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
LOOP DIAGRAMS

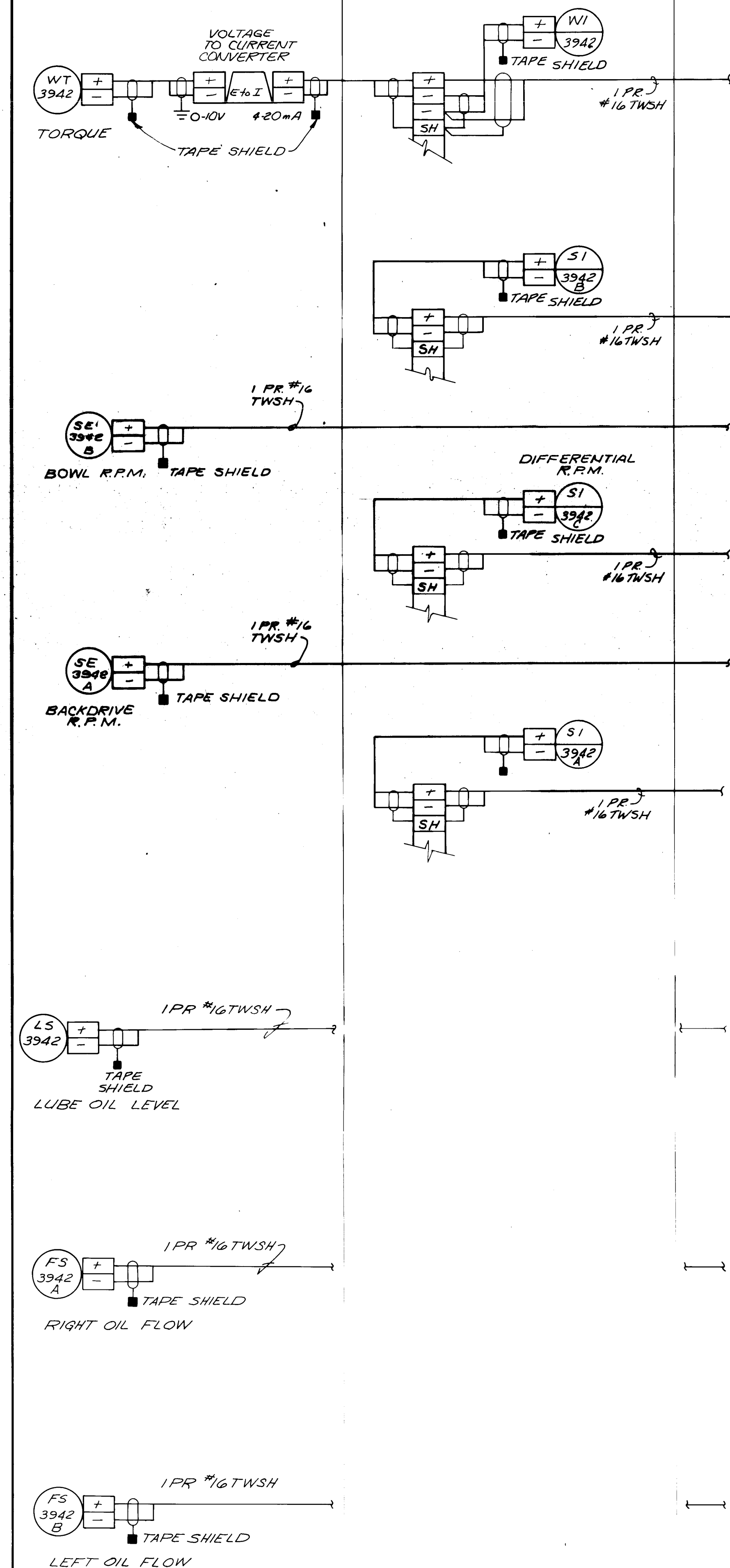
M-C NO. 832221  
I-10 73 of 112  
SC NO.



DEWATERING BLDG. - PROCESS AREA

DEWATERING CCP2

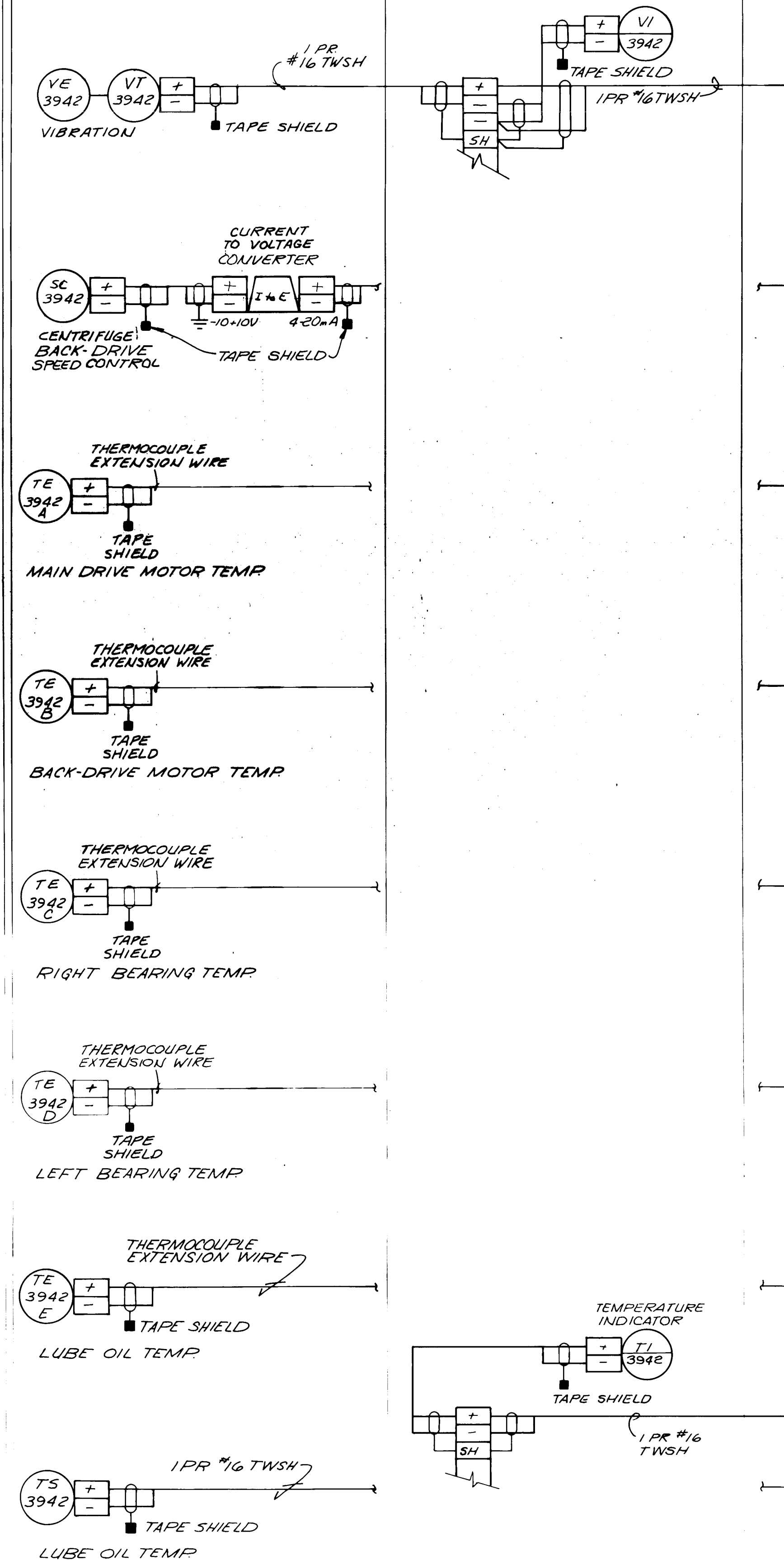
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DEWATERING BLDG. - PROCESS AREA

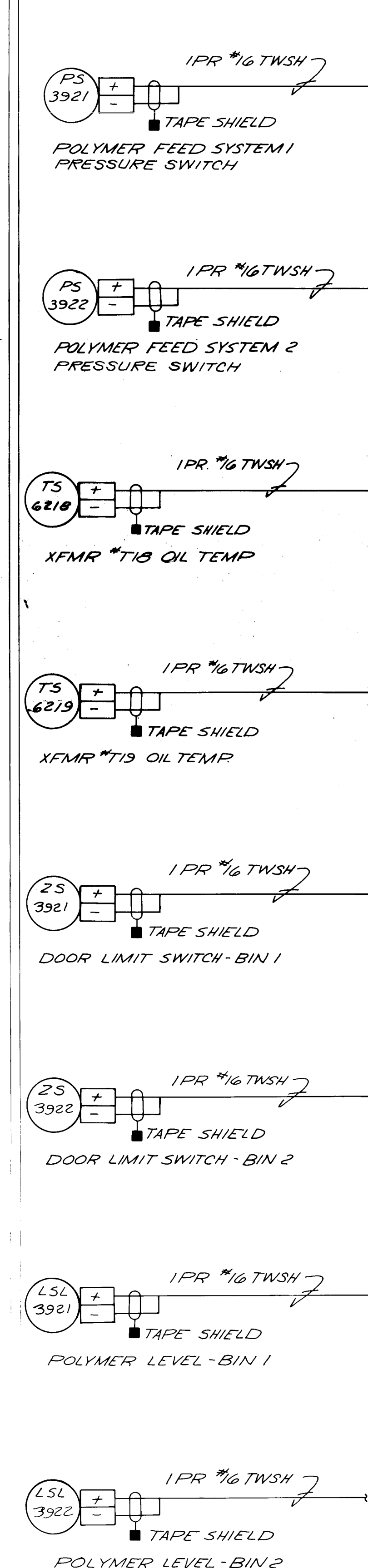
DEWATERING CCP2

PCU I/O



DEWATERING BLDG. - PROCESS AREA

PCU - I/O



## RECORD DRAWING

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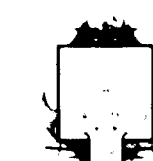
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 DATE 5-85



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A JOINT VENTURE

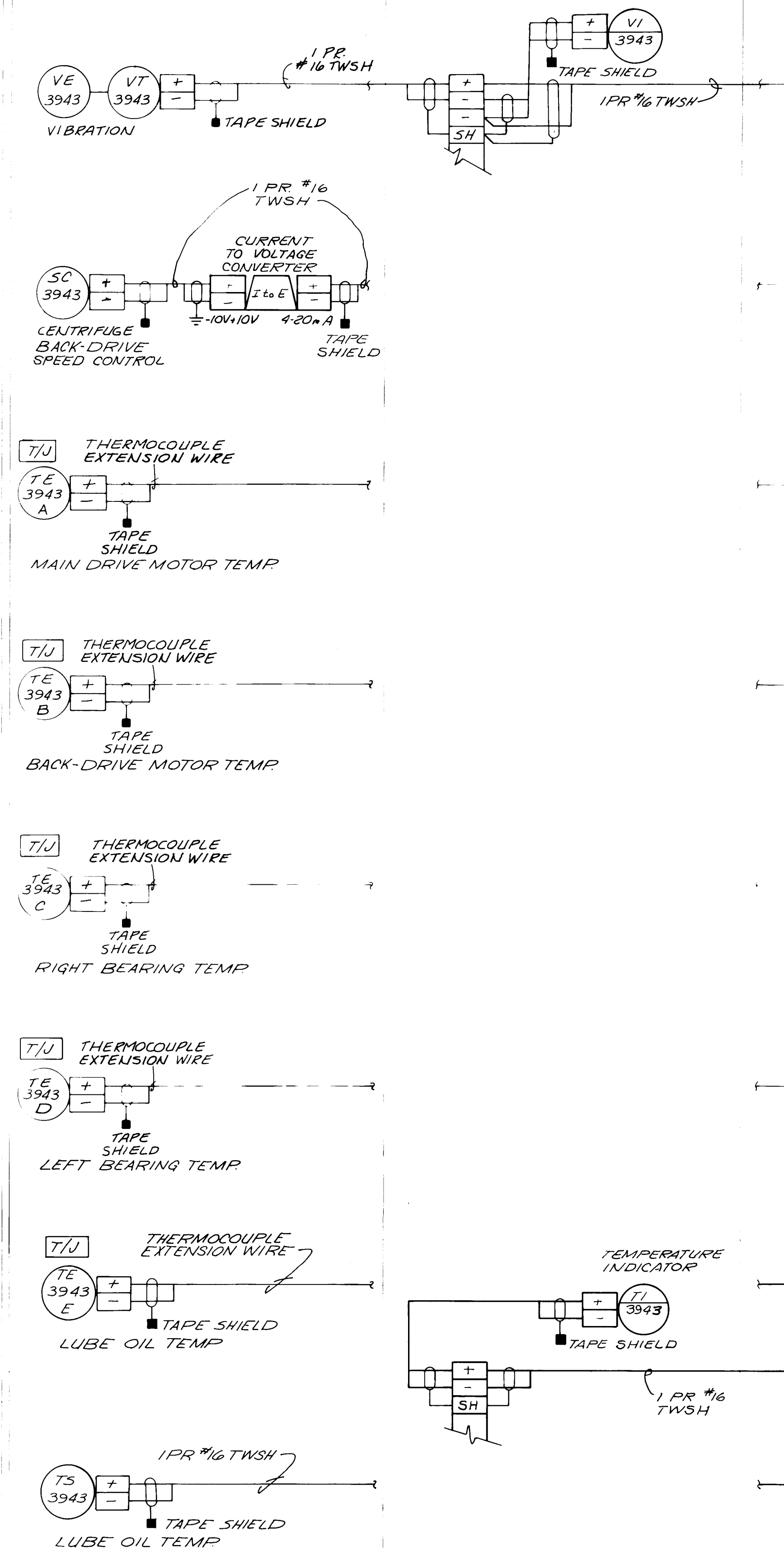
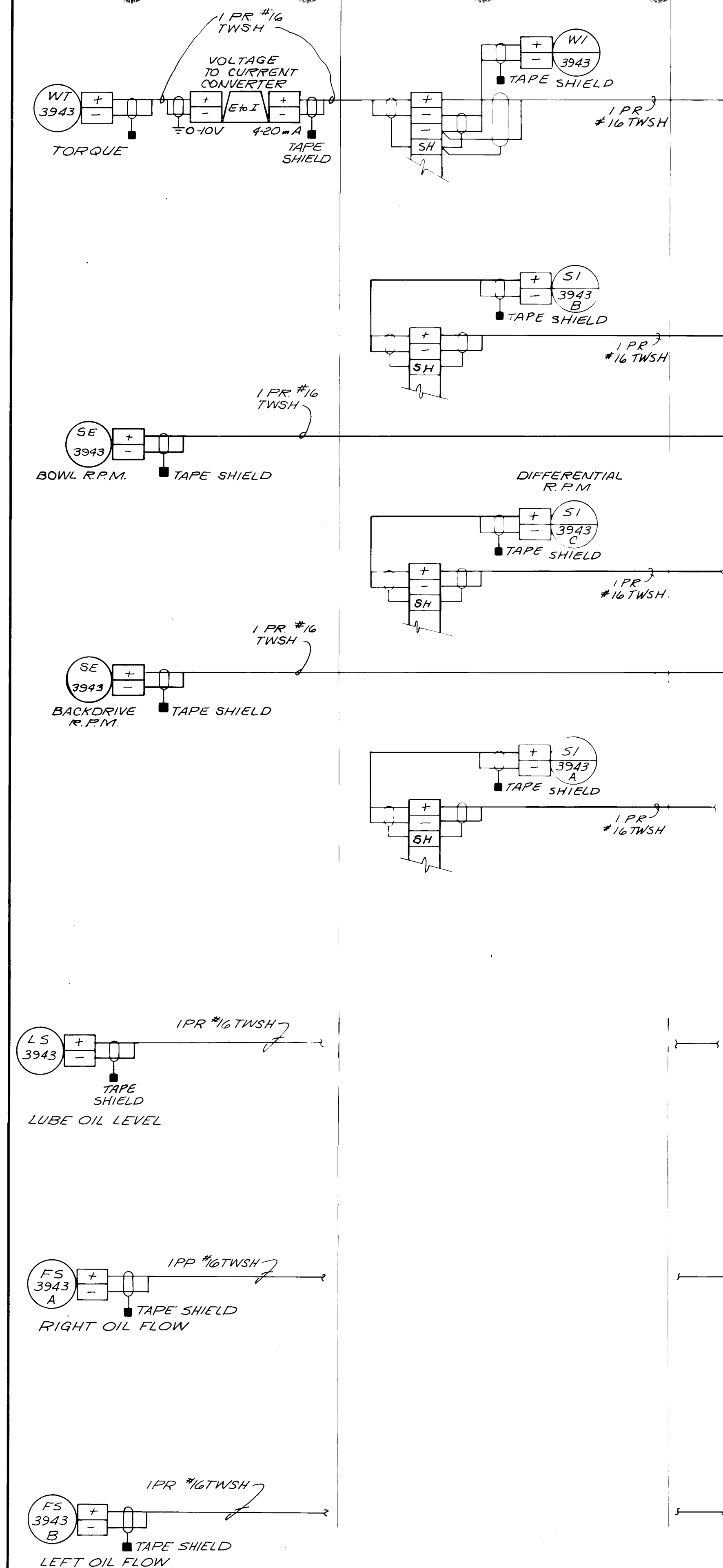
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CITY OF ALBUQUERQUE, NEW MEXICO  
 SOLIDS HANDLING FACILITIES  
 PHASE II B - 3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
 LOOP DIAGRAMS

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| M-C NO. 832221 | I-11 | 74 of 112 |
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## RECORD DRAWING

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APPROVED  
DATE 8-85



MOLZEN-CORBIN

STANLEY CONSULTANTS

A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
LOOP DIAGRAMS

M-C NO. 832221

I-12 75 of 112

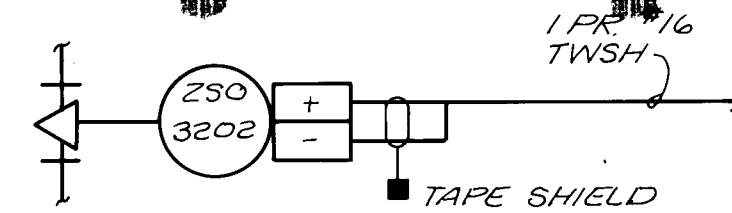
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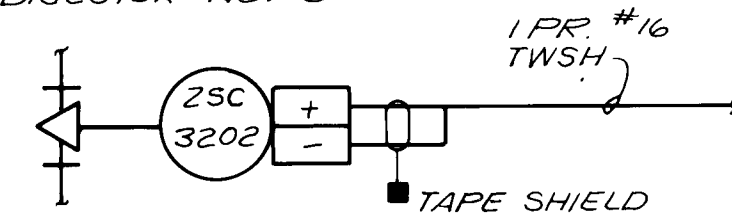
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PCU - 1/0

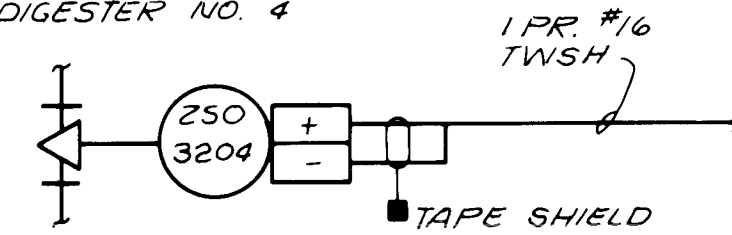
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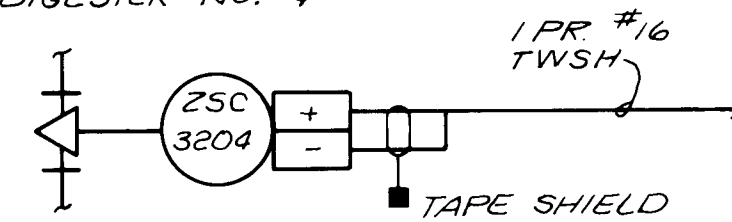
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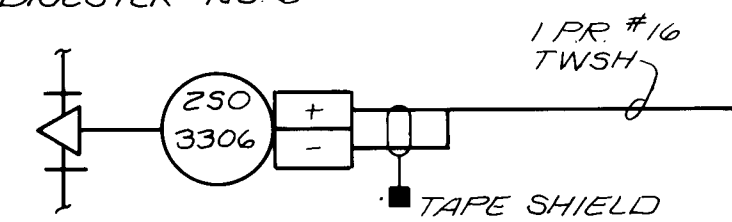
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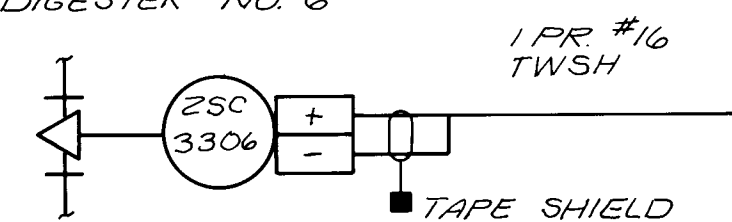
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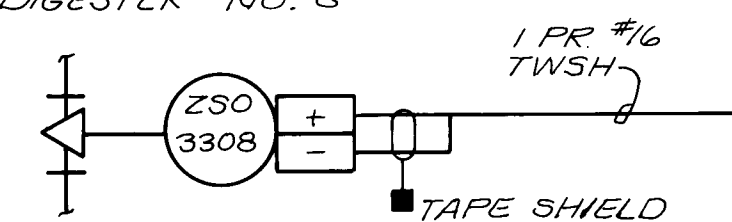
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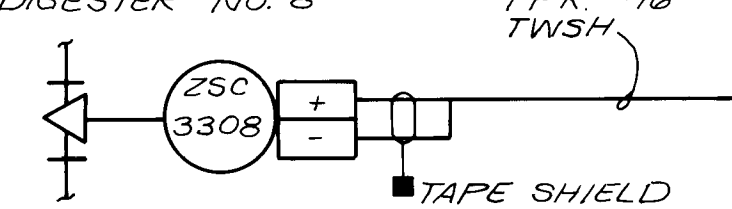
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DIGESTER NO. 8



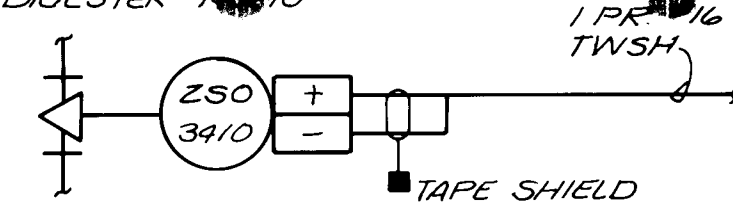
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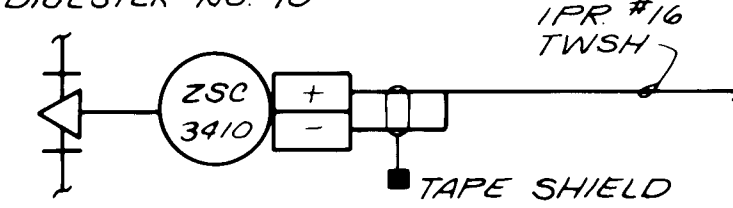
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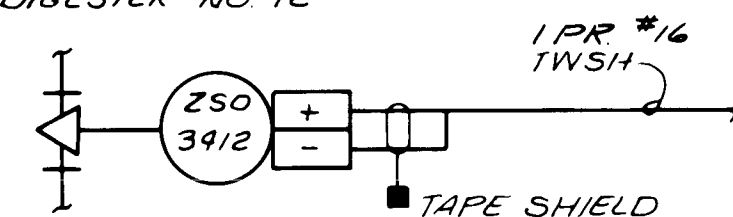
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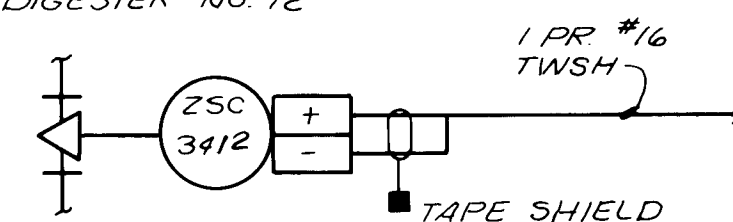
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DIGESTER NO. 12



DIGESTER NO. 12



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CHECKED    
APPROVED    
DATE 5-85

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
LOOP DIAGRAMS

M-C NO. 832221

I-13 76 OF 112

SC NO.

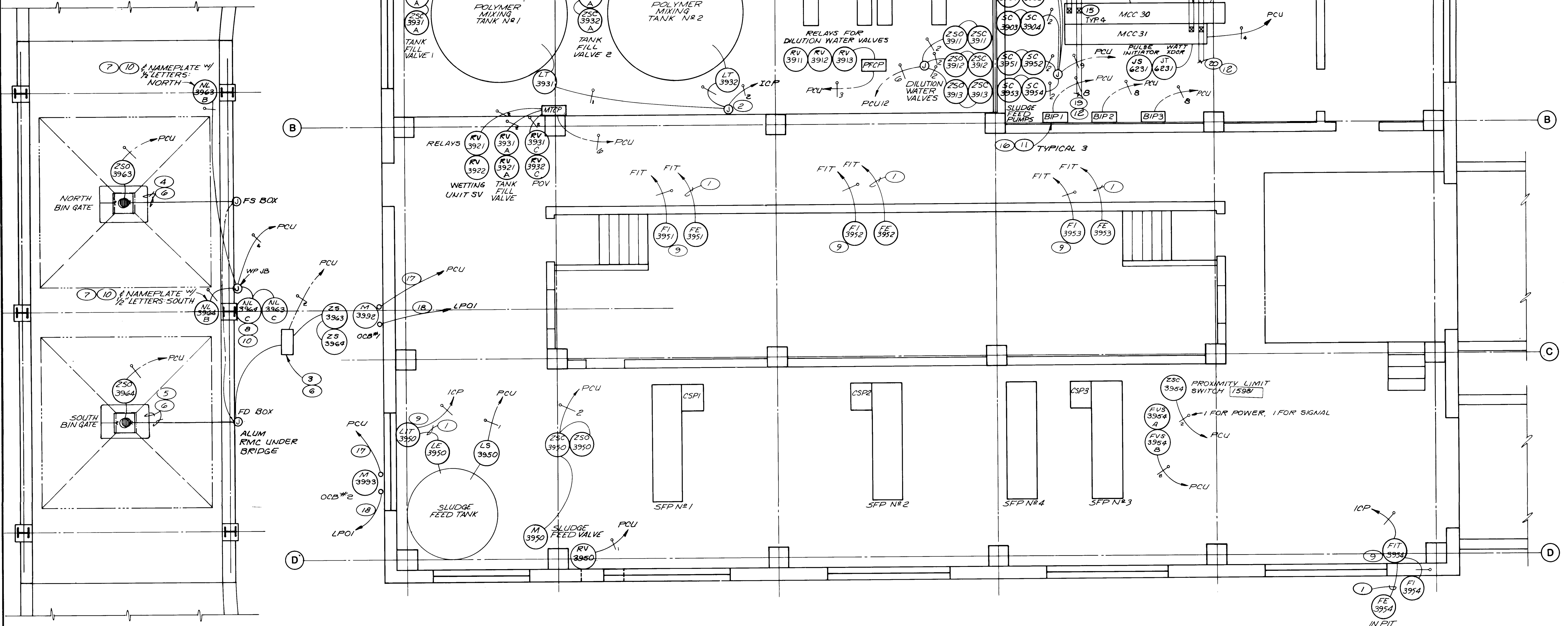


# NOTES

- 1/2" PVC RMC WITH CABLE BY METER MANUFACTURER. DO NOT COMBINE.
- MOUNT ON CEILING.
- WP ENCLOSURE AND TWO AMPLIFIERS FOR LOOP DETECTOR. MOUNT ON UNISUB ON SIDE OF PLATFORM WITH DOOR CONVENIENTLY ACCESSIBLE FROM PLATFORM FOR MAINTENANCE.
- LOOP FOR ZS 3963.
- LOOP FOR ZS 3964.
- EQUIPMENT, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH SECTION 713 OF THE NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION - 1984.
- FACE WEST. MOUNT 100" CENTERLINE ABOVE DRIVE PAD.
- SEE ENCLOSURE DETAIL ON SHEET E-15.
- MOUNT 60" ABOVE FINISHED FLOOR.
- 24VDC PILOT, GREEN, ALLEN-BRADLEY 800H-QR24G.
- 2 SIGNAL CONVERTERS, 2 INTERPOSING RELAYS, TERMINAL BOARDS, 5 NP (MAIN = BACKDRIVE INTERFACE X, TAG # FOR EACH COMPONENT), NEMA 12 ENCLOSURE. FOR DETAIL SEE SHEET E-14.
- USE FOR DCS CABLES.

# GENERAL NOTES

- INSTALL NEC 500 GAS SEALS ON ALL CONDUITS PENETRATING THE ENVELOPE OF THE CONVEYOR ROOM AND/OR BIN AREA. FILL WITH NON-HARDENING SEALER.
- WHERE WIREWAYS ENTER BOTTOM OF PCU, CCP, ICP, SEAL BETWEEN CONCRETE AND WIREWAY WITH SILICONE SEAL AND BETWEEN CABLES AND WIREWAY WITH DUCT SEAL.



- 6" X 6" WIREWAY DILIGHT LAY-IN HOFFMAN BULLETIN F10 OR EQUAL. PROVIDE ALL HANGERS, ELBOWS, FITTINGS, OFFSET, TEES AND PLATES. MOUNT ON THE CEILING.
- 6" X 6" VERTICAL SAME AS 13 EXCEPT TO THE BOTTOM OF PCU ABOVE.
- 6" X 6" VERTICAL SAME AS 13 EXCEPT FROM TOP OF MCC TO HORIZONTAL WIREWAY.
- BACKDRIVE INTERPOSING PANEL.
- RUN 1" CONDUIT FROM PCU. STUB AND CAP 6" ABOVE GRADE AT EDGE OF SLAB FOR CARBON ADSORPTION VESSEL.
- SAME AS 17 EXCEPT TO LPO1.
- SAME AS 13 EXCEPT TO BOTTOM OF CCP1 AND CCP2 ABOVE.
- SAME AS 13 EXCEPT TO BOTTOM OF CCP3 (OR ICP3) AND ICP1 ABOVE.

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APPROVED *SS*  
DATE *5-85*

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/4" 1'-0"  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
INSTRUMENTATION GROUND FLOOR PLAN  
M-C NO. 832221  
**I-14** 77 of 112  
SC NO.

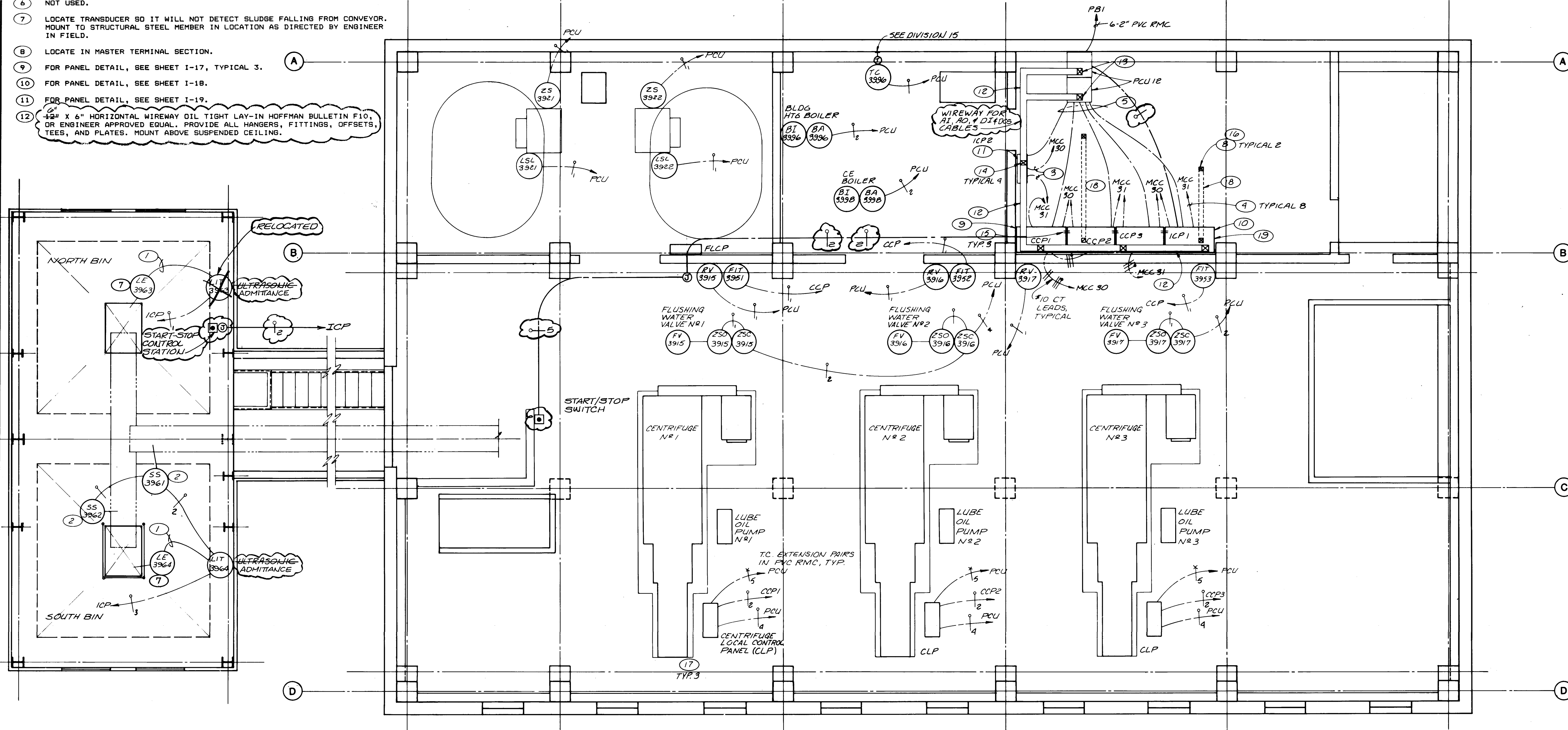


# NOTES

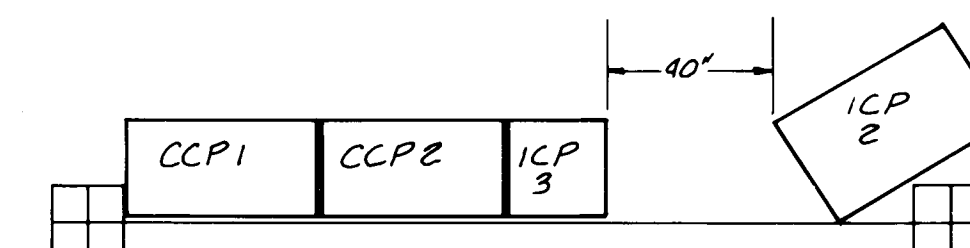
- WIRE BY LIT MANUFACTURER.
- SHOWN THUS FOR DESIGN PURPOSES. ACTUAL LOCATION WILL BE PROVIDED BY CONVEYOR MANUFACTURER.
- 1-1" FOR DC PILOTS. 1 CONDUIT FOR AC CONTROL CONDUCTORS AS REQUIRED ON SCHEMATICS, CONDUIT SIZE TO MATCH. 1-1" SPARE.
- 1" CONDUIT FOR DC PILOTS. 1" SPARE.
- ONE CONDUIT FROM EACH PANEL TO PCU FOR DO. SIZE OF CONDUIT AND QUANTITY OF CONDUCTORS AS REQUIRED BY SCHEMATICS, INSTRUMENTATION INDEX, LOOP DIAGRAMS, ETC. MINIMUM 3/4" EACH RUN.
- NOT USED.
- LOCATE TRANSDUCER SO IT WILL NOT DETECT SLUDGE FALLING FROM CONVEYOR. MOUNT TO STRUCTURAL STEEL MEMBER IN LOCATION AS DIRECTED BY ENGINEER IN FIELD.
- LOCATE IN MASTER TERMINAL SECTION.
- FOR PANEL DETAIL, SEE SHEET I-17, TYPICAL 3.
- FOR PANEL DETAIL, SEE SHEET I-18.
- FOR PANEL DETAIL, SEE SHEET I-19.
- 12" X 6" HORIZONTAL WIREWAY OIL TIGHT LAY-IN HOFFMAN BULLETIN F10, OR ENGINEER APPROVED EQUAL. PROVIDE ALL HANGERS, FITTINGS, OFFSETS, TEES, AND PLATES. MOUNT ABOVE SUSPENDED CEILING.

# GENERAL NOTES

- INSTALL NEC 500 GAS SEALS ON ALL CONDUITS PENETRATING ENVELOPE OF CONVEYOR ROOM AND/OR BIN AREA. FILL WITH NON-HARDENING SEALER.
- WHERE WIREWAYS ENTER BOTTOM OF PCU, CCP, ICP: SEAL BETWEEN CONCRETE AND WIREWAY WITH SILICONE SEAL, AND BETWEEN CABLE AND WIREWAY WITH DUCT SEAL.
- HORIZONTAL RUNS OF WIREWAY: 8" NOMINAL ABOVE CEILING, BUT CLOSE COORDINATION WITH HVAC DUCT REQUIRED.



- SAME AS (12) EXCEPT 6" X 6". VERTICAL TO TOP OF PCU.
- SAME AS (12) EXCEPT 4" X 4". VERTICAL TO CCP, ICP.
- CHASE NIPPLES AS NECESSARY FOR CONTROL WIRING.
- SAME AS (12) EXCEPT 6" X 6". VERTICAL TO TOP OF MCC 30 & MCC 31 IN MCC ROOM.
- FOR CENTRIFUGE LOCAL CONTROL PANEL (CLP) SEE DETAIL ON SHEET E-12.
- SAME AS (12) EXCEPT 6" X 6" FROM TOP OF MCC TO BOTTOM OF CCP'S & ICP'S, MOUNT ON THE CEILING OF MCC ROOM. USE FOR AC CONTROL.
- USE ALTERNATE PANEL LAYOUT IF ONLY 2 CCP'S ARE SUPPLIED. ADJUST WIREWAY LAYOUT TO MATCH.



ALTERNATE PANEL LAYOUT  
SCALE 1/4" = 1'-0"

## RECORD DRAWING

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**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**INSTRUMENTATION SECOND FLOOR PLAN**

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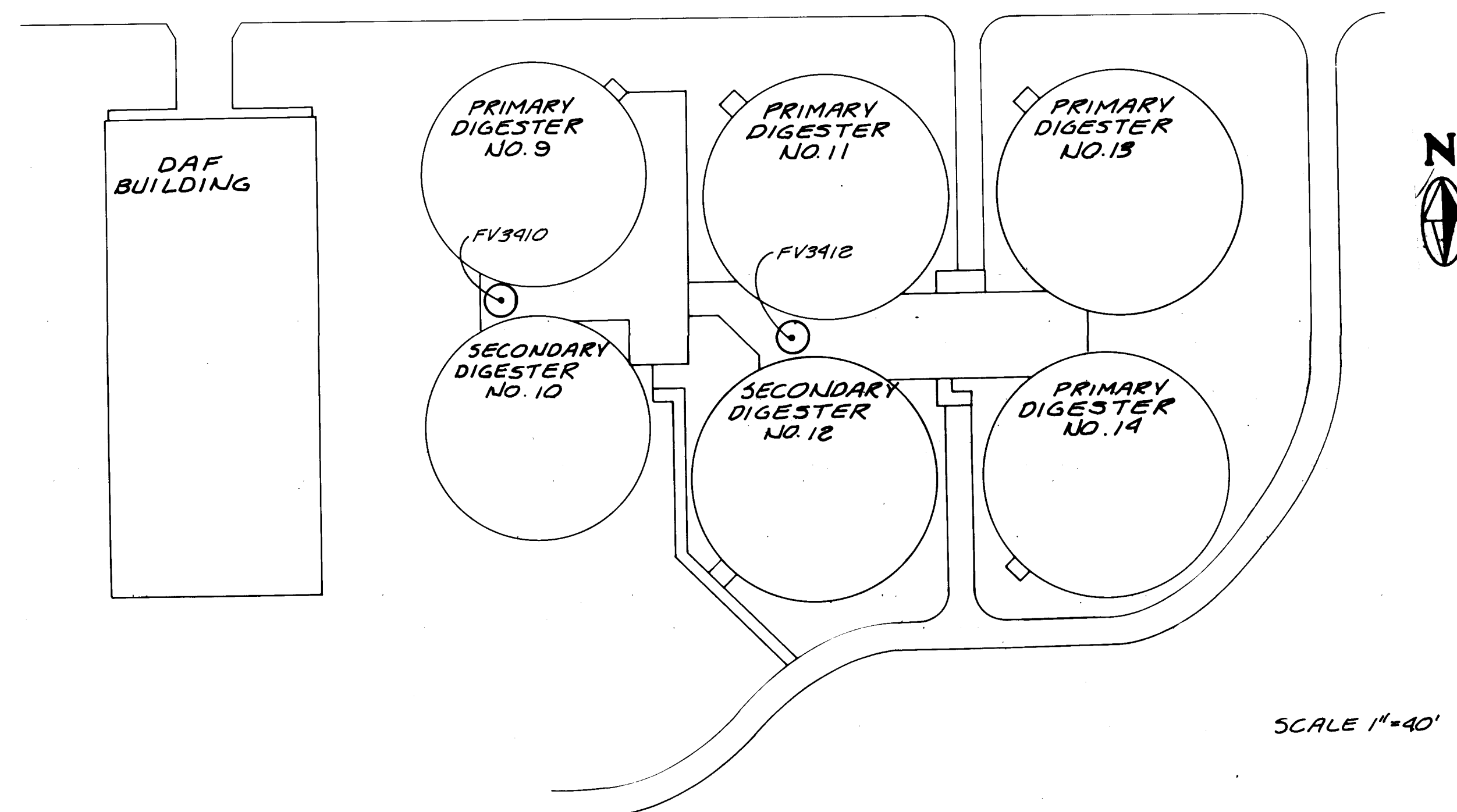
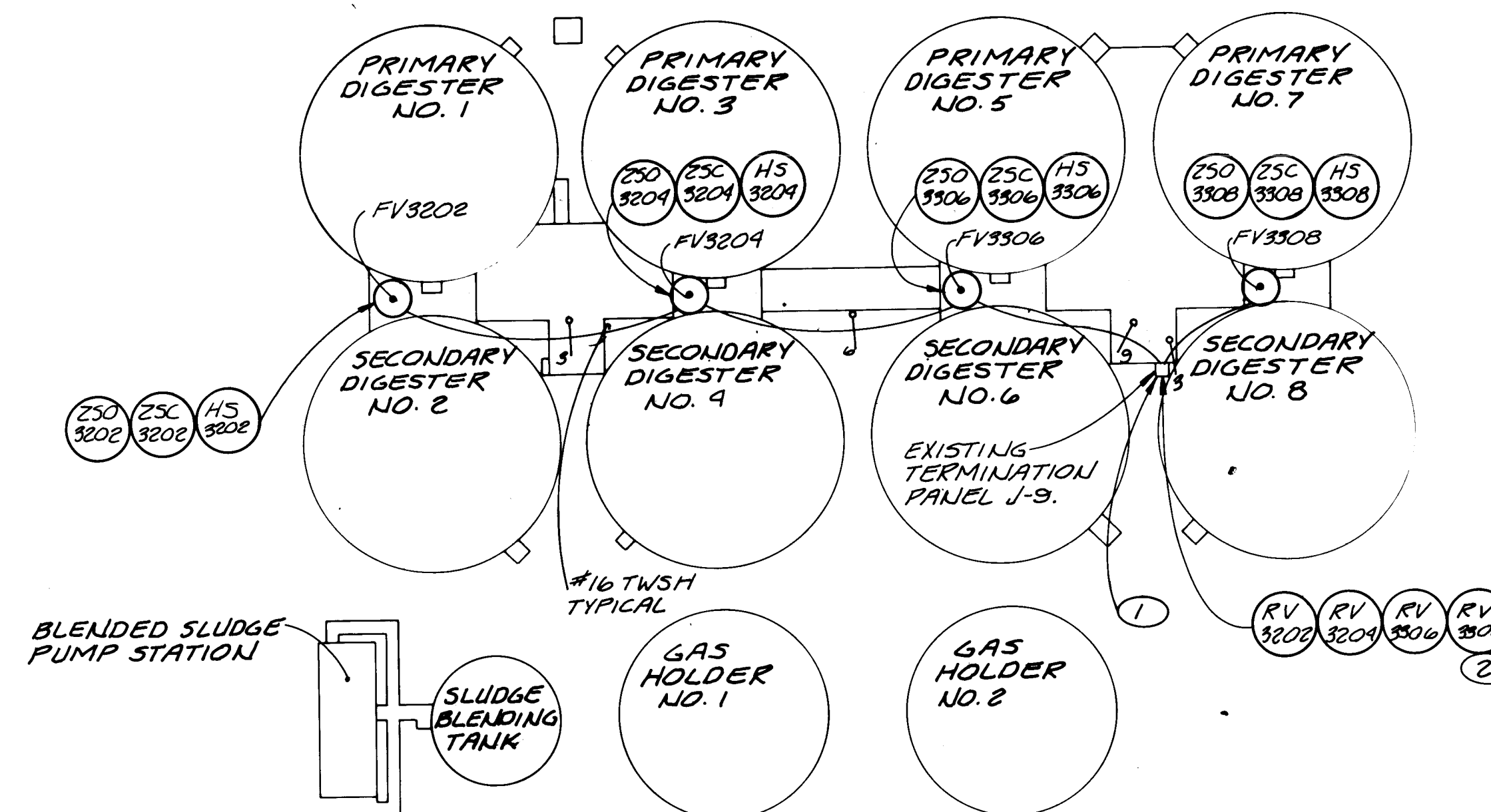


# GENERAL NOTES

- ALL CONSTRUCTION MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF NEC ARTICLE 500 AND ARTICLE 501 FOR CLASS 1 DIVISION 2 INSTALLATION. ENCLOSURES SHALL BE NEMA 7.
- VALVES FV 3202, FV 3204, FV 3306, FV 3308, RELAYS AND INSTRUMENTATION ARE NEW. ALL ELSE IS EXISTING OR OTHER CONTRACTS.

## NOTES

- OWNER WILL FURNISH INFORMATION FOR CONNECTION OF HS, ZSO, ZSC AND FV TO TERMINALS IN J-9.
- INSTALL 4 NEW INTERPOSING RELAYS (SAME AS REQUIRED IN SECTION 16920) IN J-9. CONNECT TO FV 3202, FV 3204, FV 3306, FV 3308. SEE NOTE 2 ON SHEET E-08. NP ON EACH RELAY TO INCLUDE VALVE NAME AND TAG NUMBER.



## RECORD DRAWING

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APPROVED M  
DATE 8-2-88

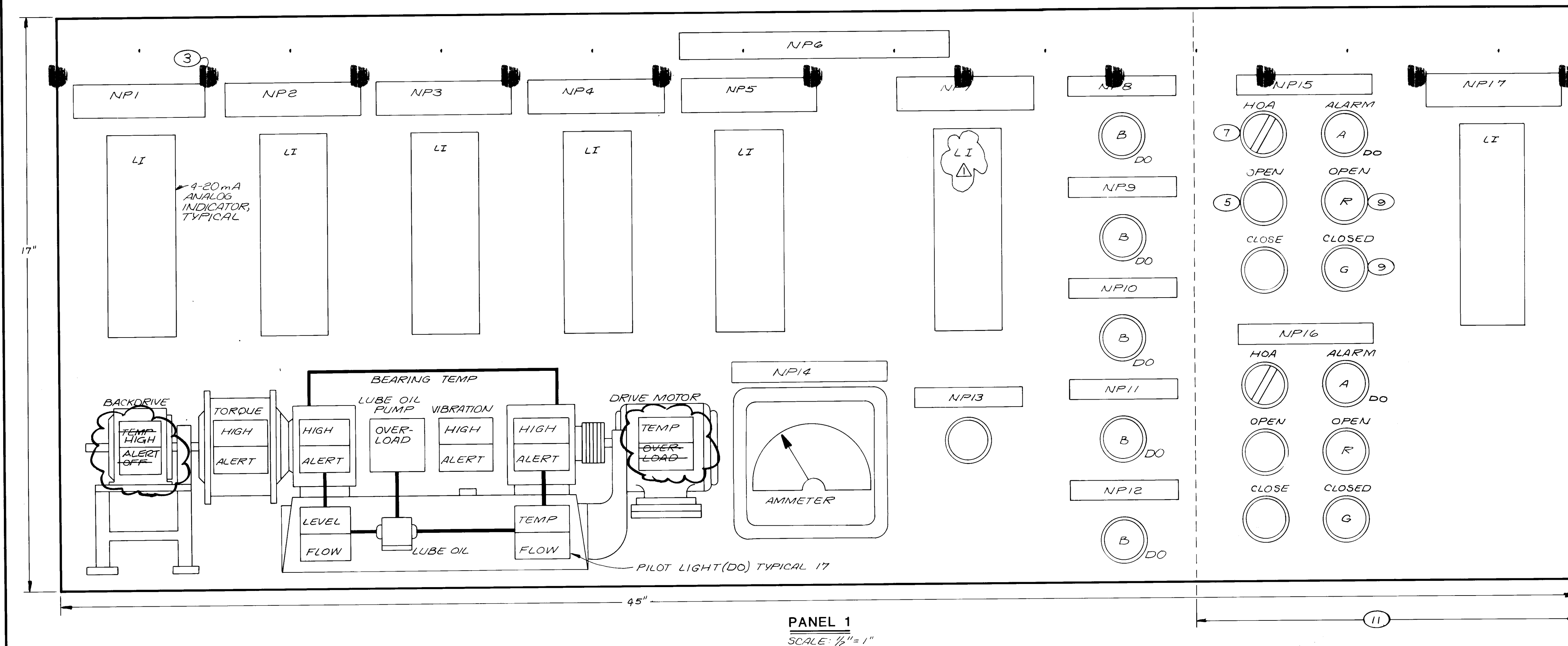
**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**

GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-1, CONTRACT 1

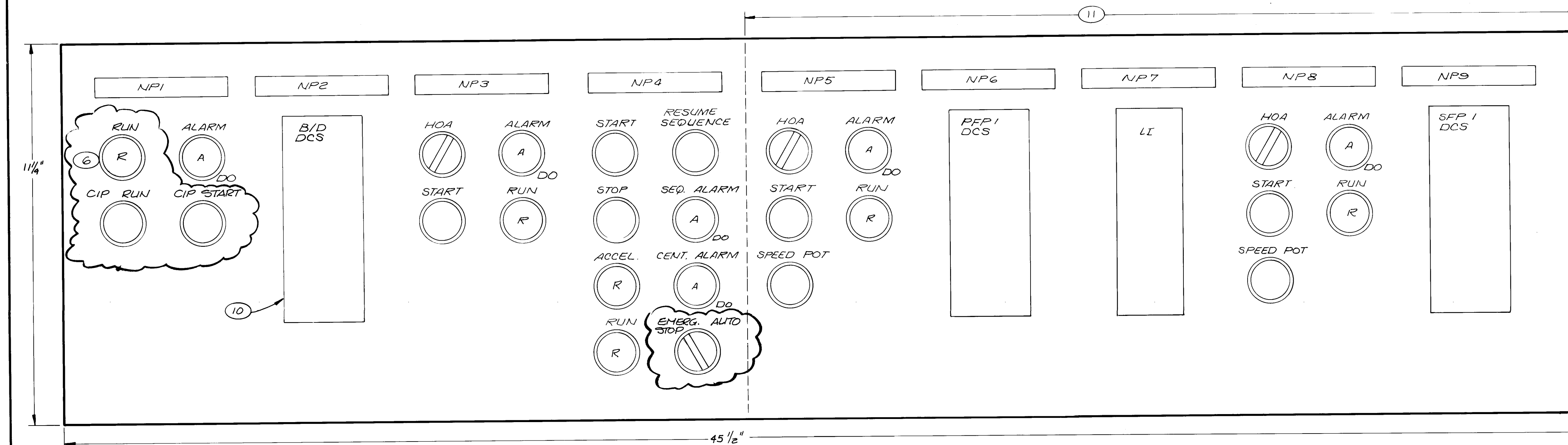
**INTERIM SLUDGE DEWATERING FACILITIES**  
**INSTRUMENTATION-DIGESTERS 2-12**





PANEL 1  
SCALE: 1/2" = 1"

TYPICAL NAMEPLATE: BACKDRIVE TORQUE  
WI-3941



PANEL 2  
SCALE: 1/2" = 1"

CENTRIFUGE CONTROL PANEL (CCP) TYPICAL 3

1 2

NOTES

- FOR CENTRIFUGE CONTROL PANEL ELEVATION, SEE SHEET I-18.
- FOR PANEL REQUIREMENTS, SEE SPECIFICATION SECTION 15920.
- ENGRAVED NAMEPLATE WITH TAG NUMBER AS SHOWN ON ADJACENT SCHEDULE, TYPICAL.
- TAG NUMBERS SHOWN HERE ARE FOR CENTRIFUGE NO. 1. FOR CENTRIFUGE NO. 2 AND 3 TAG NUMBERS, SEE INSTRUMENTATION INDEX.
- PUSHBUTTON, SPECIFICATION SECTION 16956, TYPICAL.
- TWO POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956, TYP.
- THREE POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956, TYP.
- NOT USED.
- 24VDC INCANDESCENT PILOT LIGHT, SPECIFICATION SECTION 16956, TYP.
- DIGITAL CONTROL STATION, (DCS) TYPICAL 3. SEE SPECIFICATION SECTION 16972.
- 24" WIDE ICP, IF SUPPLIED.

| NAMEPLATE | ENGRAVING                         | LETTER SIZE |
|-----------|-----------------------------------|-------------|
| NP1       | BACKDRIVE TORQUE WI-3941          | 1/8"        |
| NP2       | BACKDRIVE R.P.M. SI-3941A         | 1/8"        |
| NP3       | DELTA R.P.M. SI-3941C             | 1/8"        |
| NP4       | BOWL R.P.M. SI-3941B              | 1/8"        |
| NP5       | VIBRATION VI-3941                 | 1/8"        |
| NP6       | CENTRIFUGE 1                      | 1/2"        |
| NP7       | TEMPERATURE INDICATOR TI-3941     | 1/8"        |
| NP8       | MAIN DRIVE WINDING NL-3941B       | 1/8"        |
| NP9       | BACKDRIVE WINDING NL-3941E        | 1/8"        |
| NP10      | RIGHT BEARING NL-3941F            | 1/8"        |
| NP11      | LEFT BEARING NL-3941G             | 1/8"        |
| NP12      | LUBE OIL NL-3941J                 | 1/8"        |
| NP13      | DISPLAY CONTROL HS-3941D          | 1/8"        |
| NP14      | MAIN DRIVE CURRENT II-3941        | 1/8"        |
| NP15      | FLUSHING WATER VALVE NO.1 FV-3915 | 1/8"        |
| NP16      | DILUTION WATER VALVE NO.1 FV-3911 | 1/8"        |
| NP17      | CENTRATE FLOW MAG METER FI-3954B  | 1/8"        |

| NAMEPLATE | ENGRAVING                           | LETTER SIZE |
|-----------|-------------------------------------|-------------|
| NP1       | BACKDRIVE MS-3941B                  | 1/8"        |
| NP2       | BACKDRIVE DCS WIC-3941              | 1/8"        |
| NP3       | LUBE OIL MS-3941C                   | 1/8"        |
| NP4       | CENTRIFUGE                          | 1/8"        |
| NP5       | POLYMER FEED PUMP NO. 1 MS-3901     | 1/8"        |
| NP6       | POLYMER FEED PUMP NO.1 DCS FIC-3901 | 1/8"        |
| NP7       | SLUDGE FLOW MAG METER NO.1 FE-3951  | 1/8"        |
| NP8       | SLUDGE FEED PUMP NO. 1 MS-3951      | 1/8"        |
| NP9       | SLUDGE FEED PUMP NO.1 DCS FIC-3951  | 1/8"        |

RECORD DRAWING

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29  
26 36 94 80 88



| NO.     | DATE       | REVISIONS | APPROVED |
|---------|------------|-----------|----------|
| 7-23-85 | NP7 DEVICE |           |          |

|             |           |
|-------------|-----------|
| DESIGNED SS | DATE 5-85 |
| DRAWN STAFF |           |
| CHECKED     |           |
| APPROVED    |           |

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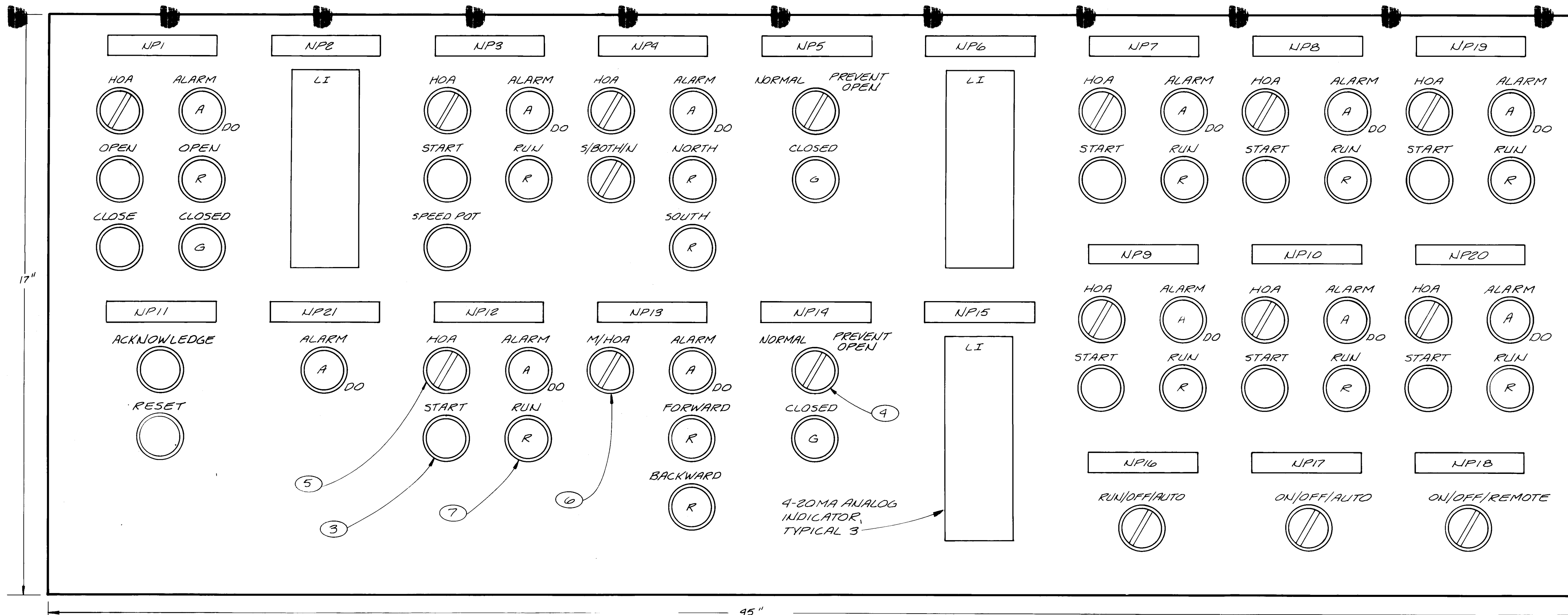


CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
CENTRIFUGE CONTROL PANEL

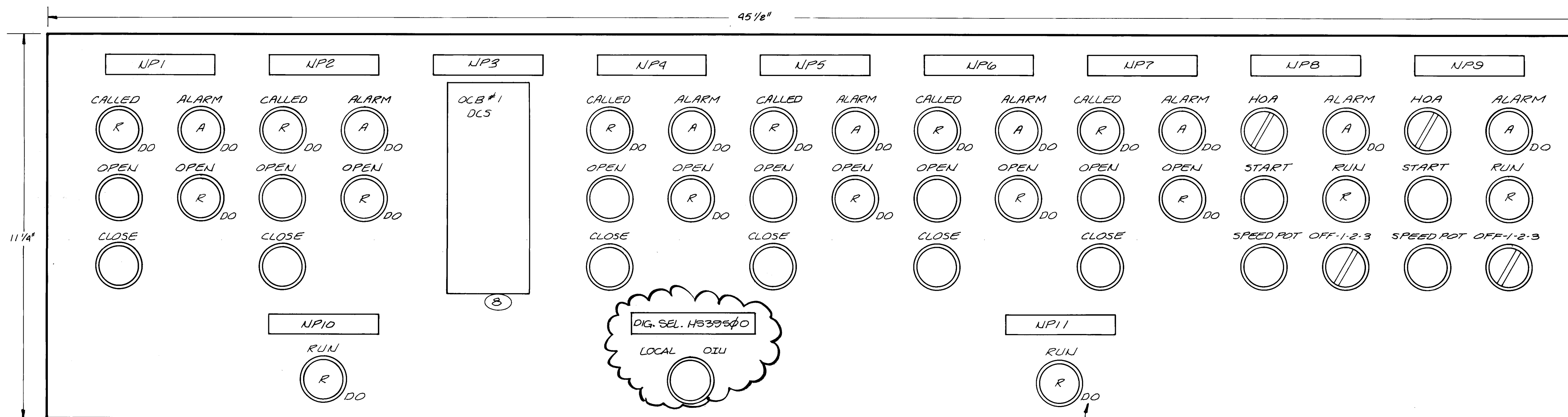
M-C NO. B32221  
I-17  
80 of 112  
SC NO.





PANEL 1  
SCALE 1/8"=1"

TYPICAL NAMEPLATE:  
DISTRIBUTION CONVEYOR  
MSF-3962 MSB-3962



PANEL 2  
SCALE 1/8"=1"

### GENERAL NOTES

1. PROVIDE 120VAC TO 24VDC REGULATED ( $\pm 1\%$ ) POWER SUPPLY WATT CAPACITY AS REQUIRED TO DRIVE RELAYS LABELED 'AR' ON SCHEMATICS PLUS 50 %. ONE REQUIRED AMBIENT TO 60°.
2. PROVIDE 120VAC TO 24VDC REGULATED ( $\pm 0.5\%$ ) DC POWER SUPPLY FOR PILOT LAMPS. WATT CAPACITY AS REQUIRED TO DRIVE ALL PILOT LAMP ASSEMBLIES ON TWO ICP'S AND THREE CCP'S, PLUS CAPACITY FOR TWENTY FUTURE PILOT LAMP ASSEMBLIES. ONE REQUIRED AMBIENT TO 60°.
3. EACH SUPPLY SHALL HAVE INTEGRAL LOAD AMMETER AND ADJUSTABLE FOLDBACK CURRENT LIMITING; SHOW COMPLETE DC CONNECTIONS ON SUBMITTALS.

### INTEGRATED CONTROL PANEL NO.1 (ICP1)

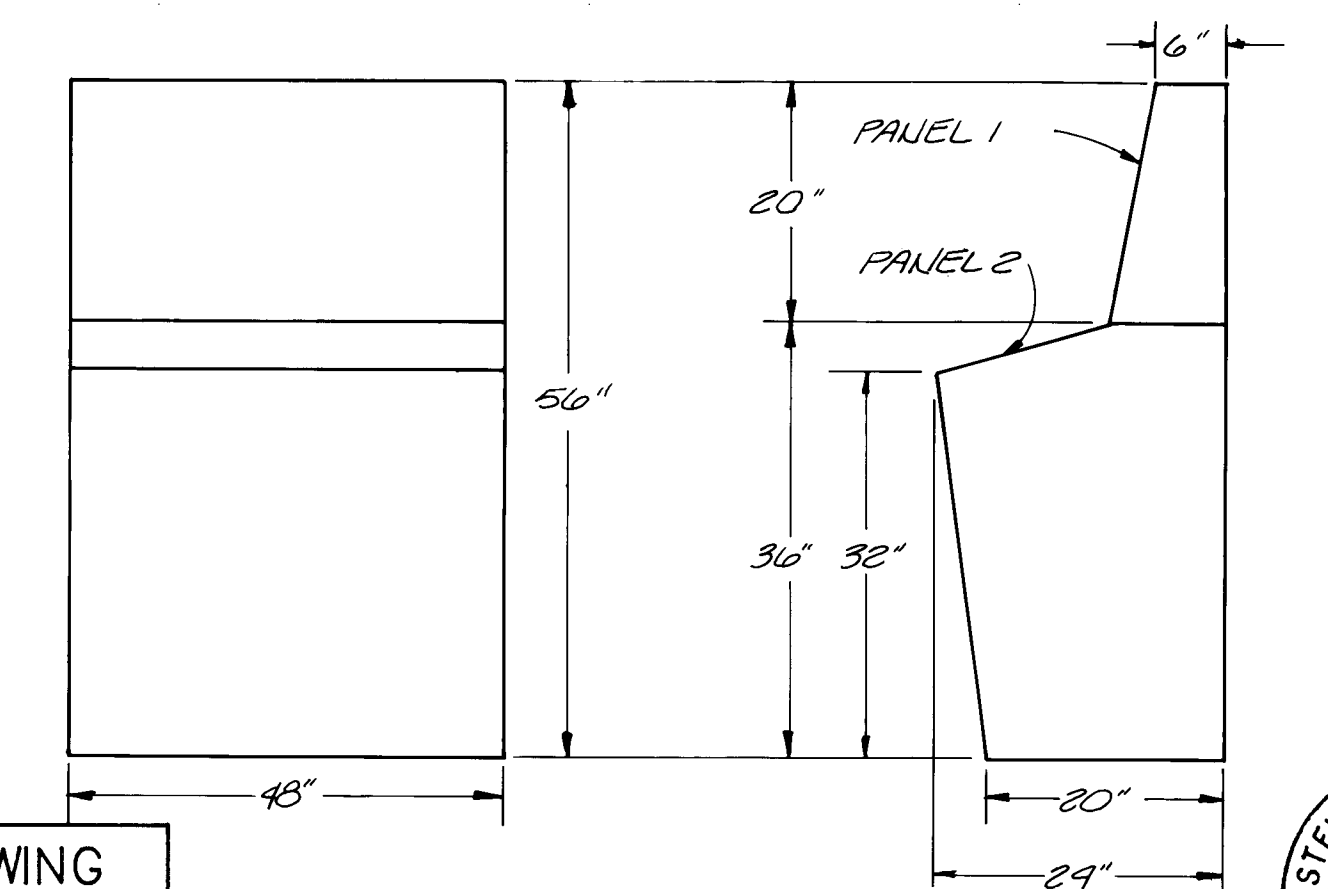
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### NOTES

1. FOR PANEL REQUIREMENTS SEE SPECIFICATION SECTION 15920
2. FOR CONTROL PANEL ELEVATIONS, SEE THIS SHEET.
3. PUSHBUTTON SPECIFICATION SECTION 16956 TYPICAL.
4. TWO POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956 TYPICAL.
5. THREE POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956 TYPICAL.
6. FOUR POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956 TYPICAL.
7. 24V DC INCANDESCENT PILOT LIGHT, SPECIFICATION SECTION 16956 TYPICAL.
8. DIGITAL CONTROL STATION (DCS), SPECIFICATION SECTION 15978.

| NAMEPLATE | ENGRAVING                                | LETTER SIZE |
|-----------|------------------------------------------|-------------|
| NP1       | SLUDGE FEED VALVE FV-3950                | 1/8"        |
| NP2       | SLUDGE FEED TANK LEVEL INDICATOR LI-3950 | 1/8"        |
| NP3       | ODOR CONTROL BLOWER NO. 1 MS-3992        | 1/8"        |
| NP4       | DISTRIBUTION CONVEYOR MSF-3962 MSB-3962  | 1/8"        |
| NP5       | SOUTH BIN GATE FV-3964                   | 1/8"        |
| NP6       | SOUTH BIN LEVEL INDICATOR LI-3964A       | 1/8"        |
| NP7       | HOT WATER PUMP NO. 1 MS-3996             | 1/8"        |
| NP8       | HOT WATER PUMP NO. 2 MS-3997             | 1/8"        |
| NP9       | INTAKE FAN NO. 1 MS-3990                 | 1/8"        |
| NP10      | INTAKE FAN NO. 2 MS-3999                 | 1/8"        |
| NP11      | ALARM UA-3975                            | 1/8"        |
| NP12      | ODOR CONTROL BLOWER NO. 2 MS-3993        | 1/8"        |
| NP13      | INCLINED CONVEYOR MSF-3961 MSB-3961      | 1/8"        |
| NP14      | NORTH BIN GATE FV-3963                   | 1/8"        |
| NP15      | NORTH BIN LEVEL INDICATOR LI-3963A       | 1/8"        |
| NP16      | CONTROL ROOM AIR CONDITIONER TC-3991     | 1/8"        |
| NP17      | AREA LIGHTING HS-3973G                   | 1/8"        |
| NP18      | MAINTENANCE LIGHTING HS-3973             | 1/8"        |
| NP19      | POWER ROOF EXHAUSTER NO. 1 MS-3994       | 1/8"        |
| NP20      | POWER ROOF EXHAUSTER NO. 2 MS-3995       | 1/8"        |
| NP21      | SLUDGE FEED TANK LEVEL NL-3950A          | 1/8"        |

| NAMEPLATE | ENGRAVING                               | LETTER SIZE |
|-----------|-----------------------------------------|-------------|
| NP1       | DIGESTER VALVE NO. 2 FV-3202            | 1/8"        |
| NP2       | DIGESTER VALVE NO. 4 FV-3204            | 1/8"        |
| NP3       | ODOR CONTROL BLOWER NO. 1 DCS FIC-3992  | 1/8"        |
| NP4       | DIGESTER VALVE NO. 6 FV-3306            | 1/8"        |
| NP5       | DIGESTER VALVE NO. 8 FV-3308            | 1/8"        |
| NP6       | DIGESTER VALVE NO. 10 FV-3410           | 1/8"        |
| NP7       | DIGESTER VALVE NO. 12 FV-3412           | 1/8"        |
| NP8       | SLUDGE FEED PUMP NO. 4 STANDBY MS-3954  | 1/8"        |
| NP9       | POLYMER FEED PUMP NO. 4 STANDBY MS-3904 | 1/8"        |
| NP10      | DIGESTED SLUDGE PUMP NO. 1 NL-3291      | 1/8"        |
| NP11      | DIGESTED SLUDGE PUMP NO. 3 NL-3400      | 1/8"        |



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### CONTROL PANEL ELEVATIONS NO SCALE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29  
26 36 9 4 8 1 8 8



| NO.      | DATE  | REVISIONS | APPROVED |
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| DESIGNED | 55    |           |          |
| DRAWN    | STAEF |           |          |
| CHECKED  |       |           |          |
| APPROVED |       |           |          |
| DATE     | 5-85  |           |          |

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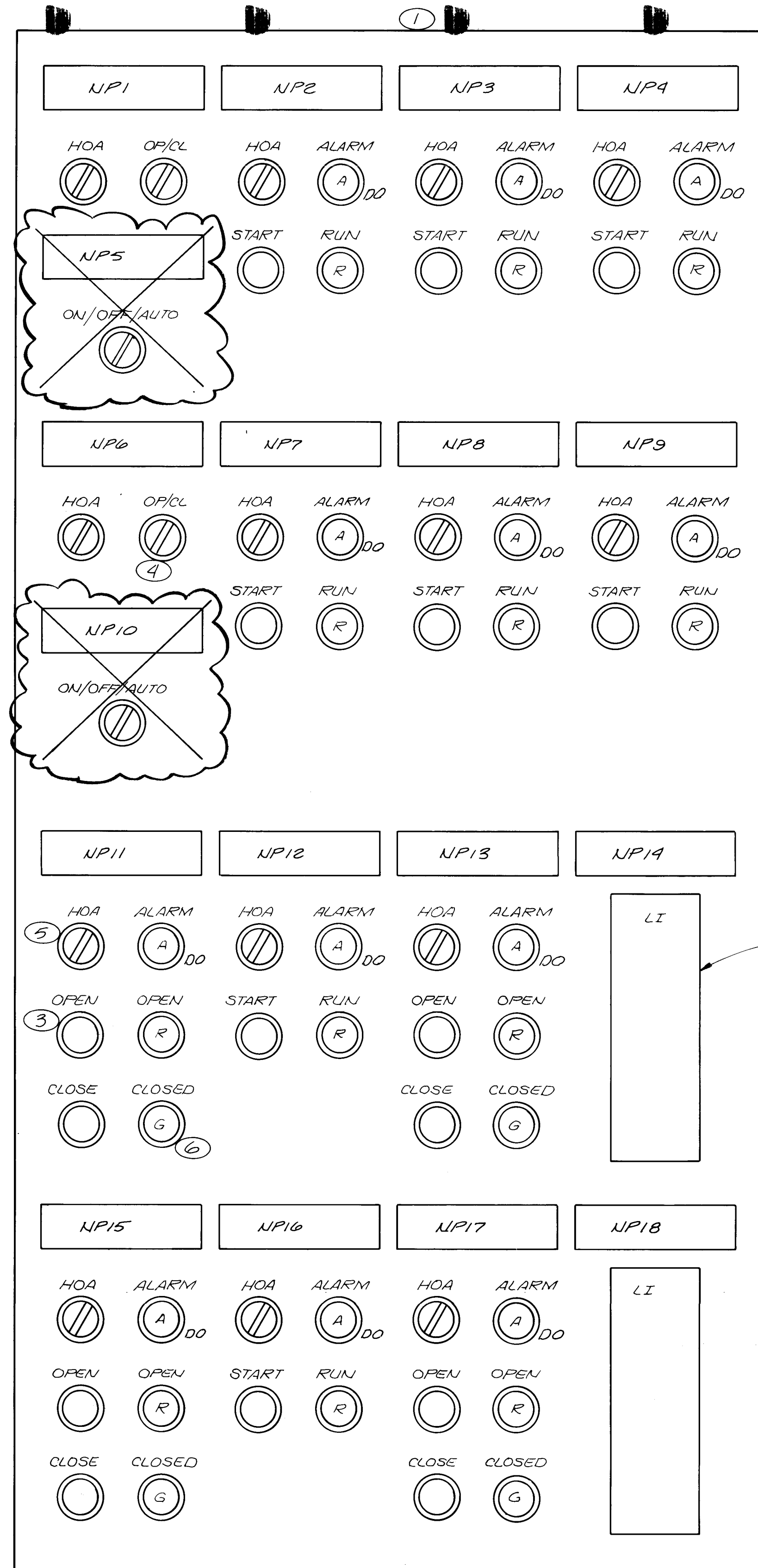


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
INTEGRATED CONTROL PANEL NO. 1

M-C NO. 832221  
**I-18** 81 OF 112  
SC NO.





| NAME-PLATE | ENGRAVING                              | LETTER SIZE |
|------------|----------------------------------------|-------------|
| NP1        | WETTING UNIT SOLENOID VALVE #1 SV-3921 | 1/8"        |
| NP2        | DUST COLLECTOR #1 MS-3921C             | 1/8"        |
| NP3        | BLOWER #1 MS-3921B                     | 1/8"        |
| NP4        | SCREW FEEDER #1 MS-3921A               | 1/8"        |
| NP5        | VIBRATOR #1 HS-3921LI                  | 1/8"        |
| NP6        | WETTING UNIT SOLENOID VALVE #2 SV-3922 | 1/8"        |
| NP7        | DUST COLLECTOR #2 MS-3922C             | 1/8"        |
| NP8        | BLOWER #2 MS-3922B                     | 1/8"        |
| NP9        | SCREW FEEDER #2 MS-3922A               | 1/8"        |
| NP10       | VIBRATOR #2 HS-3922LI                  | 1/8"        |
| NP11       | POLYMER OUTLET VALVE #1 FV-3931B       | 1/8"        |
| NP12       | POLYMER MIXER #1 MS-3931               | 1/8"        |
| NP13       | TANK FILL VALVE #1 FV-3931A            | 1/8"        |
| NP14       | POLYMER MIXING TANK #1 LEVEL LI-3931   | 1/8"        |
| NP15       | POLYMER OUTLET VALVE #2 FV-3932B       | 1/8"        |
| NP16       | POLYMER MIXER #2 MS-3932               | 1/8"        |
| NP17       | TANK FILL VALVE #2 FV-3932A            | 1/8"        |
| NP18       | POLYMER MIXING TANK #2 LEVEL LI-3932   | 1/8"        |

TYPICAL NAMEPLATE : SCREW FEEDER #1 MS-3921A

NOTES

- 1 48 3/8" X 36 1/2" X 1 1/4" CONTROL ENCLOSURE NEMA 4X WITH 45" X 38" PANEL- ROBROY INDUSTRIES CAT # N483612HWT WITH BACKPAUEL CAT. # BP4836 OR ENGINEER APPROVED EQUAL.
- 2 FOR PANEL REQUIREMENTS SEE SPECIFICATION SECTION 16920
- 3 PUSHBUTTON SPECIFICATION SECTION 16956 TYPICAL.
- 4 TWO POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956 TYPICAL.
- 5 THREE POSITION SELECTOR SWITCH, SPECIFICATION SECTION 16956 TYPICAL.
- 6 24 V. DC INCANDESCENT PILOT LIGHT, SPECIFICATION SECTION 16956 TYPICAL.

INTEGRATED CONTROL PANEL NO. 2 (ICP2)  
NO SCALE

|                                                                                                                                                                                                                                                |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| RECORD DRAWING                                                                                                                                                                                                                                 |                    |
| DATE:<br>AUG. 1988                                                                                                                                                                                                                             | DRAFTED BY:<br>MCA |
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|    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 82 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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| NO. | DATE | REVISIONS | APPROVED |
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|     |      |           |          |

DESIGNED SS  
DRAWN STAFF  
CHECKED 161  
APPROVED 161  
DATE 5-85

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

AS SHOWN  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
INTEGRATED CONTROL PANEL NO.2

|                |      |           |
|----------------|------|-----------|
| M-C NO. 832221 | I-19 | 82 of 112 |
| SC NO.         |      |           |



| MFC01     | A & B                   | C1501A                  | C1501B                  | C1501C                  | C1501D                     | C1501E                     | C1501F                     |
|-----------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------|----------------------------|----------------------------|
| SADR      | SADR                    | SADR                    | SADR                    | SADR                    | SADR                       | SADR                       | SADR                       |
| SLAVES    | AI                      | AI                      | AI                      | AI                      | AI                         | AI                         | AI                         |
| 1. C1501A | FIT 3951                | FIT 3952                | FIT 3953                | FIT 3954                | SE 3941A                   | SE 3942A                   | SE 3943A                   |
| 2. C1501B | VT 3941                 | VT 3942                 | VT 3943                 | VT 3944                 | SE 3941B                   | SE 3942B                   | SE 3943B                   |
| 3. C1501C | LT 3951                 | LT 3952                 | LT 3953                 | LT 3954                 | WT 3941                    | WT 3942                    | WT 3943                    |
| 4. C1501D | AO                      | AO                      | AO                      | AO                      | SC 3941                    | SC 3942                    | SC 3943                    |
| 5. C1501E | DI                      | DI                      | DI                      | DI                      | SI 3941A                   | SI 3942A                   | SI 3943A                   |
| 6. C1501F | LSL 3921                | HS 3954E                | HS 3954F                | HS 3954G                | TC 3994                    | TC 3995                    | TC 3996                    |
| 7. C1501G | HS 3921                 | HS 3954F                | HS 3954G                | HS 3954H                | TC 3994                    | TC 3995                    | TC 3996                    |
| 8. C1501H | DO                      | DO                      | DO                      | DO                      | DO                         | DO                         | DO                         |
| 9.        | SV 3921                 |                         |                         |                         |                            |                            |                            |
| 10.       | SV 3922                 |                         |                         |                         |                            |                            |                            |
| 11.       | SV 3954A                |                         |                         |                         |                            |                            |                            |
| 12.       | SV 3954B                |                         |                         |                         |                            |                            |                            |
| 13.       | SOFTWARE TITLES         | SOFTWARE TITLES         | SOFTWARE TITLES         | SOFTWARE TITLES         | SOFTWARE TITLES            | SOFTWARE TITLES            | SOFTWARE TITLES            |
| 14.       | 1. POLYMER FEED PUMP #1 | 1. POLYMER FEED PUMP #2 | 1. POLYMER FEED PUMP #3 | 1. POLYMER FEED PUMP #4 | 1. CENTRIFUGE #1 BACKDRIVE | 1. CENTRIFUGE #2 BACKDRIVE | 1. CENTRIFUGE #3 BACKDRIVE |
| 15.       | 2. SLUDGE FEED PUMP #1  | 2. SLUDGE FEED PUMP #2  | 2. SLUDGE FEED PUMP #3  | 2. SLUDGE FEED PUMP #4  | 2. CE BOILER               | 2. CE BOILER               | 2. CE BOILER               |
| 16.       | 3. SAMPLE VALVES        | 3. STANDBY SFP SELECT   | 3. BUILDING BOILER      | 3. BUILDING BOILER      | 2. CE BOILER               | 2. CE BOILER               | 2. CE BOILER               |
| 17.       | DESCRIPTION             | DESCRIPTION             | DESCRIPTION             | DESCRIPTION             | DESCRIPTION                | DESCRIPTION                | DESCRIPTION                |
| 18.       | REDUNDANT MULTIFUNCTION | REDUNDANT MULTIFUNCTION | REDUNDANT MULTIFUNCTION | REDUNDANT MULTIFUNCTION | REDUNDANT MULTIFUNCTION    | REDUNDANT MULTIFUNCTION    | REDUNDANT MULTIFUNCTION    |
| 19.       | CONTROLLER FOR THE      | CONTROLLER FOR THE      | CONTROLLER FOR THE      | CONTROLLER FOR THE      | CONTROLLER FOR THE         | CONTROLLER FOR THE         | CONTROLLER FOR THE         |
| 20.       | 8 C15 MODULES LISTED    | 8 C15 MODULES LISTED    | 8 C15 MODULES LISTED    | 8 C15 MODULES LISTED    | 8 C15 MODULES LISTED       | 8 C15 MODULES LISTED       | 8 C15 MODULES LISTED       |
|           | AT RIGHT                | AT RIGHT                | AT RIGHT                | AT RIGHT                | AT RIGHT                   | AT RIGHT                   | AT RIGHT                   |
| HADR      | HADR                    | HADR                    | HADR                    | HADR                    | HADR                       | HADR                       | HADR                       |

| C1501G                     | C1501H                    | COM0            | COM0            | COM0            | COM0            |
|----------------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|
| SADR                       | SADR                      | MADR            | MADR            | MADR            | MADR            |
| AI                         | AI                        | AI              | AI              | AI              | AI              |
| SE 3943A                   | IT 3941                   |                 |                 |                 |                 |
| SE 3943B                   | IT 3942                   |                 |                 |                 |                 |
| SE 3943C                   | IT 3943                   |                 |                 |                 |                 |
| WT 3941                    | AO                        | AO              | AO              | AO              | AO              |
| SC 3943                    | SC 3940                   |                 |                 |                 |                 |
| SI 3943B                   | SI 3943C                  |                 |                 |                 |                 |
| DI                         | DI                        | DI              | DI              | DI              | DI              |
| TC 3997                    | TS 6218                   |                 |                 |                 |                 |
| HS 3942B                   | TS 6219                   |                 |                 |                 |                 |
| DO                         | DO                        | DO              | DO              | DO              | DO              |
| SV 3921                    |                           |                 |                 |                 |                 |
| SV 3922                    |                           |                 |                 |                 |                 |
| SV 3954A                   |                           |                 |                 |                 |                 |
| SV 3954B                   |                           |                 |                 |                 |                 |
| SOFTWARE TITLES            | SOFTWARE TITLES           | SOFTWARE TITLES | SOFTWARE TITLES | SOFTWARE TITLES | SOFTWARE TITLES |
| 1. CENTRIFUGE #3 BACKDRIVE | 1. DIGESTED SLUDGE PUMP 9 |                 |                 |                 |                 |
|                            | 2. XFRM T18 & T19 ALARM   |                 |                 |                 |                 |
| DCS NO.                    | DCS NO.                   | DCS NO.         | DCS NO.         | DCS NO.         | DCS NO.         |
| DCS03KWC3993               |                           |                 |                 |                 |                 |
| HADR                       | HADR                      | HADR            | HADR            | HADR            | HADR            |

| LMM05A                  | DSM05A                     | DSM05B                   | DSM05C                     | DSM05D                     | DSM05E                     | DSM05F                     | DSM0                       | DSM0                       |
|-------------------------|----------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| SADR                    | SADR                       | SADR                     | SADR                       | SADR                       | SADR                       | SADR                       | SADR                       | SADR                       |
| DO                      | DO                         | DO                       | DO                         | DO                         | DO                         | DO                         | DO                         | DO                         |
| MS 3901                 | FV 3915                    | MS 3921A                 | FV 3915                    | MS 3921B                   | MS 3921C                   | FV 3915                    | MS 3921D                   | MS 3921E                   |
| NL 3901                 | NL 3915                    | MS 3921B                 | NL 3915                    | MS 3921C                   | NL 3915                    | MS 3921D                   | MS 3921E                   | MS 3921F                   |
| MS 3951                 | FV 3911                    | MS 3921B                 | MS 3921C                   | MS 3921D                   | MS 3921E                   | MS 3921F                   | MS 3921G                   | MS 3921H                   |
| NL 3951                 | NL 3911                    | MS 3921C                 | NL 3911                    | MS 3921D                   | MS 3921E                   | MS 3921F                   | MS 3921G                   | MS 3921H                   |
| MSS 3941A               | NL 3950B                   | NL 3921C                 | NL 3921D                   | NL 3921E                   | NL 3921F                   | NL 3921G                   | NL 3921H                   | NL 3921I                   |
| MSR 3941A               | NL 3950B                   | NL 3921C                 | NL 3921D                   | NL 3921E                   | NL 3921F                   | NL 3921G                   | NL 3921H                   | NL 3921I                   |
| NL 3941A                | NL 3950B                   | NL 3921C                 | NL 3921D                   | NL 3921E                   | NL 3921F                   | NL 3921G                   | NL 3921H                   | NL 3921I                   |
| DI                      | DI                         | DI                       | DI                         | DI                         | DI                         | DI                         | DI                         | DI                         |
| MI 3901                 | ZSC 3915                   | PS 3921                  | ZSC 3915                   | PS 3921                    | ZSC 3915                   | PS 3921                    | ZSC 3915                   | PS 3921                    |
| MA 3901                 | HS 3915B                   | ZS 3921                  | HS 3915B                   | ZS 3921                    | HS 3915B                   | ZS 3921                    | HS 3915B                   | ZS 3921                    |
| HS 3901B                | ZSO 3911                   | HS 3921B                 | HS 3921C                   | HS 3921D                   | HS 3921E                   | HS 3921F                   | HS 3921G                   | HS 3921H                   |
| MI 3951                 | ZSC 3911                   | MI 3921A                 | ZSC 3911                   | MI 3921B                   | MI 3921C                   | MI 3921D                   | MI 3921E                   | MI 3921F                   |
| MA 3951                 | HS 3911B                   | HS 3921E                 | HS 3921F                   | HS 3921G                   | HS 3921H                   | HS 3921I                   | HS 3921J                   | HS 3921K                   |
| HS 3951B                | HS 3911B                   | HS 3921E                 | HS 3921F                   | HS 3921G                   | HS 3921H                   | HS 3921I                   | HS 3921J                   | HS 3921K                   |
| MI 3941A                | ZSO 3915                   | MI 3921B                 | MI 3921C                   | MI 3921D                   | MI 3921E                   | MI 3921F                   | MI 3921G                   | MI 3921H                   |
| HS 3941D                | ZSC 3915                   | MI 3921C                 | MI 3921D                   | MI 3921E                   | MI 3921F                   | MI 3921G                   | MI 3921H                   | MI 3921I                   |
| EQUIPMENT               | EQUIPMENT                  | EQUIPMENT                | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  |
| 1. POLYMER FEED PUMP #1 | 1. FLUSHING WATER VALVE #1 | 1. SCREW FEEDER #1       | 1. TANK FILL VALVE #1      | 1. CENTRIFUGE #1           | 1. CENTRIFUGE #1           | 1. CENTRIFUGE #1           | 1. CENTRIFUGE #1           | 1. CENTRIFUGE #1           |
| 2. SLUDGE FEED PUMP #1  | 2. DILUTION WATER VALVE #1 | 2. BLOWER #1             | 2. POLYMER MIXER #1        | 2. POLYMER MIXER #1        | 2. POLYMER MIXER #1        | 2. POLYMER MIXER #1        | 2. POLYMER MIXER #1        | 2. POLYMER MIXER #1        |
| 3. CENTRIFUGE #1        |                            | 3. WETTING UNIT VALVE #1 | 3. POLYMER OUTLET VALVE #1 | 3. POLYMER OUTLET VALVE #1 | 3. POLYMER OUTLET VALVE #1 | 3. POLYMER OUTLET VALVE #1 | 3. POLYMER OUTLET VALVE #1 | 3. POLYMER OUTLET VALVE #1 |
| HADR                    | HADR                       | HADR                     | HADR                       | HADR                       | HADR                       | HADR                       | HADR                       | HADR                       |

| LMM05B                  |
|-------------------------|
| SADR                    |
| DO                      |
| MS 3901                 |
| NL 3901                 |
| MS 3951                 |
| NL 3951                 |
| MSS 3941A               |
| MSR 3941A               |
| NL 3941A                |
| DI                      |
| MI 3901                 |
| MA 3901                 |
| HS 3901B                |
| MI 3951                 |
| MA 3951                 |
| HS 3951B                |
| MI 3941A                |
| HS 3941D                |
| EQUIPMENT               |
| 1. POLYMER FEED PUMP #1 |
| 2. SLUDGE FEED PUMP #1  |
| 3. CENTRIFUGE #1        |
| HADR                    |

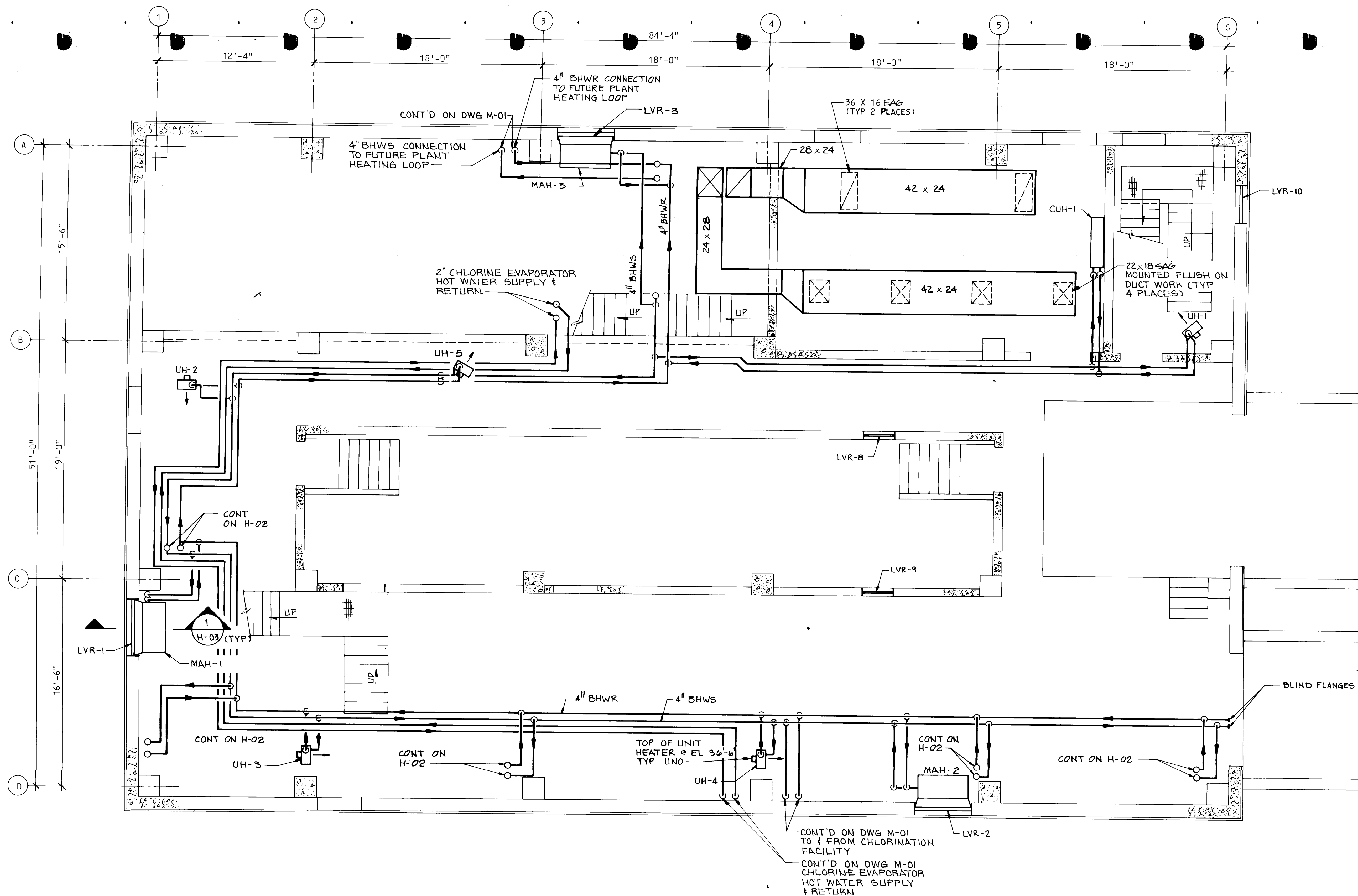
| DSM05G                  | DSM05H                     | DSM05I                   | DSM05J                     | DSM05K                     | DSM05L                     | DSM0                       | DSM0                       |
|-------------------------|----------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| SADR                    | SADR                       | SADR                     | SADR                       | SADR                       | SADR                       | SADR                       | SADR                       |
| DO                      | DO                         | DO                       | DO                         | DO                         | DO                         | DO                         | DO                         |
| MS 3902                 | FV 3916                    | MS 3922A                 | FV 3932                    | MS 3942B                   | FV 39306                   | MS 3942C                   | FV 39306                   |
| NL 3902                 | NL 3916                    | MS 3922B                 | NL 3932A                   | NL 3942C                   | NL 39306A                  | NL 3942D                   | NL 39306B                  |
| MS 3952                 | FV 3912                    | MS 3922C                 | MS 3932B                   | MS 3942D                   | MS 39306C                  | MS 3942E                   | MS 39306D                  |
| NL 3952                 | NL 3912                    | MS 3922C                 | NL 3932B                   | NL 3942E                   | NL 39306E                  | NL 3942F                   | NL 39306F                  |
| MSS 3942A               | NL 3942H                   | NL 3922A                 | NL 3932C                   | NL 3942J                   | FV 39308                   | MS 3942B                   | NL 39308A                  |
| MSR 3942A               |                            |                          | FV 3932B                   | MS 3942D                   | NL 39308B                  | NL 3942E                   | NL 39308C                  |
| NL 3942A                |                            |                          | NL 3942E                   | MS 3942B                   | NL 39308D                  | NL 3942F                   | NL 39308E                  |
| DI                      | DI                         | DI                       | DI                         | DI                         | DI                         | DI                         | DI                         |
| MI 3902                 | ZSC 3916                   | PS 3922                  | ZSO 3932A                  | HS 3942K                   | ZSO 39306                  | HS 3942L                   | ZSO 39306                  |
| MA 3902                 | HS 3916                    | ZS 3922                  | ZSC 3932A                  | HS 3942C                   | ZSC 39306                  | HS 3942D                   | ZSC 39306                  |
| HS 3902B                | HS 3912                    | HS 3922B                 | HS 3932B                   | MI 3942C                   | HS 39306A                  | MI 3942D                   | HS 39306B                  |
| MI 3952                 | ZSC 3912                   | MI 3922A                 | ZSO 3932B                  | MI 3942D                   | HS 39306C                  | MI 3942E                   | HS 39306D                  |
| MA 3952                 | HS 3912B                   | HS 3922E                 | ZSC 3932B                  | FS 3942A                   | HS 39306E                  | FS 3942B                   | ZSO 39308                  |
| HS 3952B                | HS 3922K                   | MI 3922B                 | HS 3932H                   | FS 3942B                   | ZSO 39308                  | TS 3942                    | ZSC 39308                  |
| MI 3942A                | ZSO 3916                   | HS 3922H                 | HS 3942A                   | TS 3942                    | ZSC 39308                  | LS 3942                    | HS 39308A                  |
| HS 3942D                | ZSC 3952                   | MI 3922C                 | HS 3942G                   | LS 3942                    | HS 39308A                  |                            |                            |
| EQUIPMENT               | EQUIPMENT                  | EQUIPMENT                | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  | EQUIPMENT                  |
| 1. POLYMER FEED PUMP #2 | 1. FLUSHING WATER VALVE #2 | 1. SCREW FEEDER #2       | 1. TANK FILL VALVE #2      | 1. CENTRIFUGE #2           | 1. DIGESTER #6 & #8        | 1. CENTRIFUGE #2           | 1. DIGESTER #6 & #8        |
| 2. SLUDGE FEED PUMP #2  | 2. DILUTION WATER VALVE #2 | 2. BLOWER #2             | 2. POLYMER MIXER #2        | 2. POLYMER MIXER #2        | 2. POLYMER MIXER #2        | 2. POLYMER MIXER #2        | 2. POLYMER MIXER #2        |
| 3. CENTRIFUGE #2        |                            | 3. WETTING UNIT VALVE #2 | 3. POLYMER OUTLET VALVE #2 | 3. POLYMER OUTLET VALVE #2 | 3. POLYMER OUTLET VALVE #2 | 3. POLYMER OUTLET VALVE #2 | 3. POLYMER OUTLET VALVE #2 |
| HADR                    | HADR                       | HADR                     | HADR                       | HADR                       | HADR                       | HADR                       | HADR                       |

| LMM05B                  | DSM05M                     | DSM05N                  | DSM05O                  | DSM05P                    | DSM05Q                    | DSM05R                  | DSM0                    | DSM0                    |
|-------------------------|----------------------------|-------------------------|-------------------------|---------------------------|---------------------------|-------------------------|-------------------------|-------------------------|
| SADR                    | SADR                       | SADR                    | SADR                    | SADR                      | SADR                      | SADR                    | SADR                    | SADR                    |
| DO                      | DO                         | DO                      | DO                      | DO                        | DO                        | DO                      | DO                      | DO                      |
| MS 3903                 | FV 3917                    | FV 3950                 | MS 3943B                | NL 3964B                  | NL 3964C                  | YS 3991                 | MS 3994                 | MS 3995                 |
| NL 3903                 | NL 3917                    | NL 3950B                | NL 3943C                | NL 3964C                  | NL 3964D                  | YS 3991                 | MS 3994                 | MS 3995                 |
| MS 3953                 | FV 3913                    | MSF 3961                | MS 3943C                | MS 3990                   | MS 3990                   | MS 3994                 | MS 3994                 | MS 3995                 |
| NL 3953                 | NL 3913                    | NL 3961                 | NL 3943J                | NL 3961                   | NL 3961                   | MS 3996                 | MS 3996                 | MS 3997                 |
| MSS 3943A               | NL 3943H                   | LS 3950                 | MS 3943D                | MS 3990                   | MS 3990                   | MS 3996                 | MS 3996                 | MS 3997                 |
| MSR 3943A               |                            |                         | MS 3943D                | MS 3990                   | MS 3990                   | MS 3996                 | MS 3996                 | MS 3997                 |
| NL 3943A                |                            |                         | NL 3943B                | MS 3990                   | MS 3990                   | MS 3996                 | MS 3996                 | MS 3997                 |
| NL 3943K                |                            |                         | NL 3943D                | MS 3990                   | MS 3990                   | MS 3996                 | MS 3996                 | MS 3997                 |
| DI                      | DI                         | DI                      | DI                      | DI                        | DI                        | DI                      | DI                      | DI                      |
| MI 3903                 | ZSC 3917                   | HS 3943G                | HS 3943K                | ZSC 3964                  | HS 3991                   | MI 3921                 | MI 3921                 | MI 3921                 |
| MA 3903                 | HS 3917B                   | ZSO 3950                | HS 3943L                | ZS 3964                   | MI 3921                   | MI 3921                 | MI 3921                 | MI 3921                 |
| HS 3903B                | ZSO 3913                   | ZSC 3950                | MI 3943C                | HS 3964A                  | MI 3921                   | MI 3921                 | MI 3921                 | MI 3921                 |
| MI 3953                 | ZSC 3913                   | HS 3950B                | MI 3943D                | MI 3990                   | HS 3994B                  | MI 3921                 | MI 3921                 | MI 3921                 |
| MA 3953                 | HS 3913B                   | MI 3961                 | FS 3943A                | HS 3990B                  | MI 3994                   | MI 3921                 | MI 3921                 | MI 3921                 |
| HS 3953B                | ZSO 3917                   | HS 3961D                | FS 3943B                | HS 3990B                  | MI 3994                   | MI 3921                 | MI 3921                 | MI 3921                 |
| MI 3943A                | ZSC 3953                   | SS 3961                 | TS 3943                 | HS 3943D                  | HS 3996A                  | MI 3921                 | MI 3921                 | MI 3921                 |
| HS 3943D                | ZSC 3954                   | HS 6439G                | LS 3943                 | HS 3943D                  | MI 3998                   | MI 3921                 | MI 3921                 | MI 3921                 |
| EQUIPMENT               | EQUIPMENT                  | EQUIPMENT               | EQUIPMENT               | EQUIPMENT                 | EQUIPMENT                 | EQUIPMENT               | EQUIPMENT               | EQUIPMENT               |
| 1. POLYMER FEED PUMP #3 | 1. FLUSHING WATER VALVE #3 | 1. SLUDGE FEED TANK     | 1. CENTRIFUGE #3        | 1. SOUTH BIN GATE         | 1. ODOR CONTROL BLOWER #1 | 1. CENTRIFUGE #3        | 1. CENTRIFUGE #3        | 1. CENTRIFUGE #3        |
| 2. SLUDGE FEED PUMP #3  | 2. DILUTION WATER VALVE #3 | 2. INCLINED CONVEYOR #1 | 2. DIGESTER PLUG VALVES | 2. HOT WATER CIRC PUMP #1 | 2. HOT WATER CIRC PUMP #1 | 2. DIGESTER PLUG VALVES | 2. DIGESTER PLUG VALVES | 2. DIGESTER PLUG VALVES |
| 3. CENTRIFUGE #3        |                            | 3. INTAKE FAN #1        | 3. INTAKE FAN #1        | 3. INTAKE FAN #1          | 3. INTAKE FAN #1          | 3. INTAKE FAN #1        | 3. INTAKE FAN #1        | 3. INTAKE FAN #1        |
| HADR                    | HADR                       | HADR                    | HADR                    | HADR                      | HADR                      | HADR                    | HADR                    | HADR                    |

| LMM05D                  |
|-------------------------|
| SADR                    |
| DO                      |
| MS 3904                 |
| NL 3904                 |
| MS 3954                 |
| NL 3954                 |
| MSS 3944A               |
| MSR 3944A               |
| NL 3944A                |
| DI                      |
| MI 3904                 |
| MA 3904                 |
| HS 3904B                |
| MI 3954                 |
| MA 3954                 |
| HS 3954B                |
| MI 3944A                |
| HS 3944D                |
| EQUIPMENT               |
| 1. POLYMER FEED PUMP #4 |
| 2. SLUDGE FEED PUMP #4  |
| 3. CENTRIFUGE #4        |
| HADR                    |

| DSM05S                      | DSM05T                      | DSM05U                           | DSM05V                                                                                                       | DSM05W                                                                                   | DSM05X                                 | DSM0      | DSM0      |
|-----------------------------|-----------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------|-----------|-----------|
| SADR                        | SADR                        | SADR                             | SADR                                                                                                         | SADR                                                                                     | SADR                                   | SADR      | SADR      |
| DO                          | DO                          | DO                               | DO                                                                                                           | DO                                                                                       | DO                                     |           |           |
| MS 3904                     | MSF 3962                    | NC 3963B                         | MS 3993                                                                                                      | UA 3975                                                                                  | FV 39410                               |           |           |
| NL 3904                     | NL 3962                     | NC 3963C                         | NL 3993                                                                                                      | TC 3991                                                                                  | NL 39410A                              |           |           |
| MS 3954                     | MSS 39400                   | YS 6439A                         | MS 3995                                                                                                      |                                                                                          | NL 39410B                              |           |           |
| NL 3954                     | MSR 39400                   | YS 6439B                         | NL 3995                                                                                                      |                                                                                          | NL 39410C                              |           |           |
| MS 3992                     |                             | YS 6439C                         | MS 3997                                                                                                      |                                                                                          | FV 39412                               |           |           |
| NL 3992                     |                             | YS 6439D                         | NL 3997                                                                                                      |                                                                                          | NL 39412A                              |           |           |
|                             |                             | YS 6439E                         | MS 3999                                                                                                      |                                                                                          | NL 39412B                              |           |           |
|                             |                             | YS 6439F                         |                                                                                                              |                                                                                          | NL 39412C                              |           |           |
| DI                          | DI                          | DI                               | DI                                                                                                           | DI                                                                                       | DI                                     |           |           |
| MI 3904                     | MI 3962                     | ZSC 3963                         | MI 3993                                                                                                      | JS 6230                                                                                  | ZSO 39410                              |           |           |
| MA 3904                     | HS 3962                     | ZS 3963                          | HS 3993B                                                                                                     | JS 6231                                                                                  | ZSC 39410A                             |           |           |
| HS 3904B                    | SS 3962                     | HS 6439A                         | MI 3995                                                                                                      | HS 3975A                                                                                 | HS 39410B                              |           |           |
| MI 3954                     | HS 3962D                    | HS 6439B                         | HS 3995B                                                                                                     | HS 3975B                                                                                 | HS 39410C                              |           |           |
| MA 3954                     | HS 3962E                    | HS 6439C                         | MI 3997                                                                                                      | LS 6111                                                                                  | HS 39410D                              |           |           |
| HS 3954B                    | HS 3962C                    | HS 6439D                         | HS 3997B                                                                                                     | LS 6112                                                                                  | ZSO 39412                              |           |           |
| MI 3992                     | HS 3962F                    | HS 6439E                         | MI 3999                                                                                                      | HS 39412C                                                                                | ZSC 39412                              |           |           |
| MA 3992                     |                             | HS 6439F                         | HS 3999B                                                                                                     | HS 39412D                                                                                | HS 39412A                              |           |           |
| EQUIPMENT                   | EQUIPMENT                   | EQUIPMENT                        | EQUIPMENT                                                                                                    | EQUIPMENT                                                                                | EQUIPMENT                              | EQUIPMENT | EQUIPMENT |
| 1. POLYMER FEED<br>PUMP # 4 | 1. INCLINED<br>CONVEYOR # 2 | 1. NORTH BIN GATE<br>2. LIGHTING | 1. ODOR CONTROL<br>BLOWER # 2<br>2. HOT WATER<br>CIRCULATION PUMP<br>3. INTAKE FAN # 2<br>4. POWER ROOF EXH. | 1. MCC 30, MCC 31<br>2. ALARM<br>3. PPMH # 11<br>4. CDMH # 12<br>5. DIG 12 PLUG<br>VALVE | 1. DIGESTER # 10 & # 12<br>PLUG VALVES |           |           |
| HADR                        | HADR                        | HADR                             | HADR                                                                                                         | HADR                                                                                     | HADR                                   | HADR      | HADR      |





NOTES:  
TOP OF DUCT WORK AT EL 36'-6" (±) UNLESS NOTED OTHERWISE.

**RECORD DRAWING**

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|----|----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 9 | 4 | 8 | 4 | 8 | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|         |               |           |                          |
|---------|---------------|-----------|--------------------------|
| 4-22-88 | FINAL DRAWING | CLM       | DESIGNED BY: [Signature] |
|         |               |           | DRAWN BY: RU HANSON      |
|         |               |           | CHECKED BY: [Signature]  |
|         |               |           | APPROVED BY: [Signature] |
|         |               |           | DATE: MAY 31, 1985       |
| NO.     | DATE          | REVISIONS | APPROVED                 |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/4" = 1'-0"

0 4' 8'

GRAPHIC SCALE

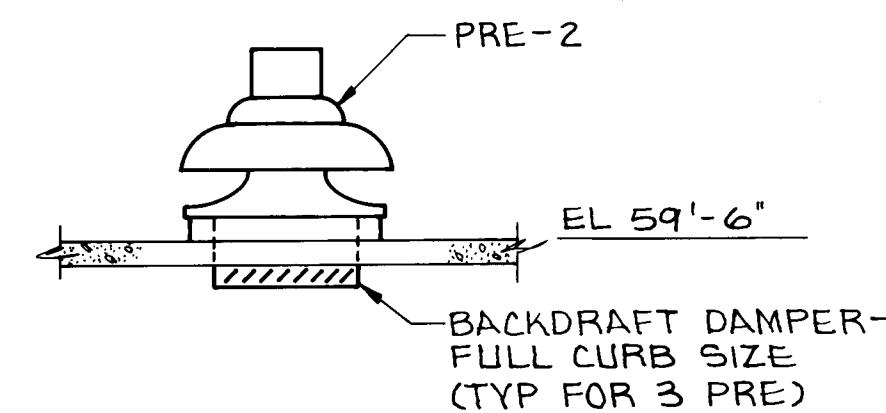
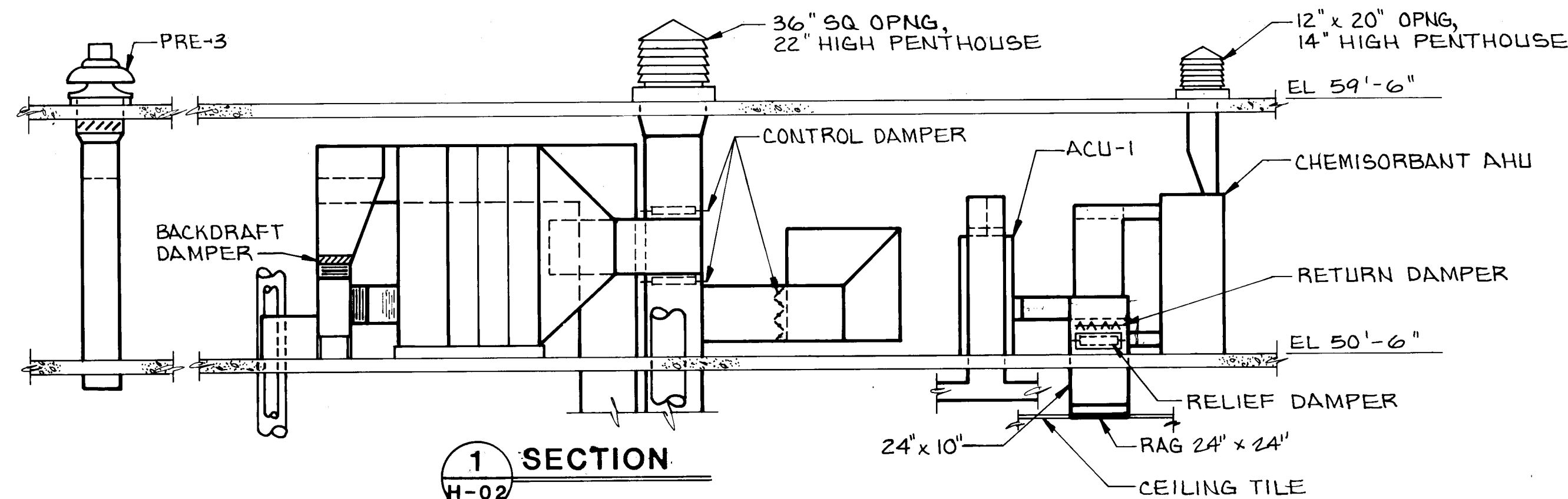
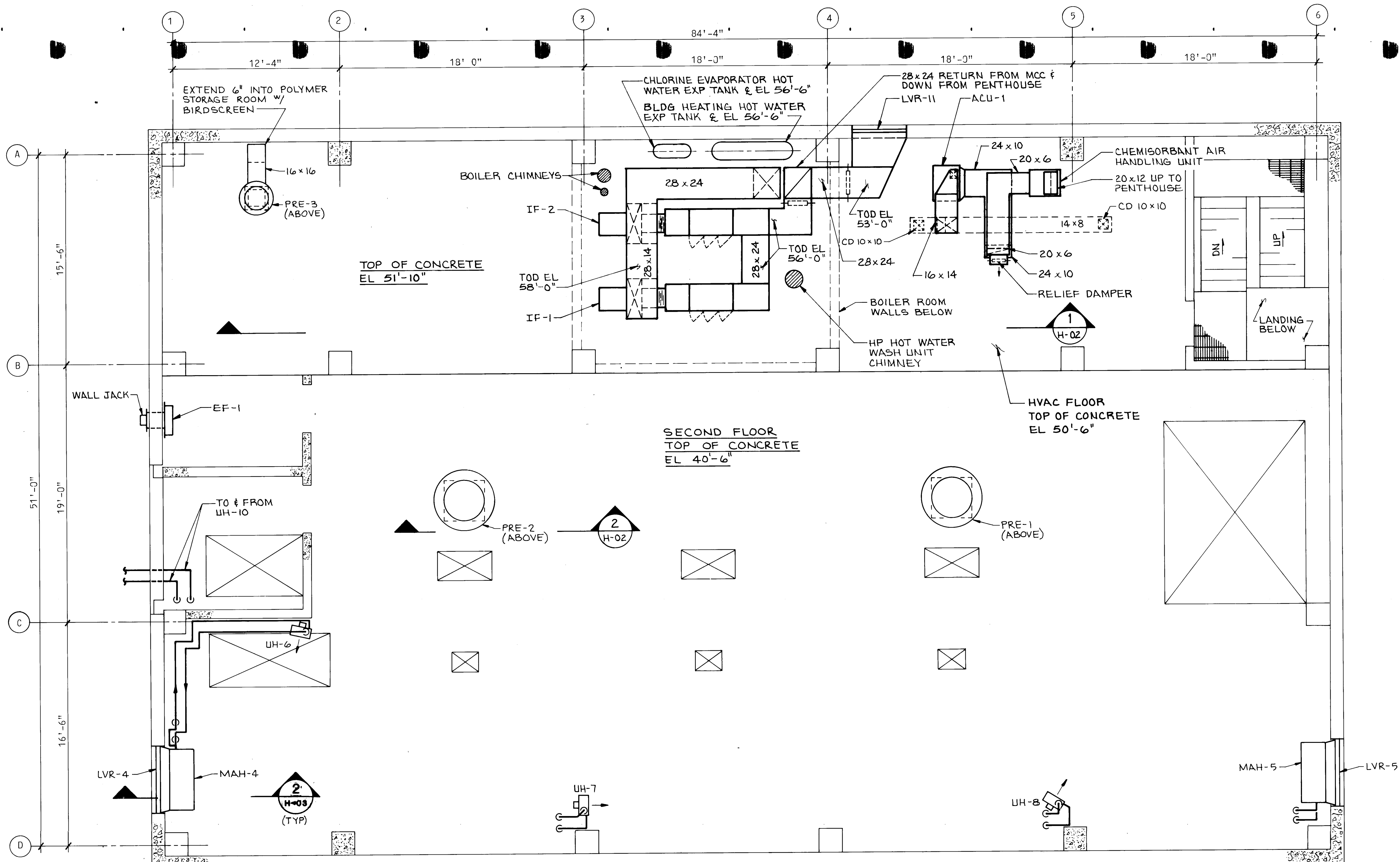
CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**DWATERING BUILDING**  
**HVAC GROUND FLOOR PLAN**

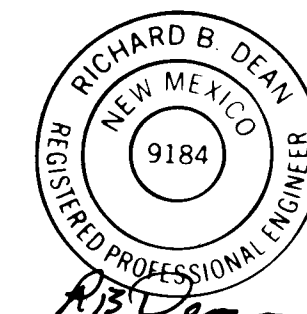
M-C NO. **H-01** 84 or 112

SC NO. 8496-H1





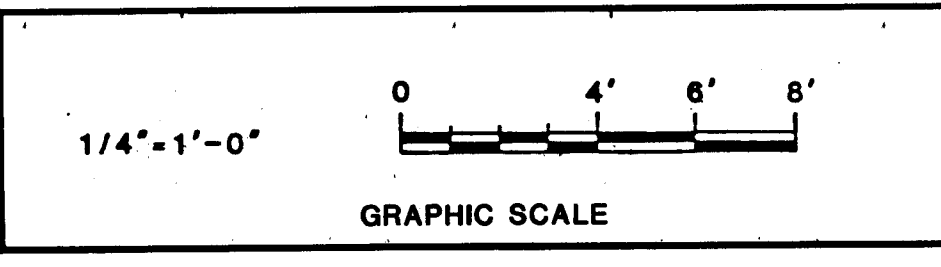
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 DATE: AUG. 1988  
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|    |    |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 9 | 4 | 8 | 5 | 8 | 8 |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|                                                                                     |         |               |            |
|-------------------------------------------------------------------------------------|---------|---------------|------------|
|  | 4-22-88 | FINAL DRAWING | C.L. Meyer |
|                                                                                     |         |               |            |
|                                                                                     |         |               |            |
|                                                                                     |         |               |            |
|                                                                                     |         |               |            |
| NO.                                                                                 | DATE    | REVISIONS     | APPROVED   |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

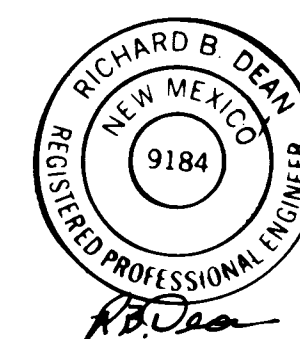
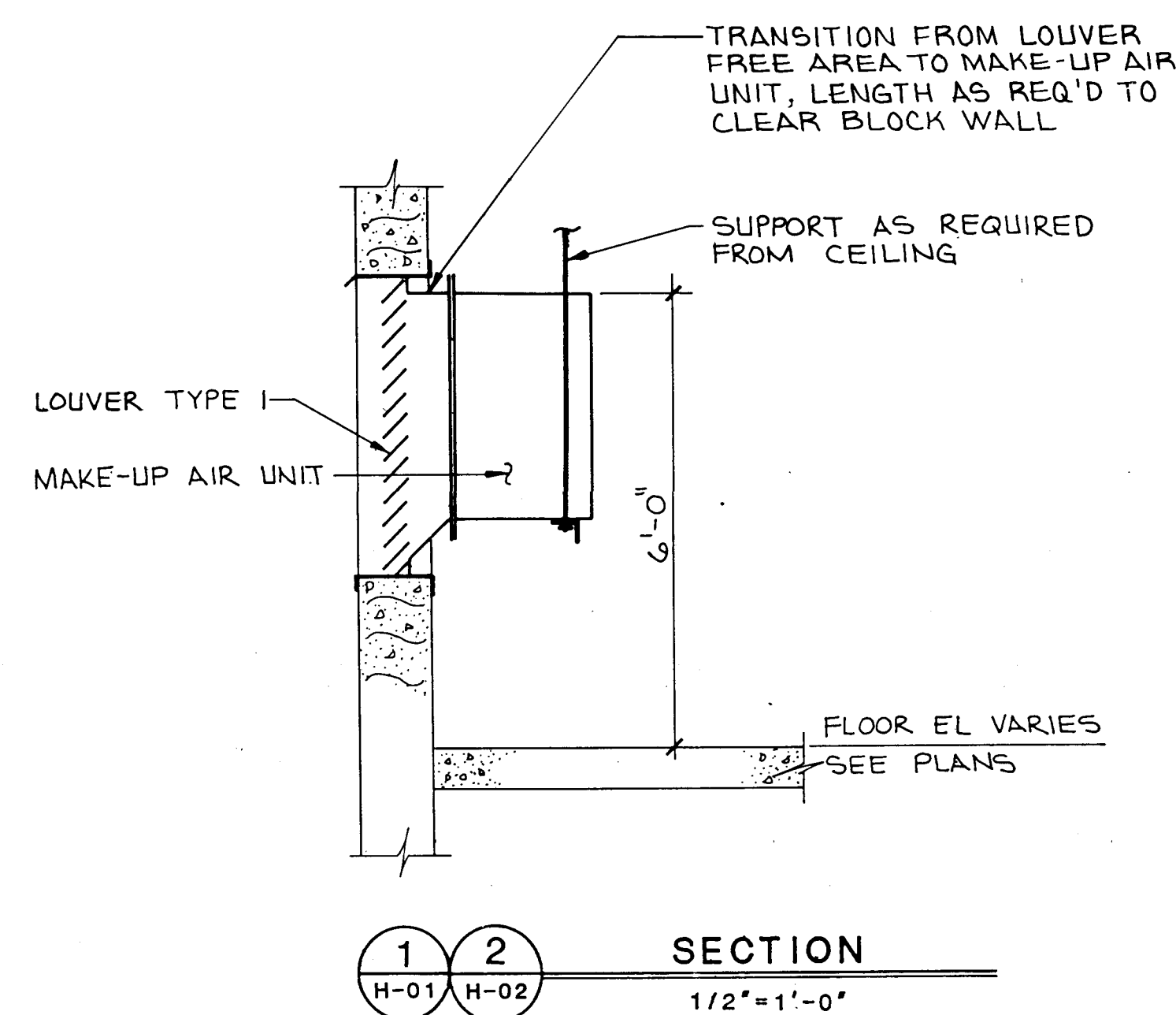
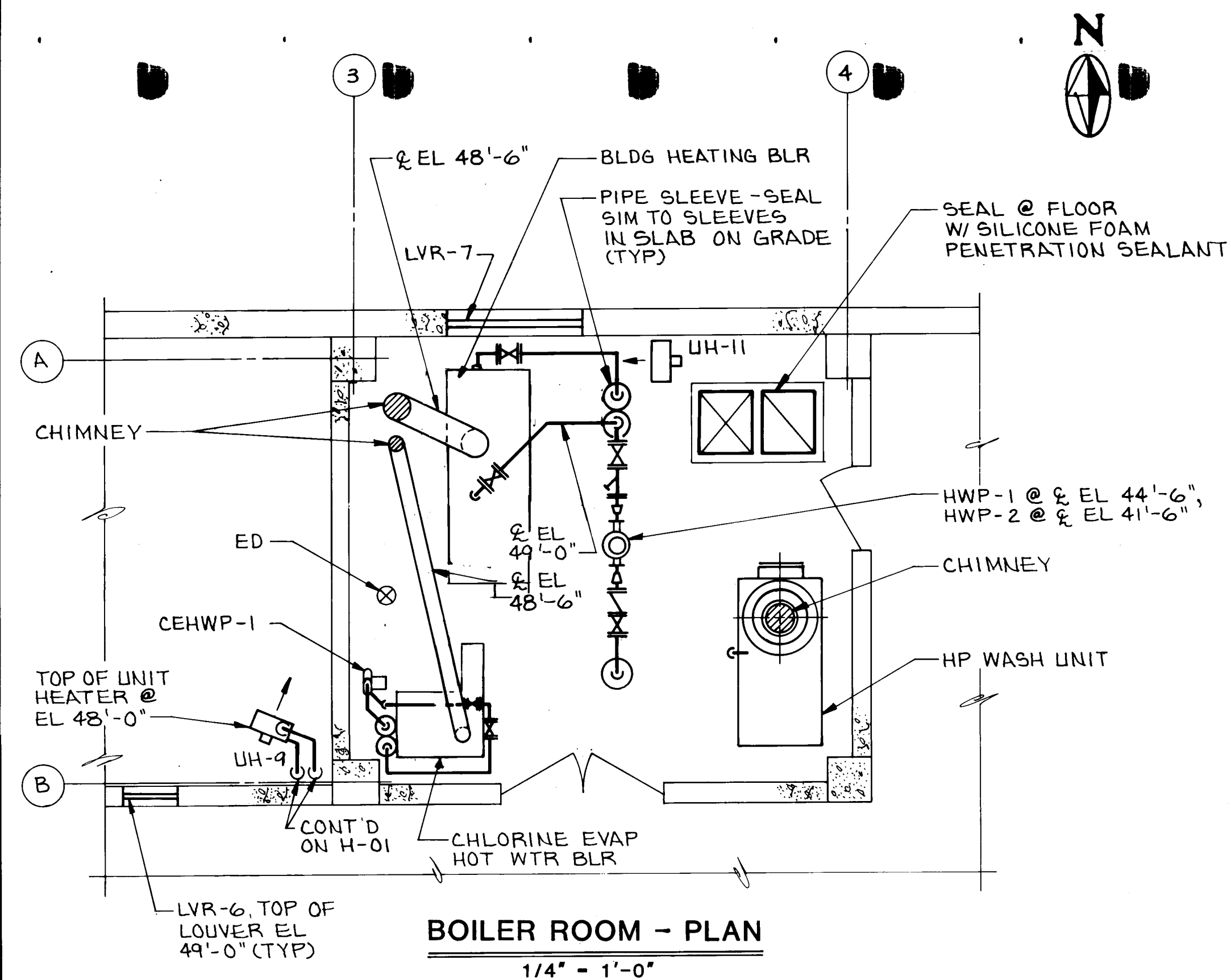


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**DEWATERING BUILDING**  
**HVAC SECOND FLOOR PLAN**

H-02 85 of 112  
 SC NO. 8496-H2





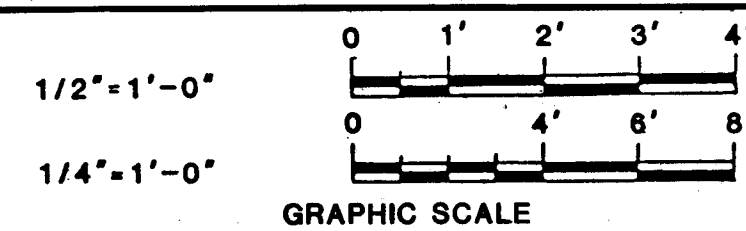
| RECORD DRAWING                                                                                                                                                                                                                                                |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                            | DRAFTED BY:<br>MCA |
| <small>THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.</small> |                    |

|    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 86 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|         |               |           |
|---------|---------------|-----------|
| 4-22-88 | FINAL DRAWING | CLM       |
| NO.     | DATE          | REVISIONS |
|         |               |           |
|         |               |           |
|         |               |           |

DESIGNED *W. Schaner*  
 DRAWN *M. MARTZ*  
 CHECKED *W. Schaner*  
 APPROVED *W. Schaner*  
 DATE MAY 31 1988

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

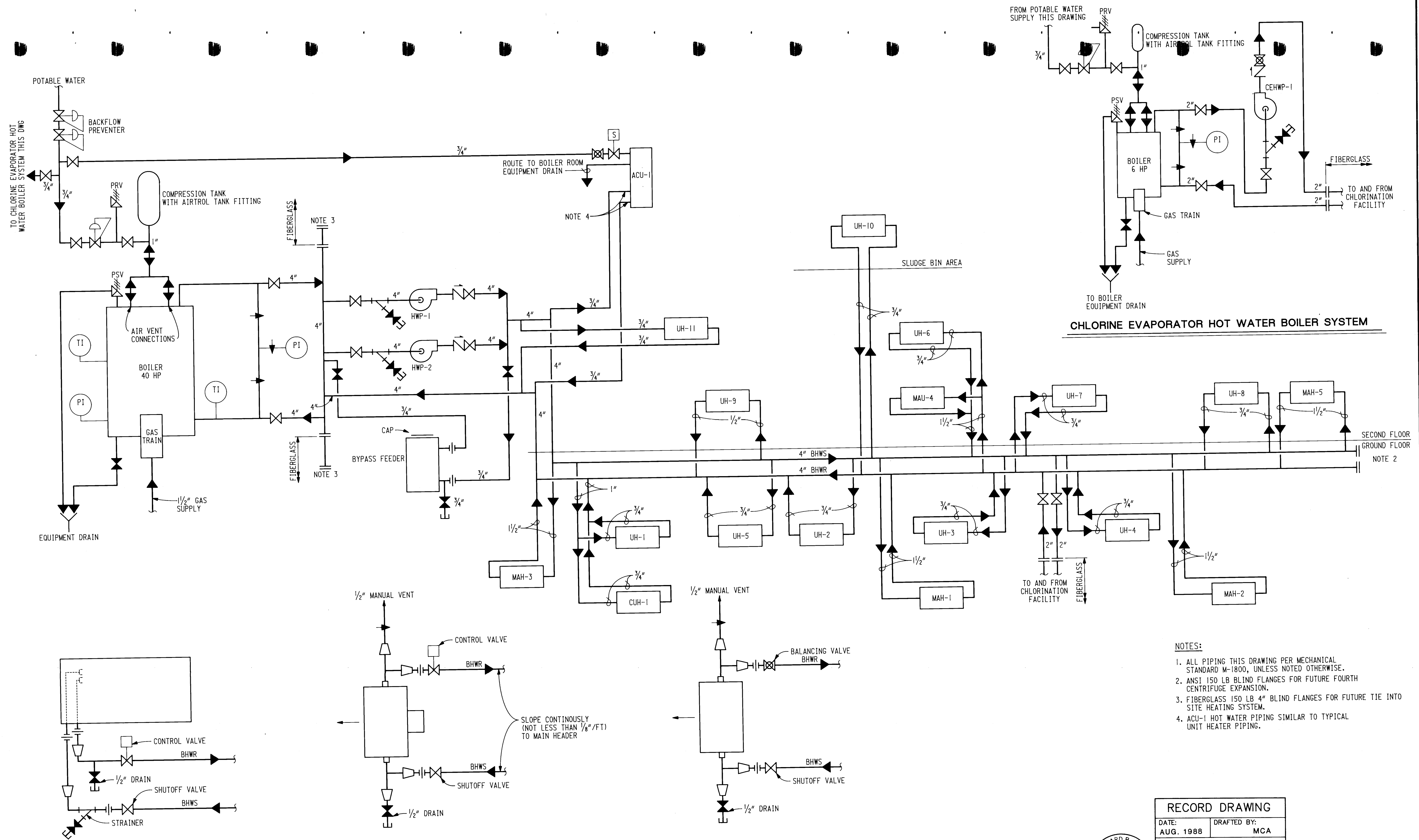


CITY OF ALBUQUERQUE, NEW MEXICO  
 SOLIDS HANDLING FACILITIES  
 PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
 DEWATERING BUILDING  
 HVAC SECTIONS AND DETAILS

M-C NO.  
**H-03** 88 of 112  
 SC NO. 8496-H3





TYPICAL CABINET UNIT HEATER DETAIL

TYPICAL UNIT HEATER DETAIL

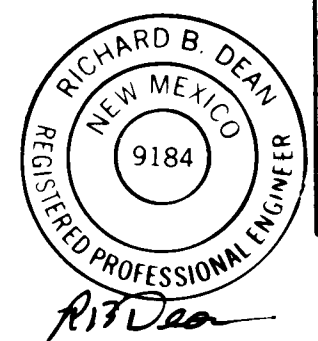
TYPICAL MAKE-UP AIR HEATER DETAIL

- NOTES:
1. ALL PIPING THIS DRAWING PER MECHANICAL STANDARD M-1800, UNLESS NOTED OTHERWISE.
  2. ANSI 150 LB BLIND FLANGES FOR FUTURE FOURTH CENTRIFUGE EXPANSION.
  3. FIBERGLASS 150 LB 4" BLIND FLANGES FOR FUTURE TIE INTO SITE HEATING SYSTEM.
  4. ACU-1 HOT WATER PIPING SIMILAR TO TYPICAL UNIT HEATER PIPING.

RECORD DRAWING

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|    |    |    |    |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 87 | 8 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|         |      |               |          |
|---------|------|---------------|----------|
| NO.     | DATE | REVISIONS     | APPROVED |
| 4-22-88 |      | FINAL DRAWING |          |

DESIGNED: *Bob Shuman*  
 DRAWN: *DWRIGHT*  
 CHECKED: *Bob Shuman*  
 APPROVED: *Bob Shuman*  
 DATE: MAY 31, 1985

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE

NO SCALE  
 GRAPHIC SCALE

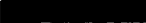
CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
 DEWATERING BUILDING  
 HVAC HEATING WATER PIPING SCHEMATIC

M-C NO.  
**H-04** 87 of 112  
 SC NO. 8496-H4



|                                      |  |                                         |                                                               |                                                                                   |                                      |       |
|--------------------------------------|--|-----------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------|-------|
| 1-GENERAL<br>REVISIONS               |  | 9256FW NPS<br>DATE OWN APP DATE 4-24-67 | DRAWN J.C.S.<br>CHECKED J.C.H.<br>APPROVED N.P.S.<br>APPROVED |  | SCALE NONE<br>NO M-700<br>SHEET OF 2 | REV 1 |
| MECHANICAL STANDARD<br>PIPE SUPPORTS |  |                                         | PIPE SUPPORT NOTES                                            |                                                                                   |                                      |       |

|                                      |  |                                                                                                                  |                                                                                     |                                        |
|--------------------------------------|--|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------|
| 1-GENERAL<br>REVISIONS               |  | DRAWN J.C.C.<br>CHECKED J.C.C.<br>APPROVED <i>N.E.J.</i><br>APPROVED <i>N.E.J.</i><br>DATE DOWN APP DATE 4-28-67 |  |                                        |
| MECHANICAL STANDARD<br>PIPE SUPPORTS |  | PIPE SUPPORT NOTES                                                                                               |                                                                                     | SCALE NONE<br>NO M-700<br>SHEET 2 OF 2 |

|                                      |         |     |                          |                                                                                     |                         |                   |
|--------------------------------------|---------|-----|--------------------------|-------------------------------------------------------------------------------------|-------------------------|-------------------|
| 2. NOTE 24<br>1. GENERAL             | 129717H | 140 | DRAWN <u>J. G. C.</u>    |  | CHECKED <u>J. G. C.</u> | SCALE <u>NONE</u> |
|                                      | 988707H | 140 | APPROVED <u>J. G. C.</u> |                                                                                     |                         |                   |
| REVISIONS                            | DATE    | OWN | APP.                     | DATE                                                                                | 6-24-67                 | SHEET 1 OF 2      |
| MECHANICAL STANDARD<br>PIPE SUPPORTS |         |     |                          | PIPE SUPPORT<br>MATERIAL LIST                                                       |                         |                   |

|                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |                                                                                                                                                                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div style="display: flex; justify-content: space-between;"> <div> <p>2- NOTE 24</p> <p>1- GENERAL</p> <p>REVISIONS</p> </div> <div> <p>2077 KJH</p> <p>2078 RW</p> <p>DATE DWG APP</p> </div> <div> <p>429</p> <p>428</p> <p>DATE</p> </div> <div> <p>DRAWN <i>J.C.F.</i></p> <p>CHECKED <i>J.L.H.</i></p> <p>APPROVED <i>K.E.R.</i></p> <p>APPROVED</p> </div> </div> |  |  |  | <div style="display: flex; align-items: center;"> </div>                                                                                                          |  |
| <div style="display: flex; justify-content: space-between;"> <div> <p>MECHANICAL STANDARD<br/>PIPE SUPPORTS</p> </div> <div> <p>PIPE SUPPORT<br/>MATERIAL LIST</p> </div> </div>                                                                                                                                                                                        |  |  |  | <div style="display: flex; justify-content: space-between;"> <div> <p>SCALE NONE</p> <p>NO M-701</p> <p>SHEET 2 OF 2</p> </div> <div> <p>REV. 2</p> </div> </div> |  |

STRUCTURAL MEMBER CLAMPS

WELDED CONNECTION TO STRUCTURAL MEMBER

GUIDED BRACKET SUPPORT

CONNECTION TO NEW CONCRETE

BASE ELBOW

TYPICAL ANCHOR TO STEEL MEMBER

CONNECTION TO EXISTING CONCRETE

TYPICAL ANCHOR TO CONCRETE

2. NOTE 2.4 7/27/71 K.H. HRS. DRAWN G.S.H.  
 1. GENERAL 9/25/71 W.H. APPROVED IN 24  
 REVISIONS DATE 10/11/71 APP. DATE 8-24-67

MECHANICAL STANDARD PIPE SUPPORTS TOP ATTACHMENT AND MISCELLANEOUS SUPPORTS

SCALE NONE  
 NO. M-702  
 REVISIONS

|                                      |  |                          |            |                                                      |      |         |  |
|--------------------------------------|--|--------------------------|------------|------------------------------------------------------|------|---------|--|
| 2. NOTE 24<br>GENERAL                |  | 7/29/74 JH<br>9/25/74 PW | DES<br>HIS | DRAWN JAC<br>CHECKED JLM<br>APPROVED NEB<br>APPROVED |      |         |  |
| REVISIONS                            |  | DATE                     | DOWN       | APP                                                  | DATE | 4-24-67 |  |
| MECHANICAL STANDARD<br>PIPE SUPPORTS |  |                          |            | TOP ATTACHMENT AND<br>MISCELLANEOUS SUPPORTS         |      |         |  |
|                                      |  |                          |            | SCALE NONE                                           |      | REV 2   |  |
|                                      |  |                          |            | NO M-702                                             |      |         |  |

**SINGLE ROD HANGER**

**DOUBLE ROD HANGER  
SPRING SUPPORTED**

**DOUBLE ROD HANGER  
VERTICAL PIPE**

**SECTION A-A**

**NOTES**

- NO WELD ON BOTTOM OR TOP CORNERS OF LUG.
- SEE DRAWING M-701 FOR LIST OF MATERIALS REFERRED TO ABOVE BY NUMBERS.

| REVISIONS | DATE    | OWN | APP | DATE     | BY | CHKD | APP | DATE |
|-----------|---------|-----|-----|----------|----|------|-----|------|
| 1-GENERAL | 9-25-67 | PIW | KPS | APPROVED |    |      |     |      |
|           |         |     |     |          |    |      |     |      |

DRAWN G.R.H.  
CHECKED Z.F.H.  
APPROVED H.F.H.

DATE 6-24-67

**MECHANICAL STANDARD  
PIPE SUPPORTS**

**STANDARD HANGERS**

SCALE NONE  
NO M-703

| TABLE OF HORIZONTAL PIPE SUPPORT SPACING<br>FOR FIELD FABRICATION FROM RANDOM MATERIAL |                                                |                  |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
|----------------------------------------------------------------------------------------|------------------------------------------------|------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| PIPE<br>SIZE<br>INCHES                                                                 | STD. & X. H.<br>STEEL AT<br>MAXIMUM OF<br>750F | COPPER<br>TUBING | FIBER-<br>GLASS                                                                        | PLASTIC                                                                                | CAST IRON<br>WATER                                                                                                                          | CAST IRON<br>SOIL                                                                                                                           | MINIMUM<br>ROD<br>SIZE |
| 3/4                                                                                    | 7                                              | 5                | FOLLOW PIPE MANUFACTURER'S<br>RECOMMENDATIONS FOR MATERIAL<br>AND SERVICE TEMPERATURE. | FOLLOW PIPE MANUFACTURER'S<br>RECOMMENDATIONS FOR MATERIAL<br>AND SERVICE TEMPERATURE. | 12'-0" MAX. SPACING. MINIMUM OF ONE (1)<br>HANGER PER PIPE SECTION AT THE JOINTS;<br>ALSO AT CHANGE OF DIRECTION AND<br>BRANCH CONNECTIONS. | 10'-0" MAX. SPACING. MINIMUM OF ONE (1)<br>HANGER PER PIPE SECTION AT THE JOINTS;<br>ALSO AT CHANGE OF DIRECTION AND<br>BRANCH CONNECTIONS. | 3/8" $\phi$            |
| 1                                                                                      | 7                                              | 6                |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 3/8" $\phi$            |
| 1 1/4                                                                                  | 7                                              | 7                |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 3/8" $\phi$            |
| 1 1/2                                                                                  | 9                                              | 8                |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 3/8" $\phi$            |
| 2                                                                                      | 10                                             | 8                |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 3/8" $\phi$            |
| 2 1/2                                                                                  | 11                                             | 9                |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 1/2" $\phi$            |
| 3                                                                                      | 12                                             | 10               |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 1/2" $\phi$            |
| 4                                                                                      | 14                                             | 12               |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 5/8" $\phi$            |
| 5                                                                                      | 16                                             | 13               |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 5/8" $\phi$            |
| 6                                                                                      | 17                                             | 14               |                                                                                        |                                                                                        |                                                                                                                                             |                                                                                                                                             | 3/4" $\phi$            |
| 8                                                                                      | 19                                             | 16               | 7/8" $\phi$                                                                            |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 10                                                                                     | 22                                             |                  | 7/8" $\phi$                                                                            |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 12                                                                                     | 23                                             |                  | 7/8" $\phi$                                                                            |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 14                                                                                     | 25                                             |                  | 1" $\phi$                                                                              |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 16                                                                                     | 27                                             |                  | 1" $\phi$                                                                              |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 18                                                                                     | 28                                             |                  | 1 1/8" $\phi$                                                                          |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 20                                                                                     | 30                                             |                  | 1 1/4" $\phi$                                                                          |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |
| 24                                                                                     | 32                                             |                  | 1 1/2" $\phi$                                                                          |                                                                                        |                                                                                                                                             |                                                                                                                                             |                        |

NOTES

1 SPACINGS SHOWN IN TABLE ARE IN FEET.

2 ADDITIONAL SUPPORTS SHALL BE LOCATED NEAR VALVES OR OTHER LARGE CONCENTRATED LOADS.

1-GENERAL

REVISIONS

DATE DWN APP

7-25-75 PM NFB

DATE 4-24-67

DRAWN JAC

CHECKED JAC

APPROVED RFB

DATE 4-24-67



MECHANICAL STANDARD  
PIPE SUPPORTS

PIPE SUPPORT SPACING TABLE

SCALE NONE

NO M-710

REV. 1

RICHARD B. DEAN

NEW MEXICO

9184

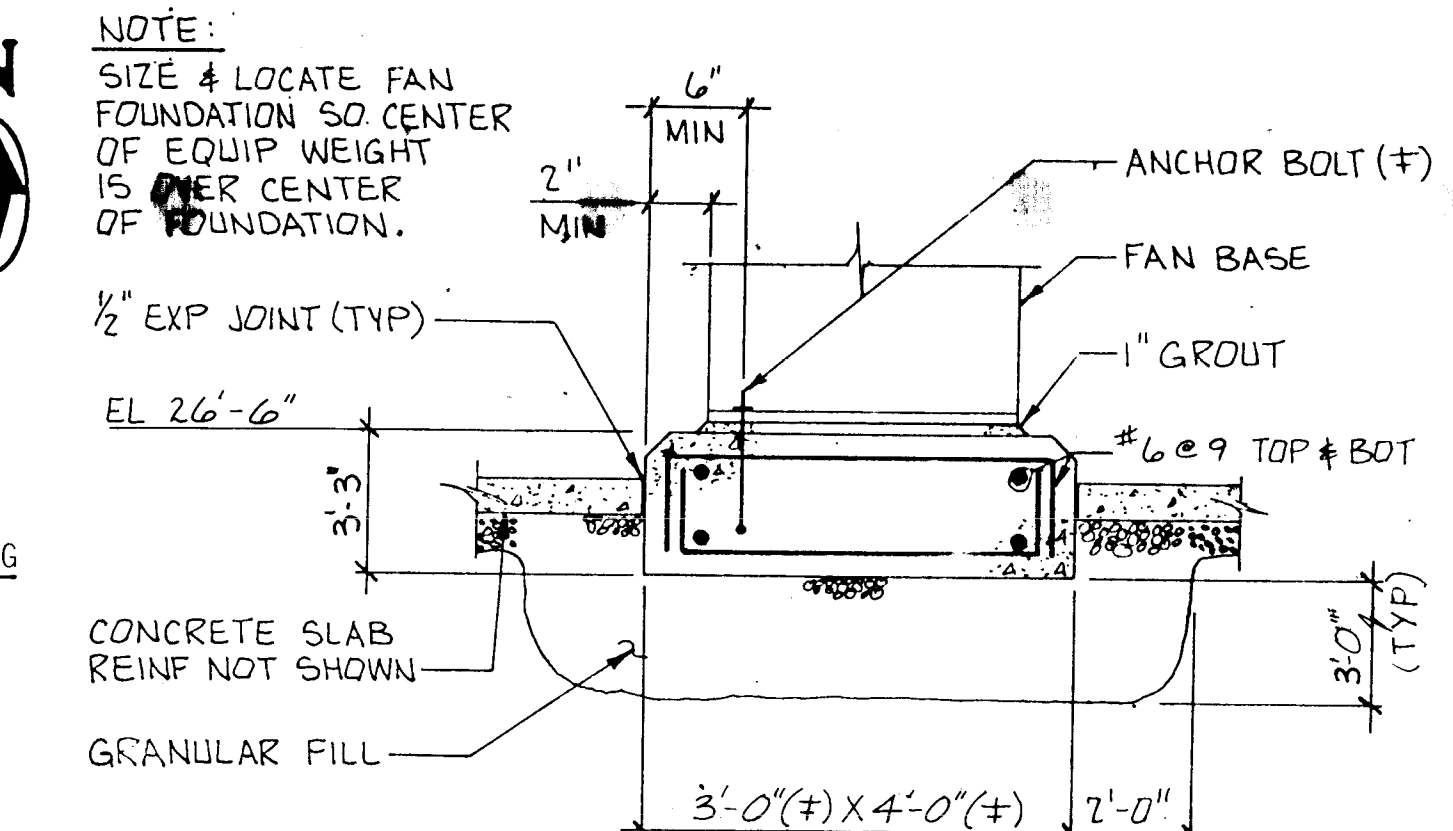
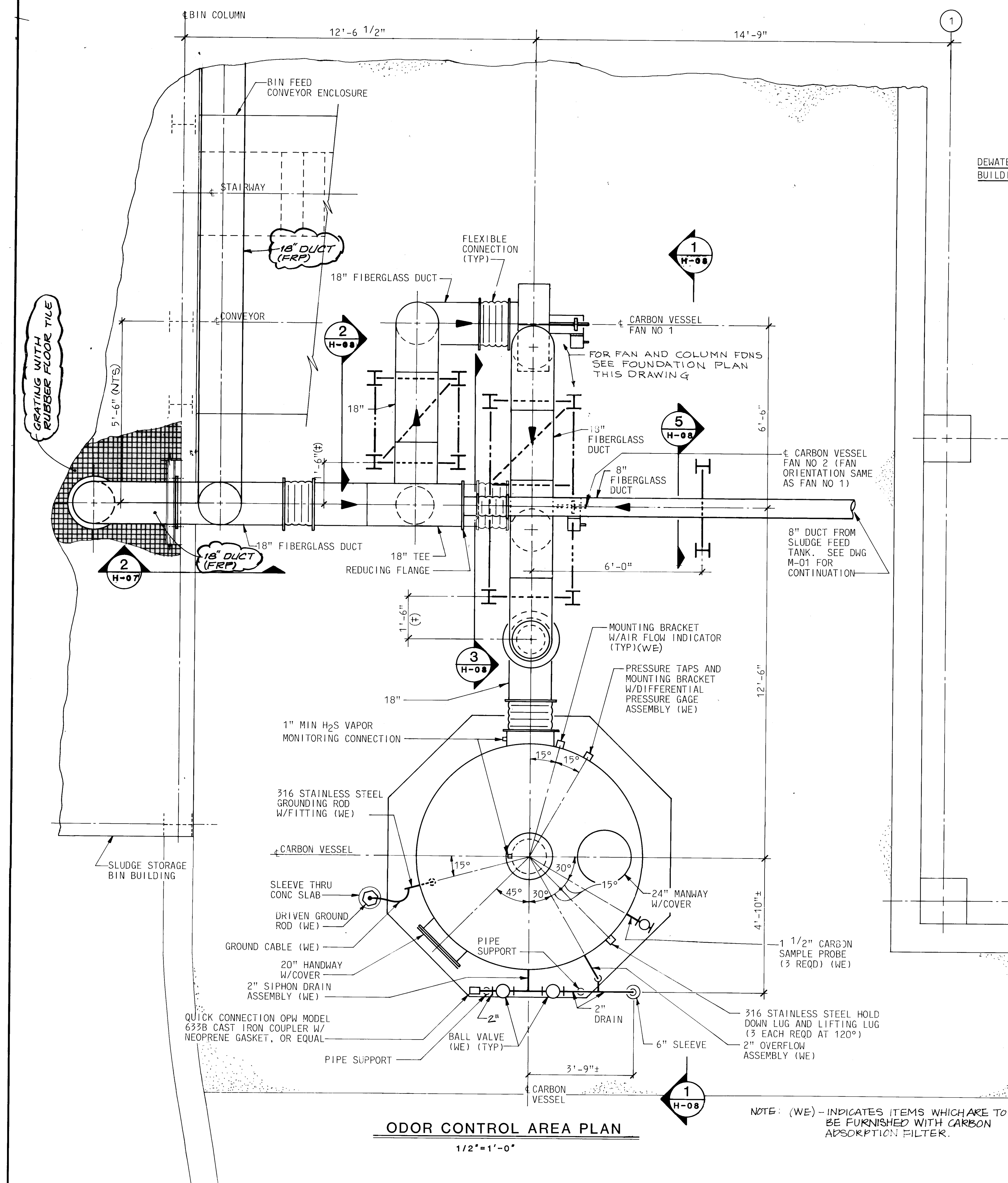
REGISTERED PROFESSIONAL ENGINEER

*R.B. Dean*

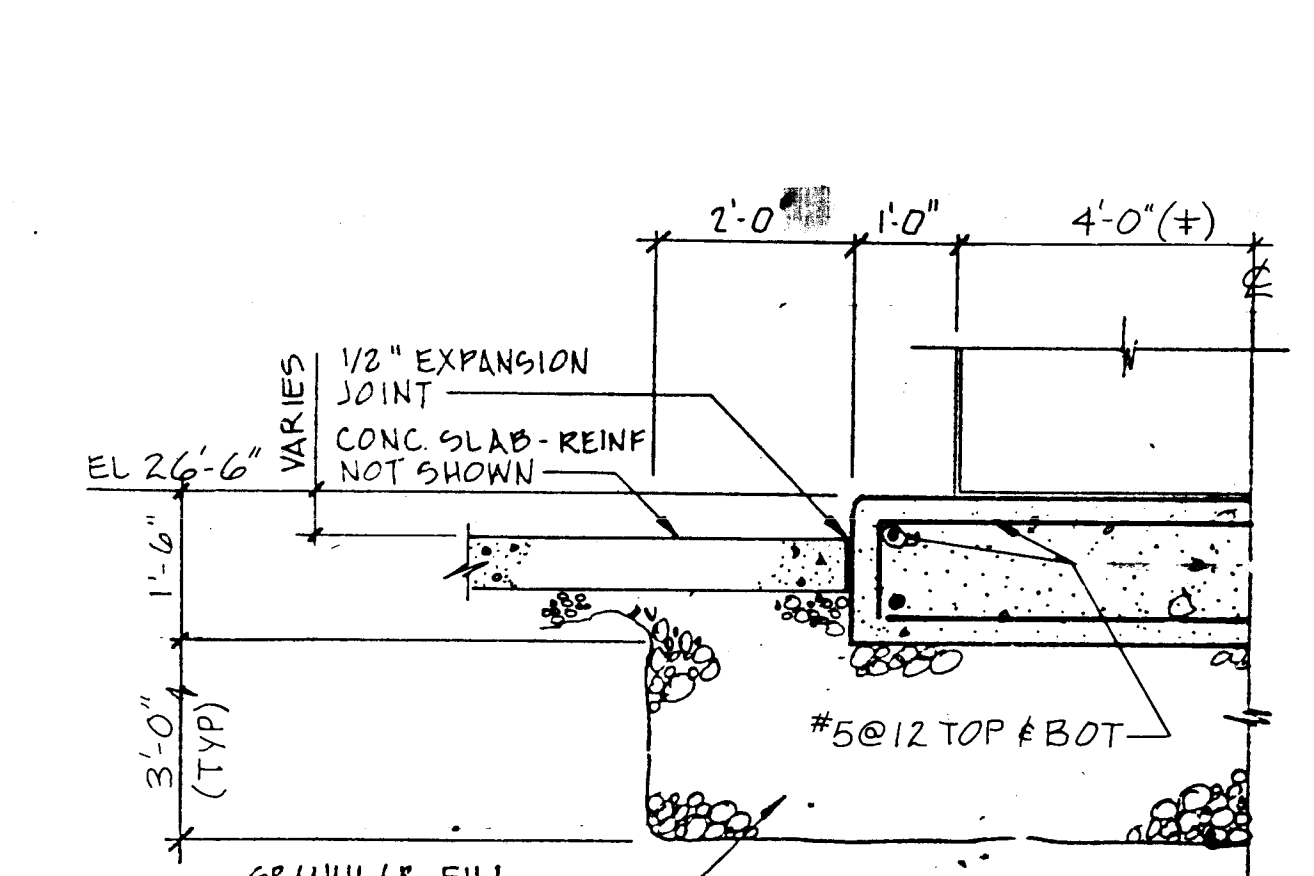




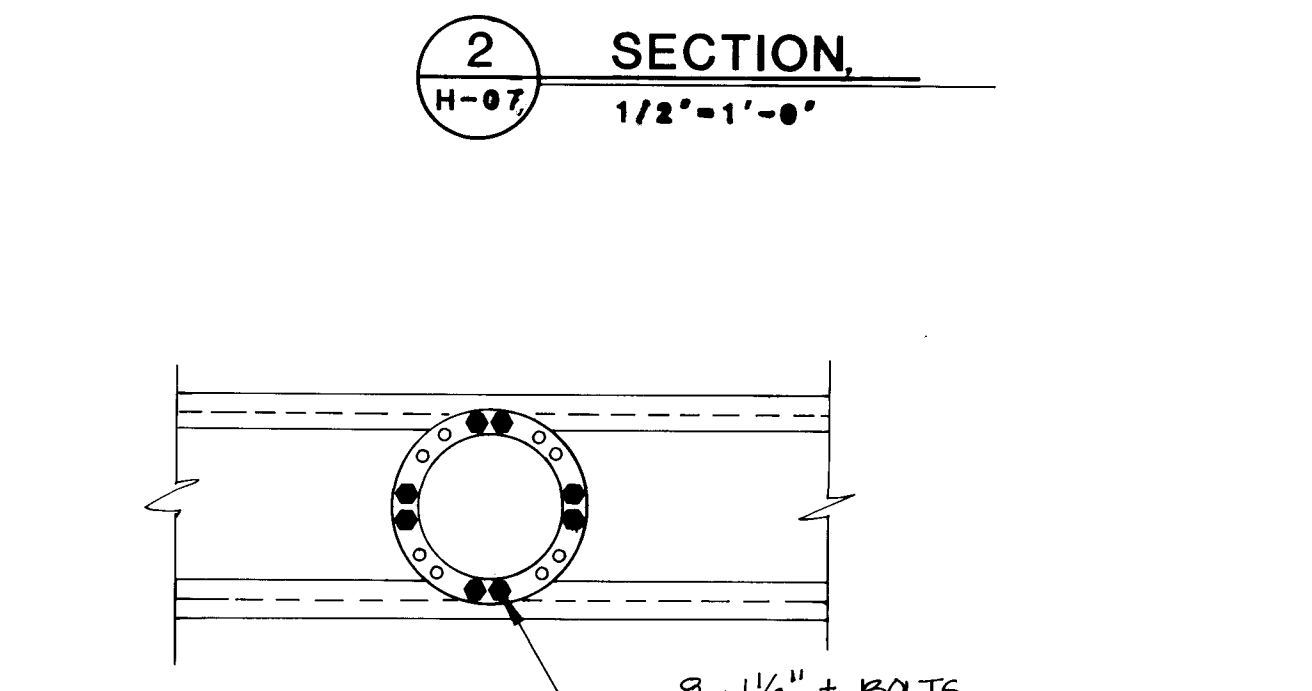
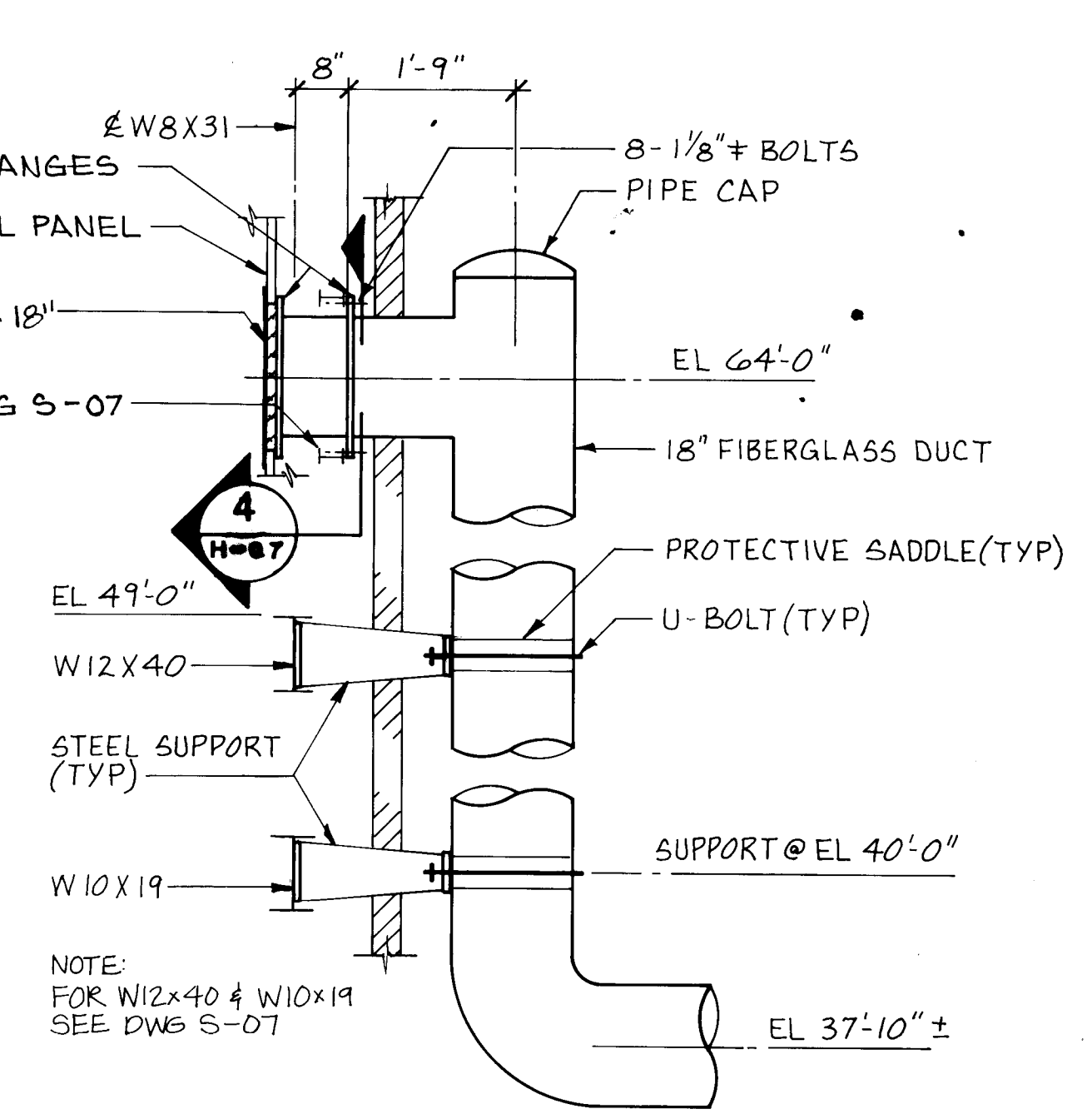
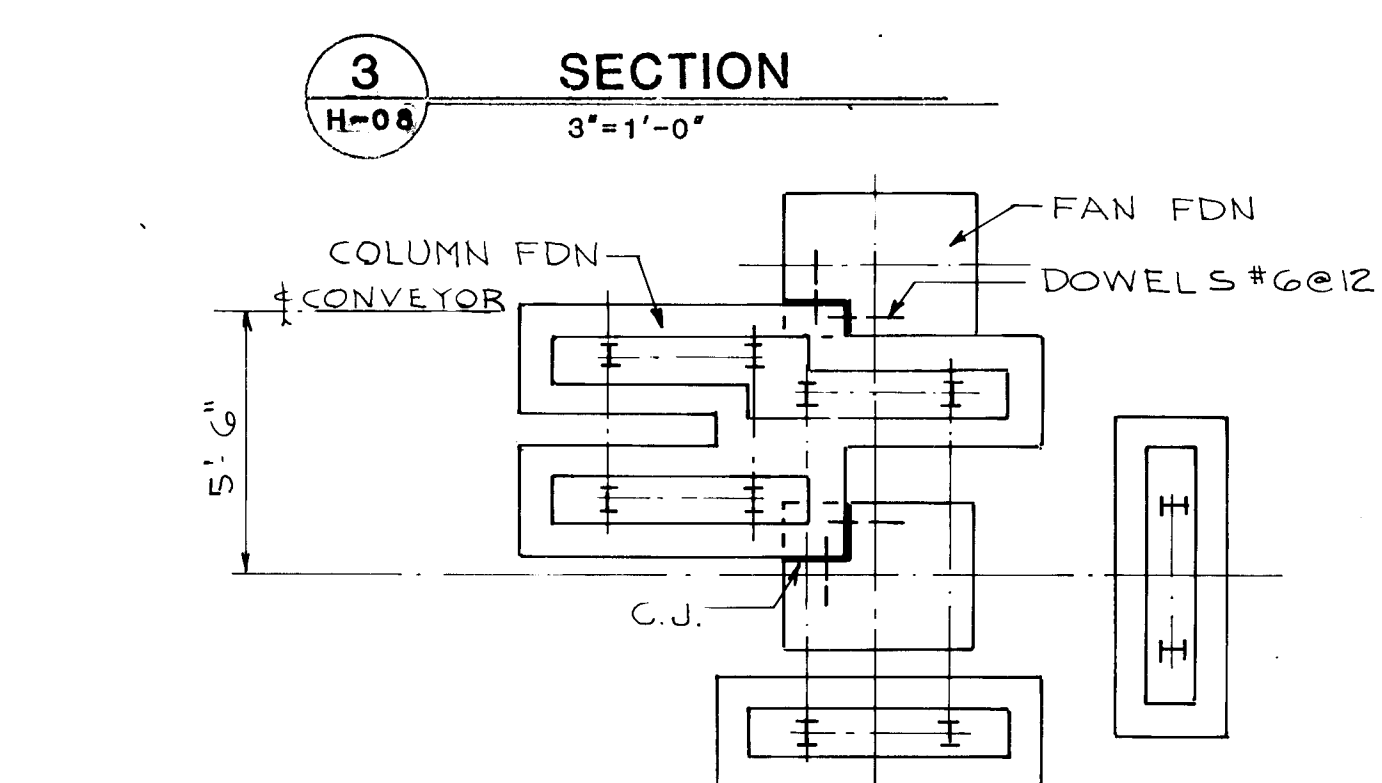
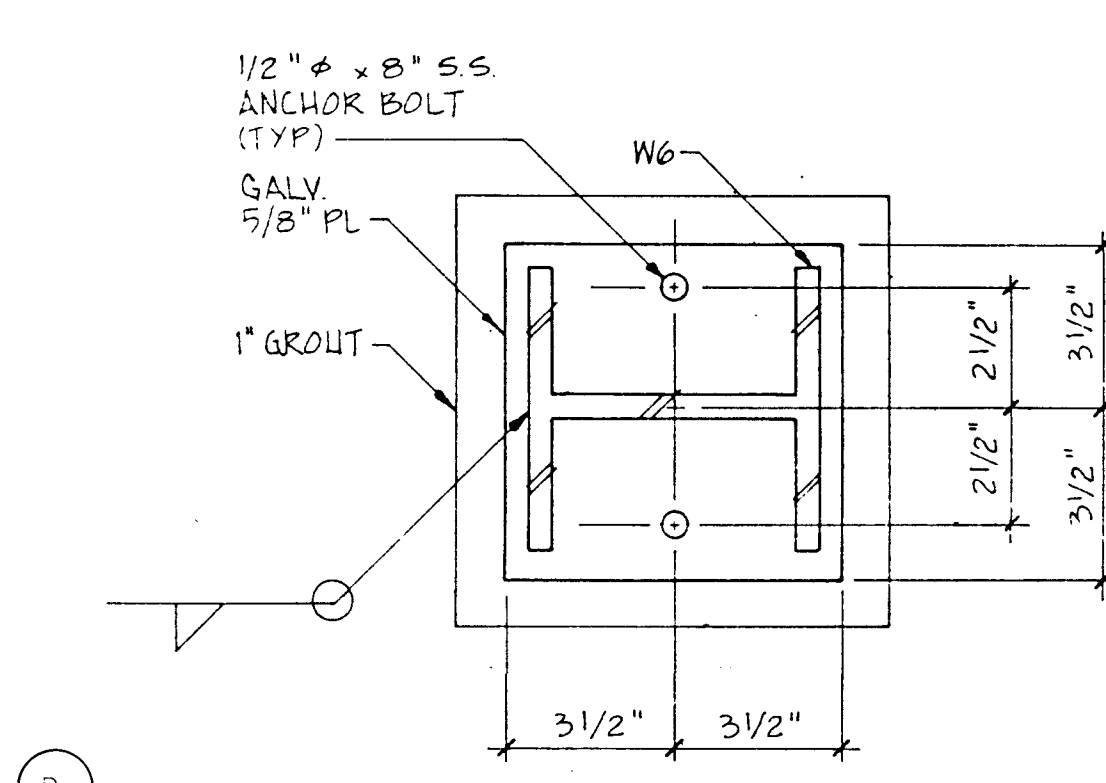
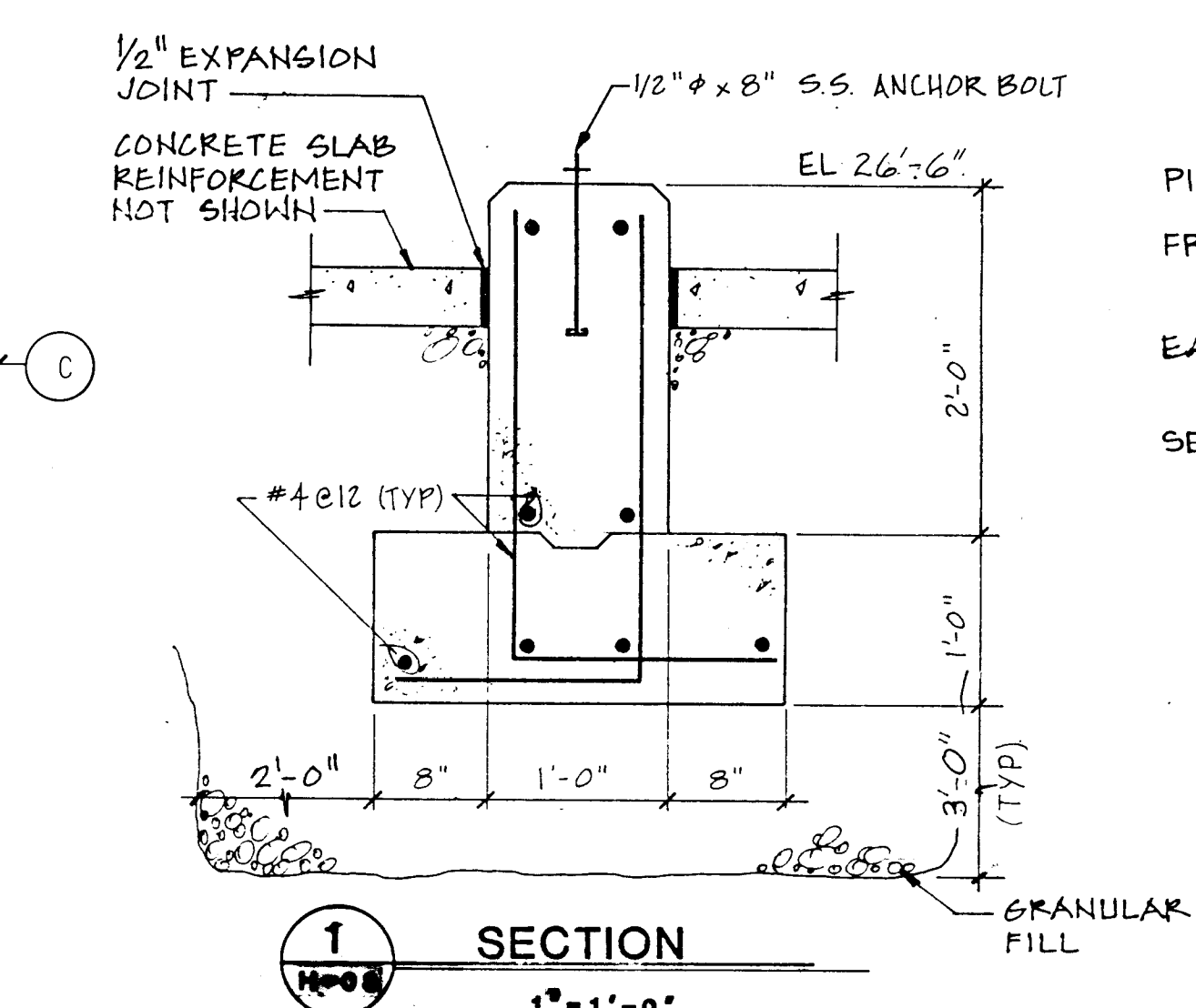




**CARBON VESSEL FAN NO.1 AND NO.2 FOUNDATION**  
1/2" = 1'-0"



**CARBON VESSEL FOUNDATION**  
1/2" = 1'-0"



**FOUNDATION PLAN**  
NO SCALE

**ODOR CONTROL AREA PLAN**  
1/2" = 1'-0"

NOTE: (WE) - INDICATES ITEMS WHICH ARE TO BE FURNISHED WITH CARBON ADSORPTION FILTER.

|         |                        |                         |
|---------|------------------------|-------------------------|
| 4-22-88 | FINAL DRAWING          | DESIGNED BY WRT         |
| 2-11-89 | REVISED RECORD DRAWING | DRAWN BY JARRETT        |
|         |                        | CHECKED BY WRT          |
|         |                        | APPROVED BY [Signature] |
|         |                        | APPROVED BY [Signature] |
| NO.     | DATE                   | REVISIONS               |
|         |                        | APPROVED                |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/2" = 1'-0"  
1" = 1'-0"  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**ODOR CONTROL AREA**  
**PLAN AND DETAILS**

RECORD DRAWING  
DATE: AUG. 1988  
DRAFTED BY: MCA

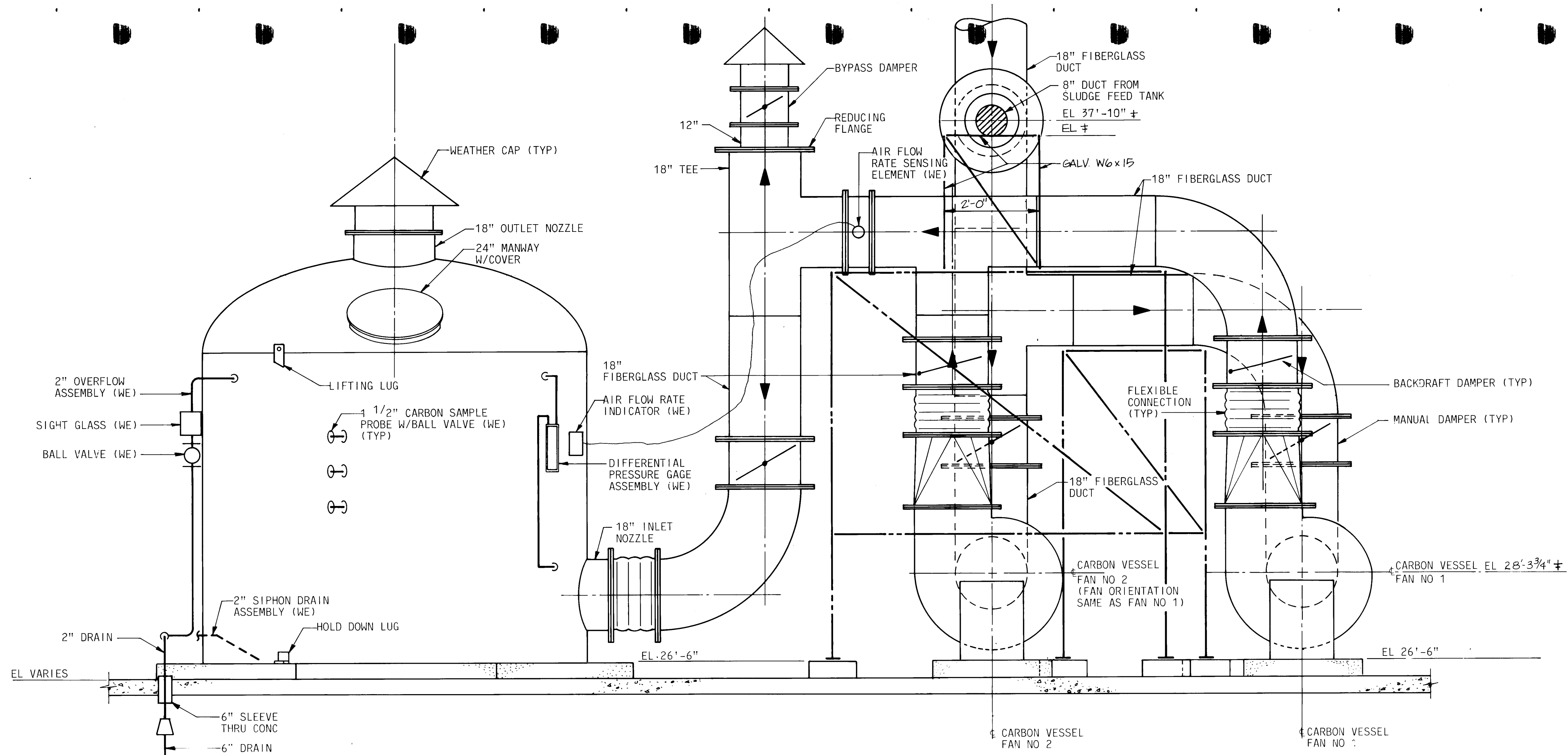
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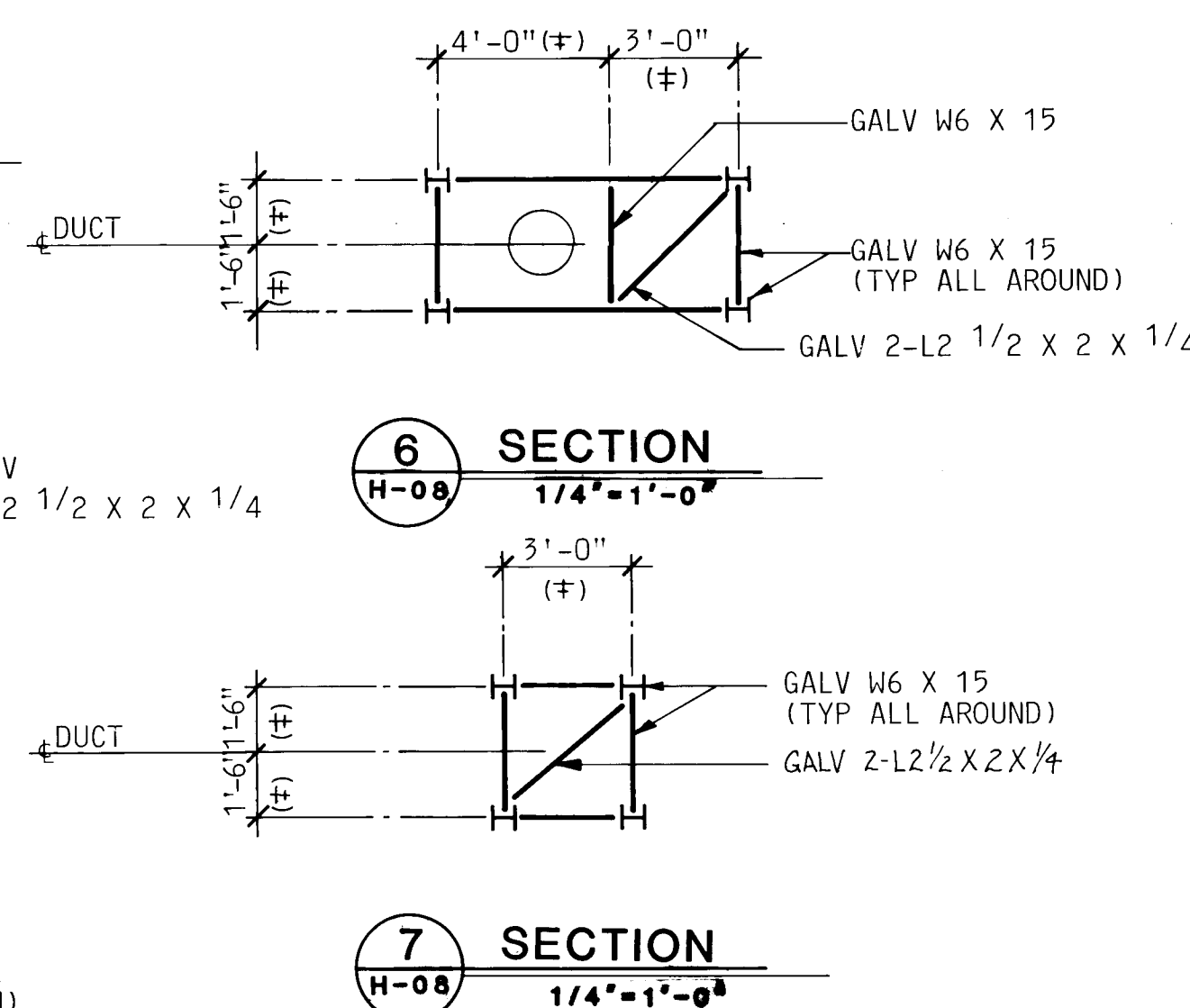
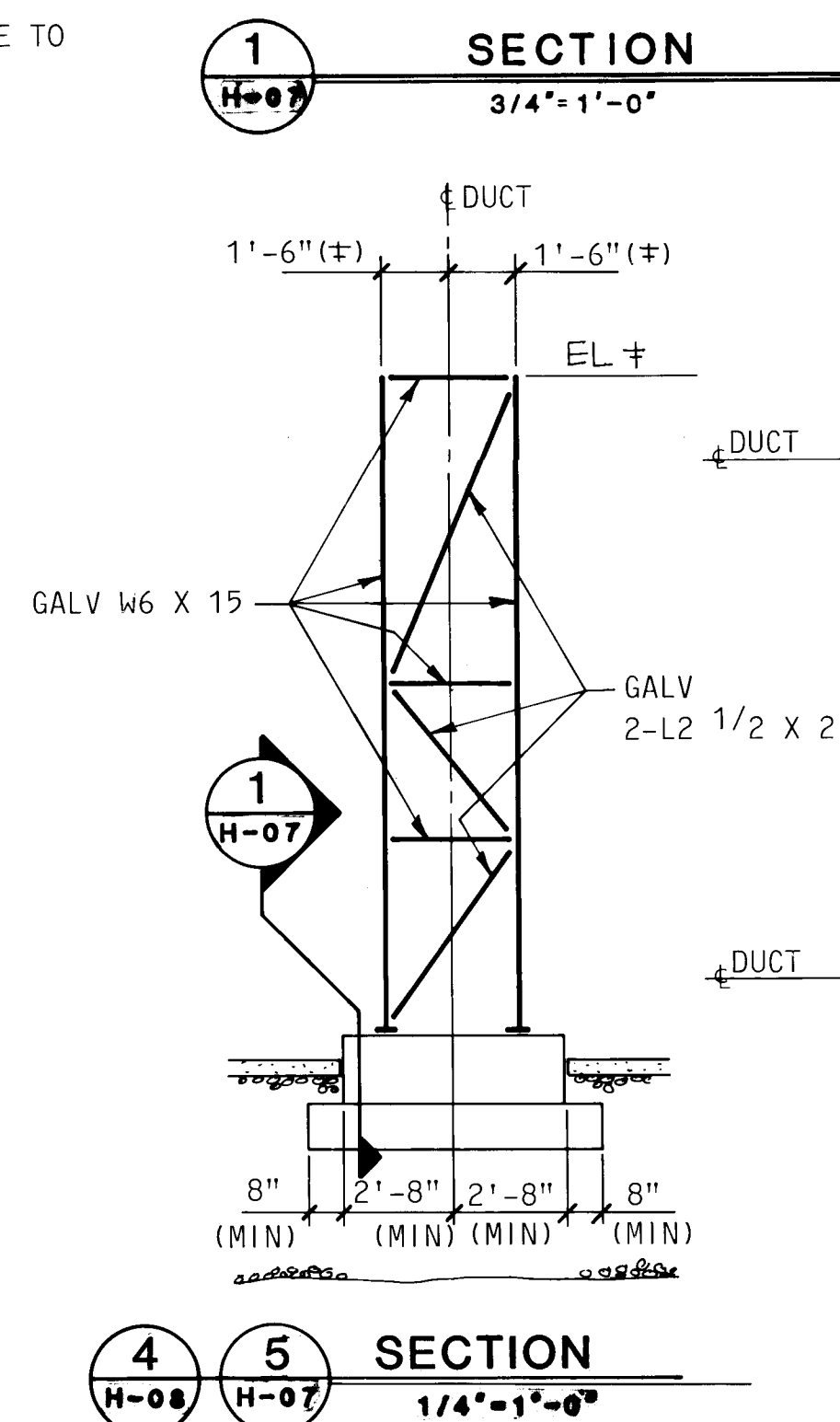
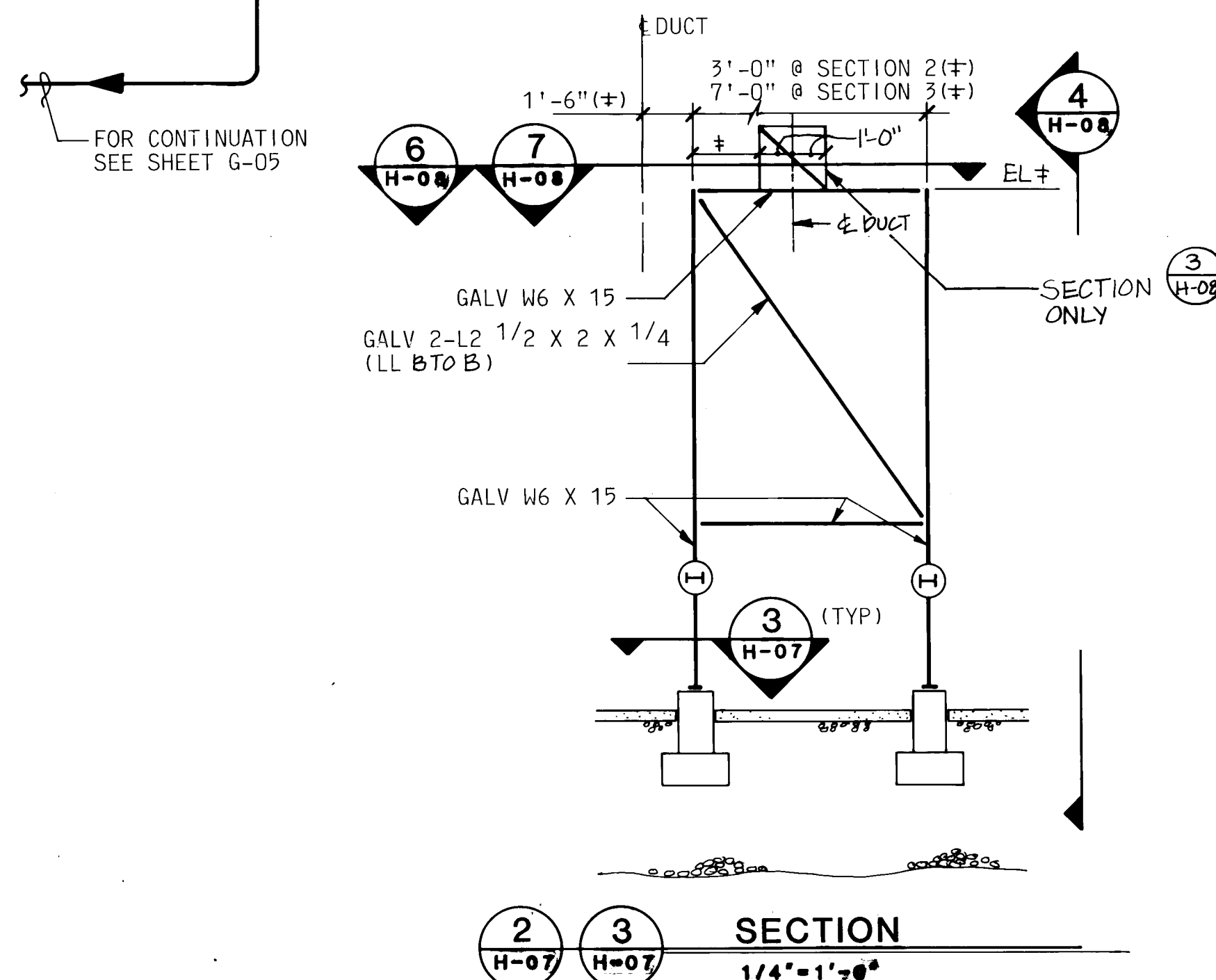
26 36 94 90 88

M-C NO.  
**H-07** 90-112  
SC NO. 8496-H7





NOTE: (WE) - INDICATES ITEMS WHICH ARE TO BE FURNISHED WITH CARBON ADSORPTION FILTER.



# RECORD DRAWING

DATE: AUG. 1988  
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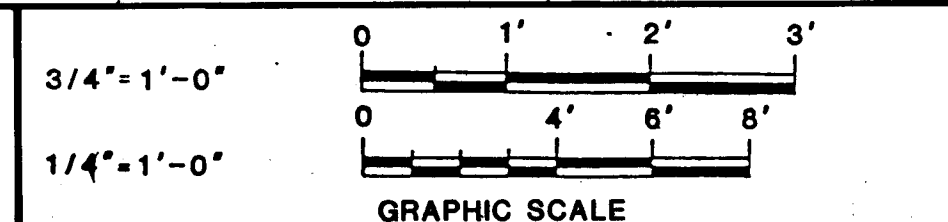


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|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 36 | 94 | 91 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|     |         |               |          |
|-----|---------|---------------|----------|
| NO. | DATE    | REVISIONS     | APPROVED |
| 1   | 4-22-88 | FINAL DRAWING |          |

DESIGNED BY: WRT  
DRAWN BY: G. JARRETT  
CHECKED BY: WRT  
APPROVED BY: [Signature]  
DATE: MAY 31, 1985

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
**ODOR CONTROL AREA**  
**SECTIONS AND DETAILS**

M-C NO.  
**H-08** 91 of 112  
SC NO. 8496-H8

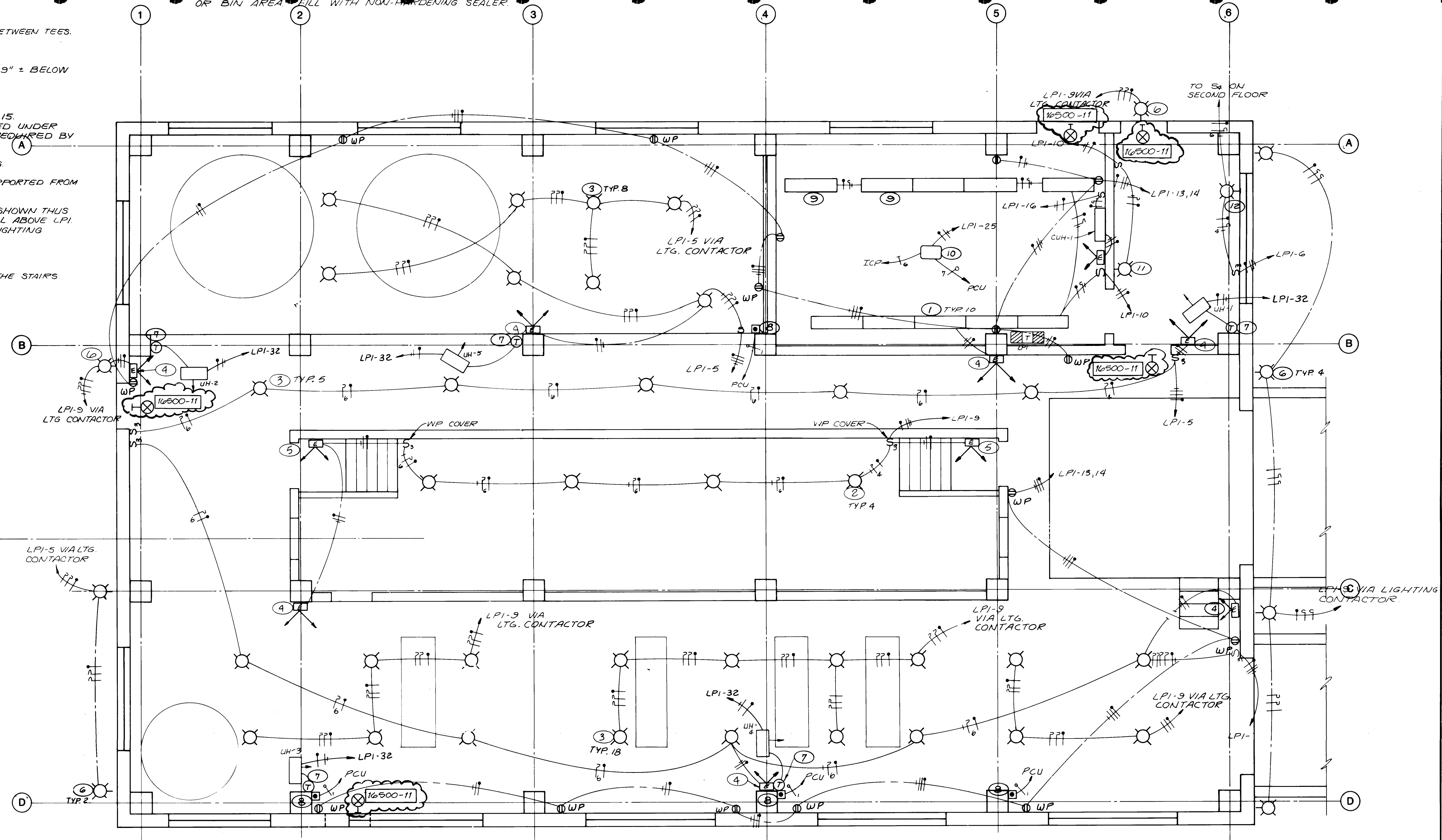






- 1 16500-1
- 2 16500-2
- 3 16500-5 MOUNT AS HIGH AS PRACTICAL BETWEEN TEES.
- 4 16500-7 MOUNT 9' ± AFF.
- 5 16500-7 MOUNT SO TOP OF HEADS ARE 9" ± BELOW CEILING.
- 6 16500-6 MOUNT 12" ± ABOVE DOOR.
- 7 THERMOSTAT PROVIDED UNDER DIVISION 15.  
INSTALLATION AND CONNECTION PROVIDED UNDER  
DIVISION 16. 1/2" EMT, CONTROLS AS REQUIRED BY  
MANUFACTURER'S INSTRUCTIONS. (A)
- 8 LIGHTING CONTROL SWITCH. SEE SCHEMATICS.
- 9 SUSPEND UNDER DUCT WITH UNISTRUT SUPPORTED FROM  
CEILING WITH THREADED ROD.
- 10 NEMA 12 LIGHTING CONTACTOR, ENCLOSURE, SHOWN THUS  
FOR DRAFTING CONVENIENCE. MOUNT ON WALL ABOVE LPI.  
CONTAINS MAINTENANCE AND EXTERIOR LIGHTING  
CONTACTORS.
- 11 16500-6 MOUNT 8' ± AFF.
- 12 MOUNT HIGH ON THE WALL TO THE SIDE OF THE STAIRS

1. INSTALL NEC 500 GAS SEALS ON ALL CONDUITS PENETRATING THE ENVELOPE OF THE CONVEYOR ROOM AND/OR BIN AREA. FILL WITH NON-HARDENING SEALER.



THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.

[illegible]

|    |      |  |  |           |  |                    |
|----|------|--|--|-----------|--|--------------------|
|    |      |  |  |           |  | DESIGNED <u>SS</u> |
|    |      |  |  |           |  | DRAWN <u>STAFF</u> |
|    |      |  |  |           |  | CHECKED _____      |
|    |      |  |  |           |  | APPROVED <u>SS</u> |
|    |      |  |  |           |  | DATE <u>5-85</u>   |
| NO | DATE |  |  | REVISIONS |  | APPROVED           |



**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

1/4" = 1'-0"



0 4 8

GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**

**LIGHTING - GROUND FLOOR PLAN**

4-C NO. 832221

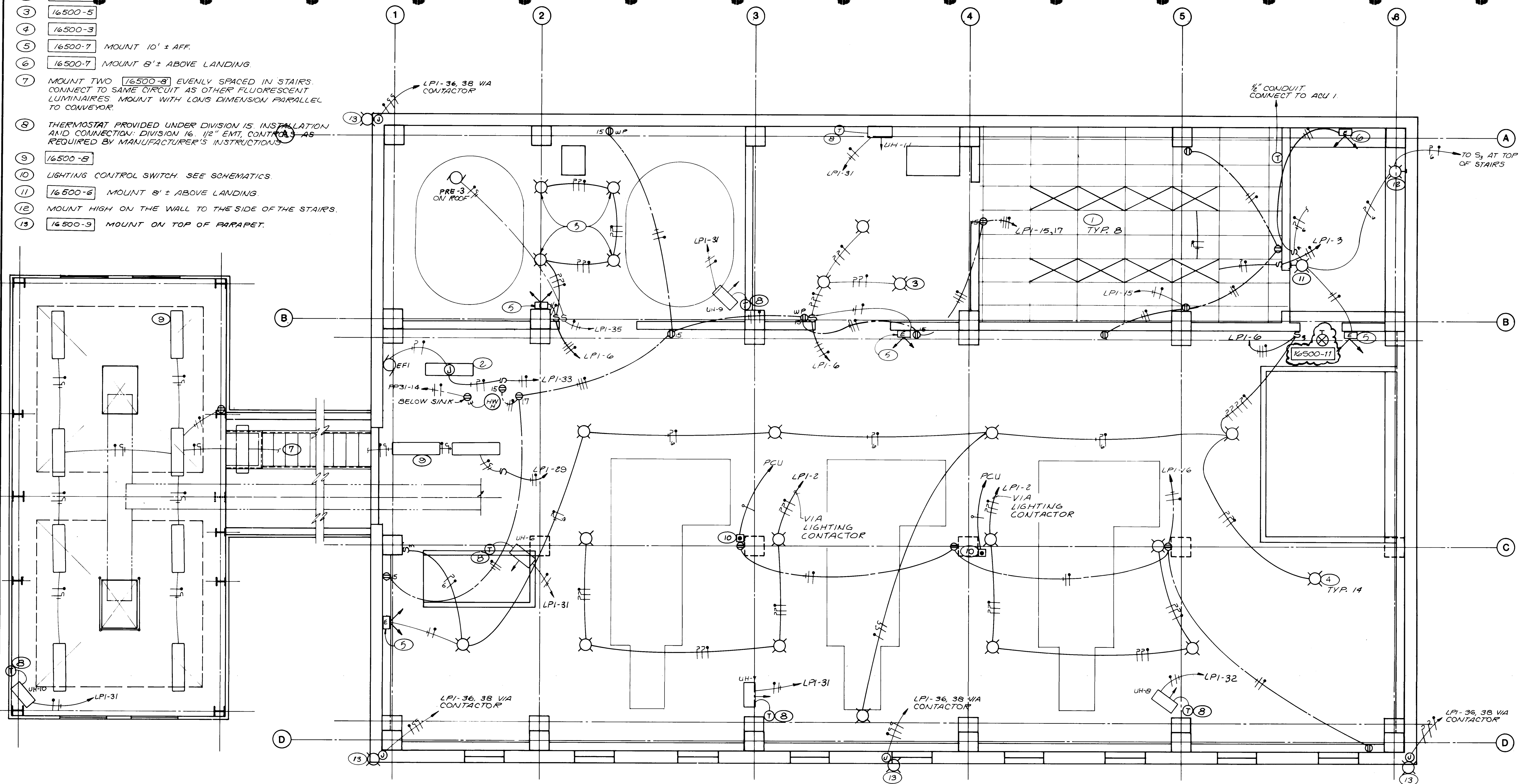
E-02 93 of 112

BC NO.



1. 16500-1
2. 16500-4
3. 16500-5
4. 16500-3
5. 16500-7 MOUNT 10' ± AFF.
6. 16500-7 MOUNT 8' ± ABOVE LANDING.
7. MOUNT TWO 16500-8 EVENLY SPACED IN STAIRS. CONNECT TO SAME CIRCUIT AS OTHER FLUORESCENT LUMINAIRES MOUNT WITH LONG DIMENSION PARALLEL TO CONVEYOR.
8. THERMOSTAT PROVIDED UNDER DIVISION 15 INSTALLATION AND CONNECTION: DIVISION 16, 1/2" EMT, CONTRA-45 REQUIRED BY MANUFACTURER'S INSTRUCTIONS.
9. 16500-8
10. LIGHTING CONTROL SWITCH. SEE SCHEMATICS.
11. 16500-6 MOUNT 8' ± ABOVE LANDING.
12. MOUNT HIGH ON THE WALL TO THE SIDE OF THE STAIRS.
13. 16500-9 MOUNT ON TOP OF PARAPET.

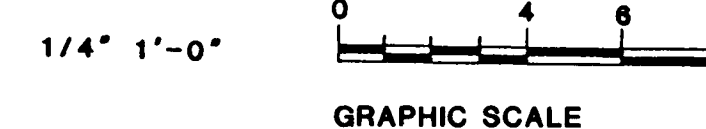
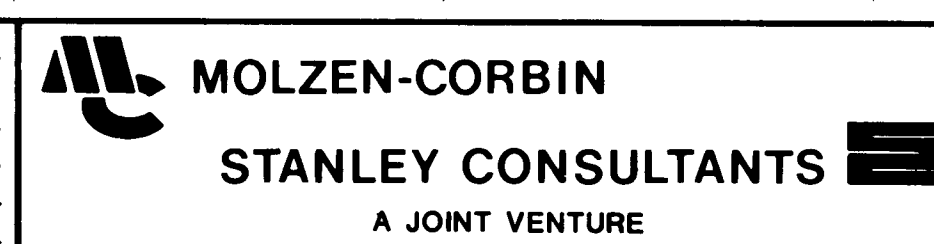
1. INSTALL NEC 500 GAS SEALS ON ALL CONDUITS PENETRATING THE ENVELOPE OF THE CONVEYOR ROOM AND/OR BIN AREA. FILL WITH NON-HARDENING SEALER.



| RECORD DRAWING                                                                                                                                                                                                                                        |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                    | DRAFTED BY:<br>MCA |
| <p>THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.</p> |                    |

[illegible]

|     |      |  |           |  |          |                    |
|-----|------|--|-----------|--|----------|--------------------|
|     |      |  |           |  |          | DESIGNED <u>SS</u> |
|     |      |  |           |  |          | DRAWN <u>STAFF</u> |
|     |      |  |           |  |          | CHECKED <u>SS</u>  |
|     |      |  |           |  |          | APPROVED <u>SS</u> |
|     |      |  |           |  |          | APPROVED           |
| NO. | DATE |  | REVISIONS |  | APPROVED | DATE <u>5-85</u>   |



CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

## INTERIM SLUDGE DEWATERING FACILITIES

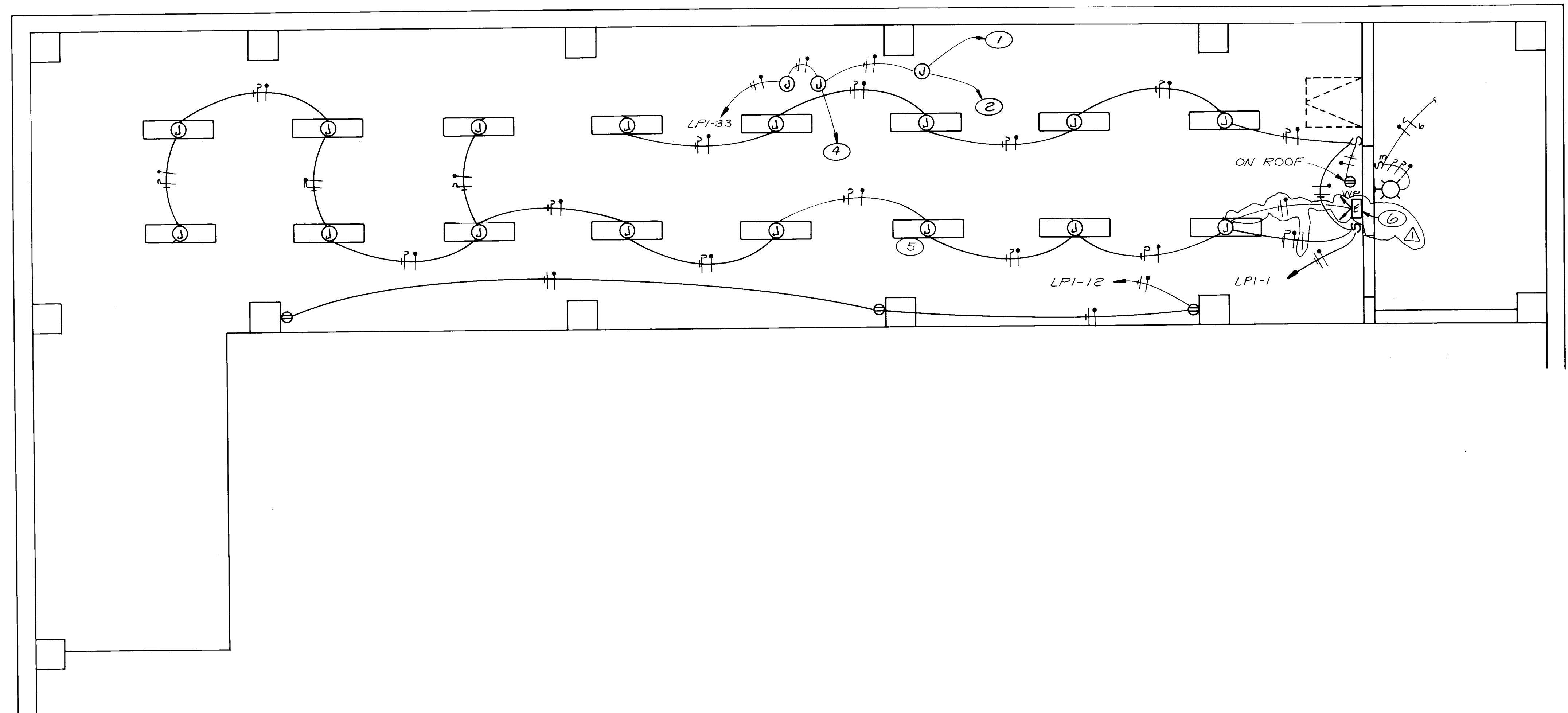
### LIGHTING - SECOND FLOOR PLAN

|                |           |
|----------------|-----------|
| M-C NO. 832221 |           |
| E-03           | 94 of 112 |
| C NO.          |           |



# NOTES

- 1 1/2" EMT TO THERMOSTAT ON CONTROL ROOM WALL, SECOND FLOOR. CONTROLS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS.
- 2 1/2" EMT TO DIFFERENTIAL PRESSURE TRANSMITTER ON MCC ROOM WALL. CONTROLS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS.
- 3 THERMOSTAT PROVIDED UNDER DIVISION 15. INSTALLATION AND CONNECTION UNDER DIVISION 16.
- 4 1/2" EMT TO THERMOSTAT ON MCC ROOM WALL. CONTROLS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS.
- 5 16500-4
- 6 16500-7 7'-0" AFF.



## RECORD DRAWING

DATE: AUG. 1988 DRAFTED BY: MCA

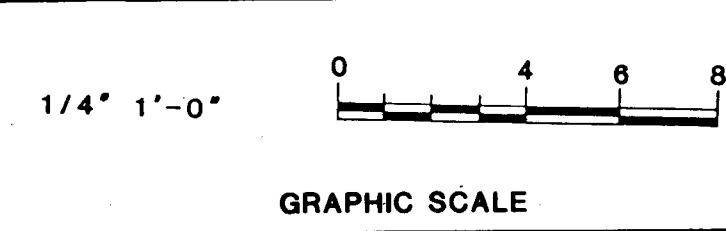
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| 26 | 36 | 94 | 95 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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| DESIGNED <i>SS</i> |  |
| DRAWN <i>STAFF</i> |  |
| CHECKED <i>SS</i>  |  |
| APPROVED <i>SS</i> |  |
| DATE <i>5-85</i>   |  |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
 A JOINT VENTURE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
 PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
 LIGHTING - MEZZANINE

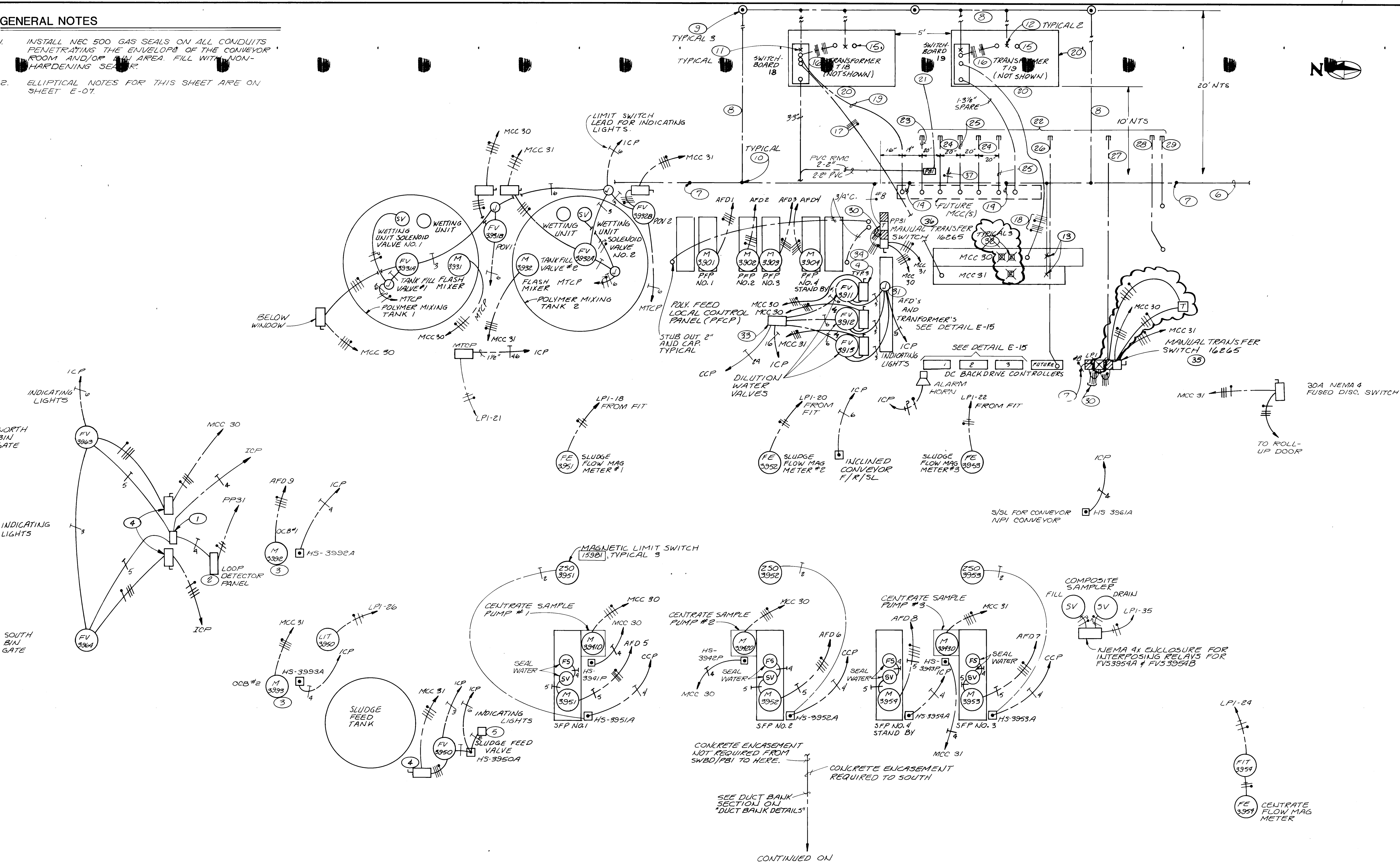
M-C NO. 832221  
**E-04** 95 of 112  
 SC NO.

| NO.     | DATE | REVISIONS               | APPROVED |
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| 7-23-85 |      | EMERGENCY LIGHT, NOTE 6 |          |



GENERAL NOTES

- 1. INSTALL NEC 500 GAS SEALS ON ALL CONDUITS PENETRATING THE ENVELOPE OF THE CONVEYOR ROOM AND/OR BIN AREA. FILL WITH NON-HARDENING SEALER.
- 2. ELLIPTICAL NOTES FOR THIS SHEET ARE ON SHEET E-07.



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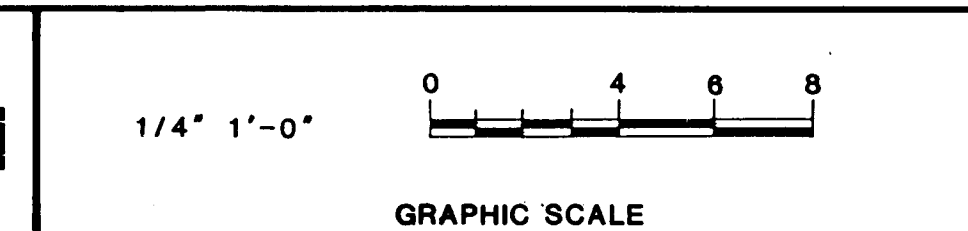


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DESIGNED: SS  
DRAWN: STAFF  
CHECKED: [Signature]  
APPROVED: [Signature]  
DATE: 5-85

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
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CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
POWER & CONTROL - GROUND FLOOR PLAN

M-C NO. 832221  
**E-05** 96 of 112  
SC NO.

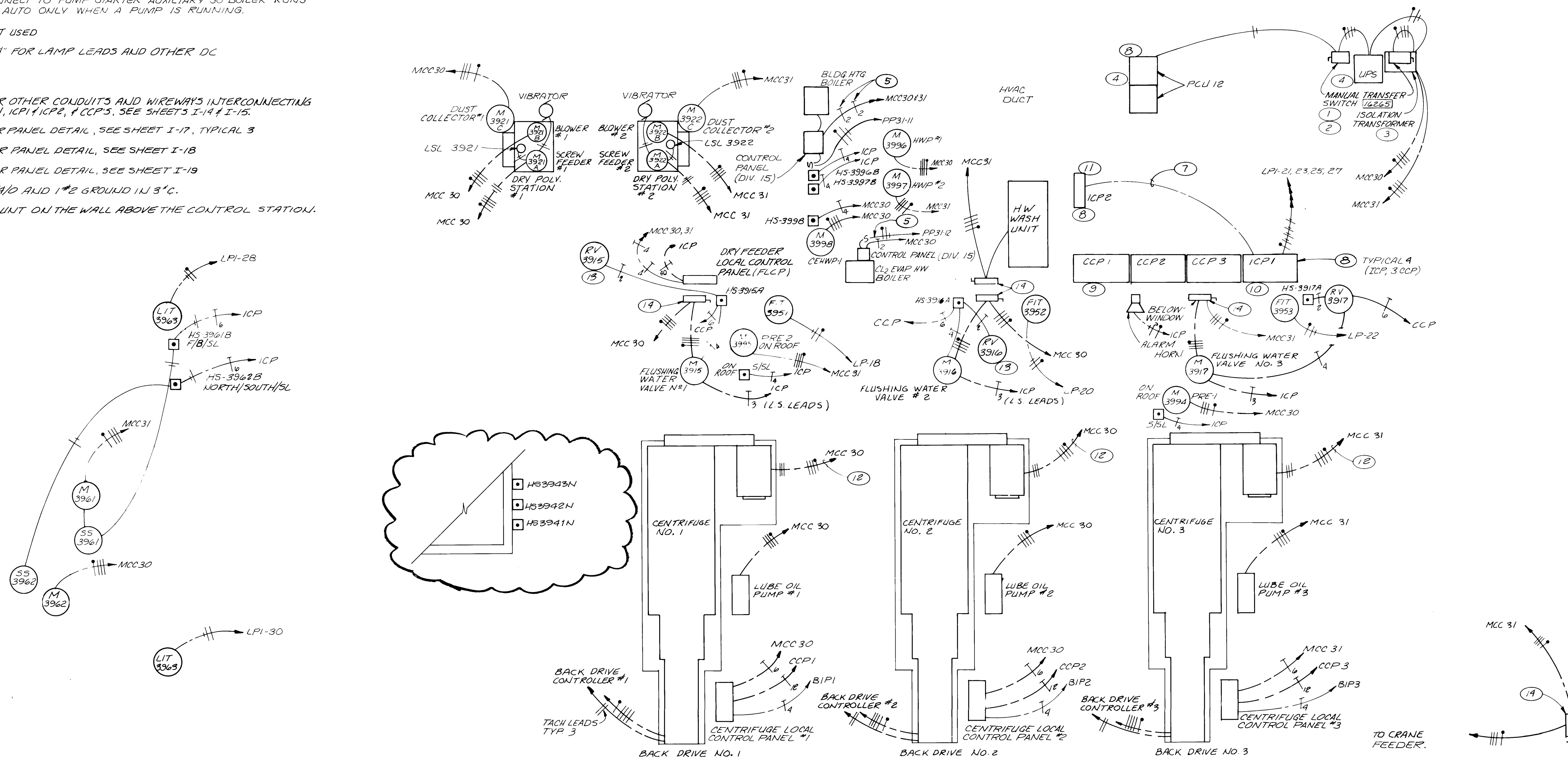


## NOTES

1. 16265 30A 100V NP: FED FROM MCC 30; NP: FED FROM MCC 31; NP: FEEDS ISOLATION TRANSFORMER.
2. 16265 0A 120V NP: FED FROM UPS; NP: FED FROM ISOLATION TRANSFORMER; NP: FEEDS PCU.
3. SHIELDED ISOLATION TRANSFORMER: 480/120V, 1P, 5KVA, TRANSVERSE NOISE REJECTION=60dB COMMON, MODE NOISE REJECTION=120dB. NP: ISOLATION TRANSFORMER, FED FROM ADJACENT MANUAL TRANSFER SWITCH. FEEDS UPS AND MANUAL TRANSFER SWITCH. MOUNT BELOW MANUAL TRANSFER SWITCH.
4. SEE PCU GROUNDING DETAIL, DWG E-15.
5. CONNECT TO PUMP STARTER AUXILIARY SO BOILER RUNS IN AUTO ONLY WHEN A PUMP IS RUNNING.
6. NOT USED.
7. 3/4" FOR LAMP LEADS AND OTHER DC.
8. FOR OTHER CONDUITS AND WIREWAYS INTERCONNECTING PCU, ICP1, ICP2, & CCP'S, SEE SHEETS I-14 & I-15.
9. FOR PANEL DETAIL, SEE SHEET I-17, TYPICAL 3.
10. FOR PANEL DETAIL, SEE SHEET I-18.
11. FOR PANEL DETAIL, SEE SHEET I-19.
12. 6#4/D AND 1#2 GROUND IN 3"C.
13. MOUNT ON THE WALL ABOVE THE CONTROL STATION.

## GENERAL NOTES

1. INSTALL NEC 500 GAS SEALS ON ALL CONDUITS PENETRATING ENVELOPE OF CONVEYOR ROOM AND/OR BIN AREA. FILL WITH NON-HARDENING SEALER.



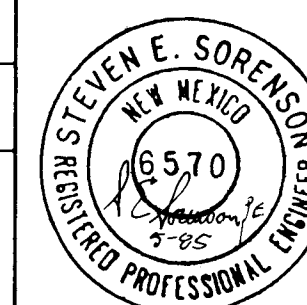
## NOTES CONT.

14. 30A FUSED DISCONNECT SWITCH 480V, NEMA 4S.S. PROVIDE UP TO IDENTIFY EQUIPMENT SERVED.

## RECORD DRAWING

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29  
26 36 94 97 88

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DRAWN STAEF  
CHECKED STAEF  
APPROVED STAEF  
DATE 5-85

**MOLZEN-CORBIN**  
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1/4" 1"=0"



GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
POWER & CONTROL - SECOND FLOOR PLAN

M-C NO. 832221

E-06 97 of 112

SC NO.

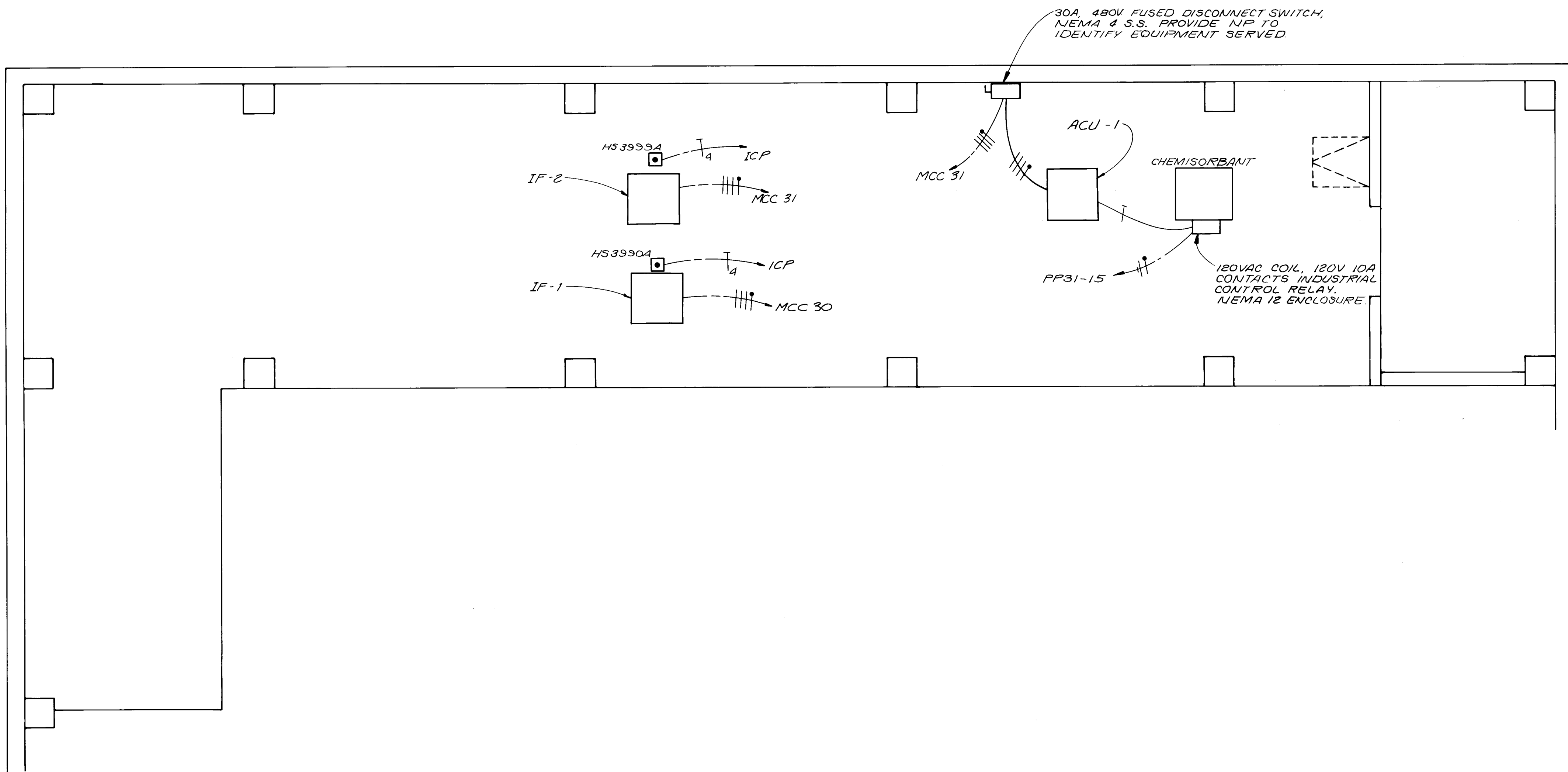






NOTES FOR GROUND FLOOR PLAN POWER & CONTROL SHEET E-05

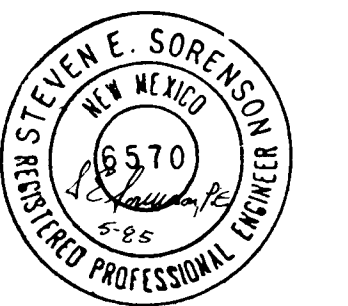
- 1 MOUNT ON COLUMN 60" ABOVE PLATFORM. FOR PANEL DETAIL, SEE SHEET E-15.
- 2 MOUNT ON RAIL TO EAST SIDE OF THE PLATFORM.
- 3 FOR LOCATION, SEE MECHANICAL SHEET H-07.
- 4 30A, 480V FUSED DISCONNECT SWITCH, NEMA 4 S.S. PROVIDE NP TO IDENTIFY EQUIPMENT SERVED.
- 5 INTERPOSING RELAY. SEE SCHEMATIC. MOUNT ABOVE CONTROL STATION.
- 6 2/0 BARE COPPER IN FOOTING.
- 7 BRAZE COPPER TO REINFORCING ROD.
- 8 2/0 BARE COPPER AT 30" NOMINAL DEPTH.
- 9 5/8" x 10' RODS DRIVEN SO TOP IS 30" BELOW GRADE.
- 10 ALL COPPER-COPPER AND COPPER-GROUND ROD CONNECTIONS IN CONCRETE OR IN EARTH SHALL BE MADE BY HDWP.
- 11 2/0 BARE COPPER TO SWITCHBOARD GROUND BUS. BOND NEUTRAL TO GROUND.
- 12 2/0 BARE COPPER TO TRANSFORMER GROUND PAD. BOND NEUTRAL TO GROUND.
- 13 2/0 BARE COPPER TO MCC BUS.
- 14 STUB UP 18" FOR FUTURE MCC GROUND.
- 15 3 #2 15KV, 1 #2 GND., 5" CONDUIT TO FIFTH AVE. SWITCHING STATION. SEE G-05.
- 16 2-500 MCM PER PHASE AND 2-2/0 NEUTRAL, 2-3 1/2" CONDUITS.
- 17 1-500 MCM PER PHASE AND 1-2/0 GND., 1-3 1/2" CONDUIT AND 1-3 1/2" CONDUIT SPARE.
- 18 2-500 MCM PER PHASE AND 2-2/0 GROUND, 2-3 1/2" CONDUITS
- 19 2-3 1/2" CONDUIT SPARE.
- 20 FOR TRANSFORMER PAD, SEE SHEET E-20.
- 21 INSTRUMENTATION CONDUITS WITH DATA HIGHWAY CONDUITS. EXTEND TO CCMH11. SEE SHEET G-05. SEE "DATA HIGHWAY PLANT COMMUNICATION LOOP" DETAIL.
- 22 EXTEND 1' NORTH OF SIDEWALK AT 24" DEPTH AND CAP. CAP 2" ABOVE FLOOR IN MCC ROOM. USE RNMC WITH RNMC ELBOWS EXCEPT AS NOTED.
- 23 2-2 1/2" WITH PVC RMC ELBOWS, 2-1".
- 24 6-1", 6-3/4".
- 25 4-1 1/2" WITH PVC ELBOWS, 6-3/4".
- 26 1-1 1/2" WITH PVC ELBOWS, 1-3/4".
- 27 3-1/2", 6-3/4".
- 28 6-3/4".
- 29 4-3/4".
- 30 1 #6 NEUTRAL, 3 #6 PHASE, 1 #8 GND.
- 31 MOUNT ON WALL ADJACENT TO VALVES.
- 32 30 KVAR 480V POWER FACTOR CORRECTION CAPACITOR. SUSPEND FROM SLAB ABOVE. OVER MCC. CONNECT TO RESPECTIVE CENTRIFUGE STARTER IN ACCORDANCE WITH NEC.
- 33 SUPPORT WITH 4" ALUMINUM "C" CHANNEL ON EACH SIDE FROM FLOOR. STABILIZE TO PLATFORM. NO PROTRUSIONS ON NORTH SIDE.
- 34 MOUNT ALL SWITCHES NEAR COLUMN B-4. NP ON EACH.
- 35 16265 30A 480V, NP: FED FROM MCC 30; NP: FED FROM MCC 31; NP: FEED XFMR & LP1.
- 36 16265 SAME AS 35 EXCEPT NP: FEED XFMR & PP31
- 37 #2 UP TO PCU GROUND.



RECORD DRAWING

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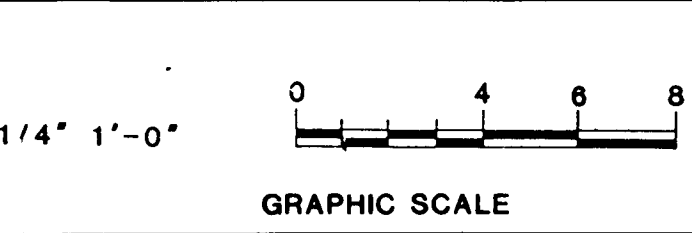
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| 7-23-85   | NOTE 15 & NOTE 1 |
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CITY OF ALBUQUERQUE, NEW MEXICO  
SOLIDS HANDLING FACILITIES  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
POWER & CONTROL - MEZZANINE

M-C NO. 832221  
E-07 98 of 112  
SC NO.

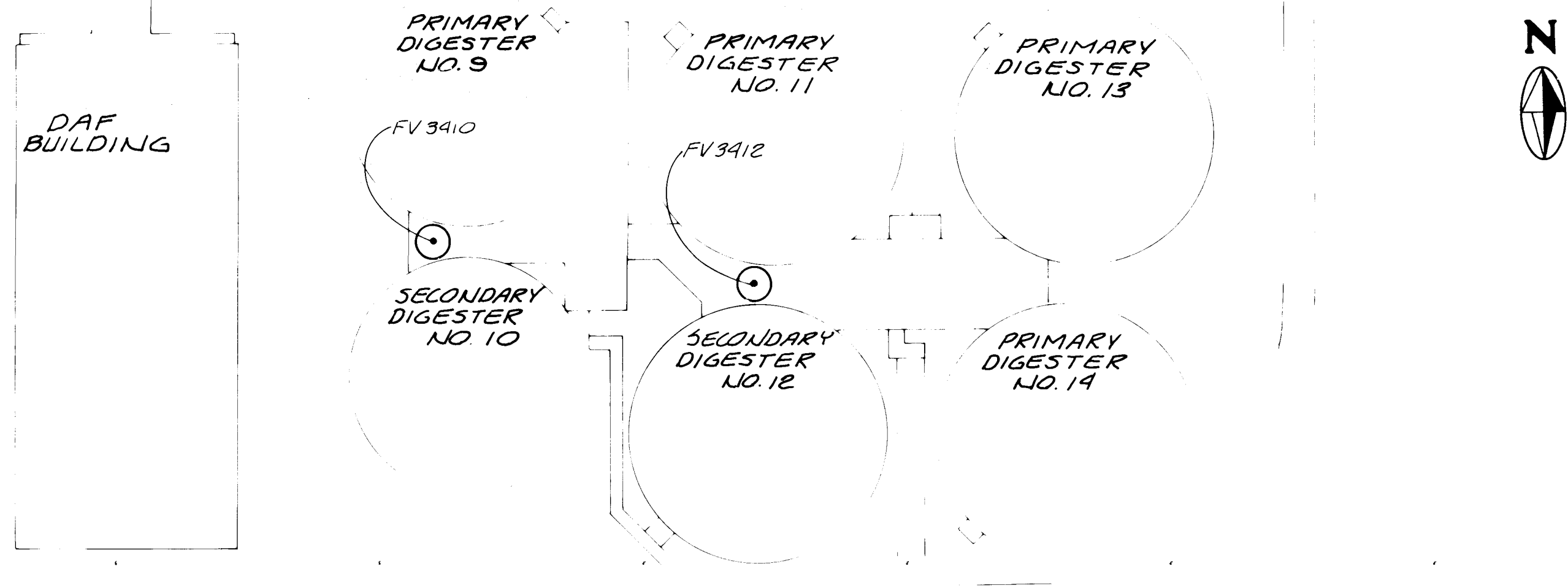
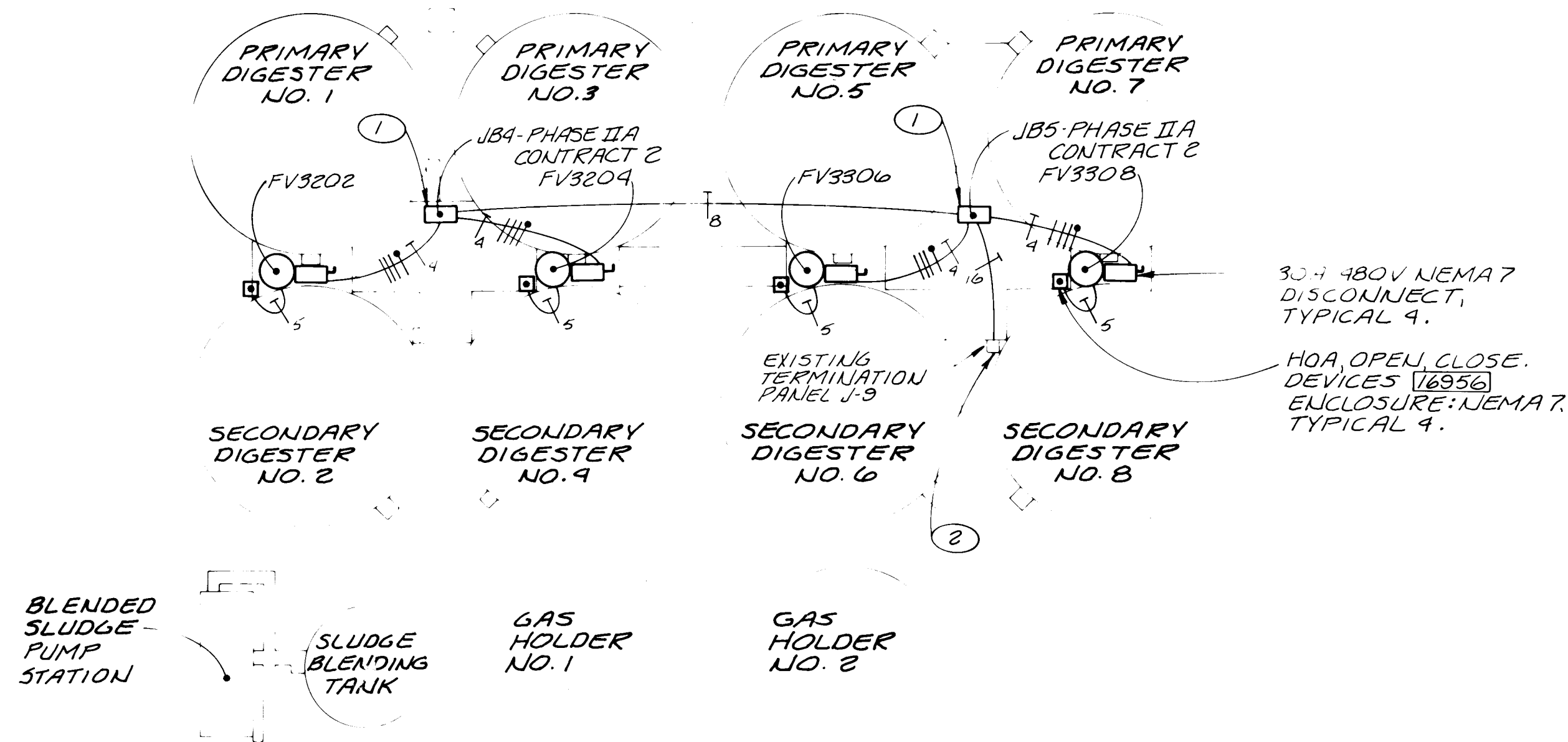


GENERAL NOTES

1. ALL CONSTRUCTION MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF NEC ARTICLE 500 AND ARTICLE 501 FOR CLASS 1 DIVISION 2 INSTALLATION ENCLOSURES SHALL BE NEMA 7.
2. VALVES FV 3202, FV 3204, FV 3304, FV 3308, RELAYS AND INSTRUMENTATION ARE NEW. ALL ELSE IS EXISTING OR OTHER CONTRACTS.

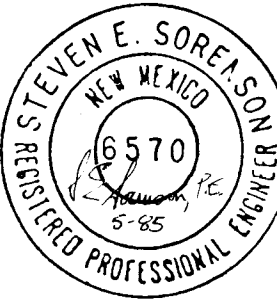
NOTES

1. SPLICE TO CONDUCTORS FOR DIGESTER INLET PLUG VALVES FURNISHED UNDER PHASE IIA CONTRACT 2.
2. EXISTING TERMINATION PANEL J-9. CONNECT VALVE CONTROLS TO CONTACTS OF NEW RELAYS AS SHOWN ON SCHEMATICS.



SCALE 1"=40'

| RECORD DRAWING                                                                                                                                                                                                                                 |                    |
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| 26 | 36 | 94 | 99 | 88 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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DATE 5-85

**MOLZEN-CORBIN**

**STANLEY CONSULTANTS**  
A JOINT VENTURE

AS SHOWN

GRAPHIC SCALE

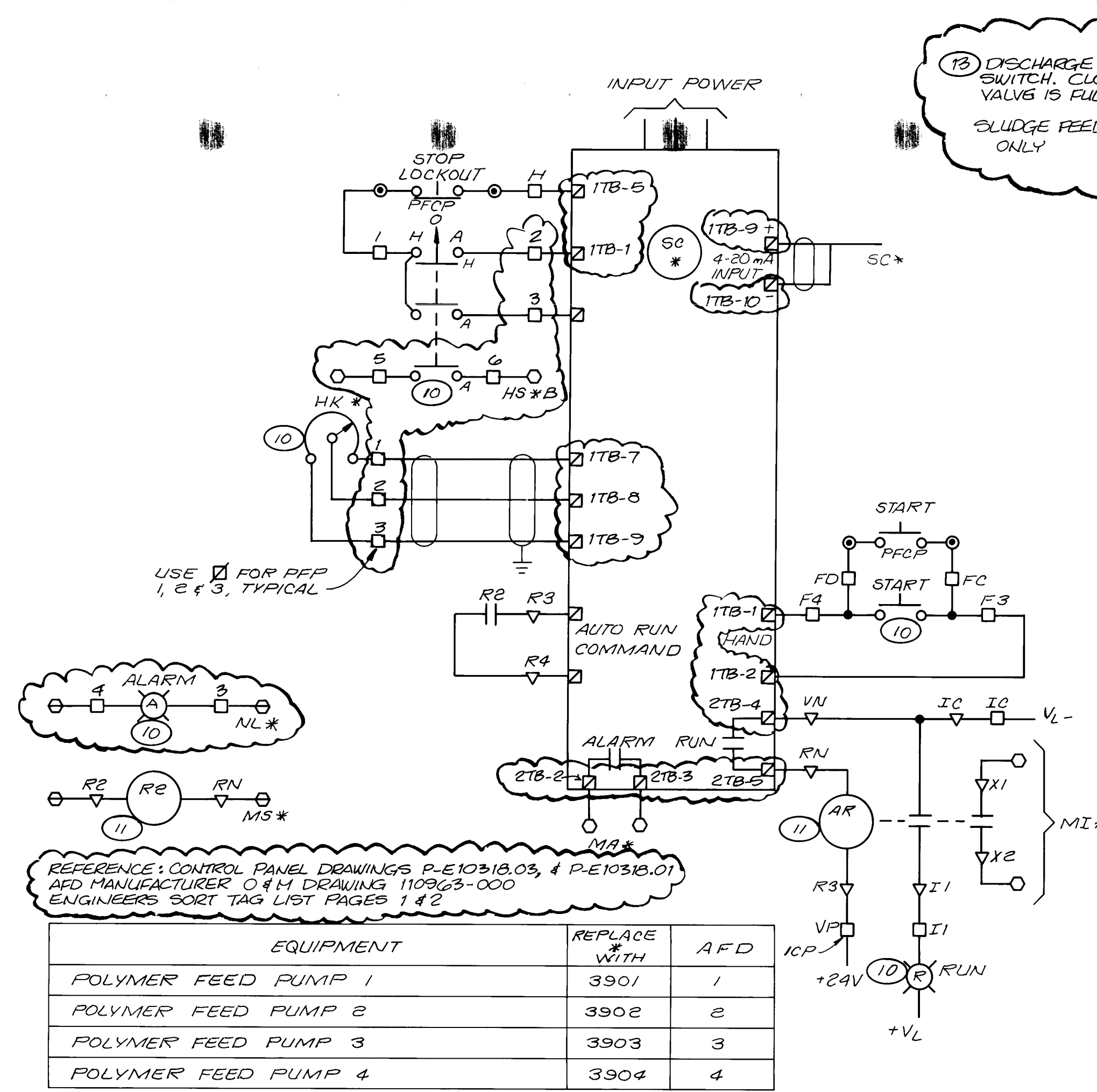
**CITY OF ALBUQUERQUE, NEW MEXICO**

**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

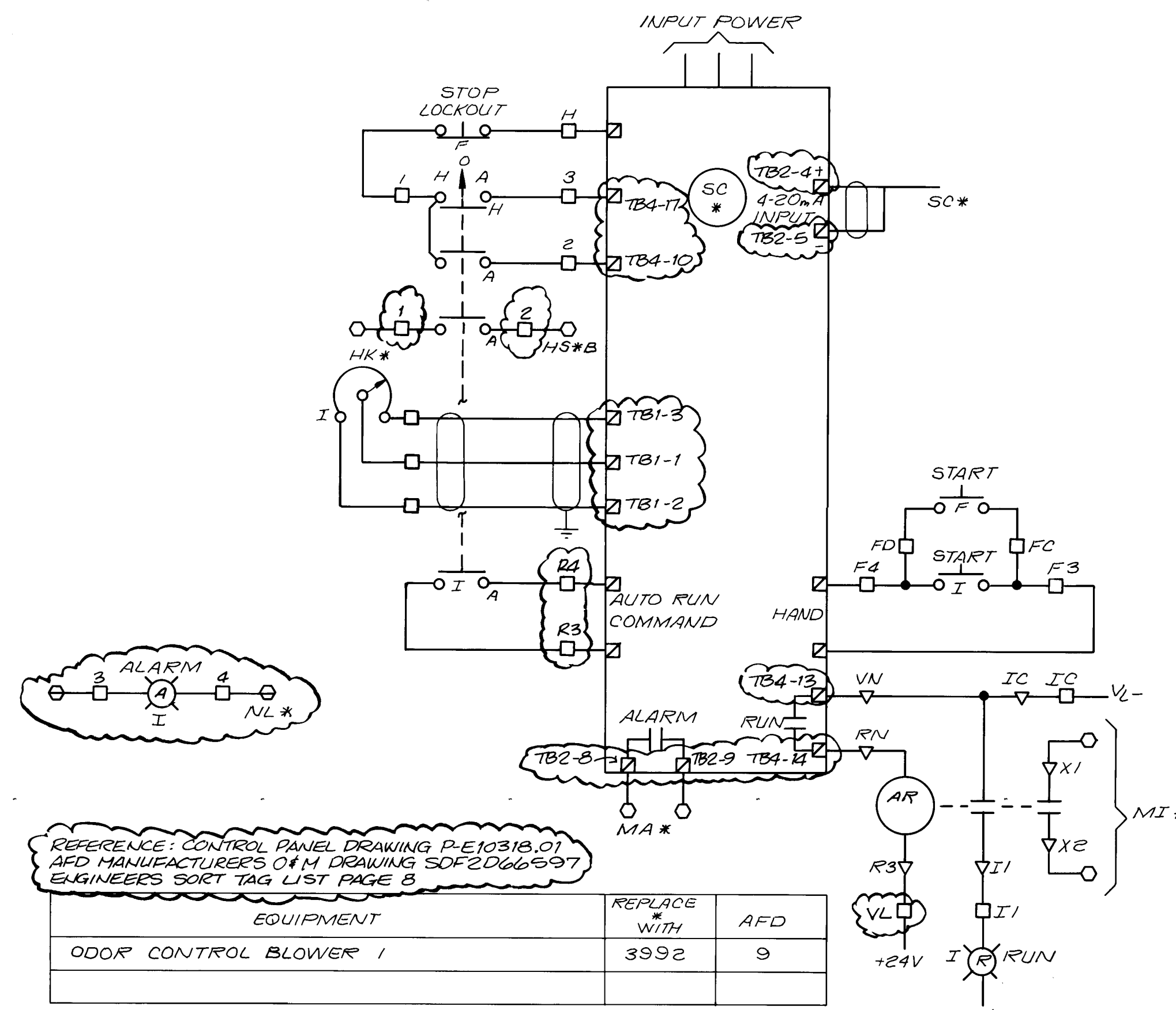
**INTERIM SLUDGE DEWATERING FACILITIES**  
POWER & CONTROL-DIGESTERS 2-12

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| M-C NO. 832221        |
| <b>E-08</b> 99 of 112 |
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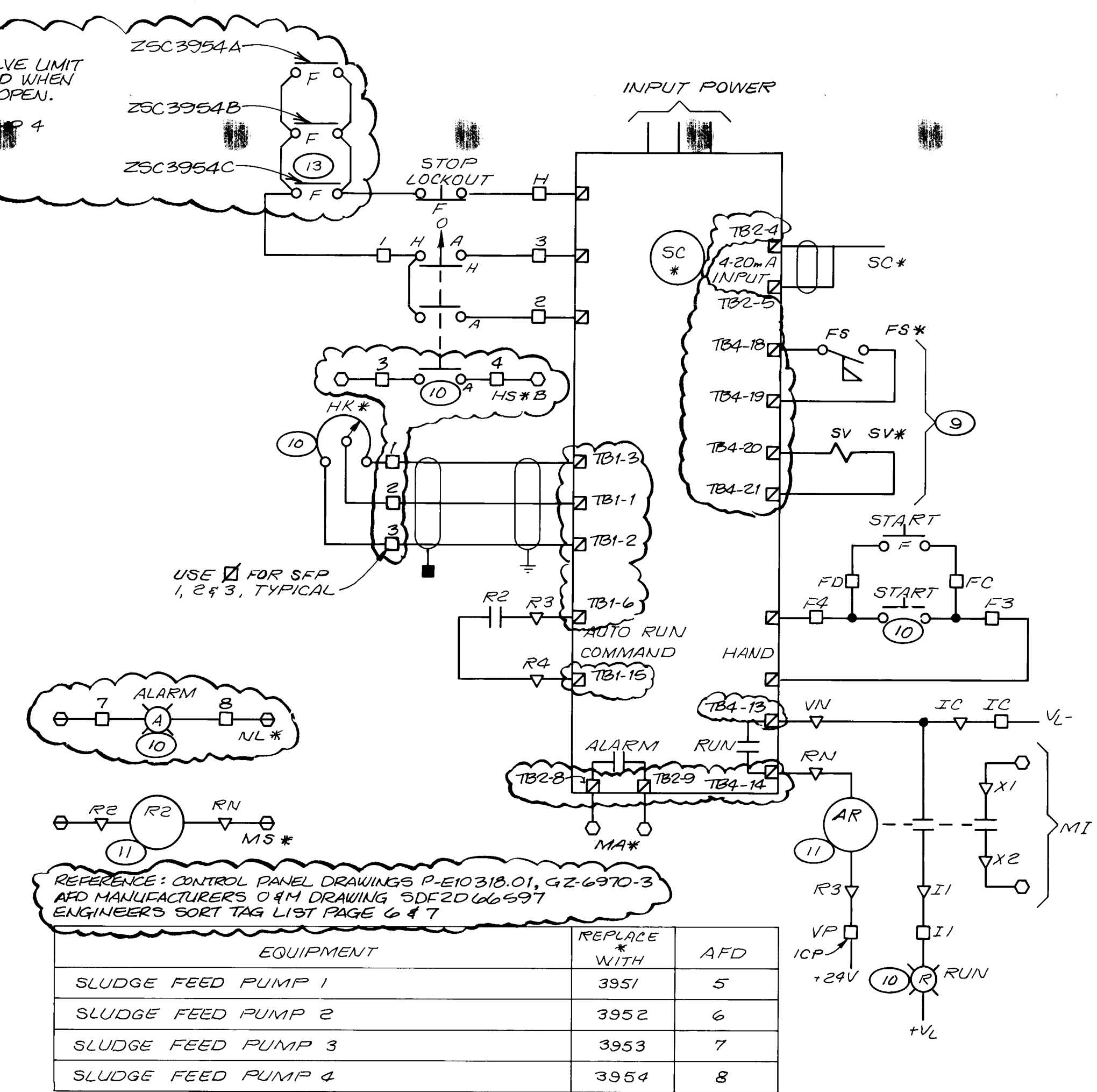




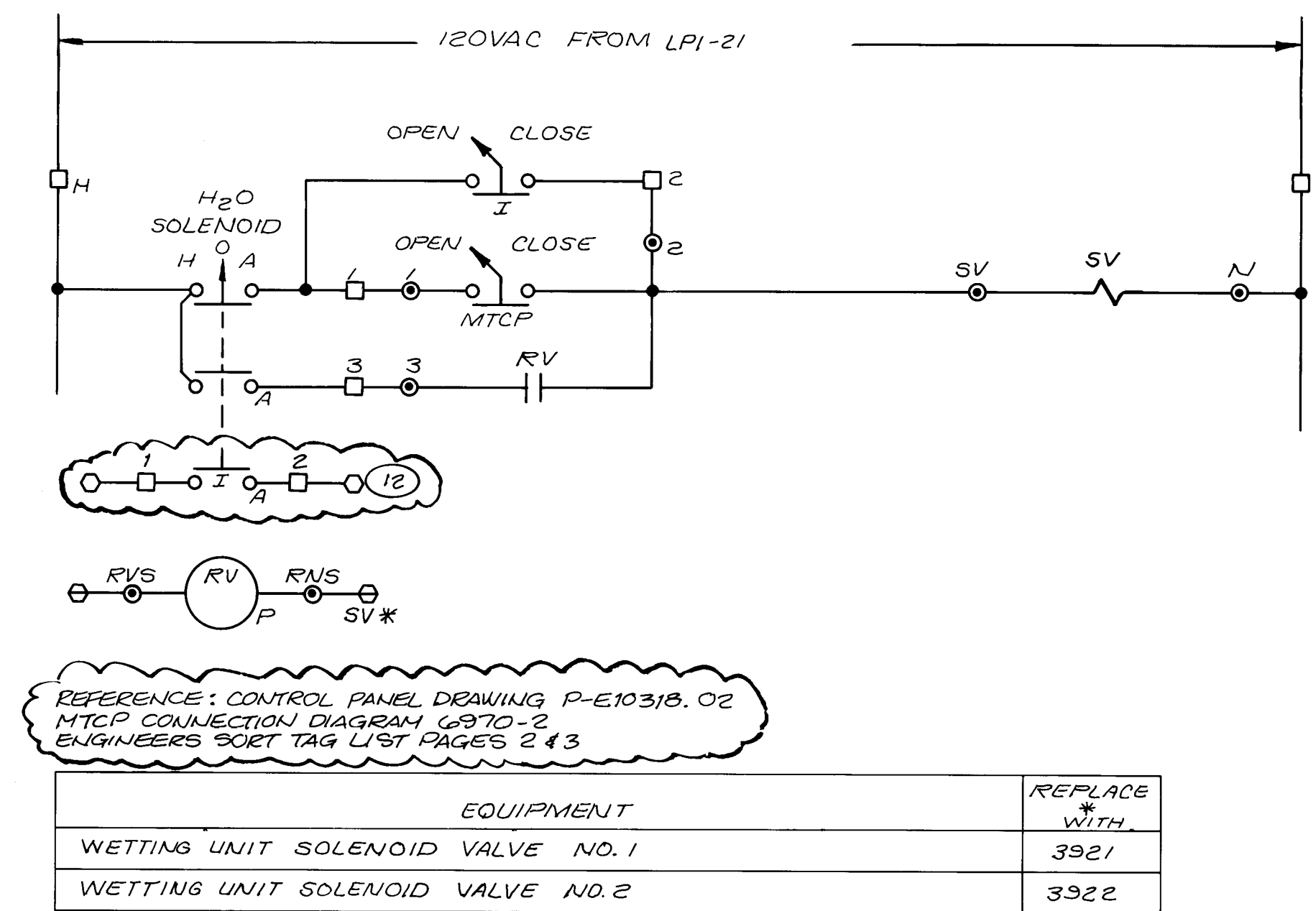
SCHEMATIC 5



SCHEMATIC 6

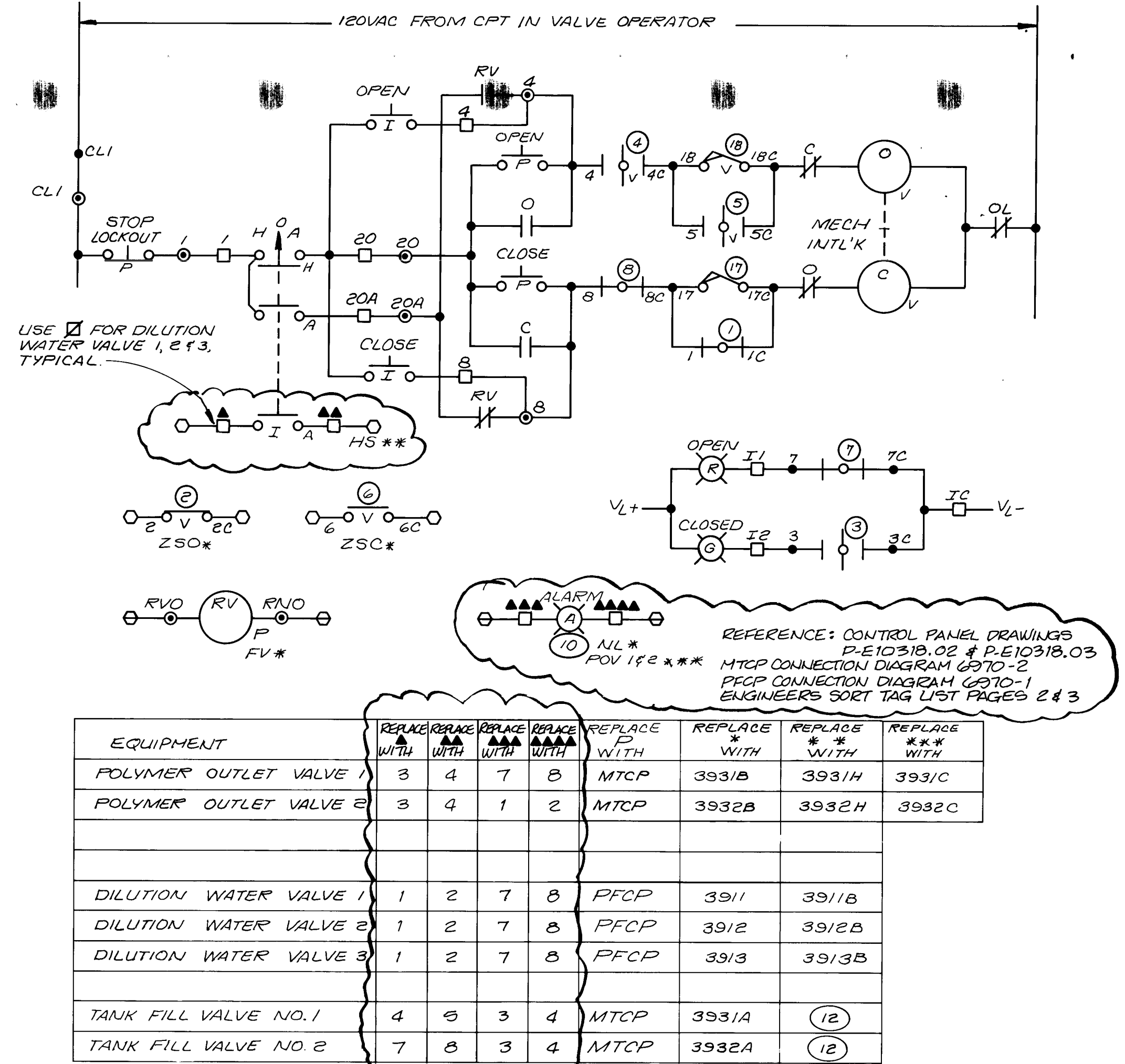


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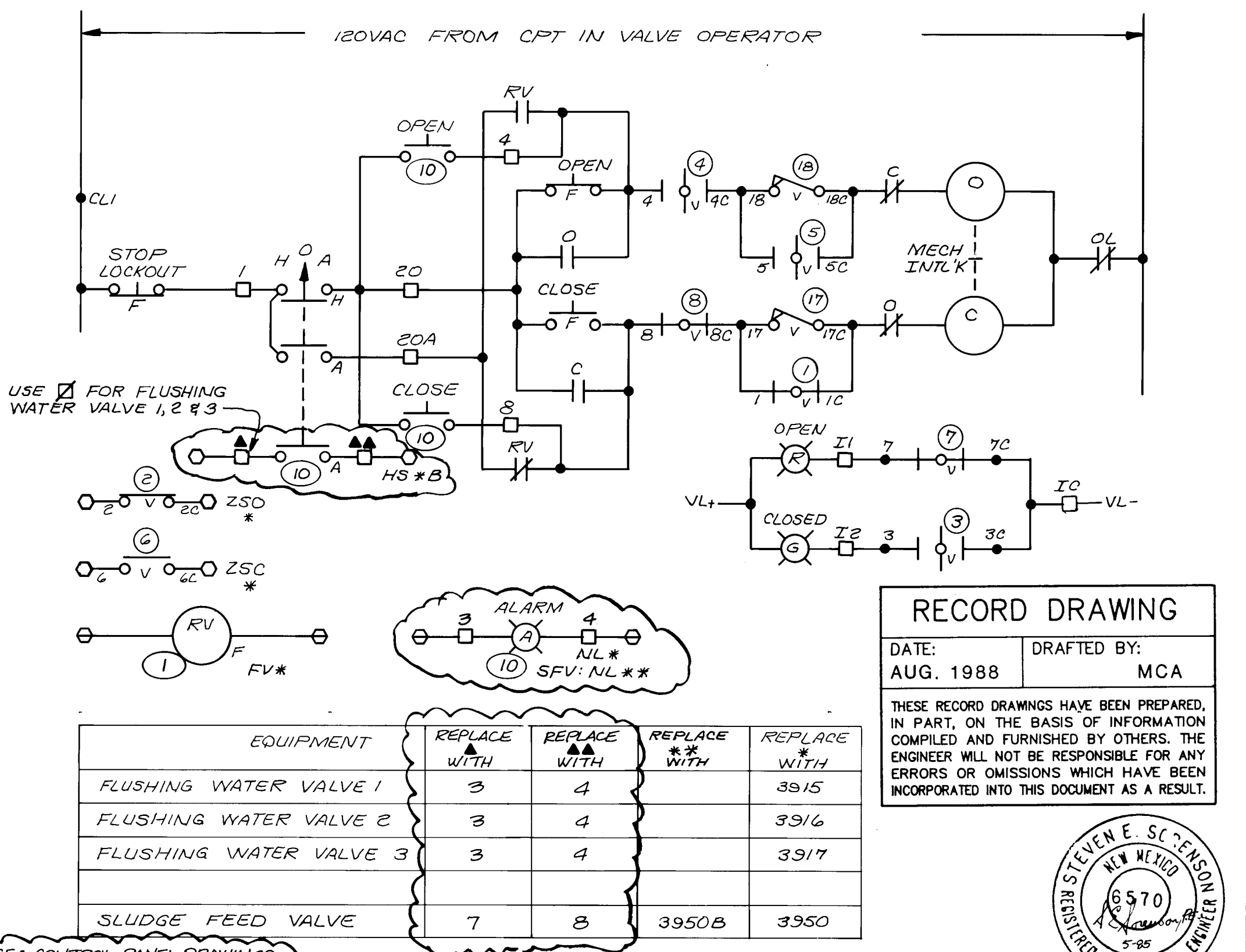


SCHEMATIC 8

FOR LEGEND, NOTES, & GENERAL NOTES, SEE SHEET 5-11.



SCHEMATIC 9



SCHEMATIC 10

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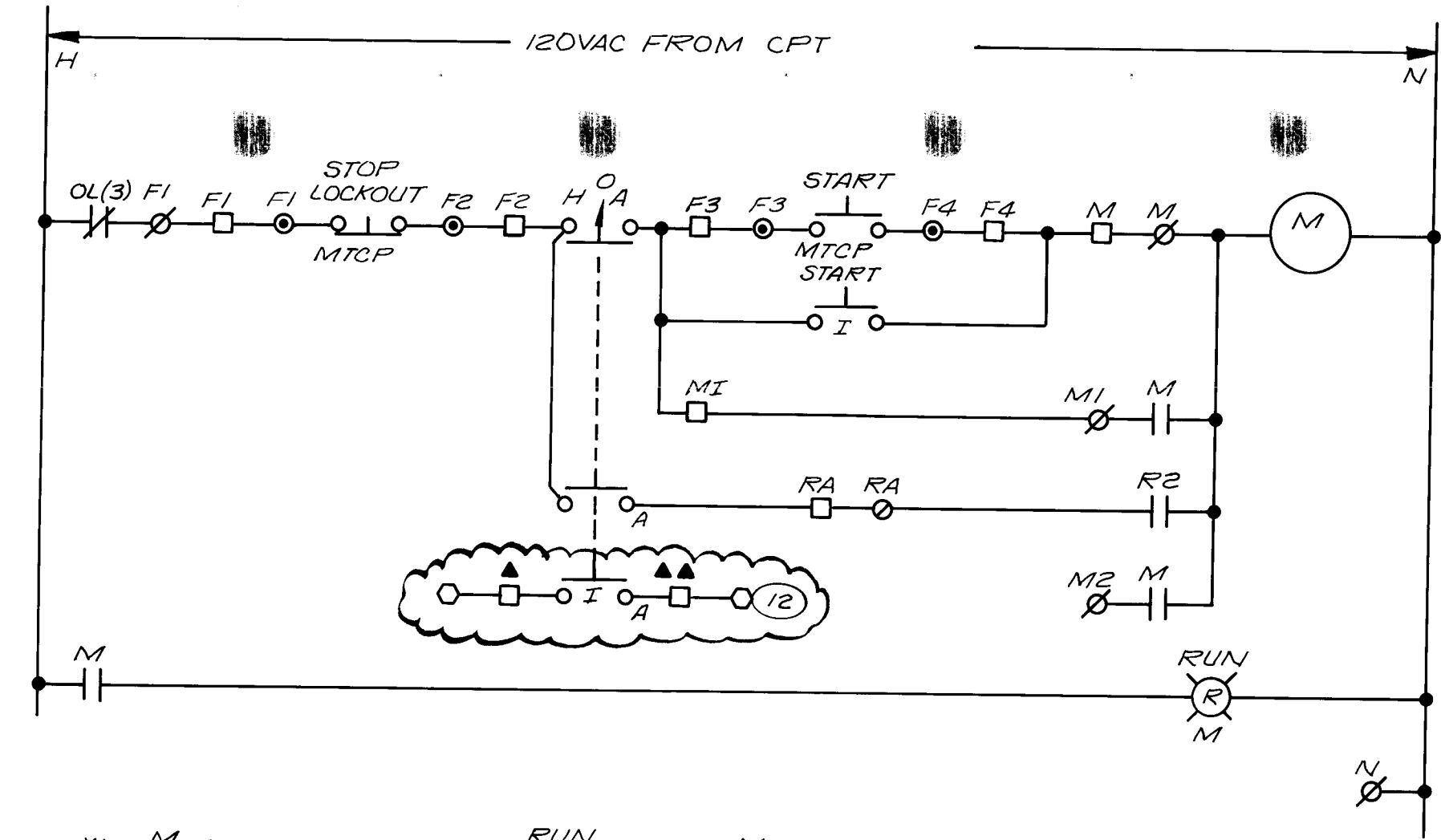
**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
SCHEMATICS  
M-C NO. 832221  
**E-09** 100 of 112  
SC NO.



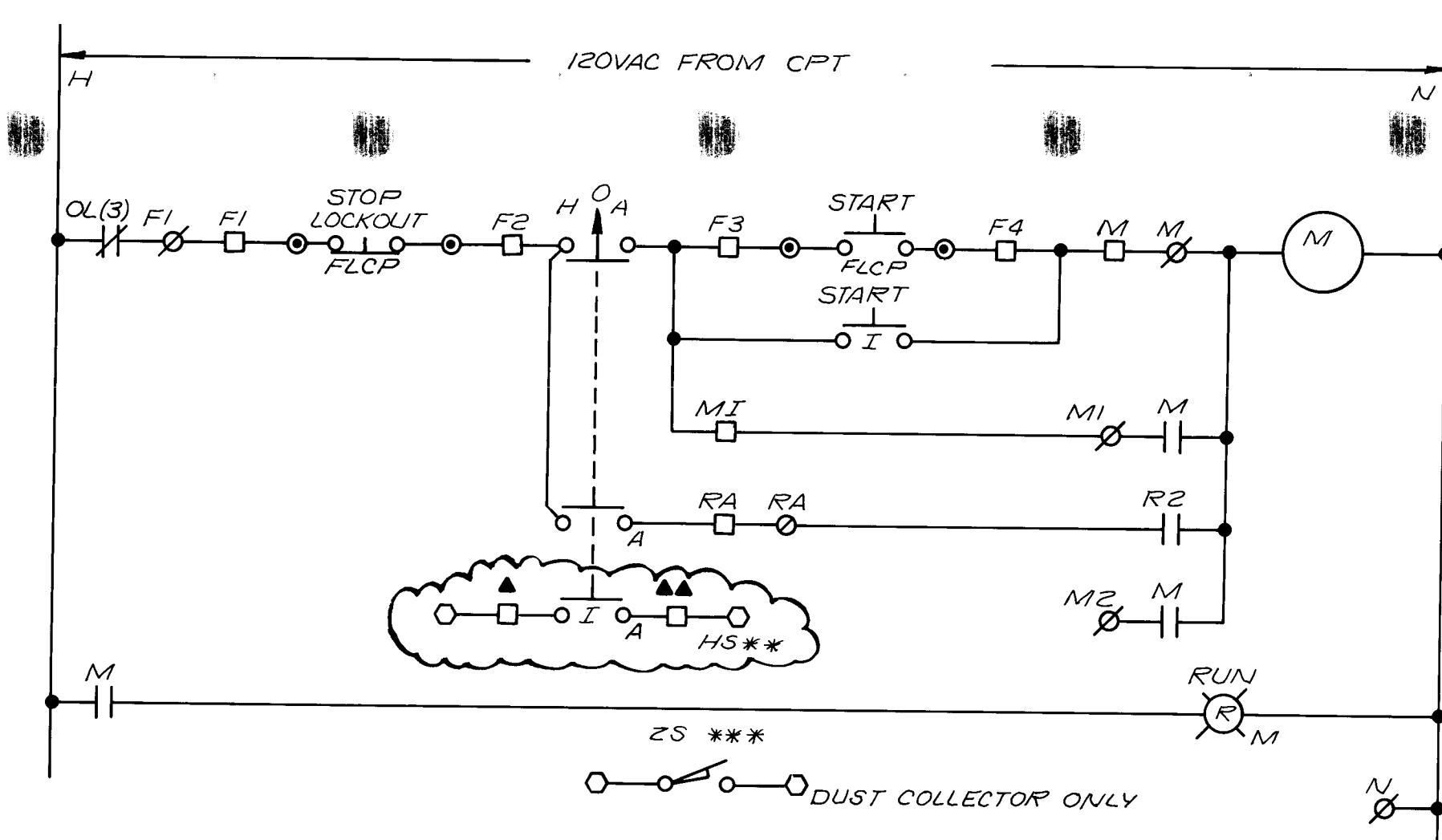


| EQUIPMENT       | REPLACE WITH | REPLACE WITH | REPLACE WITH |
|-----------------|--------------|--------------|--------------|
| POLYMER MIXER 1 | 2            | 5            | 3931         |
| POLYMER MIXER 2 | 4            | 8            | 3932         |

REFERENCE: CONTROL PANEL DRAWING P-E10318.02, 6970-2  
MCC DRAWING NO'S D-2216-1-C, D-2216-2-7, ENGINEERS SORT TAG LIST PAGE 3

SCHEMATIC 11

CUBICLE TB \*  
FI  
MI  
MI  
ME  
I  
IC  
N  
X1  
X2

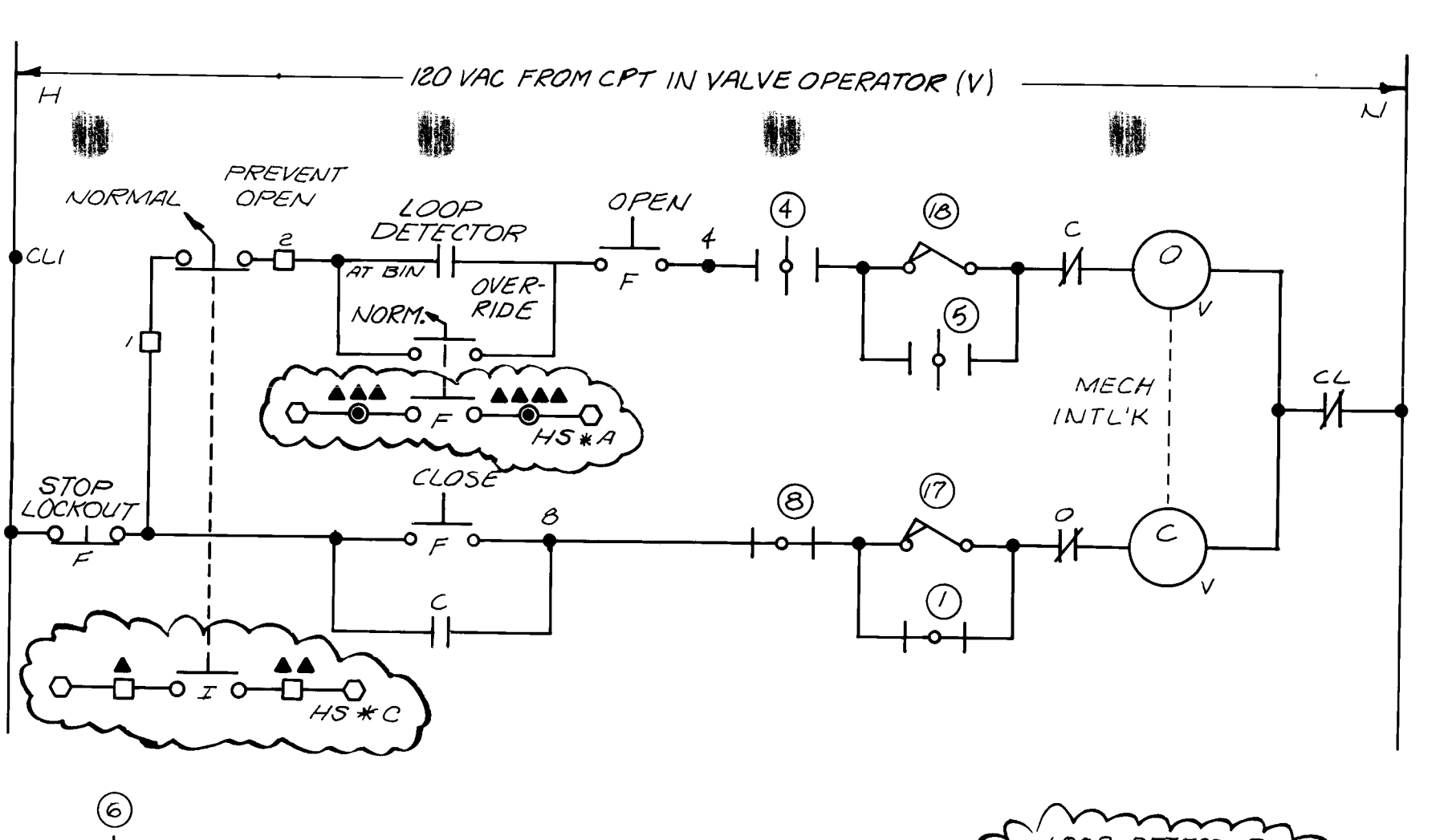


| EQUIPMENT         | REPLACE WITH | REPLACE WITH | REPLACE WITH |
|-------------------|--------------|--------------|--------------|
| DUST COLLECTOR #1 | 3            | 4            | 1            |
| DUST COLLECTOR #2 | 3            | 4            | 3            |
| BLOWER 1          | 2            | 3            | 5            |
| BLOWER 2          | 4            | 5            | 5            |

REFERENCE: CONTROL PANEL DRAWING P-E10318.02, 6970-1  
MCC DRAWING NO'S D-2216-1-9, D-2216-1-12, D-2216-2-5, D-2216-2-10  
ENGINEERS SORT TAG LIST PAGES 2 & 3

SCHEMATIC 13

CUBICLE TB \*  
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X1  
X2

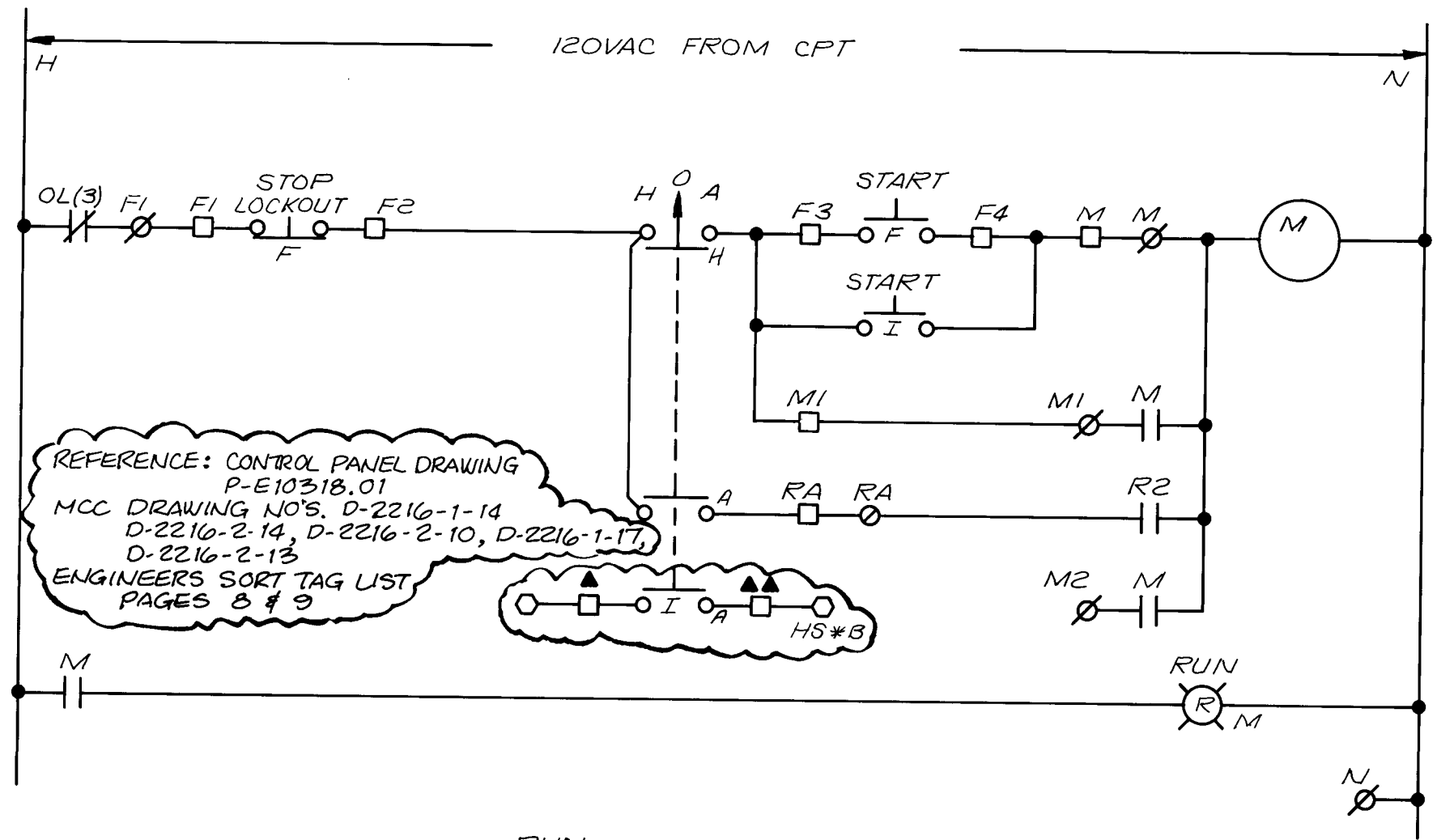


| EQUIPMENT      | REPLACE WITH | REPLACE WITH | REPLACE WITH | REPLACE WITH |
|----------------|--------------|--------------|--------------|--------------|
| NORTH BIN GATE | 3            | 4            | 8            | 7            |
| SOUTH BIN GATE | 5            | 6            | 16           | 15           |

REFERENCE: CONTROL PANEL DRAWING P-E10318.01 & GZ-2  
ENGINEERS SORT TAG LIST PAGES 7 & 8

SCHEMATIC 15

CUBICLE TB \*  
FI  
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MI  
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X1  
X2

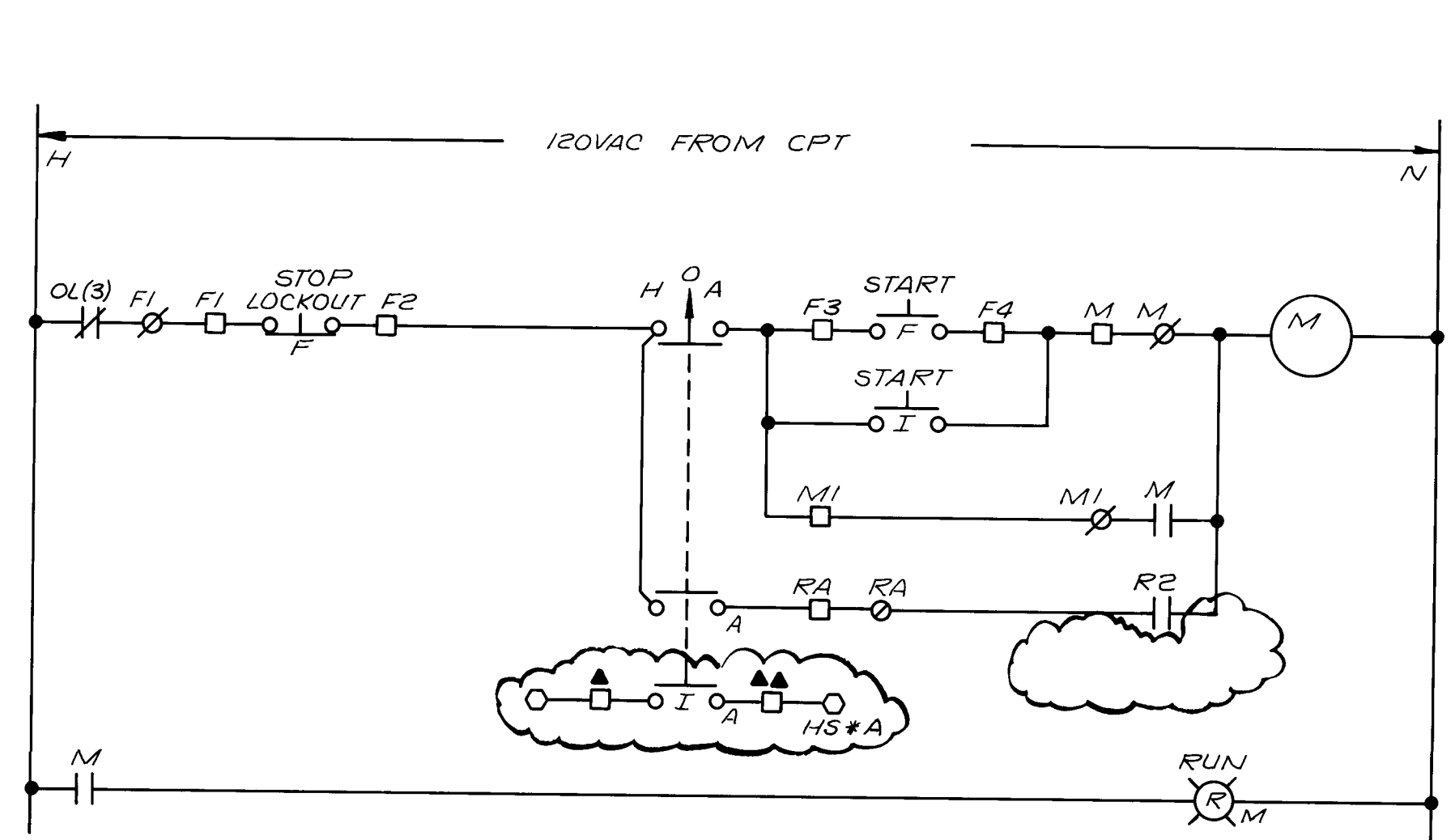


| EQUIPMENT              | REPLACE WITH | REPLACE WITH | REPLACE WITH | REPLACE WITH |
|------------------------|--------------|--------------|--------------|--------------|
| PRE #1                 | 7            | 8            | 7            | 8            |
| PRE #2                 | 7            | 8            | 7            | 8            |
| ODOR CONTROL BLOWER #1 | 3            | 4            | 3            | 4            |
| INTAKE FAN #1          | 1            | 2            | 7            | 8            |
| INTAKE FAN #2          | 7            | 8            | 7            | 8            |

REFERENCE: CONTROL PANEL DRAWING P-E10318.01  
MCC DRAWING NO'S D-2216-1-14, D-2216-2-10, D-2216-1-17  
ENGINEERS SORT TAG LIST PAGES 8 & 9

SCHEMATIC 12

CUBICLE TB \*  
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X1  
X2

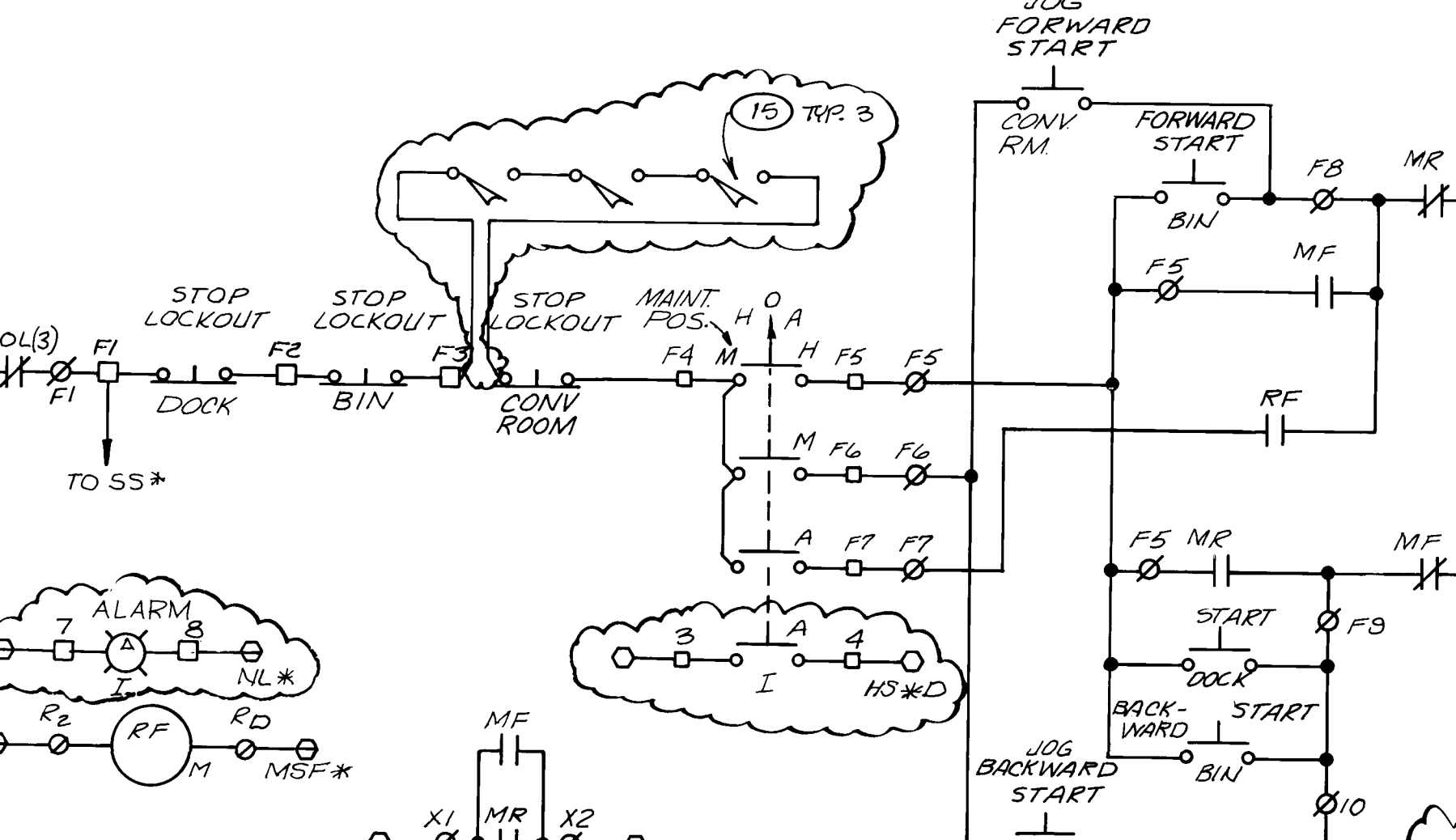


| EQUIPMENT                     | REPLACE WITH | REPLACE WITH | REPLACE WITH |
|-------------------------------|--------------|--------------|--------------|
| HOT WATER CIRCULATION PUMP #1 | 5            | 6            | 3996         |
| HOT WATER CIRCULATION PUMP #2 | 3            | 4            | 3997         |

REFERENCE: CONTROL PANEL DRAWING P-E10318.01  
MCC DRAWING NO'S D-2216-1-16, D-2216-2-12  
ENGINEERS SORT TAG LIST PAGE 8

SCHEMATIC 14

CUBICLE TB \*  
FI  
MI  
MI  
ME  
I  
IC  
N  
X1  
X2



| EQUIPMENT         | REPLACE WITH |
|-------------------|--------------|
| INCLINED CONVEYOR | 3961         |

REFERENCE: CONTROL PANEL DRAWING P-E10318.01  
MCC DRAWING NO'S D-2216-2-15

SCHEMATIC 16

CUBICLE TB \*  
FI  
MI  
MI  
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IC  
N  
X1  
X2

RECORD DRAWING  
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FOR LEGEND, NOTES, & GENERAL NOTES  
SEE SHEET E-11.



## LEGEND

- Ø TB POINT- MCC CUBICLE AND MASTER COMPARTMENT  
 ○ TB POINT- MCC MASTER COMPARTMENT ONLY  
 □ TB POINT- INTEGRATED CONTROL PANEL  
 ○ TB POINT- PROCESS CONTROL UNIT INPUT  
 ⊕ TB POINT- PROCESS CONTROL UNIT OUTPUT  
 ▽ TB POINT- AFD INTERPOSING RELAY PANEL  
 ⊙ TB POINT- LOCAL CONTROL PANEL  
 ▣ TB POINT- CENTRIFUGE CONTROL PANEL  
 ▤ TB POINT- LIGHTING CONTACTOR  
 ▥ TB POINT- PACKAGED CONTROLS  
 ● TB POINT- VALVE OPERATOR  
 C3 CONTACTOR  
 C3X INTERPOSING RELAY - LIGHTING CONTACTOR  
 M EQUIPMENT IN MOTOR CONTROL CENTER  
 F EQUIPMENT IN FIELD  
 I or ICP EQUIPMENT IN INTEGRATED CONTROL PANEL  
 V EQUIPMENT IN VALVE OPERATOR  
 P EQUIPMENT IN PANEL  
 CCP EQUIPMENT IN CENTRIFUGE CONTROL PANEL  
 FLCP DRY FEEDER LOCAL CONTROL PANEL  
 MTLCP MIXING TANK LOCAL CONTROL PANEL  
 PFLCP POLYMER FEED LOCAL CONTROL PANEL  
 CLP CENTRIFUGE LOCAL PANEL  
 BIP BACKDRIVE INTERFACE PANEL  
 SS SPEED SWITCH  
 R1 INTERPOSING RELAY - STOP  
 R2 INTERPOSING RELAY - START OR RUN  
 RV INTERPOSING RELAY - VALVE CONTROL  
 AR "RUNNING" RELAY

## GENERAL NOTES

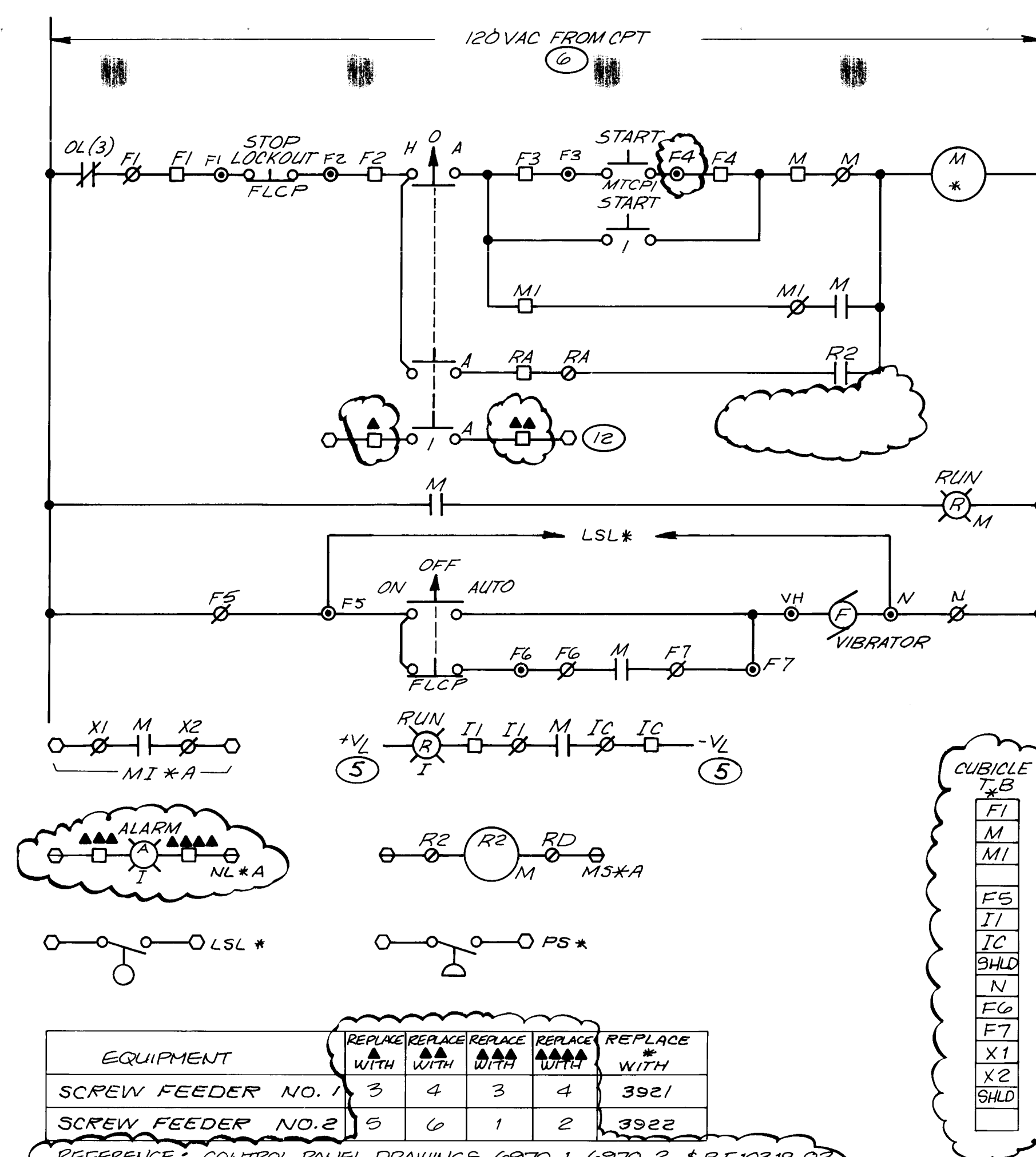
- ALL RELAYS WITH DESIGNATION BEGINNING WITH "A", "C", OR "R" SUCH AS C1X, RV ETC. SHALL BE STRUTHERS-DUNN 219ABA150, 24VDC COILS TO MATCH EXISTING.
- CONDUCTORS TO TERMINALS WITH LABELS I, R, S AND X: SHIELDED PAIR RUN SEPARATE FROM ALL AC CONDUCTORS.

## NOTES

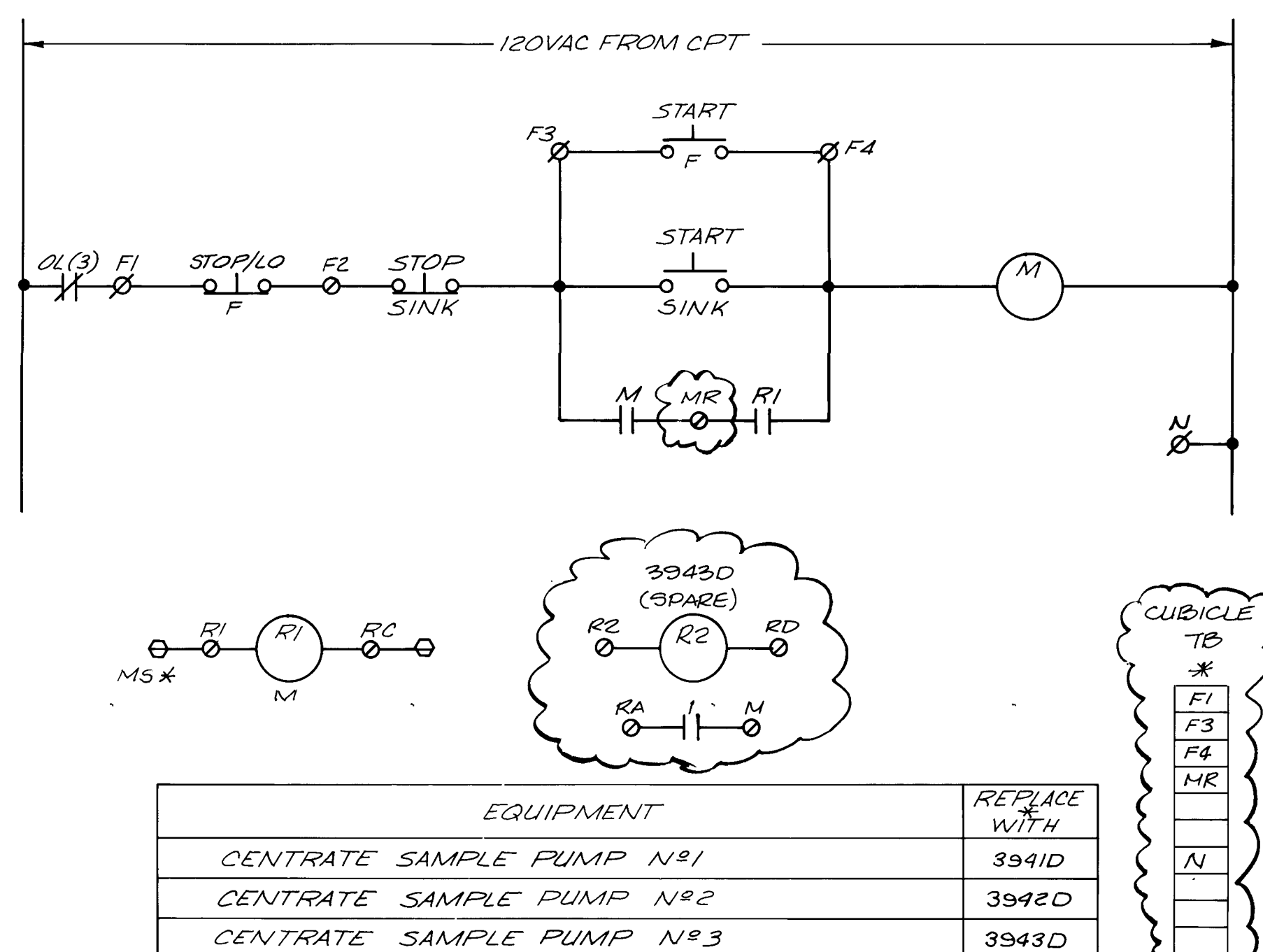
- MOUNT IN NEMA 4X ENCLOSURE ADJACENT TO VALVE. NP: INTERPOSING RELAY FOR VALVE.
- CONTROL RELAY, 120VAC COIL, 6 PNO CONTACTS, STRUTHERS-DUNN 219FXXP.
- 16930 LIGHTING CONTACTOR
- NP: MAINTENANCE LIGHTS. PUSH ONCE FOR 2 HOURS, TWICE FOR FOUR HOURS, HOLD 5 SECONDS TO TURN OFF, TYPICAL
- VOLTAGE FOR INCANDESCENT PILOT FROM DC POWER SUPPLY IN ICP, TYPICAL
- VA CAPACITY OF CPT: SUFFICIENT FOR STARTER, PILOT LIGHT, AND 60W CONTINUOUS LOAD OF VIBRATOR, 150VA MINIMUM
- CONNECT CONTACT OF EACH PUMP TO BOILER CONTROLS SO BOILER RUNS ONLY WHEN AT LEAST ONE PUMP IS RUNNING.
- CONNECT TO CE BOILER CONTROL TO STOP BOILER WHEN PUMP IS OFF.
- SEAL WATER SOLENOID VALVE AND FLOW SWITCH. ENERGIZE VALVE BEFORE STARTING PUMP. RUN PUMP ONLY IF FLOW SWITCH IS CLOSED.
- FOR LOCATION SEE INSTRUMENTATION INDEX OR CCP AND ICP DETAILS.
- MOUNT IN AFD ENCLOSURE IN MCC ROOM.
- CONNECT 5 SWITCHES (EQUIPMENT #1) IN SERIES FOR PCU DI "H53921" AND 5 IN SERIES (EQUIPMENT #2) FOR "H53922".
- DISCHARGE VALVE LIMIT SWITCH. CLOSED WHEN VALVE IS FULLY OPEN.
- VALVE OPERATOR, POWER WIRING, CONTROL WIRING, INSTRUMENTATION WIRING: EXISTING.
- LIMIT SWITCH AT TOP OF CONVEYOR TO DETECT BREAK IN BELT OR TRACK. SWITCHES ARE N.O., HELD CLOSED.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

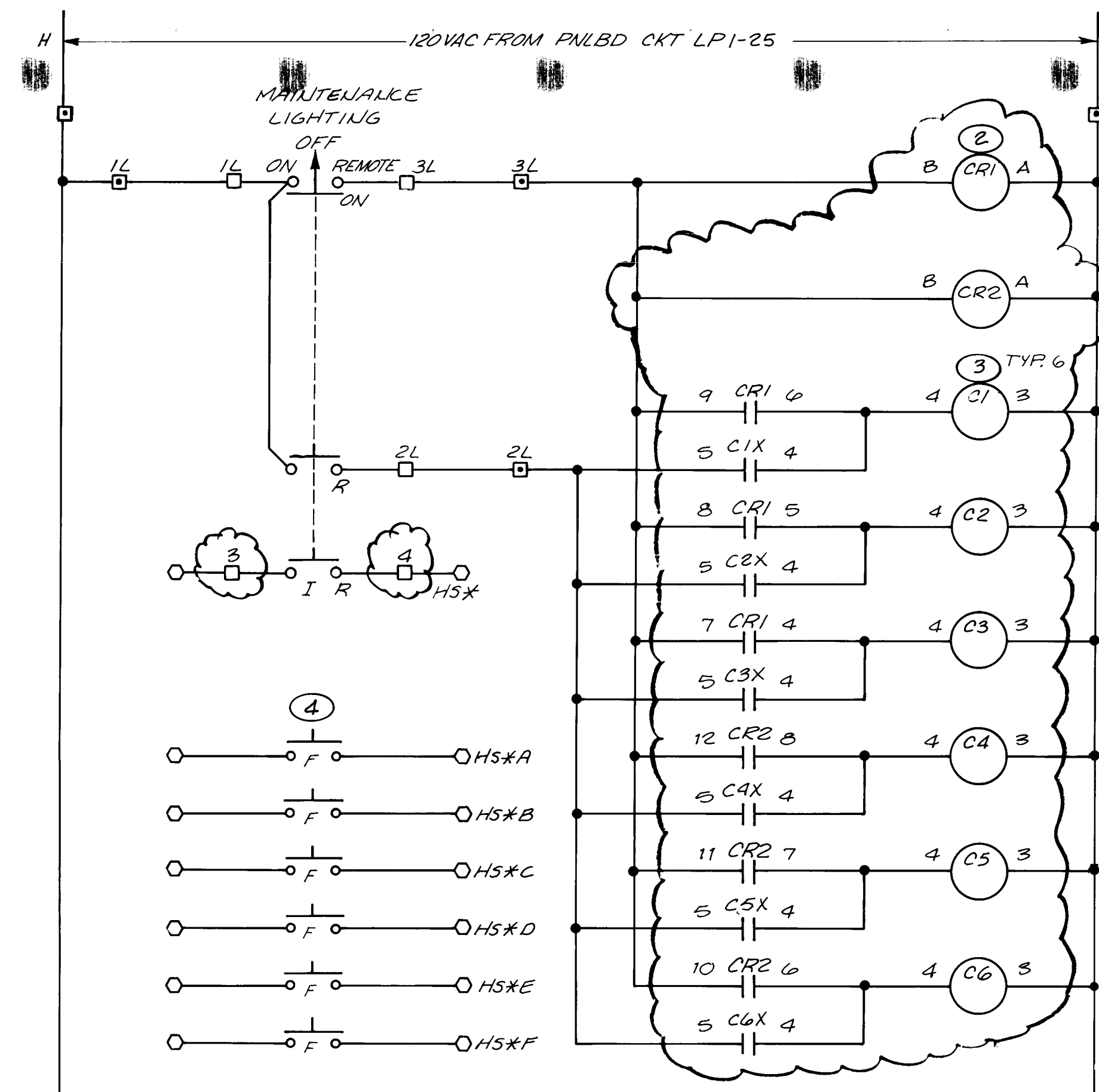
26 36 94 102 88



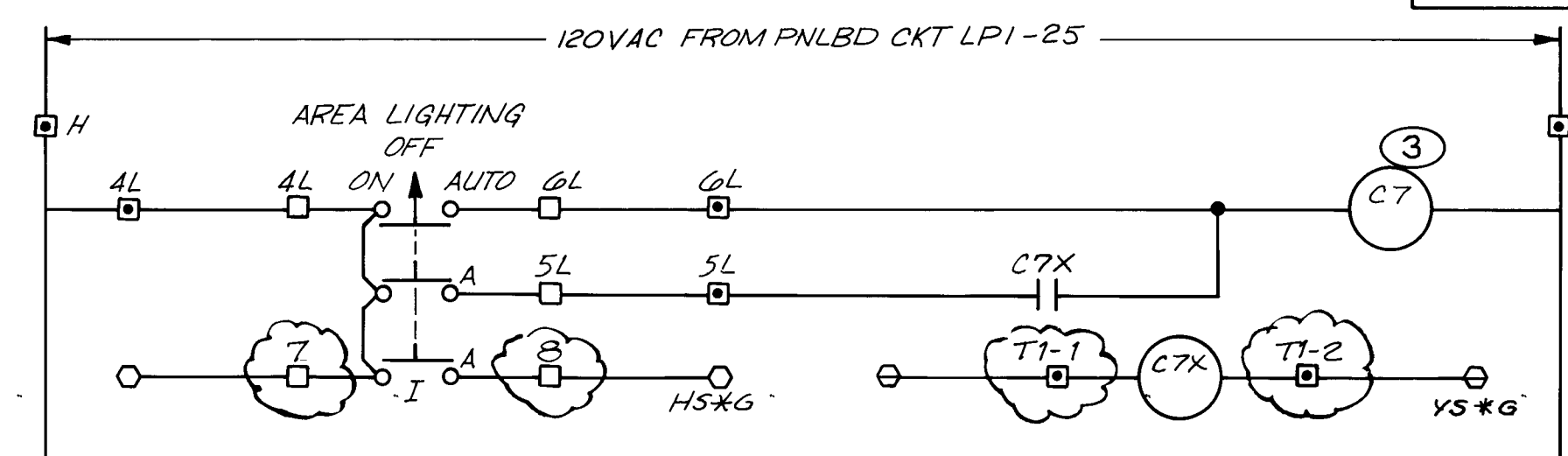
SCHEMATIC 1



SCHEMATIC 2



SCHEMATIC 3



SCHEMATIC 4

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| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |
|     |      |           |          |
|     |      |           |          |

DESIGNED: SS  
DRAWN: STAFF  
CHECKED: STAFF  
APPROVED: STAFF  
DATE: 5-88

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

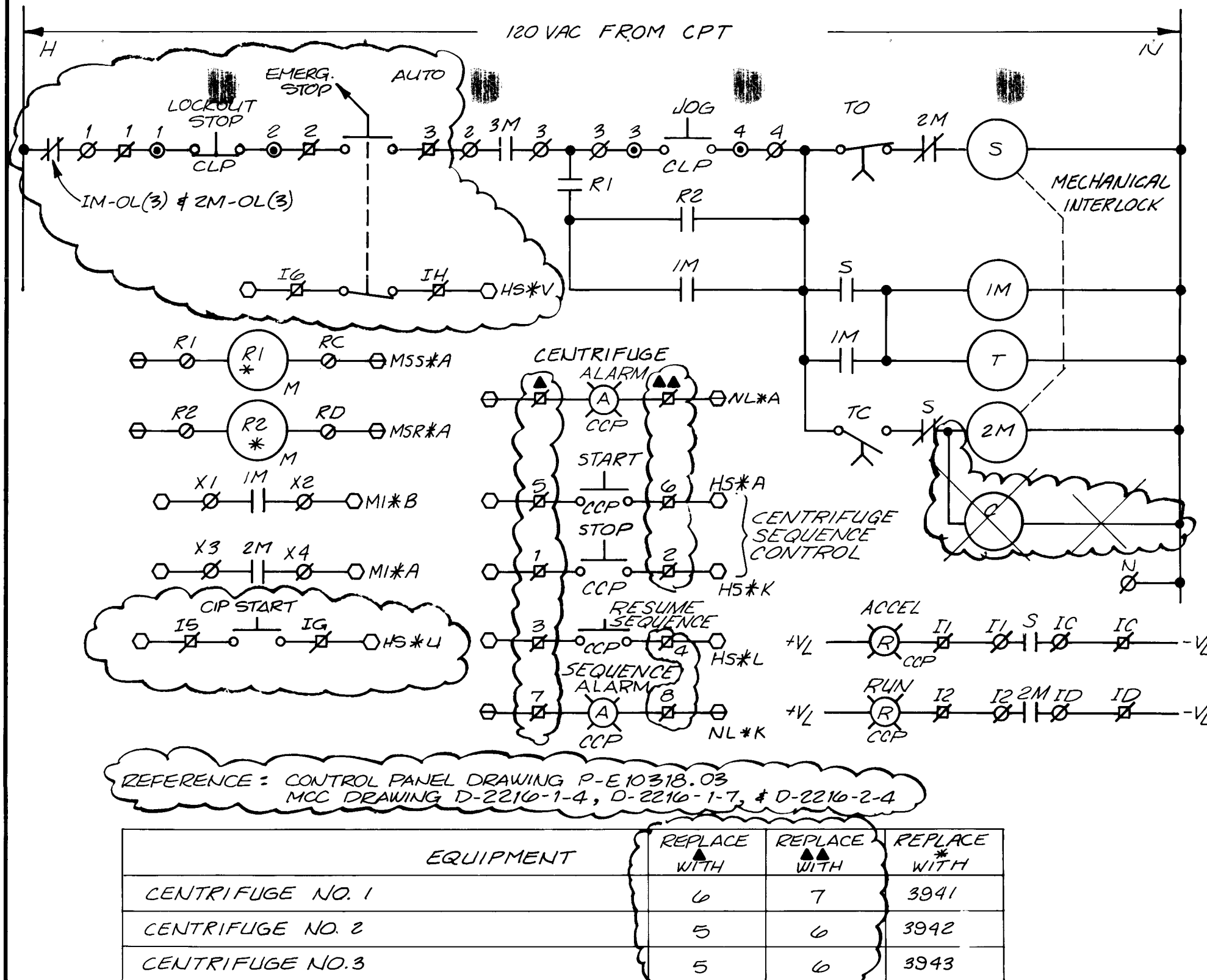
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GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

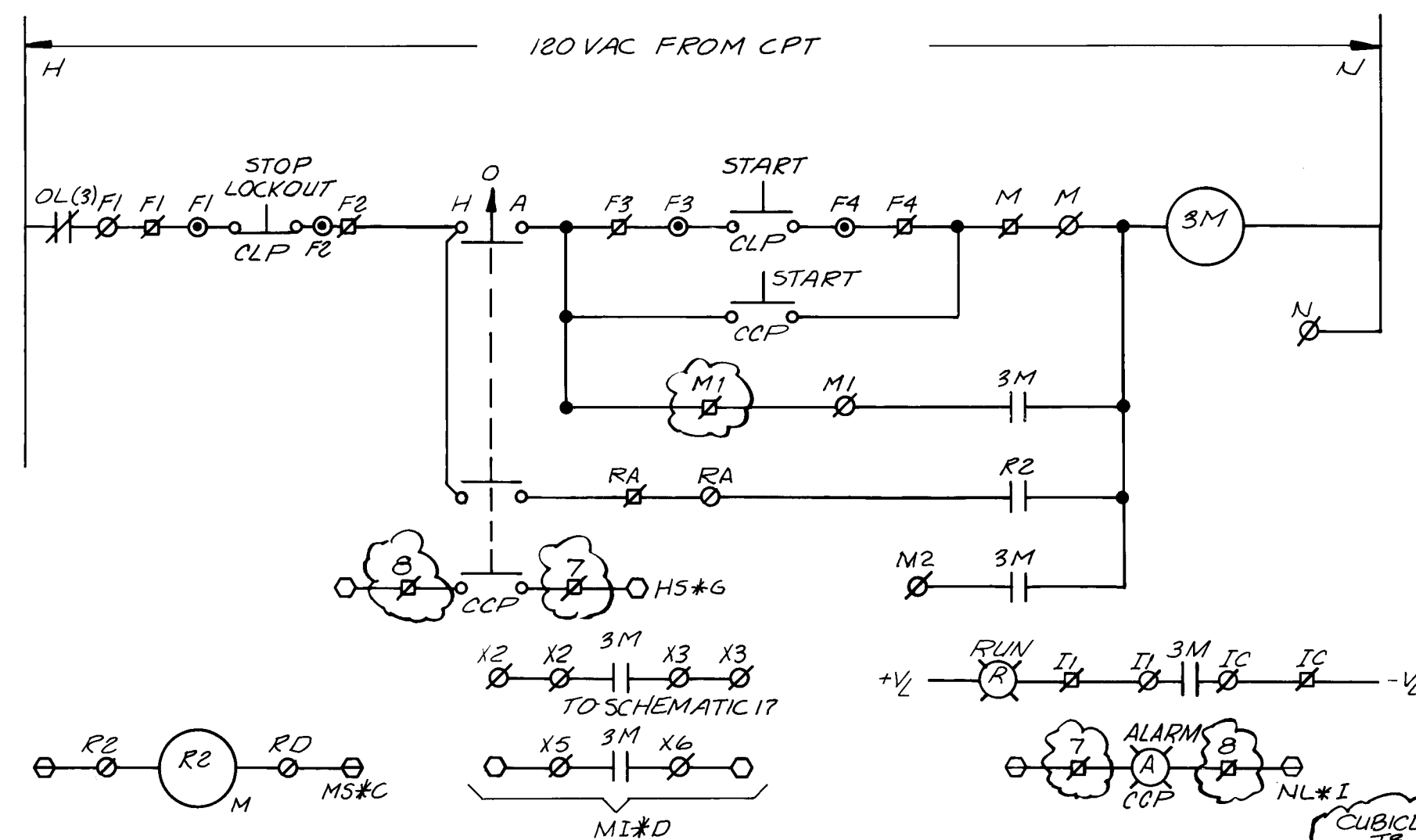
**INTERIM SLUDGE DEWATERING FACILITIES**  
SCHEMATICS

M-C NO. 832221  
**E-11** 102 of 112  
SC NO.





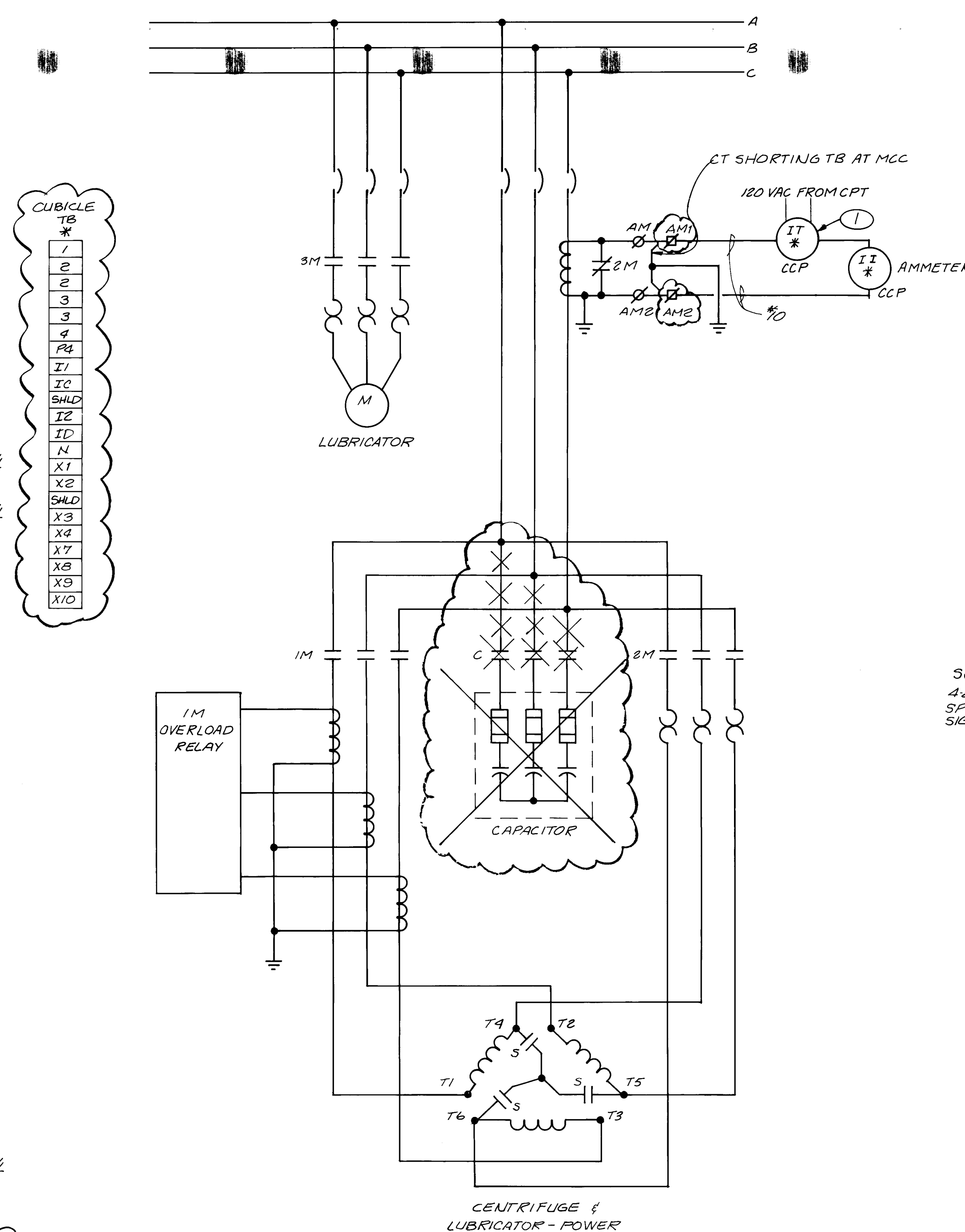
SCHEMATIC 17



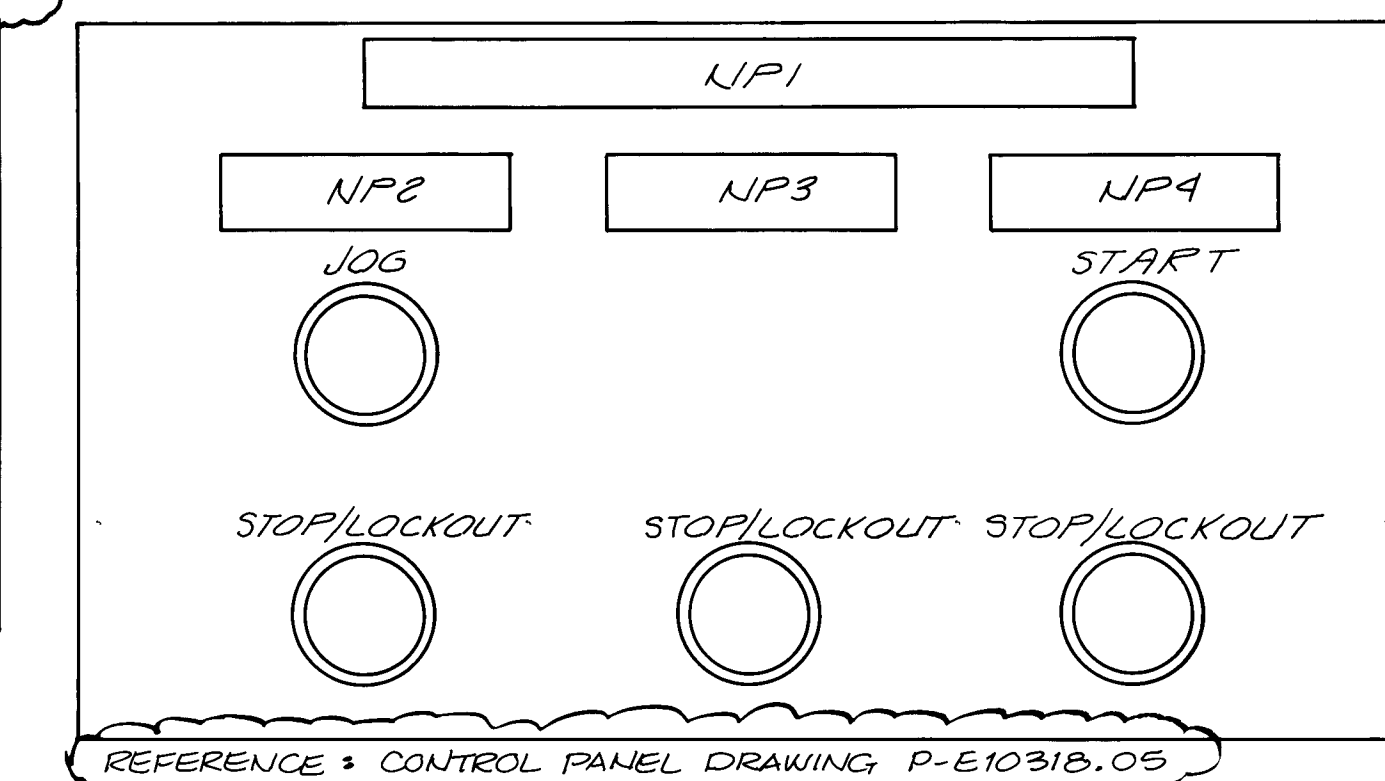
SCHEMATIC 18

## NOTES

- ① SAME AS SECTION 16980 2.07 B EXCEPT CURRENT TRANSDUCER RATHER THAN POWER TRANSDUCER. SAME MANUFACTURER.



SCHEMATIC 19



CENTRIFUGE LOCAL PANEL (CLP)

NO SCALE

TYPICAL 3

| NAMEPLATE | ENGRAVING                          | LETTER SIZE |
|-----------|------------------------------------|-------------|
| NP1       | CENTRIFUGE 1,2,3 LOCAL PANEL (CLP) | 3/8"        |
| NP2       | CENTRIFUGE MAIN DRIVE MOTOR        | 1/8"        |
| NP3       | CENTRIFUGE BACK-DRIVE MOTOR        | 1/8"        |
| NP4       | LUBE OIL PUMP                      | 1/8"        |

FOR LEGEND, NOTES, & GENERAL NOTES, SEE SHEET E-11.

## RECORD DRAWING

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29  
26 36 94 103 88

| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |

|             |      |
|-------------|------|
| DESIGNED BY | SS   |
| DRAWN BY    | STEF |
| CHECKED BY  | MM   |
| APPROVED BY | MM   |
| DATE        | 5-85 |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE

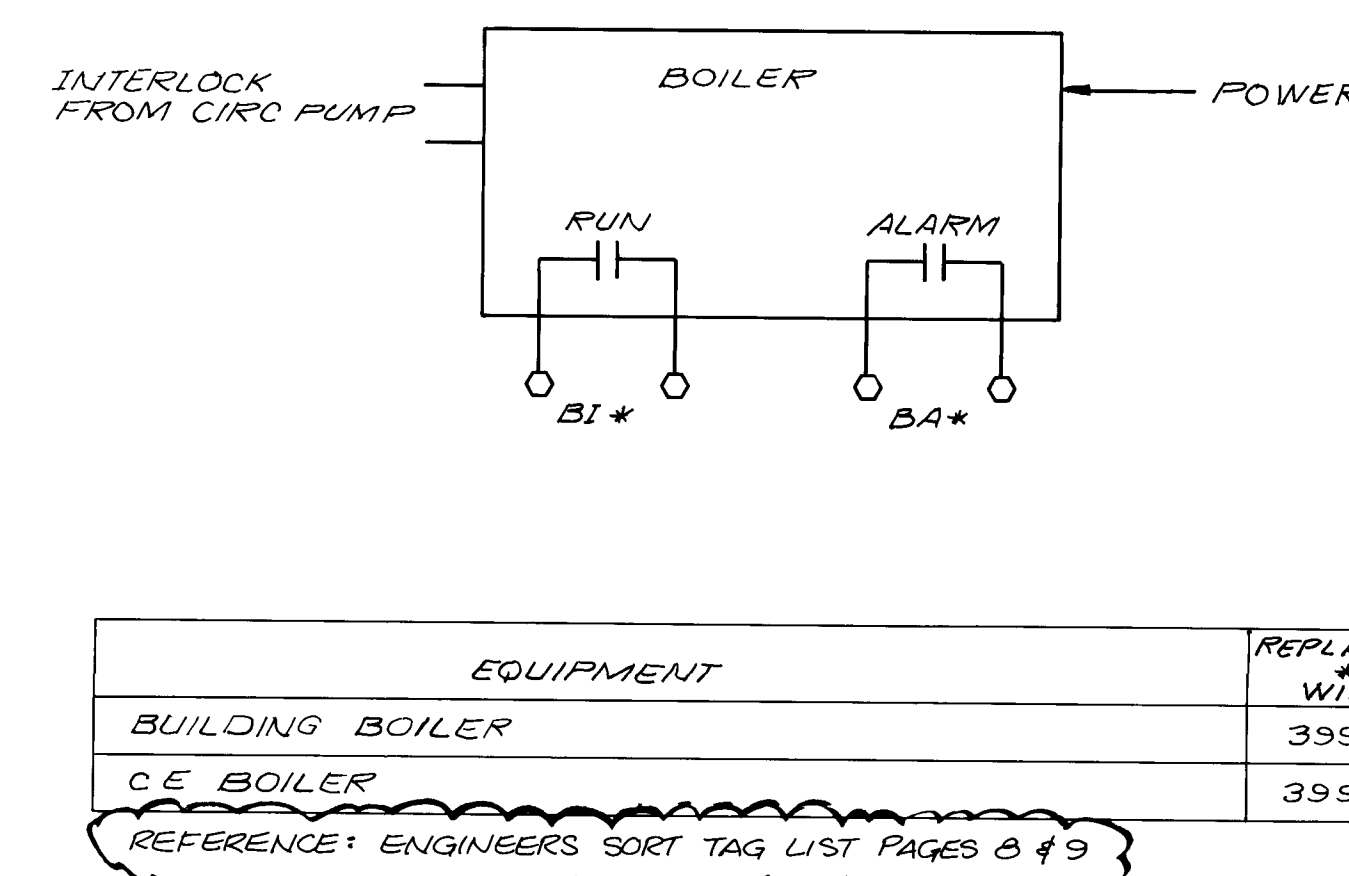
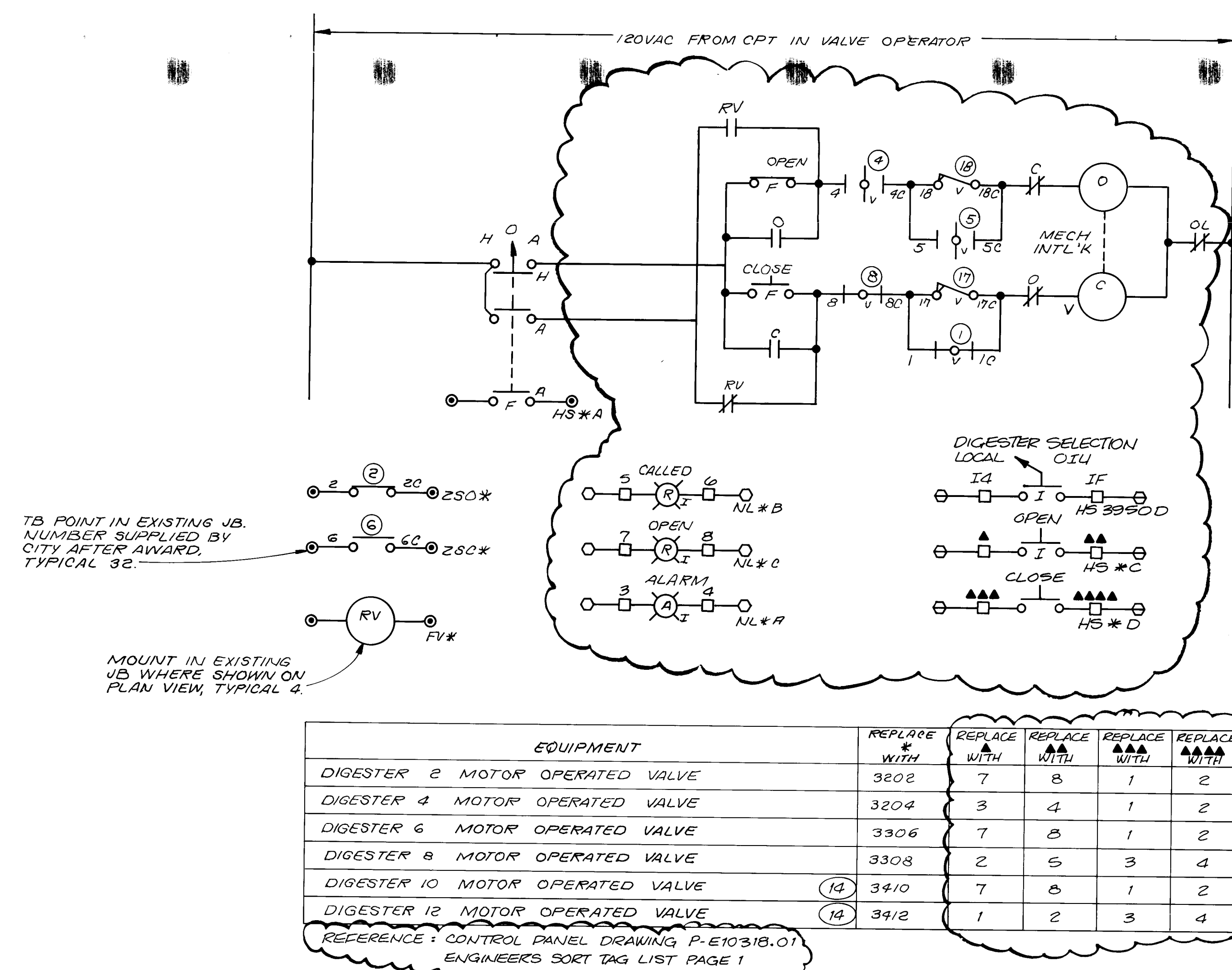
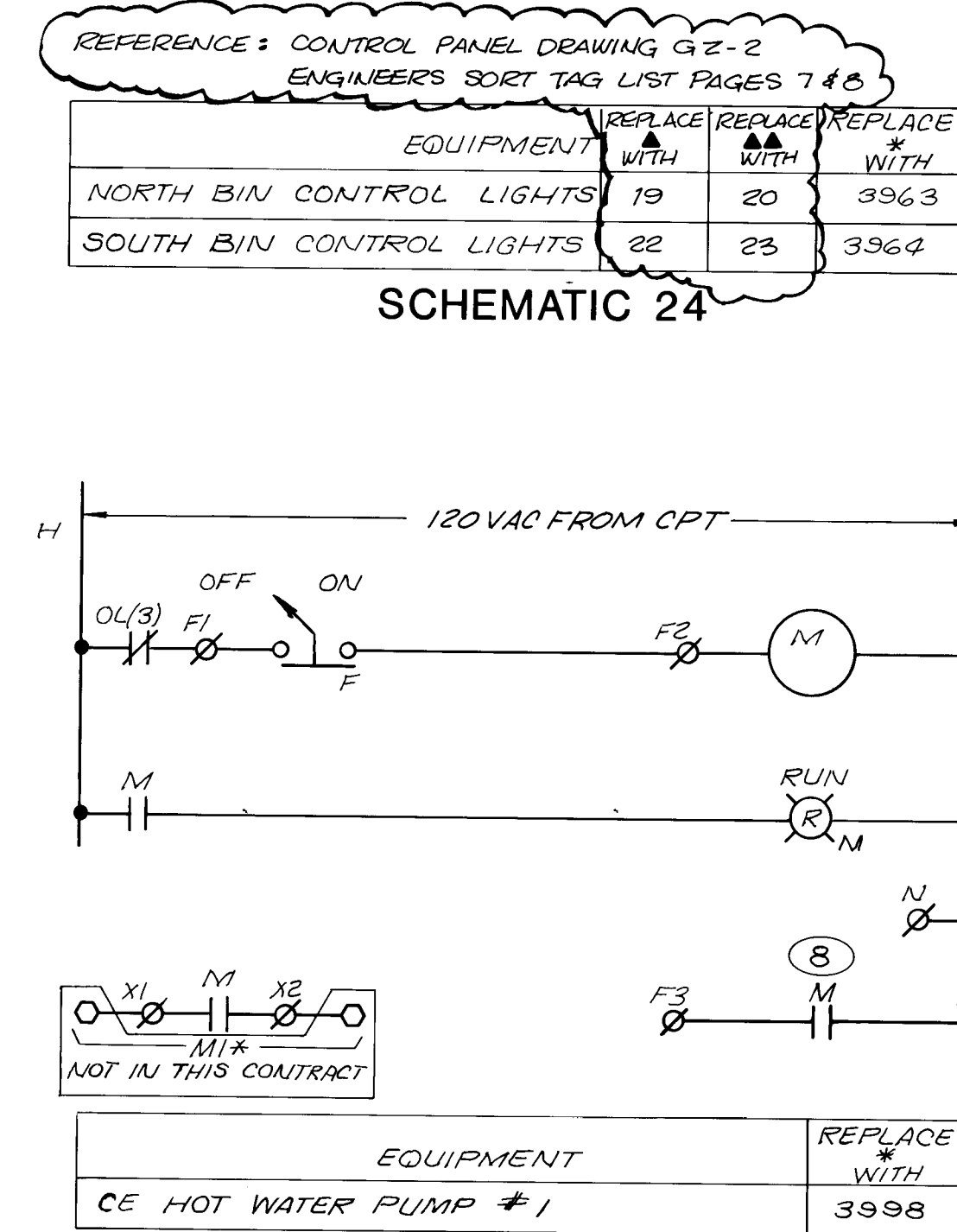
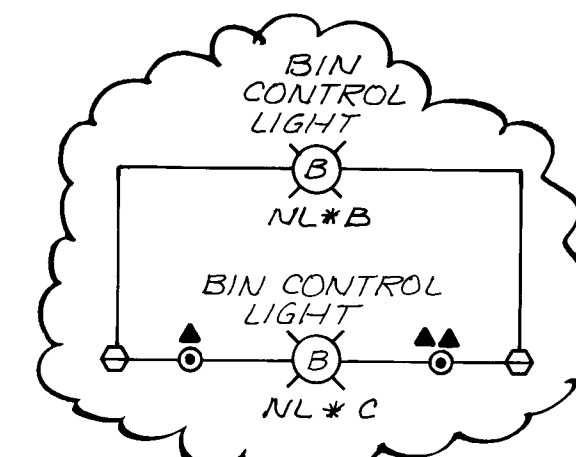
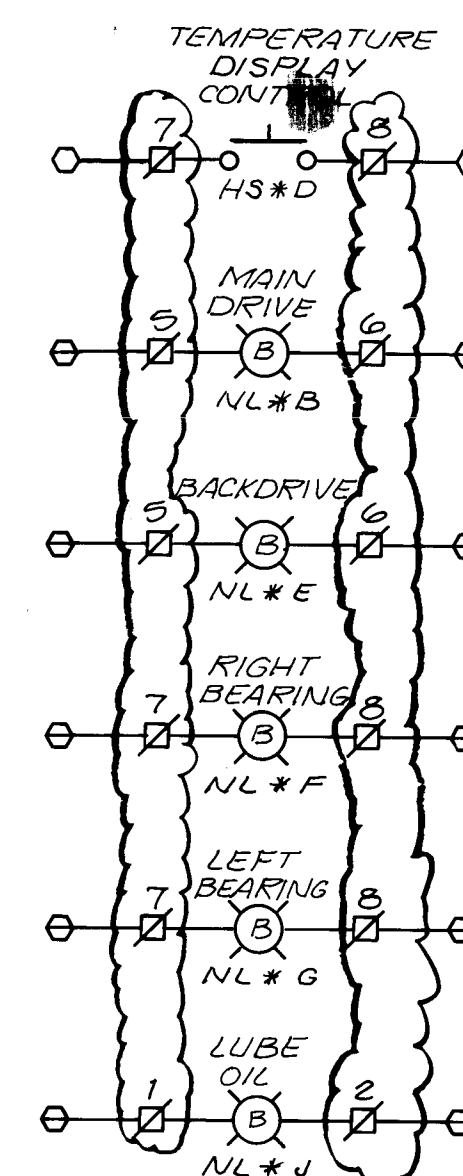
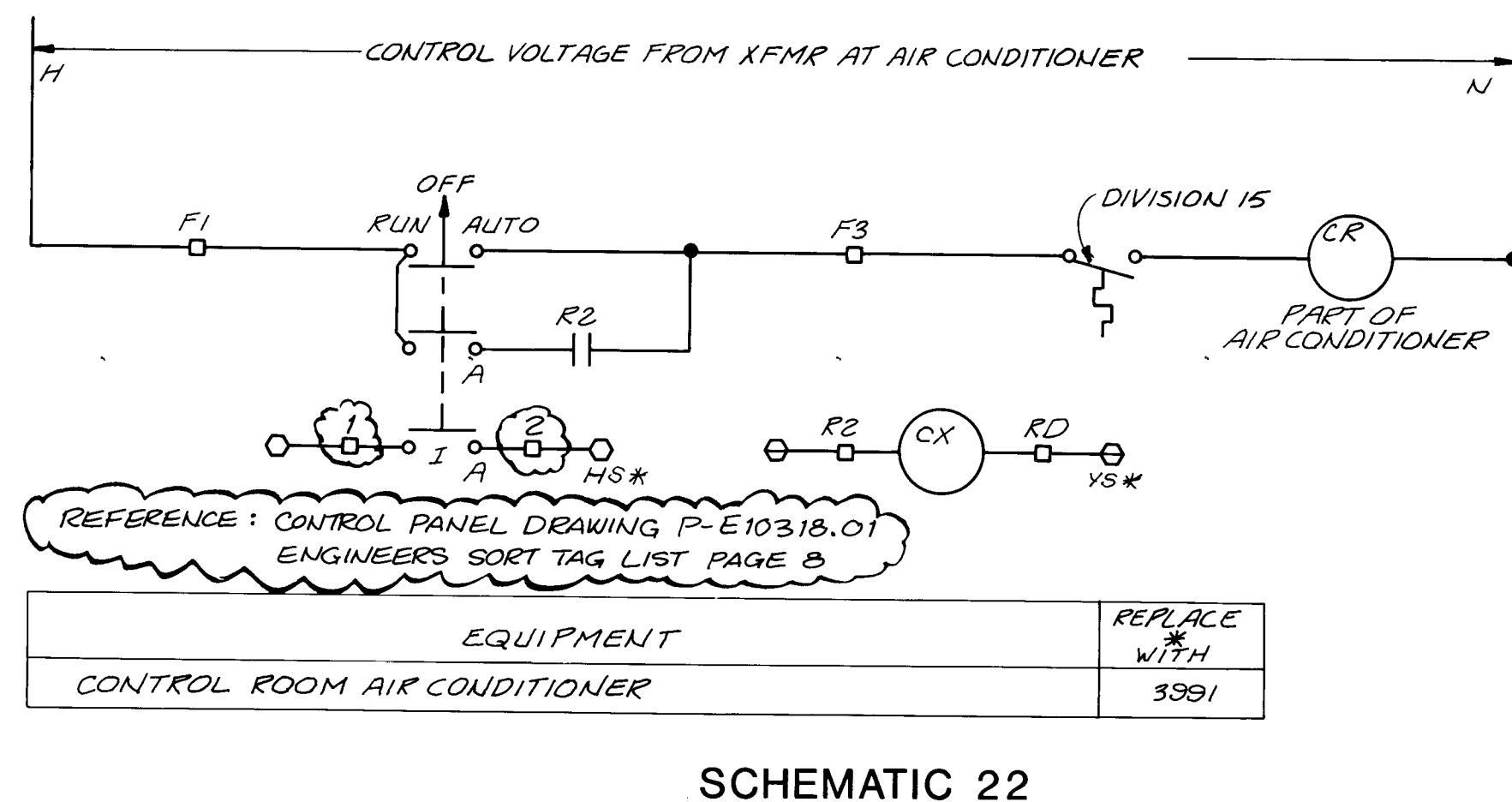
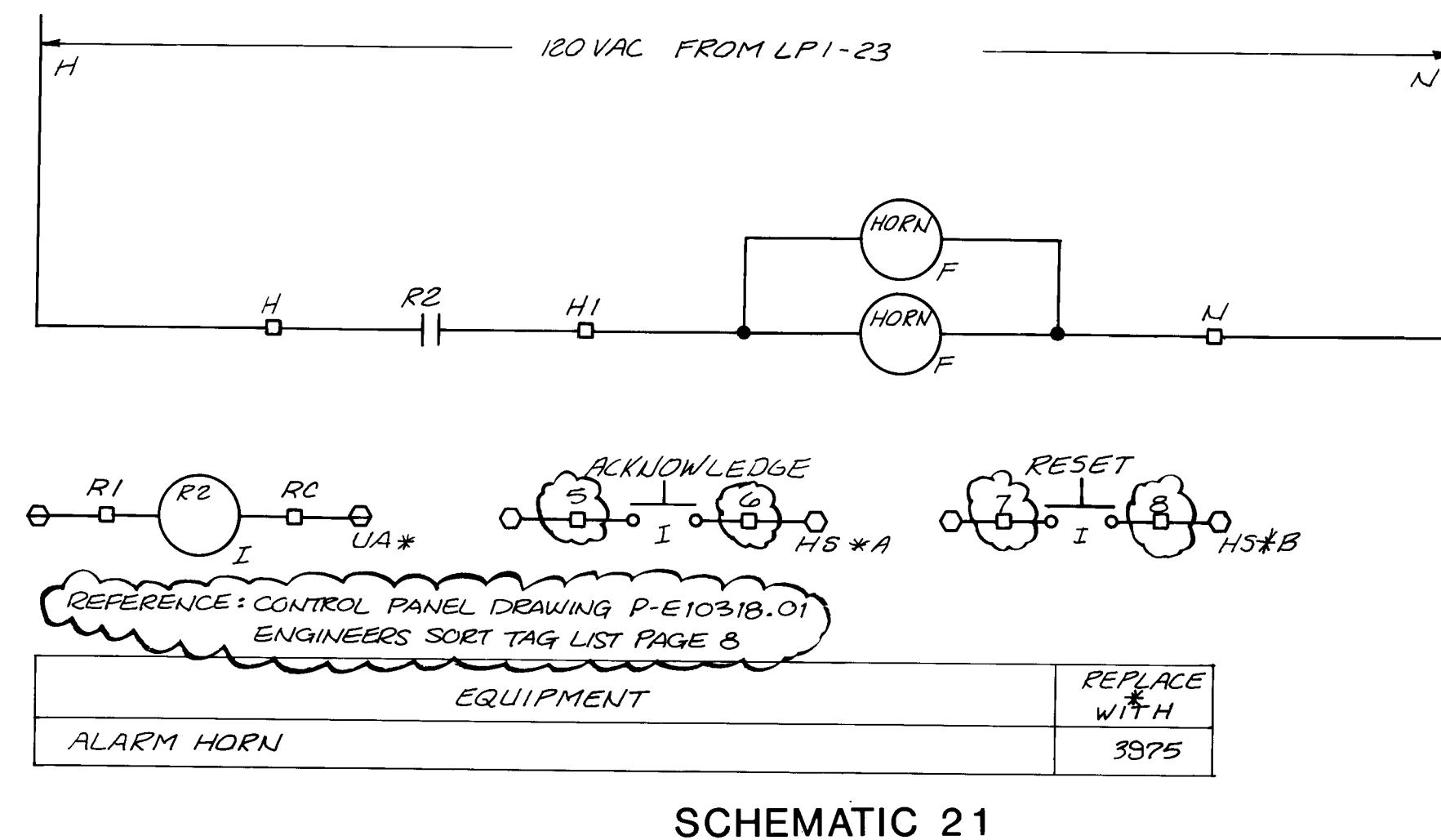
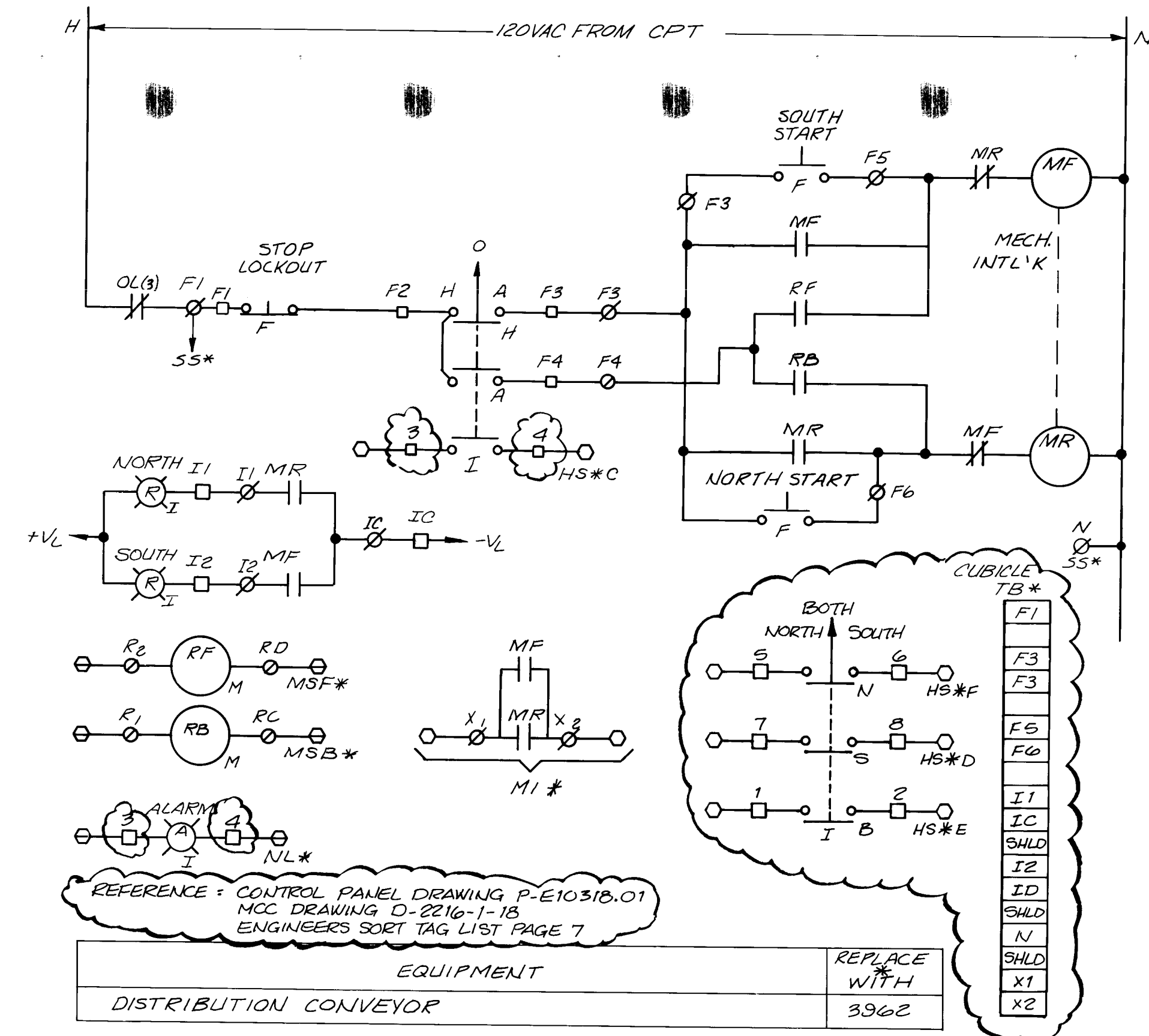


CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
SCHEMATICS & CLP DETAIL

M-C NO. 832221  
**E-12** 103 of 112  
SC NO.



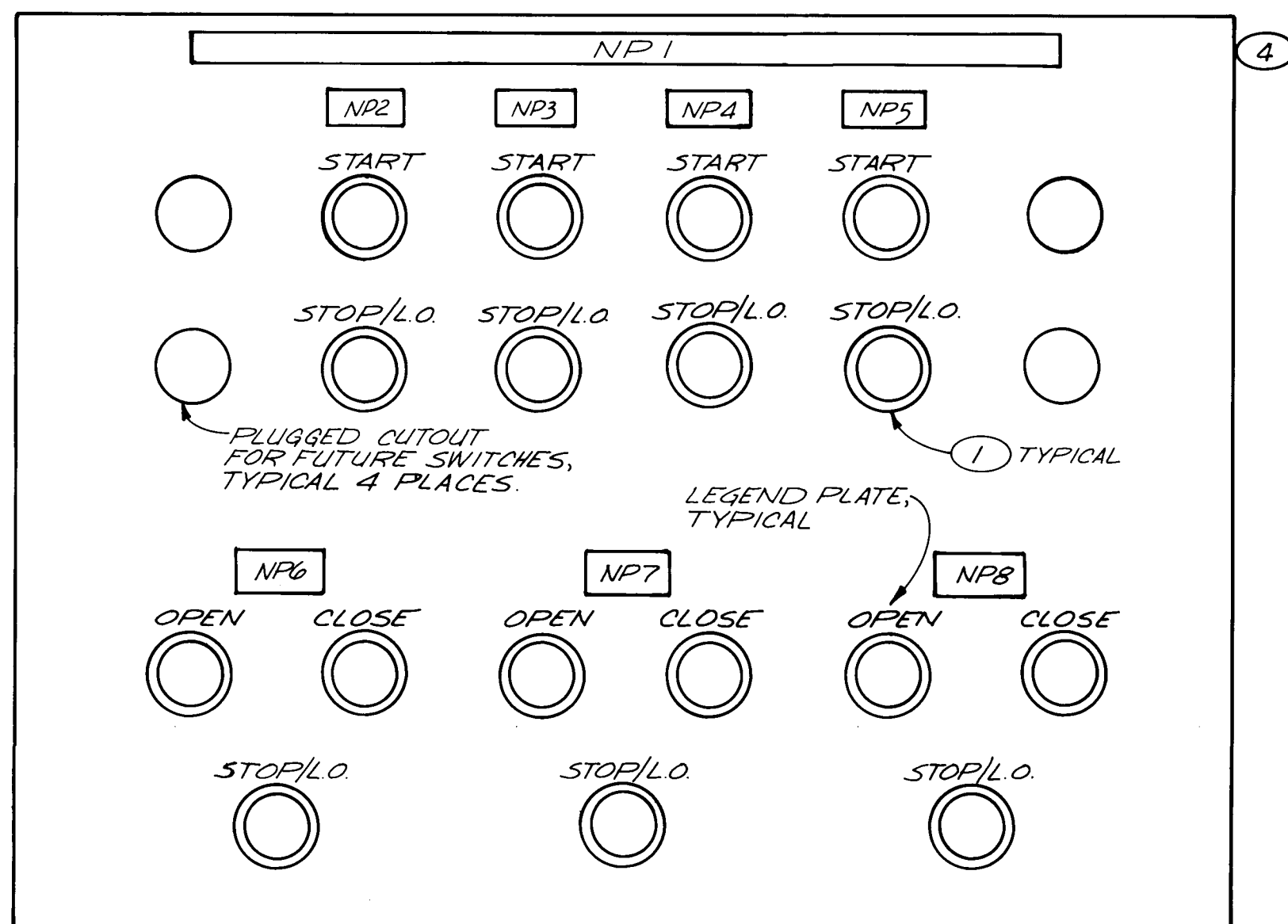


| RECORD DRAWING                                                                                                                                                                                                                                      |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                                  | DRAFTED BY:<br>MCA |
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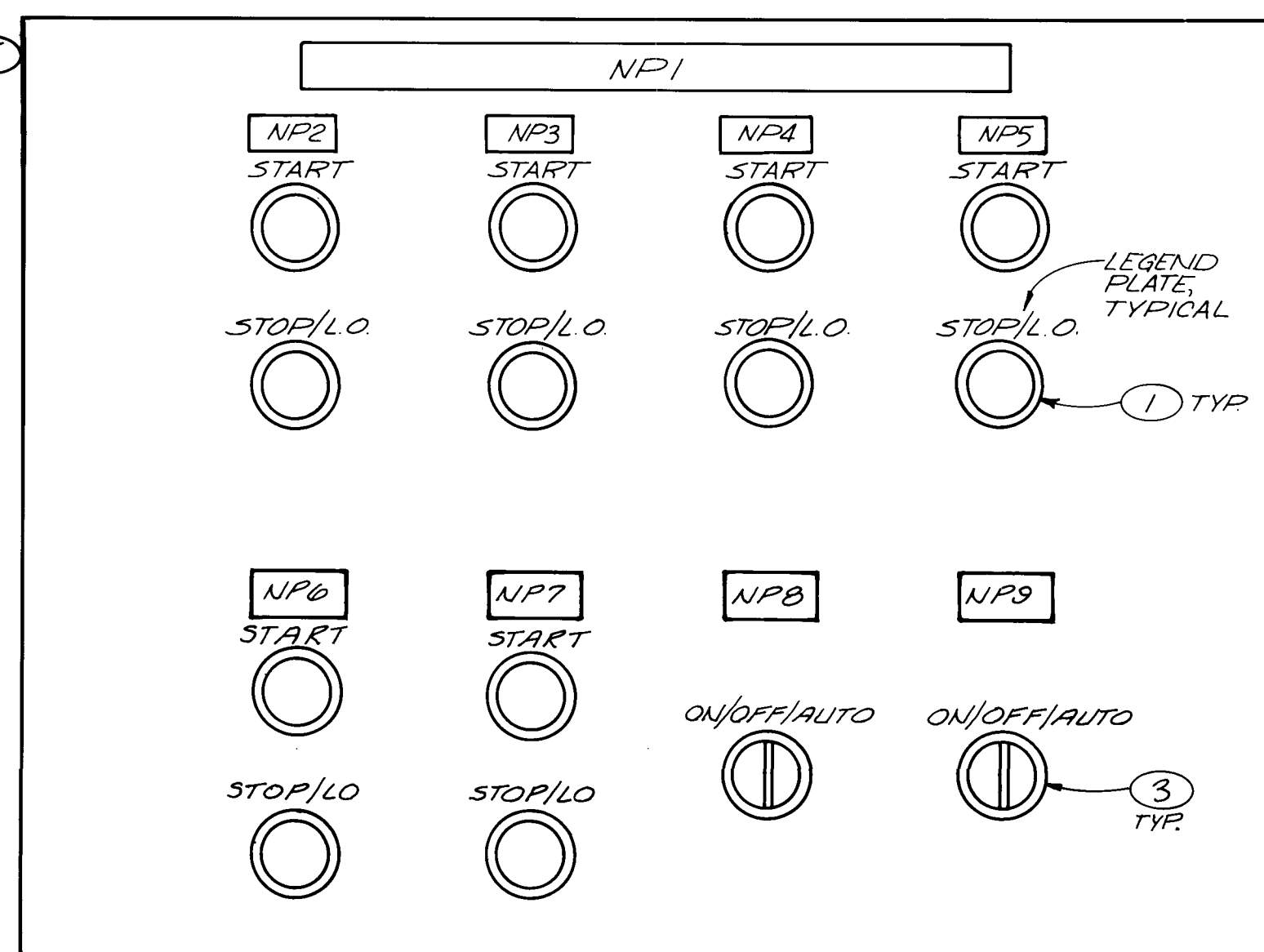


| NPI<br>LIGHTING PANEL<br>120/208V 3Ø 4W |    |    |   |    |    |                               |    |    |   |    |    |
|-----------------------------------------|----|----|---|----|----|-------------------------------|----|----|---|----|----|
| DESCRIPTION                             | A  | No | Ø | No | A  | DESCRIPTION                   | A  | No | Ø | No | A  |
| MEZZANINE LIGHTS                        | 20 | 1  | A | 2  | 20 | CENTRIFUGE & CONV. LIGHTS     | 20 | 1  | A | 2  | 20 |
| 2 <sup>ND</sup> FLOOR FLUORESCENT LAMPS | 20 | 3  | B | 4  | 2P |                               |    |    |   |    |    |
| 1 <sup>ST</sup> FLOOR GEN. & POLY       | 20 | 5  | C | 6  | 20 | POLY, STAIRS, CENTRIFUGE      | 20 | 5  | C | 6  | 20 |
|                                         | 2P | 7  | A | 8  | 2P |                               |    |    |   |    |    |
| CONV., MAINT. & EXT                     | 20 | 9  | B | 10 | 20 | MCC ROOM LIGHTS               | 20 | 9  | B | 10 | 20 |
|                                         | 2P | 11 | C | 12 | 15 | MEZZANINE RECEPT.             | 20 | 13 | A | 14 | 20 |
| 1 <sup>ST</sup> FLOOR RECEPT.           | 20 | 13 | A | 14 | 20 | 1 <sup>ST</sup> FLOOR RECEPT. | 20 | 13 | A | 14 | 20 |
| 2 <sup>ND</sup> FLOOR RECEPT.           | 20 | 15 | B | 16 | 20 | 2 <sup>ND</sup> FLOOR RECEPT. | 20 | 15 | B | 16 | 20 |
| WATER COOLER                            | 15 | 17 | C | 18 | 20 | SLUDGE FIT, CENT. #1          | 20 | 17 | C | 18 | 20 |
| CUH -1                                  | 15 | 19 | A | 20 | 20 | SLUDGE FIT, CENT. #2          | 20 | 17 | C | 18 | 20 |
| WETTING UNIT SOLENOID VALVES            | 20 | 21 | B | 22 | 20 | SLUDGE FIT, CENT. #3          | 20 | 17 | C | 18 | 20 |
| ALARM HORN                              | 20 | 23 | C | 24 | 20 | CENTRATE FIT                  | 20 | 17 | C | 18 | 20 |
| LIGHTING CONTROL                        | 20 | 25 | A | 26 | 20 | SLUDGE FEED TANK LEVEL        | 20 | 17 | C | 18 | 20 |
| ICP-DC POWER SUPPLY                     | 20 | 27 | B | 28 | 20 | NORTH BIN LEVEL               | 20 | 17 | C | 18 | 20 |
| HOPPER & STAIR LIGHTING                 | 20 | 29 | C | 30 | 20 | SOUTH BIN LEVEL               | 20 | 17 | C | 18 | 20 |
| UNIT HEATERS                            | 20 | 31 | A | 32 | 20 | UNIT HEATERS                  | 20 | 17 | C | 18 | 20 |
| RESTROOM EXHAUST & DAMPERS              | 20 | 33 | B | 34 | 20 | POLY ROOM EXHAUSTER           | 20 | 17 | C | 18 | 20 |
| COMPOSITE SAMPLER                       | 20 | 35 | C | 36 | 20 | AREA LIGHTING                 | 20 | 17 | C | 18 | 20 |
| SPARE                                   | 20 | 37 | A | 38 | 2P |                               |    |    |   |    |    |
| SPARE                                   | 20 | 39 | B | 40 | 20 | SPARE                         | 20 | 17 | C | 18 | 20 |
| SPARE                                   | 20 | 41 | C | 42 | 20 | SPARE                         | 20 | 17 | C | 18 | 20 |
| 125AMCB                                 |    |    |   |    |    |                               |    |    |   |    |    |



| TAG No.  | NAMEPLATE | ENGRAVING                                | LETTER SIZE |
|----------|-----------|------------------------------------------|-------------|
| —        | NP1       | POLYMER FEED LOCAL CONTROL PANEL (PFCLP) | 3/8"        |
| HS-3901A | NP2       | POLYMER FEED PUMP N° 1                   | 1/8"        |
| HS-3902A | NP3       | POLYMER FEED PUMP N° 2                   | 1/8"        |
| HS-3903A | NP4       | POLYMER FEED PUMP N° 3                   | 1/8"        |
| HS-3904A | NP5       | POLYMER FEED PUMP N° 4                   | 1/8"        |
| HS-3911A | NP6       | DILUTION WATER VALVE N° 1                | 1/8"        |
| HS-3912A | NP7       | DILUTION WATER VALVE N° 2                | 1/8"        |
| HS-3913A | NP8       | DILUTION WATER VALVE N° 3                | 1/8"        |

| PNL BOARD #31<br>120/208V 3Ø 4W |    |    |   |    |    |                                                                                                         |  |  |  |  |  |
|---------------------------------|----|----|---|----|----|---------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| DESCRIPTION                     | A  | No | Ø | No | A  | DESCRIPTION                                                                                             |  |  |  |  |  |
| AFD #1                          | 20 | 1  | A | 2  | 20 | AFD #2                                                                                                  |  |  |  |  |  |
|                                 | 2P | 3  | B | 4  | 2P |                                                                                                         |  |  |  |  |  |
| AFD #3                          | 20 | 5  | C | 6  | 20 | AFD #4                                                                                                  |  |  |  |  |  |
|                                 | 2P | 7  | A | 8  | 2P |                                                                                                         |  |  |  |  |  |
| PRE #3                          | 20 | 9  | B | 10 | 20 | EF #1                                                                                                   |  |  |  |  |  |
| BUILDING HEATING BOILER         | 20 | 11 | C | 12 | 20 | CHLORINE EVAP. HW. BOILER                                                                               |  |  |  |  |  |
| HOPPER LOOP DETECTOR            | 20 | 13 | A | 14 | 20 | RESTROOM HOT WATER HEATER                                                                               |  |  |  |  |  |
| CHEMISORBANT                    | 20 | 15 | B | 16 | 20 | MAKE-UP AIR HEATERS  |  |  |  |  |  |
| SPARE                           | 20 | 17 | C | 18 | 20 | SPARE                                                                                                   |  |  |  |  |  |
| SPARE                           | 20 | 19 | A | 20 | 20 | SPARE                                                                                                   |  |  |  |  |  |
| SPARE                           | 20 | 21 | B | 22 | 20 | SPARE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 23 | C | 24 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 25 | A | 26 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 27 | B | 28 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 29 | C | 30 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 31 | A | 32 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 33 | B | 34 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 35 | C | 36 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 37 | A | 38 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 39 | B | 40 |    | SPACE                                                                                                   |  |  |  |  |  |
| SPACE                           |    | 41 | C | 42 |    | SPACE                                                                                                   |  |  |  |  |  |
| 50A MCB                         |    |    |   |    |    |                                                                                                         |  |  |  |  |  |
|                                 | N  |    |   |    | G  |                                                                                                         |  |  |  |  |  |



| TAG No.  | NAMEPLATE | ENGRAVING                              | LETTER SIZE |
|----------|-----------|----------------------------------------|-------------|
| —        | NP1       | DRY FEEDER LOCAL CONTROL PANEL (FLCLP) | 3/8"        |
| HS-3921D | NP2       | BLOWER N° 1                            | 1/8"        |
| HS-3922D | NP3       | BLOWER N° 2                            | 1/8"        |
| HS-3921A | NP4       | SCREW FEEDER N° 1                      | 1/8"        |
| HS-3922A | NP5       | SCREW FEEDER N° 2                      | 1/8"        |
| HS-3921J | NP6       | DUST COLLECTOR N° 1                    | 1/8"        |
| HS-3922J | NP7       | DUST COLLECTOR N° 2                    | 1/8"        |
| HS-3921N | NP8       | VIBRATOR NO. 1                         | 1/8"        |
| HS-3922N | NP9       | VIBRATOR NO. 2                         | 1/8"        |

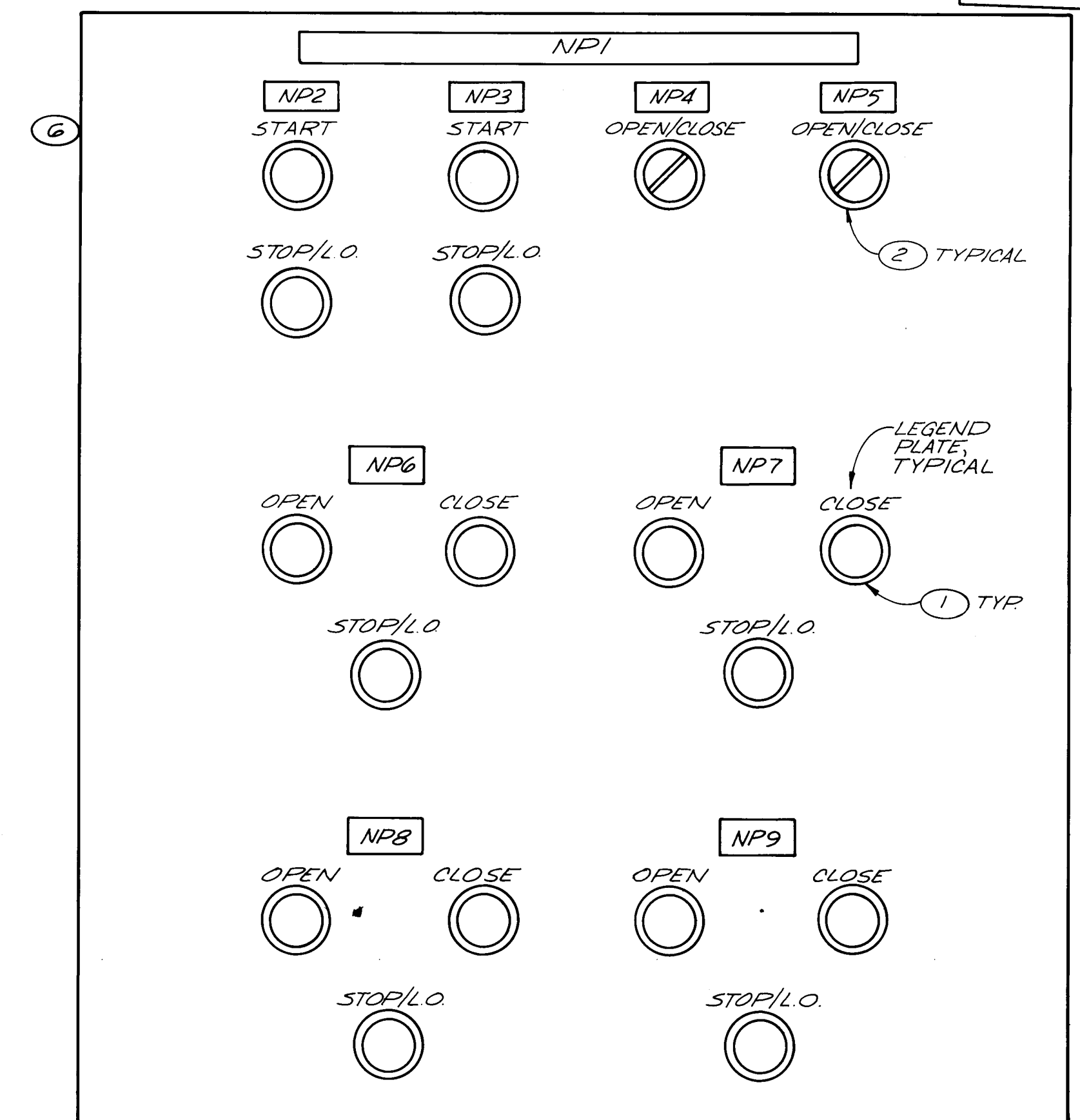
## NOTES

1. PUSHBUTTON SPECIFICATION 16956.
2. TWO POSITION SELECTOR SWITCH. SPECIFICATION SECTION 16956.
3. THREE POSITION SELECTOR SWITCH. SPECIFICATION SECTION 16956.
4. 24 1/2 x 24 1/4 x 12 1/8 CONTROL ENCLOSURE, NEMA 4X WITH BACK PANEL 21" x 21". ROBROY INDUSTRIES CAT # N242410HWT OR ENGINEER APPROVED EQUAL.
5. 20 1/2 x 16 3/8 x 12 1/8 CONTROL ENCLOSURE, NEMA 4X WITH BACK PANEL 17" x 13". ROBROY INDUSTRIES CAT # N201610HWT OR ENGINEER APPROVED EQUAL.
6. 30 3/4 x 20 3/4 x 10 1/8 CONTROL ENCLOSURE, NEMA 4X WITH BACK PANEL 27" x 17". ROBROY INDUSTRIES CAT # N30208HWT OR ENGINEER APPROVED EQUAL.

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| TAG No.  | NAMEPLATE | ENGRAVING                               | LETTER SIZE |
|----------|-----------|-----------------------------------------|-------------|
| —        | NP1       | MIXING TANK LOCAL CONTROL PANEL (MTCLP) | 3/8"        |
| HS-3931D | NP2       | MIXER N° 1                              | 1/8"        |
| HS-3932D | NP3       | MIXER N° 2                              | 1/8"        |
| HS-3921G | NP4       | WETTING UNIT SOLENOID VALVE N° 1        | 1/8"        |
| HS-3922G | NP5       | WETTING UNIT SOLENOID VALVE N° 2        | 1/8"        |
| HS-3931A | NP6       | TANK FILL VALVE N° 1                    | 1/8"        |
| HS-3932A | NP7       | TANK FILL VALVE N° 2                    | 1/8"        |
| HS-3931G | NP8       | POLYMER OUTLET VALVE N° 1               | 1/8"        |
| HS-3932G | NP9       | POLYMER OUTLET VALVE N° 2               | 1/8"        |

|               |  |
|---------------|--|
| DESIGNED SS   |  |
| DRAWN STAFF   |  |
| CHECKED 10/1  |  |
| APPROVED 10/1 |  |
| DATE 5-85     |  |



MOLZEN-CORBIN

STANLEY CONSULTANTS

A JOINT VENTURE

NONE

GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO

SOLIDS HANDLING FACILITIES

PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES

PANELBOARDS, PANEL DETAILS

M-C NO. 832221

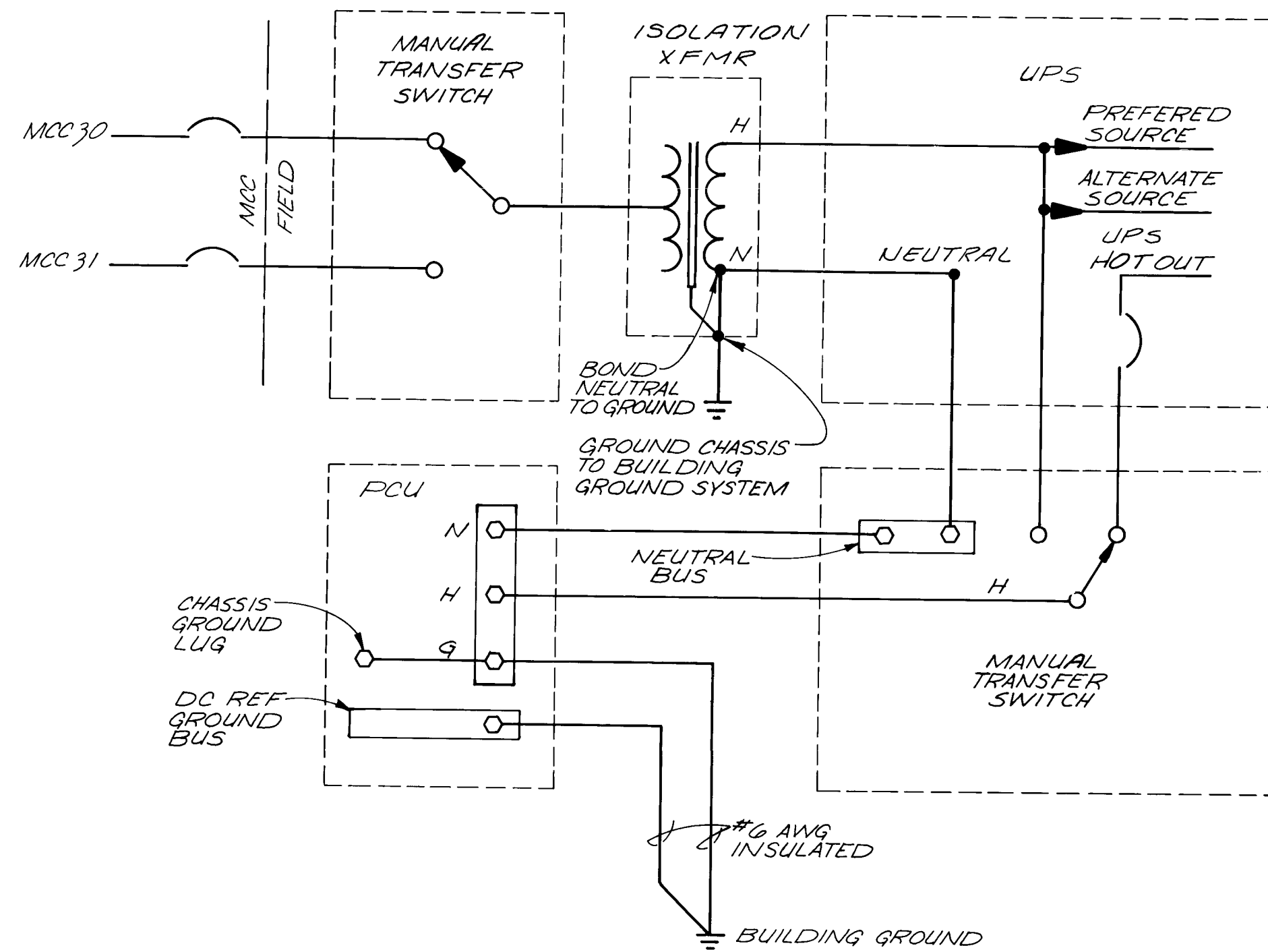
E-14 105 of 112

SC NO.



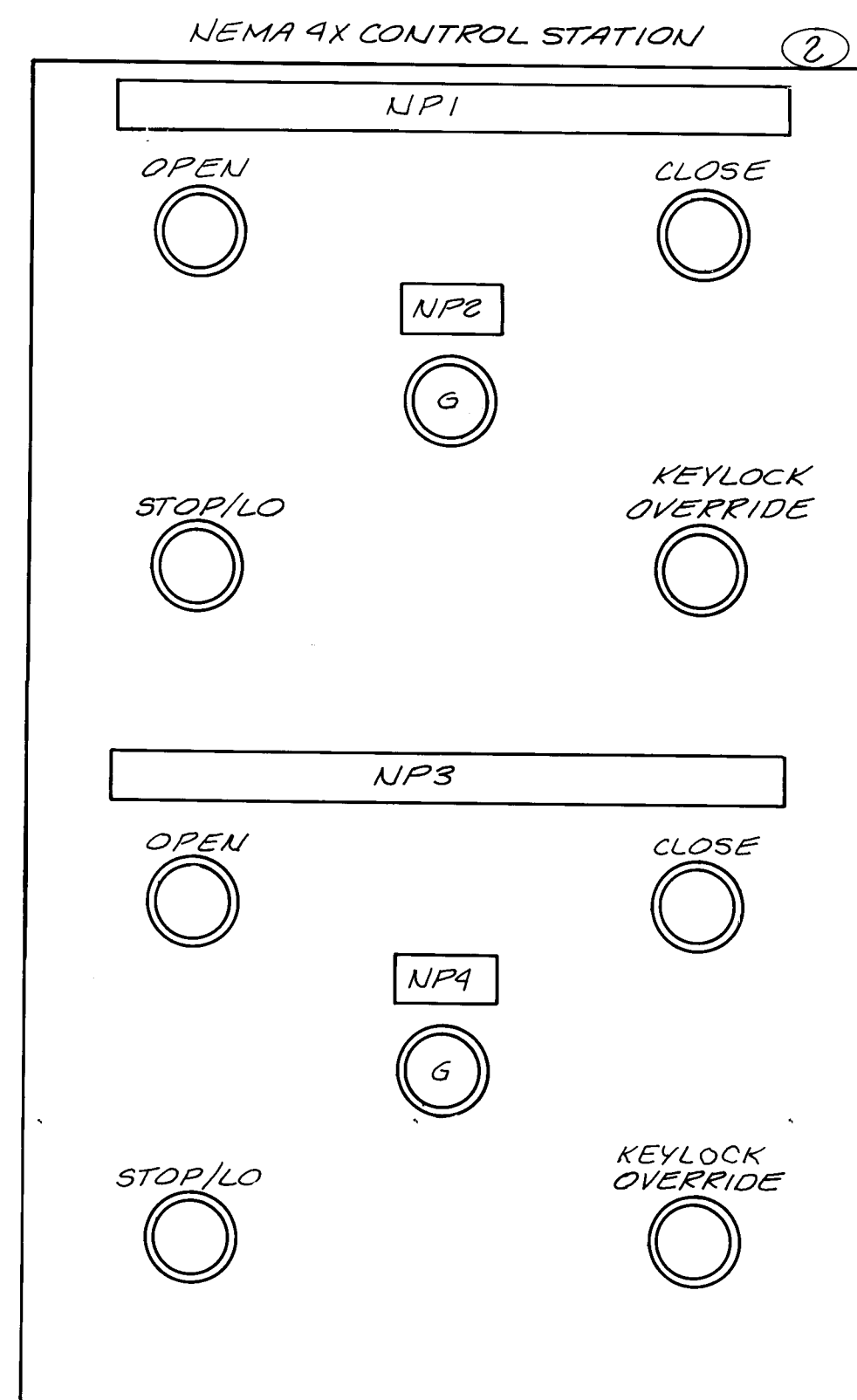
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26 36 94 105 88





**POWER & GROUNDING DETAIL**  
**PCU-12 & ASSOCIATED EQUIPMENT**

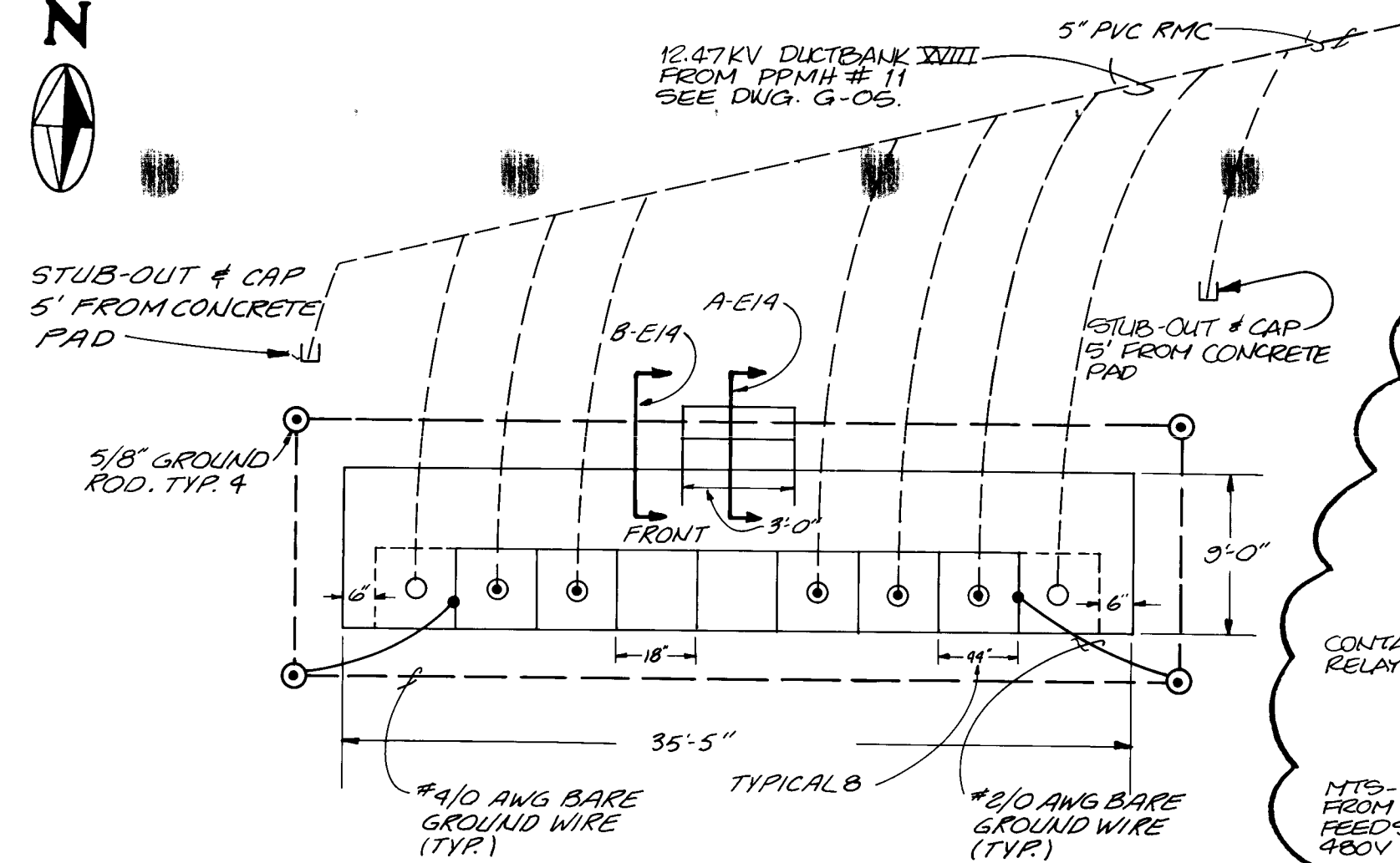
NO SCALE



**BIN GATE CONTROL PANEL**

NO SCALE

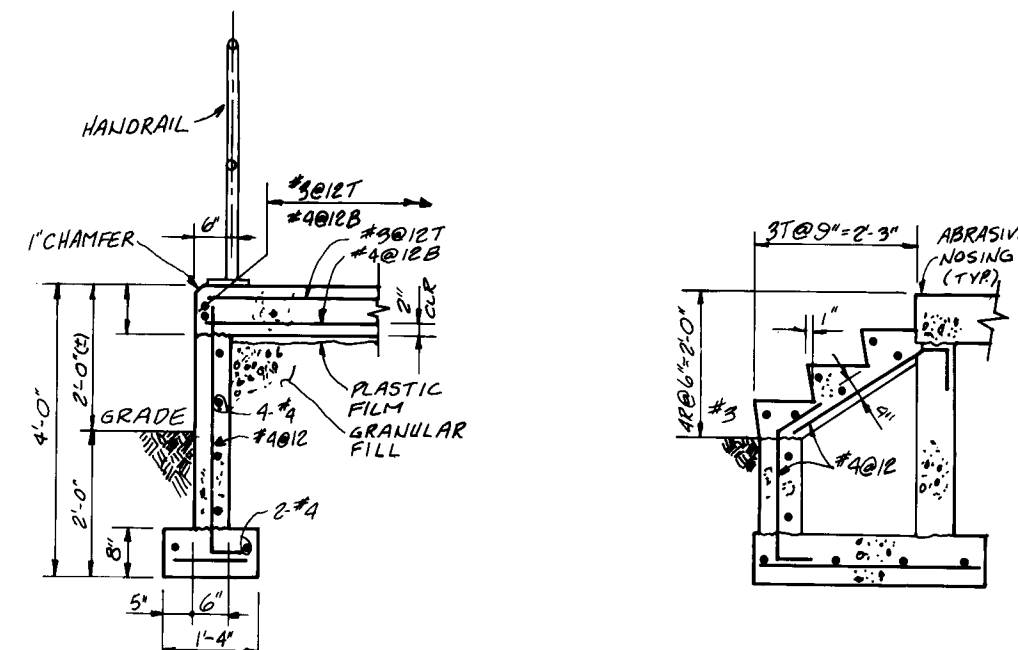
| NAMEPLATE | ENGRAVING                          | LETTER SIZE |
|-----------|------------------------------------|-------------|
| NP1       | NORTH BIN GATE CONTROLS<br>FV-3963 | 1/2"        |
| NP2       | BIN READY NL-3963C                 | 1/8"        |
| NP3       | SOUTH BIN GATE CONTROLS<br>FV-3964 | 1/2"        |
| NP4       | BIN READY NL-3964C                 | 1/8"        |



**5th AVE. SWITCHING STATION**

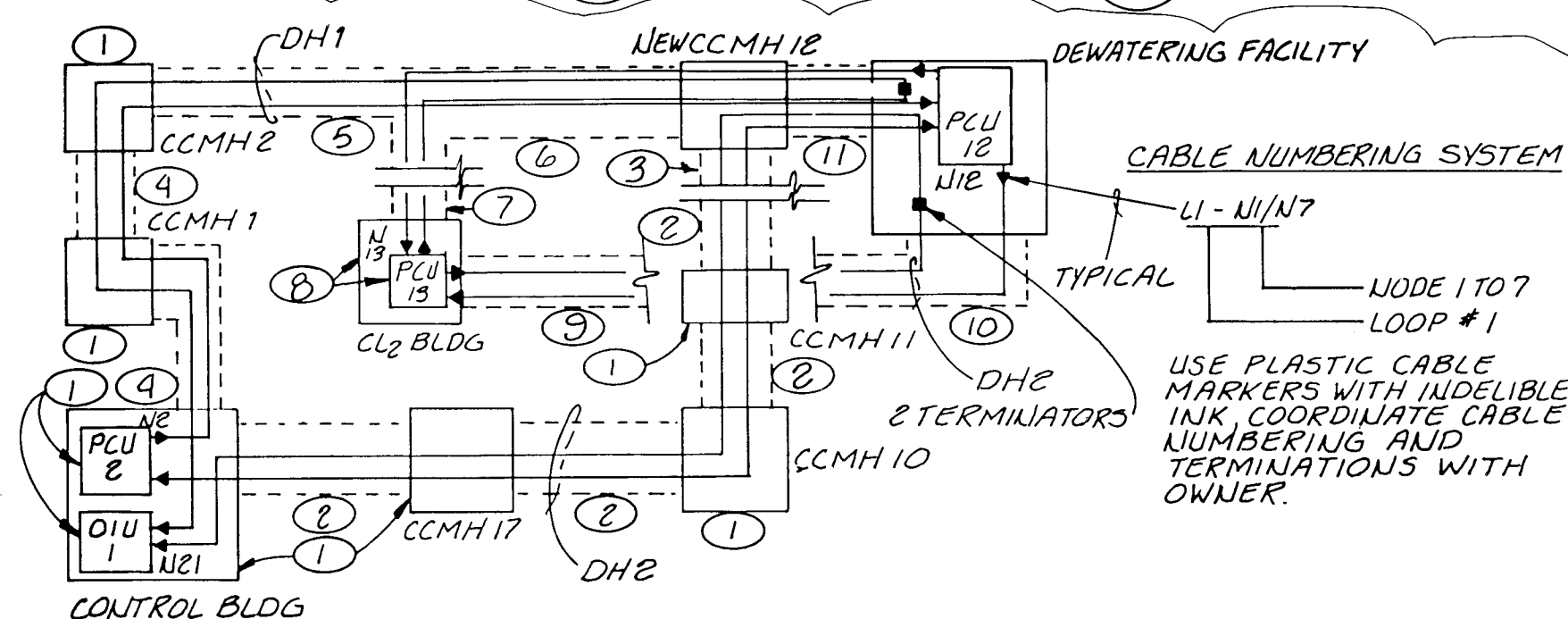
NO SCALE

FOR LOCATION, SEE  
DRAWING NO. G-05.



**SECTION E-14**  
NO SCALE

**SECTION E-14**  
NO SCALE



**NOTES**

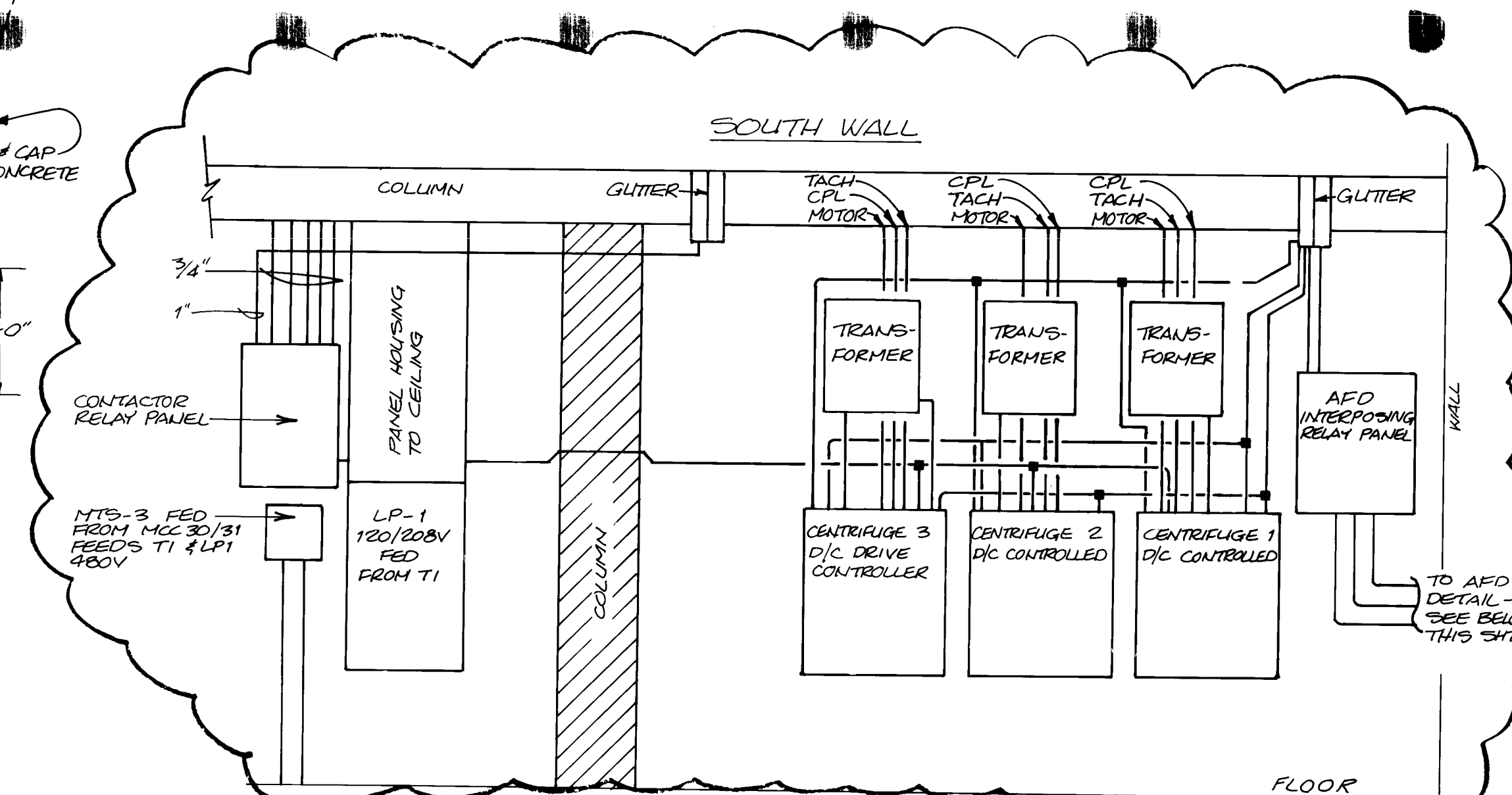
- EXISTING
- DUCT BANK; EXISTING. DATA HIGHWAY 2 CABLES (DH2); THIS CONTRACT.
- DUCT BANK AND DH2; THIS CONTRACT.
- DUCT BANK; EXISTING. DH1: LIQUID SYSTEMS RENOVATION (LSR) CONTRACT.
- DUCT BANK; THIS CONTRACT. DH1: LSR CONTRACT.
- DUCT BANK; THIS CONTRACT. OIU1 TO PCU12 PORTION OF DH1: LSR CONTRACT.
- DUCT BANK AND PCU12 TO PCU13 PORTION OF DH1: LSR CONTRACT.
- LSR CONTRACT.
- DUCT BANK AND PCU12 TO PCU13 PORTION OF DH2: LSR CONTRACT.
- DUCT BANK; THIS CONTRACT. PCU12 TO PCU13 PORTION OF DH2: LSR CONTRACT.
- DUCT BANK AND DH2; THIS CONTRACT. DH1 CABLE: LSR CONTRACT. INSTALLATION OF DH1: THIS CONTRACT. DH1 & DH2 IN SAME CONDUIT.

**GENERAL NOTES**

- EACH DH=2 COAXIAL CABLE, SECTION 16120.
- NO SPLICES ALLOWED.
- ALL TERMINATIONS AND INSTALLATIONS TO DH: THIS CONTRACT. CONNECTION TO PCU/OIU: OWNER.
- SHOW CONSEQUENTIAL CHANGES TO DUCT BANK FILL INFORMATION ON RECORD DRAWINGS.
- BOTH HIGHWAYS SHALL BE CONNECTED TO PCU 2 (EXISTING) OIU 1 (EXISTING), PCU 12, AND PCU 13 (NOT IN THIS CONTRACT) ON THE SAME DAY. COORDINATE CLOSELY WITH CITY AND WITH THE CONTRACTOR FURNISHING PCU 13 TO ENSURE TIMELY AND SMOOTH INSTALLATION AND CONNECTION OF HIGHWAYS.

**DATA HIGHWAY LOOP CONNECTION DETAIL**

NO SCALE

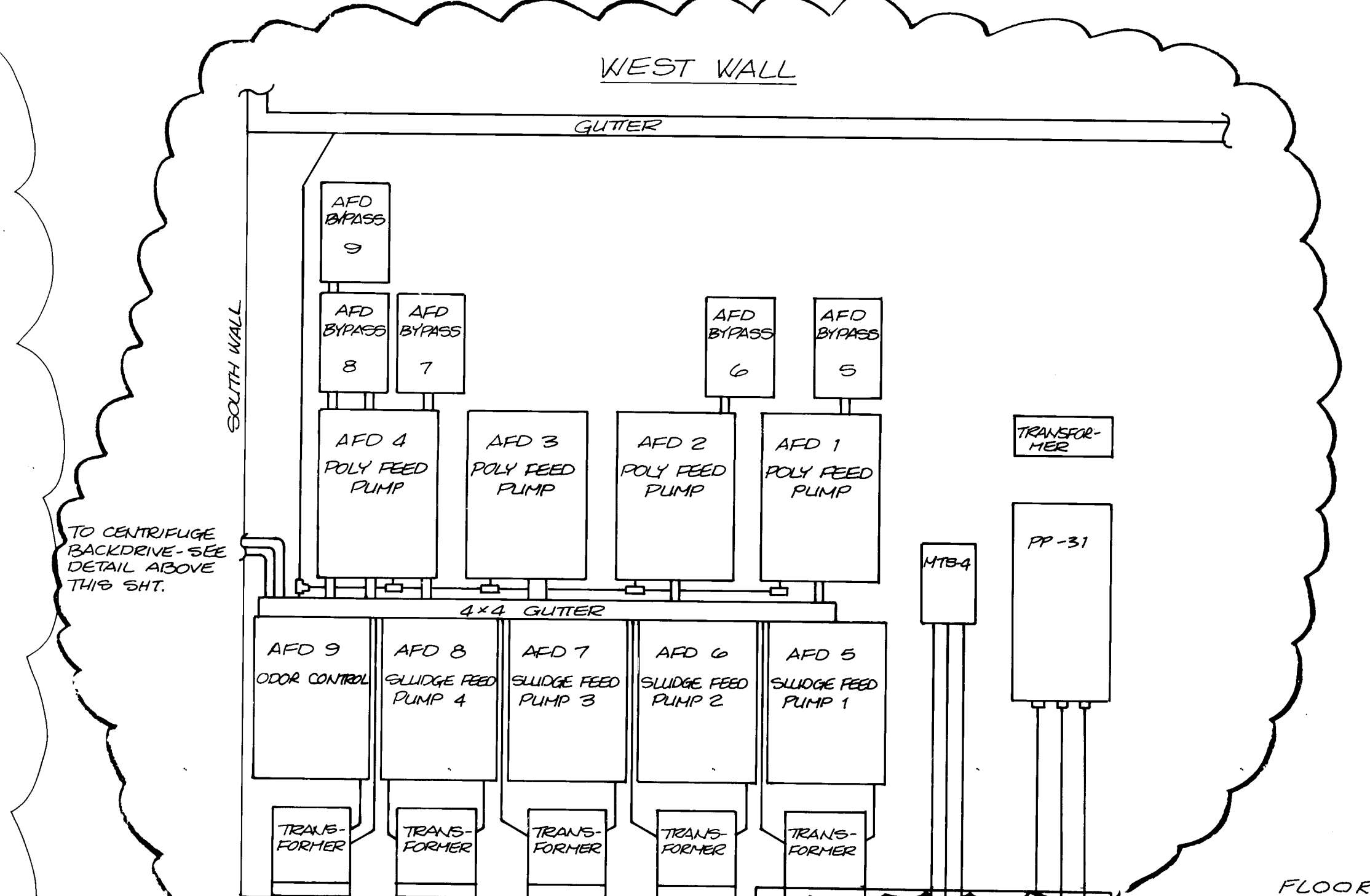


**CENTRIFUGE BACKDRIVE DETAIL**

NO SCALE

**NOTES**

- 24" X 20" X 10" NEMA TYPE 12 ENCLOSURE WITH BACK PANEL 21" X 17" HOFFMAN BULLETIN A-12 CAT. NO. A-242010LP WITH A-24P20 OR ENGINEER APPROVED EQUAL.
- 20 1/4" X 16 5/8" X 7 7/8" CONTROL ENCLOSURE, NEMA 4X WITH BACK PANEL 17" X 13" ROBROY CAT. NO. N20166 OR ENGINEER APPROVED EQUAL.



**AFD DETAIL**

NO SCALE

**RECORD DRAWING**

DATE: AUG. 1988 DRAFTED BY: MCA

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

|             |           |
|-------------|-----------|
| DESIGNED 22 | DATE 5-85 |
| DRAWN STAFF |           |
| CHECKED 10  |           |
| APPROVED 10 |           |
| APPROVED 10 |           |
| DATE 5-85   |           |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

AS SHOWN  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
ELECTRICAL DETAILS

M-C NO. 832221

**E-15** 106 of 112

SC NO.



# MOTOR CONTROL CENTER SCHEDULE # 30

| MCC & UNIT NUMBER | REF NUMBER | UNIT NAMEPLATE |                 |            | HP OR KVA | FLA | STARTER |      | CB/MCP |      | AUX MS CONTACTS |      | SCHEM NO. | NOTES |
|-------------------|------------|----------------|-----------------|------------|-----------|-----|---------|------|--------|------|-----------------|------|-----------|-------|
|                   |            | FIRST LINE     | SECOND LINE     | THIRD LINE |           |     | SIZE    | TYPE | FRAME  | TRIP | N.O.            | N.C. |           |       |
| 1A                |            | SPACE          |                 |            |           |     |         |      |        |      |                 |      |           |       |
| 1B                | E-21       | KWH            | METERING        |            |           |     |         |      |        |      |                 |      |           | (1)   |
| 1C                | E-05       | INCOMING       | FEEDER          |            |           |     |         |      |        |      |                 |      |           |       |
| 2A                | E-06       | CENTRIFUGE     | MANDRIVE #1     |            | 150       | 150 | 5       | *    | 400    | 250  | 7               | 2    | 17        | (5)   |
| 3AL               | E-05       | TANK FILL      | WATER VALVE #1  | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 9         |       |
| 3AR               | E-06       | TRANSFORMER    | FEEDER TO       | U.P.S.     |           |     |         |      | 150    | 15   | -               | -    | -         |       |
| 3BL               | E-06       | FLUSHING       | WATER VALVE #1  | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 10        |       |
| 3BR               | E-05       | DILUTION       | WATER VALVE #2  | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 9         |       |
| 3CL               | E-05       | SLUDGE         | FEED PUMP #1    | FEEDER     | 7 1/2     | 11  | -       | -    | 150    | 20   | -               | -    | 7         |       |
| 3CR               | E-06       | CENTRIFUGE     | BACKDRIVE #1    | FEEDER     | 25        | 11  | -       | -    | 150    | 40   | -               | -    | 19        |       |
| 3DL               | E-05       | SLUDGE         | FEED PUMP #2    | FEEDER     | 7 1/2     | 11  | -       | -    | 150    | 20   | -               | -    | 7         |       |
| 3DR               | E-06       | CENTRIFUGE     | BACKDRIVE #2    | FEEDER     | 25        | 15  | -       | -    | 150    | 40   | -               | -    | 19        |       |
| 3E                | E-06       | LUBE           | OIL             | PUMP #1    | 1/4       | 1   | 1       | FVNR | 3      | 8    | 5               | -    | 18        |       |
| 3F                | E-06       | SCREWFEEDER #1 |                 |            | 1/2       | 1   | 1       | FVNR | 3      | 8    | 6               | -    | 1         |       |
| 4A                | E-06       | CENTRIFUGE     | MANDRIVE #2     |            | 150       | 150 | 5       | *    | 400    | 250  | 7               | 2    | 17        | (5)   |
| 5A                | E-06       | POWER ROOF     | EXHAUSTER #1    |            | 1         | 1.8 | 1       | FVNR | 3      | 18   | 5               | -    | 12        |       |
| 5BL               | E-06       | FLUSHING       | WATER VALVE #2  | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 10        |       |
| 5BR               | E-05       | DILUTION       | WATER VALVE #2  | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 9         |       |
| 5C                | E-05       | POLYMER        | MIXER #1        |            | 2         | 3.4 | 1       | FVNR | 7      | 30   | 5               | -    | 11        |       |
| 5DL               | E-05       | TRANSFORMER    | FEEDER TO       | LTG. PNL.  | 45KVA     | 54  | -       | -    | 150    | 70   | -               | -    | -         |       |
| 5DR               | E-05       | TRANSFORMER    | FEEDER TO POLY. | FEED PUMPS | 15KVA     | 18  | -       | -    | 150    | 25   | -               | -    | -         |       |
| 5E                | E-06       | BLOWER #1      |                 |            | 2         | 3.4 | 1       | FVNR | 7      | 30   | 5               | -    | 13        |       |
| 5F                | E-06       | LUBE           | OIL             | PUMP #2    | 1/4       | 1   | 1       | FVNR | 3      | 8    | 5               | -    | 18        | (4)   |
| 6AL               | E-05       | NORTH          | BIN GATE        | FEEDER     | 1 1/2     | 2.6 | 1       | FVNR | 3      | 8    | -               | -    | 15        |       |
| 6AR               |            | POLYMER        | OUTLET VALVE    | # FEEDER   | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 9         |       |
| 6B                | E-05       | CENTRATE       | SAMPLE          | PUMP #1    | 1/8       | 1   | 1       | FVNR | 3      | 8    | 1               | -    | 2         |       |
| 6C                | E-06       | DUST           | COLLECTOR #1    |            | 1/2       | 1   | 1       | FVNR | 3      | 8    | 5               | -    | 13        |       |
| 6D                | E-05       | CENTRATE       | SAMPLE          | PUMP #2    | 1/8       | 1   | 1       | FVNR | 3      | 8    | 1               | -    | 2         |       |
| 6E                | E-06       | DISTRIBUTION   | CONVEYOR        |            | 3.4       | 1.4 | 1       | FVNR | 3      | 13   | 6               | 2    | 20        |       |

## GENERAL NOTES

- NAMEPLATE NOT REQUIRED FOR "SPACE". UNLESS NOTED OTHERWISE, "SPACE" SHALL BE A 12" SPACE SUITABLE FOR THE FUTURE INSTALLATION OF A SIZE 2 STARTER OR A 80A FEEDER.
- HORSEPOWERS, STARTER SIZES, SWITCH AMPACITY, AND FUSE SIZES ARE BASED ON PLANT EQUIPMENT AS DESIGNED. ADJUST TO MATCH EQUIPMENT ACTUALLY SUPPLIED.
- FUSE SIZES ARE BASED ON THE RECOMMENDATIONS OF THE BUSBMAN COMPANY FOR THEIR FIRST FUSE. SUBMITTALS OF MCC SCHEDULES SHALL SHOW THE RECOMMENDED FUSE SIZES FOR THE FUSES ACTUALLY SUPPLIED.
- FURNISH ACTUAL HP OF EACH MOTOR TO MCC MANUFACTURER BEFORE MCC SUBMITTALS ARE PREPARED. MCC MANUFACTURER FURNISH EQUIPMENT TO MATCH. SIZE 1 IS MINIMUM STARTER SIZE.

## NOTES

- CT'S, PT'S, KWH METER, K<sub>T</sub> TRANSDUCER, VOLTMETER SWITCH (VS), VOLTMETER (VM), AMPMETER SWITCH (AS), AMPMETER (AM).
- SIZE AS REQUIRED FOR EQUIPMENT SUPPLIED.
- PROVIDE FUSES FOR EQUIPMENT SUPPLIED.
- OVERSIZED CONTROL TRANSFORMER.
- PROVIDE 150:5 CT ON PHASE C. SEE SCHEMATIC.

REFERENCE MCC DRAWING D-2216-1-2

\* REDUCED VOLTAGE WYE - DELTA.

| MCC & UNIT NUMBER | REF NUMBER | UNIT NAMEPLATE  |             |            | HP OR KVA | FLA | STARTER |      | CB/MCP |      | AUX MS CONTACTS |      | SCHEM NO. | NOTES        |
|-------------------|------------|-----------------|-------------|------------|-----------|-----|---------|------|--------|------|-----------------|------|-----------|--------------|
|                   |            | FIRST LINE      | SECOND LINE | THIRD LINE |           |     | SIZE    | TYPE | FRAME  | TRIP | N.O.            | N.C. |           |              |
| 6F                |            | SPACE           |             |            |           |     |         |      |        |      |                 |      |           |              |
| 7A                | E-06       | CE              | HOT WATER   | PUMP #1    | 1 1/2     | 2.6 | 1       | FVNR | 3      | 18   | 3               | -    | 25        |              |
| 7B                | E-06       | MANHOLE PUMP    | FEEDER      |            |           |     |         |      | 20CB   |      |                 |      |           |              |
| 7C                |            | SPARE           |             |            |           |     |         |      | 20CB   |      |                 |      |           |              |
| 7D                | E-07       | INTAKE          | FAN #1      |            | 3         | 4.8 | 1       | FVNR | 7      | 48   | 5               | -    | 12        |              |
| 7E                |            |                 |             |            |           |     |         |      |        |      |                 |      |           |              |
| 8A                | E-18       | MASTER TERMINAL | INTERPOSING | RELAYS     |           |     |         |      |        |      |                 |      |           | FULL SECTION |

## RECORD DRAWING

DATE: AUG. 1988  
DRAFTED BY: MCA

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION OBTAINED FROM THE RECORDS OF THE CITY OF ALBUQUERQUE, NEW MEXICO. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.



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|--------------|-------------|--------------|------------|
| DESIGNED: SS | CHECKED: SS | APPROVED: SS | DATE: 5-85 |
| 7-23-85      | CUBICLE 7A  | REVISIONS    | APPROVED   |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-2, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
MCC # 30 SCHEDULE  
E-11



MOTOR CONTROL CENTER SCHEDULE # 31

| MCC & UNIT NUMBER | REF NUMBER | UNIT NAMEPLATE   |               |                 | HP OR KVA | FLA | STARTER |      | CB/MCP |      | AUX MS CONTACTS |      | SCHEM NO. | NOTES |
|-------------------|------------|------------------|---------------|-----------------|-----------|-----|---------|------|--------|------|-----------------|------|-----------|-------|
|                   |            | FIRST LINE       | SECOND LINE   | THIRD LINE      |           |     | SIZE    | TYPE | FRAME  | TRIP | N.O.            | N.C. |           |       |
| 1A                |            | SPACE            |               |                 |           |     |         |      |        |      |                 |      |           |       |
| 1B                | E-21       | KWH              | METERING      |                 |           |     |         |      |        |      |                 |      |           | ①     |
| 1C                | E-05       | INCOMING         | FEEDER        |                 |           |     |         |      |        |      |                 |      |           |       |
| 2A                | E-06       | CENTRIFUGE       | MAIN DRIVE #3 |                 | 150       | 180 | 5       | *    | 400    | 250  | 7               | 2    | 17        | ③     |
| 3A                |            | SPACE            |               |                 |           |     |         |      |        |      |                 |      |           |       |
| 3B                | E-06       | DUST             | COLLECTOR #2  |                 | 1/2       | 1   | 1       | FVNR | 3      | 8    | 5               | -    | 13        |       |
| 3C                | E-06       | LUBE, OIL        | PUMP #3       |                 | 1/2       | 1   | 1       | FVNR | 3      | 8    | 5               | -    | 18        |       |
| 3DL               | E-05       | SLUDGE           | FEED PUMP #3  | FEEDER          | 7 1/2     | 11  | -       | -    | 150    | 20   | -               | -    | 7         |       |
| 3DR               | E-06       | CENTRIFUGE       | BACK DRIVE #3 | FEEDER          | 25        | -15 | -       | -    | 150    | 40   | -               | -    | 19        |       |
| 3EL               | E-05       | SLUDGE           | FEED PUMP #4  | FEEDER          | 7 1/2     | 11  | -       | -    | 150    | 20   | -               | -    | 7         |       |
| 3ER               | E-05       | SLUDGE           | FEED VALVE    | FEEDER          | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 10        |       |
| 3FL               | E-05       | SOUTH            | BIN GATE      | FEEDER          | 1 1/2     | 2.6 | -       | -    | 150    | 15   | -               | -    | 15        |       |
| 3FR               |            | POLYMER          | OUTLET VALVE  | #1 FEEDER       | 1         | 1.8 | -       | -    | 150    | 15   | -               | -    | 9         |       |
| 4A                | E-06       | POLYMER          | MIXER #2      |                 | 2         | 3.4 | 1       | FVNR | 7      | 30   | 5               | -    | 11        |       |
| 4BL               | E-06       | TRANSFORMER      | FEEDER TO     | U.P.S.          |           |     |         |      | 150    | 15   |                 |      |           |       |
| 4BR               | E-05       | ODOR CONTROL     | BLOWER #1     | FEEDER          | 5         | 7.6 | -       | -    | 150    | 15   | -               | -    | 6         |       |
| 4CL               | E-05       | TRANSFORMER      | FEEDER TO     | LTG. PNL.       | 45KVA     | 54  | -       | -    | 150    | 70   | -               | -    |           |       |
| 4CR               | E-05       | TRANSFORMER      | FEEDER TO     | POLY. FEED PUMP | 15KVA     | 18  | -       | -    | 150    | 25   | -               | -    |           |       |
| 4D                | E-05       | CENTRATE         | SAMPLE        | PUMP #3         | 1/3       | 1   | 1       | FVNR | 3      | 8    | 1               | -    | 2         |       |
| 4E                | E-06       | INCLINED         | CONVEYOR      |                 | 2         | 3.4 | 1       | FUR  | 7      | 30   | 6               | 2    | 16        |       |
| 4F                |            | SPACE            |               |                 |           |     |         |      |        |      |                 |      |           |       |
| 5A                | E-06       | SCREW FEEDER     | #2            |                 | 1/2       | 1   | 1       | FVNR | 3      | 8    | 6               | -    | 1         |       |
| 5BL               | E-06       | HOT WATER        | WASH UNIT     | FEEDER          | 7 1/2     | 11  | -       | -    | 150    | 15   | -               | -    |           |       |
| 5BR               |            | SPACE            |               |                 |           |     |         |      |        |      |                 |      |           |       |
| 5C                | E-05       | ODOR CONTROL     | BLOWER #2     |                 | 5         | 7.6 | 1       | FVNR | 15     | 68   | 5               | -    | 12        |       |
| 5D                | E-06       | BLOWER #2        |               |                 | 2         | 3.4 | 1       | FVNR | 7      | 30   | 5               | -    | 13        |       |
| 5E                | E-06       | HOT WATER        | CIRCULATION   | PUMP #2         | 3         | 4.8 | 1       | FVNR | 7      | 42   | 5               | -    | 14        | ④     |
| 5FL               | E-06       | BRIDGE           | CRANE         | FEEDER          | 25        | 34  | -       | -    | 150    | 40   | -               | -    |           |       |
| 5FR               | E-07       | AIR CONDITIONING | UNIT          | FEEDER          | 3/4       | 1.4 | -       | -    | 150    | 20   | -               | -    | 22        |       |

| MCC & UNIT NUMBER | REF NUMBER | UNIT NAMEPLATE    |                |            | HP OR KVA | FLA | STARTER |      | CB/MCP |      | AUX MS CONTACTS |      | SCHEM NO. | NOTES        |
|-------------------|------------|-------------------|----------------|------------|-----------|-----|---------|------|--------|------|-----------------|------|-----------|--------------|
|                   |            | FIRST LINE        | SECOND LINE    | THIRD LINE |           |     | SIZE    | TYPE | FRAME  | TRIP | N.O.            | N.C. |           |              |
| 6A                |            | SPACE             |                |            |           |     |         |      |        |      |                 |      |           |              |
| 6aB               | E-06       | FLUSHING          | WATER VALVE #3 | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   |                 |      | 10        |              |
| 6C                | E-05       | DILUTION          | WATER VALVE #3 | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   |                 |      | 9         |              |
| 6CL               | E-05       | ROLL-UP           | DOOR           | FEEDER     | 1/2       | 2.6 | -       | -    | 150    | 15   |                 |      | -         |              |
| 6CR               | E-05       | TANK FILL         | VALVE #2       | FEEDER     | 1         | 1.8 | -       | -    | 150    | 15   |                 |      | 9         |              |
| 6D                | E-07       | INTAKE            | FAN #2         |            | 3         | 4.8 | 1       | FVNR | 7      | 42   | 5               | -    | 12        |              |
| 6E                | E-06       | POWER ROOF        | EXHAUSTER      | #2         | 1         | 1.8 | 1       | FVNR | 3      | 18   | 5               | -    | 12        |              |
| 6F                |            | INCLINED CONVEYOR | SOFT START     | MODULE     |           |     |         |      |        |      |                 |      |           |              |
| 7A                | E-18       | MASTER TERMINALS  | # INTERPOSING  | RELAYS     |           |     |         |      |        |      |                 |      |           | FULL SECTION |

GENERAL NOTES

- NAMEPLATE NOT REQUIRED FOR "SPACE". UNLESS NOTED OTHERWISE, "SPACE" SHALL BE A 12" SPACE SUITABLE FOR THE FUTURE INSTALLATION OF A SIZE 2 STARTER OR A 60A FEEDER.
- HORSEPOWERS, STARTER SIZES, SWITCH AMPACITY, AND FUSE SIZES ARE BASED ON PLANT EQUIPMENT AS DESIGNED. ADJUST TO MATCH EQUIPMENT ACTUALLY SUPPLIED.
- FUSE SIZES ARE BASED ON THE RECOMMENDATIONS OF THE BUSSMAN COMPANY FOR THEIR FRMR FUSE. SUBMITTALS OF MCC SCHEDULES SHALL SHOW THE RECOMMENDED FUSE SIZES FOR THE FUSES ACTUALLY SUPPLIED.
- FURNISH ACTUAL HP OF EACH MOTOR TO MCC MANUFACTURER BEFORE MCC SUBMITTALS ARE PREPARED. MCC MANUFACTURER FURNISH EQUIPMENT TO MATCH. SIZE 1 IS MINIMUM STARTER SIZE.

NOTES

- CT'S, PT'S, KWH METER, KW TRANSDUCER, VOLTMETER SWITCH (VS), VOLTMETER (VM), AMMETER SWITCH (AS), AMMETER (AM).
- SIZE AS REQUIRED FOR EQUIPMENT SUPPLIED.
- PROVIDE FUSES FOR EQUIPMENT SUPPLIED.
- OVERSIZED CONTROL TRANSFORMER.
- PROVIDE 150:5 CT ON PHASE C. SEE SCHEMATIC.

\* REDUCED VOLTAGE WYE - DELTA.

REFERENCE MCC DRAWING D-2216-2-2

RECORD DRAWING

DATE: AUG. 1988  
DRAFTED BY: MCA  
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.



|    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 26 | 3 | 6 | 9 | 4 | 1 | 0 | 8 | 8 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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| DESIGNED | SS    |
| DRAWN    | STAFF |
| CHECKED  | HA    |
| APPROVED | HA    |
| DATE     | 8-85  |

| NO. | DATE | REVISIONS | APPROVED |
|-----|------|-----------|----------|
|     |      |           |          |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

NONE  
GRAPHIC SCALE



CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

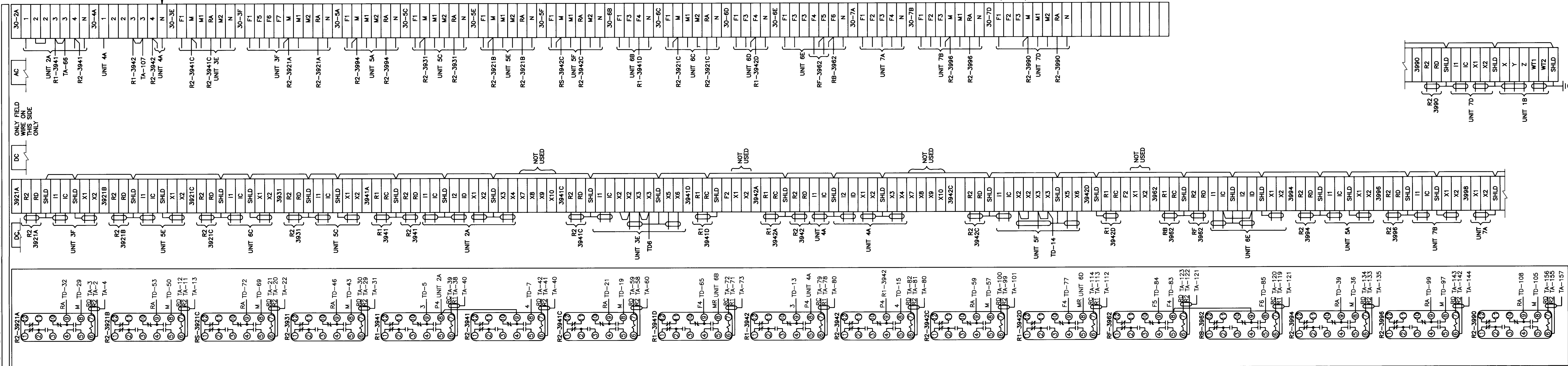
**INTERIM SLUDGE DEWATERING FACILITIES**  
MCC # 31 SCHEDULE

M-C NO. 832221  
**E-17** 108 of 112  
SC NO.

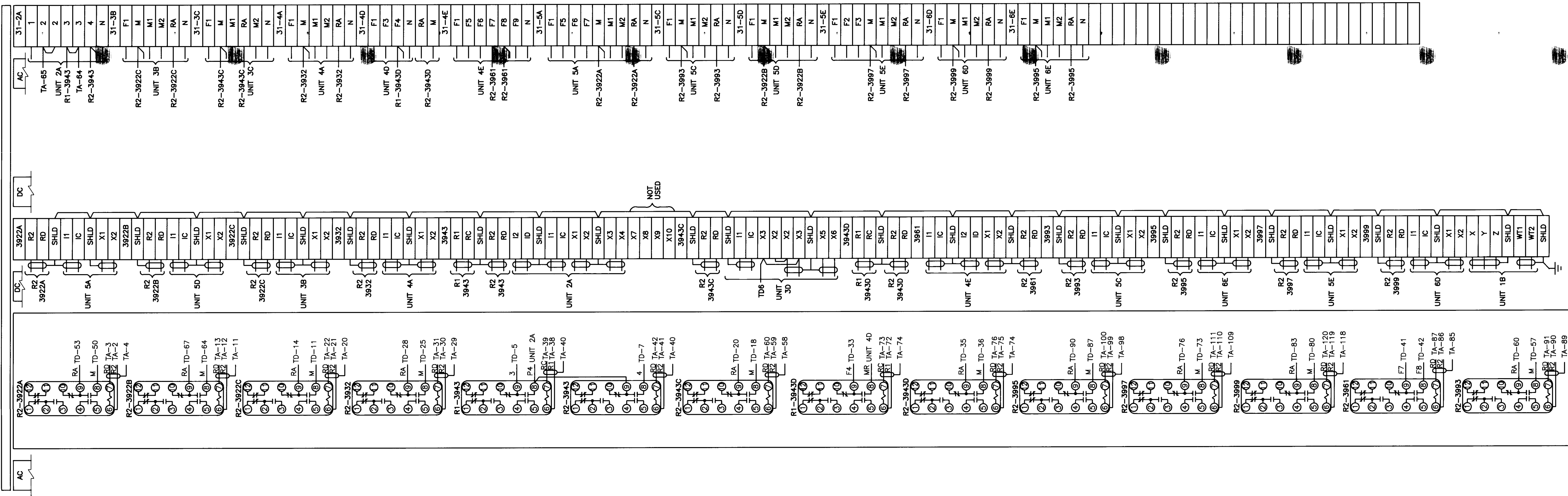


2 x 2 PLASTIC  
WIREWAY TYPICAL  
ALL VERTICAL

MCC 30 MASTER TERMINALS & INTERPOSING RELAYS



MCC 31 MASTER TERMINALS & INTERPOSING RELAYS



1. WIRING NOT SHOWN.
2. MAKE EACH TB AND VERTICAL WIREWAY FULL HEIGHT OF COMPARTMENT.
3. KEEP AC AND DC WIRING SEPARATED IN MASTER COMPARTMENT, AND THROUGHOUT THE MCC.
4. DRAWING IS MAINLY TO ILLUSTRATE OVERALL REQUIREMENTS. COMPLETE, DETAILED SUBMITTALS REQUIRED. GROUP ALL MASTER TERMINALS IN THIS SECTION, NONE REQUIRED OR ALLOWED IN ANY OTHER SECTIONS.

26 - 3694-109-88

| RECORD DRAWING                                                                                                                                                                                                                                 |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 88                                                                                                                                                                                                                               | DRAFTED BY:<br>MCA |
| THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. |                    |



REFERENCE MCC DRAWINGS 2D31455 SHEETS 33 AND 35

|                  |                |
|------------------|----------------|
| DESIGNED<br>SS   | STAFF          |
| DRAWN<br>SES     | SES            |
| CHECKED<br>SES   | SES            |
| APPROVED<br>DATE | MAY 1985       |
| NO.              | DATE           |
| 10/88            | RECORD DRAWING |
|                  | REVISIONS      |
|                  | APPROVED       |

 **MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

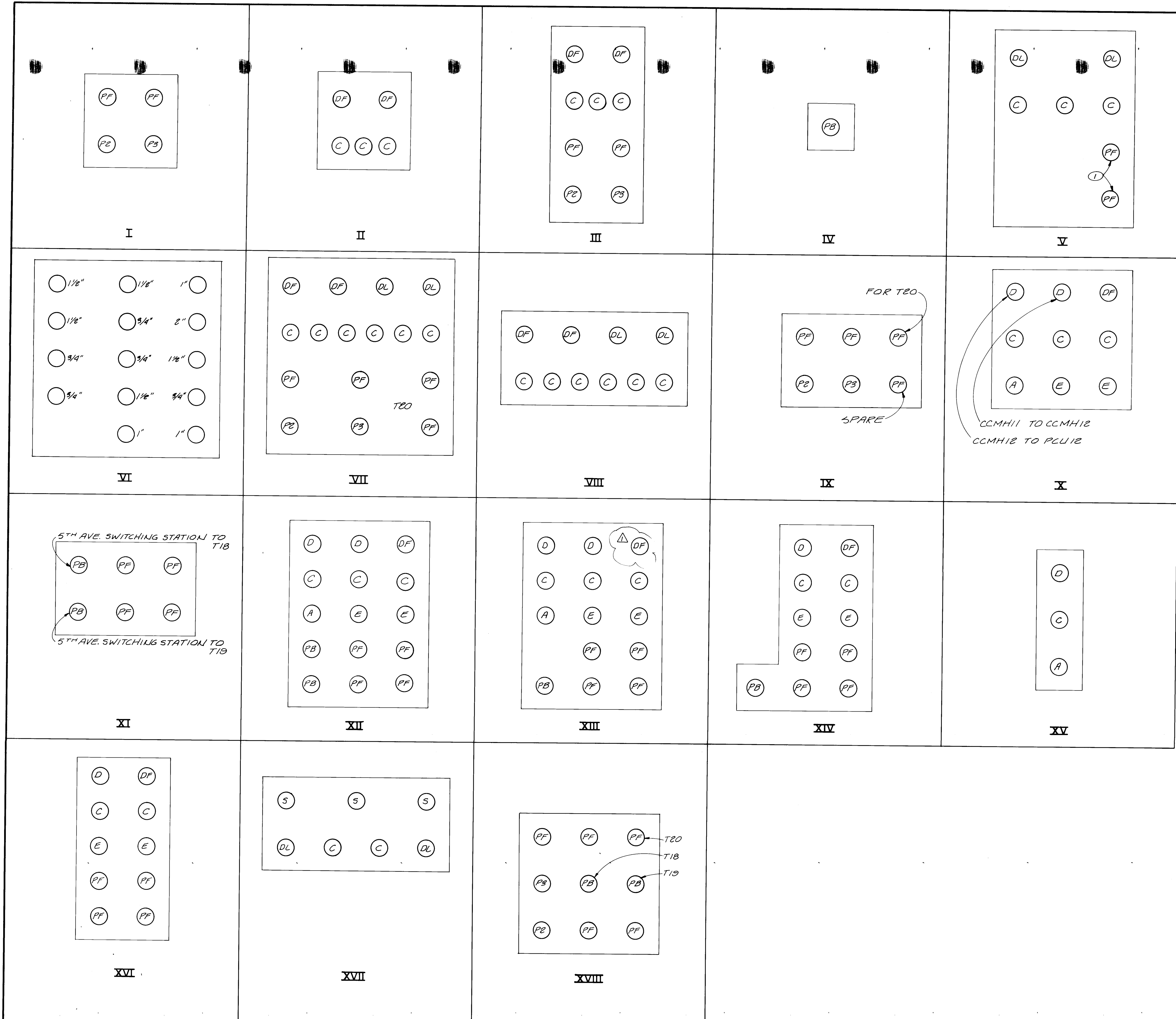
NONE  
GRAPHIC SCALE

 CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

INTERIM SLUDGE DEWATERING FACILITIES  
MCC TERMINAL BOARD

|         |            |
|---------|------------|
| M-C NO. | 832221     |
| E-18    | 109 OF 112 |
| SC NO.  |            |





NOTES

- 1. LEAVE 24" OF CONDUIT AND REBAR CLEAR OF CONCRETE AND CAP FOR FUTURE EAST END EXTENSION.

GENERAL NOTES

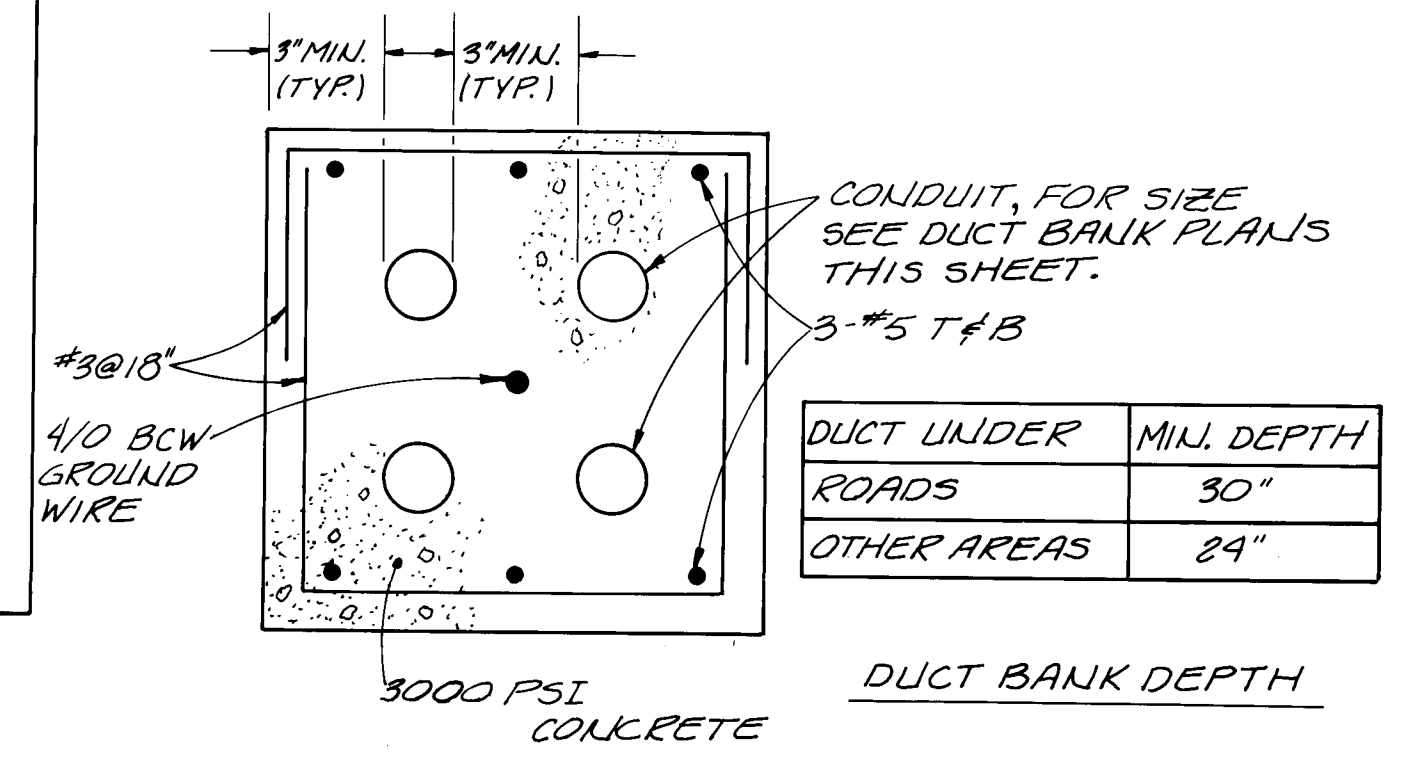
- 1. FOR LOCATIONS OF DUCT BANKS, SEE SHEETS 6-04, 6-05, 6-06.

| LETTER DESIGNATION | CONDUIT SIZE & TYPE | TYPE OF CIRCUIT         |
|--------------------|---------------------|-------------------------|
| A                  | 1" PVC              | ALARM FLOAT (1)         |
| E                  | 2" PVC              | FUTURE ELECTRICAL (2)   |
| C                  | 2" PVC              | CONTROL & INSTR. (2)    |
| D                  | 4" RMC              | DATA HIGHWAY (3)        |
| DL                 | 2" RMC              | DATA HIGHWAY LOOP (2)   |
| DF                 | 4" RMC              | DATA HIGHWAY FUTURE (2) |
| P2                 | 5" PVC              | PLANT PRIMARY - 2 (4)   |
| P3                 | 5" PVC              | PLANT PRIMARY - 3 (4)   |
| PF                 | 5" PVC              | FUTURE PRIMARY (2)      |
| PB                 | 5" PVC              | BRANCH PRIMARY (3)      |
| S                  | 3" PVC              | SECONDARY POWER (2)     |

- (1) 2 - TWISTED SHIELDED #16 PAIRS.
- CONDUIT: THIS CONTRACT. CABLE: NOT THIS CONTRACT.
- (3) 2 COAXIAL CABLES 16120 FOR D.H.1.
- (4) 3 - 500 MCM, 15KV AND 1 - #1/0 GROUND.
- (5) 3 #2, 15KV AND 1 - #2 GROUND.

DUCT BANK IDENTIFICATION SCHEDULE

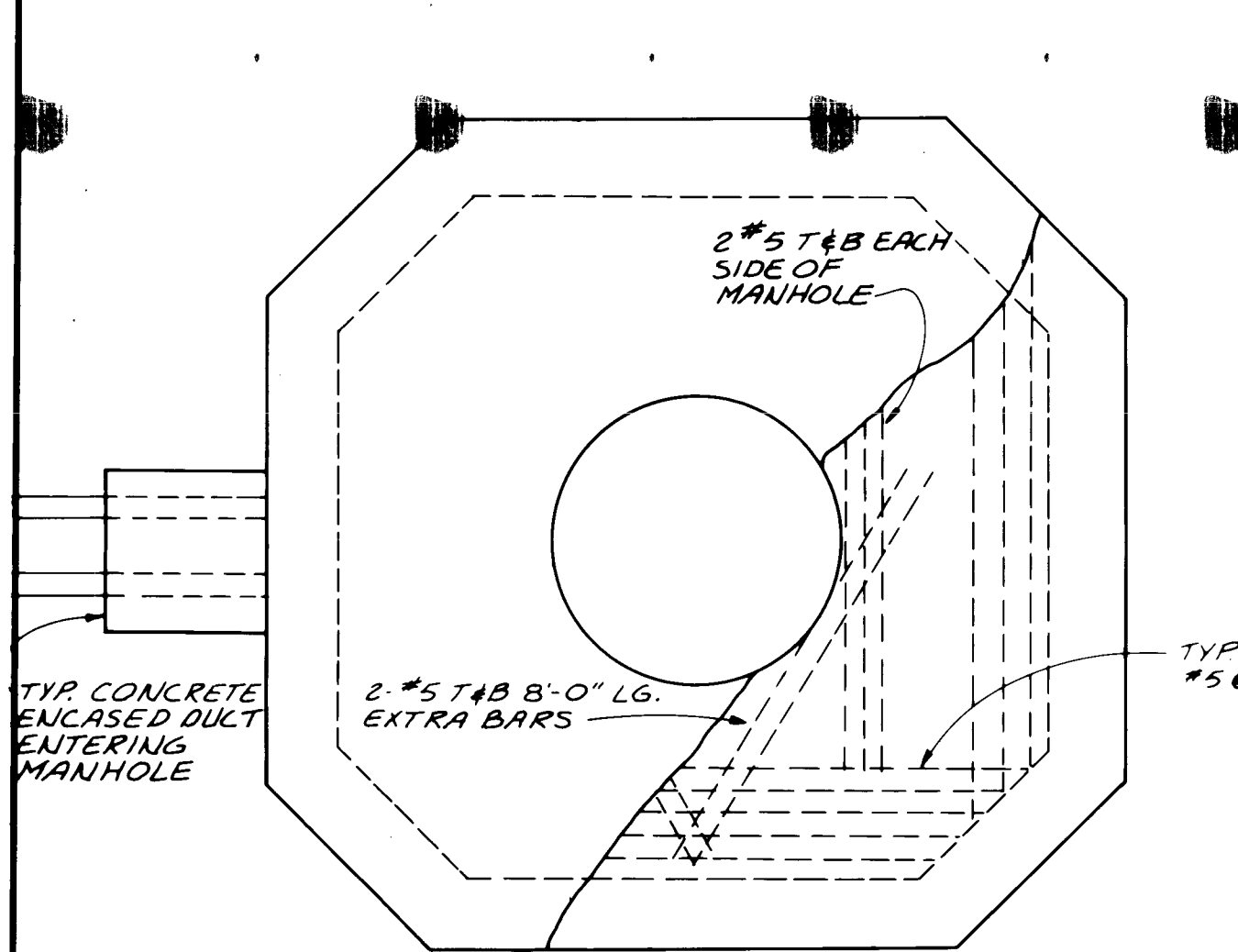
NO SCALE



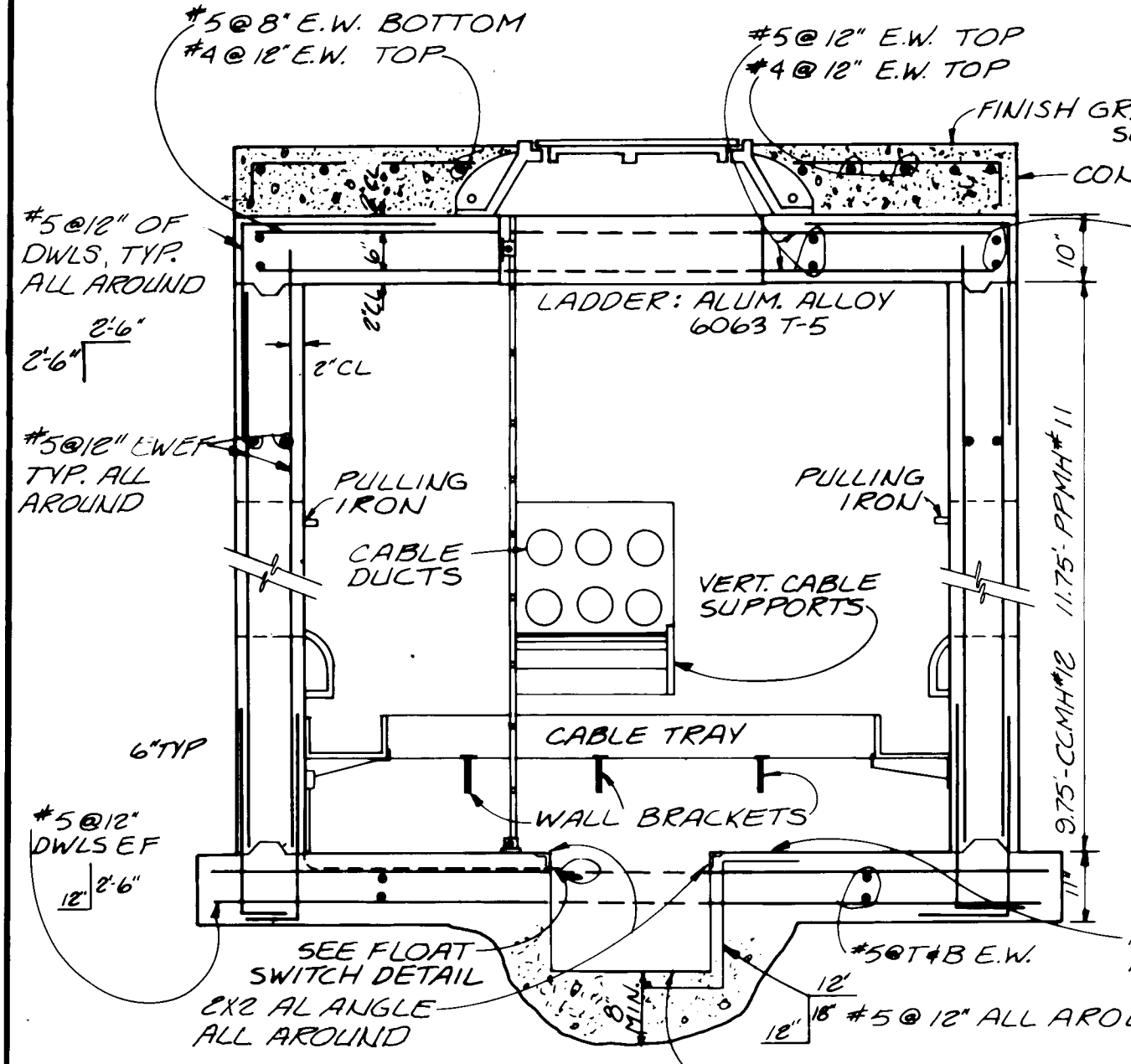
DUCT BANK DETAIL

NO SCALE

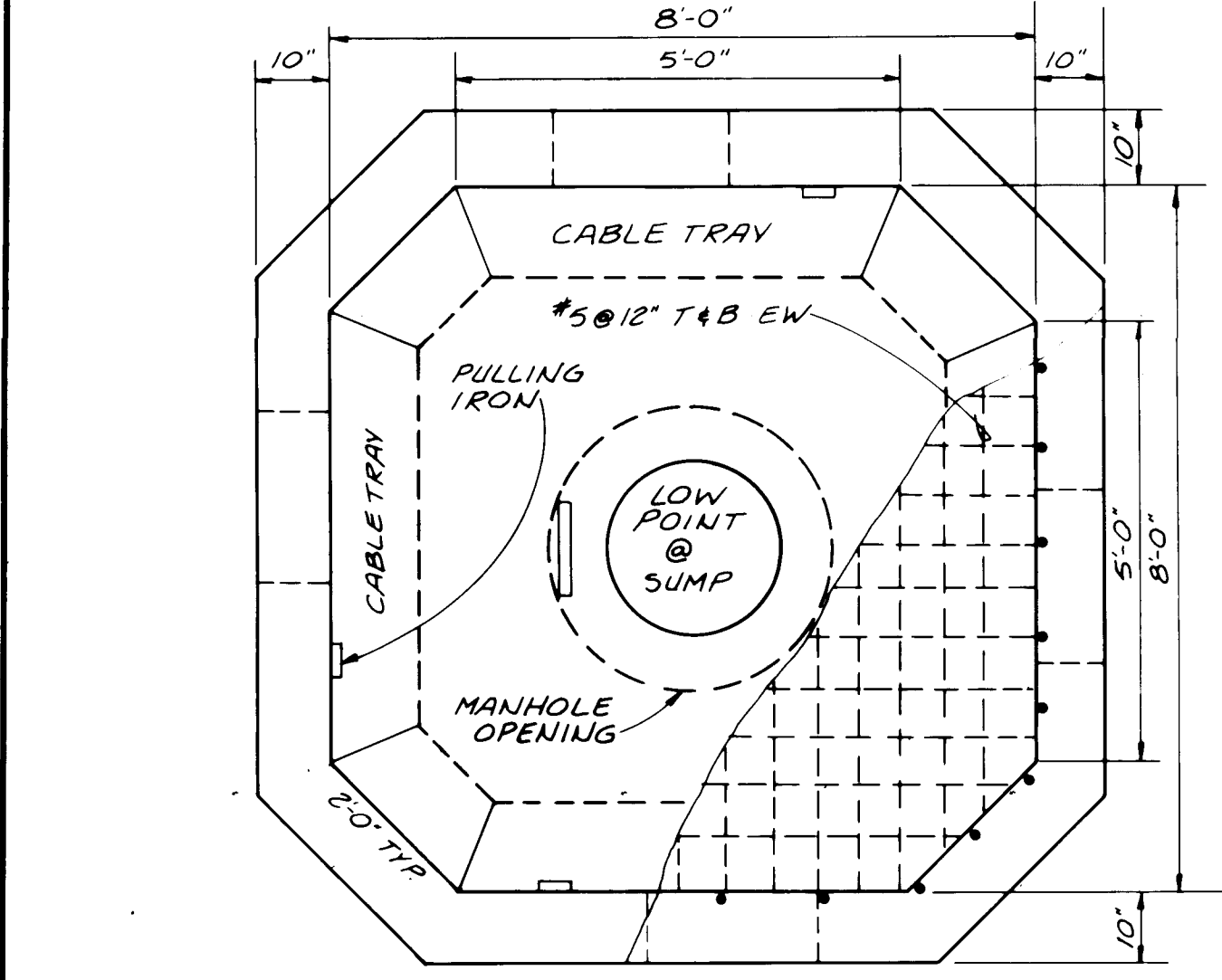




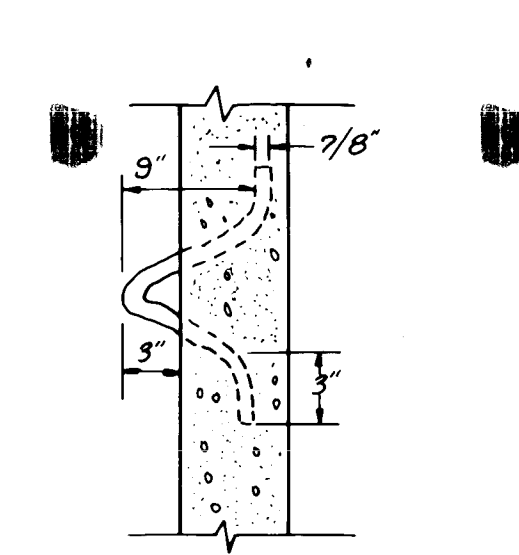
TOP VIEW-TOP SLAB  
SCALE 1/8"=1'-0"



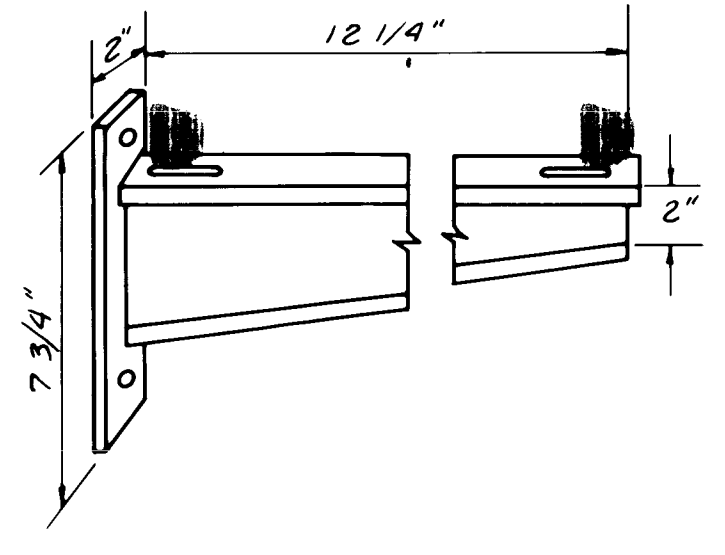
MANHOLE SECTION  
SCALE 1/2"=1'-0"



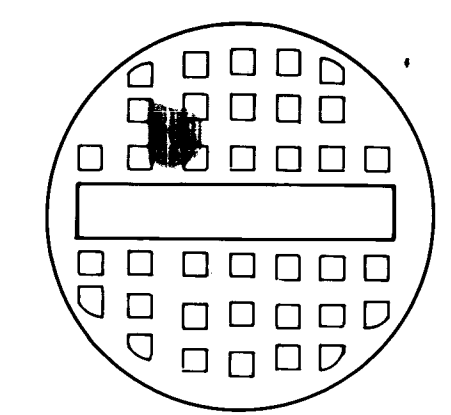
TOP VIEW-BOTTOM SLAB  
SCALE 1/8"=1'-0"



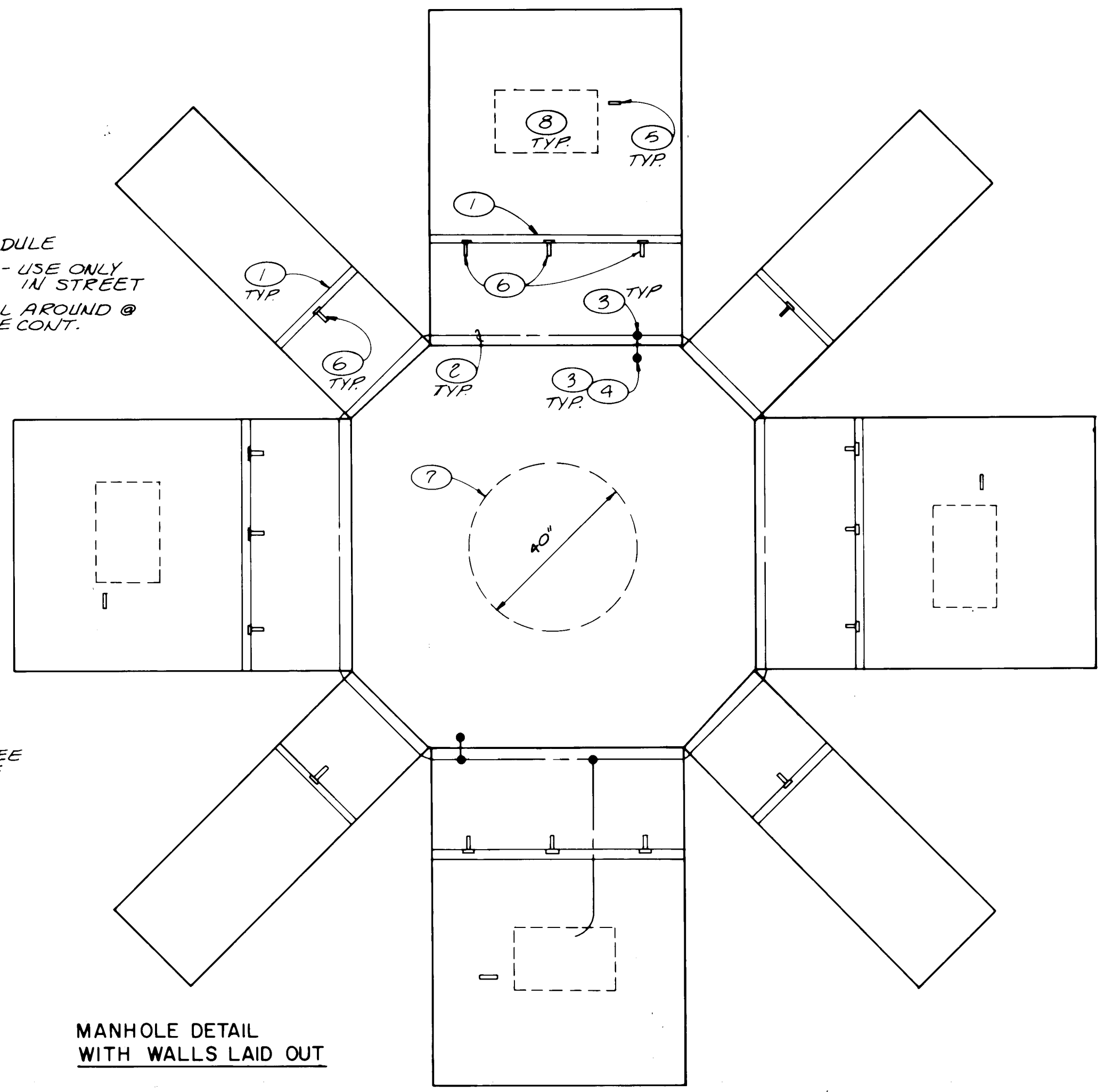
PULLING IRON DETAIL  
NO SCALE



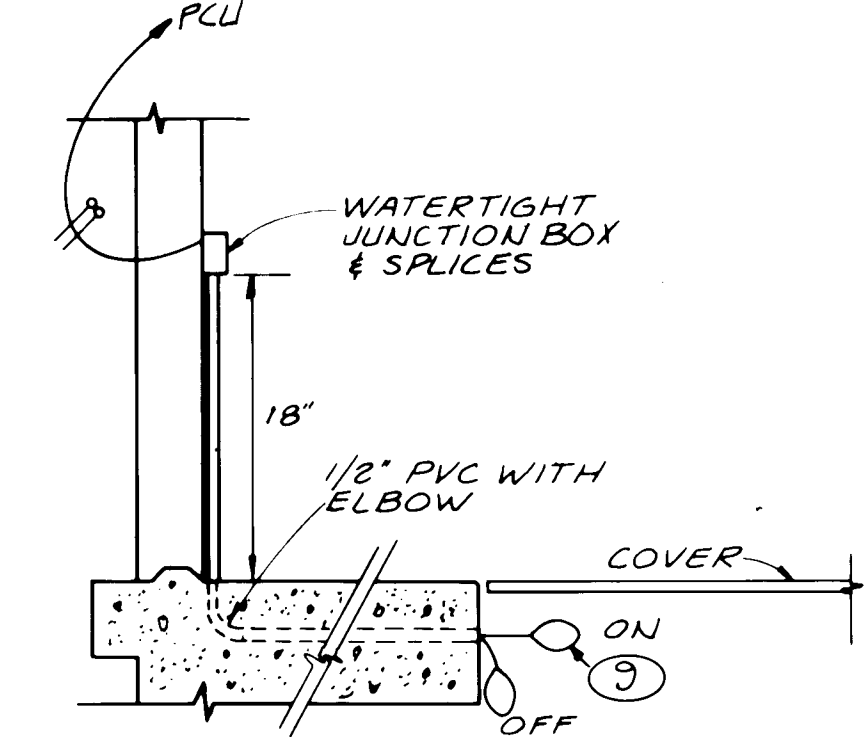
WALL BRACKET DETAIL  
NO SCALE



LID DETAIL  
NO SCALE



MANHOLE DETAIL  
WITH WALLS LAID OUT  
NO SCALE



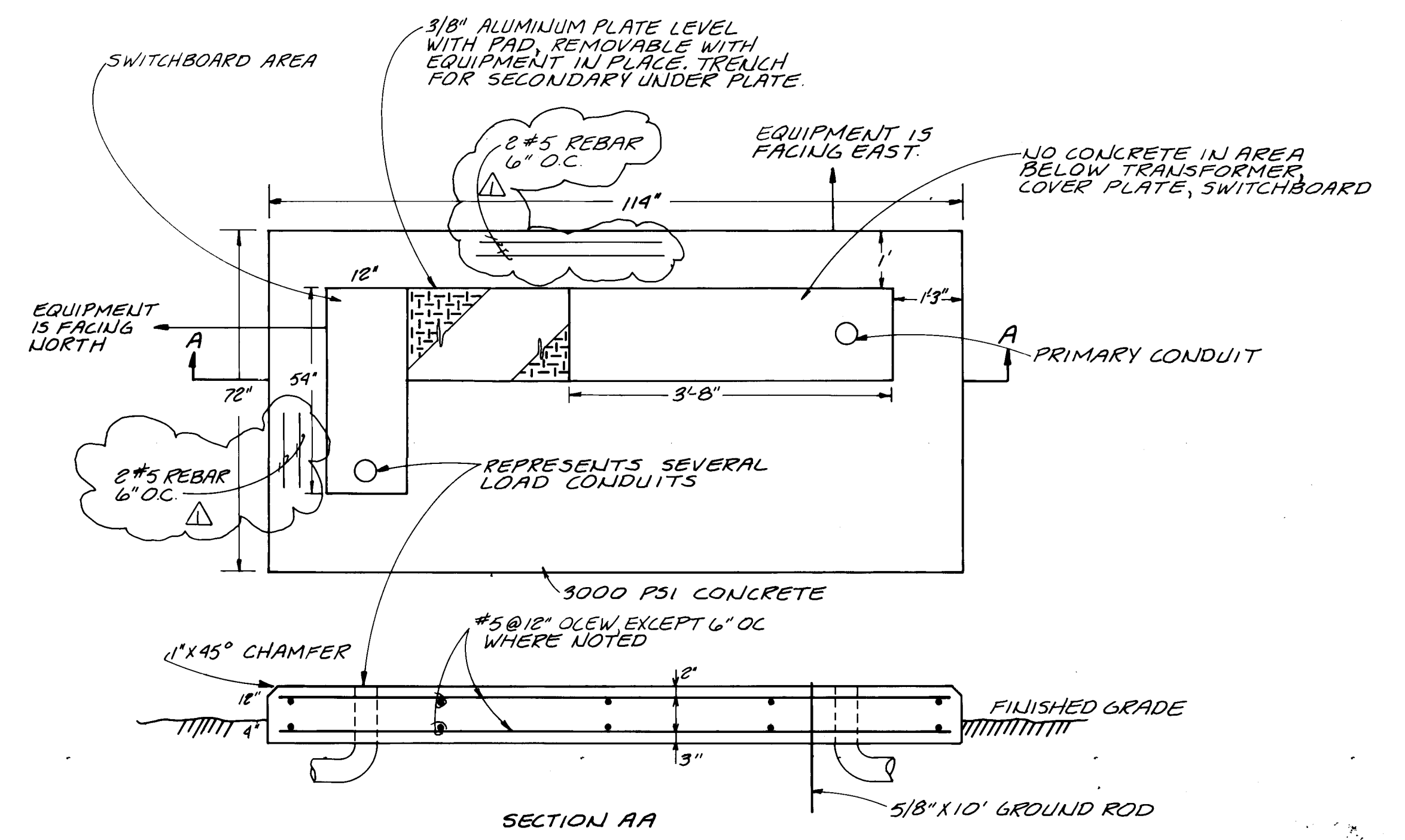
FLOAT SWITCH DETAIL  
NO SCALE

### GENERAL NOTES

1. CABLE TRAY TO BE MOUNTED AT LEAST 2" ABOVE FLOOR LEVEL.
2. CONCRETE ENCASEMENT SHALL BE RED DYE-3000 PSI.
3. PROVIDE ALL COUPLING ADAPTERS, FITTINGS, ELBOWS, SOLVENT, CEMENT, BENDERS, BUSHINGS, BELL ENDS, SPACERS, DUCT PLUGS, TAPE AND MISC. MATERIAL. INSTALL SYSTEM WITH PROPER GRADING AS PER RECOMMENDED BY MANUFACTURER.
4. PROVIDE ALL BOLTS, WASHERS, WALL ANCHORS, AND MISC. MATERIAL FOR MOUNTING CABLE TRAY TO WALL AS PER MANUFACTURERS RECOMMENDATIONS.
5. CONCRETE PAD DIMENSIONS ARE APPROXIMATE, CONTRACTOR IS RESPONSIBLE FOR ADJUSTING PAD DIMENSIONS TO MATCH EQUIPMENT SUPPLIED.

### NOTES

1. HUSKY/BURNDY ALUM. VENTRIB CABLE TRAY TYPE AM OR EQUAL.
2. 1 #3/0 BARE COPPER GROUND WIRE AROUND INSIDE MANHOLE WALL 2" ABOVE FLOOR. CONNECT TO GROUND ROD 4.
3. SUMP CONNECTION.
4. 1/2" x 10'-0" COPPERWELD GROUND ROD WITH TOP 3" ABOVE MANHOLE FLOOR.
5. PULLING IRON, SEE DETAIL THIS SHEET.
6. HUSKY/BURNDY WALL BRACKET SUPPORT, CAT. NO. WKB 12L OR EQUAL.
7. OUTLINE OF MANHOLE OPENING. FRAME AND COVER TO BE NEENAH FOUNDRY CAT. NO. R-1640 D OR EQUAL.
8. DUCT BANKS AS CALLED FOR IN DRAWINGS. SHOWN THIS SHEET IN SECTION ADJUST POSITION TO MATCH MANHOLE SCHEDULE.
9. FLYGT SUBMERSIBLE WATERTIGHT SWITCH.
10. SUMP PUMP COVER AND FRAME TO BE NEENAH R-4380-21 OR EQUAL.



TRANSFORMER PAD DETAIL  
NO SCALE

| RECORD DRAWING                                                                                                                                                                                                                                 |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| DATE:<br>AUG. 1988                                                                                                                                                                                                                             | DRAFTED BY:<br>MCA |
| THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. |                    |



|                 |  |
|-----------------|--|
| DESIGNED<br>SS  |  |
| DRAWN<br>STAFF  |  |
| CHECKED<br>MCA  |  |
| APPROVED<br>MCA |  |
| DATE<br>5-85    |  |

**MOLZEN-CORBIN**  
**STANLEY CONSULTANTS**  
A JOINT VENTURE

CITY OF ALBUQUERQUE, NEW MEXICO  
**SOLIDS HANDLING FACILITIES**  
PHASE II B-3, CONTRACT 1

**INTERIM SLUDGE DEWATERING FACILITIES**  
ELECTRICAL MANHOLE AND  
TRANSFORMER PAD DETAIL

M-C NO. 832221  
**E-20** 1110112  
SC NO.



