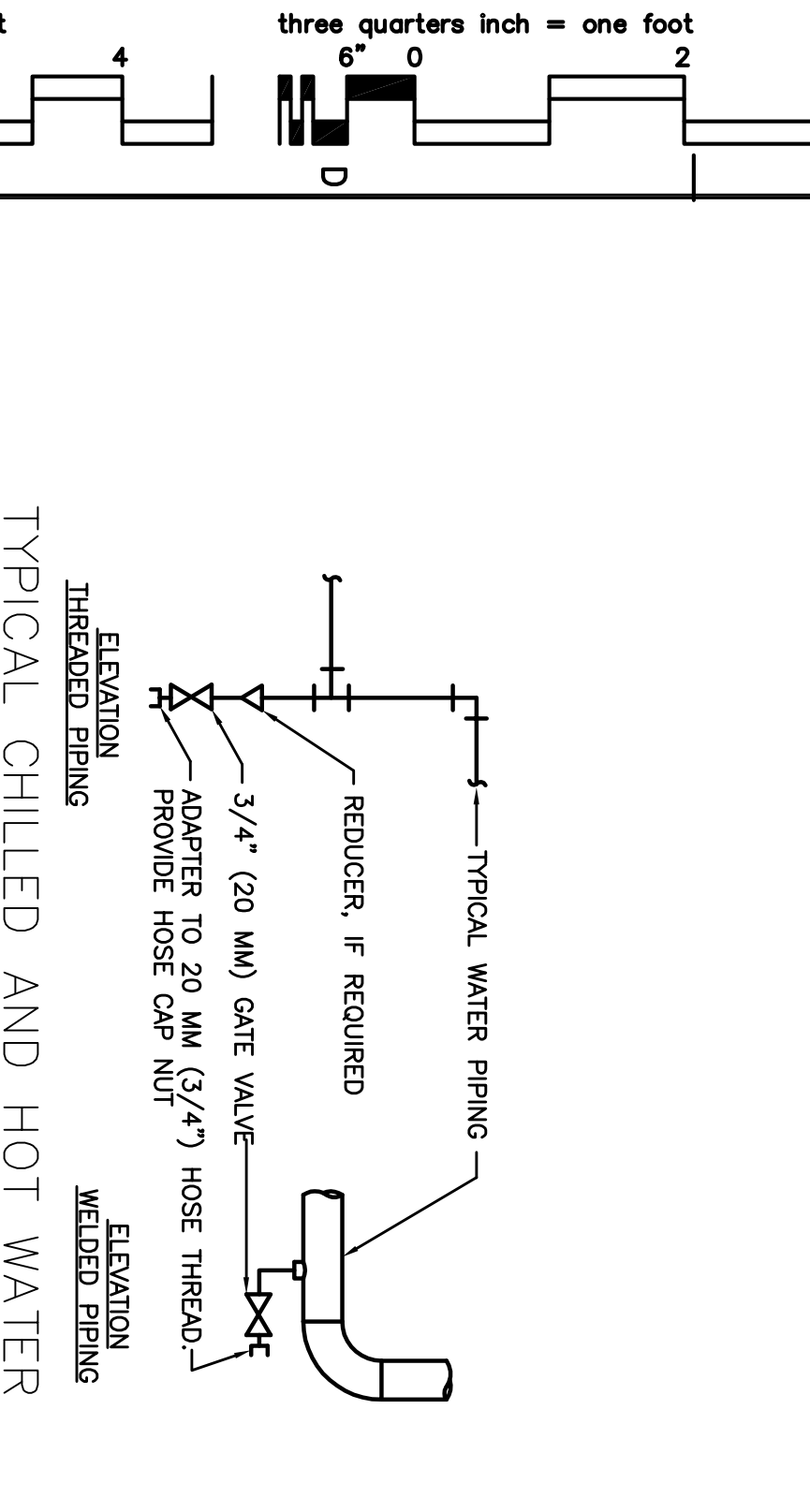


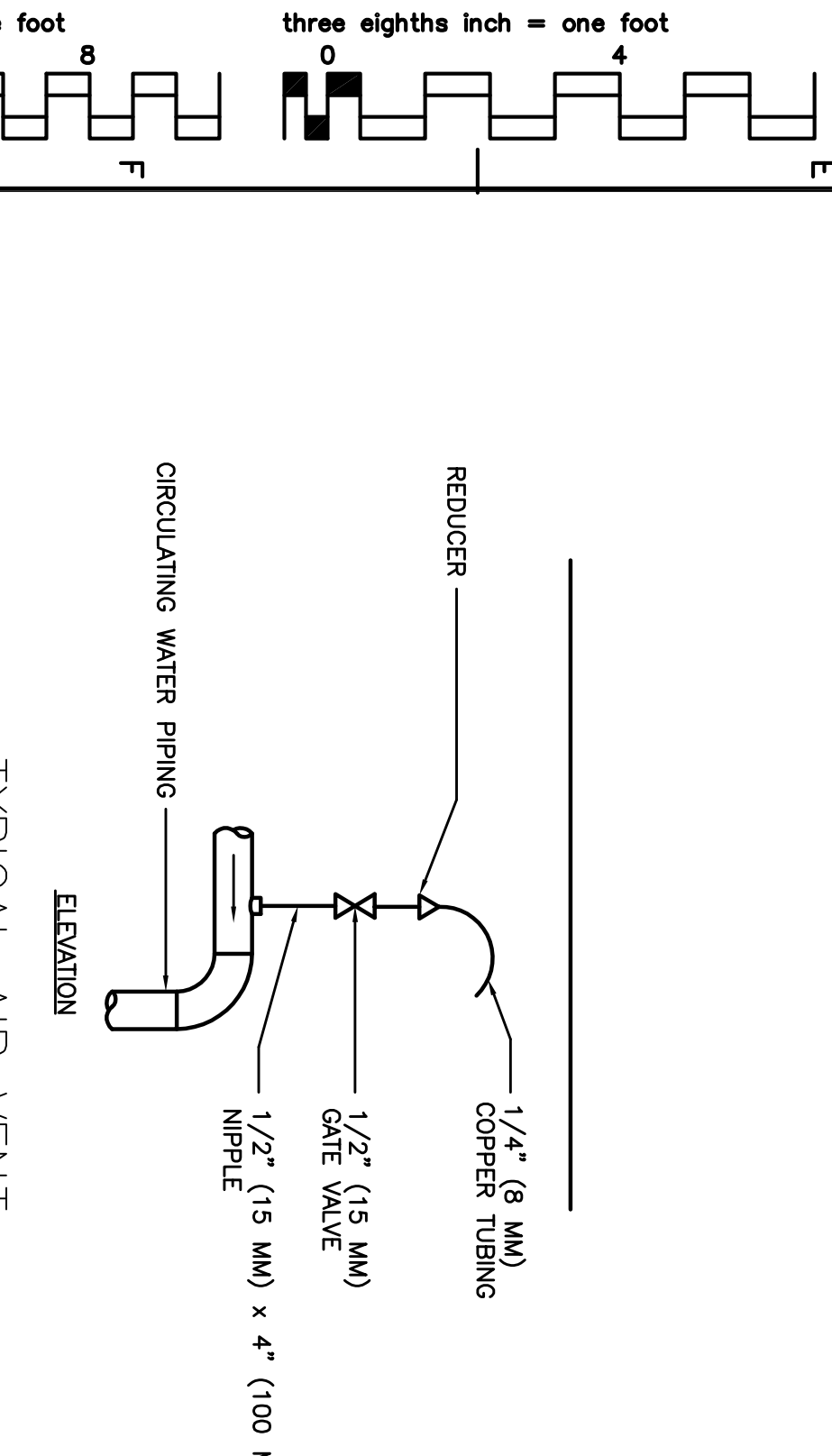
VIBRATION ISOLATION BASES

NTS

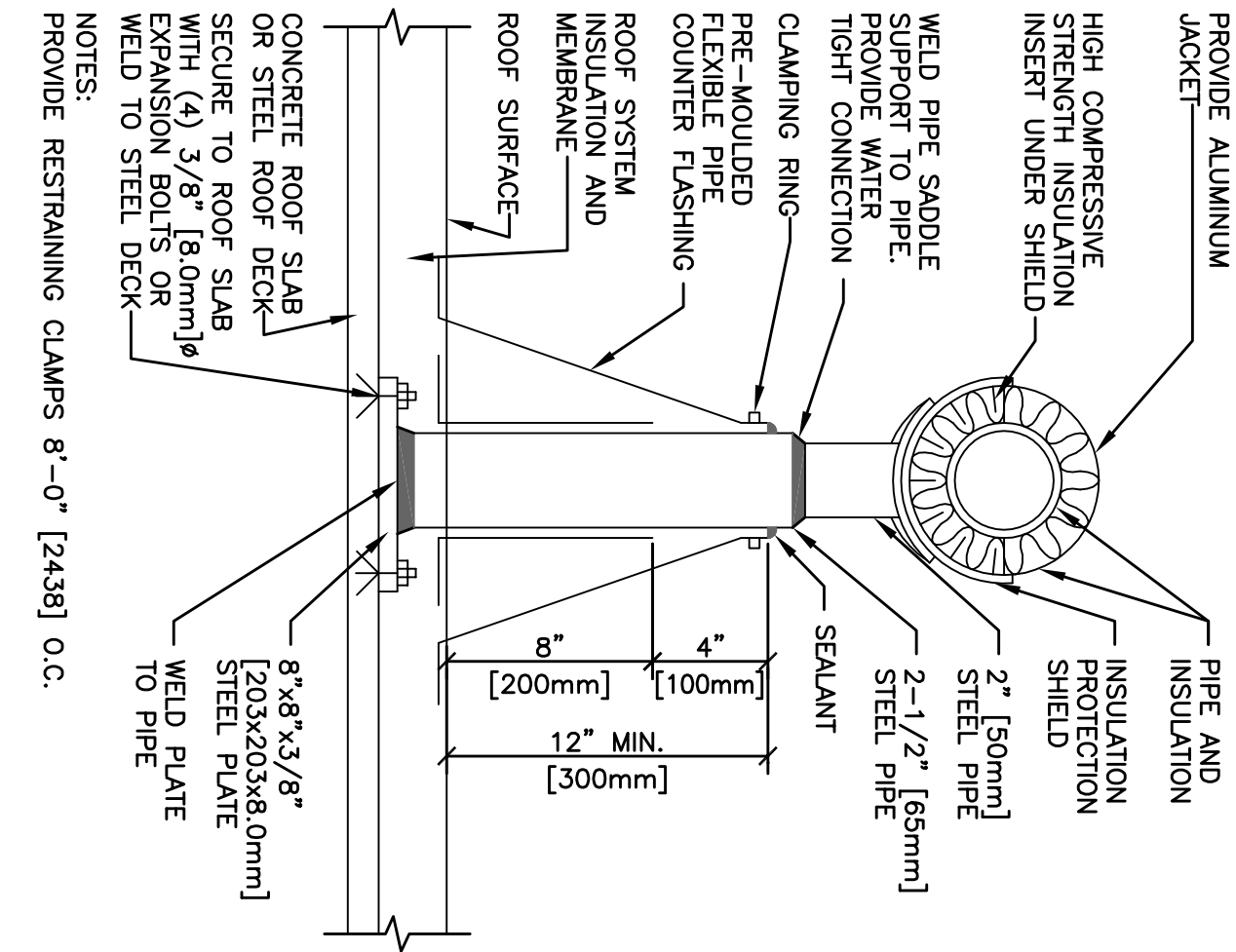


TYPICAL CHILLED AND HOT WATER PIPING DRAIN VALVE CONNECTIONS

- NOTES:
1. DRAIN ALL LOW POINTS AS INDICATED ABOVE.
 2. WHERE SCALE POCKETS ARE SHOWN ON PIPE RISER DIAGRAMS AND/OR PLANS LOCATE DRAIN AT BOTTOM OF SCALE POCKET.

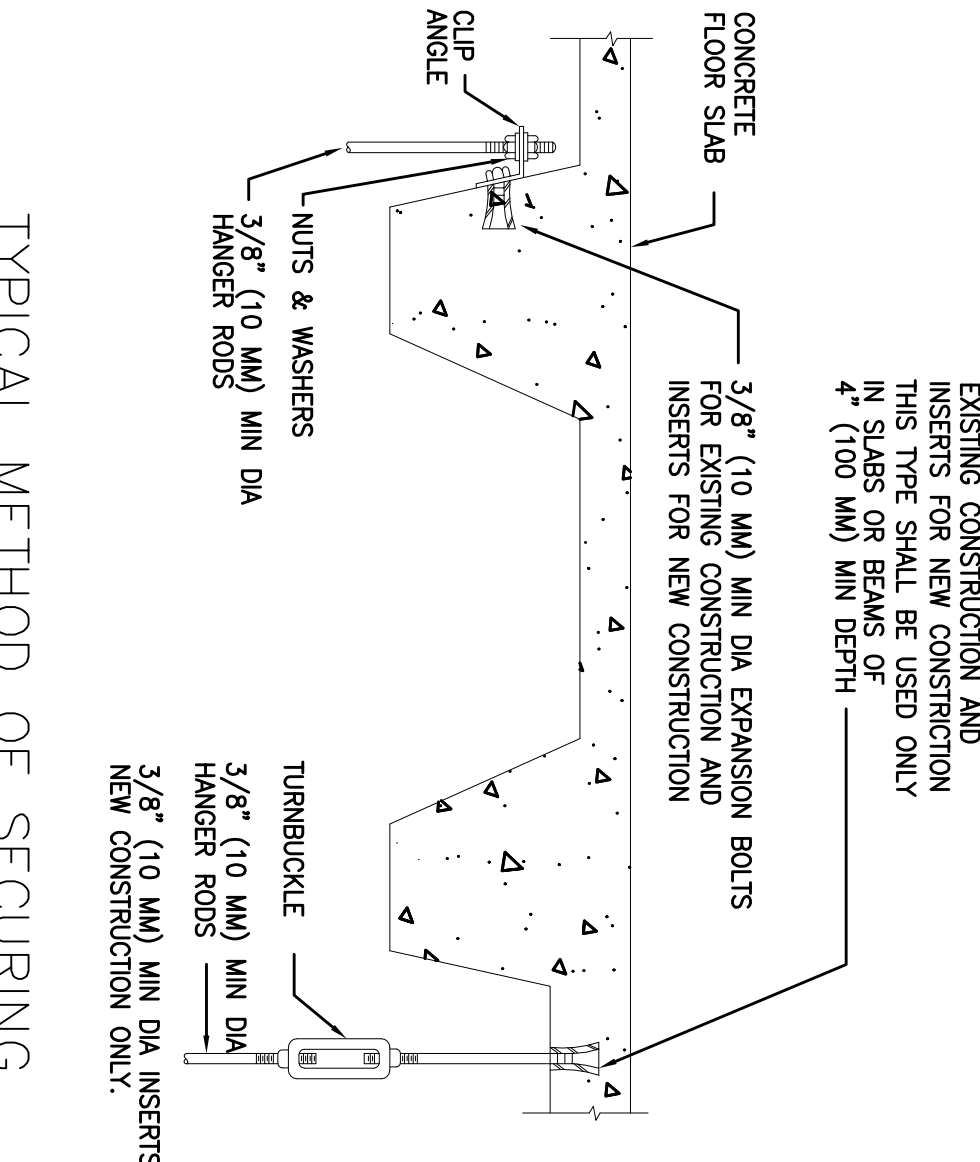


- NOTES:
1. VENT ALL HIGH POINTS INDICATED ABOVE.
 2. IF AUTOMATIC AIR VENTS ARE USED, PIPE DISCHARGE TO DRAIN.



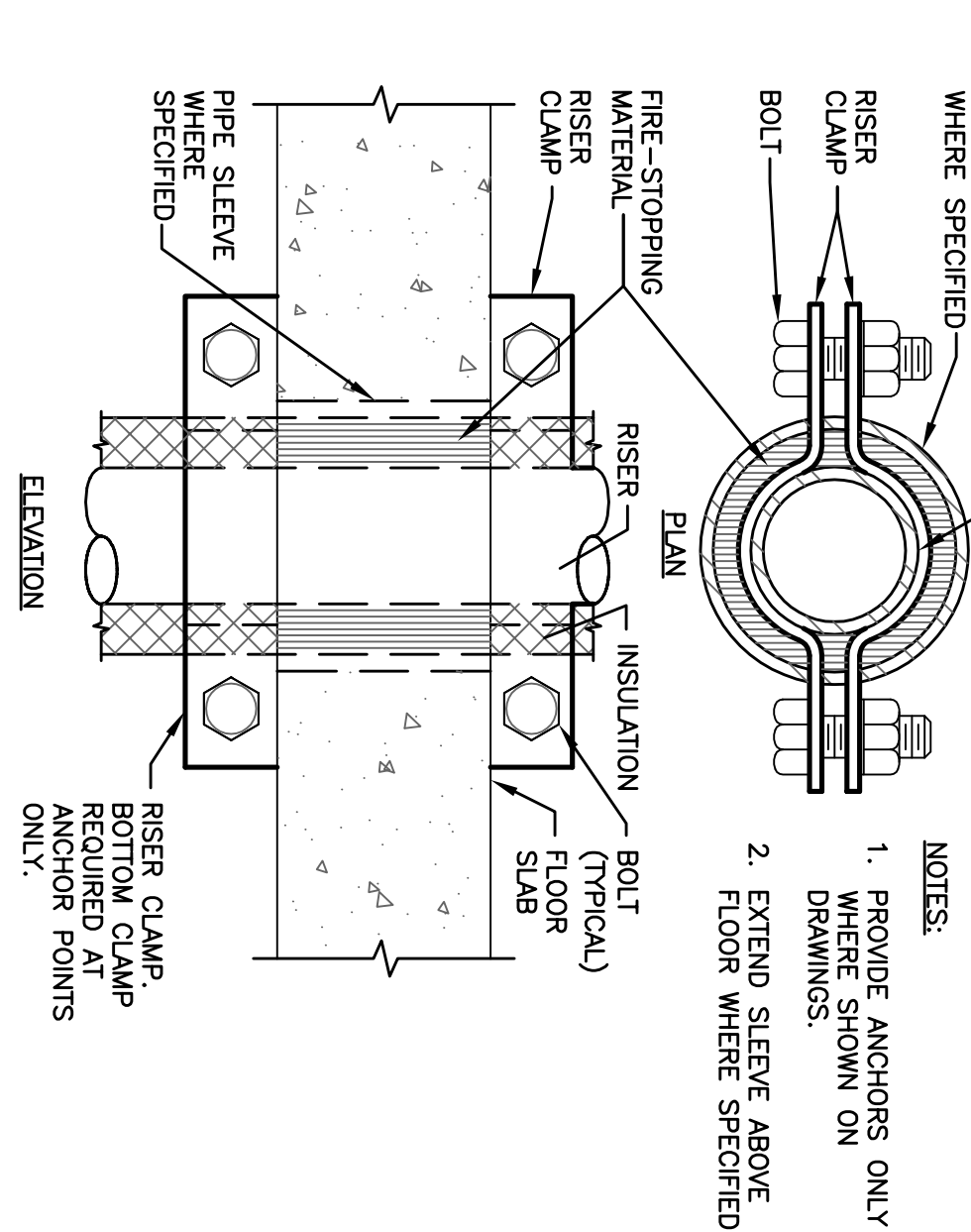
ROOF PIPE SUPPORT DETAIL

NTS



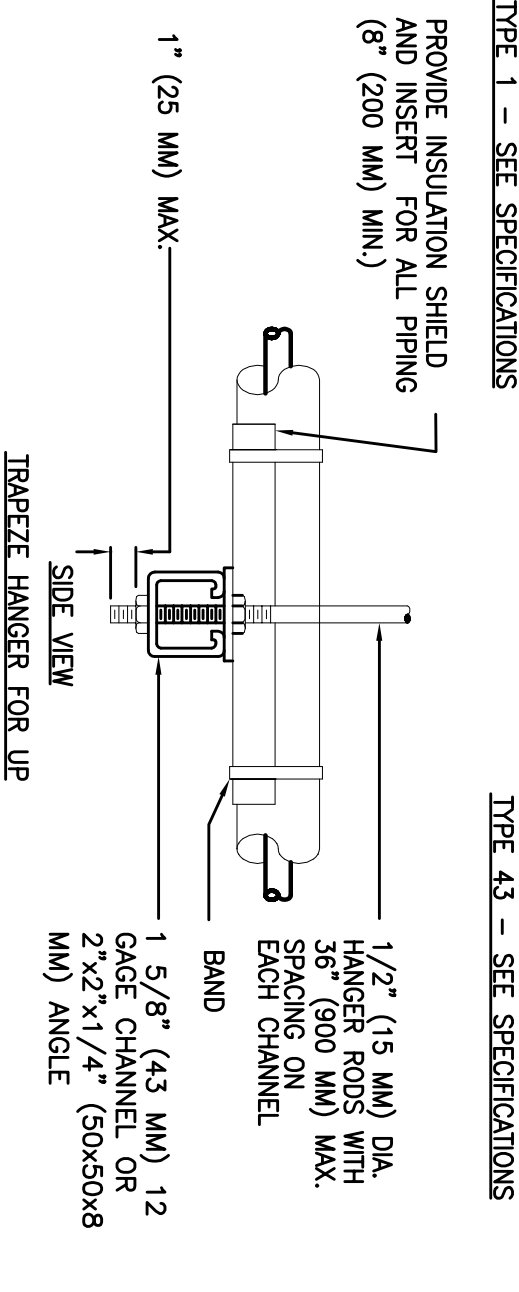
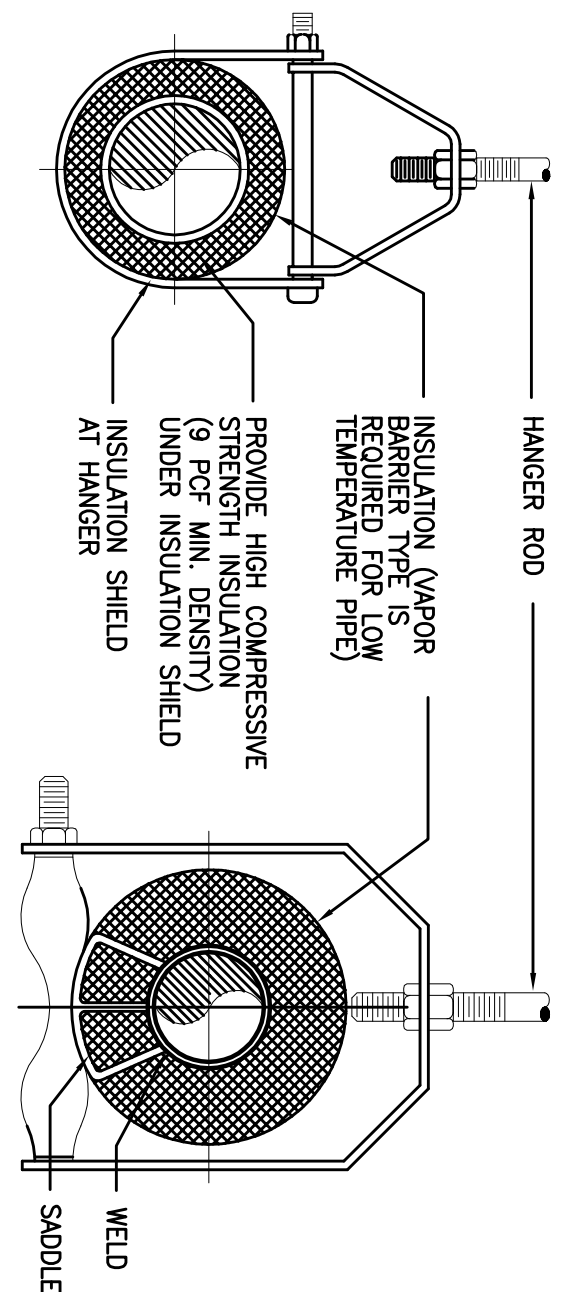
TYPICAL METHOD OF SECURING HANGER RODS IN CONCRETE SLABS AND BEAMS.

NTS



SUPPORT/ANCHOR FOR PIPE RISERS

NTS

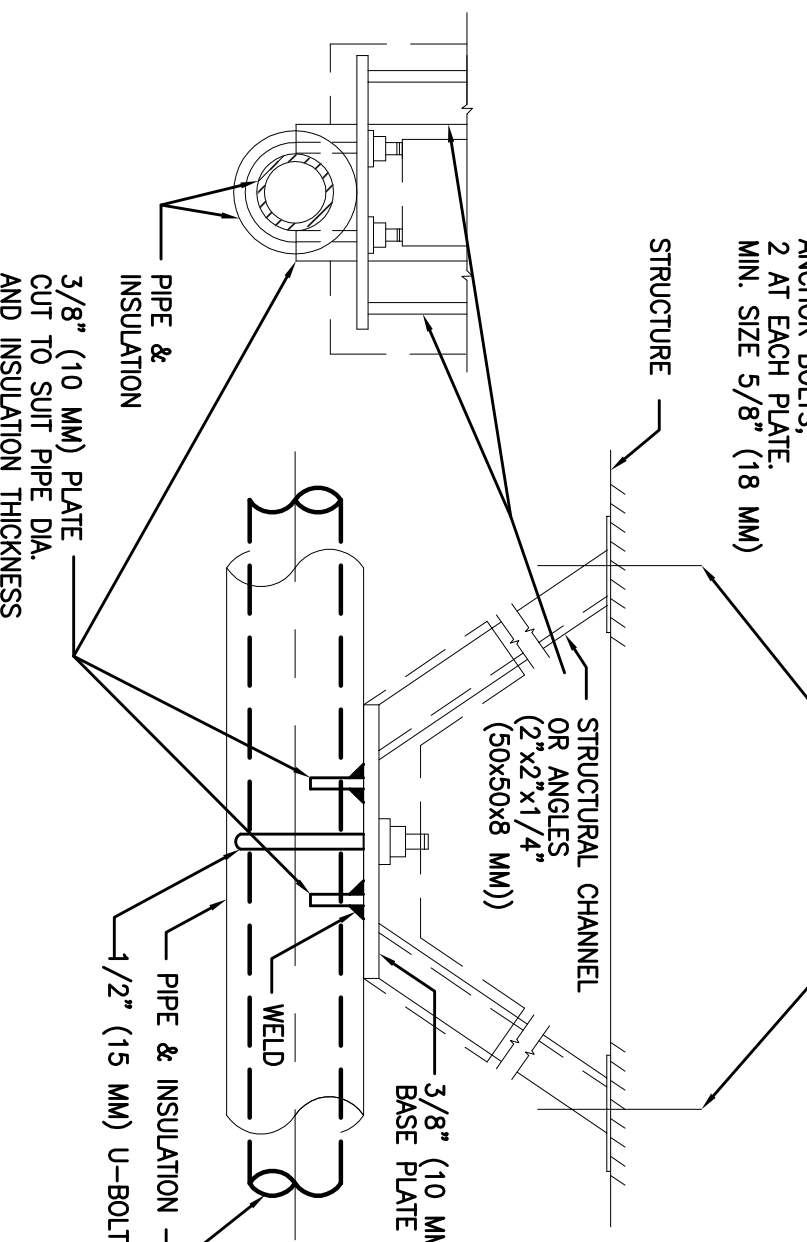


TYPICAL PIPE HANGERS

NTS

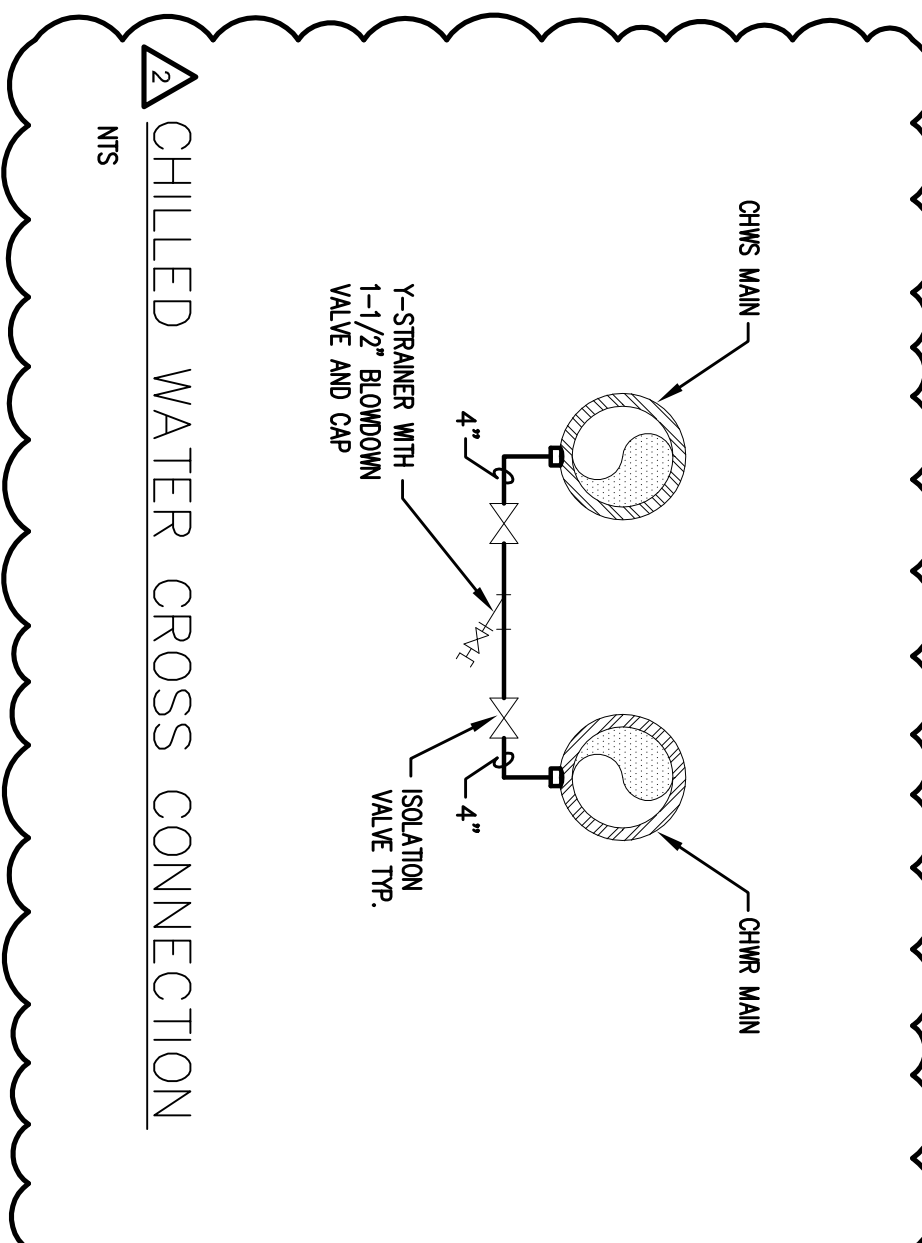
| MAXIMUM PIPE/TUBING SUPPORT SPACING | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------------------------------------|-------|------|------|-------|-------|------|-------|-------|-------|
| NOM. SIZE (IN.) | THRU | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 2 1/2 | 3 | 4 |
| PIPE (IN.) | THRU | (20) | (25) | (40) | (50) | (65) | (75) | (100) | (120) |
| TUBING (IN.) | THRU | (20) | (25) | (40) | (50) | (65) | (75) | (100) | (120) |
| 5 FT | 5 FT | (18) | (21) | (24) | (27) | (30) | (33) | (36) | (39) |
| 6 FT | 6 FT | (18) | (21) | (24) | (27) | (30) | (33) | (36) | (39) |
| 7 FT | 7 FT | (18) | (21) | (24) | (27) | (30) | (33) | (36) | (39) |
| 8 FT | 8 FT | (18) | (21) | (24) | (27) | (30) | (33) | (36) | (39) |
| 9 FT | 9 FT | (18) | (21) | (24) | (27) | (30) | (33) | (36) | (39) |
| 10 FT | 10 FT | (18) | (21) | (24) | (27) | (30) | (33) | (36) | (39) |

NOTE: FOR TRAPEZE HANGER LIKE SPACING OF SMALLEST SIZE ON TRAPEZE.

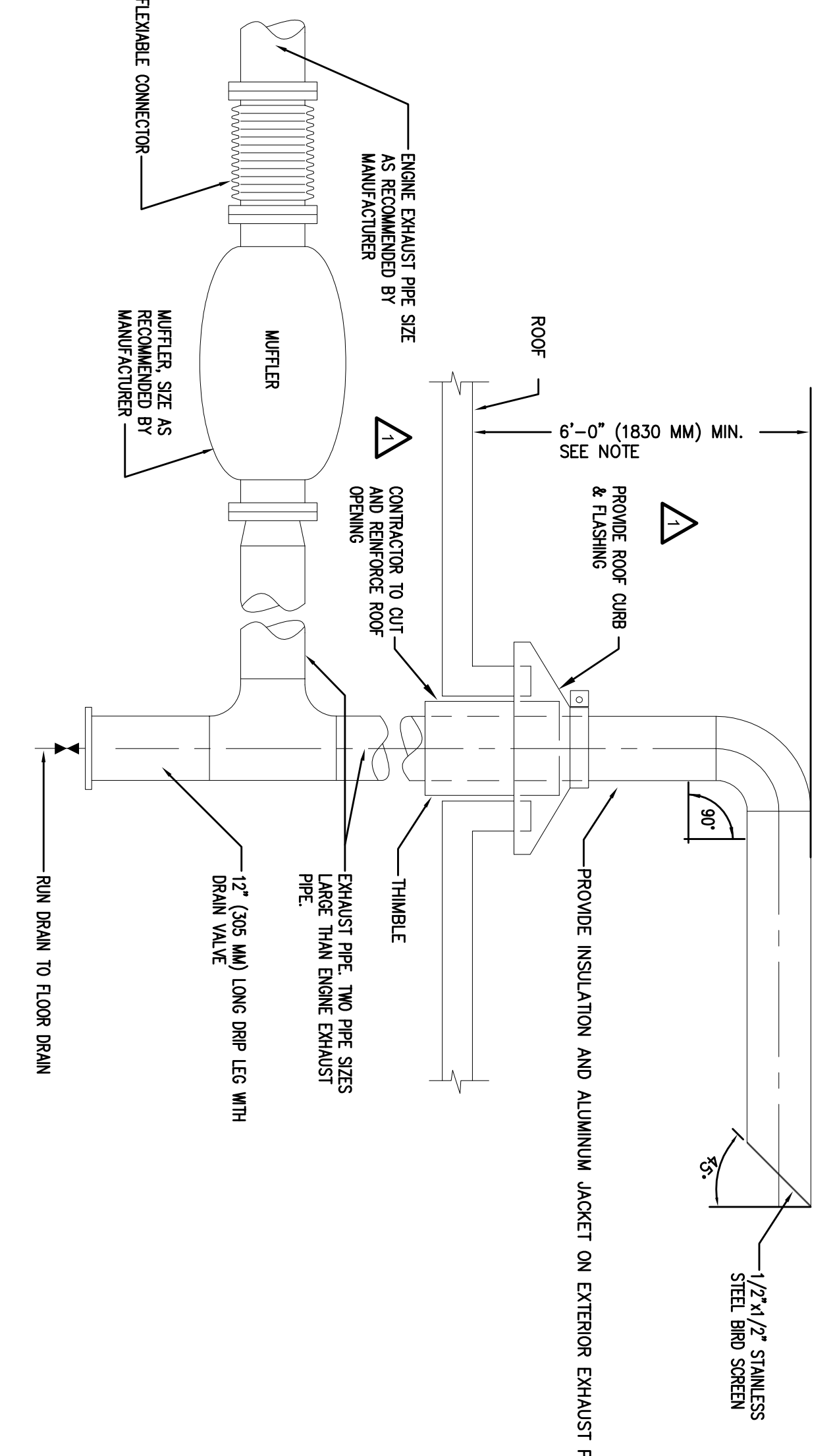


HORIZONTAL PIPE ANCHOR DETAIL

NTS



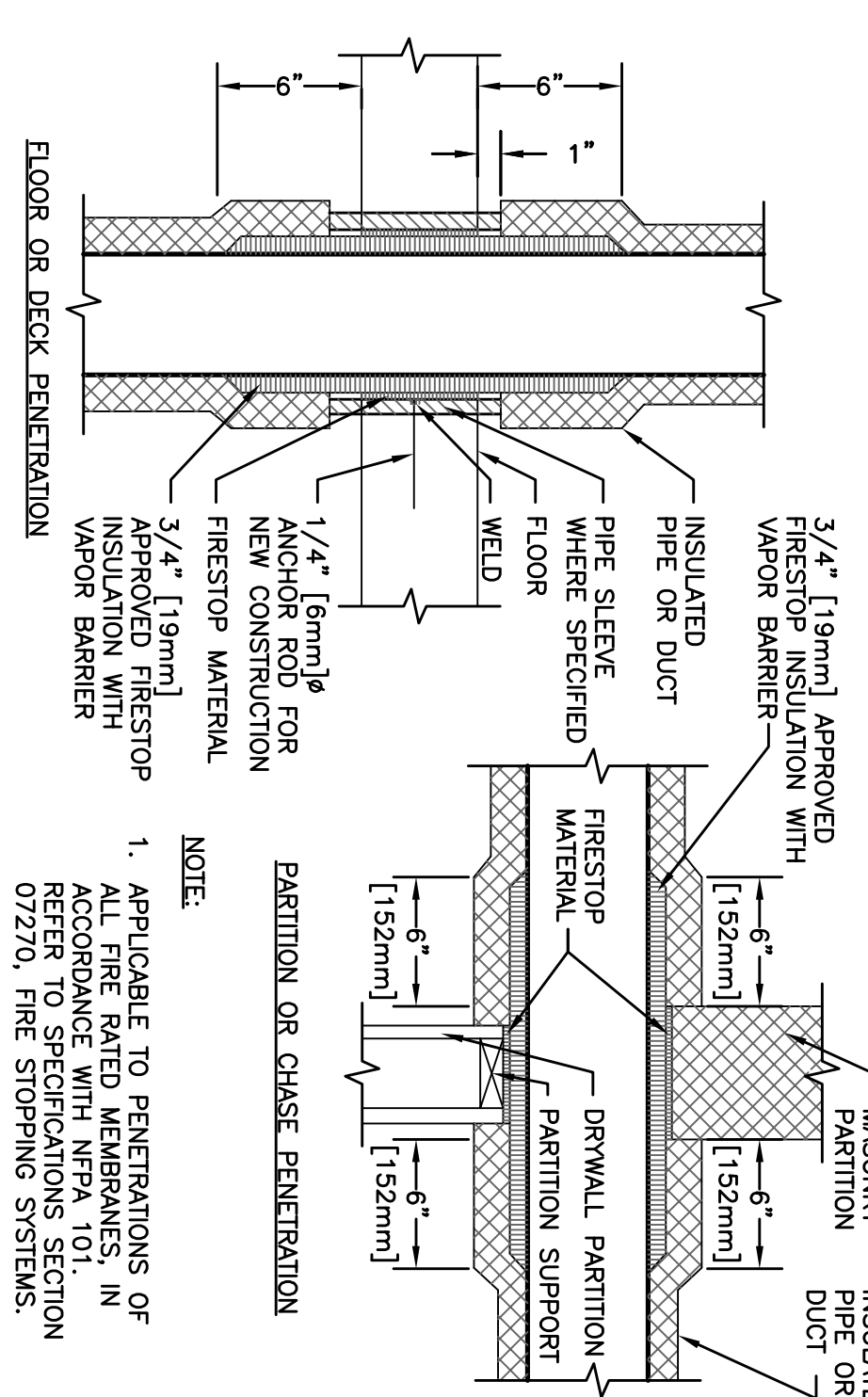
NTS



- NOTES:
1. ANY HEIGHT ABOVE 6'-0" (1830 MM) MIN. WILL REQUIRE BRACING.
 2. ALL GENERATOR EXHAUST PIPE AND EXHAUSTS SHALL BE INSULATED.

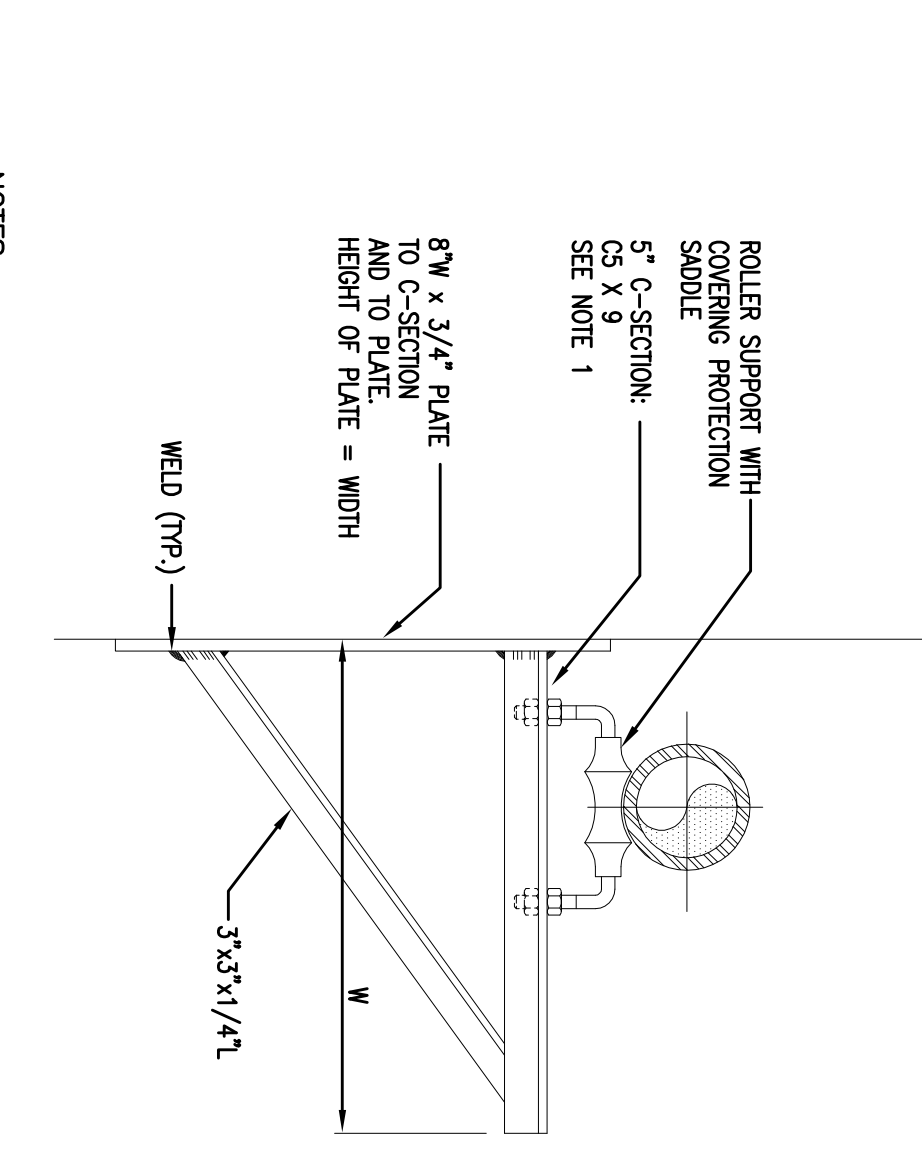
EMERGENCY GENERATOR EXHAUST DETAIL

NTS



PENETRATION OF FIRE/SMOKE BARRIERS

NTS



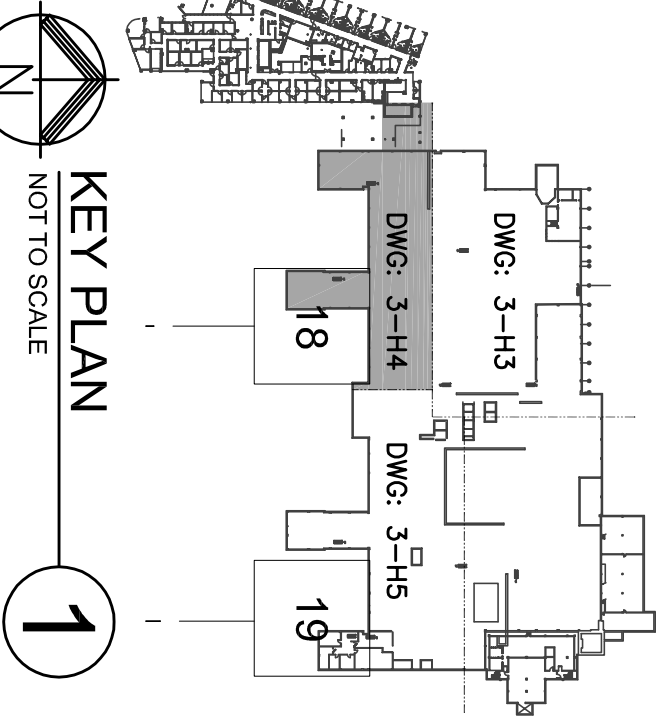
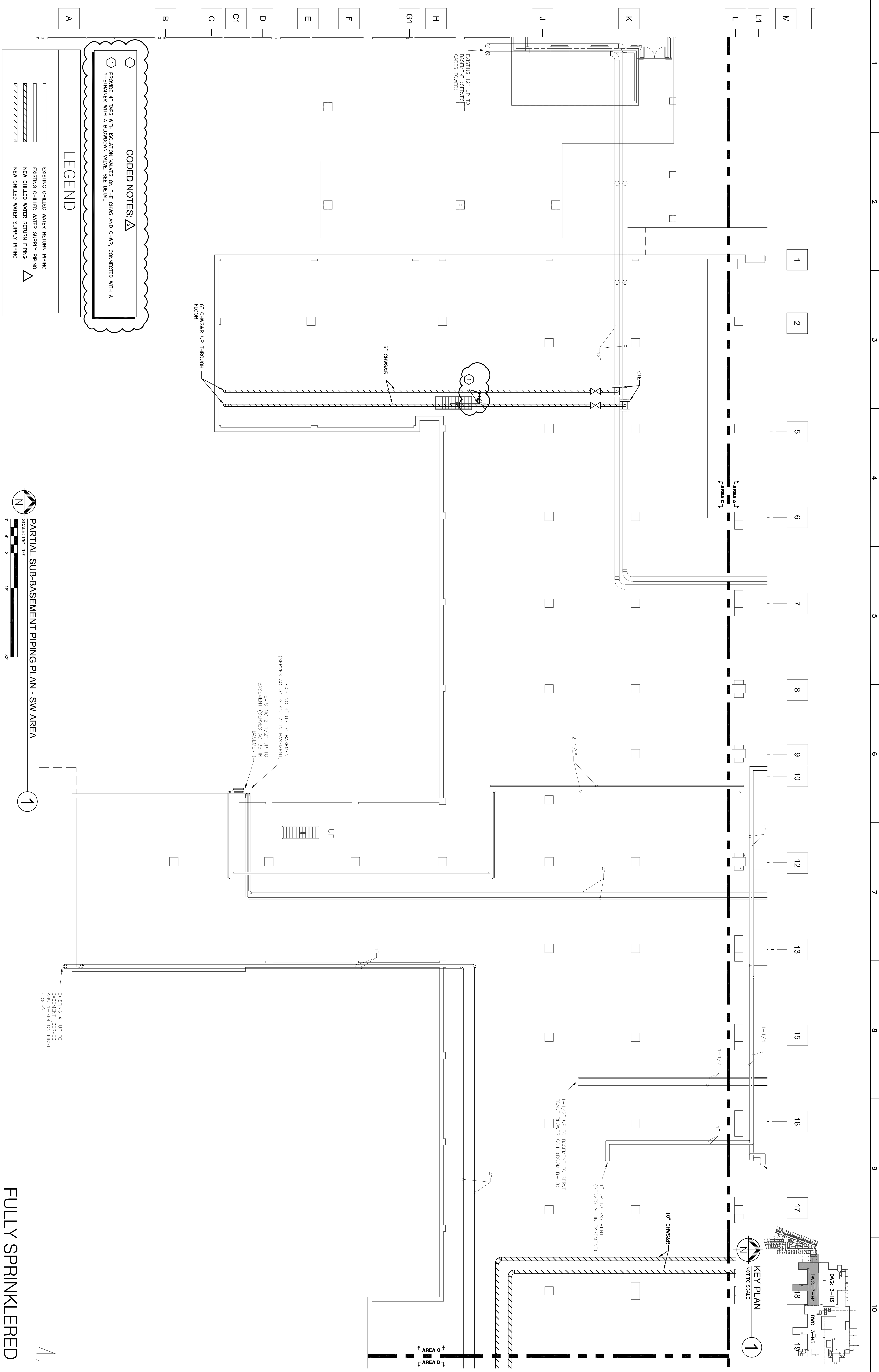
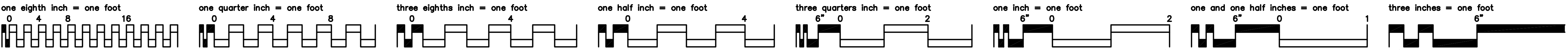
- NOTES:
1. VERTICAL SUPPORT ATTACHMENT PLATE (TUNNEL ROOF PLATE SIMILAR)
 2. HORIZONTAL ATTACHMENT PLATE, SECURE TO WALL W/ (4) 3/4" CONCRETE INSERTS BY 4" LONG.
 3. SUPPORT SPACING IS 10'-0". REFER TO PLAN.
 4. REGISTERED STRUCTURAL ENGINEER.

WALL SUPPORT PIPE DETAIL

NTS

FULLY SPRINKLERED

| Revisions | DATE | DESCRIPTION |
|-----------|----------|--|
| 1 | 04-06-12 | FINAL CD SUBMISSION - FOR CONSTRUCTION |
| 2 | 05-16-12 | ADDENDUM 02 |
| 3 | 05-30-12 | ADDENDUM 01 |
| 4 | 06-14-12 | ADDENDUM 03 |
| 5 | 06-28-12 | ADDENDUM 04 |
| 6 | 07-12-12 | ADDENDUM 05 |
| 7 | 07-26-12 | ADDENDUM 06 |
| 8 | 08-09-12 | ADDENDUM 07 |
| 9 | 08-23-12 | ADDENDUM 08 |
| 10 | 09-06-12 | ADDENDUM 09 |
| 11 | 09-20-12 | ADDENDUM 10 |
| 12 | 10-04-12 | ADDENDUM 11 |
| 13 | 10-18-12 | ADDENDUM 12 |
| 14 | 11-01-12 | ADDENDUM 13 |
| 15 | 11-15-12 | ADDENDUM 14 |
| 16 | 11-29-12 | ADDENDUM 15 |
| 17 | 12-13-12 | ADDENDUM 16 |
| 18 | 12-27-12 | ADDENDUM 17 |
| 19 | 01-10-13 | ADDENDUM 18 |
| 20 | 01-24-13 | ADDENDUM 19 |
| 21 | 02-07-13 | ADDENDUM 20 |
| 22 | 02-21-13 | ADDENDUM 21 |
| 23 | 03-07-13 | ADDENDUM 22 |
| 24 | 03-21-13 | ADDENDUM 23 |
| 25 | 04-04-13 | ADDENDUM 24 |
| 26 | 04-18-13 | ADDENDUM 25 |
| 27 | 05-02-13 | ADDENDUM 26 |
| 28 | 05-16-13 | ADDENDUM 27 |
| 29 | 05-30-13 | ADDENDUM 28 |
| 30 | 06-13-13 | ADDENDUM 29 |
| 31 | 06-27-13 | ADDENDUM 30 |
| 32 | 07-11-13 | ADDENDUM 31 |
| 33 | 07-25-13 | ADDENDUM 32 |
| 34 | 08-08-13 | ADDENDUM 33 |
| 35 | 08-22-13 | ADDENDUM 34 |
| 36 | 09-05-13 | ADDENDUM 35 |
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| 39 | 10-17-13 | ADDENDUM 38 |
| 40 | 10-31-13 | ADDENDUM 39 |
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| 46 | 01-23-14 | ADDENDUM 45 |
| 47 | 02-06-14 | ADDENDUM 46 |
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| 98 | 01-18-16 | ADDENDUM 97 |
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| 165 | 08-13-18 | ADDENDUM 164 |
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| 167 | 09-10-18 | ADDENDUM 166 |
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| 245 | 09-11-21 | ADDENDUM 244 |
| 246 | 09-25-21 | ADDENDUM 245 |
| 247 | 10-09-21 | ADDENDUM 246 |
| 248 | 10-23-21 | ADDENDUM 2 |



CONSULTANTS:

LEGEND

CODED NOTES: Δ_2

PROVIDE 4 INPS WITH ISOLATION VALVES ON THE CHWS AND CTRW, CONNECTED WITH A Y-STRAINER WITH A BLOWDOWN VALVE. SEE DETAIL.

EXISTING CHILLED WATER RETURN PIPING
EXISTING CHILLED WATER SUPPLY PIPING
NEW CHILLED WATER RETURN PIPING
NEW CHILLED WATER SUPPLY PIPING

PARTIAL SUB-BASEMENT PIPING

ARCHITECTS

Perspectus

architecture

13212 Shaker Square Suite 204 Cleveland, Ohio 44120
P. 216.752.1800 F.216.752.3833

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Drawing Title
**PARTIAL SUB-BASEMENT
PIPING PLAN - SW AREA**

Approved: Project Director

CHILLER PLANT GENERATOR & DISTRIBUTION UPGRADES

VAMC - MADE PARK

| | | |
|------------|---------|--|
| Date | Checked | |
| 01.00.0000 | | |

04-06-2012
BMW

Project Number
541-11-108
Building Number

Drawing Number

3-H4

Office of Facilities Management



Veterans Affairs

