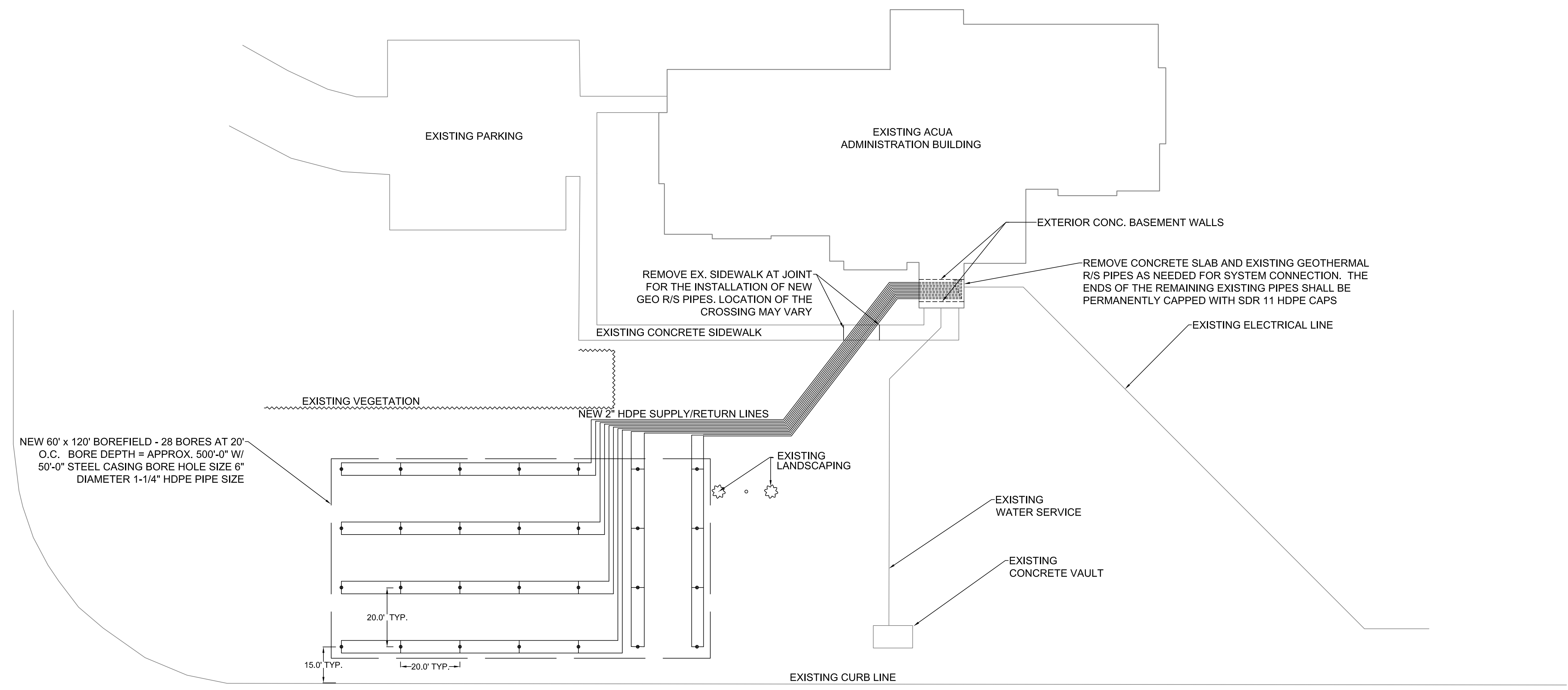


ENVIRO DRIVE

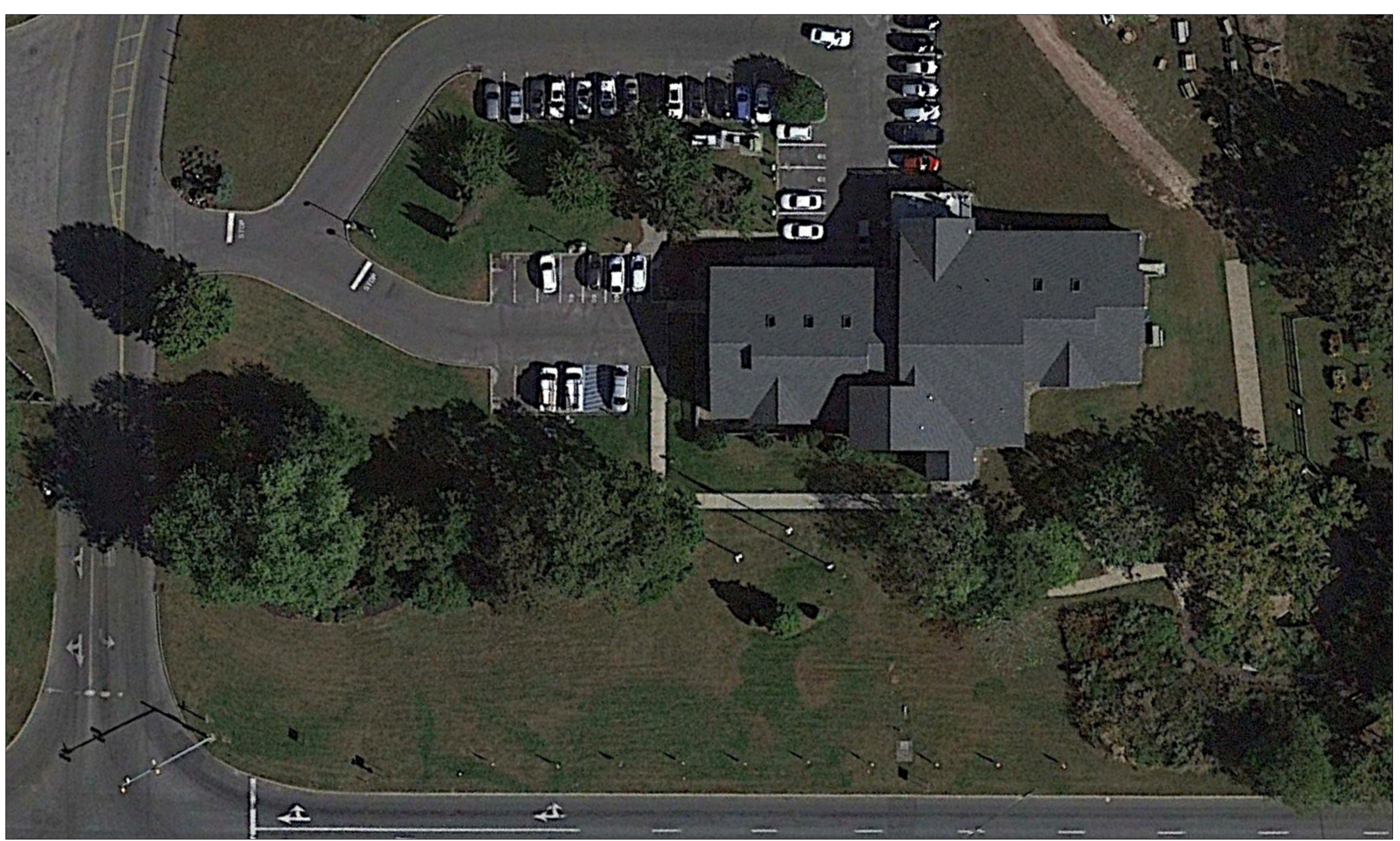


DELILAH ROAD (90' R.O.W.)

GEOTHERMAL BOREFIELD SITE PLAN
1" = 20'

GENERAL NOTES:

1. CONTRACTOR TO PROVIDE LAYOUT OF PROPOSED BOREFIELD FOR APPROVAL BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREE/VEGETATION TRIMMING REQUIRED FOR THE OPERATION OF THE DRILL RIG. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING TREES/VEGETATION WHICH ARE NOT IN CONFLICT WITH THE BOREFIELD.
3. CONTRACTOR SHALL CALL FOR A UTILITY MARKOUT PRIOR TO ANY DRILLING OR EXCAVATION.
4. CONSTRUCTION SILT FENCE TO BE PLACED AROUND THE PERIMETER OF THE BOREFIELD PRIOR TO DRILLING OR EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN AND PERFORM ANY REPAIRS ON THE SILT FENCE DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO MAINTAIN DUST CONTROL. VEHICLES SHALL BE CLEANED, AS NECESSARY, PRIOR TO USING PUBLIC STREETS. PAVED ROADS SHALL BE SPRINKLED WITH WATER IF NEED.
6. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. SEDIMENT FILTER SHALL BE INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE DETAILS OF DESIGN AND CONSTRUCTION SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR REVIEW.
7. THE ACUA ADMINISTRATION BUILDING IS OPEN TO THE PUBLIC. SAFE ACCESS SHALL BE MAINTAINED TO THE FRONT ENTRANCE WAY AT ALL TIMES DURING CONSTRUCTION.



EXISTING SITE AERIAL VIEW

APPROVALS:



ATLANTIC COUNTY UTILITIES AUTHORITY

6700 DELILAH ROAD
EGG HARBOR TOWNSHIP, NJ 08234

THOMAS R. GANARD
CHIEF ENGINEER
PROFESSIONAL ENGINEER
NJ LICENSE NO. GE03526100

PROJECT NAME:
ACUA REBID GEOTHERMAL WELLFIELD REPLACEMENT

ACUA PROJECT NO.:
2022-SW-07

REVISIONS	
DATE	

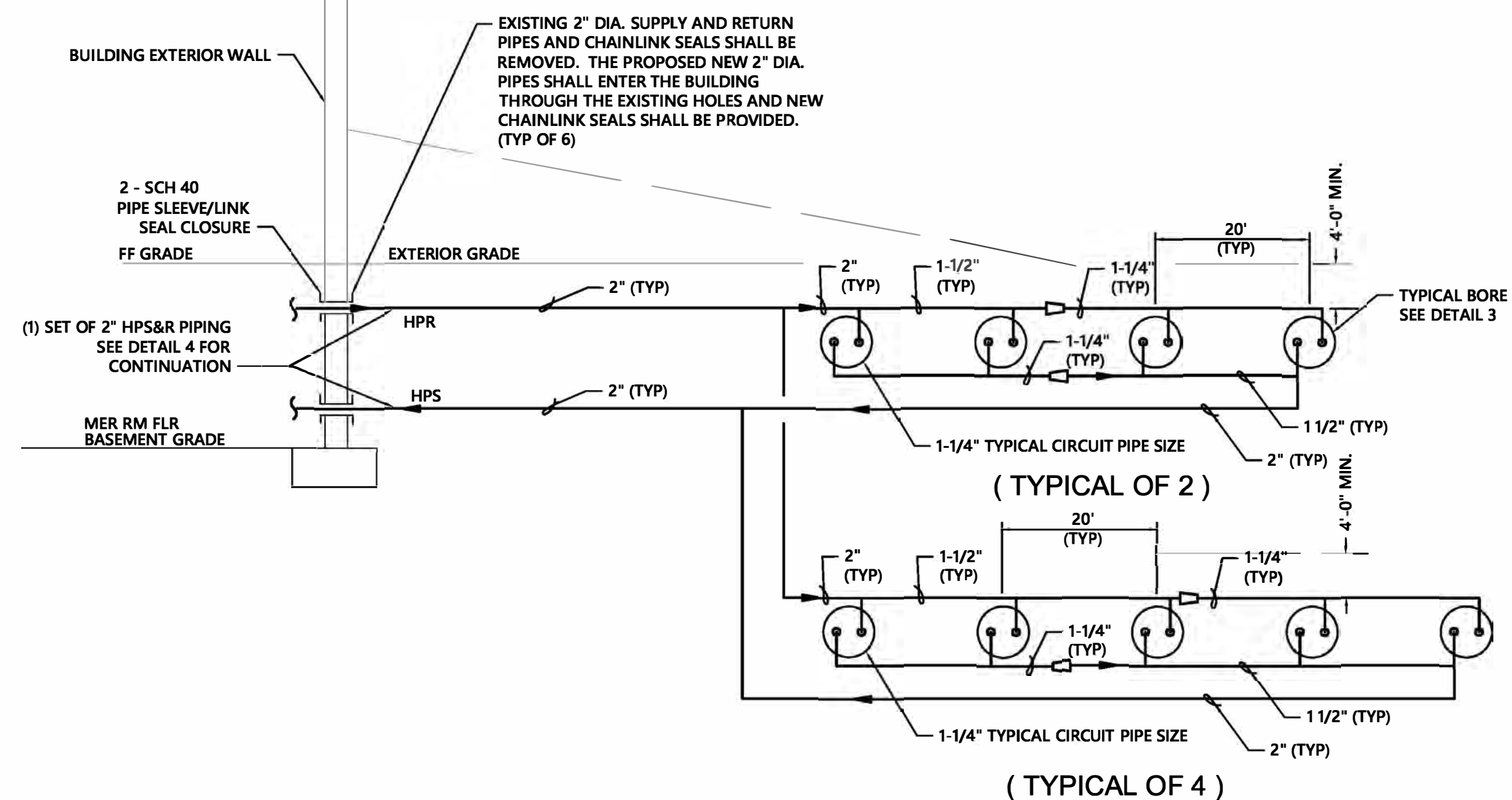
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SHEET TITLE:
GEOTHERMAL BOREFIELD SITE PLAN

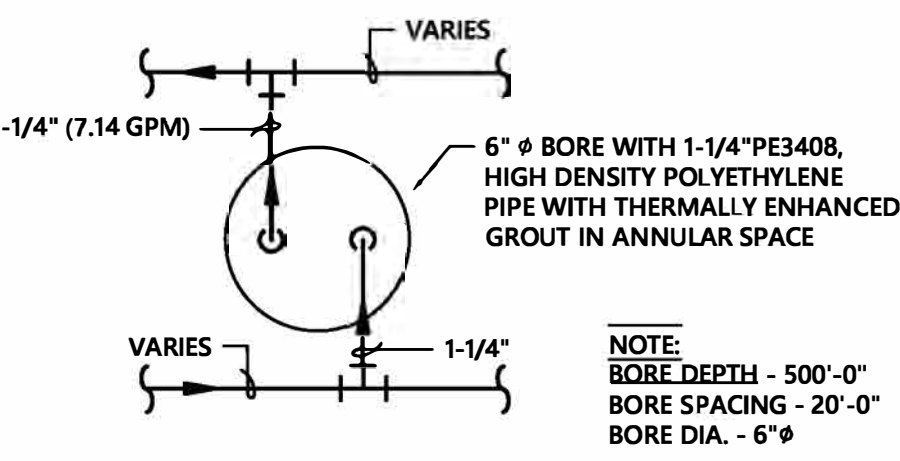
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DWG. NO.: **1 OF 3**

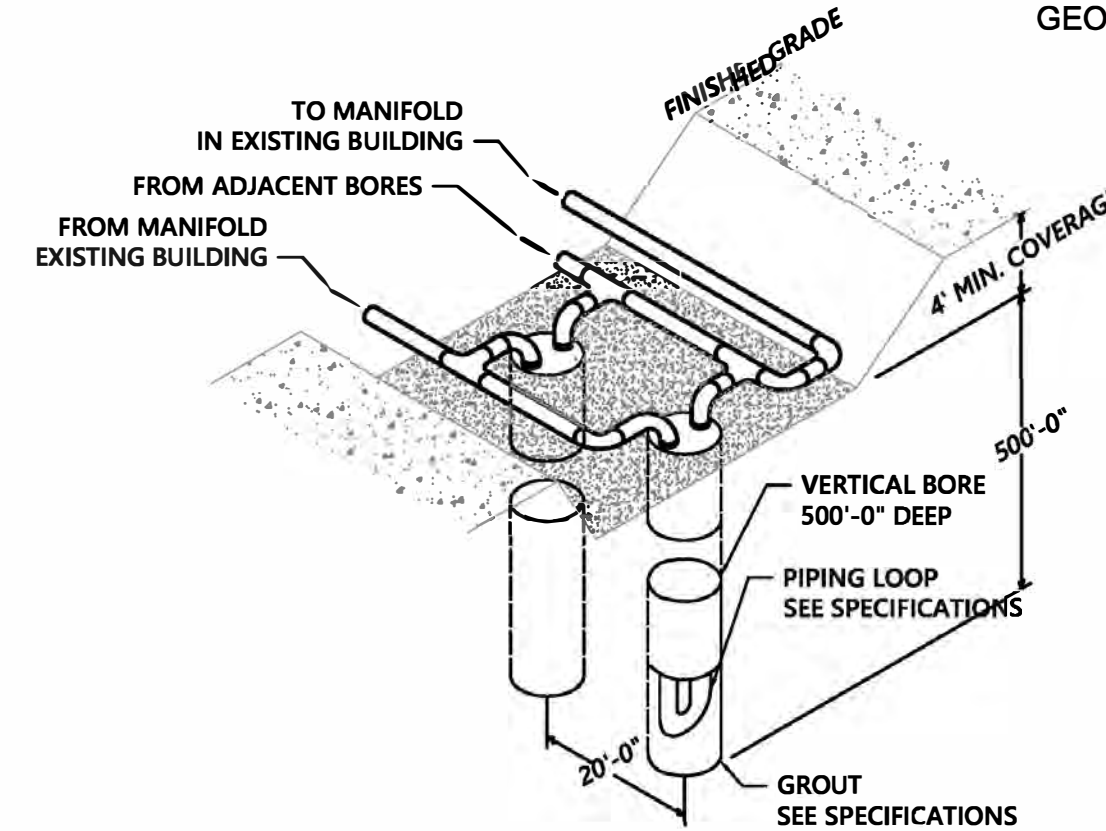
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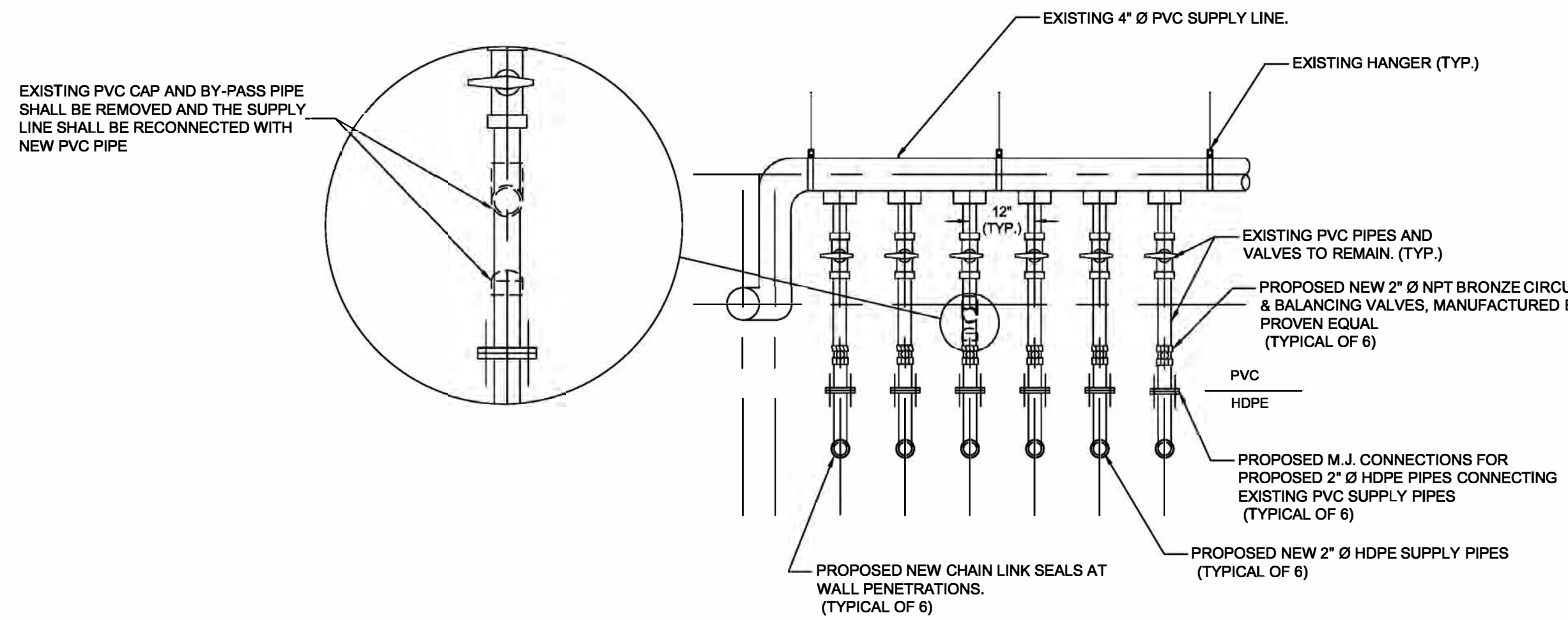
1 GROUND HEAT EXCHANGER SCHEMATIC DIAGRAM
DS-1 SCALE: NTS



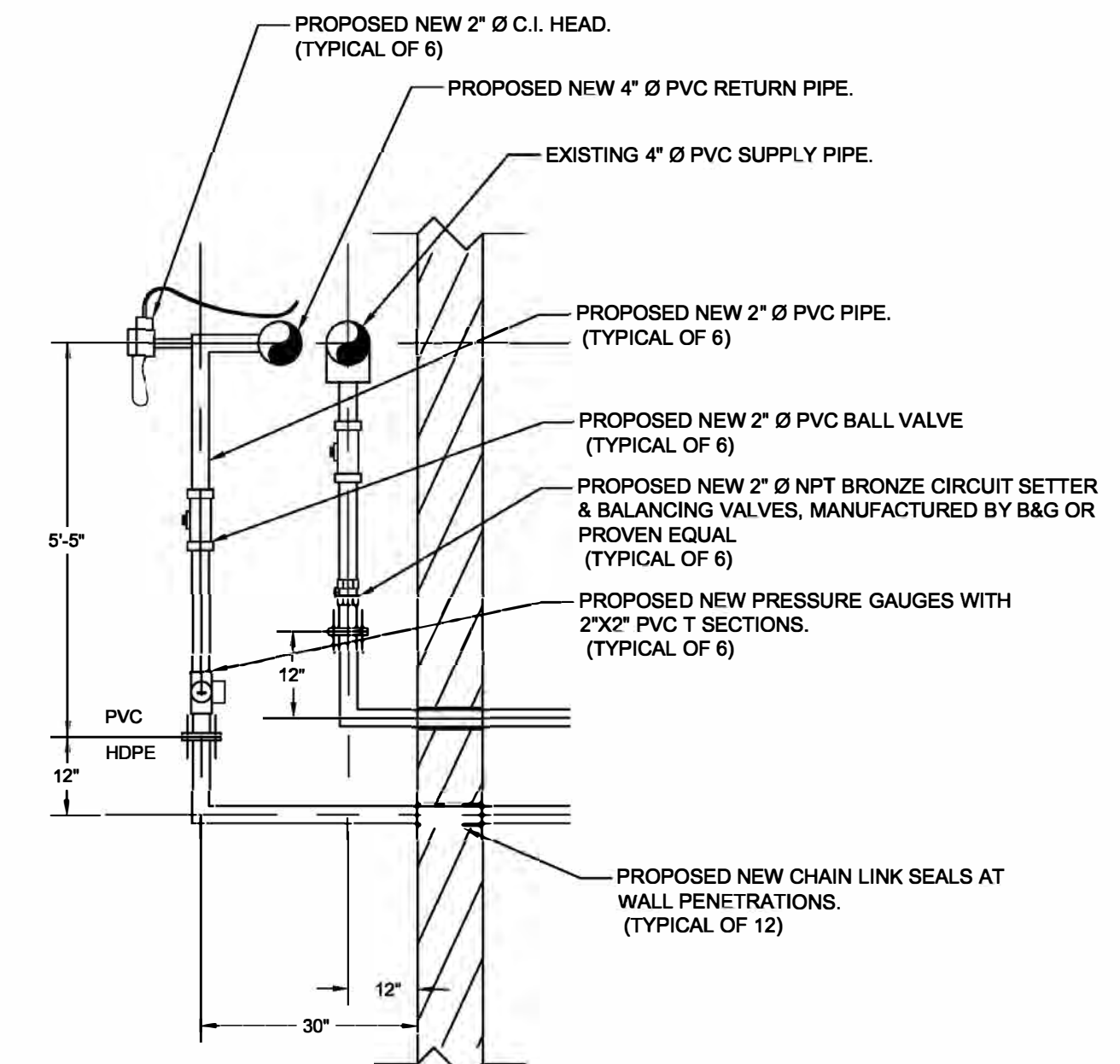
3 TYPICAL BORE PLAN
DS-1 SCALE: NTS



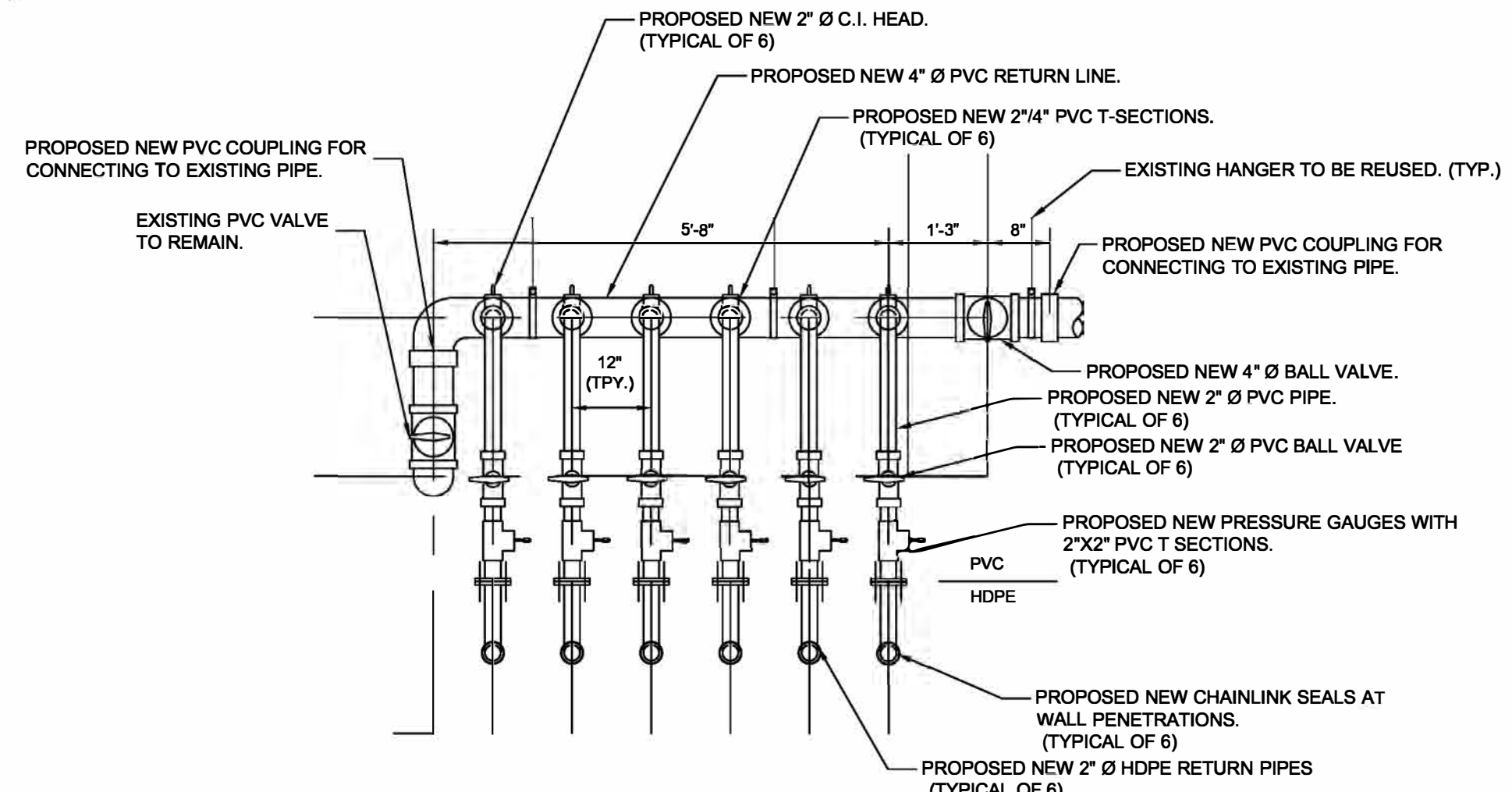
2 BORE PIPING DETAIL
DS-1 SCALE: NTS



4 PROPOSED SUPPLY PIPING INSIDE BUILDING
DS-1 SCALE: NTS



6 CROSS SECTION OF PROPOSED GEOTHERMAL PIPING INSIDE BUILDING
DS-1 SCALE: NTS



5 PROPOSED RETURN PIPING INSIDE BUILDING
DS-1 SCALE: NTS

NOTES:

- PIPE INSULATION SHALL BE PROVIDED FOR NEW SUPPLY AND RETURN PIPES INSIDE OF THE BUILDING.

GENERAL NOTES:

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION AND/OR ASSEMBLY OF THE PROPOSED GEOTHERMAL SYSTEM.

APPROVALS:



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DATE	DESCRIPTION

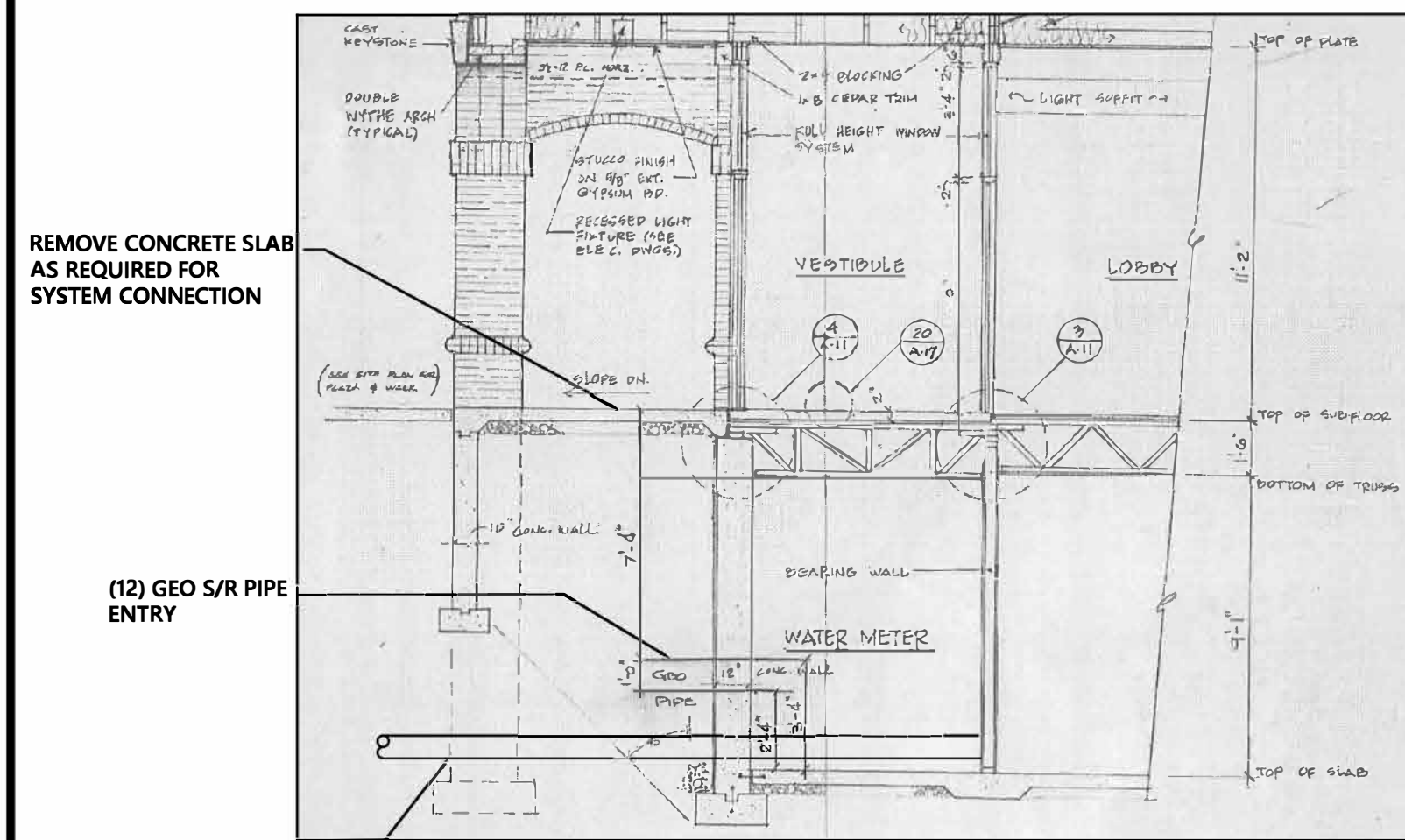
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SHEET TITLE:
DETAIL SHEET DS-1

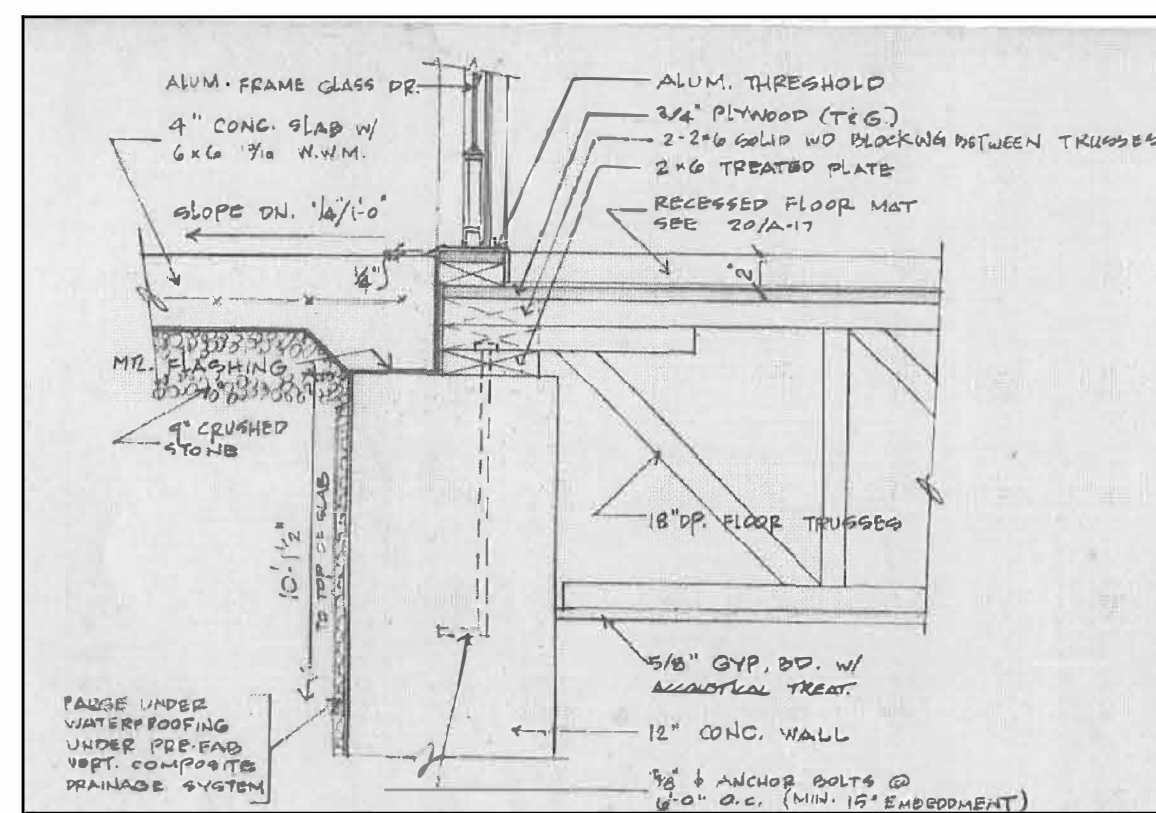
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DWG. NO.:
2 OF 3

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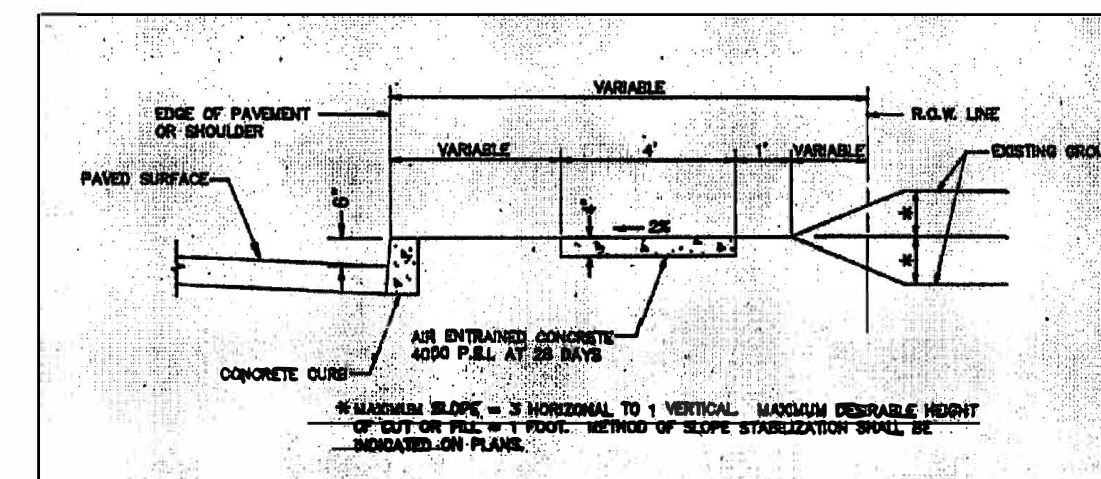
7 BUILDING FOUNDATION PLAN
DS-2 SCALE: NTS



8 EXISTING CONCRETE SLAP DETAIL
DS-2 SCALE: NTS

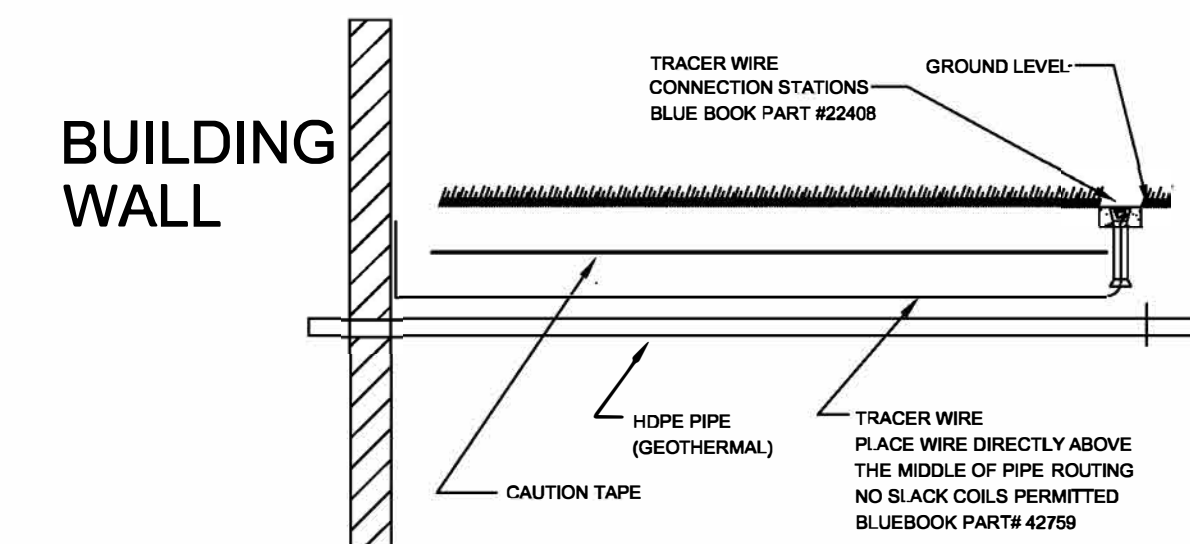
GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION AND/OR ASSEMBLY OF THE PROPOSED GEOTHERMAL SYSTEM.

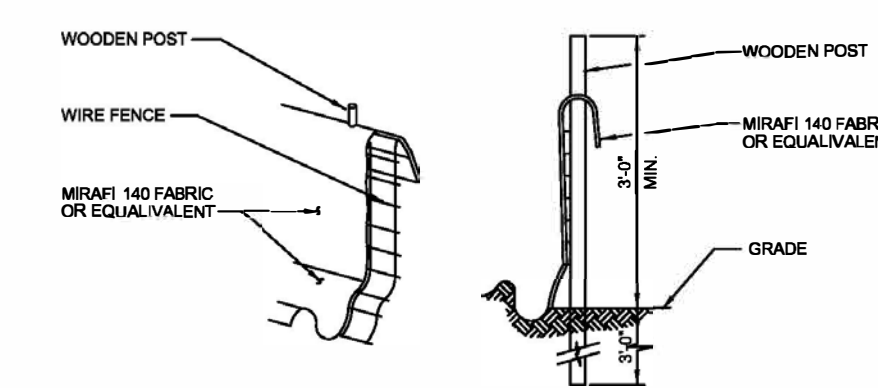


NOTE: EXISTING 4" THICK CONCRETE SIDEWALK SHALL BE RESTORED TO ITS ORIGINAL CONDITION.

9 EXISTING CONCRETE SIDEWALK DETAIL
DS-2 SCALE: NTS



10 TYPICAL TRENCH SECTION AND PROFILE
DS-2 SCALE: NTS



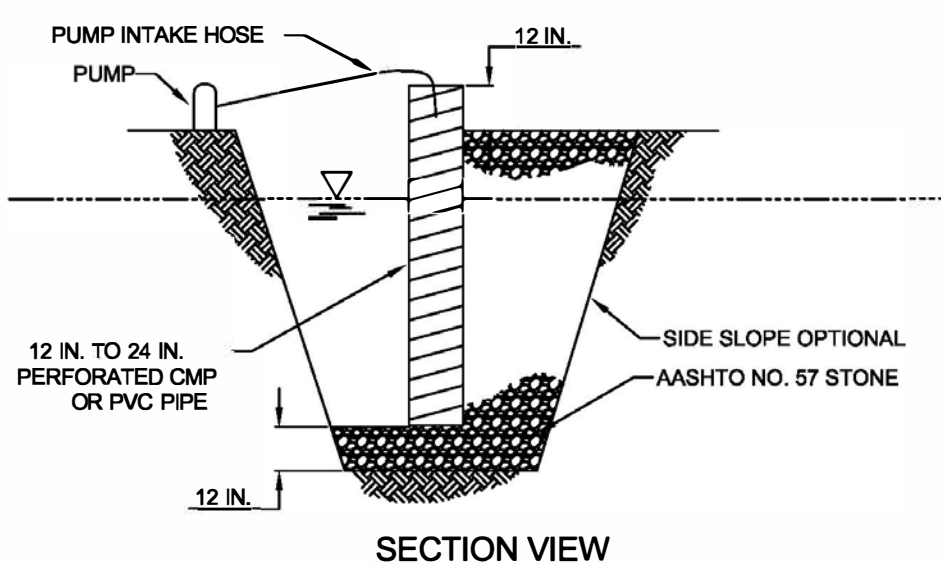
12 STANDARD SILT FENCE DETAIL
DS-2 SCALE: NTS



EX. PUMP TRIM TO REMAIN

PROVIDE NEW SUCTION DIFFUSER AND PUMPS

CLEAN, REPAIR AND PAINT EXISTING PUMP HOUSEKEEPING PAD



MINIMUM DIAMETER OF PIT BOTTOM SHALL BE 24" LARGER THAN PIPE DIAMETER. MINIMUM DEPTH OF PIT SHALL BE 24" BELOW WATER LEVEL IN WORK AREA (INCLUDING THE AASHTO #57 STONE). 12" TO 24" PERFORATED CMP OR PVC PIPE SHALL BE SET ON 12" OF CLEAN AASHTO # 57 STONE.

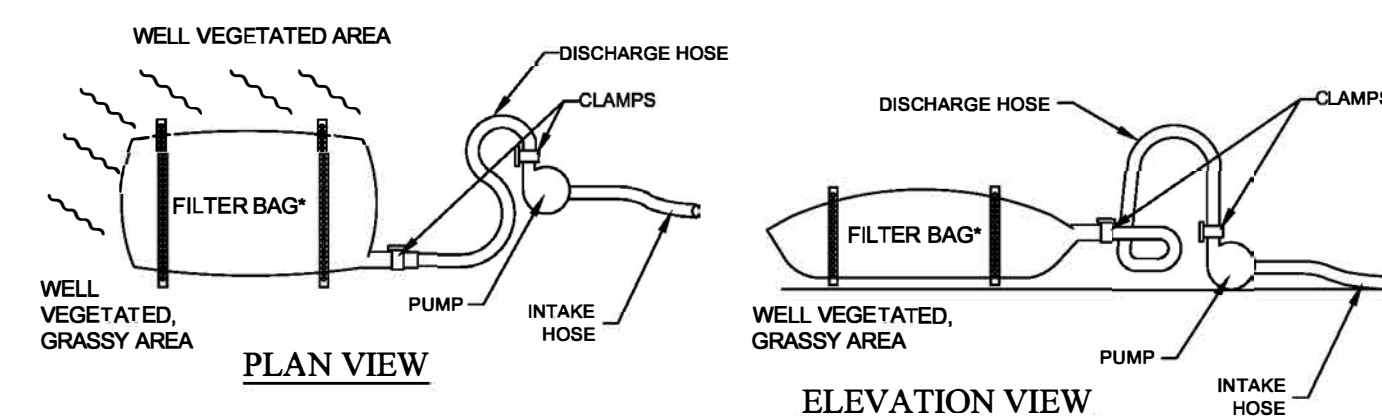
VOID SPACE AROUND PIPE SHALL BE FILLED WITH AASHTO # 57 STONE. PIPE TO EXTEND 12" MIN. ABOVE TOP OF STONE AND/OR WATER BEING PUMPED FROM WORK AREA.

SET PUMP INTAKE INSIDE STANDPIPE.

DISCHARGE FROM PUMP SHALL BE TO A STABLE AREA BELOW DISTURBANCES FROM THE WORK ZONE.

SUMP MAY BE USED IN CONJUNCTION WITH FILTER BAG WHERE ADDITIONAL FILTERING IS NEEDED.

13 SUMP PIT DETAIL
DS-2 SCALE: NTS



14 PUMPED WATER FILTER BAG
DS-2 SCALE: NTS

MANUFACTURE:	ITT BELL & GOSSETT, MORTON GROVE, IL, U.S.A.
MODEL:	2G 12.75 BF
SPECIFICATIONS:	200 G.P.M 160 F.T. 15 H.P. 1800 R.P.M.
	MAX. WORK PRESSURE: 175 P.S.I.
	208V / 3HP / 60HZ

11 EXISTING PUMPS (2) TO BE REPLACED
DS-2 SCALE: NTS

NOTE:
1. THE EXISTING B&G 2G PUMP HAS BEEN DISCONTINUED. PROVIDE B&G e-1510, 2GB, 12.5 IMPELLER, 200GPM, 160"HD, 15 HP, 1750 RPM, 208V/3PH/60HZ OR PROVEN EQUAL. (PROVIDE VFD/DISCONNECT FOR BALANCING PURPOSES ONLY)

APPROVALS:



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DRAWN: Y.L. CHECK: T.G.

SHEET TITLE:
DETAIL SHEET DS-2

SCALE: N.T.S. DATE: 06/03/22

DWG. NO.:
3 OF 3

FILE: \\ACUA\SP\0000000000\ENGINEERING\PROJECTS\GEOTHERMAL WELL FIELD - 44-2022_V1\GEO THERMAL DETAILS\FINAL 6-03-2022.DWG. DATE: 06/03/2022 12:23PM BY: YAU:YREB