

COPPLE CROWN VILLAGE DISTRICT

NEW DURHAM, NH

REPLACEMENT OF WATER BOOSTER PUMP STATIONS

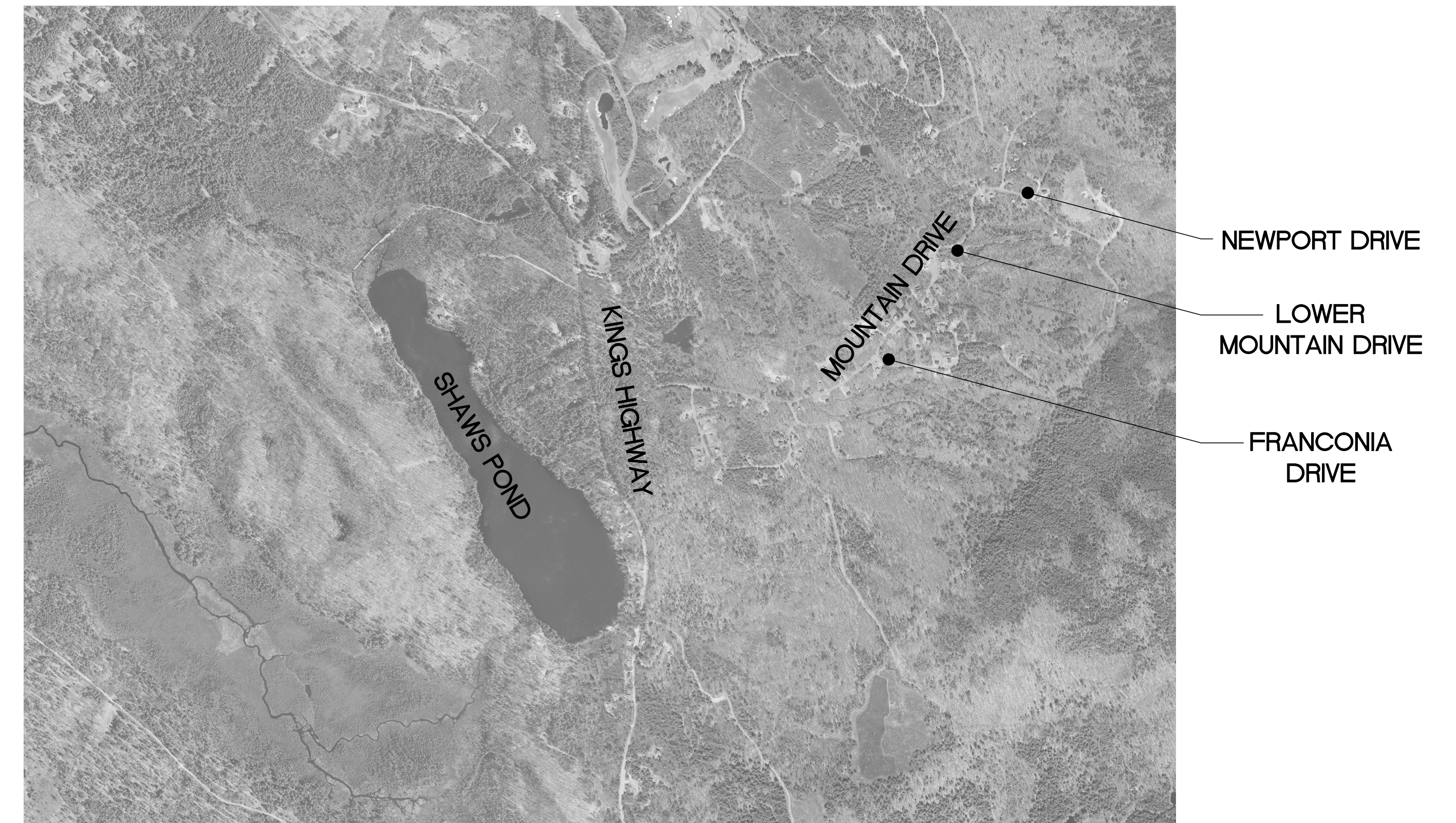
PER
PLAN REF.

INDEX OF DRAWINGS

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GENERAL NOTES

- GENERAL NOTES APPLY TO ALL DRAWINGS IN THE PROJECT DOCUMENTS, AND DRAWING NOTES APPLY ONLY TO THOSE DRAWINGS ON WHICH THEY APPEAR.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION PROCEDURES, SCHEDULES, TRAFFIC CONTROL, AND EQUIPMENT WITH THE COPPLE CROWN VILLAGE DISTRICT. HE SHALL COORDINATE HIS CONSTRUCTION SCHEDULE WITH ANY AND ALL AFFECTED UTILITIES IN ORDER TO PREVENT UNNECESSARY DELAYS IN THE WORK, AND/OR INTERRUPTION OF SERVICE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PAVEMENT AND ROADWAYS OUTSIDE THE WORK AREA. HE SHALL REPAIR, AT NO COST TO THE OWNER, ALL DAMAGED AREAS RESULTING FROM HIS OPERATIONS OR HIS SUB-CONTRACTORS. ANY AREAS DISTURBED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE RESTORED TO ORIGINAL CONDITIONS, REGARDLESS IF THE RESTORATION IS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER THROUGHOUT THE CONSTRUCTION ACTIVITIES.
- EXISTING UTILITIES, AND ALL UNDERGROUND STRUCTURES SHOWN ON THESE DRAWINGS ARE APPROXIMATELY ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND LOCATE ALL AFFECTED UTILITIES. THE ENGINEER NOR THE OWNER GUARANTEES THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS.
- ALL AREAS BEYOND THE LIMITS OF CONSTRUCTION WHICH ARE DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.
- ANY PROPERTY LINES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY, AND SHOWN ONLY FOR REFERENCE.
- THE CONTRACTOR AND ALL HIS SUB-CONTRACTORS SHALL BECOME FAMILIAR WITH THE CONTRACT DOCUMENTS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY VARIATIONS OR SUBSTITUTIONS MUST HAVE PRIOR APPROVAL OF THE ENGINEER.
- FLUET ENGINEERING ASSOCIATES, WAIVE ALL LIABILITY AND RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS AND SPECIFICATIONS, AND THE DESIGN INTENT WHICH THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM FAILURE TO OBTAIN AND/OR FOLLOW FLUET ENGINEERING GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, AMBIGUITIES, OR CONFLICTS WHICH ARE ALLEGED.
- REFERENCES TO THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) SPECIFICATIONS SHALL REQUIRE THAT THE MATERIAL AND INSTALLATION COMPLY WITH THE CURRENT VERSION OF THE NHDOT SPECIFICATIONS, FOR THE SECTION SPECIFIED.
- TOPOGRAPHIC SURVEY DATA FOR THIS DRAWING WAS PRODUCED BY NORWAY PLAINS ASSOCIATES OF ROCHESTER, NH.
- PROTECT BENCH MARKS AND EXISTING WORK FROM DAMAGE OR DISPLACEMENT.
- THE CONTRACTOR SHALL IMPLEMENT ALL REASONABLE MEASURES TO MINIMIZE EROSION.
- SUBSOIL MATERIAL SUITABLE FOR REUSE SHALL INCLUDE EXCAVATED MATERIAL OR BORROW MATERIAL FREE FROM DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY. REUSE OF THIS MATERIAL SHALL BE APPROVED BY THE ENGINEER PRIOR TO BEING BROUGHT ON SITE.
- EROSION CONTROL STRUCTURES SHALL BE INSPECTED AFTER EACH RAINSTORM OF 1 INCH OR MORE, AND BE MAINTAINED WHEN NECESSARY, BUT IN NO CASE LESS OFTEN THAN ONCE PER YEAR.



VACINITY MAP

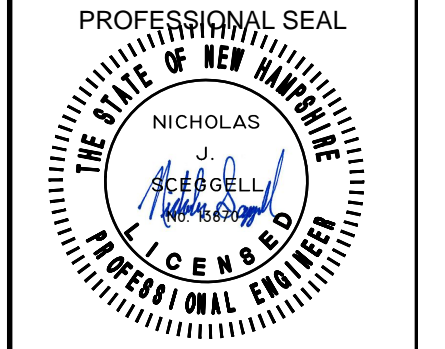
APPROX. SCALE: 1" = 1,000'

PREPARED BY:

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DRAWN BY: MEF	DATE: SEPT. 2014
CHECKED BY: NJS	PROJECT NO.:
PROJECT ENG: NJS	DRAW NO.:
	C1.0
SHEET 1 OF 8	



NO.	DATE	DESCRIPTION	BY	CHK'D
1	00-00-2011	INSERT TEXT	XXX	XXX

NEW DURHAM,
NEW HAMPSHIRE

COPPLE CROWN
VILLAGE DISTRICT
REPLACEMENT OF
WATER BOOSTER
PUMP STATIONS

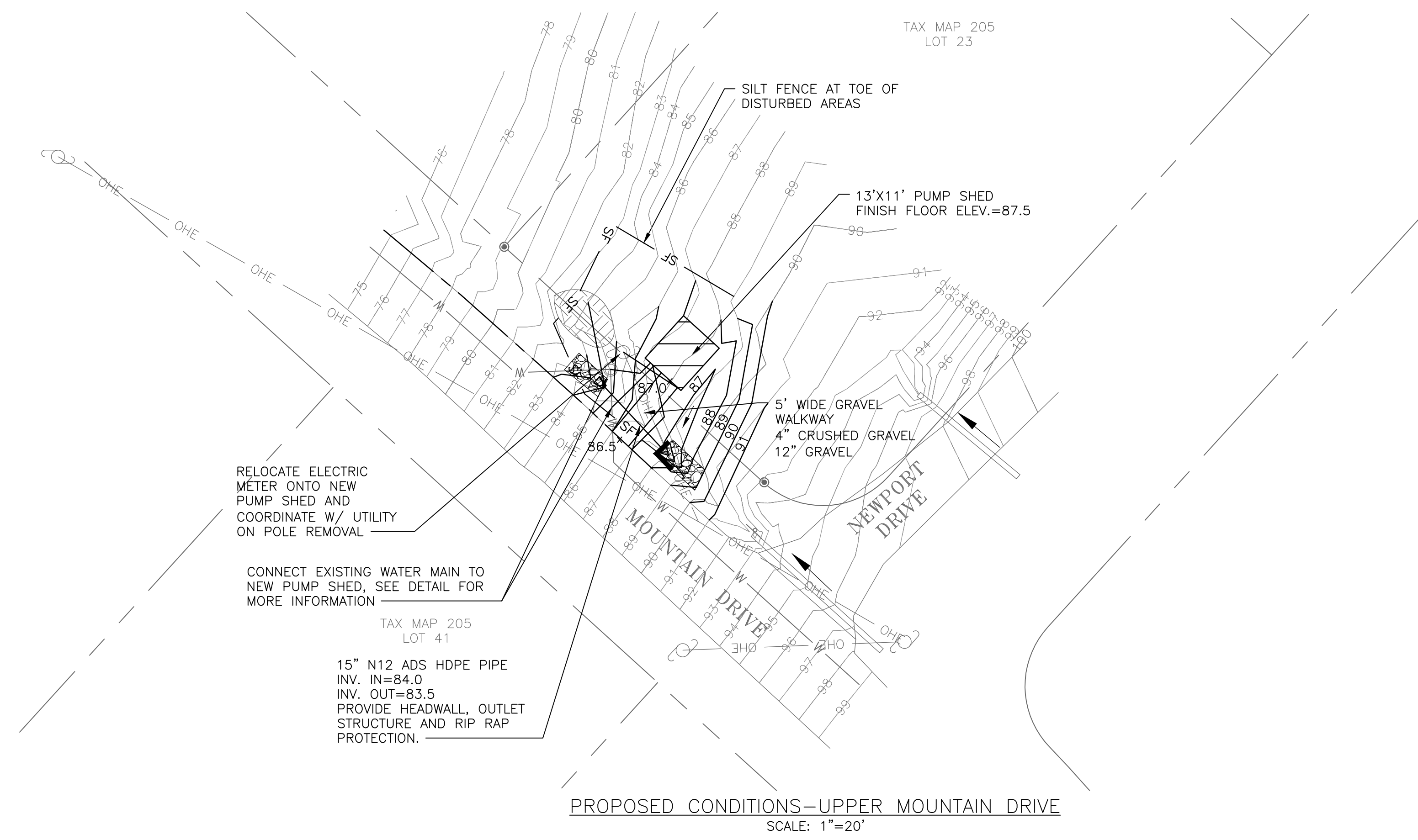
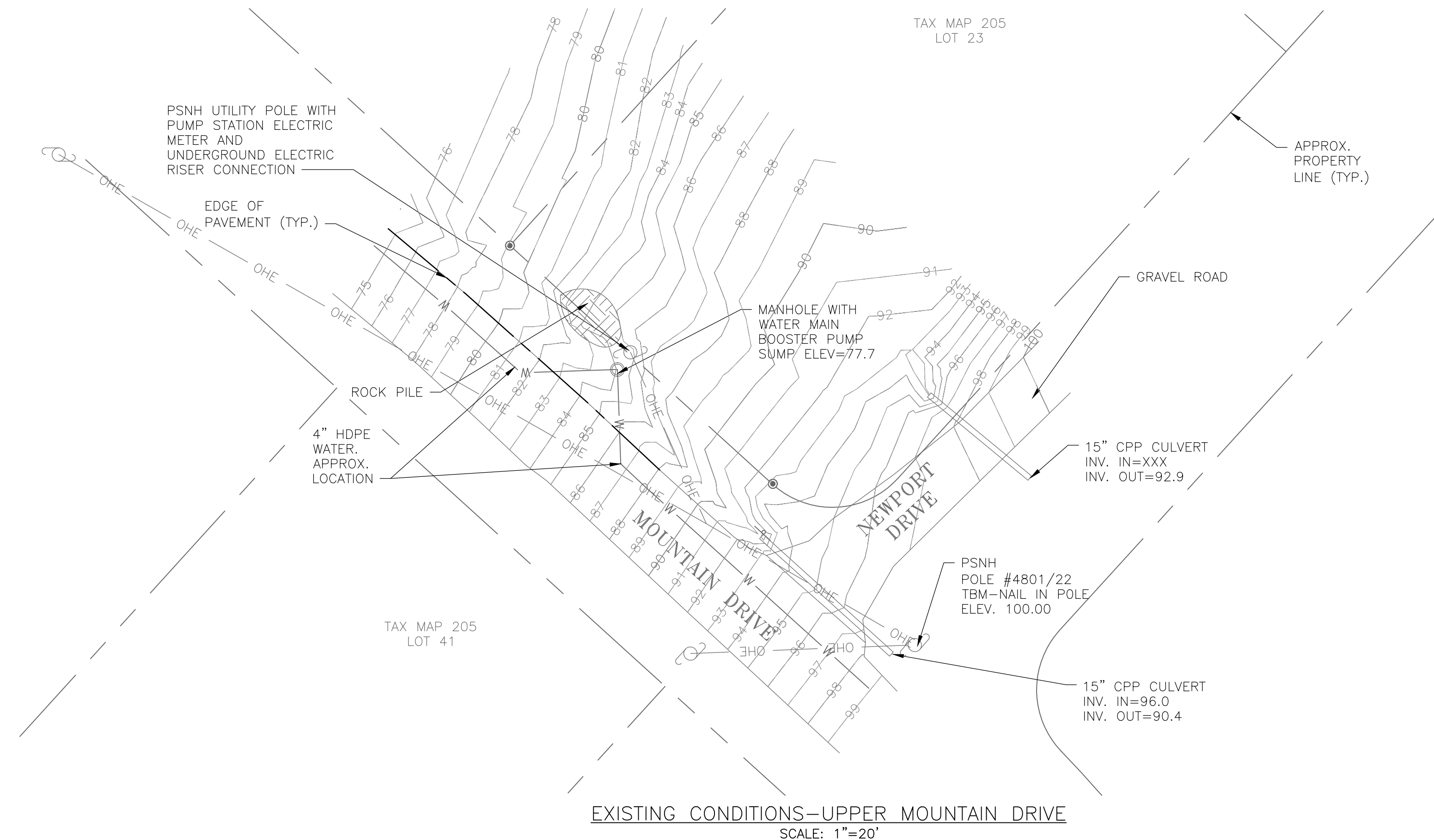
SHEET TITLE

SITE PLAN
MOUNTAIN DRIVE AT
NEWPORT DRIVE

DRAWN BY	DATE
MEF	SEPT. 2014
CHECKED BY	D&K PROJECT #
NJS	222649L
PROJ. ENG.	D&K ARCHIVE #
NJS	

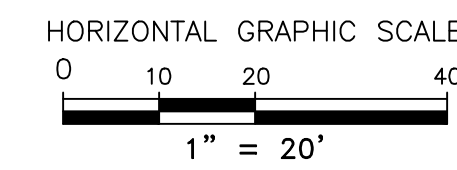
SHEET NUMBER

C1.2



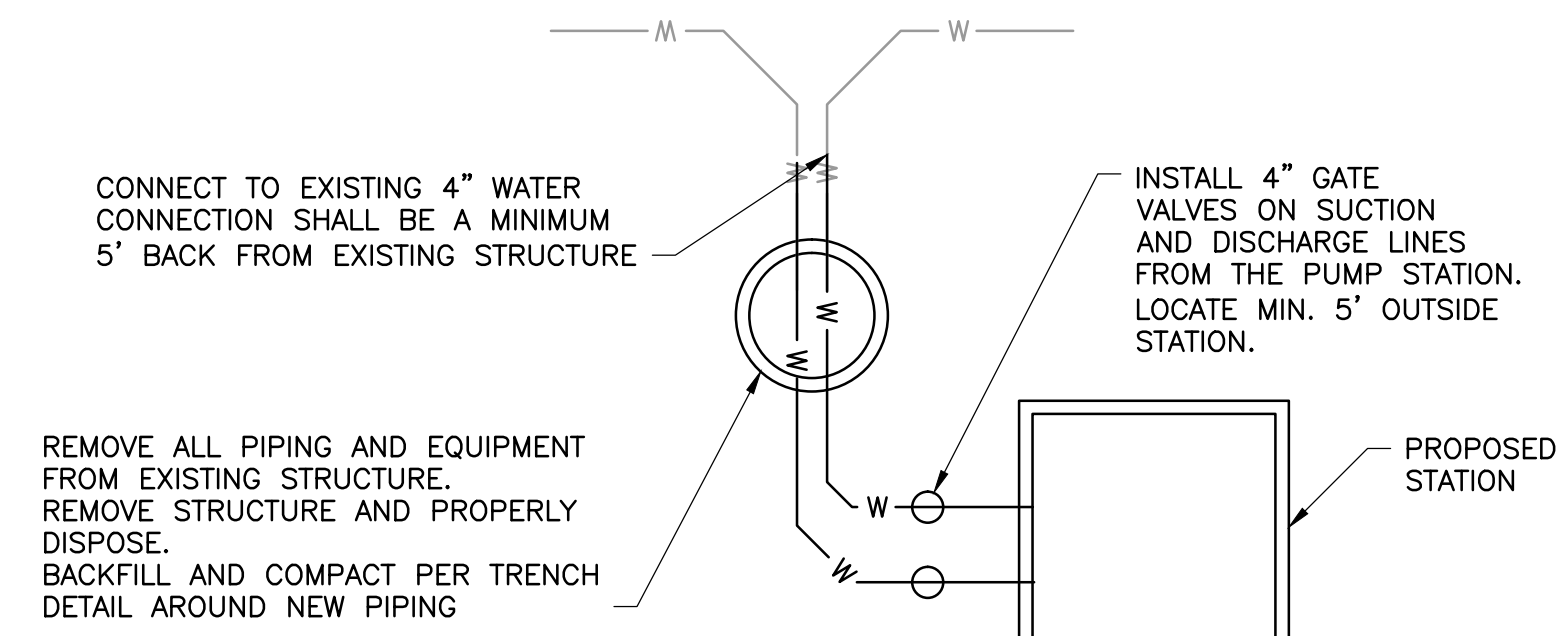
UTILITY NOTES:

- BELOW GRADE UTILITY INFORMATION IS BASED ON BEST AVAILABLE INFORMATION AT TIME OF SURVEY. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER SERVICE LINES AND BURIED ELECTRICAL SERVICE LINES ARE NOT SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ALL UTILITIES WITH LOCAL UTILITY COMPANIES ALONG WITH NOTIFYING "DIG-SAFE" (1-800-344-7233) AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE INITIATION OF CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY RELOCATION AND INSTALLATION WITH THE APPROPRIATE UTILITY.
- ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE PLAN. AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL REPAIR OR COORDINATE WITH THE RESPECTIVE UTILITY FOR DAMAGE TO UTILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY FEES INCLUDING ELECTRICITY CONNECTION FEES.
- CONSTRUCTION, TESTING AND DISINFECTION OF WATER UTILITIES SHALL BE IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS ASSOCIATED WITH THIS PROJECT.

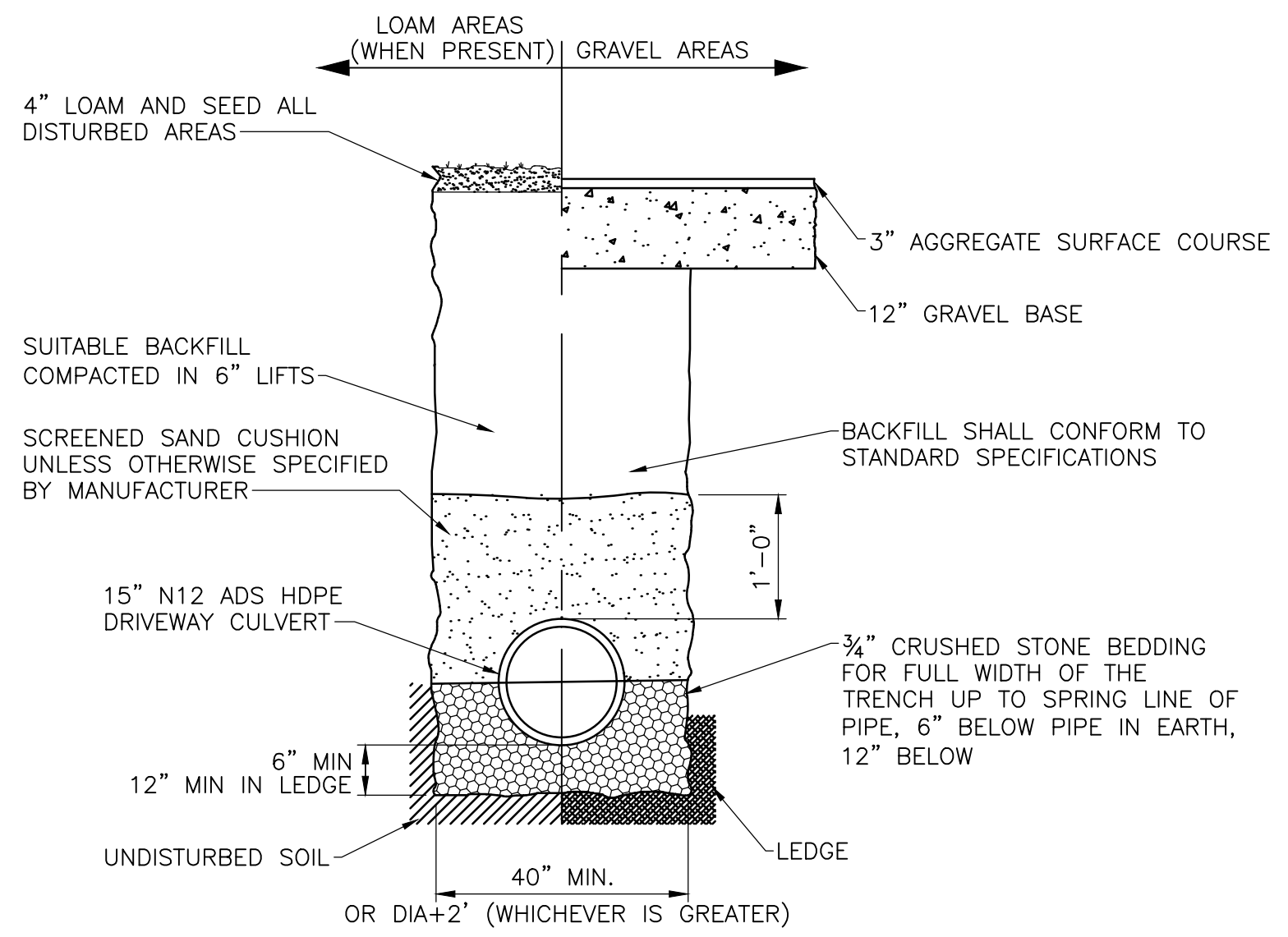
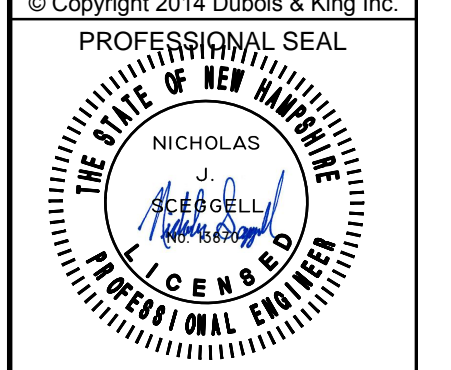


LEGEND

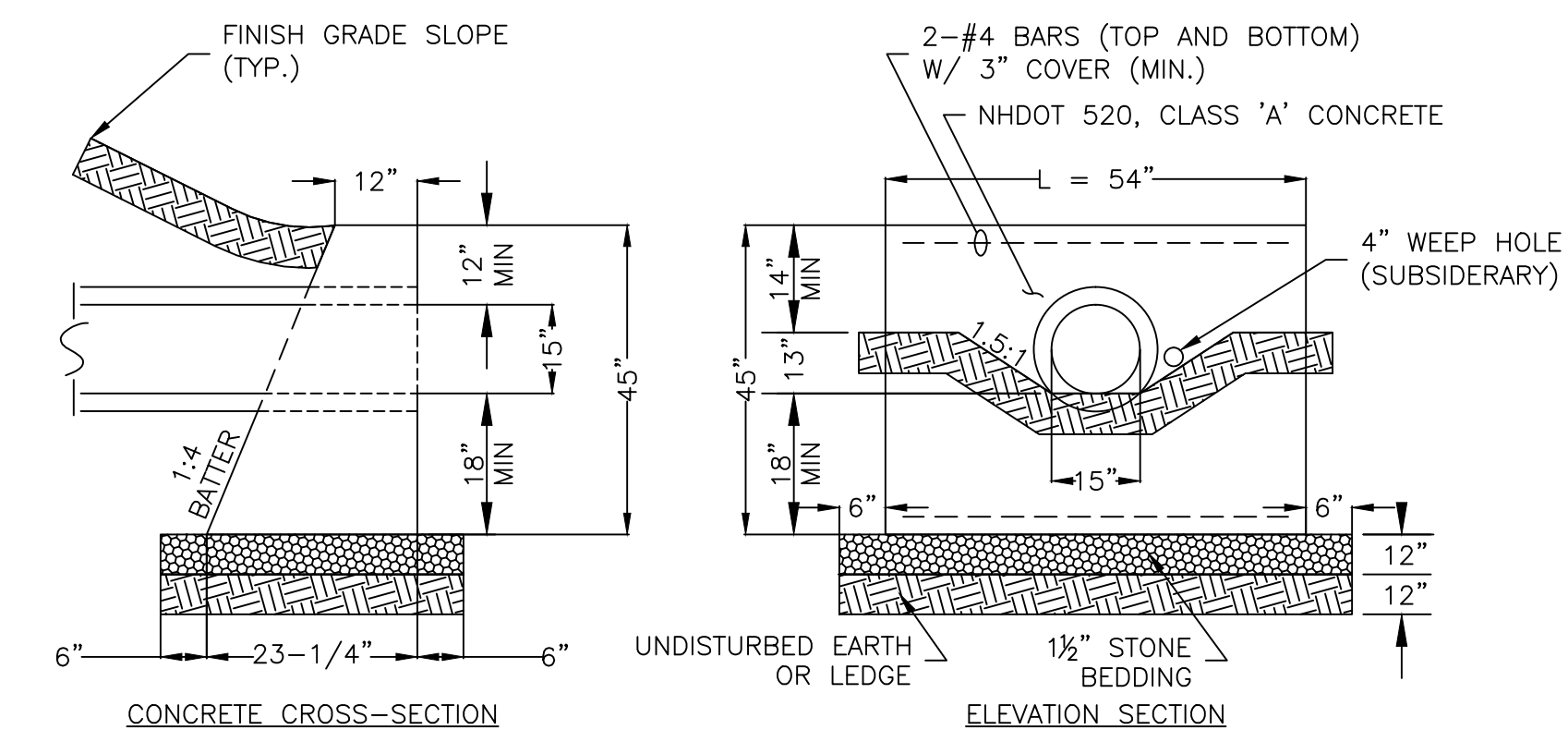
EXISTING		PROPOSED
---	PROPERTY LINE	---
---	BUILDING	[Hatched Box]
— OHE —	OVERHEAD ELECTRIC	— OHE —
⊙	UTILITY POLE	
⊙	WATER MANHOLE	
— W —	WATER MAIN	— W —
— 100 —	CONTOUR MAJOR	[100]
— 98 —	CONTOUR MINOR	[98]
—	DRAIN PIPE/DRIVEWAY CULVERT	—
— SF —	SILT FENCE	— SF — SF —



WATERLINE CONNECTION SCHEMATIC
NOT TO SCALE



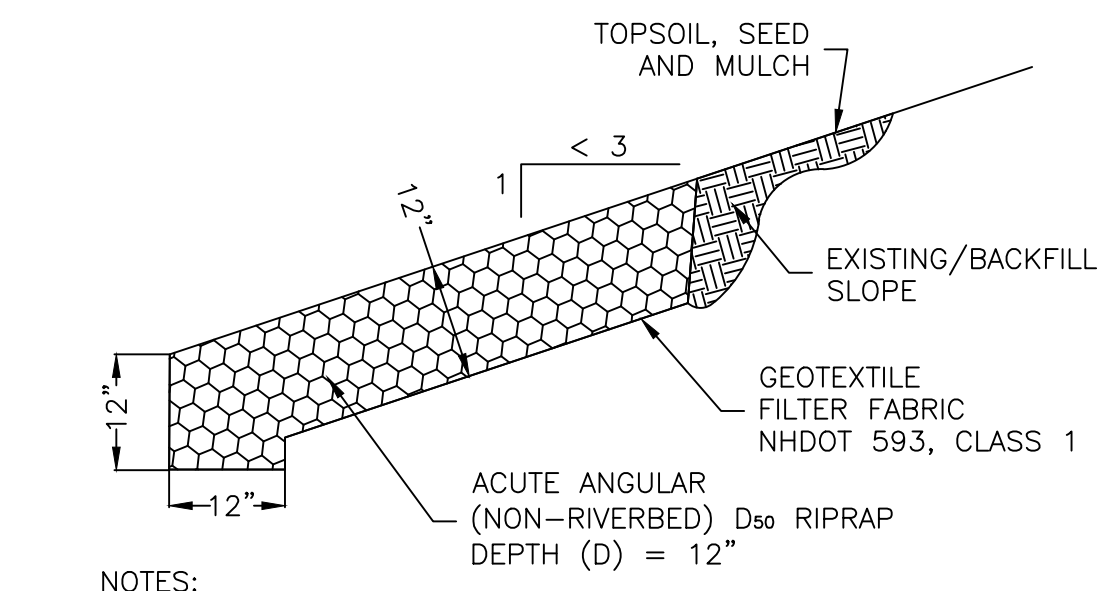
TYPICAL DRAIN TRENCH DETAIL
NOT TO SCALE



HEADWALL DIMENSION SCHEDULE

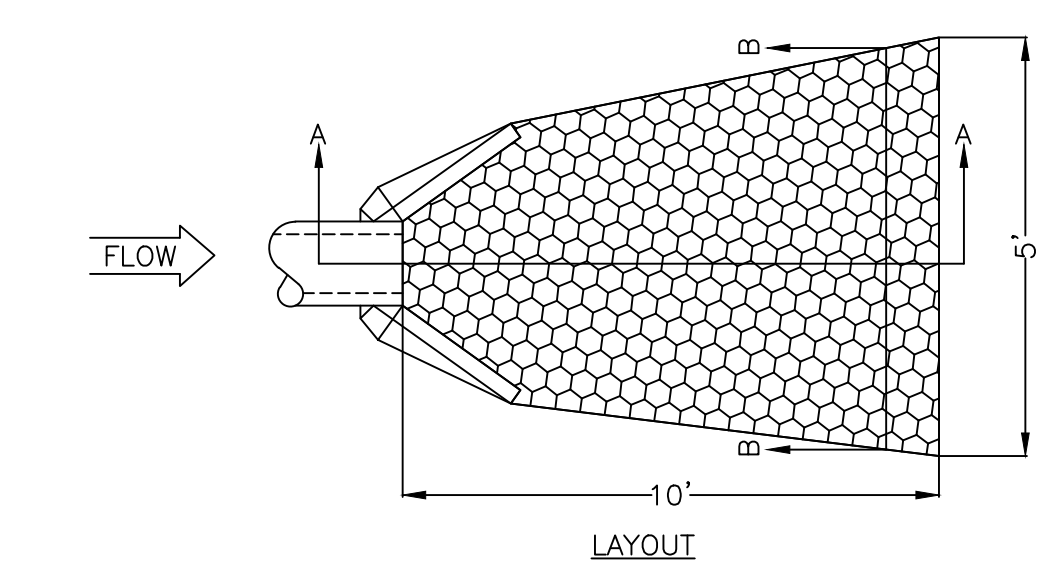
PIPE DIAMETER (D)	HEADER LENGTH (L)	HEADER HEIGHT (H)	WIDTH AT BOTTOM OF HEADER (W)	FILL HEIGHT (FH)
15"	4'-6"	3'-9"	1'-11 1/2"	1'-1"

DRIVEWAY CULVERT HEADWALL DETAIL
NOT TO SCALE



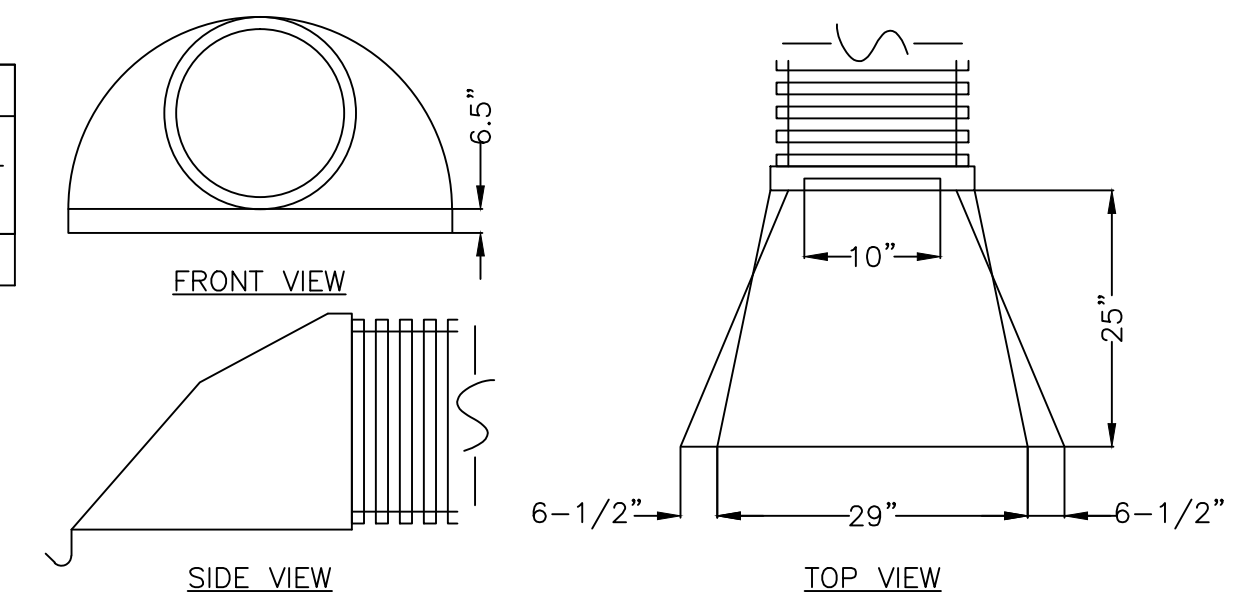
- NOTES:
- RIPRAP SHALL BE PLACED ON SLOPES STEEPER THAN 3:1
 - RIPRAP PLACEMENT ON BACKFILL MATERIAL: IF RIPRAP MATERIAL IS TO BE SUPPORTED/PLACED ON NEWLY PLACED BACKFILL MATERIAL (VERSUS AN EXISTING SLOPE), THEN BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO THE EXPOSED LIMITS OF THE PROPOSED RIPRAP MATERIAL. ONCE BACKFILL MATERIAL HAS BEEN PLACED, THEN EXCAVATION OF THE NEWLY PLACED BACKFILL CAN BE REMOVED AND REPLACED WITH RIPRAP MATERIAL IN ACCORDANCE TO THE DIAGRAM ABOVE.

RIPRAP SLOPE DETAIL
NOT TO SCALE



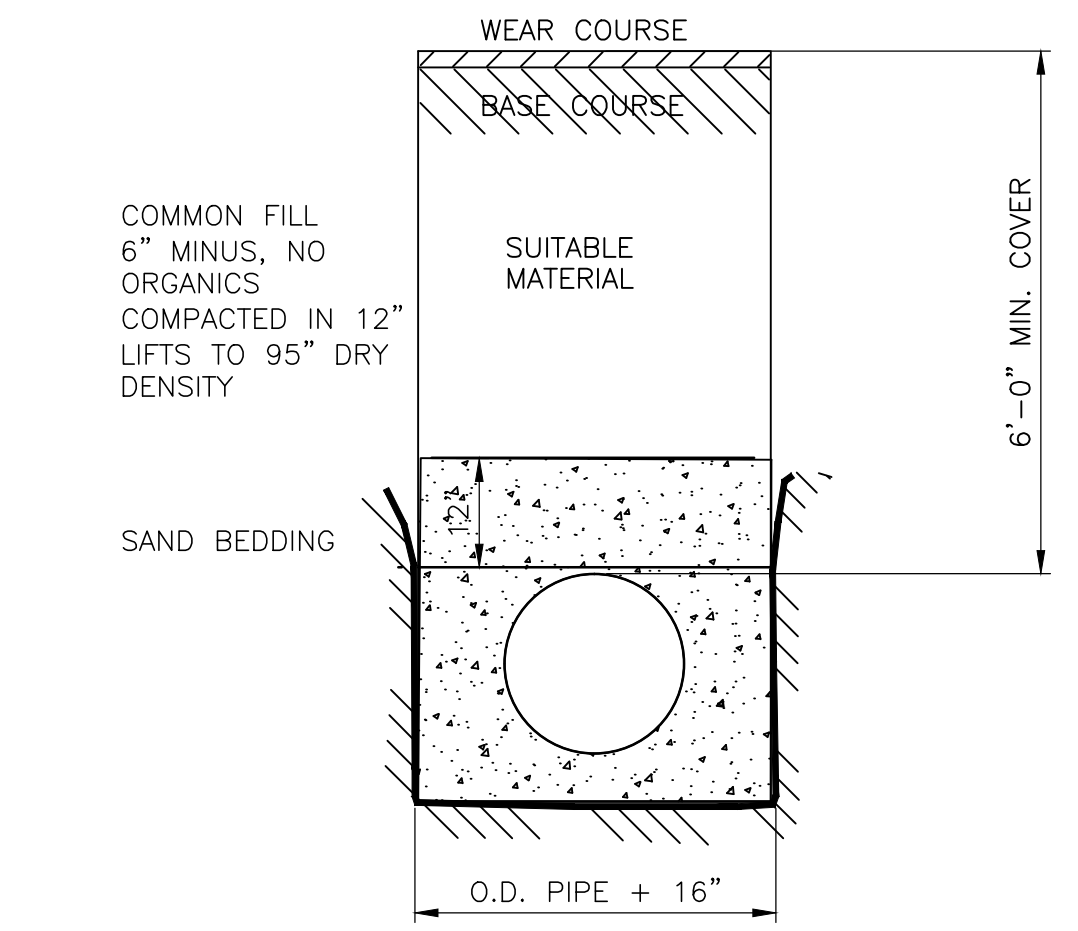
FLARED END SECTION SCHEDULE

PIPE DIA. (D)	A	THREADED ROD (MAX.) (B)	END LENGTH (L)	END WIDTH (W)	END HEIGHT (H)
15"	6.5"	10"	25"	29"	6.5"

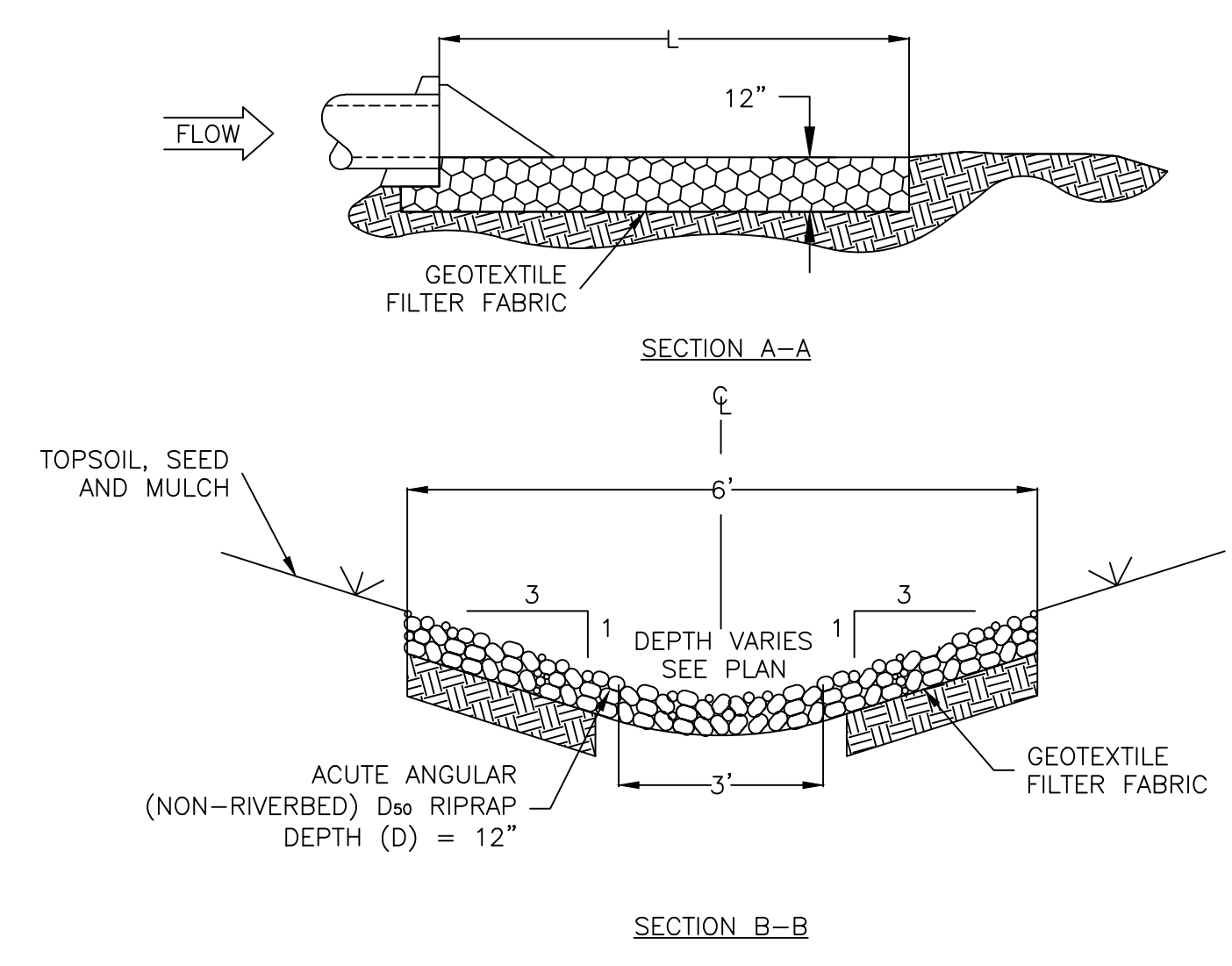


- NOTES:
- THREADED ROD WITH WING NUTS PROVIDED FOR END SECTIONS 12' THROUGH 24". END SECTIONS 30" AND 36" SHALL BE WELDED TO PIPE PER MANUFACTURER'S RECOMMENDATION

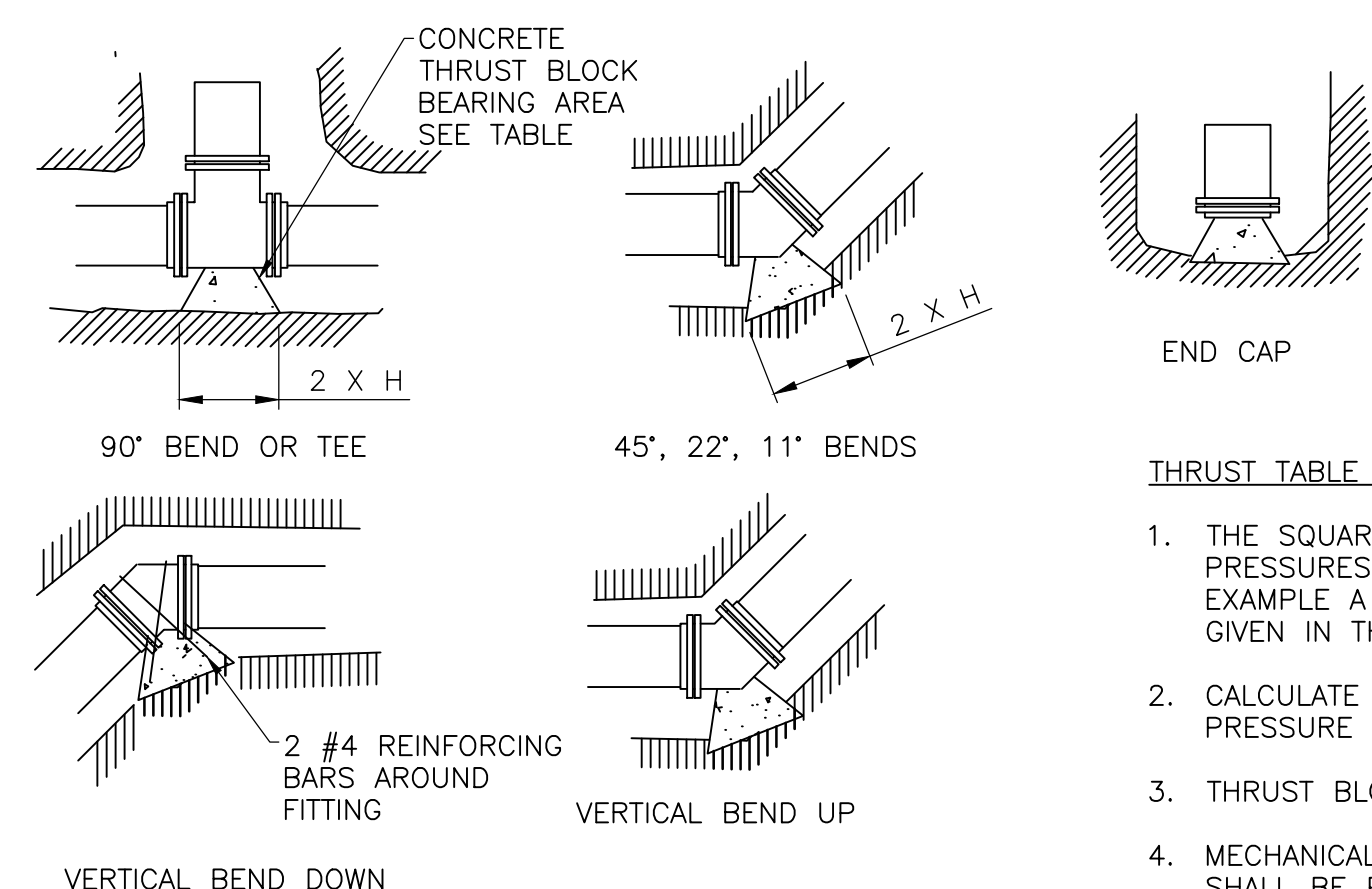
SLOPED END SECTION DETAIL
NOT TO SCALE



TYPICAL WATER TRENCH DETAIL
NOT TO SCALE



STONE LINED OUTLET PROTECTION DETAIL
NOT TO SCALE



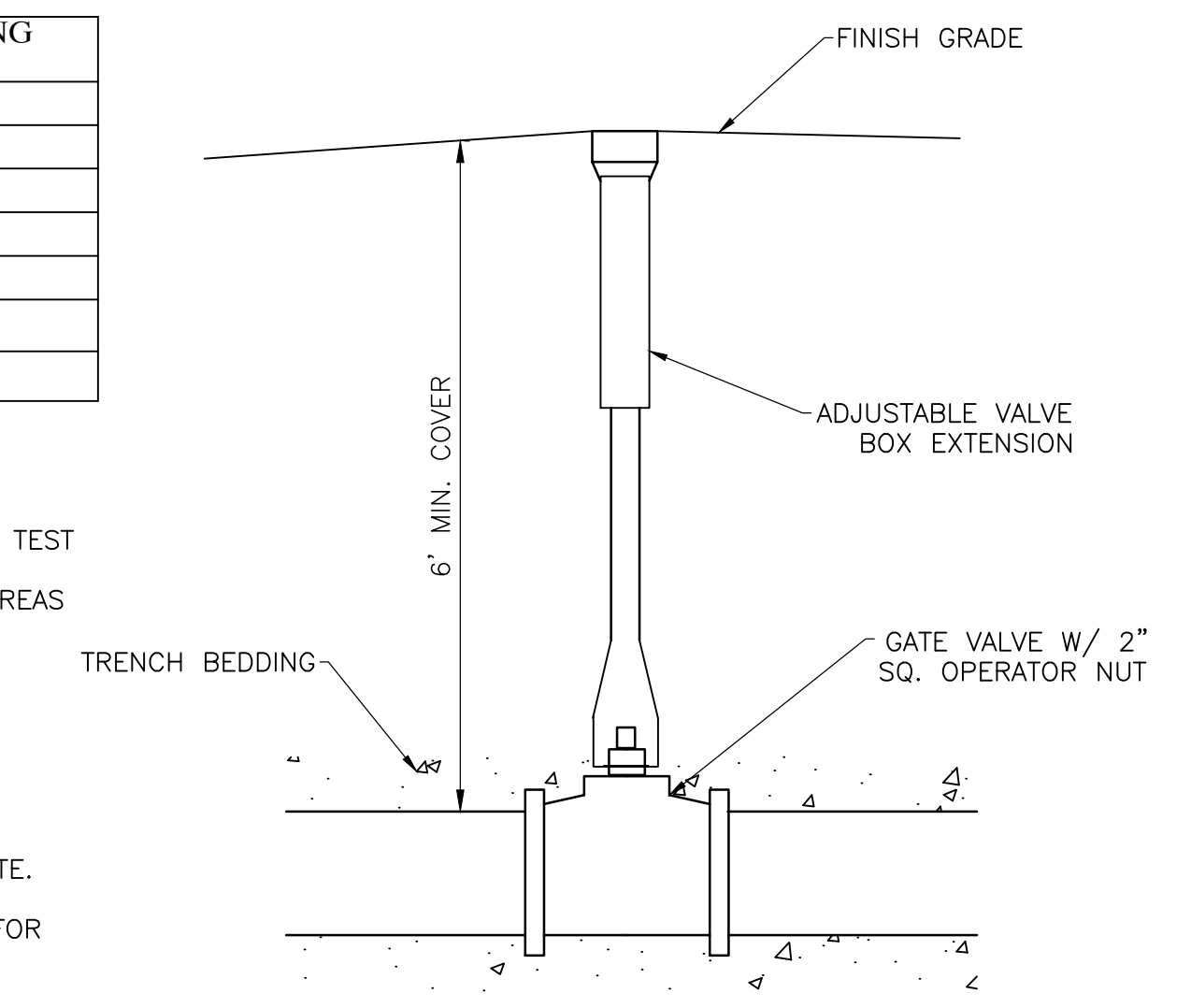
THRUST BLOCK DETAIL
NOT TO SCALE

SQUARE FEET OF THRUST BLOCK BEARING AREA ON UNDISTURBED SOIL*

BEND FOR ELBOW	PIPE SIZE		
	4"	6"	8"
90 DEGREE	0.9	2.2	3.9
PLUG, CAP OR TEE	0.7	1.6	2.8
45 DEGREE	0.5	1.2	2.1
22 - 1/2 DEGREE	0.3	0.6	1.1
11 - 1/4 DEGREE	0.1	0.3	0.5

* BASED ON 100 PSI PRESSURE

- THRUST TABLE NOTES:
- THE SQUARE FEET OF CONCRETE THRUST BLOCK REQUIRED FOR OTHER TEST PRESSURES IS DIRECTLY PROPORTIONAL TO THE ABOVE TABLE. FOR EXAMPLE A 150 PSI TEST PRESSURE WOULD REQUIRE 1.5 TIMES THE AREAS GIVEN IN THE TABLE.
 - CALCULATE THE THRUST BLOCK SIZES BASED ON THE MAXIMUM TEST PRESSURE FOR THAT SECTION OF PIPE.
 - THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
 - MECHANICAL JOINT CONNECTIONS, RETAINING GLANDS, AND PIPE JOINTS SHALL BE PROTECTED, AND NOT HAVE ANY CONTACT WITH THE CONCRETE.
 - FOR SOIL BEARING OF LESS THAN 1000 PSF CONSULT THE ENGINEER FOR FURTHER INSTRUCTIONS.



VALVE BOX DETAIL
NOT TO SCALE

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XXX	XXX	XXX	BY
00-00-2011			

NEW DURHAM, NEW HAMPSHIRE

COPPLE CROWN VILLAGE DISTRICT REPLACEMENT OF WATER BOOSTER PUMP STATIONS

SHEET TITLE

DETAILS

DRAWN BY	DATE
MEF	SEPT. 2014
CHECKED BY	D&K PROJECT #
NJS	222649L
PROJ. ENG.	D&K ARCHIVE #
NJS	

SHEET NUMBER

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NEW DURHAM,
NEW HAMPSHIRE

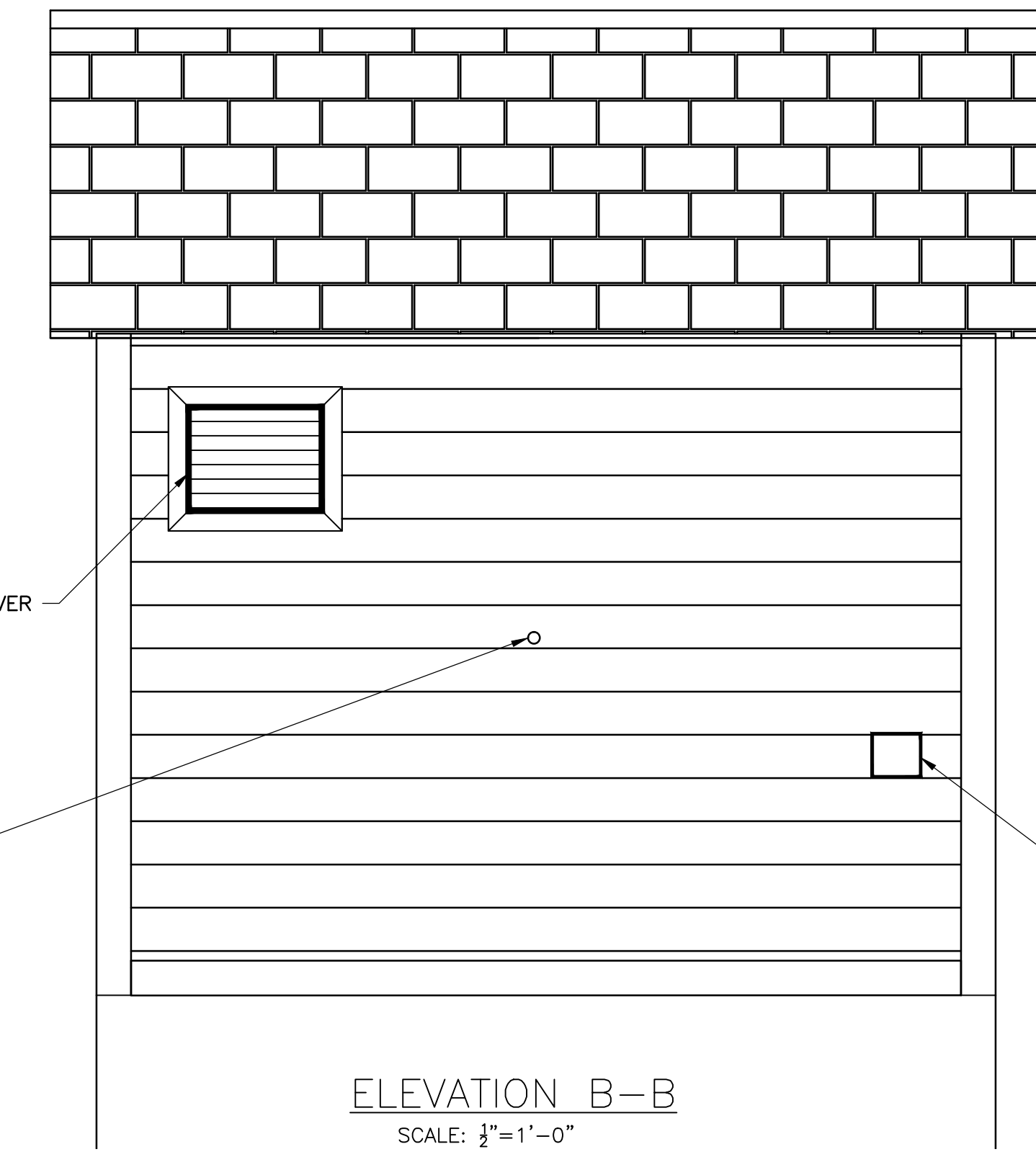
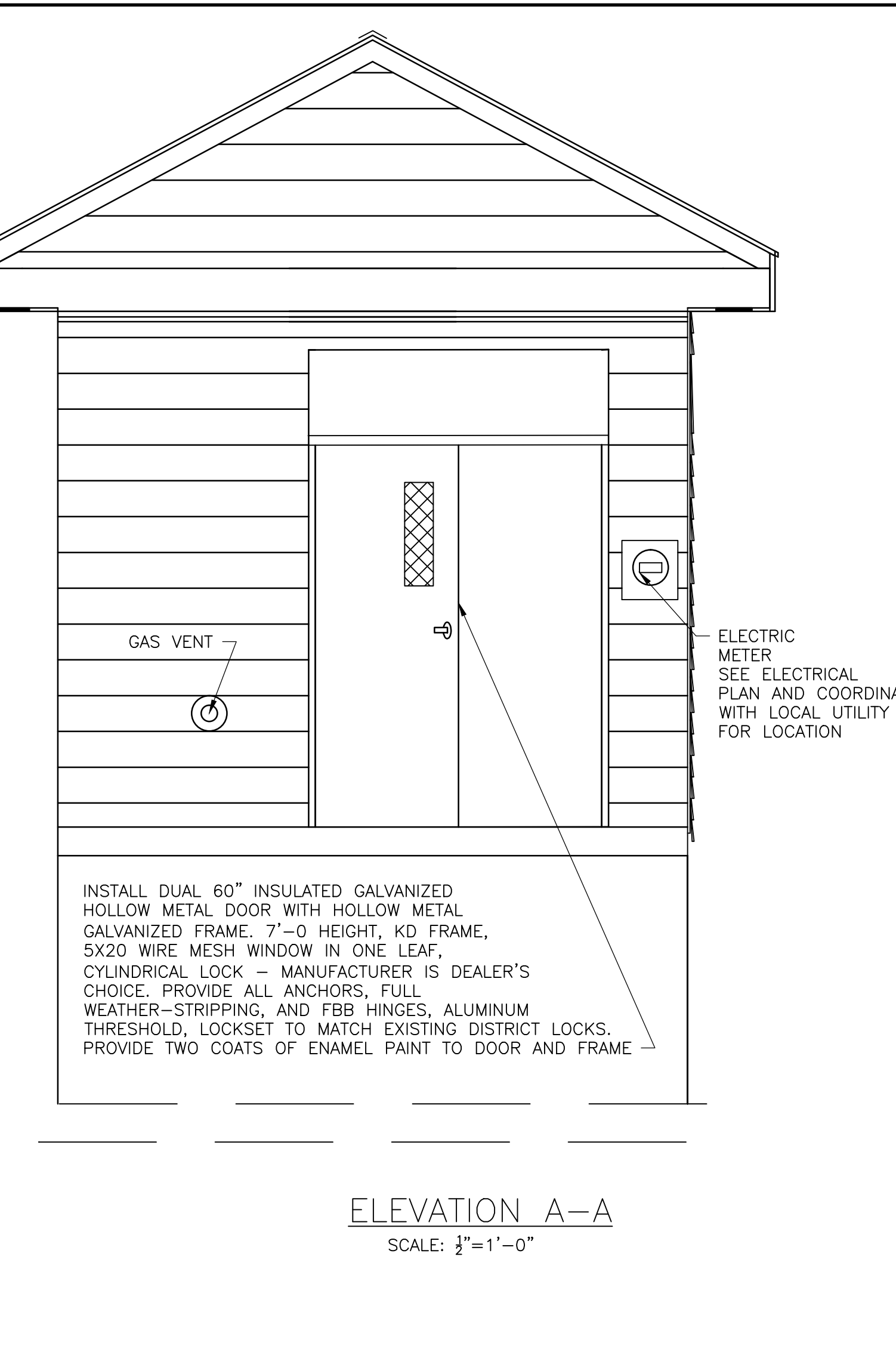
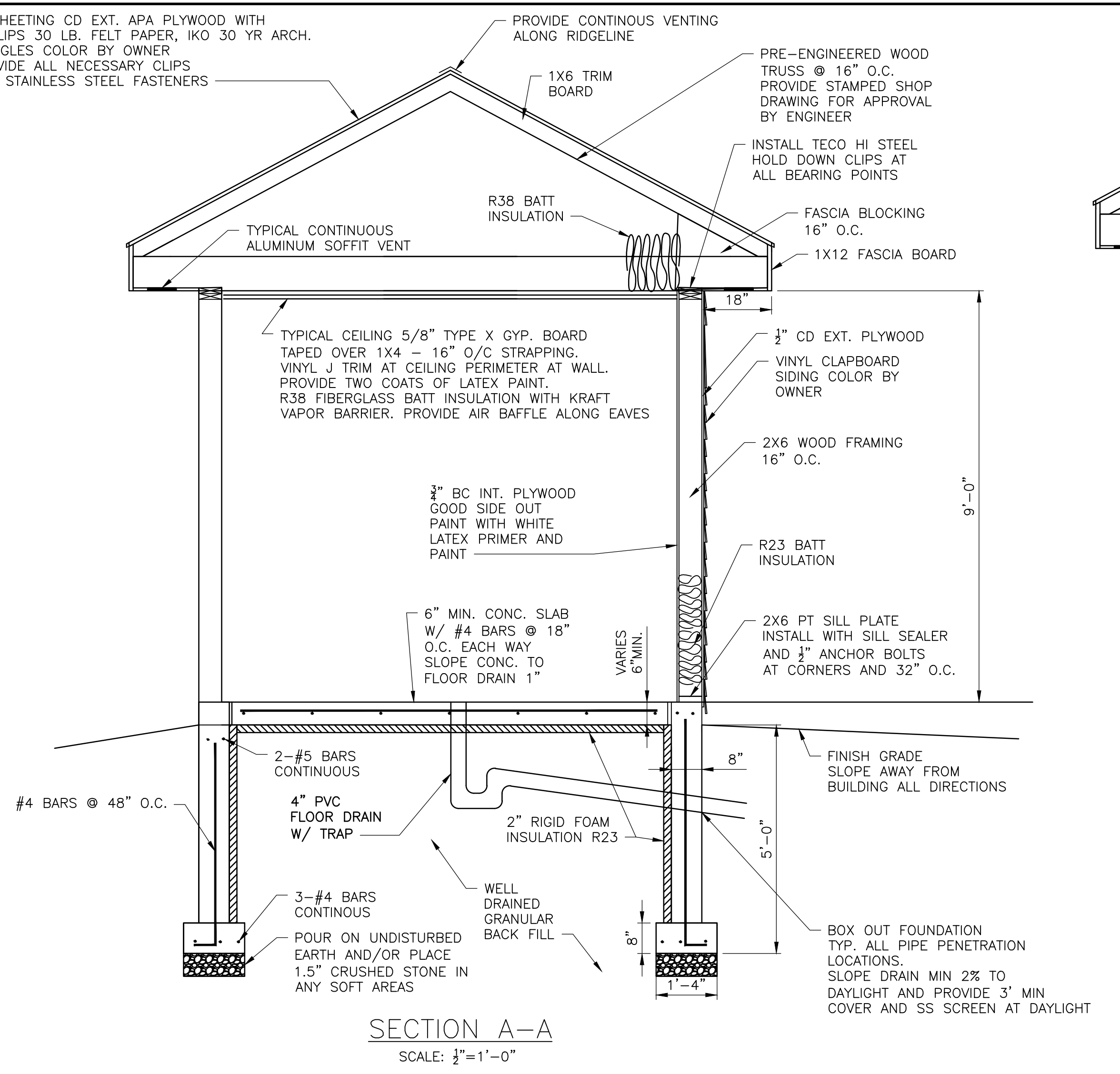
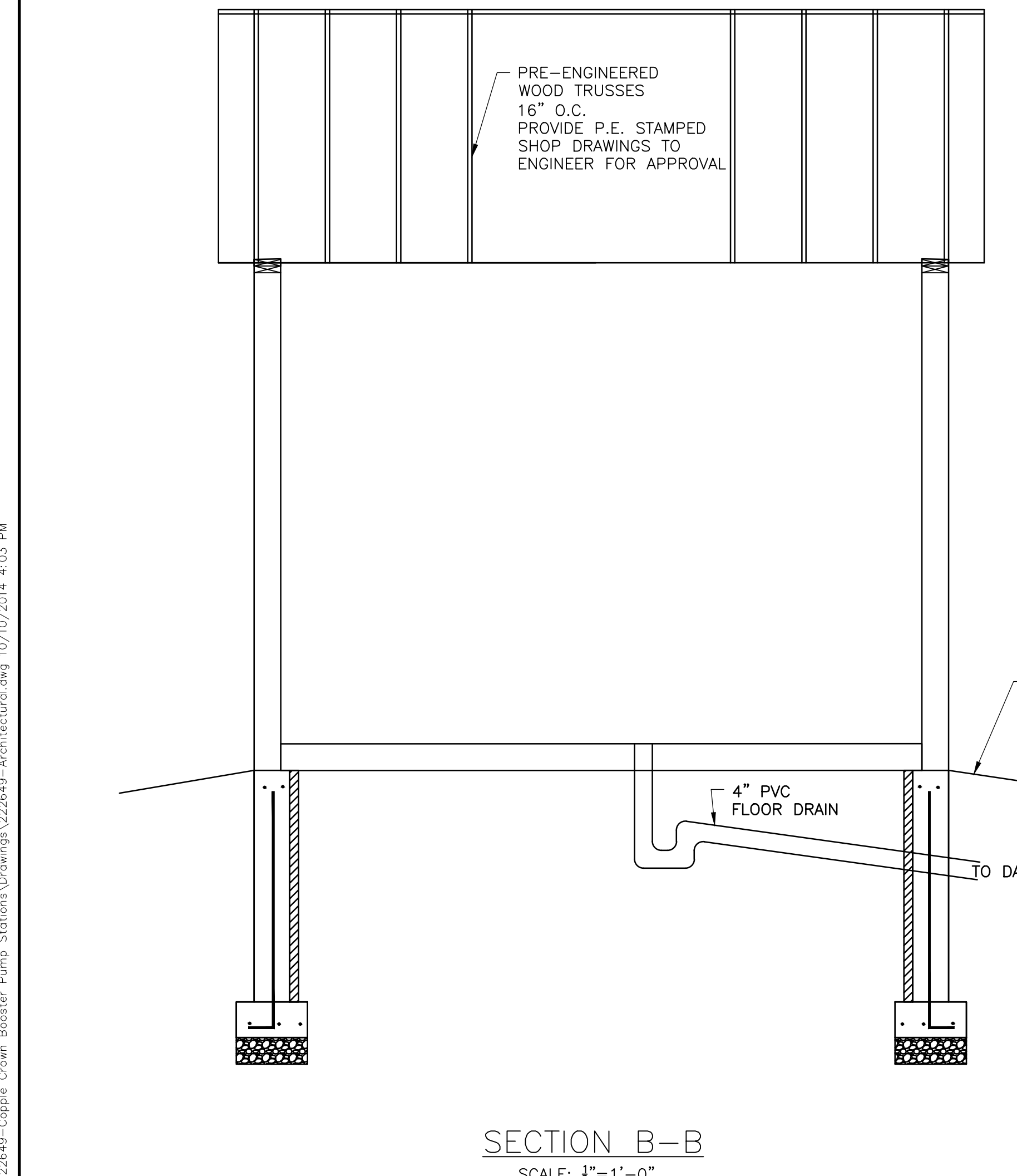
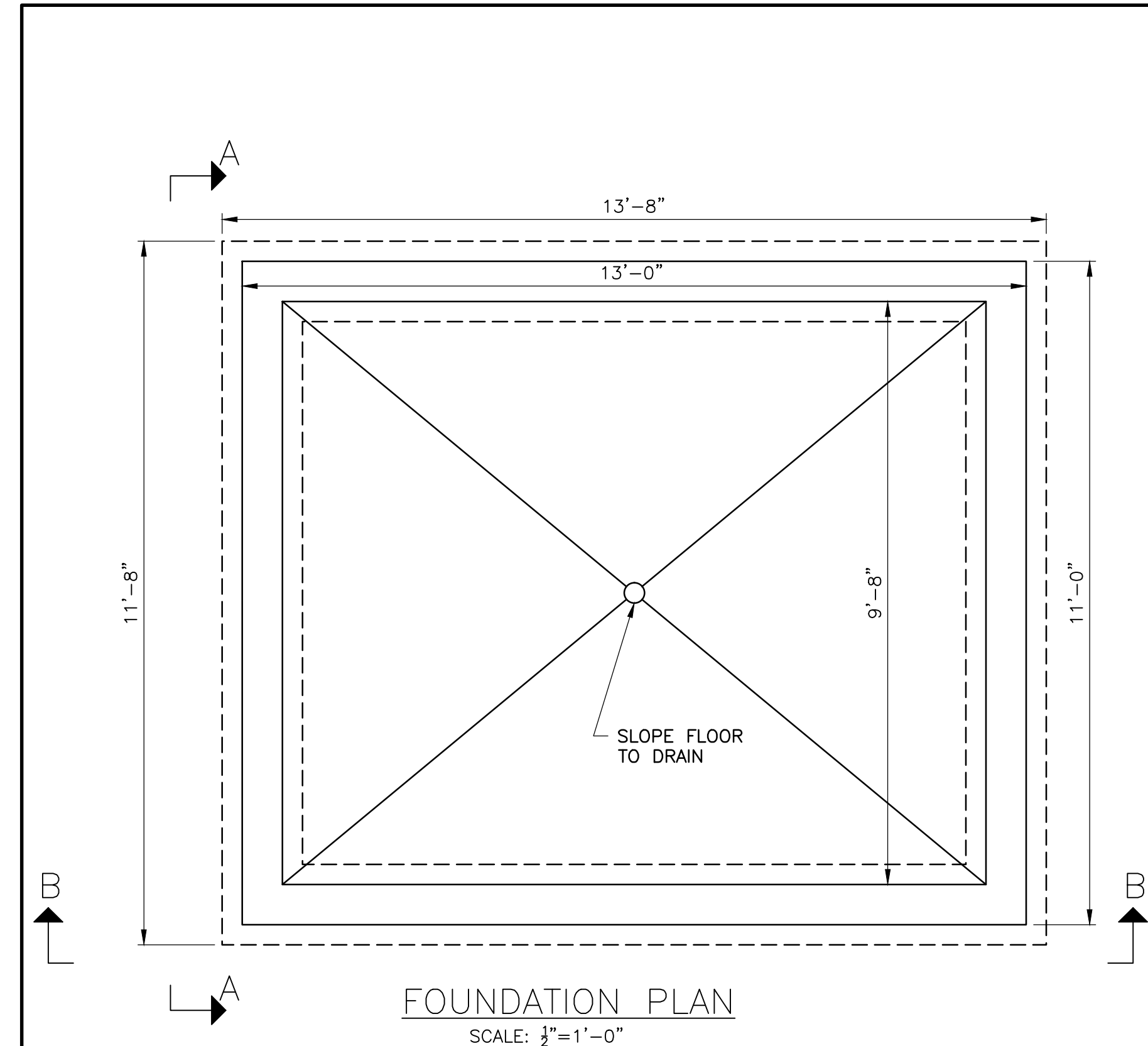
COPPLE CROWN
VILLAGE DISTRICT
REPLACEMENT OF
WATER BOOSTER
PUMP STATIONS

SHEET TITLE
TYPICAL
BOOSTER STATION
PLANS
AND
SECTIONS

DRAWN BY	DATE
MEF	SEPT. 2014
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NJS	222649L
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NJS	XXXXXX

SHEET NUMBER

A1.0



- DRAWING NOTES:
1. CONCRETE FOR FOOTINGS, WALLS, AND SLABS SHALL BE 3000 PSI STRENGTH.
 2. BEAR FOUNDATION ON VIRGIN SOIL OR 1.5" CRUSHED STONE AT A MINIMUM DEPTH OF 5'-0" BELOW FINISH GRADE.
 3. PROVIDE WELL DRAINED GRANULAR COMPACTED FILL BELOW ALL FOUNDATION AND UNDER SLABS. COMPACTED TO 98% MAXIMUM DENSITY.
 4. ROOF STRUCTURE SHALL MEET ALL APPLICABLE CODES FOR LOADING. PROVIDE STAMPED SHOP DRAWINGS INDICATING LOADING REQUIREMENTS ARE MET. PROVIDE ALL BRACING AS REQUIRED DURING CONSTRUCTION.
 5. A GAS HEATER SHALL BE INSTALLED INSIDE THE BUILDING. A PROPANE TANK SIZED BY THE SUPPLIER AND INSTALLED BY THE SUPPLIER SHALL BE LOCATED OUTSIDE THE BUILDING IN A LOCATION APPROVED BY THE OWNER.

I:\222649-Copple Crown Booster Pump Stations Drawings\222649-Architectural.dwg 10/10/2014 4:03 PM



PARTS LEGEND

- ① GRUNDFOS 3-PHASE PUMP OR EQUAL
SEE TABLE THIS SHEET FOR MODEL
- ② ISOLATION BALL VALVE - WATTS LFB6400
- ③ CHECK VALVE - WATTS LF600 SERIES
- ④ SUCTION PRESSURE GAUGE
LIQUID FILLED 0-100 PSI
- ⑤ DISCHARGE PRESSURE GAUGE
LIQUID FILLED 0-200 PSI
- ⑥ TRANSITION FROM 4" HDPE
TO 2" TYPE K COPPER
- ⑦ TRUE UNION CONNECTION
- ⑧ WELL X-TROL DIAPHRAGM TANK
MODEL WX-407
- ⑨ AIR RELEASE VALVE WITH
DISCHARGE PIPING TO OUTSIDE
- ⑩ MECH. TYPE PRESSURE SWITCH
MOUNT W/ TEE & ISOLATION
VALVE
- ⑪ GRUNDFOS 1-PHASE JOCKEY
PUMP MODEL CR 1S-9 OR
EQUAL

PUMP STATION	OPERATING CONDITIONS	PUMP MODEL
LOWER MOUNTAIN DR	35 GPM @ 230'	GRUNDFOS CR 10-5 or EQUAL
UPPER MOUNTAIN DR	35 GPM @ 300'	GRUNDFOS CR 10-7 or EQUAL
FRANCONIA DR	35 GPM @ 230'	GRUNDFOS CR 10-5 or EQUAL

PUMP STATION CONTROL SETPOINTS

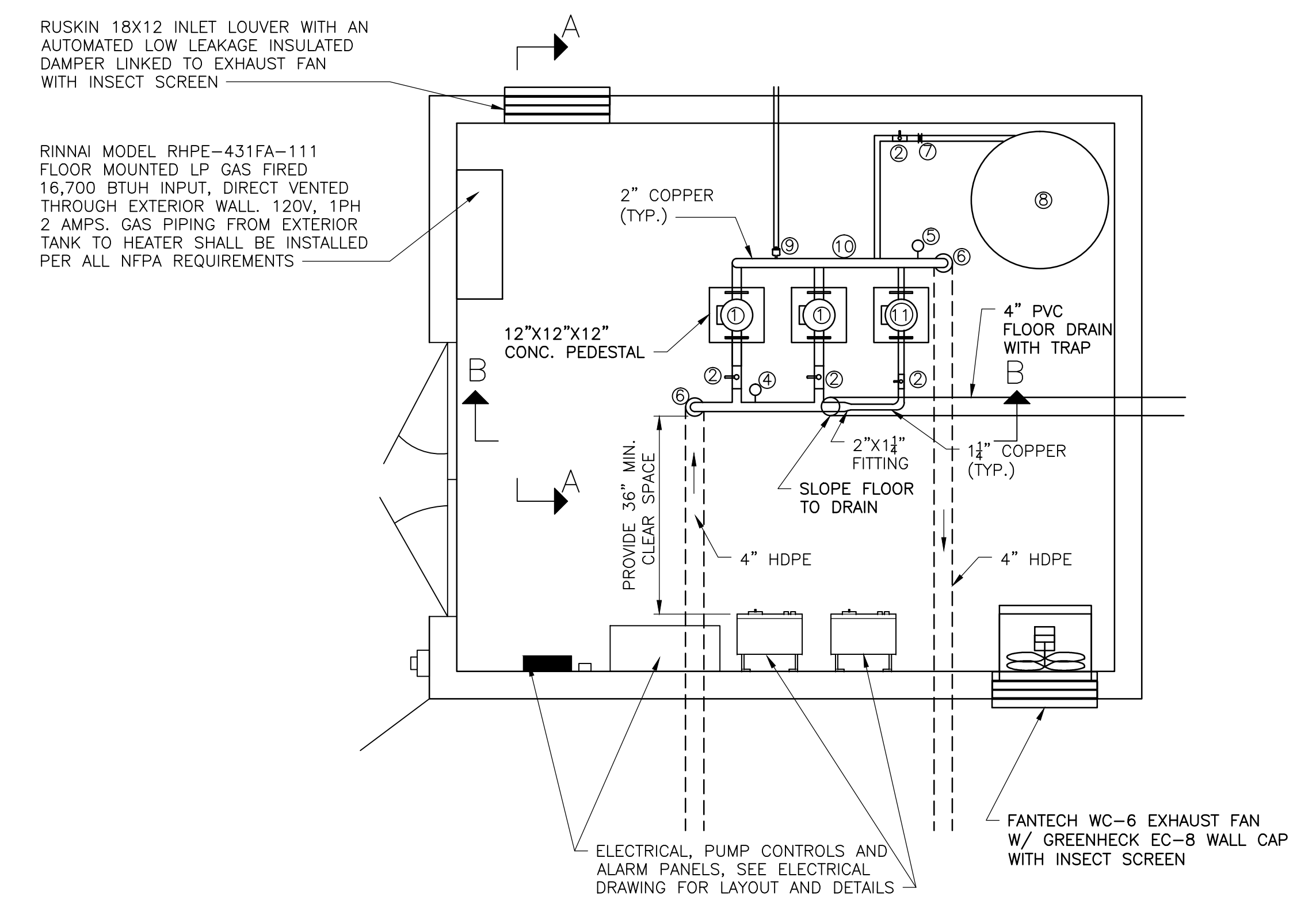
PUMP STATION	JOCKEY PUMP ON/OFF	PRIMARY PUMP ON/OFF
LOWER MOUNTAIN DR	ON-110PSI OFF-130PSI	ON-105 PSI OFF-130 PSI
UPPER MOUNTAIN DR	ON-140PSI OFF-160PSI	ON-135 PSI OFF-160 PSI
FRANCONIA DR	ON-120PSI OFF-140PSI	ON-115 PSI OFF-140 PSI

CONTROL NOTES:

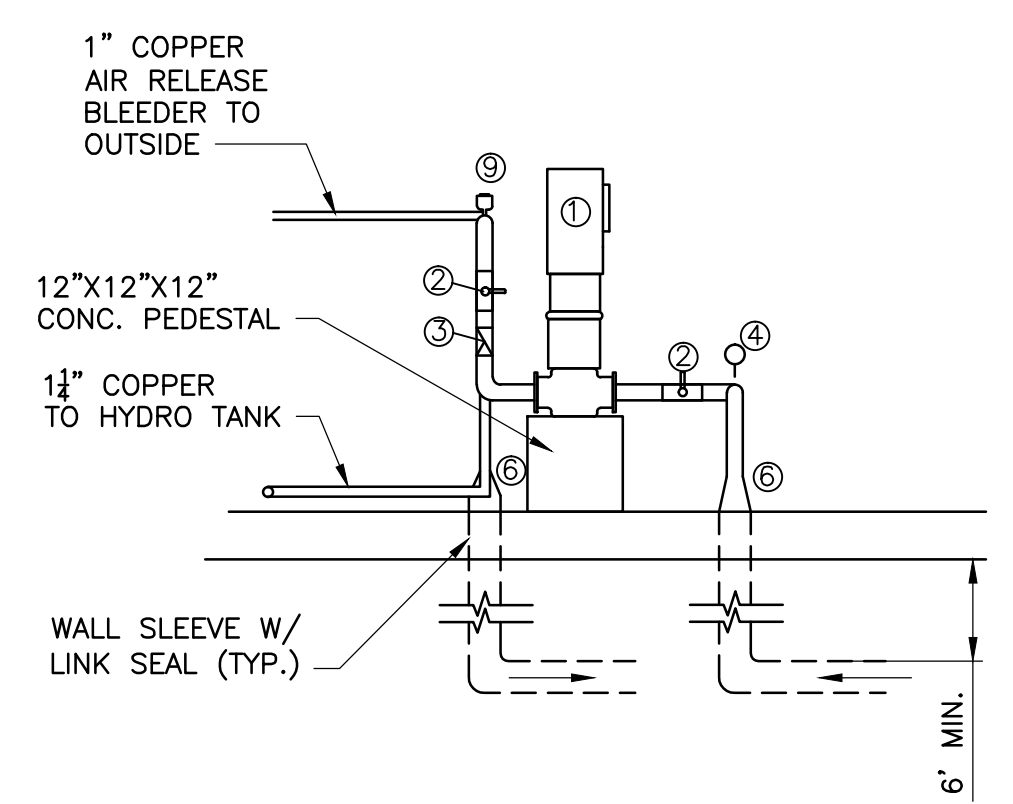
- JOCKEY PUMP SHALL BE CONFIGURED TO TURN OFF WHEN THE PRIMARY PUMP TURNS ON.
- A FIELD ADJUSTABLE TIME DELAY SHALL BE PROVIDED FOR EACH PUMP CONTROL SETPOINT.
- THE TWO PRIMARY PUMPS SHALL OPERATE IN AN ALTERNATING SEQUENCE.

DRAWING NOTES:

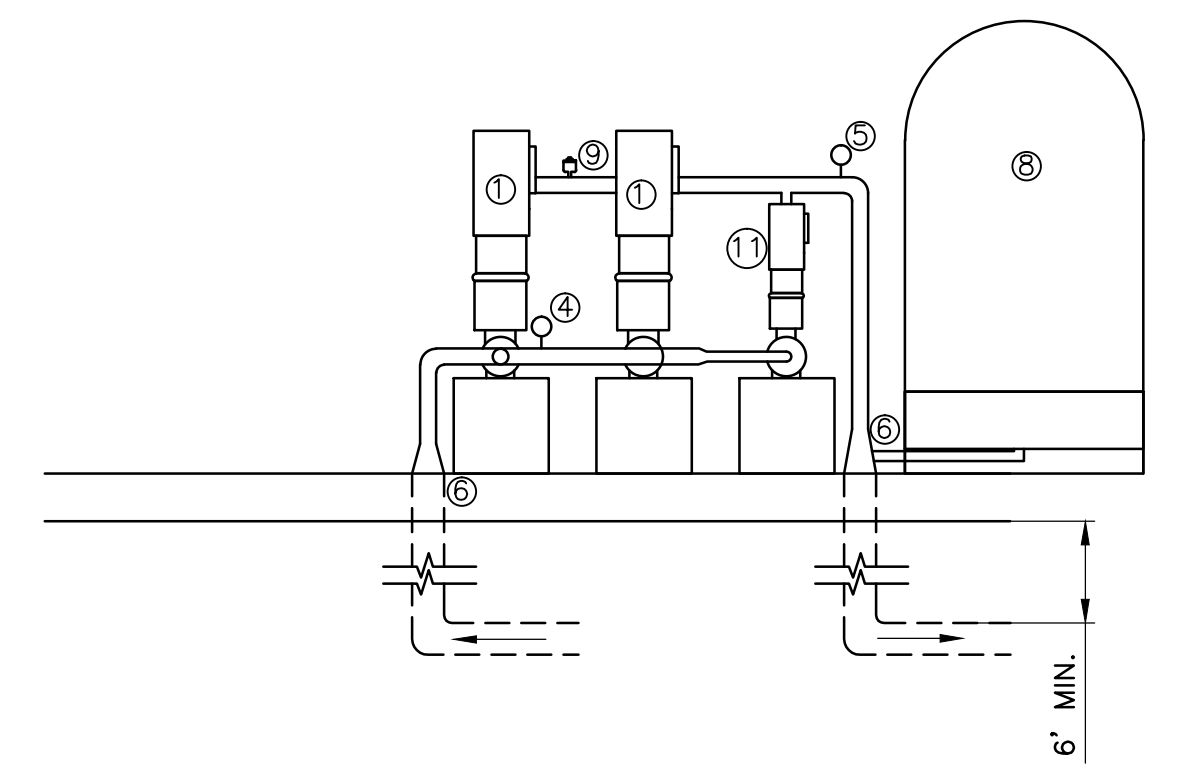
- CONTRACTOR SHALL COORDINATE LOCATIONS OF WATERLINE ENTERING THE BUILDING WITH EACH STATION SITE PLAN. WATERLINE LOCATIONS SHOWN ON THIS DRAWING ARE TYPICAL AND MAY REQUIRE FIELD ADJUSTMENTS BASED ON SITE CONDITIONS.
- ANCHOR PUMP EQUIPMENT TO CONCRETE PEDESTALS PER MANUFACTURERS RECOMMENDATIONS.
- ALL COPPER PIPING SHALL BE LEAD FREE AND MEET REQUIREMENTS OF NHDES AND EPA FOR WATER SUPPLY.
- SEE ELECTRICAL DRAWING FOR PANEL CONFIGURATION AND ANY BUILDING ELECTRICAL COMPONENTS.



PLAN
SCALE: 1/2"=1'-0"



SECTION A-A
SCALE: 1/2"=1'-0"



SECTION B-B
SCALE: 1/2"=1'-0"

NO.	DATE	INSERT TEXT	DESCRIPTION	BY	CHK'D
1	00-00-2011			XXX	XXX

NEW DURHAM,
NEW HAMPSHIRE

COPPLE CROWN
VILLAGE DISTRICT
REPLACEMENT OF
WATER BOOSTER
PUMP STATIONS

SHEET TITLE
**TYPICAL
BOOSTER STATION
PLANS
AND
SECTIONS**

DRAWN BY MEF	DATE SEPT. 2014
CHECKED BY NJS	D&K PROJECT # 222649L
PROJ. ENG. NJS	D&K ARCHIVE # XXXXXX

SHEET NUMBER

M1.0

ELECTRICAL SYMBOLS

NOT ALL SYMBOLS SHOWN MAY BE USED

- FLUORESCENT LIGHTING FIXTURE - AS NOTED ON DRAWINGS.
- WALL MOUNTED LIGHTING FIXTURE - AS NOTED ON DRAWINGS.
- DUAL HEAD EMERGENCY BATTERY PACK, SEE LIGHTING FIXTURE SCHEDULE FOR SPECIFICATIONS.
- DUPLEX CONVENIENCE OUTLET MOUNTED AT +18" OR AS NOTED.
- DOUBLE DUPLEX OUTLET (FOURPLEX) RECEPTACLE MOUNTED AT +18" OR AS NOTED.
- SPECIAL OUTLET AS NOTED ON DRAWINGS.
- TELEPHONE OUTLET AT +18" OR AS NOTED. FURNISH (1) 3/4" CONDUIT WITH TELEPHONE CABLE TO TELEPHONE MOUNTING BOARD OR AS NOTED.
- JUNCTION BOX IN ACCESSIBLE LOCATION.
- JUNCTION BOX IN ACCESSIBLE LOCATION WITH FLEXIBLE CONDUIT CONNECTION TO EQUIPMENT AS NOTED.
- INDICATES CIRCUIT IN CONDUIT RUN IN FLOOR OR UNDERGROUND.
- INDICATES CIRCUIT IN CONDUIT CONCEALED IN WALLS OR ABOVE CEILING.
- INDICATES HOMERUN TO PANELBOARD OR AS NOTED.
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- PANELBOARD - MOUNT AT 6'-6" TO TOP.
- MOTOR - SIZE AS INDICATED ON DRAWINGS.
- H.P. RATED MANUAL MOTOR STARTER (WEATHERPROOF WHERE OUTSIDE).
- SINGLE POLE SWITCH MOUNTED AT +48" OR AS NOTED.
- 3/4" PLYWOOD TELEPHONE MOUNTING BOARD WITH #6 CU. GROUND AND DEDICATED DUPLEX CONVENIENCE OUTLET. FURNISH IN ACCORDANCE WITH TELEPHONE CO. REQUIREMENTS. SIZE AS NOTED.
- WP WEATHERPROOF (RAINTIGHT).
- C CONDUIT
- EF EXHAUST FAN - 150W, 120V. UNLESS OTHERWISE NOTED.

GENERAL NOTES:

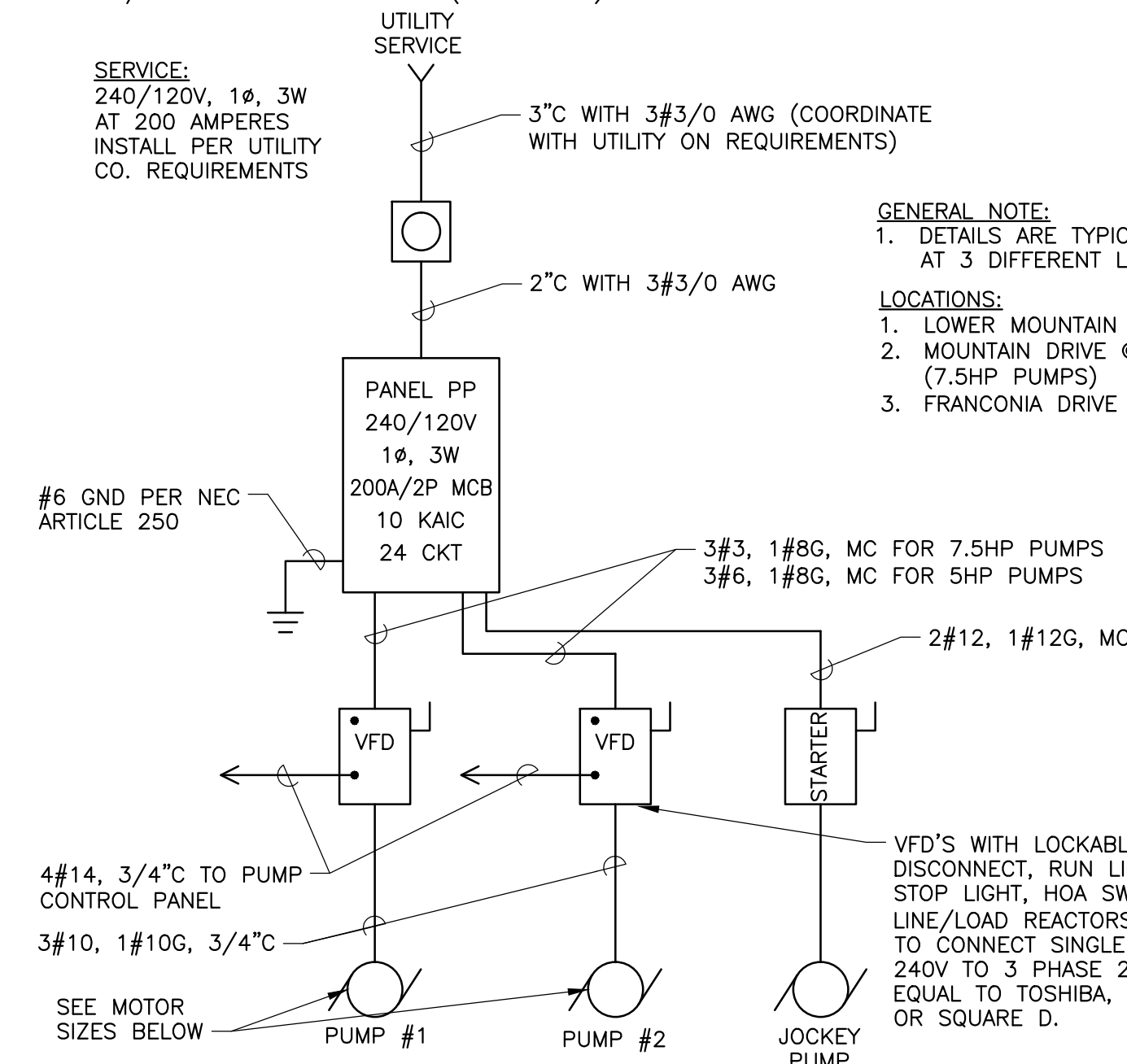
- THE SCOPE OF WORK IS TO PROVIDE ALL LABOR, MATERIALS, SERVICES, SUPPLIES, TOOLS, EQUIPMENT, TRANSPORTATION, AND FACILITIES NECESSARY TO FURNISH AND INSTALL COMPLETE ELECTRICAL WORK AS CALLED FOR ON THE DRAWINGS, SPECIFIED, OR AS MAY REASONABLY BE IMPLIED AS BEING INCIDENTAL TO THIS WORK.
- ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE (N.E.C.) LATEST EDITION.
- SECURE AND PAY COSTS OF PERMITS, CERTIFICATES, LICENSES, INSPECTIONS, AND APPROVALS. ANY POWER OUTAGE SHALL BE SCHEDULED AND APPROVED BY THE OWNER.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF WORK. BASIC DESIGN CONCEPTS INDICATED ARE MINIMAL AND MUST BE EITHER FOLLOWED OR BETTERED. WORK IS NOT SHOWN IN DETAIL BUT IS INTENDED TO INCLUDE ITEMS NECESSARY FOR PROPER OPERATION AND COMPLETION. DO NOT SCALE DRAWINGS. FIELD VERIFY ALL LOCATIONS, ELEVATIONS, AND DIMENSIONS.
- EXECUTE ALL WORK IN A NEAT AND WORKMANLIKE MANNER IN CONFORMANCE WITH BEST MODERN TRADE PRACTICE, BY COMPETENT, EXPERIENCED MECHANICS, PRESENTING A NEAT APPEARANCE WHEN COMPLETED. REPLACE WORK NOT APPROVED BY OWNER WITHOUT ADDITIONAL CHARGE.
- ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL CODES, REGULATIONS AND REQUIREMENTS OF ALL MUNICIPAL, STATE, FEDERAL AND OTHER PUBLIC OR PRIVATE AUTHORITIES WHICH HAVE JURISDICTION. IN EACH CASE, CODES ARE MINIMUM REQUIREMENTS.
- ALL LIGHTING AND POWER WIRING NOT IN CONDUIT SHALL BE TYPE MC #12 WITH GROUND (TYPICAL) WITH NUMBER OF CONDUCTORS AS REQUIRED.
- CONTRACTOR TO LIMIT 20A, 120V BRANCH CIRCUITS TO A MAXIMUM 1920VA LOAD AND 15A, 120V BRANCH CIRCUIT TO A MAXIMUM 1440VA LOAD. FIELD VERIFY ALL BRANCH CIRCUITS AFFECTED BY RENOVATION.
- INSTALL A SEPARATE GREEN GROUND WIRE IN ALL POWER AND RECEPTACLE CIRCUITS.
- EACH OUTLET OR JUNCTION IN ANY OF THE WIRING SYSTEMS SHALL BE MADE IN AN APPROVED, METALLIC JUNCTION BOX. SUCH BOX SHALL BE SUITABLE FOR THE SIZE AND NUMBER OF CONDUCTORS AND DEVICES TO BE INSTALLED, AS WELL AS THE CONDITION ENCOUNTERED. ALL SPLICES SHALL BE MADE WITH APPROVED, MECHANICAL CONNECTORS.
- DURING ROUGH IN AND FINISHED STAGES OF CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND KEEP CLEAN ALL ELECTRICAL EQUIPMENT, PANELS, FIXTURES AND DEVICES.
- AS THERE MAY BE VARIOUS CONDITIONS AT THE SITE WHICH DO NOT SHOW ON THE ACCOMPANYING DRAWINGS, OR WHICH ARE AT VARIANCE WITH THE CONDITIONS INDICATED ON THE DRAWINGS, IT IS IMPORTANT THAT EACH BIDDER VISIT THE SITE AND ACQUAINT HIMSELF WITH EXISTING CONDITIONS AND TAKE THESE CONDITIONS INTO CONSIDERATION WHEN PREPARING HIS BID. EACH BIDDER SHALL OBTAIN INFORMATION OR MAKE ANY MEASUREMENT DESIRED. LACK OF KNOWLEDGE RELATIVE TO EXISTING SITE CONDITIONS WILL NOT BE ALLOWED AS A BASIS FOR EXTRA COMPENSATION.
- THE FINISHED INSTALLATION SHALL BE COMPLETE IN EVERY RESPECT AND DETAIL, TESTED AND LEFT READY IN PERFECT OPERATING CONDITION FOR THE OWNER'S USE.
- MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITERS' LABORATORIES AND SHALL BE INSTALLED IN ACCORDANCE WITH SUCH LISTINGS.
- THE CONTRACTOR SHALL GUARANTEE THAT MATERIALS, EQUIPMENT AND WORKMANSHIP PROVIDED BY HIM SHALL BE FREE FROM DEFECTS IN MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK DONE UNDER THIS CONTRACT, AND SHALL REPLACE PARTS FOUND TO BE DEFECTIVE WITHIN THE PERIOD COVERED BY SUCH GUARANTEE, WITHOUT COST TO THE OWNER.
- INSTALLATION SHALL BE MADE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

BUS		200 AMP		PANEL No. PP		LOCATION		PUMP STATION	
PANEL RATING		10 KAIC		MOUNTING		SURFACE		DRAWING No. E1	
SUPPLY VOLTAGE		240/120V		DRAWING No.		E1			
SERVICE		10.4W WITH GROUND BUS							
WIRING	COND	DESCRIPTION	VA OR W	BREAKER	CKT NO	DESCRIPTION	VA OR W	BREAKER	CKT NO
2#12, 1#12G	MC	LIGHTS	150	1 20 1	x 2	PUMP #1 VFD NOTE 1	4800	2 1 80	4800
2#12, 1#12G	MC	RECEPTACLES	720	1 20 3	x 4	PUMP #2 VFD NOTE 1	4800	2 1 80	4800
2#12, 1#12G	MC	PUMP CONTROL PANEL	200	1 20 5	x 6	JOCKEY PUMP (3/4HP)	828	2 1 15	828
2#12, 1#12G	MC	HEATER	100	1 20 7	x 8	SPACE			
2#12, 1#12G	MC	EXHAUST FAN	670	1 20 9	x 10	SPACE			
		SPACE		1 20 11	x 12	SPACE			
		SPACE		1 20 13	x 14	SPACE			
		SPACE		1 20 15	x 16	SPACE			
		SPACE		1 20 17	x 18	SPACE			
		SPACE		19	x 20	SPACE			
		SPACE		21	x 22	SPACE			
		SPACE		23	x 24	SPACE			
TOTAL 1			1020			TOTAL 2	10428		10428
TOTAL 2			10428						
TOTAL 1+2			11448						
CONN. LOAD TOTAL			22896						
AMPERES			95						

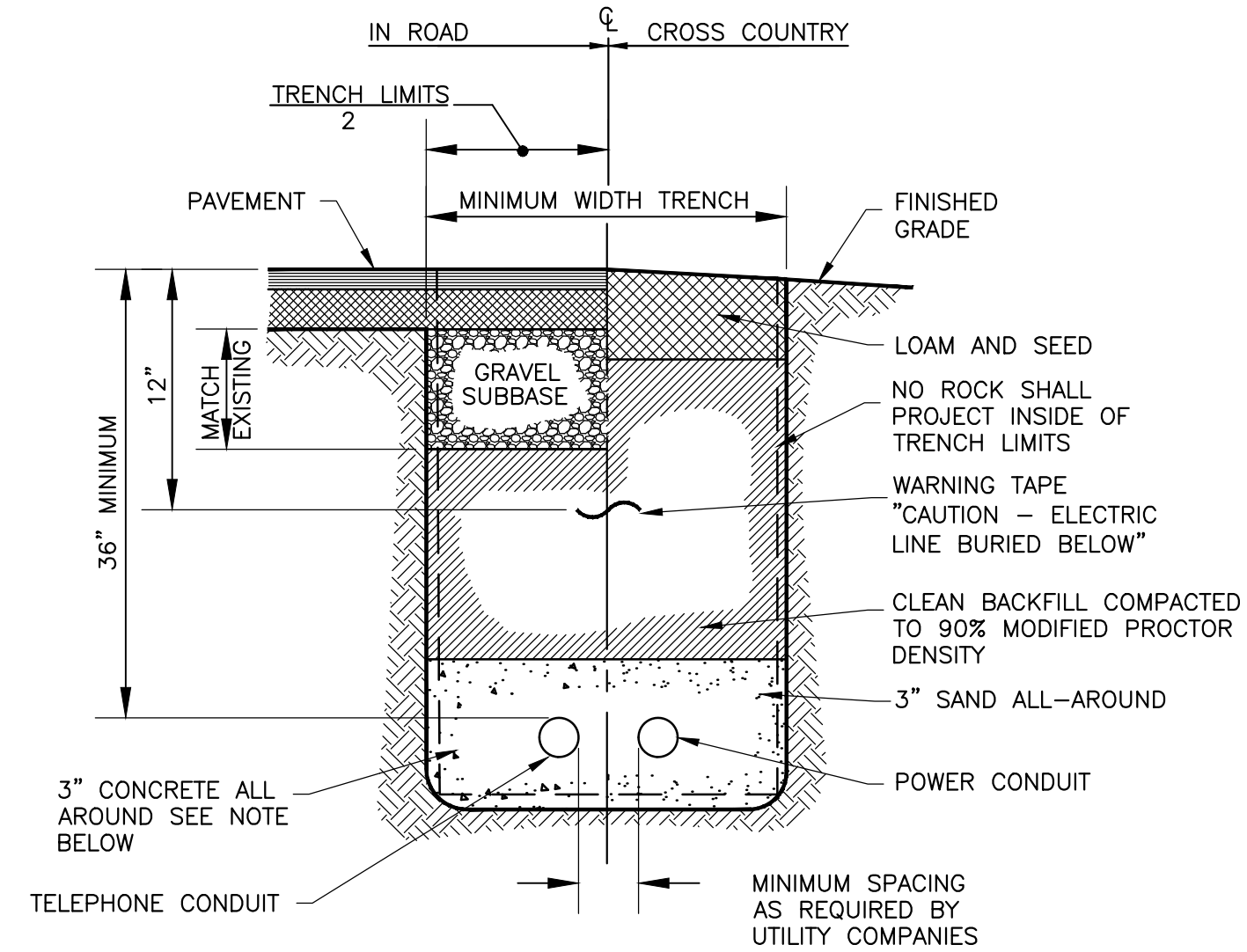
NOTES:

- THE BREAKERS FOR THE PUMPS SHALL BE
 - 60A/2P FOR LOWER MOUNTAIN DRIVE (5HP PUMPS)
 - 80A/2P FOR MOUNTAIN DRIVE @ NEWPORT DRIVE (7.5HP PUMPS)
 - 60A/2P FOR FRANCONIA DRIVE (5HP PUMPS)

SERVICE:
240/120V, 1Ø, 3W
AT 200 AMPERES
INSTALL PER UTILITY
CO. REQUIREMENTS

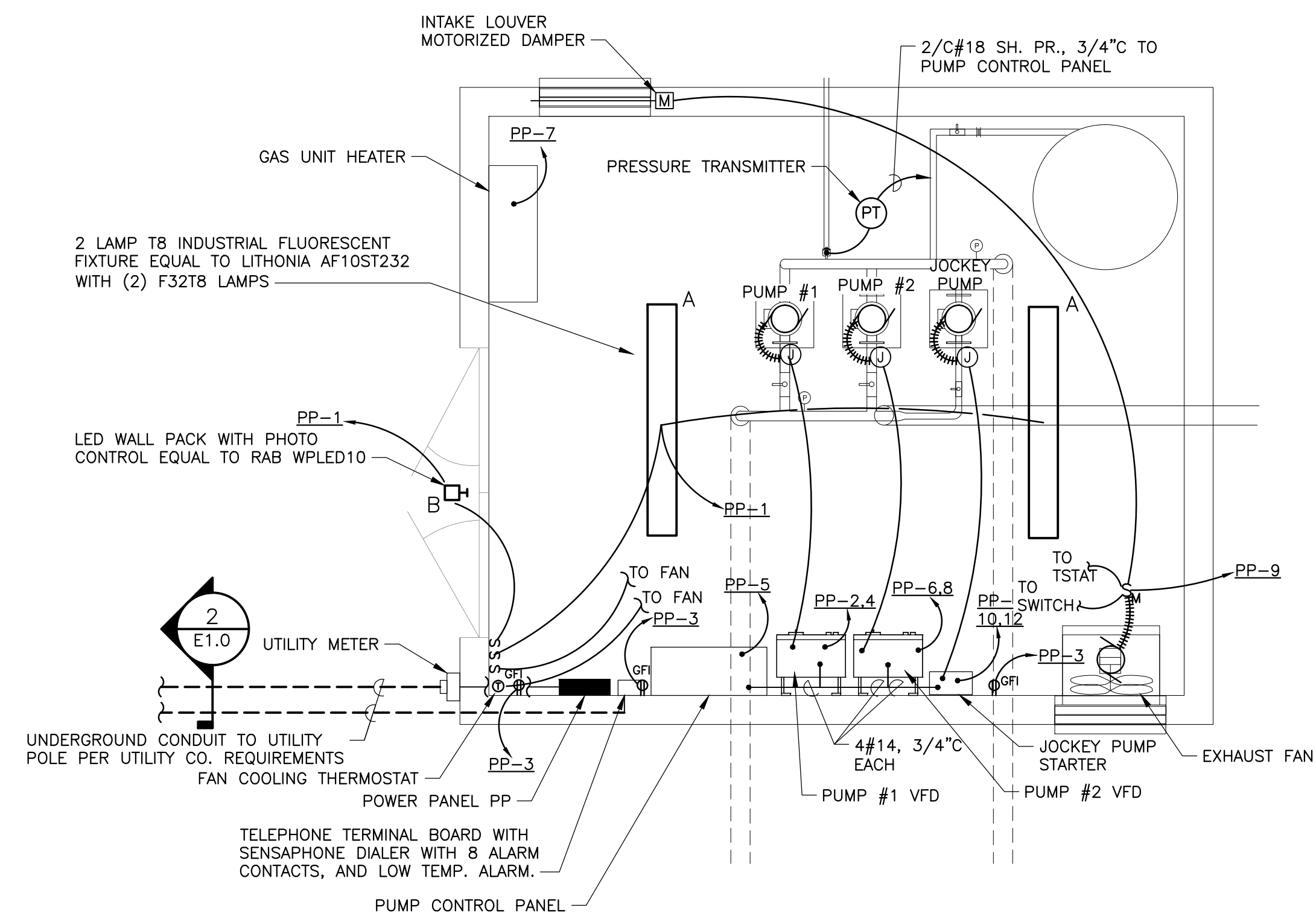


1 ONE-LINE DIAGRAM
E1.0 SCALE: NOT TO SCALE



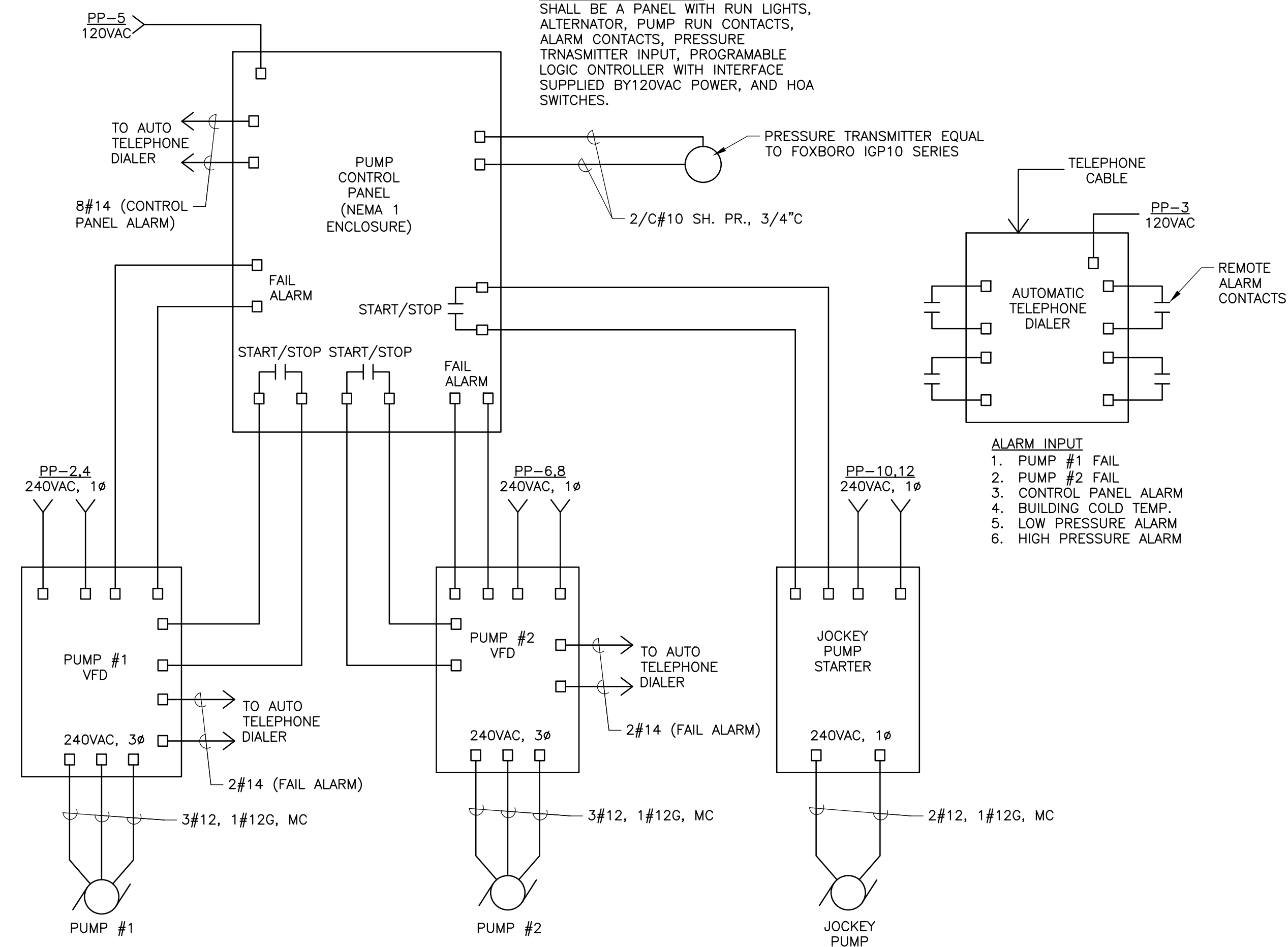
2 TYPICAL TRENCH SECTION
E1.0 NOT TO SCALE

NOTE: PROVIDE 3" CONCRETE ENCASEMENT AROUND PVC CONDUITS AT ALL ROAD AND DRIVEWAY CROSSINGS TO 5' BEYOND EDGE OF PAVEMENT. TYPICAL.



TYPICAL PUMP STATION ELECTRICAL PLAN
SCALE: 1/2" = 1' 0"

PUMP CONTROL PANEL:
SHALL BE A PANEL WITH RUN LIGHTS, ALTERNATOR, PUMP RUN CONTACTS, ALARM CONTACTS, PRESSURE TRANSMITTER INPUT, PROGRAMABLE LOGIC CONTROLLER WITH INTERFACE SUPPLIED BY 120VAC POWER, AND HOA SWITCHES.



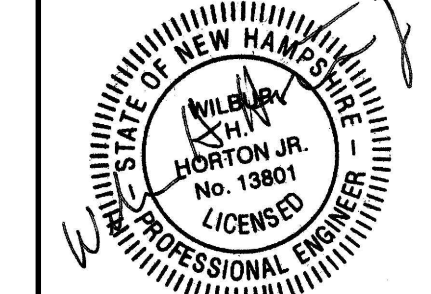
3 CONTROL SYSTEM INTERCONNECTION DIAGRAM
E1.0 SCALE: NOT TO SCALE

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PROFESSIONAL SEAL



NO.	DATE	DESCRIPTION	BY
			CKD

NEW DURHAM, NEW HAMPSHIRE

COPPLE CROWN VILLAGE DISTRICT REPLACEMENT OF WATER BOOSTER PUMP STATIONS

SHEET TITLE

TYPICAL PUMP STATION ELECTRICAL PLANS AND DETAILS

DRAWN BY	DATE
MEF	SEPT. 2014
CHECKED BY	D&K PROJECT #
NJS	222649L
PROJ. ENG.	D&K ARCHIVE #
NJS	

SHEET NUMBER

E1.0

SHEET 8 OF 8

**COPPLE CROWN VILLAGE DISTRICT
WATER TREATMENT SYSTEM
BOOSTER STATION UPGRADE
NEW DURHAM, NEW HAMPSHIRE**

ADDENDUM #1

DATE: JULY 19, 2024
TO: PLAN HOLDERS

This ADDENDUM #1 shall become part of the Bidding Documents and Contract Documents for the above referenced project. BIDDERS, please acknowledge receipt of this ADDENDUM #1 on the BID FORM (Page 1). This ADDENDUM #1 consists of 2 pages in total.

1. Bid Documents page 7 of 15 (or 13 of 114). References an older version of the Heavy GWD, 1/5/24. The correct reference is 4/19/24. The guidance on page 24 is correct and the correct wage decisions are included in the original Bid Documents.
2. Clarifications:
 - a. The intent of this project is to abandon the clubhouse building. This means the relocation of the treatment equipment, salvaging the existing Grundfos pumps, reconfiguring the well to discharge to the Mountain Drive Booster Station, the construction of a 15,000 gallon storage tank, and the disconnection/abandonment of the clubhouse facility from the water main. The demolition of the clubhouse is not part of this contract.
 - b. Upon review of the basis of design, it was determined that the Mountain Drive Booster station would now be responsible for pressurizing the entire community below the clubhouse facility. To prevent over pressurization of the water main, because of the elevation differential, a secondary, 4" watermain has been suggested to tie in just below the Franconia Drive. Everything above Franconia Drive will be on the booster station, everything below Franconia Drive will receive pressure directly from the storage tank.
 - c. Trench details regarding watermain piping shall follow manufacturer's recommendations and Env-Dw 405 Design Standards for Small Community Water Systems.
 - d. The engineer recommends a minimum of 2 inch thick pavement patch and a minimum of 4 inches of crushed gravel where pavement is disturbed. Winning contractor to recommend mix type.
 - e. There is no distribution map to show side street connections

- f. The project is not to replace watermain, services, and curb stops.
- g. There are no boring logs for the area of the tank or proposed watermain areas. No ledge analysis was completed.
- h. The ledge was discussed in the field and would be change ordered in if any is found during construction.
- i. Individual homes shall not require booster pumps as they are not allowed per Env-Dw 405.32(c)(2).
- j. Attached construction set by Dubois & King for the Mountain View Booster Station dimensions.
- k. Electrical schedule and control detail to be determined by the winning contractor as part of the design build.
- l. The winning contractor has the flexibility to determine the most cost effective solution within the scope of this project.

End of Addendum #1