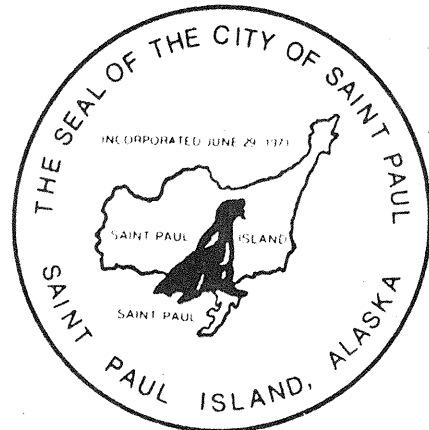


**THE CITY OF ST. PAUL, ALASKA
& ALASKA DEPARTMENT OF
ENVIRONMENTAL CONSERVATION'S
VILLAGE SAFE WATER PROGRAM**

**WATER SYSTEM
EXPANSION:**



**ST. PAUL,
ALASKA**

SCHEDULE OF DRAWINGS

- 1 COVER
- 2 ACCESS ROAD ALIGNMENT & PROFILE
- 3 WATER MAIN ALIGNMENT & PROFILE
(STA 0+00 TO STA 19+00)
- 4 WATER MAIN ALIGNMENT & PROFILE
(STA 19+00 TO STA 33+10)
- 5 WELL HOUSE PLANS, DETAILS &
ELEVATIONS
- 6 CIVIL DETAILS & SECTIONS
- 7 ELECTRICAL DETAILS & SECTIONS

ABBREVIATIONS

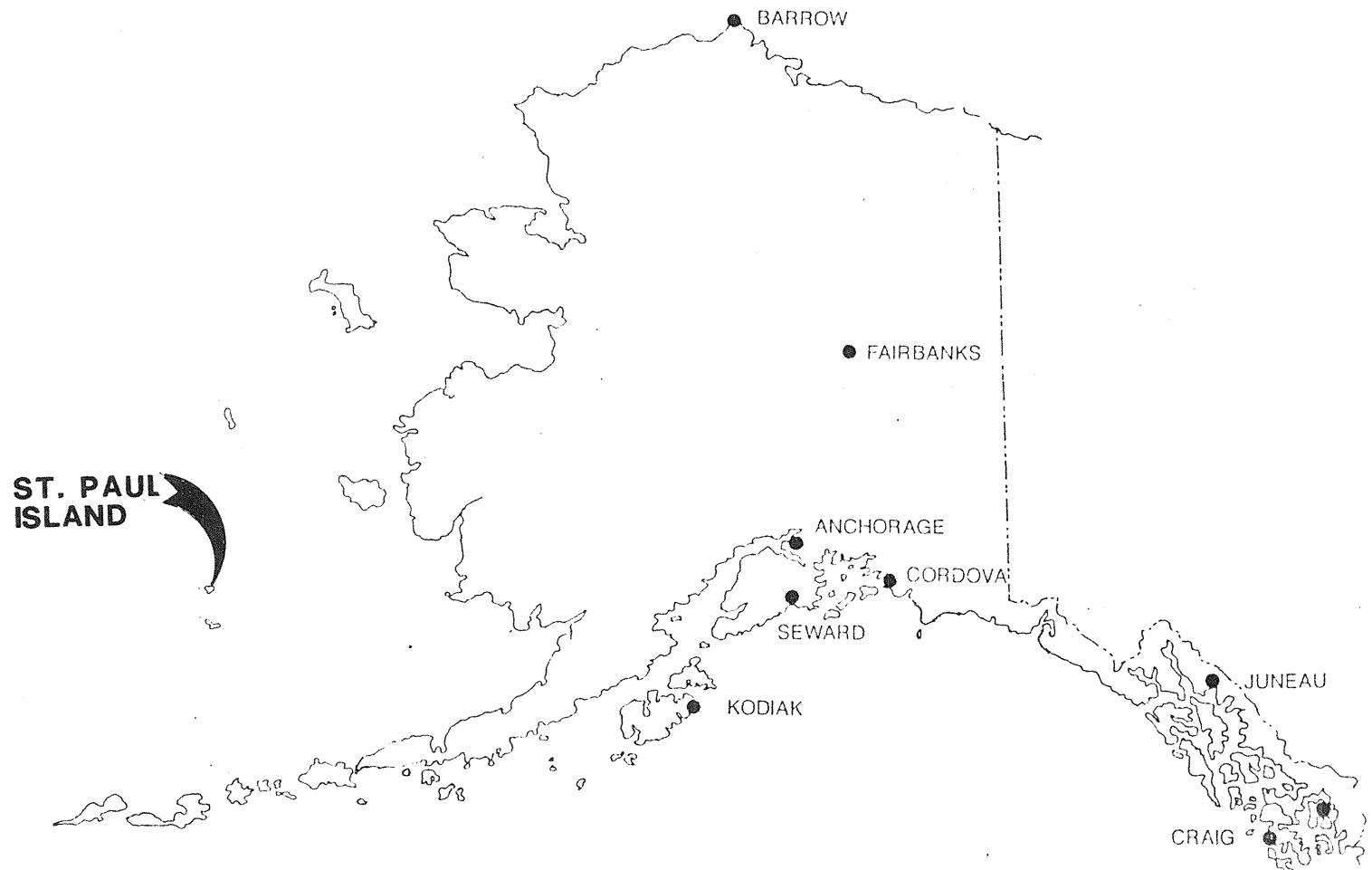
BVC - BEGIN VERTICAL CURVE
CLR - CLEAR
CMP - CORRUGATED METAL PIPE
CY - CUBIC YARD
EOP - END OF PROJECT
EVC - END VERTICAL CURVE
EW - EACH WAY
GALV
STL - GALVANIZED STEEL
LF - LINEAR FEET
MAX - MAXIMUM
MIN - MINIMUM
OC - ON CENTER
POB - POINT OF BEGINNING
PSI - POUNDS PER SQUARE INCH
SHT - SHEET
STA - STATION
VC - VERTICAL CURVE
VPI - VERTICAL POINT OF INTERSECTION
W/ - WITH

LEGEND

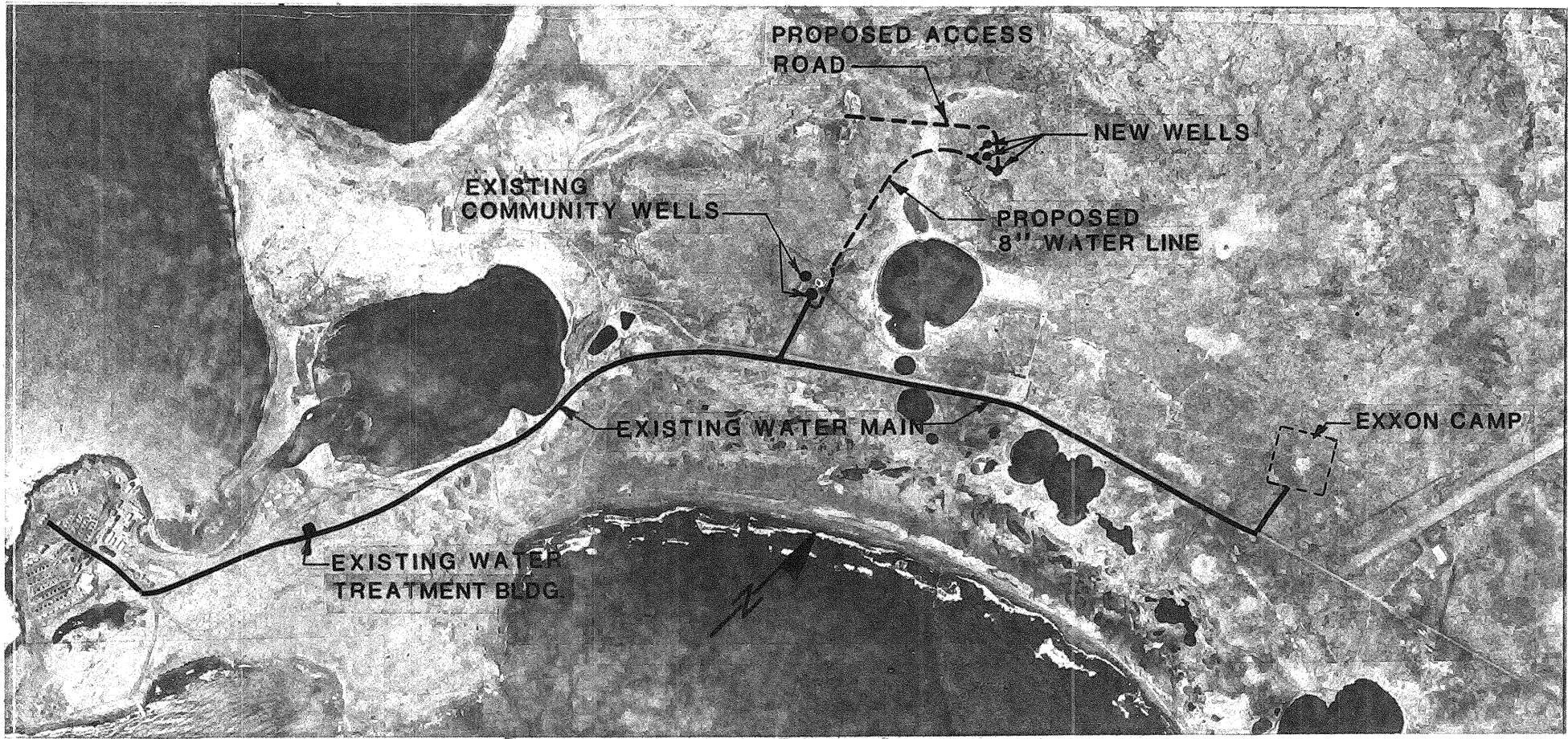
— CULVERT
--- C --- CUT AREA
--- F --- FILL AREA
— WATER MAIN
— PERMANENT EASEMENT
— CONSTRUCTION EASEMENT
- - - - - POWER LINE

WATER SYSTEM DESIGN CRITERIA

- 0 TOTAL DYNAMIC HEAD = 315 FT.
 - STATIC HEAD = 119 FT.
 - DYNAMIC HEAD = 196 FT.
- 0 FLOW RATE
 - DESIGN FLOW = 100 GPM
- 0 STORAGE TANKS
 - LWL = ELEV. 115
 - HWL = ELEV. 122
 - STORAGE VOLUME = 240,000 GAL.
- 0 HEADLOSS
 - 8" DI, C = 110 (3,310 L.F.)
 - 4" GALV. STL., C = 90 (13,000 L.F.)
- 0 SYSTEM PRESSURE
 - PUMP DISCHARGE = 107 PSI
 - CONNECT TO EXISTING 4" GALV.
STL. LINE = 83 PSI



LOCATION MAP

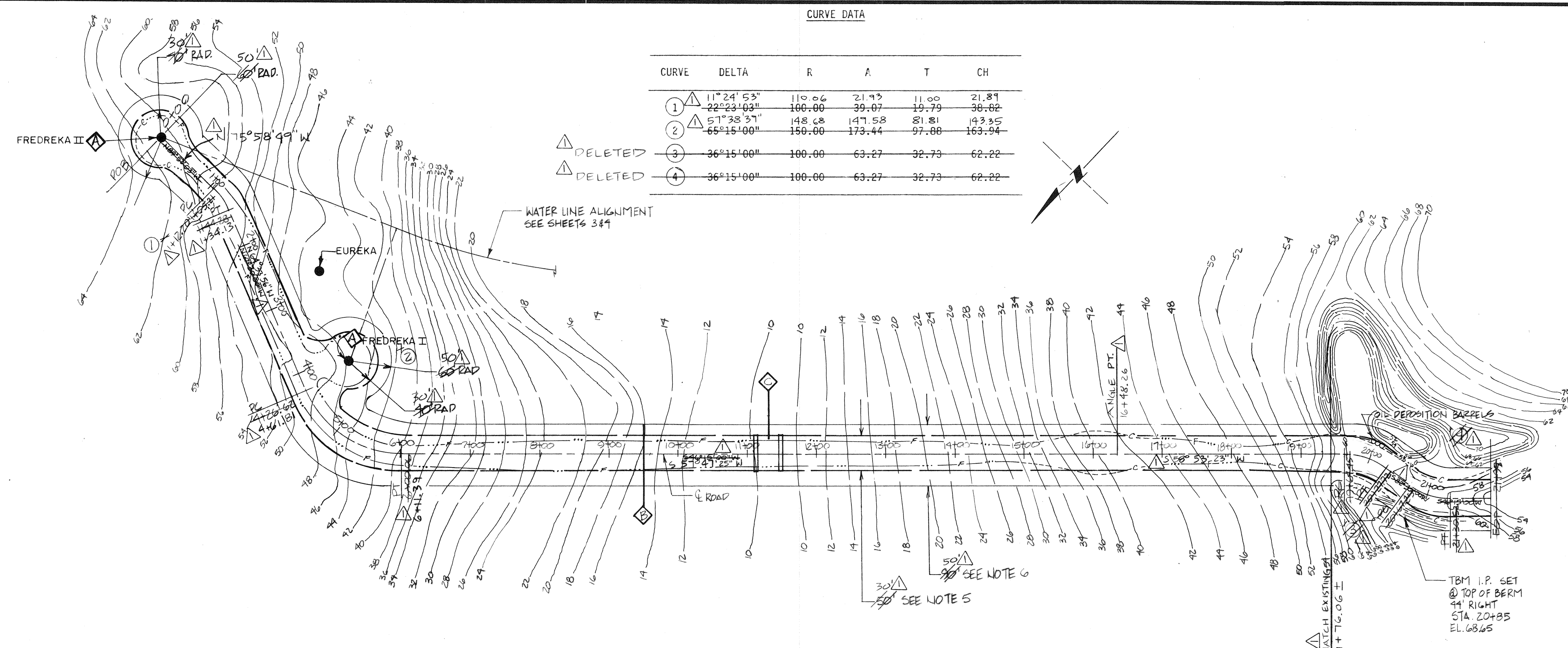


PROJECT VICINITY MAP

**URS CORPORATION
&
LONGSTAFF ENGINEERS, INC.**

**RECORD DRAWING
JULY 15, 1988**

SHEET 1 OF 7

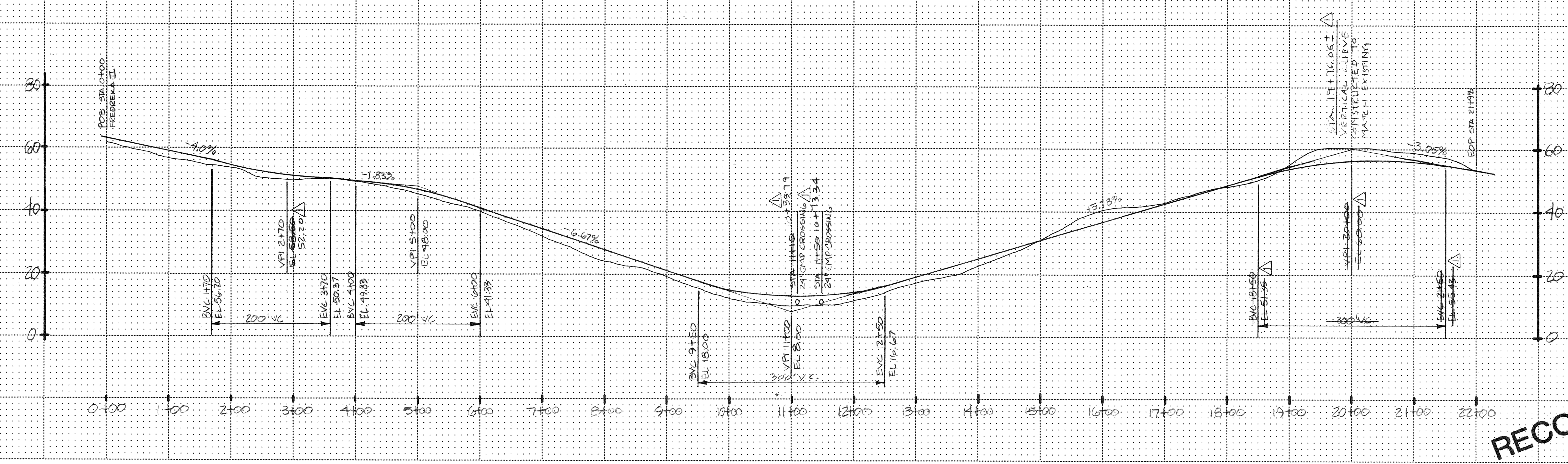


CURVE DATA					
CURVE	DELTA	R	A	T	CH
1	11° 24' 53"	110.06	21.93	11.00	21.81
2	22° 23' 03"	100.00	39.07	19.79	30.02
3	57° 38' 51"	148.68	147.58	81.81	143.35
4	65° 15' 00"	150.00	173.44	97.00	163.94
5	36° 15' 00"	100.00	63.27	32.73	62.22
6	36° 15' 00"	100.00	63.27	32.73	62.22

- NOTES:**
- WELL HOUSE PLANS, DETAILS & ELEVATIONS: SEE SHT 5.
 - ACCESS ROAD SECTION: SEE DETAIL G, SHT 6.
 - CULVERT DETAIL: SEE DETAIL C, SHT 6.
 - ORGANIC MATERIAL TO BE REMOVED FROM FULL WIDTH OF ROAD CROSS-SECTION.
 - PROFILE TO BE FIELD ADJUSTED AS REQUIRED TO MINIMIZE CUT-AND-FILL QUANTITIES.
 - PLACE PIPE MARKERS AT EACH END OF CMP CULVERTS; SEE DETAIL D, SHT 6.
 - WELL HOUSE SITE WORK: PREPARE PAD WITH SUBBASE AND LEVELING COURSE AS IN DETAIL G, SHT 6; FIELD GRADE PAD AT 2% SLOPE AWAY FROM STRUCTURE, ALL DIRECTIONS.
 - PERMANENT EASEMENT, 25' EACH SIDE OF ROAD CENTERLINE (IE, 50').
 - CONSTRUCTION EASEMENT, 45' EACH SIDE OF ROAD CENTERLINE (IE, 90').

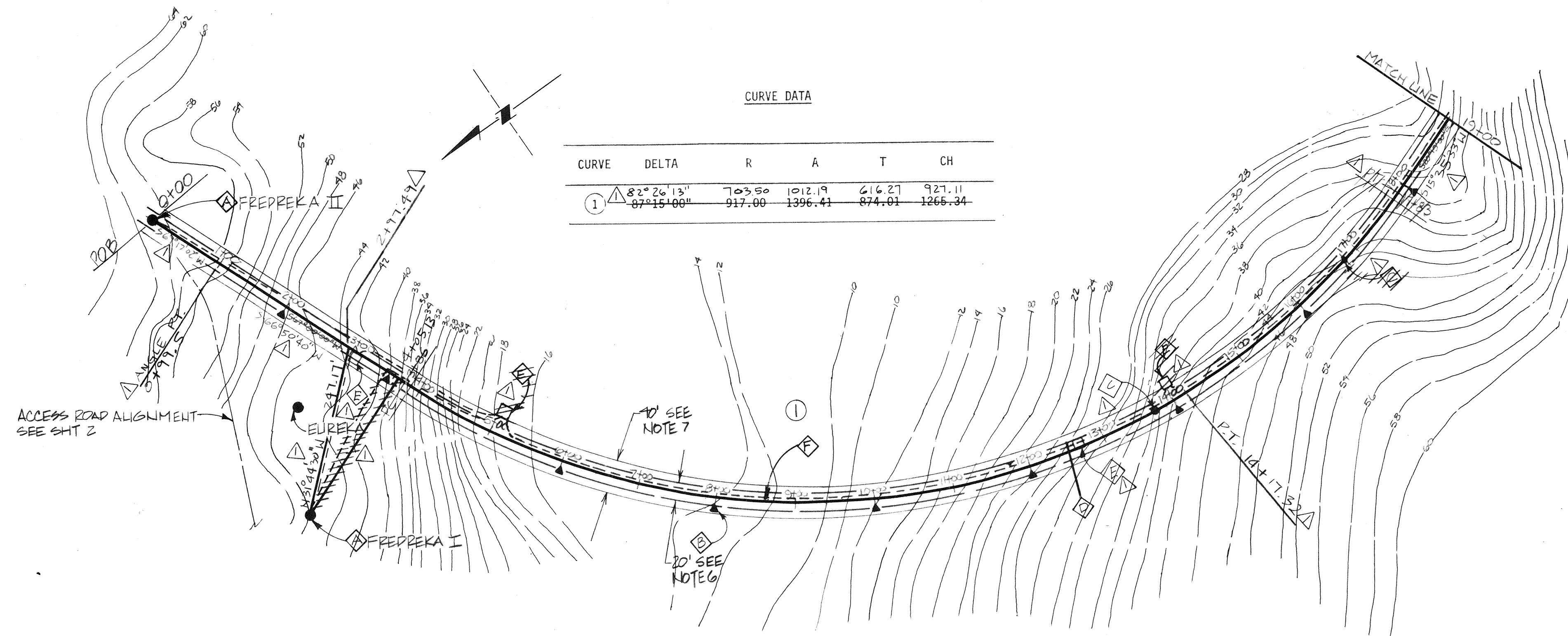
RECORD DRAWING NOTES:

1) WELL HOUSE CUL-DE-SACS PADS HAVE A 20' RADIUS.



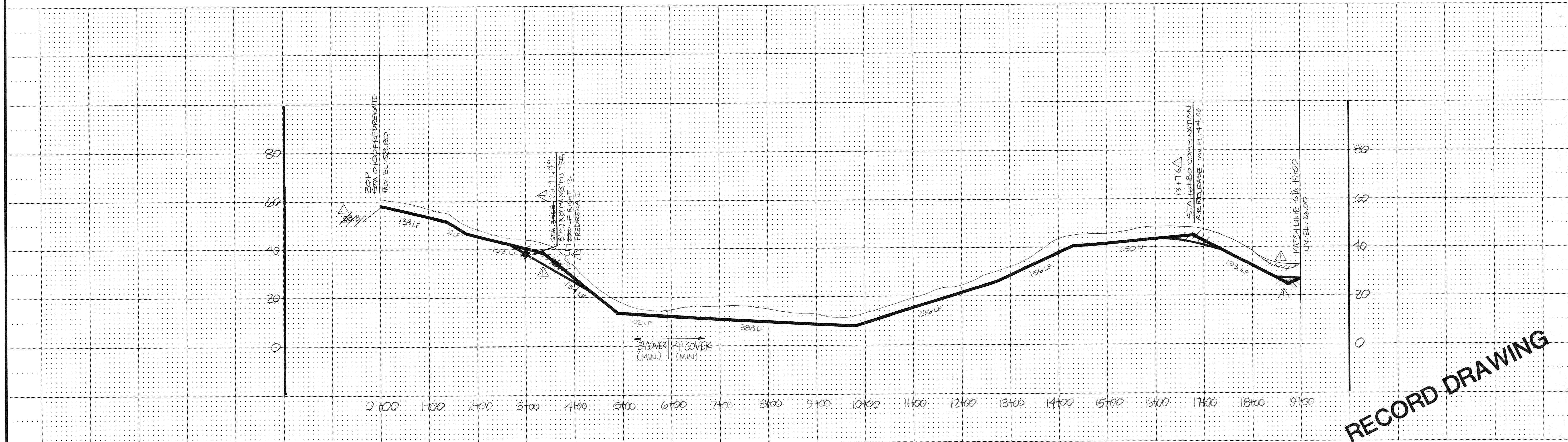
RECORD DRAWING

1/14/88 RDG RECORD DRAWING INFORMATION				JOB No. 75070.01		DESIGNED: HE		PROJECT ENGINEER: RWM		URS CORPORATION ARCHITECTURAL & ENGINEERING CONSULTANTS		CITY OF ST. PAUL, ALASKA ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S VILLAGE SAFEGWATER PROGRAM				WATER SYSTEM EXPANSION ST. PAUL, ALASKA		ACCESS ROAD ALIGNMENT & PROFILE		SHEET 2 OF 7	
				SCALE: HORIZ. 1"=100' VERT. 1"=20'		DRAWN BY: DEF		APPROVED BY:													
						CHECKED BY: HE		DATE:													
No.	DATE	BY	REVISION																		



NOTES

- WELL HOUSE PLANS, DETAILS & ELEVATIONS: SEE SHT 5.
- PIPE MARKERS PLACED 5'-0" RT. OF WATERLINE ALIGNMENT: SEE DETAIL D, SHT 6.
- COMBINATION AIR RELEASE: SEE DETAIL B, SHT 6.
- TRENCH SECTION (BEDDED/NON-BEDDED): SEE DETAIL H, SHT 6.
- POWER PEDESTAL.
- 3 PHASE, 480 V. SERVICE. 2 1/2" PVC, 3 - #4/0, AL, XLP, WITH 1 - #2/0 AL, XLP. GROUND. BURY WITH WATERLINE PER DETAIL H, SHEET 6.
- PIPE: DUCTILE IRON, 8" NOMINAL INSIDE DIAMETER, ANSI CLASS 50: PUSH-ON JOINT, MEETING ANSI/AWWA - C151/A21.51 AND - C111/A21.11; CEMENT MORTAR LINING, AWWA C-104.
- THRUST BLOCKING: PROVIDE MIN. 2000 PSI CONCRETE BLOCKING AT ALL FITTINGS WITH UNBALANCED THRUST; TYPICAL CONFIGURATIONS, DETAIL I, SHT 6.
- HYDROSTATIC PRESSURE TEST: PERFORM TESTING AS PER AWWA C600.
- DISINFECTION: 5% AVAILABLE CHLORINE BY WEIGHT, CHLORINE LEVEL OF AT LEAST 50 PPM; RETAIN AT LINE 24 HOURS, MIN. 10 PPM RESIDUAL. FLUSH LINE, SUBMIT WATER SAMPLE FOR BACTERIOLOGICAL TESTING.
- MAX. PIPE DEFLECTION AT JOINT NOT TO EXCEED 5 DEGREES.
- PERMANENT EASEMENT, 10' EACH SIDE OF CENTERLINE OF PIPE (IE. 20').
- CONSTRUCTION EASEMENT, 20' EACH SIDE OF CENTERLINE OF PIPE (IE. 40').



RECORD DRAWING

RECORD DRAWING INFORMATION				JOB No.		DESIGNED:		PROJECT ENGINEER:	
1/14/88 206				75070.01		HE/DEF		RJM	
SCALE:				DRAWN BY:		CHECKED BY:		APPROVED BY:	
HORIZ 1"=100'				DEF		HE		DATE:	
VERT 1"=20'									
No. DATE BY REVISION									

URS

CORPORATION

ARCHITECTURAL & ENGINEERING CONSULTANTS

CITY OF ST. PAUL, ALASKA

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S VILLAGE SAFEWATER PROGRAM

WATER SYSTEM EXPANSION

ST. PAUL, ALASKA

WATER MAIN ALIGNMENT & PROFILE

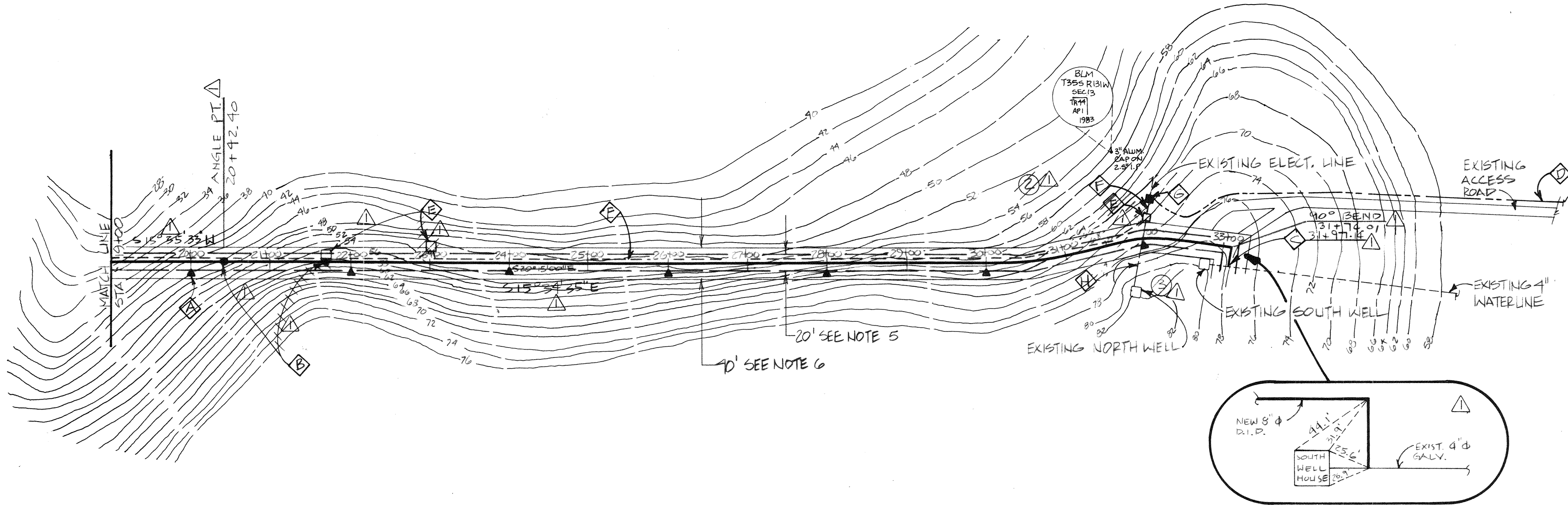
STA. 0+00 TO STA. 19+00

SHEET: 3

SHT. 3 OF 7

NOTES:

1. FIELD LOCATE EXISTING ELECTRICAL LINE AND 4" WATERLINE; ADJUST DEPTH OF WATERLINE BURIAL TO MINIMIZE CONFLICTS. LOCK-OUT POWER PRIOR TO EXCAVATION IN AREA OF ELECTRICAL LINE.
2. AREAS OF EXISTING ROADWAY DISTURBED DURING TRENCHING: REPAIR SUBBASE AND LEVELING COURSE AS PER DETAIL G, SHT 6.
3. FIELD ADJUST LOCATION OF 8" D.I. CONNECTION TO EXISTING 4" STL WATERLINE TO MAINTAIN ACCESS TO SOUTH WELL PUMP HOUSE.
4. MAXIMUM PIPE DEFLECTION AT JOINT NOT TO EXCEED 5 DEGREES.
5. PERMANENT EASEMENT, 10' EACH SIDE OF CENTERLINE OF PIPE (IE. 20').
6. CONSTRUCTION EASEMENT, 20' EACH SIDE OF CENTERLINE OF PIPE (IE. 40').



NOTES:

- A. PIPE MARKERS PLACED 5'-0" RT. OF WATER-LINE ALIGNMENT: SEE DETAIL D, SHT 6.
- B. COMBINATION AIR RELEASE: SEE DETAIL B, SHT 6.
- C. CONNECT 8" D.I. WATERLINE TO EXISTING 4" STL. WATERLINE: SEE DETAIL A, SHT 6.
- D. 3 - #2 VRD, 15KV, 12470V7200V, 3-PHASE LINE EXTENSION FROM 200A SECTIONALIZER AT INTERSECTION OF EXISTING ACCESS ROAD AND POLOVINA TURNPIKE. BURY PER DETAIL H, SHEET 6.
- E. POWER PEDESTAL.
- F. 3-PHASE 480V SERVICE. 2 1/2" PVC, 3 - #4/0, AL, XLP, WITH 1 - #2/0, AL, XLP, GROUND. BURY WITH WATERLINE PER DETAIL H, SHEET 6.
- G. PAD MOUNTED TRANSFORMER, 75KVA, 12470:480, 3-PHASE. CONCRETE PAD PER DETAIL J, SHEET 6; TRANSFORMER INSTALLATION PER RURAL ELECTRIFICATION ADMINISTRATION (REA) STANDS.
- H. INTERCEPT EXISTING 480V 3 Ø FEEDER FROM COAST GUARD STATION. UNEARTH SUFFICIENT LENGTH TO PROVIDE TERMINATION AT NEW POWER PEDESTAL. INSULATE AND ABANDON REMAINING COAST GUARD POWER FEEDER. AFTER INSTALLATION, CONFIRM PUMP ROTATION AND "SWAP" PHASES AT PEDESTAL IF ROTATION IS REVERSED.

RECORD DRAWING

7/14/88 EDG RECORD DRAUGHTING INFORMATION				JOB No. 78070.01		DESIGNED: HE/DEF		PROJECT ENGINEER: RWM		URS CORPORATION ARCHITECTURAL & ENGINEERING CONSULTANTS	CITY OF ST. PAUL, ALASKA ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S VILLAGE SAFETY WATER PROGRAM	STATE OF ALASKA 49th 1521 - E Professional Engineer	WATER SYSTEM EXPANSION ST. PAUL, ALASKA	WATER MAIN ALIGNMENT & PROFILE STA 19+00 TO STA 33+10	SHEET: 4 SHT. 4 OF 7
				SCALE: HORIZ 1"=100' VERT 1"=20'		DRAWN BY: DEF		APPROVED BY:							
						CHECKED BY: HE		DATE:							
No. DATE BY REVISION															

NOTES:

DELETED - SEE RECORD DRAWING DETAIL BELOW

1. 6" CONNECTOR: 4" DIAM. GALV. STL. FJ x IPS THREAD, COMPANION FLANGE.
2. 6" FJ x 4" FJ FLEXIBLE CONNECTOR.
3. 1" VACUUM RELEASE, 1" x 1" IPS.
4. PRESSURE GAGE, SPRING-TYPE, 0-200 PSI.
5. HOSE BIBB (1" IPS INLET, 1/2" EXT. HOSE THREAD SPOUT) AND VACUUM BREAKER.
6. 6" SWING CHECK, FJ x IPS.
7. 4" INLINE FLOW METER, DIRECT READ GPM AND REMOTE REGULATOR, CUMULATIVE GALLONS, 4" x 6" CONCENTRIC REDUCERS EACH END.
8. PRESSURE RELIEF VALVE, 1" IPS INLET x 1" IPS OUTLET, PRE-SET 125 PSI; 1" DRAIN LINE TO BUILDING EXTERIOR.
9. 4" GATE VALVE, FJ x FJ, NORMALLY CLOSED.
10. 6" GATE VALVE, FJ x FJ, NORMALLY OPEN.
11. 8" FJ x 6" FJ CONCENTRIC REDUCER.
12. 6" MJ x 8" FJ CONNECTING PIECE.
13. SAFETY CABLE, 1/4" WIRE ROPE, ATTACHED TO WELL CASING AND PUMP.
14. SANITARY WELL SEAL, 8" x 2" PULL-PIPE; RE-TAP VENT FOR WATER LEVEL MEASURING PORT; SEE DETAIL 4, SHT. 5, SECTION A-A.
15. WATER LEVEL MEASURING PORT (DETAIL 4, SECTION A-A) AND 1" ID MEDICAL-GRADE SILICON TUBING.
16. FITTING: ADAPTER, 4" IPS INLET x 4" OUTLET, 2" PULL-PIPE. SEE RECORD DRAWING DETAIL BELOW
17. PIPE STABILIZER/TORQUE ARRESTOR (4") SPACED 20'-0" O.C.
18. 4" WAFER CHECK VALVE, SPRING-LOADED.
19. 4" DIAM. SCHED. 40 GALV. STL. DROP PIPE.
20. SUBMERSIBLE PUMP: RED JACKET SST SUBMERSIBLE TURBINE, MODEL 6 B0-120, 6 STAGE PUMP END, 15 HP 460 VOLT 3-PHASE MOTOR, OR EQUAL.
21. 6" DRESSER-TYPE FLEXIBLE COUPLING. SEE RECORD DRAWING DETAIL BELOW

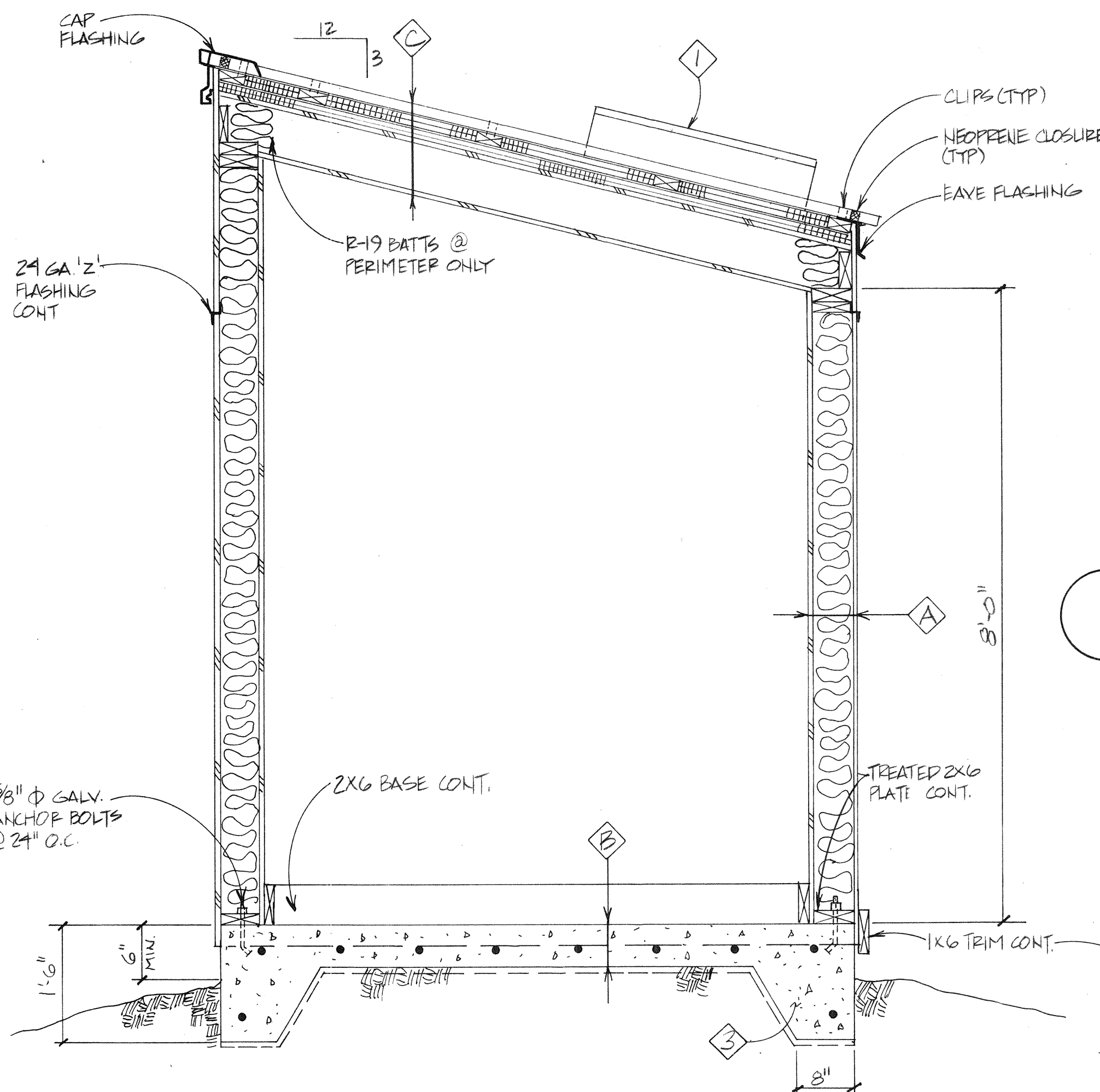
SECTION A-A

ELEVATION DATA

ELEV.	WELL F-I	WELL F-II
A'	46.3*	61.2*
B	-7.7'	-1.6'
C	-11.5'	11.5'
D	-28.7'	22.8'

*FIELD ADJUST HEIGHT FOR WELL HOUSE CONSTRUCTION; ELEV. INDICATED IS EXISTING TOP OF CASING.

WELL HOUSE PLUMBING ISOMETRIC



24 GA 1/2" FLASHING COAT

2X6 BASE CONT.

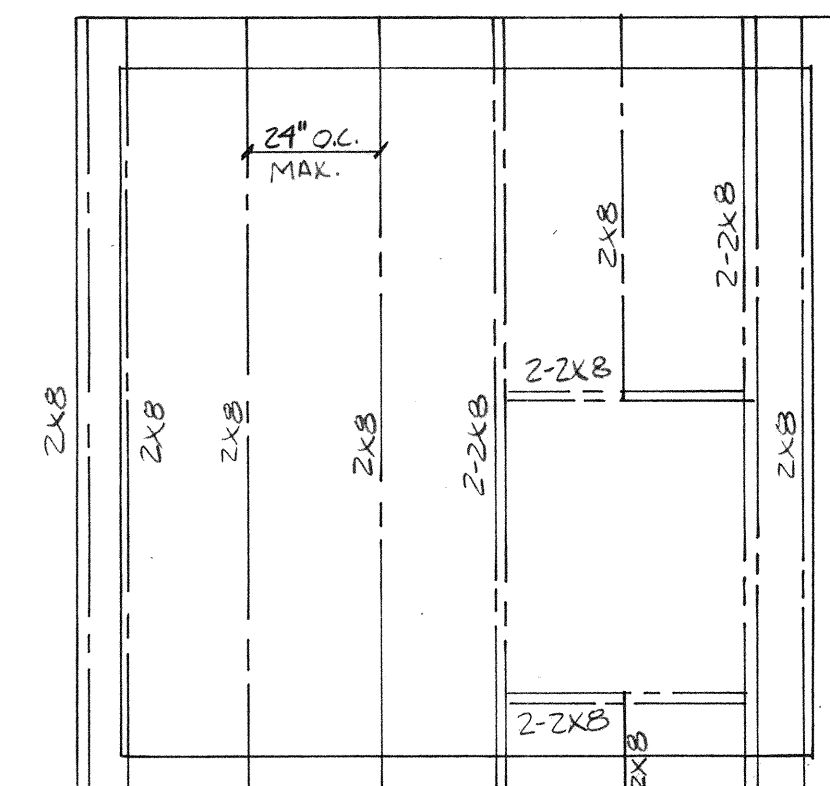
TREATED 2X6 PLATE CONT.

1X6 TRIM CONT.

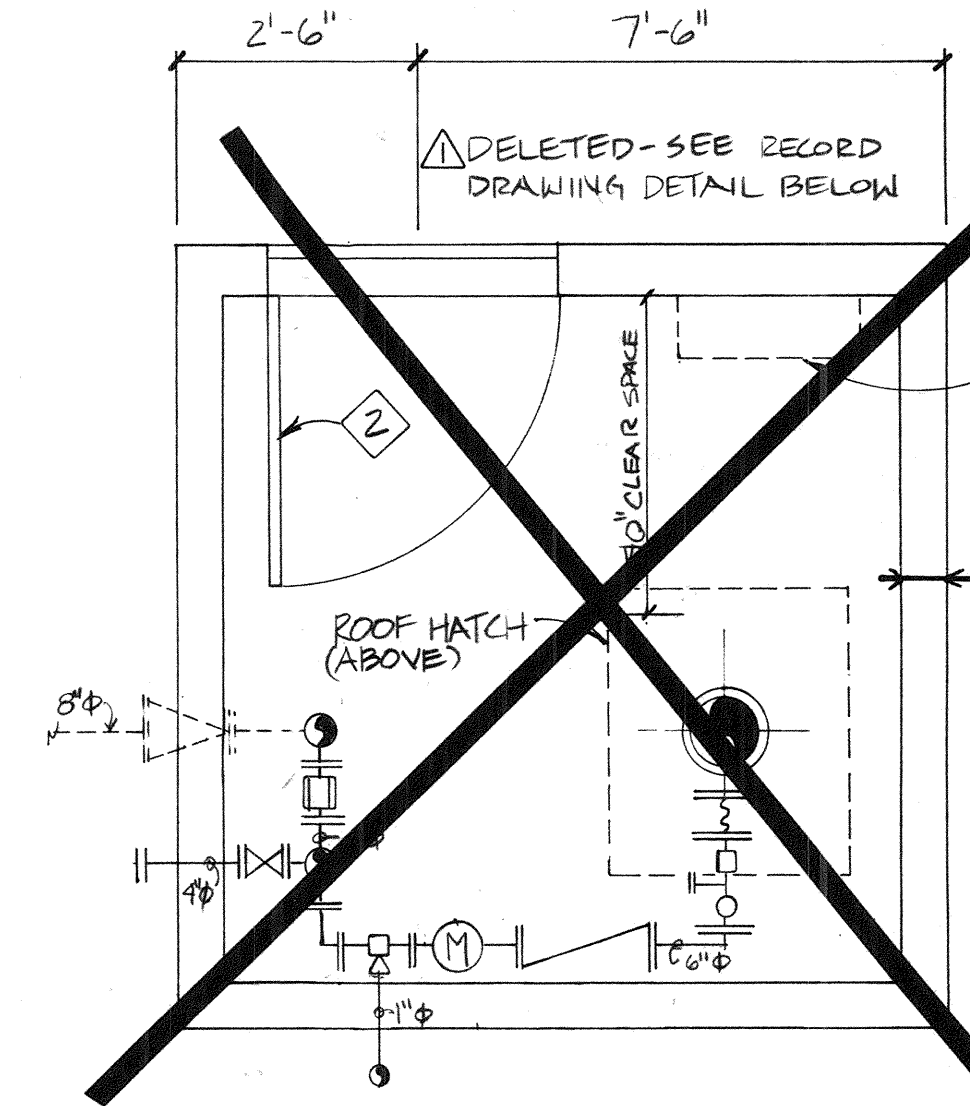
5/8" GALV. ANCHOR BOLTS @ 24" O.C.

BUILDING SECTION

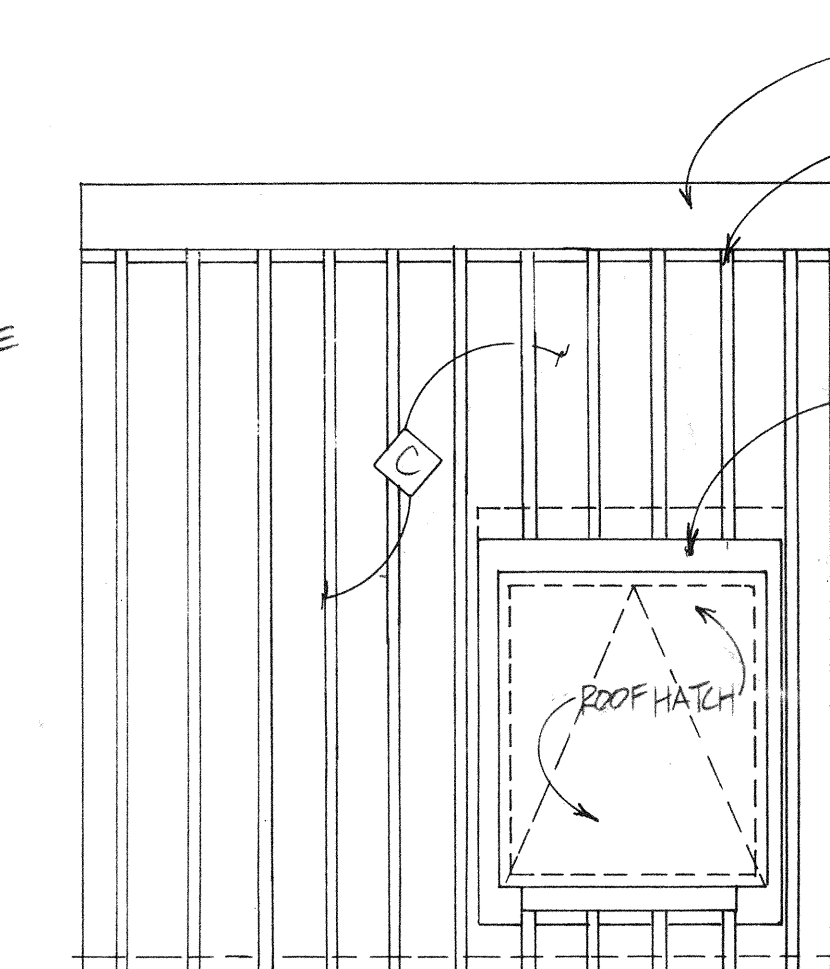
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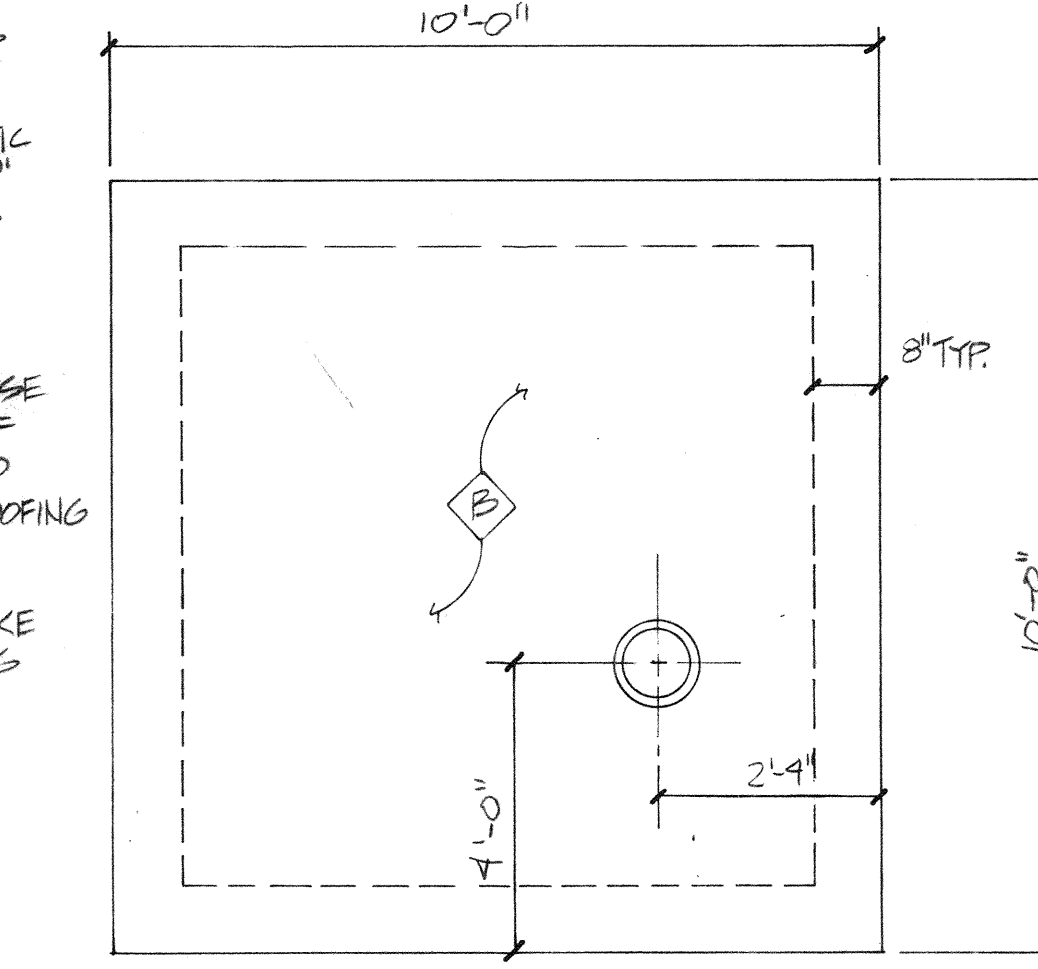
FRAMING PLAN



FLOOR PLAN



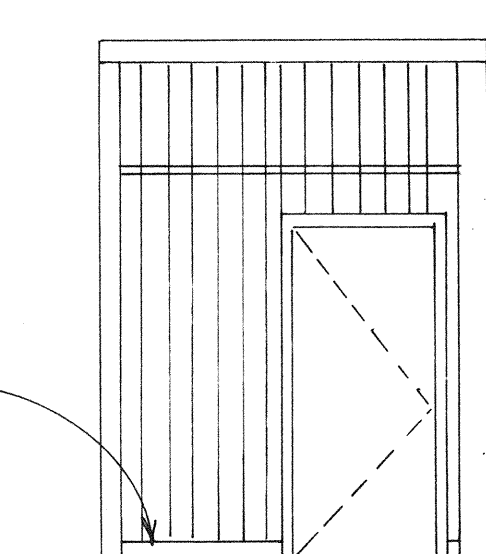
ROOF PLAN



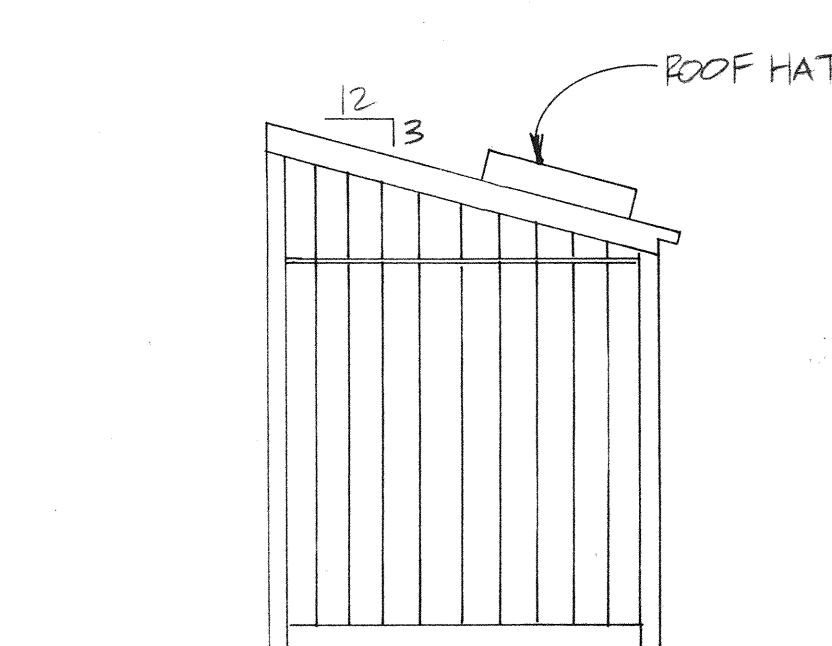
FOUNDATION PLAN

PLANS

NTS



FRONT ELEVATION



SIDE ELEVATION

BUILDING ELEVATIONS

NTS

NOTES

WALL SYSTEM

- o 5/8" T1-11 PLYWOOD, MDO FACE; GROOVES 4" O.C.; PAINT W/2 COATS SOLID BODY WOOD STAIN.
- o "TYVEC HOUSEWRAP" AIR INFILTRATION BARRIER.
- o 2 x 6 NO. 2 D.F. STUDS @ 24" O.C.
- o R-19 UNFACED FIBERGLASS BATT INSULATION.
- o 0.008" POLYETHYLENE VAPOR BARRIER.
- o 5/8" MDO PLYWOOD SCREW ATTACHED TO STUDS; PAINT W/2 COATS SEMI-GLOSS LATEX ENAMEL.

FLOOR SYSTEM

- o GRAVEL LEVELING PAD.
- o 0.008" POLYETHYLENE VAPOR BARRIER.
- o 6" REINFORCED CONCRETE SLAB W/4 REINFORCING BARS @ 12" O.C. EA. WAY.

ROOF SYSTEM

- o ASC PACIFIC "KLIP RIB" ROOFING.
- o 15 LB. ROOFING FELTS.
- o TREATED 2 x 4 SLEEPERS @ 2'-3 1/2" O.C. EACH WAY.
- o 2-LAYERS 1 1/2" EXTRUDED POLYSTYRENE RIGID INSULATION BETWEEN 2 x 4 SLEEPERS.
- o 5/8" CDX PLYWOOD SHEATHING.
- o 2 x 8 JOISTS SPACED AS SHOWN ON FRAMING PLAN.
- o 0.008" POLYETHYLENE VAPOR BARRIER.
- o 5/8" MDO PLYWOOD SCREW ATTACHED TO JOISTS. PAINT W/2 COATS SEMI-GLOSS LATEX ENAMEL.

- 1. ROOF HATCH: INRYCO RBS-1, GALVANIZED STEEL ROOF HATCH; 3'-0" x 2'-6"; SINGLE LEAF.
- 2. DOOR/FRAME: 3'-0" x 7'-0" x 1 3/4" GALV. MTL. INSULATED EXTERIOR DOOR WITH 2" x 7 3/4" GALV. METAL FRAME. SUPPLY PREHUNG ASSEMBLY.

HARDWARE:

1 1/2 pr.	Butts	McKinney	T4A-3386
1 ea.	Lockset	Schlage	D53PD x Orbit
1 ea.	Wallbumper	GlennJohnson	GJ 60C
1 set	Weatherstrip	Pemko	375 AR
1 ea.	Door Bottom	Pemko	368 AN
1 ea.	Threshold	Pemko	171 AFG
Finish	US260		

CONCRETE

- o Strength:
 1. 3000 psi minimum field strength at 28 days.
 2. Cement content not less than 560 lbs. (6 sacks) per cubic yard of concrete.
 3. Water content not more than 5 gallons per 100 lb. of cement.
- o Cement: ASTM C150, Type II.
- o Aggregates: maximum aggregate size 3/4" inch.
- o Admixtures:
 1. Air entrain all concrete, unless elsewhere excepted, with agent conforming to ASTM C260. Fresh-water concrete air content between 4 percent and 6 percent by volume.
 2. Apply in strict accordance with manufacturer's printed instructions.

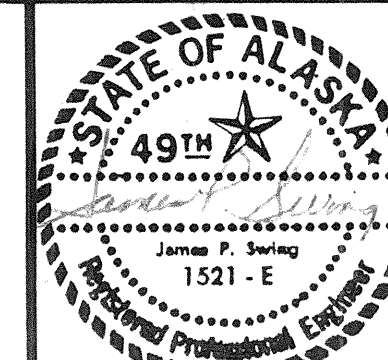
RECORD DRAWING

No.	DATE	BY	REVISION
1	7/5/88	EDG	RECORD DRAWING INFORMATION
2			
3			
4			
5			
6			
7			
8			
9			
10			

JOB No.	DESIGNED:	PROJECT ENGINEER:
75070.01	CH/HE	PHM
SCALE:	DRAWN BY:	APPROVED BY:
NTS	DEF	
	CHECKED BY:	DATE:
	HE	

URS CORPORATION

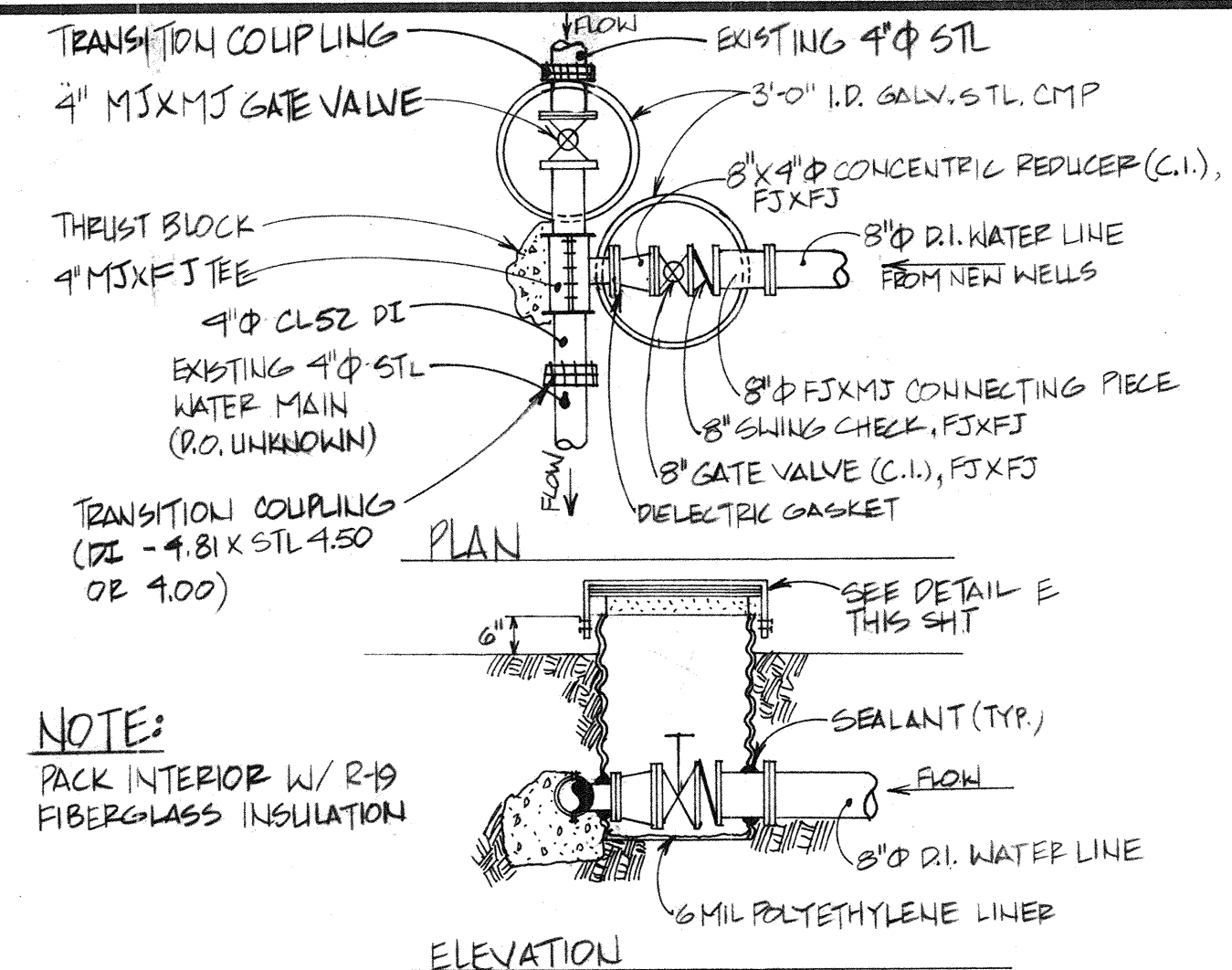
CITY OF ST. PAUL, ALASKA
ALASKA DEPARTMENT OF ENVIRONMENTAL-CONSERVATION'S VILLAGE SAFEWATER PROGRAM



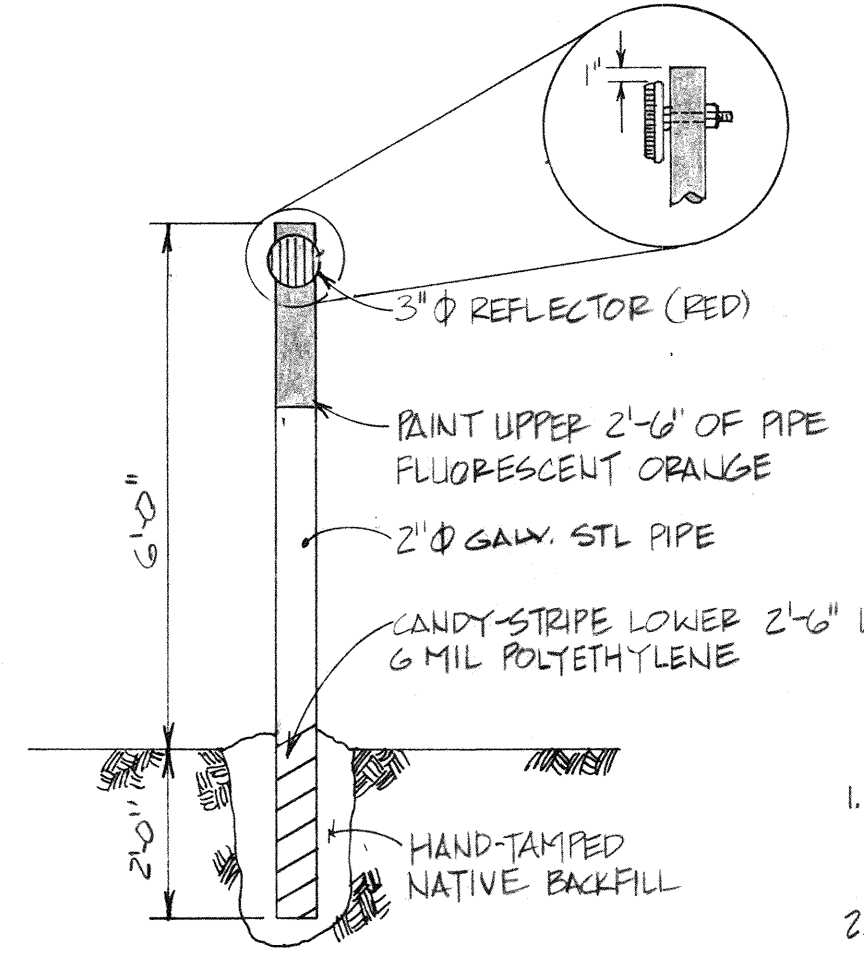
WATER SYSTEM EXPANSION
ST. PAUL, ALASKA

WELL HOUSE
PLANS, DETAILS
& ELEVATIONS

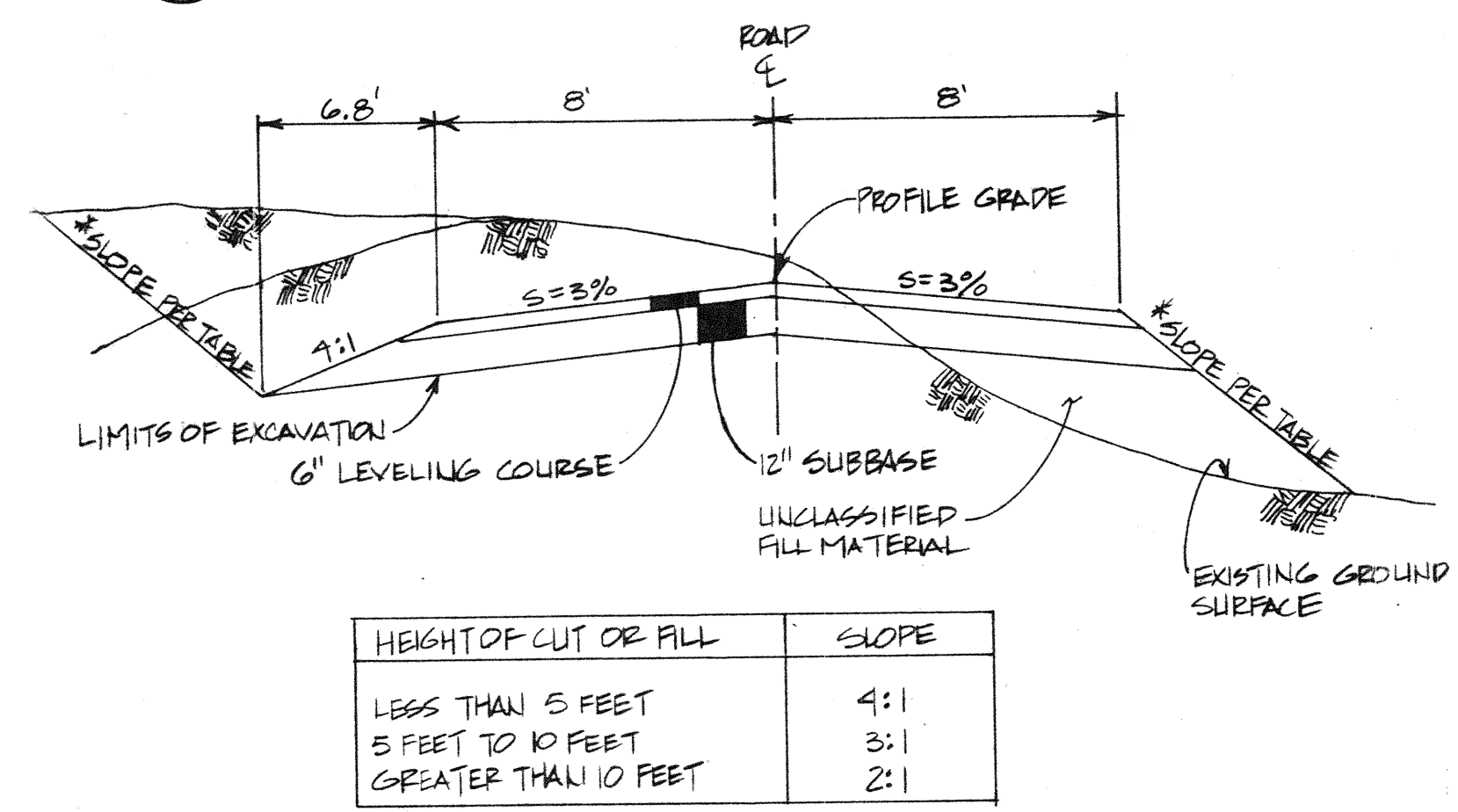
SHEET:	5
SHT. OF 7	



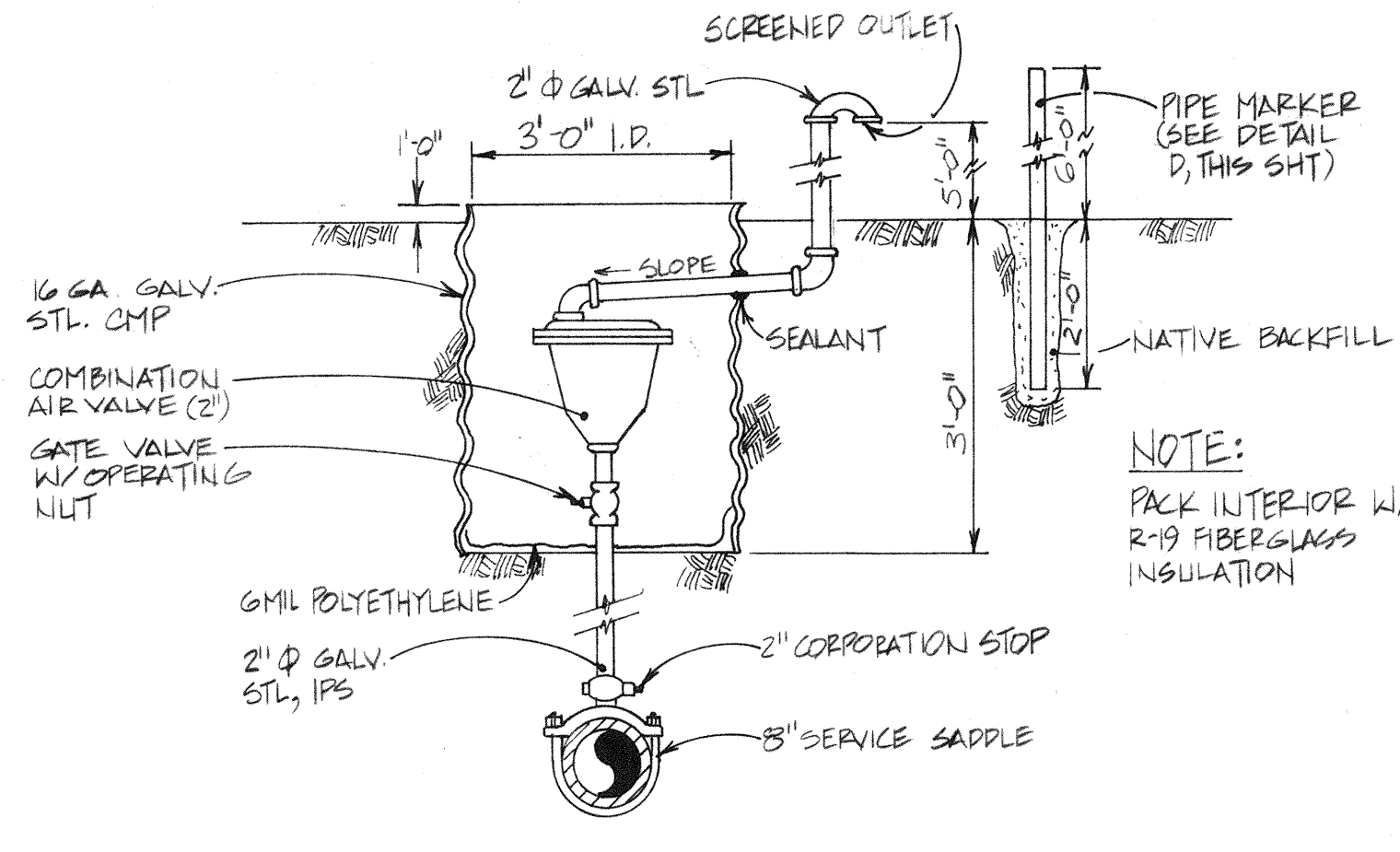
A CONNECTION @ EXISTING WATER MAIN
NTS



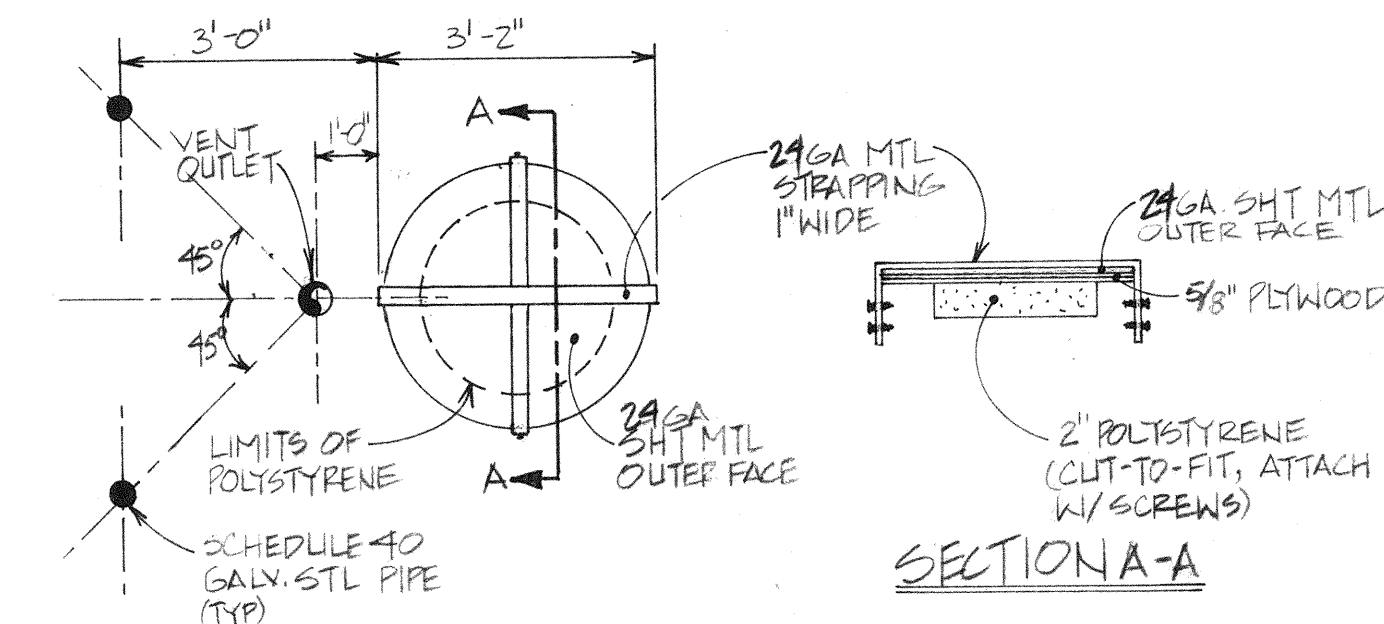
D PIPE MARKERS
NTS



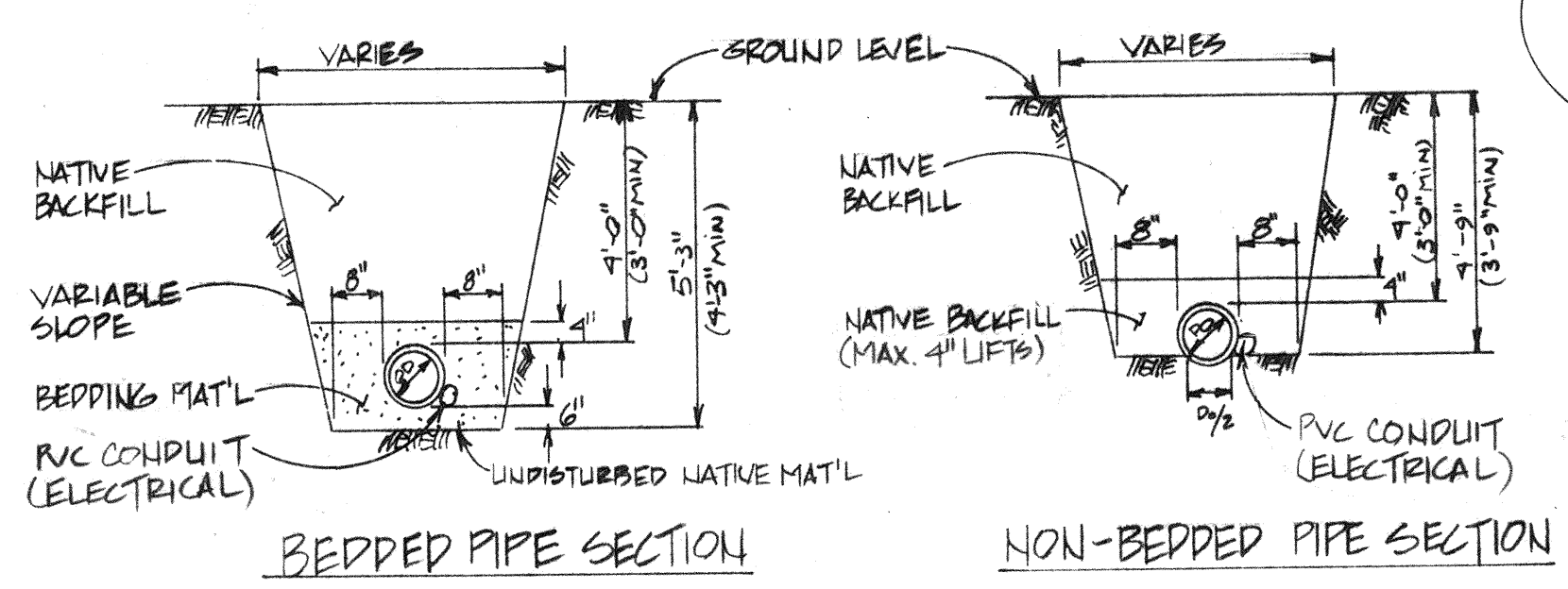
G ACCESS ROAD SECTION
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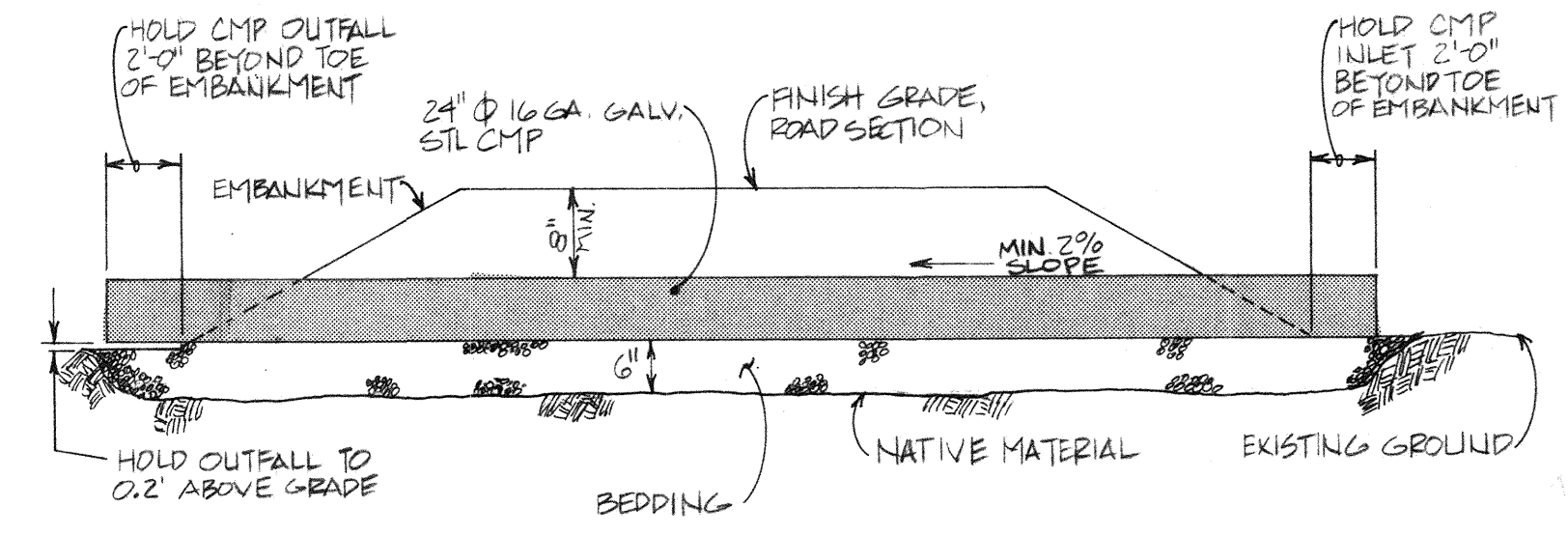
B COMBINATION AIR VALVE
NTS



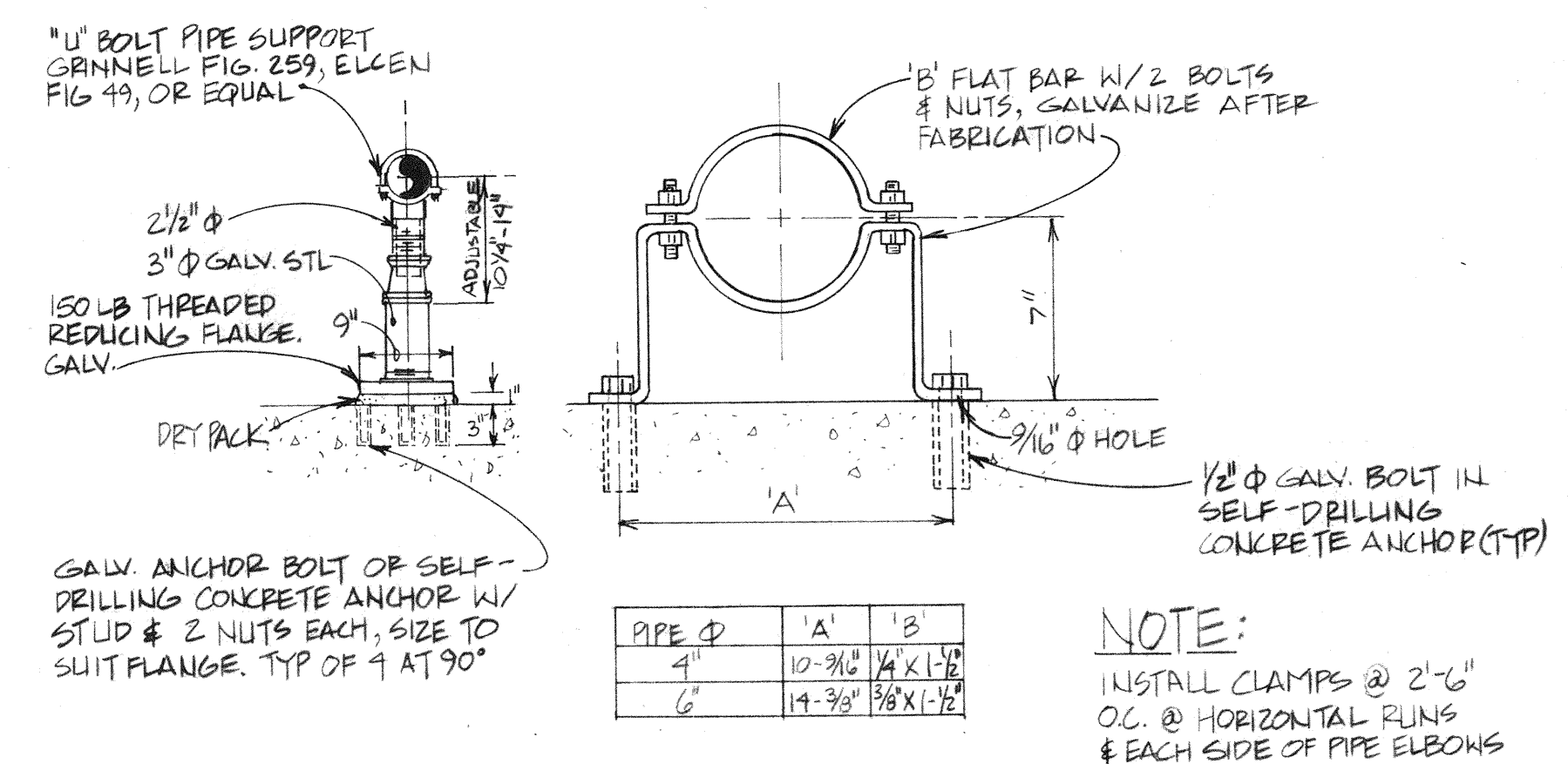
E VALVE BOX COVER
NTS



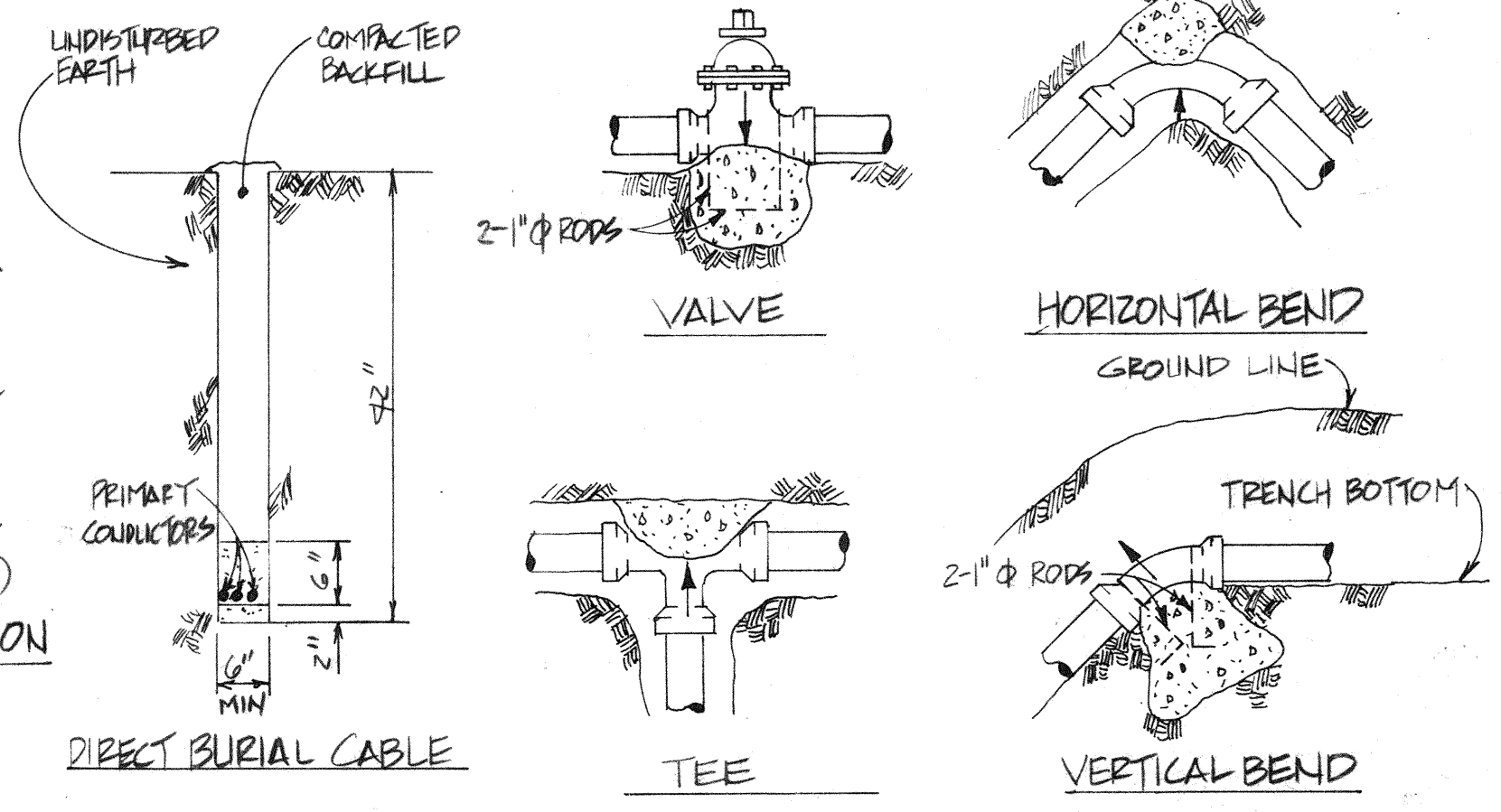
H TRENCH SECTIONS
NTS



C CULVERT DETAIL
NTS



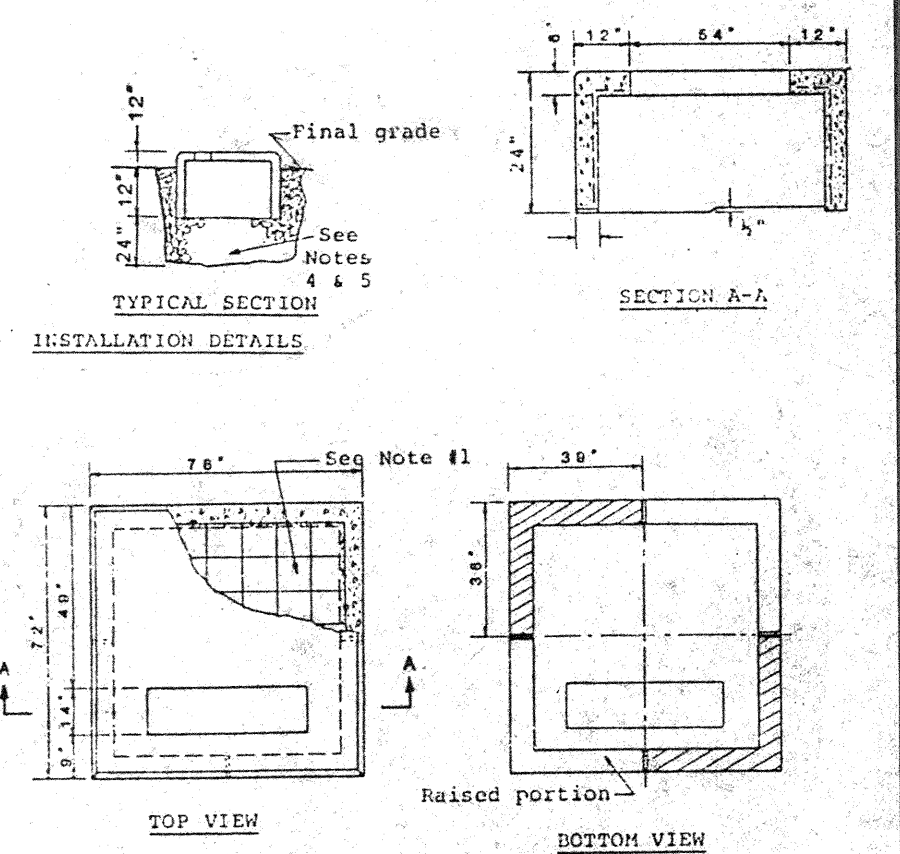
F PIPE CLAMP & ADJUSTABLE PIPE SUPPORT
NTS



I CONCRETE THRUST BLOCKING
NTS

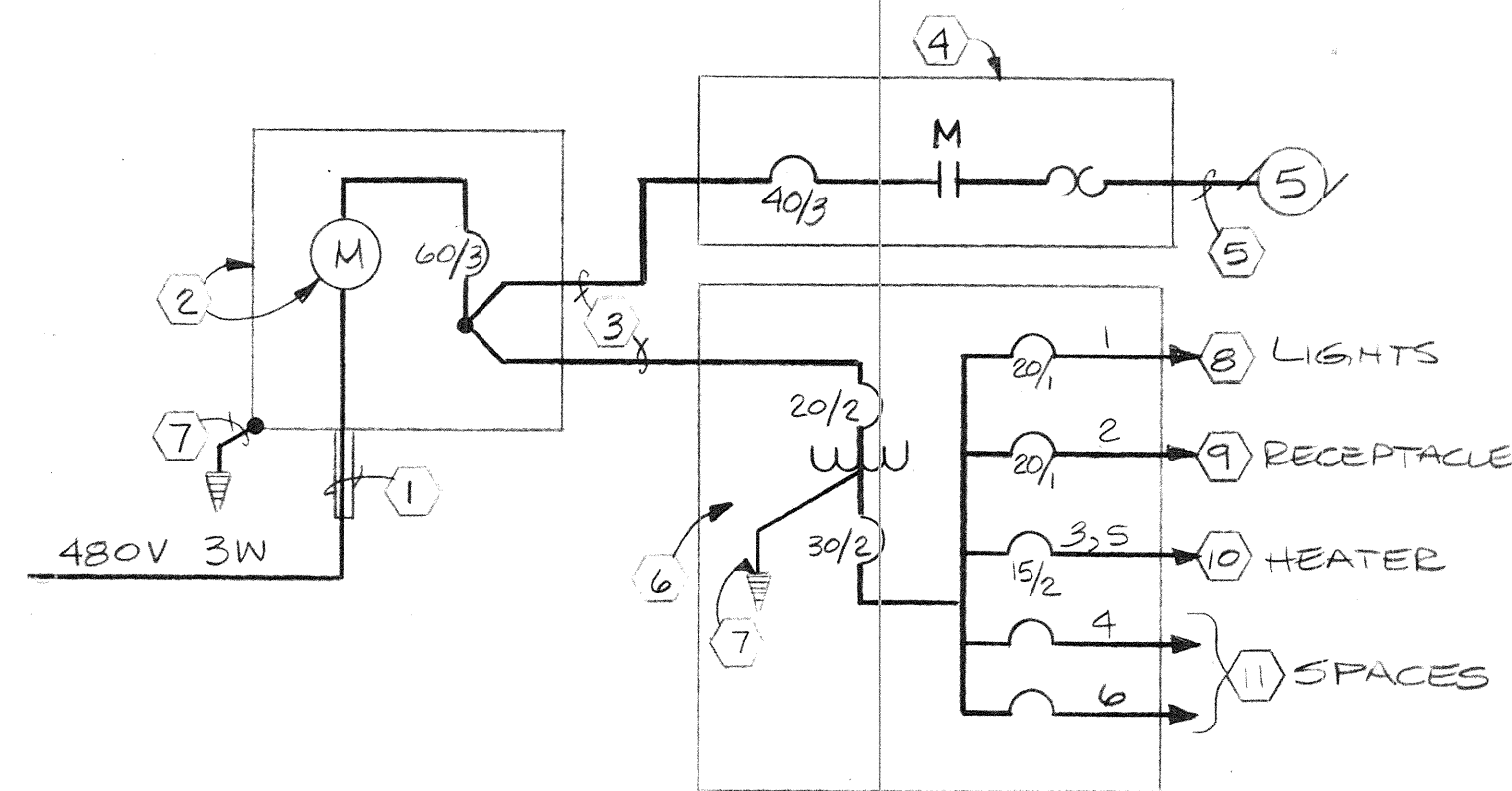
- NOTES:**
- LEVELING COURSE: CITY OF ST. PAUL STD. ROAD LEVELING COURSE: 1-1/2" MINUS SCORIA, LESS THAN 6% PASSING NO. 200 SIEVE.
 - SUBBASE MATERIAL: CITY OF ST. PAUL STD. ROAD SUBBASE: 3" MINUS SCORIA, LESS THAN 10% PASSING NO. 200 SIEVE.
 - UNCLASSIFIED FILL: MATERIAL EXCAVATED AT OR ADJACENT TO SITE; FREE OF DEBRIS, FROZEN OR ORGANIC MATERIAL, AND COBBLES GREATER THAN 6" IN DIAMETER.
 - NATIVE BACKFILL: MATERIAL EXCAVATED AT OR ADJACENT TO SITE; FREE OF DEBRIS, FROZEN OR ORGANIC MATERIAL, AND COBBLES GREATER THAN 6" IN DIAMETER (1-1/2" IN PIPE ZONE).
 - ORGANIC MATERIALS AND VEGETATION: STRIP FROM AREA AND STOCKPILE AWAY FROM WORK SITE, AS REQUIRED.
 - BEDDING: 3/4" MINUS SCORIA AND SAND MIXED 1:1 PRIOR TO PLACING IN TRENCH, MAXIMUM 4" LIFTS.
 - COMPACTION: SUBBASE AND LEVEL COURSE, 95% OF ASTM D1557, METHOD D. BEDDING AND BACKFILL IN PIPE ZONE, 95% COMPACTION; 90% COMPACTION AT SUCCEEDING LAYERS OF BACKFILL OR UNCLASSIFIED FILL.
 - THRUST BLOCKS: MIN. 2000 PSI CONCRETE, FIELD PLACED AT ALL AREAS OF UNBALANCED THRUST; PRE-CAST BLOCKING SHALL NOT BE USED.

LOCATION	BEARING AREA (FT.2)	LENGTH/WIDTH (CY)	VOL (CY)
BEND	9.1	3.5' x 2.6'	0.34
TEE/VALVE	6.4	2.9' x 2.2'	0.23



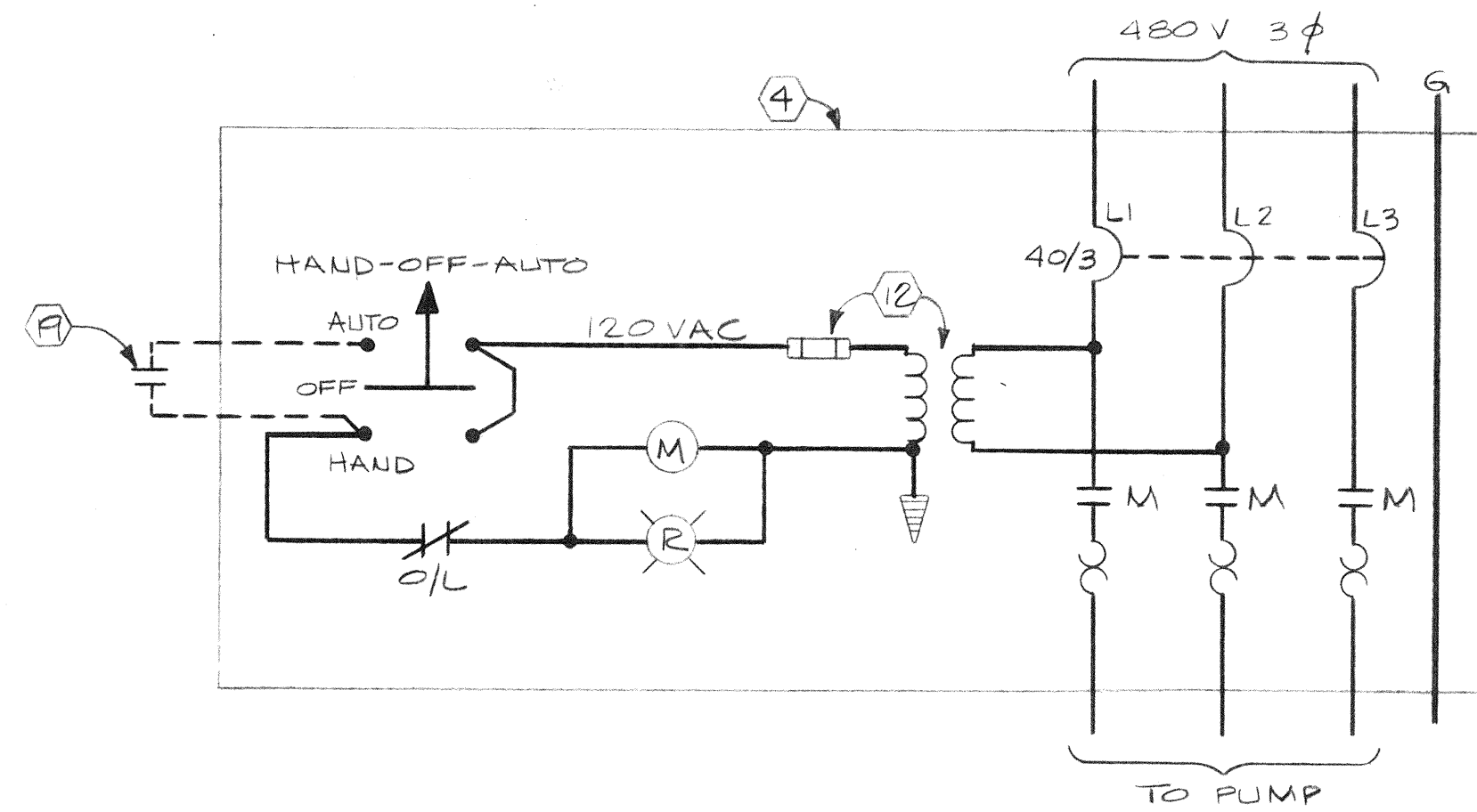
J 75 KVA TRANSFORMER CONCRETE PAD

RECORD DRAWING INFORMATION			JOB No.	DESIGNED:	PROJECT ENGINEER:	CITY OF ST. PAUL, ALASKA	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S VILLAGE SAFAEWATER PROGRAM	STATE OF ALASKA 49th James F. Smith 1521-E Registered Professional Engineer	WATER SYSTEM EXPANSION ST. PAUL, ALASKA	DETAILS & SECTIONS	SHEET: 6 SHT. 6 OF 7
			75070.01	HE	RWM						
SCALE:			NTS	DRAWN BY:	APPROVED BY:						
				CHECKED BY:	DATE:						
No.	DATE	BY	REVISION								



TOTAL CONNECTED LOAD = 19.9 kVA $\approx$ 24A @ 480 3 ϕ

POWER ONE LINE
NOT TO SCALE



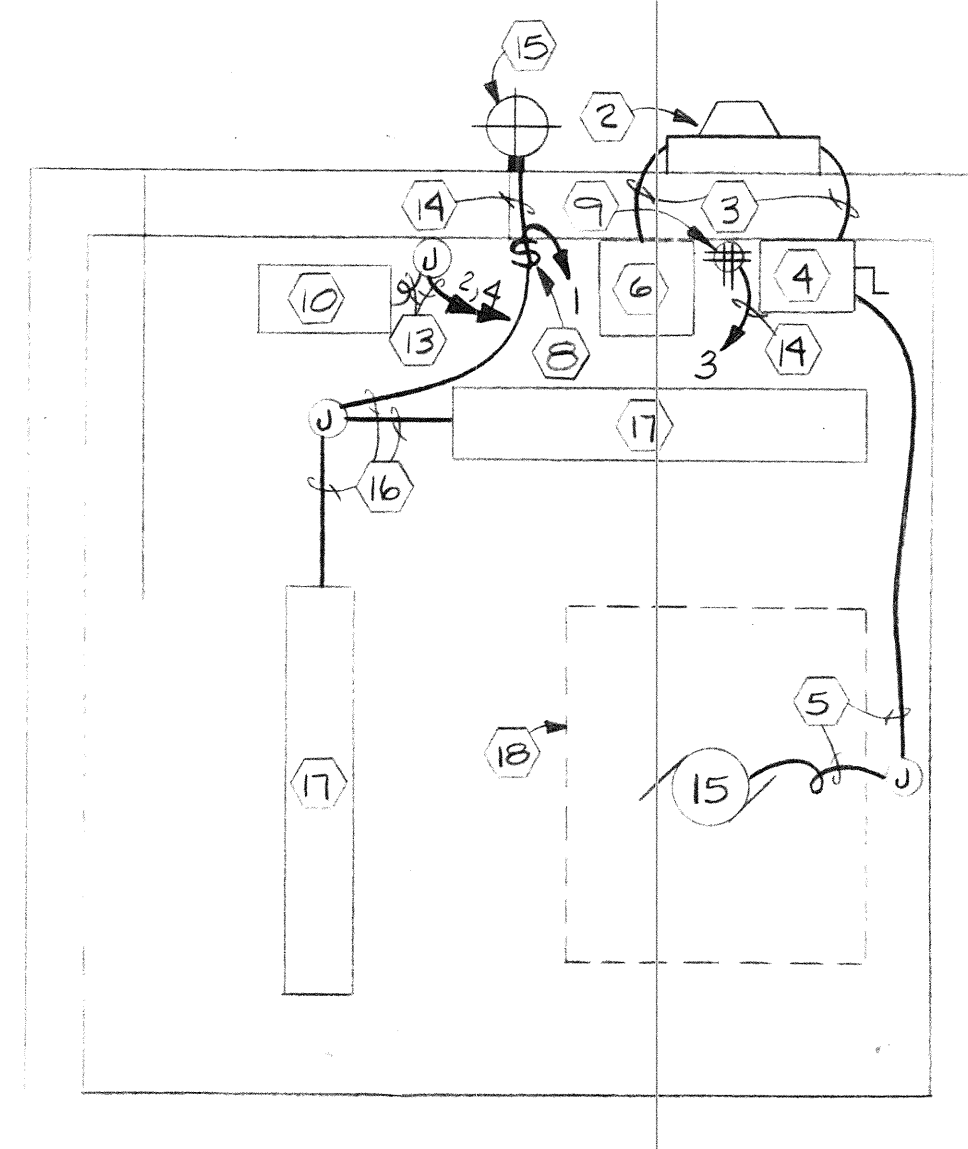
PUMP CONTROL SCHEMATIC
NOT TO SCALE

LEGEND:

- X — HOMERUN TO PANELBOARD, POLE "X"
- — — — — CONDUIT: GEC-EXTERIOR & IMC-INTERIOR.
- — — — — LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
- — — — — CIRCUIT BREAKER W/ X=AMP & Y=POLE
- — — — — NORMALLY OPEN CONTACT SET
- — — — — NORMALLY CLOSED CONTACT SET
- — — — — OVERLOAD RELAY SENSOR
- (X) — MOTOR, X hp RATED
- (J) — CAST JUNCTION BOX
- (M) — MOTOR STARTER COIL
- (R) — RED "RUNNING" LIGHT
- — — — — WIRES CONNECTED
- — — — — WIRES NOT CONNECTED
- H — HOT
- N — NEUTRAL
- G — GROUND
- — — — — SHEET NOTE
- O/L — OVERLOAD CONTACTS

NOTES:

- 1 2" C, 3-1/0 (3H), CONDUIT EXTENDS TO 2' BELOW GRADE. PROVIDE NON-METALLIC BUSHING.
- 2 5-JAW METER/MAIN COMBO, 100 AMPERE (A), 480V RATED. EQUAL TO CIRCLE AW P/N U215 MTS MS-15. PROVIDE 60A 3-POLE (P) MAIN CIRCUIT BREAKER (C.B.) WITH DOUBLE LUGGED LOAD TERMINALS SIZED FOR #6 CU. PROVIDE SELF CONTAINED DIGITAL FACE METER EQUAL TO DUNCAN 9502-2590 WITH POLYCARBONATE COVER AND CYCLOMETER TYPE REGISTER.
- 3 1" C, 4-#6 (3H, G).
- 4 COMBINATION, ACROSS THE LINE, MOTOR STARTER, NEMA SIZE 2 IN A NEMA 12 ENCLOSURE. PROVIDE WITH CONTROLS AS SHOWN IN PUMP CONTROL SCHEMATIC INCLUDING: 120V COIL, 480:120V TRANSFORMER WITH FUSED SECONDARY, HAND-OFF-AUTO SWITCH AND RED "RUNNING" LIGHT. EQUAL TO SQUARE D 8539 SDA-52.
- 5 3/4" C, 4-#10 (3H, G).
- 6 SELF CONTAINED "MINI POWER ZONE" PANELBOARD IN NEMA JR ENCLOSURE. UNIT CONSISTS OF 20A 2P PRIMARY C.B., 5 KVA -480:120/240V TRANSFORMER, 30A 2P SECONDARY C.B. AND SPACES FOR SIX 1P OR THREE 2P CIRCUIT BREAKERS. PROVIDE CIRCUIT BREAKERS PER POWER ONE-LINE. EQUAL TO SQUARE D MPZS40P.
- 7 GROUND CONSISTS OF #6 ECU (BARE COPPER) GROUND CONDUCTOR BONDED TO A 5/8" X 8" COPPER CLAD STEEL ROD AND WELL CASING.
- 8 (LIGHTING CIRCUIT) SINGLE POLE SWITCH. EQUAL TO LEVITON 1221 IN BELL 272-L BOX WITH BELL 216 COVER. MOUNT +48" AFF.
- 9 (RECEPTACLE CIRCUIT) QUADRUPEX RECEPTACLE EQUAL TO 2 EA. LEVITON P/N 5800 DUPLEX RECEPTACLES IN A BELL 276-3L BOX WITH BELL 201-2 COVER. MOUNT +18" AFF.
- 10 (HEATER CIRCUIT) WALL MOUNTED UNIT HEATER RATED AT 2KW AT 240 VAC WITH BUILT-IN THERMOSTAT. MOUNT 12" ABOVE DOOR. "HARD" WIRE UNIT USING L.T. FLEX. EQUAL TO MARKEL P/N HF682T.
- 11 FOR FUTURE TELEMETRY/CONTROL BY OTHERS.
- 12 CONTROL TRANSFORMER AND SECONDARY FUSE SIZED PER MANUFACTURERS REQUIREMENTS.
- 13 1/2" C, 3-#12 (3H, G).
- 14 1/2" C, 3-#12 (H, N, G).
- 15 WALL MOUNTED, 70W HPS, 120V FIXTURE WITH INTERNAL PHOTO ELECTRIC CONTROL AND WIRE GUARD. MOUNT FIXTURE CENTERED ON BUILDING WALL +9' ABOVE GRADE. EQUAL TO LITHONIA TNL 70 SN LP 120 WITH PEK PHOTO ELECTRIC CONTROL AND TWLWG WIRE GUARD.
- 16 1/2" C, 3-#12 (N, G, SWITCH LEG).
- 17 SURFACE MOUNT, DAMP LOCATION APPROVED, 4', 2F40 FLUORESCENT FIXTURE. EQUAL TO LITHONIA DL 240 ARL20.
- 18 DASHED LINE INDICATES PERIMETER OF CEILING HATCH.
- 19 FUTURE REMOTE CONTROL CONTACTS. (BY OTHERS)



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

SPECIFICATIONS

1. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENTLY ADOPTED EDITION OF THE NATIONAL ELECTRIC CODE BY ALASKA LICENSED JOURNEYMEN ELECTRICIANS.
2. ALL WIRING SHALL BE COPPER WITH XHHW INSULATION.
3. ALL WIRING SHALL BE IN METALLIC CONDUIT.
4. SEAL ALL BUILDING PENETRATIONS AND ALL CONDUITS AT BUILDING PENETRATIONS.
5. ALL CONDUITS SECURED BY LOCK RINGS OR STUB-UPS SHALL BE PROVIDED WITH NON-METALLIC INSULATING BUSHINGS.
6. ALL MATERIALS INSTALLED SHALL BE U.L. LISTED.

RECORD DRAWING

RECORD DRAWING INFORMATION 1/15/88 RDR 15070.01 SCALE: AS SHOWN No. DATE BY REVISION				JOB No. 15070.01 DESIGNED: BILL DISNEY DRAWN BY: CANDY R. CHECKED BY: TOM LONGSTAFFE		PROJECT ENGINEER: P.W.M. APPROVED BY: P.M. DATE: 29 JUNE 87		CITY OF ST. PAUL, ALASKA ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S VILLAGE SAFE WATER PROGRAM				WATER SYSTEM EXPANSION ST. PAUL ALASKA		ELECTRICAL DETAILS & SECTIONS		SHEET: 7 SHT. 7 OF 7	
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