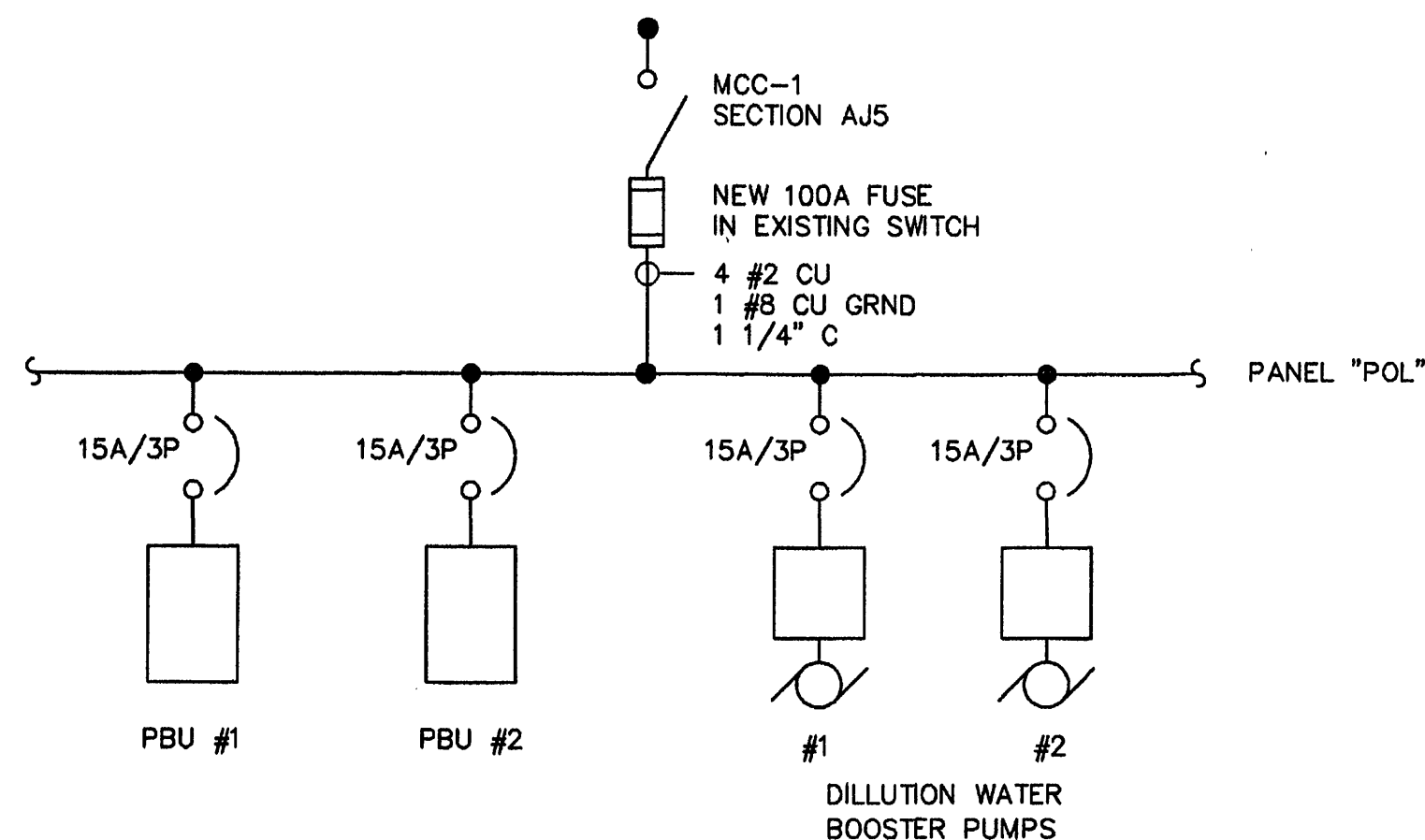


NOTES:

1. AREA CLASSIFICATION:

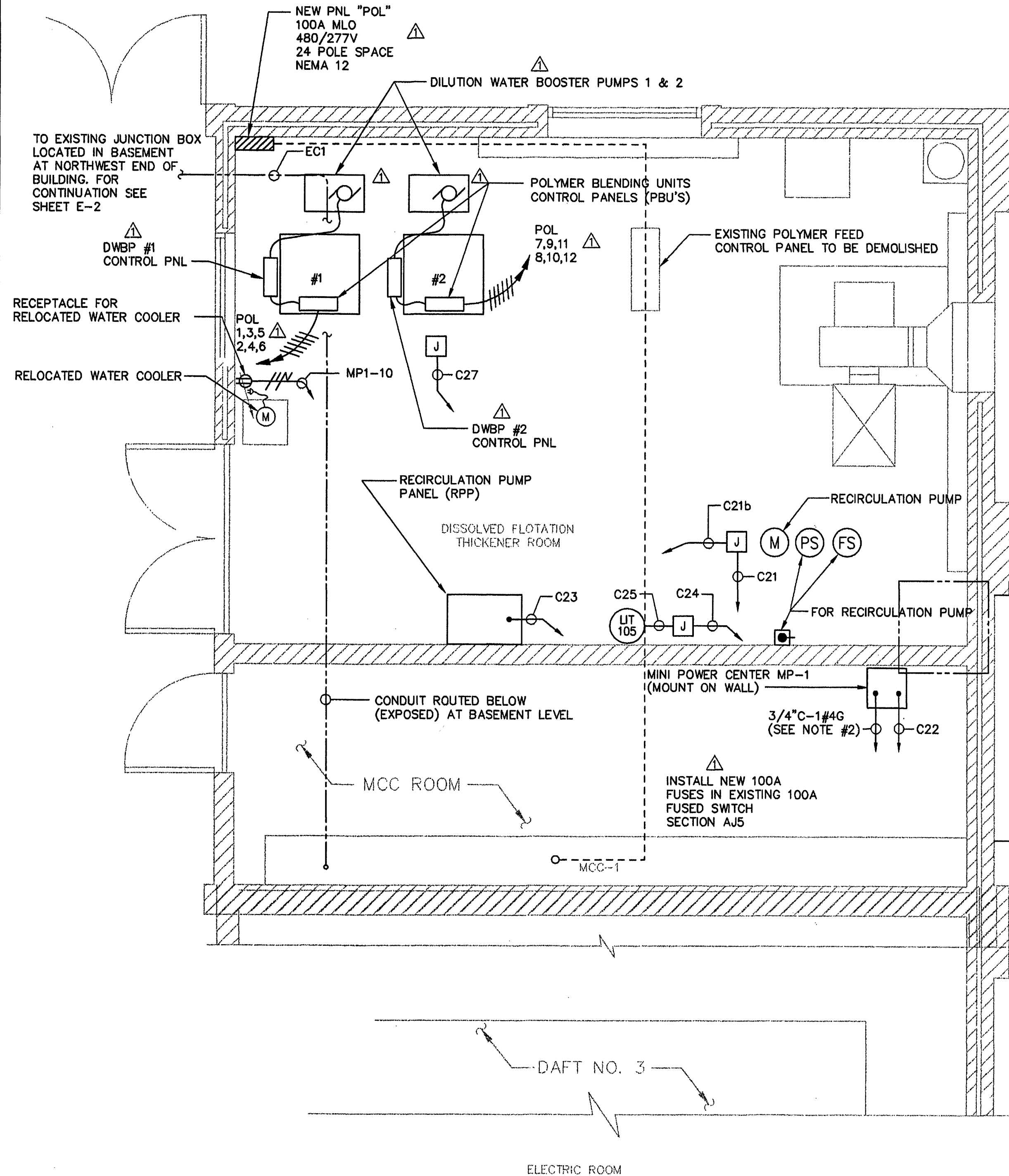
- THE EXISTING DISSOLVED AIR FLOTATION THICKENING ROOM AND ALL OUTDOOR AREAS ARE CONSIDERED A WET LOCATION. ALL EQUIPMENT, MATERIALS AND INCIDENTALS SHALL MEET NEMA 4X REQUIREMENTS. ALL EXPOSED CONDUITS SHALL BE PVC COATED RIGID STEEL CONDUITS.
 - THE EXISTING ELECTRIC ROOM IS CONSIDERED A DUSTY LOCATION. ALL EQUIPMENT, MATERIALS AND INCIDENTALS SHALL MEET NEMA 12 REQUIREMENTS. ALL EXPOSED CONDUITS SHALL BE PVC COATED RIGID STEEL.
- CONTRACTOR SHALL ROUTE 1#4 BARE COPPER GROUND IN 3/4" CONDUIT (AS INDICATED) FROM TRANSFORMER OF MP-1 TO EXISTING MCC-1 AND GROUND TO MCC-1 GROUND BUS.
 - CONTRACTOR SHALL COORDINATE THE INSTALLATION OF UNDERGROUND CONDUITS FROM THE STORAGE TANK AREA AND FILL STATION TO THE THICKENER BUILDING WITH NEW AND EXISTING CONDITIONS.
 - CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING POLYMER FEED SYSTEM EQUIPMENT. FIELD DETERMINE ORIGIN OF ALL WIRING FOR EQUIPMENT AND DISCONNECT AND REMOVE WIRING. REMOVE ALL EXPOSED CONDUIT. ALL EXISTING CONDUIT RUN IN SLAB SHALL BE CUT FLUSH TO SLAB, CAPPED AND ABANDONED IN PLACE. IT IS INTENDED THAT THE EXISTING POLYMER SYSTEM SHALL BE ENTIRELY REMOVED AND REPLACED WITH NEW.
 - RUN CONDUIT UNDERGROUND AND THRU EXISTING WALL. CORE DRILL THRU THE WALL AND PROVIDE PULL BOXES AS REQUIRED.



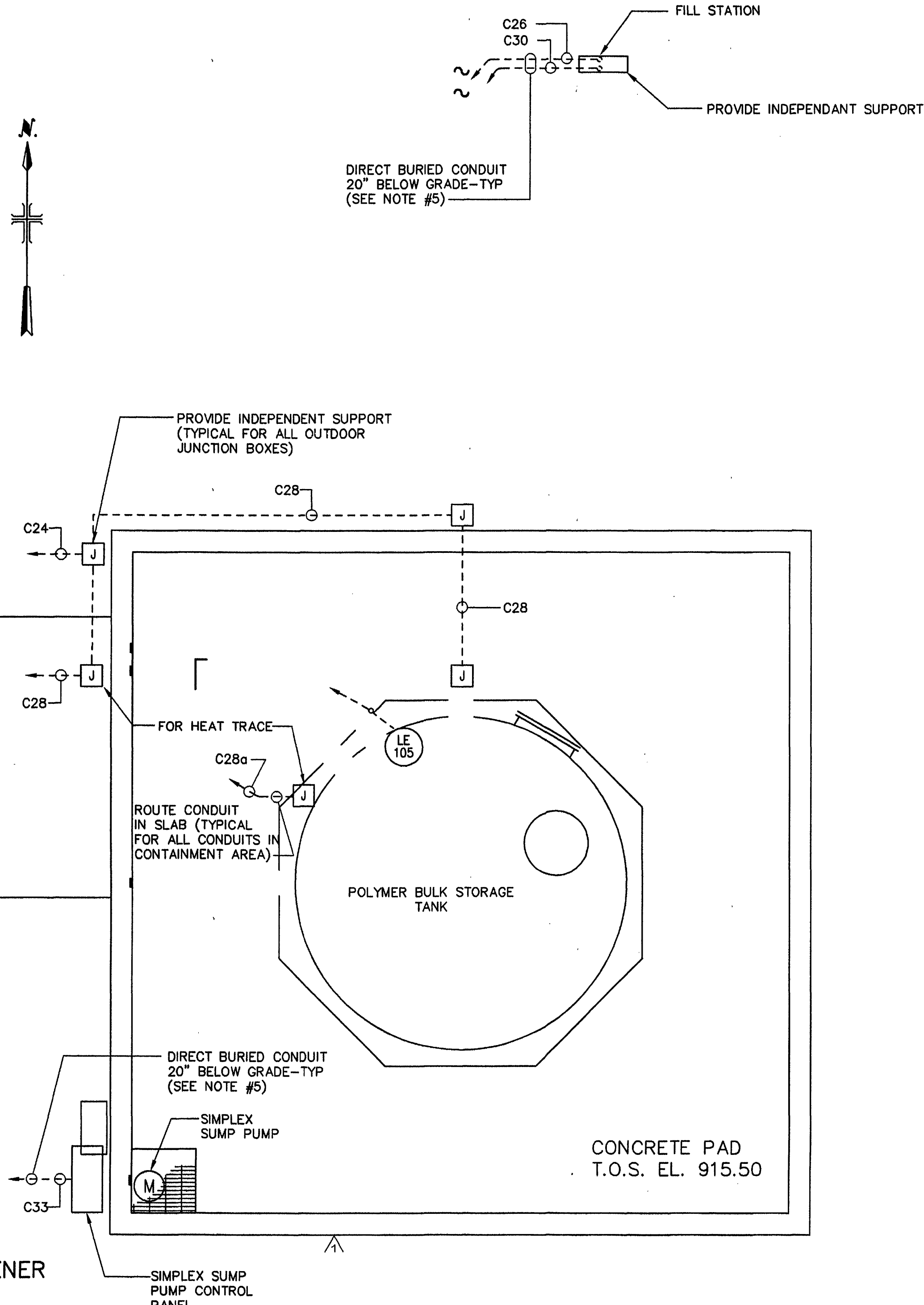
△ SKETCH E-33A

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD KVA	KVA PER LEG		LOAD KVA	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
				A	B				
1	30	SPARE	2.90	3.90		1.00	SIMPLEX SUMP PUMP CONTROL PANEL	20	2
3	30	SPARE	2.90		3.90	1.00	HEAT TRACE POWER SUPPLY (TANK)	30	4
5	20	LT-105 AND FILL STATION POWER SUPPLY	0.50	1.50		1.00	HEAT TRACE POWER SUPPLY (TANK)	30	6
7	20	RECIRCULATION PUMP PANEL (RPP)	1.00		2.00	1.00	HEAT TRACE POWER SUPPLY (PIPING)	30	8
9	20	INSTRUMENTS	0.20	0.70		0.50	RECEPTACLE FOR WATER COOLER	20	10
11	20	SPARE	-	-	-	-	SPARE	20	12
13	20	SPARE	-	-	-	-	SPARE	20	14
15	20	SPARE	-	-	-	-	SPARE	20	16
17	20	SPARE	-	-	-	-	SPARE	20	18
19	20	SPARE	-	-	-	-	SPARE	20	20
21	SPARE	-	-	-	-	-	SPARE		22
23	SPACE	-	-	-	-	-	SPACE		24
MINI-POWER CENTER LIGHTING PANEL: MP-1 LOCATION: ELECTRICAL ROOM BUILDING: DISSOLVED AIR FLOTATION THICKENER BUILDING			TOTAL KVA	6.10	5.90	SERVICE CHARACTERISTICS: 120/240 VOLT - 1 PHASE - 3 WIRE - 60 Hz PROVIDE MAIN BREAKER & SOLID NEUTRAL & GROUND BUS			
			GRAND CONNECTED TOTAL KVA			12.00			

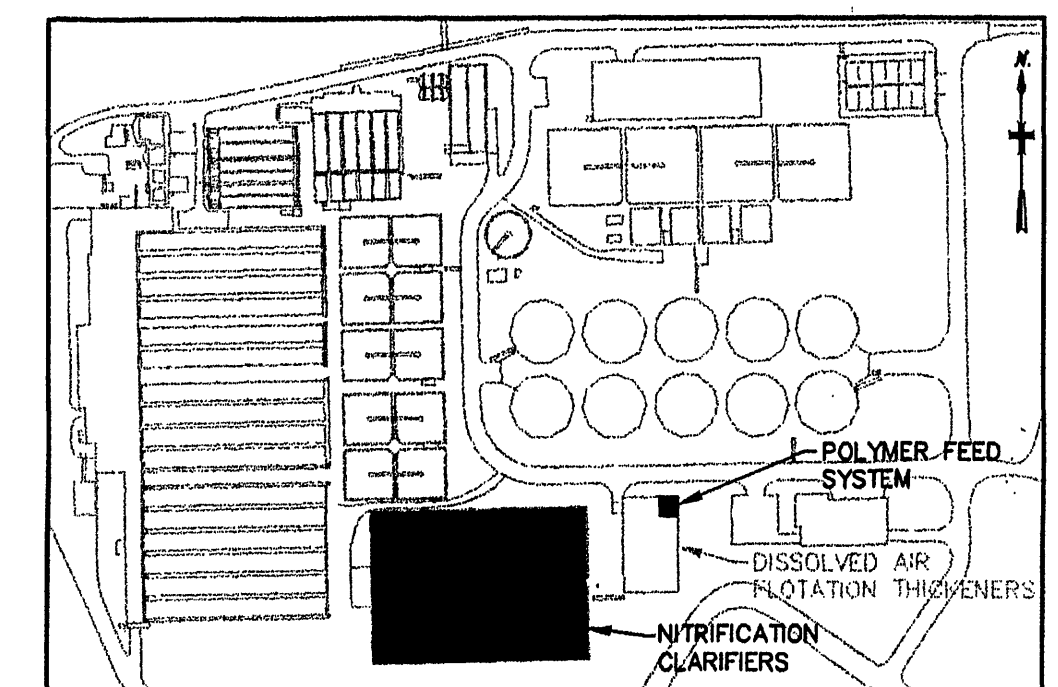
* PROVIDE GFCI CIRCUIT BREAKER (SIZE AS SHOWN)



DISSOLVED AIR FLOTATION THICKENER PARTIAL PLAN



DISSOLVED AIR FLOTATION THICKENER DEMOLITION PLAN (SEE NOTE #4)



KEY PLAN NTS

COPYRIGHT © 1997
MALCOLM PIRNIE, INC.

DATE MAY 1997

E SHEET 34 OF 36

CAD REF. NO. 0060E699

MALCOLM PIRNIE
11832 Rock Landing Drive, Suite 400
Newport News, Virginia 23606

NO.	BY	DATE	REVISIONS	REMARKS
1	ARB	JAN. 2000	RECORD DRAWING	

DES GJM/TK
DWN GJM
CKD TK



CITY OF ROANOKE, VIRGINIA
**WATER POLLUTION
CONTROL PLANT
UPGRADE AND EXPANSION**

**DISSOLVED AIR FLOTATION THICKENER
POWER LAYOUT**

SCALE: 3/8"=1'-0"