

NOTE:
PLUMBER SHALL COORDINATE ALL EQUIPMENT ROOM
PIPING AND PIPE CONNECTIONS TO EQUIPMENT WITH
CAROLINA PRIDE CAR WASH SYSTEMS AND SOLUTIONS.
CONTACT: DWAYNE KEATON (336-597-5112).

RECLAIM SYSTEM

REQUIREMENTS

WATER

(2) 3" PVC SUCTION LINES WITH 3" PVC FULL
FLAPPER CHECK VALVES ONE FOR USE AND ONE
FOR SPARE, MOUNT IN TANKS WITH UNIONS THAT
ARE ACCESSIBLE FROM THE MANWAY. SUCTION
LINES ARE TO COME UP FROM SETTLING TANKS
AND TERMINATE ON THE RIGHT SIDE OF THE
FRAME, FORWARD OF THE RECIRCULATION LINE
AS SHOWN.

(1) 2" LINE OUT TO THE WASH MANIFOLD
(1) 1" LINE FROM UNDERFLOW ON SEPARATOR TO
CATCH BASIN IN WASH.
(1) 1" LINE TO RETURN TO THE FIRST CHAMBER OF
THE RECLAIM TANK #2, IN AN ACCESSIBLE
LOCATION SUCH AS THE MANWAY FOR AERATION
SPARGER - LINE SHOULD END ABOVE WATER
LINE.

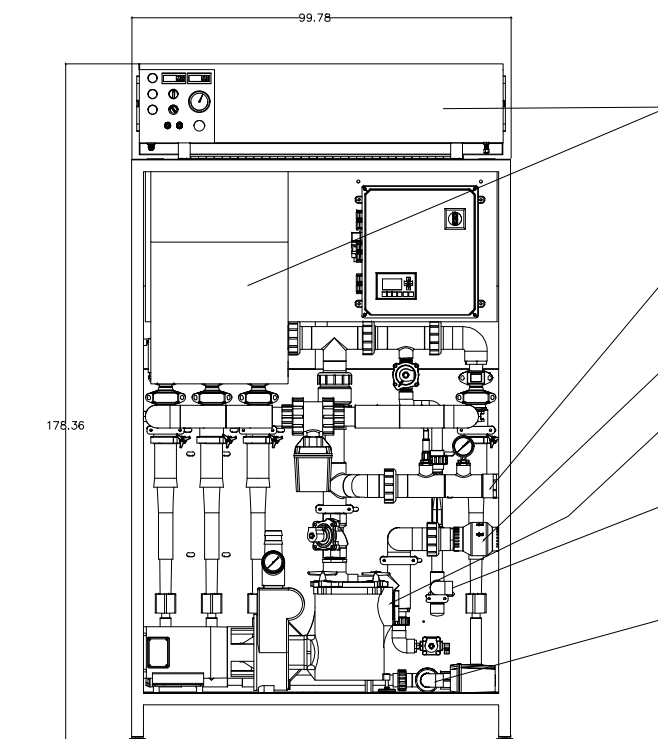
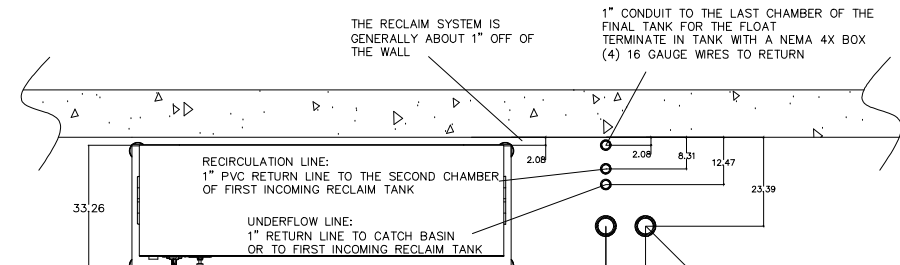
--OR--

(1) 1" LINE TO RETURN TO THE FIRST CHAMBER OF
THE RECLAIM TANK #2, CONNECT TO TANK STUB
WITH UNION AND ELBOW DOWN. TERMINATE END
OF PIPE WITH A TEE LOCATED 1/2" OF WATER
LEVEL (APPROX. 2 FT.) FROM THE BOTTOM OF
THE TANK.

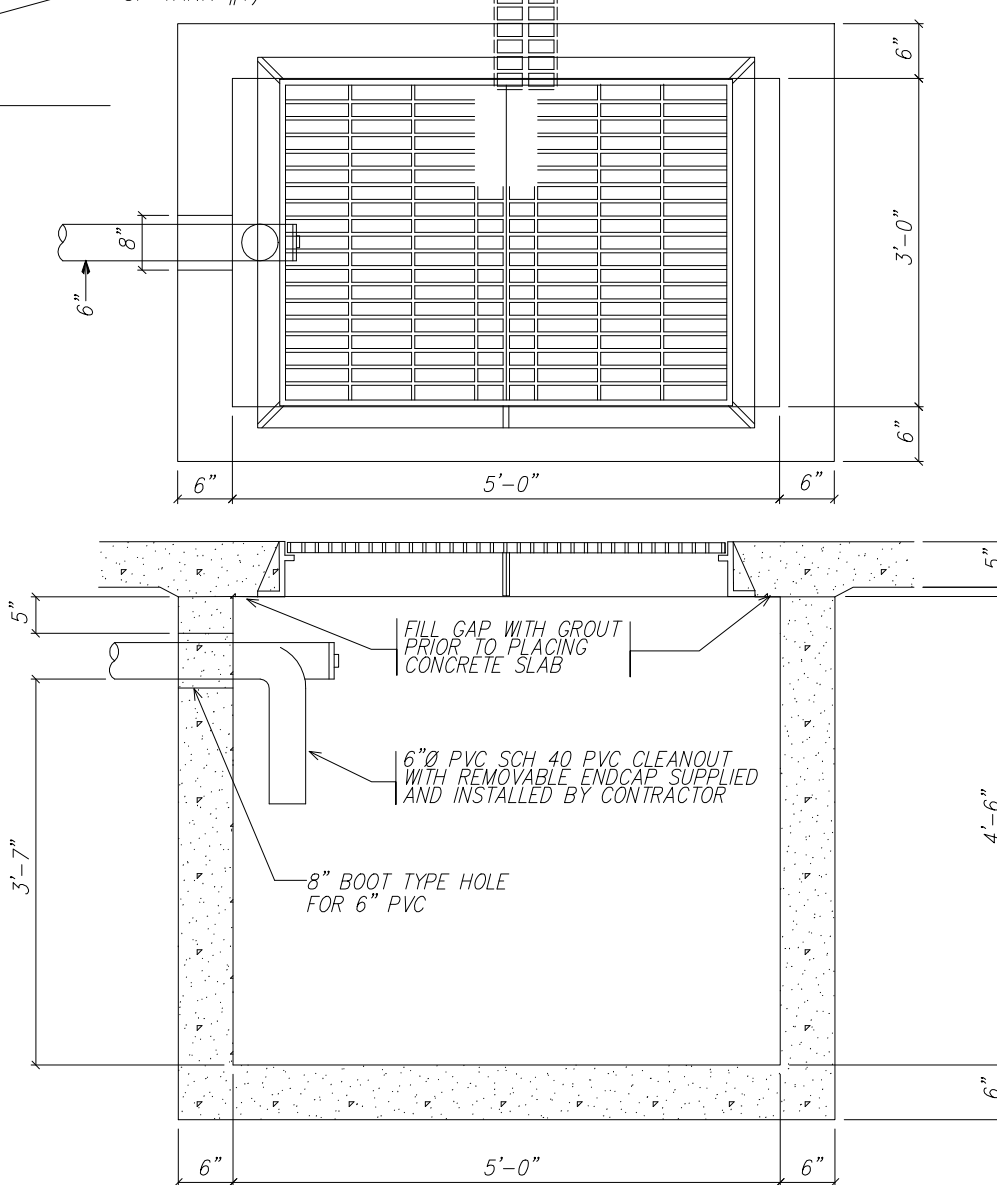
ELECTRICAL

(1) 200 VOLT 30 AMP OR 200 VOLT 20 AMP
THREE PHASE CIRCUITS TO BE HARD WIRED 5
FEET UP FROM THE FLOOR TO THE RIGHT OF THE
REGULATION UNIT. NOTE: THE CHOICE OF 200
OR 208 MUST BE DETERMINED WHEN ORDERED.
(1) 120 VOLT 20 AMP SINGLE PHASE - FOR THE
PVC AND (ZONE - IF APPLICABLE)
(1) 1" CONDUIT FROM RECLAIM EQUIPMENT
CONTROL BOX TO FRONT OF LAST TANK FOR
FLOATS.

(1) 3" CONDUIT FROM EACH CARWASH EQUIPMENT
CONTROL BOX TO SEND A CONTROL VOLTAGE
SIGNAL TO PURWATER'S REPRESSURIZATION
POWER BOX. CONTROL WIRING FROM CARWASH
CONTROLLER (110V IS THE DEFAULT) TO BE
WIRED INTO CONTROL BOX ON FRAME.



RECLAIM SYSTEM



CATCH BASIN SAND TRAP DETAIL NO SCALE

PLUMBING FIXTURE SCHEDULE

P-1 (6" FLOOR DRAIN WITH TRAP SEAL)

SHALL BE A JOSAM 30003-A SERIES COATED CAST IRON FLOOR DRAIN, 3" PIPE CONNECTION, 6" DRAIN TOP, STRAINER TYPE 6A, TWO-PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEALOC INVERTIBLE NON-FUNCTIONING FLASHING COLLAR, WEEPHOLE, BOTTOM OUTLET AND ADJUSTABLE SATIN NIKALOID ROUND SUPER-FLO STRAINER.

* <http://www.jpsm.com/s/cast-iron-adjustable-round-top-floor-drain/30000-A>

FLOOR DRAIN TRAP SEAL

SHALL BE A 3" "SURE SEAL" MODEL SS3000 PREASSEMBLED INLINE FLOOR DRAIN TRAP SEALER. 5 PIECES: COMMERCIAL GRADE ABS PLASTIC HOUSING AND KEEPER PIN, PROPRIETARY NEOPRENE RUBBER DIAPHRAGM, WITH 2 SOFT RUBBER SEALING GASKETS. FLOOR RATING ASSE-1072 AF-GW.

* http://www.theureseal.com/Portals/49321/gccs/pitch_sheet_ss3000.pdf

P-2 (HUB DRAIN - INDIRECT WASTE FUNNEL)

SHALL BE A "ZURN" Z326, 2" PIPE CONNECTION, DURA-COATED CAST IRON BODY AND BOTTOM OUTLET. CONTRACTOR SHALL VERIFY FINAL HEIGHT OF FUNNEL WITH EQUIPMENT THAT IS UTILIZING FUNNEL. DRAIN AND VERIFY PROPER CLEARANCE PRIOR TO CONSTRUCTION.

* http://content.zurn.com/web_documents/pdfs/specsheets/z326.pdf

P-3 (3" STUDOR VENT - AIR ADMITTANCE VALVE)

SHALL BE A IPS CORPORATION "STUDOR MAXI-VENT", 3" VENT.

* <http://www.ipscorp.com/plumbing/studor/maxivent>

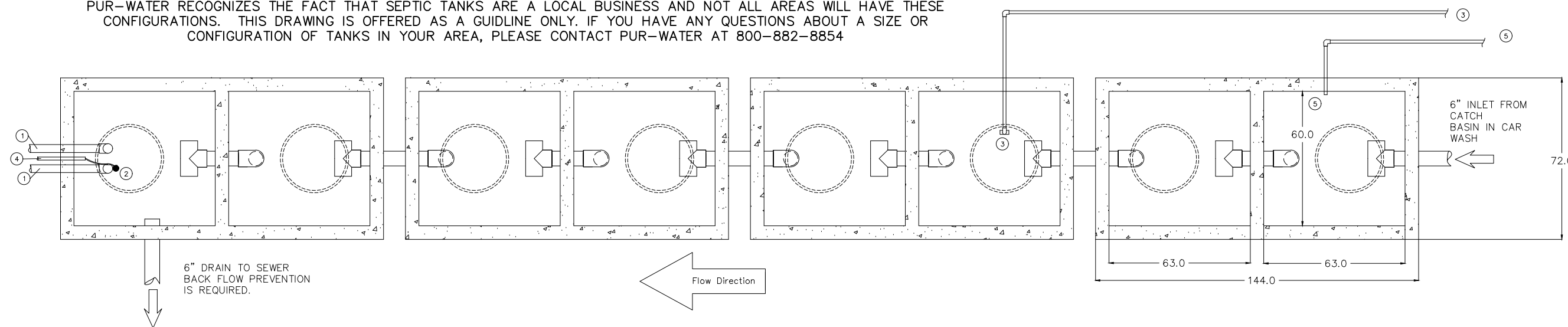
NOTES:

- 1) ALL PLUMBING FIXTURES SHALL BE AS SPECIFIED OR APPROVED EQUAL.
- 2) PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.

1 SANITARY ISOMETRIC NO SCALE

4 TANK CONFIGURATION FOR 5 MICRON PUR-WATER RECOVERY SYSTEMS

THIS IS THE SUGGESTED IDEAL CONFIGURATION FOR A 120 TO 160 GPM MODERATE TO HIGH VOLUME PUR-WATER SYSTEM. PUR-WATER RECOGNIZES THE FACT THAT SEPTIC TANKS ARE A LOCAL BUSINESS AND NOT ALL AREAS WILL HAVE THESE CONFIGURATIONS. THIS DRAWING IS OFFERED AS A GUIDELINE ONLY. IF YOU HAVE ANY QUESTIONS ABOUT A SIZE OR CONFIGURATION OF TANKS IN YOUR AREA, PLEASE CONTACT PUR-WATER AT 800-882-8854



TO PURWATER RECOVERY SYSTEM (2) 3" SCH 80 PVC SUCTION LINES, ONE TO SERVE AS A SPARE. LINES ARE

① STRAPPED TO THE TANK WALL. INSTALL SCH 80 UNIONS ABOVE THE WATERLINE TO ALLOW SERVICING OF EACH

SUCTION LINE. TERMINATE SUCTION LINES W/ FULL FLOW FLAPPER CHECK VALVES (PURWATER SUPPLIED). NO

SPRING LOADED FOOT VALVES

② PURWATER PROVIDED (1) LOW-LOW SAFETY LEVEL FLOAT SHOULD BE MOUNTED SO THAT IT WILL BE IN THE DOWN

POSITION 8" ABOVE THE BOTTOM OF THE FLAPPER CHECK. THIS FLOAT CONTROLS THE SAFETY FUNCTION TO

PROTECT THE PUMP FROM A LOW WATER SITUATION.

③ (1) 1" SCH 80 AIR SPARGER OR OZONE RECIRCULATION LINE.

FOR AIR SPARGER SYSTEMS, ALLOW THE SPARGER TO BE 6-12" ABOVE THE WATER LINE. MOUNT IN THE

MANWAY, IF POSSIBLE, TO ALLOW ACCESS FOR MAINTENANCE.

FOR OZONE SYSTEMS, PLUMB THE LINE WITH A TEE, ON THE WET END, 24" UP FROM THE BOTTOM OF THE TANK.

NOTES:

POSITION TANKS SO PLUMBING IS BELOW FROST LINE IN AREAS WHERE FREEZING MAY OCCUR.

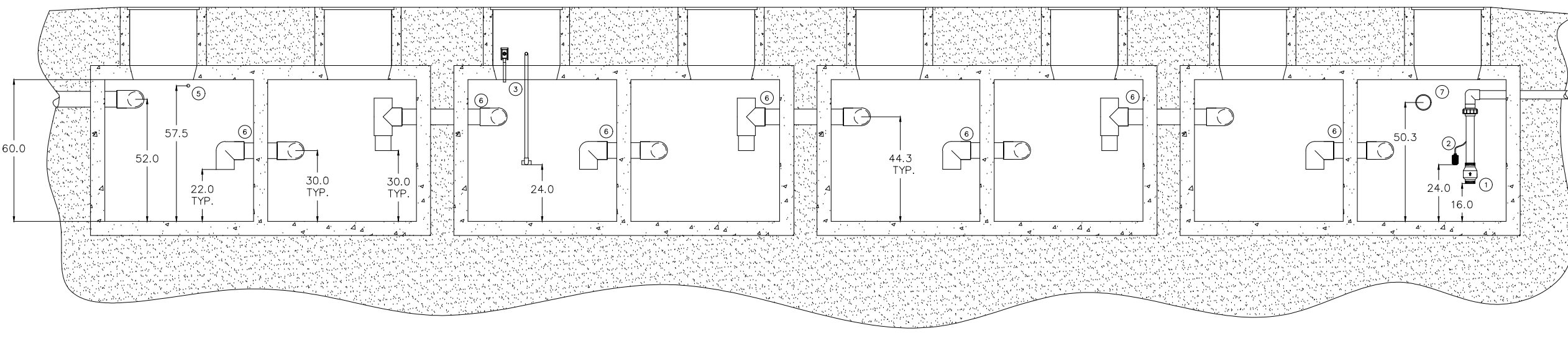
DRAWING IS FOR REFERENCE ONLY AND IS TO BE USED FOR PLUMBING REFERENCE. CONSULT WITH TANK MANUFACTURER FOR TANK LOADS.

CONSULT WITH CIVIL ENGINEER FOR SOIL PREPARATION AND TANK PLACEMENT.

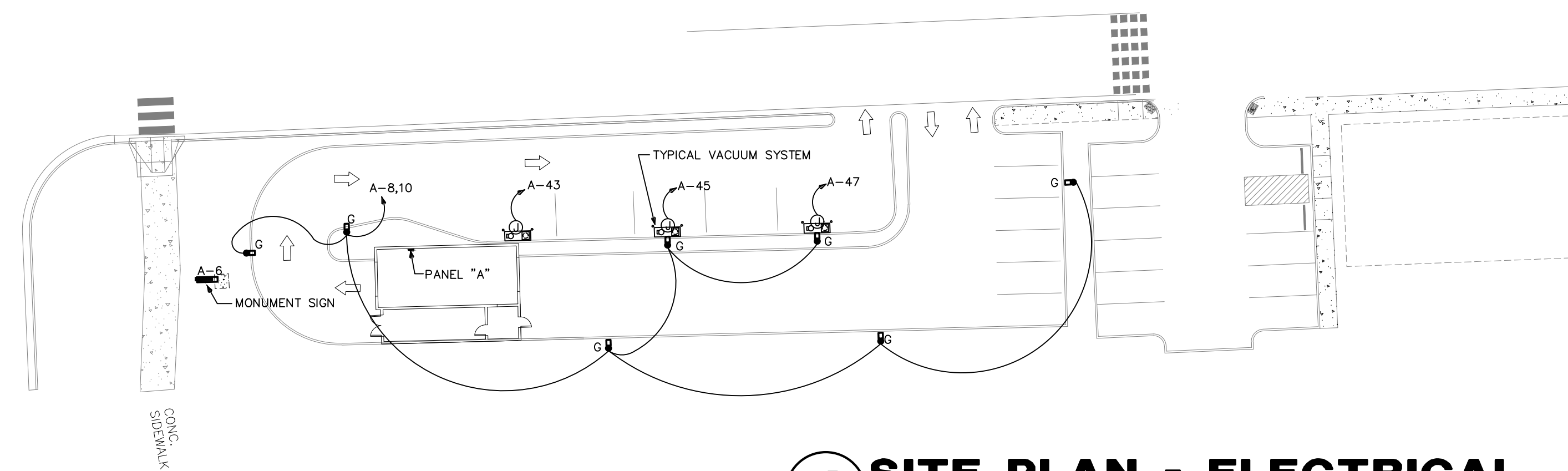
SEAL ALL TANK PENETRATIONS TO PROVIDE WATER TIGHT SEAL TO PREVENT TANK LEAKAGE INTO SOIL.

LINE TO SEWER TO HAVE BACK FLOW PREVENTION. CONSULT WITH LOCAL AUTHORITIES ON WHETHER FURTHER TREATMENT (I.E. OIL/WATER SEPARATOR IS REQUIRED TO MEET DISCHARGE PERMIT).

APPROX. TANK VOLUME IS 1500 GALLONS PER TANK, EACH TANK IS DIVIDED BY INTERNAL BAFFLE. TOTAL WATER STORAGE IS APPROX. 6000 GALLONS.



2 RECLAIM SYSTEM DETAILS NO SCALE



1 SITE PLAN - ELECTRICAL

SCALE: 1"=30'-0"

NOTE - ALL SITE WIRING TO BE A MINIMUM OF #10 CU IN A 1" MINIMUM CONDUIT WITH A MINIMUM BURIAL DEPTH OF 18".

ELECTRICAL NOTES:

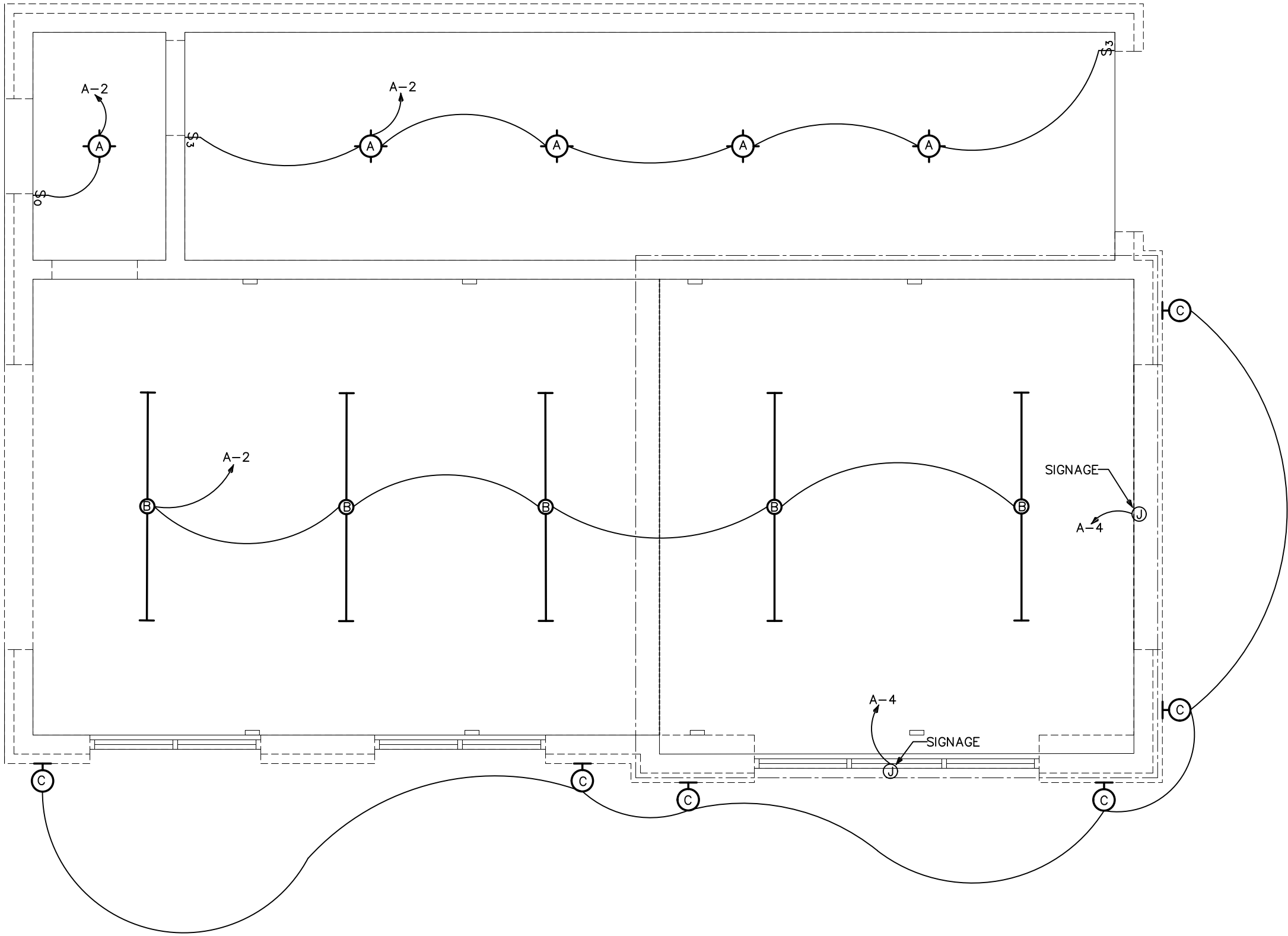
1. GENERAL: ALL WORK SHALL CONFORM TO THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL JURISDICTIONAL CODES.
- THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND ANY APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, THE CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM, AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL THE OWNER HAS DIRECTED THE CORRECTIVE ACTION TO BE TAKEN.
- THE CONTRACTOR SHALL COORDINATE THE PROPOSED LOCATIONS OF ALL ELECTRICAL MATERIALS AND EQUIPMENT WITH THE REPRESENTATIVES OF THE OTHER TRADES INVOLVED BEFORE STARTING INSTALLATION OF THOSE ITEMS.
- COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES, CONDUIT, AND SLEEVES TO BE SET IN CAST-IN-PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.
- UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL SPECS ARE NOT INTENDED TO BE PROPRIETARY, SUBSTITUTIONS WILL BE ACCEPTABLE FOR EQUAL RATED AND LISTED UNITS.
2. SCOPE: EXCEPT WHERE OTHERWISE SPECIFICALLY INDICATED ON THE DRAWINGS BY "FUTURE", "BY OTHERS", OR BY A SIMILAR NOTATION, IT IS THE INTENT THAT THE CONTRACTOR FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS NECESSARY TO PROVIDE ALL SYSTEMS IN COMPLETE AND OPERATING CONDITION.
3. EXCAVATE AS NECESSARY FOR THE INSTALLATION OF ELECTRICAL MATERIALS AND EQUIPMENT. VERIFY THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES OR STRUCTURES BEFORE EXCAVATING AND EXERCISE CARE TO AVOID DAMAGE TO SUCH ITEMS DURING EXCAVATION. BACKFILL WITH EARTH FREE OF LARGE CLODS, LARGE STONES AND FOREIGN DEBRIS, DEPOSITED IN 6" LAYERS AND COMPACTED TO A DENSITY OF NOT LESS THAN THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. MATERIALS: THE MATERIALS AND EQUIPMENT FURNISHED SHALL BE AS INDICATED ON THE DRAWINGS; SUBSTITUTIONS SHALL NOT BE MADE EXCEPT WHERE EXPRESSLY APPROVED BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO STARTING INSTALLATION OF THE ITEMS. THE ELECTRICAL MATERIALS AND EQUIPMENT FURNISHED SHALL BE LISTED OR LABELED BY UNDERWRITERS LABORATORIES OR OTHER RECOGNIZED TESTING ORGANIZATION, AND SHALL BE ACCEPTABLE TO THE LOCAL BUILDING AUTHORITY.
5. GROUNDING: GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250, NEC.
6. SHARED NEUTRAL CONDUCTORS SHALL NOT BE ALLOWED UNLESS INSTALLED IN ACCORDANCE WITH NEC-210.4

7. CONDUITS: PROVIDE CONDUITS WHERE CALLED FOR ON PANEL SCHEDULES; ELECTRICAL METALLIC TUBING (EMT) SHALL BE INSTALLED ONLY IN DRY LOCATIONS, IN CONCRETE ABOVE GRADE, AND WHERE NOT SUBJECT TO PHYSICAL DAMAGE. CONDUITS INSTALLED UNDERGROUND SHALL BE POLYVINYLCHLORIDE (PVC) AND SHALL NOT BE SMALLER THAN 3/4" TRADE SIZE. WHERE PVC CONDUIT IS INSTALLED UNDERGROUND, ELBOWS TURNING UP AND CONDUIT EMERGING ABOVE GRADE SHALL BE RSC, THE TOPS OF CONDUITS SHALL NOT BE LESS THAN 2" BELOW FINISHED GRADE. PVC CONDUIT INSTALLED ABOVE GRADE OR DIRECT-BURIED IN EARTH SHALL BE NEMA 1C2 TYPE EPC-40-PVC (SCHEDULE 40) EXCEPT THAT WHERE UNDER AREAS SUBJECT TO HEAVY VEHICULAR TRAFFIC, IT SHALL BE NEMA 1C2 TYPE EPC-80-PVC (SCHEDULE 80).
- ALL ARMOR CLAD CABLE (AC CABLE) WIRING SHALL MEET OR EXCEED ALL NEC, OSHA AND HUD STANDARDS.
8. CONDUCTORS: CONDUCTORS SHALL BE AS SCHEDULED ON PANEL SCHEDULES. ALL POWER CONDUCTORS SHALL NOT BE SMALLER THAN #14 AWG (CU), OR #12 AWG (AL), CONTROL CIRCUIT CONDUCTORS SHALL NOT BE SMALLER THAN #18 AWG CU. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET WITHOUT SPLICES EXCEPT WITHIN WIREWAY OR JUNCTION BOXES. MARK CONDUCTORS IN PANELS, PULL BOXES OR WIREWAYS AND TERMINAL STRIP TERMINALS FOR IDENTIFICATION OF CIRCUITS.
- CONDUCTORS SHALL BE JOINED USING COMPRESSION SPLICES, EXCEPT THAT CONDUCTORS #10 AND SMALLER MAY BE JOINED USING WIRE NUT TYPE CONNECTORS. CONDUCTORS SHALL BE TERMINATED USING COMPRESSION OR PRESSURE TYPE TERMINAL LUGS, OR IN PRESSURE TERMINALS. COMPRESSION SPLICES USED ON CONDUCTORS #10 AWG AND SMALLER SHALL BE THE SELF-INSULATED TYPE; OTHER SPLICES SHALL BE INSULATED USING 3M #33+ OR #88 PLASTIC TAPE. SPLICES IN WET LOCATIONS SHALL BE INSULATED WITH ELECTRICAL TAPE AND ENCAPSULATED WITH SCOTCHCAST OR EQUAL POTTING COMPOUND.
9. PROVIDE AND INSTALL JUNCTION AND PULL BOXES WHERE INDICATED AND WHERE NECESSARY TO TERMINATE, TAP OFF, OR REDIRECT MULTIPLE CONDUIT RUNS, OF SIZE INDICATED OR AS REQUIRED BY NEC. WHERE FEEDER SPLICES ARE TO BE MADE, INSTALL BOXES LARGE ENOUGH TO PROVIDE AMPLE WORK SPACE.
10. LIGHTING FIXTURES: LIGHTING FIXTURES SHALL BE AS INDICATED ON THE DRAWINGS, AND SHALL BE INSTALLED COMPLETE WITH LAMPS. FIXTURES WITH ADJUSTMENTS AFFECTING LIGHT DISTRIBUTION SHALL BE SET TO PROVIDE THE REQUIRED LIGHT PATTERNS PRIOR TO THE FINAL DEMONSTRATION TEST.
11. TESTS: AFTER EACH SYSTEM HAS BEEN COMPLETED, A FUNCTIONAL TEST SHALL BE PERFORMED TO DEMONSTRATE THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS. THE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER OR HIS REPRESENTATIVE.
12. TERMINALS: ALL ELECTRICAL EQUIPMENT FURNISHED ON THIS PROJECT IS TO HAVE TERMINALS RATED FOR 75° C. OPERATION.

ELECTRICAL SYMBOLS LEGEND			
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	DUPLEX RECEPTACLE, MTD. +18" AFF		TRANSFORMER -- SIZE AS NOTED
	240 VOLT RECEPTACLE (HT. AS REQ.)		PANEL -- SIZE AS NOTED
	QUADRUPLX RECEPTACLE, MTD. +18"		MOMENTARY CONTACT PUSH BUTTON
	COUNTERTOP HT. RECEPTACLE +42"		F--FAN; M--MOTOR; P--PUMP
	SINGLE POLE SWITCH, MTD +47"		SPECIAL OUTLET -- AS REQUIRED
	THREE-WAY SWITCH, MTD +47"		CKT. HOMERUN (B INDICATES PANEL) "2" DESIGNATES CIRCUIT NUMBER
	MANUAL STARTER SWITCH		EXIT SIGN; ONE SIDED, OR TWO SIDED
	DIMMER SWITCH, MTD +47"		EMERGENCY LIGHTING
	SWITCH W/ ILLUM WHEN ON MTD +47"		RECESSED MOUNTED LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	THREE-WAY SWITCH W/ OCCU SENSOR MTD. +47"		OVERHEAD OCCUPANCY SENSOR
	SWITCH W/ OCCU SENSOR. MTD. +47"		HIGHBAY HID LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	JUNCTION BOX, FLUSH IF POSSIBLE		FLUORESCENT LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	TELEPHONE / DATA OUTLET +18"		FLUORESCENT LIGHTING NIGHT LIGHT B DESIGNATES FIXTURE TYPE
	DED. COMPUTER TERM. OUTLET +18"		FLUORESCENT STRIP LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	DISCONNECT SWITCH W/ STARTER		LED LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	DISCONNECT SWITCH		ISOLATED GROUND
	FLR. MTD. FLUSH DUPLEX RECEPTACLE		WEATHER-PROOF
	FLR. MTD. FLUSH QUAD. RECEPTACLE		BELOW COUNTER
	FLR. MTD. FLUSH PHONE/DATA OUTLET		TIME CLOCK -- 24 HOUR
	FLR. MTD. FLUSH COMPUTER OUTLET		GFI GROUND FAULT INTERRUPTER
	AREA SMOKE DETECTOR		ABOVE FINISHED FLOOR
	HEAT DETECTOR		ELECTRIC WATER COOLER
	DUCT SMOKE DETECTOR		ABOVE SHOW WINDOW
	FIRE ALARM MAN. PULL STATION +47"		BELOW SHOW WINDOW
	HORN WITH STROBE LIGHT, MTD. +80" # RESIDE. DEVICE IS CANDELLA RATING		FACP FIRE ALARM CONTROL PANEL
	STROBE LIGHT ONLY, MTD. +80" # RESIDE. DEVICE IS CANDELLA RATING		FAAP FIRE ALARM ANNUNCIATOR PANEL

LIGHTING FIXTURE SCHEDULE

LABEL	TYPE OF FIXTURE	FINISH	LENS TYPE	VOLTAGE	LAMP	MANUFACTURER & MODEL NO.	REMARKS
A	SURFACE MOUNT CANOPY	WHITE	LED	120	2100 mA	LITHONIA DSXSC LED-30C 700 40K T5W MVOLT SRM XAD DWHXD	
B	STRIP LIGHT	WHITE	LED	120	43W	LITHONIA ZLIN L96 1000-OLM FST MVOLT 40K 80CRI WH	ORDER WITH LSXR 4PK P
C	SCONCE WALL MOUNT	GRAPHITE		120	(2) 90W	QUORUM 721-2-3	
F	LIGHTS OVER VACUUM	BROZE	LED	120	99W	GE EALS 01 0 HS SM 7 40 N A D1 DKBZ	
G	OUTDOOR POLE LIGHT	ALUMINUM	LED	208	99W	GE E2SA 0 A1 A5 1 40 A N	



1 FLOOR PLAN - LIGHTING
SCALE: 1/4"=1'-0"



PANEL NOTES:
* - LIGHTS ARE FROM DUST TO DOAM

PANEL A DIVERSIFICATION CALCULATIONS		
RECEPTACLES (20) -	3600 VA TOTAL	
	FIRST 10 KVA AT 100% -	3600
LIGHTING -	4062 X 125% -	5078
MOTOR LOADS AT 100% -		45744
MISC NON-CONTINUOUS LOADS AT 100% -		75300
TOTAL DIVERSIFIED PANEL LOAD -		129722
LOAD AT 120/208V/3-PHASE/4-WIRE -		360.3A

