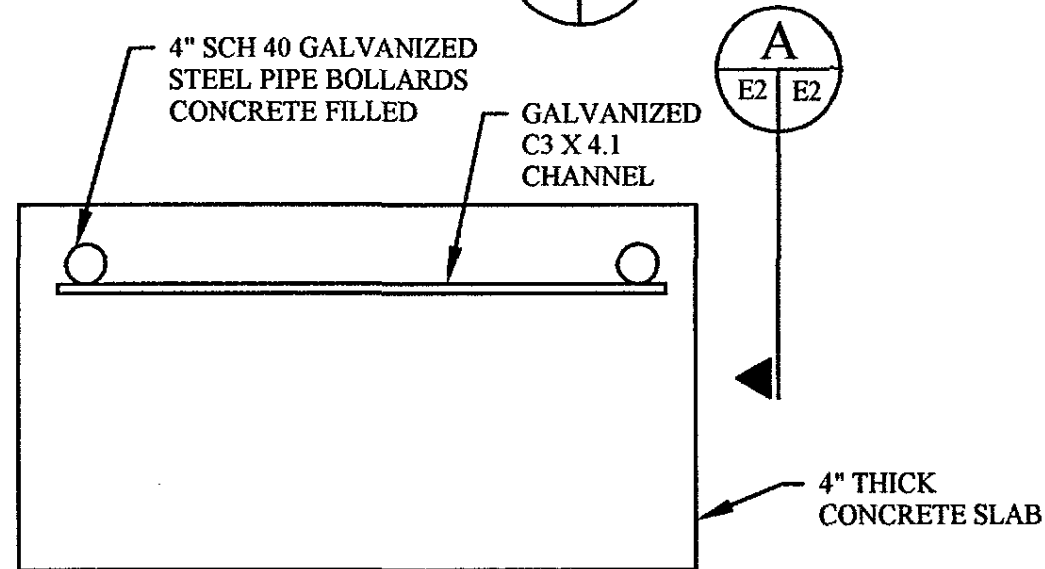


SECTION  
NOT TO SCALE



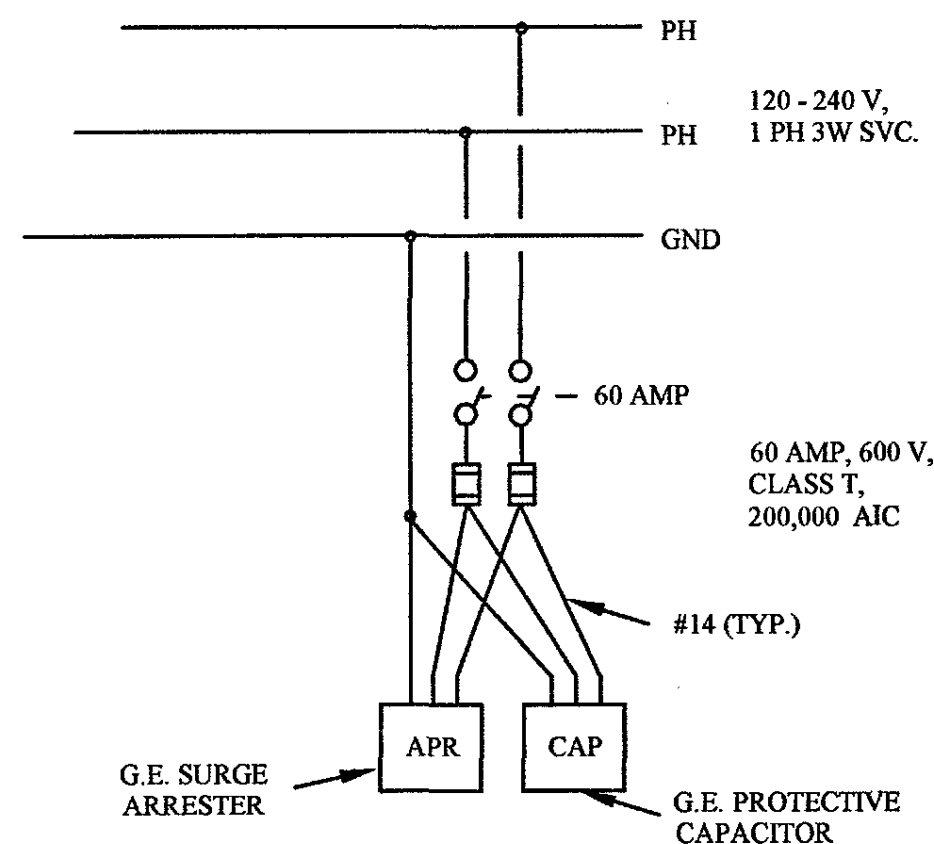
NOTE: ALL ELECTRICAL EQUIPMENT ENCLOSURES ON RACK SHALL BE NEMA 3R RATED UNLESS OTHERWISE INDICATED.

PAINT PIPE BOLLARDS WITH 3 COATS OF BLACK ENAMEL PAINT.

#### WELL #2 ELECTRICAL SERVICE RACK DETAIL

NO SCALE

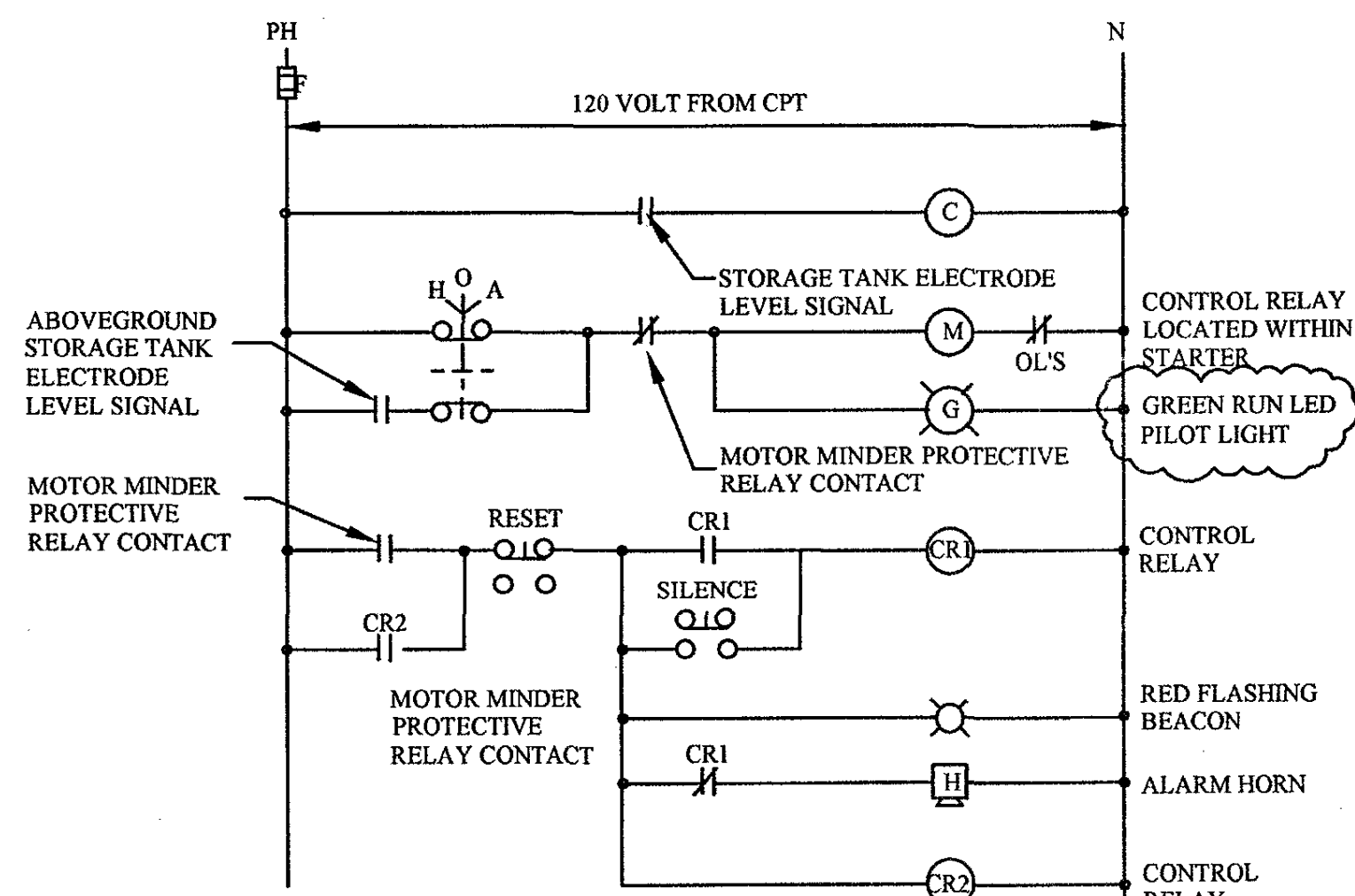
NEMA 3R SERVICE ENTRANCE PANEL "A" SCHEDULE											
120/240 VOLTS, 1 PHASE, 3 WIRES, SOLID NEUTRAL, GROUND BAR, 100 AMP MAIN BREAKER, 100 AMP BUS											
PANELBOARD, MINIMUM SHORT CIRCUIT RATING 10,000 SYM RMS AMPS											
CKT. NO.	POLE NO.	DESCRIPTION	CONN. KVA	CONN. A	AMPS	BREAKER			NUMBER & WIRE SIZE		
						P	AF	AT	PHASE	NEUT.	EGC
1	1	WELL PUMP #2	6.4	28	-	2	100	50	4	NEUT.	10
3	3				28				4		
5	5	SPACE AND BUS ONLY				1	100				
7	7	SPACE AND BUS ONLY				1	100				
9	9	SPACE AND BUS ONLY				1	100				
11	11	SPACE AND BUS ONLY				1	100				
13	13	SPACE AND BUS ONLY				1	100				
15	15	SPACE AND BUS ONLY				1	100				
17	17	SPACE AND BUS ONLY				1	100				
19											



NOTE: PROVIDE NEMA 1 HOFFMAN ENCLOSURE FOR ARRESTER AND CAPACITOR NEMA 3R ENCLOSURE AT WELL SITE.

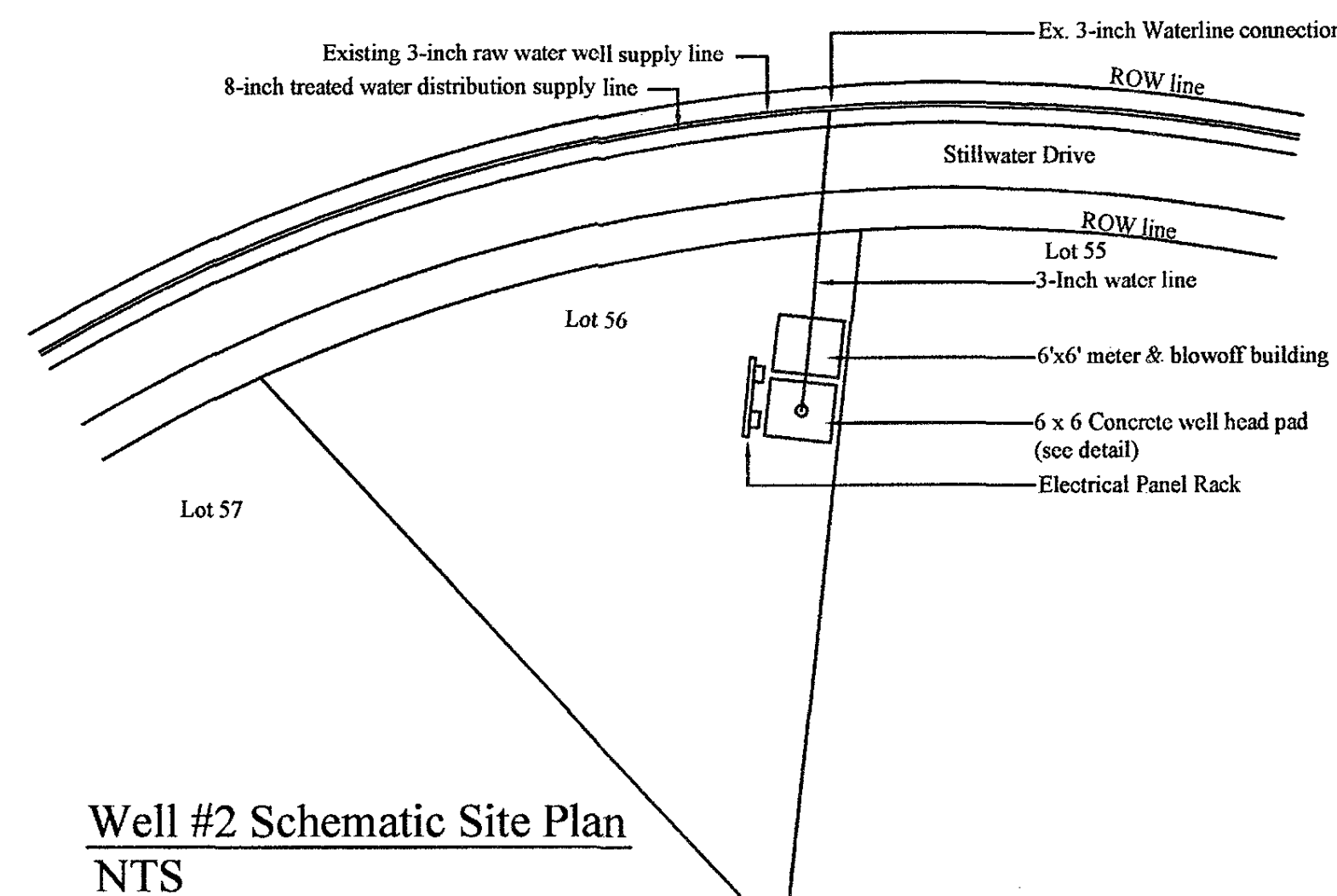
#### DETAIL SURGE ARRESTOR & PROTECTIVE CAPACITOR CONNECTIONS

NO SCALE

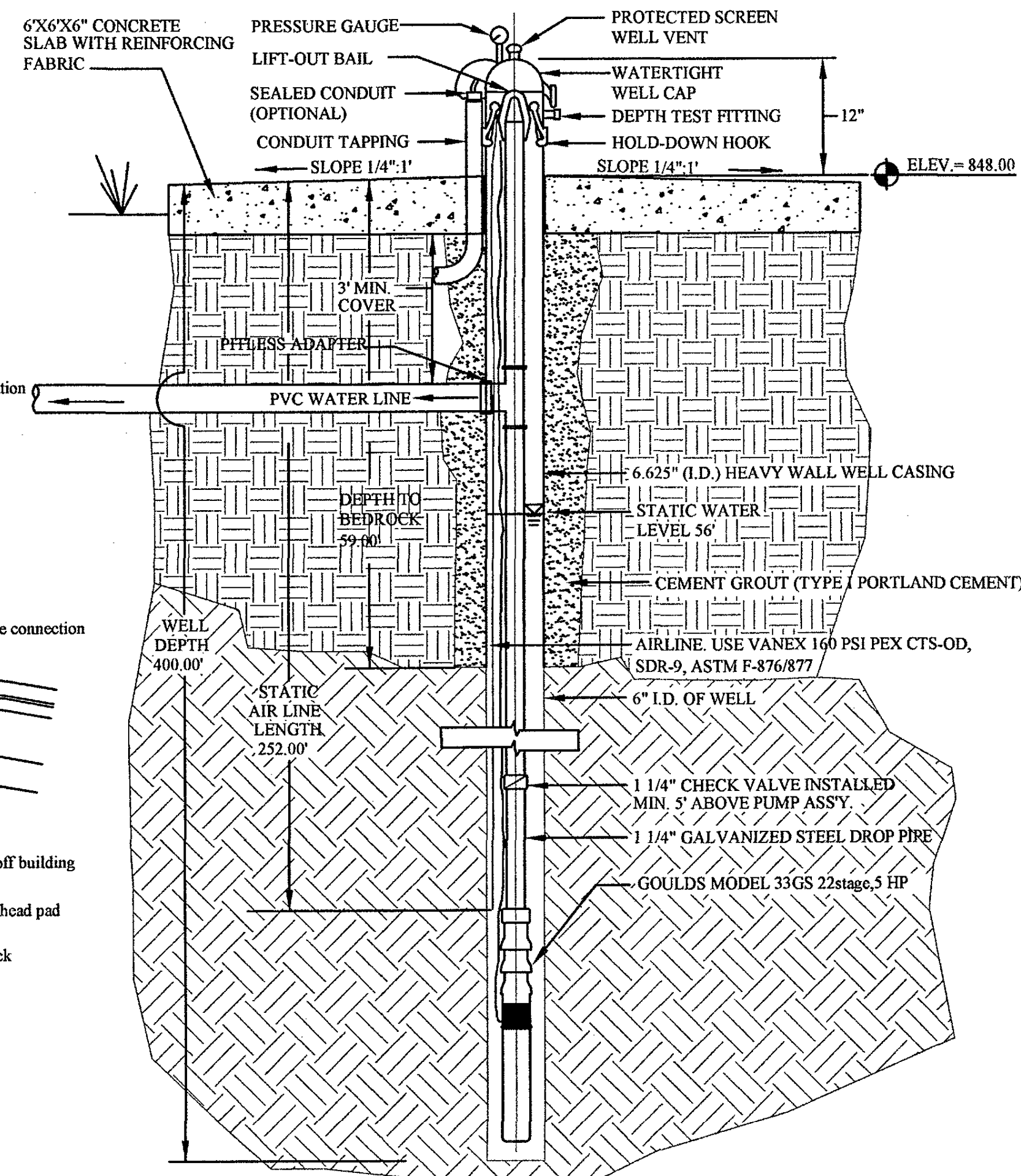


#### WELL PUMP #2 ELECTRICAL CONTROL DIAGRAM

NO SCALE



Well #2 Schematic Site Plan  
NTS



#### WELL #2 DETAIL/SPECIFICATIONS

SUMMARY WELL #2  
VDH CLASSIFICATION: IIB  
STATIC WELL LEVEL: 56'  
DRAWDOWN: 38 GPM @ 100' (Max Yield & Drawdown)  
WELL DEPTH: 365'

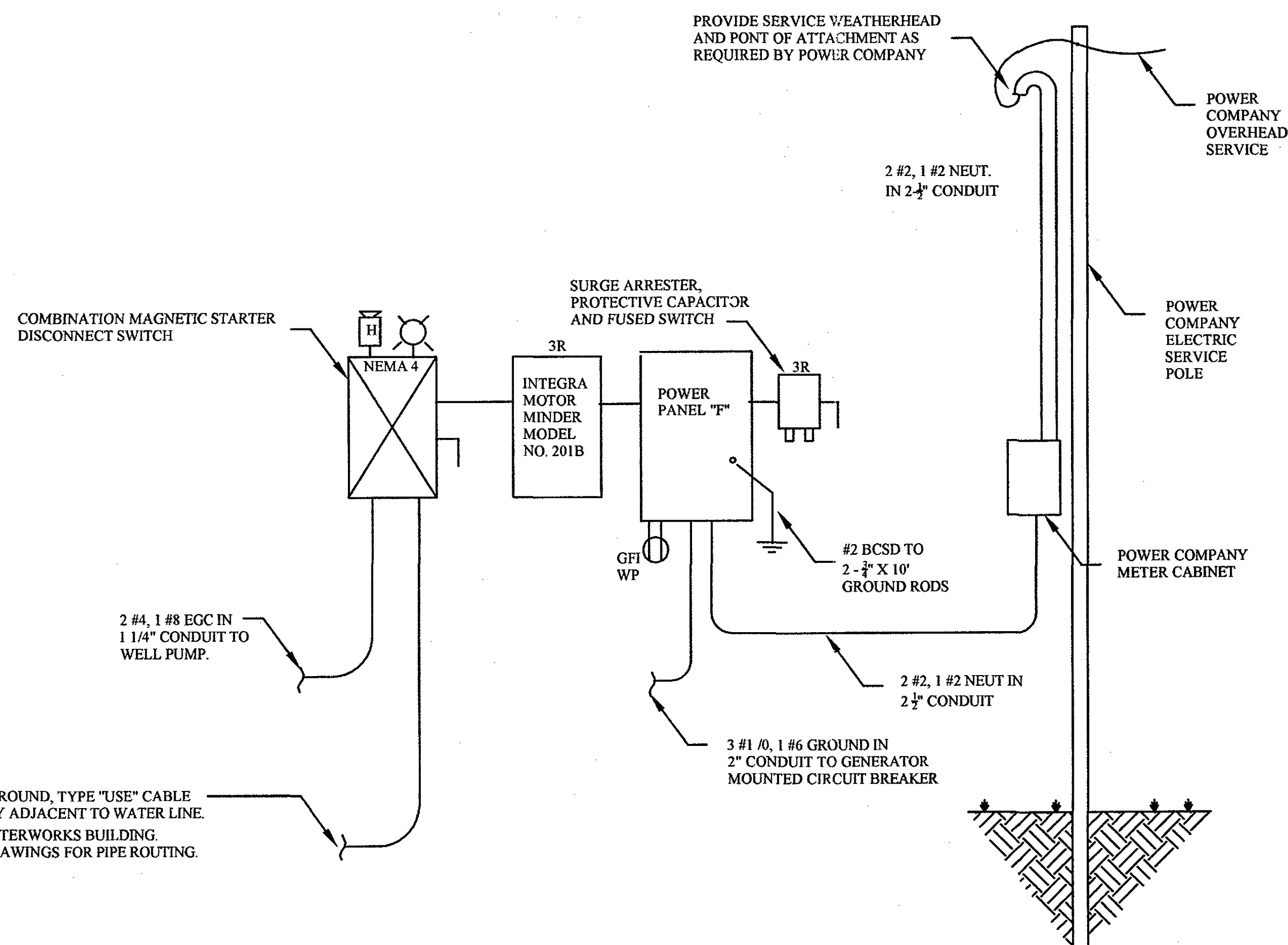
ELEVATIONS  
WELL HEAD: ELEV. = 848.00  
WATER TANK OVERFLOW = 969.00 (ATMOSPHERIC STORAGE TANK AT THE RETREAT)

WELL CAP  
CAMPBELL WATERTIGHT WELL CAP, WTC6 OR EQUAL  
PITLESS UNIT  
CAMPBELL MODEL B-20 OR EQUAL

WELL PUMP  
Goulds Model 33GS 22 Stage, 5 HP, Single Phase

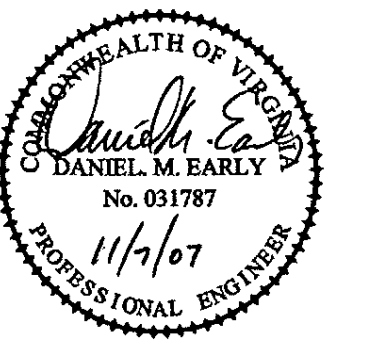
DROP PIPE SPECIFICATIONS  
USE 1 1/4 HOT-DIP GALVANIZED STEEL (INSIDE & OUTSIDE) CONFORMING TO APPLICABLE AWWA, ASTM, AND VDH STANDARDS  
General Notes:

- Refer to approved construction drawings associated with The Retreat Water System as prepared by Berkley-Howell for Plyler Properties.
- Well #2 is an existing well and was drilled and tested in 2002. Testing documents with regard to this testing have been submitted with the engineering calculations associated with this project.
- Well #2 and existing Well #3 will share a common raw waterline that conveys well water to the water treatment plant facility located at the intersection of Ivy Lane and Veranda Bay Drive.
- Well #2 and Well #3 shall have individual meter and sample port/blowoff assemblies installed in valve vaults located adjacent to each well. The meters will provide historical data gathering capabilities for each well. Sample ports will permit periodic testing as may be required.
- Well #2 was previously dedicated as part of The Retreat and indicated in the construction drawings. Well dedication statements, documents, and plats have been duly recorded and copies filed with VDH.
- The sampling port indicated for Well #2 shall extend above adjacent grade so as to prevent possible groundwater contamination. The valve vault may be extended 24-inches above grade in lieu of the insulated cover as indicated on the detail. If the vault is extended, the vault shall be properly insulated to prevent freezing.
- After installation and testing, water flow from Well #2 and #3 shall be throttled using a lever handle controlled ball valve or gate valve assembly. Each well shall be throttled such that well production for each will be 25 GPM. After adjustment, the handles shall be removed to prevent accidental adjustment. Throttling is required due to water treatment plant flow limitations associated with the green sand filter system.



#### WELL #2 - ELECTRIC SERVICE DIAGRAM

NO SCALE



**ACS  
DESIGN**

ENGINEERING • SURVEYING  
LANDSCAPE ARCHITECTURE  
CONSTRUCTION MANAGEMENT

2203 PETERS CREEK ROAD  
ROANOKE, VIRGINIA 24017  
P 540.582.2345 F 562.2344  
INFO@ACSDSIGNLLC.COM  
WWW.ACSDSIGNLLC.COM

The Coves at Smith Mountain Lake  
Optima Properties-Smith Mountain Lake, LLC  
Franklin County, Virginia

DRAWN BY: AH1  
DESIGNED BY: DME  
CHECKED BY: DME  
DATE: 01 MAY 2006  
JOB NUMBER: 05271

REVISIONS:  
No. 1 08/18/06  
No. 2 10/30/06  
rev Well #2 detail per VDH  
No. 3 5/11/2007  
Final For Construction  
No. 4 11/7/2007  
Water System Revisions

SHEET NO.:  
C4.6

WELL #2 &  
WATERLINE  
DETAILS