

HYDRO-PNUMATIC EQUIPMENT GENERAL NOTES:

1. In accordance with VSUBC, this building shall receive a 200 amp electrical service. Since the electrical service is less than 800 amp, this project does not require mechanical, electrical and plumbing drawings sign and sealed by a licensed engineer.
2. This building is being constructed as an accessory utility building for the water operations of the subdivision (a private entity). This building is an independent structure, there shall be no other building structure with occupants within 20' of this building
3. This building shall not have any full-time occupants. Testing staff shall periodically visit the complex in order to monitor the operations of the water system.
4. Since this building is a private structure, for private use only, it shall not be required to comply with the handicap accessibility requirements of ANSI A117.1.
5. The sidewalks and the grades around the building shall be as shown on the site plan.
6. The building shall receive heating, air-conditioning and ventilation for all spaces in accordance with applicable codes.
7. All other materials and finishes used on this project shall be standard commercial grade products and systems as approved for similar use.
8. Process piping and fittings shall be SCH 80 PVC (unless otherwise noted) meeting the standards of ASTM d-1748, ASTM D-1785, PVC 1120, NSF Standard No. 14.
9. Supply and distribution piping to and from the filter plant shall be ductile iron adhering to AWWA 151 standards.
10. Booster pumps shall be Aurora Pump type 110 Regen Turbine size P5 with a 5.59" diameter impeller capable of passing a 5/16" sphere. The boosters pumps shall have a rated capacity of 95 gpm @ 112 feet total dynamic head. The booster pumps shall have automatic alternating capabilities with manual operation override switches. The pumps shall be capable of simultaneous operation through manual activation. The pump assemblies shall be stainless steel. The electric motors shall be rated at 10 horsepower, single phase with soft start capability.
11. All water treatment plant equipment proposed for painting shall use paint meeting NSF 61 requirements. contractor shall provide shop drawings and vendor specifications indicating paint material specifications.
12. See sheet C4.4 for electrical control panel design.
13. Color selection and coordination of colors by owner.
14. Paint listed in schedule above shall not be used to paint the interior surface of tanks, piping or valves.
15. All doors to be equipped with 1-1/2 pair of medium traffic hinges, door stops and kick plates (stainless steel finish)
16. Locks are heavy duty cylindrical locksets by Yale Security. Satin stainless steel finish. key all locks alike. 1= Entrance set with panic hardware
17. Refer to project specifications for specific equipment & installation procedures.
18. Provide opening in masonry wall, size to suit equipment provided. Provide heat pump- CARRIER MODEL 52CQ207-3 or approved equal. Unit shall be rated in accordance with ARI standard 380-87. Cooling capacity shall be 7,000 btu/hr. heat pump heating capacity shall be 6,100 btu/hr. electric heat heat capacity shall be 7,800 btu/hr. Install the unit 1'-6" a.f.f. provide field fabricated supports as required. Provide a wall sleeve, outdoor grille, minimum outside air controls, flashing, caulking and a condensate drain to the outside. Install unit in accordance with mfr's recommendations.

BUILDING CODE ANALYSIS

APPLICABLE CODES: IBC 2003, VIRGINIA UNIFORM STATE WIDE BUILDING CODE, CABO ANSI A117.1
USE GROUP: U, UTILITY (IBC 312)

CONSTRUCTION CLASS: TYPE VB, UNPROTECTED WOOD FRAMED (IBC 601)

ALLOWABLE AREA: 5,500 S.F. (IBC 503)

PROPOSED AREA: 336 S.F.

ALLOWABLE HEIGHT: 1 STORY AND 40 FEET (IBC 503)

ACTUAL BUILDING HEIGHT: 1 STORY AND 15.67 FEET (MEAN ROOF HEIGHT)

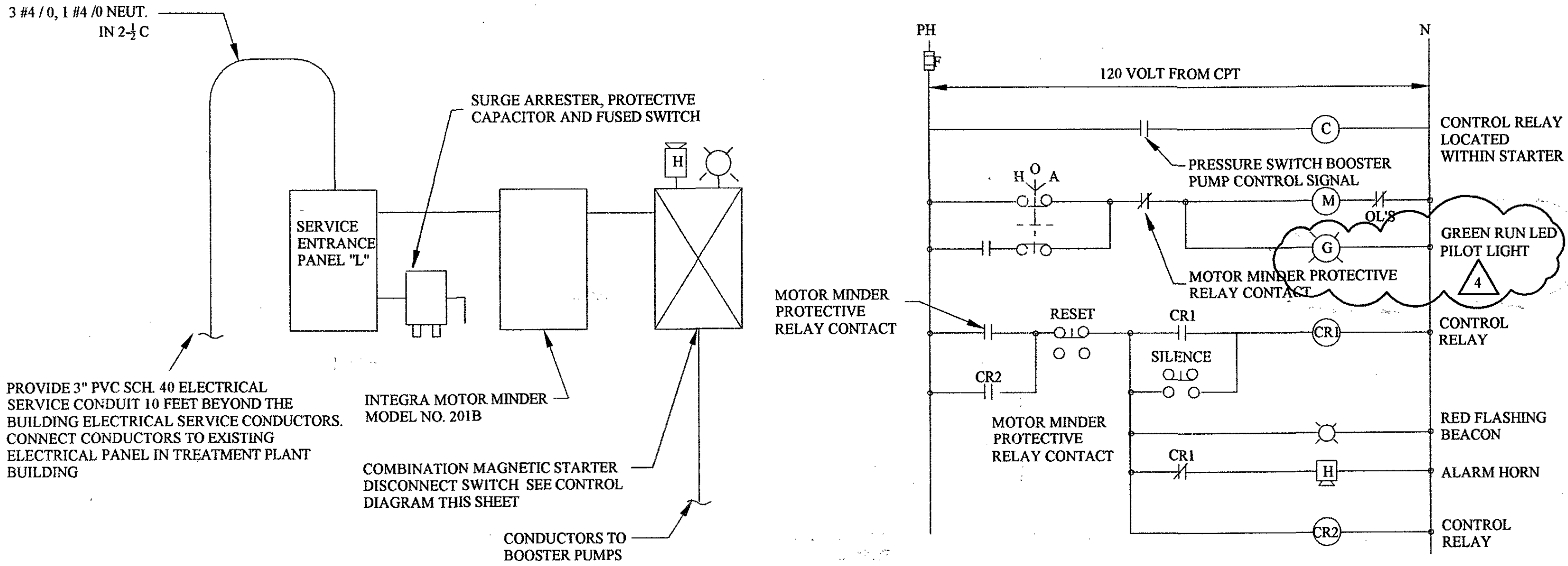
FINISH SCHEDULE

FLOOR	
A	PAINTED
WALLS	
1	1/2" FINISH GRADE PLYWOOD-EPOXY PAINTED
CEILING	
1	1/2" FINISH GRADE PLYWOOD-EPOXY PAINTED

PAINT SCHEDULE

INTERIOR PLYWOOD WALLS	PRIME WITH SERIES 36-603 FINISH COAT SERIES 29
INTERIOR PLYWOOD CEILINGS	PRIME WITH SERIES 36-603 FINISH COAT SERIES 29
FLOORS	PRIME WITH SERIES 201 FINISH COAT SERIES 280
STEEL TANKS & PIPING	PRIME WITH SERIES 66 FINISH COAT SERIES 73
DOORS & FRAMES (INT. & EXT.)	PRIME WITH SERIES 66 FINISH COAT SERIES 73

PAINT PRODUCTS BY TNEMEC COMPANY INCORPORATED



HP BUILDING ELECTRIC SERVICE DIAGRAM

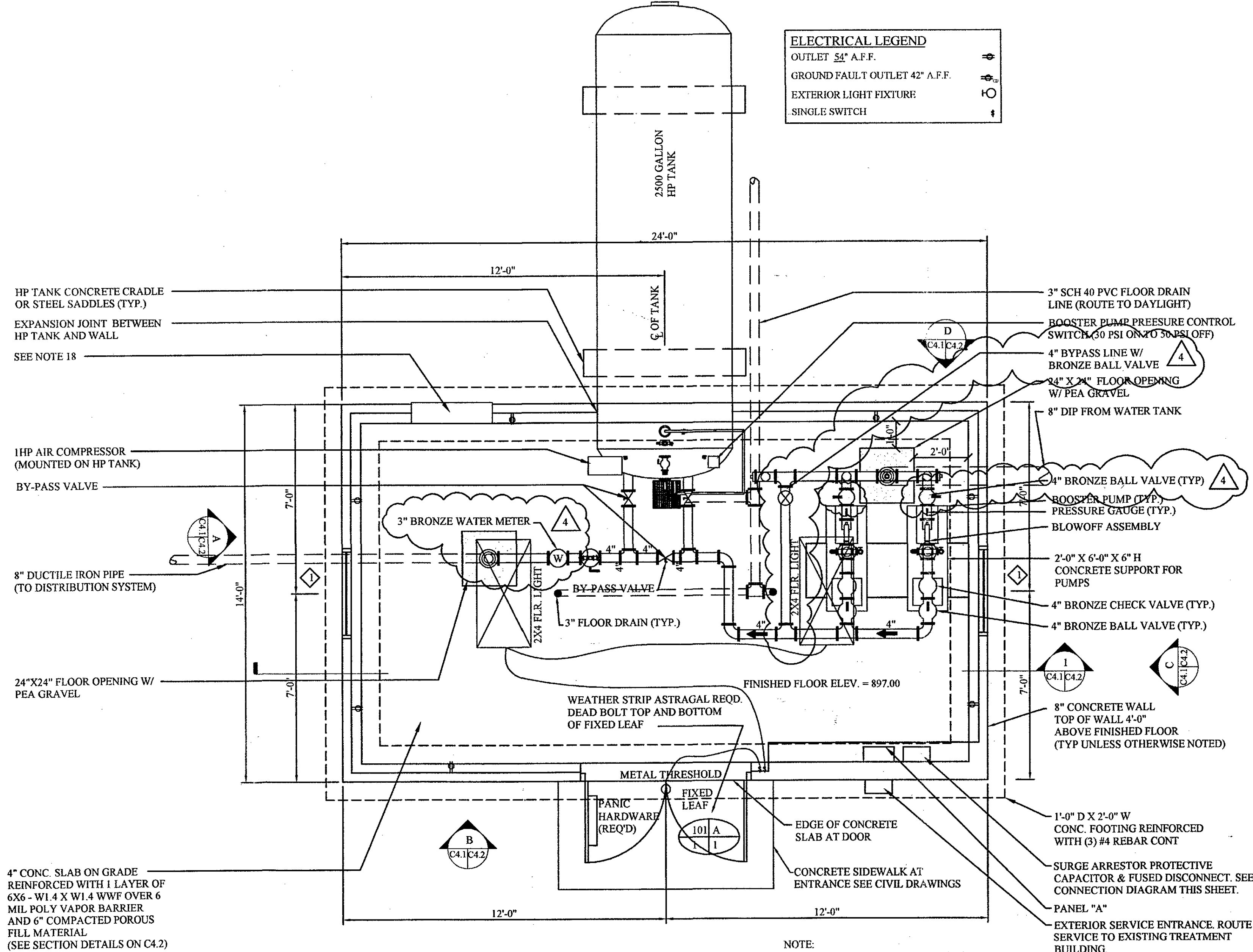
NO SCALE

BOOSTER PUMP ELECTRICAL CONTROL SCHEMATIC

DIAGRAM

NO SCALE

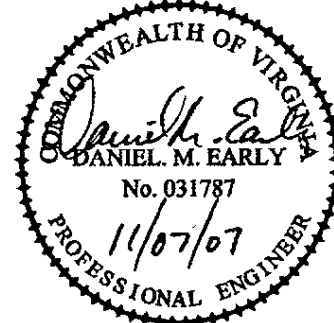
ELECTRICAL LEGEND	
OUTLET 54" A.F.F.	⊕
GROUND FAULT OUTLET 42" A.F.F.	⊕
EXTERIOR LIGHT FIXTURE SINGLE SWITCH	⊕



FLOOR PLAN & EQUIPMENT PLAN

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

NOTE: DIMENSIONS ARE TO FACE OF CONCRETE OR FACE OF WOOD STUDS.



ACS DESIGN

ENGINEERING - SURVEYING
LANDSCAPE ARCHITECTURE
CONSTRUCTION MANAGEMENT

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

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

REVISIONS:
No. 1 9/1/06
Per FC/ACSNDH
No. 2 1/19/07
Revised Booster Pump Per VDOT
No. 3 5/11/2007
Final For Construction
No. 4 11/7/2007
Water System Revisions

SHEET NO.:

C4.1

HP BUILDING
PLAN