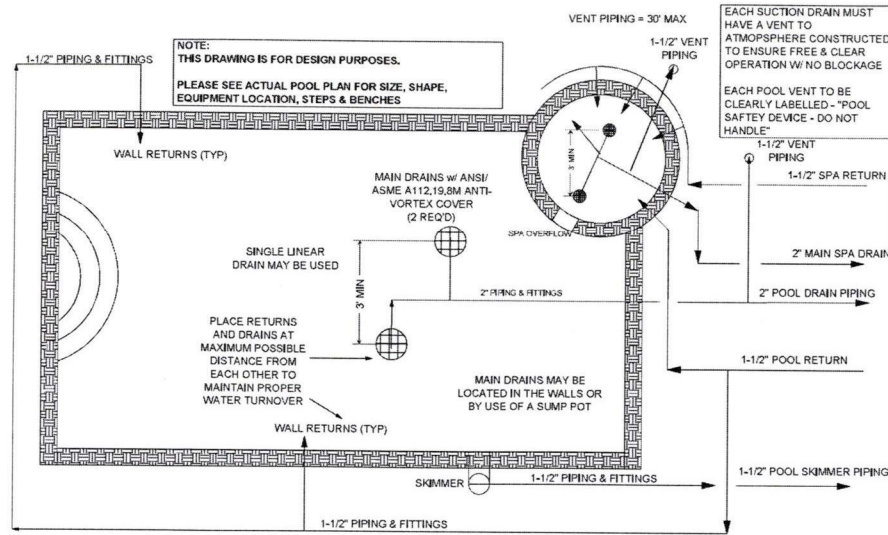
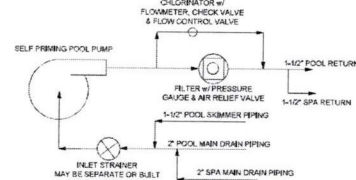
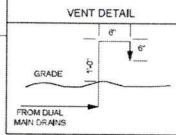




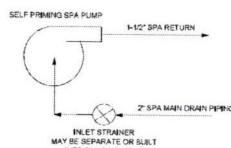
Digitally signed
by Milan Slovak
Date:
2025.03.03
09:42:17 -05'00'

Design Criteria:

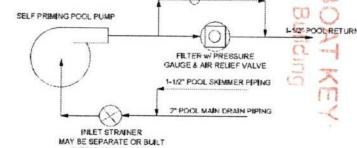
- ALL CONSTRUCTION TO BE IN CONFORMANCE w/ FBC 2023, FOR RISK FACTOR I
- EXPOSURE "D"
- VULT = 150
- VASD = 116
- VULT DESIGN PRESSURE = 35.4 psf
- DESIGN AS OPEN
- 0.0 PRESSURE DESIGN FACTOR



SINGLE PUMP POOL & SPA PIPING PLAN



POOL &/or SPA PIPING PLAN



Piping Plan

DESIGN NOTES

DESIGN, CONSTRUCTION & WORKMANSHIP SHALL BE IN ACCORDANCE WITH ANSI / NSPI: 3, 4, 5 & 6 BASED POOL TYPE & WITH Section R4501, of the Current FBC Edition - Residential. THIS POOL IS NOT DESIGNED FOR DIVING

POOL PIPING TO BE LEAK TESTED PRIOR TO GRADING

POOL PIPING SHALL BE NSF-PW APPROVED SCHEDULE 40 RATED FOR 50 PSI & MEET THE REQUIREMENTS OF THE FBC & FPC

PIPE SIZES SHOWN REFLECT A 35 - 60 GPM PUMP WHICH IS REQUIRED FOR UP TO 20,000 GALLON POOLS

ALL ELECTRICAL INSTALLATIONS SHALL CONFORM TO THE NEC & Chapter 42, FBC Current Edition-Residential

GROUNDING OF POOL/SPA STEEL TO LIGHTS & FOOTINGS SHALL CONTINUE TO ALL ELECTRICAL EQUIPMENT

DUAL MAIN DRAINS SHALL HAVE A MINIMUM 3 FOOT SEPARATION (MAIN DRAINS MAY BE LOCATED ON THE POOL WALLS)

ALL SUCTION COVERS MUST MEET ANSI/ASME A112.19.8M ANTI-VORTEX REQUIREMENTS

EACH SUCTION DRAIN MUST HAVE A VENT TO ATMOSPHERE CONSTRUCTED TO ENSURE FREE & CLEAR OPERATION w/ NO BLOCKAGE. SEE DETAIL

EACH POOL VENT TO BE CLEARLY LABELLED - "POOL SAFETY DEVICE - DO NOT HANDLE"

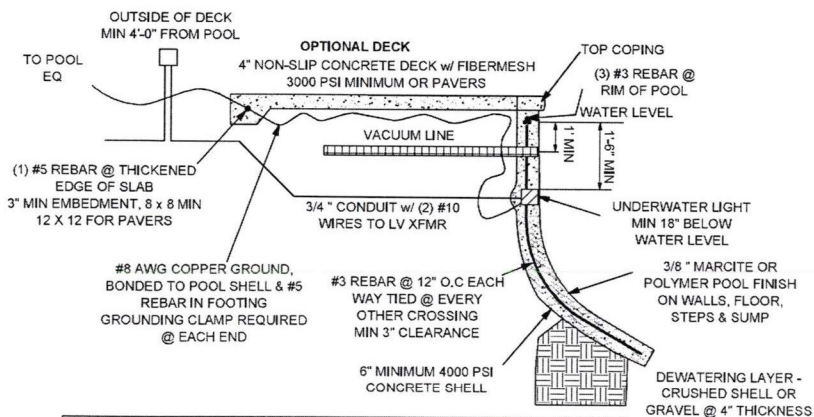
UNDERWATER POOL VENT PIPING SHALL NOT EXCEED 30 FEET

TEMPORARY FENCING PER CODE SHALL BE INSTALLED & KEPT IN ORDER DURING CONSTRUCTION & UNTIL COMPLETION OF THE PERMANENT BARRIER

A PERMANENT POOL BARRIER MEETING THE REQUIREMENTS OF THE FBC & COUNTY CODES MUST BE IN PLACE PRIOR TO FINAL POOL APPROVALS

Separate Site Specific Pool Plan Must Accompany this Drawing

Piping Schematic



ALL GROUNDING TO BE IN CONFORMANCE WITH THE CURRENT NEC CODE
PLASTIC LIGHT NICHE WILL NEED WATER GROUNDING ITEM

Pool Shell

Generic Pool Construction

See Pool Plan for Size, Equipment Layout & Location

S & S PROFESSIONAL
ENGINEERING
3300 26th St. W Bradenton, FL 34205
PH: 941-755-7007 COA # 26900
LUIJ A. ROSARIO, P.E. FL# 61838
MILAN SLOVAK, P.E. FL# 67626

COPYRIGHT
© 2025
MILAN SLOVAK, P.E.
REGISTERED PROFESSIONAL ENGINEER
STATE OF FLORIDA
THE CONTRACTOR OF ANY WORK
SHOWN ON THIS DRAWING IS TO BE
CONSIDERED AS THE PROPERTY OF
S & S PROFESSIONAL ENGINEERING

A Pool &/or Spa For:
BAYVIEW LONGBOAT KEY LLC
569 Bayview Dr.
Longboat Key, FL 34228

Date: 2/28/25
Drawn By:
M553
Water Lily
569 Bayview Dr

Sheet
1 of 4

Seal

RECEIVED

MAY 09 2025
TOWN OF LONGBOAT KEY
Planning, Zoning & Building

ANSI/APSP/ICC-15 ENERGY EFFICIENCY COMPLIANCE INFORMATION FOR RESIDENTIAL SWIMMING POOLS			
PROJECT NAME: AND ADDRESS:	569 Bayview 569 Bayview Dr Longboat Key, FL 34228	CONTRACTOR NAME AND ADDRESS:	Water Lily Pool & Spa, Inc. 6906 34th Ave W Bradenton, FL 34209
OWNER:	Bayview Longboat Key LLC	CONTRACTOR PHONE:	941-713-4464
		DATE:	2/28/25

This information sheet was prepared by the APSP-15 Residential Swimming Pool and Spa Energy Efficiency Standard Writing Committee of the Association of Pool and Spa Professionals (APSP). It is not part of the American National Standard ANSI/APSP/ICC-15 2011 but is included for information only. Contractors should acquire and comply with the ANSI/APSP/ICC-15 2011 standard which can be purchased at www.apsp.org.

1. \$5.2.1: Calculated pool volume

- a. Gallons: 4,247; or
b. Calculated Gallons: (surface area) X (average depth) X 7.48 (gal/ft³) = 0

2. \$5.2.1: Calculated maximum filtration flow rate

(Pool volume ÷ 360 or 36gpm whichever is larger)

3. \$5.2.2: Auxiliary Pool Load: ☐ Yes, ☒ No?

(Enter the highest "auxiliary pool load" to be powered by the swimming pool filtration pump. Do not add auxiliary pool load flow rates together, only the highest is used.)

4. Calculated maximum flow rate

(Item 2 or Item 3, whichever is larger.)

5. \$5.1: Pipe sizing:

a. Minimum suction pipe diameter

(Enter the smallest pipe size from Table 1 with a 6 fps flow capacity the same or more than item 4.)

b. Minimum suction branch pipe diameter

(Calculate: Item 4, 36 (gpm) ÷ Branch Pipes 1 (quantity) = branch flow rate 36 (gpm).
Enter the smallest pipe size from Table 1 with a 6 fps flow capacity the same or more than the calculated suction branch flow rate.)

c. Minimum return pipe diameter

(Enter the smallest pipe size from Table 1 with a 8 fps flow capacity the same or more than item 4.)

d. Minimum return branch pipe diameter

(Calculate: Item 4, 36 (gpm) ÷ Branch Pipes 1 (quantity) = branch flow rate 36 (gpm).
Enter the smallest pipe size from Table 1 with a 8 fps flow capacity the same or more than the calculated return branch flow rate.)

6. \$5.4.1: Filter type and size:

a. Filter type: (Cartridge, DE, Sand)

b. Minimum filter area

(Calculate: Item 4, 36 (gpm) ÷ filter factor 0.375)

Filter factors: Cartridge=0.375, Sand=15, Diatomaceous Earth=2

7. \$5.4.2: Backwash valve: ☐ Yes, ☒ No?

(When using a backwash valve, enter result of item 5c or 2 inches whichever is larger)

Table 1

Pipe Size:	1.5"	2"	2.5"	3"	3.5"	4"	5"	6"
Minimum GPM @ 6 ft/s	36	63	90	139	165	216	374	545
Minimum GPM @ 8 ft/s	51	84	119	184	247	317	499	720

8. Pump selection:

\$5.3.2.1: Pools 17,000 gallons or less, select pump* from the database with a Curve-A gpm flow equal to item 2 or less.
\$5.3.2.2: Pools 17,001 gallons or more, select pump* from the database with a Curve-C gpm flow equal to item 2 or less. *Multi-speed pumps must have one speed rated that satisfies this requirement.

a. Pump model

b. Pump flow

(\$5.3.2.1, 5.3.2.2: Applicable Curve A or C gpm flow listed in database)

ANSI/APSP/ICC-15 Standard Writing Committee Form

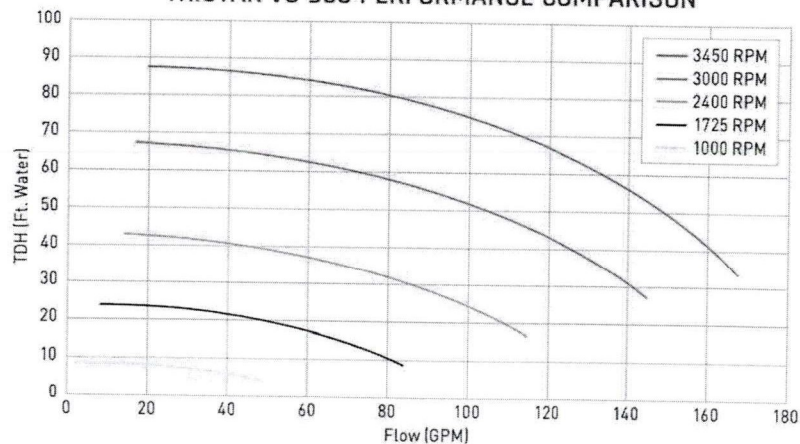
1 of 2

Component	Section	Requirements	Check
Heaters	4.4.1.1	Heater has no pilot light	☒
	4.4.1.2	Readily accessible on-off switch mounted outside of the heater	☒
	4.3.1.3	No electric resistance heating unless for inground spa with tight fitting cover with R-6 insulation, or for pool with 60% of documented pool heating from on-site solar or recovered energy.	☒
	4.3.2	Heater efficiency: gas/oil fired heater efficiency at least 78%, heat pump COP at least 4.0	☒
Pool systems	5.1.1	Pool filter pump listed in database	☒
	5.3.1	Pool filter pump with total horsepower 1.0 or more is multi-speed	☒
	5.3.3	Multi-speed pump controller programmed to default to the filtration flow rate when no auxiliary pool loads are operating within 24 hours and programmed with temporary override capability for servicing.	☒
	5.3.4	Single-speed pump controller capable of operating pump during off-peak electric demand.	☐
	5.5.2	Pipe before pump has at least 4 diameters of straight pipe.	☒
	5.5.3	System installed with solar, or setup for the future addition of solar heating equipment by installing 18 inches of horizontal or vertical pipe after the filter and before a heater, or built-in or built-up connections, or dedicated pipe to and from the pool.	☐
	5.5.6	Directional inlets for mixing pool water.	☒

POOL	Head Loss
Skimmer / Drain	0.2
Intake Line	3.0
Intake Manifold	1.0
Backwash Valve	15.0
Filter	10.0
Heater	10.0
Return Line	3.0
Return Fittings	3.5
TOTAL HEAD LOSS	45.7

SPA	Head Loss
Skimmer / Drain	0.2
Intake Line	3.0
Intake Manifold	1.0
Backwash Valve	15.0
Filter	10.0
Heater	10.0
Return Line	3.0
Return Fittings	10.0
TOTAL HEAD LOSS	52.2

TRISTAR VS 950 PERFORMANCE COMPARISON



**S & S PROFESSIONAL
ENGINEERING**

3300 26th St. W Bradenton, FL 34205
PH: 941-755-7067 COA # 26900
☐ LUIS A. ROSARIO, P.E. FL# 61828
☐ MIHAI SLOVAK, P.E. FL# 67626

**COPYRIGHT
© 2025**

THIS DOCUMENT IS THE PROPERTY OF S&S ENGINEERING. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF S&S ENGINEERING.

A Pool &/or Spa For:
BAYVIEW LONGBOAT KEY LLC

569 Bayview Dr.
Longboat Key, FL 34228

Date: 2/28/25
Drawn By:
MSS3
Water Lily
569 Bayview Dr.

Sheet
2 of 4

Seal

4'H vinyl fence
around equipment

POOL
EQUIPMENT

HOUSE

HOUSE

house

door alarm

standard paver deck

stairs

standard paver deck

VAC L

at grade

Longboat Key Planning, Zoning & Building

baby fence

Approved for Zoning:
For Statement of
Zoning Compliance Only

setback

20'

seawall

IMPERVIOUS CALCULATIONS

TOTAL LOT	10,000 S.F.
HOUSE FOOTPRINT	2,965 S.F.
CONCRETE	70 S.F.
DRIVEWAY AND WALK	602 S.F.
POOL AT GRADE incl. deck	899 S.F.
TOTAL IMPERVIOUS	4,536 S.F.
TOTAL COVERAGE %	45.36%
MAX ALLOWABLE IMPERVIOUS COVERAGE	50% (5,000 S.F.)

BUILDING COVERAGE CALCULATIONS

TOTAL LOT	10,000 S.F.
HOUSE FOOTPRINT	2,965 S.F.
TOTAL HOUSE %	29.65%
MAX ALLOWABLE BLDG COVERAGE	30% (3,000 S.F.)

LOT INFORMATION:
569 BAYVIEW DRIVE
LONGBOAT KEY, FL
CUSTOM RESIDENCE

ZONING: RSF-4
MAX BLDG HGT: 30'
BASE FLOOD ELEVATION: AE8

BLDG SETBACKS:
FRONT: 20'
REAR: 20'
SIDES: 8' MIN/18' TOT

POOL

Perimeter: 76' Area: 240 sq ft
Depth: 3.5'-5' Volume: 3,520 gals
Coping: Leathered Marble
Interior Finish: Stone Scapes Aqua Cool
Barrier house: alarms UL2017 compliant
Barrier pool: fence by GC
Drain: SDX
Lights: colorlogic 320 x 3
Skimmer: 1 Returns: 3

SPA

Perimeter: 26' Area: 42 sq ft
Depth: 3' Volume: 727 gals
Coping: Leathered Marble Interior
Finish: Stone Scapes Aqua Cool
Height: flush w/deck Jets: 6
Return: 1
Light: colorlogic 320 x 1

EQUIPMENT

Manufacturer: Hayward
Pump: Tristar VS950
Control Panel: OMNI PL w/salt system
Filter: C200
Lights: Colorlogic
Heater: HeatPro 140k BTU

Date: 2/28/25
Drawn By:
M553
Water Lily
569 Bayview Dr.

Sheet
3 of 4

Seal

A Pool &/ or Spa For:

BAYVIEW LONGBOAT KEY LLC

569 Bayview Dr.

Longboat Key, FL 34228

COPYRIGHT
© 2025

WHILE EVERY ATTEMPT HAS BEEN
MADE TO PREPARE THIS SET OF
PLANS TO COMPLY WITH ALL
APPLICABLE CODES, THE
CONTRACTOR SHALL BE RESPONSIBLE
FOR OBTAINING ALL NECESSARY
PERMITS AND FOR THE FINAL
COMPLIANCE OF THE PROJECT.

S & S PROFESSIONAL
ENGINEERING

3300 26th St W Bradenton, FL 34205
PH: 941-755-7087 COA # 26900

☐ LUIS A. ROSARIO, P.E. FL# 61828
☐ MILAN SLOVAK, P.E. FL# 67628

POOL LAYOUT

Name

Date

RECEIVED

MAY 09 2025

TOWN OF LONGBOAT KEY
Planning, Zoning & Building

S & S PROFESSIONAL
ENGINEERING

3300 26th St W Bradenton, FL 34205
PH: 941-755-7067 COA # 26900
☐ LUIS A. ROSARIO, P.E., F.L.E. 825
☐ MIAN SLOVAK, P.E., F.L.E. 67620

COPYRIGHT
© 2025

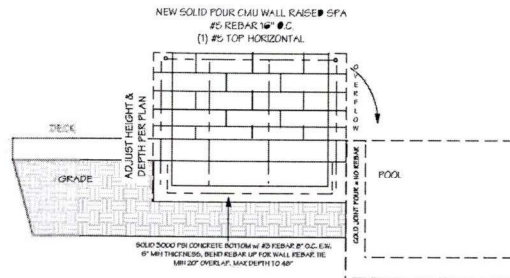
THIS IS A PRELIMINARY DESIGN. IT IS NOT TO BE USED FOR CONSTRUCTION. THE DESIGNER ASSUMES NO LIABILITY FOR ANY DAMAGE OR LOSS OF ANY KIND, INCLUDING BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, AND OTHER DETAIL DAMAGE, ARISING FROM THE USE OF THIS DESIGN.

A Pool &/ or Spa For:
BAYVIEW LONGBOAT KEY LLC
569 Bayview Dr.
Longboat Key, FL 34228

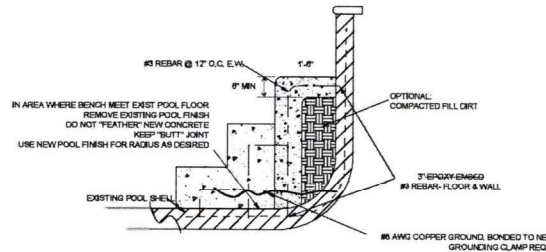
Date: 2/28/25
Drawn By:
M553
Water Lily
569 Bayview Dr

Sheet
4 of 4

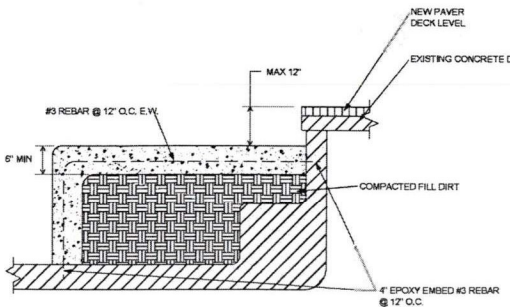
Seal



SPA DETAIL
SPA MAY ALSO BE FOR VIEW & "POURED"
W/ 1/2\"/>

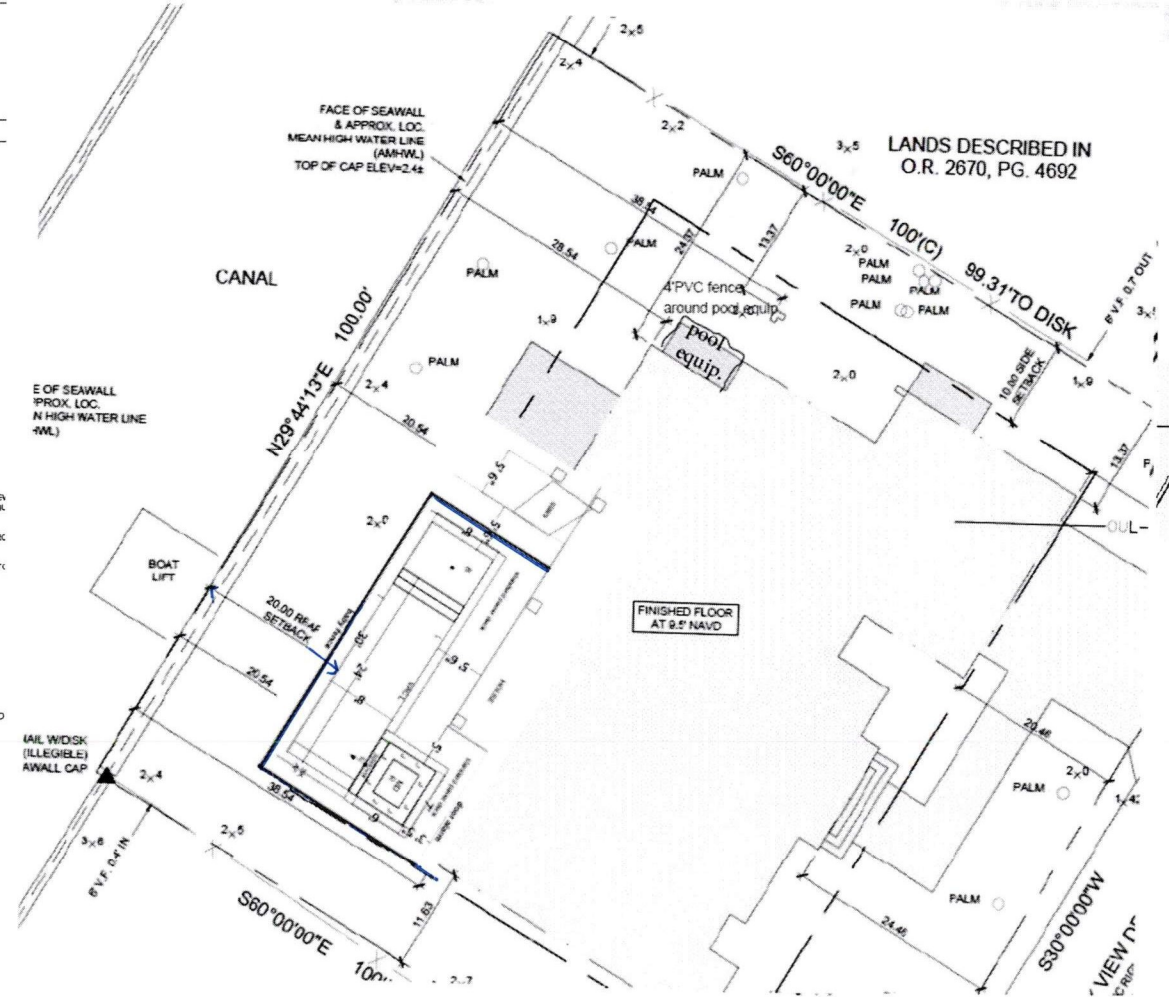


Bench / Steps Section



Sunshelf Section

Not all details may be used.
Changes in Field may dictate their use



Site Plan