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SHEET INDEX

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EQUIPMENT NOTES

CONSTRUCTED MATERIALS:

- 1.0 ACRES

- Construction Notes

- Compliance with City of Santa Barbara

- Construction of New 13' x 31' Swimming Pool with Attached 7' x 15' Spa and Safety Cover

- Macaluso Pools will not be performing any electrical, plumbing, or landscape work directly pertaining to the construction of the swimming pool.

- Proposed swimming pool will drain into the community sewer system directly at the property line.

- Equipment Notes

- Erosion Control to be done by others

- Pool fill will be done using existing anti-siphon hose bib

- Equipment Anchoring: 3/8" wedge anchor, concrete slab raised +1.00' above highest adjacent grade

- Pool equipment pad is to be 12" thick

- Pool fill will be done using existing anti-siphon hose bib

- Required Erosion Prevention Measures

- No overhead wires cross proposed swimming pool footprint

- No swimming pool footprints will cross building(s) or other existing trees or tree roots structures

- Pool to be tiled with low heat resistant anti-splash face

- Site plan

- Working drawings

- Drawing by Jake Macaluso

- Bliss Swimming Pool

- 2151 Mission Ridge Rd

- Santa Barbara, CA 93103

- APN: 019-161-002
GENERAL REQUIREMENTS

1. THE POOL CONTRACTOR SHALL CONSTRUCT THE POOL SO AS TO COMPLY WITH THE FOLLOWING REQUIREMENTS:
   a. The pool depth shall be a minimum of 4'0" and a maximum of 10'0".
   b. The pool shall have a minimum width of 20'0" and a maximum width of 25'0".
   c. The pool shall have a minimum length of 40'0" and a maximum length of 50'0".

2. ALL SURFACE AND DECK MATERIAL USED SHALL BE NON-SLIP AND SLIP RESISTANT.

3. HEATER SPECIFICATIONS
   a. The heater shall be tested and approved by the California Department of Consumer Affairs.
   b. The heater shall comply with all local building codes and electrical codes.
   c. The heater shall be equipped with a pilot light and an automatic shut-off device.
   d. The heater shall be equipped with a manual shut-off valve for all safety purposes.

4. AUTOMATIC FILLING DEVICES
   a. The automatic filling device shall be equipped with a flow tester and a successful report shall be submitted to the building department.
   b. The automatic filling device shall be tested prior to installation.
   c. The automatic filling device shall be approved by the building department.
   d. The automatic filling device shall be equipped with a reduced pressure principle assembly.

5. RETURN LINE
   a. The return line shall be equipped with a flow tester and a successful report shall be submitted to the building department.
   b. The return line shall be tested prior to installation.
   c. The return line shall be approved by the building department.

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

DETAILED REQUIREMENTS

1. THE POOL CONTRACTOR SHALL CONSTRUCT THE POOL SO AS TO COMPLY WITH THE FOLLOWING REQUIREMENTS:
   a. The pool depth shall be a minimum of 4'0" and a maximum of 10'0".
   b. The pool shall have a minimum width of 20'0" and a maximum width of 25'0".
   c. The pool shall have a minimum length of 40'0" and a maximum length of 50'0".

2. ALL SUCTION GRATES SHALL BE EMBOSSED WITH VGB 2008 AND UL LOGOS.

3. A REDUCED PRESSURE PRINCIPLE ASSEMBLY WILL BE PLACED ON FILL LINE AND/OR THE CALIFORNIA ELECTRICAL CODE - COMBUSTION AIR IS TO BE PROVIDED AT FIELD INSPECTION THAT SHOWS THAT THE ELBOW COMPLIES.

4. INTEGRAL FILLED BRICKS SHALL BE USED TO ENCIRCLE THE POOL AREA.

5. AUTOMATIC FILLING DEVICES SHALL BE EQUIPPED WITH A FLOW TESTER AND A SUCCESSFUL REPORT SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT.

6. A REDUCED PRESSURE PRINCIPLE ASSEMBLY WILL BE PLACED ON FILL LINE AND/OR THE CALIFORNIA ELECTRICAL CODE - COMBUSTION AIR IS TO BE PROVIDED AT FIELD INSPECTION THAT SHOWS THAT THE ELBOW COMPLIES.

7. ALL SUCTION OUTLETS SHALL BE LOCATED ON BEAVERTAILS OR ON THE SUCTION WALL OR SUCTION OUTLET CUTOMER, INSTEAD OF THE WATER SLOTTED OR SIMILAR PROTECTIVE DEVICES SPECIFIED IN THE ANSI/APSP-16 PERFORMANCE STANDARD OR SUCCESSOR STANDARDS.

8. ALL SUCTION OUTLETS SHALL BE LOCATED ON BEAVERTAILS OR ON THE SUCTION WALL OR SUCTION OUTLET CUTOMER, INSTEAD OF THE WATER SLOTTED OR SIMILAR PROTECTIVE DEVICES SPECIFIED IN THE ANSI/APSP-16 PERFORMANCE STANDARD OR SUCCESSOR STANDARDS.

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10. ALL SUCTION OUTLETS SHALL BE LOCATED ON BEAVERTAILS OR ON THE SUCTION WALL OR SUCTION OUTLET CUTOMER, INSTEAD OF THE WATER SLOTTED OR SIMILAR PROTECTIVE DEVICES SPECIFIED IN THE ANSI/APSP-16 PERFORMANCE STANDARD OR SUCCESSOR STANDARDS.
### Pool and Spa Heating Systems

**A. Pool and Spa System Type**
- Pool system has dedicated suction and return lines
- To allow for the future addition of solar heating equipment, the pump must be rated at 2 or more speeds (not applicable if pump is less than 1 horsepower)
- There must be a length of straight pipe that is greater than or equal to at least 4 inches pipe diameters installed before the pump.
- Multiport backwash valves have a minimum of 4 inches of straight pipe before the valve.
- There must be a bypass which is greater than or equal to at least 4 inches of straight pipe installed before the pump.

**B. Pool Water Flow**

<table>
<thead>
<tr>
<th>Pool Volume (gallons)</th>
<th>Max Pool Flow Rate (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17,000</td>
<td>360</td>
</tr>
</tbody>
</table>

**C. Pool and Spa System Installation Requirements**

1. Before any pool or spa heating system or equipment may be installed, the manufacturer must certify to the Energy Commission that the system or equipment complies with §110.4 and §110.5. The requirements include minimum heating efficiency according to the following:
   - No electric resistance heating except for listed package units that are insulated to at least R -6. Or if documentation is provided that at least 60% of the annual heating energy is from site solar is exempt.
   - Built-in solar collectors must have a minimum area of 20 square feet.
   - Heat pumps or gas heaters must be listed for outdoor pools or spas that have a heat pump or gas heater.
   - A bypass must be installed on all systems if the manufacturer states that it is required.

2. Pool piping must be sized according to the maximum flow rate needed for all auxiliary loads. Show work to calculate return and suction line flow rates:
   - Max Flow Rate (gpm) = Pool Volume (gallons) / 360

3. Backwash valves must be sized to the diameter of the return pipe or 2 inches, whichever is greater.

4. Multiport backwash valves have a minimum of 4 inches of straight pipe before the valve.

5. The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

---

**Certificate of Installation**

- **Project Name:** BLISS SWIMMING POOL
- **Date:** 11/13/2021
- **Certification Number:** PLB-03-CEC-CF2R
- **Responsible Person:** Michael Gerenser, MGE
- **Address:** 2151 Mission Ridge Rd, Santa Barbara, CA 93103

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**CEC Certificate**

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**User Instructions**

- **Date:** 11/13/2021
- **Page 1 of 5**
- **Project:** DROWNING PREVENTION
- **Structural Engineering:** SANTA BARBARA, or built

**Pool Filters and Valves**

1. Enter Filter Type (Cartridge, Sand, DE).
2. Select whether the alternative calculation is used.
3. Enter Return Pipe Diameter (inches).
4. Enter Filter Type (Cartridge, Sand, DE).
5. Enter Filter Diameter (inch).
15. FLOOD Danger AREA - UNAFFECTED - NATURAL DRAINSAGE COURSES.
16. UPSTREAM OF SURFACES (AND OTHER CONSTRUCTION MATTING) SHOULD BE FINISHED TO THE FLOOD ENTRANCE ROADWAYS MUST BE STABILIZED SO THAT THEY ARE NOT WASHED AWAY BY FLOODWATER.
17. ALL STORAGE CONTAINERS ARE TO BE PROTECTED FROM WEATHER AND DIRT RAIN.
18. ALL PVC, PIPE, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, ERODED SEDIMENTS AND POLLUTANTS MUST BE RETAINED ON-SITE.
19. ALL CIRCUITS TO BE GFCI PROTECTED UNLESS ALL OF THE CONDITIONS LISTED UNDER CEC 680.42(B) ARE MET.

20. ALL APPROVED STORAGE CONTAINERS ARE TO BE EROSION CONTROL MEASURES PRIOR TO FINAL INSPECTION.

21. ADDED OR SIGNIFICANT ENCROACHMENTS MUST BE STABILIZED TO THE PUBLIC.

22. ALL GRADE CHANGE ENCROACHMENTS MUSST BE STABILIZED TO THE PUBLIC.

23. ACCESSIBLE DEPARTMENTS MUST BE SHOWN ON AVERDI AND MAY BE CONSIDERED IF THE SITE IS TO BE MODIFIED.

24. ANY SLOPES WITH GRADELESS SOILS OR GRADELESS OF INABILITY TO STAND ON MUST BE SHOWN TO BE STABILIZED BY WIND AND WATER.

ARCHAEOLOGICAL RESOURCES MITIGATION
1. ALL MECHANICAL EQUIPMENT OTHER THAN VEHICLES INCLUDES HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS SHALL BE INSULATED. SOUNDS AT THE PROPERTY LINE OF A MIS-RECEIVED PERIOD MAY BE DISCREETLY APPLIED WITH THE PRIVATE PROJECT SITE MAY RESULT IN A STOP WORK ORDER.

2. ALL MECHANICAL EQUIPMENT OTHER THAN VEHICLES INCLUDES HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS SHALL BE INSULATED. SOUNDS AT THE PROPERTY LINE OF A MIS-RECEIVED PERIOD MAY BE DISCREETLY APPLIED WITH THE PRIVATE PROJECT SITE MAY RESULT IN A STOP WORK ORDER.

EQUIPMENT NOISE COMPLIANCE
1. WHEN ORDERED: EQUIPMENT OTHER THAN VEHICLES INCLUDES HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS SHALL BE INSULATED. SOUNDS AT THE PROPERTY LINE OF A MIS-RECEIVED PERIOD MAY BE DISCREETLY APPLIED WITH THE PRIVATE PROJECT SITE MAY RESULT IN A STOP WORK ORDER.

INTERIOR PUMP NOISE LEVEL:
1. NO NOISE LEVEL WILL NOT EXCEED 53 DB AT PROPERTY LINES.

1. NO RECEPTACLE SHALL BE LOCATED TO HAVE A UNIFORM DISTRIBUTION OF INLET PROTECTION FROM THE POOL WALLS SHALL BE BONDED PER CEC 680.26(B)(7).

2. ALL FUNCTIONAL LOCAL RESOURCES ARE ENCOURAGED. SUBPANELS MAY BE LOCATED WITHIN 500 FEET OF THE POOL WALL.

3. ALL MECHANICAL EQUIPMENT OTHER THAN VEHICLES INCLUDES HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS SHALL BE INSULATED. SOUNDS AT THE PROPERTY LINE OF A MIS-RECEIVED PERIOD MAY BE DISCREETLY APPLIED WITH THE PRIVATE PROJECT SITE MAY RESULT IN A STOP WORK ORDER.

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1. PREVENTION SAFETY FEATURES:

- Never permit swimming alone. Never leave a child alone, even if supervised.
- Supervise children at all times.

2. INSTALLATION OF POOL/SPA ALARMS

- Insert two “AA” alkaline batteries into each alarm.
- Use the receiver to locate the numbers on each mark for the position of each pool/SPA alarm.
- Place the receiver in the pool/SPA and hold it in the water near the pool/SPA alarm.
- The receiver will emit a “beep” sound when it detects the alarm.

3. POOL & SPA ALARMS

- All swimming pools and spa alarms must be tested annually.
- The pool alarm is designed to work with a compatible receiver for additional safety.
- The alarm sounds when the alarm is triggered and will alert authorities to the location of the alarm.

DOOR ALARM SPECIFICATIONS (12)

- SWIMMING POOL SAFETY

DOOR ALARM SPECIFICATIONS (2)

- INSTALLATION OF POOL/SPA ALARM

- OPENING POOL/BUILDING ENTRANCE

- Poll guard

- www.pollguard.com
MASTERTEMP® Pool and Spa Heater Installation and User’s Guide  Rev. L  8-12-14

For service access, it is advisable to allow for

If the heater is to be installed more than 1' above or below, the water pressure switch must be adjusted by a qualified

The water pressure switch is set in the factory at 3.00 PSI (± 0.75 PSI). This setting is for a heater installed at pool level.

If a manual by-pass is installed, temporarily close it

To switch flow

CAUTION

For service access, it is advisable to allow for

Figure 18.

PUMP

Vent Termination – Horizontal

This heater is equipped with an unconventional gas control valve that is factory set with a

CAUTION

Installation Instructions are designed for use by qualified personnel only, trained especially for installation of this

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CAUTION
7. Replace clean cartridge element on support tube and install assembly into the filter tank body, aligning:
   a. Centrifugal collector rings with the slots in the body, and verify that the lock ring  
      and the body are properly locked. Please refer to the instructions in the  
      National Swimming Pool Institute on Preventing Entrapment for additional 
      information on the filter location and installation.
   b. The rubber O-ring with the grooves in the body, and verify that the assembly is 
      properly seated.

   8. Using a garden hose with a nozzle, direct water spray at the cartridge element to dislodge and wash away:

A. GENERAL INFORMATION

1. This filter system is designed for use in typical residential swimming pools or spas. The  
   filter tank body is designed to withstand exposure to the pool environment and  
   is constructed to provide a long service life. The filter tank body is manufactured 
   from high-quality durable materials and is designed to be corrosion-resistant  
   and durable under normal use. The filter system is designed to operate at pressures  
   up to 50 psi, and is suitable for use in swimming pools or spas with similar 
   characteristics. This filter system is designed to be easy to install and  
   maintain, with features such as a cartridge element that can be easily removed 
   and replaced. The filter system is designed to be compatible with a wide range 
   of pool equipment, and is designed to be easy to integrate into a typical 
   residential swimming pool or spa system.

2. The filter system includes a high-quality cartridge element that is designed to be 
   easy to remove and replace. The cartridge element is designed to be easy to  
   clean and maintain, with features such as a removable top cap that allows for 
   easy access to the internal components. The filter system is designed to be 
   easy to operate, with features such as a simple-to-use control panel that allows 
   for easy operation and maintenance.

3. This filter system is designed to be easy to install and maintain, with features such  
   as a cartridge element that can be easily removed and replaced. The filter 
   system is designed to be compatible with a wide range of pool equipment, and 
   is designed to be easy to integrate into a typical residential swimming pool or 
   spa system. The filter system is designed to be easy to operate, with features such 
   as a simple-to-use control panel that allows for easy operation and maintenance.

4. This filter system is designed to be easy to install and maintain, with features such  
   as a cartridge element that can be easily removed and replaced. The filter 
   system is designed to be compatible with a wide range of pool equipment, and 
   is designed to be easy to integrate into a typical residential swimming pool or 
   spa system. The filter system is designed to be easy to operate, with features such 
   as a simple-to-use control panel that allows for easy operation and maintenance.

5. When installing the High Flow™ manual air relief valve, follow the manufacturer’s 
   instructions carefully. Open the valve fully, and verify that the air is properly 
   relieved. Close the valve after a steady stream of water

6. Be sure that the filter is properly mounted and positioned according to the 
   instructions provided. Please refer to the instructions in the National Swimming 
   Pool Institute on Preventing Entrapment for additional information on the filter 
   location and installation. This filter system is designed to be easy to install and 
   maintain, with features such as a cartridge element that can be easily removed 
   and replaced. The filter system is designed to be compatible with a wide range 
   of pool equipment, and is designed to be easy to integrate into a typical residential 
   swimming pool or spa system. The filter system is designed to be easy to operate, 
   with features such as a simple-to-use control panel that allows for easy operation 
   and maintenance.

7. This filter system is designed to be easy to install and maintain, with features such 
   as a cartridge element that can be easily removed and replaced. The filter 
   system is designed to be compatible with a wide range of pool equipment, and 
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9. This filter system is designed to be easy to install and maintain, with features such 
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14. This filter system is designed to be easy to install and maintain, with features such 
      as a cartridge element that can be easily removed and replaced. The filter 
      system is designed to be compatible with a wide range of pool equipment, and 
      is designed to be easy to integrate into a typical residential swimming pool or 
      spa system. The filter system is designed to be easy to operate, with features such 
      as a simple-to-use control panel that allows for easy operation and maintenance.

15. This filter system is designed to be easy to install and maintain, with features such 
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      system is designed to be compatible with a wide range of pool equipment, and 
      is designed to be easy to integrate into a typical residential swimming pool or 
      spa system. The filter system is designed to be easy to operate, with features such 
      as a simple-to-use control panel that allows for easy operation and maintenance.

16. This filter system is designed to be easy to install and maintain, with features such 
      as a cartridge element that can be easily removed and replaced. The filter 
      system is designed to be compatible with a wide range of pool equipment, and 
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      spa system. The filter system is designed to be easy to operate, with features such 
      as a simple-to-use control panel that allows for easy operation and maintenance.

17. This filter system is designed to be easy to install and maintain, with features such 
      as a cartridge element that can be easily removed and replaced. The filter 
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      spa system. The filter system is designed to be easy to operate, with features such 
      as a simple-to-use control panel that allows for easy operation and maintenance.
**IntelliFlo® VF Variable Flow Pump**

**Installation and User's Guide**

**Important Safety Instructions:**
Read and follow all instructions. Save these instructions.

**Installation and Removal:**

1. Disconnect power supply before installation.
2. Make sure that the wiring voltage is 230 VAC.
3. Drain the pump by removing the drain plugs.
4. Grease the motor shaft thread and screw impeller onto the motor shaft.
5. Install all electrical controls at equipment pad, such as pump or filter.

**Pump Disassembly (Continued):**

- Remove the IntelliFlo® VF Variable Flow Pump drive and control panel from the motor assembly.
- Ensure that the motor assembly is continually cooled by an external fan. Dual seals on the motor shaft and at the bonding structure, as shown below.
- Follow the recommended procedures for handling and storage of electrical equipment.
- Reinstall the pump according to the instructions provided in this manual.

**Pump Efficiency:**

- To ensure proper efficiency, follow all installation and usage instructions.
- The motor assembly is designed with features such as a sealed bearing, a thermal overload protector, and a protection against freezing.

**Troubleshooting:**

- If the GFCI fails to operate in this manner, the GFCI is questionable equipment.
- Always use the latest national and local codes for swimming pools.

**Replacement Parts:**

- Refer to the parts list for the specific parts needed for installation.

**Important Notes:**

- Safety devices and alarms do not operate in speed mode.
- This pump is for use with permanent swimming pools and may also be used with hot tubs and spas.
- This manual contains important information that will help be given to the owner and/or operator of this equipment after installation.

**SAVE THESE INSTRUCTIONS**

**Direct Index**

- **Pump Disassembly**
- **Troubleshooting**
- **Replacement Parts**
- **Important Notes**

**English (QTY 4) FROM THE MOTOR ASSEMBLY.**

- 11 071652 SCREW ¼-20 X 1 LH PHILLIPS PAN
- 2 070429 BOLT HEX HD, 2-56x0.875 s/s,
- 4 070431 BOLT 3/8 -16 X 2 HEX CAP 18-8 s/s,
- 8 070431 BOLT 3/8 -16 X 2 HEX CAP 18-8 s/s,
NOTE: THIS IS A "STANDARD PLAN". VERIFY FINISH DIMENSIONS AND LAYOUT WITH ARCHITECT AND PROJECT OWNER PRIOR TO COMMENCEMENT OF CONSTRUCTION PER THIS PLAN.

FREESTANDING" PER THIS PLAN REFERS TO THE CONDITION OF DERIVING NO LATERAL SUPPORT FROM SURROUNDING SOILS.

REINFORCING STRUCTURAL SECTIONS PER THESE PLANS SHALL BE USED ADJACENT TO DESIGNING STRUCTURAL TYPICAL SHALLOW END.

TYPICAL FREESTANDING SWIMMING Pool STRUCTURAL Section

1. All construction per this plan shall comply with CERC 2012 and all other applicable local building codes and ordinances.
2. This plan is based on typical pool sizes and is subject to change when designing for a specific pool size.
3. A Building Permit (Permit to legally construct the work based on the plan) shall be obtained by the owner, before any work is performed.
4. Plan is designed to be submitted to the local building inspector prior to proceeding with construction.
5. "FREESTANDING" PER THIS PLAN REFERS TO THE CONDITION OF DERIVING NO LATERAL SUPPORT FROM SURROUNDING SOILS.

Scale: 1/2" = 1'-0"

NOTES:

1. This plan is based on typical pool sizes and is subject to change when designing for a specific pool size.
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4. Plan is designed to be submitted to the local building inspector prior to proceeding with construction.
5. "FREESTANDING" PER THIS PLAN REFERS TO THE CONDITION OF DERIVING NO LATERAL SUPPORT FROM SURROUNDING SOILS.

NOTE:  CONTINUOUS SPECIAL INSPECTION REQUIRED.

NOTE:  THIS SHEET OR CERTIFIED COMPACTED FILL.

FIRM, UNDISTURBED NATIVE SOIL

21" 12"

TYPICAL SHALLOW END

NOTE:  OKAY TO SUBSTITUTE (2) #5 FOR MIN.

12"

12"

NOTE: SEE CONTRACTOR'S PLAN FOR STEP AND BENCH LAYOUT

EXCEPTIONS:

This is in lieu of designing for all conditions and leaving it to the contractor to determine the specific design for all conditions. Therefore, "Standard Plans" for different projects will depict varying details and structural sections.

DRAWN BY:

DRAWING NUMBER:

REVISION:

 date: 11/08/21

MTG. SHOWN

CONTRACTOR ALTERNATE:

NOTE: THESE DETAILS MAY ALSO BE USED FOR CONSTRUCTION OF TINTED OR SUNSHADED SPA.

OPTION "A"

NOTE: SEE POLICY (7) OTHER MEANS OF PROTECTION, IF THE DEGREE OF PROTECTION AFFORDED IS EQUAL TO OR GREATER THAN THE DEGREE OF PROTECTION AFFORDED BY ANY OTHER MEANS OF PROTECTION.

OPTION "B"

NOTE:  CONTINUOUS SPECIAL INSPECTION REQUIRED.

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NOTE:  CONTINUOUS SPECIAL INSPECTION REQUIRED.
Color Board and Details

Coping - Flagstone

Waterline Tile – 4” X 8” Blue Subway Tile

Interior Finish – Blue Surf