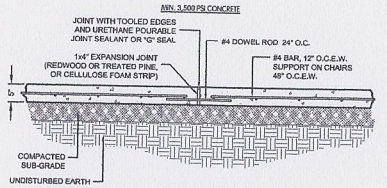
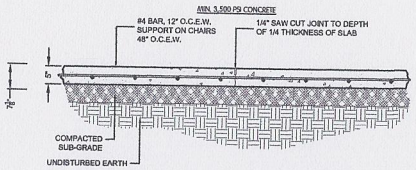


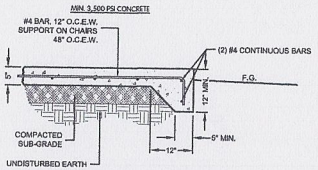
1 DOWELED EXPANSION JOINT

SCALE: 3/4" = 1'-0"



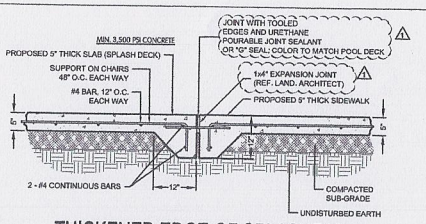
2 CRACK CONTROL JOINT

SCALE: 3/4" = 1'-0"



3 THICKENED SLAB EDGE

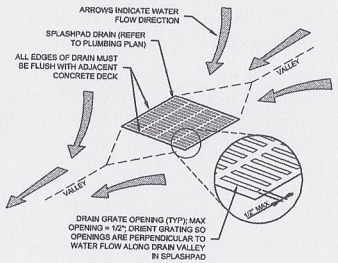
SCALE: 3/4" = 1'-0"



THICKENED EDGE OF SPLASHPAD ADJACENT TO CONCRETE DECK

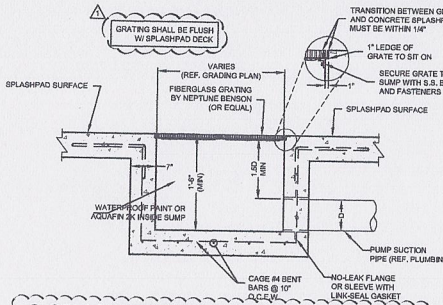
4

SCALE: 3/4" = 1'-0"



5 SPLASHPAD DRAIN INSTALLATION

NOT TO SCALE

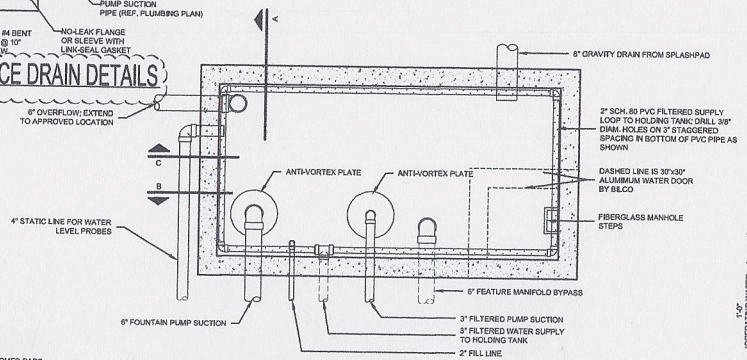


6 SPLASHPAD CAST-IN-PLACE DRAIN DETAILS

SCALE: 3/4" = 1'-0"

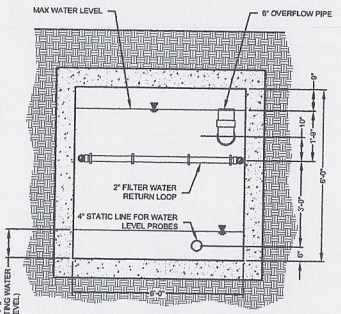
SPLASHPAD DRAIN NOTE:

1. PAINT INSIDE OF TANK WITH AQUAFIN(OR EQUAL) WATERPROOFING.
2. DRAIN COVERS ARE TO BE FIBERGLASS EXTRUDED T-BAR GRATING WITH OPENINGS NOT TO EXCEED 1/2 INCH IN WIDTH.
3. ALL GRATING SHALL BE INSTALLED AND SECURED WITH STAINLESS STEEL FASTENERS.



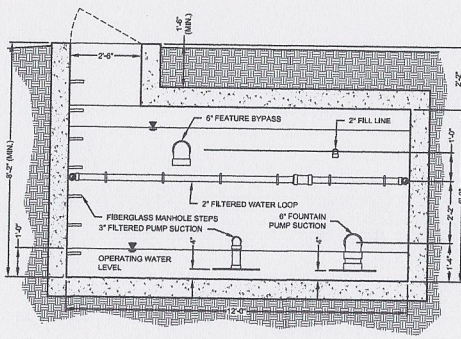
7 SPLASHPAD HOLDING TANK DETAIL

NOT TO SCALE



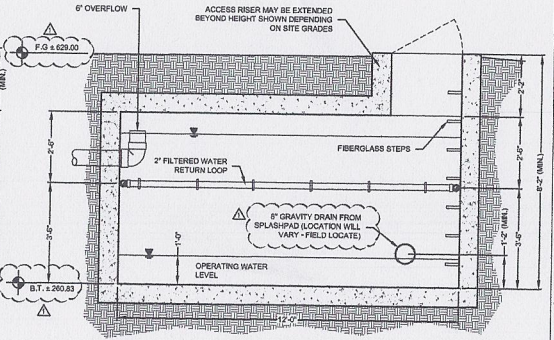
SECTION A

1/2" = 1'-0"



SECTION B

1/2" = 1'-0"



SECTION C

1/2" = 1'-0"

STRUCTURAL NOTES

1. FOUNDATIONS:

1.1. SOIL PREPARATION: SOIL PREPARATION WILL BE BY SITE CONTRACTOR - NOT BY POOL CONTRACTOR. ALL SPLASHPAD STRUCTURES HAVE BEEN DESIGNED ASSUMING THAT THE SOIL WILL BE PREPARED ACCORDING TO THE GEOTECHNICAL REPORT (ALPHA REPORT # G120807-4 DATED JULY 10, 2014) AND SUCH THAT THE POTENTIAL FOR VERTICAL RISE (PVR) FOR ANY EXPANSIVE SOILS WILL BE REDUCED TO 1-INCH OR LESS. ADDITIONALLY, THE SOIL BENEATH SPLASHPAD MUST HAVE NEGLIGIBLE SETTLEMENT OVER THE LIFE OF THE SPLASHPAD. IT IS RECOMMENDED THE CONTRACTOR PROOF-ROLL THE SITE AS NEEDED ONCE EXCAVATION HAS TAKEN PLACE TO CHECK FOR WEAK SPOTS IN THE NATIVE SOIL THAT NEED TO BE IMPROVED.

1.2. IT HAS BEEN ASSUMED THAT THE SPLASHPAD WILL NOT BE CONSTRUCTED ON THE NATIVE CLAYS THAT EXIST ON THE SITE DUE TO THE RISK OF POTENTIAL MOVEMENT ASSOCIATED WITH THOSE CLAYS. THE SPLASHPAD SLAB HAS BEEN DESIGNED ASSUMING THE POTENTIAL OF VERTICAL MOVEMENT (PVR) OF THE SOIL BENEATH THE POOL AND DECKS HAS BEEN REDUCED TO 1-INCH OR LESS.

1.3. SOILS BEING USED AS FILL MATERIAL SHALL BE CONSIDERED "SELECT FILL" WITH THE FOLLOWING CHARACTERISTICS:

- SELECT FILL SOILS SHALL BE CLAYEY SAND (SC) OR A LOW PLASTICITY SANDY CLAY (CL) HAVING A LIQUID LIMIT LESS THAN 38 AND A PLASTICITY INDEX (PI) BETWEEN 7 AND 18.
- SELECT FILL SHALL BE FREE OF ORGANIC MATERIAL.
- SELECT FILL SHALL HAVE NO PARTICLES MEASURING GREATER THAN 2-INCHES IN ANY DIRECTION
- SELECT FILL SHALL BE INSTALLED IN 8-INCH LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR DENSITY AT ± 3.0% OF OPTIMUM MOISTURE CONTENT FOR THE SOIL.

2. CONCRETE:

2.1. MINIMUM 28-DAY COMPRESSIVE STRENGTHS FOR STRUCTURAL CONCRETE SHALL BE:

- 3,000 PSI — CAST-IN-PLACE FOOTINGS, GRADE BEAMS AND SLABS ON GRADE.
- 3,500 PSI — CAST-IN-PLACE CONCRETE WALLS AND STRUCTURAL SUSPENDED SLABS.
- 4,000 PSI — SHOTCRETE/GUNITE STRUCTURES (SUCH AS POOL SHELLS); SHOTCRETE SHALL BE 7-SACK CEMENT.

2.2 MAXIMUM AGGREGATE SIZE SHALL BE AS FOLLOWS:

- 1-1/2" — CAST-IN-PLACE FOOTINGS AND SLABS ON GRADE.
- 1" — CAST-IN-PLACE GRADE BEAMS, STRUCTURAL SUSPENDED SLABS AND WALLS.
- 1" — SHOTCRETE/GUNITE STRUCTURES (SUCH AS POOL SHELLS)

STRUCTURAL NOTES (CONT'D)

3. REINFORCING STEEL:

3.1 REINFORCING STEEL SHALL BE ASTM A615 GRADE 40 (MIN.) DEFORMED BARS MANUFACTURED IN THE USA. BAR PLACEMENT AND DETAILING SHALL BE IN ACCORDANCE WITH ACI 318 (LATEST EDITION).

3.2 REINFORCING DOWELS SHALL HAVE THE SAME SIZE AND SPACING AS THE MAIN BARS THEY ADJOIN (MIN. LAP = 30*BAR DIAM.) THE MINIMUM SPLICE OF ALL CONTINUOUS BARS SHALL BE 40*BAR DIAM. (2'-0" MIN).

3.3 CLEAR MINIMUM COVER OF CONCRETE OVER REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI 318 AND AS FOLLOWS:

- 1-1/2" — FORMED CONCRETE AGAINST EARTH
- 3" — CAST-IN-PLACE CONCRETE AGAINST EARTH
- 3/4" — TOP OF SLABS-ON-GRADE
- 2" — CAST-IN-PLACE CONCRETE RETAINING WATER
- BE CAREFUL TO MAINTAIN MINIMUM CLEARANCES ON ALL SHOTCRETE/GUNITE STRUCTURES SUCH AS POOL SHELLS. CONCRETE CLEARANCES LISTED ARE CRITICAL.

3.4. CONCRETE REINFORCING SHALL BE SECURED IN POSITION PRIOR TO PLACEMENT. IT IS RECOMMENDED FLOOR STEEL BE SUPPORTED WITH PLASTIC CHAIRS OR METAL (SPIDER) CHAIRS WITH PLASTIC BEARING PLATES. DO NOT SUPPORT FLOORS WITH CHUNKS OF WOOD OR BROKEN BRICK PIECES.

4. BACKFILL:

4.1 UNLESS OTHERWISE NOTED, USE SELECT FILL MATERIAL MEETING THE "FOUNDATIONS" NOTES ABOVE FOR BACKFILL BEHIND WALLS. BACKFILL SHALL BE COMPACTED BY "HAND-TAMPING." DO NOT USE MECHANICAL EQUIPMENT TO COMPACT BACKFILL BEHIND STRUCTURAL WALLS AS WALLS HAVE NOT BEEN DESIGNED FOR SURCHARGE LOADS OR SUCH MACHINERY.

HOLDING TANK NOTES:

1. PAINT INSIDE OF TANK WITH AQUAFIN(OR EQUAL) WATERPROOFING.
2. PENETRATIONS THROUGH VAULT WALLS, FLOOR, OR TOP SHALL HAVE NO LEAK FLANGES OR CORES WITH LINK SEAL GASKET.
3. STRUCTURE SHALL BE DETERMINED BY MANUFACTURER.
4. POOL CONTRACTOR SHALL SET THE FLOOR ELEVATION OF THE TANK IN THE FIELD. FLOOR ELEVATION MUST BE SUCH THAT 6" DRAIN LINE IS ON A MINIMUM 1.0% GRADE AND 6'-0" INTERIOR HEIGHT OF TANK IS MAINTAINED. TANK HEIGHT MAY GET LARGER FROM WHAT IS SHOWN HEREIN, BUT NOT LESS THAN 6'-0"

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2/3/2017

BILE LAGOONS — WORTHEY AQUATICS

CANYON FALLS AMENITY CENTER 2

NEW OUTDOOR POOL & SPLASHPAD

NORTHLAKE, TEXAS

Revisions/Revisions:	Date:
PERMIT	01.09.2017
Revised per Review Comments	02.03.2017

Designed: BR
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AE Project No.: 15.193

Sheet Title:
SPLASHPAD CONST. DETAILS

Sheet No.:
SP8.0

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