

EQUIPOTENTIAL BONDING GRID:

ALL METAL PARTS SPECIFIED IN 680.26(B) MUST BE BONDED TO AN EQUIPOTENTIAL BONDING GRID WITH A SOLID COPPER CONDUCTOR NOT SMALL THAN 8 AWG. THE TERMINATION OF THE BONDING CONDUCTOR MUST BE MADE BY EXOTHERMIC WELDING, LISTED PRESSURE CONNECTORS, OR LISTED CLAMPS THAT ARE LABELED AS SUITABLE FOR THE PURPOSE. THE QUIPOTENTIAL BONDING GRID MUST EXTEND UNDER PAVED WALKING SURFACES FOR 3 FEET HORIZONTALLY FROM THE WATER (680.26(C)).

THE EQUIPOTENTIAL BONDING GRID MUST BE FORMED FROM EITHER OR BOTH OF:

THE STRUCTURAL REINFORCING STEEL OF A CONCRETE PERMANENTLY INSTALLED POOL, OUTDOOR SPA, OR OUTDOOR HOT TUB, TIED TOGETHER BY THE USUAL STEEL TIE WIRES.

THE METAL WALLS OF A PERMANENTLY INSTALLED POOL, OUTDOOR SPA, OR OUTDOOR HOT TUB

THE EQUIPOTENTIAL BONDING GRID CAN BE CONSTRUCTED WITH 8 AWG BARE SOLID COPPER CONDUCTORS BONDED TO EA OTHER AT ALL POINTS OF CROSSING BY EXOTHERMIC WELDING, LISTED PRESSURE CONNECTORS OF THE SET SCREW OR COMPRESSION TYPE, LISTED CLAMPS, OR OTHER LISTED FITTINGS (250.8).

THE EQUIPOTENTIAL BONDING GRID MUST COVER THE CONTOUR OF THE PERMANENTLY INSTALLED POOL, OUTDOOR SPA OR HOT TUB AND DECK EXTENDING 3 FEET HORIZONTALLY FROM THE WATER. THE EQUIPOTENTIAL BONDING GRID MUST BE ARRANGED IN A 1-FOOT BY 1-FOOT NETWORK OF 8 AWG CONDUCTORS, WITH A TOLERANCE OF 4 INCHES.

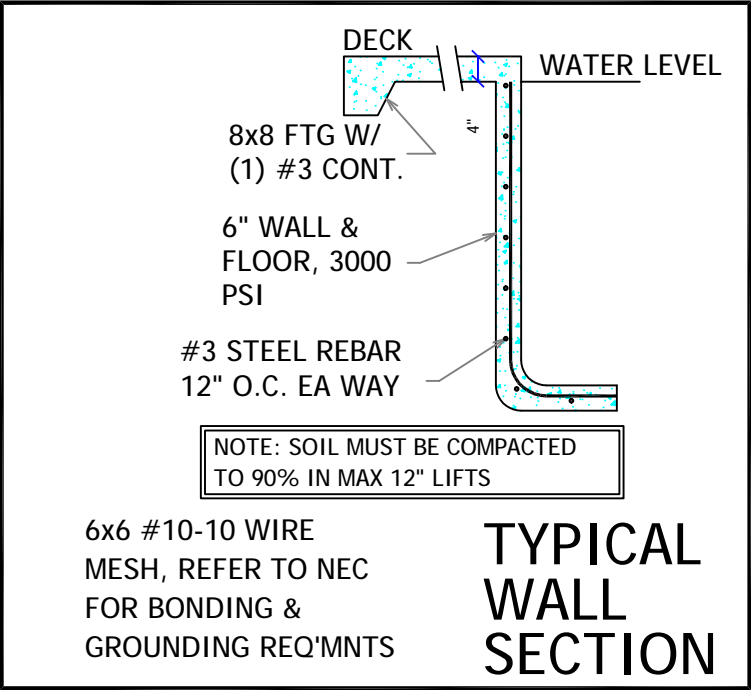
EXCEPTION: THE EQUIPOTENTIAL BONDING GRID SHALL NOT BE REQ'D TO BE INSTALLED UNDER THE BOTTOM OR VERTICALLY ALONG THE WALLS OF VINYL LINED POLYMER WALL, FIBERGLASS COMPOSITE, OR OTHER POOLS CONSTRUCTED OF NON-CONDUCTIVE MATERIALS.

ANY METAL PARTS OF THE POOL, INCLUDING METAL STRUCTURAL SUPPORTS, SHALL BE BONDED IN ACCORDANCE WITH 680.26(B). POURED CONCRETE, PNEUMATICALLY-APPLIED CONCRETE, AND CONCRETE BLOCK SHALL BE CONSIDERED CONDUCTIVE MATERIAL

GENERAL NOTES:

- 1) Per UL listing, pool motors require GFCI protection
- 2) FSPA requires the motor controller to be capable of 2 speeds, a time clock will not satisfy this unless it has 2 trip settings.
- 3) If heater installed (other than solar), it must comply with FBC-EC403.9.1 & have a cover per 403.9.3 (this applies to mechanical (not solar) heaters---cover required)
- 4) Outdoor swimming pools shall be provided with a barrier complying with Sections R4501.17.1.1 through R4501.17.1.14.
- 5) NEC 680.26(C) requires a conductive metal part of 9 sq., in. in direct contact with the pool water.
- 6) R4501.17.1.9 All doors and windows providing direct access from the home to the pool shall be equipped with an exit alarm complying with UL 2017 that has a minimum sound pressure rating of 85 dB at 10 feet.

STEPS: MIN. TREAD 10" x 12", 7" MIN RISER, 12" MAX RISER. INTERMEDIATE TREADS AND RISERS TO BE UNIFORM.



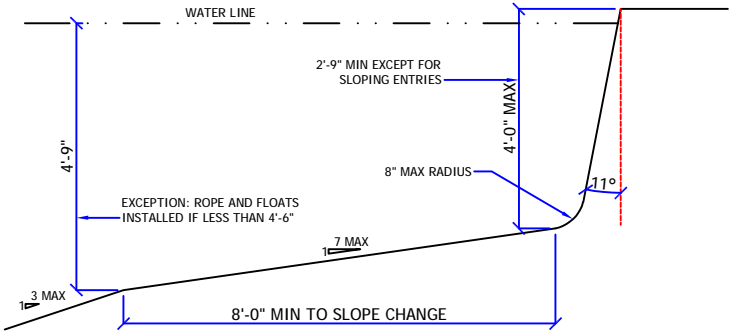
NOTE: IF ANY PART OF THE POOL ENCROACHES UPON THE ANGLE OF REPOSE, PLACE STEEL @ 6" o.c. EA WAY IN AREAS OF QUESTION



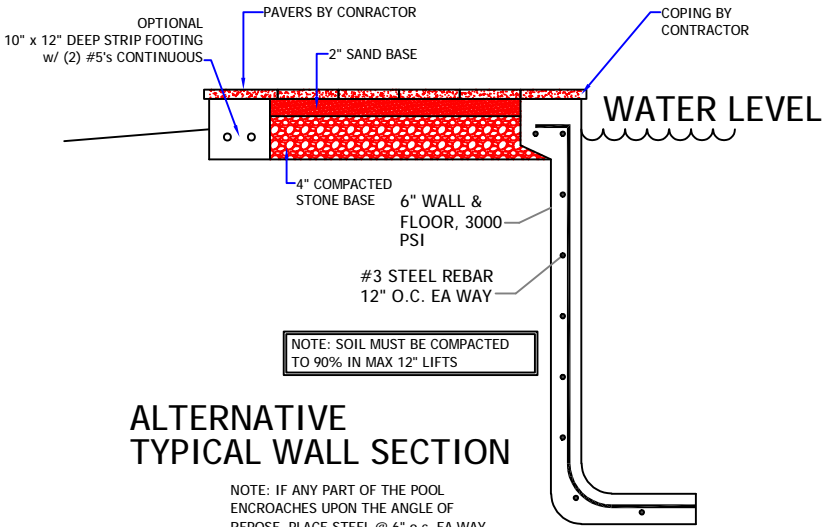
- ENGINEERING NOTES:
- 1. ALL WORK IS TO COMPLY WITH ALL APPLICABLE CODES & ORDINANCES.
  - 2. CONSTRUCTED OF 3000 PSI CONCRETE OR EQUAL WITH #3 REBAR 12" O.C. EACH WAY, TIED AT EVERY OTHER INTERSECTION. MIN COVER FOR REBAR IS 2.5" MIN OVERLAP IS 18".
  - 3.N/A
  - 4. ASSUMED SOIL BEARING = 2 KSF
  - 5. CIRCULATION SYSTEMS, COMPONENTS, & EQUIPMENT SHALL COMPLY W/ NSF 50.
  - 6. INSTALL CONTROL JOINTS @ 20'-0" ON CENTER IN POOL DECKING.
  - 7. PLANS TO CONFORM TO NEC 2020
  - 8. 2023 FBC RESIDENTIAL 8th EDITION APSP13
  - 9. CONCRETE STAIRS ARE 12" TREAD WIDTH AND 10" MAXIMUM HEIGHT
  - 10. ALL CONSTRUCTION SHALL COMPLY WITH ANSI 5-03, 2020 NEC ARTICLE 680, & ANSI-NSPI 3-99 IN-GROUND SPA CONSTR.

\*11. ENGINEERS DESIGN IS FOR STRUCTURAL ONLY. DESIGN OF PIPING/EQUIPMENT ETC.

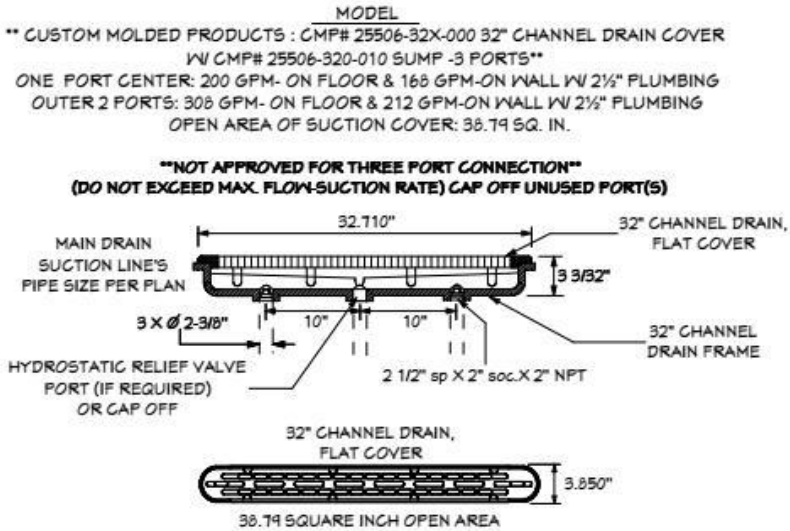
- BY POOL CONTRACTOR
- FENCE REQUIREMENTS:
- 1. MINIMUM 48" HEIGHT
  - 2. 2" MAX VERTICAL CLEARANCE BETWEEN GRADE & BARRIER BOTTOM.
  - 3. MAX OPENING SHALL NOT ALLOW PASSAGE OF 4" SPHERE.
  - 4. FENCE POSTS WILL BE LOCATED ON POOL-SIDE OF FENCE.
  - 5. GATE WILL BE SELF-LOCKING WITH APPROVED LOCKING DEVICE.



FLOOR SLOPE DETAIL NTS



ALTERNATIVE TYPICAL WALL SECTION



Riddle Consulting Engineers, Inc.

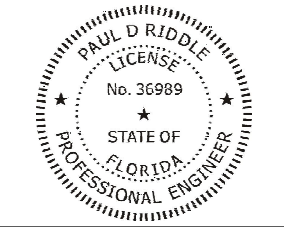


Paul D. Riddle, P.E.  
Senior Engineer  
COA: 00004759

ADDRESS 1720 SE CTY HWY 484  
BELLEVUE, FL 34420  
PHONE (352) 245-7041  
FAX (352) 245-5458  
WEB: WWW.RIDDLEENGINEERING.COM

ENGINEER'S SEAL

PAUL D. RIDDLE, P.E.  
P.E. 36989

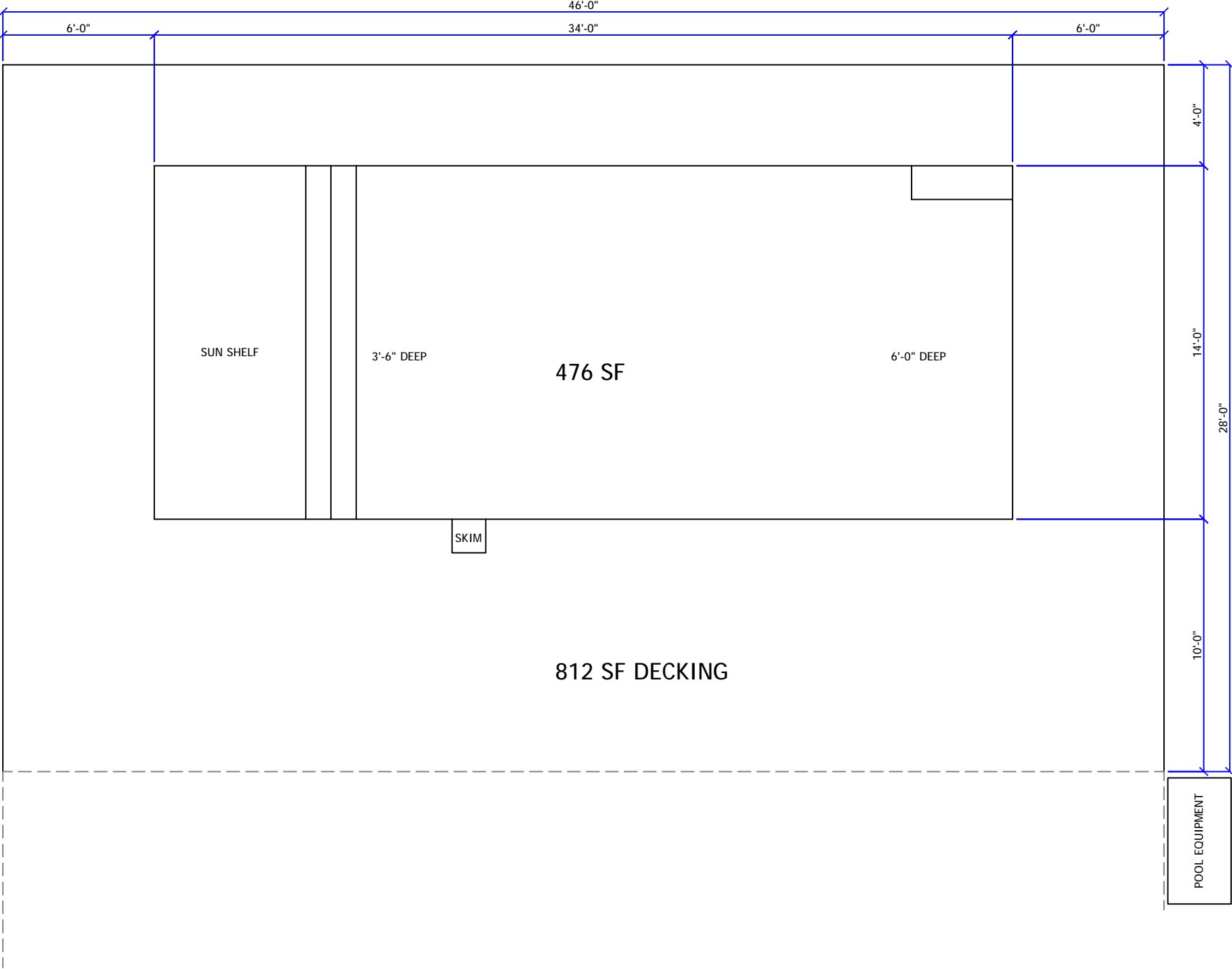


THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PAUL D. RIDDLE, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

JOB No.: 2240297

DATE Jun. 5, 24

A CUSTOM DESIGN FOR  
THE GONZALEZ  
RESIDENCE  
AQUATIC ART



Riddle Consulting Engineers, Inc.

structural  
civil  
mechanical

Paul D. Riddle, P.E.

Senior Engineer

COA: 00004759

ADDRESS

1720 SE CTY HWY 484  
BELLEVUE, FL 34420

PHONE

(352) 245-7041

FAX

(352) 245-5458

WEB:

WWW.RIDDLEENGINEERING.COM

ENGINEER'S SEAL

PAUL D. RIDDLE, P.E.

P.E. 36989

PAUL D RIDDLE

LICENSE

No. 36989

STATE OF FLORIDA

PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PAUL D. RIDDLE, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

JOB No.:

2240297

DATE

A CUSTOM DESIGN FOR

THE GONZALEZ

RESIDENCE

AQUATIC ART

Page:

2 of 3

3/16" = 1'-0" SCALE

Riddle Consulting Engineers, Inc.

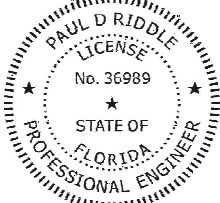


Paul D. Riddle, P.E.  
Senior Engineer  
COA: 00004759

ADDRESS 1720 SE CTY HWY 484  
BELLEVUE, FL 34420  
PHONE (352) 245-7041  
FAX (352) 245-5458  
WEB: [WWW.RIDDLEENGINEERING.COM](http://WWW.RIDDLEENGINEERING.COM)

ENGINEER'S SEAL

PAUL D. RIDDLE, P.E.  
P.E. 36989



THIS ITEM HAS BEEN DIGITALLY  
SIGNED AND SEALED BY PAUL D.  
RIDDLE, PE ON THE DATE ADJACENT TO  
THE SEAL. PRINTED COPIES OF THIS  
DOCUMENT ARE NOT CONSIDERED  
SIGNED AND SEALED AND THE  
SIGNATURE MUST BE VERIFIED ON ANY  
ELECTRONIC COPIES.

JOB No.: 2240297

DATE

A CUSTOM DESIGN FOR  
THE GONZALEZ  
RESIDENCE  
AQUATIC ART

Page:

3 of 3

3/16" = 1'-0" SCALE

