GENERAL NOTES:

APPLICABLE CODES:

These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2021 Edition and the 'Minimum Design Loads for Buildings and Other Structures' (ASCE/SEI 7-16).

All material and workmanship shall be in accordance with applicable provisions of the codes specified above.

LOADS USED IN DESIGN:

```
Gravity Loading

Poof Snow Loads:
```

Roof Snow Loads:	5 pst
Roof Live Loads:	20 ps
Roof Dead Loads:	10 ps
Floor Live Loads:	40 ps
Floor Dead Loads:	10 pst
Ceiling Live Loads:	10 ps
Ceiling Dead Loads:	5 psf

Wind Loading

```
Velocity Ultimate (3 sec gust): . . . .
Exposure: .
Risk Factor:
Internal Pressure Coeff., GCpi: . . . .
                                                        -0.18 / 0.18 (Enclosed)
```

COORDINATION:
A. DO NOT SCALE PLANS. The layout shown is based solely on the architectural plans by Changes affecting the layout shown must be specific and clearly nveyed to GreenWorks Engineering in written form as a change for inclusion into these plans.

- Contractor and/or client shall verify all dimensions and layout prior to construction. All dimensions shall be checked against the architectural plans referenced above and any discrepancies shall be brought to the attention of the Architect and Engineer of Record immediately. Refer to mechanical, electrical and architectural plans for openings not shown on the structural plans.
- Shop drawings shall be prepared by the fabricator. Copying of these construction documents for use as shop drawings will not be permitted.

- as a strop drawings will not be perimited.

 All temporary shoring shall be the responsibility of the contractor.

 Design is based on the current applicable building codes listed above and shall be void if the building code at the time of construction changes from the codes listed above.

- Concrete has been designed and shall be constructed in accordance with the American Concrete Institute 'Building Code Requirement Reinforced Concrete' and 'Specifications for Concrete for Buildings'(ACI 318 and ACI 301) latest editions. Section 1.3"Inspection" of ACI 318 is deleted in its entirety, see 'Field Observations' paragraph. All concrete shall be of stone aggregate, unless noted otherwise.
- Concrete Mixes: See specifications for any additional durability requirements

 Mix 'A' For Slabs on Grade

4,000 psi minimum compressive strength at 28 days. Type I/II Cement, minimum of 540 pounds per cubic yard. Fly Ash not allowed.

maximum aggregate size.

3% maximum entrained air.

4" maximum slump (8" with super-plasticizer).

Water reducing agent (use in accordance with manufacturer's recommendations). For Footings, Grade Beams, and Miscellaneous Concrete

3,500 psi minimum compressive strength at 28 days. Type I/II Cement, minimum of 470 pounds per cubic yard. 3/4" maximum aggregate size.

6% maximum entrained air.

- 4" maximum slump (8" with super-plasticizer).

 C. Reinforcing shall be new billet steel conform to ASTM A615, grade 60, except ties shall be grade 40. Provide not less than (2) #4 around all sides of all openings in concrete and extend 2'-0" past edges of openings. No splices Of reinforcement are permitted except as detailed or authorized by the Engineer of Record. Where permitted use contact lap splices, (36) bar diameters minimum. For the proper placement of the reinforcement provide chairs, bolsters, additional reinforcement, and
- accessories necessary to support the reinforcement at the positions shown on plans. Support of reinforcement on form ties, wood, brick, brickbat or other unacceptable material, will not be
- Grout under base plates and bearing plates shall be high strength, non—shrink, non—metallic grout with a minimum compressive strength, at 28 days, of 7,500 psi.
 Reinforcement shall be placed so that the following minimum concrete cover is provided, unless
- noted otherwise.

1) Concrete poured against earth	3" Clear
Formed surfaces exposed to earth or weather.	
a) #6 Bars and larger	2" Clear
b) #5 Bars and smaller	1-1/2" Clear
3) Concrete not exposed to earth or weather	3/4" Clear
4) Beams, columns, ties, stirrups or spirals	
around primary reinforcement, or primary	
reinforcement with no ties, stirrups or spirals.	1-1/2" Clear
5) Slabs	Placed at center (U.N.O.)
Wire Fabric (WWF) shall conform to ASTM A185. Provide	de WWF in flat sheets, rolled sheets are

- Welded not allowed. Where permitted use contact lap splices, (50) bar diameters minimum.
- Foundation walls below grade shall have backfill placed equally on both sides until the required levels are reached. Walls shall be appropriately shored when backfill is placed on one side only. Additional (2) #4 bars (one each face) with a 2'-0'' projection shall be placed diagonally across the
- corners of all openings and at vertical steps in walls unless otherwise detailed on plans.
- The contractor is responsible for determining when it is safe to remove forms and/or shoring. Forms and shoring must not be removed until the walls are strong enough to support their own weight and any superimposed loads. For foundation walls, this typically requires 12 hours of cumulative curing time at a temperature of 50° F or more. Concrete must be adequately covered during cold periods to maintain this surface temperature. Due to varying weather conditions, alternative curing processes, and the use of Type I/II cement, GreenWorks Engineering suggests forms remain in place a minimum of 3 days to assure this performance specification has been met. When forms are stripped there must be no excessive deflection, distortion, discoloration and no evidence of damage to the concrete. Adequate thermal protection of the concrete shall be continued after stripping for a cumulative period of 48 hours at 50°F, or more, after the initial pour. See applicable notes for specifications on when to backfill foundation walls.

K. Field Quality Control

- Reference standard: ACI 301 Chapters 16 and 17, in latest edition.
 - Slump tests: The contractor shall provide necessary equipment and shall make test in conformity with ASTM C143. The contractor shall make slump tests on the first concrete truck of each pour and as often as deemed necessary by the contractor to maintain the required slump when directed by the Architect or Engineer of Record.
 - Control tests:
 - Control tests of concrete work shall be made on every 50 cubic yards or fraction thereof of concrete placed and, in any case, minimum of once during each day's pour.
 - Each test shall consist of four standard 6" test cylinders cast and cured in accordance with ASTM C31 and ASTM C172.
 - Sample concrete at point of placement.
 - One cylinder shall be tested at the end of 7 days after placing, two cylinders shall be tested at 28 days after placing and the remaining cylinder shall be stored until its disposition is determined
 - general, remaining cylinder will be tested only when previous test reports
 - indicated unsatisfactory results. Tests on remaining cylinder shall be at the expense of the contractor.
 - Architect and /or Engineer of Record reserves the right to stop future concrete work when the 7 or 28 day tests indicate unsatisfactory results until, in the opinion of the Architect and/or Engineer of Record, proper corrective measures have been taken to insure quality concrete in future work and corrections deemed necessary have been made.
 - Tests shall be made at time control tests are taken and so stated in reports to determine slump, air content, unit weight and
 - All tests shall be made in accordance with ASTM C138 or ASTM C2.31
 - 4) Slab tolerance: Maintain surface flatness with maximum variation of 1/8" in

- STRUCTURAL STEEL:
 A. Structural steel, including cast in angles, plates or other sections shall be detailed and erected in accordance with the American Institute of Steel Construction (AISC) Specifications and Code of Standard Practice, latest edition.
- All wide flange and channel structural steel shall conform to ASTM A992. All HSS members shall conform to ASTM A500, Grade-B. Pipe columns shall conform to ASTM A53, Grade—B. All other structural shapes and miscellaneous steel shall conform to ASTM A36 unless otherwise noted.
- Column base plates shall be set on 1 1/2" non-shrink high density grout with a minimum of (4) 3/4"ø x 1'-0" anchor bolts, unless noted otherwise.
- Shop connections shall be welded with E70xx electrodes and ground smooth where exposed. Field connections shall be made with bolts conforming to ASTM A325N unless otherwise noted. Field welds shall be made with E70xx electrodes. All welding shall be in accordance with AWS "Structural Welding Code", latest edition and performed by certified, licensed welder.
- All beam connections not detailed on the drawings shall be standard framed beam connections as shown in Table II and III of the AISC "Manual of Steel Construction", latest edition, designed to carry the full capacity of the uniformly loaded member, unless noted otherwise.
- Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded.
- Steel stairs to be detailed and designed by others unless noted otherwise. Stair detailer shall provide shop drawings and calculations prepared and stamped by a structural engineer registered in the state of Texas, for review by the Engineer of Record to verify they conform to the requirements of the basic structure. Fabrication shall not proceed until completion of shop drawing review by the Engineer of Record.
- All exposed structural steel shall be not dipped galvanized.
 Field Quality Control: Inspect in accordance with AISC specifications. Materials engineer shall visually inspect all field welded connections and visually inspect all bolted connections to ascertain that all welds, bolts, nuts and required washers have been installed and are of proper type and that all facing surfaces have been brought into snug contact.

HELICAL PILES:

All helical piles/anchors and end caps shall be manufactured and supplied by Magnum Piering Inc. Piles, anchors and caps shall be aglyanized steel.

Helical piles/anchors shall be furnished and installed at the locations, inclinations, and orientations shown on the plans. Standard tolerance for transverse positioning is \pm 1"; fo longitudinal positioning the tolerance is \pm 0.5", and for declination the tolerance is \pm 5. Helical piles/anchors should extend to or beyond the minimum depth shown on the plans or contained in the soil report. Continue installation until installation torque equals or exceeds that shown on the helical pile/anchor schedule. Log installation depth and torque at 3—foot intervals during installation and submit installation logs to Engineer for review prior to completion of the project.

Backfill shall be placed and compacted per soil report. At a minimum, backfill may consist of non-expansive on-site soils or imported sandy soils. Backfill materials shall be free of cobbles, boulders, and debris greater than 3" diameter. Backfill materials shall not contai frozen soil or water, organics or any deleterious materials. Backfill shall be placed and compacted in thin (8" max) lifts.

D. Drainage:

The ground surface shall be sloped as much as practical to conduct runoff water away from foundations and retaining walls. For new construction, Magnum Geo—Solutions, LLC. typically recommends a minimum slope of 10% in landscaped areas and 1% for pavements and slab—on—grade. This drainage should be monitored and maintained throughout the life of the structure.

E. Foundation Drains:

Foundation and retaining wall drains should conform to the geotechnical engineer's report. At a minimum, foundation drains, if any, shall consist of drainage fabric over 12" of clean gravel over a 4" perforated pipe sloped at k" per foot to daylight well beyond the foundation or earth retention system or to a sump pit with pump.

F. Limitations:

This Plan is based on client furnished plans, soil report, and the above referenced specifications. It is the contractors responsibility to verify and coordinate all dimensions prior to construction. Any discrepancies or changes should be brought to the attention the Engineer. This plan is only a helical pile/anchor plan. Unknowns could exist regarding the construction of the structure and subsurface properties that could affect pile/anchor performance. This plan was prepared to the level of skill and care ordinarily practiced by other engineers in this area at this time. No warrantee is made by Engineer, express o

This plan is based on products manufactured by Magnum Piering, Inc. and methods of installation practiced by Magnum Authorized Dealers. This plan is invalid for products manufactured by others and any other installation contractors.

STRUCTURAL LEGEND						
- S-	DETAIL # OR LETTER SHEET DETAIL IS ON		INTERIOR BRACED WALL			
(1)	SEE KEYED NOTES		ROOF LINE			
B1	BEAM/HEADER SCHEDULE		STEEL FRAMING			
	COL/POST SCHEDULE		FRAMED WALL			
3	HOLDOWN PER PLAN LEGEND		FOUNDATION PERIMETER			
	SOLID BOX INDICATES LOAD		FOUNDATION FOOTING/BEAM			
LA	CONTINUES DOWN TO FOUNDATION BELOW	TYP	TYPICAL			
	OPEN BOX INDICATES LOAD	SP	SOUTHERN PINE			
	CARRIED BY BEAM OR HEADER BELOW	O.C.	ON CENTER			
	- JOIST SPAN	К	KING/FULL-HEIGHT STUD			
	RAFTER SPAN	Т	TRIMMER/JACK STUD			
	COMMODITY LUMBER HEADER	LVL	LAMINATED VENEER LUMBER			
:=====:	:LVL BEAM OR HEADER	SIM	SIMILAR			
	PRE-MANUFACTURED TRUSS	0.S.B.	ORIENTED STRAND BOARD			
	- LEDGER	Ę	CENTER LINE			
<u> </u>	JOIST/RAFTER SPAN	G.T.	GIRDER TRUSS			
 	(BEAR ON BEAM)	HSS	HOLLOW STRUCTURAL SECTION			
<u> </u>	JOIST/RAFTER SPAN	GLB	GLUE-LAMINATED BEAM			
 	(FLUSH FRAME TO BEAM)	BWL	BRACED WALL LINE			
0>	ROOF BRACE & THROW	GALV.	GALVANIZED			
<u> </u>	BRACED WALL LINE	MIN./MAX.	MINIMUM/MAXIMUM			
	EXTERIOR BRACED WALL	U.N.O.	UNLESS NOTED OTHERWISE			



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COURT TEXAS WINDLASS GALVESTON, 3427

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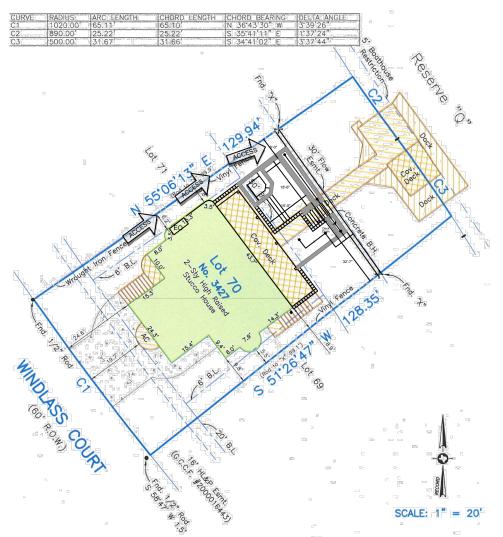
NEW

DESIGN BY: SS DRAWN BY: SS DATE: 08/22/2023 REVISION: DATE: REV 1 08/23/2023 REV 2 09/13/2023

SHEET No.

1 OF 1

РКОЈЕСТ No. 84197



Survey of Lot Seventy (70), in Block Two (2), of PIRATES COVE, SECTION SIX (6) SECOND AMENDING PLAT, a subdivision in Galveston County, Texas, according to the map or plat thereof recorded in Volume 18, Page 574, in the Office of the County Clerk of Galveston County, Texas.

I hereby certify that on the below date, the herein described property, together with improvements located thereon, was surveyed on the ground and under my direction, and that this map, together with dimensions as shown hereon, accurately represents the facts as found on the ground-this date.





GALVESTON OFFICE
Registration Number: 10193855
(409) 740-1517 www.hightidelandsurveying.com
8017 HARBORSIDE DRIVE GALVESTON, TX 77854
Mailing J P. O. BOX 16142 | GALVESTON, TX 77852

NOTES:

1) This property does lie within the 100 Year Flood Plain as established by the Federal Emergency Management Agency.

2) This property is subject to any restrictions of record as established by the City Plat, or Subdivision Covenants and Restrictions; may also be subject to easements and setbocks for utility services and power lines as individually recorded or established by OSFIA (call your power company).

established by USHA (call your power company).

3) Bearings based on Northeasterly R.O.W. line of Windloss Court.

4) Surveyed without benefit of a Title Report.



Date Total Depth of Boring: Groundwater Depth: 12	Boring Log					Boring No. BH-1			
Depth (feet) Dept		Date		Total Depth of Boring:	Groundwater Depth:			th:	
2	5			20 ft	<u> </u>				
2	Depth (feet)	tst Penetrometer, Hand	(blows/foot) Blow Counts	Lithology	Moisture	200 Sieve Passing No.	Liquid Limit	Plasticity Index	
4 8 10 10 15 15 17 12 36 NP NP 115 15 15 15 15 15 15 15 15 15 15 15 15				Brown SILTY SAND (SM) with clay pockets	9	47 N	P NP		
10	2								
15	4		8						
10	6		10						
15 Light brown, with shells 13' to 20'	8		15						
15	10		17	-	12	36 NP	NP		
20 25	15		24	Light brown, with shells 13' to 20'					
	20		25						
					1				
BUILD ENGINEERING GROUP, LLC Boring Log: Sheet 1 of 1					L			Ш	

Silty Sand

Fat Clay
Limestone

Clayey Sand
Sandy Silty Clay

SITE INFORMATION
SCALE: N.T.S.





3427 WINDLASS COURT POOL NEW

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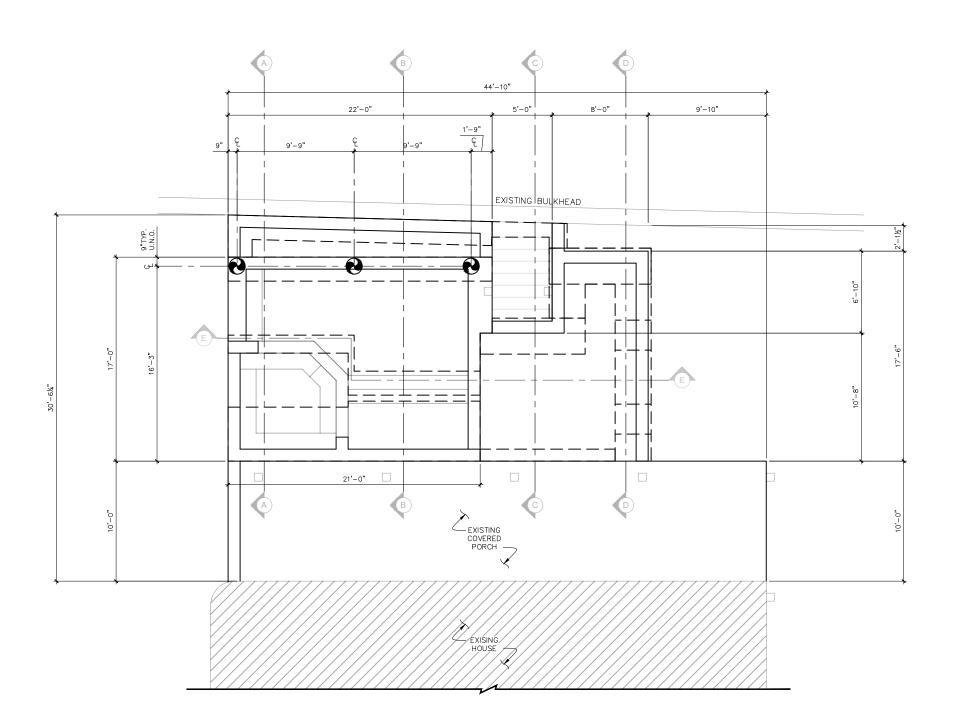
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DESIGN BY: SS DRAWN BY: DATE: 08/22/2023 REVISION: DATE: REV 1 08/23/2023 REV 2 09/13/2023

SHEET No.

2 OF 11

PROJECT No. 84197



FOUNDATION DESIGN BASED ON NON-EXPANSIVE SOIL W/ MIN. BEARING CAPACITY 1500 PSF. CONTACT GREENWORKS ENGINEERING IMMEDIATELY IF IN-SITU CONDITIONS DIFFER

2. DRAINAGE SHALL BE MAINTAINED AROUND THE FOUNDATION AT ALL TIMES DURING AND AFTER CONSTRUCTION. SURFACE WATER SHALL FLOW RAPIDLY AWAY FROM THE FOUNDATION.



NEW POOL

3427 WINDLASS COURT

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REV 1 08/23/2023
REV 2 09/13/2023

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PROJECT No. 84197

FOUNDATION PLAN

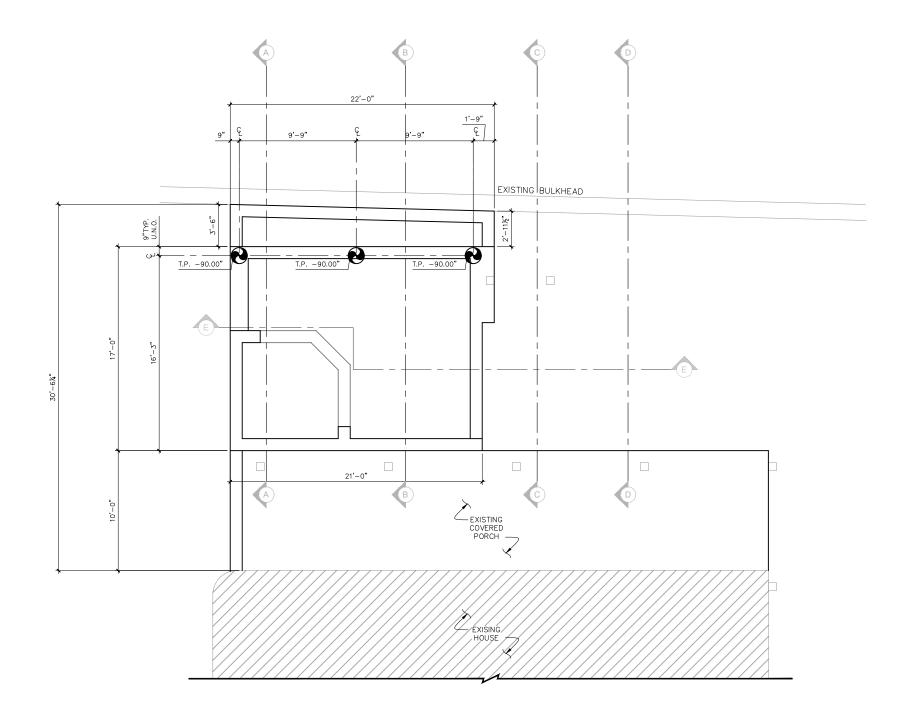
SCALE: 1/8" = 1'-0"

VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION

PILE SCHEDULE									
SYMBOL	No. PILES	ANCHOR/ PILE TYPE	HELIX SIZE	SHAFT	MIN. DEPTH (FT)	COATING	ULT. CAPACITY (Tons)	ALL. CAPACITY (Tons)	MINIMUM TORQUE (ft-lb)
9	3	MH325BR	(1) 12" ø	HSS 3.00"x0.27" ASTM A513		GALVENIZED	50 tons	25 TONS	3,000

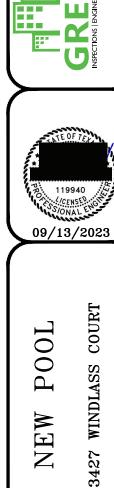
FOUNDATION DESIGN BASED ON NON-EXPANSIVE SOIL W/ MIN. BEARING CAPACITY 1500 PSF. CONTACT GREENWORKS ENGINEERING IMMEDIATELY IF IN-SITU CONDITIONS DIFFER

DRAINAGE SHALL BE MAINTAINED AROUND THE FOUNDATION AT ALL TIMES DURING AND AFTER CONSTRUCTION. SURFACE WATER SHALL FLOW RAPIDLY AWAY FROM THE FOUNDATION.



ALL ELEVATION POINTS ARE RELATIVE TO EXISTING DECK ELEVATION OF +0.00"

VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION



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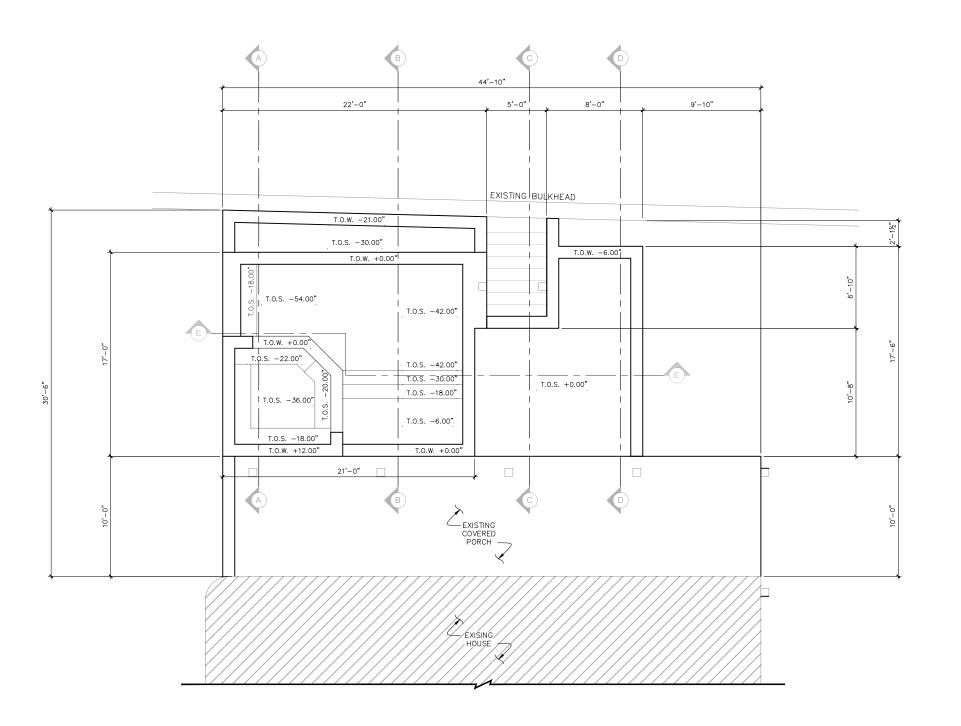
SHEET No.

53 4 OF 11

PROJECT No. 84197

PIER PLAN

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



FOUNDATION DESIGN BASED ON NON-EXPANSIVE SOIL W/ MIN. BEARING CAPACITY 1500 PSF. CONTACT GREENWORKS ENGINEERING IMMEDIATELY IF IN-SITU CONDITIONS DIFFER

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VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION



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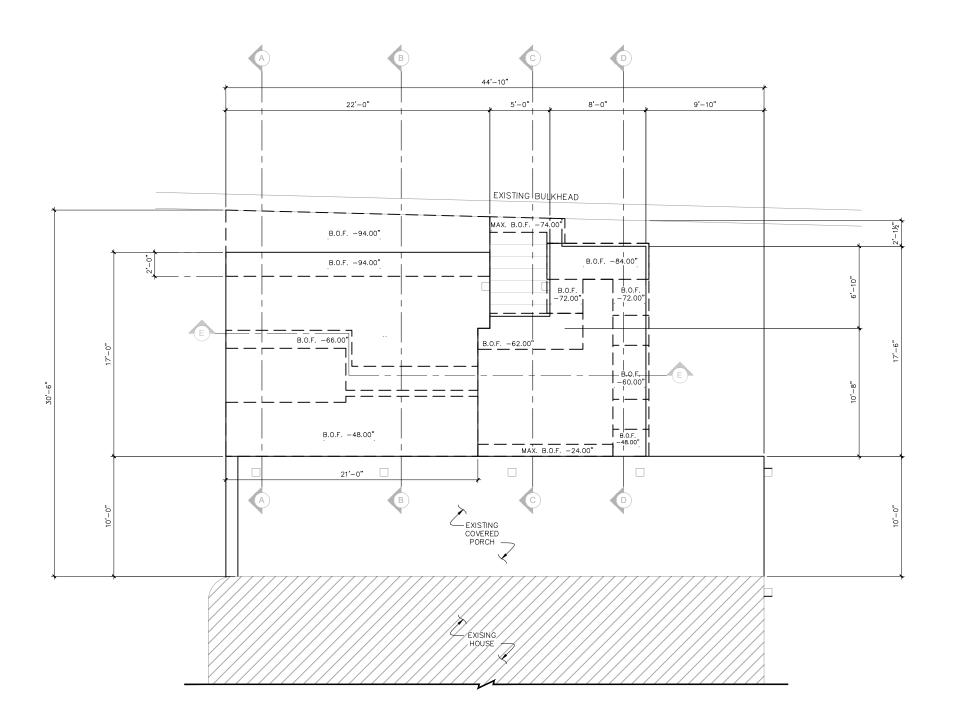
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5 OF 11

PROJECT No. 84197

ALL ELEVATION POINTS ARE RELATIVE TO EXISTING DECK ELEVATION OF +0.00" CONCRETE PLAN

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



FOUNDATION DESIGN BASED ON NON-EXPANSIVE SOIL W/ MIN. BEARING CAPACITY 1500 PSF. CONTACT GREENWORKS ENGINEERING IMMEDIATELY IF IN-SITU CONDITIONS DIFFER

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ALL ELEVATION POINTS ARE

RELATIVE TO EXISTING DECK ELEVATION OF +0.00"

VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION



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3427 WINDLASS COURT GALVESTON,

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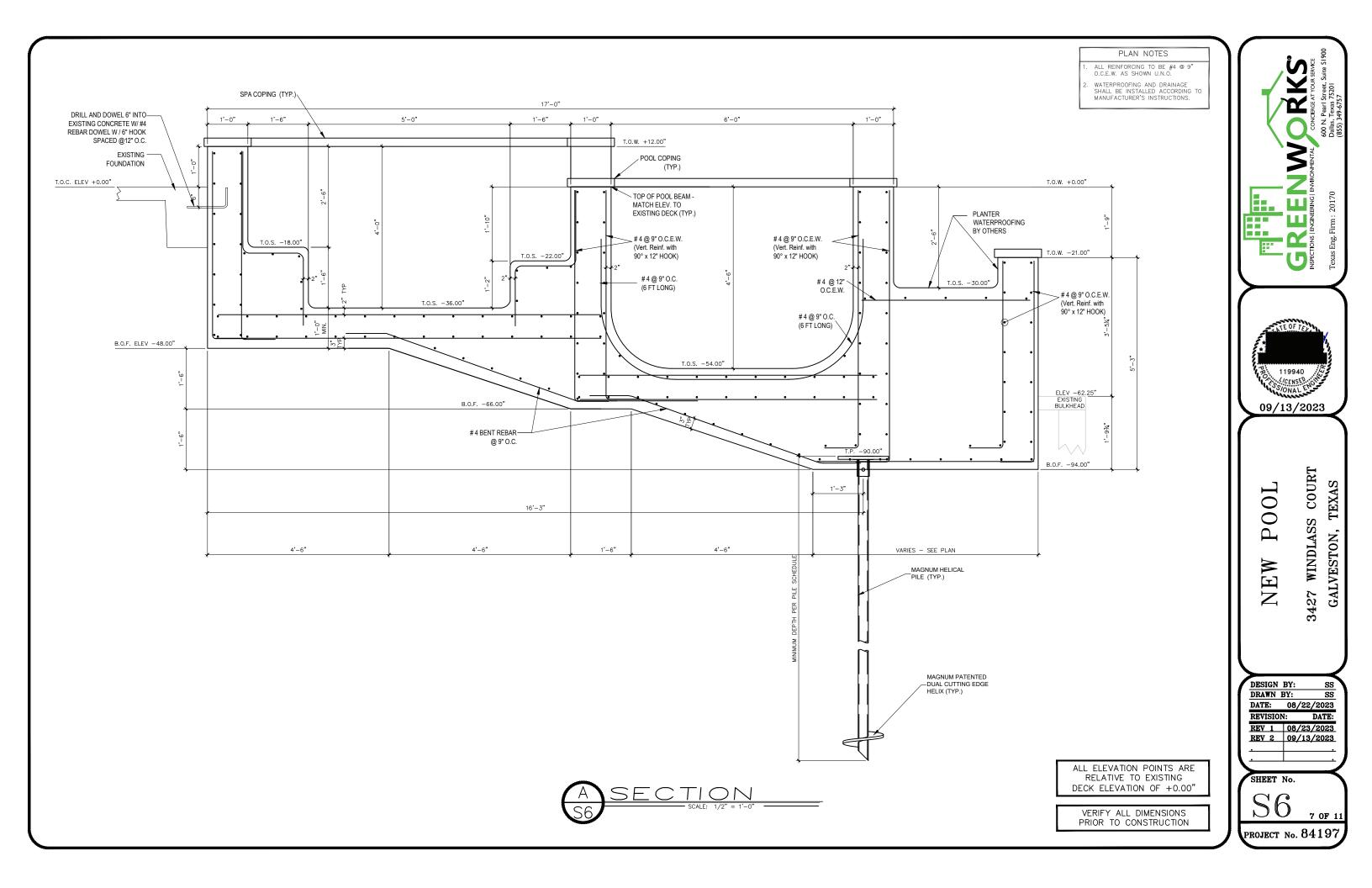
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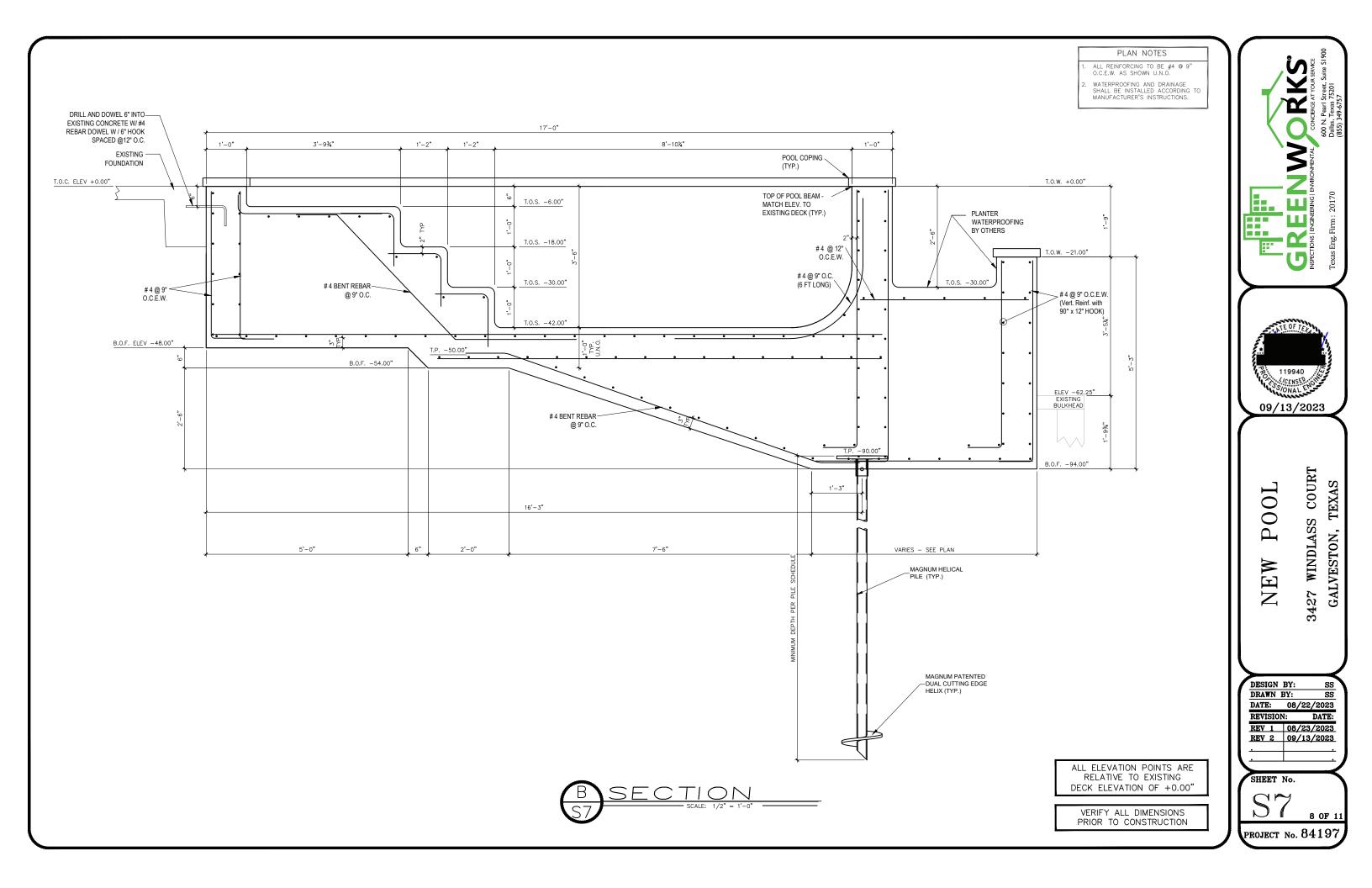
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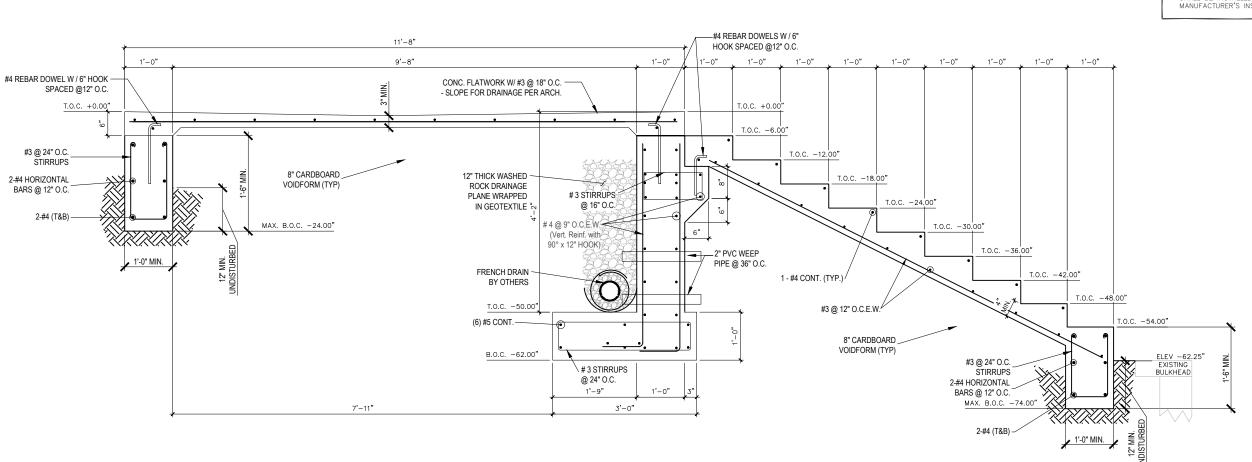
PROJECT No. 84197

FOOTING PLAN

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









- ALL REINFORCING TO BE #4 @ 9" O.C.E.W. AS SHOWN U.N.O.
- 2. WATERPROOFING AND DRAINAGE SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

NEW POOL

3427 WINDLASS COURT

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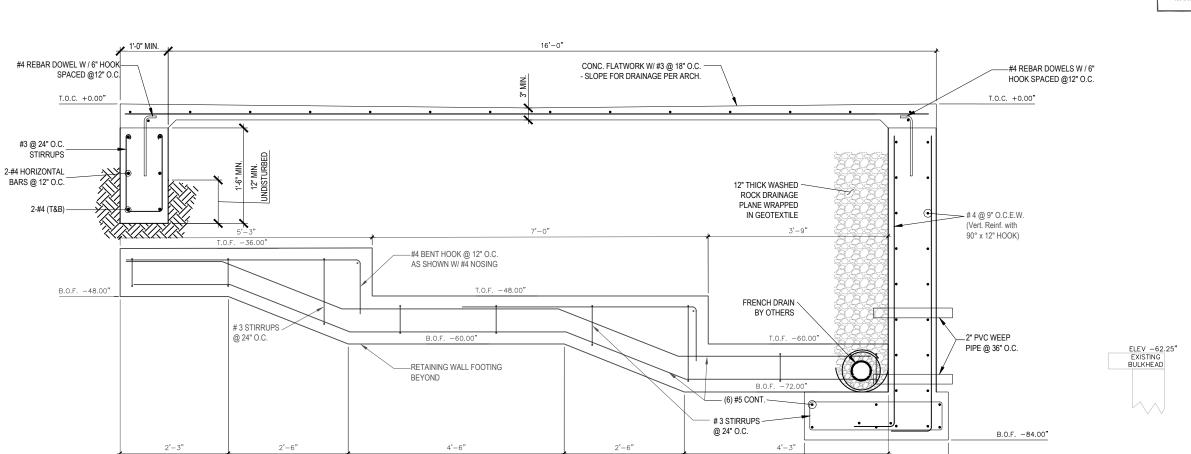
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ALL ELEVATION POINTS ARE RELATIVE TO EXISTING DECK ELEVATION OF +0.00"

VERIFY ALL DIMENSIONS

PRIOR TO CONSTRUCTION





- ALL REINFORCING TO BE #4 @ 9" O.C.E.W. AS SHOWN U.N.O.
- 2. WATERPROOFING AND DRAINAGE SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION

NEW POOL

3427 WINDLASS COURT

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PROJECT No. 84197

ALL ELEVATION POINTS ARE
RELATIVE TO EXISTING
DECK ELEVATION OF +0.00"



