

COVER SHEET

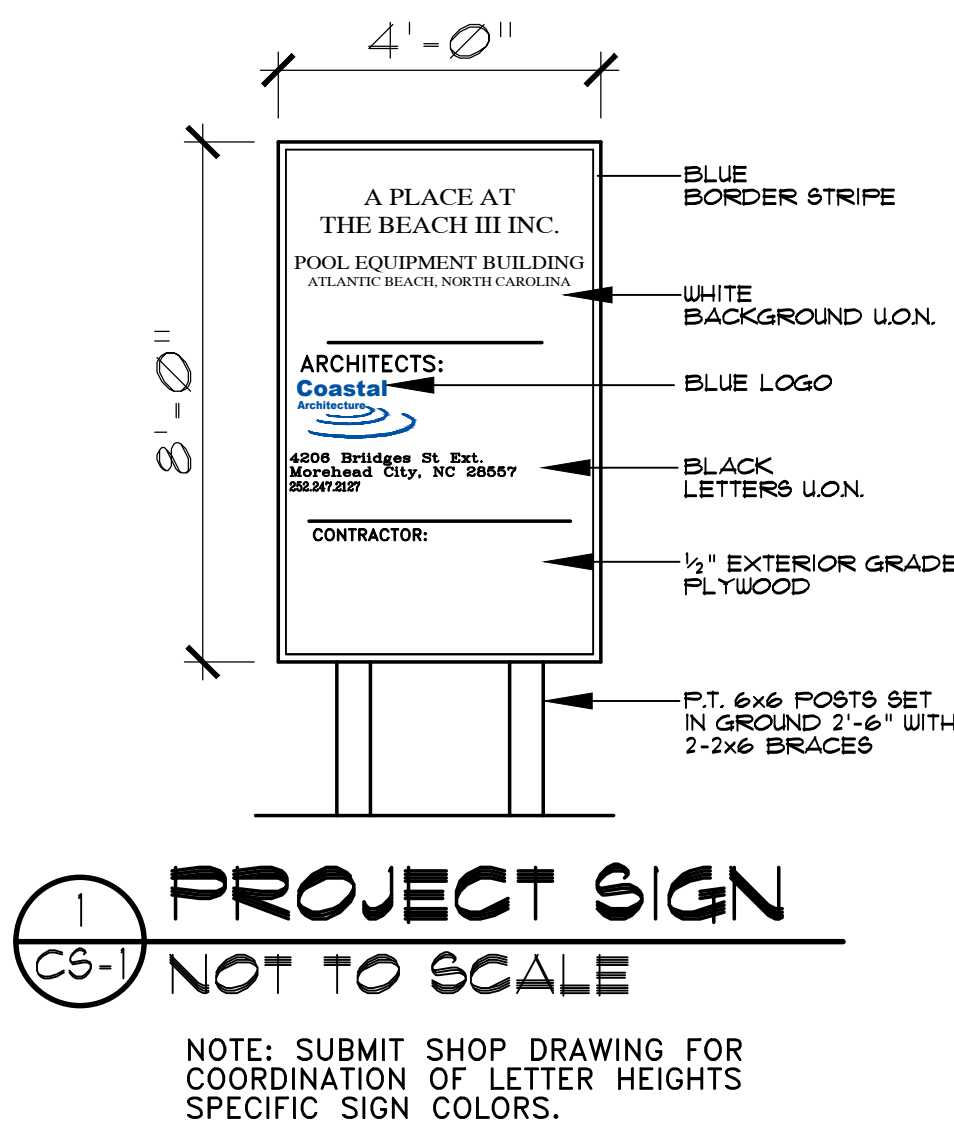
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ISSUED: 08/18/25
DWG BY: CRF
CKD BY: LDD
REVISIONS

SHEET NO.
CS-1
OF

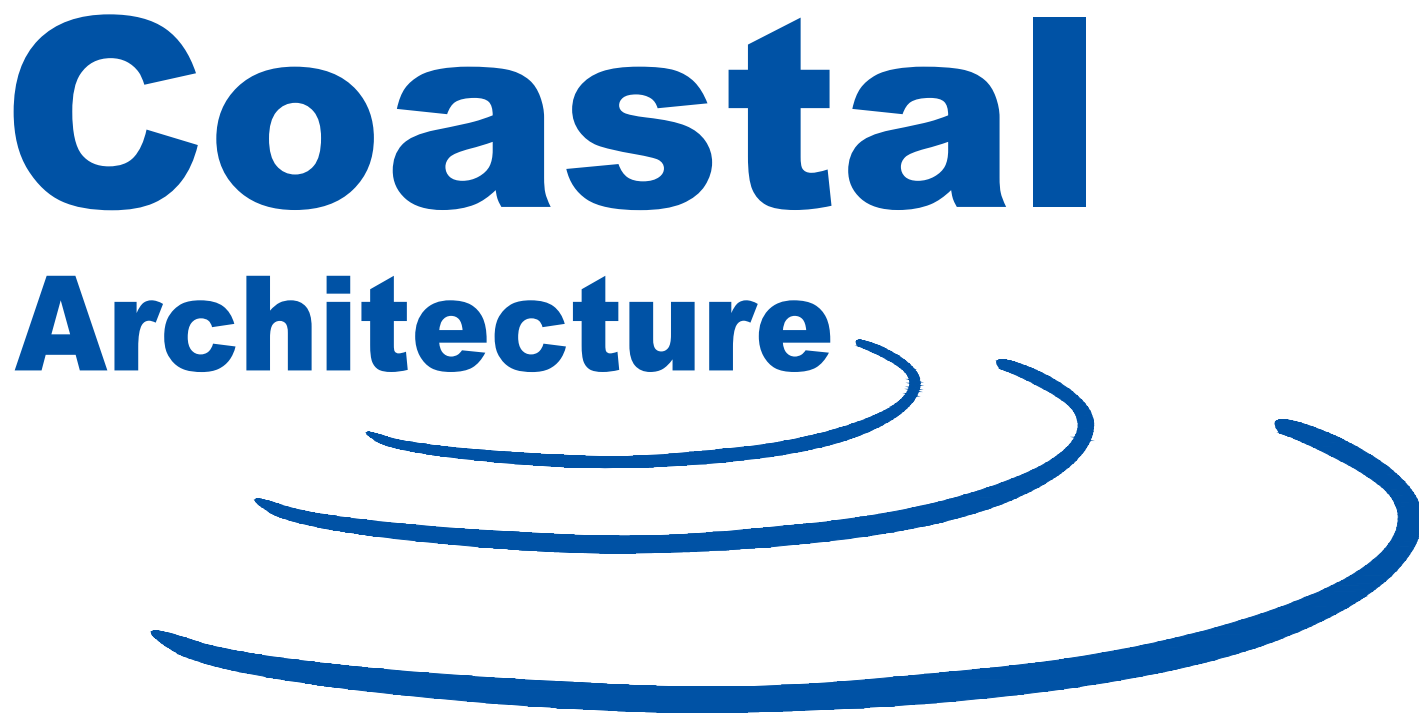
A PLACE AT THE BEACH III INC. POOL EQUIPMENT BUILDING

ATLANTIC BEACH, NORTH CAROLINA



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APPENDIX B
2018 BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: **A PLACE AT THE BEACH III INC. POOL EQUIPMENT BUILDING**
Address: **1924 E FORT MACON RD** Phone # (252) 241-2121 Zip Code 28512
Owner/Authorized Agent: **LEE DIXON** E-Mail **lee@coastalarchitecture.net**
Owned by: ☐ City/County ☒ Private ☐ State
Code Enforcement Jurisdiction: ☒ City ATLANTIC BEACH ☐ County ☐ State

CONTACT:
DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL
Architectural **Coastal Architecture** **Lee Dixon** 6419 (252) 241-2121 **lee@coastalarchitecture.net**
Civil **James Phillips Land Surveying** **Ben Burke** 22038 (919) 111-1916 **benburke@ncrr.com**
Electrical **Burke Design Group** **Ben Burke** 22038 (919) 111-1916 **benburke@ncrr.com**
Fire Alarm _____
Plumbing _____
Mechanical _____
Sprinkler-Standpipe _____
Structural _____
Retaining Walls > 5 feet High _____
Other _____

(*Other* should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ☒ New Building ☐ Shell/Core ☐ 1st Time Interior Completions
☐ Addition ☐ Phased Construction—Shell Core
2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Alteration Level I ☐ Historic Property
(check all that apply) ☐ Repair ☐ Alteration Level II ☐ Change of Use
☐ Chapter 14 ☐ Alteration Level III

CONSTRUCTED: (date) _____ CURRENT USE(S) (Ch. 3): _____
RENOVATED: (date) _____ PROPOSED USE(S) (Ch. 3): _____
OCCUPANCY CATEGORY (Table 1604.5): Current: _____ Proposed: _____

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☒ V-B
Sprinklers: ☐ No ☐ Partial ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Primary Fire District: ☒ No ☐ Yes Flood Hazard Area: ☐ No ☐ Yes
Special Inspections Required: ☒ No ☐ Yes

GROSS BUILDING AREA TABLE

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor			
Basement			
TOTAL			

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)

Exempt Building: ☒ Provide code or statutory reference: **UNHEATED**

Climate Zone: ☒ 3A ☐ 4A ☐ 5A

Method of Compliance:
Energy Code: ☐ Performance ☐ Prescriptive
ASHRAE 90.1: ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE: (Prescriptive method only)
Roof/ceiling Assembly (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Skylights in each assembly: _____
U-Value of skylight: _____
total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazing)
U-Value of assembly: _____
Solar heat gain coefficient: _____
projection factor: _____
Door R-Values: _____

Walls below grade (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors over unconditioned space (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/vertical requirement: _____
slab heated: _____

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐ > 50 OCCUPANTS
Educational ☐ > 1 Moderate ☐ > 2 Low
Factory ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Hazardous ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2
I-2 Condition ☐ 1 ☐ 2
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☒

Accessory Occupancy Classification(s): _____
Incidental Uses (Table 509): _____
This separation is not exempt as a Nonseparated Use (see exceptions).
Special Uses (Chapter 4 – List Code Sections): _____
Special Provisions: (Chapter 5 – List Code Sections): _____
Mixed Occupancy: ☐ No ☐ Yes Separation: _____ Hr Exception: _____
Non-separated Use (508.3): _____
Separated Use (508.4)—See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.
Select one
Actual Area of Occupancy A + Actual Area of Occupancy B
Allowable Area of Occupancy A Allowable Area of Occupancy B 15
____ + _____ = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASES 1	(D) ALLOWABLE AREA PER STORY OR INCREASES 1
1	POOL EQUIPMENT	1671	5500	NOT REQUIRED	5500

- Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
- Unlimited area applicable under conditions of Section 507.
- Maximum Building Area = total number of stories in the building × D (maximum 3 stories) (506.2).
- The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
- Frontage increase is based on the unsprinklered area value in Table 506.2.

STRUCTURAL DESIGN

DESIGN LOADS:
Importance Factors: Wind (IW) _____
Snow (IS) _____
Seismic (IE) _____

Live Loads: Roof 20 psf
Mezzanine _____ psf
Floor 40 psf

Ground Snow Load: _____ psf

Wind Load: Basic Wind Speed 134 mph (ASCE-7)
Exposure Category _____

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☐ C ☐ D

Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) ☒ I ☐ II ☐ III ☐ IV
Spectral Response Acceleration SS _____ % S1 _____ %
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data

Basic structural system (check one)
☒ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☐ No

LATERAL DESIGN CONTROL: ☐ Earthquake ☒ Wind

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 1500 psf
Pile size, type, and capacity _____

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40	1	EXISTING
Building Height in Stories (Table 504.4)	15	1	EXISTING

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQD	PROVIDED (W/ REDUCTION)				
Structural Frame including columns, girders, trusses		0	0				
Bearing Walls							
Exterior							
North		0	0				
East		0	0				
West		0	0				
South		0	0				
Nonbearing walls and partitions							
Exterior walls		-	-				
North		-	-				
East		-	-				
West		-	-				
South		-	-				
Interior walls and partitions							
Floor Construction including supporting beams and joists							
Floor Ceiling Assembly		0	0				
Columns Supporting Floors		0	0				
Columns Supporting Floors							
Roof Construction including supporting beams and joists							
Roof Ceiling Assembly		0	0				
Columns Supporting Roof		0	0				
Shaft Enclosures—Exit		-	-				
Shaft Enclosures—Other		-	-				
Corridor Separation		-	-				
Occupancy/Fire Barrier Separation		-	-				
Party/Fire Wall Separation		-	-				
Smoke Barrier Separation		-	-				
Smoke Partition		-	-				
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A	N/A				
Incidental Use Separation		-	-				

* Indicate section number permitting reduction

MECHANICAL DESIGN

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: _____
summer dry bulb: _____

Interior design conditions
winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

Building heating **N/A**
Building cooling load: _____

Mechanical Spacing Conditioning System
Unitary
description of unit: _____
heating efficiency: _____
cooling efficiency: _____
size category of unit: _____
Boiler
Size category, if oversized, state reason: _____
Chiller
Size category, if oversized, state reason: _____
List equipment efficiencies: _____

ELECTRICAL DESIGN

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:
Energy Code: ☐ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance

Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps **SEE ELECTRICAL**
ballast type used _____
number of ballasts in fixture
total wattage per fixture
total interior wattage specified versus allowed (whole building or space by space)
total exterior wattage specified versus allowed

Additional Prescriptive Compliance
☐ 506.2.1 More Efficient Mechanical Equipment
☐ 506.2.2 Reduced Lighting Power Density
☐ 506.2.3 Energy Recovery Ventilation Systems
☐ 506.2.4 Higher Efficiency Service Water Heating
☐ 506.2.5 On-Site Supply of Renewable Energy
☐ 506.2.6 Automatic Daylighting Control Systems

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION [TABLE 705.3]	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
>30	UPNS	N.L.	-

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☒ Yes ☐ No
Exit Signs: ☒ Yes ☐ No
Fire Alarm: ☐ Yes ☒ No
Smoke Detection Systems: ☐ Yes ☒ No
Carbon Monoxide Detection: ☐ Yes ☒ No

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: **G-2**
☒ Fire and/or smoke rated wall locations (Chapter 7)
☒ Assumed and real property line locations (if not on the site plan)
☒ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☒ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
☒ Occupant loads for each area
☒ Exit access travel distances (1017)
☒ Common path of travel distances [Tables 1006.2.1 & 1006.3.2(1)]
☒ Dead end lengths (1020.4)
☒ Clear exit widths for each exit door
☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
☒ Actual occupant load for each exit door
☒ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
☒ Location of doors with panic hardware (1010.1.10)
☒ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☒ Location of doors with electromagnetic egress locks (1010.1.9.9)
☒ Location of doors equipped with hold-open devices
☒ Location of emergency escape windows (1030)
☒ The square footage of each fire area (202)
☒ The square footage of each smoke compartment for Occupancy Classification 1-2 (407.5)
☒ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
		N/A					

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE UNITS PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESSIBLE	132" ACCESSIBLE	8' ACCESSIBLE	
		N/A				
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/TUBS	DRINKING FOUNTAINS	
	Male	Female	Unisex		Male	Female	Unisex		Regular	Accessible
SPACE	EXIST'G	-	-	-	-	-	-	-	-	-
	NEW	-	-	-	-	-	-	-	-	-
	REQD	-	-	-	-	-	-	-	-	-

TOILET CALC

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

NONE



- Architectural Design
- Planning
- Interiors



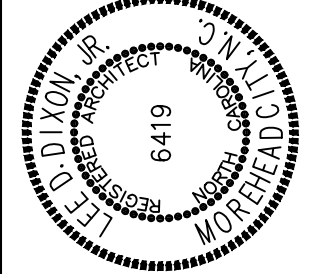
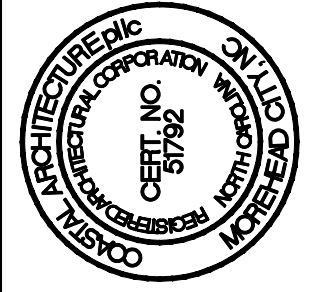
Member of the American Institute of Architects

Lee D. Dixon, Jr., AIA
252-247-2121
lee@coastalarchitecture.net

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Suite C
Morehead City, NC 28557

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A PLACE AT THE BEACH III INC.
POOL EQUIPMENT BUILDING
ATLANTIC BEACH, NORTH CAROLINA



GENERAL DATA

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DWG BY: SKC

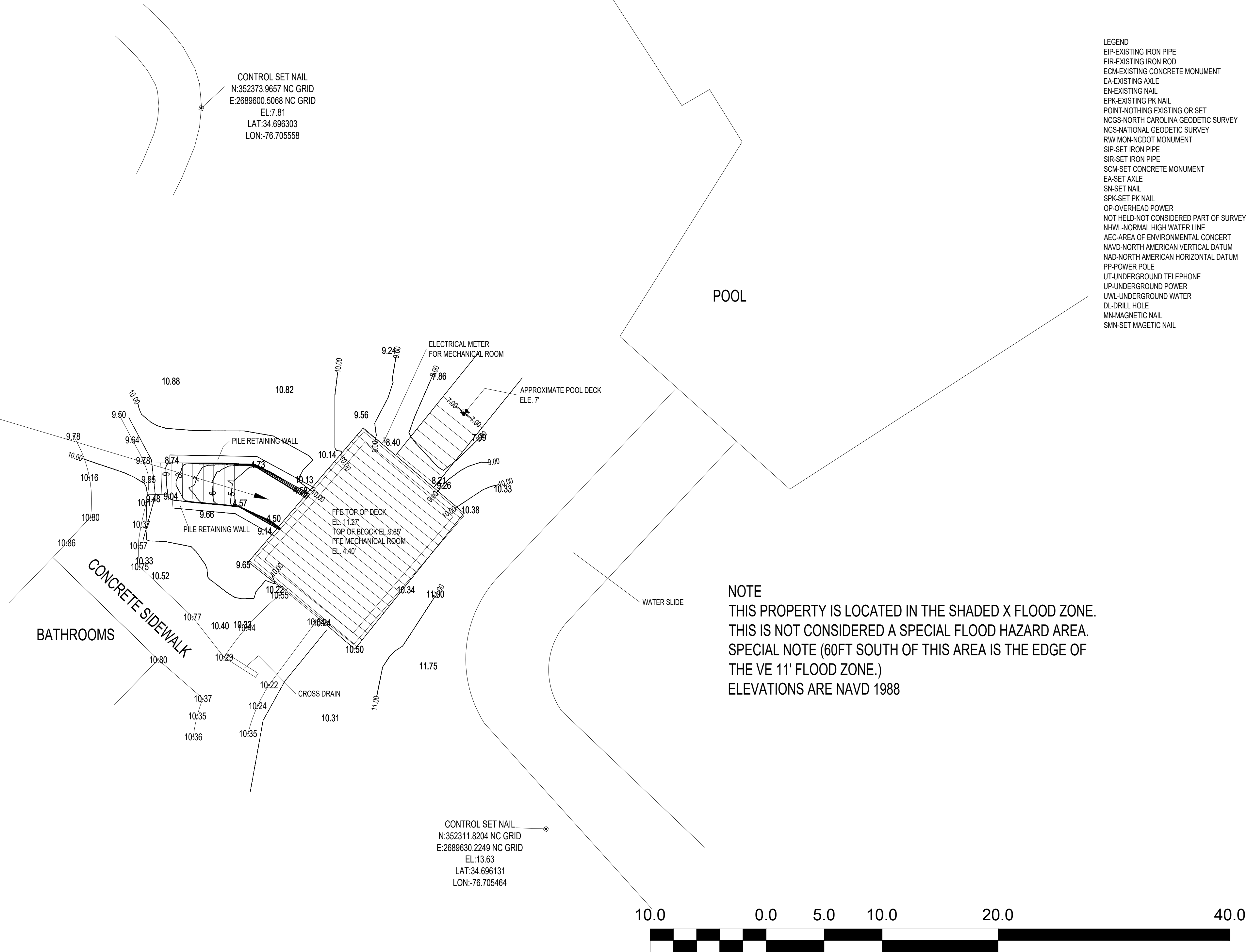
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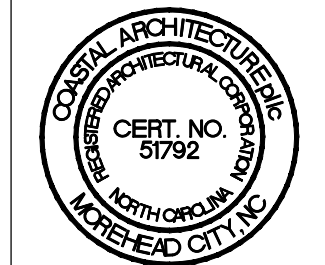
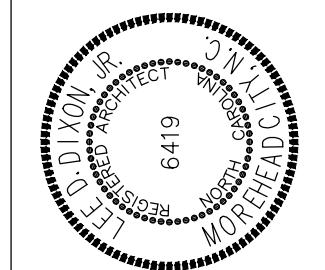
G-1

OF



NOTE
SURVEY TAKEN FROM JAMES I. PHILLIPS LAND SURVEYING
01-17-2025

DATE OF FIELD SURVEY: 1-17-2025	DATE OF MAPPING:
SURVEY BY: JIP	DRAWN BY: JIP
CHECKED BY: JIP	
JAMES I. PHILLIPS LAND SURVEYING PO BOX 2103, 379 Arrington Rd., Beaufort, N.C. 28516 252-728-5848 phone jphillipssurvey@gmail.com	



SITE PLAN

24033

ISSUED: 08/19/25

DWG. BY: CRF

CKD. BY: LDD

REVISIONS

SHEET NO.

SD-1

OF

LEGEND
EIP-EXISTING IRON PIPE
EIR-EXISTING IRON ROD
ECM-EXISTING CONCRETE MONUMENT
EA-EXISTING AXLE
EN-EXISTING NAIL
EPK-EXISTING PK NAIL
PONT-NOTHING EXISTING OR SET
NCGS-NORTH CAROLINA GEODETIC SURVEY
NGS-NATIONAL GEODETIC SURVEY
R1/4 MON-NCDOT MONUMENT
SIP-SET IRON PIPE
SIR-SET IRON PIPE
SCM-SET CONCRETE MONUMENT
EA-SET AXLE
EN-SET NAIL
SPK-SET PK NAIL
OP-OVERHEAD POWER
NOT HELD-NOT CONSIDERED PART OF SURVEY
NHUL-NORMAL HIGH WATER LINE
AEC-AREA OF ENVIRONMENTAL CONCERN
NAVVD-NORTH AMERICAN VERTICAL DATUM
NAD-NORTH AMERICAN HORIZONTAL DATUM
PP-POWER POLE
UT-UNDERGROUND TELEPHONE
UP-UNDERGROUND POWER
UWL-UNDERGROUND WATER
DL-DRILL HOLE
MN-MAGNETIC NAIL
SMN-SET MAGNETIC NAIL

EXIST.
POOL

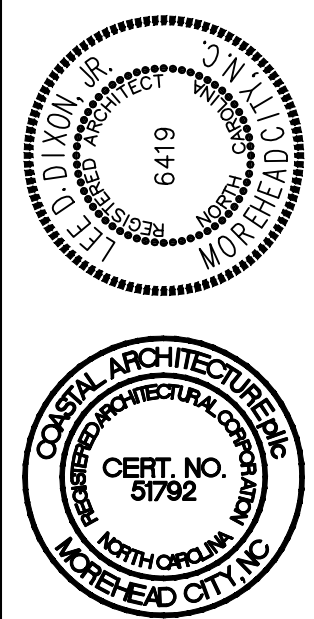
NOTE
THIS PROPERTY IS LOCATED IN THE SHADED X
FLOOD ZONE.
THIS IS NOT CONSIDERED A SPECIAL FLOOD
HAZARD AREA.
SPECIAL NOTE (60FT SOUTH OF THIS AREA IS
THE EDGE OF THE VE II' FLOOD ZONE.)
ELEVATIONS ARE NAVD 1988

SITE PLAN

SCALE: 1"=10'-0"



NC GRID NAD 1983 (2011)
NCGS RTK 1-17-2025



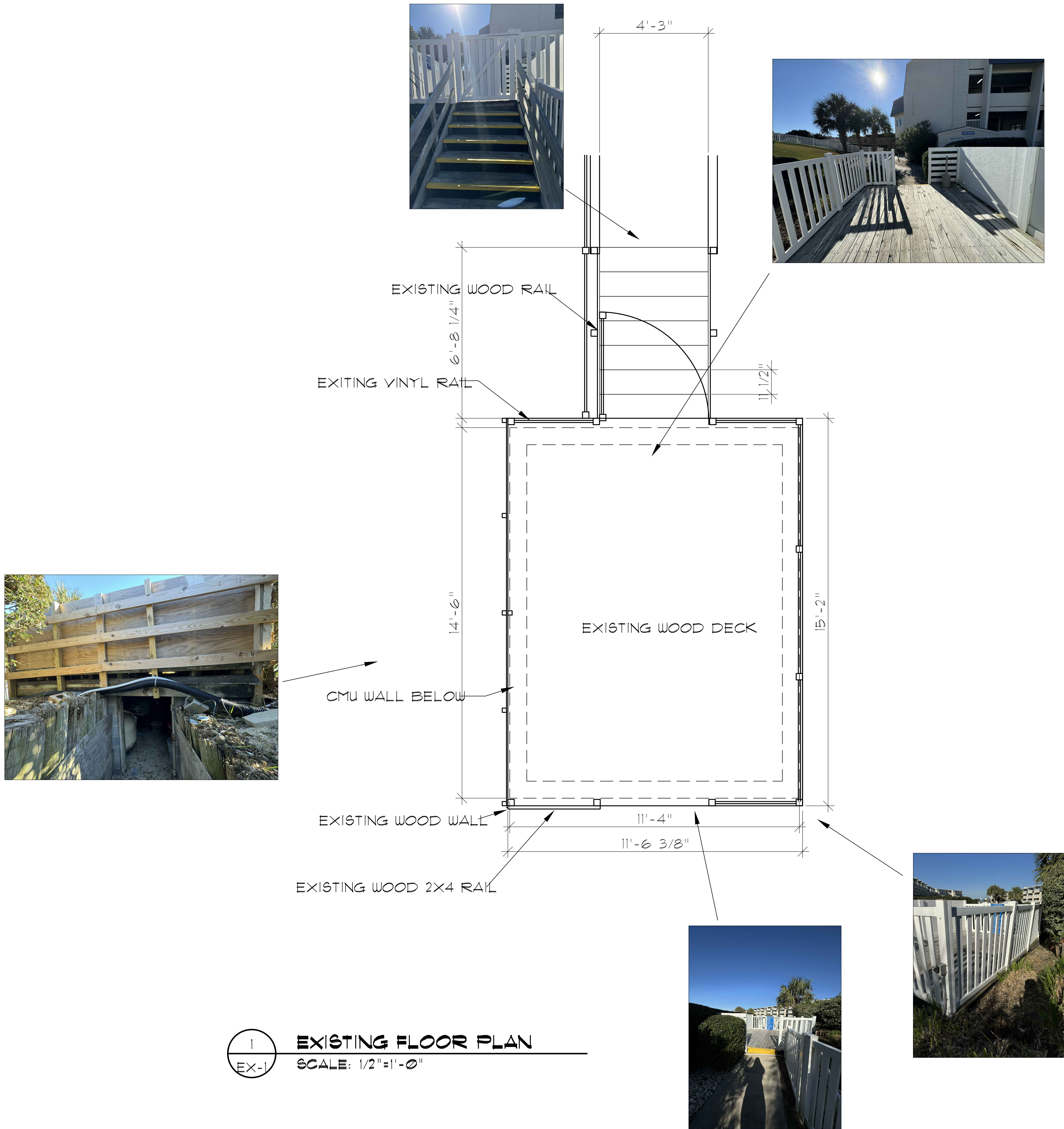
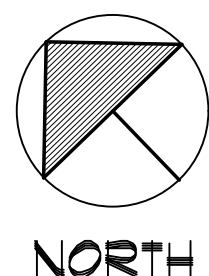
EXISTING FLOOR PLAN

24033

ISSUED: 08/19/25
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CKD BY: LDD

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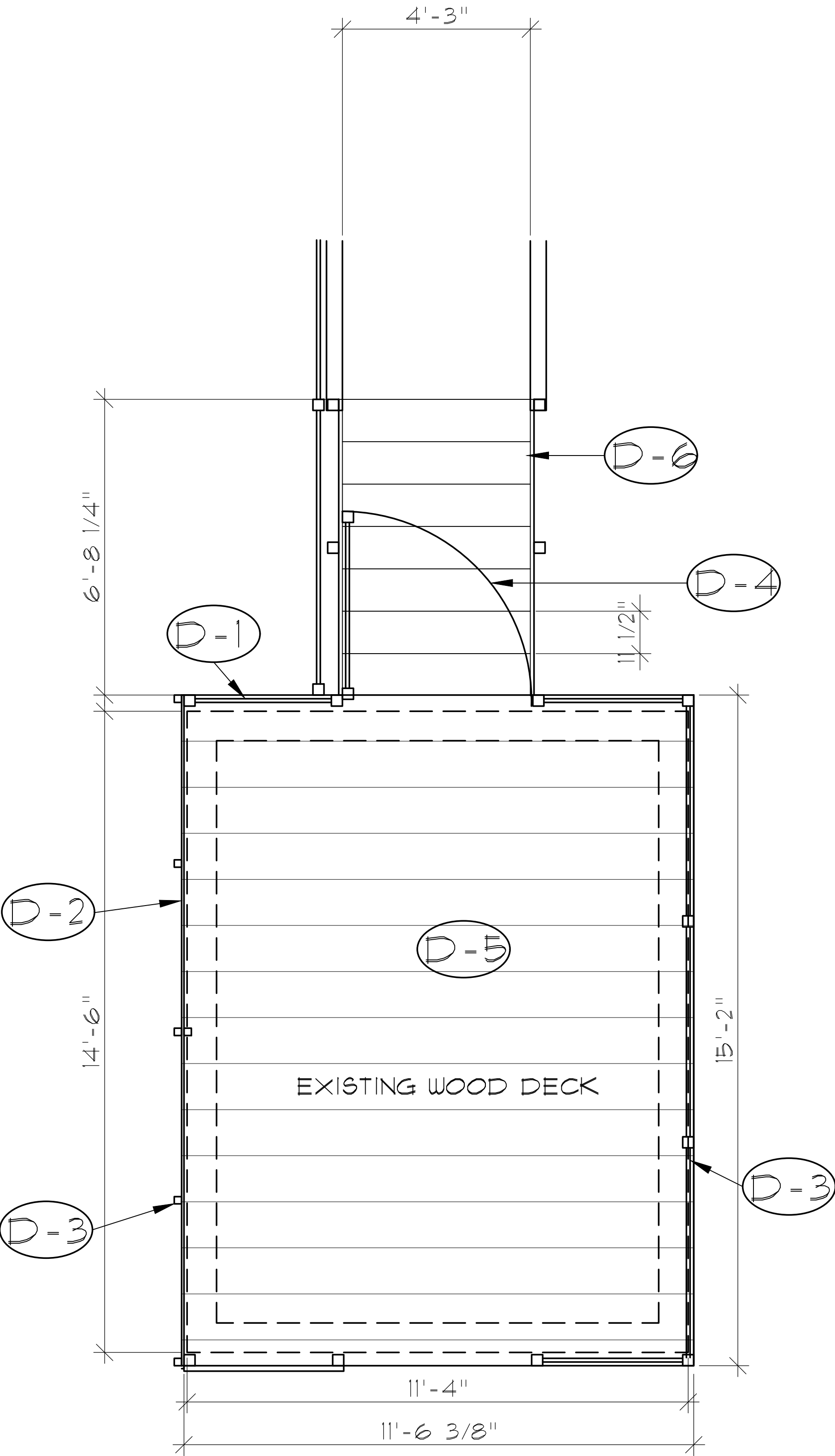
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OF



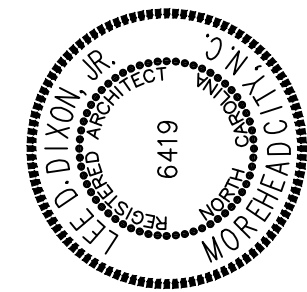
1
EX-1
EXISTING FLOOR PLAN
SCALE: 1/2"=1'-0"

GENERAL NOTES:

- D-1 REMOVE EXISTING VINYL FENCE
- D-2 REMOVE EXISTING FENCE BOARD
- D-3 REMOVE EXISTING FENCE POST
- D-4 REMOVE EXISTING FENCE GATE
- D-5 REMOVE TOP WOOD DECK
- D-6 REMOVE EXISTING STAIRS



1 SELECTIVE DEMO FLOOR PLAN
D-1
SCALE: 1/2"=1'-0"



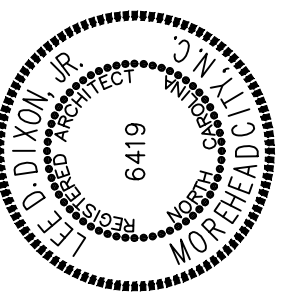
SELECTIVE DEMO
FLOOR PLAN

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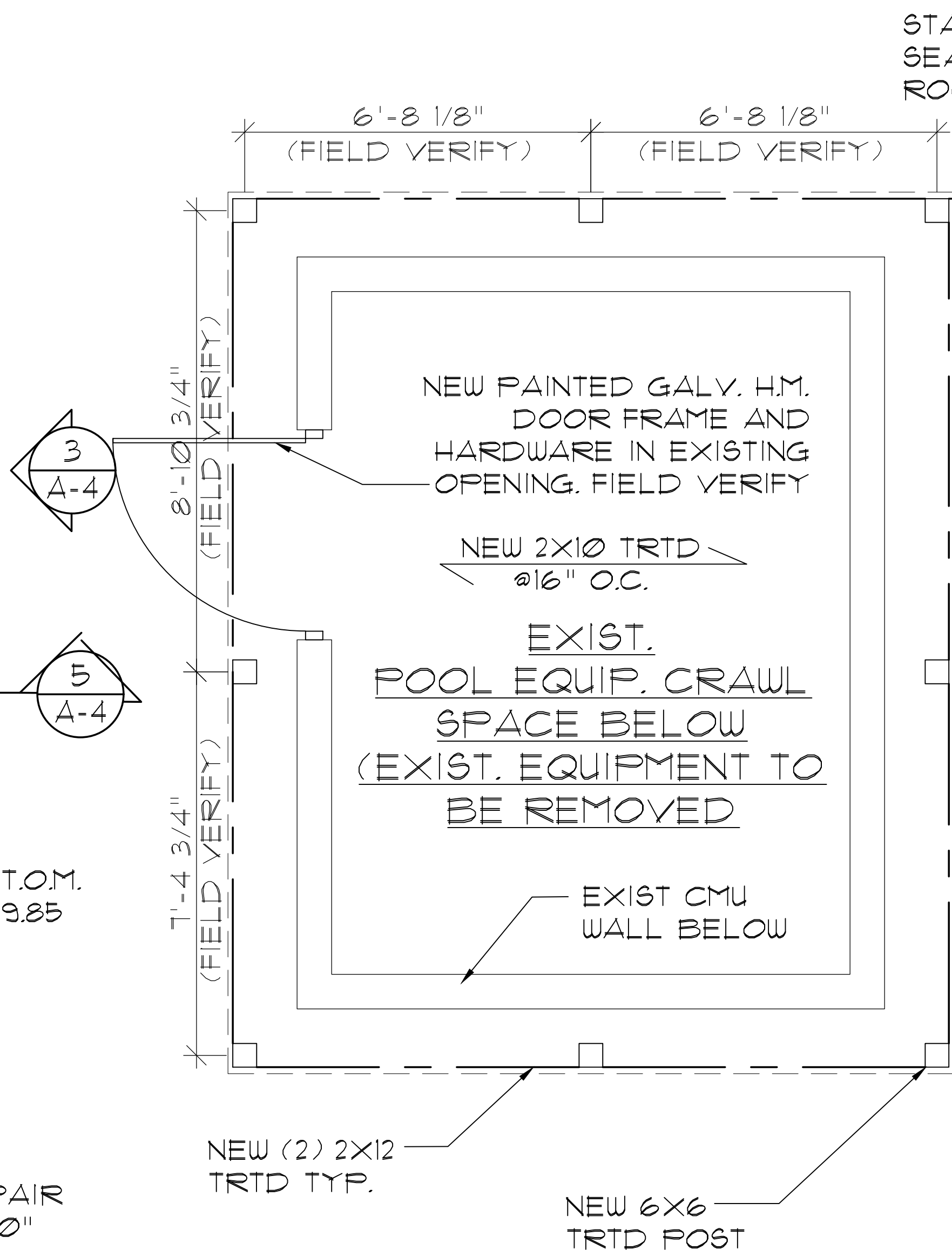
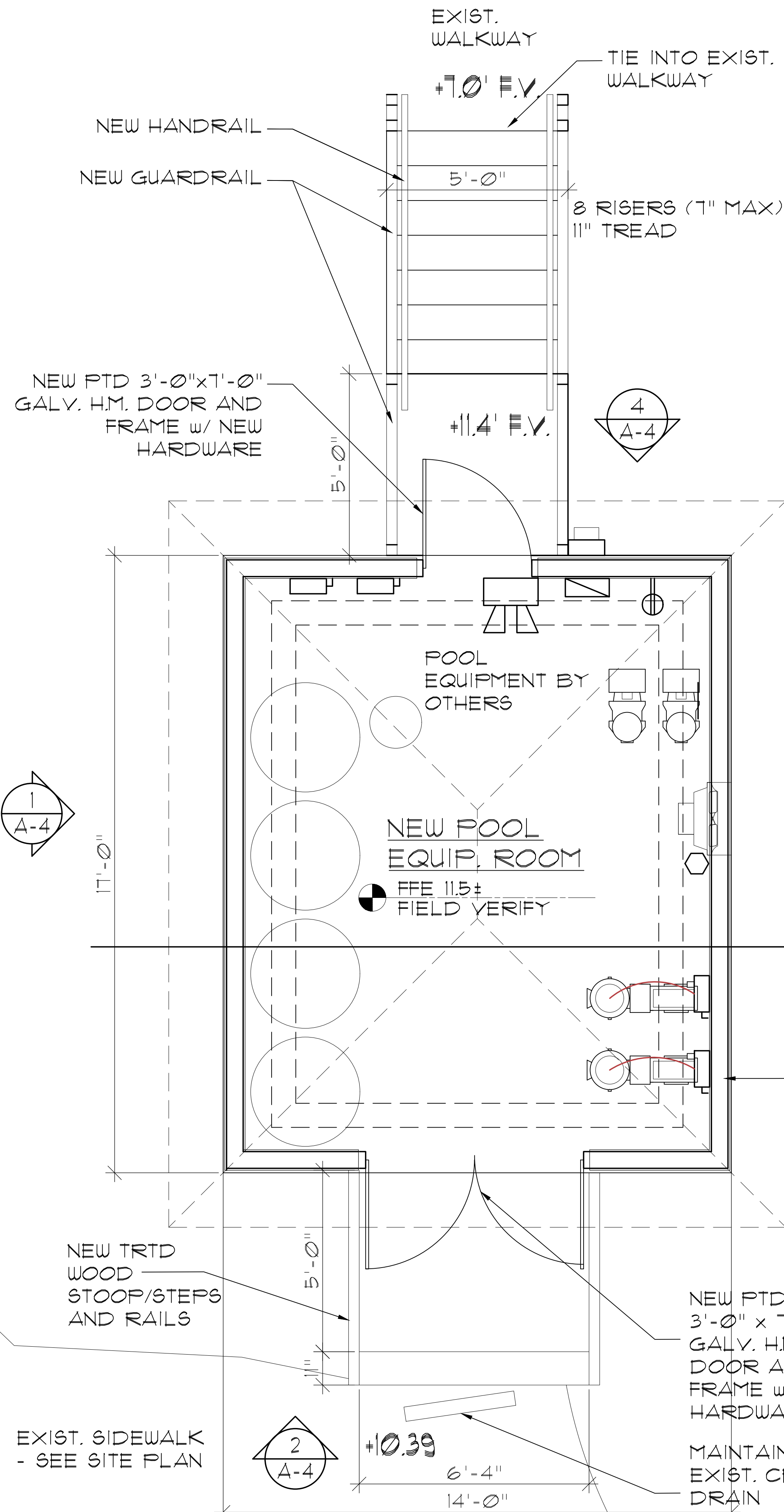
FLOOR PLAN AND
ROOF PLAN

24033

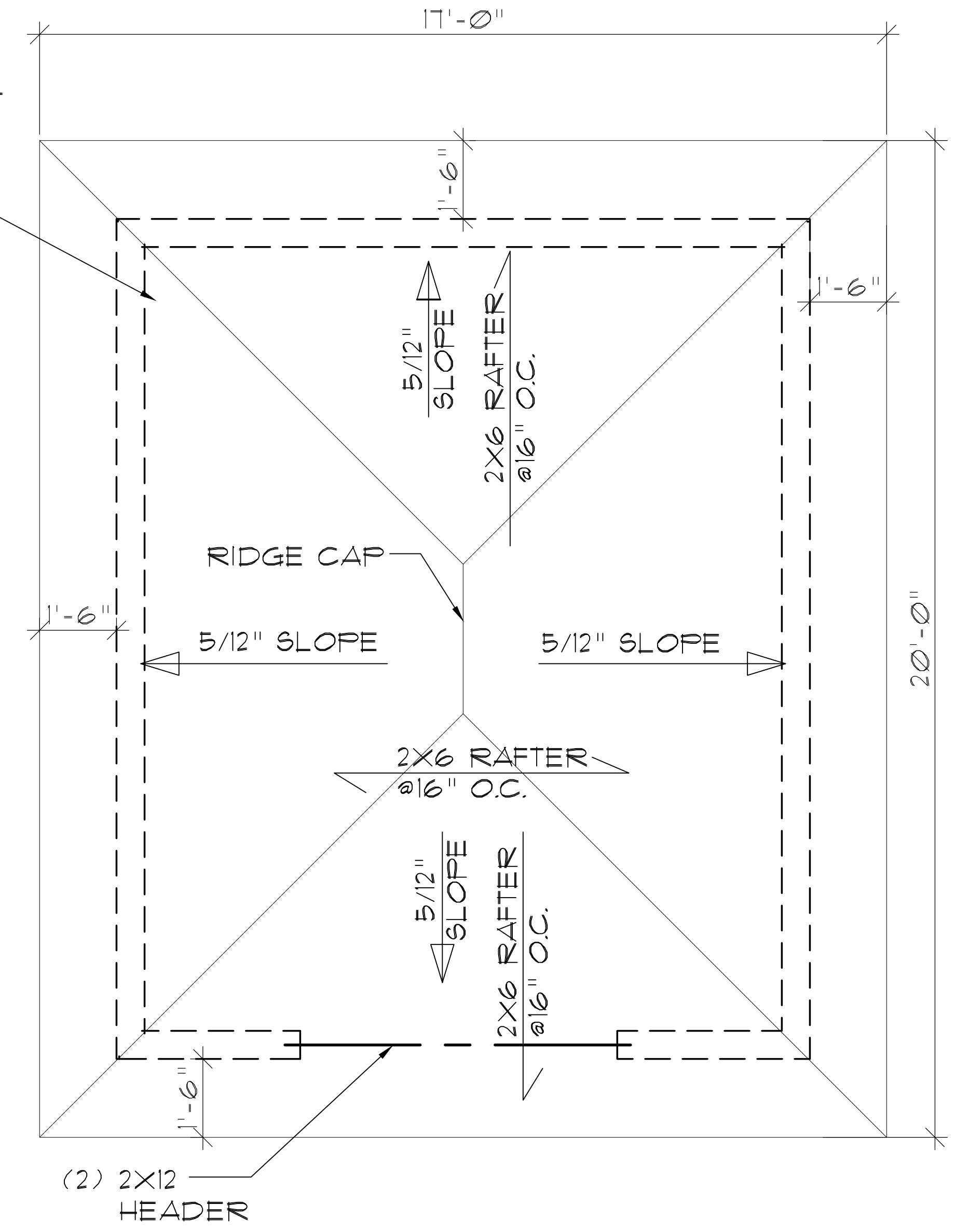
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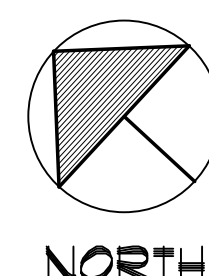
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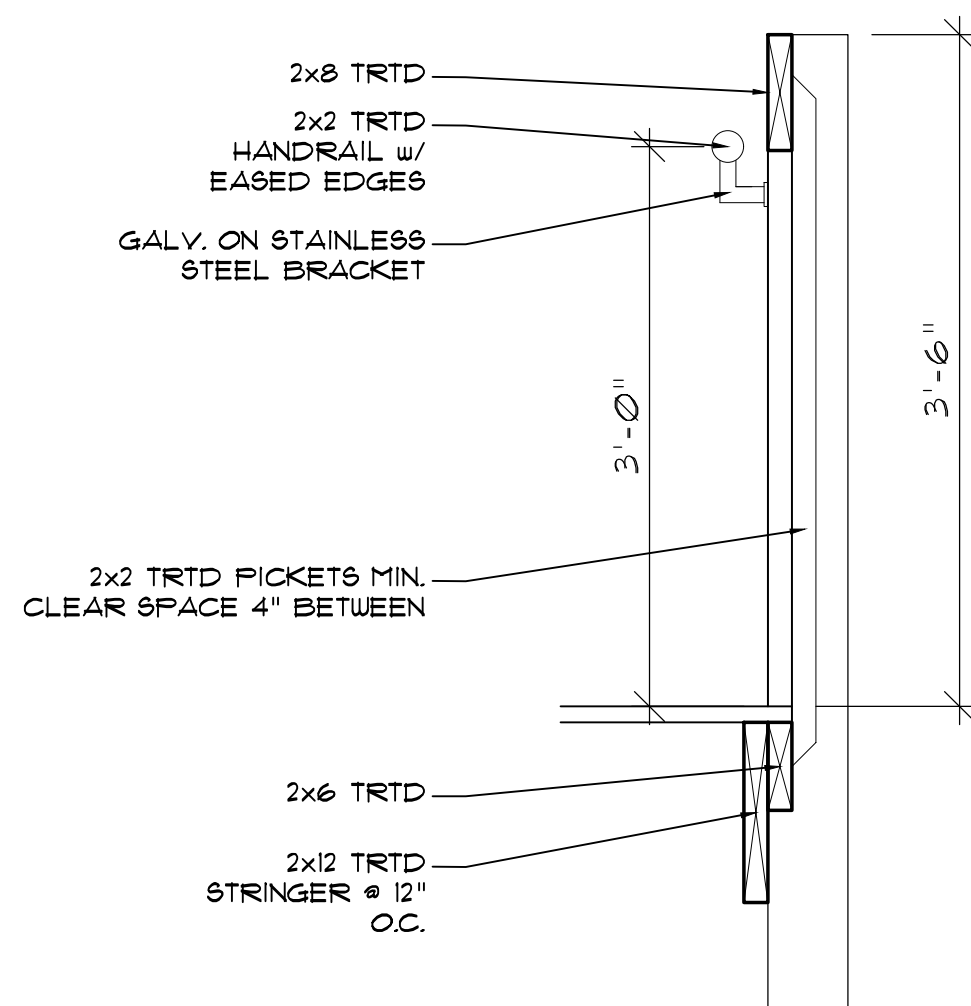


2 FLOOR FRAMING PLAN
SCALE: 1/2"=1'-0"

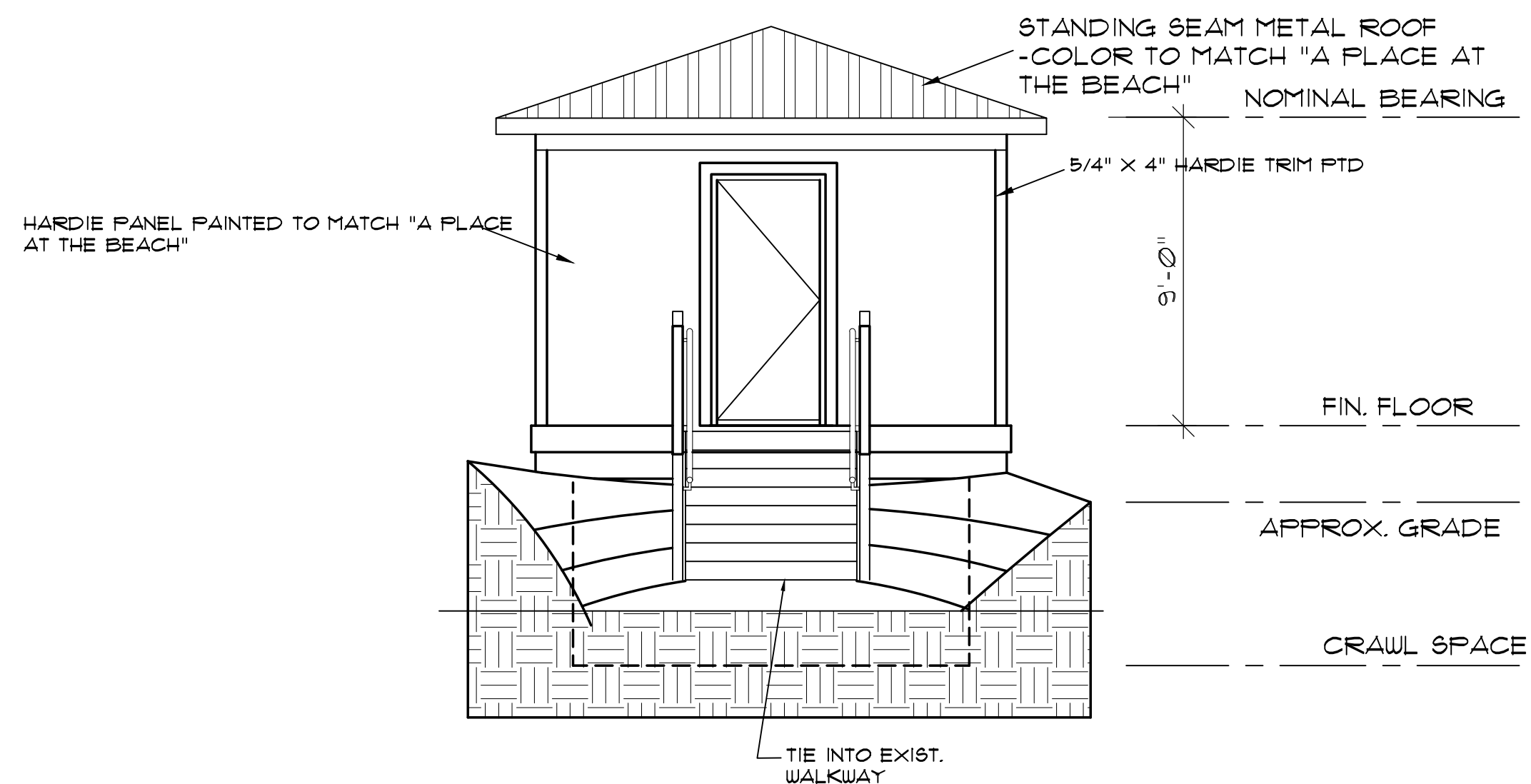


1 ROOF FRAMING PLAN
SCALE: 1/2"=1'-0"

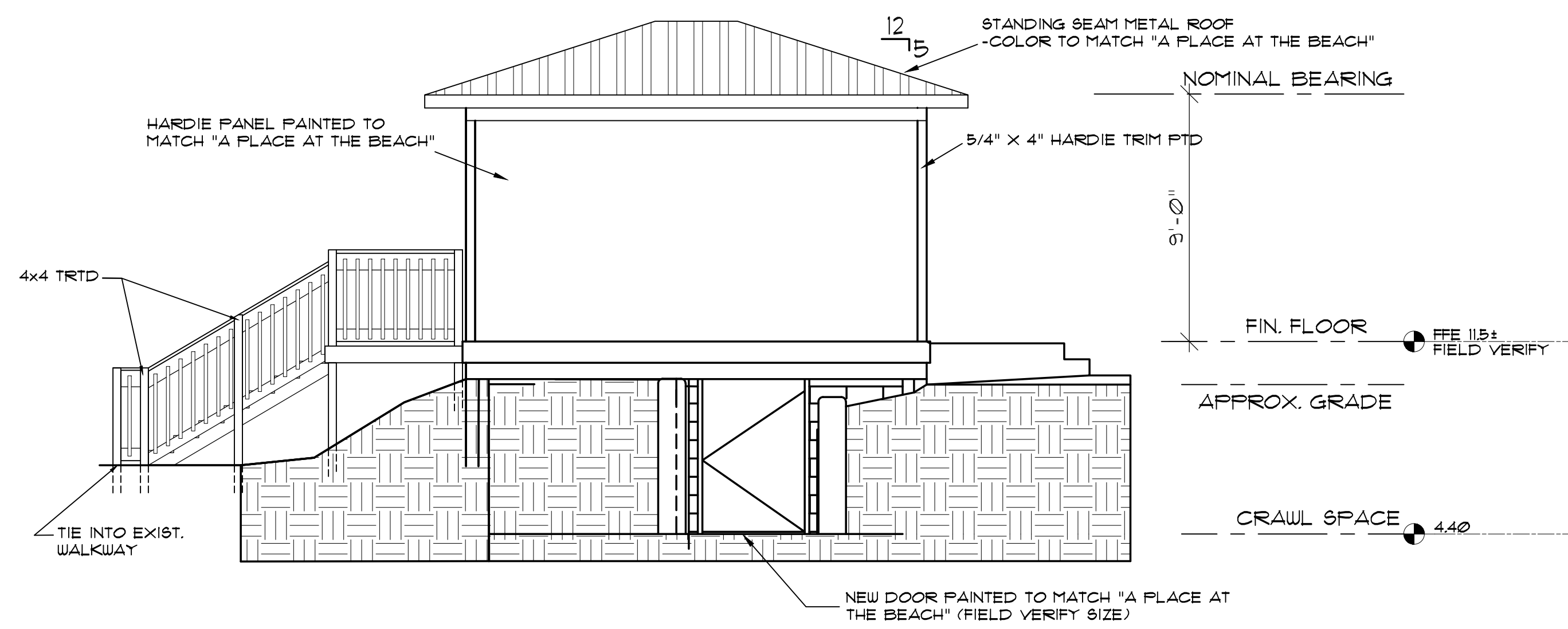




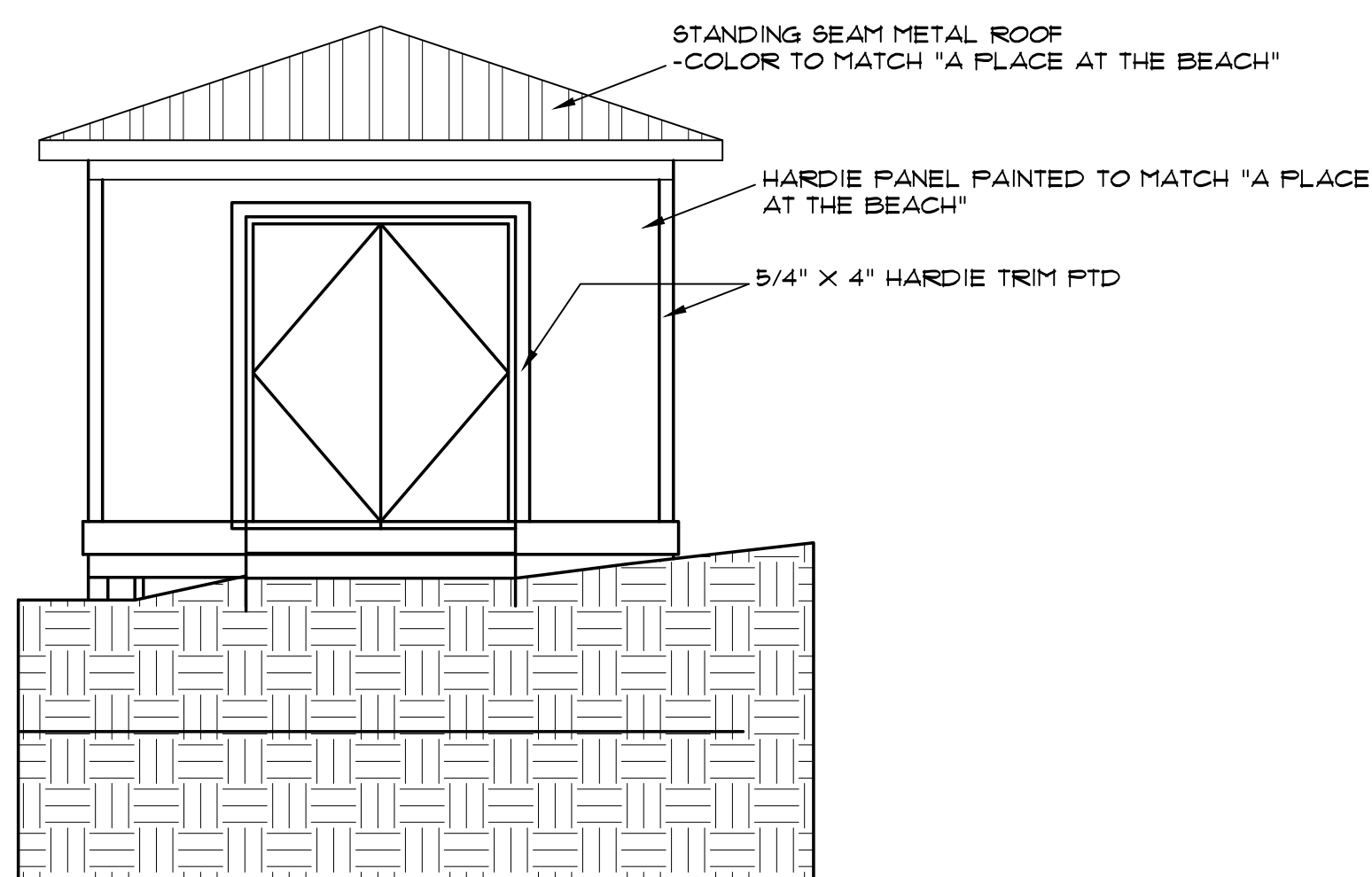
5
A-4 STAIR RAIL DETAIL
SCALE: 1"=1'-0"



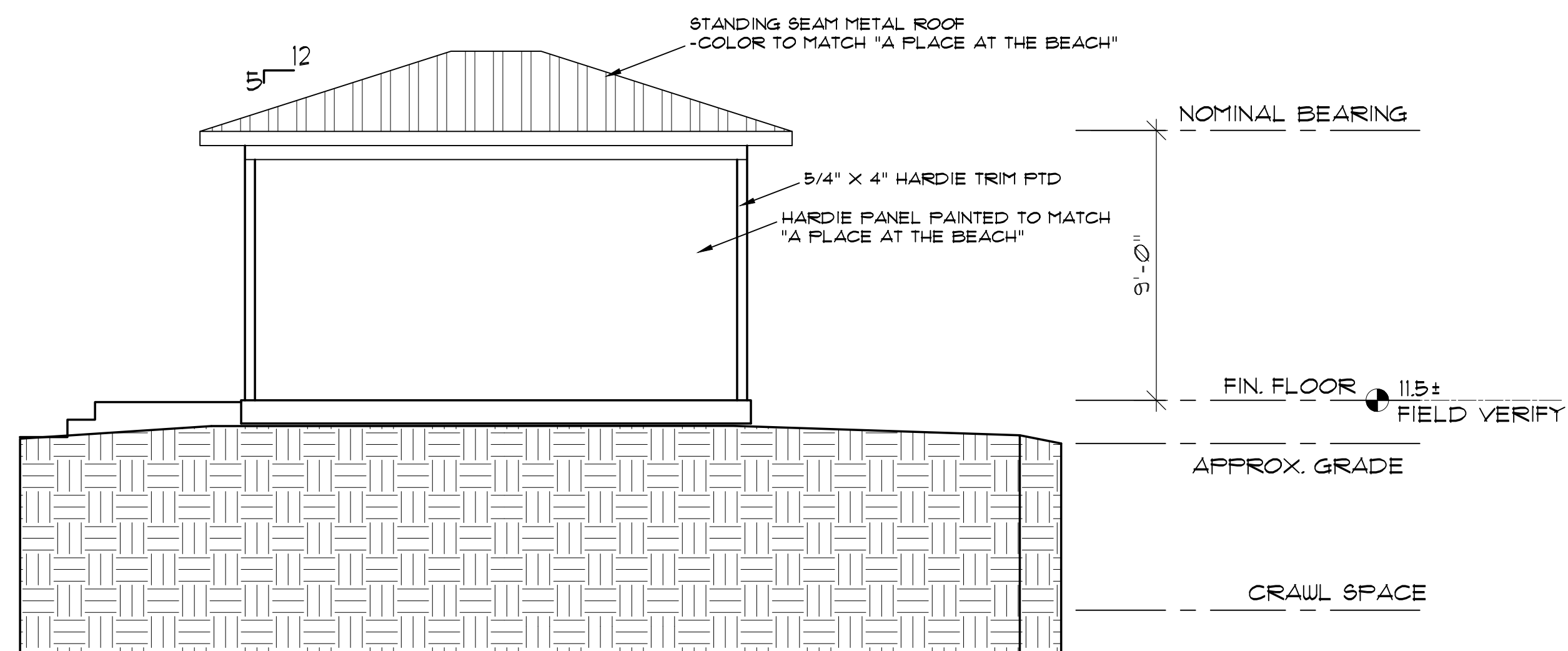
4
A-4 NORTH ELEVATION
SCALE: 1/4"=1'-0"



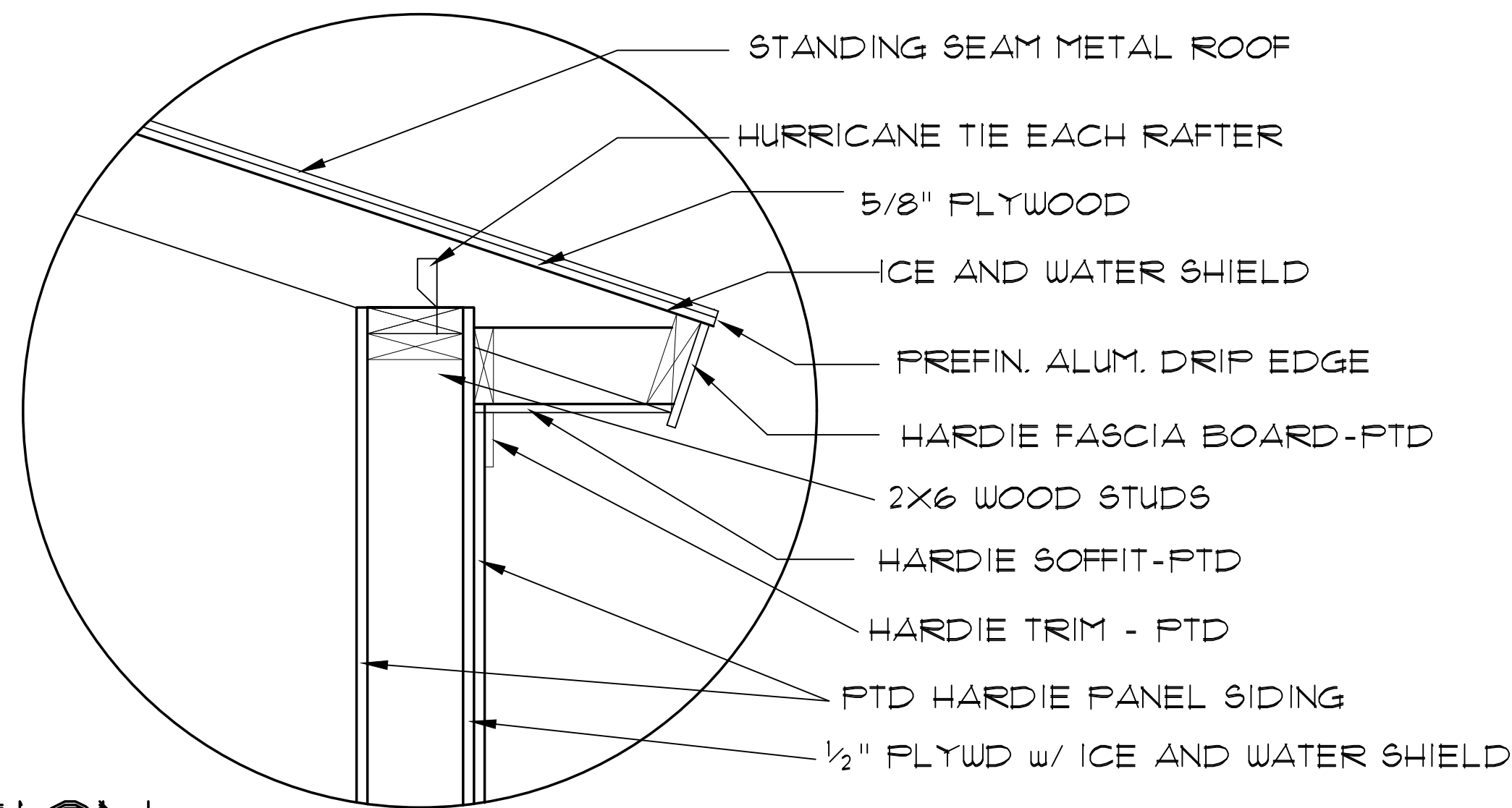
3
A-4 WEST ELEVATION
SCALE: 1/4"=1'-0"



2
A-4 SOUTH ELEVATION
SCALE: 1/4"=1'-0"



1
A-4 EAST ELEVATION
SCALE: 1/4"=1'-0"

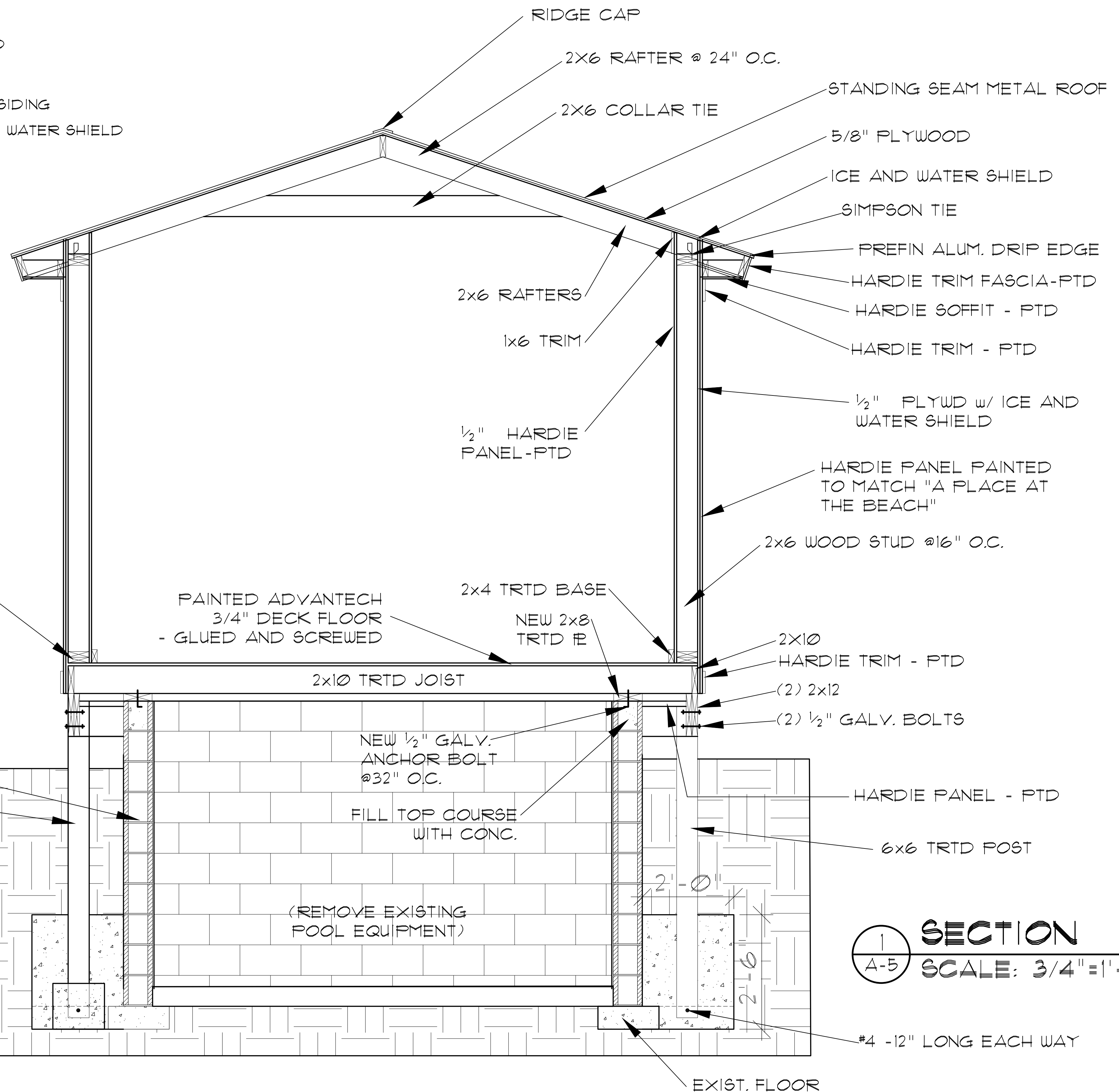


2 SECTION
A-5 SCALE: 1-1/2" = 1'-0"

NOMINAL BEARING

FFE 11.5±
FIELD VERIFY

CRAWL SPACE
FFE 4.40



1 SECTION
A-5 SCALE: 3/4" = 1'-0"

DIVISION 16 – ELECTRICAL

PART 1 – GENERAL

1.1 DESCRIPTION OF THE WORK

A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:

1. Electrical service and service equipment.
2. Lighting and power distribution system.
3. Provide lighting fixtures selected by owner with lamps to match.
4. Wiring devices, boxes, cover plates, etc.
5. Source of power for all items of equipment.
6. Grounding.
7. Other requirements and/or systems where shown.

B. All work shall be complete and items, equipment, etc., shall be electrically connected for proper and correct operation.

C. All work under this contract shall be installed in accordance with the latest edition of the following codes and standards insofar as they apply:

1. The 2020 National Electrical Code.
2. The National Electrical Safety Code.
3. Underwriter's Laboratories, Inc., Standards and approved listings.
4. Electrical Testing Laboratories standards.
5. North Carolina Building Code, Latest Edition and Revisions.
6. All local codes and ordinances.

D. The Electrical Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.

E. Obtain all permits, licenses, inspections, etc., required for the work and pay for the same. Furnish final certificate of inspection and approval from the electrical inspector having jurisdiction prior to acceptance of the work.

F. All work shall be done by skilled mechanics and shall present a neat, trim, workmanlike condition when complete.

1.2 INTENT

A. The intent of these specifications and the accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Electrical Contractor shall take this into consideration and include in his bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.

B. Locations shown are approximate. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required. Coordinate all locations with architect before any rough-in.

1.4 SHOP DRAWINGS

A. Shop drawings shall be submitted for panels and service equipment, lighting, wiring devices, and cover plates. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified.

PART 2 – PRODUCTS AND MATERIALS

2.1 GENERAL

A. All material shall be new and shall bear the manufacturer's name, trade name, and UL label where such standard has been established for the particular material. Materials shall be the standard products of manufacturer's regularly engaged in the manufacturer of the required type of equipment and the manufacturer's latest approved design.

1. Boxes installed in concealed locations shall be set flush with the finished surfaces.
2. Provide rated boxes in all fire barriers & walls installed per code.

2.2 NOT USED

2.3 CONDUCTORS

A. Conductors shall be color coded, sizes #8 and larger may be color taped on the job. Color coding shall be: Standard Practice.

B. Conductors shall be manufactured by Dodge, Southwire or approved equal. Conductors shall meet the latest requirements of NEMA and IPCEA and shall be UL approved.

C. Metallic sheathed "MC" cable may be used where allowed by N.E.C.

D. Conductors shall be spliced and taped as follows:

1. Size #10 and #12, use Ideal "Wing Nuts" or T&B "Plug" connectors. Connectors shall be rated for 150 degrees C for use in recessed lighting fixtures.
2. Size #8 and larger shall be solderless screw and screw-clamping type, smoothly covered and shaped with rubber gum type with final cover vinyl plastic electrical type. In lieu of rubber gum and vinyl plastic type, factory fabricated approved preformed insulating covers may be used. All connectors shall be UL approved.
3. No split-bolt type connectors may be used.

E. All branch wire and connections shall be copper and sized per National Electric Code.

F. All conductors shall be continuous without splice between junction, outlet, device boxes, etc. No splicing will be permitted in panelboard cabinets, safety switches, etc.

G. All wiring in mechanical spaces shall be plenum rated.

H. Provide GFI protection within 6'-0" of any sink.

I. All multi-wire branch circuits shall comply with 2020 NEC, 210.4(B).

J. All wiring at medical facilities shall comply with 2020 NEC, 517.1.

2.4 PANELBOARDS, SAFETY SWITCHES

A. Panelboards shall comply with NEMA Standard PB 1 – Latest Edition and as manufactured by Square D or ITE-Siemens.

B. The contractor shall be responsible for correctly phasing the circuits in the panelboards.

C. Safety switches shall be general duty type, size and rating as required for load service. Safety switches shall be fused or unfused as shown and/or as required. Safety switches serving motor loads shall be horsepower rated for load served.

2.5 NOT USED

2.6 WIRING DEVICES

A. Wiring devices shall be commercial grade by Bryant, Leviton, or approved equal. With matching cover. Color by Architect.

B. Wiring devices installed under a Kitchen Hood shall have stainless steel covers.

C. Wiring devices installed over counters shall comply with ANSI A117.1.

2.7 NOT USED

2.8 CONDUIT

A. PVC conduit will be allowed where N.E.C. approved.

B. All service conduit shall be rigid where exposed below 8'-0" AFF or exposed to the elements or hazardous conditions.

PART 3 – EXECUTION

3.1 CIRCUIT GROUNDING

A. All circuits shall contain an insulated, green, copper grounding conductor, sized in accordance with Table 250-95 of the NEC. Grounding conductors shall be connected to equipment grounding bus in panelboard and securely attached and grounded to the device or enclosure at the other end.

3.2 GROUNDING TYPE CONVENIENCE OUTLETS AND SWITCHES

A. Outlets and switches shall be solidly grounded to equipment grounding system with a green colored insulated conductor. Electrical connections shall be continuous from equipment ground bus in panelboard to the hex nut on the convenience outlet or switch.

3.3 MOTORS

A. All motors shall be connected to conduit system with short length (minimum length 24" and maximum length 36") of flexible liquidtight conduit.

3.4 NOT USED

3.5 EQUIPMENT LABELING

A. Provide permanent name plates for all panelboards, safety switches, wiring troughs, etc., for identification of equipment controlled, services, etc. Nameplates shall be securely and permanently attached to equipment with stainless steel screws. Nameplates shall include the name of the equipment and where it is fed from.

B. All switch plates, receptacle plates and outlet covers shall be labeled with machine printed vinyl labels identifying the circuit(s) within.

C. All empty conduit runs shall be identified and indicated where they terminate.

D. Provide typewritten directory in each panelboard to clearly identify each circuit, service, etc.

3.6 NOT USED

3.7 NOT USED

3.8 JUNCTION AND/OR PULL BOXES

A. Boxes shall be installed where necessary to avoid excessive runs and/or too many bends between outlets.

3.9 PULL WIRE

A. Leave pull wire in each empty conduit run.

3.10 NOT USED

3.11 GROUNDING

A. All grounding shall be in accordance with Article 250 of the NEC. In addition, the following requirements shall be met:

1. Grounding conductors shall be installed as to permit the shortest and most direct path from equipment to ground. All connections to grounding conductors shall be accessible.
2. Equipment ground continuity shall be maintained through flexible metal conduit.
3. All wiring devices equipped with grounding connection shall be solidly grounded to ground system with grounding conductors.
4. The frame of all lighting fixtures shall be securely grounded to the equipment ground system with grounding conductors.
5. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately banded to ground.
6. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be effectively and adequately banded to ground.

3.12 ELECTRICAL WORK IN CONNECTION WITH OTHER WORK

A. PLUMBING WORK: The Electrical Contractor shall furnish and install switches and devices as shown and electrically connect electric water heaters, etc. All other electrical work required will be performed by the PLUMBING CONTRACTOR.

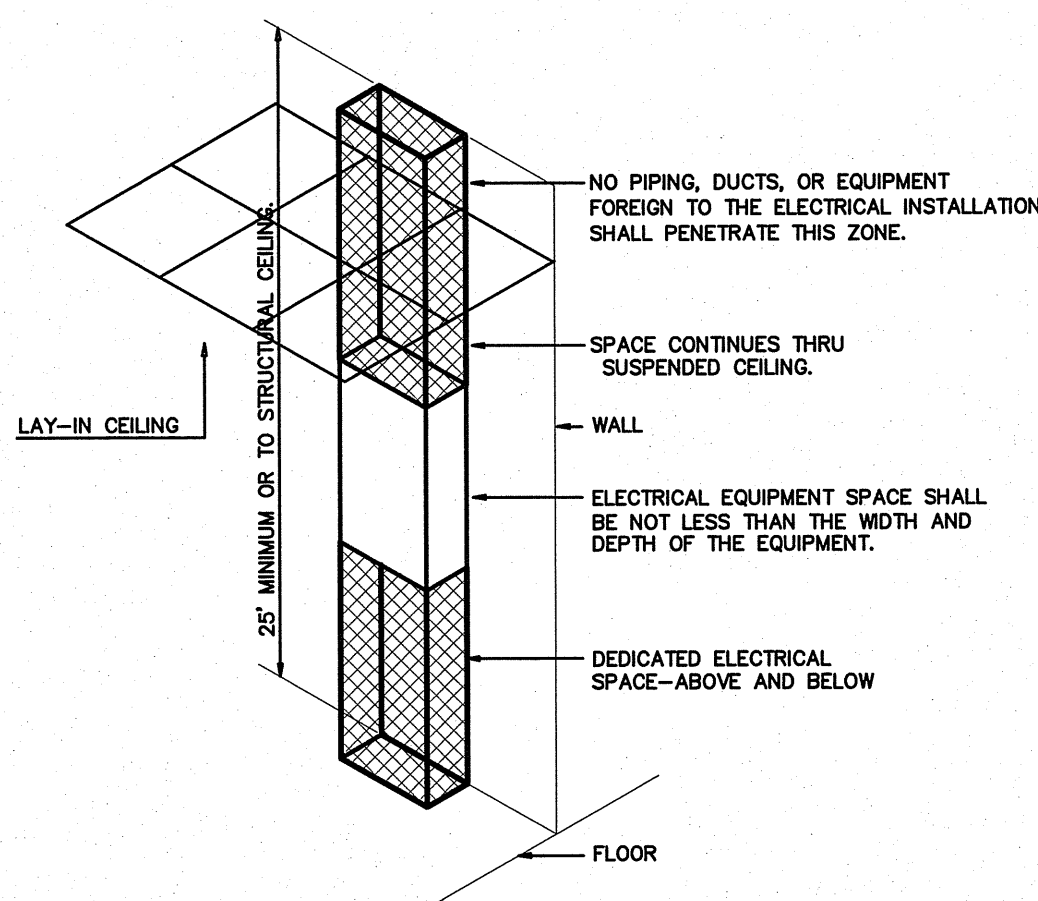
B. HEATING AND AIR CONDITIONING WORK: The Electrical Contractor shall provide all disconnect switches, starters, and associated hardware for the equipment furnished including all line and load side wiring and conduit. Final connections to the equipment will be by the HVAC contractor. All control wiring will be accomplished by the HVAC contractor. Coordinate all work associated with the HVAC contractor.

3.13 CLEAN UP

A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

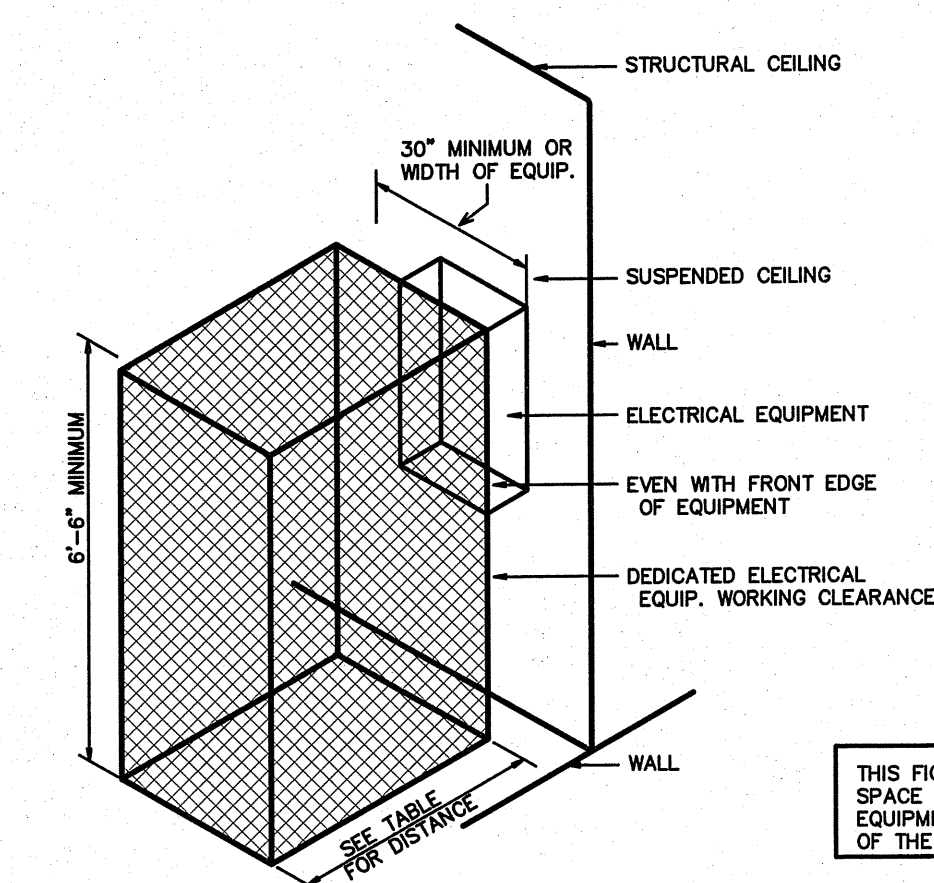
3.14 GUARANTEE

A. Guarantees all materials and labor included in the electrical work for a period of one year from date of final acceptance by the Owner. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the Owner.



ELECTRICAL EQUIPMENT DEDICATED SPACE
PER ARTICLE 110.26.F.1 OF N.E.C.

1 DEDICATED SPACE
SCALE: NTS



ELECTRICAL EQUIPMENT WORKING CLEARANCE
PER ARTICLE 110-26 OF N.E.C.

WORKING CLEARANCES			
VOLTAGE TO GROUND NOMINAL	MIN. CLEAR DISTANCE IN FEET		
	CONDITION: 1	2	3
0-150	3	3	3
151-600	3	3-1/2	4

WHERE THE CONDITIONS ARE AS FOLLOWS:

1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUND PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS.
2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUND PARTS ON THE OTHER SIDE.
3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

2 ELECTRICAL CLEARANCES
SCALE: NTS

GENERAL NOTES

1 ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES HAVING JURISDICTION.

2 ALL BRANCH CIRCUIT CONDUCTORS TO BE COPPER (SERVICE CONDUCTORS MAY BE ALUMINUM WITH SAME AMPACITY AS COPPER CONDUCTORS. RE-SIZE CONDUCTORS AND CONDUIT PER NEC.)

3 ALL CIRCUITS TO BE 2 #12, 1 #12 GND IN 1/2" EMT CONDUIT AS A MINIMUM. PROVIDE WIRING FOR LARGER CIRCUITS AS REQUIRED BY NEC. RIGID CONDUIT IS REQUIRED WHERE EXPOSED BELOW 8'-0" A.F.F.

4 ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FEET SHALL BE PROVIDED WITH A PULL WIRE OR FISH TAPE/CORD.

5 CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.

6 ALL BRANCH CIRCUIT CONDUCTORS FROM THE PANEL TO THE FIRST OUTLET SHALL BE INCREASED TO THE NEXT LARGER SIZE WHERE THE LENGTH OF THE HOME RUN EXCEEDS 120 FEET ON 120V AND 208V CIRCUITS.

7 THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON DRAWINGS OR NOT.

8 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELBOARDS.

9 THE ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING SYSTEM WITH THE GENERAL CONTRACTOR TO INSURE THAT ALL LIGHTING FIXTURES ARE COMPATIBLE WITH THE CEILING SYSTEM BEING INSTALLED. LIGHTING FIXTURES SHOULD NOT BE ORDERED UNTIL TYPE OF CEILING HAS BEEN VERIFIED.

10 ELECTRICAL REQUIREMENTS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. IF FURNISHED EQUIPMENT DIFFERS FROM RATINGS ON DRAWINGS CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER FOR APPROPRIATE ACTION TO BE TAKEN.

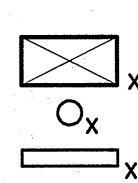
11 IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT BREAKER REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ORDERING PANEL. ADJUST BREAKER AND WIRE SIZES AS REQUIRED.

12 PROVIDE BOXES, JACKS, WIRING AND CONDUIT FROM LOCATIONS SHOWN TO MTP LOCATION. VERIFY EXACT REQUIREMENTS WITH OWNER.

13 ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS FOR MECHANICAL & PLUMBING EQUIPMENT. DISCONNECTS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS AND FUSED PER NAME PLATE. PROVIDE NEMA 3R ENCLOSURES ON EXTERIOR. COORDINATE FUSE SIZES.

14 THE EC SHALL MEET WITH THE ARCHITECT AND TENANT PRIOR TO INSTALLING OUTLET BOXES TO VERIFY LOCATIONS AND MOUNTING HEIGHTS OF RECEPTACLES AND TELEPHONE OUTLETS.

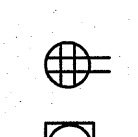
ELECTRICAL LEGEND



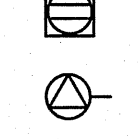
LIGHT FIXTURE: LETTER DENOTES FIXTURE TYPE (REFER TO LIGHTING PLAN AND FIXTURE SCHEDULE).
NL = NIGHT LIGHT (NOT SWITCHED/ALWAYS ON)



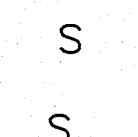
DUPLEX RECEPTACLE – 120V; MOUNT 18" TO CENTER AFF UNLESS NOTED OTHERWISE; "WP" INDICATES WEATHER PROOF, "GFI" INDICATES GROUND FAULT CURRENT INTERRUPT PROTECTED.
"U" INDICATES RECEPTACLE WITH (2) USB PORTS.



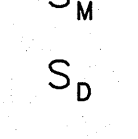
QUADRAPLEX RECEPTACLE – 120V



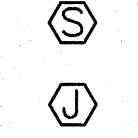
FLOOR OR CEILING OUTLET (AS NOTED) – 120V



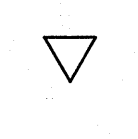
SPECIAL PURPOSE RECEPTACLE – REFER TO POWER PLAN AND PANEL SCHEDULE



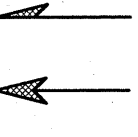
LIGHT SWITCH



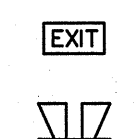
SWITCH WITH INTEGRAL PIR/US MOTION SENSOR FOR AUTOMATIC SHUT-OFF WITH UP TO 2 HOUR ADJUSTABLE DELAY.



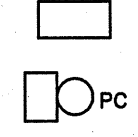
DIMMABLE LIGHT SWITCH



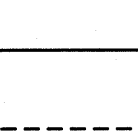
MOTOR RATED SWITCH



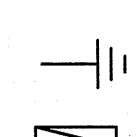
JUNCTION BOX



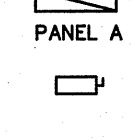
TELE/DATA OUTLET – PROVIDE JUNCTION BOX WITH CONDUIT BACK TO MTP. PROVIDE (1) TELEPHONE JACK AND (1) CAT 5 DATA JACK



SINGLE-POLE HOMERUN TO PANELBOARD



TWO-POLE OR 3-POLE HOMERUN TO PANELBOARD



EXIT LIGHT



EMERGENCY EGRESS FIXTURE



PHOTOCELL (LED COMPLIANT)



BRANCH CIRCUIT WIRING



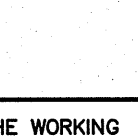
SWITCH LEG



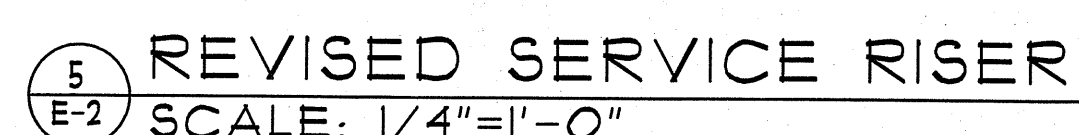
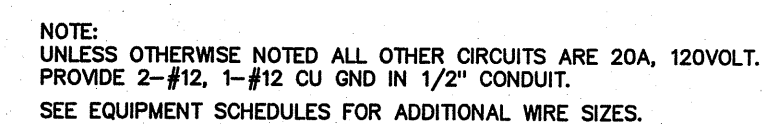
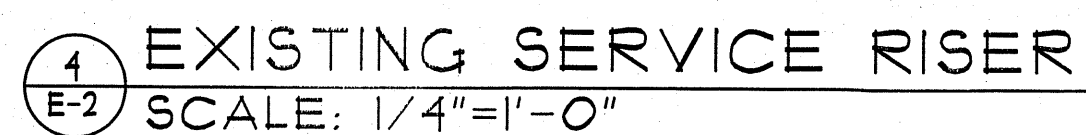
GROUND CONNECTION



DISTRIBUTION PANELBOARD



DISCONNECTING MEANS AS REQUIRED BY CODE



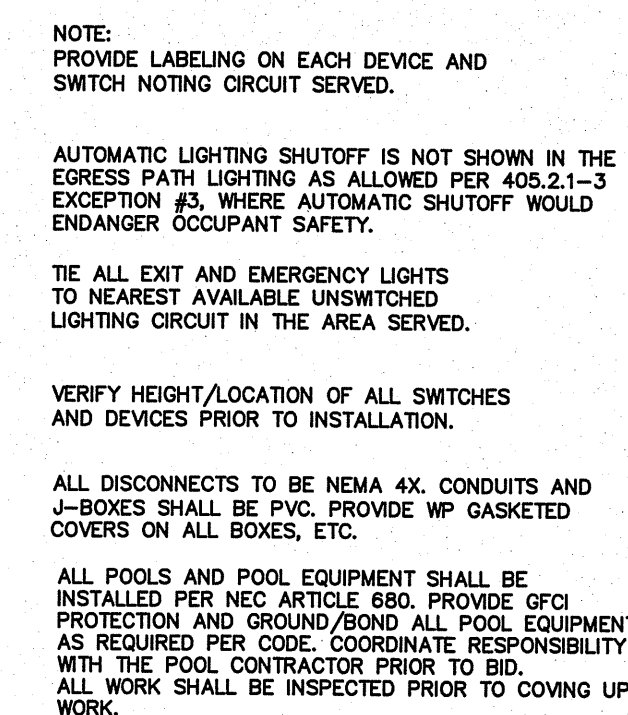
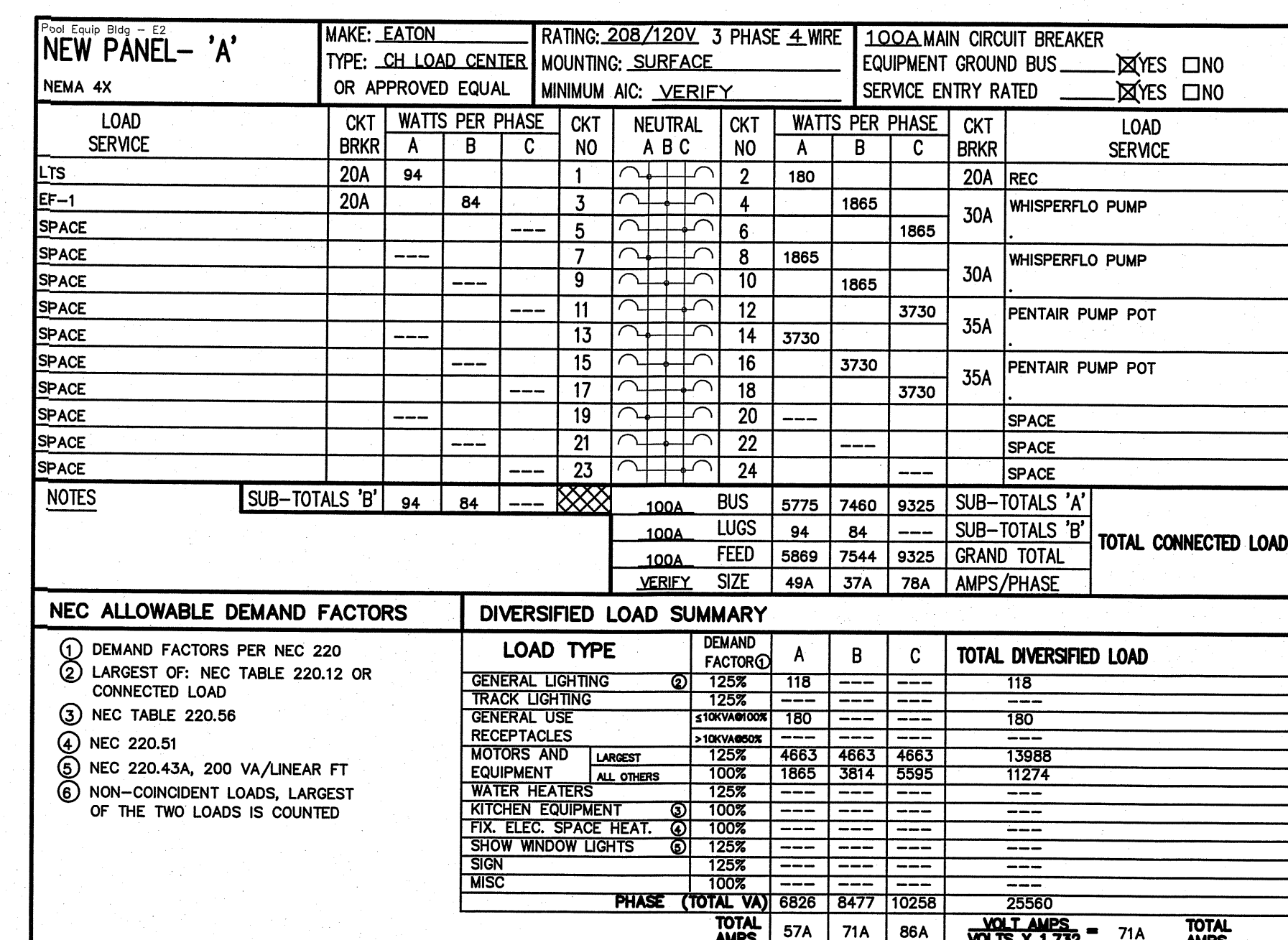
EXISTING POOL EQUIP
SCALE: 1/4"=1'-0"

LIGHTING SCHEDULE *									
MARK	MANUFACTURER	CATALOG NO.	VOLT	LAMPS NO. TYPE W	BALLAST TYPE	W/ FIXTURE	REMARKS		
A	COLUMBIA	LXEMA-35HL-RFA-EU	120	- LED -	-	47	4' ENCLOSED LED GASKETED STRIP		
	COMPASS	CSWEU2LED	120	- LED -	-	10	GASKETED EMERGENCY LIGHT, BATTERY BACKUP, BATTERY DIAGNOSTICS. POLYCARBONATE SHIELD		

Pool Equip. Rtg. - E2 EXHAUST FAN SCHEDULE	
EXHAUST FAN #1 (EF-1)	* BROAN MODEL# 512M THROUGH-WALL EXHAUST FAN, 70 CFM, 3.5 SONES, 0.7 A.M.PS, 120VAC, 60 HZ. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE SWITCH AND WIRE THE UNIT. THE HVAC CONTRACTOR SHALL PROVIDE UNIT, LOCATE LOCATE EXHAUST TERMINATION A MINIMUM OF 10'-0" FROM ANY INTAKES.

2
E-2

REVISED LOWER LEVEL
SCALE: 1/4" = 1'-0"



ENGINEER

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