JOINT APPLICATION AND NOTIFICATION
U.S. ARMY CORPS OF ENGINEERS
MISSISSIPPI DEPARTMENT OF MARINE RESOURCES
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY/OFFICE OF POLLUTION CONTROL

Applicant: Bob Mandal
Mailing Address: 2102 Ward Lane
Biloxi, MS 39531
Phone Number: (228) 806-9200
Email Address:

Agent: HD Homes LLC - Hunter Desporte
Mailing Address: 13824 Mesa Rd
Ocean Springs MS, 39564
Phone Number: (228) 238-6733
Email Address:
Hdesporte@builderhd.com

Date Submitted:

11/03/2021

DMR Permit Number:
DMR21-000703

Historic DMR Permit Numbers:

060602

DMR File Number:
060602

Project Location:

2102 Ward Lane
Biloxi, MS
Harrison County
Back Bay of Biloxi
Latitude:
Longitude:

Do you still need to enter a Project Location?
How will you identify the project location:

Project Information:

Project Name or Title: Mandal Boat House Remodel

Project Description: Expand Boat house, Install new lift system

Project Purpose and Need: Storage of Boat

Intended Use: Residential

Will the Proposed Project have a Public Benefit?: No
Increased tax base:
Increased employment:
National security benefits:
Improved habitat:
Other:

Does Project area contain any marsh Vegetation?: No

What measures will be taken to reduce detrimental off-site effects to the Coastal Wetlands during and after the proposed activity?: Best Management Practices

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Impact Information:

Number of Impact Types	**01**
Impact Type:	**Boathouse**
New or Maintenance	Maintenance
Length	46
Width	36
Method of piling installation1(Pier, Boathouse, Pilings)	1. Pile driver
Is this a component of a larger project?	No
Is any portion of this impact complete?	No

Additional information relating to the proposed activity

Have any other federal, state, or local agencies issued permits or other types of approvals for the proposed project?: No

Have any other federal, state, or local agencies denied approval for the proposed project?: No

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Project Schedule

Do you know the Proposed Start Date? Yes
11/22/2021

Do you know the Proposed Completion Date? Yes
03/15/2022

Do you know the Estimated Cost of the Project? Yes
$120,000.00

Adjacent Property Owners:

Application Certified by: Hunter Desporte

A NEW BOATHOUSE FOR THE MANDAL FAMILY BILOXI, MISSISSIPPI

STANDARD ABBREVIATIONS

AB.	ANCHOR BOLT
ACT	ACOUSTICAL CEILING TILE
A.F.F.	ABOVE FINISHED FLOOR
AGGR.	AGGREGATE
AL.	ALUMINUM
ALT.	ALTERNATE
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
BD.	BOARD
BLDG.	BUILDING
BLK	BLOCK
BLK'G.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BTWN.	BETWEEN
B.U.R.	BUILT UP ROOFING
B.W.	BOTH WAYS
C.J.	CONTROL JT.
CLG.	CEILING
CLKG.	CAULKING
CLR.	CLEAR
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
C.T.	CERAMIC TILE
DEG.	DEGREE
DET./DTL.	DETAIL
D.F.	DRINKING FOUNTAIN
DIAG.	DIAGONAL
DIA. Ø	DIAMETER
DN.	DOWN
DS.	DOWN SPOUT
DWG.	DRAWING
E	EAST
(E)	EXISTING
EA.	EACH
E.J.	EXPANSION JOINT
E.I.F.S.	EXTERIOR INSULATION AND FINISH SYSTEM
EL. ELEV.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EMER	EMERGENCY
ENCL.	ENCLOSURE
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.W.	EACH WAY
E.W.C.	ELECTRIC WATER COOLER
EXP.	EXPANSION
EXT.	EXTERIOR
F.A.	FIRE ALARM
F.D.	FLOOR DRAIN
F.D.C.	FIRE DEPARTMENT CONNECTION
FDN.	FOUNDATION
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CAB
F.F.	FINISH FLOOR
F.H.C.	FIRE HOSE CABINET
FIN.	FINISH
F.L.	FLOW LINE
FLR.	FLOOR
FLUOR.	FLUORESCENT
FND.	FOUNDATION
F.O.B.	FACE OF BRICK
F.O.C.	FACE OF CONCRETE
F.S.	FULL SIZE
FT.	FOOT OR FEET
FTG.	FOOTING
FURR.	FURRING
GA.	GAUGE
GALV.	GALVANIZED
G.C.	GENERAL CONTRACTOR
G.L.	GLASS
GR.	GRADE
GYP.	GYPSUM
GYP. BD.	GYPSUM BOARD
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
H/C	HANDICAPPED
HDWD.	HARDWOOD
HDWE.	HARDWARE
H.M.	HOLLOW METAL
HR.	HOUR
HT.	HEIGHT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
I.C.F.	INSULATED CONCRETE FORM
INT.	INTERIOR
JAN.	JANITOR
JNT.	JOINT
JST.	JOIST
KIT.	KITCHEN
LAB.	LABORATORY
LAM.	LAMINATE
LAV.	LAVATORY
LT.	LIGHT
MAX.	MAXIMUM
MECH.	MECHANICAL
MEMB.	MEMBRANE
MFR.	MANUFACTURER
M.H.	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MTL.	METAL
MUL.	MULLION
N	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OH.	OVERHEAD
OPG.	OPENING
OPP.	OPPOSITE
PCT.	PRE-CAST
P.L.	PROPERTY LINE
P.LAM.	PLASTIC LAMINATE
PLAS.	PLASTER
PLYWD.	PLYWOOD
PR.	PAIR
Q.T.	QUARRY TILE
R.	RISER
R.D.	ROOF DRAIN
RE:	REFER TO ...
REFR.	REFRIGERATOR
REINF.	REINFORCED
REQ'D.	REQUIRED
RM	ROOM
R.O.	ROUGH OPENING
S	SOUTH
S.C.	SOLID CORE
SCHED.	SCHEDULE
SECT.	SECTION
S.F.	SQUARE FOOT
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION
SQ. OR ⌗	SQUARE
S.S.	STAINLESS STEEL
STAGG.	STAGGERED
STD.	STANDARD
STIFF	STIFFENER
STL.	STEEL
STRUC.	STRUCTURAL
SUSP.	SUSPENDED
TR	TREAD
T & B	TOP AND BOTTOM
TER.	TERRAZZO
T & G	TONGUE & GROOVE
THK.	THICK
T/	TOP OF
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VER	VERIFY
VERT.	VERTICAL
VIF	VERIFY IN FIELD
W	WEST
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD
W/O	WITHOUT
℄	CENTERLINE
PL	PLATE

GENERAL NOTES

1. SCOPE DOCUMENT
THIS DOCUMENT INDICATES THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ARCHITECTURAL DESIGN CONCEPT. THE DIMENSIONS OF THE BUILDING, THE MAJOR ARCHITECTURAL ELEMENTS AND THE TYPE OF STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS. AS SCOPE DOCUMENTS, THE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL ITEMS REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED, THE CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. DECISIONS OF THE ARCHITECT AS TO THE ITEMS OF WORK REASONABLY INCLUDED WITHIN THE SCOPE OF THIS DOCUMENT SHALL BE FINAL AND BINDING ON THE CONTRACTOR.

2. CONTRACTOR SHALL VERIFY ALL DIMENSION AND SITE CONDITIONS BEFORE ORDERING ANY MATERIALS OR BEGINNING ANY CONSTRUCTION AND SHALL REPORT HIS/HER FINDINGS TO THIS ARCHITECT.

3. DRAINAGE NOTE:
CONTRACTOR SHALL INSURE THAT ALL SURFACE DRAINAGE WILL NOT RUN ON TO ADJACENT PROPERTIES, AND WILL DRAIN AWAY FROM STRUCTURE.

4. DEMOLITION NOTE:
NOTHING IN THESE DOCUMENTS SHALL IMPOSE LIABILITY ON THE ARCHITECT/ENGINEER FOR CLAIMS, LAWSUITS, EXPENSES OR DAMAGES ARISING FROM, OR IN ANY MANNER RELATED TO THE EXPOSURE TO, OR THE HANDLING, MANUFACTURE OR DISPOSAL OF ASBESTOS, ASBESTOS PRODUCTS, OR HAZARDOUS WASTE IN ANY OF ITS VARIOUS FORMS, AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY. CONTRACTOR SHALL IDENTIFY AND NOTIFY THE OWNER AND ARCHITECT OF THE PRESENCE OF ASBESTOS OR OTHER SUSPECTED HAZARDOUS MATERIALS BEFORE INITIATING THE DEMOLITION OF SAME, AT WHICH TIME APPROPRIATE IDENTIFICATION AND REMOVAL OF SUCH SUSPECTED MATERIALS BY A LICENSED AND APPROVED CONTRACTOR SHALL COMMENCE. METHOD AND COSTS OF REMOVAL SHALL BE APPROVED AND PAID FOR DIRECTLY BY THE OWNER.

5. OWNERSHIP OF DOCUMENTS NOTICE:
DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE EXCLUSIVE PROPERTY OF THIS ARCHITECT WHETHER THE PROJECT FOR WHICH THEY WERE PREPARED IS EXECUTED AND CONSTRUCTED OR NOT. THESE DOCUMENTS ARE NOT TO BE REPRODUCED IN ANY FORM AND THEY ARE NOT TO BE USED BY THE PROJECT OWNER NOR ANY OTHER ENTITY ON ANY OTHER PROJECTS OR FOR ANY EXTENSIONS OR ADDITIONS OR ALTERATIONS TO THE ORIGINAL PROJECT EXCEPT BY WRITTEN AUTHORIZATION AND PERMISSION FROM AND AGREEMENT WITH THIS ARCHITECT.

6. THESE DOCUMENTS APPLY TO THE INTERIOR LAYOUT AND CONSTRUCTION OF THIS BUILDING ONLY.

7. THE INTERIOR OF THIS BUILDING IS TO HAVE A FIRE SPRINKLER SYSTEM INSTALLED. REFER TO PLANS AND SPECIFICATIONS DESIGNED AND PROVIDED BY THE SPRINKLER SYSTEM PROVIDER. ALL LOCAL CODES REGARDING SPRINKLER SYSTEMS ARE TO BE COMPLIED WITH.

8. INTERIOR PARTITIONS, DOORS, FINISHES ETC. SHALL COMPLY WITH LOCAL CODES FOR FIRE AND BUILDING REQUIREMENTS.

9. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL BUILDING CODES, NATIONAL CODES (WHEN APPLICABLE) AND LOCAL ORDINANCES.

ALL ITEMS ARE NEW UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL REPAIR ALL AREAS OUTSIDE CONTRACT LIMITS TO ORIGINAL CONDITION.

CONTRACTOR TO COOR
DINATE ALL ARCHITECTURAL WITH STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK AND ADJUST SAME AS REQUIRED

CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES, ALSO CONFORMING TO NATIONAL A.D.A. REQUIREMENTS.

ALL UNNOTED OR NON VISIBLE EASEMENTS AND SUBSURFACE CONDITIONS ARE THE RESPONSIBLITY OF THE CONTRACTOR.

ALL HIDDEN STRUCTURAL DISCREPANCIES MUST BE REPORTED TO ARCHITECT SO THAT CORRECTIVE MEASURES CAN BE TAKEN PRIOR TO PROJECT COMPLETION.

ALL MECHANICAL, ELECTRICAL, AND PLUMBING SHALL BE PREFORMED BY LICENSED SUBCONTRACTORS AND SHALL CONFORM TO BUILING CODES.

ALL EQUIPMENT CONNECTIONS TO BE VERIFIED AND COORDINATED BY SUBCONTRACTORS WITH CONTRACTOR AND ARCHITECT

SYMBOL LEGEND

- 1/A5.2 — SECTION: SECTION NUMBER/ SHEET NUMBER
- 3 / A3 — DETAIL: DETAIL NUMBER SHEET NUMBER
- 14 — DOOR NUMBER
- A — WINDOW TYPE
- ENTRY 117 — ROOM NAME / ROOM NUMBER
- ELEVATION TAG
- x102.5 — SPOT ELEVATION - EXISTING
- x102.5 — SPOT ELEVATION - NEW
- 2 — REVISION
- 1-A4.1 — DETAIL NUMBER / SHEET NUMBER
- B / 12 — COLUMN GRID
- ℄ — CENTER LINE
- ℘ — PROPERTY LINE
- 1" DN. — CHANGE IN ELEVATION
- 12 / 5 — ROOF SLOPE INDICATION
- 3/A3.2 — INTERIOR ELEVATION: ELEVATION NUMBER SHEET NUMBER

GENERAL PROJECT INFORMATION AND CODE ANALYSIS

PROJECT SITE PHYSICAL ADDRESS

STREET ADDRESS: 2102 WARD LANE
CITY: BILOXI
STATE / ZIPCODE: MS 39502
TAX PARCEL ID NO: N/A
SCOPE OF WORK: New Boathouse

THE FOLLOWING INFORMATION IS BASED ON LOCAL BUILDING CODES

INTERNATIONAL BUILDING CODE (YEAR USED):

*ALL REFERENCES TO IBC SHALL FOLLOW AND BE IN ACCORDANCE WITH YEAR REFERENCED ABOVE.

1) CLASSIFICATION OF OCCUPANCY / ZONE: N/A
2) OCCUPANCY SEPARATION (TABLE 302.3.2): N/A
3) OCCUPANT LOAD (TABLE 1004.1.2): N/A
4) ALLOWABLE HEIGHT AND BUILDING AREA (TABLE 503):
5) MINIMUM TYPE OF CONSTRUCTION (CHAPTER 6):
6) FIRE RESISTANCE RATING - BUILDING ELEMENTS (TABLE 601)
7) FIRE RESISTANT RATING - EXTERIOR WALLS (TABLE 602)
8) HEIGHT (ACTUAL): 26'
9) NUMBER OF STORIES: (ACTUAL): One
10) SQUARE FOOTAGE: (ACTUAL) CONDITIONED S.F. = N/A
EXTERIOR COVERED S.F. = 1696 ⌗
UNDER BEAM S.F. = 2000 ⌗
11) SPRINKLED: N/A
12) ALARM SYSTEM REQUIRED? N/A
13) MODIFICATIONS: N/A
14 F.F.E.: 9' above M.H.T.
15) BUILDING SETBACK LINE REQUIREMENTS: (CITY ZONING)
A) FRONT / HOUR RATING: N/A
B) REAR: N/A
C) SIDE YARD - NORTH: N/A
D) SIDE YARD - SOUTH: N/A
16) PARKING REQUIREMENTS: N/A
17) FIRE DISTRICT: N/A
18) FLOOD ZONE: N/A

INDEX OF DRAWING SHEETS

TS	TITLE SHEET
G1	GENERAL NOTES.
1	SITE PLAN · CROSS SECTION ·
2	PILING PLAN · DECK FRAMING PLAN. ·
3.	FLOOR PLAN · ROOF FRAMING PLAN ·
4	ELECTRICAL PLAN · ELEVATIONS ·
MEP's	MECHANICAL · ELECTRICAL · PLUMBING · NOTES.

MATERIAL KEYING LEGEND

REV	REVISION / SUBMISSION	DATE

DENMARK DESIGN P.A.
ARCHITECTURE
11455 HOLLY BLUFF CIRCLE - BILOXI, MS 39532 - 228.348.2588

PROJECT TITLE: MANDAL BOATHOUSE

CONSULTANT:

SEAL: REGISTERED ARCHITECT Jorge E.E. Denmark 2143 Biloxi, MS STATE OF MISSISSIPPI

PROJECT NO:
DATE: 8/17/21
CHECKED:

SHEET NO: TS
OF
REV:

TABLE 2306.1 FASTENING SCHEDULE *(MODIFIED FOR INTERNAL PRESSURE)

CONNECTION	FASTENER	NUMBER OR SPACING
BAND JOIST TO SILL OR TOP PLATE, TOE NAIL	8d	3 IN. O.C.
JOIST TO BAND JOIST, FACE NAIL	16d COMMON	3
JOIST TO SILL OR GIRDER, TOE NAIL	8d COMMON	3
BRIDGING TO JOIST, TOE NAIL	8d COMMON	2
LEDGER STRIP	16d COMMON	3 @ EACH JOIST
1x6 OR LESS SUBFLOOR TO EACH JOIST, FACE NAIL	8d COMMON	2
OVER 1x6 SUBFLOOR TO EACH JOIST, FACE NAIL	8d COMMON	3
2-IN. SUBFLOOR TO JOIST OR GIRDER, BLIND OR FACE NAIL	16d COMMON	2
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d COMMON	8 IN. O.C.
TOP OR SOLE PLATE TO STUD, END NAIL	16d COMMON	2
STUD TO SOLE PLATE	8d COMMON	4
DOUBLE STUDS, FACE NAIL	10d COMMON	12 IN. O.C.
DOUBLE TOP PLATES, FACE NAIL	10d COMMON	8 IN. O.C.
TOP PLATES, LAP AND INTERSECTIONS, FACE NAIL	-	2-16d OR 3-10d COMMON
CONTINUOUS HEADER, TWO PIECES	16d COMMON	8 IN. O.C. ALONG EACH EDGE
CEILING JOIST TO PLATE, TOE NAIL	8d COMMON	3
CONTINUOUS HEADER TO STUD, TOE NAIL	8d COMMON	3
CEILING JOISTS, LAP OVER PARTITIONS, FACE NAIL	-	3-16d OR 4-10d COMMON
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	-	3-16d OR 4-10d COMMON
RAFTER TO PLATE, TOE NAIL	8d COMMON	3
1-INCH BRACE TO EACH STUD AND PLATE, FACE NAIL	8d COMMON	2
1x8 OR LESS SHEATHING TO EACH BEARING, FACE NAIL	8d COMMON	2
OVER 1x8 SHEATHING TO EACH BEARING, FACE NAIL	8d COMMON	3
BUILT-UP CORNER STUDS	16d COMMON	12 IN. O.C.
BUILT-UP GIRDERS AND BEAMS, OF THREE MEMBERS	20d COMMON	16 IN. O.C. AT TOP AND BOTTOM AND STAGGERED 2 ENDS AT EACH SPLICE
2-INCH PLANKS	16d COMMON	2 EACH BEARING
STUDS TO SOLE PLATE, END NAIL	16d COMMON	2 EACH END
WOOD STRUCTURAL PANEL SUBFLOOR *(7) 15/32 IN., 1/2 IN., 7/16 IN.	6d COMMON, ANNULAR OR SPIRAL THREAD	3 IN O.C. EDGES AND 6 IN O.C. INTERMEDIATE
19/32 IN. - 3/4 IN.	8d COMMON OR 6d ANNULAR OR SPIRAL THREAD	3 IN O.C. EDGES AND 6 IN O.C. INTERMEDIATE
1 IN. - 1 1/8 IN.	10d COMMON OR 8d ANNULAR OR SPIRAL HEAD	3 IN. O.C. EDGES AND 3 IN. O.C. INTERMEDIATE *(9)
15/32 IN., 1/2 IN., 7/16 IN.	16 GA. GALVANIZED WIRE STAPLES 3/8 IN. MINIMUM CROWN 1 5/8 IN. LENGTH	2 IN. O.C. EDGES AND 3 1/2 IN. O.C. INTERMEDIATE
19/32 IN., 5/8 IN.	16 GA. GALVANIZED WIRE STAPLES 3/8 IN. MINIMUM CROWN 1 5/8 IN. LENGTH	1 1/4 IN. O.C. EDGES AND 2 IN. O.C. INTERMEDIATE
WOOD STRUCTURAL PANEL & WALL SHEATHING PARTICLEBOARD WALL SHEATHING		
1/2 IN. OR LESS	8d COMMON (WALL) 8d COMMON (ROOF)	3 IN O.C. EDGES AND 6 IN O.C. INTERMEDIATE
19/32 IN. OR LESS	8d COMMON	3 IN O.C. EDGES AND 6 IN O.C. INTERMEDIATE
5/16 IN. - 1/2 IN.	16 GA. GALVANIZED WIRE STAPLES 3/8 IN. MINIMUM CROWN. LENGTH OF 1 IN. PLUS WOOD STRUCTURAL PANEL OR PARTICLEBOARD THICKNESS	2 IN. O.C. EDGES AND 4 IN. O.C. INTERMEDIATE
19/32 IN. - 3/4 IN.	16 GA. GALVANIZED WIRE STAPLES 3/8 IN. MINIMUM CROWN. LENGTH OF 1 IN. PLUS WOOD STRUCTURAL PANEL OR PARTICLEBOARD THICKNESS	1 IN. O.C. EDGES AND 2 1/2 IN. O.C. INTERMEDIATE
FIBERBOARD SHEATHING *(1)		
1/2 IN. REGULAR	6d COMMON NAIL OR 11 GA. GALV. ROOFING NAIL 1 1/2 IN. LONG WITH 7/16" HEAD	3 IN. O.C. EDGES, 6 IN, O.C. AT OTHER BEARING AREAS
1/2 IN. STRUCTURAL	8d COMMON NAIL OR 11 GA. GALV. ROOFING NAIL 1 1/2 IN. LONG WITH 7/16" HEAD	1 1/2 IN. O.C. EDGES, 3 IN, O.C. AT OTHER BEARING AREAS
25/32 IN. STRUCTURAL	8d COMMON NAIL OR 11 GA. GALV. ROOFING NAIL 1 1/2 IN. LONG WITH 7/16" HEAD	1 1/2 IN. O.C. EDGES, 3 IN, O.C. AT OTHER BEARING AREAS
GYPSUM SHEATING		
1/2 IN.	11 GA. 1 1/2 IN. GALVANIZED 7/16 IN. HEAD	2 IN. O.C. AT EDGES, 4 IN. O.C. AT OTHER BEARING
5/8 IN.	11 GA. 1 3/4 IN. GALVANIZED 7/16 IN. HEAD	2 IN. O.C. AT EDGES, 4 IN. O.C. AT OTHER BEARING
PARTICLEBOARD SIDING		
5/16 IN. - 1/2 IN. *(3)	6d *(4)	
5/8 IN. *(5)	8d *(4)	
3/4 IN. *(6)	8d *(4)	
HARDBOARD LAP SIDING DIRECT TO STUDS *(5)	8d *(8) CORROSION-RESISTANT WITH MINIMUM SHANK DIAMETER OF 0.099 IN. AND MINIMUM HEAD DIAMETER OF 0.24 IN.	8 IN. O.C. AT TOP AND BOTTOM EDGES
HARDBOARD LAP SIDING OVER SHEATHING	10d *(6) CORROSION-RESISTANT WITH MINIMUM SHANK DIAMETER OF 0.099 IN. AND MINIMUM HEAD DIAMETER OF 0.24 IN.	8 IN. O.C. AT TOP AND BOTTOM EDGES
HARDBOARD PANEL SIDING DIRECT TO STUDS	6d *(6) CORROSION-RESISTANT WITH MINIMUM SHANK DIAMETER OF 0.092 IN. AND MINIMUM HEAD DIAMETER OF 0.225 IN.	3 IN. O.C. AT EDGES AND 6 IN. O.C. AT INTERMEDIATE SUPPORTS
HARDBOARD PANEL SIDING OVER SHEATHING	8d *(6) CORROSION-RESISTANT WITH MINIMUM SHANK DIAMETER OF 0.092 IN. AND MINIMUM HEAD DIAMETER OF 0.225 IN.	3 IN. O.C. AT EDGES AND 6 IN. O.C. AT INTERMEDIATE SUPPORTS

TABLE 2306.1 FASTENING SCHEDULE KEY NOTES:

FOR SI: 1 INCH = 25.4 mm

*(1) FIBERBOARD SHEATHING MAY BE STAPLED USING 16 GA. GALVANIZED STAPLES 1 1/8" LONG FOR 1/2" SHEATHING AND 1 1/2" LONG FOR 25/32" SHEATHING. STAPLES TO HAVE MINIMUM CROWN OF 7/16" AND SPACED 3" O.C. AT EDGES AND 6" O.C. AND OTHER BEARING.
*(2) DRYWALL NAILS SHALL CONFORM TO ASTM C 514
*(3) SIDING APPLIED TO 5/8" NET WOOD SHEATHING, 15/32 WOOD STRUCTURAL PANEL OR 1/2" PARTICLEBOARD SHEATHING
*(4) CORROSION-RESISTANT NAILS SPACED 3" O.C. AT EDGE AND 4" O.C. INTERMEDIATE SUPPORTS. NAILS SHALL HAVE A MINIMUM EDGE DISTANCE OF 3/8"
*(5) SIDING APPLIED TO STUDS SPACED 16" MAXIMUM.
*(6) SIDING APPLIED DIRECTLY TO STUDS SPACED 24" O.C. MAXIMUM.
*(7) USE ANNULAR OR SPIRAL THREAD NAILS FOR COMBINATION SUBFLOOR/UNDERLAYMENT (SINGLE FLOOR)
*(8) NAIL MUST BE OF SUFFICIENT LENGTH TO ACCOMMODATE THICKNESS OF SIDING AND SHEATHING, IF USED, AND ALLOW MINIMUM STUD PENETRATION OF 1 1/2" INCHES.
*(9) FOR 1-INCH WOOD STRUCTURAL PANELS, 6" O.C. INTERMEDIATE SHALL BE PERMITTED.

ENGINEERING GENERAL NOTES:

1. ARCHITECTURAL FINISHES, APPLIANCES, DOORS, WINDOWS, ETC. PER OWNER / ARCHITECT
2. ELECTRICAL DESIGN & INSTALLATION TO BE BY ALABAMA LICENSED ELECTRICAL CONTRACTOR AND PER N.E.C. REQUIREMENTS/LOCAL CODES
3. HVAC DESIGN & INSTALLATION TO BE BY [redacted] LICENSED MECHANICAL CONTRACTOR AND BE IN ACCORDANCE WITH D.C.A. ENERGY CODE REQUIREMENTS
4. PLUMBING DESIGN & INSTALLATION TO BE BY [redacted] LICENSED PLUMBING CONTRACTOR AND PER APPLICABLE CODE. Mississippi
5. ALL DOORS & WINDOWS IN EXTERIOR WALLS ARE TO BE STORM RATED TO 140 M.P.H. - 3 SEC. GUST.
6. SEE TRUSS MANUFACTURERS TRUSS DRAWINGS FOR LOAD BEARING WALLS INTERIOR GRADE BEAMS ARE LOCATED UNDER LOAD BEARING WALLS
7. CONTRACTOR TO VERIFY FLOOD ZONE AND WATER TABLE PRIOR TO START OF CONSTRUCTION AND ASSURE FINISH FLOOR ELEVATION IS AT REQUIRED ELEVATION
8. CONTRACTOR TO VERIFY THAT SOIL IS FREE OF MUCK, CLAY, SILT, ORGANIC DEBRIS AND OTHER DELETERIOUS MATERIALS.

STRUCTURAL NOTES:

S1. STRUCTURES WITHIN THE WIND-BORNE DEBRIS REGION, WHICH ARE DEFINED AS AREAS WITHIN HURRICANE-PRONE REGIONS WITHIN ONE MILE OF THE COASTAL MEAN HIGH WATER LINE WHERE THE BASIC WIND SPEED IS 110 MILES PER HOUR OR GREATER, SHALL BE DESIGNED IN ACCORDINANCE WITH ONE OR MORE OF THE ACCEPTED DESIGN MANUALS LISTED IN SECTION R301.2.1.1 OF THE [redacted] 2018 INTERNATIONAL RESIDENTIAL CODE.

S2. INTERNAL PRESSURE COEFFICENT VALUE EQUALS ±0.55.

S3. WINDOWS IN BUILDINGS LOCATED IN WINDBORNE DEBRIS REGIONS (AS DESCRIBED IN S1) SHALL HAVE GLAZED OPEININGS PROTECTED FROM WINDBORNE DEBRIS AS DESCRIBED IN SECTION R301.2.1.2 IN THE 2003 INTERNATIONAL RESIDENTIAL CODE.

S4. USE 3/4" PLYWOOD (MINIMUM) FOR ROOF SHEATHING.

S5. USE 3/4" PLYWOOD (MINIMUM) FOR WALL SHEATHING.

S6. USE THE MODIFIED FASTENING SCHEDULE TABLES R602.3.(1-5) AS SHOWN IN THE 2003 INTERNATIONAL RESIDENTIAL CODE.

S7. SEE ATTACHED MODIFIED FASTENING SCHEDULE TABLE 2306.1 FOR INTERNAL PRESSURE DESIGN

S8. COMPONENTS AND CLADDING PRESSURES PER TABLE R301.2(2) IN THE [redacted] INTERNATIONAL RESIDENTIAL CODE 2018

S9. SHUTTERS OR IMPACT GLASS NOT REQUIRED

DESIGN BASIS:

D1. DESIGN IS BASED ON A WIND SPEED TO 140 MPH - 3 SEC. GUST
EXPOSURE CATEGORY C
IMPORTANCE FACTOR 1.0
VERTICAL WIND LOAD, PSF SEE OWNER FOR WIND LOAD REPORT
HORIZONTAL WIND LOAD, PSF SEE OWNER FOR WIND LOAD REPORT
CLADDING: ROOF DESIGN PRESSURE, PSF 20.18 -49.94
SIDING DESIGN PRESSURE, PSF 49.98 -61.74
FLOOR DEAD LOAD OF 20 PSF AND LIVE LOAD OF 40 PSF, ROOF LIVE LOAD OF 20 PSF, AND DECK LIVE LOAD OF 50 PSF. DESIGN SOIL BEARING CAPACITY IS 2000 PSF.

D2. METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE THE INTEGRITY AND STABILITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

GEOTECHNICAL NOTES:

G1. CLEAR AND GRUB SURFACE SOILS WITHIN AND EXTENDING 5 FEET BEYOND BUILDING AREA. TEST FOR AND REMOVE ORGANIC AND ORGANIC LADEN SURFACE SOILS FROM UNDER BUILDING AREA UNTIL CLEAN SAND IS ENCOUNTERED.

G2. COMPACT EXISTING SOILS UNTIL A DENSITY OF 98 % OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY IS ACHIEVED TO A DEPTH OF TWO (2) FEET BELOW COMPACTED GRADE.

G3. FILL SOILS USED TO RAISE THE BUILDING AREA TO FINISHED GRADE SHALL BE SANDS CONTAINING NO MORE THAN 15 %, BY DRY WEIGHT, FINER THAN THE U.S. No. 200 MESH SIEVE. FILL SHALL BE PLACED IN THIN LEVEL LIFTS NOT TO EXCEED TWELVE (12) INCHES, LOOSE, AND COMPACTED TO A DENSITY OF 98% OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY THROUGHOUT ITS FULL DEPTH.

G4. AREA UNDER SLABS TO BE TREATED FOR TERMITES.

CONCRETE NOTES:

C1. CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II. AGGREGATE SHALL CONFORM TO ASTM C-33.

C2. MIXING, TRANSPORTING, AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301 (LATEST EDITION). CONCRETE SHALL BE POURED WITH 5" MAXIMUM SLUMP.

C3. ALLOW CONCRETE TO CURE FOR A MINIMUM OF 7 DAYS BEFORE ANY LOADS ARE APPLIED.

C4. DETAILING OF REINFORCEMENT BARS AND ACCESSORIES SHALL CONFORM TO THE CRSI "MANUAL OF STANDARD PRACTICE", LATEST EDITION.

C5. UNLESS OTHERWISE NOTED, THE FOLLOWING COVER FOR REINFORCEMENT SHALL BE PROVIDED:
A. CONCRETE DEPOSITED DIRECTLY AGAINST GROUND, 3" CLEAR.
B. FORMED CONCRETE EXPOSED TO WEATHER OR GROUND AFTER REMOVAL OF FORMS, 2" CLEAR.
C. FORMED CONCRETE NOT EXPOSED TO WEATHER OR GROUND, 1 1/2" CLEAR FOR COLUMNS AND BEAMS, 3/4" CLEAR FOR SLABS AND WALLS.

C6. CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A-615, GRADE 40. REINFORCEMENT BARS SHALL NOT BE WELDED OR HEATED UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

C7. REINFORCING BARS SHALL BE CONSIDERED CONTINUOUS AND SHALL HAVE A MINIMUM 40 BAR DIAMETER LAP UNLESS NOTED OTHERWISE.

C8. WELDED WIRE FABRIC SHALL BE 6x6-10/10 CONFORMING TO ASTM A185. FABRIC SHALL BE LAPPED TWO MESH AT SPLICES.

MASONRY NOTES:

GENERAL NOTES.
1. MASONRY TO CONFORM TO NCMA STANDARDS
2. MASONRY STUCCO W/ CONROL JOINTS BOUNDING 400 PSF MAX.

M1. HOLLOW CONCRETE BLOCK (MASONRY) UNITS SHALL CONFORM TO ASTM C-90, NORMAL WEIGHT, GRADE N, TYPE II WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI ON THE NET AREA AND 1,000 PSI ON THE GROSS AREA. (f'm = 1,500 PSI)

M2. ALL MORTAR FOR USE IN MASONRY SHALL CONFORM TO ASTM C-270, TYPE M OR S.

M3. ALL GROUT FOR USE IN MASONRY SHALL CONFORM TO ASTM C-476, MIN 2,500 PSI AND NOT LESS THAN A 6 1/2 SACK MIX. MINIMUM COARSE AGGREGATE SIZE SHALL BE 3/8". SLUMP SHALL BE BETWEEN 8 AND 10 INCHES.

M4. PROVIDE 9 GAGE LADDER TYPE JOINT REINFORCEMENT (OR DUR-O-WALL) AT 16" O.C. VERTICALLY FOR TYPICAL HORIZONTAL REINFORCEMENT IN CMU WALLS.

M5. PROVIDE 8" LAP ON ALL HORIZONTAL JOINT REINFORCING. USE PREFABRICATED "L" AND "T" UNITS AT CORNERS AND INTERSECTIONS.

M6. METAL ACCESSORIES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 AND/OR ASTM A641.

M7. EXTERIOR OF ALL C.M.U. WALLS TO BE WATERPROOFED W/ A HIGH QUALITY WARRANTABLE SYSTEM (MIN. 10 YEAR WARRANTY) INSTALL AS PER MANUF. INSTRUCTIONS

M8. ALL MASONARY HEADERS TO BE PRE-CAST AS BY CAST-CRETE OR EQUAL. INSTALL AS PER MANUF. SPECIFICATIONS. REFER TO A3.2
NOTE: CONTRACTOR CAUTIONED TO SUPPORT ALL LOAD (LINTEL/HEADER) UNTIL THEY REACH FULL STRENGTH

M9. VERTICAL REBAR TO BE #5. INSTALL @ MAX. 16" O.C., DOUBLE @ CORNERS, AND ADJACENT TO ALL OPENINGS. LAP/SPLICES TO BE MIN. 25"
REFER TO FOUNDATION DETAILS FOR LOCATIONS OF REBAR

M10. CONTRACTOR SHALL PROVIDE A CRAWL SPACE ACCESS DOOR AND CRAWL SPACE VENTALATION AS PER CODE.

M11. 2 COURSES GROUT FILLED CMU LINTEL BLOCK (TOP OF WALL) WITH 2- #5 (MIN.) REBAR CONTINUOUS EACH COURSE, TOTAL (4) #5

M12. 2 COURSES GROUT FILLED CMU LINTEL BLOCK (WINDOW & DOOR HEADERS)) WITH 2- #5 (MIN.) REBAR CONTINUOUS EACH COURSE, TOTAL (4) #5

WOOD FRAME CONSTRUCTION:

GENERAL NOTES.
1. ALL FRAMING PER CHAPTERS 5, 6, & 8, IRC 2003
2. USE TABLE 2306.1 FASTENING SCHEDULE (MODIFIED FOR INTERNAL PRESSURE) THIS SHEET
3. ABIDE BY THE FRAMING REQUIREMENTS OF CHAPTERS 5, 6, & 8, IRC 2003 WITH PARTICULAR ATTENTION TO CORNER BRACING (3-STUD MIN.)/LATERIAL SUPPORT, LATERAL BRACING, STAIR AND HANDRAIL FRAMING.
4. WINDOWS WITHIN 36" OF CORNERS AND AT BAY WINDOW:
   * USE ONLY STORM RATED WINDOWS RATED AT: 140 MPH - 3 SEC. GUST
   * USE DOUBLE CRIPPLES
   * USE DOUBLE STUD JAMBS
   * USE DOUBLE STUD 8" O.C. TO CORNER
   * USE (3) STUDS (MIN.) @ CORNER
5. GABLE EXPOSURES:
   * USE GABLE STUDS AT 16" C-C
   * USE LATERAL BRACING (SOLID BLOCKING) 48" C-C THRU THE FIRST (4) RAFTERS

W1. ALL LOAD BEARING FRAMING SHALL BE GROUP II (SYP NO. 2 GRADE OR BETTER, M.M.[redacted]) UNLESS NOTED OTHERWISE. ALL FRAMING EXPOSED TO WEATHER OR IN CONTACT WITH SOIL OR CONCRETE SHALL BE PRESSURE TREATED
* OPTIONAL LUMBER - LODGE POLE PINE NO. 1 (MMC 19%) OR STRONGER
- SPF SELECT STRUCTURAL (MMC 19%) OR STRONGER
- FRAMING LUMBER WITH SINGLE EXTREME FIBER BENDING, "F" " OF 1200 PSI (MINIMUM)
- FRAMING LUMBER WITH REPETITIVE EXTREME FIBER BENDING, "F " OF 1450 PSI (MINIMUM)
GIRDER TO BE PRESSURE TREATED TO AWPA STANDARDS (AS REQ'D)

W2. ALL FRAMING SHALL BE IN ACCORDANCE WITH SBCCI "STANDARD FOR HURRICANE RESISTANT RESIDENTIAL CONSTRUCTION" SSTD 10-99 UNLESS NOTED OTHERWISE.
- USE SIMPSON FRAMING ANCHOR AT TOP AND BOTTOM OF ALL INTERIOR AND EXTERIOR LOAD BEARING WALLS ——— SP1 AND SP2
- USE SIMPSON HURRICANE HARDWARE AT EACH RAFTER TO TOP PLATE CONNECTION AT INTERIOR AND EXTERIOR LOAD BEARING WALLS ——— MTS, SERIES
- USE SIMPSON RIDGE TO RAFTER CONNECTORS AT RIDGE BEAM OR SIMPSON A35 CONNECTOR

W3. NOT USED

W4. ROOF JOIST SHALL BE FASTENED AS SHOWN ON DRAWINGS. USE SIMPSON'S LTS16 @ EACH END OF ROOF FRAMING AND AT INTERIOR BEARING WALLS.

W5. ALL FASTENERS USED IN EXPOSED CONDITIONS SHALL BE HEAVILY GALVANIZED (I.E. SIMPSON Z-MAX). WHERE A PARTICULAR FASTENER BRAND (IE: SIMPSON STRONG TIE) IS CALLED OUT, LIKE FASTENERS PRODUCED BY OTHER COMPANIES MAY BE SUBSTITUTED PROVIDED ALL LOAD CAPACITIES ARE EQUAL TO OR GREATER THAN SPECIFIED.

W6. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH RATED 3/4" (23/32") CDX NAILED AS PER FASTENING SCHEDULE THIS SHEET. SHEATHING SHALL BE ATTACHED ALONG ALL FOUR EDGES WITH JOINTS OCCURRING OVER COMMON FRAMING MEMBERS OR BLOCKING.

W7. ALL INTERIOR LOAD BEARING WALLS SHALL HAVE SIMPSON "SP1" STUD PLATE TIES AT BOTTOM AND "SP2" AT TOP OF EACH STUD UNLESS OSB OR CDX SHEATHING IS SPECIFIED FOR UPLIFT RESISTANCE.

W8. EXTERIOR AND INTERIOR LOAD BEARING COLUMNS SHALL BE PT6x6 POSTS (MAX HGT. 12 FEET) WITH SIMPSON "ABU66" BASE. BEAM TO COLUMN STRAPS SHALL BE AS PER HEADER NOTE. ALTERNATE COLUMNS CONSTRUCTED OF ALUMINUM, STEEL, OR RESIN MATERIALS MAY BE SUBSTITUTED PROVIDED THE COLUMNS ARE MANUFACTURER CERTIFIED AS LOAD BEARING (4,000# MIN FOR HEIGHT INSTALLED). UPLIFT ANCHORAGE FOR ALTERNATE COLUMNS SHALL BE PROVIDED BY INSTALLING A 5/8" ANCHOR BOLT IN THE FOUNDATION WITH A GALVANIZED COUPLING AND GALV 5/8" ALL-THREAD ROD UP THROUGH BEAM ABOVE. USE 1/8x2x2 PLATE WASHER ON TOP OF BEAM WITH 5/8" NUT TO FASTEN.

W9. ROOF SHEATHING SHALL BE RATED 3/4" (23/32") CDX NAILED AS PER O.C. EDGES AND 12" O.C. INTERIOR. THE SHEATHING SHALL BE APPLIED WITH LONG DIMENSION PERPENDICULAR TO THE FRAMING AND END JOINTS STAGGERED.

W10. ALL HEADERS IN 2x4 STUD WALLS SHALL BE CONSTRUCTED OF (2) 2x12's WITH 1/2" SPACER UNLESS NOTED OTHERWISE. ALL HEADERS IN 2x6 STUD WALLS SHALL BE CONSTRUCTED OF (3) 2x12's WITH 1/2" SPACERS UNLESS NOTED OTHERWISE. HEADERS WITH 4 FEET OR LESS SPAN SHALL BE STRAPPED TO HEADER STUDS WITH SIMPSON "LSTA21" STRAPS (OR EQUAL) ON EACH END. HEADERS WITH SPANS BETWEEN 4 AND 9 FEET SHALL HAVE TWO STRAPS EACH END.

W11. TOP PLATE SPLICES SHALL BE MADE WITH A MINIMUM LAP OF 4 FEET AND CONNECTED WITH (18) 16d COMMON NAILS.

W12. ALL EXTERIOR WINDOWS AND DOORS SHALL BE RATED FOR DESIGN WIND SPEED AND EXPOSURE NOTED IN DESIGN BASIS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS FOR SPECIFIED WIND LOADING.

W13. FLOOR JOISTS SHALL BE OPEN WEB FLOOR TRUSSES (3 1/2" WIDE) OR "TJI" JOIST. TRUSS MANUFACTURER TO PROVIDE ENGINEERED SHOP DRAWINGS OF TRUSSES, LAYOUT, AND BRACING. TRUSSES TO BE DESIGNED AS PER DRAWINGS
SEE PLANS FOR ANY ADDITIONAL BLOCKING OR REINFORCEMENT WHICH MAY BE SPECIFIED SUBMIT LOAD CALCULATIONS, REACTIONS, AND FABRICATION DRAWINGS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO TRUSS MANUFACTURE.

*** (W13 MANDATORY) ***

W14. GALVANIZED 1-1/2" WIDE, 20 GA MIN STRAPS BETWEEN FLOORS SHALL BE INSTALLED AT 32" O.C., AT EACH SIDE OF HEADER STUDS FOR DOOR AND WINDOW OPENINGS, AND AT MULTIPLE BEARING STUDS SUPPORTING ROOF GIRDER TRUSSES. STRAP LENGTH SHALL BE EQUAL TO THE SUM OF THE FLOOR TRUSS DEPTH + 20" MINIMUM. USE (10) 10d NAILS MIN IN EACH END LENGTH.

W15. FLOOR SHEATHING SHALL BE 23/32" MIN C-D T&G SHEATHING GRADE PLYWOOD. THE SHEATHING SHALL BE APPLIED WITH LONG DIMENSION PERPENDICULAR TO THE FRAMING AND END JOINTS STAGGERED. FLOOR FRAMING SHALL HAVE CONSTRUCTION ADHESIVE APPLIED TO TOP SURFACE PRIOR TO SHEATHING. SHEATHING SHALL BE NAILED TO FRAMING AND BLOCKING WITH 10d COMMON NAILS 6" O.C. AT EDGES AND 12" O.C. IN FIELD.

MATERIAL KEYING LEGEND

REV	REVISION / SUBMISSION	DATE

DENMARK DESIGN P.A.
ARCHITECTURE
11455 HOLLY BLUFF CIRCLE - BILOXI, MS 39532 - 228.348.2588

PROJECT TITLE: MANDAL BOATHOUSE

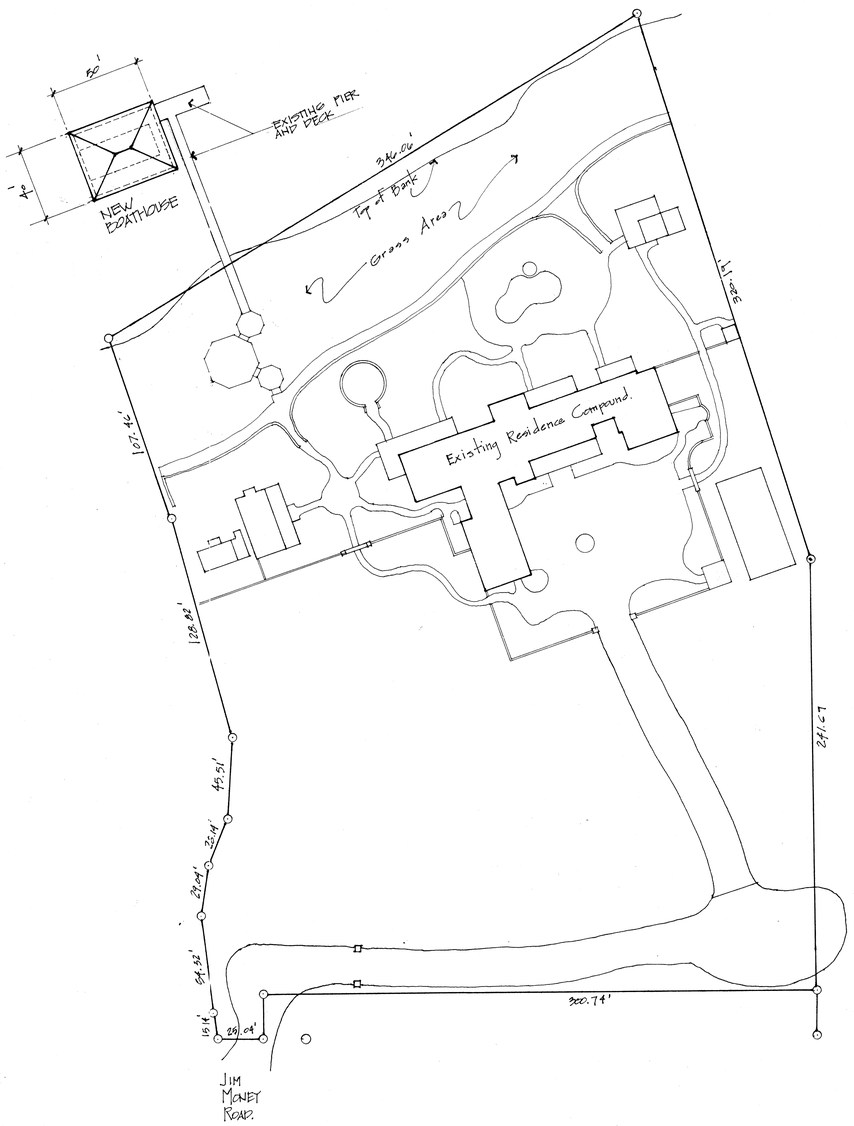
CONSULTANT:

SEAL: REGISTERED ARCHITECT Mississippi C. Denmark 2143 Biloxi, MS STATE OF MISSISSIPPI

PROJECT NO:
DATE: 8/17/21
CHECKED:

SHEET NO: G1 OF

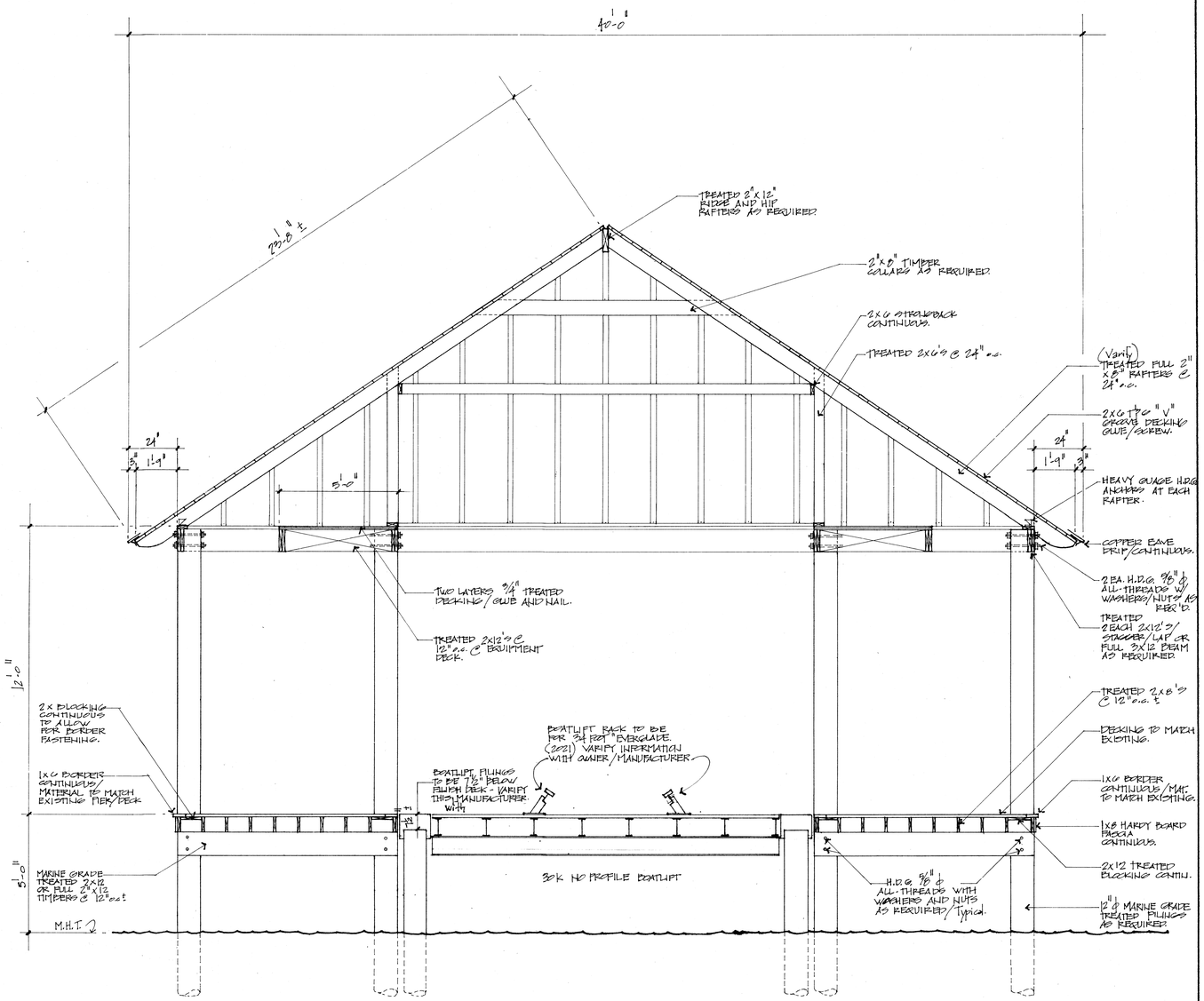
REV:



SITE PLAN

SC. 1" = 40'

NORTH



1 CROSS SECTION

SC. 3/8"

MATERIAL KEYING LEGEND

REV	REVISION/SUBMISSION	DATE
	NOT FOR CONSTRUCTION	

DENMARK DESIGN P.A.

ARCHITECTURE

11455 HOLLY BLUFF CIRCLE · BILOXI, MS 39532 228-348-2588

PROJECT TITLE:

MANDAL BOATHOUSE.

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SEAL:

MISSISSIPPI REGISTERED ARCHITECT
Joseph C. Denmark
2143
Biloxi MS
STATE OF MISSISSIPPI

PROJECT NO:

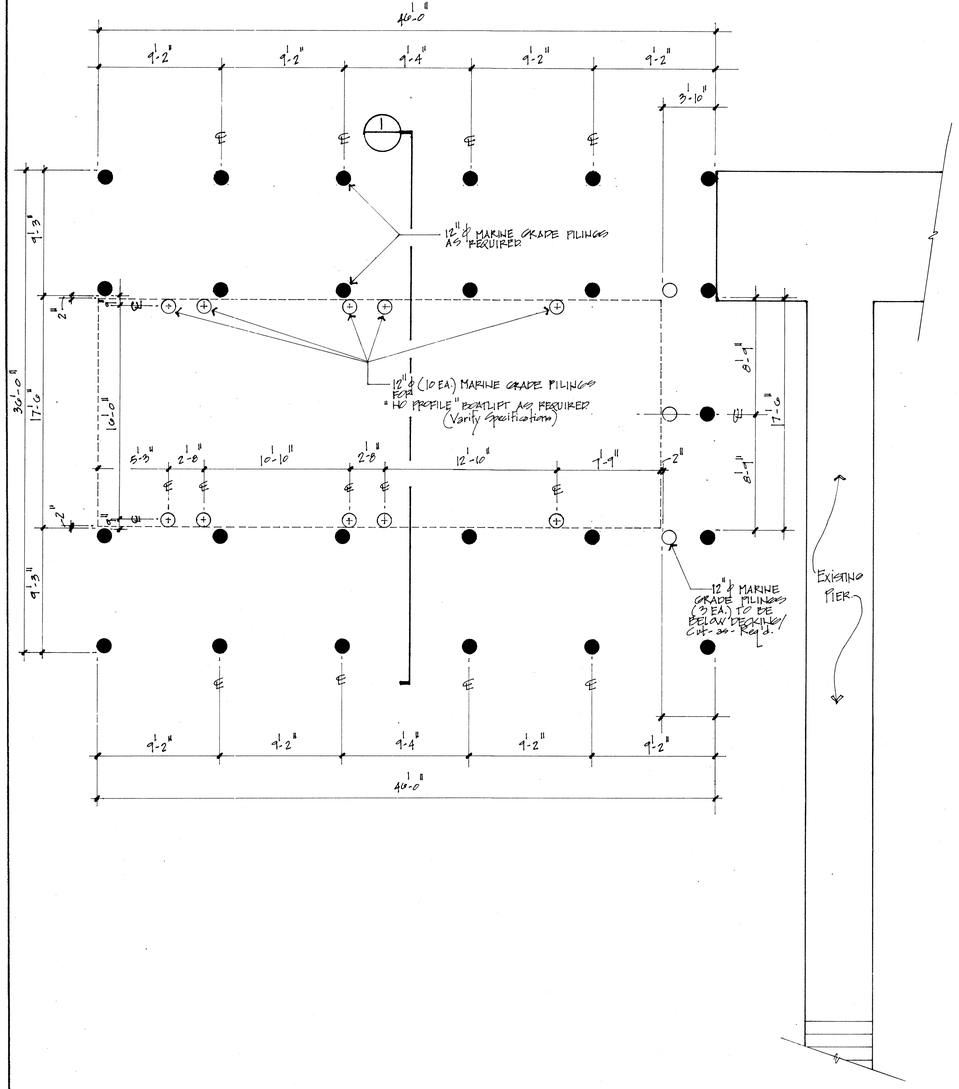
DATE: 8/17/21

CHECKED:

SHEET NO: 1 OF

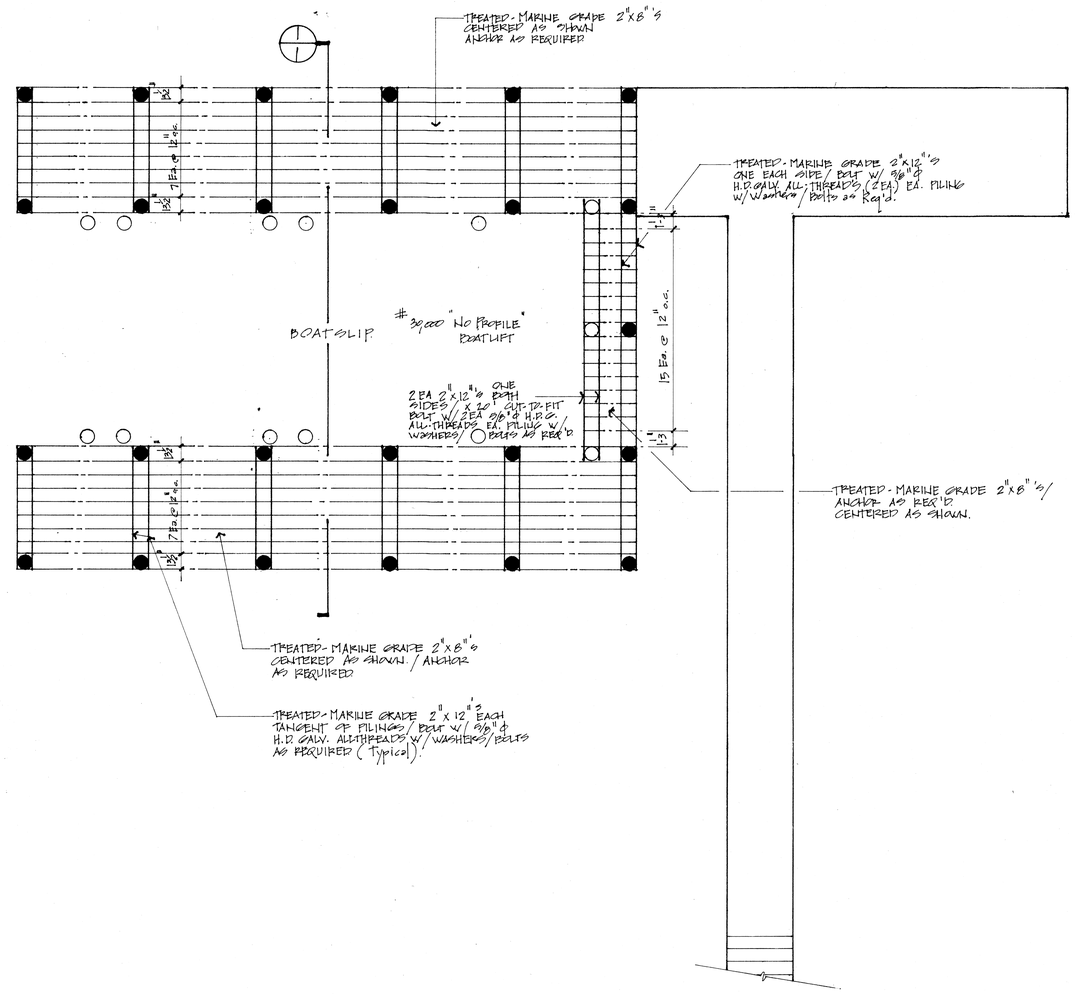
REV:

SOUTHERN BLUEPRINT 817153



PILING PLAN

SCALE · 3/16" = 1'-0"



DECK FRAMING PLAN

SCALE · 3/16" = 1'-0"

MATERIAL KEYING LEGEND

REV	REVISION/SUBMISSION	DATE
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DENMARK DESIGN P.A.

ARCHITECTURE

11455 HOLLY BLUFF CIRCLE - BILOXI, MS 39532 228-348-2588

PROJECT TITLE:

MANDAL BOATHOUSE.

CONSULTANT:

SEAL:

REGISTERED ARCHITECT — George E. Denmark — 3743 — Biloxi, MS — STATE OF MISSISSIPPI

PROJECT NO:

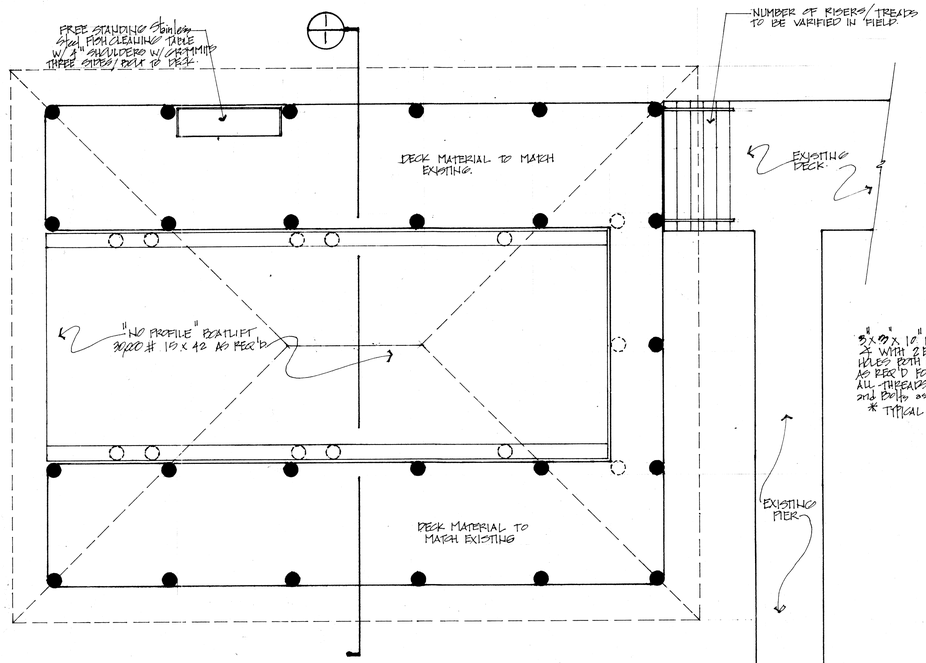
DATE: 8/17/21

CHECKED:

SHEET NO: 2 OF

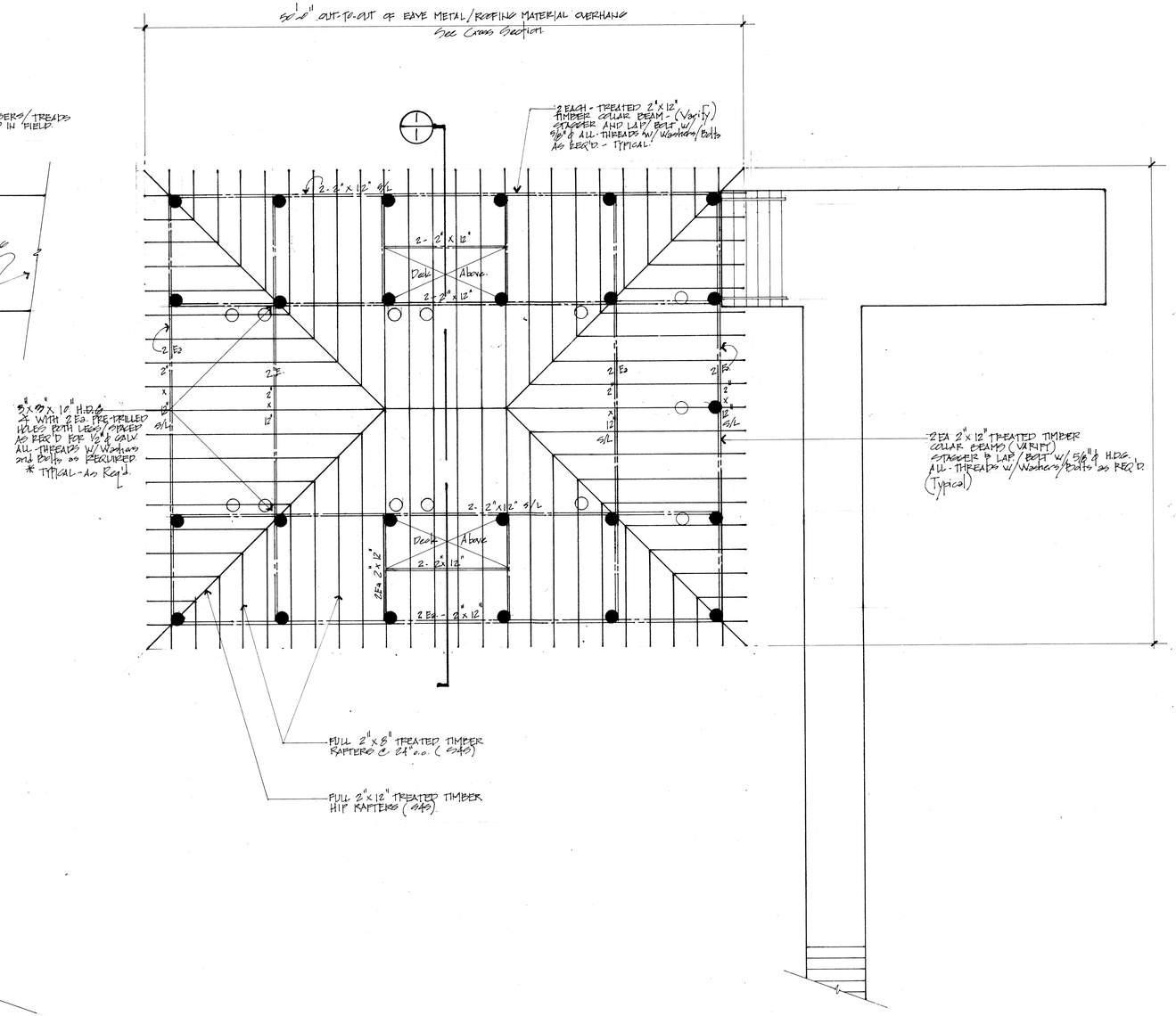
REV:

SOUTHERN BLUEPRINT 871153



FLOOR PLAN

SCALE - 3/16" = 1'-0"

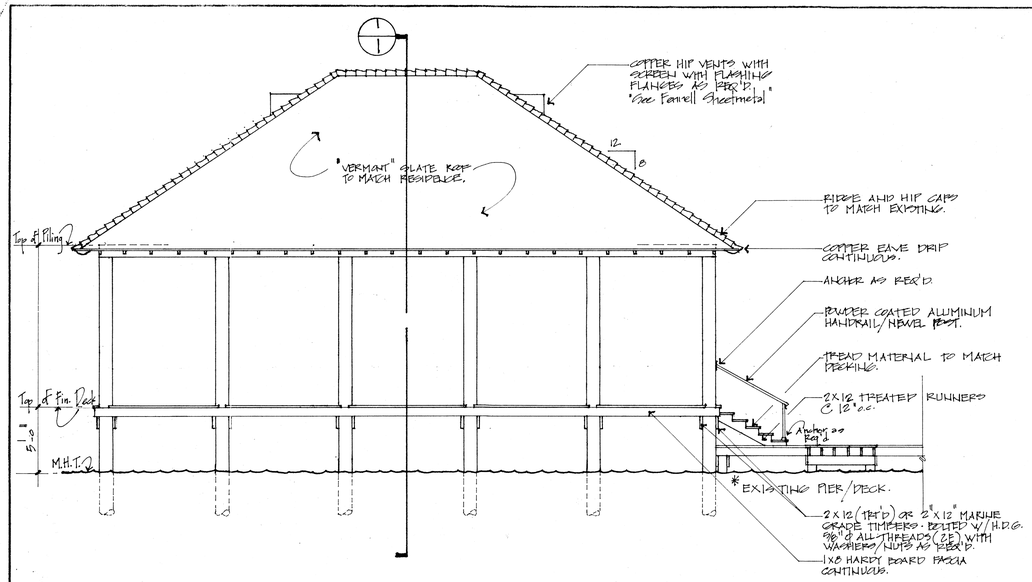


ROOF FRAMING PLAN

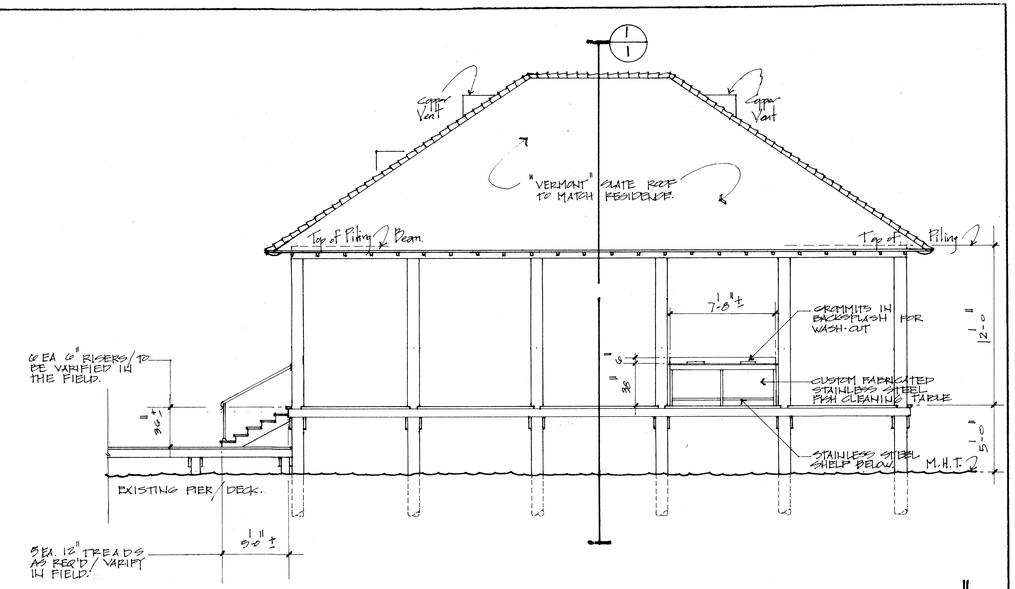
SCALE - 3/16" = 1'-0"

MATERIAL KEYING LEGEND

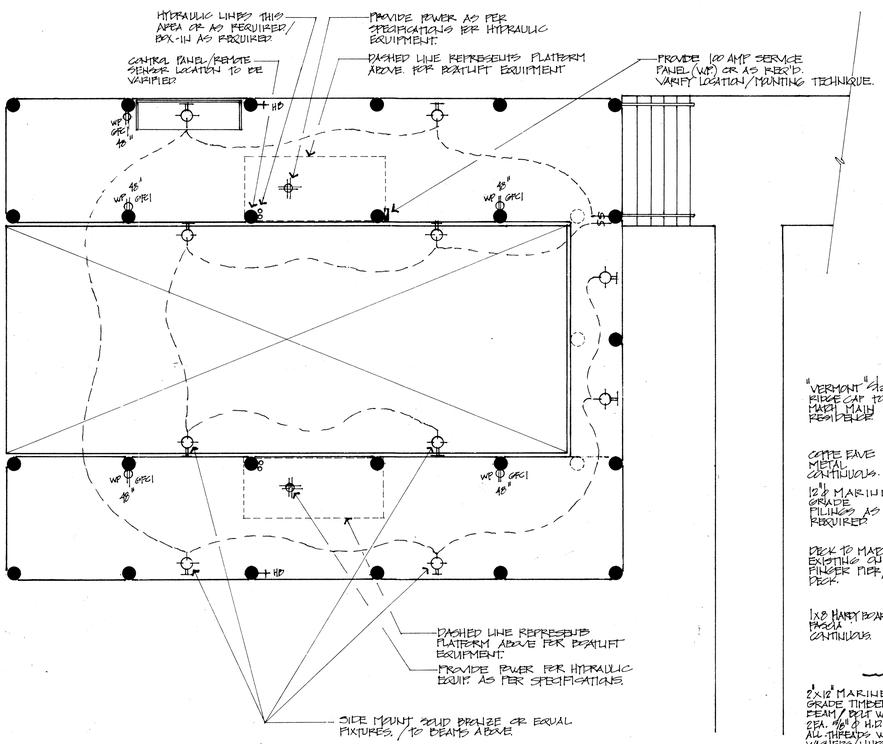
REV	REVISION/SUBMISSION	DATE



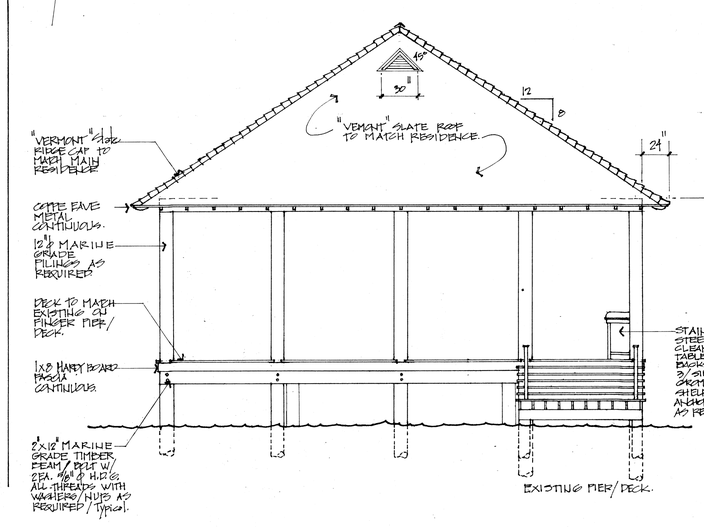
SOUTH ELEVATION sc. 3/16"



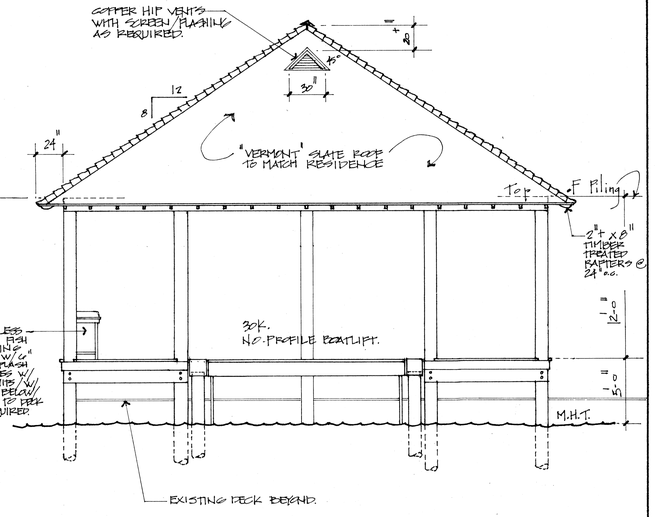
NORTH ELEVATION sc. 3/16"



ELECTRICAL PLAN sc. 3/16"



EAST ELEVATION sc. 3/16"



WEST ELEVATION sc. 3/16"

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DENMARK DESIGN P.A.

ARCHITECTURE

11455 HOLLY BLUFF CIRCLE - BILOXI, MS 39532 228-348-2588

PROJECT TITLE: MANDAL BOATHOUSE.

CONSULTANT:

SEAL: REGISTERED ARCHITECT — Denmark Design P.A. — 2143 — Biloxi MS — STATE OF MISSISSIPPI

PROJECT NO:

DATE: 8/17/21

CHECKED:

SHEET NO: 4 OF

REV:

SOUTHERN BLUEPRINT 817153

DIVISION 15 - MECHANICAL

SECTION 15010 - GENERAL

A. EXTENT OF WORK:

PROVIDE AND INSTALL COMPLETE AIR CONDITIONING AND VENTILATION SYSTEM, AND COMPLETE PLUMBING SYSTEM, AS DRAWN ON THE ACCOMPANYING PLANS.

B. CODE REQUIREMENTS:

ALL WORK SHALL COMPLY WITH ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES, CODES, AND AS SHOWN ON DRAWINGS AND SPECIFIED HEREIN.

C. FEE AND PERMITS:

PROVIDE, PROCURE AND PAY FOR ALL PERMITS, LICENSES, CERTIFICATE, INSPECTIONS, ETC., REQUIRED TO CARRY OUT AND COMPLETE THE WORK.

LETTERS OR CERTIFICATES OF APPROVAL SHALL BE FURNISHED TO THE ARCHITECT UPON COMPLETION OF THE JOB FROM INSPECTION DEPARTMENTS HAVING JURISDICTION BEFORE FINAL PAYMENT IS MADE TO THE CONTRACTOR. RECEIPTS FOR PAYMENT OF ALL PERMITS AND INSPECTION FEES SHALL ALSO BE PRODUCED AT THIS TIME, AND THOSE MADE IN THE NAME OF THE OWNER SHALL BE TURNED OVER TO THE ARCHITECT UPON FINAL ACCEPTANCE OF THE WORK COVERED HEREUNDER.

D. GUARANTEE:

CONTRACTORS SHALL GUARANTEE THAT ALL WORK WHICH HE IS RESPONSIBLE AND THE COMPLETE SYSTEM OPERATION WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS. THE CONTRACTOR AGREES TO REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF THE APPARATUS ON THE WORK WHICH PROVES DEFECTIVE WITHIN ONE (1) YEAR.

MECHANICAL CONTRACTORS SHALL FURNISH TO THE GENERAL CONTRACTOR ALL CERTIFICATES OF FINAL INSPECTION AND APPROVAL FROM INSPECTION AUTHORITIES HAVING JURISDICTION.

E. DRAWINGS:

INSTALL WORK AS INDICATED ON DRAWINGS; HOWEVER, CHANGES TO ACCOMMODATE INSTALLATION OF WORK WITH OTHER WORK OR TO MEET ARCHITECTURAL OR STRUCTURAL CONDITIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.

FOR PURPOSE OF CLARITY AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC TO THE EXTENT THAT MANY OFFSETS, BONDS, UNIONS SPECIAL FITTINGS AND EXACT LOCATIONS ARE NOT INDICATED. MAKE USE OF ALL DATA IN ALL CONTRACT DOCUMENTS AND VERIFY INFORMATION AT SITE.

ALL DIMENSIONS AND LOCATIONS OF EQUIPMENT, DOORS, PARTITIONS, FIXTURES, GRILLES, ETC., ARE TO BE TAKEN FROM THE DRAWINGS BUT SHALL BE VERIFIED AT THE SITE.

F. INSPECTIONS:

DO NOT ALLOW ANY WORK TO BE COVERED UP OR ENCLOSED UNTIL TESTED BY THIS CONTRACTOR, INSPECTED AND APPROVED BY THE ARCHITECT AND OTHER AUTHORITIES HAVING JURISDICTION OVER THIS WORK.

SHOULD ANY WORK BE ENCLOSED OR COVERED UP BEFORE SUCH INSPECTIONS AND TESTS, THIS CONTRACTOR SHALL AT HIS WON EXPENSE UNCOVER WORK AND AFTER IT HAS BEEN TESTED, INSPECTED AND APPROVED, MAKE ALL REPAIRS AS NECESSARY TO RESTORE ALL WORK DISTURBED BY HIM TO ITS ORIGINAL AND PROPER CONDITIONS AND TO THE SATISFACTION OF THE ARCHITECT.

G. RECORD DRAWINGS:

AT THE COMPLETION OF THIS PHASE OF WORK, THIS CONTRACTOR SHALL FURNISH REPRODUCIBLE DRAWINGS SHOWING ALL VARIATIONS IN RUNNING OF PIPE, LOCATION OF DRAINS, CLEANOUTS, EQUIPMENT, ETC., FROM SHOWN ON THE ORIGINAL DRAWINGS. THESE DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT UPON COMPLETION OF THIS PHASE.

H. DEFINITION OF CONTRACTOR:

THE TERM "CONTRACTOR" AS USED IN THIS PHASE OF THE SPECIFICATIONS OR DRAWINGS MEANS THE PERSON OR PERSONS WHO UNDERTAKE THE RESPONSIBILITY TO PERFORM THAT PHASE OF CONSTRUCTION. EXAMPLE: THE PERSON PERFORMING ALL PLUMBING SHALL BE THE PLUMBING CONTRACTOR.

- E N D -

SECTION 15020 - AIR CONDITIONING AND HEATING

A. SCOPE OF WORK:

FURNISH ALL LABOR, MATERIALS, TOOLS EQUIPMENT, INCIDENTALS, AND SERVICES REQUIRED FOR THE COMPLETION OF ALL HEATING, AIR CONDITIONING, VENTILATING AND PIPING WORK INCLUDED AS FOLLOWS:

CONDENSING UNITS AIR HANDLING UNITS CEILING OUTLETS
REGISTERS & GRILLES DUCT INSULATION HVAC FANS
DUCT WORK THERMOSTATS

CONCRETE SLAB OR PADS FOR EQUIPMENT WILL BE FURNISHED BY GENERAL CONTRACTOR.

ALL POWER WIRING, DISCONNECT SWITCHES AND FINAL CONNECTIONS OF SAME WILL BE MADE BY ELECTRICAL CONTRACTOR. THOUGH THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL POWER WIRING, THE HVAC CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL WIRING AND FINAL CONNECTIONS OF HVAC EQUIPMENT AND THERMOSTATS.

THE PLUMBING CONTRACTOR WILL FURNISH NECESSARY CONDENSATE DRAINS FOR THE HVAC CONTRACTOR TO CONNECT TO.

FURNISH, WITHOUT CHARGE, ANY ADDITIONAL MATERIAL AND LABOR WHEN AND WHERE REQUIRED TO COMPLY WITH CODES AND REGULATIONS, THOUGH THE WORK MAY NOT BE MENTIONED IN THE SPECIFICATIONS NOR SHOWN ON THE DRAWINGS.

A. MATERIALS:

SHALL CONFORM WITH THE RESPECTED PUBLICATIONS AND REQUIREMENTS OF MANUFACTURERS AND ALL APPLICABLE CODES AND ORDINANCES. PROVIDE A COMPLETE INSTALLATION IN EVERY RESPECT.

B. WORKMANSHIP:

MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER TO CONFORM TO THE CONTRACT DOCUMENTS. THE INSTALLATIONS SHALL BE ACCOMPLISHED BY WORKMEN SKILLED IN THIS TYPE WORK.

C. JOB CONDITIONS:

BEFORE BEGINNING WORK OR ANY INSTALLATION OF WORK, CAREFULLY STUDY ALL CONTRACT DRAWINGS AND CHECK ANY PIPING, DUCTWORK AND EQUIPMENT LOCATIONS FOR INTERFERENCE WITH OTHER TRADES. IF CONFLICTS ARE DISCOVERED IN DRAWINGS OR AS WORK PROGRESSES, A SET OF PRINTS MARKED WITH RED PENCIL SHOWING RECOMMENDED INSTALLATION METHODS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF WORK IN QUESTION.

NO ADDITIONAL COSTS TO OWNER WILL BE CONSIDERED FOR WORK WHICH MUST BE RELOCATED DUE TO CONFLICTS BETWEEN WORK OF DIFFERENT SECTIONS.

NO EXTRA COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS.

D. SUBMITTALS:

PREPARE SHOP DRAWING SUBMITTALS FOR ALL ITEMS OF EQUIPMENT AND MATERIAL SPECIFIED IN OTHER SECTIONS OF THIS DIVISION.

IDENTIFY EACH ITEM BY MANUFACTURER, BRAND AND TRADE NAME, NUMBER, SIZE, RATING AND WHATEVER OTHER DATA ARE NECESSARY TO PROPERLY IDENTIFY AND CHECK MATERIALS AND EQUIPMENT. SUBMITTAL SHALL BE ALL-INCLUSIVE, WITH ALL ITEMS BEING SUBMITTED AT SAME TIME; INDIVIDUAL SUBMITTALS WILL NOT BE ACCEPTED.

E. INSTALLATION:

PLACE ANY SLEEVES, CHASES, CONCRETE INSERTS, ANCHOR BOLTS, ETC., BEFORE CONCRETE IS POURED AND BE RESPONSIBLE FOR CORRECT LOCATION AND INSTALLATION OF THESE ITEMS.

DO ALL SLEEVING, CUTTING AND PATCHING OF ROUGH CONSTRUCTION FOR PIPING.

LOCATION OF EQUIPMENT, PIPING AND DUCTWORK INDICATED ON DRAWINGS IS APPROXIMATE AND SHALL BE CHANGED TO MEET ARCHITECTURAL AND STRUCTURAL CONDITIONS AS REQUIRED.

ALL EQUIPMENT SHALL BE ACCURATELY SET AND LEVELED. SUPPORTS SHALL BE NEATLY PLACED AND PROPERLY FASTENED. ALL EQUIPMENT SHALL BE SET SO AS NOT TO CAUSE NOTICEABLE VIBRATION TO STRUCTURE.

BEFORE ACCEPTANCE OF BUILDING, MAKE ARRANGEMENTS WITH GENERAL CONTRACTOR FOR TEMPORARY USE OF HEATING OR COOLING EQUIPMENT TO MAINTAIN TEMPERATURE AND HUMIDITY IN BUILDING.

AT THE TIME OF SUBSTANTIAL COMPLETION, CLEAN OR REPLACE ALL FILTERS, REGISTERS, DIFFUSERS TO PUT EQUIPMENT INTO PROPER WORKING ORDER.

THOROUGHLY CLEAN ALL EQUIPMENT, PIPING AND DUCTS, FREE FROM RUST, DUST FILINGS, PLASTER, ETC., BEFORE SYSTEMS ARE PUT IN OPERATION.

THE SYSTEM SHALL BE TESTED AS WORK PROGRESSES AND BE COMPLETELY CHECKED AND TESTED BEFORE FINAL ACCEPTANCE.

SHOULD ANY PIECE OF EQUIPMENT OR MATERIAL FAIL ANY OF THE TESTS, IMMEDIATELY REMOVE AND REPLACE WITH NEW EQUIPMENT OR MATERIAL AND RETEST THE SYSTEM.

F. EXCAVATION:

TRENCHES: DIG STRAIGHT AND TRUE TO LINE AND GRADE WITH BOTTOMS SMOOTH. PIPE SHALL BE SUPPORTED FOR THE ENTIRE LENGTH ON UNDISTURBED ORIGINAL EARTH OR COMPACTED SAND.

SHORING: ALL NECESSARY SHORING, SHEETING AND PLUMBING SHALL BE PART OF WORK OF THIS SECTION.

TREES: WHEN IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, PLUMBING CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND ROOTS. CUT ROOTS CLEAN WITH SAW THEN PAINT AREA. WHERE A DITCHING MACHINE IS RUN CLOSE TO TREES HAVING ROOTS SMALLER THAN 2 INCHES IN DIAMETER, WALL OF TRENCH ADJACENT TO TREE SHALL BE FILLED WITHIN 24 HOURS AFTER EXCAVATION BUT, WHERE THIS IS NOT POSSIBLE, THE SIDE OF TRENCH ADJACENT TO TREE SHALL BE KEPT MOIST. STOCKPILING OF EARTH OR BUILDING MATERIALS WITHIN THE DRIP LINE OF TREES IS PROHIBITED. NO TRENCHING BENEATH DRIP LINE OF OAK TREES SHALL BE DONE UNLESS WRITTEN APPROVAL OF ARCHITECT IS RECEIVED, OR IN THE CASE OF CITY PROPERTY, APPROVAL IS GRANTED BY THE AUTHORITIES HAVING JURISDICTION.

G. BACKFILL:

AFTER PIPING HAS BEEN INSTALLED, TESTED AND APPROVED, ALL EXCAVATIONS SHALL BE BACKFILLED, TAMPED AND COMPACTED.

H. WATER SUPPLY PIPES:

UNDER BUILDING SLAB USE SOFT COPPER. AT ALL OTHER LOCATIONS, USE HARD COPPER.

I. WATER SUPPLY PIPE FITTINGS:

WROUGHT COPPER AND CAST FITTINGS WITH SOLDER JOINTS.

J. SOIL AND VENT PIPES:

SHALL BE ABS, SCHEDULE 40 PLASTIC WITH FITTINGS OF THE SAME MATERIAL. THROUGH ROOF VENT PIPES SHALL BE PAINTED TO MATCH COLOR OF ROOFING AND PLACED TO THE REAR SIDE OF RIDGE OF ROOF SO AS NOT TO BE SEEN FROM THE FRONT OF THE STRUCTURE. THROUGH ROOF VENTS SHALL BE AS FEW AS POSSIBLE BY MEANS OF AS MANY COMMON VENTS AS POSSIBLE.

K. CLEANOUTS:

IN HORIZONTAL SEWER AND STORM WATER DRAINS, CLEANOUTS SHALL BE LOCATED AT LEAST EVERY 50 FEET AND WHERE SHOWN ON DRAWINGS. CLEANOUTS SHALL ALSO BE LOCATED AT THE FOOT OF EACH RISER AND EVERY CHANGE OF DIRECTION GREATER THAN 90 DEGREES.

L. ROOF FLASHING:

IN ACCORDANCE WITH ROOFING MANUFACTURER'S DETAILS AND SPECIFICATIONS.

M. INSULATION:

ALL HOT AND COLD WATER LINES ABOVE GROUND SHALL BE INSULATED WITH 1/2" FIBERGLASS MOLDED PIPE COVERING. ALL HOT WATER LINES BELOW GROUND SHALL BE INSULATED WITH 1/2" ARMAFLEX.

N. AIR CHAMBER:

FURNISH AND INSTALL 18 INCH HIGH FULL BRANCH SIZE AIR CHAMBER ON ALL COLD WATER AND HOT WATER PIPING IN CONNECTION WITH ALL FIXTURE GROUPS THROUGHOUT BUILDING.

O. WATER HEATER:

(VERIFY) AS SPECIFIED ON THE ACCOMPANYING DRAWINGS. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL AN EMERGENCY PAN WITH A DRAIN TO OUTSIDE OF BUILDING. PRESSURE RELIEF VALVE SHALL BE PIPED TO OUTSIDE OF BUILDING. A DRAIN PIPE FROM HOT WATER HEATERS SHALL BE INSTALLED TO A FREEZE-PROOF HOSE BIBB LOCATED ON THE EXTERIOR OF THE BUILDING AT THE SAME HEIGHT OF OTHER HOSE BIBBS FOR DRAINING OF HOT WATER HEATERS.

P. HOSE BIBBS:

FURNISH AND INSTALL WHERE SHOWN ON DRAWINGS 1/2" SOLID BRASS HOSE BIBBS, FREEZE-PROOF TYPE.

Q. WASHER AND DRYER CONNECTIONS:

FURNISH AND INSTALL, RECESSED IN WALL BEHIND WASHER SUPPLY AND DRAIN UNIT, COMPLETE WITH 1/2 INCH HOT AND COLD WATER VALVES, 2 INCH DRAIN PIPE.

R. SHOWER PANS:

WHERE SHOWERS ARE INDICATED ON DRAWINGS, FURNISH AND INSTALL AS PER MANUFACTURER'S INSTRUCTIONS A SHOWER PAN FABRICATED OF CHLORALOY MEMBRANE, AS MANUFACTURED BY THE NOBLE COMPANY, GRAND HEAVEN, MI. TURN PAN UP WALLS A MINIMUM OF 6 INCHES AND OVER 6 INCH HIGH CURB AT ENTRANCE. TEST PAN FOR LEAKS BEFORE INSTALLING TILE WORK OR SIMULATED MARBLE FINISH.

PLUMBING CONTRACTOR SHALL PROVIDE A ONE (1) YEAR GUARANTEE ON THE SHOWER PAN AND INSTALLATION AND SHALL PAY FOR REPAIR OF ALL DAMAGE CAUSED BY DEFECTIVE PAN.

S. PLUMBING FIXTURES:

PLUMBING FIXTURES AND TRIM SHALL BE AS SPECIFIED HEREIN AND INSTALLED BY THE PLUMBING CONTRACTOR.

INSTALL AND CONNECT ALL PLUMBING FIXTURES INDICATED ON DRAWINGS OR HEREIN SPECIFIED. REFER TO DRAWINGS FOR LOCATION AND NUMBER OF FIXTURES REQUIRED AND IF ANY FIXTURES NOT SHOWN ON ARCHITECTURAL PLANS BUT SPECIFIED, THESE FIXTURES SHALL BE SUPPLIED BY CONTRACTOR AND INSTALLED AND CONNECTED BY THE PLUMBING CONTRACTOR. CONTRACTOR SHALL CALL THIS TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.

EACH PLUMBING FIXTURE SHALL BE FITTED WITH ALL NECESSARY AND PROPER FITTINGS, TRIMMINGS AND OPERATING DEVICES AND SHALL BE LEFT IN PERFECT OPERATING CONDITION. FINISH OF ALL EXPOSED METAL WORK IN CONNECTION WITH FIXTURES, TRIMMING AND OPERATING DEVICES, WHERE NOT SPECIFICALLY MENTIONED, SHALL BE POLISHED BRASS.

ALL TRAPS AND WALL ESCUTCHEONS SHALL BE METAL (VERIFY FINISH).

T. ICEMAKERS:

FURNISH 1/4 INCH COPPER WATER LINE TO ICEMAKERS. FURNISH AND INSTALL ICEMAKER SUPPLY AND DRAINS.

- E N D O F D I V I S I O N 1 5 -

DIVISION 15 - MECHANICAL

SECTION 15030 - PLUMBING

A. SCOPE OF WORK:

FURNISH ALL LABOR, MATERIALS, TOOLS EQUIPMENT, INCIDENTALS, AND SERVICES NECESSARY FOR THE INSTALLATION OF THE PLUMBING AND DRAINAGE SYSTEM AS FOLLOWS AND AS SHOWN ON DRAWINGS:

PLUMBING SERVICE SOIL, DRAIN, AND WASTE LINES
CLEANOUTS HOT & COLD WATER SYSTEM
HOSE BIBS FLOOR DRAINS
PLUMBING FIXTURES INSULATION
FLASHING, ETC.

ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES AND REGULATIONS, STATE FIRE MARSHALL REGULATIONS, THE NATIONAL PLUMBING CODE, STANDARDS OF THE NATIONAL PROTECTION ASSOCIATION, STATE DEPARTMENT OF INSURANCE, AND ALL OTHER APPLICABLE LOWS, CODES AND REGULATIONS. NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

FURNISH, WITHOUT CHARGE, ANY ADDITIONAL MATERIAL AND LABOR WHEN AND WHERE REQUIRED TO COMPLY WITH CODES AND REGULATIONS, THOUGH THE WORK MAY NOT BE MENTIONED IN THE SPECIFICATIONS NOR SHOWN ON THE DRAWINGS.

B. MATERIALS:

SHALL CONFORM WITH THE RESPECTED PUBLICATIONS AND REQUIREMENTS OF MANUFACTURERS AND ALL APPLICABLE CODES AND ORDINANCES. PROVIDE A COMPLETE INSTALLATION IN EVERY RESPECT.

C. JOB CONDITIONS:

BEFORE BEGINNING WORK OR ANY INSTALLATION OF WORK, CAREFULLY STUDY ALL CONTRACT DRAWINGS AND CHECK ANY PIPING, DUCTWORK AND EQUIPMENT LOCATIONS FOR INTERFERENCE WITH OTHER TRADES. IF CONFLICTS ARE DISCOVERED IN DRAWINGS OR AS WORK PROGRESSES, A SET OF PRINTS MARKED WITH RED PENCIL SHOWING RECOMMENDED INSTALLATION METHODS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF WORK IN QUESTION.

NO ADDITIONAL COSTS TO OWNER WILL BE CONSIDERED FOR WORK WHICH MUST BE RELOCATED DUE TO CONFLICTS BETWEEN WORK OF DIFFERENT SECTIONS.

NO EXTRA COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS.

D. SUBMITTALS:

PREPARE SHOP DRAWING SUBMITTALS FOR ALL ITEMS OF EQUIPMENT AND MATERIAL SPECIFIED IN OTHER SECTIONS OF THIS DIVISION, AND DRAWINGS IN RED PENCIL SHOWING PROPOSED ROUTING OF PIPING AND VENTS TO INCLUDE SIZES FOR THE ARCHITECT'S APPROVAL.

IDENTIFY EACH ITEM BY MANUFACTURER, BRAND AND TRADE NAME, NUMBER, SIZE, RATING AND WHATEVER OTHER DATA ARE NECESSARY TO PROPERLY IDENTIFY AND CHECK MATERIALS AND EQUIPMENT. SUBMITTAL SHALL BE ALL-INCLUSIVE, WITH ALL ITEMS BEING SUBMITTED AT THE SAME TIME; INDIVIDUAL SUBMITTALS WILL NOT BE ACCEPTED.

E. INSTALLATION:

PLACE ANY SLEEVES, CHASES, CONCRETE INSERTS, ANCHOR BOLTS, ETC., BEFORE CONCRETE IS POURED AND BE RESPONSIBLE FOR CORRECT LOCATION AND INSTALLATION OF THESE ITEMS.

DO ALL SLEEVING, CUTTING AND PATCHING OF ROUGH CONSTRUCTION FOR PIPING.

LOCATION OF EQUIPMENT, PIPING AND DUCTWORK INDICATED ON DRAWINGS IS APPROXIMATE AND SHALL BE CHANGED TO MEET ARCHITECTURAL AND STRUCTURAL CONDITIONS AS REQUIRED.

ALL EQUIPMENT SHALL BE ACCURATELY SET AND LEVELED. SUPPORTS SHALL BE NEATLY PLACED AND PROPERLY FASTENED. ALL EQUIPMENT SHALL BE SET SO AS NOT TO CAUSE NOTICEABLE VIBRATION TO STRUCTURE.

THOROUGHLY CLEAN ALL EQUIPMENT, PIPING AND DUCTS, FREE FROM RUST, DUST FILINGS, PLASTER, ETC., BEFORE SYSTEMS ARE PUT IN OPERATION.

THE SYSTEM SHALL BE TESTED AS WORK PROGRESSES AND BE COMPLETELY CHECKED AND TESTED BEFORE FINAL ACCEPTANCE.

SHOULD ANY PIECE OF EQUIPMENT OR MATERIAL FAIL ANY OF THE TESTS, IMMEDIATELY REMOVE AND REPLACE WITH NEW EQUIPMENT OR MATERIAL AND RETEST THE SYSTEM.

F. EXCAVATION:

TRENCHES: DIG STRAIGHT AND TRUE TO LINE AND GRADE WITH BOTTOMS SMOOTH. PIPE SHALL BE SUPPORTED FOR THE ENTIRE LENGTH ON UNDISTURBED ORIGINAL EARTH OR COMPACTED SAND.

SHORING: ALL NECESSARY SHORING, SHEETING AND PLUMBING SHALL BE PART OF WORK OF THIS SECTION.

TREES: WHEN IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, PLUMBING CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND ROOTS. CUT ROOTS CLEAN WITH SAW THEN PAINT AREA. WHERE A DITCHING MACHINE IS RUN CLOSE TO TREES HAVING ROOTS SMALLER THAN 2 INCHES IN DIAMETER, WALL OF TRENCH ADJACENT TO TREE SHALL BE FILLED WITHIN 24 HOURS AFTER EXCAVATION BUT, WHERE THIS IS NOT POSSIBLE, THE SIDE OF TRENCH ADJACENT TO TREE SHALL BE KEPT MOIST. STOCKPILING OF EARTH OR BUILDING MATERIALS WITHIN THE DRIP LINE OF TREES IS PROHIBITED. NO TRENCHING BENEATH DRIP LINE OF OAK TREES SHALL BE DONE UNLESS WRITTEN APPROVAL OF ARCHITECT IS RECEIVED, OR IN THE CASE OF CITY PROPERTY, APPROVAL IS GRANTED BY THE AUTHORITIES HAVING JURISDICTION.

G. BACKFILL:

AFTER PIPING HAS BEEN INSTALLED, TESTED AND APPROVED, ALL EXCAVATIONS SHALL BE BACKFILLED, TAMPED AND COMPACTED.

H. WATER SUPPLY PIPES:

UNDER BUILDING SLAB USE SOFT COPPER. AT ALL OTHER LOCATIONS, USE HARD COPPER.

I. WATER SUPPLY PIPE FITTINGS:

WROUGHT COPPER AND CAST FITTINGS WITH SOLDER JOINTS.

J. SOIL AND VENT PIPES:

SHALL BE ABS, SCHEDULE 40 PLASTIC WITH FITTINGS OF THE SAME MATERIAL. THROUGH ROOF VENT PIPES SHALL BE PAINTED TO MATCH COLOR OF ROOFING AND PLACED TO THE REAR SIDE OF RIDGE OF ROOF SO AS NOT TO BE SEEN FROM THE FRONT OF THE STRUCTURE. THROUGH ROOF VENTS SHALL BE AS FEW AS POSSIBLE BY MEANS OF AS MANY COMMON VENTS AS POSSIBLE.

K. CLEANOUTS:

IN HORIZONTAL SEWER AND STORM WATER DRAINS, CLEANOUTS SHALL BE LOCATED AT LEAST EVERY 50 FEET AND WHERE SHOWN ON DRAWINGS. CLEANOUTS SHALL ALSO BE LOCATED AT THE FOOT OF EACH RISER AND EVERY CHANGE OF DIRECTION GREATER THAN 90 DEGREES.

L. ROOF FLASHING:

IN ACCORDANCE WITH ROOFING MANUFACTURER'S DETAILS AND SPECIFICATIONS.

M. INSULATION:

ALL HOT AND COLD WATER LINES ABOVE GROUND SHALL BE INSULATED WITH 1/2" FIBERGLASS MOLDED PIPE COVERING. ALL HOT WATER LINES BELOW GROUND SHALL BE INSULATED WITH 1/2" ARMAFLEX.

N. AIR CHAMBER:

FURNISH AND INSTALL 18 INCH HIGH FULL BRANCH SIZE AIR CHAMBER ON ALL COLD WATER AND HOT WATER PIPING IN CONNECTION WITH ALL FIXTURE GROUPS THROUGHOUT BUILDING.

O. WATER HEATER:

(VERIFY) AS SPECIFIED ON THE ACCOMPANYING DRAWINGS. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL AN EMERGENCY PAN WITH A DRAIN TO OUTSIDE OF BUILDING. PRESSURE RELIEF VALVE SHALL BE PIPED TO OUTSIDE OF BUILDING. A DRAIN PIPE FROM HOT WATER HEATERS SHALL BE INSTALLED TO A FREEZE-PROOF HOSE BIBB LOCATED ON THE EXTERIOR OF THE BUILDING AT THE SAME HEIGHT OF OTHER HOSE BIBBS FOR DRAINING OF HOT WATER HEATERS.

P. HOSE BIBBS:

FURNISH AND INSTALL WHERE SHOWN ON DRAWINGS 1/2" SOLID BRASS HOSE BIBBS, FREEZE-PROOF TYPE.

Q. WASHER AND DRYER CONNECTIONS:

FURNISH AND INSTALL, RECESSED IN WALL BEHIND WASHER SUPPLY AND DRAIN UNIT, COMPLETE WITH 1/2 INCH HOT AND COLD WATER VALVES, 2 INCH DRAIN PIPE.

R. SHOWER PANS:

WHERE SHOWERS ARE INDICATED ON DRAWINGS, FURNISH AND INSTALL AS PER MANUFACTURER'S INSTRUCTIONS A SHOWER PAN FABRICATED OF CHLORALOY MEMBRANE, AS MANUFACTURED BY THE NOBLE COMPANY, GRAND HEAVEN, MI. TURN PAN UP WALLS A MINIMUM OF 6 INCHES AND OVER 6 INCH HIGH CURB AT ENTRANCE. TEST PAN FOR LEAKS BEFORE INSTALLING TILE WORK OR SIMULATED MARBLE FINISH.

PLUMBING CONTRACTOR SHALL PROVIDE A ONE (1) YEAR GUARANTEE ON THE SHOWER PAN AND INSTALLATION AND SHALL PAY FOR REPAIR OF ALL DAMAGE CAUSED BY DEFECTIVE PAN.

S. PLUMBING FIXTURES:

PLUMBING FIXTURES AND TRIM SHALL BE AS SPECIFIED HEREIN AND INSTALLED BY THE PLUMBING CONTRACTOR.

INSTALL AND CONNECT ALL PLUMBING FIXTURES INDICATED ON DRAWINGS OR HEREIN SPECIFIED. REFER TO DRAWINGS FOR LOCATION AND NUMBER OF FIXTURES REQUIRED AND IF ANY FIXTURES NOT SHOWN ON ARCHITECTURAL PLANS BUT SPECIFIED, THESE FIXTURES SHALL BE SUPPLIED BY CONTRACTOR AND INSTALLED AND CONNECTED BY THE PLUMBING CONTRACTOR. CONTRACTOR SHALL CALL THIS TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.

EACH PLUMBING FIXTURE SHALL BE FITTED WITH ALL NECESSARY AND PROPER FITTINGS, TRIMMINGS AND OPERATING DEVICES AND SHALL BE LEFT IN PERFECT OPERATING CONDITION. FINISH OF ALL EXPOSED METAL WORK IN CONNECTION WITH FIXTURES, TRIMMING AND OPERATING DEVICES, WHERE NOT SPECIFICALLY MENTIONED, SHALL BE POLISHED BRASS.

ALL TRAPS AND WALL ESCUTCHEONS SHALL BE METAL (VERIFY FINISH).

T. ICEMAKERS:

FURNISH 1/4 INCH COPPER WATER LINE TO ICEMAKERS. FURNISH AND INSTALL ICEMAKER SUPPLY AND DRAINS.

- E N D O F D I V I S I O N 1 5 -

DIVISION 16 - ELECTRICAL WORK

SECTION 16010 - GENERAL

A. EXTENT OF WORK:

WHETHER SHOWN OR NOT ALL MATERIALS, LABOR AND INCIDENTALS, NECESSARY TO PROVIDE A COMPLETE ELECTRICAL SYSTEM, IN PROPER WORKING ORDER, AS SHOWN ON DRAWINGS OR SPECIFIED HEREIN.

B. QUALITY ASSURANCE:

THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL WORK TO MEET REQUIREMENTS AND RECOMMENDATIONS OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE STATE AND LOCAL CODES. ARRANGE WITH POWER COMPANY FOR SERVICE AND METERING. ELECTRICAL CONTRACTOR SHALL ARRANGE WITH TELEPHONE COMPANY AND CABLE TELEVISION COMPANY FOR SERVICE AND WIRING. PAY ALL FEES AND ASSESSMENTS. OBTAIN ALL REQUIRED PERMITS AND CERTIFICATES OF INSPECTION.

SHOULD ANY PART OF THE DESIGN FAIL TO COMPLY WITH SUCH REQUIREMENTS, DISCREPANCY SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT PRIOR TO SUBMISSION OF BID.

C. WARRANTY PERIOD:

THE ELECTRICAL CONTRACTOR SHALL GIVE A GUARANTEE OF ONE YEAR FROM THE DATE OF THE OWNER'S ACCEPTANCE OF THE COMPLETED WORK SHALL BE REQUIRED ON ALL WORKMANSHIP, MATERIALS AND EQUIPMENT RELATED TO THIS PHASE OF CONSTRUCTION UNLESS A LONGER PERIOD IS STATED IN THE SPECIFICATIONS OR IN THE MANUFACTURER'S LITERATURE.

D. TEST:

TEST PANELS AND CIRCUITS FOR GROUNDS AND SHORTS.

TEST EACH INDIVIDUAL CIRCUIT AT THE PANEL, WITH EQUIPMENT CONNECTED FOR PROPER OPERATIONS.

GROUND TESTS SHALL MEET REQUIREMENTS OF NATIONAL ELECTRICAL CODE.

ON COMPLETION OF WORK, A FINAL INSPECTION WILL BE MADE AND EQUIPMENT SHALL BE OPERATED UNDER NORMAL CONDITIONS.

OBTAIN AND PAY FOR AS REQUIRED.

E. LOCATIONS:

ALL LOCATIONS SHOWN ARE APPROXIMATE.

F. MATERIALS:

SHALL BE NEW AND BEAR THE LABEL OF THE UNDERWRITER'S LABORATORIES, INC.

G. GROUND:

AS REQUIRED BY N.E.C., ARTICLE 250, GROUND ALL MAIN SERVICE EQUIPMENT, CONDUIT SYSTEMS, MOTORS, PANEL BOARDS, AND OTHER EQUIPMENT, ALSO COMPLY WITH LOCAL INSPECTION AUTHORITIES.

H. RECORD DRAWINGS:

AT THE COMPLETION OF THE JOB, THE ELECTRICAL CONTRACTOR SHALL FURNISH TO THE ARCHITECT REPRODUCIBLE DRAWINGS SHOWING THE CIRCUIT NUMBER OF EACH ELECTRICAL OUTLET, SWITCH, FIXTURE, APPLIANCE, AND SYSTEM. EACH CIRCUIT SHALL BE NUMBERED.

FURNISH TO THE ARCHITECT A NEAT, TYPED SCHEDULE OF THE CIRCUITS CONTAINED IN EACH PANEL AND SUBPANEL. CIRCUIT NUMBERS SHALL BE NEATLY LETTERED ON DISCONNECTS.

I. ALLOWANCES:

SEE ALLOWANCE SECTION OF SPECIFICATION FOR ITEMS RELATED TO WORK OF THIS SECTION.

J. SUBSTITUTIONS:

REFERENCE IN THESE SPECIFICATIONS TO ANY ARTICLE, DEVICE, PRODUCT MATERIAL, FIXTURE, FORM OR TYPE OF CONSTRUCTION BY NAME, MAKE OR CATALOG NUMBER, SHALL BE INTERPRETED AS ESTABLISHING A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPLETION. THE CONTRACTOR, IN SUCH CASES, MAY, AT HIS OPTION, USE ANY ARTICLE, DEVICE, PRODUCT, MATERIAL, FIXTURE, FORM OR TYPE OF CONSTRUCTION WHICH IN THE JUDGEMENT OF THE ARCHITECT, EXPRESSED IN WRITING, IS EQUAL TO THAT SPECIFIED.

- E N D -

SECTION 16020 - WIRE

A. ALL WIRE:

FURNISH ALL LABOR, MATERIALS, TOOLS EQUIPMENT, INCIDENTALS, AND SERVICES REQUIRED FOR THE COMPLETION OF ALL HEATING, AIR CONDITIONING, VENTILATING AND PIPING WORK INCLUDED AS FOLLOWS:

CONDENSING UNITS AIR HANDLING UNITS FLOOR OUTLETS
HVAC FANS WALL RECEPTACLES

ALL POWER WIRING, DISCONNECT SWITCHES AND FINAL CONNECTIONS OF SAME WILL BE MADE BY ELECTRICAL CONTRACTOR. THOUGH THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL POWER WIRING, THE HVAC CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL WIRING AND FINAL CONNECTIONS OF HVAC EQUIPMENT AND THERMOSTATS.

FURNISH, WITHOUT CHARGE, ANY ADDITIONAL MATERIAL AND LABOR WHEN AND WHERE REQUIRED TO COMPLY WITH CODES AND REGULATIONS, THOUGH THE WORK MAY NOT BE MENTIONED IN THE SPECIFICATIONS NOR SHOWN ON THE DRAWINGS.

B. FIXTURE WIRE:

SHALL CONFORM WITH THE RESPECTED PUBLICATIONS AND REQUIREMENTS OF MANUFACTURERS AND ALL APPLICABLE CODES AND