WOOD RAMP DESIGN

425 NW WINFIELD ST. LAKE CITY. FL 32055

SCOPE OF WORK:

1. PROVIDE STRUCTURAL DRAWINGS FOR A WOOD RAMP AND HANDRAIL MASTER PLAN.

STRUCTURAL NOTES:

THE WORK SPECIFIED HEREIN HAS BEEN DESIGNED & ALL WORK SHALL BE IN ACCORDANCE WITH THE STRUCTURAL PROVISIONS OF THE 8TH EDITION FLORIDA BUILDING CODE (2023), AND ASCE 7-22.

- ALL WORK SPECIFIED HEREIN HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE BUILDING CODE AS STATED HEREIN
- THE HOST STRUCTURE IS ASSUMED TO BE ADEQUATE TO WITHSTAND THE LOADS IMPOSED BY THIS DESIGN AS WORK REPLACES PART OF THE EXISTING MASONRY WALL, AND DOOR. THE CONTRACTOR/BUILDING OFFICIAL SHALL VERIFY THAT THE SUBSTRATE EXPOSED DURING WORK IS SOUND FOR INSTALLATION OF THIS SYSTEM.
- THIS WORK IS GENERIC AND DOES NOT PERTAIN TO ANY SPECIFIC PROJECT SITE. INFORMATION CONTAINED HEREIN IS BASED ON CONTRACTOR-SUPPLIED DATA AND MEASUREMENTS. DOP ENGINEERING SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY. BUT SHALL REMAIN IN CONFORMANCE WITH REQUIREMENTS AND LIMITATIONS OF THIS PLAN. THE CONTRACTOR IS TO VERIFY ALL FIELD DIMENSIONS PRIOR TO INSTALLATION, AND VERIFY THAT PROPOSED DIMENSIONS AND FIELD CONDITIONS AGREE WITH THIS PROPOSED PLAN. USE OF THIS DOCUMENT CONSTITUTES ACCEPTANCE OF THE PROPOSED SYSTEM LAYOUT, COMPONENTS SELECTED, AND INSTALLATION. INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS, ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
- ALL MATERIALS USED & FABRICATION METHODS SHALL CONFORM TO THE MANUFACTURER'S PUBLISHED AND APPROVED REQUIREMENTS.

DEAD LOAD = 5 PSE LIVE LOAD = 40 PSF

WIND LOAD = +/- 16 PSF (ULTIMATE PER ASCE 7 SECTION 30.2.2)

THESE PLANS CERTIFY THE STRUCTURAL ADEQUACY OF THE PROPOSED SYSTEM IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE BUILDING CODE ONLY.

GENERAL NOTES:

- CONSTRUCTION METHODS PROCEDURES, AND SEQUENCES ARE THE CONTRACTOR'S RESPONSIBILITY AND THE CONTRACTOR IS TO TAKE ALL THE NECESSARY MEANS TO MAINTAIN AND PROTECT THE STRUCTURAL INTEGRITY OF ALL CONSTRUCTION AT ALL STAGES.
- SHOULD ANY SPECIFIC CONDITION DIFFER FROM THAT SPECIFIED HEREIN. OR STANDARD FIELD CONDITIONS, ADDITIONAL SPECIFIC ENGINEERING MAY BE REQUIRED AS DETERMINED BY THE BUILDING INSPECTOR AND PERMITTING CONTRACTOR.
- USE MANUFACTURER'S CERTIFIED DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION NOT SHOWN IN THESE PLANS.
- DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY, BUT SHALL REMAIN IN CONFORMANCE WITH THE LIMITATIONS OF THIS PLAN. THE CONTRACTOR IS TO VERIFY ALL FIELD DIMENSIONS PRIOR TO INSTALLATION. AND VERIFY THAT PROPOSED DIMENSIONS AND FIELD CONDITIONS AGREE WITH THIS PROPOSED PLAN. THESE DRAWINGS ARE NOT INTENDED TO BE USED AS FABRICATION OR SHOP DRAWINGS
- ALL STRUCTURAL MEMBERS AS SHOWN HAVE BEEN DESIGNED TO CARRY IN PLACE DESIGN LOADS ONLY, THE CONTRACTORS SHALL BE RESPONSIBLE FOR THE SUPPORT OF ANY ADDITIONAL LOADS AND FORCES IMPOSED DURING MANUFACTURING, TRUCKING, ERECTING, AND HANDLING,
- ALL THE CONTRACTOR'S PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY A LICENSE ENGINEER, BY LETTER, PRIOR TO ANY PERMANENT WORK AND PRIOR TO THE AWARD OF THE
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COSTS & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION. SYSTEM ERECTION. & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN. EXCEPT AS EXPRESSLY PROVIDED IN HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE

INTENDED.

- THIS DOCUMENT CONTAINS INFORMATION RELEVANT TO THE NECESSARY STRUCTURAL REQUIREMENTS OF THE SYSTEM INSTALLATION. COMPONENTS AND FASTENERS NOT REFERENCED WHICH ARE PART OF THE INTERNAL FABRICATION OF THE SPECIFIED SYSTEMS SHALL BE PER MANUFACTURER PUBLISHED SPECIFICATIONS.
- THIS ENGINEER SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. THIS ENGINEER SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO RE-EVALUATE OUR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION UPON DISCOVERY OF ANY NON-MATCHING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.
- OMISSIONS/CONFLICTS: IN CASE OF OMISSIONS AND CONFLICTS BETWEEN PLANS. SPECIFICATIONS AND SITE CONDITIONS THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE DISSIMILAR METALS TO PREVENT ELECTROLYSIS.

WOOD:

MATERIALS:

- ALL LUMBER SHALL BE N°2 GRADE (OR BETTER) SOUTHERN PINE. ALLOWABLE STRESSES SHALL BE AS INDICATED IN "DESIGN VALUES FOR WOOD CONSTRUCTION", A SUPPLEMENT TO THE "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION" 2015 EDITION. BY THE AMERICAN FOREST AND PAPER ASSOCIATION. ALLOWABLE MAXIMUM WATER CONTENT SHALL BE
- PLYWOOD ROOF SHEATHING SHALL BE RATED FOR EXPOSURE 1, WITH A MINIMUM NOMINAL THICKNESS OF 19/32" (U.O.N.)
- INSTALL ROOF SHEATHING W/ THE LONG DIMENSION OR STRENGTH AXIS OF THE PANEL ACROSS SUPPORTS & W/ PANELS CONTINUOUS OVER (2) OR MORE SPANS. PANEL END JOINTS SHALL OCCUR OVER FRAMING. ALLOW 1/8" SPACING @ PANEL ENDS & EDGES UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER. FOR NAILING, SEE DRAWINGS
- ALL FASTENERS (E.G. NAILS, SCREWS, BOLTS, TIE-RODS) SHALL BE HOT-DIPPED GALVANIZED (G60 MINIMUM GALVANIZED COATING) OR 300-SERIES STAINLESS STEEL.
- STEEL CONNECTORS SHALL CONFORM TO ASTM A653 AND SHALL BE HOT-DIP GALVANIZED PER ASTM A525 OR 300-SERIES STAINLESS STEEL
- FASTENERS AND CONNECTORS USED TOGETHER SHALL BE OF THE SAME.
- ALL CUTS, HOLES AND INJURIES TO THE SURFACE OF TREATED WOOD SHALL BE PROTECTED BY FIELD TREATMENT MEETING AWPA STANDARD M4.
- ALL TREATED WOOD PRODUCTS SHALL BE HANDLED AND FIELD-FABRICATED IN ACCORDANCE WITH AWPA STANDARD M4 FOR THE CARE OF PRESERVATIVE-TREATED WOOD PRODUCTS.
- DO NOT USE STANDARD CARBON-STEEL OR ALUMINUM PRODUCTS IN DIRECT CONTACT WITH PRESSURE-TREATED WOOD.

MAXIMUM DEFLECTION CRITERIA:

LIVE LOAD.. L/360. TOTAL LOAD... 1/240

WOOD SHRINKAGE NOTES:

- WOOD SHRINKAGE IS A VARIABLE PROPERTY AND CAN BE AFFECTED BY SEVERAL UNKNOWN FACTORS INCLUDING BUT NOT LIMITED TO THE ORIENTATION OF THE ANNULAR RINGS TO EACH INDIVIDUAL PIECE OF LUMBER. THE TIME OF TRANSIT TO THE JOB SITE. THE LENGTH OF THE EXPOSURE DURING CONSTRUCTION, AND THE GEOGRAPHICAL LOCATION OF THE JOB SITE. THESE CALCULATIONS ARE BASED ON AVERAGE AND ACCEPTED INDUSTRY STANDARDS.
- WOOD USED FOR THE DESIGN OF THE PROJECT HAS BEEN ASSUMED TO HAVE A MAXIMUM MOISTURE CONTENT OF 19%. THE MOISTURE DESIGNATION ON THE GRADE STAMP OF THE WOOD SHALL BE SURFACE (S-DRY) OR KILN DRY (KD)

ALUMINUM

STRUCTURAL ALUMINUM SHALL BE 6061-T6 ALLOY. DESIGNED IN ACCORDANCE WITH THE ALUMINUM ASSOCIATION'S SPECIFICATION FOR ALUMINUM STRUCTURES, LATEST EDITION.

ALUMINUM WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE FBC 2020 SECTION 2003.8.1.3 WITH WELD FILLER ALLOYS MEETING ANSI/AWS A5.10 STANDARDS TO ACHIVE ULTIMATE DESIGN STRENGTH IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL PART I-A, TABLE J.2.1. USE WELD FILLER 5356 OR BETTER ELECTRODES. ALL ALUMINUM CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE TOLERANCES, QUALITY AND METHODS OF CONSTRUCTION AS SET FORTH IN FBC SECTION 2003 AND THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE-ALUMINUM (D1.2). MINIMUM WELD IS 1/8" THROAT FULL PERIMETER FILLET WELD UNLESS OTHERWISE NOTED.

FASTENERS (AS APPLICABLE)

- ALL BOLTS SHALL BE HOT DIPPED GALVANIZED, OR STAINLESS STEEL & MEET THE REQUIREMENTS OF ASTM A307. WASHERS SHALL BE USED BETWEEN ALUMINUM & BOLT HEAD & BETWEEN WOOD & NUT. WHERE GENERIC FASTENERS ARE LABELED IN DETAILS, CAPACITIES SHALL BE EQUAL TO OR GREATER THAN SIMPSSON STRONG TIE TITEN HD OR OTHERWISE NOTED.
- ALL METAL CONNECTORS USED IN LOCATIONS EXPOSED TO WEATHER SHALL BE GALVANIZED.
- ALL FASTENERS TO BE #14 OR GREATER SS316 MIN. WITH (5) PITCHES MIN. PAST THE THREAD PLANE OR NUT. COORDINATE ANCHOR PLACEMENT (IN CONFORMANCE WITH THIS DOCUMENT) WITH MANUFACTURER TO PREVENT DAMAGE TO MECHANICAL UNIT HOUSING AND COMPONENTS.
- EMBEDMENT DEPTHS SPECIFIED HEREIN ARE DEPTHS INTO SOLID SUBSTRATE AND DO NOT INCLUDE THICKNESS OF STUCCO OR OTHER FINISHES.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS, I.E. ALUMINUM PER F.B.C. 2003.8.4.

FOUNDATIONS:

- SOIL STATEMENT: FOOTINGS HAVE BEEN DESIGNED FOR 2,000 P.S.F. ALLOWABLE SOIL BEARING CAPACITY, PRIOR TO THE INSTALLATION OF ANY FOOTING FOUNDATION SYSTEM FOR NEW BUILDINGS. STRUCTURES OR ADDITIONS. THE BUILDING OFFICIAL SHALL BE PROVIDED WITH A STATEMENT OF ALLOWABLE BEARING CAPACITY FROM AN ARCHITECT OR PROFESSIONAL ENGINEER. SAID STATEMENT SHALL CLEARLY IDENTIFY THE ALLOWABLE IN-PLACE BEARING CAPACITY OF THE BUILDING PAD FOR THE NEW BUILDING OR ADDITION AND VERIFY THE EXISTING SOIL CONDITIONS. THE CERTIFIED IN-PLACE BEARING CAPACITY SHALL HAVE BEEN DETERMINED BY WAY OF RECOGNIZED TESTS OR RATIONAL ANALYSIS AND SHALL MEET OR EXCEED THE DESIGN BEARING CAPACITY.
- FOOTINGS SHALL BE FOUNDED ON WELL COMPACTED VIRGIN SOIL OR ON ENGINEERED FILL AT THE ELEVATIONS SHOWN.
- KEEP FOUNDATION EXCAVATIONS FREE OF WATER AT ALL TIMES. REPLACE SOFT OR WEAKENED SOIL WITH STRUCTURAL FILL.
- ELEVATIONS SHOWN AT FOOTINGS ARE TOP OF FOOTING ELEVATION (T.O.F.).
- ALL EXTERIOR FOOTINGS TO BEAR MINIMUM 2'-0" BELOW ADJACENT GRADE. UNLESS OTHERWISE NOTED. ADJUST BOTTOM OF FOOTING AS REQUIRED.
- FOR CONTINUOUS WALL FOOTINGS, SPLICES IN REINFORCING BARS SHALL NOT BE LESS THAN (48) BAR DIAMETERS AND REINFORCEMENT SHALL BE CONTINUOUS AROUND ALL CORNERS AND CHANGES IN DIRECTION. CONTINUITY SHALL BE PROVIDED AT CORNERS OR CHANGES IN DIRECTION BY BENDING THE LONGITUDINAL STEEL AROUND THE CORNER (48) BAR DIAMETERS OR BY ADDING MATCHING REINFORCING STEEL. WHICH SHALL EXTEND (48) BAR DIAMETERS FROM EACH CORNER OR CHANGE IN DIRECTION. WHEN THREE OR MORE BARS ARE REQUIRED, THE BARS SHALL BE HELD IN PLACE AND ALIGNMENT BY TRANSVERSE BARS SPACED NOT MORE THAN

SHORING, RESHORING AND TEMPORARY BRACING:

THE GENERAL CONTRACTOR (GC) IS SOLELY RESPONSIBLE FOR FIELD FORMWORK, SHORING RESHORING. TEMPORARY AND PERMANENT BRACING DESIGN.

CHANGES OR SUBSTITUTIONS

PROPOSED CHANGES OR SUBSTITUTIONS TO STRUCTURAL DETAILS OR PLANS SHALL BE SUBMITTED TO A LICENSE PROFESSIONAL FOR REVIEW AND APPROVAL.

MANAGEMENT, OINCIANA APT 206 S 1P DES OD RAMP I 425 NW WINFIEL LAKE CITY, FL 3 100D 425 N LAKE HOENIX 375 ≶ P24-3052-10.0-PH0E01



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