STRUCTURAL NOTES

GENERAL NOTES

ALL WORK SHALL BE IN CONFORMANCE WITH STRUCTURAL DRAWINGS, SPECIFICATIONS AND THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE ("THE BUILDING CODE" REFERENCED IN THE FOLLOWING NOTES).
1.-TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
2.-CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE NOTED ABOVE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS, AND LAWS
3.-THE CONTRACTOR SHALL COMPARE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS BEFORE COMMENCING WITH THE WORK AND SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES REQUIRING CLARIFICATION OR REVISIONS. DO NOT SCALE STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. SEE "DIMENSION" SECTION OF GENERAL NOTES FOR ADDITIONAL NOTES.
4.-THE CONTRACTOR SHALL USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS TO COORDINATE LOCATION OF DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, DIMENSIONS, ETC. (DRAWINGS ARE NOT TO BE SCALED).
5.-DISCREPANCIES BETWEEN INFORMATION PRESENTED WITHIN PROJECT SPECIFICATIONS AND WITHIN STRUCTURAL NOTES ON PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE CONTRACTOR PRIOR TO PRESENTING HIS OR HER BID. IF SUCH A DISCREPANCY IS DISCOVERED SUBSEQUENT TO BIDDING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE OPTION SUBSEQUENTLY SELECTED BY THE ENGINEER AT NO ADDITIONAL COST.
6.-CONTRACTORS SHALL BE RESPONSIBLE FOR FINAL VERIFICATION OF ALL DIMENSIONS, ELEVATIONS, CLEARANCES, ETC. OF THE FRAMING SHOWN ON THE STRUCTURAL DRAWINGS AGAINST INFORMATION PROVIDED BY MANUFACTURER OF SELECTED MECHANICAL EQUIPMENT PRIOR TO PROCEEDING WITH ANY RELATED PORTION OF WORK, ITEMS REQUIRING SUCH REVIEW SHALL INCLUDE ELEVATORS (ELEVATOR PITS, BEAMS ABOVE ELEVATORS DOORS, ETC.), ESCALATORS, DUCTS, COOLING TOWERS, ETC. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY REMEDIAL WORK AND FOR ITS IMPACT ON THE WORK SCHEDULE RESULTING FROM FAILURE TO PROVIDE EARLY NOTIFICATION OF SUCH CONFLICTS TO THE DESIGN TEAM.
7.-POTENTIAL CONFLICTS, ERRORS OR OMISSIONS PRESENT WITHIN THE DRAWINGS (WHETHER WITHIN STRUCTURAL DRAWINGS OR BETWEEN STRUCTURAL, ARCHITECTURAL, AND M.E.P DRAWINGS) SHALL BE IDENTIFIED BY THE CONTRACTOR DURING HIS/HER EARLY REVIEW OF THE PROJECT DOCUMENTS. SUCH CONFLICTS, ERRORS OR OMISSIONS SHALL BE COMMUNICATED TO THE ARCHITECT IN WRITING PRIOR TO COMMENCEMENT OF WORK. IN THE EVENT OF FAILURE TO PROVIDE SUCH A NOTICE AND SUFFICIENT TIME FOR A RESPONSE, THE CONTRACTOR SHALL BECOME RESPONSIBLE FOR COST OF ALL WORK OR REMEDIAL WORK RESULTING FROM SUCH CONFLICTS, ERRORS OR OMISSION, AS WELL AS FOR ITS IMPACT ON THE PROJECT SCHEDULE.
8.-ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OR STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.
9.-IN THE EVENT THAT CERTAIN DETAILS OF THE CONSTRUCTION ARE NOT FULLY SHOWN OR NOTED ON THE DRAWINGS, THEIR CONSTRUCTION SHALL BE OF THE SAME TYPE AS FOR SIMILAR CONDITIONS WHICH ARE SHOWN AND NOTED, SUBJECT TO THE STRUCTURAL ENGINEER'S APPROVAL. DETAILS LABELED "TYPICAL" APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED, WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. QUESTIONS REGARDING THE APPLICABILITY OF TYPICAL DETAILS SHALL BE RESOLVED BY THE PROJECT ARCHITECT.
10.-SEE THE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
10.1.-SIZE AND LOCATIONS OF ALL CONCRETE CURBS, FLOOR DRAINS, SLOPES, INSERTS, ETC. EXCEPT AS SHOWN.
10.2-SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS EXCEPT AS SHOWN.
10.3-SIZE AND LOCATION OF ROOF AND FLOOR OPENINGS, FLOOR AND ROOD PUNISHES, TYPES OF WATER PROOFING AND DAMP PROOFING.
10.4.-FINISHED FLOOR AND EXTERIOR ELEVATIONS.
10.5-DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
10.6.-FIRE PROTECTION REQUIREMENTS.
10.7.-MISC. STEEL TUBES, CHANNELS, ANGLES, AND PLATES FOR METAL PANEL WALL AND CURTAIN WALL SUPPORT.
10.8-EMBEDS FOR MISC METAL FRAMING AND CLADDING ANCHORAGE.
10.9-SIZE AND LOCATIONS OF MASONRY, DRYWALL, NON-LOAD BEARING PARTITIONS AND EXTERIOR WALL. PROVIDE SLIP CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE HEADS OF ALL SUCH PARTITIONS, CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF THE WALLS LATERALLY FOR THE CODE-REQUIRED LATERAL LOAD.
11.-SEE THE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
11.1.-PIPE AND DUCT RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
11.2.-ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
11.3.-CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
11.4.-ANCHOR BOLTS FOR MOTOR MOUNTS, EXCEPT AS SHOWN OR NOTED.
11.5-SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES (HOUSEKEEPING PADS). NOTE THAT HOUSEKEEPING PADS SHOWN ON THE STRUCTURAL DRAWINGS ARE APPROXIMATE AND ARE INCLUDED FOR GENERAL REFERENCE ONLY.
12.-OPENINGS, POCKETS, ETC., LARGER THAN 6" SHALL NOT BE PLACED IN CONCRETE SLABS, DECKS, OR WALLS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., LARGER THAN 6" WHICH ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS.
13.-ALL SUSPENDED MECHANICAL, ELECTRICAL, OR OTHER SYSTEM LOADS EXCEEDING 100 POUNDS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION UNLESS SPECIFICALLY DETAILED ON THE DRAWINGS. ANY REINFORCEMENT, ETC. REQUIRED BY SUCH LOADS SHALL BE BY THE TRADE REQUIRING THE EQUIPMENT.
14.-YHCE, CONSULTING ENGINEERS. INC. SHALL NEITHER HAVE CONTROL OVER OR CHARGE OF, NOR BE RESPONSIBLE FOR, THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, SINCE THESE ARE SOLELY THE CONTRACTOR'S RIGHTS AND RESPONSIBILITIES UNDER THE CONTRACT DOCUMENTS HAS SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S OR ANY SUBCONTRACTOR'S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK, AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY INCLUDING ALL SHAN REQUIREMENTS.
15.-THE STRUCTURE WAS DESIGNED TO BE SELF-SUPPORTING AND STABLE FOLLOWING INSTALLATION OF ALL COMPONENTS AS INDICATED ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE METHOD AND SEQUENCE OF ERECTION PROCEDURES (INCLUDING IMPLEMENTATION OF TEMPORARY SHORING, BRACING, ETC.) AND TO ENSURE SAFETY THROUGH THE PERIOD OF CONSTRUCTION. CONTRACTOR AGREES THAT HE WILL HOLD OWNER, ARCHITECT, ENGINEER, AND/OR ANY OF THEIR EMPLOYEES OR AGENTS, HARMLESS FROM ANY AND ALL DAMAGE AND CLAIMS WHICH MAY ARISE BY A REASON OF ANY NEGLIGENCE ON THE PART OF THE CONTRACTOR, OR ANY OF HIS SUBCONTRACTORS, OR ANY MATERIAL AND EQUIPMENT SUPPLIERS, AND/OR ANY OF THEIR EMPLOYEES OR AGENTS, IN THE PERFORMANCE OF THIS CONTRACT. IN CASE ANY ACTION IS BROUGHT AGAINST THE OWNER, OR ARCHITECT, OR ENGINEER, OR ANY OF THEIR EMPLOYEES OR AGENTS, CONTRACTOR SHALL ASSUME LULL RESPONSIBILITY FOR DEFENSE THEREOF, TO THE FULL SATISFACTION OF THE LATTER PARTY.
16.-DO NOT PLACE CONCRETE WITHOUT APPROVED STRUCTURAL SHOP DRAWINGS MECHANICAL/ARCHITECTURAL SHOP DRAWINGS RELATED TO THE CONCRETE WORK. RELATED ITEMS INCLUDE LOCATIONS OF OPENINGS. PIPE SLEEVES, REGLETS, DOVETAIL SLOTS, DRIPS, INSERTS FOR MECHANICAL EQUIPMENTS, HUNG CEILINGS, AND ANY OTHER ITEMS REQUIRED TO BE INSTALLED AND/OR TO BE COORDINATED BY THE ARCHITECTURAL/MECHANICAL TRADES.
17.-CONTRACTOR IS TO PROVIDE DURING CONSTRUCTION AND MAKE ALLOWANCE FOR DESIGN, DETAILING, AND PURCHASE. DURING BID PHASE FOR ALL MISCELLANEOUS STEEL REQUIRED FOR THE SUPPORT OF ARCHITECTURAL FEATURES THAT ARE NOT STRUCTURAL ITEMS TO THE BASE STRUCTURE. SUCH ITEMS INCLUDE MEP HANGINGS, CEILING, AND CURTAIN WALL SUPPORTS.
18.-SUPPLEMENT SKETCHES/DRAWINGS: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FORWARD A COPY OF ALL CORRESPONDENCE AFFECTING THE STRUCTURE TO THE PROJECT'S INSPECTOR THROUGHOUT THE DURATION OF CONSTRUCTION

CONCRETE:

A. ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318-14 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
B. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE AS FOLLOWS:
STRUCTURAL BEAMS ---------- 5000 PSI MIN
COLUMNS ---------- 5000 PSI MIN
ALL OTHER CONCRETE ---------3000 PSI
C. FORMWORK SHALL COMPLY WITH ACI 347R-14, " RECOMMENDED PRACTICE FOR CONCRETE WORK."
D. MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF ANY CONCRETE WORK. SUBMIT STATISTICAL DATA FOR EACH CLASS OF CONCRETE.
E. NO WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB SITE.
F. THE OWNER SHALL CONTRACT AN INDEPENDENT TESTING LABORATORY TO PER- FORM CONCRETE CYLINDER TESTS AS FOLLOWS: SIX CYLINDER TESTS FOR ANY 50 CUBIC YARDS OF CONCRETE POURED, OR FRACTION THEREOF FOR EACH CLASS OF CONCRETE POURED EACH DAY. ONE CYLINDER SHALL BE TESTED AT 3 DAYS AND 7 DAYS, THREE AT 28 DAYS, AND ONE RESERVED TO BE TESTED AT 56 DAYS IF REQUIRED. FOLLOW ASTM STANDARDS FOR SAMPLING AND TESTING. ONE SLUMP TEST SHALL BE TAKEN FOR EACH SET OF TEST CYLINDERS CAST. SLUMP TEST SHALL CONFORM WITH ASTM C 143. NO CONCRETE TEST WILL BE ACCEPTED IF CONCRETE IS TAMPERED WITH IN ANY WAY AFTER SAID TEST IS PERFORMED. REPEAT TEST IF WATER IS ADDED AFTER INITIAL SAMPLING.
G. TRANSPORTING, PLACING, CURING AND DEPOSITING OF CONCRETE SHALL COMPLY WITH ACI 301-16: SPECIFICATIONS FOR STRUCTURAL CONCRETE.
H. CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE LOCATED AT I/3 OF THE SPAN WITH REINFORCING CONTINUOUS ACROSS THE JOINT. PROVIDE A CONTINUOUS 2 X 4 SHEAR KEY AT SLABS. AT BEAMS PROVIDE A 1 1/2" DEEP SHEAR KEY WITH A WIDTH 8" SMALLER THAN THE BEAM WIDTH AND A DEPTH 8" SMALLER THAN THE BEAM DEPTH. LOCATIONS SHALL BE APPROVED BY STRUCTURAL ENGINEER OF RECORD BEFORE POUR.
I. CONCRETE USED AT BALCONIES AND TERRACES SHALL HAVE A WATER/ CEMENT RATIO OF 0.40.
K. MAXIMUM WATER/CEMENT RATIO FOR CONCRETE CONTAINING A SUPERPLASTICIZING ADMIXTURE SHALL BE 0.40. SLUMP AFTER ADDITION OF SUPERPLASTICIZER SHALL BE 6" +\- 1"
L. MINIMUM CONCRETE COVER FOR REINFORCEMENT:
I. CONCRETE EXPOSED TO EARTH OR WEATHER
#6 BARS AND LARGER.....2"
#5 BARS AND SMALLER.....1 1/2"
II. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WIH EARTH:
BEAMS AND COLUMNS.....1 1/2" TO TIES OR STIRRUPS

WIND ANALYSIS DESIGN PARAMETERS:

1.-WIND DESIGN HAS BEEN DONE IN ACCORDANCE WITH ASCE 7-16 AND 2020 FBC (7TH EDITION), HVHZ.
2.-EXPOSURE "D"
3.-RISK CATEGORY: II
4.-INTERNAL PRESSURE COEFFICIENT, GCpi= ,0.18.
5.-ULTIMATE WIND VELOCITY, V= 175 MPH

DIMENSIONS

1.-WHILE THE POSITION OF MOST CONCRETE, STEEL, AND DECKING MEMBERS ARE DEFINED DIRECTLY ON THE STRUCTURAL DRAWINGS THERE ARE INSTANCES WHERE REFERENCE MUST BE MADE TO ARCHITECTURAL OR OTHER DRAWINGS TO DEDUCE A DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR SUCH DIMENSIONAL COORDINATION AND CROSS REFERENCING.

2.-WITH THE POSITION OF MOST CONCRETE, MASONRY, STEEL, AND DECKING MEMBERS THUS FIXED, THE CONTRACTOR SHALL STILL NEED TO DEDUCE AND COMPUTE OTHER DIMENSIONS THAT ARE DERIVATIVE FROM THE BASIC DIMENSIONS, THESE MAY INCLUDE TRUE DISTANCE BETWEEN WORK POINTS, TRUE LENGTH, AND ORIENTATION OF MEMBERS, AND SO ON. SUCH DERIVATION OR DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.

3.-TO ENSURE ACCURACY OR THESE DERIVED DIMENSIONS, THE CONTRACTOR IS TO PRODUCE LAYOUT DRAWINGS FOR COORDINATION WITH OTHER TRADES, AS WELL AS DETAILED SHOP DRAWINGS, ALTHOUGH THEY WILL NOT BE CHECKED, THESE LAYOUT DRAWING ARE TO BE SUBMITTED AT THE SAME TIME AS THE RELEVANT SHOP DRAWING.

SHORING AND RESHORING

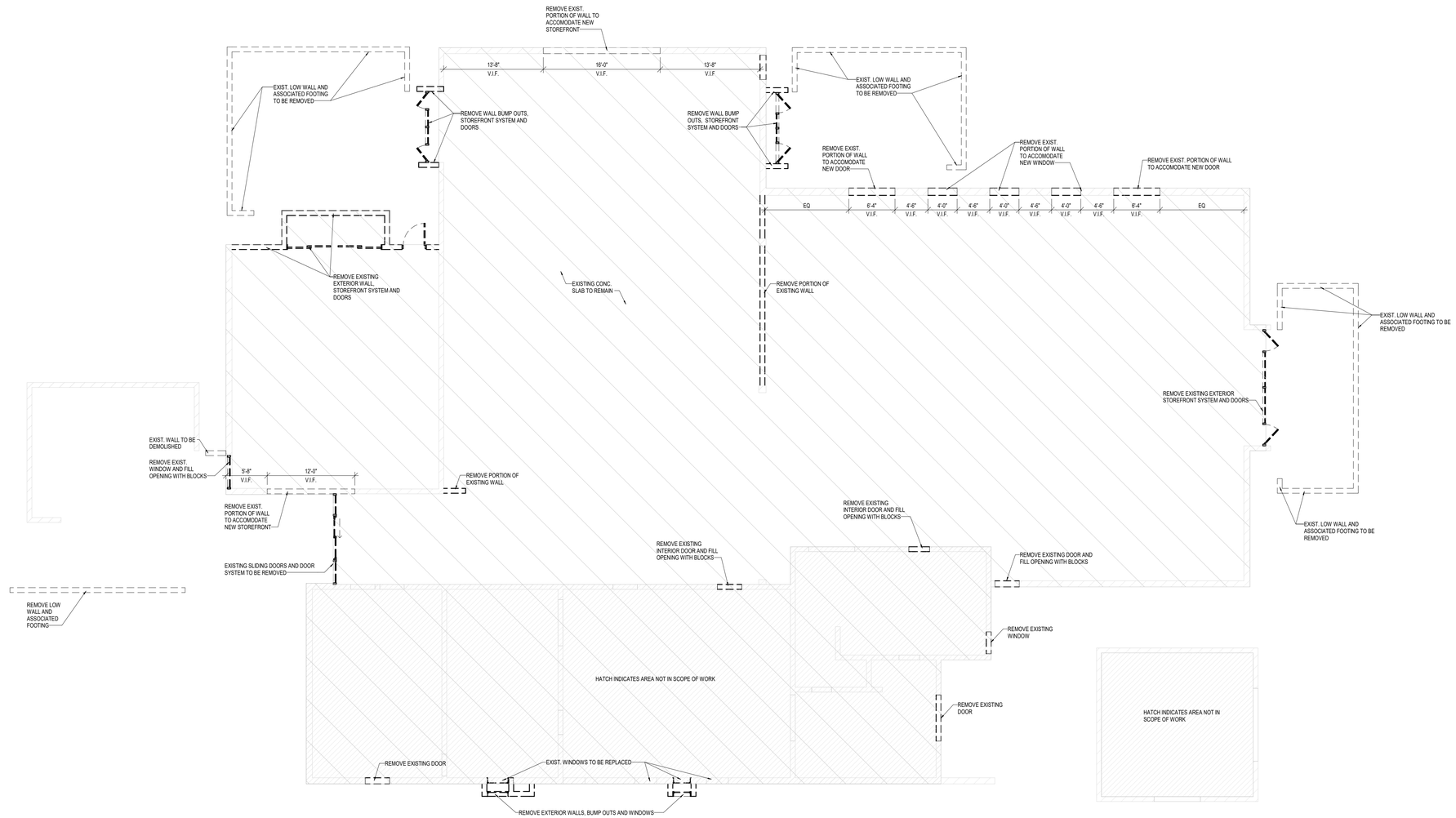
1.-SHORING AND RESHORING DRAWINGS SHALL BE PREPARED BY A STATE OF FLORIDA REGISTERED SPECIALTY ENGINEER WITH A MINIMUM OF TEN YEARS OF EXPERIENCE IN SHORING AND RESHORING DESIGN AND DETAILING.
2.-SHORING AND RESHORING DRAWINGS SHALL INCLUDE AT LEAST THE FOLLOWING ITEMS:
2.1.-LOCATION, SIZE, TYPE AND CAPACITY OF ALL SHORING.
2.2.-LOCATION, SIZE, TYPE, AND CAPACITY OF ALL RESHORING.
2.3-LOCATION, SIZE, AND TYPE OF ALL BLOCKING, MUD SILLS, TEMPORARY LATERAL BRACING AND OTHER ACCESSORIES REQUIRED TO ADEQUATELY AND SAFELY SUPPORT AND BRACE THE STRUCTURE DURING CONSTRUCTION.
2.4.-INSTALLATION PROCEDURE, SEQUENCE OF INSTALLATION, LOAD RELIEF AND REMOVAL OF ALL SHORING AND RESHORING.
3.-SHORING AND RESHORING SUBMITTAL FOR APPROVAL SHALL INCLUDE AT LEAST TWO COPIES FOR THE BUILDING DEPARTMENT, ONE FOR THE ENGINEER OF RECORD, ONE FOR THE THRESHOLD INSPECTOR, AND ONE FOR THE ARCHITECT.
4.-DESIGN, DETAIL AND ERECT FORMS, SHORING AND RESHORING IN COMPLIANCE WITH ACI 347R-14, PROJECT SPECIFICATIONS, AND THESE NOTES. FORMS, SHORING AND RESHORING SHALL BE DESIGNED FOR THE WEIGHT OF THE FLOOR OR ROOF, A CONSTRUCTION LOAD OF 50 PSF, AND FOR THE CUMULATIVE LOADS OF THE SUPPORTED HORIZONTAL CONCRETE MEMBERS. USE A DESIGN FACTOR OF SAFETY OF 3 FOR WOOD SHORES AND 2 FOR METAL SHORES.
5.-THE MAXIMUM SUPERIMPOSED CONSTRUCTION LOAD APPLIED TO FLOORS SUPPORTING SHORES OR RESHORES SHALL NOT EXCEED 75% OF THE DESIGN LIVE LOAD SPECIFIED FOR SLABS (AND JOISTS WHERE APPLICABLE) AND 60% OF THE LIVE LOAD SPECIFIED FOR BEAMS. NO CONSTRUCTION LOAD SHALL BE APPLIED TO ANY MEMBER UNTIL THE CONCRETE IS A MINIMUM OF 14 DAYS OLD AND THE 7 DAY STRENGTH THIS 70% OF THE SPECIFIED 28 DAY STRENGTH.
6.-FORMS MAY BE REMOVED 72 HOURS AFTER CONCRETE POUR PROVIDED THAT CONCRETE STRENGTH IS 70% OF THE SPECIFIED 28 DAY STRENGTH AND NOT LESS THAN 3500 PSI. RESHORE EACH BAY IMMEDIATELY AFTER FORMS ARE STRIPPED AND REMOVED. REMOVAL OF FORMS IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. REMOVAL OF FORMS SHALL BE CARRIED OUT IN SUCH A WAY AS TO NOT DAMAGE THE STRUCTURE, INSURE SAFETY AND PREVENT CREEP DEFLECTION OF STRUCTURAL MEMBERS.

SHOP DRAWINGS AND SUBMITTALS

1.-THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE ARCHITECT'S REVIEW PRIOR TO COMMENCEMENT OF WORK.
2.-SHOP DRAWINGS WILL BE REVIEWED FOR COMPLIANCE WITH CONTRACT DOCUMENTS, CONSTRUCTION METHODS, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE PROJECT ENGINEER. DRAWINGS WITHOUT CONTRACTOR'S APPROVAL STAMP SHALL BE RETURNED WITHOUT ENGINEER'S REVIEW.
3.-IN CASE OF A CONFLICT, INFORMATION PRESENTED ON STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THAT WITHIN SHOP DRAWINGS, UNLESS SPECIFICALLY ADDRESSED BY THE ENGINEER IN WRITING.
4.-THROUGH THE PROCESS OF A CURSORY REVIEW, ENGINEER ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS. ANY ERRORS OR OMISSIONS IRRESPECTIVE OF ENGINEER'S COMMENTS OR DURATION OR THE REVIEW SHALL BE THE RESPONSIBILITY OF AND MUST BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL SERVICE CHARGE EVEN IF SUCH WORK WAS DONE IN ACCORDANCE WITH THE SHOP DRAWINGS.
5.-THE ENGINEER RESERVES TEN WORKING DAYS FOR SHOP DRAWING REVIEW TIME (FROM THE DATE OF RECEIPT). IN CASES WHERE THE VOLUME OF SUBMITTED SHOP DRAWINGS IS VIEWED AS EXCESSIVE, THE ENGINEER RESERVES THE RIGHT TO NOTIFY THE OWNER, ARCHITECT, AND THE CONTRACTOR OR THE ADDITIONAL TIME REQUIRED TO PERFORM A QUALITY REVIEW, ALL STRUCTURAL SHOP DRAWINGS AND PRODUCT SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY IN FULL SIZE PDF FORMAT. HARD COPY SUBMITTAL WILL NOT BE ACCEPTED.
6.-REPRODUCTION OR ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTED AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
7.-ON FIRST SUBMITTAL, CLEARLY FLAG AND CLOUD ALL DIFFERENCES FROM THE CONTRACT DOCUMENTS ON RESUBMITTED, FLAG AND CLOUD ALL CHANGES AND ADDITIONS TO PREVIOUS SUBMITTAL; ONLY CLOUDED ITEMS WILL BE REVIEWED FOR RESUBMITTED SHOP DRAWINGS.
8.-THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, DRAWINGS AND CALCULATIONS FOR ALL OF THE FOLLOWING ASSEMBLIES. THE DESIGN OF THESE ASSEMBLIES IS THE RESPONSIBILITY OF THE CONTRACTOR'S DELEGATED SPECIALTY ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION ALL SUBMITTALS SHALL BEAR THE ENGINEER'S SEAL & SIGNATURE. REVIEW SHALL BE FOR GENERAL CONFORMANCE WITH THE PROJECT PARAMETERS AS INDICATED ON THE DRAWINGS AND THE GENERAL NOTES.
8.1.-NON-LOAD BEARING STUD WALL AND CURTAIN WALL SYSTEMS AND RELATED CONNECTIONS: DESIGN SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES. REFER TO SPECIFICATION FOR DETAILED REQUIREMENTS.
8.2.-PROVIDE COMPLETE SHORING AND RE-SHORING DRAWINGS PREPARED BY OR UNDER THE DIRECT SUPERVISION OR A DELEGATED/SPECIALTY ENGINEER AND CONFORMING TO THE REQUIREMENTS OF THE SPECIFICATIONS AND THE BUILDING CODE.
9.-DELEGATED/SPECIALTY ENGINEER SUBMITTALS: SUBMITTALS SHALL BE PREPARED IN ACCORDANCE WITH THE BUILDING CODE. ENGINEERS NAME, LICENSE NUMBER AND BUSINESS ADDRESS SHALL BE LEGIBLY INDICATED ON ALL SIGNED AND SEALED DOCUMENTS. SPECIALTY ENGINEER SHALL BE SOLELY RESPONSIBLE FOR DIRECT CONTACT WITH THE BUILDING DEPARTMENT WHILE OBTAINING BUILDING DEPARTMENT'S APPROVAL FOR HIS/HER PORTION OR WORK (INCLUDING PROVIDING RESPONSES TO REVIEW COMMENTS, SUPPLYING ADDITIONAL CALCULATIONS AND PLANS, ATTENDING MEETINGS, ETC). DELEGATED/SPECIALTY ENGINEER IS DEFINED AS ONE WHO SPECIALIZES IN AND UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN A SPECIFIC SUBMITTAL PREPARED FOR THIS PROJECT AND IS AN EMPLOYEE OR OFFICER OR, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL.
10.-IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED/SPECIALTY ENGINEER SUBMITTAL IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED /SPECIALTY ENGINEER AND THAT THE DELEGATED/SPECIALTY ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED/SPECIALTY ENGINEER IS SOLELY RESPONSIBLE FOR HIS/HER DESIGN, INCLUDING BUT NOT LIMITED TO THE ACCURACY OF HIS/HER CALCULATIONS AND COMPLIANCE WITH THE APPLICABLE CODES AND STANDARDS.
11.-TOWER CRANE (SHOP DRAWINGS REQUIRED): FOUNDATIONS AND BRACING FOR THE CRANE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. SIGNED AND SEALED SET OF SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE THRESHOLD INSPECTOR FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION.LOCATION SHALL BE APPROVED BY THE ENGINEER/ARCHITECT. ADDITIONAL RE-DESIGN WORK REQUIRED AS A RESULT OF CONFLICT BETWEEN CRANE AND THE STRUCTURE SHALL BE BILLED TO THE CONTRACTOR BY THE ENGINEER OR RECORD AT AN HOURLY RATE. COST ADDITIONAL MATERIALS AND LABOR FOR THE STRUCTURAL REVISIONS ASSOCIATED WITH PLACEMENT OF CRANE SHALL BE COVERED BY THE CONTRACTOR.

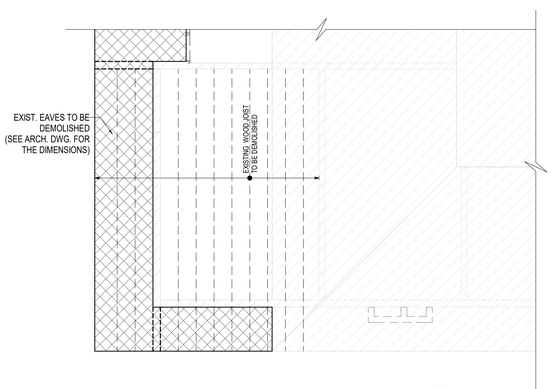
DEMOLITION:

SUBMITTALS
A. SUBMIT SCHEDULE INDICATING PROPOSED SEQUENCE OF OPERATION FOR SELECTIVE DEMOLITION WORK TO OWNER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK. INCLUDE METHOD OF DEMOLITION AND PLAN FOR REMODELING WORK, COORDINATION FOR SHUT-OFF, COPPING, CONTINUATION OF UTILITY SERVICES AS REQUIRED, TOGETHER WITH DETAILS FOR DUST AND NOISE CONTROL PROTECTION.
B. CERTIFICATION: SUBMIT COPY OF DEMOLITION FIRM CURRENT LICENSES.
C. COORDINATE WITH OWNER'S CONTINUING OCCUPANCY OF PORTIONS OF EXISTING BUILDING.
PROJECT RECORD DOCUMENTS
A. ACCURATELY RECORD ACTUAL LOCATIONS OF CAPPED UTILITIES, SUBSURFACE OBSTRUCTIONS, AND UNANTICIPATED STRUCTURAL, MECHANICAL AND ELECTRICAL ELEMENTS UNCOVERED DURING DEMOLITION.
QUALITY ASSURANCE
A. ORGANIZE AND PERFORM DEMOLITION WORK TO AVOID DAMAGE TO CONSTRUCTION INTENDED TO REMAIN.
B. DEMOLITION AND TRANSPORTATION OF DEBRIS SHALL COMPLY WITH APPLICABLE CODES AND REGULATIONS GOVERNING THESE OPERATIONS. FEES ARE PAID BY THE CONTRACTOR.
C. CONDUCT DEMOLITION AND REMOVAL OPERATIONS IN AN EXPEDIENT MANNER, WITH PRECAUTIONS TAKEN TO PREVENT DEMOLITION SITE FROM BEING AN "ATTRACTIVE NUISANCE."
D. NOTIFY THE OWNER AND A/E OF ANY CONDITIONS CAPABLE OF AFFECTING THE SAFETY OF OCCUPANTS OF ADJACENT BUILDINGS, THE NORMAL USE OF THESE FACILITIES, OR THE PHYSICAL CONDITION OF THE STRUCTURES.
- IN CASE OF ACCIDENTAL DISRUPTION OF UTILITIES OR THE DISCOVERY OF PREVIOUSLY UNKNOWN UTILITIES, STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND A/E.
- DO NOT CONTINUE WORK UNTIL OWNER, A/E AND CONTRACTOR AGREE ON A PLAN TO CORRECT THE SITUATION OR IDENTIFY UTILITY SERVICE LINE.
REGULATORY REQUIREMENTS
A. CONFORM TO FLORIDA BUILDING CODE 2014 FIFTH EDITION WITH LATEST REVISIONS, FOR DEMOLITION WORK. SAFETY OF STRUCTURES DUST CONTROL AND SAFEGUARDS REQUIRED DURING CONSTRUCTION.
B. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS.
C. DO NOT CLOSE OR OBSTRUCT EGRESS WIDTH TO EXISTS.
D. DO NOT DISABLE OR DISRUPT BUILDING FIRE OR LIFE SAFETY SYSTEMS WITHOUT THREE (3) DAY PRIOR WRITTEN NOTICE TO THE OWNER.
JOB CONDITIONS
A. OWNER WILL BE CONTINUOUSLY OCCUPYING AREAS OF BUILDING AND SITE IMMEDIATELY ADJACENT TO AREAS OF SELECTIVE DEMOLITION. CONDUCT DEMOLITION WORK IN MANNER THAT WILL MINIMIZE DISRUPTION OF OWNER'S NORMAL OPERATIONS. PROVIDE MINIMUM OF FIVE (5) WORKING DAYS ADVANCE NOTICE TO OWNER OF DEMOLITION ACTIVITIES, WHICH WILL SEVERELY IMPACT OWNER'S NORMAL OPERATIONS.
B. EXISTING WORK NOT SPECIFIED FOR REMOVAL THAT IS TEMPORARILY REMOVED, DAMAGED EXPOSED OR IN ANY WAY DISTURBED OR ALTERED BY REMOVAL WORK SHALL BE REPAIRED, PATCHED OR REPLACED TO THE OWNER AND A/E SATISFACTION AT NO ADDITIONAL COST TO THE BOARD.
C. PROVIDE BARRIERS AND WARNING DEVICES TO PROTECT THE PUBLIC AND USERS OF ADJACENT FACILITIES.
PREPARATION
A. WHERE SELECTIVE DEMOLITION WHICH WILL CREATE EXCESSIVE DUST OCCURS IMMEDIATELY ADJACENT TO OR WITHIN OCCUPIED PORTIONS OF BUILDING, CONSTRUCT DUST-PROOF PARTITIONS OR BARRIERS TO MITIGATE SPREAD OF AIRBORNE DUST OR DEBRIS.
B. PROVIDE WEATHERPROOF CLOSURES FOR EXTERIOR OPENINGS RESULTING FROM SELECTIVE DEMOLITION WORK.
C. IDENTIFY STUB OFF AND DISCONNECT UTILITY SERVICES THAT ARE NOT INDICATED TO REMAIN. REMAINING UTILITIES SHALL BE KEPT ACTIVE
DEMOLITION
A. DISCONNECT, REMOVE, CAP AND IDENTIFY DESIGNATED UTILITIES WITHIN DEMOLITION AREAS.
B. DEMOLISH IN AN ORDERLY AND CAREFUL MANNER. PROTECT EXISTING SUPPORTING STRUCTURAL MEMBERS AND ALL ITEMS TO REMAIN.
C. PROMPTLY REMOVE DEBRIS TO AVOID IMPOSING EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS OR FRAMING.
D. IF UNANTICIPATED MECHANICAL, ELECTRICAL OR STRUCTURAL ELEMENTS WHICH CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED INVESTIGATE MEASURE BOTH NATURE EXTENT OF THE CONFLICT. SUBMIT REPORT TO OWNER IN WRITTEN ACCURATE DETAIL.
DISPOSAL OF DEMOLISHED MATERIALS
A. REMOVE DEBRIS, RUBBISH OTHER MATERIALS RESULTING FROM SELECTIVE DEMOLITION OPERATIONS FROM BUILDING SITE. LEGALLY TRANSPORT AND DISPOSE OF MATERIALS OFF SITE ON A REGULAR BASIS.
B. ACCUMULATION OF DEBRIS ON THE SITE WILL NOT BE ALLOWED.
C. IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, COMPLY WITH APPLICABLE REGULATIONS LAWS, ORDINANCES CONCERNING REMOVAL, HANDLING AND PROTECTION AGAINST EXPOSURE OF ANY ENVIRONMENTAL POLLUTION.
D. BURNING OF REMOVED MATERIALS WILL NOT BE PERMITTED ON PROJECT SITE.
REPAIR
A. REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN DAMAGED STRUCTURES, SURFACES TO REMAIN TO CONDITIONS EXISTING PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION WORK. REPAIR ADJACENT C



GROUND FLOOR DEMOLITION PLAN

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



ROOF DEMOLITION PLAN

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

LEGEND:

- DENOTES EXISTING WALL/ WINDOW/ DOOR TO BE DEMOLISHED
- DENOTES EXISTING WALLS TO REMAIN
- HATCH INDICATES AREA NOT IN SCOPE OF WORK

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library

6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: DEMOLITION PLAN

REVISION

DATE
04-03-2023

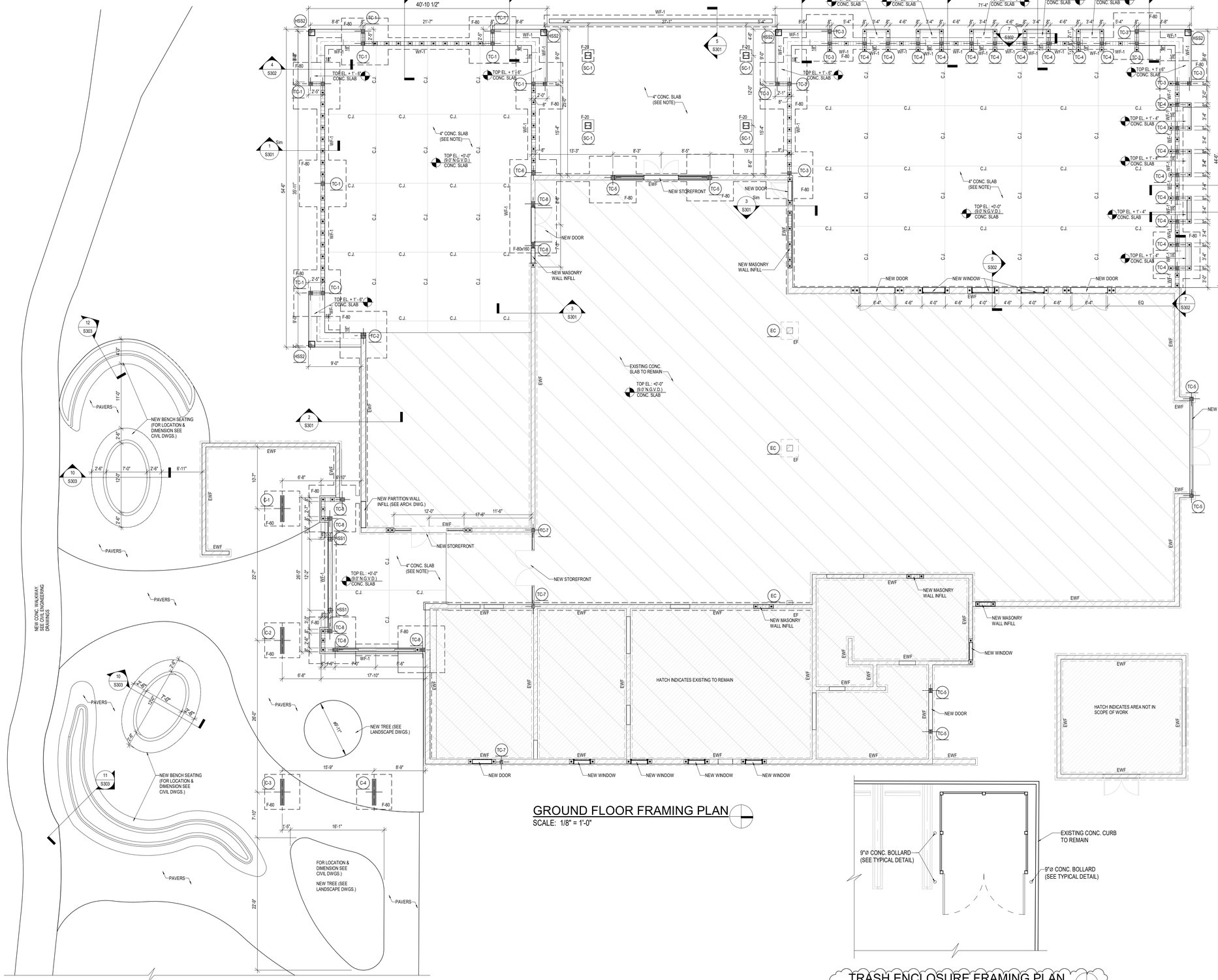
PROJECT NUMBER
19119

SHEET NUMBER
D101

OF

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

YOUSSEF H. HACHEM LICENSE No.43302 STATE OF FLORIDA PROFESSIONAL ENGINEER
YOUSSEF HACHEM, Ph.D, P.E.
No. 43302



GROUND FLOOR FRAMING PLAN

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

TRASH ENCLOSURE FRAMING PLAN

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

1

SOIL STATEMENT:

FOUNDATION SYSTEM CONSISTS OF PADS AND MONOLITHIC CONTINUOUS FOOTINGS BEARING ON UNDISTURBED LIMEROCK. ALLOWABLE SOIL BEARING PRESSURE USED IN THE DESIGN OF FOOTINGS IS 2000 PSF.
AT THE TIME OF CONSTRUCTION THE PROFESSIONAL SHALL SUBMIT TO THE BUILDING OFFICIAL A LETTER ATTESTING THAT THE SITE HAS BEEN OBSERVED AND THE FOUNDATION CONDITIONS ARE SIMILAR TO THOSE UPON WHICH THE DESIGN IS BASED, PER F.B.C.-2017

NOTES:

1- DIMENSIONS SHOWN SHALL BE FIELD-VERIFIED. ANY DISCREPANCIES SHALL BE NOTED AND THE ENGINEER OF RECORD NOTIFIED BEFORE CONTINUING WITH THE WORK.
2- CONTRACTOR TO SUBMIT SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS FOR WINDOWS AND DOORS BY FLORIDA PROFESSIONAL ENGINEER BEFORE FABRICATION FOR APPROVAL BY THE ENGINEER OF RECORD TO SHOW COMPLIANCE WITH THE RESIDENTIAL FLORIDA BUILDING CODE 2020 (SEVENTH EDITION).
3- TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THIS SECTION AND CHAPTER 633, FLORIDA STATUTES.
4- A 6-MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR THE PREPARED SUBGRADE WHERE NO BASE COURSE EXISTS PER RESIDENTIAL F.B.C. 2020 (SEVENTH EDITION), SECTION R506, R506.2.3.
5- TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTIVE TREATMENT TO NEW CONSTRUCTION. SEE SECTION 202, "REGISTERED TERMITICIDE." UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.", PER RESIDENTIAL F.B.C. 2020 (SEVENTH EDITION), SECTION R318, R318.1
6- ALL ELECTRICAL, MECHANICAL AND PLUMBING PENETRATIONS THROUGH STRUCTURAL MEMBERS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR. LOCATION AND DIMENSIONS OF EQUIPMENTS TO BE VERIFIED BY SPECIFIC VENDOR PRIOR TO INSTALLATION. SPECIFIC VENDOR IS RESPONSIBLE FOR CHECKING ADECUANCY OF EQUIPMENT WEIGHTS WITH STATED LOADS USED FOR STRUCTURAL DESIGN, IF LOADS EXCEED THOSE, VENDOR WILL RESPONSIBLE FOR UPDATE THE DESIGN ACCORDINGLY. PERMITTING TASKS AND TIMELINE COMPLIANCE ASSOCIATED WITH NEW DESIGN WILL BE VENDOR RESPONSABILITY AS WELL.

SLAB NOTES:

4" CONC. SLAB OVER 6 MIL. VISQUEEN ON CLEAN FINE SAND SUPERVISED FILL COMPACTED IN 12" LAYERS TO 95% OF THE STANDARD PROCTOR DENSITY TEST. REINFORCED w/#4 @12" EACH WAY PLACED 11/2" FROM TOP OF SLAB. SOIL COMPACTION SHALL BE SUPERVISED BY GEOTECHNICAL ENGINEER.

CONCRETE MASONRY NOTES:

1. PROVIDE 1-#5 VERTICAL IN FILLED CELL ADJACENT TO ANY WINDOW AND DOOR OPENINGS WHERE NO COLUMN IS INDICATED, UNLESS OTHERWISE NOTED. EXTEND REINFORCEMENT FROM FRAMING FLOOR TO BEAM ABOVE.

2. ALL MASONRY WALLS TO HAVE #9 LADDER TYPE DUR-O-WALL HORIZONTAL JOINT REINFORCING EVERY 2ND BLOCK COARSE. EXTEND REINFORCING MINIMUM 4" INTO CONC. COLUMNS.

3. ALL SLOPES, DRAINS AND RECESSES IN FLOOR SLAB, COORDINATE W/ ARCH. AND MECHANICAL DRAWINGS PRIOR OF POURING FLOOR SLAB.

4. ■ INDICATES (1)-#5 IN FILLED CELL AT 32" O.C. MAXIMUM, UNLESS OTHERWISE NOTED. PROVIDE ADDITIONAL REBAR WHERE SHOWN ON PLAN. MASONRY SHALL HAVE A MINIMUM F'm = 1,500 psi.

5. WINDOWS OPENING AND DOOR COORDINATE W/ARCHITECTURAL DRAWINGS AND MANUFACTURE.

SUPERIMPOSED LOADS

GROUND FLOOR	DEAD	25 PSF
	LIVE	40 PSF

LEGEND:

⬚	DENOTES EXISTING WALL/ WINDOW/ DOOR TO BE DEMOLISHED
▨	DENOTES EXISTING WALLS TO REMAIN
☐	HATCH INDICATES AREA NOT IN SCOPE OF WORK
▥	DENOTES A NEW 8" CMU WALLS
▬	DENOTES A NEW CONC. COL./ CONC. WALL
XX	DENOTES A NEW COLUMN STARTING AT THIS LEVEL

EWF/ EF: DENOTES AN EXISTING CONC. WALL FOOTING/ CONC. FOOTING TO REMAIN

EC DENOTES AN EXISTING COLUMN TO REMAIN

YHCE
YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

YOUSSEF H. HACHEM
LICENSE
No.43302
STATE OF FLORIDA
PROFESSIONAL ENGINEER

YOUSSEF HACHEM, Ph.D, P.E.
No. 43302

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

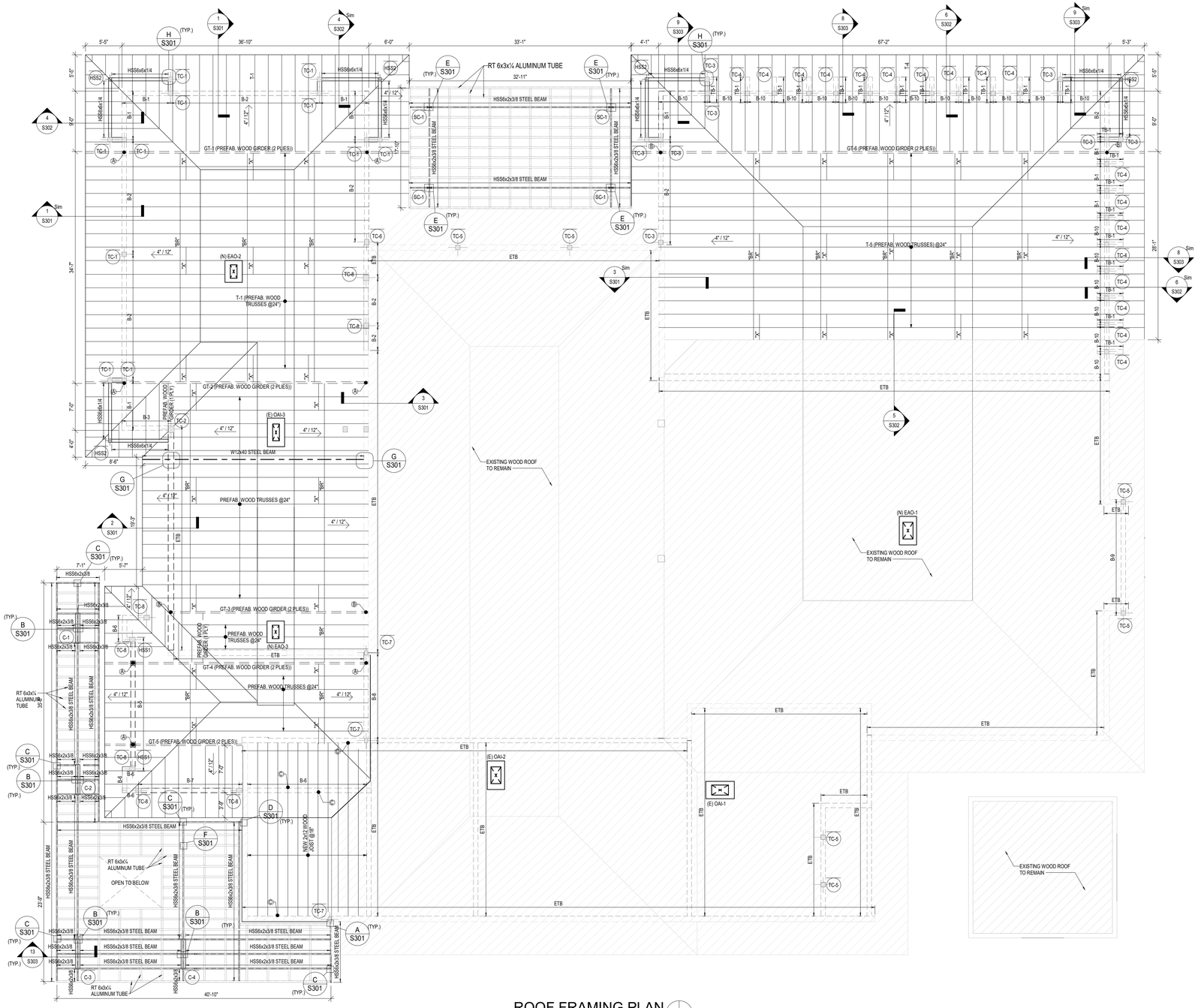
OWNER:

Miami Lakes Branch Library
6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: GROUND FLOOR FRAMING PLAN

REVISION		
1	RREVISION 01	08-28-23

DATE
04-03-2023
PROJECT NUMBER
19119
SHEET NUMBER
S101
OF



ROOF FRAMING PLAN

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

NOTES:

1- DIMENSIONS SHOWN SHALL BE FIELD-VERIFIED. ANY DISCREPANCIES SHALL BE NOTED AND THE ENGINEER OF RECORD NOTIFIED BEFORE CONTINUING WITH THE WORK.
2- CONTRACTOR TO SUBMIT SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS FOR WINDOWS AND DOORS BY FLORIDA PROFESSIONAL ENGINEER BEFORE FABRICATION FOR APPROVAL BY THE ENGINEER OF RECORD TO SHOW COMPLIANCE WITH THE RESIDENTIAL FLORIDA BUILDING CODE 2020 (SEVENTH EDITION).
3- TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THIS SECTION AND CHAPTER 633, FLORIDA STATUTES.
4- TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTIVE TREATMENT TO NEW CONSTRUCTION. SEE SECTION 202, "REGISTERED TERMITICIDE." UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.", PER RESIDENTIAL F.B.C. 2020 (SEVENTH EDITION), SECTION R318, R318.1
5- ALL ELECTRICAL, MECHANICAL AND PLUMBING PENETRATIONS THROUGH STRUCTURAL MEMBERS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR. LOCATION AND DIMENSIONS OF EQUIPMENTS TO BE VERIFIED BY SPECIFIC VENDOR PRIOR TO INSTALLATION. SPECIFIC VENDOR IS RESPONSIBLE FOR CHECKING ADECUANCY OF EQUIPMENT WEIGHTS WITH STATED LOADS USED FOR STRUCTURAL DESIGN, IF LOADS EXCEED THOSE, VENDOR WILL RESPONSIBLE FOR UPDATE THE DESIGN ACCORDINGLY. PERMITTING TASKS AND TIMELINE COMPLIANCE ASSOCIATED WITH NEW DESIGN WILL BE VENDOR RESPONSABILITY AS WELL.

WOOD TRUSS NOTES:

1. TRUSS MANUFACTURER TO PROVIDE DEAD, LIVE, AND WIND UPLIFT REACTIONS FOR ALL TRUSSES AND GIRDERS.
2. STRAP ALL "PIGGYBACK" TRUSSES WITH 14 GA. BY 1" GALV. STEEL STRAPS TO EA. SUPPORTING TRUSS W/ 4-16d NAILS INTO "PIGGYBACK" TRUSS AND INTO SUPPORTING TRUSSES. STRAP BY NU-VUE .
3. AS THE ENGINEER OF RECORD OF THIS DESIGN, I HEREBY STATE THAT THE NET WIND UPLIFT REACTIONS SHOWN IN THIS PLAN SHALL SUPERSEDE THOSE SHOWN IN THE TRUSS MANUFACTURER SHOP DRAWINGS AND ENGINEERING CALCULATIONS. THE NET WIND UPLIFT REACTIONS WERE CALCULATED BY MYSELF, CONSIDERING LOCATION, TRIBUTARY AREAS, HEIGHT, AND ROOF SLOPE IN ACCORDANCE WITH THE ASCE 7-10 CODE FOR A 175 MPH WIND VELOCITY. THE CONNECTORS NOTED IN PLAN EXCEED THE NET WIND UPLIFT REACTIONS SHOWN IN PLAN.
4. MAIN ROOF PLYWOOD SHEATHING SHALL BE EXTENDED UNDER ALL VALLEY TRUSSES.
5. BRACING FOR THE ROOF SYSTEM IS DESIGNED FOR BOTH POSITIVE AND NEGATIVE PRESSURE AND MEETS THE REQUIREMENTS OF CHAPTER 23 F.B.C. 2319.17.2.4
6. OVERSTRESSING OF WOOD FOR WIND DESIGN IS ALLOWED BUT NOT TO OVERSTRESS TRUSS METAL PLATES, WHICH IS NOT ALLOWED BY ASCE 7-16.
7. FOR WATER PROOFING DETAILS SEE ARCHITECTURAL DRAWINGS.

"X": DIAGONAL "X" BRACING COMPOSED OF 2x4'S NAILED TO TRUSSES w/2-16d NAILS @ EACH POINT OF CONTACT, AS PER TPI HIB 91, PAGE 4. SEE DETAIL ON S502.
"BR": CONT. 2x4 WOOD BRACING NAILED TO TOP OF EACH TRUSS BOTTOM CHORD w/2-16d NAILS SPACING EQUALLY AS NOTED, MAX. 10'-0". SEE DETAIL ON S502.

WOOD TRUSSES REACTION

RD+L: DENOTES DEAD LOAD PLUS LIVE LOAD WOOD JOIST REACTION

N.W.U.: DENOTES NET WIND UPLIFT WOOD JOIST REACTION

SUPERIMPOSED LOADS

ROOF	DEAD	30 PSF
	LIVE	30 PSF

LEGEND:

- DENOTES EXISTING WALLS TO REMAIN
- DENOTES A NEW CONCRETE COLUMN OR WALL BELOW
- (XX) DENOTES A NEW COLUMN ENDING AT THIS LEVEL

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library

6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: ROOF FRAMING PLAN

REVISION

DATE
04-03-2023

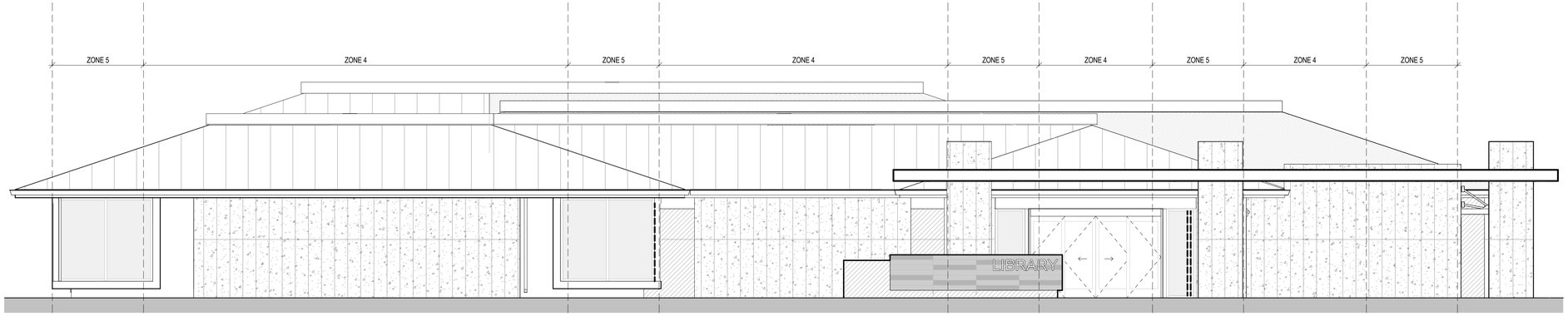
PROJECT NUMBER
19119

SHEET NUMBER
S102

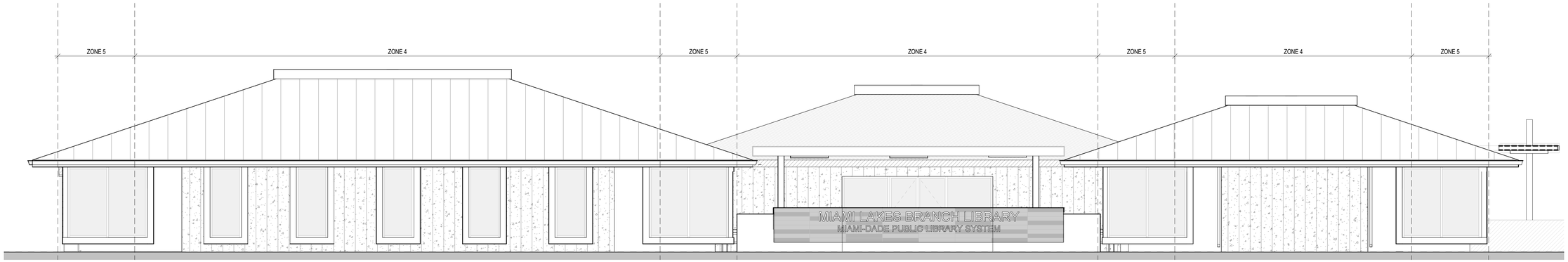
OF

HCE
YOUSSEF HACHEM
CONSULTING ENGINEERING, INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

YOUSSEF H. HACHEM LICENSE No.43302 STATE OF FLORIDA PROFESSIONAL ENGINEER
YOUSSEF HACHEM, Ph.D, P.E.
No. 43302



SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



WEST ELEVATION
SCALE: 3/16" = 1'-0"

DOOR & WINDOW WIND PRESSURE (PSF)		
	WINDOWS/DOOR WIND PRESSURES CALCULATED USING A WIND DIRECTIONALITY FACTOR OF Kd=0.85	
	ZONE	
	ZONE 4	ZONE 5
WINDOWS & TRANSOMS (AREA 50 SQ.FT)	+45.06 -51.19	+41.27 -72.08
DOORS/WINDOWS (AREA 100 SQ.FT)	+42.33 -49.21	+38.77 -65.97

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646
Qualifier: Erik Lloyd Myers
State of Florida: AR 93574
Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library

6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: WINDOWS & DOOR WIND DESIGN PRESSURE

REVISION
1 RREVISION 01 08-28-23

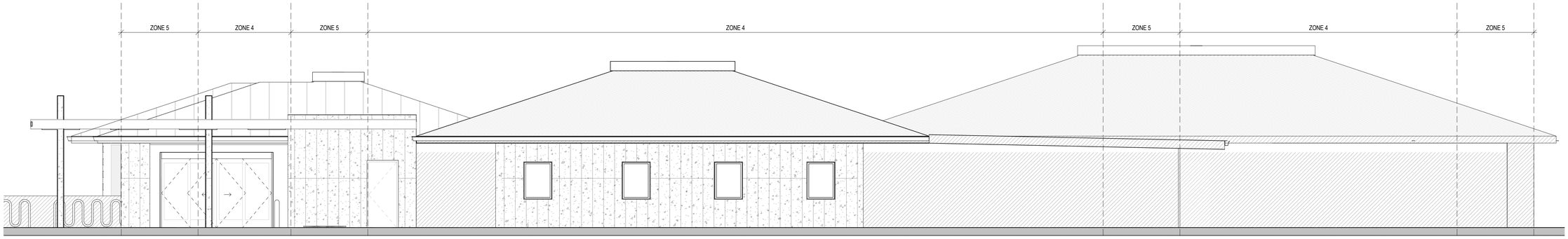
DATE
04-03-2023

PROJECT NUMBER
19119

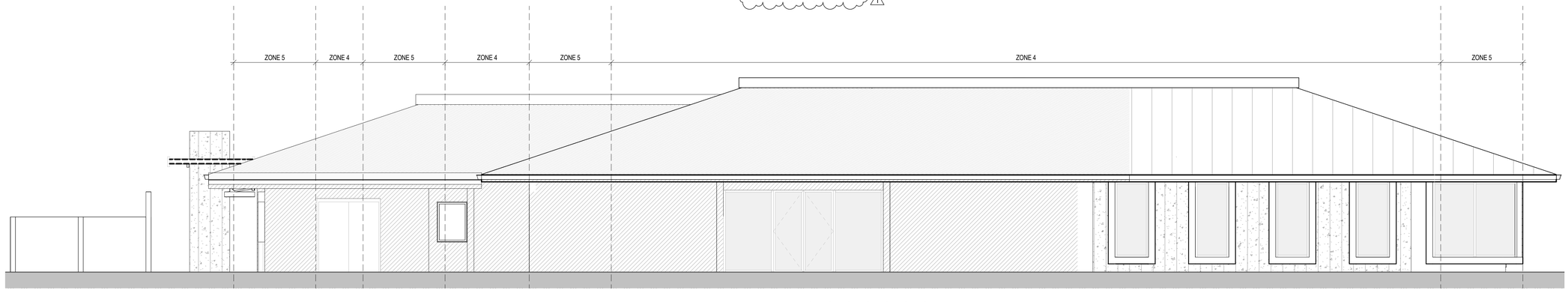
SHEET NUMBER
S201

OF

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com
YOUSSEF HACHEM, Ph.D, P.E.
No. 43302



EAST ELEVATION
SCALE: 3/16" = 1'-0"



NORTH ELEVATION
SCALE: 3/16" = 1'-0"

DOOR & WINDOW WIND PRESSURE (PSF)	WINDOWS/DOOR WIND PRESSURES CALCULATED USING A WIND DIRECTIONALITY FACTOR OF Kd=0.85	
	ZONE	
	ZONE 4	ZONE 5
WINDOWS & TRANSOMS (AREA 50 SQ.FT)	+45.06 -51.19	+41.27 -72.08
DOORS/WINDOWS (AREA 100 SQ.FT)	+42.33 -49.21	+38.77 -65.97

ROOF WIND UPLIFT PRESSURE (C&C) BASED ON 10 SQUARE FEET EFECTIVE AREA (ROOFING)		
ZONE	PRESSURES(PSF)	OVERHANG PRESSURES(PSF)
1	-48.38	-71.39
2e	-63.03	-115.83
2r	-79.18	-115.83
3	-180.35	-115.18

ROOF WIND UPLIFT PRESSURE (C&C) FOR TRIBUTARY 100 SQUARE FEET TO 700 SQUARE FEET (TRUSS CONECTIONS)		
ZONE	PRESSURES(PSF)	OVERHANG PRESSURES(PSF)
1	-53.47	-71.35
2e	-76.13	-115.38
2r	-76.13	-115.38
3	+45.06	-119.58

ROOF LOAD NOTES:

1) WIND LOADS:

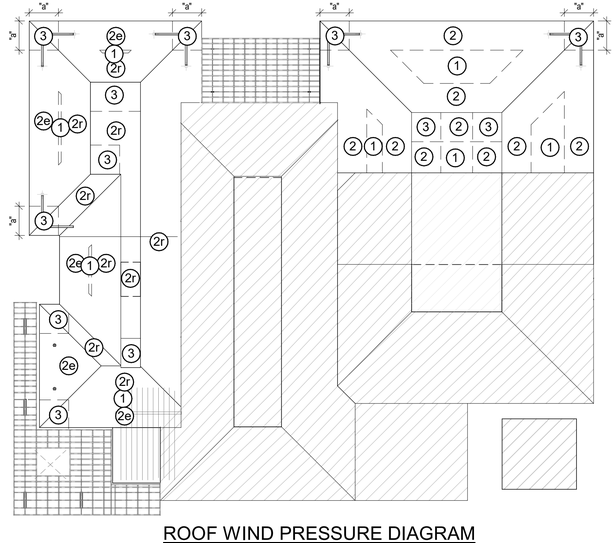
ASCE 07-16
WIND VELOCITY, V = 175 MPH
CATEGORY EXPOSURE "D"
COEF.OF INTERNAL PRESSION GCpi=0.18
MEAN ROOF HEIGHT = 20.5ft
BASIC WIND PRESSURE 43.49 PSF
Kd = 0.85 KH = 1.088 Kz=1
qh = 43.49
a = 8.2 ft

GRAVITY LOADS:

DEAD LOAD:
SEAM TILES: .....12 PSF
19/32" PLYWOOD.....3 PSF
FRAMING.....3 PSF
CEILING, MECH & ELECT.....6 PSF

LIVE LOAD:
ROOF (NON-ACCESIBLE): 30 PSF

TOTAL LOAD:.....54.0 PSF



ROOF WIND PRESSURE DIAGRAM
SCALE: N.T.S.

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

YOUSSEF H. HACHEM
LICENSE
No.43302
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

YOUSSEF HACHEM, Ph.D, P.E.
No. 43302

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library
6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: WINDOWS & DOOR WIND DESIGN PRESSURE

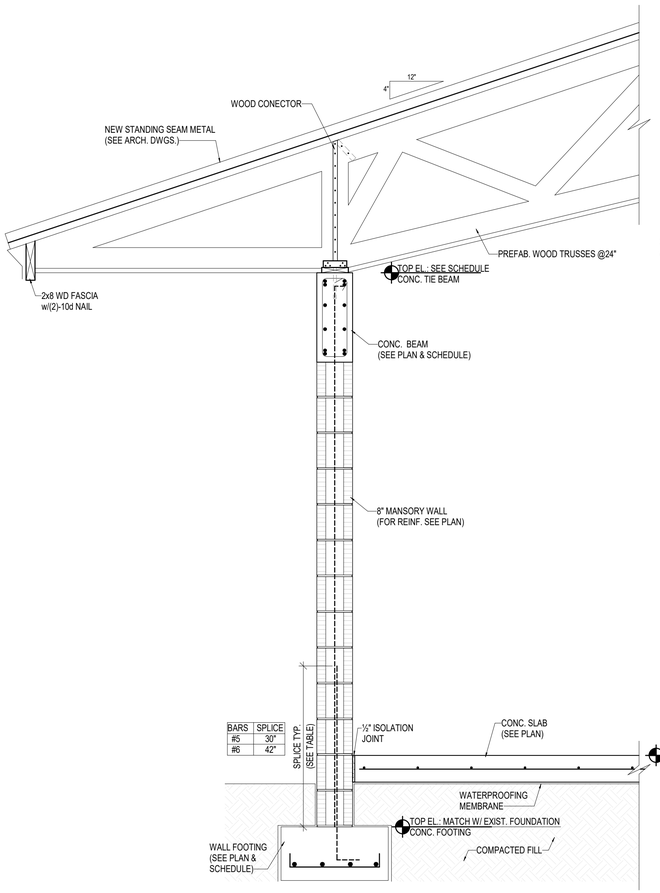
REVISION
1 RREVISION 01 08-28-23

DATE
04-03-2023

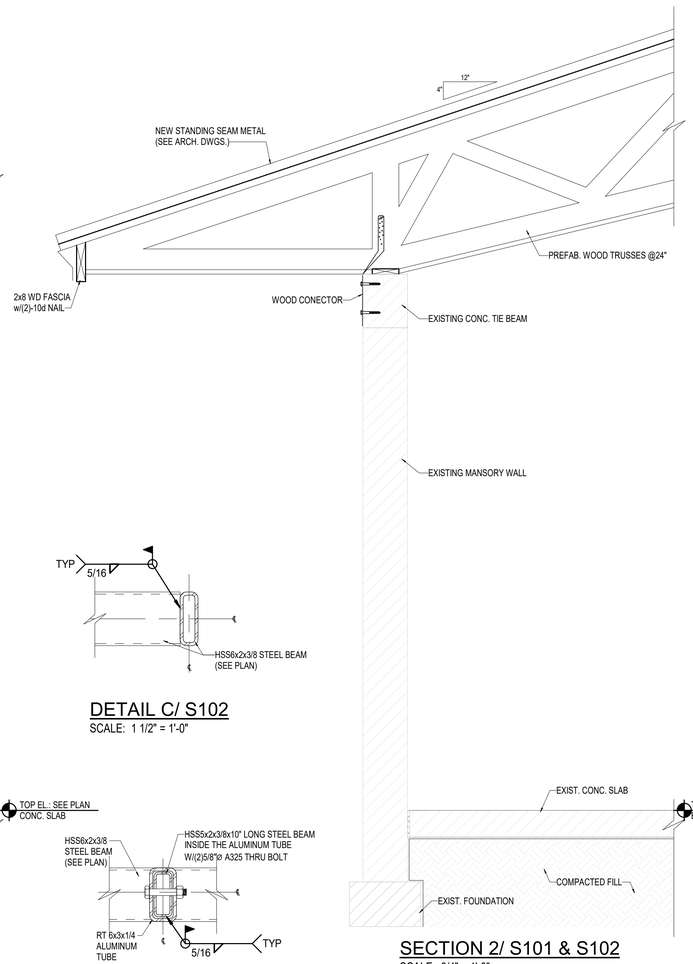
PROJECT NUMBER
19119

SHEET NUMBER
S202

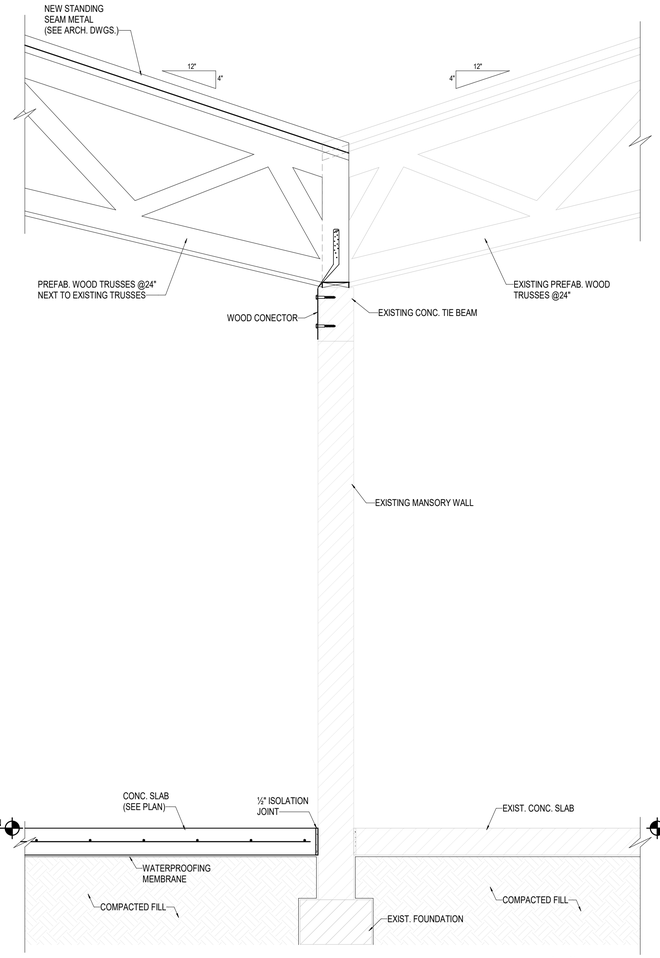
OF



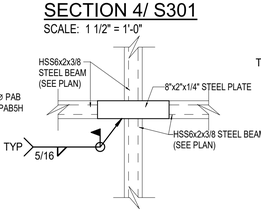
SECTION 1/ S101 & S102
SCALE: 3/4" = 1'-0"



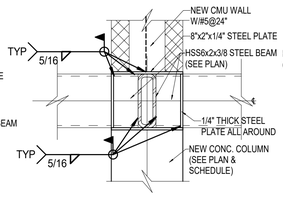
SECTION 2/ S101 & S102
SCALE: 3/4" = 1'-0"



SECTION 3/ S101 & S102
SCALE: 3/4" = 1'-0"

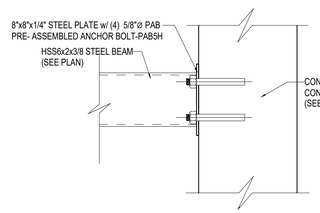


TOP VIEW

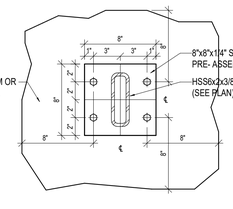


FRONT VIEW

SECTION 4/ S301
SCALE: 1 1/2" = 1'-0"

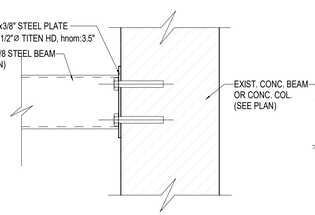


DETAIL A/ S102
SCALE: 1 1/2" = 1'-0"

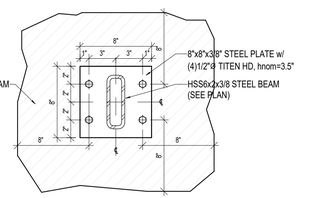


STEEL PLATE DETAIL
SCALE: 1 1/2"=1'-0"

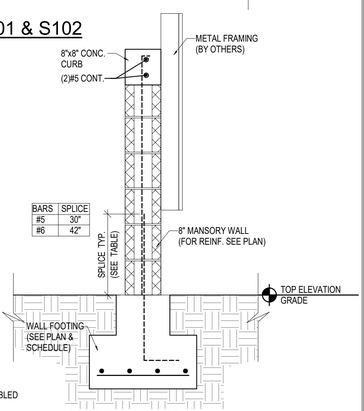
DETAIL B/ S102
SCALE: 1 1/2" = 1'-0"



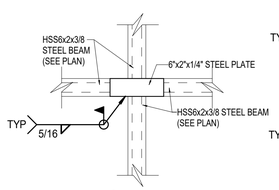
DETAIL D/ S102
SCALE: 1 1/2" = 1'-0"



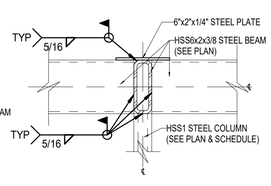
STEEL PLATE DETAIL
SCALE: 1 1/2"=1'-0"



SECTION 5/S101
SCALE: 3/4" = 1'-0"

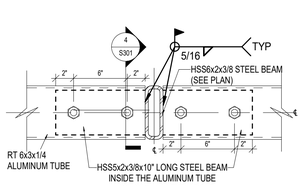


TOP VIEW

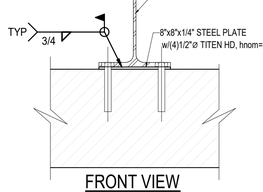


FRONT VIEW

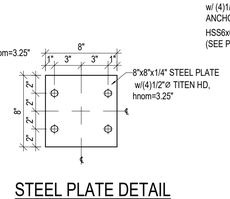
DETAIL E/ S102
SCALE: 1 1/2" = 1'-0"



DETAIL F/ S102
SCALE: 1 1/2" = 1'-0"

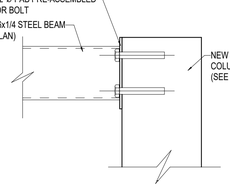


FRONT VIEW
SCALE: 1 1/2"=1'-0"

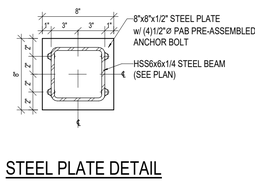


STEEL PLATE DETAIL
SCALE: 1 1/2"=1'-0"

DETAIL G/ S102
SCALE: 1 1/2" = 1'-0"



DETAIL H/ S102
SCALE: 1 1/2" = 1'-0"



STEEL PLATE DETAIL
SCALE: 1 1/2"=1'-0"

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library
6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: SECTIONS

REVISION

DATE
04-03-2023

PROJECT NUMBER
19119

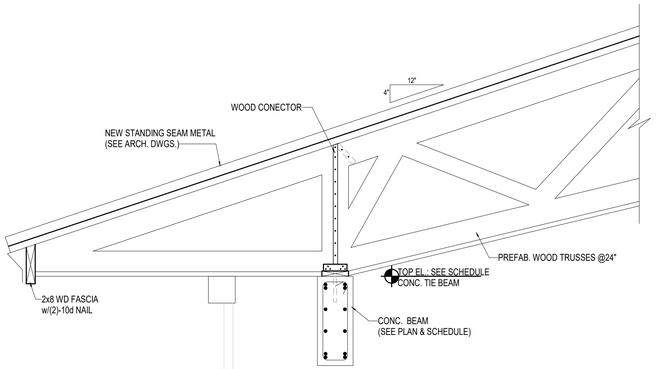
SHEET NUMBER
S301

OF

HCE
YOUSSEF HACHEM
CONSULTING ENGINEERING, INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

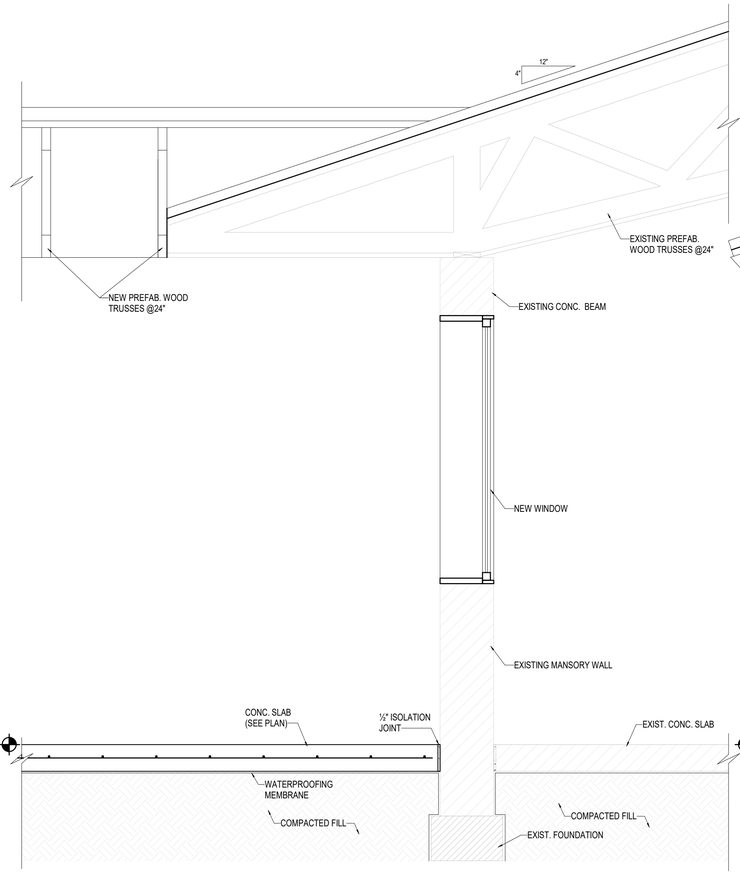
YOUSSEF H. HACHEM
LICENSE
No.43302
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

YOUSSEF HACHEM, Ph.D, P.E.
No. 43302



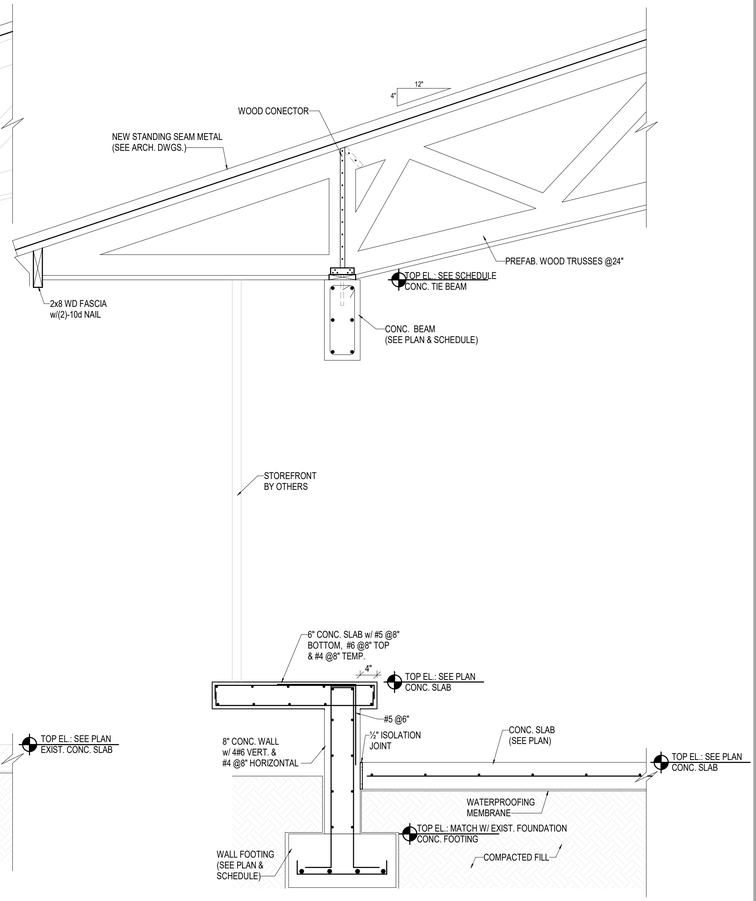
SECTION 4/ S101 & S102

SCALE: 3/4" = 1'-0"



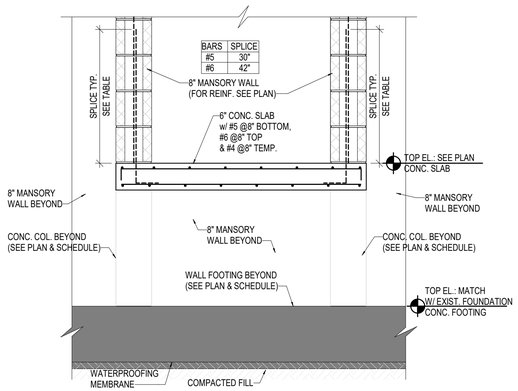
SECTION 5/ S101 & S102

SCALE: 3/4" = 1'-0"



SECTION 6/ S101 & S102

SCALE: 3/4" = 1'-0"



SECTION 7/ S101

SCALE: 3/4" = 1'-0"

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library

6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: SECTIONS

REVISION

DATE
04-03-2023

PROJECT NUMBER
19119

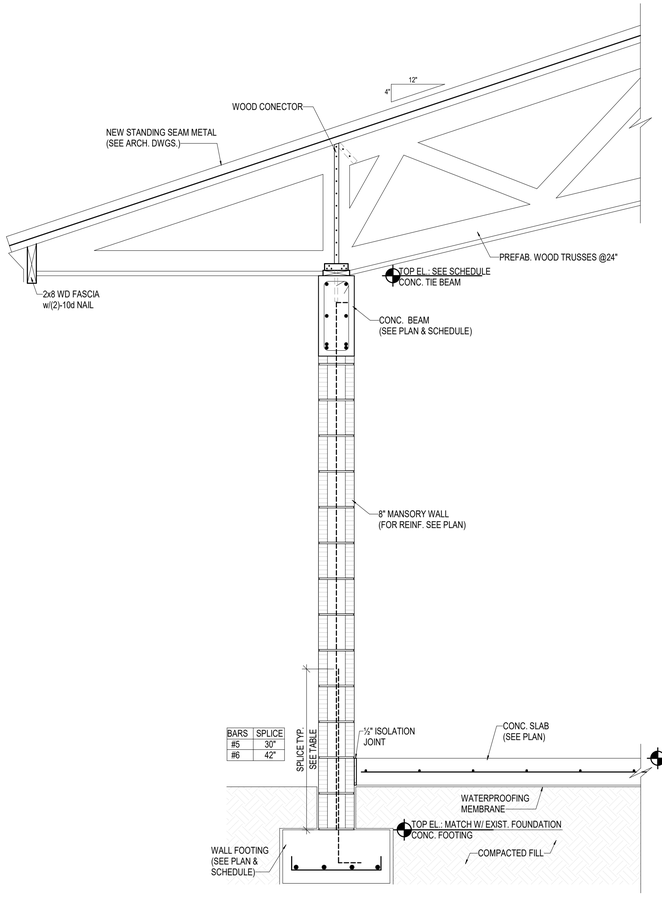
SHEET NUMBER
S302

OF

HCE
YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

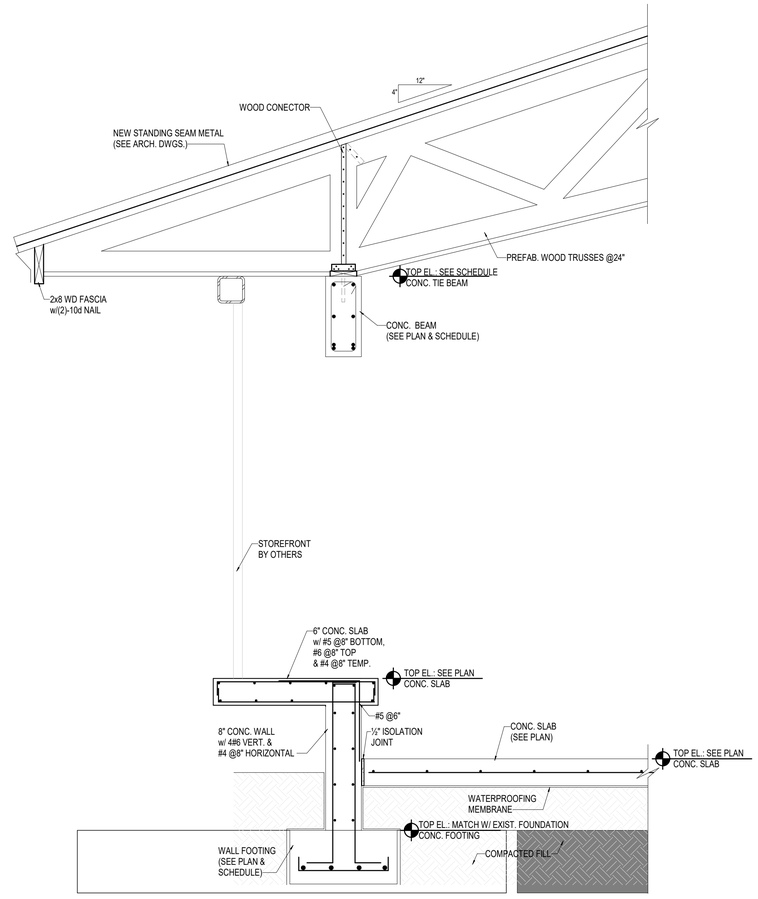
YOUSSEF H. HACHEM
LICENSE
No.43302
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

YOUSSEF HACHEM, Ph.D, P.E.
No. 43302



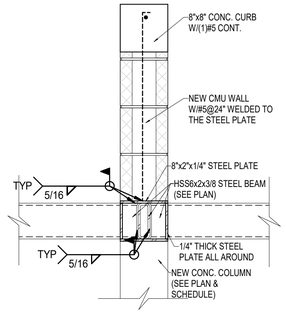
SECTION 8/ S101 & S102

SCALE: 3/4" = 1'-0"



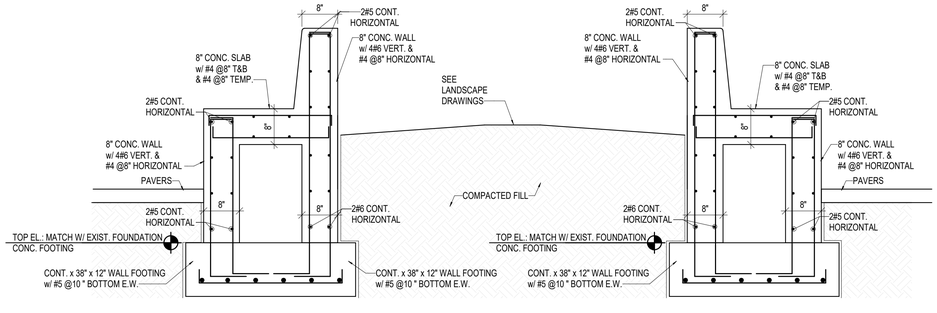
SECTION 9/ S101 &S102

SCALE: 3/4" = 1'-0"



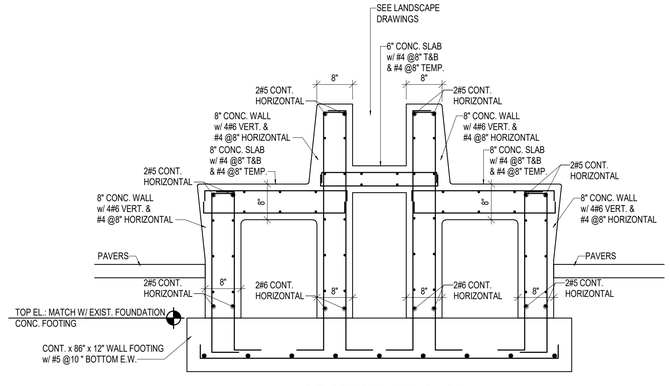
SECTION 13/ S102

SCALE: 1" = 1'-0"



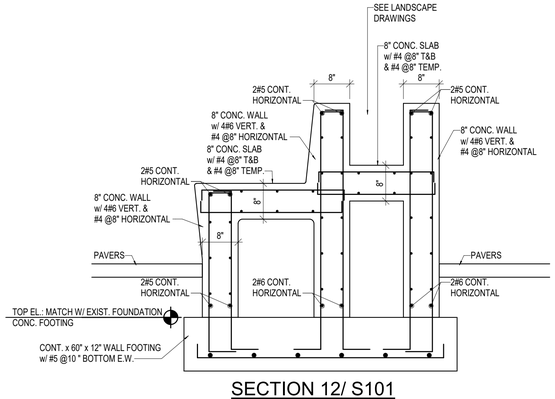
SECTION 10/ S-101

SCALE: 3/4" = 1'-0"



SECTION 11/ S101

SCALE: 3/4" = 1'-0"



SECTION 12/ S101

SCALE: 3/4" = 1'-0"

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

YOUSSEF H. HACHEM LICENSE No.43302 STATE OF FLORIDA PROFESSIONAL ENGINEER

YOUSSEF HACHEM, Ph.D, P.E.
No. 43302

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646

Qualifier: Erik Lloyd Myers
State of Florida: AR 93574

Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library

6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: SECTIONS

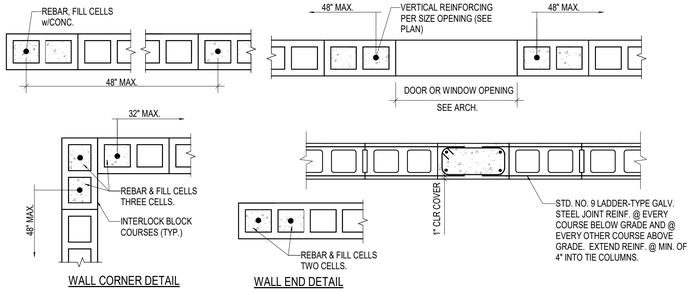
REVISION

DATE
04-03-2023

PROJECT NUMBER
19119

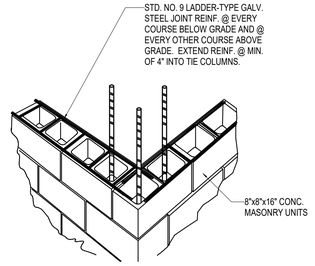
SHEET NUMBER
S303

OF



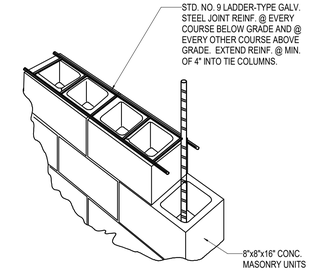
TYPICAL REINFORCING CMU CONC. BLOCK DETAIL

SCALE: N.T.S.



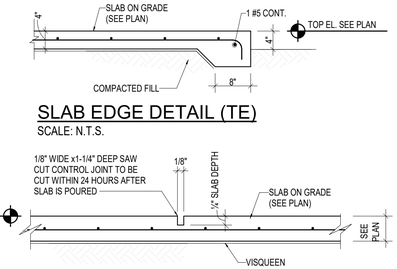
TYPICAL WALL REINFORCING AT CORNER DETAIL

SCALE: N.T.S.



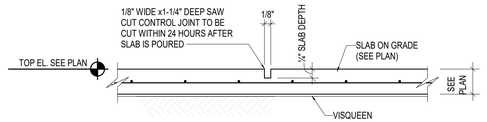
TYPICAL WALL REINFORCING DETAIL

SCALE: N.T.S.



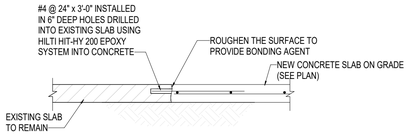
SLAB EDGE DETAIL (TE)

SCALE: N.T.S.



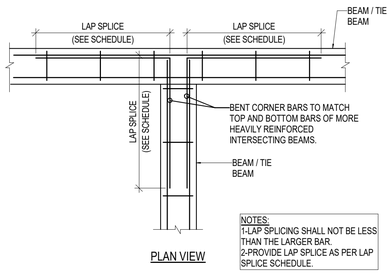
TYP. CONTROL JOINT DETAIL (C.J.)

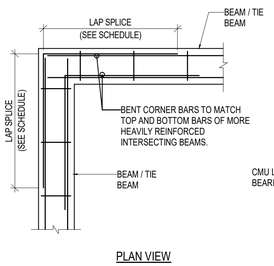
SCALE: N.T.S.



CONNECTION @ NEW & EXIST. SLAB TYP. DETAIL

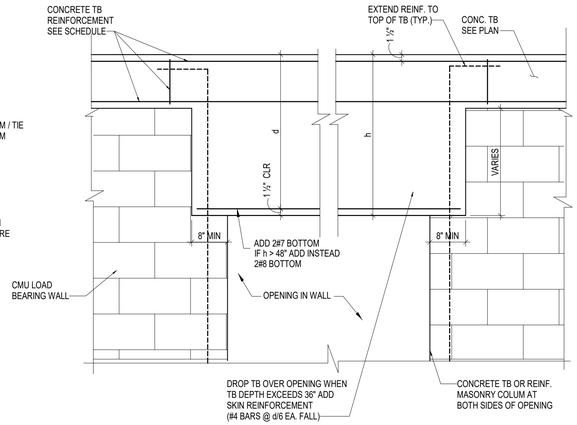
SCALE: N.T.S.





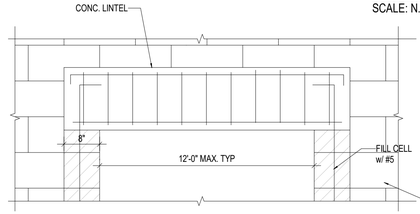
BEAM CORNER BARS AND INTERSECTION DETAILS

SCALE: N.T.S.



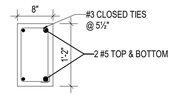
TYP. TIE BEAM DROP DETAIL AT OPENING

SCALE: N.T.S.



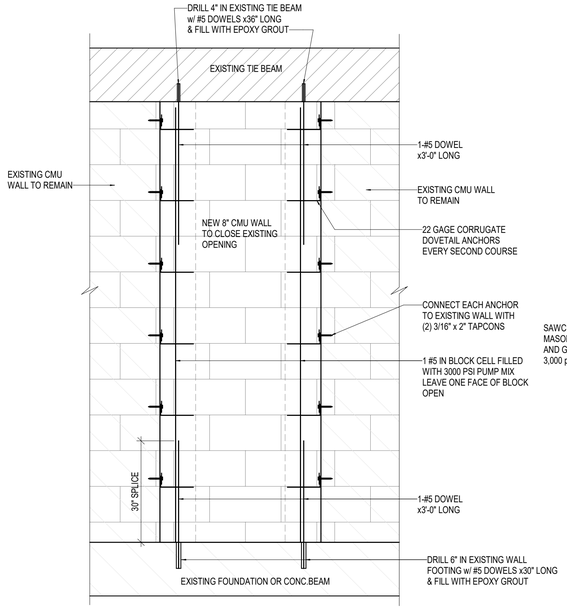
TYPICAL CONC. LINTEL

SCALE: N.T.S.



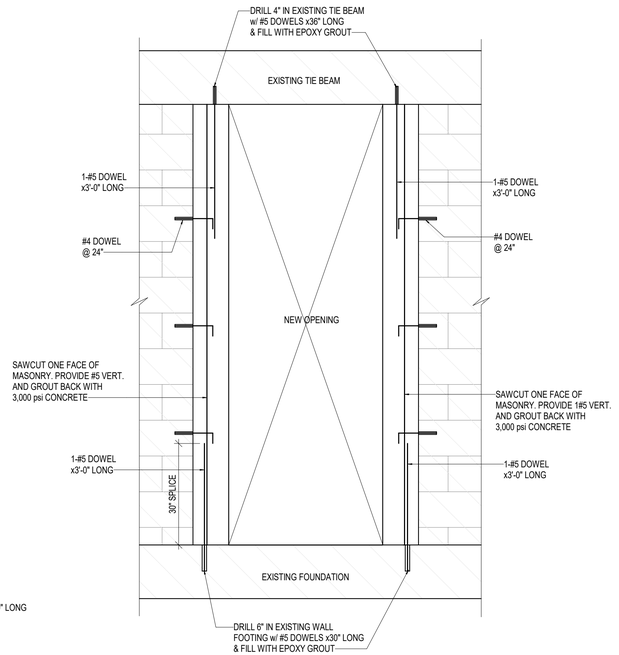
SECTION CONC. LINTEL

SCALE: N.T.S.



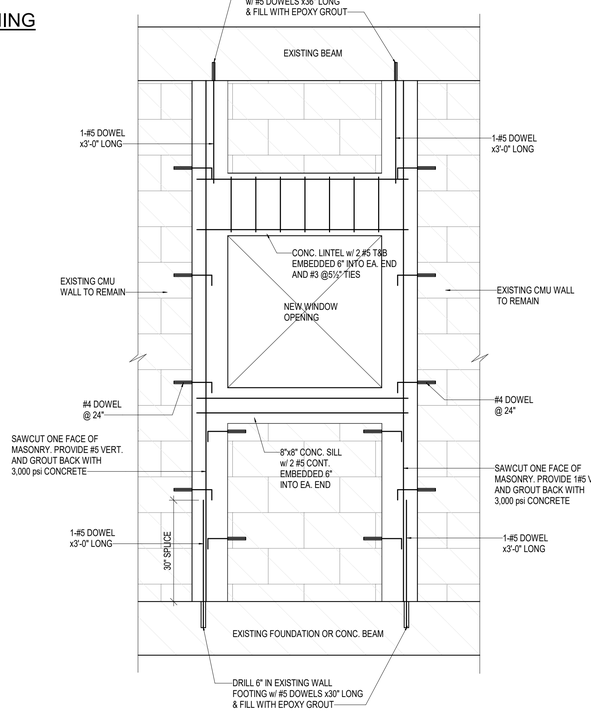
TYPICAL CLOSED DOOR OPENING DETAIL

SCALE: N.T.S.



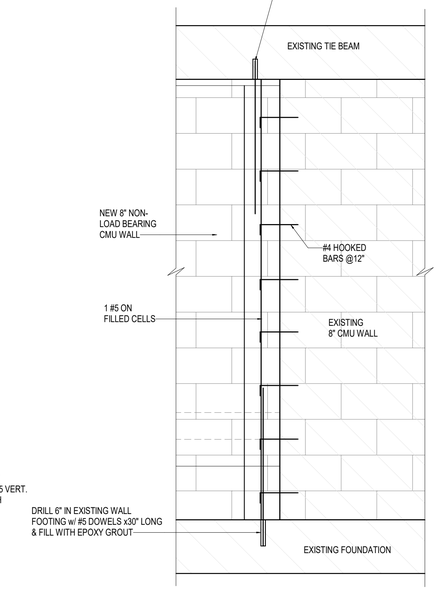
TYPICAL NEW DOOR OPENING DETAIL N

SCALE: N.T.S.



TYPICAL NEW WINDOW OPENING DETAIL

SCALE: N.T.S.



NEW WALL TO EXISTING WALL CONNECTION DETAIL

SCALE: N.T.S.

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

Y. YOUSSEF H. HACHEM LICENSE No.43302 STATE OF FLORIDA PROFESSIONAL ENGINEER
YOUSSEF HACHEM, Ph.D, P.E.
No. 43302

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646
Qualifier: Erik Lloyd Myers
State of Florida: AR 93574
Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

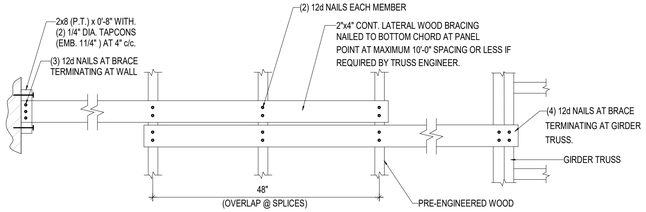
OWNER:

Miami Lakes Branch Library
6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: TYPICAL DETAILS

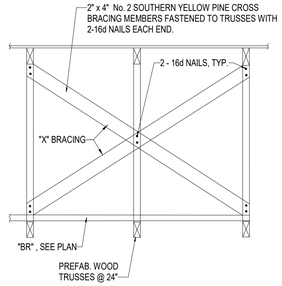
REVISION

DATE
04-03-2023
PROJECT NUMBER
19119
SHEET NUMBER
S501
OF



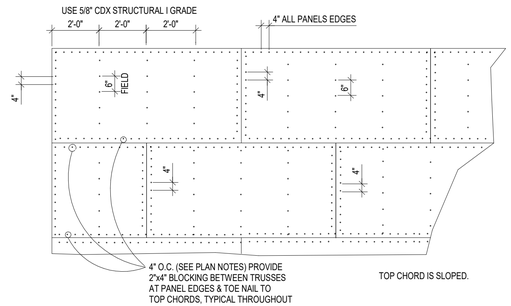
TYPICAL LATERAL BRACING DETAIL

SCALE: N.T.S.



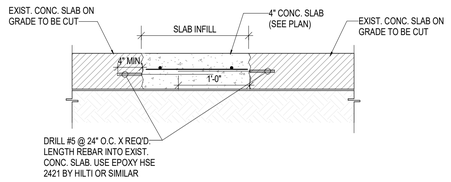
TYPICAL "X" BRACING DETAIL

SCALE: N.T.S.



PLYWOOD SHEATHING NAILING PATTERN

SCALE: N.T.S.



TRENCH TYPICAL DETAIL

SCALE: N.T.S.

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 287-9120
FAX (305) 969-9453
www.yhengineering.com

Y. YOUSSEF H. HACHEM LICENSE No.43302 STATE OF FLORIDA PROFESSIONAL ENGINEER

YOUSSEF HACHEM, Ph.D, P.E.
No. 43302

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646
Qualifier: Erik Lloyd Myers
State of Florida: AR 93574
Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library
6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: TYPICAL DETAILS

REVISION

DATE
04-03-2023

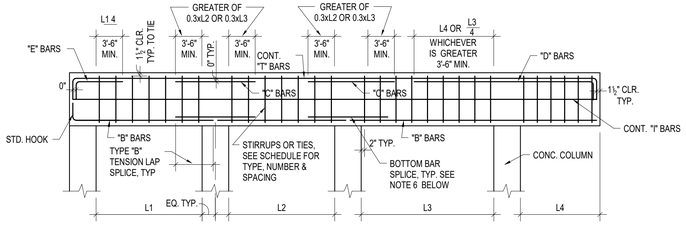
PROJECT NUMBER
19119

SHEET NUMBER
S502

OF

CONCRETE BEAM SCHEDULE

MARK	TOP ELEVATION	WIDTH (IN)	DEPTH (IN)	BOTTOM REINFORCING "B" BARS	TOP REINFORCING "T" BARS	TOP REINFORCING "C" BARS	TOP REINFORCING "E" BARS	MID BARS "I" BARS EA. FACE	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING	REMARKS
B-1	9' - 0"	8"	16"	2#8+2#6**	2#8+2#6			2#4	#4	I	@8" O.C.	** IN TWO LAYERS
B-2	9' - 0"	8"	16"	2#8+2#6**	2#8+2#6			2#4	#4	I	@8" O.C.	** IN TWO LAYERS
B-3	9' - 0"	8"	16"	2#8**	2#8**			2#4	#4	I	@8" O.C.	** IN TWO LAYERS
B-5	9' - 0"	10"	12"	3#5+3#5**	3#5			2#4	#4	I	@8" O.C.	** IN TWO LAYERS
B-6	9' - 0"	10"	12"	2#5	2#5			2#4	#4	I	@8" O.C.	
B-7	9' - 0"	10"	12"	2#8+2#6*	2#8			1#4	#4	I	@8" O.C.	* IN A SECOND LAYER
B-8	9' - 0"	8"	12"	2#6**	2#6			1#4	#4	I	@8" O.C.	** IN TWO LAYERS
B-9	10' - 0"	8"	12"	2#6**	2#6			1#4	#4	I	@8" O.C.	** IN TWO LAYERS
B-10	9' - 0"	8"	16"	2#6+2#5*	2#5			1#4	#4	I	@8" O.C.	* IN A SECOND LAYER
TB-1	9' - 0"	8"	12"	2#5	2#5				#4	I	@8" O.C.	

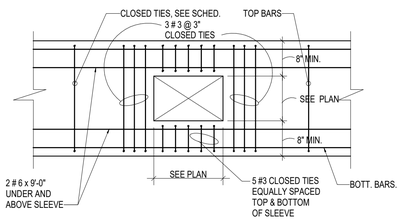


TYPICAL BEAM BAR PLACING DIAGRAM

NTS

NOTES:

1.-PLACE A MAXIMUM OF 2 BARS PER LAYER IN 8"-WIDE BEAMS.
2.-ALL TOP & BOTTOM BARS SHALL BE CONT. WHERE NECESSARY. LAP SPLICE TOP BARS IN MIDDLE 3RD OF SPAN & LAP SPLICE BOTTOM BARS @ SUPPORTS. LAP SPLICE SHALL BE MIN. 3'-6", SPLICE TOP BARS AT MID SPAN W/ CLASS "B" TENSION LAP SPLICES.
3.-SPLICE "T" BARS AT SUPPORTS W/ CLASS "B" TENSION LAP SPLICES.
4.-PLACE "C" BARS OVER RIGHT-HAND SUPPORT, UNLESS NOTED IN REMARKS.
5.-"I" BARS AS SCHEDULED SHALL BE PLACED EACH SIDE OF BEAM.
6.-PROVIDE ¼ OF THE AREA OF THE BOTTOM REINFORCING OF THE ADJACENT SPAN WITH THE HIGHEST AREA OF BOTTOM REINFORCING, BUT NOT LESS THAN TWO BARS. BAR SIZE NO LESS THAN A #5 BAR. WHERE ADJACENT BEAMS ARE DIFFERENT IN DEPTH PLACE THE SPLICE BAR AT THE LEVEL OF THE BOTTOM BARS OF THE SHALLOWEST BEAM.
7.-ALL LAP SPLICE SHALL BE CLASS "B" TENSION LAP SPLICE, THE LONGER SPLICE LENGTH SHALL BE USED FOR BARS OF DIFFERENT SIZE.
8.-"L" INDICATES THE LARGER OF ADJACENT SPANS.
9.-WHERE BOTTOM BARS ARE INDICATED AS CONT. w/ADJACENT SPANS, SPLICES, WHERE NEEDED, SHALL BE MADE AT SUPPORTS.
10.-ALL TOP BARS TO BE HOOKED AT EA END WITH STANDARD HOOK SPECIFIED FOR TENSION, SEE SCHEDULE.

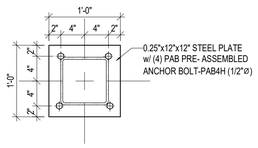


TYP. CONCRETE BEAM SLEEVE DETAIL

SCALE: 3/4" = 1'-0"

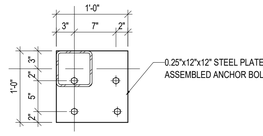
STEEL COLUMN SCHEDULE

MARK	DESCRIPTION	BASE PLATE	TOP PLATE	ANCHORS AT BASE	ANCHORS AT TOP	REMARKS
HSS1	HSS 6"x6"x1/2"	0.25"x12"x12"	-	(4) PAB PRE-ASSEMBLED ANCHOR BOLT-1/2" DIAM. PAB4H EMBEDMENT 4" IN CONCRETE	-	
HSS2	HSS 6"x6"x1/2"	0.25"x12"x12"	-	(4) PAB PRE-ASSEMBLED ANCHOR BOLT-1/2" DIAM. PAB4H EMBEDMENT 4" IN CONCRETE	-	
SC-1	W8x15	0.25"x12"x12"	-	(4) PAB PRE-ASSEMBLED ANCHOR BOLT-1/2" DIAM. PAB4H EMBEDMENT 4" IN CONCRETE	-	



HSS1 BASE PLATE DETAIL

SCALE: 1" = 1'-0"

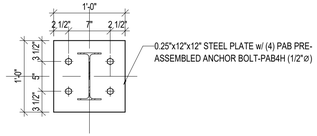


HSS2 BASE PLATE DETAIL

SCALE: 1" = 1'-0"

CONCRETE COLUMN SCHEDULE

MARK	SIZE	REINFORCEMENT VERTICAL	REINFORCEMENT TIES OR CAP	REMARKS
C-1	8"x54"	12#6	#3 @12" O.C..	
C-2	8"x54"	12#6	#3 @12" O.C..	
C-3	8"x54"	12#6	#3 @12" O.C..	
C-4	8"x54"	12#6	#3 @12" O.C..	
TC-1	8" x 8"	4#6	#3 @8" O.C..	
TC-2	10" x 12"	4#6	#4 @8" O.C..	
TC-3	8" x 8"	4#6	#4 @8" O.C..	
TC-4	8" x 8"	4#5	#3 @8" O.C..	
TC-5	8" x 8"	4#5	#3 @8" O.C..	
TC-6	8" x 10"	4#6	#3 @8" O.C..	
TC-7	6" x 8"	4#6	#4 @8" O.C..	
TC-8	8" x 10"	4#6	#4 @8" O.C..	



SC-1 BASE PLATE DETAIL

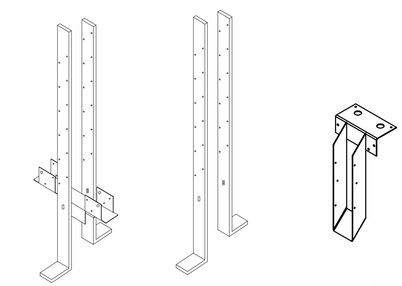
SCALE: 1" = 1'-0"

FOOTING SCHEDULE

MARK	SIZE L X W X THICKNESS	REINFORCEMENT BOTTOM SHORT BAR	REINFORCEMENT BOTTOM LONG BAR	REINFORCEMENT TOP SHORT BAR	REINFORCEMENT TOP LONG BAR	REMARKS
F-20	4'-0" x 4'-0" x 12"	6#6	6#6			
F-60	6'-0" x 6'-0" x 12"	10#5	10#5			
F-80	8'-0" x 8'-0" x 14"	12#5	12#5			
F-80x160	8'-0" x 16'-0" x 14"	12#5	12#5			
WF-1	CONT. x 36" x 12"	#5 @6"	4#8			

CONNECTOR SCHEDULE

MARK	CONNECTOR	CONNECTOR ALLOWABLE LOAD VALUES (LBS) UPLIFT	DOWN	LATERAL LOAD PARALLEL	LATERAL LOAD PERPENDICULAR	NAIL SIZE & CUANTITY	N.O.A./FL APPROVAL
A	DELTA 20	2480	-	2000	1505	(18) 10d x 1½"	
B	(2) HETA 16	2700	-	1350	1520	(12) 16d	
C	WMU1.81X	545	3380			(2) 0.162x 3 1/2 DUPLEX	



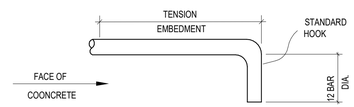
	CONCRETE COVER	CENTER TO CENTER BAR SPACING < 2 DB	≥ 2 DB , 3 ØB	≥ 3 DB
BEAMS, COLUMNS	< 1 DB	CASE 2	CASE 2	CASE 2
	≥ 1 DB	CASE 2	CASE 1	CASE 1
ALL OTHER	< 1 DB	CASE 2	CASE 2	CASE 2
	≥ 1 DB	CASE 2	CASE 2	CASE 1

TENSION LAP SPLICES

F'c (PSI) / BAR SIZE	4000	5000	6000	7000	8000
#4	37"	33"	30"	29"	26"
#5	47"	42"	37"	36"	33"
#6	56"	50"	44"	43"	39"
#7	81"	73"	65"	63"	57"
#8	93"	83"	73"	71"	65"
#9	105"	94"	83"	54"	74"
#10	118"	106"	96"	90"	83"

TENSION EMBEDMENT LENGTH (with std. hook) SCHEDULE

BAR SIZE	f'c = 3000 psi TOP	f'c = 3000 psi BOT	f'c = 4000 psi TOP	f'c = 4000 psi BOT	f'c = 5000 psi TOP	f'c = 5000 psi BOT	f'c = 6000 psi TOP	f'c = 6000 psi BOT	f'c = 7000 psi TOP	f'c = 7000 psi BOT	f'c = 8000 psi TOP	f'c = 8000 psi BOT
# 4	12"	8"	10"	7"	9"	6"	9"	6"	9"	6"	9"	6"
# 5	14"	10"	13"	9"	12"	8"	10"	7"	10"	7"	10"	7"
# 6	17"	12"	14"	10"	13"	9"	13"	9"	12"	8"	12"	8"
# 7	20"	14"	17"	12"	16"	11"	14"	10"	13"	9"	13"	9"
# 8	23"	16"	20"	14"	17"	12"	16"	11"	16"	11"	14"	10"
# 9	26"	18"	21"	15"	20"	14"	19"	13"	17"	12"	16"	11"
# 10	28"	20"	24"	17"	23"	16"	20"	14"	19"	13"	17"	12"
# 11	31"	22"	27"	19"	24"	17"	23"	16	21"	15"	20"	14"



TYPICAL TENSION EMBEDMENT DETAIL
N.T.S.

TRUSS REACTION SCHEDULE AT LOW & HIGH ROOF

MARK	DL+LL REACTION (Lbs) LEFT	INTER	RIGHT	NET UPLIFT REACTION (Lbs) LEFT	INTER	RIGHT
GT-1	1043	-	1043	1008	-	1008
GT-2	914	-	914	452	-	452
GT-3	700	-	700	675	-	675
GT-4	700	-	700	675	-	675
GT-5	700	-	700	675	-	675
GT-6	2562	-	2562	1738	-	1738
T-1	1008	-	1008	687	-	687
T-2	1616	-	1616	1500	-	1500
T-3	646	-	646	593	-	593
T-4	809	-	809	790	-	790
T-5	2627	-	2627	2568	-	2568

NOTE:
REFERENCE FOR LEFT AND RIGHT SUPPORT SHALL BE TAKEN WHEN THE OBSERVER INSIDE THE BUILDING IS FACING WEST OR FACING SOUTH.

YOUSSEF HACHEM
CONSULTING ENGINEERING,INC.
CA 26553
99 NW 27 AVE
MIAMI, FL. 33125
TEL. (786) 267-9120
FAX (305) 969-9453
www.yhengineering.com

YOUSSEF H. HACHEM LICENSE No.43302 STATE OF FLORIDA PROFESSIONAL ENGINEER
YOUSSEF HACHEM, Ph.D, P.E.
No. 43302

ELM ARCH
8950 SW 74TH Court
Suite 1204
Miami, FL 33156
786-391-2646
Qualifier: Erik Lloyd Myers
State of Florida: AR 93574
Sign & Seal: Erik Lloyd Myers
State of Florida: AR 93574

OWNER:

Miami Lakes Branch Library
6699 Windmill Gate Road
Miami Lakes, FL 33014

TITLE: SCHEDULES

REVISION

DATE
04-03-2023

PROJECT NUMBER
19119

SHEET NUMBER
S601

OF