GENERAL STRUCTURAL NOTES:

1. SITE AND SOIL PREPARATION:
GENERAL CONTRACTOR SHALL PERFORM THE SITE PREPARATION AND EXCAVATION WORK IN ACCORDANCE WITH THE RECOMMENDATIONS ON SOILS AND FOUNDATIONS INVESTIGATION PREPARED BY AN APPROVED TESTING LABORATORY PRIOR TO FOUNDATION WORK
A COPY OF THE REPORT SHALL BE OBTAINED BY THE GENERAL CONTRACTOR FOR ADDITIONAL INFORMATION PERTAINING TO THE FOUNDATION.

2. FOUNDATION ALLOWABLE SOIL BEARING PRESSURE.
BASED ON SOIL BORINGS AND RECOMMENDATIONS MADE BY NV5 DATED SEPTEMBER 09, 2024 THE FOUNDATIONS HAVE BEEN DESIGNED FOR A SOIL BEARING CAPACITY OF 2500 POUNDS PER SQUARE FOOTS. CONTRACTOR TO OBTAIN A DATA, SIGNED AND SILED COPY OF THE GEOTECHNICAL REPORT CONTRACTOR SHALL BE RESPOMSIBLE FOR THE SOIL PREPARATION IN ACCORDANCE WITH THE RECOMMENDATION OF THE GEOTECHNICAL ENGINEER.

3. CONCRETE (SHOP DRAWINGS REQUIRED):
CAST-IN-PLACE CONCRETE TO ATTAIN THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTH:
- 3000 P.S.I IN 28 DAYS FOOTINGS.
- 4000 P.S.I IN 28 DAYS FOR ALL OTHER STRUCTURAL MEMBERS.
AGGREGATES TO BE CLEAN AND WELL GRADED, MAXIMUM SIZE 1". CONCRETE SLUMP: 3" MIN. TO 5" MAX. VERTICAL CONCRETE DROP NOT TO EXCEED 8'.

4. CONCRETE COVER:

TO BE AS FOLLOWS:	BOTTOM	TOP	SIDES
FOOTINGS	3"	2"	3"
COLUMNS	1 1/2"	1 1/2"	1 1/2"
BEAMS	1 1/2"	1 1/2"	1 1/2"
INTERIOR SLABS-ON-GRADE	1 1/2"	1 1/2"	---
EXTERIOR SLABS-ON-GRADE	1 1/2"	1 1/2"	---

5. REINFORCING STEEL (SHOP DRAWINGS REQUIRED):
TO BE NE HIGH STRENGTH BILLET STEEL DEFORMED AS PER ASTM A-305, AND CONFORMING TO ASTM A-615, GRADE 60. LAP CONTINUOUS BARS 30-BAR DIAMETERS, UNLESS OTHERWISE NOTED IN PLANS.
HOOK DISCONTINUOUS ENDS OF ALL TOP BARS. REINFORCING STEEL TO BE DETAILED AND FABRICATED IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE OF DETAILING REINFORCING CONCRETE STRUCTURES", AND THE ACI BUILDING CODE 318, LATEST EDITION. SUBMIT SHOP DRAWINGS FOR APPROVAL BY ENGINEER BEFORE FABRICATION.

6. WELDING:
ALL WELDING TO BE DONE BY CERTIFIED WELDERS HOLDING CURRENT WELDING CERTIFICATES. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A.W.S. "STRUCTURAL WELDING CODE - STEEL" (ANSI/AWS D1.1). AN APPROVED TESTING LABORATORY, RETAINED BY THE OWNER, SHALL PERFORM VISUAL INSPECTION OF ALL FIELD FILLET WELDS AND ULTRASONIC INSPECTION OF ALL FIELD GROOVE WELDS. UPON COMPLETION OF SUCH INSPECTIONS THE LABORATORY SHALL ISSUE A WRITTEN SUMMARY LETTER, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA, STATING THAT ALL WELDS WITHIN AN INSPECTED AREA CONFORMED TO THE AWS REQUIREMENTS.

7. BUILDING CODES:
- THE FLORIDA BUILDING CODE 2023 (8th EDITION) AND ALL ITS REFERENCED STANDARDS
- ASCE 7-2022
- ACI 318: LATEST EDITION
- WIND LOAD CRITERIA AND CODE COMPLIANCE:
ALL STRUCTURAL ELEMENTS, EXPOSED TO WIND, HAVE BEEN DESIGNED PER THE GUIDELINES OF THE ASCE 7-22 CODE.
WIND SPEED= 175 MPH.
EXPOSURE = C
RISK CATEGORY = (Ⅱ)
Kd = 0.85
INTERNAL PRESSURE COEFFICIENT +/- 0.18

- DESIGN LOADS:
THE FOLLOWING SUPERIMPOSED LOADS WHERE USED:
ROOF:
DEAD LOAD = 25 PSF
LIVE LOAD = 20 PSF (SLOPED)
LIVE LOAD = 30 PSF (FLAT ROOF)

8. SHOP DRAWINGS:
NO SHOP DRAWING SHALL BE SUBMITTED FOR ARCHITECT/ENGINEER'S REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING, AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR, AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. ENGINEER ASSUMES NO THE LATEST AISC SPECIFICATIONS. ALL STEEL EXPOSED TO THE WEATHER SHALL BE GALVANIZED.
REPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS, AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS MUST BE MADE GOOD BY CONTRACTOR, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY ENGINEER, AND EVEN THOUGH WORK IS DONE IN ACCORDANCE WITH SUCH SHOP DRAWINGS.

9. SLAB ON FILL:
FILL AND BACKFILL TO BE COMPACTED TO 95% OF ITS MODIFIED PROCTOR DENSITY (ASTM D-1557). THICKNESS OF COMPACTION LAYERS (LOOSE MATERIAL) SHALL NOT EXCEED 12". BACKFILL MATERIAL SHALL BE APPROVED BY GEOTECHNICAL ENGINEER. 3/16 INCH WIDE x (SLAB THICKNESS/4) DEEP SAW CUT OR TOOLED CONTRACTION JOINTS SHALL BE INSTALLED WITHIN 8 HOURS FOLLOWING PLACEMENT OF CONCRETE. JOINTS SHALL INTERSECT AT COLUMN LINES. LENGTH OF INDIVIDUAL SLAB PANELS CONTAINED WITHIN THE CONTRACTION JOINTS SHALL NOT EXCEED 30 x SLAB THICKNESS IN ANY DIRECTION. THE RATIO OF LONGER TO SHORTER DIMENSION SHALL NOT EXCEED 2. AT ALL FLOOR LOCATIONS WITH ARCHITECTURAL FINISHES (TILE, ETC.),
LOCATION OF CONTRACTION JOINTS SHALL FOLLOW THAT OF JOINTS IN FINISHES - CONTRACTOR TO SUBMIT A SHOP DRAWING INDICATING PATTERN OF CONTRACTION JOINTS FOR APPROVAL PRIOR TO CONSTRUCTION. PROVIDE 15-MIL, NON-POLYETHYLENE VAPOR BARRIER BELOW ALL SLABS ON FILL (LAP SHEETS MINIMUM OF 6" AND SEAL WITH MANUFACTURER'S SPECIFIED TAPE, TAPE ALL PENETRATIONS). REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED CHEMICAL TREATMENT OF UNDERLYING SOILS. ALL SLAB REINFORCEMENT SHALL BE SUPPORTED ON CHAIRS OR CONCRETE SLAB FINISH TOLERANCES MEASURED AS PER ACI 117 (SECTION 4) SHALL NOT EXCEED 1/4"/10 FT. AREAS OF SLAB NOT MEETING THE REQUIRED TOLERANCES SHALL BE REMOVED
AND REPLACED (BETWEEN NEAREST CONTRACTION OR CONSTRUCTION JOINTS) AT NO ADDITIONAL COST TO THE OWNER (PATCHING OR APPLICATION OF LEVELING MATERIALS SHALL NOT BE ALLOWED).

10. CONSTRUCTION JOINTS (SHOP DRAWINGS REQUIRED)
SLABS-ON-GRADE: (IF APPLICABLE)
LOCATION OF A CONSTRUCTION JOINT SHALL COINCIDE WITH THAT OF A CONTRACTION JOINT. PROVIDE A CONTINUOUS 1 1/2" DEEP x 1/2 DEPTH OF SLAB CONTINUOUS SHEAR KEY AT MID-DEPTH. PROVIDE RECESS ALONG TOP OF JOINT SIMILAR TO CONTRACTION JOINT. UNLESS NOTED OTHERWISE ON PLAN, DISCONTINUE SLAB REINFORCEMENT THROUGH THE JOINT.
PROVIDE (1)#4T CONT. PARALLEL TO JOINT WITHIN NEW SLAB (DISCONTINUE AT TRANSVERSE CONTRACTION JOINTS).
BEAMS (NON POST-TENSIONED): PROVIDE BULKHEAD AT MID-SPAN WITH 3 1/2" DEEP x 2/3 DEPTH OF BEAM x 2/3 WIDTH OF BEAM POCKET, CENTERED ON BEAM'S CROSS-SECTION. LENGTH OF EXPOSED REINFORCEMENT SHALL BE SUFFICIENT TO PROVIDE A FULL TENSION LAP SPLICE.
STRUCTURAL SLABS (NON POST-TENSIONED): PROVIDE BULKHEAD AT MID-SPAN WITH A CONTINUOUS 1 1/2" DEEP x 2/3 DEPTH OF SLAB SHEAR KEY AT MID-DEPTH. LENGTH OF EXPOSED REINFORCEMENT SHALL BE SUFFICIENT TO PROVIDE A FULL TENSION LAP SPLICE.
COLUMNS: DISCONTINUE CONCRETE AT UNDERSIDE OF BEAM, SLAB, SHEARHEAD, ETC. AND CONTINUE ABOVE MONOLITHICALLY CAST BEAM, SLAB, SHEARHEAD, ETC. UPON CONTRACTOR'S PRIOR WRITTEN REQUEST AND ENGINEER'S PRIOR WRITTEN APPROVAL, COLUMN/BEAM CONNECTIONS AT ISOLATED LOCATIONS MAY BE REINFORCED TO ALLOW FOR INSTALLATION OF COLUMN PRIOR TO PLACEMENT OF BEAM CONCRETE. THE CONTRACTOR SHALL BE BILLED ON AN HOURLY RATE BASIS FOR THE RESULTING ADDITIONAL DESIGN/DRAFTING SERVICES PROVIDED BY THE ENGINEER. COST OF SUCH SERVICES AS WELL AS THAT OF ADDITIONAL REINFORCEMENT SHALL BE COVERED SOLELY BY THE CONTRACTOR.
PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL SUBMIT A SHOP DRAWING INDICATING LOCATION OF ALL INTENDED BULKHEADS TO THE ENGINEER FOR APPROVAL. THE ENGINEER RESERVES A RIGHT TO REFUSE ALLOWING A COLD JOINT AT A SPECIFIC LOCATION.

11. EXCAVATIONS:
GENERAL CONTRACTOR TO NOT EXCAVATE ADJACENT TO OR NEAR NEW STRUCTURES AFTER THEY HAVE BEEN CONSTRUCTED. EXCAVATIONS FOR UTILITIES ADJACENT TO OR NEAR NEW STRUCTURES TO BE COMPLETED BEFORE THE NEW STRUCTURES ARE CONSTRUCTED. COORDINATE ALL UTILITIES WITH STRUCTURAL DRAWINGS. IF CONFLICTS EXIST CONTACT ARCHITECT AND STRUCTURAL ENGINEER.

GENERAL CONTRACTOR TO EXERCISE CAUTION DURING EXCAVATIONS ADJACENT TO THE EXISTING STRUCTURES. IF THERE EXISTS A DEVIATION OF THE EXISTING FOUNDATION FROM WHAT IS SHOWN IN THESE PLANS, CONTACT ARCHITECT AND STRUCTURAL ENGINEER. GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR THE BRACING AND LATERAL SUPPORT, AND FOR MAINTAINING THE INTEGRITY OF THE EXISTING STRUCTURE DURING ALL PHASES OF THE CONSTRUCTION.

12. MASONRY:
UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS OR SPECIFIED WITHIN THE FLORIDA BUILDING CODE, ALL MASONRY CONSTRUCTION SHALL CONFORM TO REQUIREMENTS OF TMS 402-2106 AND TMS 602-2016.

A. (FOR MASONRY WALL WITH f'm = 2,000 PSI) ALL CONCRETE BLOCK TO CONFORM TO ASTM C 90, GRADE N, TYPE II (NON-MOISTURE CONTROLLED) WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2,000 PSI (PRISM STRENGTH OF MASONRY WALL 2,000 PSI). MORTAR SHALL CONFORM TO ASTM C 270 TYPE M, WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI (USE PORTLAND TYPE CEMENT). GROUT SHALL CONFORM TO ASTM C 476 WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI. GROUT SLUMP SHALL BE BETWEEN 8 AND 10 INCHES. AN APPROVED TESTING LABORATORY TO PERFORM TESTS OF GROUT AND MORTAR AT A RATE OF ONE PER EVERY 2000 SQUARE FEET OF WALL ERECTED. TESTING OF GROUT SHALL CONFORM TO ASTM C 1019. TESTING OF MORTAR SHALL CONFORM TO ASTM C 270.

B. ALTERNATE HORIZONTAL JOINTS WITHIN MASONRY WALLS SHALL BE REINFORCED WITH 9 GAUGE PRE-FABRICATED DEFORMED STEEL REINFORCEMENT (DUR-O-WALL OR APPROVED SUBSTITUTE-LADDER TYPE (REINFORCED MASONRY) OR TRUSS TYPE (UNREINFORCED MASONRY)), GALVANIZED AS PER ACI 530.1-08 2.4.E.1. (INTERIOR WALLS) OR ACI 530.1-08 2.4.E.2. (EXTERIOR WALLS).

C. ALL VERTICAL REINFORCEMENT, AS SPECIFIED ON PLANS, SHALL BE PLACED IN FULLY GROUTED CELLS. DOWELS SHALL BE PROVIDED TO ENSURE CONTINUITY OF REINFORCEMENT AT THE STRUCTURE ABOVE AND BELOW. ALL LAPS SHALL BE SPLICED MINIMUM 48 BAR DIAMETERS. ADDITIONAL VERTICAL WALL REINFORCEMENT SHALL BE PROVIDED AT ALL WALL ENDS, CORNERS, INTERSECTIONS AND AT ALL WALL OPENINGS NOT BOUND BY CONCRETE COLUMNS. PROVIDE CLEANOUT HOLES IN REINFORCED WALL CELLS AT BOTTOM OF EACH POUR. CLEAN CELLS FREE OF MORTAR AND DEBRIS. TIE VERTICAL REINFORCEMENT. MAXIMUM LIFT OF EACH POUR SHALL NOT EXCEED 4 FEET. MAXIMUM VERTICAL DROP FOR GROUTING SHALL NOT EXCEED 12 FEET. GROUT SHALL BE CONSOLIDATED BETWEEN LIFTS BY RODDING OR MECHANICAL VIBRATION. VERTICAL REINFORCEMENT WITHIN TERMINATING WALLS SHALL EXTEND TO 1 1/2" BELOW TOP OF CONCRETE CAP/TIE BEAM ABOVE.

D. PROVIDE FULL MORTAR BED AT THE FIRST COURSE OF BLOCK WALLS (ABOVE SUPPORTING SLAB, BEAM OR FOOTING) AND AT ALL COURSES OF PIERS, COLUMNS AND PILASTERS. MORTAR ALL FACE SHELLS AND HEAD JOINTS (MATCHING THE WIDTH OF FACE SHELL) OF REMAINING COURSES OF BLOCK WALLS. PROVIDE AT ALL WEBS ADJACENT TO GROUTED CELLS.

E. ALL MASONRY WALLS SHALL BE PLACED IN RUNNING BOND WITH 50 PERCENT OVERLAP BETWEEN COURSES.

F. PROVIDE GALVANIZED DOVETAIL ANCHORS AT ALTERNATE JOINTS IN ALL MASONRY WALLS ABUTTING CONCRETE COLUMNS. FASTEN EACH DOVETAIL TO CONCRETE WITH ONE 1/4" DIAMETER SCREW ANCHOR (MIN. EMB. 1.25").

G. ALL INFILL MASONRY WALLS TO BE ERECTED FOLLOWING REMOVAL OF ALL SHORING AND RE-SHORING.

H. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL PARTIAL-HEIGHT MASONRY WALLS (WALLS NOT TERMINATING ON THE UNDERSIDE OF SLAB OR BEAM) SHALL BE FINISHED WITH AN 8"X12" CONCRETE CAP REINFORCED WITH (2)#5 TOP & BOTTOM CONT. AND #3@24c/c STIRRUPS. VERTICAL REINFORCEMENT WITHIN SUCH WALLS SHALL EXTEND TO 1 1/2" BELOW TOP OF CONCRETE CAP.

I. UNLESS SPECIFICALLY SHOWN AS PARTIAL HEIGHT, ALL MASONRY WALLS SHALL BE ASSUMED TO EXTEND TO THE UNDERSIDE OF SLAB/BEAM OF THE FLOOR ABOVE (DO NOT TERMINATE AT INTERMEDIATE CONCRETE BEAMS OR TIE BEAMS) WITH VERTICAL REINFORCEMENT CONTINUOUS THROUGH OR DEVELOPED INTO THE SLAB/BEAM.

13. WELDED WIRE FABRIC:
SHALL CONFORM TO ASTM A 185 AND BE FREE OF SCALE, RUST OR OIL. SPLICE SHEETS ONE-AND-A-HALF SPACE LENGTHS (MINIMUM).

14. SHORING AND RE-SHORING:
CONTRACTOR WILL PROVIDE SHORING AND RE-SHORING DRAWINGS, ALONG WITH RE-SHORING SCHEDULE FOR ALL ELEVATED STRUCTURAL COMPONENTS, INCLUDING BUT NOT LIMITED TO BEAMS, SLABS AND PRECAST JOIST. DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL STRUCTURAL ENGINEER FOR SUBMITTAL TO THE ARCHITECT AND STRUCTURAL ENGINEER AND THE THRESHOLD INSPECTOR. NO ELEVATED WORK MAY PROCEED WITHOUT THIS SUBMITTAL. CONTRACTOR TO ALSO RETAIN SAME ENGINEER TO PROVIDE FIELD INSPECTIONS, ALONG WITH REPORTS, THAT ALL OF THE SHORING AND RE-SHORING IS COMPLETED AS PER HIS DRAWINGS AND SPECIFICATIONS, FOR EACH LEVEL OF WORK.
SHORING SCHEDULE TO PROVIDE TIME THAT SHORES MAY BE REMOVED IN ORDER TO REMOVE FORMWORK, AND SPECIFIC SEQUENCE OF THE REMOVAL OF THE SHORING AS IT PROGRESSES THRU THE HEIGHT OF THE BUILDING, WITH SUFFICIENT DETAIL AS TO THE NUMBER OF DAYS TO CONPLETE REMOVAL. ALSO, IF WOOD AND METAL SHORES ARE MIXED, THE SHORING PLANS TO NOT SPECIFY PERCENTAGES, BUT RATHER EXACT NUMBERS OF WOOD POST SHORES, METAL POST SHORES, OR METAL FRAMES. SHORING DRAWINGS TO ALSO CONTAIN DETAIL OF CONNECTION OF HEADERS AT THE TOP OF THE SHORES. NOTE: IF THESE SHORING AND RE-SHORING CONFLICT WITH ANY DIRECTIVES CONTAINED IN THE JOB SPECIFICATION, THEN THE GOVERNING GUIDELINES WILL BE THESE.

15. EXPANSION ANCHORS:
THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING: POWER-STUD BY "POWERS/RAWL", KWIK BOLT II BY "HILTI", TRUBOLT WEDGE BY "RAMSET/REDHEAD" OR AN ENGINEER APPROVED SUBSTITUTE. INSTALLATION OF ANCHORS SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS.

16. EPOXY ANCHORS:
THE CONTRACTOR SHALL USE A TWO-COMPONENT EPOXY BASED PRODUCT SUPPLIED AS A SIDE-BY-SIDE CARTRIDGE SYSTEM AND DISPENSED THROUGH A STATIC MIXING NOZZLE. THE CONTRACTOR MAY USE ONE OF THE FOLLOWING: POWER-FAST BY "POWERS/RAWL", HIT RE 500 BY "HILTI", EPCON BY "RAMSET/REDHEAD", ALLIED GOLD A-1000 BY "ALLIED FASTENER AND TOOL", ET BY "SIMPSON" OR AN ENGINEER APPROVED SUBSTITUTE. INSTALLATION OF DOWELS SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS. ALL HOLES SHOULD BE BRUSHED WITH A NYLON BRUSH AND BLOWN WITH COMPRESSED AIR. ALL HOLES MUST BE OBSERVED BY THE PROJECT INSPECTOR PRIOR TO INSTALLATION OF EPOXY.

17. SCREW ANCHORS:
THE CONTRACTOR SHALL USE ONE OF THE FOLLOWING: TAPPER BY "POWERS/RAWL", KWIK-CON BY "HILTI", TAPCON BY "RAMSET/REDHEAD" OR AN ENGINEER APPROVED SUBSTITUTE. INSTALLATION OF ANCHORS SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS.

18. GENERAL:
IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS, OR OTHER DOCUMENTS, THE CONTRACTOR MUST NOTIFY THE ARCHITECT AND ENGINEER, IN WRITING, OF THE SAME PRIOR TO PROCEEDING WITH THE WORK IN QUESTION. IN THE EVENT THAT THE CONTRACTOR FAILS TO GIVE NOTICE, OR PROVIDE SUFFICIENT TIME FOR A RESPONSE, CONTRACTOR IS RESPONSIBLE FOR THE RESULTS OF SUCH ERRORS OR OMISSIONS, AND FOR ALL COSTS FOR RECTIFYING SAME AND FOR ANY DELAYS OR ANY OTHER COSTS INCURRED BY SAME. THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS TOGETHER WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS TO LOCATE DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, DIMENSIONS, ETC... POTENTIAL CONFLICTS SHALL BE TRANSMITTED TO THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE WORK. CONTRACTOR TO PROVIDE ADEQUATE TIME FOR RESPONSE FROM ARCHITECT/ENGINEER.

19.- WOOD MEMBERS:
a).- WOOD:

1.- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, NATIONAL FOREST PRODUCTS ASSOCIATIONS WITH THE EDITION 2014 FBC ALL STRUCTURAL WOOD MEMBERS (UNLESS OTHERWISE NOTED ON PLANS) SHALL BE 'SOUTHERN PINE NO. 2 WITH THE MINIMUM 1200 PSI ALLOWABLE BENDING STRESS TREATED, VISUALLY GRADE WITH STAMP FROM AN ACCREDITED AGENCY AS 'SYP' MAX. MOISTURE CONTENT 19% SURFACED OR 'SYPB' MAX. MOISTURE CONTENT 19% SURFACED DRY OR SURFACED GREEN.

2.- ANY VISUALLY TWISTED OR BOWED LUMBER, IN ANY DIRECTIONS, SHALL NOT BE ACCEPTED. NO STRUCTURAL MEMBER SHALL BE CUT NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER.

b).- PLYWOOD SHEATHING:

1.- SHALL CONFORM TO THE AMERICAN PLYWOOD INSTITUTE, AND MUST BE CONNECTED TO THE WOOD TRUSSES WITH 8D NAILS AT 6" C/C AT ALL SUPPORTS. PLYWOOD SHEETS TO BE STAGGERED THRU-OUT ROOF SYSTEM. USE 5/8" EXTERIOR GRADE STRUCTURAL PLYWOOD AS RATED BY THE A.P.A., MINIMUM, UNLESS NOTED OTHERWISE IN PLANS.

c).- PRE-FABRICATED WOOD TRUSSES: (SHOP DRAWINGS REQUIRED)

1.- WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER'S SPECIALTY ENGINEER FOLLOWING ROOF LAYOUT SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.

2.- WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE TRUSS PLATE INSTITUE (T.P.I.), LATEST EDITION, TRUSSES TO BE ERECTED FOLLOWING THE GUIDELINES OF THE ANSI/ T.P.I. SUBMIT LAYOUT PLAN AND SHOP DRAWINGS FOR EACH DIFFERENT TRUSS SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER FOR APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO FABRICATION. PLANS SHALL INDICATE LINES OF ALL PERMANENT BRACING REQUIRED BY THE TRUSS SYSTEM (AT SPACING NOT TO EXCEED 8 FEET) AS WELL AS ALL TRUSS-TO-TRUSS AND TRUSS-TO-ASSOCIATED FRAMING CONNECTORS (INCLUDING DESIGN LOADS, RATED CAPACITIES AND MIAMI-DADE NOTICE OF ACCEPTANCE NUMBERS) AND ALL INDIVIDUALLY DESIGNED PLATE ASSEMBLIES USED. ALL TRUSS CONNECTORS AND FASTENERS SHALL BE GALVANIZED.

3.- PREFABRICATED WOOD TRUSSES MUST BE TERMITE TREATED.

4.- DESIGN THE WOOD TRUSSES AND PROVIDE CALCULATIONS FOR THE FOLLOWING TWO LOAD CASES:

4.1. ROOF GRAVITY: TOP CHORD LIVE LOAD = 20 PSF.
BOTTOM CHORD LIVE LOAD = 10 PSF.
TOP CHORD SUPERIMPOSED DEAD LOAD = 10 PSF.
BOTTOM CHORD SUPERIMPOSED DEAD LOAD = 15 PSF.
4.2. NET UPLIFT: SEE PLANS

d).- GENERAL:

1.- ALL WOOD MEMBERS TO BE FREE OF ALL IMPERFECTIONS AS. SPLITS, CHECKS, OR EXCESSIVE KNOTS. UNSATISFACTORY MATERIALS TO BE REPLACE AT NO COST TO THE OWNER.

2.- ALL BOLTS AND LAGS SHALL BE HOT-DIPPED GALVANIZED.

3.- ALL HARDWARE SHALL BE HOT-DIPPED GALVANIZED EXCEPT DECKING SCREWS SHALL BE STAINLESS STEEL.

4.- GENERAL CONTRACTOR TO PROVIDE PERMANENT LATERAL BRACING OF THE BOTTOM CHORD AND THE WEB MEMBERS IN ACCORDANCE WITH RECOMMENDATIONS OF T.P.I. AND THE REQUIREMENTS OF THE INDIVIDUAL TRUSS DESIGNS. SUBMIT PERMANENT BRACING PLAN FOR APPROVAL BY ENGINEER PRIOR TO ERECTION.

5.- GENERAL CONTRACTOR TO SUBMIT SIGNED AND SEALED SHOP DRAWINGS BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER FOR ALL TRUSS TO TRUSS CONNECTIONS.

6.- THE GENERAL CONTRACTOR SHALL DETERMINE THE CUTTING OF THE WOOD COLUMNS, WHETHER SHOP OR FIELD CUTS.

20.- DELEGATED/SPECIALTY ENGINEER SUBMITTALS
SUBMITTALS SHALL BE PREPARED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND THE FLORIDA STATUTES CHAPTER 61G15. ENGINEER'S NAME, LICENSE NUMBER AND BUSINESS ADDRESS SHAL BE LEGIBLY INDICATED ON ALL DOCUMENTS. SPECIALTY ENGINEER SHALL BE SOLELY RESPONSIBLE FOR DIRECT CONTACT WITH THE BUILDING DEPARTMENT WHILE OBTAINING BUILDING DEPARTMENT'S APPROVAL FOR HIS/HER PORTION OF WORK (INCLUDING PROVIDING RESPONSES TO REVIEW COMMENTS, SUPPLYING ADDITIONAL CALCULATIONS AND PLANS, ATTENDING MEETINGS, ETC. DESIGN AND DETAILING OF CONNECTIONS BETWEEN ENGINEERED ITEM AND THE STRUCTURE SHALL BE BASED ON INFORMATION OBTAINED FROM STRUCTURAL DRAWINGS AND BE PRECEDED BY THE SPECIALTY ENGINEER'S PRIOR REVIEW OF THE CAPACITY OF THE PORTION OF STRUCTURE TO WHICH THE ITEM IS BEING FASTENED. MODIFICATIONS TO THE STRUCTURE RESULTING FROM REACTIONS IMPOSED AT THE CONNECTION POINTS (GROUTING OF MASONRY, ADDITIONAL BRACING OF STRUCTURAL MEMBERS, ADDITIONAL CONCRETE TIE-COLUMNS WITHIN MASONRY WALLS, ETC.) SHALL BE DESIGNED AND CLEARLY DETAILED BY THE DELEGATED ENGINEER ON THE SHOP DRAWINGS AND SUBMITTED FOR REVIEW AS PART OF THE SHOP DRAWINGS. CONTRACTOR SHALL ASSUME ALL COSTS OF ADDITIONAL LABOR AND MATERIALS ASSOCIATED WITH COSTS OF ADDITIONAL LABOR AND MATERIALS ASSOCIATED WITH IMPLEMENTATION OF SUCH MODIFICATIONS (IF MODIFICATIONS ARE NOT DETAILED BY THE DELEGATED ENGINEER ON HIS/HER DRAWINGS AND ARE TO BE RERFORMED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL WORK PERFORMED BY THE ENGINEER OF RECORD ON AN HOURLY CHARGE BASIS).

SPECIALTY ENGINEERED ITEMS ON THIS PROJECT INCLUDE:

a) RAILINGS
b) GLAZING AND SUPPORTING SYSTEM

21.- STRUCTURAL STEEL:

STEEL TUBES TO CONFORM TO A-500, GRADE B (fy=46 KSI) SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE FABRICATION. ALL STRUCTURAL STEEL EXPOSED TO THE ELEMENTS TO BE HOT DIP GALVANIZED.
FABRICATE AND ERECTION OF STRUCTURAL STEEL IN CONFORMANCE WITH SPECIFICATION SECTION 05120 AND AISC " SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" WITH COMMENTARY. FABRICATOR TO BE AISC CATEGORY Cbd (2) CERTIFIED. USE THE FOLLOWING:

A.- ROLLED SHAPES: ASTM A992 OR ASTM A572 GRADE 50 WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3.
B.- PLATES AND BARS: ASTM A36
C.- USE A307 BOLTS FOR ALL ERECTION BOLTS AND ALL BOLTS LESS THAN 3/4" DIAMETER, U.O.N.

CONNECTIONS NOT DETAILED ON STRUCTURAL DRAWINGS AT THE TIME DRAWINGS ARE ISSUED FOR CONSTRUCTION SHALL BE DESIGNED AND DETAILED BY FABRICATOR ACCORDING TO AISC SPECIFICATIONS. PROVIDE SHOP DRAWINGS AND CALCULATIONS, PREPARED SIGNED, SEALED AND DATED BY THE DELEGATED ENGINEER FOR ALL SUCH CONNECTIONS. CALCULATIONS ARE FOR RECORD ONLY.
SUBMIT STRUCTURAL STEEL SHOP DRAWINGS TO ARCHITECT/ENGINEER FOR REVIEW BEFORE FABRICATION. DO NOT REPRODUCE THE STRUCTURAL DRAWINGS FOR USE AS SHOP DRAWINGS.

BLOCK WALL SCHEDULE

MARK	THICKNESS	REINFORCEMENT		REMARKS
		VERTICAL	HORIZONTAL	
BW-548	8"	#5@48"c/c	NO.9 GAGE DUR-O-WALL LADDER TYPE @16"	FILL REINFORCED CELLS WITH CONCRETE.
BW-724	8"	#7@24"c/c	NO.9 GAGE DUR-O-WALL LADDER TYPE @16"	FILL REINFORCED CELLS WITH CONCRETE.

WALL FOOTING SCHEDULE

MARK	SIZE (IN)	REINFORCEMENT	REMARKS
WF-24	24x12	3-#5 BOTTOM CONTINUOUS #5@12"c/c BOTTOM TRANSV.	
WF-24 SP	24x12	4-#5 TOP & BOTTOM CONTINUOUS #5@12"c/c TOP & BOTTOM TRANSV.	T. & B. LONG WAY REINF. TO BE CONTINUOUS WITH ADJACENT WF-42.
WF-42	42x12	6-#5 BOTTOM CONTINUOUS #5@12"c/c BOTTOM TRANSV.	

FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT	REMARKS
A	3'-0"x3'-0"x18"	5-#5 EACH WAY TOP & BOTTOM	
B	2'-6"x2'-6"x18"	4-#5 EACH WAY TOP & BOTTOM	

COLUMN BAR NOTES:

1.- ALL COLUMNS SHALL HAVE #3 TIES. EXCEPT FOR COLUMNS WITH #11 VERTICAL REINFORCING WHICH SHALL HAVE #4 TIES. (TYPICAL UNLESS OTHERWISE NOTED.)

2.- TIE SPACING TO BE AS FOLLOWS (U.O.N. IN SCHEDULE).

VERTICAL BARS: SPACING:
#5..............................10 in.
#6..............................12 in.
#7..............................14 in.
#8..............................16 in.
#9..............................18 in.
#10............................18 in.
#11............................20 in.

IN NO CASE SHALL THE TIE SPACING EXCEED THE LEAST DIMENSION OF THE COLUMN

TENSION LAP SPLICE SCHEDULE FOR CONC. VERTICAL REINFG

VERTICAL BAR SIZE	SPLICE LENGTH
#4	1'-10"
#5	2'-4"
#6	2'-10"
#7	4'-1"
#8	4'-8"
#9	5'-3"
#10	5'-11"
#11	6'-6"

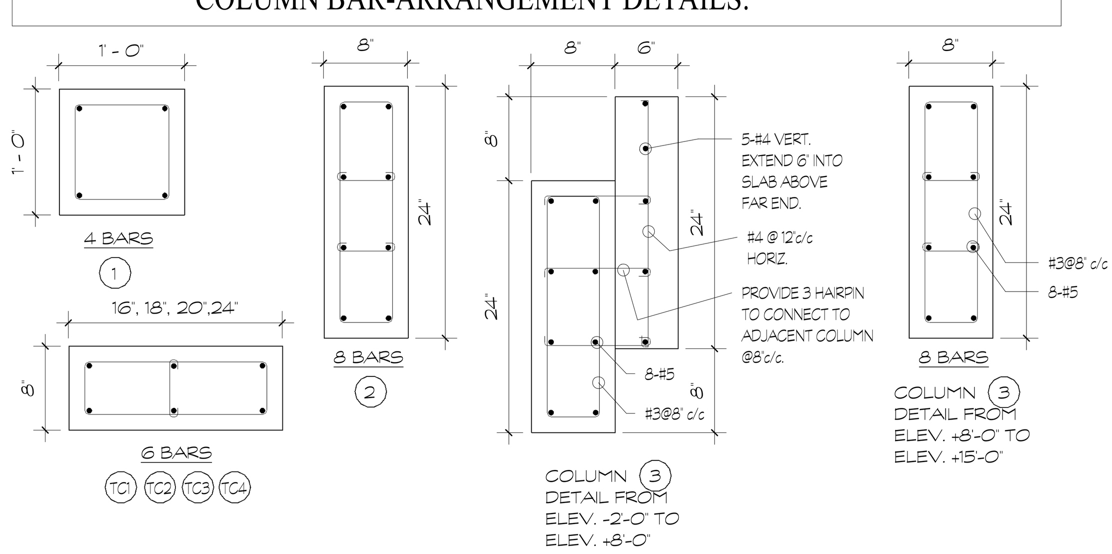
CONCRETE COLUNM SCHEDULE

MARK	SIZE (IN)	REINFORCEMENT		REMARKS
		VERTICAL	TIES	
1	12x12	4-#6	#3@10" c/c	EXTEND VERTICAL REINF. INTO FOOTING FAR END.
2	8x24	8-#5	#3@8" c/c	EXTEND VERTICAL REINF. INTO FOOTING FAR END.
3	(*)	(*)	(*)	EXTEND VERTICAL REINF. INTO FOOTING FAR END. (*) SEE COLUM BAR-ARAGEMENT DETAILS

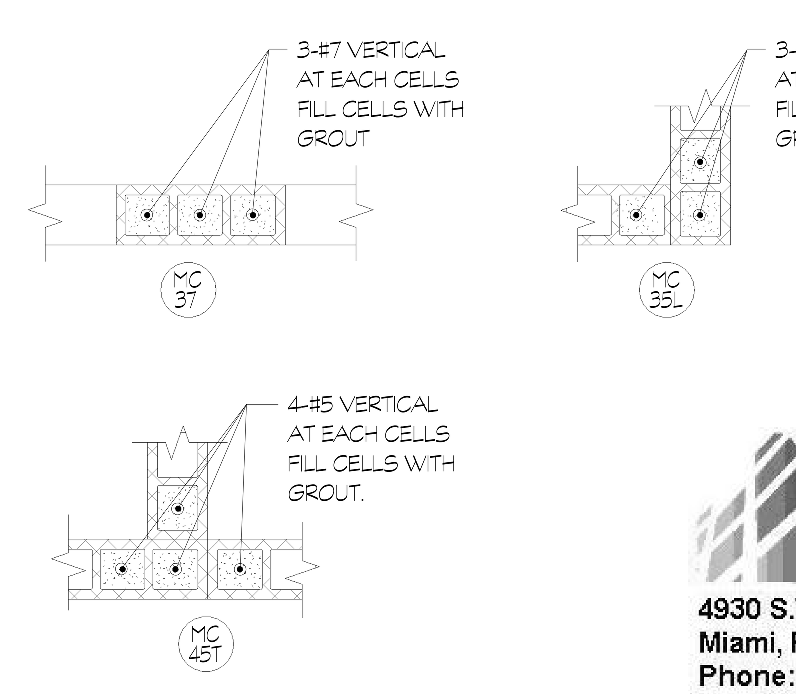
CONCRETE TIE COLUNM SCHEDULE

MARK	SIZE (IN)	REINFORCEMENT		REMARKS
		VERTICAL	TIES	
TC1	8x16	6-#5	#3@8" c/c	
TC2	8x18	6-#5	#3@8" c/c	
TC3	8x20	6-#5	#3@8" c/c	
TC4	8x24	6-#5	#3@8" c/c	FROM 6" CONC. SLAB TO HRTB-1

COLUMN BAR-ARRANGEMENT DETAILS:



TYPICAL MASONRY TIE - COLUMN DETAILS



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Fax:(305)666-5259

JOB No. 2024-70-A

PROJECT LEAD & CIVIL ENGINEERING:
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Florida Landscape Architecture Business License: LC26000457

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SGMENGINEERING.COM CA-00006208

REVISIONS

NO.	DESCRIPTION	DATE
	ISSUED FOR BUILDING PERMIT	11/21/2024

ISSUE DATE:	11/21/2024
DESIGNED BY:	D.D.A.
DRAWN BY:	D.D.A.
CHECKED BY:	D.D.A.

Aida M Albaisa
Digitally signed by Aida M Albaisa DN: CN=Aida M Albaisa, dnQualifier=A01410C0000017E73B6185400044805, O=DDA Engineers PA, C=US Reason: I am approving this document Date: 2024.11.20 13:46:38-05'00'

ENGINEER OF RECORD:
AIDA M. ALBAISA
P.E. No 45130

CLIENT
VILLAGE OF PINECREST
PINECREST PARKS & RECREATION
PINECREST PARKS AND RECREATION

PROJECT
GARY MATZNER PARK

SHEET TITLE
GENERAL STRUCTURAL NOTES AND SCHEDULES

SHEET NUMBER S-300

KEITH PROJECT NUMBER 13861.00

STATUS: CONSTRUCTION DOCUMENTS

Drawing name: P:\2024\2024-70-WJA\RV2024-70-A00-ARCHITECTURE\ARCH.11-19-2024 T.BIXR-GMP-TTLBK - StandardXR-GMP-TTLBK.dwg GARY MATZNER PARK\RV2024-70-A00

Plotted by: dda047 On ----