PROPERTY OWNER / ADDRESS:
PEACEFUL PALMS OF ISLAMORADA LLC
84745 OLD HWY
ISLAMORADA, FL. 33036

PROJECT ADDRESS:
84745 OLD HWY
ISLAMORADA, FL. 33036

RE #: - 00093940-000000

ALTERNATE KEY - 1109070

LEGAL DESCRIPTION:
23 63 37, WINDLEY ISLAND, PLAT BOOK 1, PAGE 50, PART OF LOT 6 AND PART OF LOT 7 AND .89 AC ADJACENT BAY BOTTOM AS RECORDED IN THE PUBLIC RECORDS OF MONROE COUNTY, FL.

ZONING DISTRICT:
MULTI FAMILY - MF

ADJACENT ZONING:
TOURIST COMMERCIAL - TC
MULTI FAMILY - MF

F.L.U.M. DESIGNATION:
RESIDENTIAL HIGH - RH

FLOOD CRITERIA:
FLOOD ZONE - A.E. AND V.E.
BASE FLOOD - A.E. 9' AND 10' N.G.V.D. 1929
V.E. 12' AND 14' N.G.V.D. 1929

SCOPE OF WORK:

1. 15 NEW RESIDENCES.
2. NEW POOL AND PATIO.

PROJECT SUMMARY:
LIVING AREA BREAKDOWN

RESIDENCE A-1 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE A-2 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE A-3 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE B-1 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE B-2 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE B-3 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE C-1 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE C-2 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE C-3 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE D-1 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE D-2 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE D-3 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE E-1 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE E-2 = 1,680 S.F. (3 BEDROOMS)
RESIDENCE E-3 = 1,680 S.F. (3 BEDROOMS)

STANDARD DESIGN CRITERIA:

WIND SPEED: 180 MPH PER A.S.C.E.	- 7-16
FLOOR LIVE LOAD:	- 40 #/SF
ROOF LIVE LOAD:	- 30 #/SF
FLOOR DEAD LOAD:	- 80 #/SF
ROOF DEAD LOAD	- 20 #/SF
EXPOSURE CATEGORY:	- "D"
IMPORTANCE FACTOR:	- 1.0

FLORIDA BUILDING CODE 2017
2017 F.B.C. - USE / CLASSIFICATION - RESIDENTIAL R-2

BUILDING DEPARTMENT NOTE:
SUBMITTAL OF CONSTRUCTION DRAWINGS MUST INCLUDE (BUT NOT LIMITED TO) THE FOLLOWING: 2017 FBC REQUIRES ELEV. OF BUILDINGS TO 1 FOOT ABOVE BFE.

OPEN SPACE RATIO
AND IMPERVIOUS AREA:

ENVIRO. SENSITIVE AREA	= .92 ACRES OR 40,075.2 S.F.
UPLAND AREA	= 1.14 ACRES OR 49,785 S.F.
RESIDENCES	= 18,000 S.F.
GRAVEL DRIVEWAY	= 10,579 S.F.
POOL (SEP PERMIT)	= 1,887 S.F.
BATH HOUSE (SEP PERMIT)	= 380 S.F.
DOCK (SEP PERMIT)	= 1,346 S.F.
TOTAL IMPERVIOUS	= 32,192 S.F. OR 64.66%
OPEN SPACE	= 17,593 S.F. OR 35.38%

LOCATION MAP:



PARKING CRITERIA:

RESIDENTIAL - 2 SPACES PER UNIT
15 UNITS x 2 SPACES - 30 SPACES REQUIRED
30 SPACES WILL BE PROVIDED

GENERAL PLANNING COMMENTS:

1. THE PROJECT WILL BE COMPLETED IN ONE PHASE.
2. ALL UTILITIES WILL BE SCREENED CONSISTENT WITH THE VILLAGE CODE SECTION 20-215(d)(16)f.
3. ANY FUTURE DOCK PLANS WILL BE SUBMITTED AT ANOTHER TIME ON A SEPARATE PERMIT.
4. FIRE SEPARATION OF BUILDINGS LESS THAN 10 FEET (INCLUSIVE OF OVERHANGS) WILL REQUIRE A MINIMUM OF 1 HOUR FIRE RATING OR INSTALLATION OF FIRE SPRINKLERS.
5. THERE IS NO FILL BEING ADDED ANYWHERE IN THE V.E. FLOOD ZONES ON THE PROPERTY.
6. IF IN THE FUTURE THE PROPERTY WILL SERVE THE PUBLIC AS CLIENTS, GUESTS, OR EMPLOYEES, THE APPLICANT WILL BE REQUIRED TO PROVIDE ACCESSIBLE PARKING IN ACCORDANCE WITH F.S. CH. 553, THE AMERICAN DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG), AND THE FLORIDA ACCESSIBILITY CODE, AS AMENDED FROM TIME TO TIME, PER VILLAGE CODE SECTION 30-852(E)

SHORELINE OPEN SPACE CALCULATIONS:
(30' SHORELINE SETBACK)

AREA OF 30' SETBACK	= 5,318 S.F.
ALLOWABLE AREA 60% OF 5,318 S.F.	= 3,191 S.F.
DOCKS (SEP PERMIT)	= 1,346 S.F.
POOL (SEP PERMIT)	= 958 S.F.
TOTAL S.F. WITHIN SETBACK	= 2,302 S.F.
2,302 S.F. / 5,318 S.F.	= 43.29%

FIRE DEPARTMENT NOTES:

1. FIRE HYDRANT INSTALLATION AND CERTIFICATION REQUIRED PRIOR TO PROJECT GOING VERTICAL WITH COMBUSTIBLE BUILDING MATERIAL.
2. ALL UNITS SHALL BE SPRINKLED WITH ALARM NOTIFICATION SYSTEM PER NFPA 101-33.3.6.3 AND 30.2.4.6.
3. ALDRIDGE BENGE SIGNAGE IS REQUIRED WHERE APPLICABLE.

KEYS ENGINEERING
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2017
4	REVISION	11/26/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	12/28/2021
7	VILLAGE COMMENT	1/3/2022

SCALE: 1" = 20'-0"
DATE: 3/1/2016
DWG BY: D.G.O.
REVISED:

TITLE: SITE PLAN
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: C-1
PROJECT No: D-16-047

LANDSCAPING LEGEND:

STREET TREE =

CANOPY TREE =

UNDERSTORY TREE =

SHRUBS =

20' WIDE CLASS "D" MAJOR STREET BUFFER:
PROPERTY HAS 202 L.F. ALONG MAJOR STREET

CANOPY - 13

UNDER STORY - 7

SHRUBS - 57

20' WIDE CLASS "D" DISTRICT BOUNDARY BUFFER:
PROPERTY HAS 329 L.F. ALONG PROPERTY LINE

CANOPY - 21

UNDER STORY - 12

SHRUBS - 92

LANDSCAPE PARKING:

PLANTING AREA REQUIRED = 1,000 S.F.
(PER 24 SPACES)

41.7 S.F. PER 1 SPACE

30 SPACES x 41.7 S.F. = 1,251 S.F.

PLANTING AREA PROVIDED = 1,306 S.F.

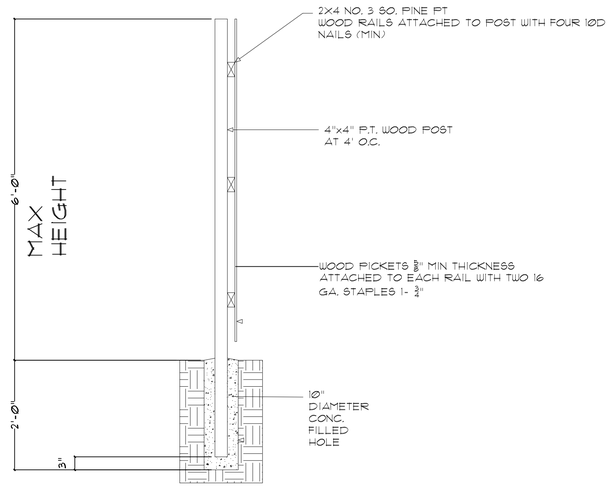
CANOPY = 4

UNDER STORY = 2

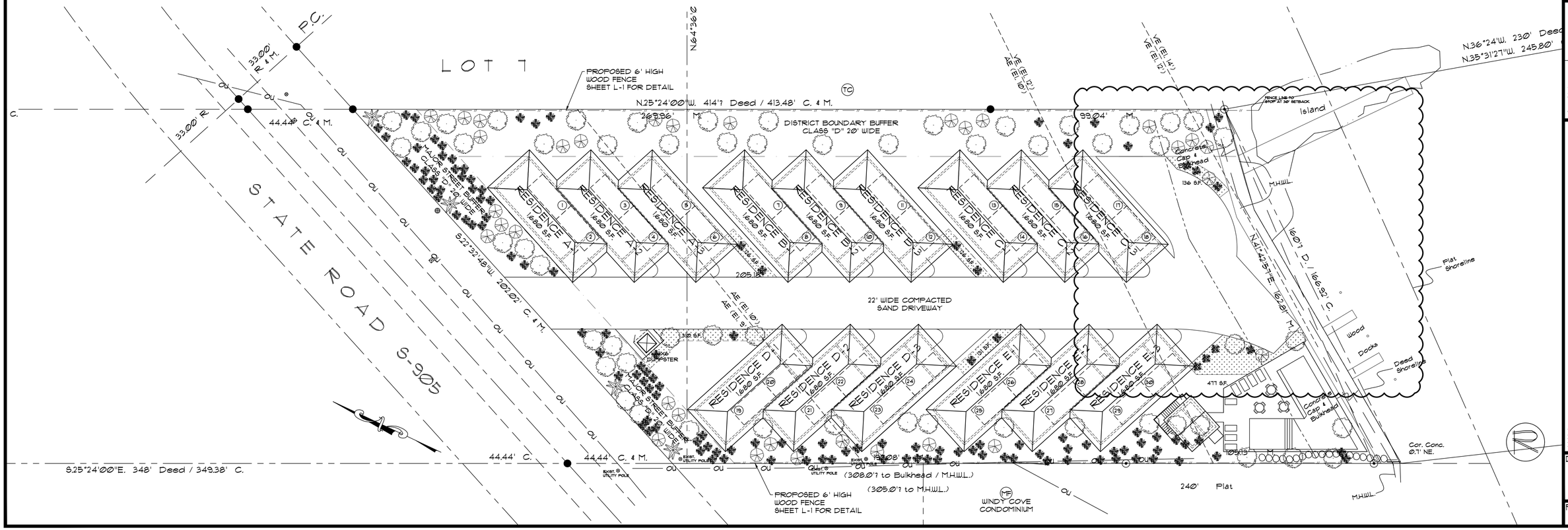
SHRUBS = 9

LANDSCAPE CRITERIA:

1. ONE STREET TREE PER 50' ON OVERSEAS HIGHWAY.
2. ALL CATEGORY 1 AND 2 INVASIVE EXOTIC VEGETATION SHALL BE REMOVED.
3. WHEN EXISTING NON-INVASIVE VEGETATION IS REMOVED OR WHEN VEGETATION THAT WAS TO BE PRESERVED OR RELOCATED IS DAMAGED OR DESTROYED DURING DEVELOPMENT ACTIVITIES, SUCH VEGETATION SHALL BE REPLACED, MITIGATED OR RESTORED IN ACCORDANCE WITH SECTION 30-1615. SPECIES LISTED AS ENDANGERED, THREATENED, OR REGIONALLY IMPORTANT MUST BE REPLACED AT A MINIMUM RATIO OF 1:1 OF SIMILAR SIZE AND MATURITY.
4. REPLACEMENT TREES SHALL BE AT LEAST EIGHT FEET IN HEIGHT, THREE INCHES DBH, AND CONSIST OF NON-INVASIVE SPECIES PURSUANT TO THE STANDARDS CONTAINED IN THIS DIVISION. THE DIRECTOR OF PLANNING AND DEVELOPMENT SERVICES MAY REDUCE THE HEIGHT REQUIREMENT UP TO 50 PERCENT FOR RARE NATIVE PLANT SPECIES. PLEASE NOTE ON THE PLANS THAT THE PLANTS INSTALLED TO MEET LANDSCAPING STANDARDS OF THE LDR'S SHALL BE OF THE FOLLOWING:
   - CANOPY TREES SHALL HAVE A MINIMUM 8' IN HEIGHT, THREE INCHES DBH, AND CONSIST OF NON-INVASIVE SPECIES. UNDERSTORY TREES SHALL BE A MINIMUM OF SIX FEET IN HEIGHT. SHRUBS SHALL BE A MINIMUM OF THREE FEET IN HEIGHT.
   - NO ONE SPECIES OF TREE SHALL EXCEED 50 PERCENT OF THE MINIMUM NUMBER OF TREES REQUIRED. NEITHER EXISTING TREES NOR TREES IN EXCESS OF THE MINIMUM NUMBER REQUIRED SHALL BE SUBJECT TO LIMITATION.
   - SEVENTY-FIVE PERCENT OF THE PLANT MATERIAL USED TO SATISFY LANDSCAPING REQUIREMENTS SHALL BE NATIVE SPECIES. REF. CODE SECTION 30-8178.
5. ALL CATEGORY 1 AND 2 INVASIVE EXOTIC VEGETATION SHALL BE REMOVED PRIOR TO FINAL PLANNING INSPECTION.
6. NO EXISTING NATIVE VEGETATION SHALL BE REMOVED FOR SWALES OR CLEAR SITE TRIANGLES.
7. RESIDENTIAL SEMI-SHIELDED FIXTURES MAY BE USED IN CONJUNCTION WITH LOW INTENSITY LAMPS PROVIDED A MAJORITY OF THE LIGHT IS PROJECTED DOWNWARD FROM THE TOP OF THE FIXTURE. FROSTED GLOBE FIXTURES MAY ALSO BE USED IN RESIDENTIAL AREAS IN CONJUNCTION WITH LOW INTENSITY LAMPS. IN NO CASE, SHALL FULLY EXPOSED LAMPS OR FIXTURES WITH CLEAR GLASS GLOBES OR SIDE PANELS BE PERMITTED. HIGH INTENSITY FIXTURES SHALL NOT BE USED IN RESIDENTIAL AREAS.
8. NO ONE SPECIES OF TREE SHALL EXCEED 50 PERCENT OF THE MINIMUM NUMBER OF TREES REQUIRED. NEITHER EXISTING TREES NOR TREES IN EXCESS OF THE MINIMUM NUMBER REQUIRED SHALL BE SUBJECT TO THIS LIMITATION.
9. NO CANOPY TREES SHALL BE PLANTED WITHIN 15 FEET OF OVERHEAD UTILITY LINES.
10. ALL PLANT MATERIAL SHALL BE PLANTED WITH A MINIMUM OF SIX INCHES OF ORGANIC SOIL AND MULCHED TO A DEPTH OF THREE INCHES.



WOOD FENCE
TYPICAL SECTION
N.T.S.



KEYS ENGINEERING
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2017
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	8/1/2018
4	REVISION	11/26/2021
5	VILLAGE COMMENT	12/28/2021

SCALE: 1" = 20'-0"
DATE: 3/1/2016
DWG BY: D.G.O.
REVISED:

TITLE: LANDSCAPE PLAN
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: L-1

PROJECT No: D-16-047

OPEN SPACE RATIO AND IMPERVIOUS AREA:

ENVIRO. SENSITIVE AREA	=	.92 ACRES OR 40,075.2 S.F.
UPLAND AREA	=	1.14 ACRES OR 49,785 S.F.
RESIDENCES	=	18,000 S.F.
GRAVEL DRIVEWAY	=	10,579 S.F.
POOL (SEP PERMIT)	=	1,887 S.F.
BATH HOUSE (SEP PERMIT)	=	380 S.F.
DOCK (SEP PERMIT)	=	1,346 S.F.
TOTAL IMPERVIOUS	=	32,192 S.F. OR 64.66%
OPEN SPACE	=	17,593 S.F. OR 35.38%

STORMWATER CALCULATIONS:

REQUIRED VOLUME OF WATER TO BE RETAINED - 5,805 C.F.

ACTUAL VOLUME OF WATER TO BE RETAINED - 9,116.6 C.F.

REFER TO COMMERCIAL STORMWATER MANAGEMENT PACKAGE FOR COMPLETE CALCULATIONS.

LEGEND:

DIRECTION OF PITCH TOWARDS FRENCH DRAIN

EXISTING SPOT ELEVATION = X 5.5'

NEW SPOT ELEVATION OF METAL GRATE AT FRENCH DRAIN = X 5.5

FRENCH DRAIN CALCULATIONS:

- 2" LOOSE ROCK HAS 50% VOIDS

AREA OF 24" DIAMETER PIPE = 3.14 S.F.

(AREA - PIPE AREA)
48 S.F. - 3.14 S.F. = 44.86 S.F.

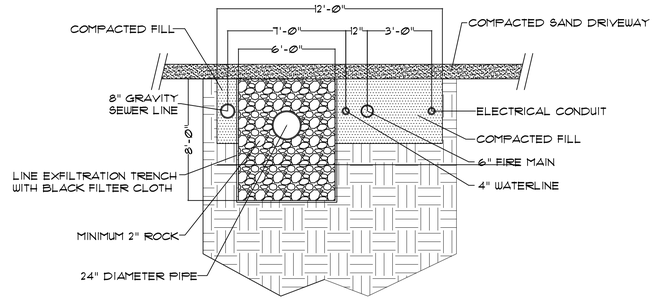
50% VOIDS
44.86 S.F. / 2 = 22.43 S.F.

AREA OF PIPE = 3.14 S.F.

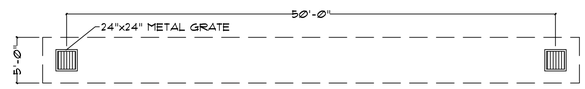
TOTAL AREA OF RETENTION = 25.57 C.F. PER L.F.

LENGTH OF DRAIN = 311 L.F.

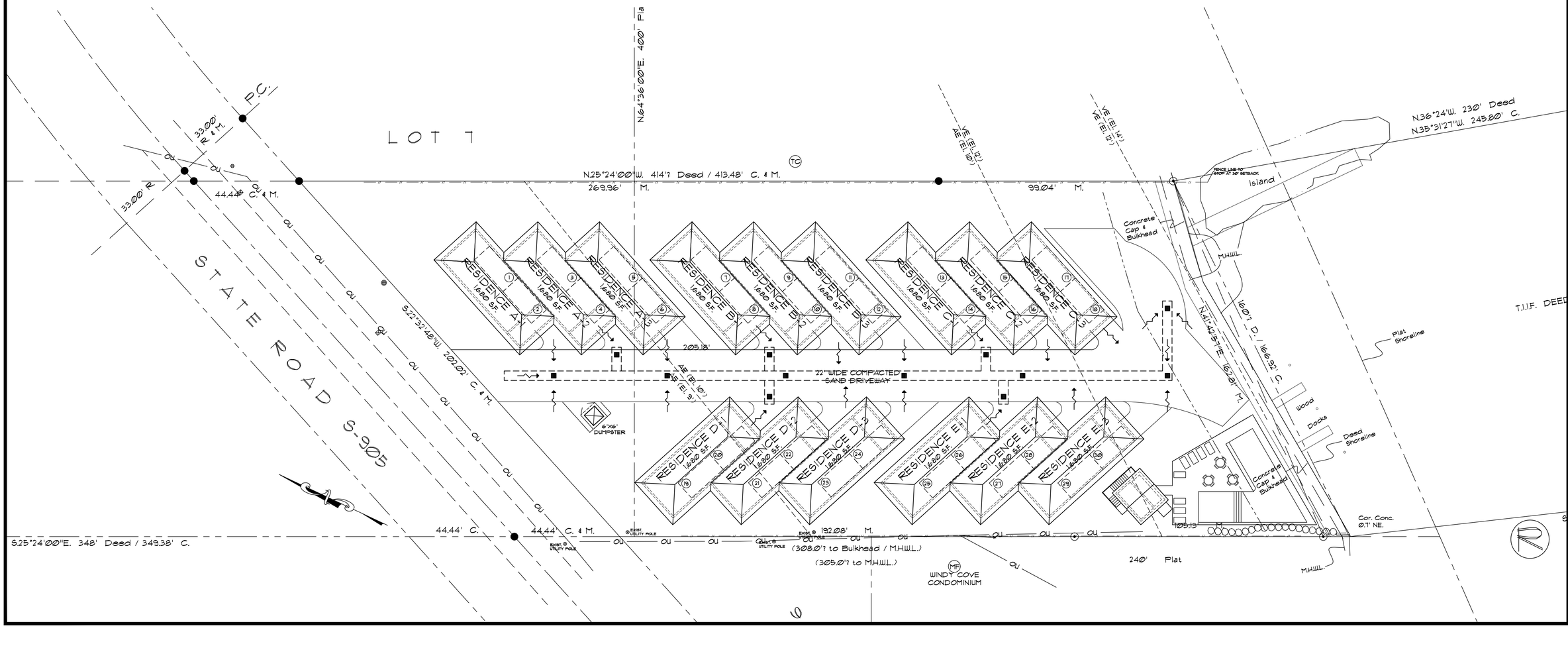
TOTAL RETENTION = 7,952 C.F.



TYPICAL TRENCH SECTION
N.T.S.



TYPICAL
FRENCH DRAIN - 380 L.F.
N.T.S.



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DARYLE L. OSBORN
P.E. No. FL. 27428
91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2017
1	VILLAGE COMMENT	4/25/2018
4	REVISION	11/26/2021
5	VILLAGE COMMENT	12/28/2021

SCALE: 1" = 20'-0"
DATE: 3/1/2016
DWG BY: D.G.O.
REVISED:

TITLE: STORMWATER MANAGEMENT
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: SW-1

PROJECT No: D-16-047

LIGHTING IN COMMERCIAL / RESIDENTIAL AREAS:

COMMERCIAL / RESIDENTIAL FIXTURES. COMMERCIAL SEMI-SHIELDED FIXTURES MAY BE USED IN CONJUNCTION WITH LOW INTENSITY LAMPS PROVIDED A MAJORITY OF THE LIGHT IS PROJECTED DOWNWARD FROM THE TOP OF THE FIXTURE. FROSTED GLOBE FIXTURES MAY ALSO BE USED IN RESIDENTIAL / COMMERCIAL AREAS IN CONJUNCTION WITH LOW INTENSITY LAMPS. IN NO CASE SHALL FULLY EXPOSED LAMPS OR FIXTURES WITH CLEAR GLASS GLOBES OR SIDE PANELS BE PERMITTED. HIGH INTENSITY FIXTURES SHALL NOT BE USED IN THESE AREAS.

EXTERIOR FIXTURES SHALL BE DESIGNED AND POSITIONED SO THAT:

1. THE POINT SOURCE OF LIGHT OR ANY REFLECTIVE SURFACE OF THE LIGHT FIXTURE IS NOT DIRECTLY VISIBLE.
2. ALL LIGHT FIXTURES SHALL BE MOUNTED AS LOW IN ELEVATION AS POSSIBLE THROUGH THE USE OF LOW-MOUNTED WALL FIXTURES, LOW BOLLARDS, AND GROUND-LEVEL FIXTURES. NO GROUND-MOUNTED LIGHT STRUCTURE SHALL EXCEED FOUR FEET IN HEIGHT.
3. ALL LIGHT FIXTURES SHALL BE FULLY SHIELDED IN SUCH A WAY AS TO DIRECT ALL LIGHT TOWARDS THE EARTH'S SURFACE AND AWAY FROM REFLECTIVE SURFACES.
4. LIGHT FIXTURES MUST BE PLACED IN SUCH A MANNER THAT NO LIGHT-EMITTING SURFACE IS VISIBLE FROM ANY RESIDENTIAL AREA OR PUBLIC/PRIVATE ROADWAY, WALKWAY, TRAIL OR OTHER PUBLIC WAY WHEN VIEWED AT GROUND LEVEL.
5. ALL SECURITY FIXTURES SHALL BE FULLY SHIELDED AND SENSOR CONTROLLED LIGHTING SHALL BE PREFERRED AS REQUIRED BY CODE.

MAXIMUM ILLUMINATION LEVELS:

THE OUTPUT OF ALL PROPOSED LIGHTING IS NOT TO EXCEED THE MAXIMUM ILLUMINATION LEVELS LISTED BELOW

IMMEDIATE LOCATION
- SECURITY LIGHTING = 2.0 FOOTCANDLES
- ALL OTHER = 1.0 FOOTCANDLES

AT PROPERTY LINE
- OPEN WATER / ANY = 0.2 FOOTCANDLES
- AT CANALS / ANY = 0.5 FOOTCANDLES
- CONSERVATION / ANY = 0.5 FOOTCANDLES
- RESIDENTIAL / RESIDENTIAL = 0.5 FOOTCANDLES
- RESIDENTIAL / COMMERCIAL = 0.5 FOOTCANDLES
- COMMERCIAL / COMMERCIAL = 1.0 FOOTCANDLES
- OTHER STREET / ANY = 1.0 FOOTCANDLES
- MAJOR STREET / ANY = 1.5 FOOTCANDLES

FIXTURE HEIGHT:

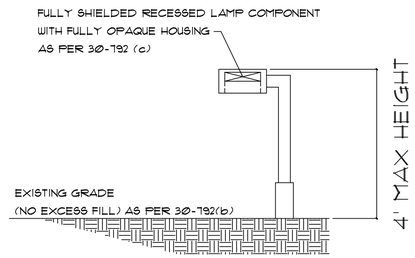
GROUND-MOUNTED FIXTURES. GROUND-MOUNTED LIGHTING FIXTURES, INCLUDING THEIR SUPPORTS, SHALL NOT EXCEED 25 FEET IN HEIGHT IN ANY NONRESIDENTIAL AREA, NOR 12 FEET IN ANY RESIDENTIAL AREA, OR AS OTHERWISE REGULATED UNDER THIS DIVISION.

SHIELDING REQUIREMENTS:

ALL LIGHT FIXTURES, UNLESS EXPRESSLY EXEMPTED, SHALL BE FULLY SHIELDED IN SUCH A WAY AS TO DIRECT ALL LIGHT TOWARDS THE EARTH'S SURFACE AND AWAY FROM REFLECTIVE SURFACES. LIGHT FIXTURE MUST BE PLACED IN SUCH A MANNER THAT NO LIGHT-EMITTING SURFACE IS VISIBLE FROM ANY RESIDENTIAL AREA OR PUBLIC/PRIVATE ROADWAY, WALKWAY, TRAIL OR OTHER PUBLIC WAY WHEN VIEWED AT GROUND LEVEL.

GENERAL PHOTOMETRIC SCHEDULE

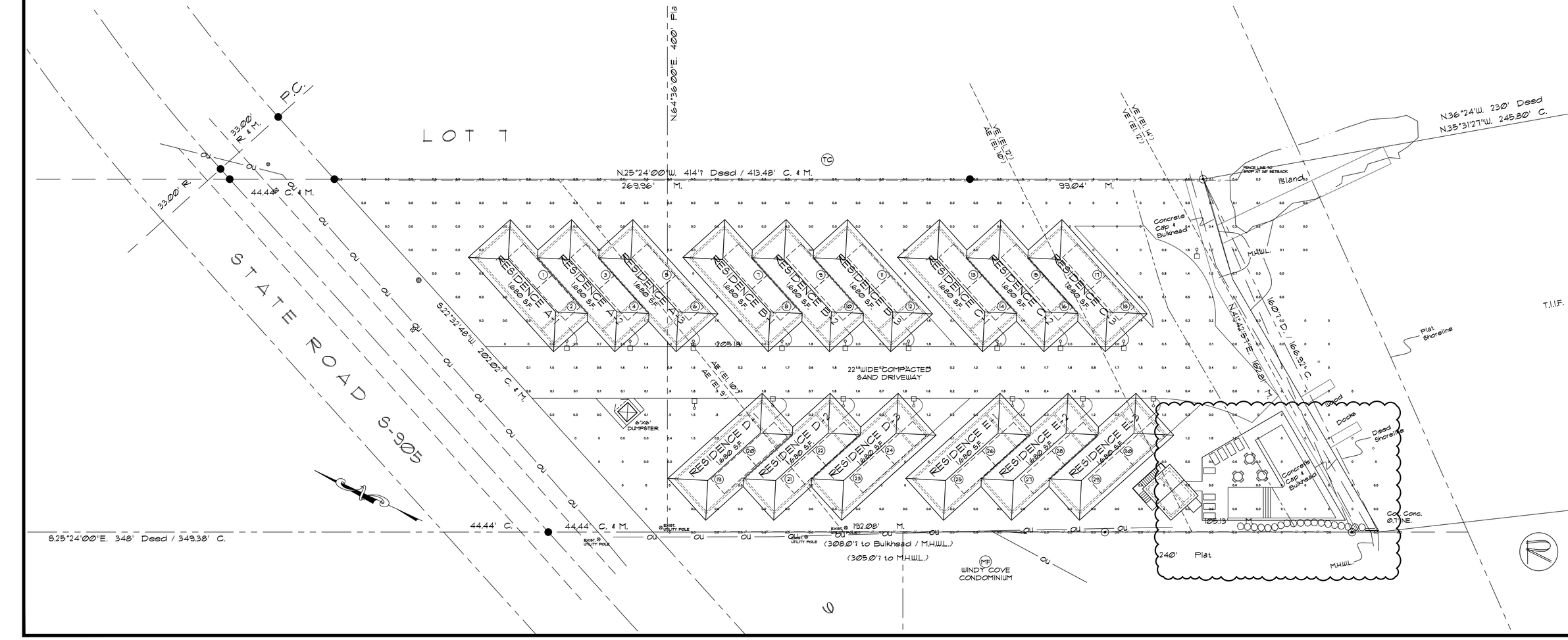
AVERAGE FOOTCANDLES	9.94
MAXIMUM FOOTCANDLES	203.6
MINIMUM FOOTCANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	203.56 / 0.00
AVERAGE TO MINIMUM FC RATIO	9.94 / 0.00



GROUND MOUNTED POLE LIGHT

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	NOTE 3	QUANTITY
4' HIGH POLE MOUNT		(1) 400 W PS MH ED 28, MS400/H75/ED28PS	OUTDOOR ROADWAY ARCHITECTURALREFL: SPECULAR SEGMENT ALUM ENCL: FROSTED AND SHIELDED GLASS	ELECTRONIC	POLE	SPAULDING LIGHTING, CR1-P40-HSP	120V 1P 2W	400 W PS MH ED 28			18
WALL MOUNT		(1) 70 W HPS / ED17	WALL MOUNTED LUMINAIRE CAST ALUM. REFLECTOR SYSTEM FROSTED AND SHIELDED GLASS	ELECTRONIC	WALL	KIM LIGHTING, WC14x2 / 70 HPS-ED17	120V 1P 2W	70 W HPS ED17			2



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91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0162

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2017
1	VILLAGE COMMENT	4/25/2018
4	REVISION	11/26/2021

SCALE: 1" = 20'-0"
DATE: 3/7/2016
DWG BY: D.G.O.
REVISED:

TITLE: PHOTOMETRIC PLAN
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: L P - 1

PROJECT No: D-16-047

PLUMBING GENERAL NOTES AND SPECIFICATION

1. A. SCOPE OF WORK
THE WORK SHALL INCLUDE ALL PLUMBING AND SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING
1. DOMESTIC COLD WATER PIPING SYSTEMS.

B. ALL PLUMBING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF "THE 2010 FLORIDA BUILDING CODE "PLUMBING EDITION", LOCAL ORDINANCES, THE FLORIDA KEYS AQUEDUCT AUTHORITY, AS WELL AS ALL DEPARTMENT OF HEALTH REGULATIONS AND REQUIREMENTS. IN THE EVENT OF CONFLICT BETWEEN ANY CODE OR REGULATIONS, THE MORE STRINGENT REQUIREMENT WILL GOVERN.

2. CONTRACTOR SHALL VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.

3. PIPING INSTALLATION.
A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE
B. PROVIDE SLEEVES FOR ALL PIPING THROUGH FOUNDATIONS, SLABS, OR MASONRY WALLS. CAULK OPENINGS BETUEENPIPE AND SLEEVES.

4. INSPECTION AND TESTS.
CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTION TO THE AUTHORITIES HAVING JURISDICTION AS THE WORK PROGRESS. ALL SYSTEMS SHALL BE TESTED BY CODE AND OR LOCAL REGULATIONS. THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE STERILIZED FOLLOWING CODE PROCEDURES. AFTER STERILIZATION FLUSH THE SYSTEM WITH CLEAN WATER UNTIL SAFE TO BE CONSUMED.

5. UTILITIES CONNECTION
PLUMBING CONTRACTOR SHALL VERIFY AT FIELD AND WITH THE FKAA UTILITY COMPANY THE EXACT POINT OF CONNECTION FOR WATER AND SEWER SERVICES BEFORE SUBMITTING A BID OR PRICE FOR HIS WORK.

6. PLUMBING CONTRACTOR IS RESPONSIBLE FOR PERFORMING THE FOLLOWING TEST IN THE PRESENCE OF AN OUNER REPRESENTATIVE.
A. ALL WATER PIPING SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST OF 100 PSIG. FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.
ANY FIELD CONDITION AFFECTING HIS WORK.
B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH WATER TO HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTION IS MADE BY
C. CORRECT ALL DEFECTS DISCLOSED BY ABOVE TEST.

7. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUND OF CHLORINATE LIME TO EACFH 1000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE.) RETAIN MIXTURE IN PIPE 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.

8. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF INSTALLATION.

9. PLUMBING CONTRACTOR SHALL FURNISH URITTREN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE FROM DATE MOF FINAL ACCEPTANCE, AND THAT HE WILL AT HIS EXPENCE REAPIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE GUARNTEE PERIOD INCLUDING BUT NOT LIMITED TO NECESSARY DEMOLITION, PATCHING, RE-PATCHING AND REFINISHING.

10. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN HIS BID, THE COST FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO PERFORM THE SCOPE OF THE WORK AND THE INTENT OF THE CONSTRUCTION DOCUMENTS FORM ALL THE LOCAL AND STATE AUTHORITIES.

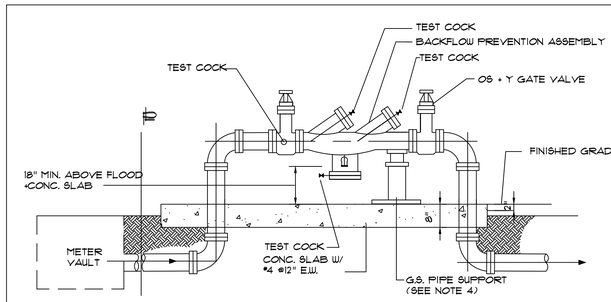
11. ALL PIPING MATERIALS SHALL BE NEW AND AS FOLLOWS:
A. SANITARY WASTE, VENT AND STORM DRAIN PIPING: UNDERGROUND AND ABOVE GROUND PIPING SHALL BE "PVC" PIPE AND FITTINGS SCHEDULE 40. MATERIAL SHALL COMPLY WITH ASTMD-1784, TYPE 1.
B. DOMESTIC WATER ABOVE GROUND SHALL BE TYPE "K" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
C. DOMESTIC WATER BELOW GROUND SHALL BE TYPE "L" COPER PIPE WITH WROUGHT COPPER SOLDERED JOINAT FITTINGS.

12. EXISTING CONDITIONS: CONTRACTOR BY AND THROUGH SUBMISSION OF HIS BID, AGREES THAT HE SHALL BE HELD RESPONSIBLE FOR HAVING EXAMINED THE SITE, THE LOCATION OF ALL PROPOSED WORK AND FOR HAVING SATISFIED HIMSELF FROM HIS OWN PERSONAL KNOWLEDGE AND EXPERIENCE OR PROFESSIONAL ADVICE AS TO THE CHARACTER, AND LOCATION OF THE SITE, THE NATURE OF THE EXISTING CONDITIONS, THE LOCATION OF EXISTING UTILITIES AND ANY OTHER CONDITIONS SURROUNDING AND AFFECTING THE WORK, ANY OBSTRUCTIONS, THE NATURE OF EXISTING CONSTRUCTION, AND ALL OTHER PHYSICAL CHARACTERISTICS OF THE JOB, IN ORDE THAT HE MAY INCLUDE IN THE PRICES WHICH HE BIDS ALL COSTS PERTAINING TO THE WORK AND THEREBY PROVIDE FOR THE SATISFACTOR COMPLETION THEREOF.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE 3" BACKFLOW PREVENTER ASSEMBLY, IN ACCORDANCE WITH THE REQUIREMENTS OF THE FBC "PLUMBING EDITION" AND IN ACCORDANCE WITH THE FKAA. EXACT LOCATION OF BACKFLOW PREVENTION ASSEMBLY MUST BE COORDINATED WITH THE ARCHITECT AND THE FKAA.

14. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY WITH THE FKAA THE ADEQUACY OF THE WATER SUPPLY FLOW AND PRESSURE FOR THE SYSTEMS AS PROPOSED HEREIN. A MINIMUM PRESSURE OF 80 PSI IS REQUIRED FOR THIS SYSTEM. NOTIFY THE ENGINEER AND THE ARCHITECT IF PRESSURE IS NOT SUFFICIENT FOR THIS PROJECT. INSTALL A PRESSURE BOOSTER PUMP AS REQUIRED SHOULD WATER PRESSURE AND FLOW NOT BE ADEQUATE FOR THIS SYSTEM. NO EXTRAS OR CHANGE ORDERS WILL BE ALLOWED FOR A BOOSTER PUMP IF THE CONTRACTOR FAILED TO ESTABLISH THE WATER FLOW AND PRESSURE OF THE FKAA MAINS PRIOR TO BID.

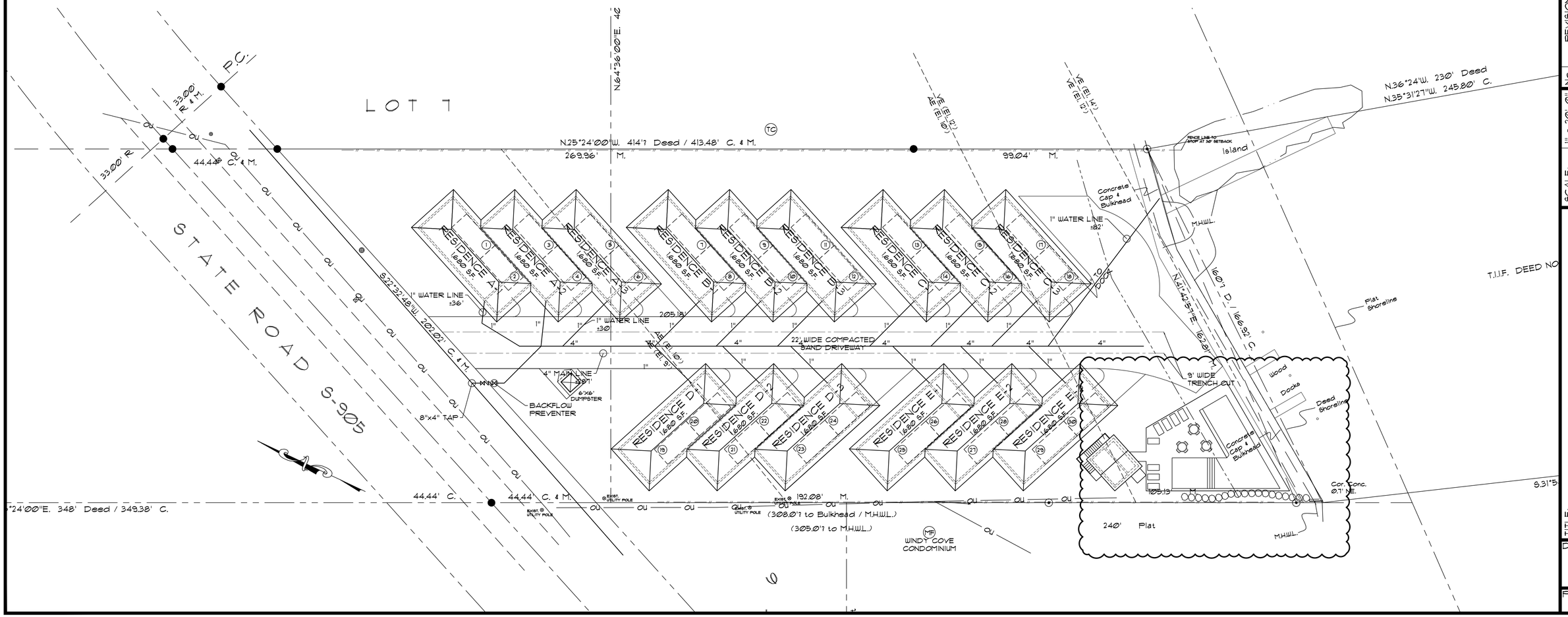
15. ALL WORK MUST CONFORM TO FKAA MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



ELEVATION VIEW
FOR PIPES 2-1/2" AND LARGER

NOTES:
1- THE ASSEMBLY SHALL BE INSTALLED WITH MINIMUM HORIZONTAL CLEARANCES OF 30 INCHES FREE FROM OBSTRUCTION IN ALL DIRECTIONS.
2- GUARD POSTS SHALL BE INSTALLED IF THE ASSEMBLY IS EXPOSED TO POSSIBLE DAMAGE FROM VEHICULAR TRAFFIC
3- ADJUSTABLE PIPE SADDLE SUPPORT SIZED TO FIT CURVATURE OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY, WITH GALVANIZED STEEL PIPE AND FLOOR FLANGE.
ATTACH FLOOR FLANGE TO CONCRETE SLAB WITH GALVANIZED STEEL EXPANSION BOLTS.
4- FKAA SHALL HAVE UNRESTRICTED AND CONTINUOUS ACCESS TO THE BACKFLOW PREVENTION ASSEMBLY.
5- PIPING 2" AND SMALLER SHALL BE SCHEDULE 40 GALV, STEEL PIPE WITH GALV, MELLEABLE IRON THREADED FITTINGS, PIPING 2-1/2" AND LARGER SHALL BE DUCTILE IRON PIPE WITH FLANGED FITTINGS. ALL PIPING SHALL BE IN ACCORDANCE WITH FKAA CONSTRUCTIONS SPECIFICATIONS FOR DONATION OF WATER MAINS.
6- ALL EXPOSED METALLIC THREADS SHELL BE PAINTED WITH BITUMASTIC PAINT.

BACKFLOW PREVENTER ASSEMBLY



REVISION	DATE
FOR SUBMITTAL	3/1/2016
REVISION	11/26/2021

SCALE:	1" = 20'-0"
DATE:	3/1/2016
DWG BY:	D.G.O.
REVISED:	

KEYS ENGINEERING
DARYLE L. OSBORN
P.E. No. FL 27428
91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0162

TITLE: WATER SERVICE PLAN
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: WS-1

PROJECT No: D-16-047

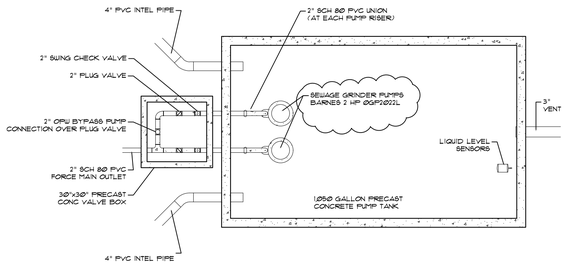
GENERAL WASTEWATER NOTE:

1. F.D.E.P. PERMIT WILL BE REQUIRED FOR CONNECTION TO THE CENTRAL SEWER SYSTEM SINCE THIS IS A MULTI-BUILDING PROPERTY.

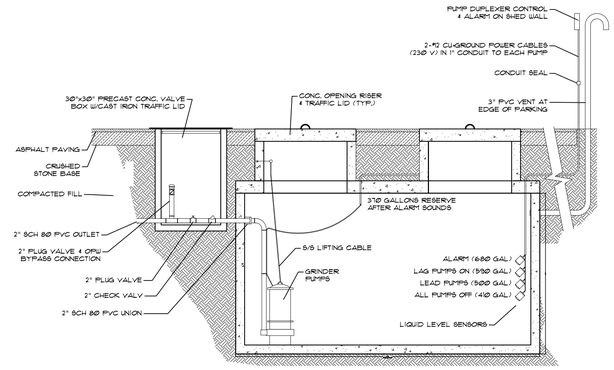
2. PERMIT MUST BE OBTAINED PRIOR TO CONSTRUCTION.

3. SYSTEM MUST BE CLEARED FOR USE BY THE DEPARTMENT PRIOR TO BEING PLACED INTO SERVICE.

4. PROPERTY IS CURRENTLY ASSESSED 2.68 EDU. DEVELOPER SHALL BE FINANCIALLY RESPONSIBLE FOR ADDITIONS TO THE EXPECTED FLOW (STANDARD 1 EDU PER RESIDENTIAL UNIT) AS WELL AS ANY REQUIRED UPGRADES TO THE CENTRAL SEWER SYSTEM.

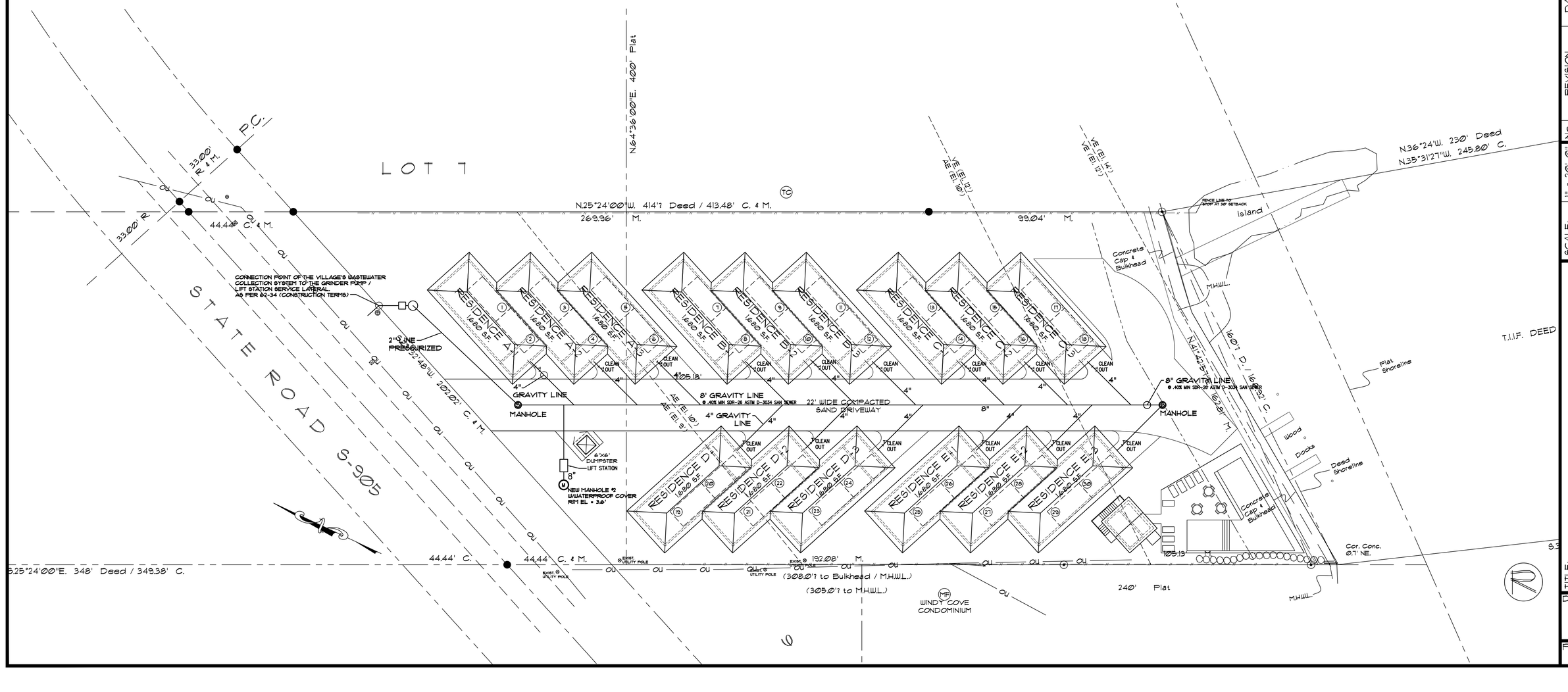


LIFT STATION PLAN



LIFT STATION SECTION

1050 GALLON PRECAST CONCRETE PUMP TANK WITH TWO BARNES 2-HORSEPOWER GRINDER PUMPS, BARNES DUPLEX CONTROL PANEL WITH 2 POLE /20 AMP 230 V BREAKERS AND AUDIO/VISUAL ALARM. ELAPSED TIME METERS IN UL-4N LOCKABLE BOX UL-698A PANEL



KEYS ENGINEERING
DARYLE L. OSBORN
P.E. No. FL 27428
91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	3/1/2016
1	VILLAGE COMMENT	4/25/2018
4	REVISION	11/26/2021

SCALE: 1" = 20'-0"
DATE: 3/7/2016
DWG BY: D.G.O.
REVISED:

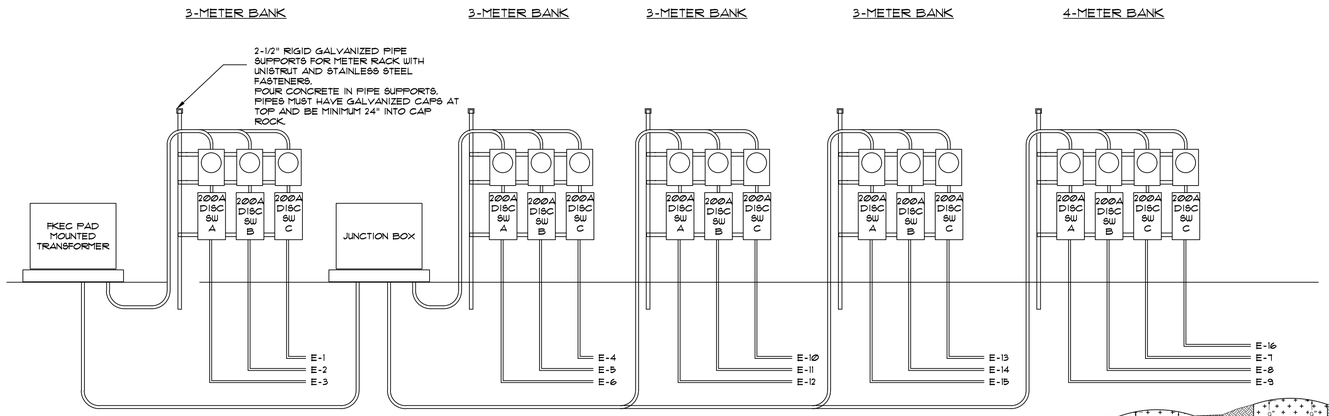
TITLE: WASTE WATER PLAN
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: WW-1

PROJECT No: D-16-047

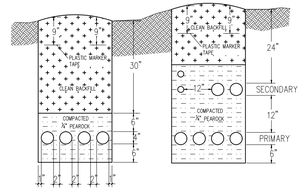
ELECTRICAL NOTES

1. DO NOT SCALE ELECTRICAL DRAWINGS! REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL EQUIPMENT AND CONFIRM WITH OWNER'S REPRESENTATIVE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE N.E.C. (LATEST EDITION) AND SHALL COMPLY WITH ALL LOCAL RULES AND ORDINANCES, INCLUDING THE FLORIDA KEYS ELECTRIC COOPERATIVE ASSOCIATION'S REGULATIONS, RULES AND REQUIREMENTS.
3. MINIMUM WIRE SIZE SHALL BE No. 12 AWG EXCLUDING CONTROL WIRE. UNLESS OTHERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER WITH THW INSULATION FOR SIZE No. 10 AND SMALLER. CONDUCTORS LARGER THAN No. 10 SHALL HAVE THW INSULATION. ALL THOSE No. 8 AND LARGER SHALL BE STRANDED.
4. ALL RACEWAYS AND PIPES PLACED IN OR THROUGH ANDY CONCRETE SLAB, SHALL BE SPACED A MINIMUM OF 3 DIAMETERS OF THE LARGEST CONDUIT OR PIP OF ANY OTHER SERVICES
5. OUTLET BOXES SHALL BE: PRESSED STEEL IN DRY LOCATIONS, OR CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS.
6. DISCONNECT SWITCHES SHALL BE HORSEPOWER RATED, HEAVY DUTY IN NEMA 1 OR 3R ENCLOSURE AS REQUIRED BY EXPOSURE.
7. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM, AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
8. THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY THE LATEST EDITION OF THE N.E.C.
9. LOAD DATA IS BASED ON INFORMATION GIVEN TO THE ENGINEER AT TIME OF DESIGN. VERIFY ALL EQUIPMENT AND PANEL SIZE BEFORE ORDERING.
10. ALL MATERIALS SHALL BE NEW AND BEAR U.L. AND UNION LABELS WHERE APPLICABLE.
11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE FOR ACCEPTANCE BY ENG/ARCH.
12. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE.
13. CONTRACTORS SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DADE OF ACCEPTANCE.
14. CONTRACTOR SHALL PAY FOR ALL PERMIT FEES, INSPECTIONS AND TESTINGS.
15. FURNISH AND INSTALL DISCONNECT SWITCHES, WIRING AND CONNECTION OF A/C SYSTEM AS SHOWN IN PLANS. CONTROLS ARE TO BE SUPPLIED BY A/C CONTRACTOR AND CONNECTED BY ELECTRICAL CONTRACTOR.



ELECTRICAL SERVICE - RISER DIAGRAM

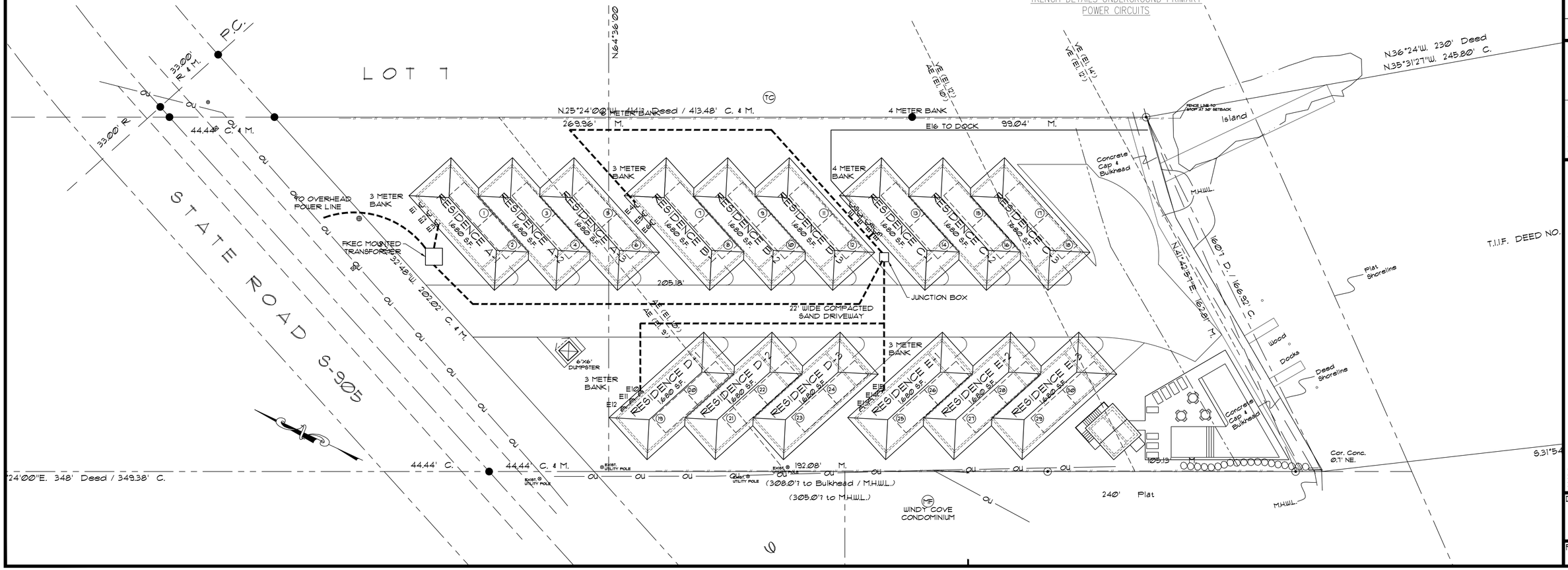
ELECTRICAL SCHEDULE					
UNIT #	WIRE	CONDUIT	V-DROP	VD-%	AMPS
E-1	3# 3/0 THWN (CU)	2"	2.1V	1.1%	200A
E-2	3# 3/0 THWN (CU)	2"	1.5V	0.6%	200A
E-3	3# 3/0 THWN (CU)	2"	0.9V	0.4%	200A
E-4	3# 3/0 THWN (CU)	2"	0.9V	0.4%	200A
E-5	3# 3/0 THWN (CU)	2"	1.5V	0.6%	200A
E-6	3# 3/0 THWN (CU)	2"	2.1V	1.1%	200A
E-7	3# 3/0 THWN (CU)	2"	0.7V	0.3%	200A
E-8	3# 3/0 THWN (CU)	2"	0.6V	0.3%	200A
E-9	3# 3/0 THWN (CU)	2"	2.2V	0.9%	200A
E-10	3# 3/0 THWN (CU)	2"	0.6V	0.3%	200A
E-11	3# 3/0 THWN (CU)	2"	2.4V	1.0%	200A
E-12	3# 3/0 THWN (CU)	2"	3.2V	1.3%	200A
E-13	3# 3/0 THWN (CU)	2"	0.6V	0.3%	200A
E-14	3# 3/0 THWN (CU)	2"	2.4V	1.0%	200A
E-15	3# 3/0 THWN (CU)	2"	3.2V	1.3%	200A
E-16	3# 3/0 THWN (CU)	2"	4.4V	1.8%	200A
TOTAL POWER SUPPLY THIS SITE:					3,400A



NOTES:

1. ONLY ONE PRIMARY PHASE CONDUCTOR WITH A FULL CONCENTRIC NEUTRAL AND MEETING F.K.E.C. SPECIFICATIONS TO BE INSTALLED IN A SINGLE DUCT.
2. ONLY ONE CIRCUIT PER TRENCH, UNLESS THERE IS A 12 INCH SEPARATION BETWEEN CIRCUIT DUCTS.
3. NO WATER OR SEWER LINES PERMITED IN TRENCH WITH POWER CIRCUITS.

TRENCH DETAILS UNDERGROUND PRIMARY POWER CIRCUITS



KEYS ENGINEERING
DARYLE L. OSBORN
P.E. No. FL 27428
91700 SUITE "I" OVERSEAS HIGHWAY
TAVERNIER, FLORIDA 33070 - PH. (305) 852-0162

No.	REVISION	DATE
0	FOR SUBMITTAL	3/1/2016
1	REVISION	11/26/2021
2	VILLAGE COMMENTS	1/3/2022

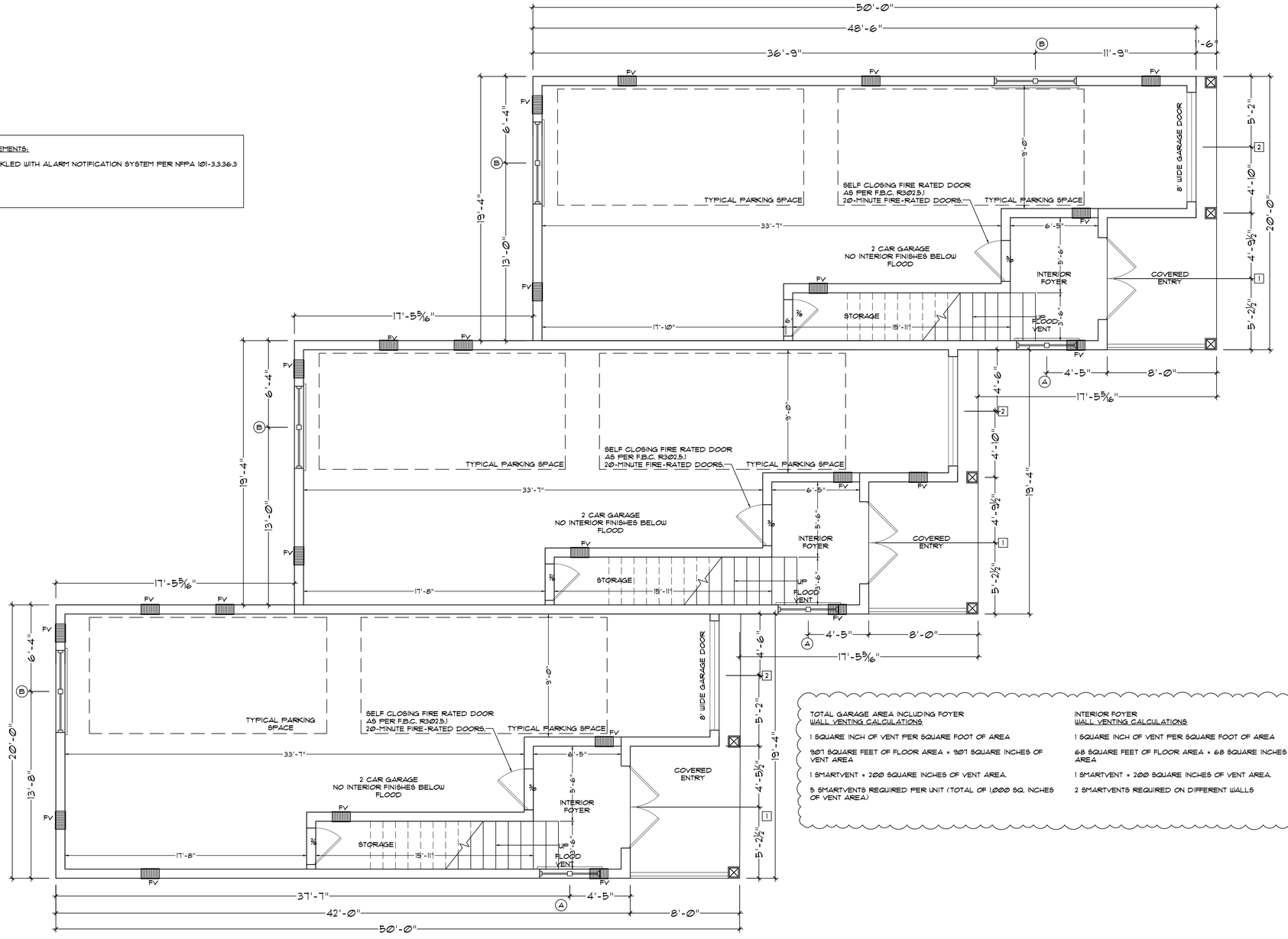
SCALE: 1" = 20'-0"
DATE: 3/1/2016
DWG BY: D.G.O.
REVISED:

TITLE: ELECTRICAL SERVICE PLAN
PROJECT: PEACEFUL PALMS
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: ES-1
PROJECT No: D-16-047

FIRE PREVENTION REQUIREMENTS:

THIS UNIT SHALL BE SPRINKLED WITH ALARM NOTIFICATION SYSTEM PER NFPA 101-33.3.6.3 AND 302.4.6.



TOTAL GARAGE AREA INCLUDING FOYER WALL VENTING CALCULATIONS	INTERIOR FOYER WALL VENTING CALCULATIONS
1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA	1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA
907 SQUARE FEET OF FLOOR AREA = 907 SQUARE INCHES OF VENT AREA	68 SQUARE FEET OF FLOOR AREA = 68 SQUARE INCHES OF VENT AREA
1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.	1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.
5 SMARTVENTS REQUIRED PER UNIT (TOTAL OF 1000 SQ. INCHES OF VENT AREA)	2 SMARTVENTS REQUIRED ON DIFFERENT WALLS

GROUND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	REVISION	11/28/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	2/2/2022

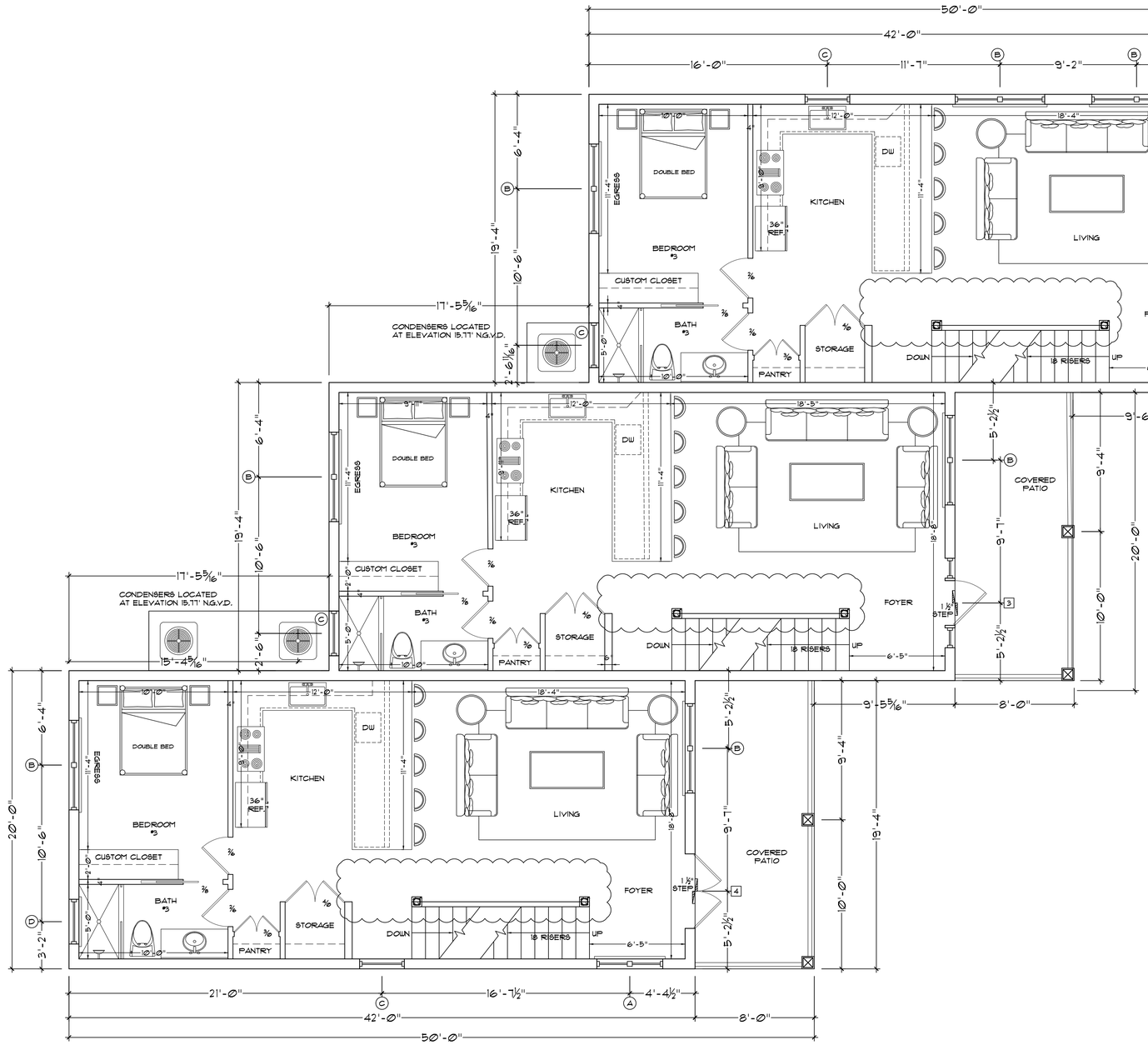
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-1

PROJECT No: D-16-047



SECOND FLOOR

SCALE @ ¼" = 1'-Ø"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	1/9/2022
3	VILLAGE COMMENT	2/2/2022

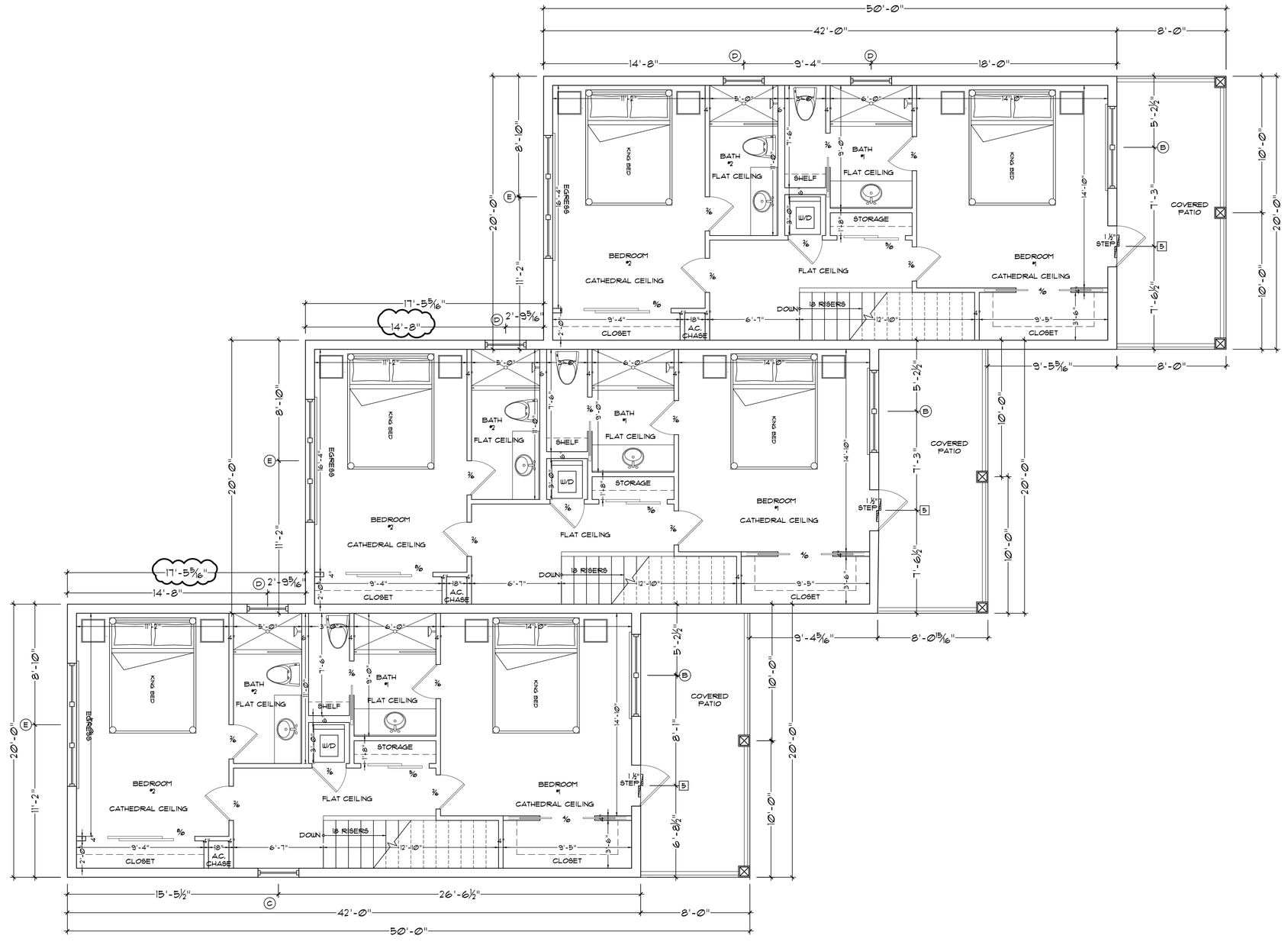
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-2

PROJECT No: D-16-047



THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-3

PROJECT No: D-16-047



FRONT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019
4	REVISION	11/28/2021

SCALE: AS SHOWN
DATE:
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX A - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-4

PROJECT No: D-16-047



REAR ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

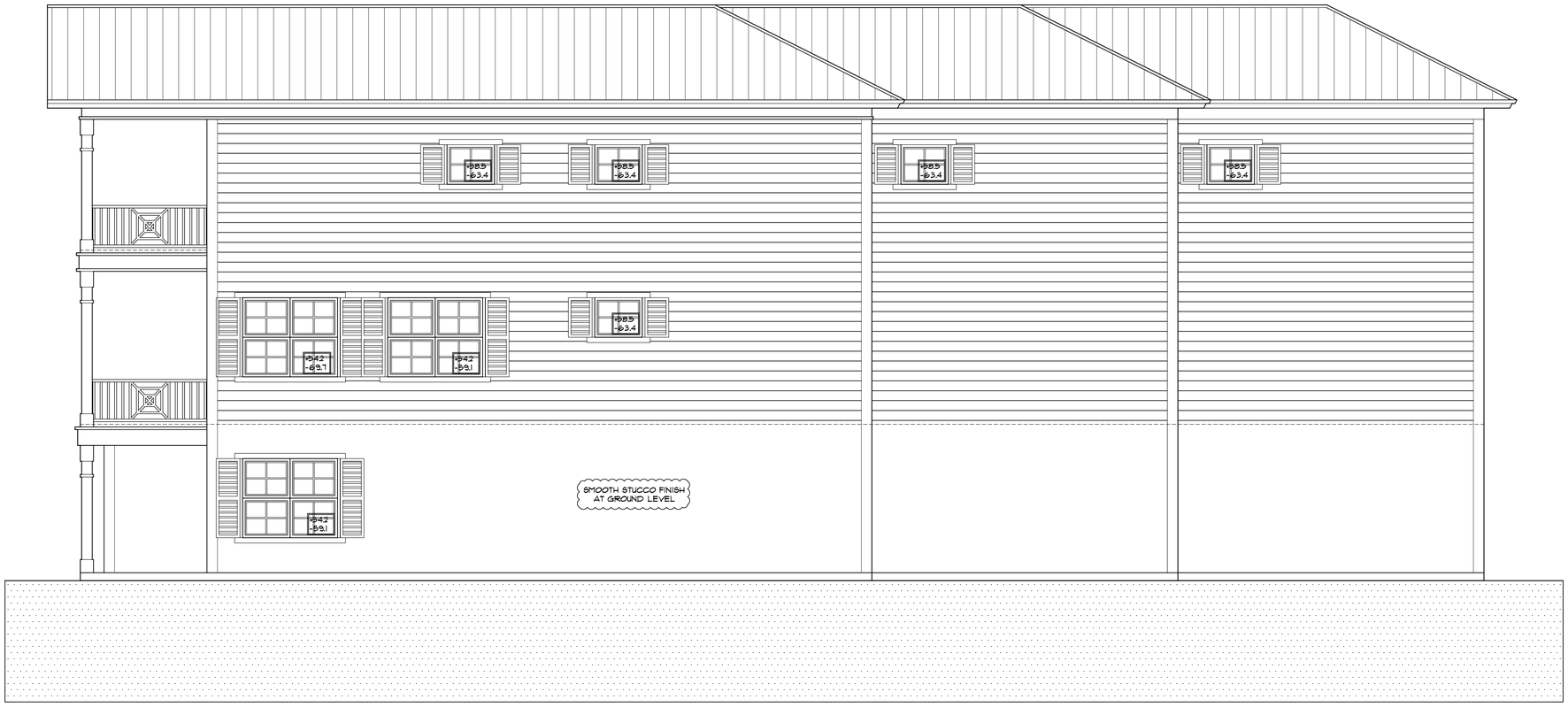
SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-5

PROJECT No: D-16-047



RIGHT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-6

PROJECT No: D-16-047



LEFT ELEVATIONS

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-7

PROJECT No: D-16-047

DOOR SCHEDULE

MARK	DOOR SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
1	74 1/2"	80 3/4"	PGT WINGUARD FD1Ø1H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
2	96"	84"	CLOPAY OVERHEAD DOOR	3	HURRICANE RATED
3	38 9/16"	96"	PGT WINGUARD FD1Ø1H FRENCH DOOR	1	FULL VIEW, WHITE ALUMINUM, RHR SWING, 1'-6" SIDELIGHT ON EACH SIDE
4	6Ø"	96"	PGT WINGUARD FD1Ø1H FRENCH DOOR	2	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
5	38 9/16"	8Ø 3/4"	PGT WINGUARD FD1Ø1H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, LHR SWING

WINDOW SCHEDULE

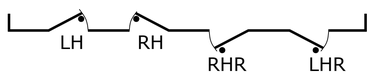
MARK	WINDOW SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
A	PAIR 27 1/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	4	MODEL H34EH
B	PAIR 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	15	MODEL 24EH
C	37 3/4"	38 3/8"	PGT WINGUARD SINGLE HUNG SH1ØØ	5	MODEL 23
D	37 3/4"	5Ø 5/8"	PGT WINGUARD SINGLE HUNG SH1ØØ	5	MODEL 24, FROSTED
E	TRIPLE 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	3	MODEL 24EH

EGRESS WINDOW NOTE

AS DESCRIBED IN FLORIDA BUILDING CODE: ALL EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (GRADE LEVEL 5.Ø SQ FT), HAVING A MINIMUM CLEAR OPENING HEIGHT OF 24 INCHES AND A NET CLEAR WIDTH OF 2Ø INCHES. EGRESS WINDOWS SHALL HAVE THE BOTTOM OF THE NET CLEAR OPENING NO GREATER THAN 44 INCHES AS MEASURED FROM THE FLOOR.

SWING DETERMINATION/DOOR HANDING

INSIDE ROOM, OR SECURE SIDE.



OUTSIDE, CORRIDOR,
OR NON-SECURE SIDE.

• = KEY SIDE

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	1/9/2022

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: WINDOWS AND DOORS

PROJECT: BG1SLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

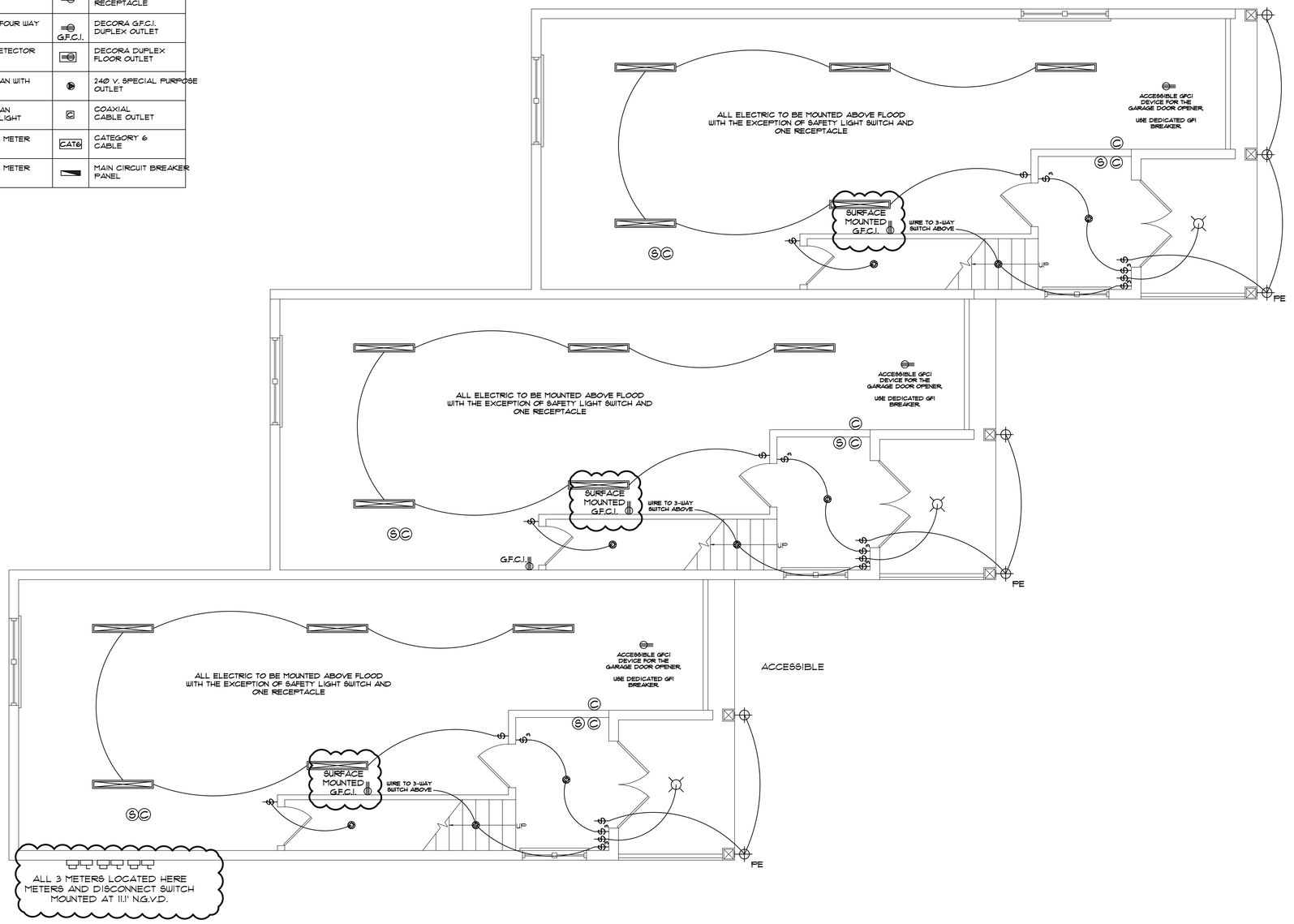
DRAWING No: A-8

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GD	GARAGE DOOR OPENER	$\$^3$	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$\$^4$	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	48" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

NOTE:

1. ALL OUTLETS AND SWITCHES TO BE MOUNTED ABOVE BASE FLOOD (AE-10) - ELEVATION VARIES PER UNIT LOCATION, COORDINATE WITH SURVEYOR PRIOR TO INSTALLATION OF ANY GROUND FLOOR ELECTRICAL



GROUND FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	12/17/2021
5	VILLAGE COMMENT	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - ELECT PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

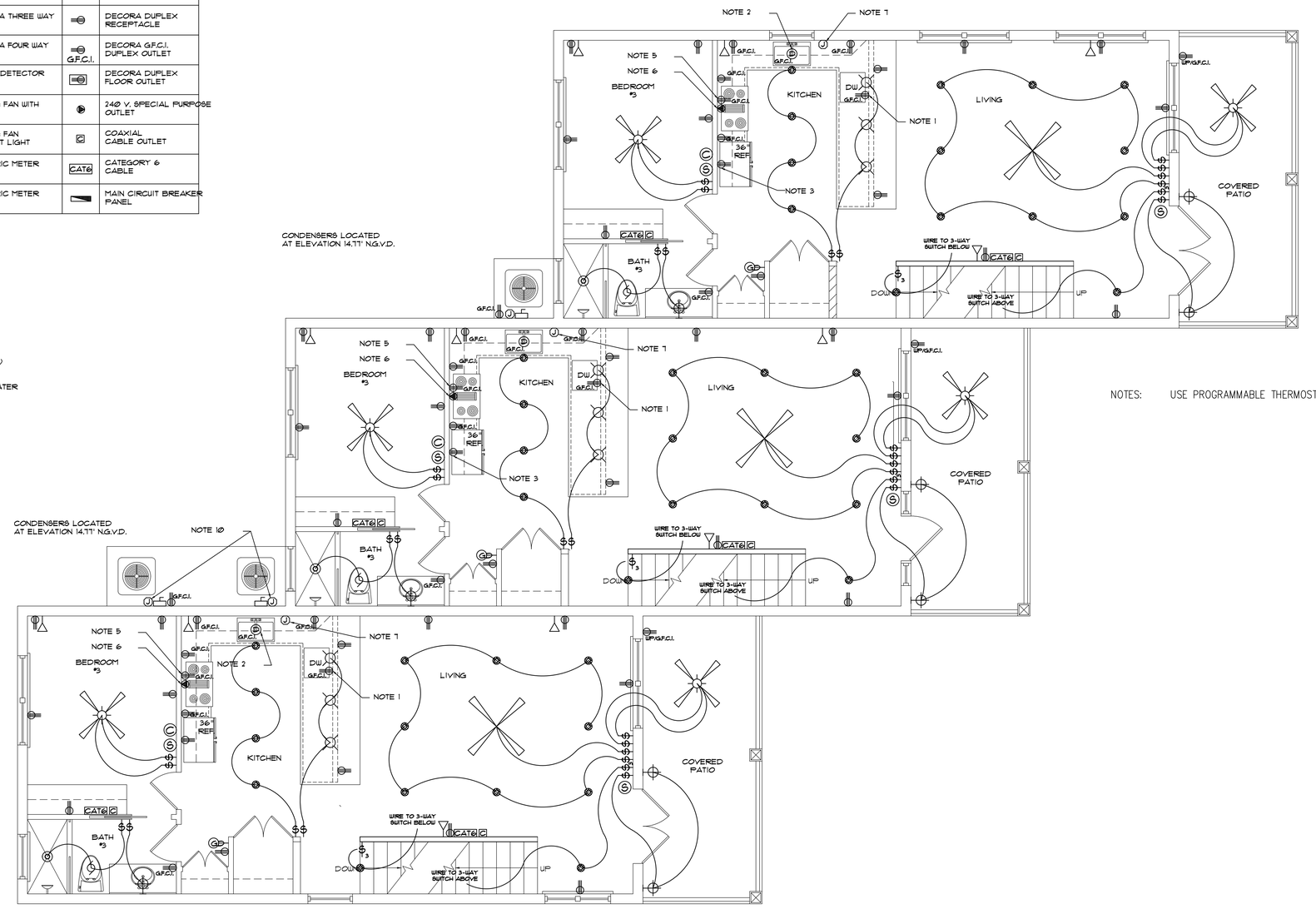
DRAWING No: E - 1

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING		A/C THERMOSTAT CONTROL	3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT	CAT6	COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH AND GFCI PROTECTION
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER



NOTES: USE PROGRAMMABLE THERMOSTAT.

SECOND FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	12/17/2021
5	VILLAGE COMMENT	1/9/2022
6	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - ELECT PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

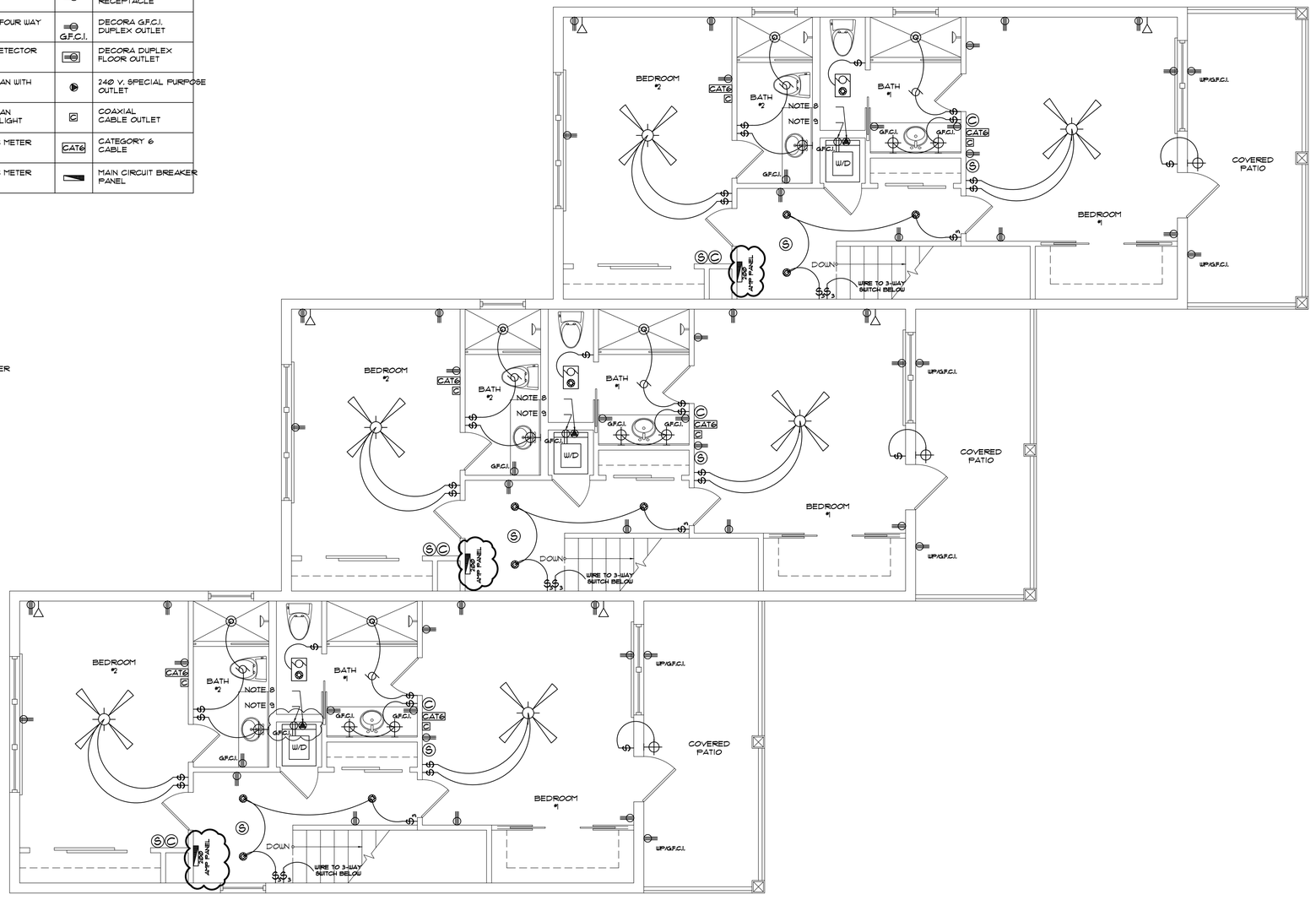
DRAWING No: E-2

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GD	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	LED. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER



THIRD FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
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1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

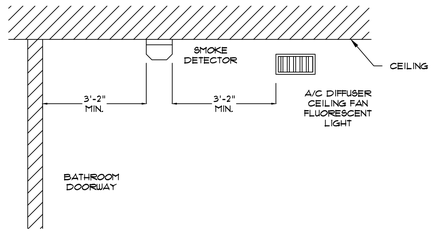
TITLE: TRIPLEX A - ELECT PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

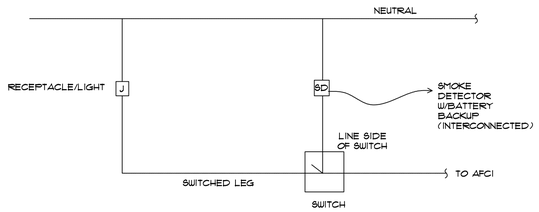
DRAWING No: E - 3

PROJECT No: D-16-047

ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE N.E.C. AND LOCAL BUILDING CODES HAVING JURISDICTION. ALL MATERIALS SHALL BEAR UNDERWRITERS LABORATORY LABEL OR BE U.L. LISTED
2. WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICES.
3. ALL EXCAVATING AND BACKFILLING REQUIRED FOR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR
4. CONNECTIONS TO EQUIPMENT, ELECTRICAL SUBCONTRACTOR SHALL VERIFY NAMEPLATE DATA OF A/C EQUIPMENT, WATER HEATERS AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVER-CURRENT PROTECTION PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING. THE ELECTRICAL SUBCONTRACTOR SHALL MAKE THE ELECTRICAL CONNECTION TO ALL EQUIPMENT REQUIRING CURRENT, ALL CONTROL WIRING SHALL BE CARRIED OUT BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE MECHANICAL SUBCONTRACTORS
5. OVERHEAD ELECTRIC CONDUCTOR CLEARANCES, HORIZONTAL OR VERTICAL SHALL BE MAINTAINED
6. ALL WIRING CONDUCTORS SHALL BE COPPER IN E.N.T. CONDUIT
7. BATHROOM, GARAGE, AND EXTERIOR RECEPTACLES SHALL BE EQUIPPED WITH GROUND FAULT INTERRUPTERS
8. ELECTRICAL INSTALLATION DESIGN IS IN COMPLIANCE AS SET FORTH BY THE STATE OF FLORIDA STATUTES MODEL ENERGY EFFICIENCY CODES
9. SMOKE DETECTORS SHALL BE HARD WIRED (110 VOLT) TO A NON-SWITCHABLE KITCHEN OR BATHROOM LIGHTING CIRCUIT AND SHALL NOT BE CONNECTED ONTO THE LOAD SIDE OF A GROUND FAULT INTERRUPTER
10. ALL PANELS SHALL BE SQUARE D OR EQUAL
11. FURNISH AND INSTALL UNDERGROUND RACEWAYS FOR POWER COMPANY SERVICE AND TELEPHONE COMPANY SERVICE AS PER UTILITY COMPANY SPECIFICATIONS, AND COORDINATE THE EXACT ROUTING OF THESE RACEWAYS WITH THE UTILITY
12. VERIFY EXACT LOCATION OF ELECTRICAL OUTLETS AND LIGHTS PRIOR TO EXECUTION OF ROUGH-IN WORK
13. ALL RACEWAYS AND NON-CURRENT CARRY METAL ENCLOSURES SHALL BE MECHANICALLY AND ELECTRICALLY GROUNDED
14. ALL RACEWAYS AND OUTLETS IN FINISHED AREAS SHALL BE MOUNTED AND SUPPORTED
15. ALL OUTLETS IN FINISHED AREAS SHALL BE MOUNTED FLUSH WITH FINISHED WALLS
16. ALL WORK SHALL BE RIGIDLY MOUNTED AND SUPPORTED
17. ELECTRICAL OUTLETS (RECEPTACLES AND LIGHTING) BELOW THE BASE FLOOD ELEVATION SHALL BE INSTALLED AT THE HIGHEST PERMITTED ELEVATION AND SHALL BE INSTALLED ON SEPARATE CIRCUIT FROM THOSE IN HABITABLE AREAS
18. NO APPLIANCE OUTLETS SHALL BE INSTALLED BELOW THE BASE FLOOD ELEVATION
19. A/C COMPRESSORS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
20. MAIN CIRCUIT BREAKER PANELS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
21. ALL WATER HEATERS SHALL BE MECHANICALLY GROUNDED





SMOKE DETECTOR DETAIL
N.T.S.

NOTE: PROVIDE ARC FAULT PROTECTION FOR ALL OUTLETS PER N.E.C. 210-12

WHERE 120 V. SMOKE DETECTORS ARE INSTALLED IN RESIDENTIAL OCCUPANCIES THEY SHALL BE INSTALLED AHEAD OF ALL SWITCHES AND SHALL BE CONNECTED TO BEDROOM AFCI CIRCUITS. SMOKE DETECTORS SHALL COMPLY WITH THE REQUIREMENTS OF THE F.B.C. 2011 ED

LOAD CALCULATION:

1,680 S.F. OF LIVING AREA x .003	= 5.04
PANEL LOAD	= 18.7
SUBTOTAL	= 23.74
FIRST 10 KW @ 100%	= 10.0
13.74 KW @ 40%	= 5.5
A.C. LOAD	= 7.5
TOTAL DEMAND FACTOR	= 23
23 KW / 230 VOLTS	= 100 AMPS

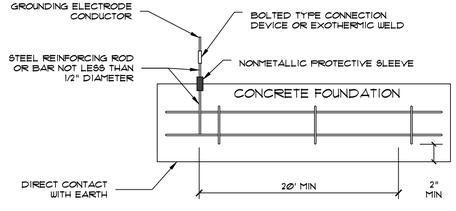
** INSTALL 200 AMP ELECTRICAL PANEL **
** ELECTRICAL LOAD FOR EACH UNIT IS THE SAME **

	MAIN PANEL				120/240V-1PH-3W		200A-MLO				
	CKT	DESCRIPTION	C.B.	POLE	WIRE	LOAD	LOAD	WIRE	POLE	C.B.	DESCRIPTION	CKT	
(a)	1 3	A.C. HANDLER	40	2	#8 THIN - 1/2" CO	5.8	9.6	#6 THIN - 3/4" CO	2	60	A.C. CONDENSER	2 4	(c)
(a)	5 7	DRYER	40	2	#8 THIN - 1/2" CO	5.2	5.5	#6 THIN - 3/4" CO	2	60	OVEN	6 8	(a)
(c)	9 11	WATER HEATER	40	2	#8 THIN - 1/2" CO	8	1.5	#12 THIN - 1/2" CO	1	20	WASHER	10	(c)
							1.5	#12 THIN - 1/2" CO	1	20	REFRIGERATOR	12	(c)
(c)	13	GARAGE	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	GROUND EXTERIOR	14	(c)
(c)	15	GARAGE DOOR	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	SECOND EXTERIOR	16	(c)
(a)	17	M.B. RECEPTACLE	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	DISHWASHER	18	(c)
(a)	19	M.B. LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	MICROWAVE	20	(a)
(a)	21	B.#2 RECEPTACLE	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	KITCHEN G.F.C.I.	22	(c)
(a)	23	B.#2 LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	KITCHEN RECEPT.	24	(a)
(a)	25	B.#3 RECEPTACLE	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	KITCHEN LIGHTS	26	(a)
(a)	27	B.#3 LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	LIVING RECEPT.	28	(a)
(c)	29	BATH #1	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	LIVING LIGHTS	30	(a)
(c)	31	BATH #2	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	THIRD EXTERIOR	32	(c)
(c)	33	BATH #3	15	1	#12 THIN - 1/2" CO	1.5						34	
	35											36	
	37											38	
	39											40	
	41											42	
TOTAL						35.5	33.1					TOTAL	

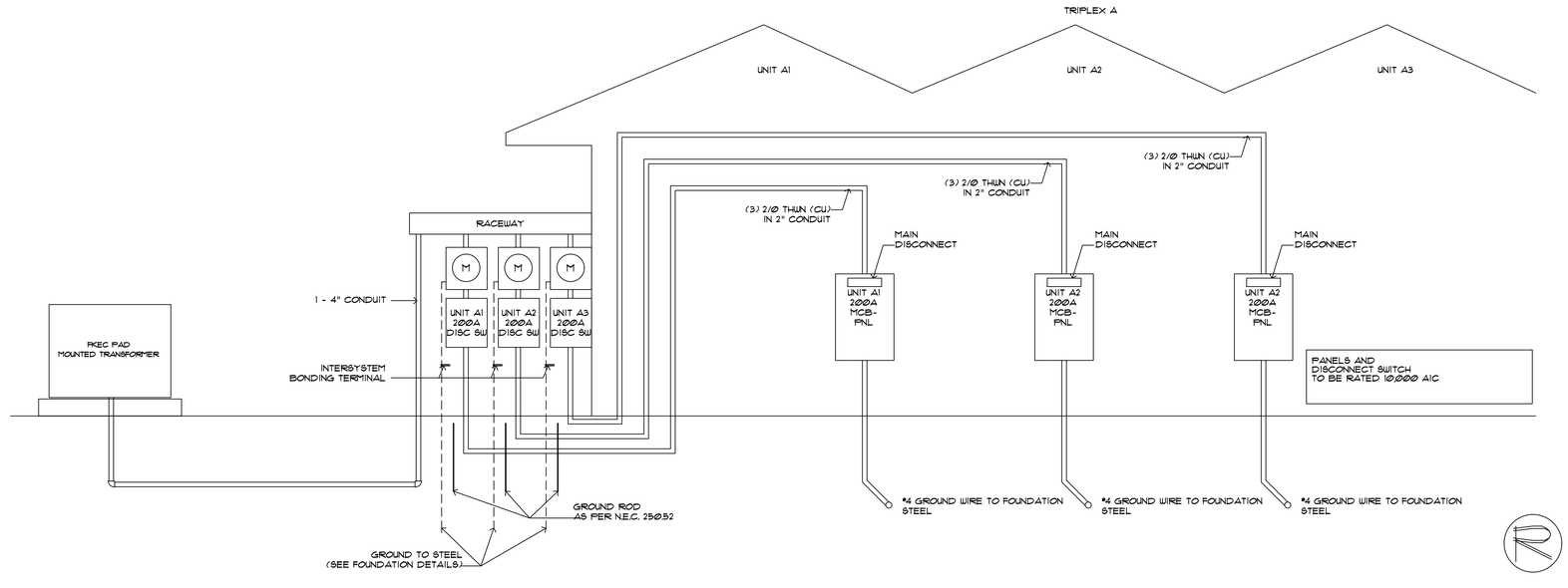
(a) AFCI C/B
(b) ON TIMER
(c) GFCI

NOTES: ALL BRANCH CIRCUITS SHALL COMPLY WITH NEC 2014 ARTICLE 210.12
PART OF 3W PER SF LOAD CALC
PROVIDE ARC FAULT PROTECTION FOR ALL RECEPTACLES

DEFINITION -NFPA 70 (2017 Edition)
(c) CONCRETE ENCASED ELECTRODE. AN ELECTRODE ENCASED BY AT LEAST 2" (50.8mm) OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET (6.1m) OF ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2" (12.7mm) DIAMETER, OR CONSISTING OF AT LEAST 20 FEET (6.1M) OF BARE COPPER CONDUCTOR NOT SMALLER THAN No.4.



NOTE: PER DETAIL THAT CONCRETE ENCASED GROUNDING ELECTRODE EXTENDS OUT OF THE FOOTER FOR CONNECTION TO GROUNDING ELECTRODE CONDUCTOR.



ELECTRICAL RISER DIAGRAM
N.T.S.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
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SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX A - ELECT NOTES
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

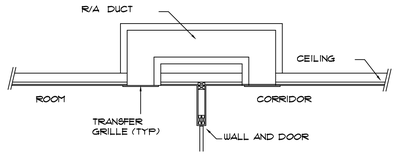
DRAWING No: E-4

PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS, TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVATA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT, EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M1403.1.1. AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

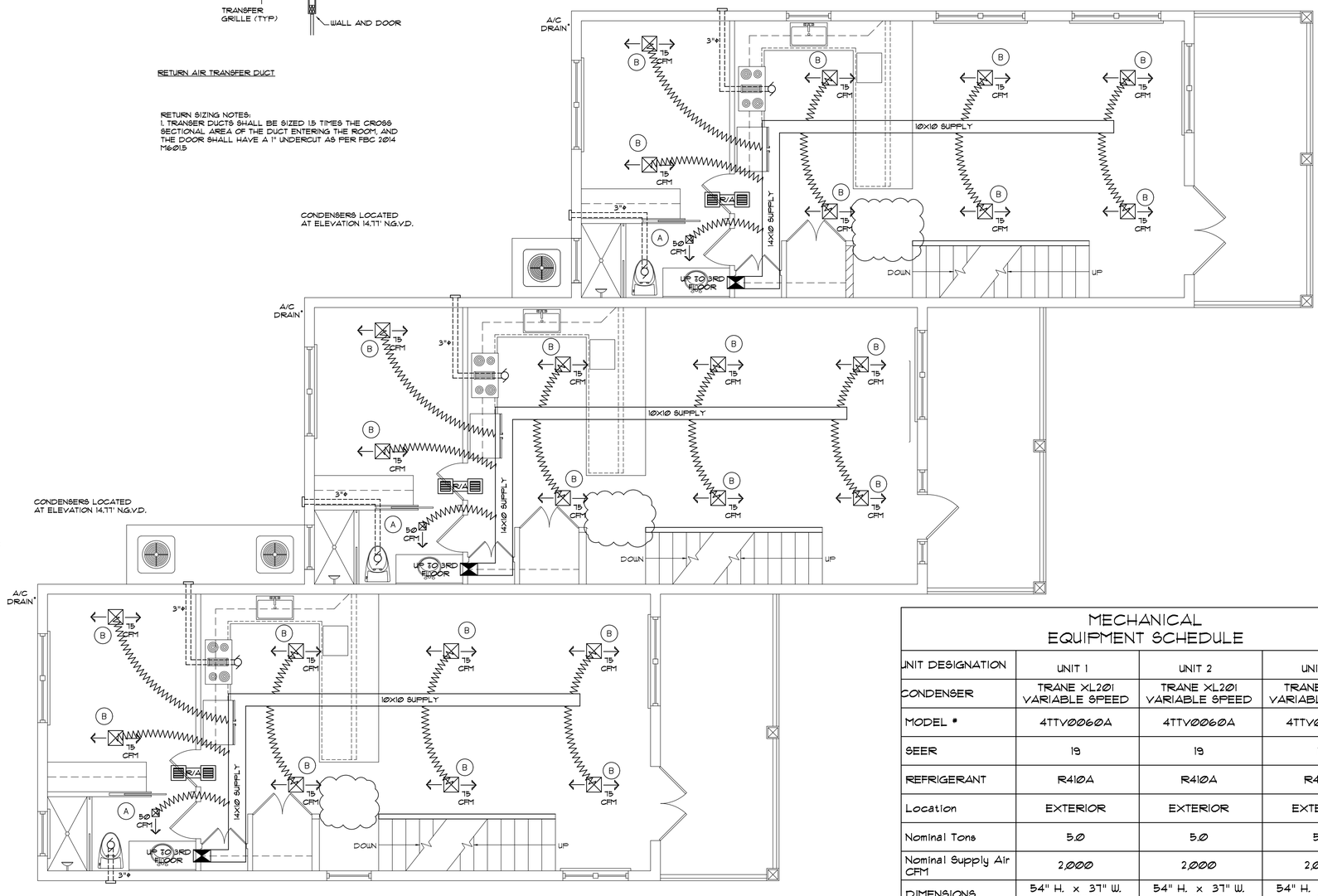


RETURN AIR TRANSFER DUCT

RETURN SIZING NOTES:
1. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M1601.5

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT,
EXHAUSTED DIRECTLY OUTDOORS
OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2
MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

NOTES: USE PROGRAMMABLE THERMOSTAT.
CONTRACTOR SHALL BE VERIFY THE DISTANCE BETWEEN THE INDOOR AND OUTDOOR UNITS AND TO CHECK THE SIZES OF THE REFRIGERANT LINES WITH MANUFACTURER



BALANCED RETURN AIR - FBC M1601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.
2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M1601.5
3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

NOTE:

ALL DUCTS SHALL BE SUPPORTED
WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

NOTE:

RETURN GRILLES BY TITUS ALL RETURN GRILLES ARE 12"x 12"

SECOND FLOOR MECHANICAL PLAN

SCALE @ ¼" = 1'-0"

MECHANICAL EQUIPMENT SCHEDULE

UNIT DESIGNATION	UNIT 1	UNIT 2	UNIT 3
CONDENSER	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED
MODEL #	4TTV0060A	4TTV0060A	4TTV0060A
SEER	19	19	19
REFRIGERANT	R410A	R410A	R410A
Location	EXTERIOR	EXTERIOR	EXTERIOR
Nominal Tons	5.0	5.0	5.0
Nominal Supply Air CFM	2,000	2,000	2,000
DIMENSIONS	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.
AIR HANDLER	TRANE M SERIES	TRANE M SERIES	TRANE M SERIES
MODEL #	TEM40C60	TEM40C60	TEM40C60
NOMINAL COOLING CAPACITY	60,000	60,000	60,000
DIMENSIONS	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.

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91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

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4	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - MECH PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-1

PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS. TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVUTA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M601.1.1: AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

BALANCED RETURN AIR - FBC M601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.

2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

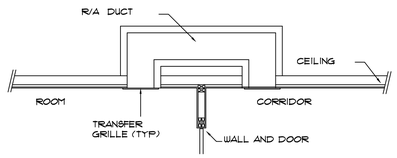
NOTE:

ALL DUCTS SHALL BE SUPPORTED
WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

NOTE:

RETURN GRILLES BY TITUS ALL RETURN GRILLES ARE 12"x 12"



RETURN AIR TRANSFER DUCT

DRYER DUCT.
EXHAUSTED DIRECTLY OUTDOORS, OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2 (TYP)

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT.
EXHAUSTED DIRECTLY OUTDOORS
OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2
MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3

CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.

RETURN SIZING NOTES:
1. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

THIRD FLOOR MECHANICAL PLAN

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

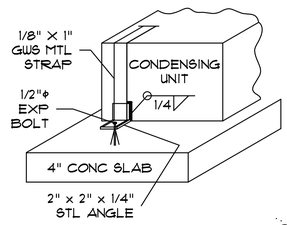
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - MECH PLANS

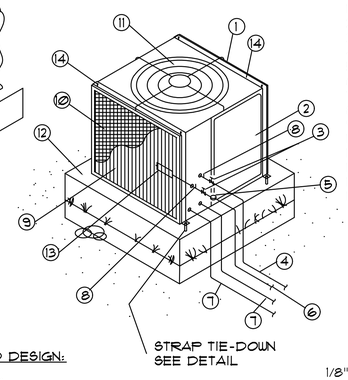
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-2

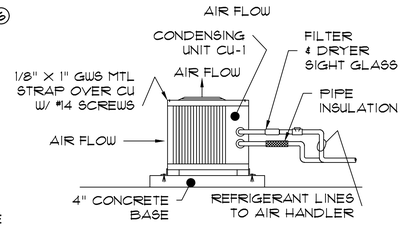
PROJECT No: D-16-047



TIE-DOWN



1. CONDENSING UNIT
2. COMPRESSOR ACCESS PANEL
3. BACK - SEATED REFRIGERANT VALVE
4. REFRIGERANT SUCTION LINE WITH INSULATION
5. SIGHT GLASS WITH MOISTURE INDICATOR
6. REFRIGERANT LIQUID LINE
7. CONDUIT - POWER AND CONTROL.
8. REFRIGERANT GAUGE CONNECTION
9. CONDENSER COIL
10. COIL GUARD
11. FAN GUARD
12. CONCRETE PAD IF REQUIRED
13. REFRIGERANT SUCTION LINE FLEX-CONNECTOR
14. 1/8" X 1" GALVANIZED METAL STRAP OVER CONDENSER SHROUD/FAN COWLING ATTACHED TO CONCRETE BASE W/MIN 1/2" ANCHOR/EXPANSION BOLTS 3" LONG ALL FOUR SIDES, W/MIN (4) #14 SCREWS W/GASKETED WASHERS TO TOP OF CONDENSER SHROUD/FAN COWLING THROUGH STRAPS.



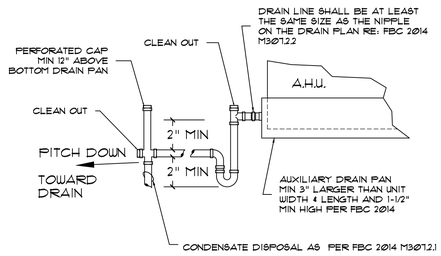
TYP ELEVATION

STRAPS OVER COWLING/SHROUD DESIGN:
UPLIFT: TA 4'x3' = 12 SF
UPLIFT: 57.7 PSF X 12 = 692.4 LBS
USE 1/8" GWS MTL STRAP 1" WIDE OVER CONDENSING UNIT AND ATTACH TO SLAB W/ (4) ANCHORS:
ANCHORS 1/2" = 4/692.4 = 173.1 LBS EACH
ANCHOR PULL-OUT 3" = 1,180 LBS fE O.K.
ALTERNATIVE:
USE (4) 3/8" X 1" "TAPPER" TAPCONS INTO CONC SLAB: 880 LBS EACH fE 173.1 = O.K.

THE STRAPS ARE ALSO ADEQUATE FOR RESISTING OF OVERTURNING OF THE A/C CONDENSER WHEN USED WITH STRAPS AND ANGLES ATTACHMENTS, FOR SIDE WIND LOADS OF -37.9 PSF.

CONDENSING UNIT TO BE ATTACHED TO SLAB WITH 1/4"x2"x2" ANGLES EACH CORNER AS INDICATED IN DETAILS (STRAPS TO BE PROVIDED IN ADDITION TO ANGLES).

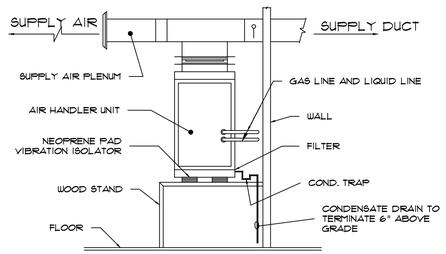
CONDENSING UNIT DETAILS



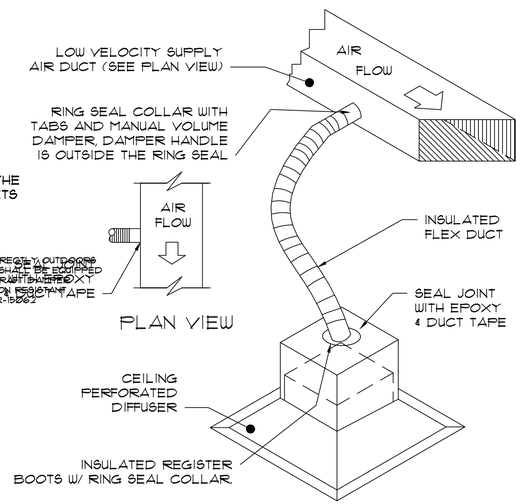
DRAIN TRAP DETAIL

NOTE:
MECHANICAL CONTRACTOR WILL COORDINATE WITH PLUMBING CONTRACTOR CONDENSATE SYSTEM INSTALLATION (TO BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR)
ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014

NOTES: A/C CONDENSING UNIT TO BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014 . THE STRAP TIE-DOWNS AS INDICATED HEREIN IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE CODE AND MEETS THE WIND LOAD REQUIREMENTS IN ACCORDANCE WITH ASCE 7-10.



AHU MOUNTING DETAIL



FLEXIBLE DUCT CONNECTION DETAIL

AIR CONDITIONING GENERAL NOTES

1. WORK INCLUDED: PROVIDING HEAT, VENTILATION, AND AIR CONDITIONING SYSTEMS WHERE SHOWN ON THE DRAWING, AS SPECIFIED HEREIN, AND AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION INCLUDING, BUT NOT NECESSARILY LIMITED TO
   - AIR CONDITIONING SUPPLY AND RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, AND REGISTERS.
   - AIR CONDITIONING UNITS, PIPING AND COMPONENTS, OPERATING AND SAFETY CONTROLS, BLOWERS, MOTORS, FILTERS, AND RELATED ITEM.
   - EXHAUST SYSTEMS INCLUDING TOILET FANS, MOTORS, DUCTWORK, GRILLES, REGISTERS, CONTROLS, AND REGISTERS.
   - TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING.
   - THERMAL INSULATION OF DUCTS AND PIPING.

2. DUCTWORK IN ATTICS SPACE AND ROOF WITH LESS THAN R-12 INSULATION SHALL BE 1-1/2" THICK FIBERGLASS WITH VAPOR BARRIER. DUCT WORK BETWEEN FLOORS, ENCLOSED ATTACHED GARAGES, UNCONDITIONED BASEMENT, UNCONDITIONED INTERIOR SPACES, AND ROOF WITH MIN R=12 INSULATION SHALL BE R-4.3 KNAUF AIR DUCT FIBERGLASS TYPE E1800 WITH VAPOR BARRIER. UNLESS OTHERWISE SPECIFIED DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ACCORDING TO "ASHRAE" AND "NAIMA" STANDARDS

   ALL DUCTWORK SHALL BE 1 ½" FIBERGLASS AND INSTALLED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND ACCORDING TO ASHRAE AND SMACNA STANDARDS, AND FLORIDA BUILDING CODE 2014 ENERGY FOR BUILDING CONSTRUCTION. DUCT DIMENSIONS ARE IN INCHES AND CORRESPOND TO INSIDE DIMENSIONS, WITH x HEIGHT. DUCT SYSTEM SHALL COMPLY WITH "NFPA" STANDARD No. 90A AND/FR 90B DUCTWORK AND COMPONENTS S SHALL BE CLASS 1 MATERIALS IN ACCORDANCE WITH U.L. 181 TESTS. FIBERGLASS DUCT SYSTEM STRAIGHT SECTIONS AND FITTINGS SHALL BE REINFORCED BY EITHER OR BOTH OF THE FOLLOWING METHODS: A) TIE ROD REINFORCEMENT AND OR B) CHANNEL REINFORCEMENT. REFER TO THE FIBROUS GLASS DUCT CONSTRUCTION STANDARDS AND MANUFACTURER RECOMMENDATION. LONGITUDINAL SEAMS AND TRANSVERSE JOINTS CLOSURES SHALL COMPLY WITH UL 181 A/P (PRESSURE SENSITIVE ALUMINUM FOIL TAPE) OR 181 A/H (HEAT SELLABLE ALUMINUM FOIL TAPE OR MANUFACTURER'S RECOMMENDATIONS FOR THE USE OF GLASS FABRIC AND MASTIC. DUCT SUPPORT SHALL BE PLACED SO AS TO PROPERLY SUPPORT ALL FITTINGS AND ACCESSORIES WITHOUT PLACING THE TAPED JOINTS UNDER STRESS.

3. COORDINATE LOCATIONS, SIZES AND OPENINGS WITH OTHER TRADES ON THE JOB. A/C CONTRACTOR SHALL PROVIDE THE COMPLETE DUCT SYSTEM WITH TURNING VANES AT ALL ELBOWS, AND INSTALLED SPLINTERS AND DAMPERS AS REQUIRED OR SHOWN ON THE DRAWING.

4. DIFFUSERS SHALL BE SELECTED, LOCATED AND BALANCED IN ORDER THAT THEY DELIVER THE REQUIRED CFM RELATIVE HUMIDITY TO THE ENTIRE ROOM EVENLY AND DRAFT FREE TO THE FOLLOWING DESIGN CONDITIONS. 50% TO 60% INSIDE OUTSIDE COOLING - 78 dB 91dB -79 wB HEATING - 72 dB

5. ALL FAN, MOTORS, COMPRESSORS, ETC. SHALL BE ISOLATED, AS REQUIRED TO OPERATE QUIETLY SO THAT NO OBJECTIONABLE SOUND WILL BE HEARD IN THE HABITABLE SPACES DUE TO AIR VELOCITY, MOTOR HUM, VIBRATION OR MECHANICAL MOVEMENT.

6. A/C SYSTEM SHALL HAVE 1" AIR FILTERS AS SPECIFIED LOCATION AND AS REQUIRED FOR EASY ACCESSIBILITY.

7. A/C SYSTEM SHALL BE CONTROLLED BY A THERMOSTAT MOUNTED 5' ABOVE FINISH FLOOR.

8. ALL GRILLES AND DIFFUSERS TO BE ALUMINUM CONSTRUCTION. ALL DIFFUSERS SHALL HAVE HIDDEN OPPOSED BLADE DAMPERS. PROVIDE GASKETS ON ALL GRILLES AND DIFFUSERS.

9. ALL REFRIGERANT PIPING SHALL BE COPPER COLD DRAWN TYPE -L-ACR, DEHYDRATED AND SEALED. ALL FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH HIGH TEMPERATURE BRAZING ALLOY OF NOT LESS THAN 5% SILVER. PIPING INSULATION NOT LESS THAN 3/4" THICK "ARMAFLEX". LIQUID AND SUCTION LINES SHALL BE SIZED ACCORDING TO EQUIPMENT MANUFACTURER'S RECOMMENDATION FOR EQUIVALENT LENGTH OF PIPING RUN FOR CONNECTED TONNAGE. ALL PIPING ACCESSORIES SHALL BE CONSTRUCTED AS SUGGESTED BY EQUIPMENT MANUFACTURER. PROVIDE FILTER/DRYER AND SIGHT GLASS ON LIQUID LINE. REFRIGERANT PIPING SYSTEM SHALL BE COMPLETED EVACUATED TO 26" VACUUM OF MERCURY GAUGE PRESSURE USING A VACUUM PUMP AND HOLD FOR A MINIMUM OF 24 HOURS. COMPRESSORS SHALL NOT BE USED TO EVACUATED SYSTEMS. CHANGE THE OIL IN THE VACUUM PUMP BEFORE VACUUM IS FULL. VACUUM SHALL BE BROKEN WITH THE OPENING REFRIGERANT.

10. ALL VENTILATION DUCTWORK SHALL BE 1 ½" FIBERGLASS INSTALLED ACCORDING TO LAST EDITION OF "SAMNA" AND "ASHRAE" FOR LOW PRESSURE DUCT SYSTEM.

11. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.

12. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE SITE, SATISFY HIMSELF TO EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PREFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FIELD CONDITION AFFECTING HIS WORK.

13. ELECTRIC HEATERS: SHALL BE MOUNTED IN BOX CASING WITH CAPACITIES AS SHOWN IN THE SCHEDULE. HEATERS TO BE U.L. LABELED AND LISTED FOR ZERO CLEARANCE AS A DUCT HEATER. ELEMENTS TO BE OPEN TYPE GRADE A NICHROME WIRE. EACH HEATER ASSEMBLY SHALL BE PROVIDED WITH A HIGH TEMPERATURE LIMIT CONTROLLER LIMIT CONTROLLER WITH A MANUAL RESET, AND WITH A SWITCH TO SHUT DOWN HEATER ON NO AIR FLOW CONDITION.

14. TESTING AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR WHO IS A MEMBER OF ASSOCIATED AIR BALANCE COUNCIL. TEST AND BALANCE REPORT SHALL BE APPROVED BY THE ENGINEER OF RECORD BEFORE CERTIFICATION OF OCCUPANCY. ALL SUPPLY DUCT, RETURN AND EXHAUST DUCT SYSTEM SHALL BE TESTED FOR AIR LEAKS, AND ANY AIR LEAKS SHALL BE FIXED AS REQUIRED.

15. PROVIDE A CONDENSATE DRAIN RUNNING TO APPROVED DRAIN. THE CONDENSATE DRAIN SYSTEM SHALL MEET THE LOCAL PLUMBING CODE REQUIREMENTS.

16. PROVIDE ELECTRICAL DISCONNECTS FOR THE AIR HANDLER AND CONDENSING UNIT. THE SIZE OF THE DISCONNECT SHALL COMPLY WITH THE EQUIPMENT MANUFACTURER'S REQUIREMENT.

17. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE MECHANICAL SYSTEMS.

18. INTERLOCK ELECTRIC DUCT HEATERS WITH COMPRESSOR CIRCUIT SO THAT HEATERS DO NOT OPERATE SIMULTANEOUSLY WITH COMPRESSORS.

19. AS PER R402.4.1.2, ANY BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 7 AIR CHANGES PER HOUR IN CLIMATE ZONES 1 AND 2, AND 3 AIR CHANGES PER HOUR IN CLIMATE ZONES 3 THROUGH 8. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY EITHER INDIVIDUALS AS DEFINED IN SECTION 553.993(5) OR (7), FLORIDA STATUTES OR INDIVIDUALS LICENSED AS SET FORTH IN SECTION 489.105(3)(F), (G), OR (I) OR AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - MECH NOTES
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-3

PROJECT No: D-16-047

PLUMBING GENERAL NOTES AND SPECIFICATION

1. A. SCOPE OF WORK.
THE WORK SHALL INCLUDE ALL PLUMBING AND SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING
1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS.
2. SANITARY DRAIN AND VENT SYSTEMS.
3. PLUMBING FIXTURES AND TRIM.
4. AIR CONDITIONING CONDENSATE DRAIN SYSTEMS.
5. PRESSURE AND TEMPERATURE RELIEF FROM WATER HEATER.
6. PIPING INSULATION.
7. SUPPORTS AND HANGERS.

2. CONTRACTOR SHALL VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.

3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING. "BITUMASTIC" OR EQUAL.

4. ALL FIXTURES SHALL BE PROTECTED AGAINST WATER HAMMER WITH AIR CHAMBERS OF SHOCK ABSORBERS AS INDICATED ON PLANS.

5. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH APPROVED MATERIALS, SHALL HAVE SMOOTH IMPERVIOUS SURFACES AND SHALL BE FREE FROM DEFECTS AND CONCEALED FOULING SURFACES. ALL FIXTURE TRIM TO BE CHROME PLATED, FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC.

6. WASTE LINES TO SLOPE 1/8"/FOOT UNLESS OTHERWISE NOTED.

7. VENT LINES TO EXTEND MIN OF 9" ABOVE ROOF AND FLASH WITH LEAD.

8. WATER PIPE BELOW GROUND SHALL BE COPPER TYPE "K", ABOVE GROUND TO BE COPPER TYPE "L".

9. PIPING INSTALLATION.
A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE
B. PROVIDE SLEEVES FOR ALL PIPING THROUGH FOUNDATIONS, SLABS, OR MASONRY WALLS. CAULK OPENINGS BETWEEN PIPE AND SLEEVES.
C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESCUTCHEONS. FIRMLY SECURE TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE SLEEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESCUTCHEONS IN BATHROOMS.
D. WHERE PIPES PASS THROUGH FIRE RATED FLOOR WALLS, OR CEILINGS, PROVIDE FIRE STOPS, OR FIRE BARRIER PENETRATION SEALING SYSTEMS SHALL BE UL. LISTED.

10. INSPECTION AND TESTS.
CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTION TO THE AUTHORITIES HAVING JURISDICTION AS THE WORK PROGRESS. ALL SYSTEMS SHALL BE TESTED BY CODE AND OR LOCAL REGULATIONS. THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE STERILIZED FOLLOWING CODE PROCEDURES. AFTER STERILIZATION FLUSH THE SYSTEM WITH CLEAN WATER UNTIL SAFE TO BE CONSUMED.

11. UTILITIES CONNECTION
PLUMBING CONTRACTOR SHALL VERIFY AT FIELD AND WITH THE UTILITY COMPANIES THE EXACT POINT OF CONNECTION FOR WATER AND SEWER SERVICES BEFORE SUBMITTING A BID OR PRICE FOR HIS WORK.

12. PLUMBING CONTRACTOR IS RESPONSIBLE FOR PERFORMING THE FOLLOWING TEST IN THE PRESENCE OF AN OWNER REPRESENTATIVE.
A. ALL WATER PIPING SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST OF 100 PSI. FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.

B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH WATER TO HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTED

13. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUND OF CHLORINATE LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE.) RETAIN MIXTURE IN PIPE 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.

14. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF INSTALLATION.

15. PLUMBING CONTRACTOR SHALL FURNISH WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE FROM DATE OF FINAL ACCEPTANCE, AND THAT HE WILL AT HIS EXPENSE REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE GUARANTEE PERIOD INCLUDING BUT NOT LIMITED TO NECESSARY DEMOLITION, PATCHING, RE-PATCHING AND REFINISHING.

16. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN HIS BID, THE COST FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO PERFORM THE SCOPE OF THE WORK AND THE INTENT OF THE CONSTRUCTION DOCUMENTS FORM ALL THE LOCAL AND STATE AUTHORITIES.

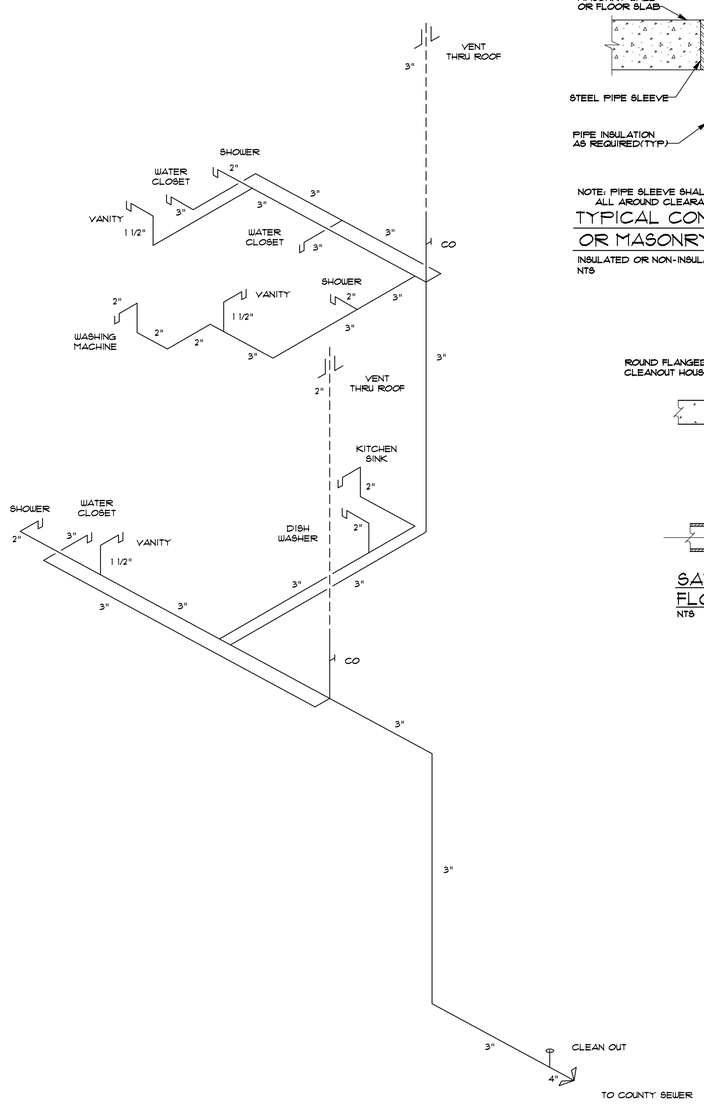
17. CONDENSATE DRAIN FROM AIR CONDITIONING UNITS SHALL BE "PVC" SCHEDULE 40 PIPE AND FITTINGS ALL HORIZONTAL RUN SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX PIPE INSULATION OR EQUAL. SLIP PIPE INSULATION AND SEAT BUTT JOINTS.

18. ALL PIPING MATERIALS SHALL BE NEW AND AS FOLLOWS:
A. SANITARY WASTE, VENT AND STORM DRAIN PIPING: UNDERGROUND AND ABOVE GROUND PIPING SHALL BE "PVC" PIPE AND FITTINGS SCHEDULE 40. MATERIAL SHALL COMPLY WITH ASTMD-1784, TYPE I.
B. DOMESTIC WATER ABOVE GROUND SHALL BE TYPE "K" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
C. DOMESTIC WATER BELOW GROUND SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT AT FITTINGS.
D. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, ELJER OF KOHLER.
E. ELECTRIC WATER HEATERS SHALL BE LOCHINVAR UNLESS OTHERWISE SPECIFIED. SEE SPECIFICATIONS.
F. SOLDER ALLOY SHALL BE LEAD FREE.
J. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.

19. INSULATION:
A. ALL RECALCULATION HOT WATER PIPE SHALL BE INSULATE WITH 1/2" THICK FIBERGLASS MOLDED INSULATION WITH PRE-SIZED FACTORY APPLIED "FRJ" JACKET OF GLASS CLOTH WITH LONGITUDINAL LAP AND BUTT JOINT STRIPS WITH SELF SEALING ADHESIVE.
B. INSULATION SHALL HAVE A MAXIMUM THERMAL CONDUCTIVITY OF Ø.26 K FACTOR AT 75 DEG. F. MEAN TEMPERATURE. JACKET INSULATION AND ADHESIVE SHALL HAVE COMPOSITE FIRE AND SMOKE RATINGS AS PER ASTM E84-75. FINISHING JACKETS SHALL HAVE A MAXIMUM FLAME SPREAD OF 25.

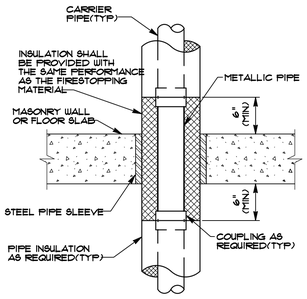
20. HANGERS AND SUPPORTS.
A. PROVIDE ADJUSTABLE HANGERS, INSERTS, BRACKETS, ROLLS, CLAMPS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. PROVIDE HANGERS TO ALLOW FOR EXPANSIONS AND CONTRACTION OF PIPE LINES AND OF ADEQUATE SIZE TO PERMIT COVERING TO RUN CONTINUOUSLY THROUGH HANGERS. PIPING AT EQUIPMENT SUPPORTED INDEPENDENTLY SO THAT NO WEIGHT WILL BE SUPPORTED BY EQUIPMENT. COORDINATE LOCATION OF HANGERS WITH LIGHT FIXTURES, AIR CONDITIONING DUCTWORK AND DIFFUSERS AND WITH EXISTING PIPING SYSTEMS.
B. PROVIDE RISER CLAMPS AT EVERY FLOOR.

21. EXISTING CONDITIONS: CONTRACTOR BY AND THROUGH SUBMISSION OF HIS BID, AGREES THAT HE SHALL BE HELD RESPONSIBLE FOR HAVING EXAMINED THE SITE, THE LOCATION OF ALL PROPOSED WORK AND FOR HAVING SATISFIED HIMSELF FROM HIS OWN PERSONAL KNOWLEDGE AND EXPERIENCE OR PROFESSIONAL ADVICE AS TO THE CHARACTER, AND LOCATION OF THE SITE, THE NATURE OF THE EXISTING CONDITIONS, THE LOCATION OF EXISTING UTILITIES AND ANY OTHER CONDITIONS SURROUNDING AND AFFECTING THE WORK, ANY OBSTRUCTIONS, THE NATURE OF EXISTING CONSTRUCTION, AND ALL OTHER PHYSICAL CHARACTERISTICS OF THE JOB, IN ORDER THAT HE MAY INCLUDE IN THE PRICES WHICH HE BIDS ALL COSTS PERTAINING TO THE WORK AND THEREBY PROVIDE FOR THE SATISFACTORY COMPLETION THEREOF.



PLUMBING ISOMETRIC

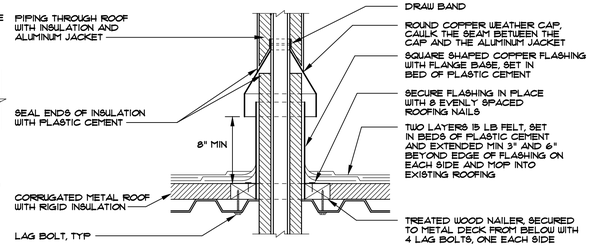
NOT TO SCALE



NOTE: PIPE SLEEVE SHALL BE SIZED TO PROVIDE 1/4" ALL AROUND CLEARANCE.

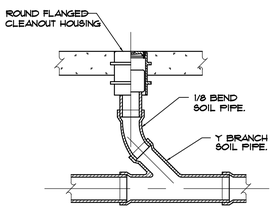
TYPICAL CONCRETE FLOOR OR MASONRY WALL PENETRATION

INSULATED OR NON-INSULATED, ABOVE GRADE
NTS



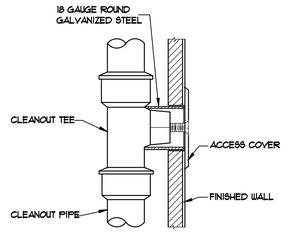
PIPING THROUGH ROOF DETAIL

NTS



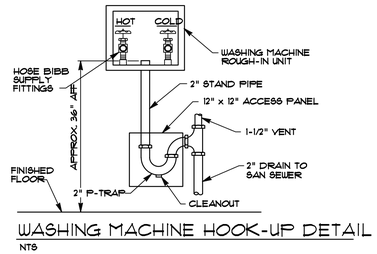
SANITARY CLEANOUT FLOOR SLAB DETAIL

NTS



WALL CLEANOUT DETAIL

NTS



WASHING MACHINE HOOK-UP DETAIL

NTS

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

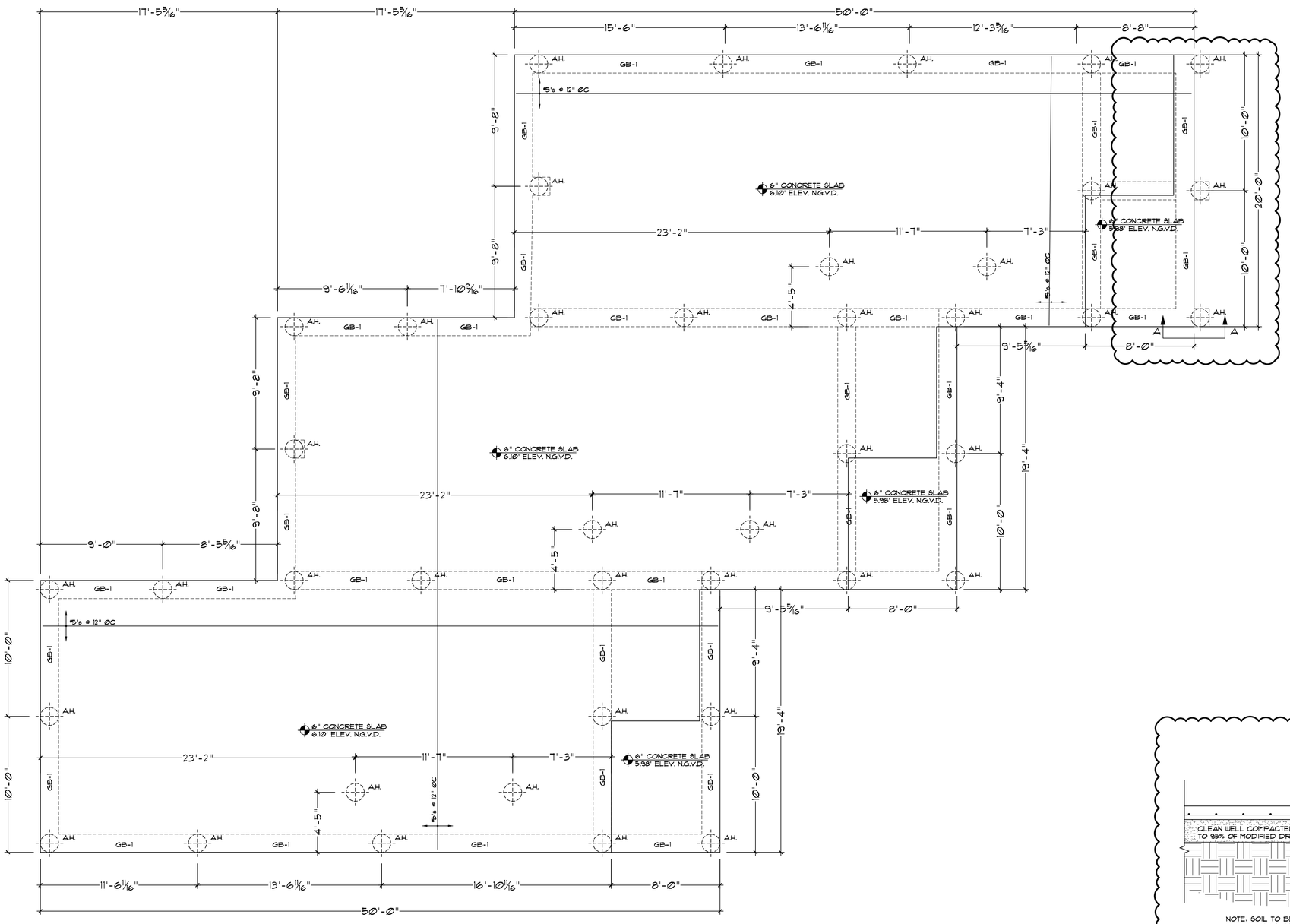
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - PLUMBING

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

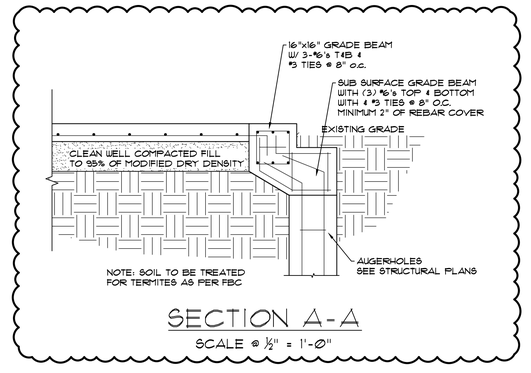
DRAWING No: P-1

PROJECT No: D-16-047



FOUNDATION PLAN

SCALE @ 1/4" = 1'-0"



SECTION A-A

SCALE @ 1/2" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

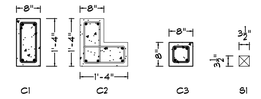
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"xH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	12/17/2021

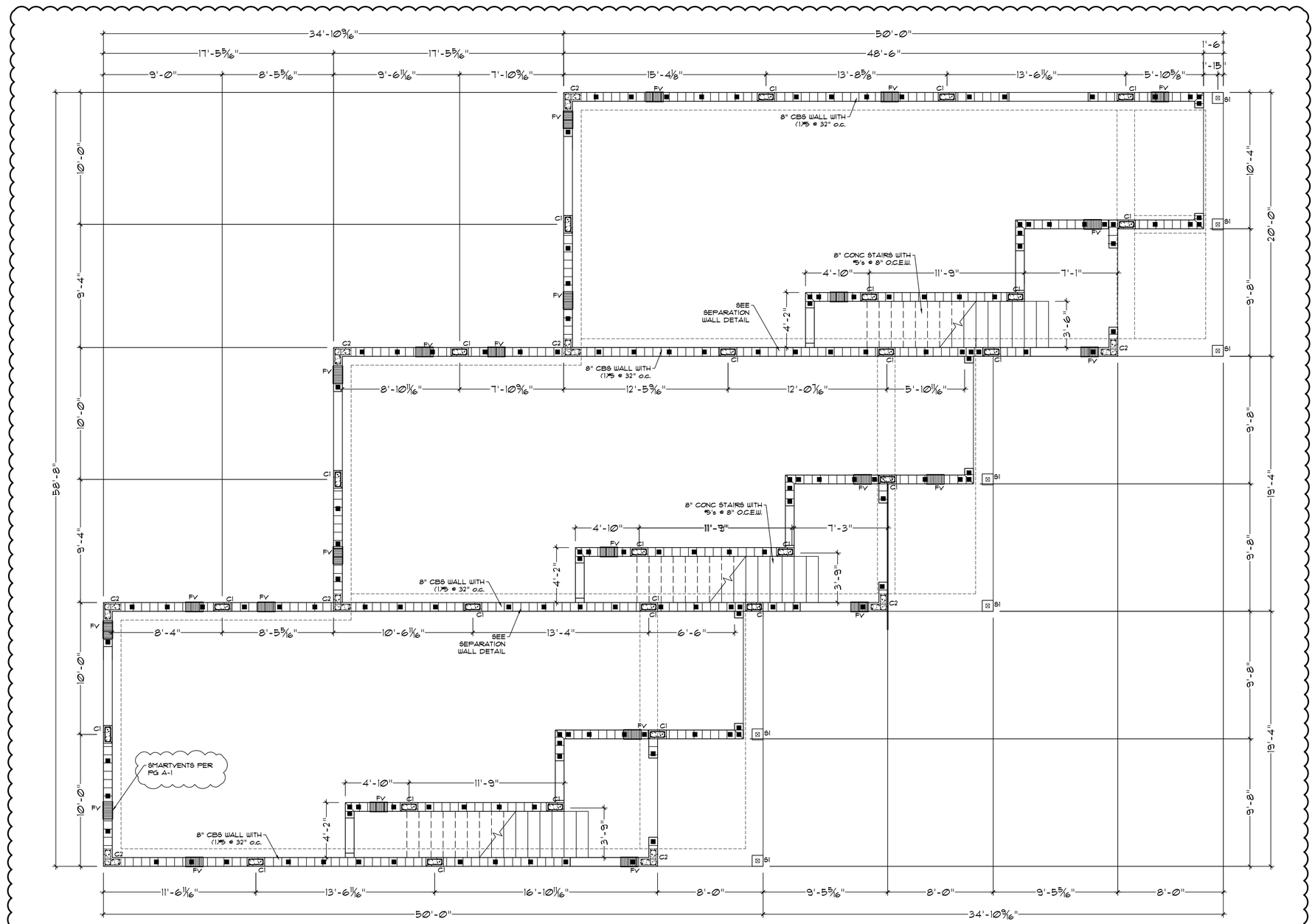
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

PROJECT No: D-16-047



GROUND FLOOR WALL & COLUMN PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

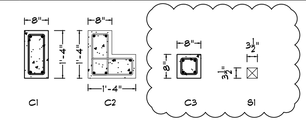
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"xH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	12/17/2021
3	VILLAGE COMMENT	2/2/2022

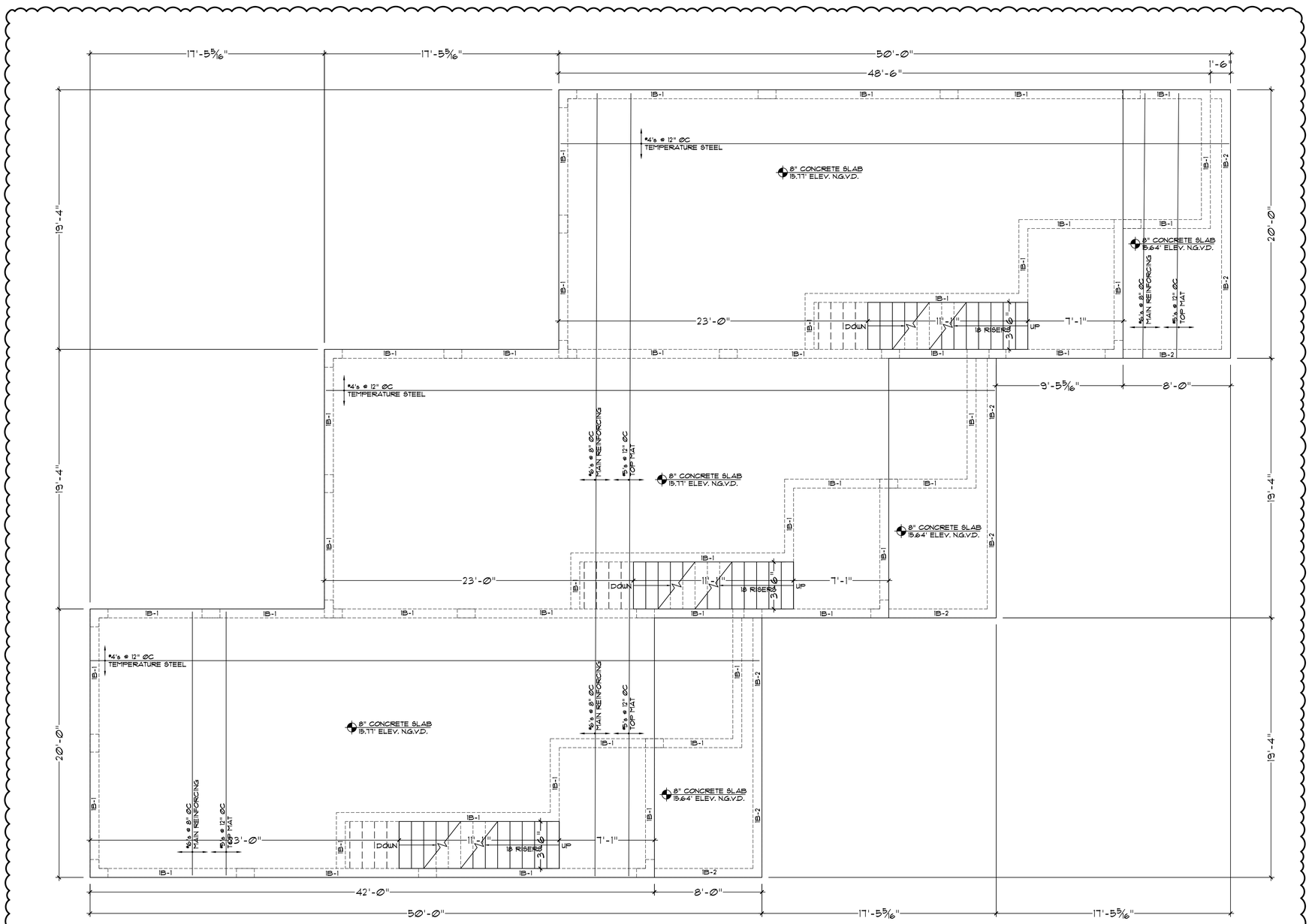
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-2

PROJECT No: D-16-047



SECOND FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

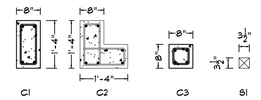
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
1B-1	8X16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
1B-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8X16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0162

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENTS	1/3/2022

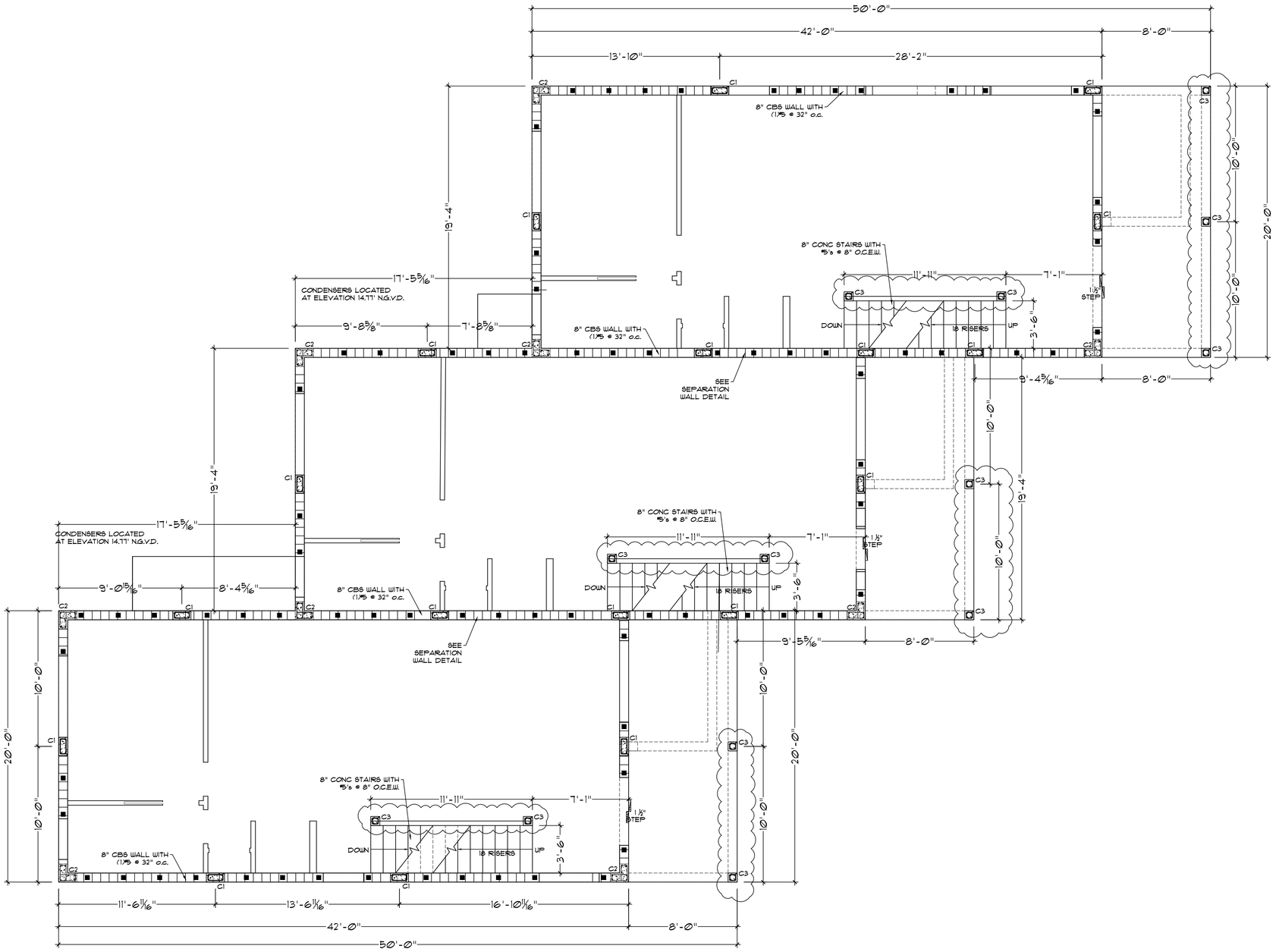
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-3

PROJECT No: D-16-047



SECOND FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

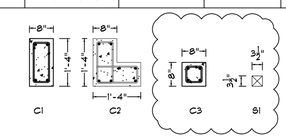
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
TB-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
TB-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	2/2/2022

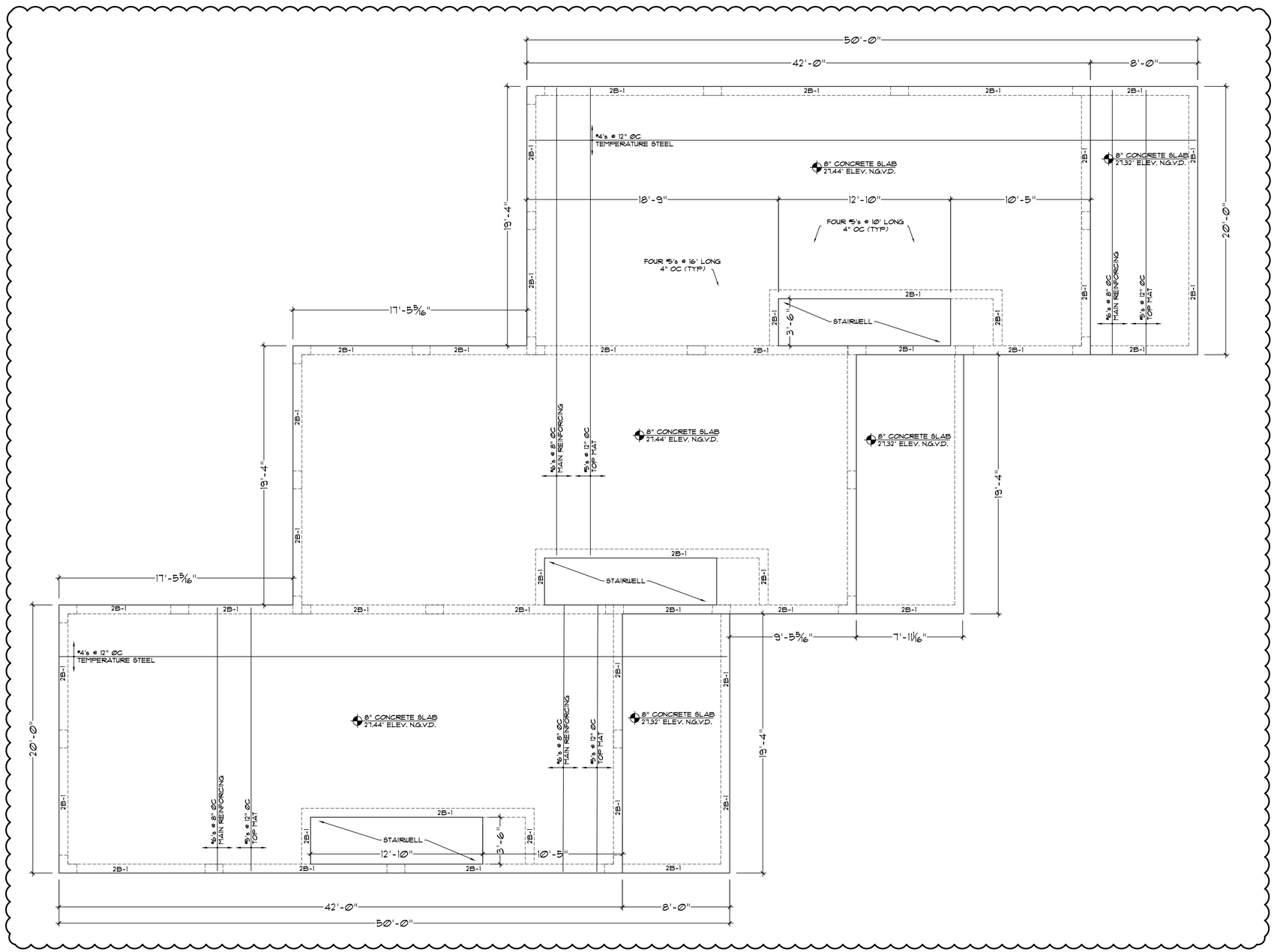
AS SHOWN
SCALE:
1/4/2017
DATE:
D.G.O.
DWG BY:
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-4

PROJECT No: D-16-047



THIRD FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

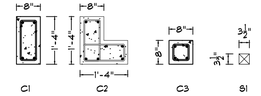
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021

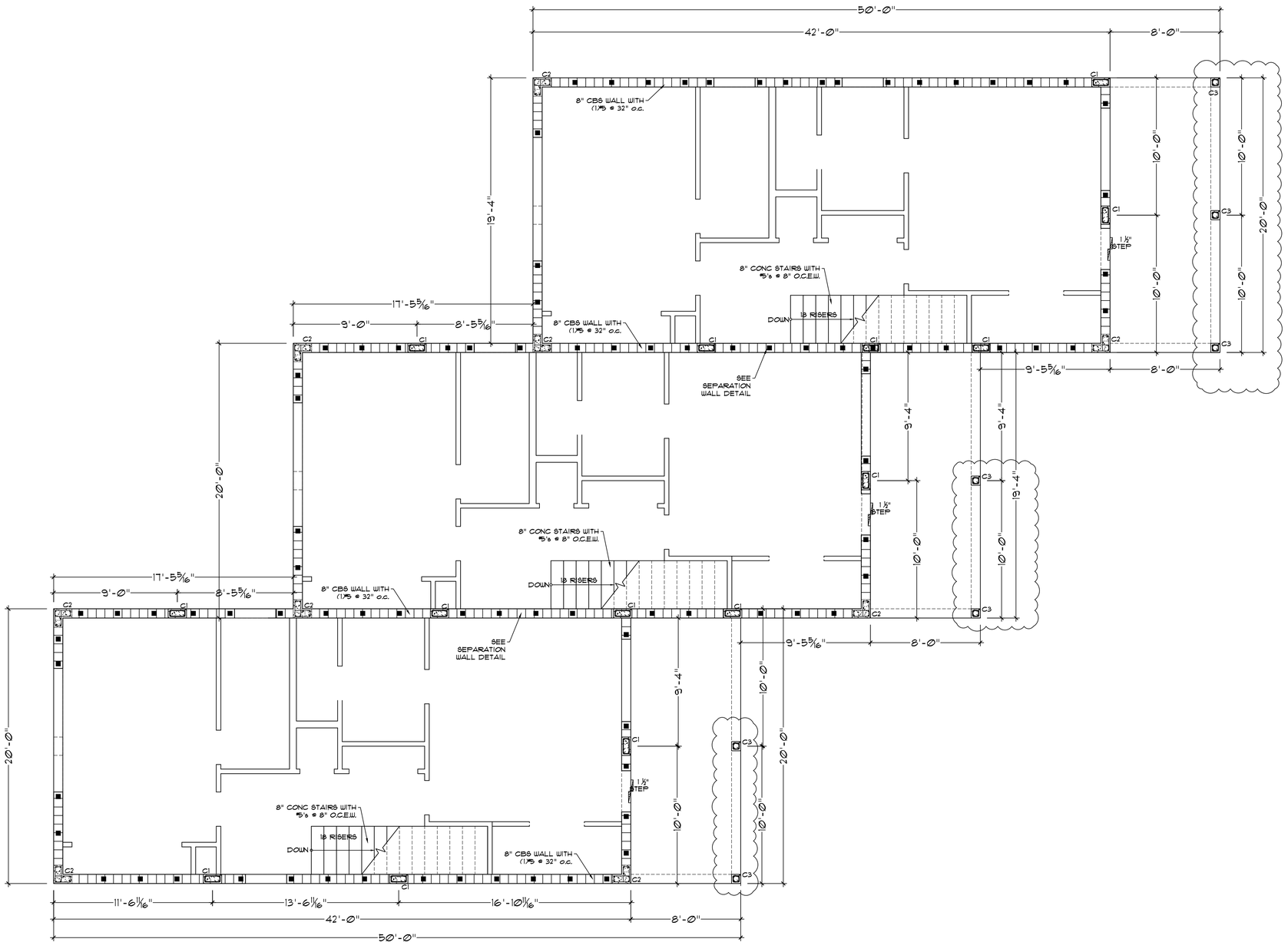
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-5

PROJECT No: D-16-047



THIRD FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

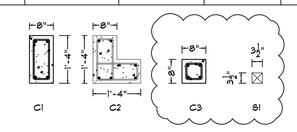
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"xH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3"x3"x3/8"x4"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	2/2/2022

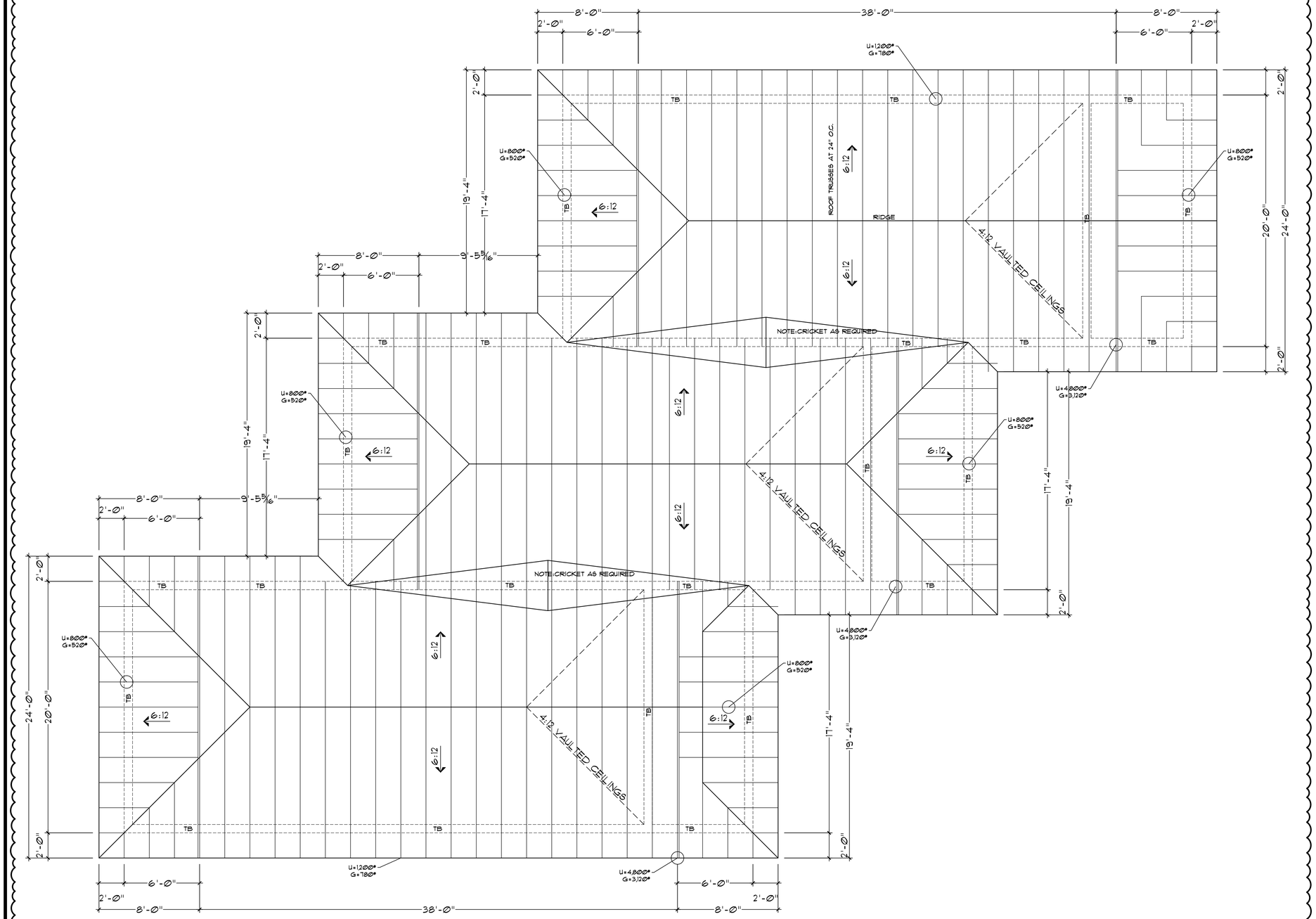
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-6

PROJECT No: D-16-047



ROOF PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

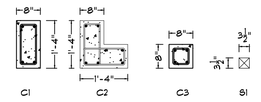
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.98'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.64'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.32'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.44'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021

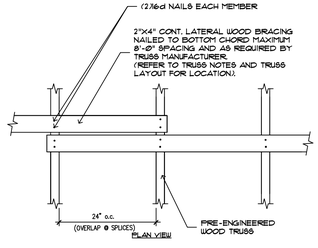
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL

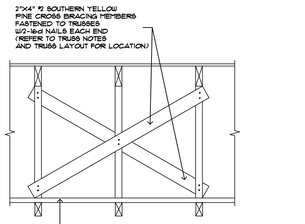
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

PROJECT No: D-16-047



TYPICAL LATERAL BRACE SPLICE
NOT TO SCALE



TYPICAL X-BRACING
NOT TO SCALE

NOTES:

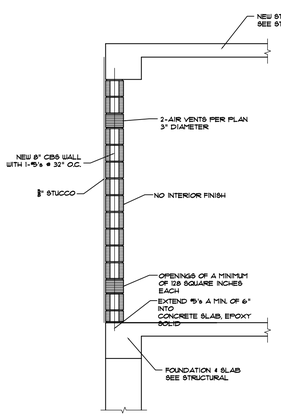
1. ATTIC ACCESS ROUGH OPENING SHALL BE NO LESS THAN 22"x30" WITH A MINIMUM OF 30" UNOBSTRUCTED HEADROOM AS PER THE FLORIDA BUILDING CODE.

2. TOP TIE BEAM SHALL NOT BE POURED UNTIL THE TRUSS LAYOUT AND CALCULATIONS HAVE BEEN APPROVED BY THE MONROE COUNTY BUILDING DEPARTMENT.

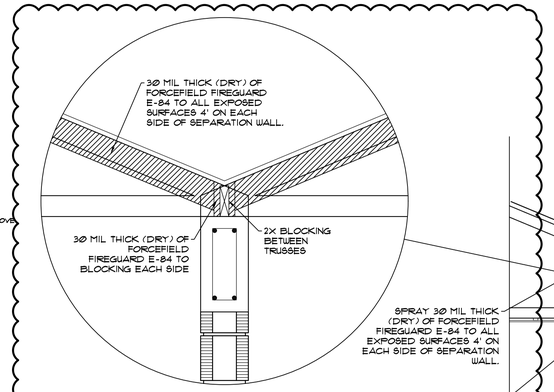
3. BORATE TREATED LUMBER, OR APPROVED EQUAL, SHALL BE USED TO PREVENT ANY INTERACTION BETWEEN FASTERN AND WOOD.

4. ROOF TRUSSES SHALL BE DESIGNED FOR A WINDSPEED OF 180 MPH PER ASCE-7-10

5. HURRICANE STRAPS SHALL BE SPECIFIED AFTER DETERMINATION OF TRUSS UPLIFT LOADS BY TRUSS MANUFACTURER.

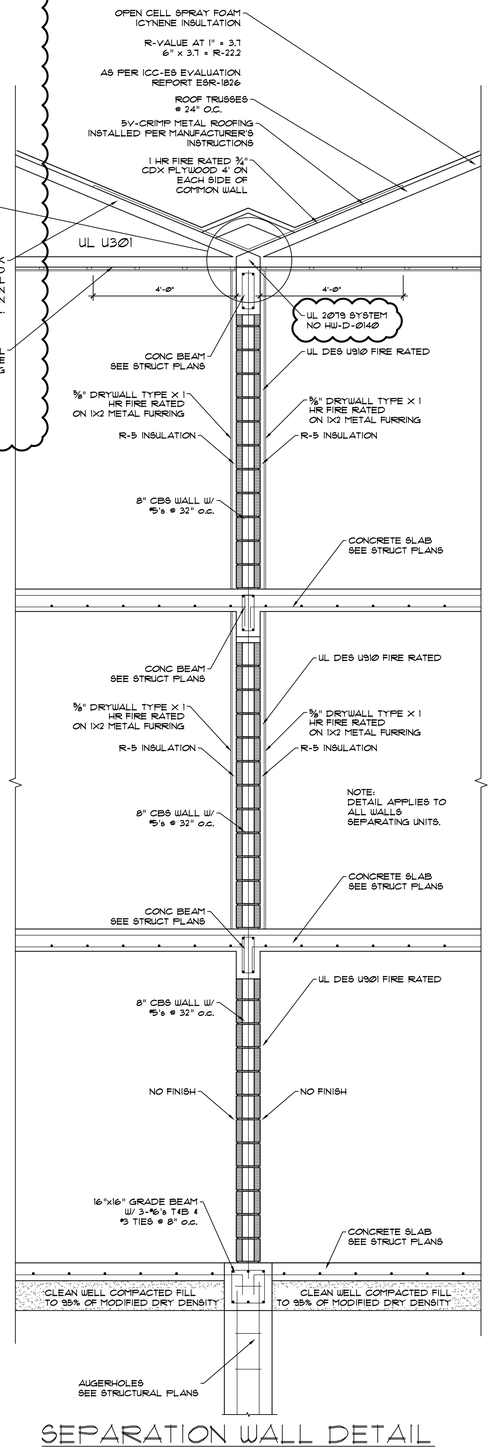


TYPICAL AE - ZONE DETAIL



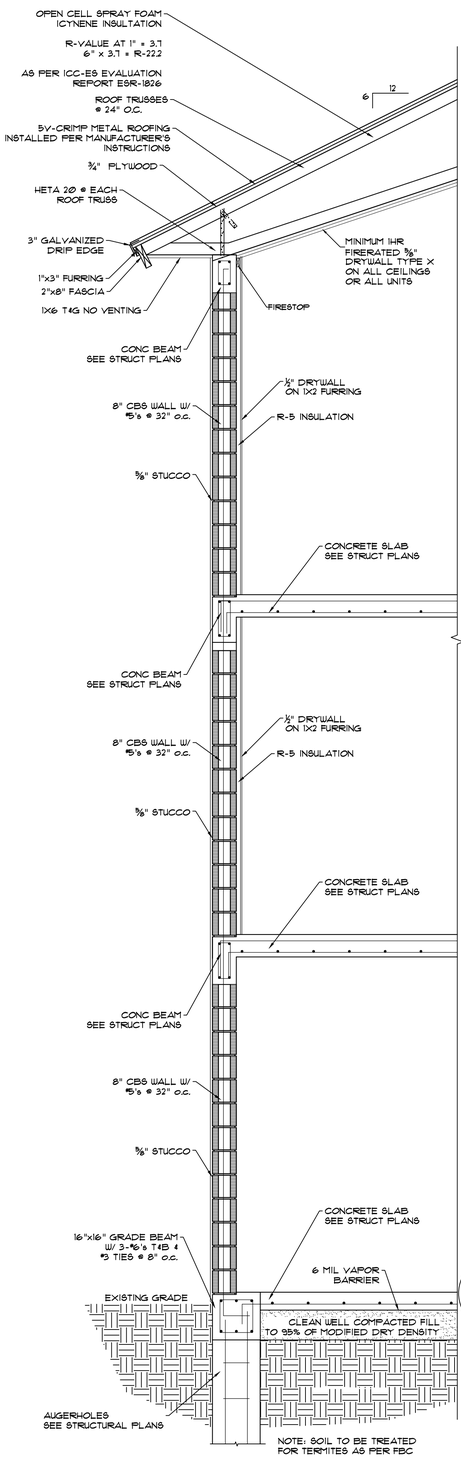
FIRE SEPARATION WITHIN TRUSS DETAIL

SCALE @ 1" = 1'-0"



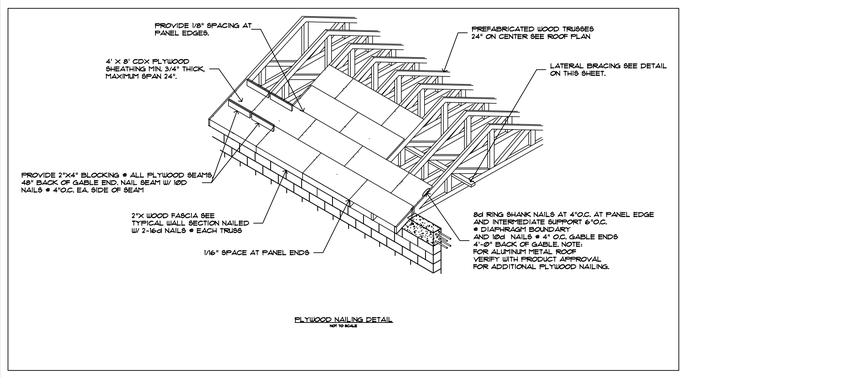
SEPARATION WALL DETAIL

SCALE @ 1/2" = 1'-0"

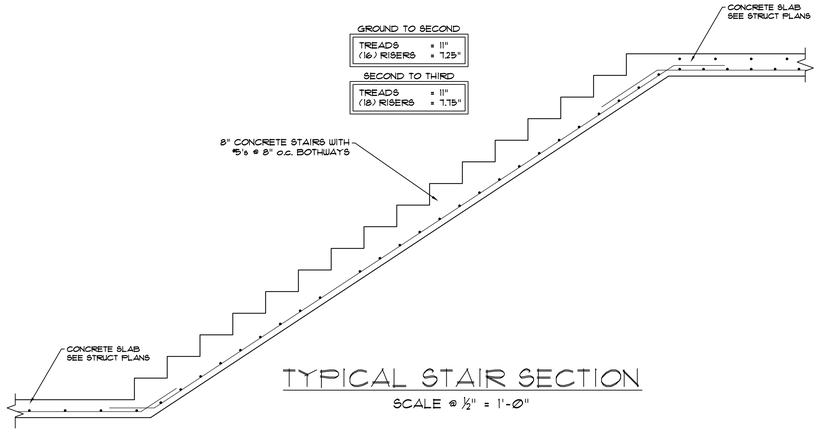


TYPICAL WALL SECTION

SCALE @ 1/2" = 1'-0"

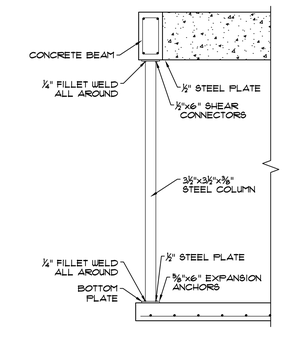


PLYWOOD NAILING DETAIL
NOT TO SCALE



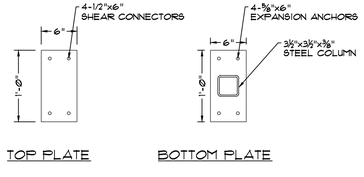
TYPICAL STAIR SECTION

SCALE @ 1/2" = 1'-0"



STEEL COLUMN DETAIL

SCALE @ 1/2" = 1'-0"



STEEL PLATE DETAIL

SCALE @ 1" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/15/2021
2	VILLAGE COMMENT	12/17/2021
3	VILLAGE COMMENT	1/3/2022
4	FIRE COMMENT	5/10/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-8

PROJECT No: D-16-047

GENERAL NOTES:

1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 2020 EDITION. THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCED STANDARD APPLIES TO THIS PROJECT.
2. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
3. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
4. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE DESIGN DOCUMENTS. IF A CONFLICT EXIST, NOTIFY THE DESIGN PROFESSIONAL.
5. DETAILS LABELLED "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 DESIGN PROFESSIONAL.
6. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL. SEE THE ARCHITECTURAL AND M.E.P. DRAWINGS FOR THE SIZE AND LOCATION OF OPENINGS IN THE STRUCTURE.
7. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE DESIGN PROFESSIONAL PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL O.S.H.A. REQUIREMENTS.
10. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. WHEREVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A FLORIDA LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.
11. DESIGN SUPERIMPOSED LOADS:

OCCUPANCY	LIVE LOAD	DEAD LOAD
ROOF	30 PSF	20 PSF
FLOOR	40 PSF	80 PSF

12. DESIGN WIND LOADS:

GOVERNING CODE	A.S.C.E. 7-16
BASIC WIND SPEED	VULT= 180 MPH/VASD= 139 MPH
RISK CATEGORY	II
BUILDING ENCLOSURE	ENCLOSED
DIRECTIONALITY FACTOR	KD = 0.85
EXPOSURE	D
INTERNAL PRESSURE COEFFICIENT	+0.18

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE PRECAST CONCRETE, PREFABRICATED WOOD COMPONENTS, OPEN WEB STEEL JOISTS AND JOIST GIRDERS, POST-TENSIONING SYSTEMS, TILT-UP PANELS, STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, EXTERIOR ENCLOSURE SYSTEMS AND SHORING AND RESHORING.
2. A DELEGATED ENGINEER IS DEFINED AS A FLORIDA LICENSED ENGINEER 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 OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS.
3. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE ARCHITECT. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTABILITY.
5. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. QUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT SUM. CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.
6. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED 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.

EXPANSION ANCHORS:

1. USE WEDGE-TYPE EXPANSION ANCHORS SUCH AS THE HILTI KWIK BOLT II, ITW RAMSET RED HEAD TRUBOLT WEDGE, POWERS RAWL POWER-STUD, SIMPSON STRONG-TIE WEDGE-ALL OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

CHEMICAL ADHESIVE FOR ANCHORING REINFORCING BARS, THREADED BARS AND ANCHOR BOLTS:

1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE HILTI HIT HY150, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, POWERS RAWL POWER-FAST SYSTEM, SIMPSON STRONG-TIE AT OR ET, ALLIED FASTENER ALLIED GOLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE DRILL SIZE. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.
4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.
5. THREADED RODS ARE A-36 GALVANIZED STEEL, U.O.N.

REINFORCED CONCRETE:

1. COMPLY WITH ACI 301 AND 318.
2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH OF 5,000 PSI IN 28.
3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS, U.O.N.
4. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MID-SPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N. PROVIDE COVER OVER REINFORCING AS FOLLOWS:

ELEMENT	BOTTOM	TOP	SIDES
FOOTINGS	3"	2"	3"
BEAMS ABOVE GRADE	1 1/2"	1 1/2"	1 1/2"
COLUMNS	-	-	1 1/2"
SLABS ON GRADE	2"	1"	2"
SLABS ABOVE GRADE	3/4"	3/4"	1"
SLABS EXPOSED TO WEATHER	1 1/2"	1 1/2"	1 1/2"

5. TENSION DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:

LAP SPLICE LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED WIRE REINFORCEMENT CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE TWO CROSS WIRE SPACING.
7. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, U.O.N. FOR OPENINGS 24" LONG OR LESS, CUT REINFORCING AND REPLACE ALONGSIDE OPENING WITH SPLICE BARS OF EQUIVALENT AREA WITH 48 BAR DIAMETERS LAP. PREPARE AND SUBMIT SHOP DRAWINGS FOR OPENINGS LONGER THAN 24". FOR RECTANGULAR OPENINGS 12" LONG OR LONGER, ADD 1#5 X 6' MID DEPTH DIAGONAL AT ALL 4 CORNERS.
8. WHERE REINFORCING STEEL CONGESTION PERMITS, CONDUIT AND PIPES UP TO 1" DIAMETER MAY BE EMBEDDED IN CONCRETE PER ACI 318, SECTION 6.3. SPACE AT 3 DIAMETERS O.C. PLACE BETWEEN OUTER LAYERS OF REINFORCING IF CONDUITS ARE SIGNIFICANTLY CONGESTED. ADDITIONAL REINFORCING PERPENDICULAR TO PIPING MAY BE REQUIRED. REQUESTS TO EMBED LARGER PIPES SHALL BE ACCOMPANIED BY A DETAILED DESCRIPTION AND BE SUBMITTED TO THE ARCHITECT FOR EVALUATION.
9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEY-WAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.
10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS.

CONCRETE MASONRY:

1. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530/ASCE 5, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"; AND ACI 530.1/ASCE 6, "SPECIFICATIONS FOR MASONRY STRUCTURES".
2. THE STRUCTURE IS SUPPORTED BY BEARING WALLS, U.O.N. ERECT MASONRY PRIOR TO CASTING CONCRETE COLUMNS WITHIN BEARING WALLS OR CASTING BEAMS AND SLABS SUPPORTED BY BEARING WALLS.
3. USE 50% SOLID, NOMINAL 8"X8"X16", CONCRETE MASONRY UNITS CONFORMING TO ASTM C90. BLOCK NET AREA COMPRESSIVE STRENGTH SHALL BE 1,900 PSI. LAY UP UNITS IN RUNNING BOND. SAWCUT UNITS WHICH ARE NOT IN MULTIPLES OF 8". UNITS SHALL BE AT LEAST 8" LONG. BOND CORNERS BY LAPPING ENDS 8" IN SUCCESSIVE VERTICAL COURSES. DESIGN OF WALLS IS BASED ON A F'M OF 1,500 PSI.
4. USE TYPE S MORTAR IN ACCORDANCE WITH ASTM C270 EXCEPT USE TYPE M MORTAR BELOW GRADE. HEAD AND BED JOINTS SHALL BE 3/8" FOR THE THICKNESS OF THE FACE SHELL. WEBS ARE TO BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS; IN THE STARTING COURSE; AND WHERE AN ADJACENT CELL IS TO BE GROUTED. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO CELLS TO BE GROUTED.
5. USE STANDARD (9 GAUGE) HORIZONTAL JOINT REINFORCING IN EVERY OTHER COURSE. JOINT REINFORCING AND ANCHORS IN EXTERIOR WALLS SHALL CONFORM TO ASTM A 153 CLASS B2, WITH A COATING THICKNESS OF 1.50 OZ/SF+ CONFORM TO ASTM A 641 IN INTERIOR WALLS. OVERLAP DISCONTINUOUS ENDS 6". USE PREFABRICATED CORNERS AND TEES. USE TRUSS TYPE, EXCEPT USE LADDER TYPE IN WALLS WITH VERTICAL REINFORCING. EXTEND JOINT REINFORCING A MINIMUM OF 4" INTO TIE COLUMNS.
6. USE FINE GROUT CONFORMING TO ASTM C476, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI IN 28 DAYS. AGGREGATE TO CONFORM TO ASTM C404 FOR FINE GROUT, WITH SLUMP OF 8" TO 10". GROUT ALL MASONRY CONTAINING REINFORCING, ALL CELLS OF 4 HOUR RATED WALLS, AND WHERE INDICATED ON THE DRAWINGS. ALLOW MORTAR TO CURE 24 HOURS PRIOR TO GROUTING. PROVIDE CLEAN OUT OPENINGS AT THE BASE OF CELLS CONTAINING REINFORCING STEEL TO CLEAN THE CELL AND TO TIE THE VERTICAL BAR TO THE DOWEL. IN HIGH-LIFT GROUTING, USE 4'-0" (MAX.) LIFTS, WITH 1/2 HOUR TO 1 HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT.
7. USE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCE WALLS WHERE INDICATED ON THE DRAWINGS AND AT ALL INTERSECTIONS, EACH SIDE OF OPENINGS AND AT THE ENDS OF WALLS. USE BAR SPACERS AT 10 FT. O.C. WHERE GROUT POUR HEIGHT EXCEEDS 10 FT.
8. AT BOND/TIE BEAM CORNERS AND INTERSECTIONS, PLACE 1 #5 X 5'-0" T + B CORNER BAR, WITH 30" LEGS EACH WAY, AT THE EXTERIOR FACE.
9. BEAMS NOT SCHEDULED ARE MIN. 8" X 12" TIE BEAMS WITH 2 #5 BARS TOP AND BOTTOM AND #3 TIES SPACED AT 12" O.C. TYPICAL U.O.N. COLUMNS NOT SCHEDULED ARE MIN. 8" X 12" TIE COLUMNS WITH 4 #5 VERTICAL BARS AND #3 TIES AT 12" O.C. USE 30" LAP SPLICES. HOOK ALL BARS AT DISCONTINUOUS ENDS.
10. REINFORCED MASONRY WALL CONSTRUCTION SHALL BE INSPECTED BY AN ENGINEER OR ARCHITECT IN ACCORDANCE WITH ACI 530.1/ASCE 6.
11. WHERE ANCHOR BOLTS, WEDGE ANCHORS OR ANCHORS SET IN EPOXY ARE SET IN A MASONRY WALL, FILL CELLS WITH GROUT FOR BOLTED COURSE, ONE COURSE ABOVE AND TWO COURSES BELOW.
12. PROVIDE LINTELS OR HEADERS WITH MIN. 8" BEARING OVER ALL MASONRY OPENINGS.
13. USE PRESSURE-TREATED WOOD FOR WOOD IN CONTACT WITH MASONRY.

STRUCTURAL STEEL:

1. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL O.S.H.A. REQUIREMENTS.
2. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
   a. PLATES AND BARS: ASTM A36, FY=36 KSI.
   b. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS):
      1. SQUARE SECTIONS: ASTM A500, GRADE B, FY=46 KSI.
3. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.
4. USE A-307 BOLTS FOR ALL ERECTION BOLTS AND BOLTS LESS THAN 3/4" DIAMETER, U.O.N. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 THREADED WITH NUTS AND WASHERS EACH END.
5. SETTING BASE AND BEARING PLATES: CLEAN CONCRETE AND MASONRY BEARING SURFACE OF BOND-REDUCING MATERIALS AND CLEAN BOTTOM OF BASE AND BEARING PLATE.
   a. SET BASE OR BEARING PLATE ON WEDGES OR OTHER ADJUSTING DEVICES.
   b. TIGHTEN ANCHOR RODS AFTER STRUCTURAL STEEL FRAME HAS BEEN PLUMBED. DO NOT REMOVE WEDGES OR SHIMS BUT, IF PROTRUDING, CUT OFF FLUSH WITH EDGE OF BASE OR BEARING PLATE PRIOR TO PACKING WITH GROUT.
   c. PACK OR POUR NON-SHRINK GROUT SOLIDLY BETWEEN BEARING SURFACE AND BASE OR BEARING PLATE. ENSURE THAT NO VOIDS REMAIN. FINISH EXPOSED SURFACES, PROTECT GROUT AND ALLOW TO CURE.
   d. FOR PROPRIETARY GROUT MATERIALS, COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
   e. BASE PLATES MUST BE GROUTED A MINIMUM OF 72 HOURS PRIOR TO PLACING CONCRETE SLABS ON SUPPORTING STEEL STRUCTURE.
6. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACES. REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTED BY ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR USING DRIFT PINS.
7. SPACE FILLER BEAMS EQUALLY BETWEEN SUPPORTS, U.O.N.
8. DO NOT SPLICE STRUCTURAL STEEL MEMBERS EXCEPT WHERE INDICATED ON THE DRAWINGS.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. REFER TO ARCHITECTURAL DRAWINGS FOR PAINTING AND FIREPROOFING OF STRUCTURAL STEEL. DO NOT PAINT STEEL SURFACES IN CONTACT WITH CONCRETE OR FIREPROOFING.

PRE-ENGINEERED WOOD TRUSSES:

1. DESIGN AND FABRICATE ALL TIMBER IN CONFORMANCE WITH DIVISION 6 SPECIFICATIONS, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND FLORIDA BUILDING CODE, 2020 EDITION, AND THE TPI-1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
2. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS SYSTEM ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE TRUSS SYSTEM, THE TRUSS SYSTEM ENGINEER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR REVIEW TO ARCHITECT/ENGINEER FOR THE ASSEMBLAGE OF PREFABRICATED, ENGINEERED WOOD TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL BRACING, CONNECTIONS AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATION CRITERIA (TRUSS PLACEMENT PLAN), THAT, IN COMBINATION, FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO THE ROOF TRUSS SYSTEM. THE TRUSS SYSTEM DOES NOT INCLUDE WALLS, OR ANY OTHER STRUCTURAL SUPPORT SYSTEMS. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS SYSTEM ENGINEER.
3. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS DESIGN ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE INDIVIDUAL TRUSSES OF THE TRUSS SYSTEM, BUT DOES NOT DESIGN THE TRUSS SYSTEM. THE TRUSS DESIGN ENGINEER SHALL SUBMIT SHOP (PIECE) DRAWINGS AND CALCULATIONS FOR EACH DIFFERENT TRUSS OF THE TRUSS SYSTEM SUCH THAT EACH TRUSS WILL FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO EACH TRUSS AND TRUSS GIRDER THAT TOGETHER COMPRISE THE TRUSS SYSTEM. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS DESIGN ENGINEER.
4. THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER SHALL EACH BE RESPONSIBLE FOR THEIR OWN WORK. HOWEVER, THEY MAY BE THE SAME INDIVIDUAL PROVIDING TWO SEPARATE SERVICES.
5. THE LOADS, LAYOUTS AND CONNECTIONS PROVIDED ON THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE THE MINIMUMS TO BE FOLLOWED BY THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER.
6. USE STRESS-RATED TIMBER FOR ALL WOOD STRUCTURAL MEMBERS. DO NOT USE WOOD STRUCTURAL MEMBERS WITH A BENDING STRESS LESS THAN 1,200 PSI OR A MODULUS OF ELASTICITY LESS THAN 1,400,000 PSI WHEN USED AT 19% MAXIMUM MOISTURE CONTENT.
7. PRESSURE TREATMENT OF ALL STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH AWPA STANDARDS C1 AND C2, LATEST EDITIONS WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5, LATEST EDITION. ALL LUMBER TO BE KILN-DRIED AFTER TREATMENT TO A MOISTURE CONTENT NOT TO EXCEED 19% OVEN-DRY BASIS, PER STANDARD C2. ALL LUMBER 4"X4" IN. (NOMINAL SIZE) AND LARGER IN DIMENSION TO BE TREATED TO THE SOIL AND FRESH WATER RETENTION AND PENETRATION REQUIREMENTS OF STANDARD C2. ALL LUMBER LESS THAN 4"X4" (NOMINAL SIZE) TO BE TREATED TO THE ABOVE GROUND REQUIREMENTS OF STANDARD C2.
8. MINIMUM DESIGN LOADS FOR ROOF TRUSSES:

30 PSF LL TOP CHORD
25 PSF DL TOP CHORD
10 PSF DL BOTTOM CHORD
200 LB CONCENTRATED LL ON ANY SINGLE BOTTOM CHORD PANEL POINT
WIND PRESSURE BASED ON ASCE-7.

9. CD FOR WIND SHALL NOT EXCEED 1.6 FOR WOOD MEMBERS. NO STRESS INCREASE ALLOWED FOR METAL PLATES.

SOIL STATEMENT:

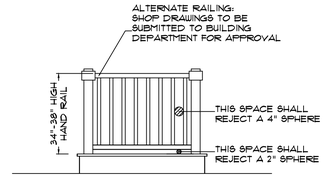
1. THE EXISTING SOIL IS ASSUMED TO HAVE A DESIGN BEARING OF 2,000 PSF. IF SOIL CONDITIONS VARY, CONTACT THE ENGINEER OF RECORD
2. ALL AUGER HOLES AND AUGER PILING SHALL BE DRILLED 3' INTO THE EXISTING PERVIOUS OOLITE ROCK
3. ALL PRECAST CONCRETE PILING SHALL BE DRIVEN TO REFUSAL

LUMBER AND FRAMING NOTES

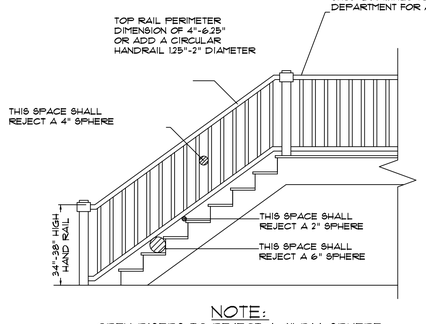
1. FRAMING LUMBER SHALL CONFORM WITH THE PROVISIONS OF THE AMERICAN SOFTWOOD LUMBER STANDARD PS-20-(LATEST EDITION) AND EACH PIECE SHALL BEAR THE GRADE STAMP OF AN APPROVED GRADING AGENCY.
2. FRAMING LUMBER GRADES THE FOLLOWING GRADES SHALL BE THE MINIMUM ACCEPTABLE GRADES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

ITEM	MINIMUM GRADE
STUD ONLY:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL LIGHT FRAMING:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL JOISTS & HEADERS:	
2" TO 4" THICK 6" AND WIDER	NO. 2 SOUTHERN PINE
POSTS:	
4" X 4" AND LARGER	NO. 2 SOUTHERN PINE

3. BOLT HOLES SHALL BE 1/16" LARGER THAT THE BOLT SIZE. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.
4. STANDARD CUT WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD.
5. 5. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR OTHERWISE BE PROTECTED BY AN APPROVED SEPARATING MATERIAL. BOLTS SHALL BE PLACED 9" FROM ANY NOTCH GREATER THAN 1/2 THE WIDTH OF A MEMBER.
6. DO NOT NOTCH JOISTS, RAFTERS OR BEAMS. OBTAIN ENGINEER'S OR ARCHITECTS APPROVAL FOR ANY HOLES OR NOTCHES NOT DETAILED. HOLES THROUGH SILLS, PLATES, STUDS AND DOUBLE PLATED IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED IN THE CENTER OF THE STUD OR PLATE.
7. 2" SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS.
8. ALL NAILING SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2020 FLORIDA BUILDING CODE. NAILS SHALL BE COMMON WIRE NAILS.
9. ALL INTERIOR FRAMING SHALL BE 2" X 4" WALL STUDS @ 16" O.C.



HANDRAIL / GUARDRAIL DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION



NOTE:
OPEN RISERS TO REJECT A 4" DIA SPHERE
OPEN RISERS IN THIS PACKAGE: NONE

HANDRAIL / GUARDRAIL STAIR DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

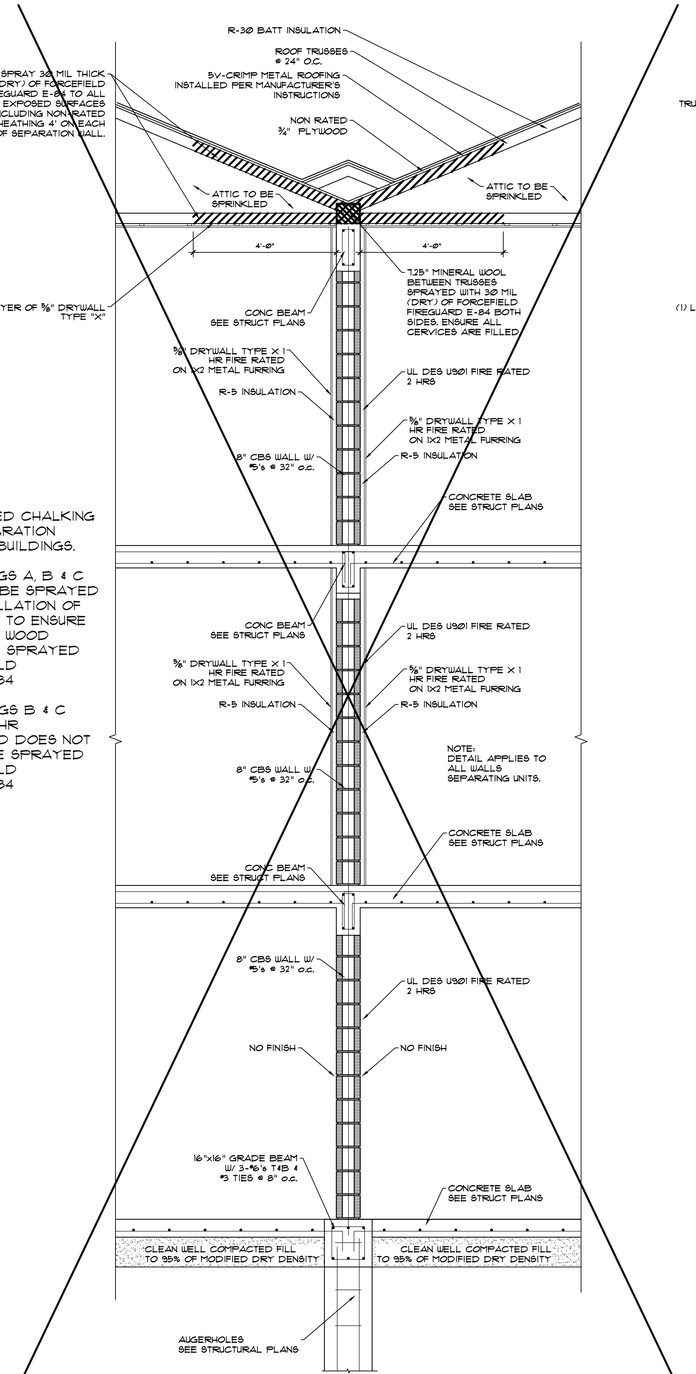
NO	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/15/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX A - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-9

PROJECT No: D-16-047

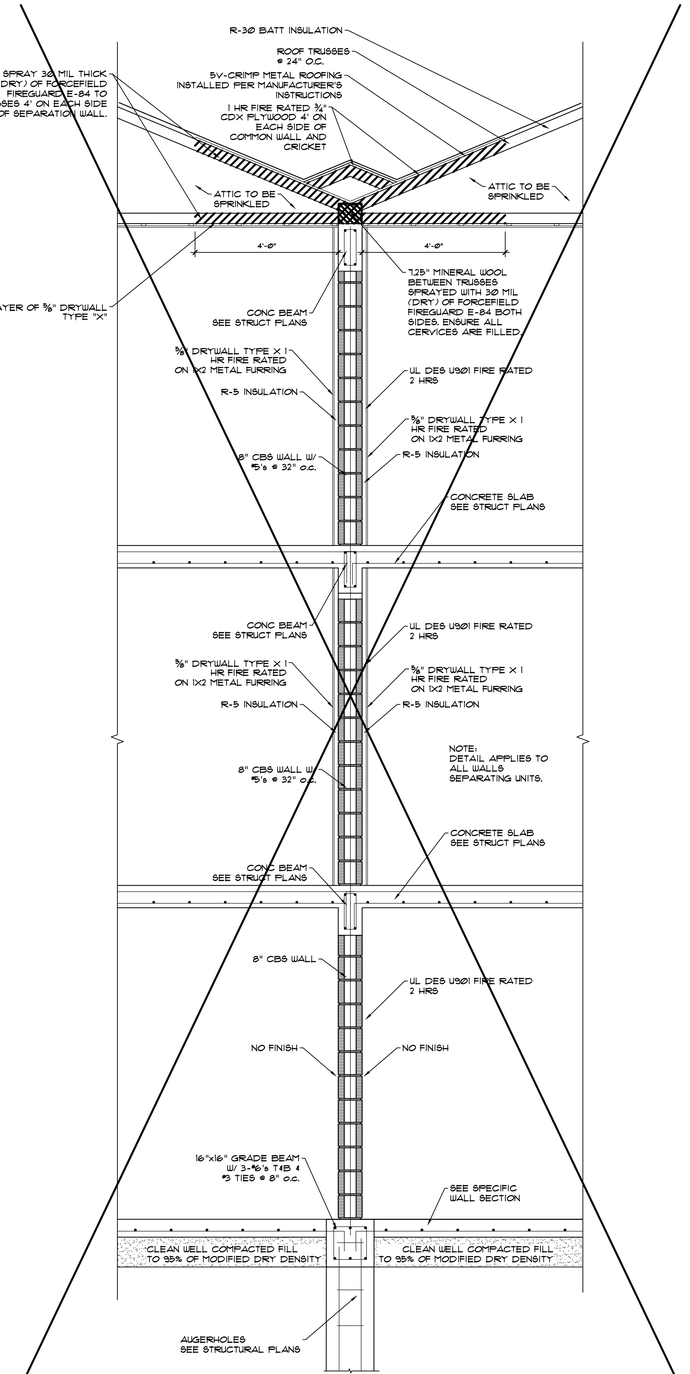


NOTES:
1. USE FIRERATED CHALKING FOR FIRE SEPARATION WALLS IN ALL BUILDINGS.

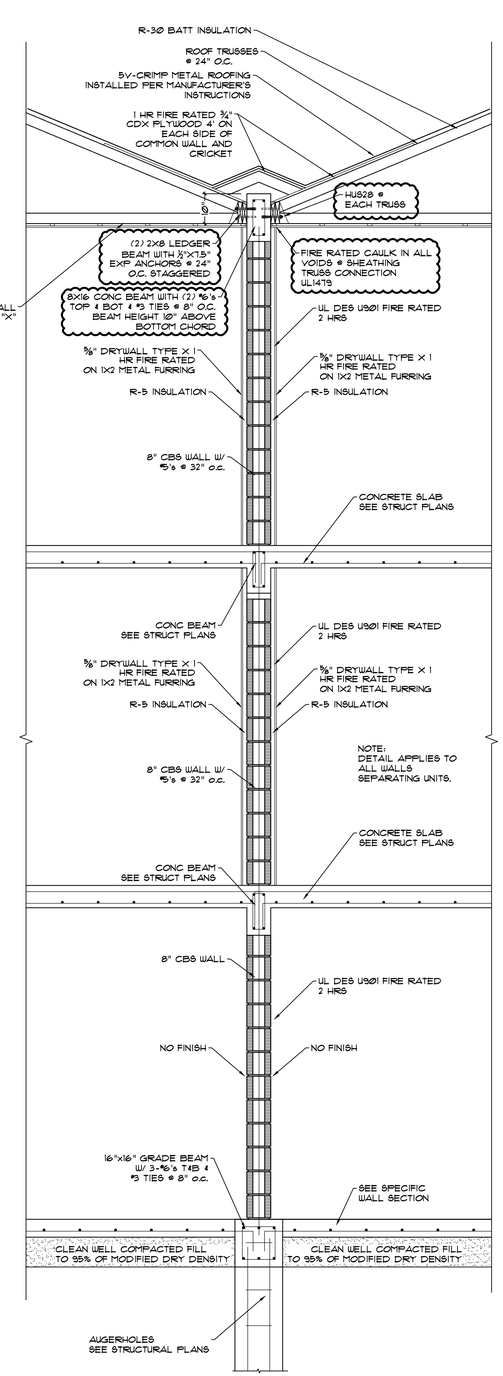
2. FOR BUILDINGS A, B & C TRUSSES MUST BE SPRAYED BEFORE INSTALLATION OF MINERAL WOOL TO ENSURE ALL REQUIRED WOOD SURFACES ARE SPRAYED WITH FORCEFIELD FIREGUARD E-84

3. FOR BUILDINGS B & C SHEATHING IS 1HR FIRERATED AND DOES NOT REQUIRE TO BE SPRAYED WITH FORCEFIELD FIREGUARD E-84

FIRE SEPARATION WALL
BUILDINGS "A"
SCALE @ ½" = 1'-0"



FIRE SEPARATION WALL
BUILDINGS "B" & "C"
SCALE @ ½" = 1'-0"



FIRE SEPARATION WALL
BUILDINGS "D" & "E"
SCALE @ ½" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	5/10/2022
1	VILLAGE COMMENTS	5/23/2022

SCALE:	AS SHOWN
DATE:	5/10/2022
DWG BY:	J.A.
REVISED:	

TITLE: FIRE SEPARATION WALLS

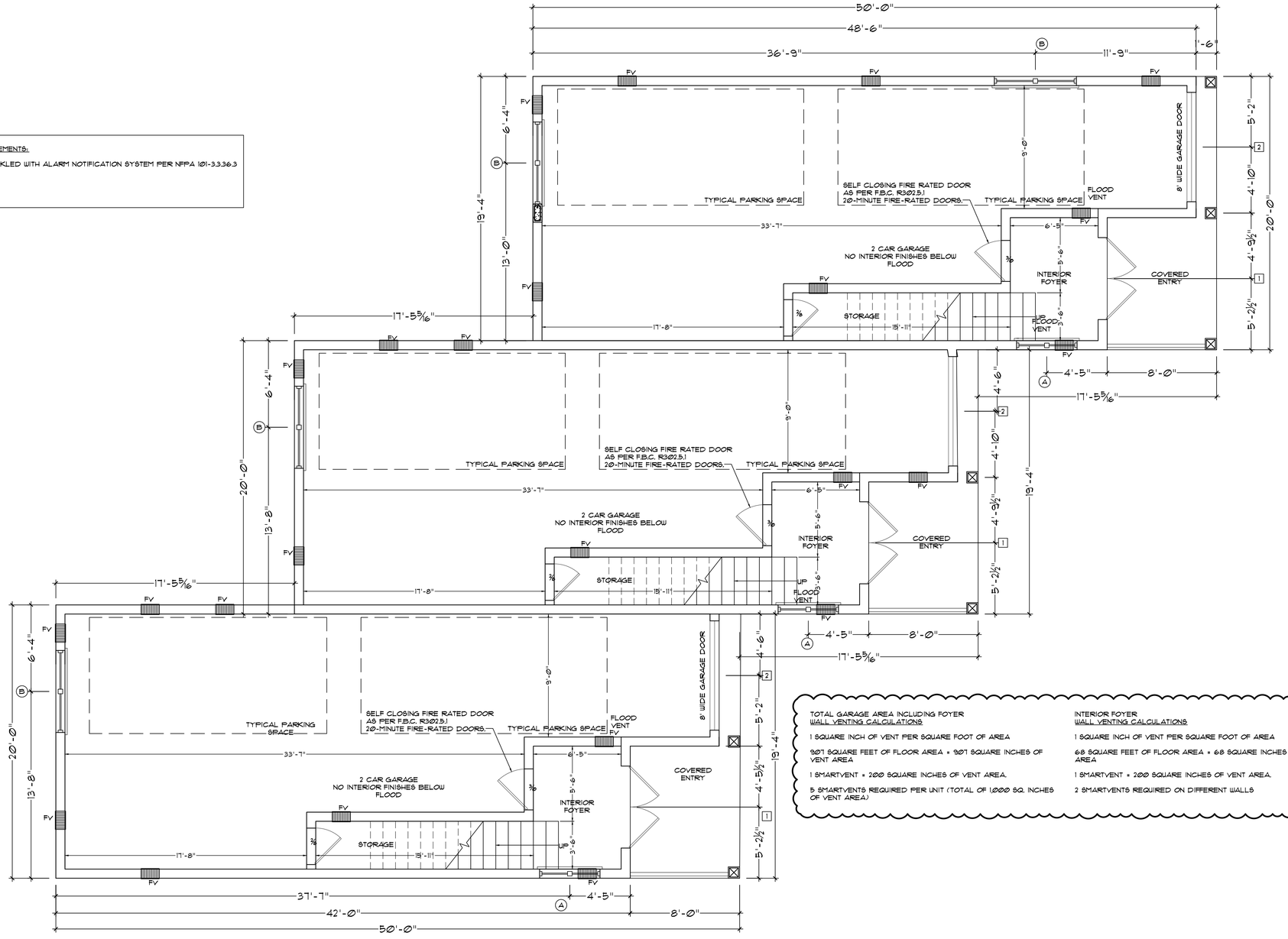
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-10

PROJECT No: D-16-047

FIRE PREVENTION REQUIREMENTS:

THIS UNIT SHALL BE SPRINKLED WITH ALARM NOTIFICATION SYSTEM PER NFPA 101-33.3.6.3 AND 30.2.4.6.



TOTAL GARAGE AREA INCLUDING FOYER
WALL VENTING CALCULATIONS

1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA

907 SQUARE FEET OF FLOOR AREA = 907 SQUARE INCHES OF VENT AREA

1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.

5 SMARTVENTS REQUIRED PER UNIT (TOTAL OF 1000 SQ. INCHES OF VENT AREA.)

INTERIOR FOYER
WALL VENTING CALCULATIONS

1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA

68 SQUARE FEET OF FLOOR AREA = 68 SQUARE INCHES OF VENT AREA

1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.

2 SMARTVENTS REQUIRED ON DIFFERENT WALLS

GROUND FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	REVISION	11/28/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	2/2/2022

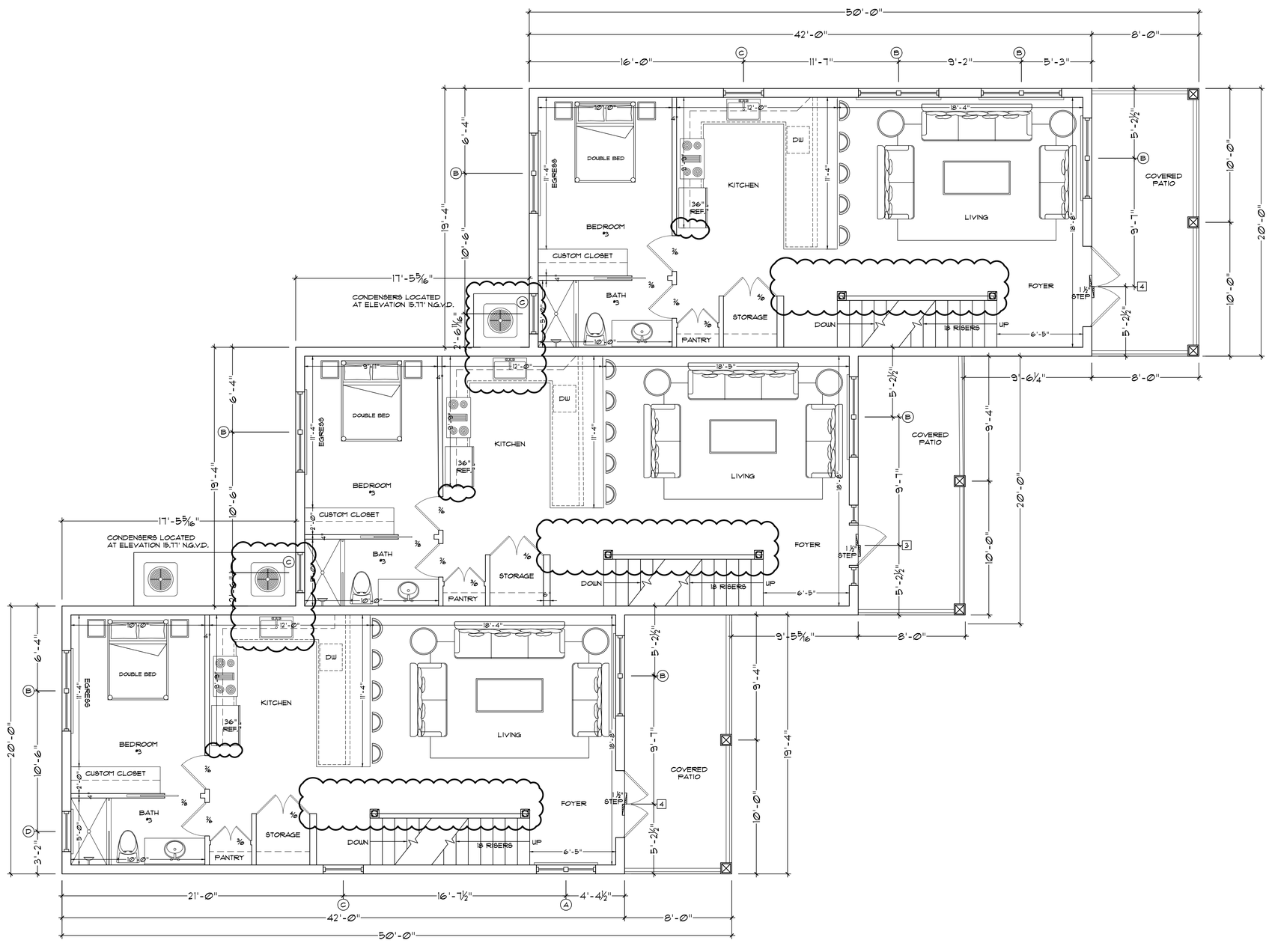
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-1

PROJECT No: D-16-047



SECOND FLOOR

SCALE @ ¼" = 1'-Ø"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	1/9/2022
7	VILLAGE COMMENT	2/2/2022

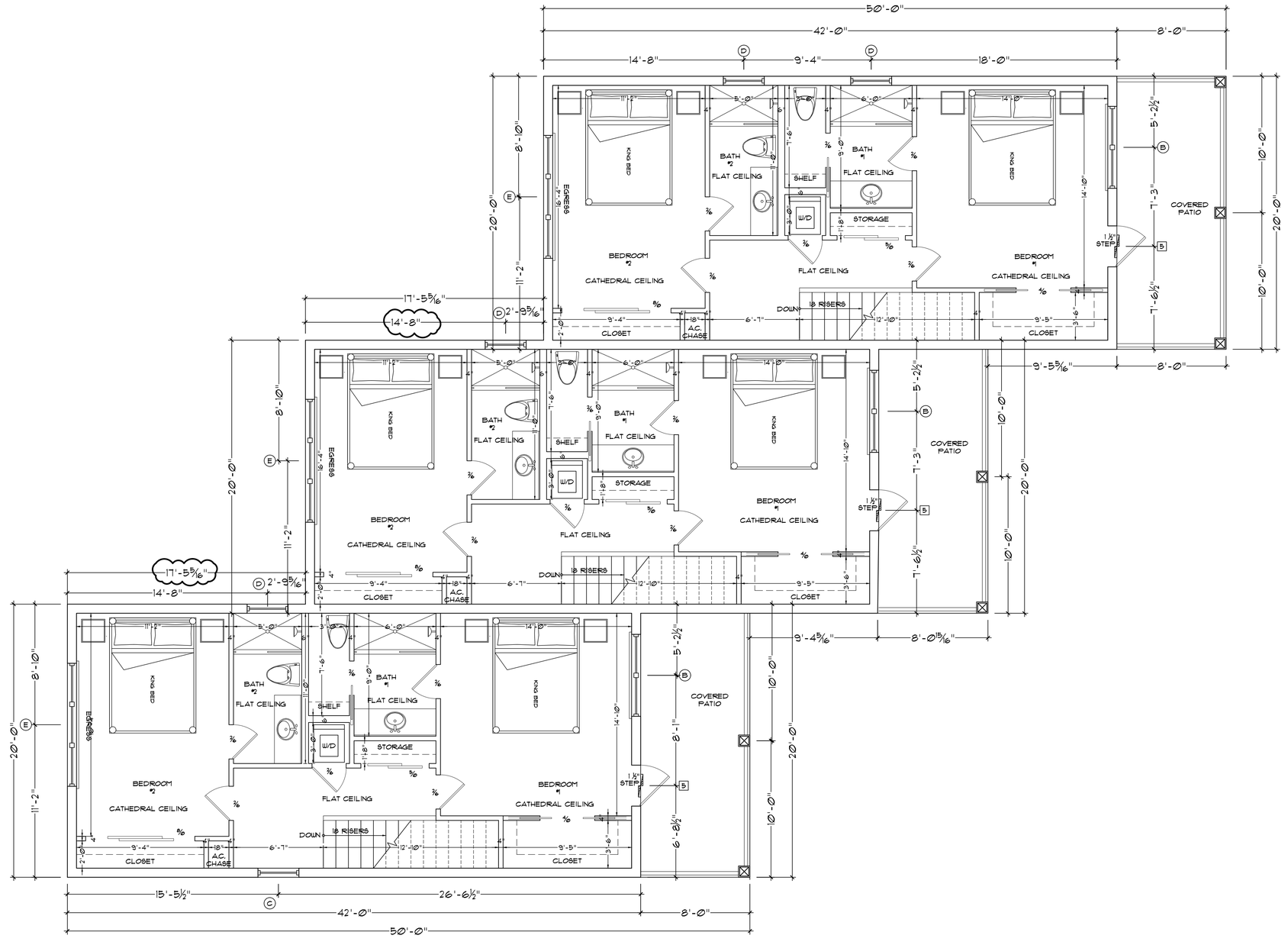
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-2

PROJECT No: D-16-047



THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-3

PROJECT No: D-16-047



FRONT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019
4	REVISION	11/28/2021

SCALE: AS SHOWN
DATE:
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX B - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-4

PROJECT No: D-16-047



REAR ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

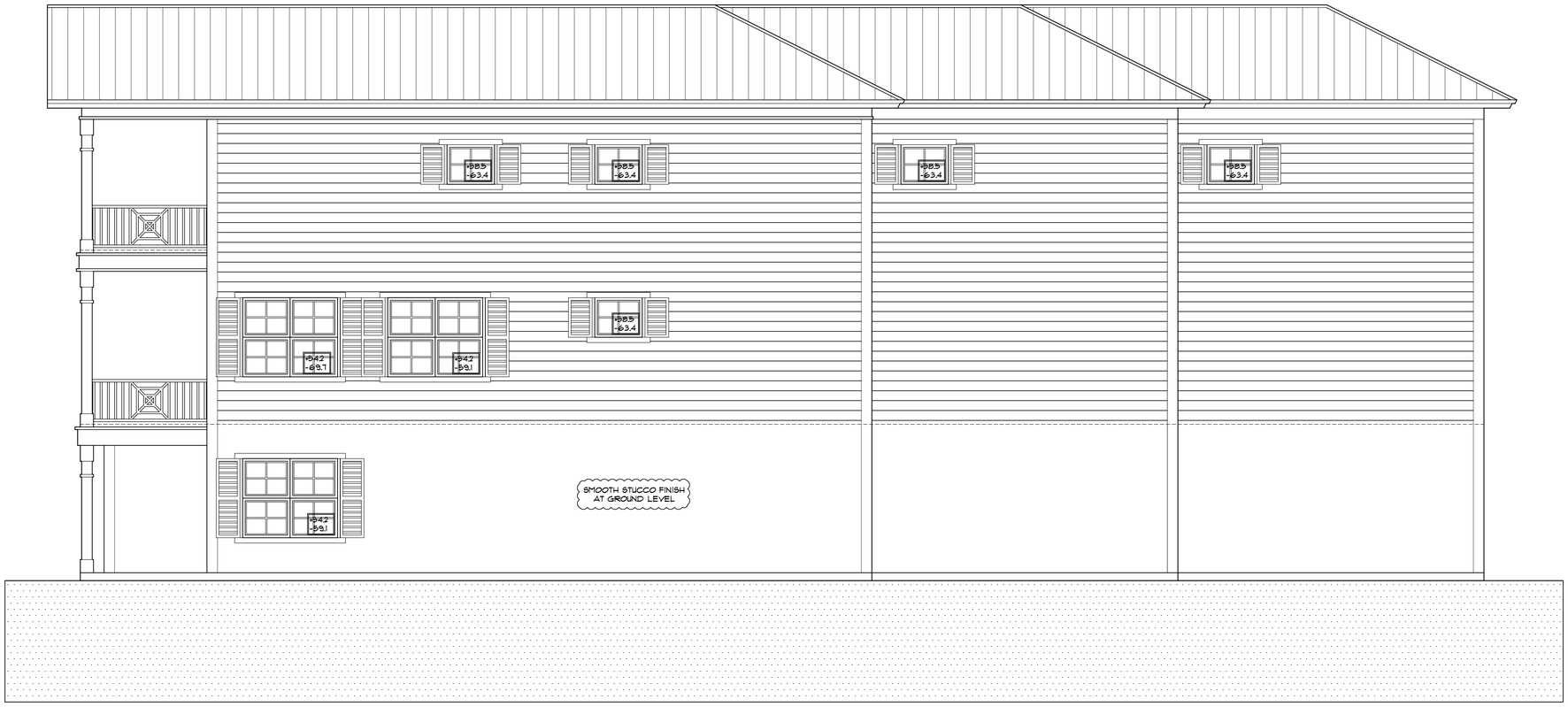
SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-5

PROJECT No: D-16-047



RIGHT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-6

PROJECT No: D-16-047



LEFT ELEVATIONS

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-1

PROJECT No: D-16-047

DOOR SCHEDULE

MARK	DOOR SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
1	74 1/2"	80 3/4"	PGT WINGUARD FD1Ø1H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
2	96"	84"	CLOPAY OVERHEAD DOOR	3	HURRICANE RATED
3	38 9/16"	96"	PGT WINGUARD FD1Ø1H FRENCH DOOR	1	FULL VIEW, WHITE ALUMINUM, RHR SWING, 1'-6" SIDELIGHT ON EACH SIDE
4	6Ø"	96"	PGT WINGUARD FD1Ø1H FRENCH DOOR	2	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
5	38 9/16"	8Ø 3/4"	PGT WINGUARD FD1Ø1H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, LHR SWING

WINDOW SCHEDULE

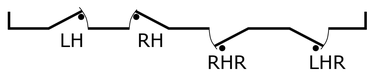
MARK	WINDOW SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
A	PAIR 27 1/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	4	MODEL H34EH
B	PAIR 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	15	MODEL 24EH
C	37 3/4"	38 3/8"	PGT WINGUARD SINGLE HUNG SH1ØØ	5	MODEL 23
D	37 3/4"	5Ø 5/8"	PGT WINGUARD SINGLE HUNG SH1ØØ	5	MODEL 24, FROSTED
E	TRIPLE 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	3	MODEL 24EH

EGRESS WINDOW NOTE

AS DESCRIBED IN FLORIDA BUILDING CODE: ALL EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (GRADE LEVEL 5.Ø SQ FT), HAVING A MINIMUM CLEAR OPENING HEIGHT OF 24 INCHES AND A NET CLEAR WIDTH OF 2Ø INCHES. EGRESS WINDOWS SHALL HAVE THE BOTTOM OF THE NET CLEAR OPENING NO GREATER THAN 44 INCHES AS MEASURED FROM THE FLOOR.

SWING DETERMINATION/DOOR HANDING

INSIDE ROOM, OR SECURE SIDE.



OUTSIDE, CORRIDOR,
OR NON-SECURE SIDE.

• = KEY SIDE

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	1/9/2022

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: WINDOWS AND DOORS

PROJECT: BG1SLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

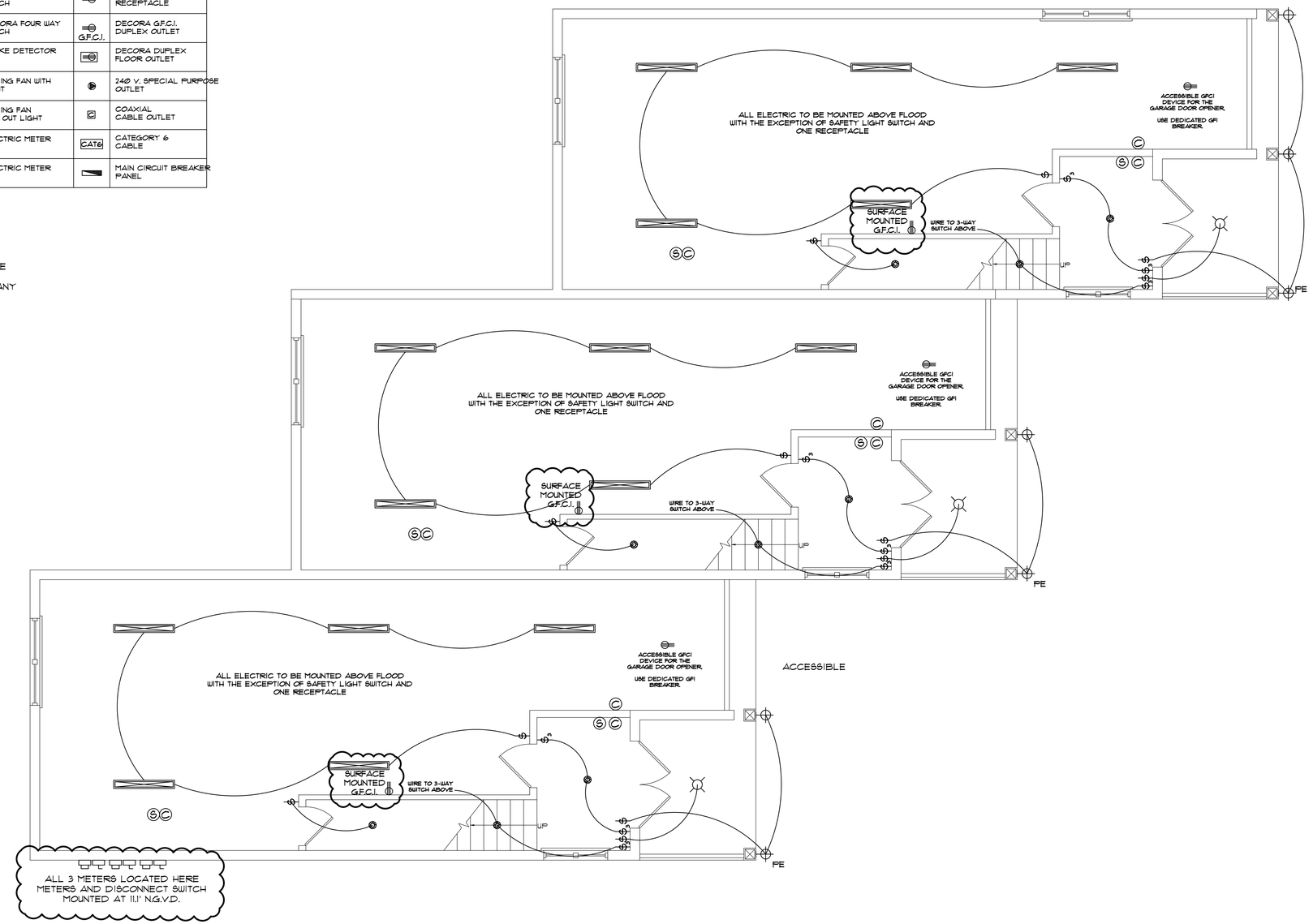
DRAWING No: A-8

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GD	GARAGE DOOR OPENER	3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

NOTE:

1. ALL OUTLETS AND SWITCHES TO BE MOUNTED ABOVE BASE FLOOD (AE-10) - ELEVATION VARIES PER UNIT LOCATION, COORDINATE WITH SURVEYOR PRIOR TO INSTALLATION OF ANY GROUND FLOOR ELECTRICAL



GROUND FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	12/17/2021
5	VILLAGE COMMENT	1/3/2022

SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX B - ELECT PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

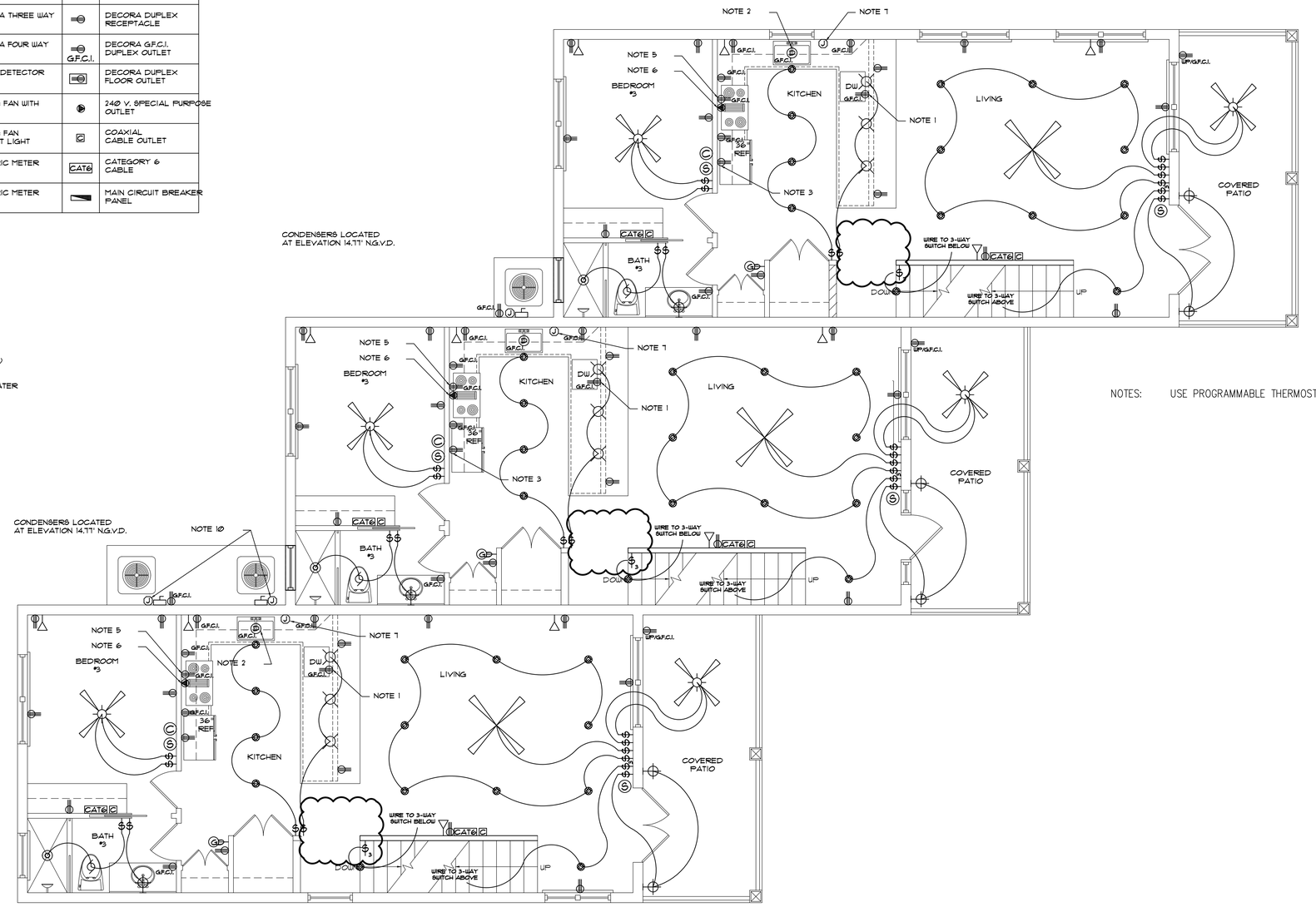
DRAWING No: E - 1

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING		A/C THERMOSTAT CONTROL	3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT		SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS		SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT		JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH AND GFCI PROTECTION
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER



NOTES: USE PROGRAMMABLE THERMOSTAT.

SECOND FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	12/17/2021
5	VILLAGE COMMENT	1/3/2022
6	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - ELECT PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

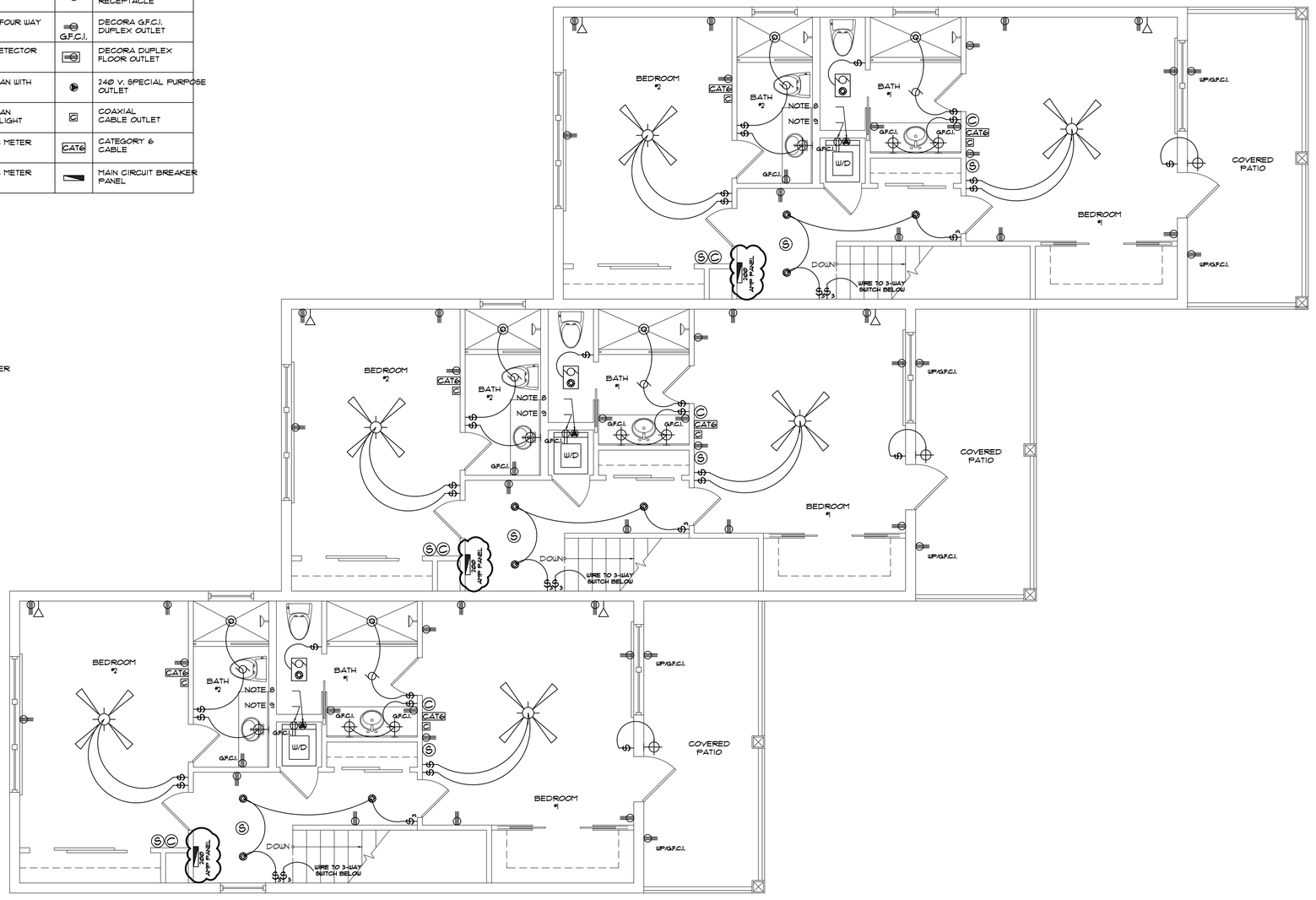
DRAWING No: E-2

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GD	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	LED. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER



THIRD FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

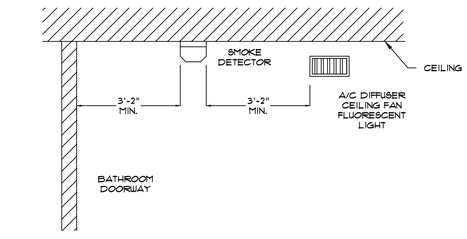
TITLE: TRIPLEX B - ELECT PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

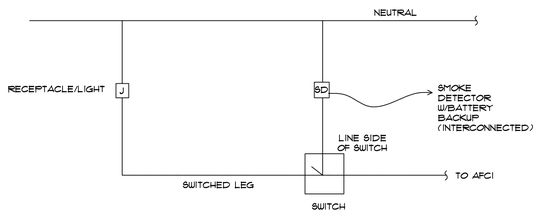
DRAWING No: E - 3

PROJECT No: D-16-047

ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE N.E.C. AND LOCAL BUILDING CODES HAVING JURISDICTION. ALL MATERIALS SHALL BEAR UNDERWRITERS LABORATORY LABEL OR BE U.L. LISTED
2. WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICES.
3. ALL EXCAVATING AND BACKFILLING REQUIRED FOR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR
4. CONNECTIONS TO EQUIPMENT, ELECTRICAL SUBCONTRACTOR SHALL VERIFY NAMEPLATE DATA OF A/C EQUIPMENT, WATER HEATERS AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVER-CURRENT PROTECTION PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING. THE ELECTRICAL SUBCONTRACTOR SHALL MAKE THE ELECTRICAL CONNECTION TO ALL EQUIPMENT REQUIRING CURRENT, ALL CONTROL WIRING SHALL BE CARRIED OUT BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE MECHANICAL SUBCONTRACTORS
5. OVERHEAD ELECTRIC CONDUCTOR CLEARANCES, HORIZONTAL OR VERTICAL SHALL BE MAINTAINED
6. ALL WIRING CONDUCTORS SHALL BE COPPER IN E.N.T. CONDUIT
7. BATHROOM, GARAGE, AND EXTERIOR RECEPTACLES SHALL BE EQUIPPED WITH GROUND FAULT INTERRUPTERS
8. ELECTRICAL INSTALLATION DESIGN IS IN COMPLIANCE AS SET FORTH BY THE STATE OF FLORIDA STATUTES MODEL ENERGY EFFICIENCY CODES
9. SMOKE DETECTORS SHALL BE HARD WIRED (110 VOLT) TO A NON-SWITCHABLE KITCHEN OR BATHROOM LIGHTING CIRCUIT AND SHALL NOT BE CONNECTED ONTO THE LOAD SIDE OF A GROUND FAULT INTERRUPTER
10. ALL PANELS SHALL BE SQUARE D OR EQUAL
11. FURNISH AND INSTALL UNDERGROUND RACEWAYS FOR POWER COMPANY SERVICE AND TELEPHONE COMPANY SERVICE AS PER UTILITY COMPANY SPECIFICATIONS, AND COORDINATE THE EXACT ROUTING OF THESE RACEWAYS WITH THE UTILITY
12. VERIFY EXACT LOCATION OF ELECTRICAL OUTLETS AND LIGHTS PRIOR TO EXECUTION OF ROUGH-IN WORK
13. ALL RACEWAYS AND NON-CURRENT CARRY METAL ENCLOSURES SHALL BE MECHANICALLY AND ELECTRICALLY GROUNDED
14. ALL RACEWAYS AND OUTLETS IN FINISHED AREAS SHALL BE MOUNTED AND SUPPORTED
15. ALL OUTLETS IN FINISHED AREAS SHALL BE MOUNTED FLUSH WITH FINISHED WALLS
16. ALL WORK SHALL BE RIGIDLY MOUNTED AND SUPPORTED
17. ELECTRICAL OUTLETS (RECEPTACLES AND LIGHTING) BELOW THE BASE FLOOD ELEVATION SHALL BE INSTALLED AT THE HIGHEST PERMITTED ELEVATION AND SHALL BE INSTALLED ON SEPARATE CIRCUIT FROM THOSE IN HABITABLE AREAS
18. NO APPLIANCE OUTLETS SHALL BE INSTALLED BELOW THE BASE FLOOD ELEVATION
19. A/C COMPRESSORS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
20. MAIN CIRCUIT BREAKER PANELS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
21. ALL WATER HEATERS SHALL BE MECHANICALLY GROUNDED





SMOKE DETECTOR DETAIL
N.T.S.

NOTE: PROVIDE ARC FAULT PROTECTION FOR ALL OUTLETS PER N.E.C. 210-12

WHERE 120 V. SMOKE DETECTORS ARE INSTALLED IN RESIDENTIAL OCCUPANCIES THEY SHALL BE INSTALLED AHEAD OF ALL SWITCHES AND SHALL BE CONNECTED TO BEDROOM AFCI CIRCUITS. SMOKE DETECTORS SHALL COMPLY WITH THE REQUIREMENTS OF THE F.B.C. 2017 ED

LOAD CALCULATION:

1,680 S.F. OF LIVING AREA x .003	= 5.04
PANEL LOAD	= 18.7
SUBTOTAL	= 23.74
FIRST 10 KW @ 100%	= 10.0
13.74 KW @ 40%	= 5.5
A.C. LOAD	= 7.5
TOTAL DEMAND FACTOR	= 23
23 KW / 230 VOLTS	= 100 AMPS

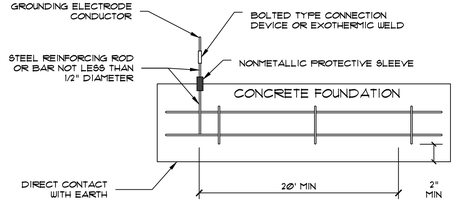
** INSTALL 200 AMP ELECTRICAL PANEL **
** ELECTRICAL LOAD FOR EACH UNIT IS THE SAME **

	MAIN PANEL				120/240V-1PH-3W			200A-MLO			
	CKT	DESCRIPTION	C.B.	POLE	WIRE	LOAD	LOAD	WIRE	POLE	C.B.	DESCRIPTION	CKT
(a)	1 3	A.C. HANDLER	40	2	#8 THIN - 1/2" CO	5.8	9.6	#6 THIN - 3/4" CO	2	60	A.C. CONDENSER	2 4 (c)
(a)	5 7	DRYER	40	2	#8 THIN - 1/2" CO	5.2	5.5	#6 THIN - 3/4" CO	2	60	OVEN	6 8 (a)
(c)	9 11	WATER HEATER	40	2	#8 THIN - 1/2" CO	8	1.5	#12 THIN - 1/2" CO	1	20	WASHER	10 (c)
							1.5	#12 THIN - 1/2" CO	1	20	REFRIGERATOR	12 (c)
(c)	13	GARAGE	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	GROUND EXTERIOR	14 (c)
(c)	15	GARAGE DOOR	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	SECOND EXTERIOR	16 (c)
(a)	17	M.B. RECEPTACLE	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	DISHWASHER	18 (c)
(a)	19	M.B. LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	MICROWAVE	20 (a)
(a)	21	B.#2 RECEPTACLE	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	KITCHEN G.F.C.I.	22 (c)
(a)	23	B.#2 LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	KITCHEN RECEPT.	24 (a)
(a)	25	B.#3 RECEPTACLE	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	KITCHEN LIGHTS	26 (a)
(a)	27	B.#3 LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	LIVING RECEPT.	28 (a)
(c)	29	BATH #1	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	LIVING LIGHTS	30 (a)
(c)	31	BATH #2	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	THIRD EXTERIOR	32 (c)
(c)	33	BATH #3	15	1	#12 THIN - 1/2" CO	1.5						34
	35											36
	37											38
	39											40
	41											42
TOTAL						35.5	33.1					TOTAL

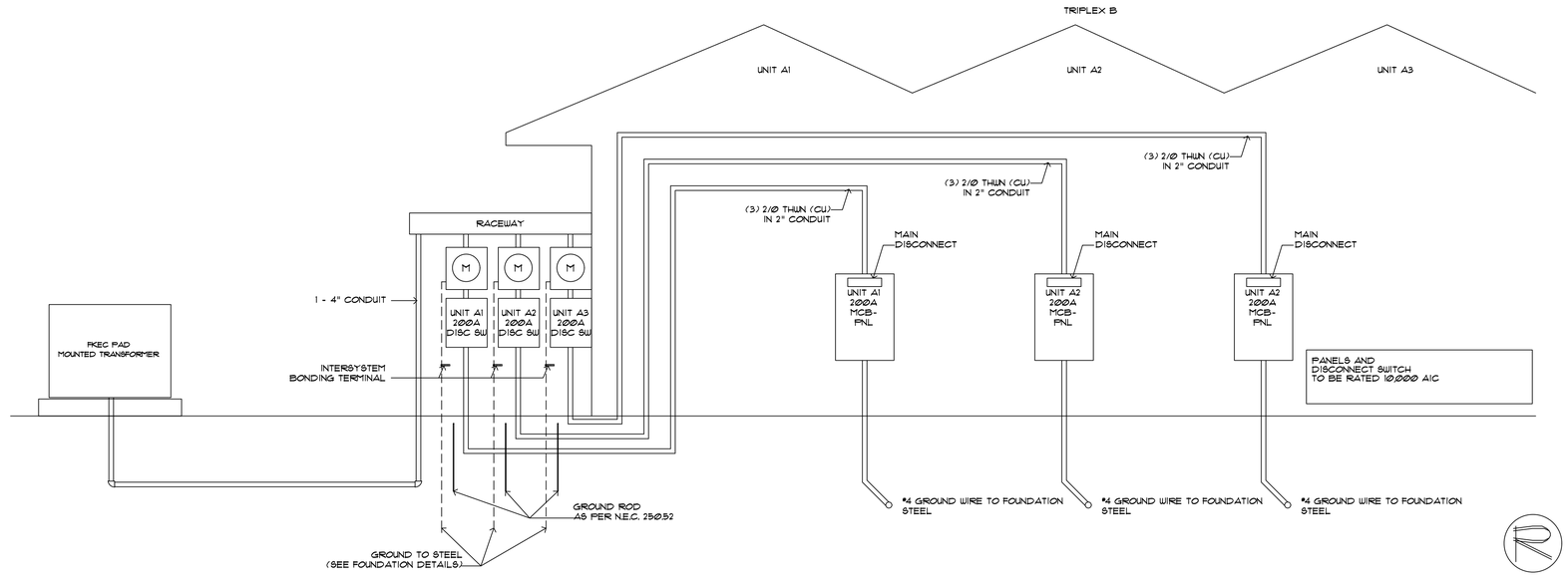
(a) AFCI C/B
(b) ON TIMER
(c) GFCI

NOTES: ALL BRANCH CIRCUITS SHALL COMPLY WITH NEC 2014 ARTICLE 210.12
PART OF 3W PER GF LOAD CALC
PROVIDE ARC FAULT PROTECTION FOR ALL RECEPTACLES

DEFINITION -NFPA 70 (2017 Edition)
(c) CONCRETE ENCASED ELECTRODE. AN ELECTRODE ENCASED BY AT LEAST 2" (50.8mm) OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET (6.1m) OF ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2" (12.7mm) DIAMETER, OR CONSISTING OF AT LEAST 20 FEET (6.1M) OF BARE COPPER CONDUCTOR NOT SMALLER THAN No.4.



NOTE: PER DETAIL THAT CONCRETE ENCASED GROUNDING ELECTRODE EXTENDS OUT OF THE FOOTER FOR CONNECTION TO GROUNDING ELECTRODE CONDUCTOR.



ELECTRICAL RISER DIAGRAM
N.T.S.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020

AS SHOWN
SCALE:
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - ELECT NOTES
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

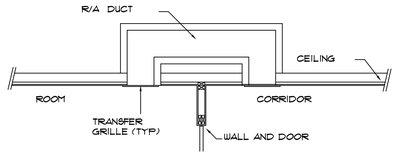
DRAWING No: E-4

PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS, TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVATA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT, EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M1403.11. AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

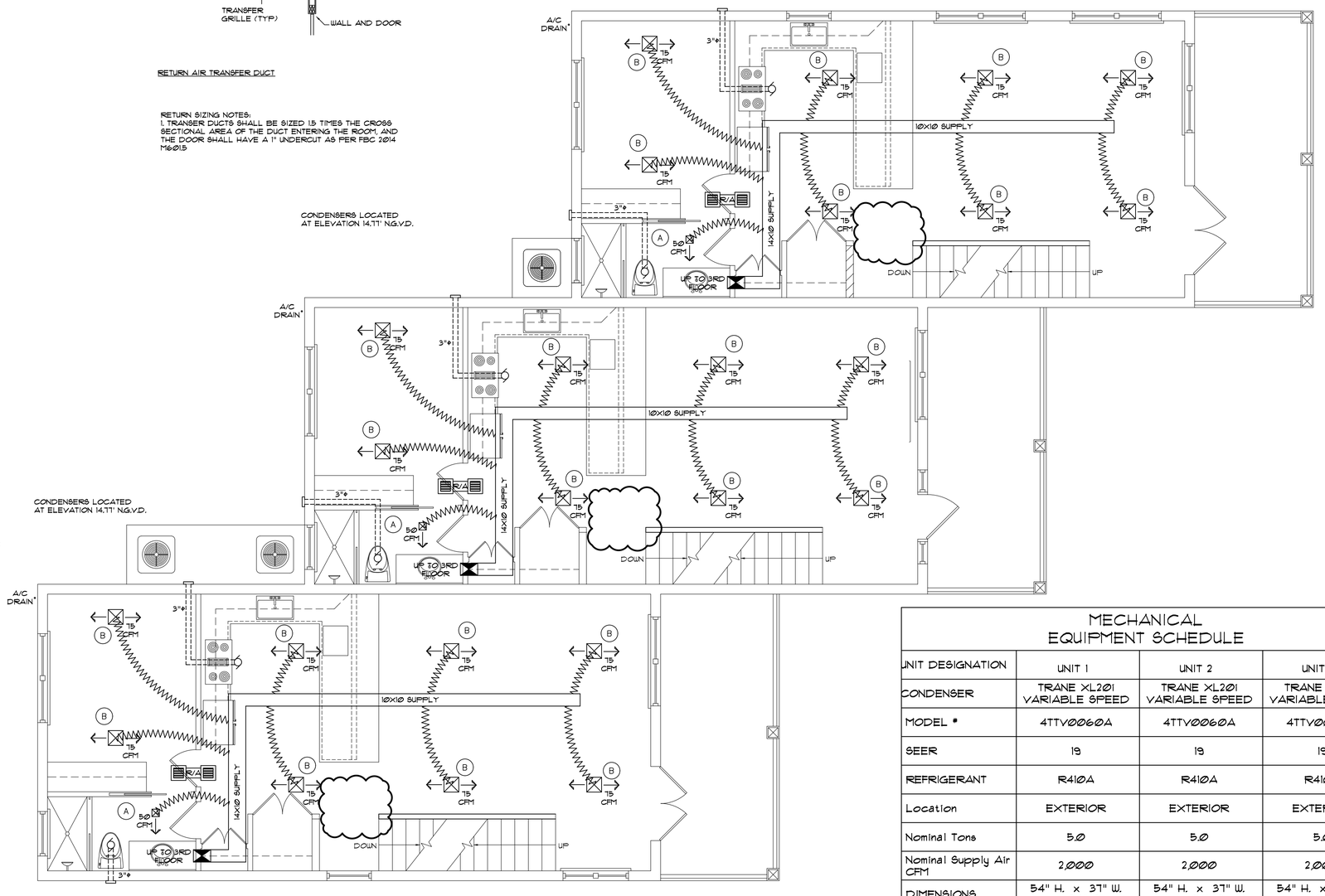


RETURN AIR TRANSFER DUCT

RETURN SIZING NOTES:
1. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M1601.5

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT,
EXHAUSTED DIRECTLY OUTDOORS
OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2
MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

NOTES: USE PROGRAMMABLE THERMOSTAT.
CONTRACTOR SHALL BE VERIFY THE DISTANCE BETWEEN THE INDOOR AND OUTDOOR UNITS AND TO CHECK THE SIZES OF THE REFRIGERANT LINES WITH MANUFACTURER



BALANCED RETURN AIR - FBC M1601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.
2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M1601.5
3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

NOTE:

ALL DUCTS SHALL BE SUPPORTED
WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS		
A	4x6	50 CFM
B	6x6	100 CFM
C	16x6	400 CFM
D	8x6	175 CFM
E	10x4	150 CFM
F	8x10	375 CFM
G	8x12	425 CFM
H	14x10	750 CFM

NOTE:

RETURN GRILLES BY TITUS ALL RETURN GRILLES ARE 12"x 12"

SECOND FLOOR MECHANICAL PLAN

SCALE @ ¼" = 1'-0"

MECHANICAL EQUIPMENT SCHEDULE

UNIT DESIGNATION	UNIT 1	UNIT 2	UNIT 3
CONDENSER	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED
MODEL #	4TTV0060A	4TTV0060A	4TTV0060A
SEER	19	19	19
REFRIGERANT	R410A	R410A	R410A
Location	EXTERIOR	EXTERIOR	EXTERIOR
Nominal Tons	5.0	5.0	5.0
Nominal Supply Air CFM	2,000	2,000	2,000
DIMENSIONS	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.
AIR HANDLER	TRANE M SERIES	TRANE M SERIES	TRANE M SERIES
MODEL #	TEM40C60	TEM40C60	TEM40C60
NOMINAL COOLING CAPACITY	60,000	60,000	60,000
DIMENSIONS	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/14/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - MECH PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-1

PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS. TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVUTA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M601.1.1: AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

BALANCED RETURN AIR - FBC M601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.

2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

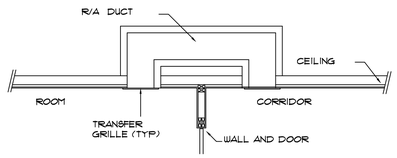
NOTE:

ALL DUCTS SHALL BE SUPPORTED
WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

NOTE:

RETURN GRILLES BY TITUS ALL RETURN GRILLES ARE 12"x 12"



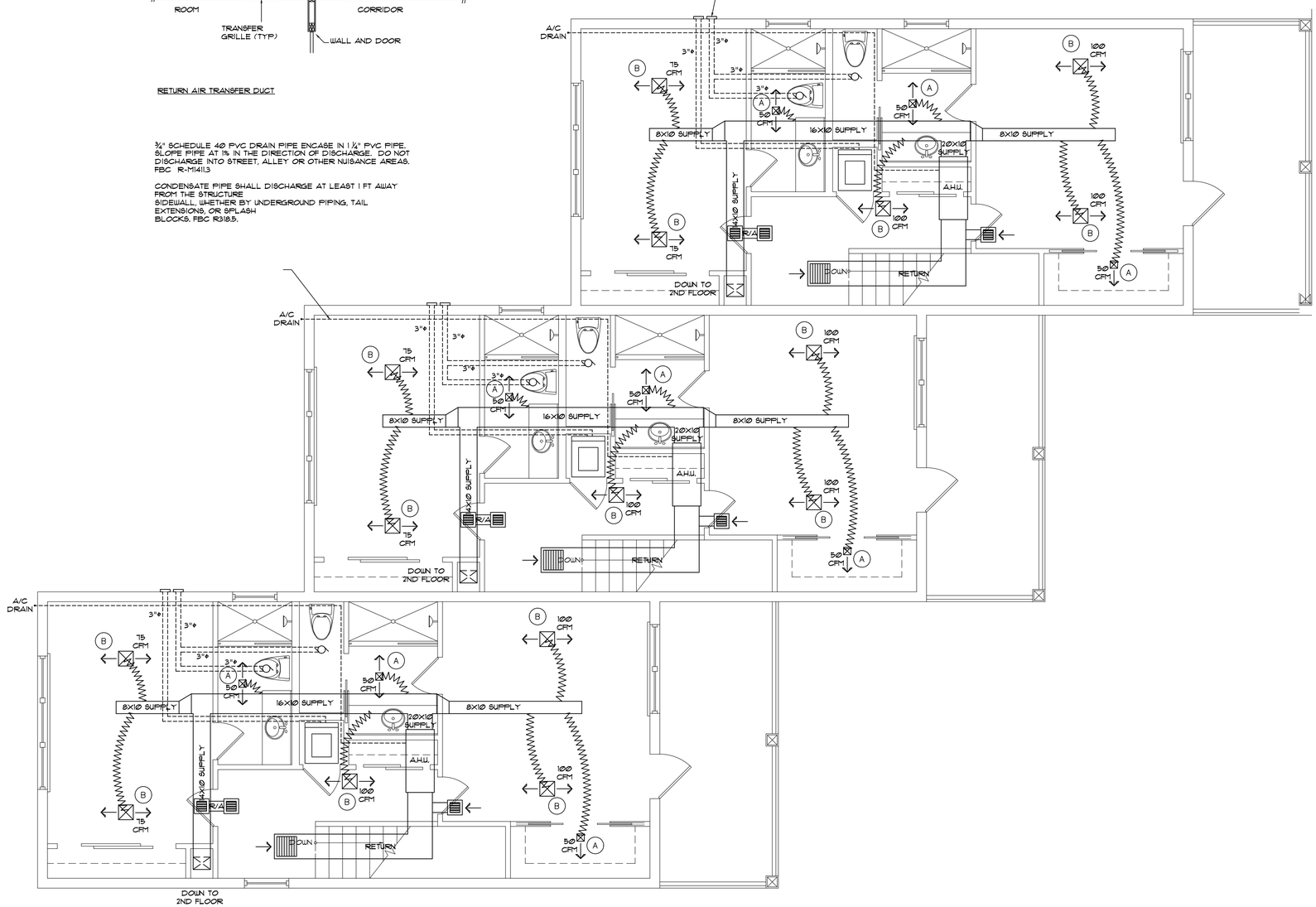
RETURN AIR TRANSFER DUCT

DRYER DUCT.
EXHAUSTED DIRECTLY OUTDOORS, OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2 (TYP)

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT.
EXHAUSTED DIRECTLY OUTDOORS
OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2
MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3

CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.



RETURN SIZING NOTES:
1. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

THIRD FLOOR MECHANICAL PLAN

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

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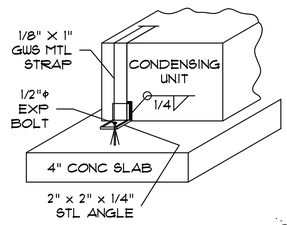
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - MECH PLANS

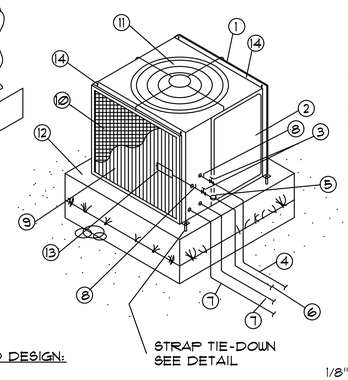
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-2

PROJECT No: D-16-047



TIE-DOWN

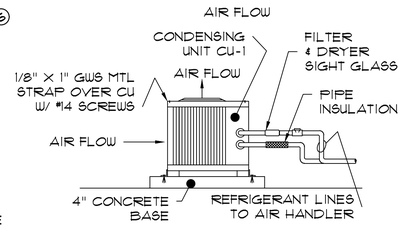


1. CONDENSING UNIT
2. COMPRESSOR ACCESS PANEL
3. BACK - SEATED REFRIGERANT VALVE
4. REFRIGERANT SUCTION LINE WITH INSULATION
5. SIGHT GLASS WITH MOISTURE INDICATOR
6. REFRIGERANT LIQUID LINE
7. CONDUIT - POWER AND CONTROL.
8. REFRIGERANT GAUGE CONNECTION
9. CONDENSER COIL
10. COIL GUARD
11. FAN GUARD
12. CONCRETE PAD IF REQUIRED
13. REFRIGERANT SUCTION LINE FLEX-CONNECTOR
14. 1/8" X 1" GALVANIZED METAL STRAP OVER CONDENSER SHROUD/FAN COWLING ATTACHED TO CONCRETE BASE W/MIN 1/2" ANCHOR/EXPANSION BOLTS 3" LONG ALL FOUR SIDES, W/MIN (4) #14 SCREWS W/GASKETED WASHERS TO TOP OF CONDENSER SHROUD/FAN COWLING THROUGH STRAPS.

STRAPS OVER COWLING/SHROUD DESIGN:
UPLIFT: TA 4'x3' = 12 SF
UPLIFT: 57.7 PSF X 12 = 692.4 LBS
USE 1/8" GWS MTL STRAP 1" WIDE OVER CONDENSING UNIT AND ATTACH TO SLAB W/ (4) ANCHORS:
ANCHORS 1/2" = 4/692.4 = 173.1 LBS EACH
ANCHOR PULL-OUT 3" = 1,180 LBS fE O.K.
ALTERNATIVE:
USE (4) 3/8" X 1" "TAPPER" TAPCONS INTO CONC SLAB: 880 LBS EACH fE 173.1 = O.K.

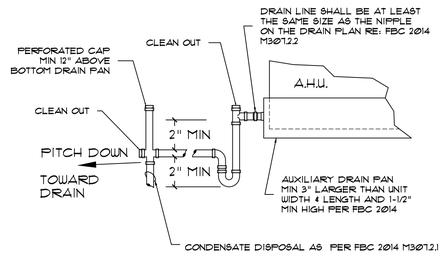
THE STRAPS ARE ALSO ADEQUATE FOR RESISTING OF OVERTURNING OF THE A/C CONDENSER WHEN USED WITH STRAPS AND ANGLES ATTACHMENTS, FOR SIDE WIND LOADS OF -37.9 PSF.

CONDENSING UNIT TO BE ATTACHED TO SLAB WITH 1/4"x2"x2" ANGLES EACH CORNER AS INDICATED IN DETAILS (STRAPS TO BE PROVIDED IN ADDITION TO ANGLES).



TYP ELEVATION

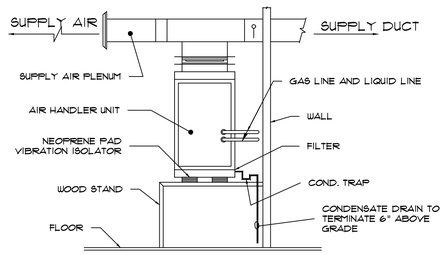
CONDENSING UNIT DETAILS



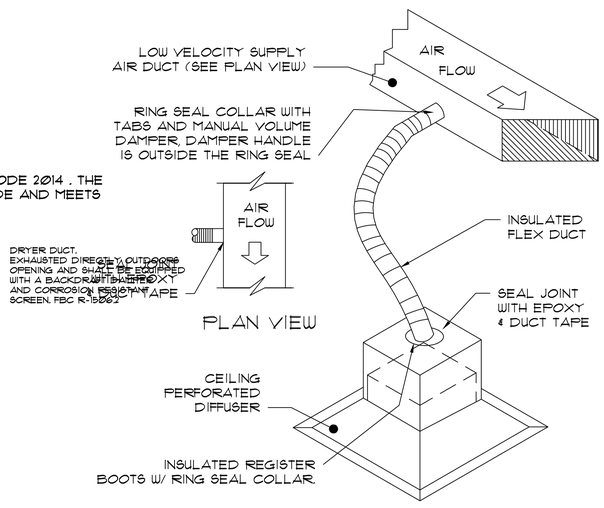
DRAIN TRAP DETAIL

NOTE:
MECHANICAL CONTRACTOR WILL COORDINATE WITH PLUMBING CONTRACTOR CONDENSATE SYSTEM INSTALLATION (TO BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR)
ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014

NOTES: A/C CONDENSING UNIT TO BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014 . THE STRAP TIE-DOWNS AS INDICATED HEREIN IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE CODE AND MEETS THE WIND LOAD REQUIREMENTS IN ACCORDANCE WITH ASCE 7-10.



AHU MOUNTING DETAIL



FLEXIBLE DUCT CONNECTION DETAIL

AIR CONDITIONING GENERAL NOTES

1. WORK INCLUDED: PROVIDING HEAT, VENTILATION, AND AIR CONDITIONING SYSTEMS WHERE SHOWN ON THE DRAWING, AS SPECIFIED HEREIN, AND AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION INCLUDING, BUT NOT NECESSARILY LIMITED TO
   - AIR CONDITIONING SUPPLY AND RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, AND REGISTERS.
   - AIR CONDITIONING UNITS, PIPING AND COMPONENTS, OPERATING AND SAFETY CONTROLS, BLOWERS, MOTORS, FILTERS, AND RELATED ITEM.
   - EXHAUST SYSTEMS INCLUDING TOILET FANS, MOTORS, DUCTWORK, GRILLES, REGISTERS, CONTROLS, AND REGISTERS.
   - TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING.
   - THERMAL INSULATION OF DUCTS AND PIPING.

2. DUCTWORK IN ATTICS SPACE AND ROOF WITH LESS THAN R-12 INSULATION SHALL BE 1-1/2" THICK FIBERGLASS WITH VAPOR BARRIER. DUCT WORK BETWEEN FLOORS, ENCLOSED ATTACHED GARAGES, UNCONDITIONED BASEMENT, UNCONDITIONED INTERIOR SPACES, AND ROOF WITH MIN R=12 INSULATION SHALL BE R-4.3 KNAUF AIR DUCT FIBERGLASS TYPE E1800 WITH VAPOR BARRIER. UNLESS OTHERWISE SPECIFIED DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ACCORDING TO "ASHRAE" AND "NAIMA" STANDARDS

   ALL DUCTWORK SHALL BE 1 ½" FIBERGLASS AND INSTALLED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND ACCORDING TO ASHRAE AND SMACNA STANDARDS, AND FLORIDA BUILDING CODE 2014 ENERGY FOR BUILDING CONSTRUCTION. DUCT DIMENSIONS ARE IN INCHES AND CORRESPOND TO INSIDE DIMENSIONS, WITH x HEIGHT. DUCT SYSTEM SHALL COMPLY WITH "NFPA" STANDARD No. 90A AND/FR 90B DUCTWORK AND COMPONENTS S SHALL BE CLASS 1 MATERIALS IN ACCORDANCE WITH U.L. 181 TESTS. FIBERGLASS DUCT SYSTEM STRAIGHT SECTIONS AND FITTINGS SHALL BE REINFORCED BY EITHER OR BOTH OF THE FOLLOWING METHODS: A) TIE ROD REINFORCEMENT AND OR B) CHANNEL REINFORCEMENT. REFER TO THE FIBROUS GLASS DUCT CONSTRUCTION STANDARDS AND MANUFACTURER RECOMMENDATION. LONGITUDINAL SEAMS AND TRANSVERSE JOINTS CLOSURES SHALL COMPLY WITH UL 181 A/P (PRESSURE SENSITIVE ALUMINUM FOIL TAPE) OR 181 A/H (HEAT SELLABLE ALUMINUM FOIL TAPE OR MANUFACTURER'S RECOMMENDATIONS FOR THE USE OF GLASS FABRIC AND MASTIC. DUCT SUPPORT SHALL BE PLACED SO AS TO PROPERLY SUPPORT ALL FITTINGS AND ACCESSORIES WITHOUT PLACING THE TAPED JOINTS UNDER STRESS.

3. COORDINATE LOCATIONS, SIZES AND OPENINGS WITH OTHER TRADES ON THE JOB. A/C CONTRACTOR SHALL PROVIDE THE COMPLETE DUCT SYSTEM WITH TURNING VANES AT ALL ELBOWS, AND INSTALLED SPLINTERS AND DAMPERS AS REQUIRED OR SHOWN ON THE DRAWING.

4. DIFFUSERS SHALL BE SELECTED, LOCATED AND BALANCED IN ORDER THAT THEY DELIVER THE REQUIRED CFM RELATIVE HUMIDITY TO THE ENTIRE ROOM EVENLY AND DRAFT FREE TO THE FOLLOWING DESIGN CONDITIONS. 50% TO 60% INSIDE OUTSIDE COOLING - 78 dB 91dB -79 wB HEATING - 72 dB

5. ALL FAN, MOTORS, COMPRESSORS, ETC. SHALL BE ISOLATED, AS REQUIRED TO OPERATE QUIETLY SO THAT NO OBJECTIONABLE SOUND WILL BE HEARD IN THE HABITABLE SPACES DUE TO AIR VELOCITY, MOTOR HUM, VIBRATION OR MECHANICAL MOVEMENT.

6. A/C SYSTEM SHALL HAVE 1" AIR FILTERS AS SPECIFIED LOCATION AND AS REQUIRED FOR EASY ACCESSIBILITY.

7. A/C SYSTEM SHALL BE CONTROLLED BY A THERMOSTAT MOUNTED 5' ABOVE FINISH FLOOR.

8. ALL GRILLES AND DIFFUSERS TO BE ALUMINUM CONSTRUCTION. ALL DIFFUSERS SHALL HAVE HIDDEN OPPOSED BLADE DAMPERS. PROVIDE GASKETS ON ALL GRILLES AND DIFFUSERS.

9. ALL REFRIGERANT PIPING SHALL BE COPPER COLD DRAWN TYPE -L-ACR, DEHYDRATED AND SEALED. ALL FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH HIGH TEMPERATURE BRAZING ALLOY OF NOT LESS THAN 5% SILVER. PIPING INSULATION NOT LESS THAN 3/4" THICK "ARMAFLEX". LIQUID AND SUCTION LINES SHALL BE SIZED ACCORDING TO EQUIPMENT MANUFACTURER'S RECOMMENDATION FOR EQUIVALENT LENGTH OF PIPING RUN FOR CONNECTED TONNAGE. ALL PIPING ACCESSORIES SHALL BE CONSTRUCTED AS SUGGESTED BY EQUIPMENT MANUFACTURER. PROVIDE FILTER/DRYER AND SIGHT GLASS ON LIQUID LINE. REFRIGERANT PIPING SYSTEM SHALL BE COMPLETED EVACUATED TO 26" VACUUM OF MERCURY GAUGE PRESSURE USING A VACUUM PUMP AND HOLD FOR A MINIMUM OF 24 HOURS. COMPRESSORS SHALL NOT BE USED TO EVACUATED SYSTEMS. CHANGE THE OIL IN THE VACUUM PUMP BEFORE VACUUM IS FULL. VACUUM SHALL BE BROKEN WITH THE OPENING REFRIGERANT.

10. ALL VENTILATION DUCTWORK SHALL BE 1 ½" FIBERGLASS INSTALLED ACCORDING TO LAST EDITION OF "SAMNA" AND "ASHRAE" FOR LOW PRESSURE DUCT SYSTEM.

11. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.

12. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE SITE, SATISFY HIMSELF TO EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PREFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FIELD CONDITION AFFECTING HIS WORK.

13. ELECTRIC HEATERS: SHALL BE MOUNTED IN BOX CASING WITH CAPACITIES AS SHOWN IN THE SCHEDULE. HEATERS TO BE U.L. LABELED AND LISTED FOR ZERO CLEARANCE AS A DUCT HEATER. ELEMENTS TO BE OPEN TYPE GRADE A NICHROME WIRE. EACH HEATER ASSEMBLY SHALL BE PROVIDED WITH A HIGH TEMPERATURE LIMIT CONTROLLER LIMIT CONTROLLER WITH A MANUAL RESET, AND WITH A SWITCH TO SHUT DOWN HEATER ON NO AIR FLOW CONDITION.

14. TESTING AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR WHO IS A MEMBER OF ASSOCIATED AIR BALANCE COUNCIL. TEST AND BALANCE REPORT SHALL BE APPROVED BY THE ENGINEER OF RECORD BEFORE CERTIFICATION OF OCCUPANCY. ALL SUPPLY DUCT, RETURN AND EXHAUST DUCT SYSTEM SHALL BE TESTED FOR AIR LEAKS, AND ANY AIR LEAKS SHALL BE FIXED AS REQUIRED.

15. PROVIDE A CONDENSATE DRAIN RUNNING TO APPROVED DRAIN. THE CONDENSATE DRAIN SYSTEM SHALL MEET THE LOCAL PLUMBING CODE REQUIREMENTS.

16. PROVIDE ELECTRICAL DISCONNECTS FOR THE AIR HANDLER AND CONDENSING UNIT. THE SIZE OF THE DISCONNECT SHALL COMPLY WITH THE EQUIPMENT MANUFACTURER'S REQUIREMENT.

17. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE MECHANICAL SYSTEMS.

18. INTERLOCK ELECTRIC DUCT HEATERS WITH COMPRESSOR CIRCUIT SO THAT HEATERS DO NOT OPERATE SIMULTANEOUSLY WITH COMPRESSORS.

19. AS PER R402.4.1.2, ANY BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 7 AIR CHANGES PER HOUR IN CLIMATE ZONES 1 AND 2, AND 3 AIR CHANGES PER HOUR IN CLIMATE ZONES 3 THROUGH 8. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY EITHER INDIVIDUALS AS DEFINED IN SECTION 553.993(5) OR (7), FLORIDA STATUTES OR INDIVIDUALS LICENSED AS SET FORTH IN SECTION 489.105(3)(F), (G), OR (I) OR AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

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SCALE: AS SHOWN
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DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - MECH NOTES
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-3

PROJECT No: D-16-047

PLUMBING GENERAL NOTES AND SPECIFICATION

1. A. SCOPE OF WORK.
THE WORK SHALL INCLUDE ALL PLUMBING AND SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING
1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS.
2. SANITARY DRAIN AND VENT SYSTEMS.
3. PLUMBING FIXTURES AND TRIM.
4. AIR CONDITIONING CONDENSATE DRAIN SYSTEMS.
5. PRESSURE AND TEMPERATURE RELIEF FROM WATER HEATER.
6. PIPING INSULATION.
7. SUPPORTS AND HANGERS.

2. CONTRACTOR SHALL VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.

3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING. "BITUMASTIC" OR EQUAL.

4. ALL FIXTURES SHALL BE PROTECTED AGAINST WATER HAMMER WITH AIR CHAMBERS OF SHOCK ABSORBERS AS INDICATED ON PLANS.

5. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH APPROVED MATERIALS, SHALL HAVE SMOOTH IMPERVIOUS SURFACES AND SHALL BE FREE FROM DEFECTS AND CONCEALED FOULING SURFACES. ALL FIXTURE TRIM TO BE CHROME PLATED, FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC.

6. WASTE LINES TO SLOPE 1/8"/FOOT UNLESS OTHERWISE NOTED.

7. VENT LINES TO EXTEND MIN OF 9" ABOVE ROOF AND FLASH WITH LEAD.

8. WATER PIPE BELOW GROUND SHALL BE COPPER TYPE "K", ABOVE GROUND TO BE COPPER TYPE "L".

9. PIPING INSTALLATION.
A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE
B. PROVIDE SLEEVES FOR ALL PIPING THROUGH FOUNDATIONS, SLABS, OR MASONRY WALLS. CAULK OPENINGS BETWEEN PIPE AND SLEEVES.
C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESCUTCHEONS. FIRMLY SECURE TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE SLEEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESCUTCHEONS IN BATHROOMS.
D. WHERE PIPES PASS THROUGH FIRE RATED FLOOR WALLS, OR CEILINGS, PROVIDE FIRE STOPS, OR FIRE BARRIER PENETRATION SEALING SYSTEMS SHALL BE UL. LISTED.

10. INSPECTION AND TESTS.
CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTION TO THE AUTHORITIES HAVING JURISDICTION AS THE WORK PROGRESS. ALL SYSTEMS SHALL BE TESTED BY CODE AND OR LOCAL REGULATIONS. THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE STERILIZED FOLLOWING CODE PROCEDURES. AFTER STERILIZATION FLUSH THE SYSTEM WITH CLEAN WATER UNTIL SAFE TO BE CONSUMED.

11. UTILITIES CONNECTION
PLUMBING CONTRACTOR SHALL VERIFY AT FIELD AND WITH THE UTILITY COMPANIES THE EXACT POINT OF CONNECTION FOR WATER AND SEWER SERVICES BEFORE SUBMITTING A BID OR PRICE FOR HIS WORK.

12. PLUMBING CONTRACTOR IS RESPONSIBLE FOR PERFORMING THE FOLLOWING TEST IN THE PRESENCE OF AN OWNER REPRESENTATIVE.
A. ALL WATER PIPING SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST OF 100 PSI. FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.

B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH WATER TO HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTED

13. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUND OF CHLORINATE LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE.) RETAIN MIXTURE IN PIPE 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.

14. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF INSTALLATION.

15. PLUMBING CONTRACTOR SHALL FURNISH WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE FROM DATE OF FINAL ACCEPTANCE, AND THAT HE WILL AT HIS EXPENSE REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE GUARANTEE PERIOD INCLUDING BUT NOT LIMITED TO NECESSARY DEMOLITION, PATCHING, RE-PATCHING AND REFINISHING.

16. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN HIS BID, THE COST FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO PERFORM THE SCOPE OF THE WORK AND THE INTENT OF THE CONSTRUCTION DOCUMENTS FORM ALL THE LOCAL AND STATE AUTHORITIES.

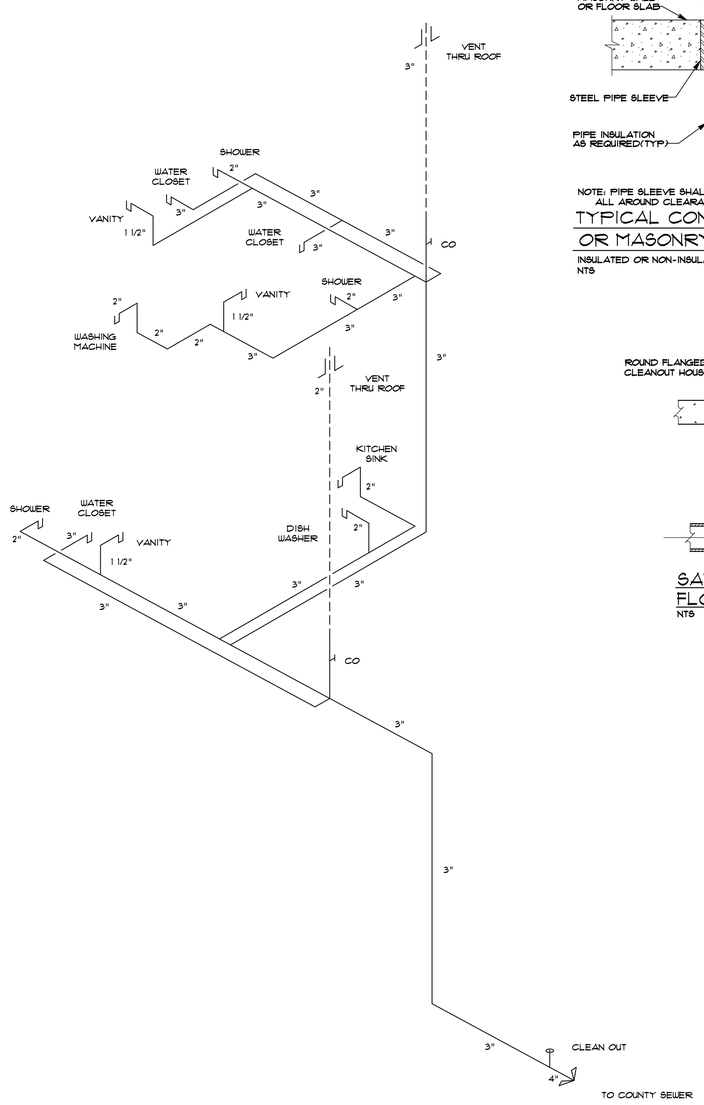
17. CONDENSATE DRAIN FROM AIR CONDITIONING UNITS SHALL BE "PVC" SCHEDULE 40 PIPE AND FITTINGS ALL HORIZONTAL RUN SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX PIPE INSULATION OR EQUAL. SLIP PIPE INSULATION AND SEAT BUTT JOINTS.

18. ALL PIPING MATERIALS SHALL BE NEW AND AS FOLLOWS:
A. SANITARY WASTE, VENT AND STORM DRAIN PIPING: UNDERGROUND AND ABOVE GROUND PIPING SHALL BE "PVC" PIPE AND FITTINGS SCHEDULE 40. MATERIAL SHALL COMPLY WITH ASTMD-1784, TYPE I.
B. DOMESTIC WATER ABOVE GROUND SHALL BE TYPE "K" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
C. DOMESTIC WATER BELOW GROUND SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT AT FITTINGS.
D. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, ELJER OF KOHLER.
E. ELECTRIC WATER HEATERS SHALL BE LOCHINVAR UNLESS OTHERWISE SPECIFIED. SEE SPECIFICATIONS.
F. SOLDER ALLOY SHALL BE LEAD FREE.
J. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.

19. INSULATION:
A. ALL RECALCULATION HOT WATER PIPE SHALL BE INSULATE WITH 1/2" THICK FIBERGLASS MOLDED INSULATION WITH PRE-SIZED FACTORY APPLIED "FRJ" JACKET OF GLASS CLOTH WITH LONGITUDINAL LAP AND BUTT JOINT STRIPS WITH SELF SEALING ADHESIVE.
B. INSULATION SHALL HAVE A MAXIMUM THERMAL CONDUCTIVITY OF Ø.26 K FACTOR AT 75 DEG. F. MEAN TEMPERATURE. JACKET INSULATION AND ADHESIVE SHALL HAVE COMPOSITE FIRE AND SMOKE RATING AS PER ASTM E84-75. FINISHING JACKETS SHALL HAVE A MAXIMUM FLAME SPREAD OF 25.

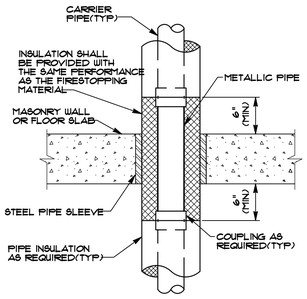
20. HANGERS AND SUPPORTS.
A. PROVIDE ADJUSTABLE HANGERS, INSERTS, BRACKETS, ROLLS, CLAMPS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. PROVIDE HANGERS TO ALLOW FOR EXPANSIONS AND CONTRACTION OF PIPE LINES AND OF ADEQUATE SIZE TO PERMIT COVERING TO RUN CONTINUOUSLY THROUGH HANGERS. PIPING AT EQUIPMENT SUPPORTED INDEPENDENTLY SO THAT NO WEIGHT WILL BE SUPPORTED BY EQUIPMENT. COORDINATE LOCATION OF HANGERS WITH LIGHT FIXTURES, AIR CONDITIONING DUCTWORK AND DIFFUSERS AND WITH EXISTING PIPING SYSTEMS.
B. PROVIDE RISER CLAMPS AT EVERY FLOOR.

21. EXISTING CONDITIONS: CONTRACTOR BY AND THROUGH SUBMISSION OF HIS BID, AGREES THAT HE SHALL BE HELD RESPONSIBLE FOR HAVING EXAMINED THE SITE, THE LOCATION OF ALL PROPOSED WORK AND FOR HAVING SATISFIED HIMSELF FROM HIS OWN PERSONAL KNOWLEDGE AND EXPERIENCE OR PROFESSIONAL ADVICE AS TO THE CHARACTER, AND LOCATION OF THE SITE, THE NATURE OF THE EXISTING CONDITIONS, THE LOCATION OF EXISTING UTILITIES AND ANY OTHER CONDITIONS SURROUNDING AND AFFECTING THE WORK, ANY OBSTRUCTIONS, THE NATURE OF EXISTING CONSTRUCTION, AND ALL OTHER PHYSICAL CHARACTERISTICS OF THE JOB, IN ORDER THAT HE MAY INCLUDE IN THE PRICES WHICH HE BIDS ALL COSTS PERTAINING TO THE WORK AND THEREBY PROVIDE FOR THE SATISFACTORY COMPLETION THEREOF.



PLUMBING ISOMETRIC

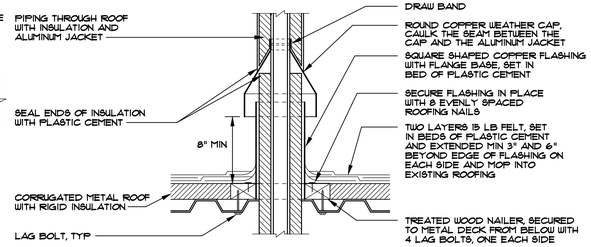
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NOTE: PIPE SLEEVE SHALL BE SIZED TO PROVIDE 1/4" ALL AROUND CLEARANCE.

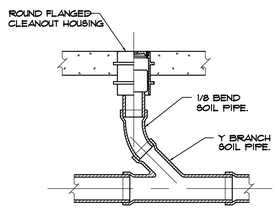
TYPICAL CONCRETE FLOOR OR MASONRY WALL PENETRATION

INSULATED OR NON-INSULATED, ABOVE GRADE
NTS



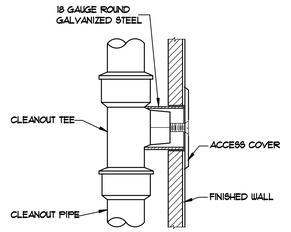
PIPING THROUGH ROOF DETAIL

NTS



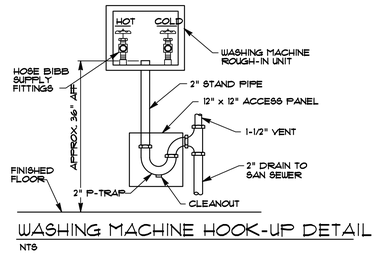
SANITARY CLEANOUT FLOOR SLAB DETAIL

NTS



WALL CLEANOUT DETAIL

NTS



WASHING MACHINE HOOK-UP DETAIL

NTS

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NO.	REVISION	DATE
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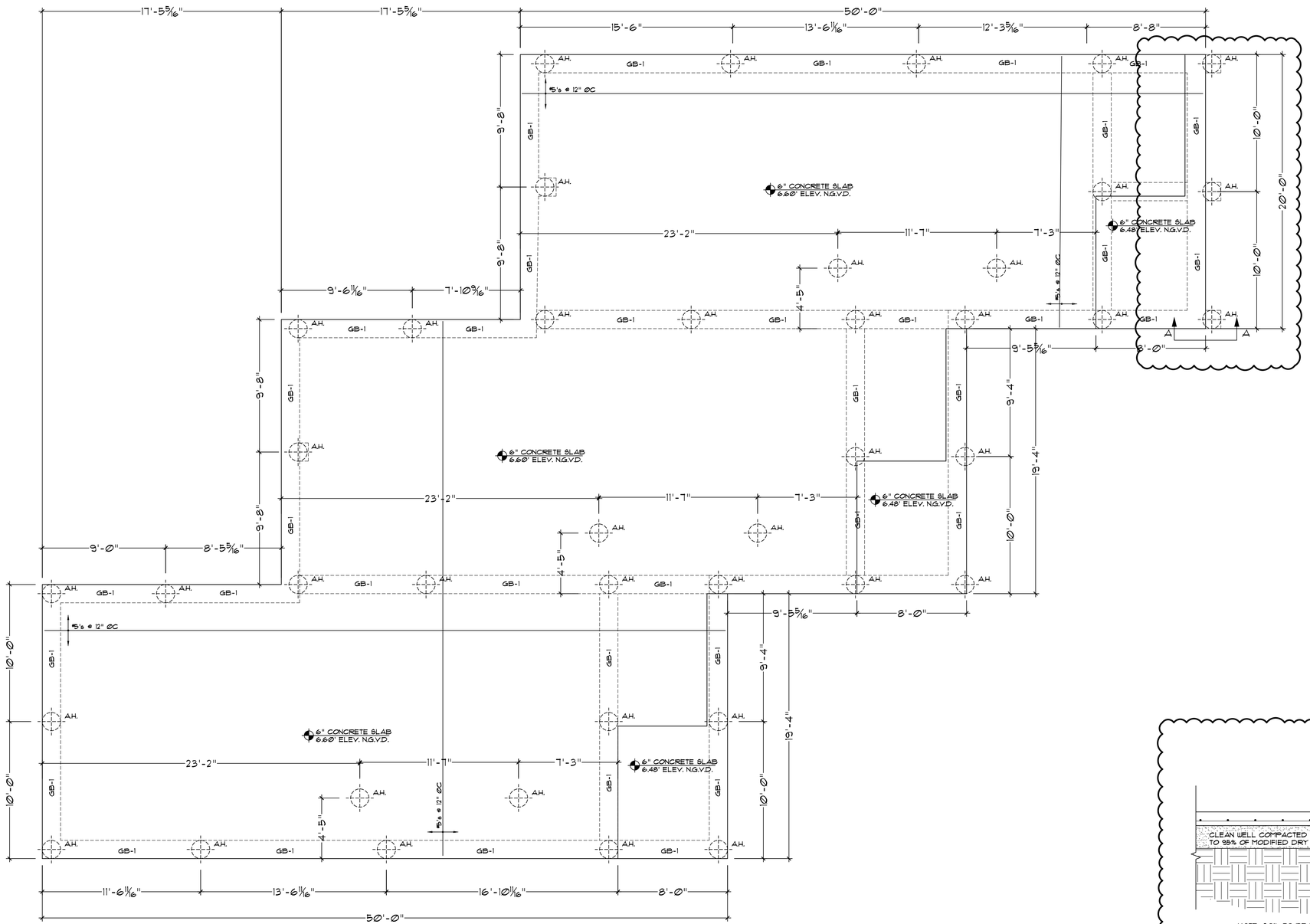
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - PLUMBING

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: P-1

PROJECT No: D-16-047



FOUNDATION PLAN

SCALE @ ¼" = 1'-Ø"

LEGEND:	
AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

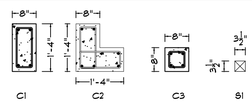
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

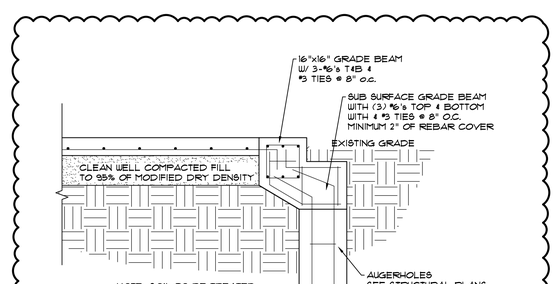
BEAM SCHEDULE

TAG	DIMENSIONS W"XH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" O.C.	6.49'
1B-1	8X16	2-#5's	-	2-#5's	#3's @ 8" O.C.	16.15'
1B-2	8X12	2-#5's	-	2-#5's	#3's @ 8" O.C.	16.15'
2B-1	8X16	2-#6's	-	2-#5's	#3's @ 8" O.C.	27.81'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" O.C.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" O.C.	
C2	8X16X16	6-#6's	#3 @ 12" O.C.	
C3	8X8	4-#6's	#3 @ 12" O.C.	
S1	3-½"X3-½"X¼"	-	-	STEEL COLUMN





SECTION A-A

SCALE @ ½" = 1'-Ø"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

REVISION	DATE
FOR SUBMITTAL	8/31/2018
REVISION 1	11/28/2021
VILLAGE COMMENT	12/17/2021

NO.	
Ø	
1	
2	

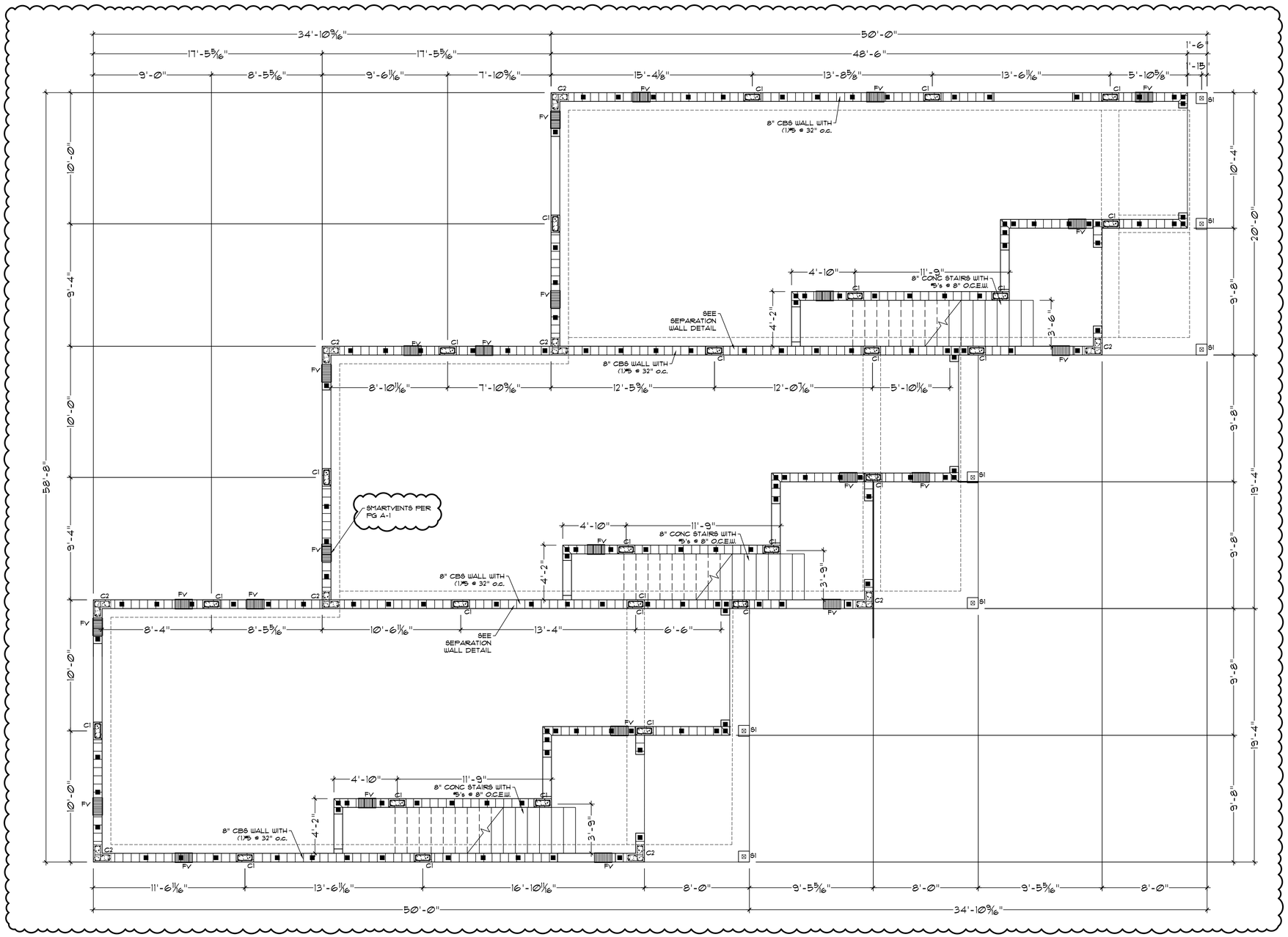
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX B - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

PROJECT No: D-16-047



GROUND FLOOR WALL & COLUMN PLAN

SCALE @ ¼" = 1'-Ø"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

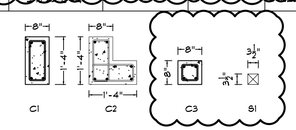
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"xH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.49'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3½"x3½"x¼"			STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

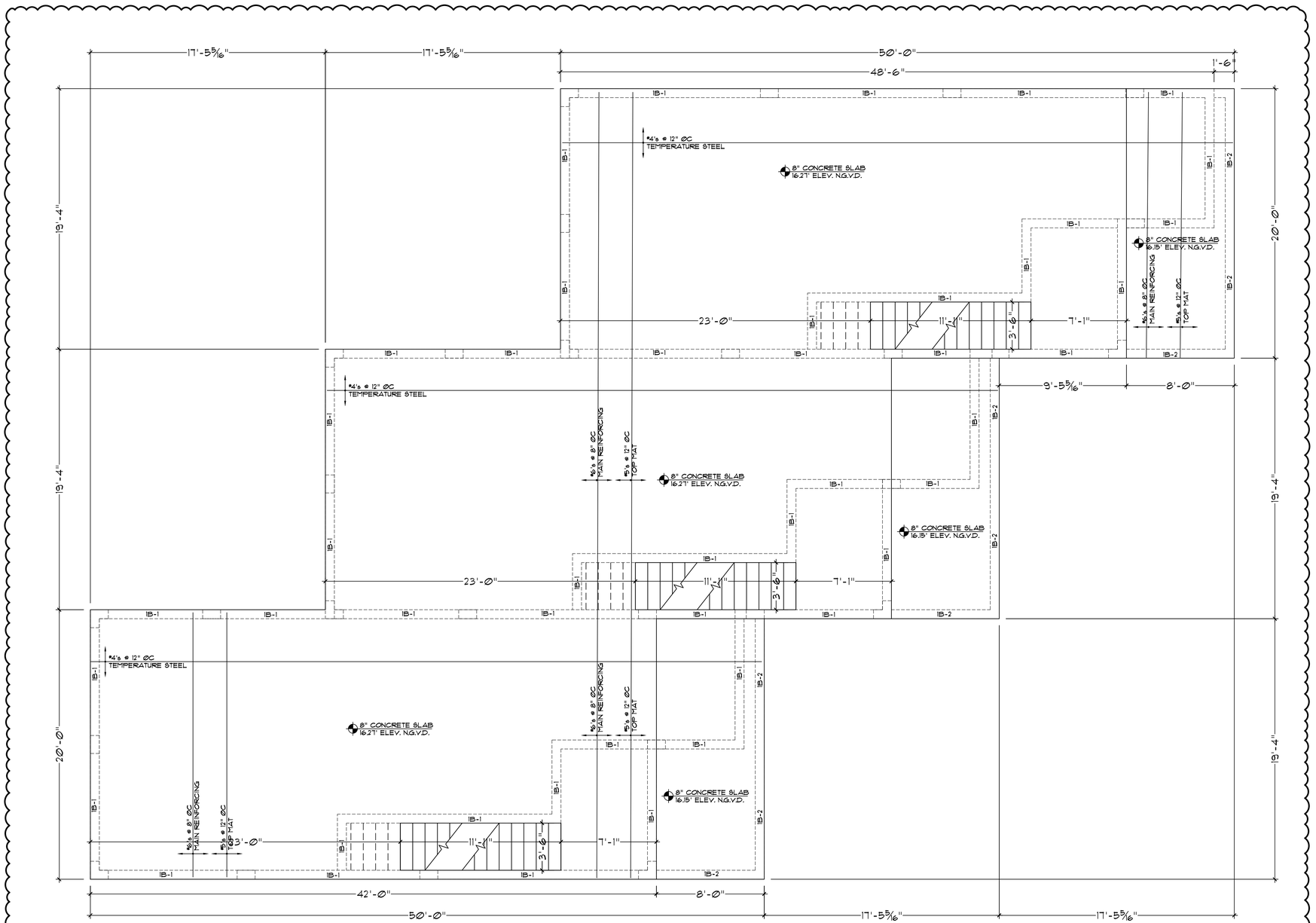
No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	12/17/2021
3	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-2

PROJECT No: D-16-047



SECOND FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

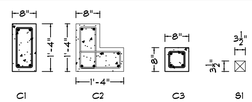
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"XH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.49'
IB-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
IB-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

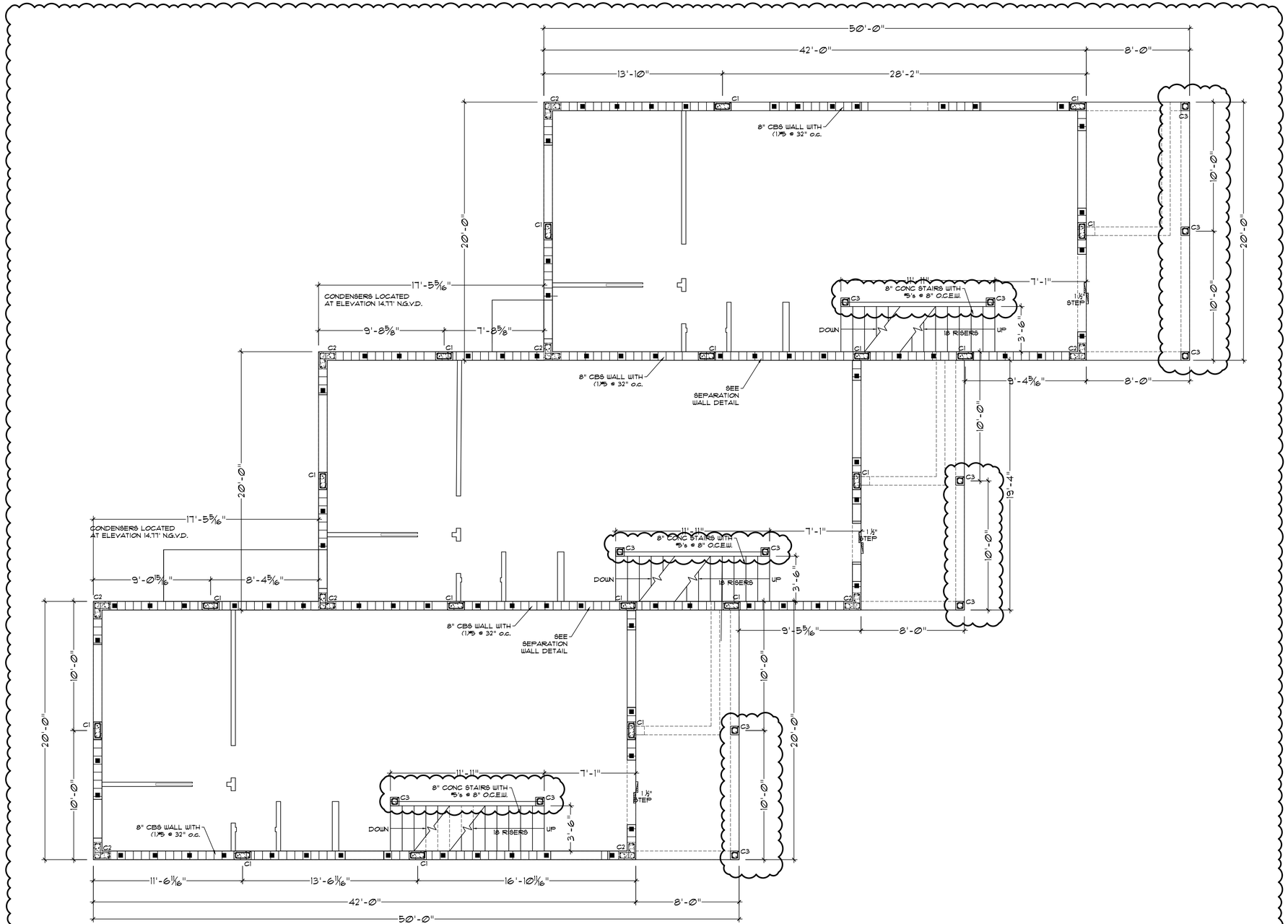
No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENTS	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX B - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-3

PROJECT No: D-16-047



SECOND FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

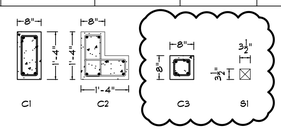
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"xH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.49'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	2/2/2022

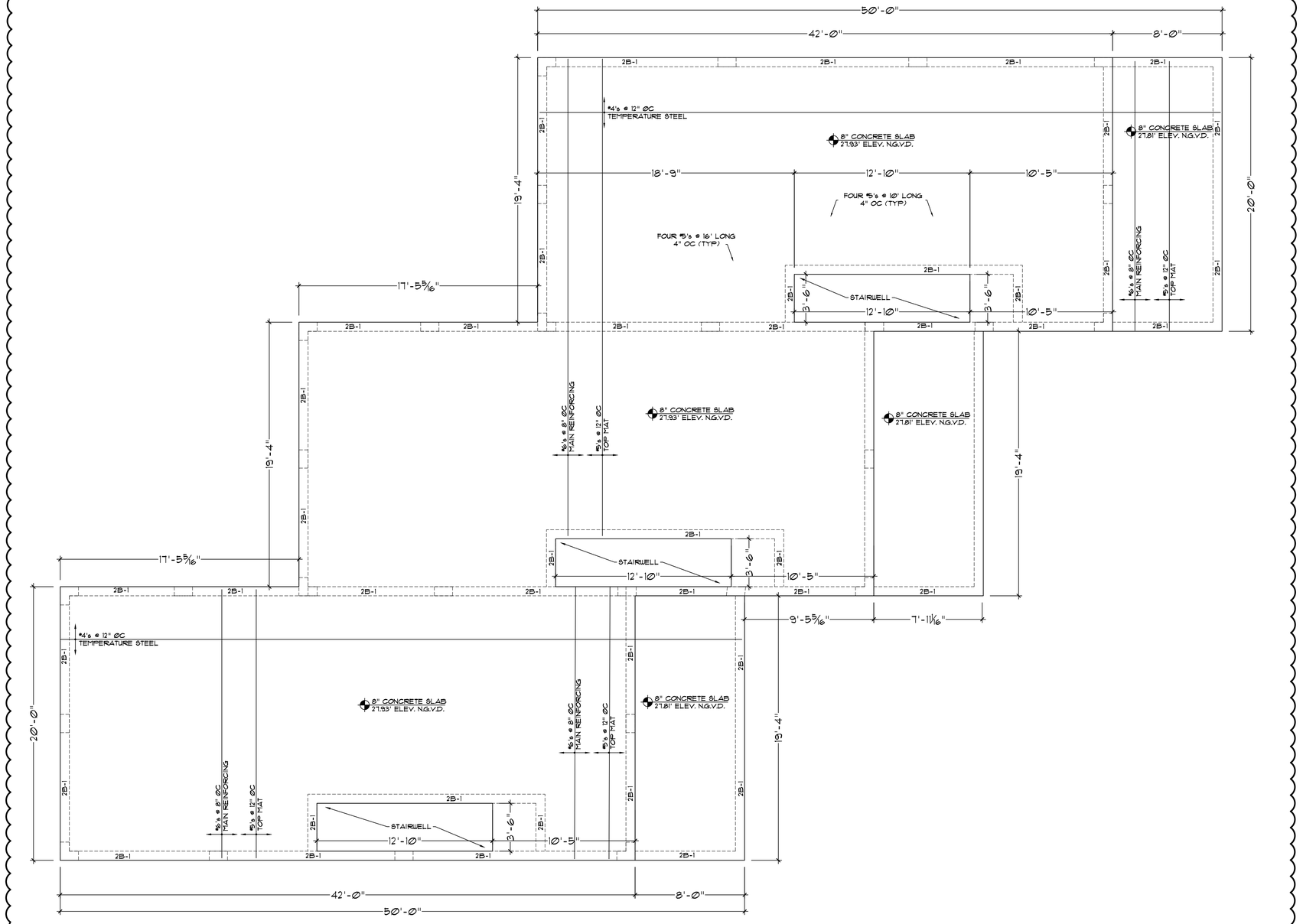
AS SHOWN
SCALE:
1/4/2017
DATE:
D.G.O.
DWG BY:
REVISED:

TITLE: TRIPLEX B - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-4

PROJECT No: D-16-047



THIRD FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE: A.H.

8" CBS WALL:

DOOR:

WINDOW:

COLUMN/BEAM BELOW:

ELEMENT ABOVE:

CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

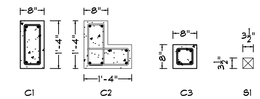
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"XH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.49'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

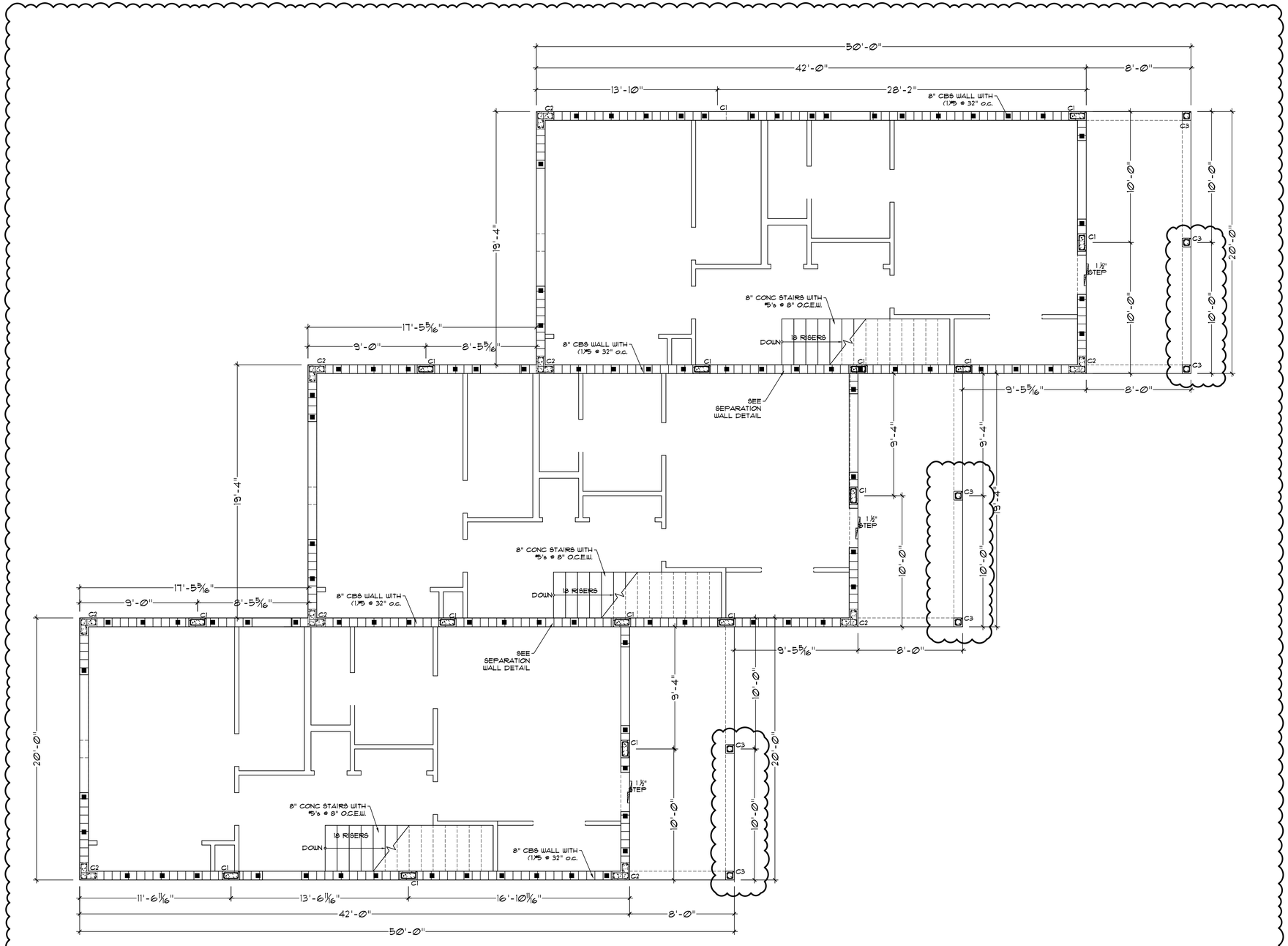
No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-5

PROJECT No: D-16-047



THIRD FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

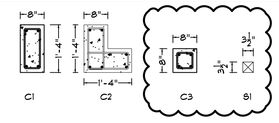
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.49'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-L3x3x1/4 x14	-	-	STEEL COLUMN



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

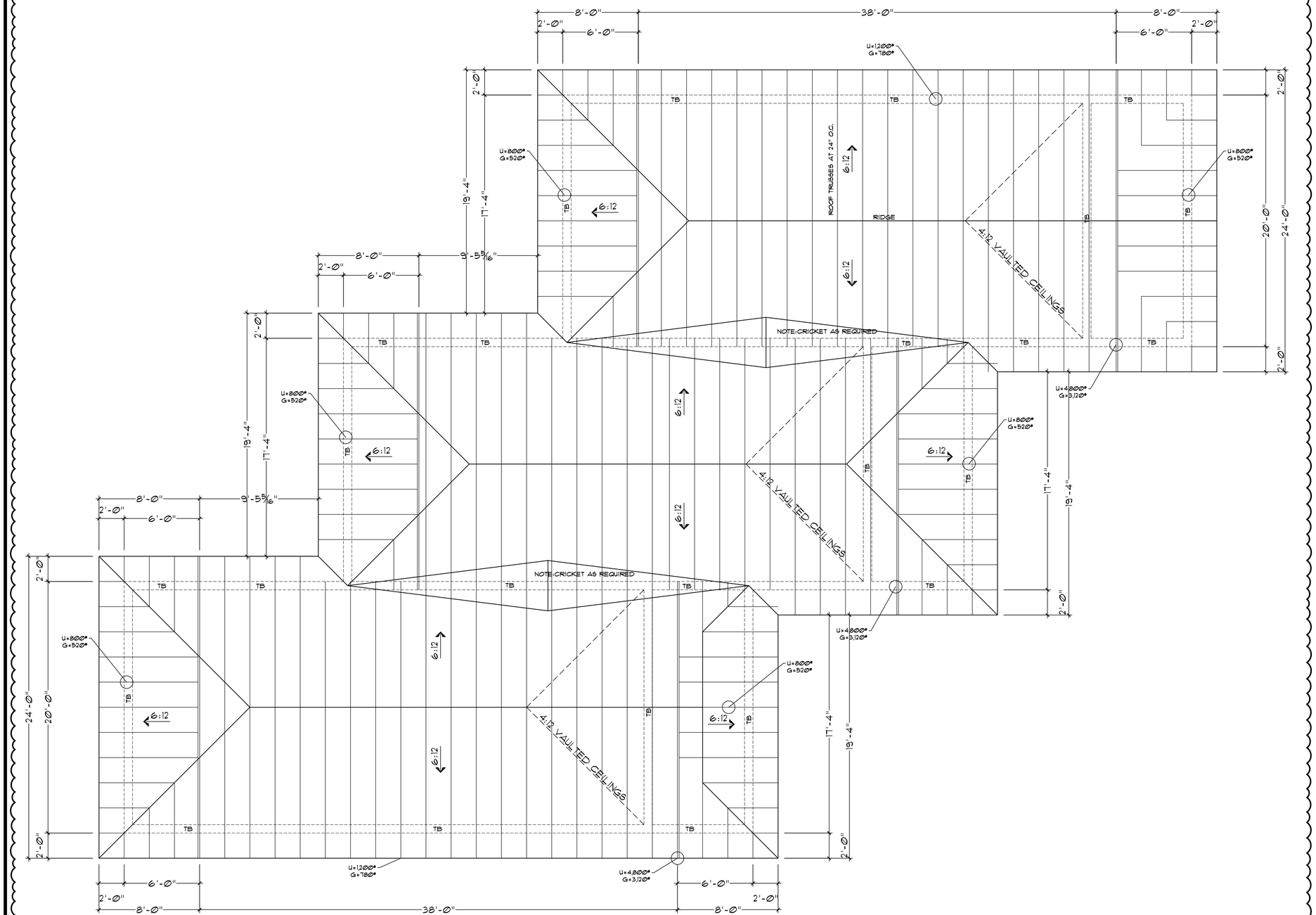
NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX B - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-6

PROJECT No: D-16-047



ROOF PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

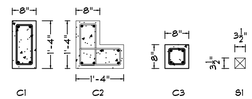
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.49'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.15'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.81'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

REVISION	DATE
FOR SUBMITTAL	8/31/2018
REVISION	11/28/2021

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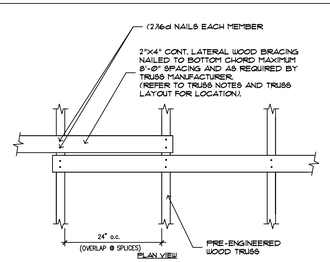
SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	DGO
REVISED:	

TITLE: TRIPLEX B - STRUCTURAL

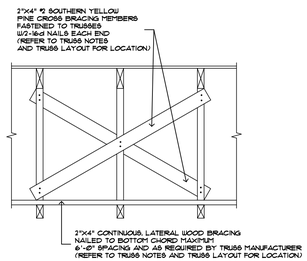
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

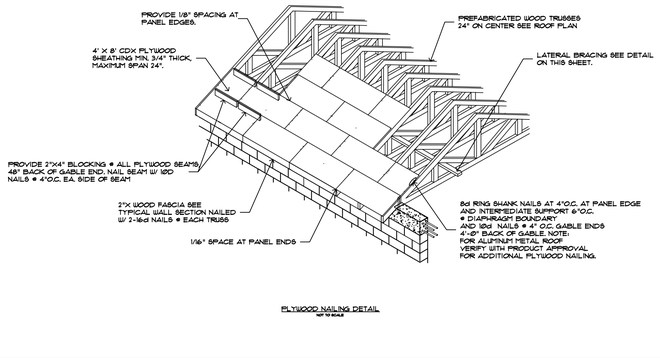
PROJECT No: D-16-047



TYPICAL LATERAL BRACE SPLICE
NOT TO SCALE



TYPICAL X-BRACING
NOT TO SCALE



FLYWOOD NAILING DETAIL
NOT TO SCALE

NOTES:

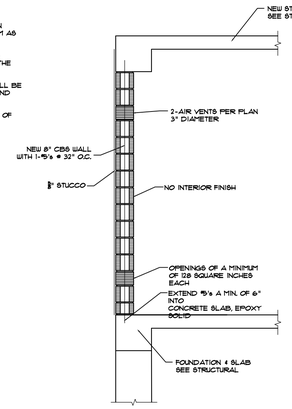
1. ATTIC ACCESS ROUGH OPENING SHALL BE NO LESS THAN 22"x30" WITH A MINIMUM OF 30" UNOBSTRUCTED HEADROOM AS PER THE FLORIDA BUILDING CODE.

2. TOP TIE BEAM SHALL NOT BE POURED UNTIL THE TRUSS LAYOUT AND CALCULATIONS HAVE BEEN APPROVED BY THE MONROE COUNTY BUILDING DEPARTMENT.

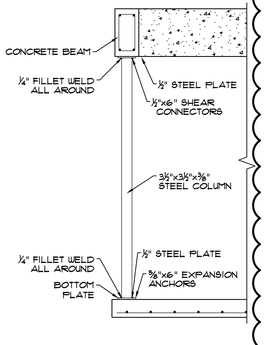
3. BORATE TREATED LUMBER, OR APPROVED EQUAL, SHALL BE USED TO PREVENT ANY INTERACTION BETWEEN FASTERN AND WOOD.

4. ROOF TRUSSES SHALL BE DESIGNED FOR A WINDSPEED OF 180 MPH PER ASCE-7-10

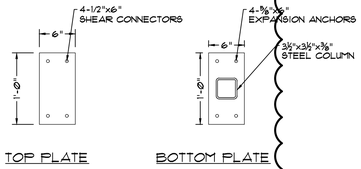
5. HURRICANE STRAPS SHALL BE SPECIFIED AFTER DETERMINATION OF TRUSS UPLIFT LOADS BY TRUSS MANUFACTURER.



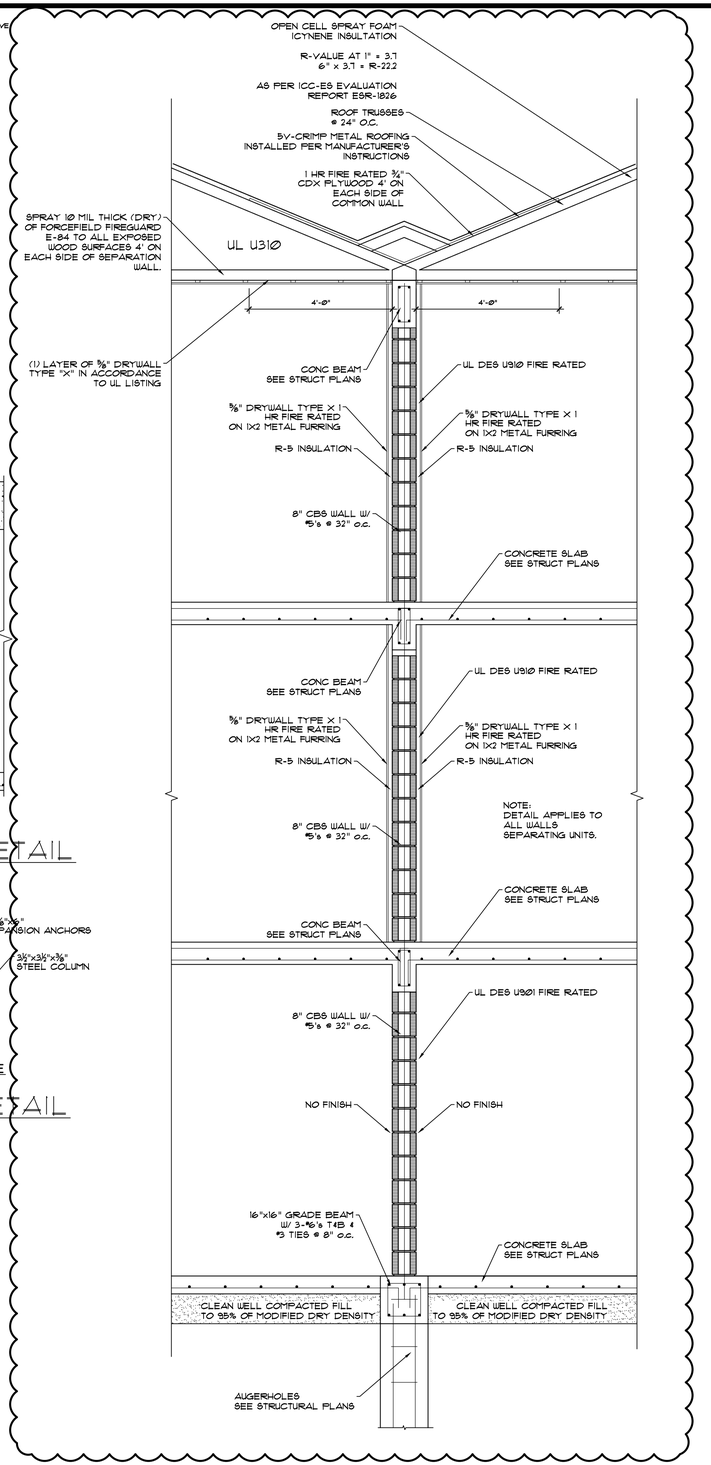
TYPICAL AE - ZONE DETAIL



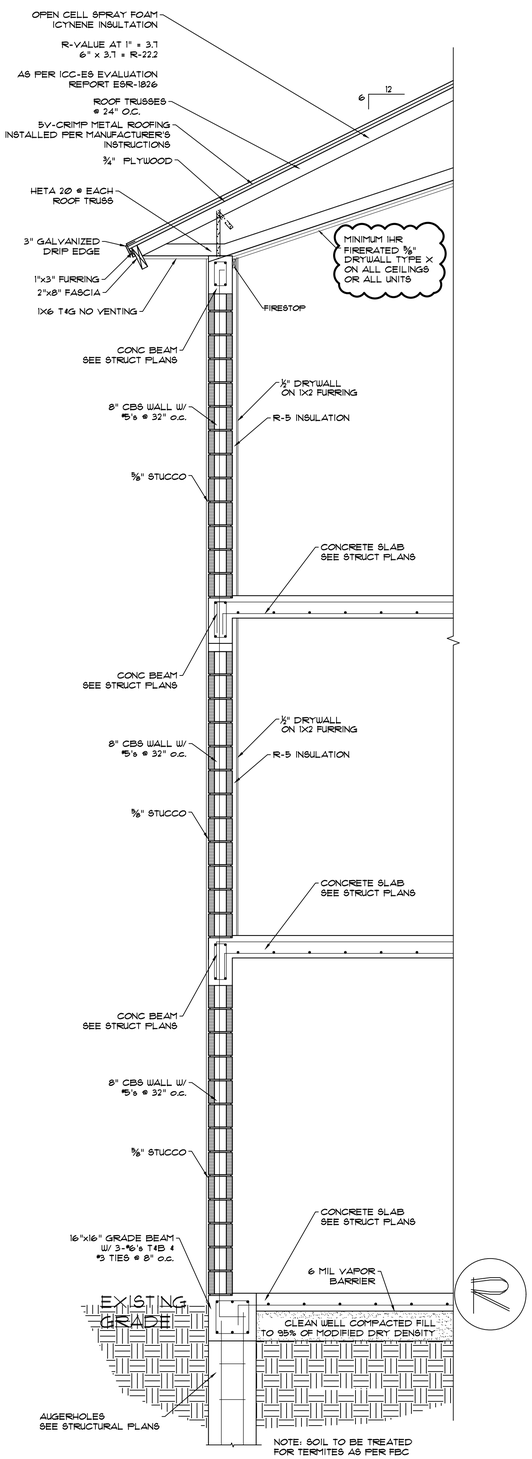
STEEL COLUMN DETAIL
SCALE @ ½" = 1'-0"



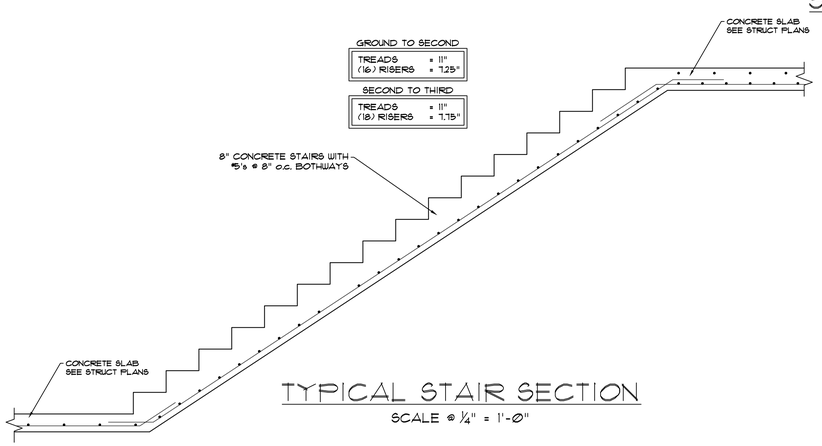
STEEL PLATE DETAIL
SCALE @ 1" = 1'-0"



SEPARATION WALL DETAIL
SCALE @ ½" = 1'-0"



TYPICAL WALL SECTION
SCALE @ ¼" = 1'-0"



TYPICAL STAIR SECTION
SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/15/2021
2	VILLAGE COMMENT	12/17/2021
3	VILLAGE COMMENT	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX B - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-8

PROJECT No: D-16-047

GENERAL NOTES:

1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 2020 EDITION. THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCED STANDARD APPLIES TO THIS PROJECT.
2. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
3. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
4. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE DESIGN DOCUMENTS. IF A CONFLICT EXIST, NOTIFY THE DESIGN PROFESSIONAL.
5. DETAILS LABELLED "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 DESIGN PROFESSIONAL.
6. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL. SEE THE ARCHITECTURAL AND M.E.P. DRAWINGS FOR THE SIZE AND LOCATION OF OPENINGS IN THE STRUCTURE.
7. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE DESIGN PROFESSIONAL PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL O.S.H.A. REQUIREMENTS.
10. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. WHEREVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A FLORIDA LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.
11. DESIGN SUPERIMPOSED LOADS:

OCCUPANCY	LIVE LOAD	DEAD LOAD
ROOF	30 PSF	20 PSF
FLOOR	40 PSF	80 PSF

12. DESIGN WIND LOADS:

GOVERNING CODE	A.S.C.E. 7-16
BASIC WIND SPEED	VULT= 180 MPH/VASD= 139 MPH
RISK CATEGORY	II
BUILDING ENCLOSURE	ENCLOSED
DIRECTIONALITY FACTOR	KD = 0.85
EXPOSURE	D
INTERNAL PRESSURE COEFFICIENT	+0.18

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE PRECAST CONCRETE, PREFABRICATED WOOD COMPONENTS, OPEN WEB STEEL JOISTS AND JOIST GIRDERS, POST-TENSIONING SYSTEMS, TILT-UP PANELS, STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, EXTERIOR ENCLOSURE SYSTEMS AND SHORING AND RESHORING.
2. A DELEGATED ENGINEER IS DEFINED AS A FLORIDA LICENSED ENGINEER 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 OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS.
3. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE ARCHITECT. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTABILITY.
5. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. QUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT SUM. CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.
6. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED 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.

EXPANSION ANCHORS:

1. USE WEDGE-TYPE EXPANSION ANCHORS SUCH AS THE HILTI KWIK BOLT II, ITW RAMSET RED HEAD TRUBOLT WEDGE, POWERS RAWL POWER-STUD, SIMPSON STRONG-TIE WEDGE-ALL OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

CHEMICAL ADHESIVE FOR ANCHORING REINFORCING BARS, THREADED BARS AND ANCHOR BOLTS:

1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE HILTI HIT HY150, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, POWERS RAWL POWER-FAST SYSTEM, SIMPSON STRONG-TIE AT OR ET, ALLIED FASTENER ALLIED GOLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE DRILL SIZE. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.
4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.
5. THREADED RODS ARE A-36 GALVANIZED STEEL, U.O.N.

REINFORCED CONCRETE:

1. COMPLY WITH ACI 301 AND 318.
2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH OF 5,000 PSI IN 28.
3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS, U.O.N.
4. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MID-SPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N. PROVIDE COVER OVER REINFORCING AS FOLLOWS:

ELEMENT	BOTTOM	TOP	SIDES
FOOTINGS	3"	2"	3"
BEAMS ABOVE GRADE	1 1/2"	1 1/2"	1 1/2"
COLUMNS	-	-	1 1/2"
SLABS ON GRADE	2"	1"	2"
SLABS ABOVE GRADE	3/4"	3/4"	1"
SLABS EXPOSED TO WEATHER	1 1/2"	1 1/2"	1 1/2"

5. TENSION DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:

LAP SPLICE LENGTH FOR BARS (IN)

REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED WIRE REINFORCEMENT CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE TWO CROSS WIRE SPACING.
7. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, U.O.N. FOR OPENINGS 24" LONG OR LESS, CUT REINFORCING AND REPLACE ALONGSIDE OPENING WITH SPLICE BARS OF EQUIVALENT AREA WITH 48 BAR DIAMETERS LAP. PREPARE AND SUBMIT SHOP DRAWINGS FOR OPENINGS LONGER THAN 24". FOR RECTANGULAR OPENINGS 12" LONG OR LONGER, ADD 1#5 X 6' MID DEPTH DIAGONAL AT ALL 4 CORNERS.
8. WHERE REINFORCING STEEL CONGESTION PERMITS, CONDUIT AND PIPES UP TO 1" DIAMETER MAY BE EMBEDDED IN CONCRETE PER ACI 318, SECTION 6.3. SPACE AT 3 DIAMETERS O.C. PLACE BETWEEN OUTER LAYERS OF REINFORCING IF CONDUITS ARE SIGNIFICANTLY CONGESTED. ADDITIONAL REINFORCING PERPENDICULAR TO PIPING MAY BE REQUIRED. REQUESTS TO EMBED LARGER PIPES SHALL BE ACCOMPANIED BY A DETAILED DESCRIPTION AND BE SUBMITTED TO THE ARCHITECT FOR EVALUATION.
9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEY-WAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.
10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS.

CONCRETE MASONRY:

1. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530/ASCE 5, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"; AND ACI 530.1/ASCE 6, "SPECIFICATIONS FOR MASONRY STRUCTURES".
2. THE STRUCTURE IS SUPPORTED BY BEARING WALLS, U.O.N. ERECT MASONRY PRIOR TO CASTING CONCRETE COLUMNS WITHIN BEARING WALLS OR CASTING BEAMS AND SLABS SUPPORTED BY BEARING WALLS.
3. USE 50% SOLID, NOMINAL 8"X8"X16", CONCRETE MASONRY UNITS CONFORMING TO ASTM C90. BLOCK NET AREA COMPRESSIVE STRENGTH SHALL BE 1,900 PSI. LAY UP UNITS IN RUNNING BOND. SAWCUT UNITS WHICH ARE NOT IN MULTIPLES OF 8". UNITS SHALL BE AT LEAST 8" LONG. BOND CORNERS BY LAPPING ENDS 8" IN SUCCESSIVE VERTICAL COURSES. DESIGN OF WALLS IS BASED ON A F'M OF 1,500 PSI.
4. USE TYPE S MORTAR IN ACCORDANCE WITH ASTM C270 EXCEPT USE TYPE M MORTAR BELOW GRADE. HEAD AND BED JOINTS SHALL BE 3/8" FOR THE THICKNESS OF THE FACE SHELL. WEBS ARE TO BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS; IN THE STARTING COURSE; AND WHERE AN ADJACENT CELL IS TO BE GROUTED. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO CELLS TO BE GROUTED.
5. USE STANDARD (9 GAUGE) HORIZONTAL JOINT REINFORCING IN EVERY OTHER COURSE. JOINT REINFORCING AND ANCHORS IN EXTERIOR WALLS SHALL CONFORM TO ASTM A 153 CLASS B2, WITH A COATING THICKNESS OF 1.50 OZ/SF+ CONFORM TO ASTM A 641 IN INTERIOR WALLS. OVERLAP DISCONTINUOUS ENDS 6". USE PREFABRICATED CORNERS AND TEES. USE TRUSS TYPE, EXCEPT USE LADDER TYPE IN WALLS WITH VERTICAL REINFORCING. EXTEND JOINT REINFORCING A MINIMUM OF 4" INTO TIE COLUMNS.
6. USE FINE GROUT CONFORMING TO ASTM C476, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI IN 28 DAYS. AGGREGATE TO CONFORM TO ASTM C404 FOR FINE GROUT, WITH SLUMP OF 8" TO 10". GROUT ALL MASONRY CONTAINING REINFORCING, ALL CELLS OF 4 HOUR RATED WALLS, AND WHERE INDICATED ON THE DRAWINGS. ALLOW MORTAR TO CURE 24 HOURS PRIOR TO GROUTING. PROVIDE CLEAN OUT OPENINGS AT THE BASE OF CELLS CONTAINING REINFORCING STEEL TO CLEAN THE CELL AND TO TIE THE VERTICAL BAR TO THE DOWEL. IN HIGH-LIFT GROUTING, USE 4'-0" (MAX.) LIFTS, WITH 1/2 HOUR TO 1 HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT.
7. USE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCE WALLS WHERE INDICATED ON THE DRAWINGS AND AT ALL INTERSECTIONS, EACH SIDE OF OPENINGS AND AT THE ENDS OF WALLS. USE BAR SPACERS AT 10 FT. O.C. WHERE GROUT POUR HEIGHT EXCEEDS 10 FT.
8. AT BOND/TIE BEAM CORNERS AND INTERSECTIONS, PLACE 1 #5 X 5'-0" T + B CORNER BAR, WITH 30" LEGS EACH WAY, AT THE EXTERIOR FACE.
9. BEAMS NOT SCHEDULED ARE MIN. 8" X 12" TIE BEAMS WITH 2 #5 BARS TOP AND BOTTOM AND #3 TIES SPACED AT 12" O.C. TYPICAL U.O.N. COLUMNS NOT SCHEDULED ARE MIN. 8" X 12" TIE COLUMNS WITH 4 #5 VERTICAL BARS AND #3 TIES AT 12" O.C. USE 36" LAP SPLICES. HOOK ALL BARS AT DISCONTINUOUS ENDS.
10. REINFORCED MASONRY WALL CONSTRUCTION SHALL BE INSPECTED BY AN ENGINEER OR ARCHITECT IN ACCORDANCE WITH ACI 530.1/ASCE 6.
11. WHERE ANCHOR BOLTS, WEDGE ANCHORS OR ANCHORS SET IN EPOXY ARE SET IN A MASONRY WALL, FILL CELLS WITH GROUT FOR BOLTED COURSE, ONE COURSE ABOVE AND TWO COURSES BELOW.
12. PROVIDE LINTELS OR HEADERS WITH MIN. 8" BEARING OVER ALL MASONRY OPENINGS.
13. USE PRESSURE-TREATED WOOD FOR WOOD IN CONTACT WITH MASONRY.

STRUCTURAL STEEL:

1. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL O.S.H.A. REQUIREMENTS.
2. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
   a. PLATES AND BARS: ASTM A36, FY=36 KSI.
   b. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS):
      1. SQUARE SECTIONS: ASTM A500, GRADE B, FY=46 KSI.
3. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.
4. USE A-307 BOLTS FOR ALL ERECTION BOLTS AND BOLTS LESS THAN 3/4" DIAMETER, U.O.N. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 THREADED WITH NUTS AND WASHERS EACH END.
5. SETTING BASE AND BEARING PLATES: CLEAN CONCRETE AND MASONRY BEARING SURFACE OF BOND-REDUCING MATERIALS AND CLEAN BOTTOM OF BASE AND BEARING PLATE.
   a. SET BASE OR BEARING PLATE ON WEDGES OR OTHER ADJUSTING DEVICES.
   b. TIGHTEN ANCHOR RODS AFTER STRUCTURAL STEEL FRAME HAS BEEN PLUMBED. DO NOT REMOVE WEDGES OR SHIMS BUT, IF PROTRUDING, CUT OFF FLUSH WITH EDGE OF BASE OR BEARING PLATE PRIOR TO PACKING WITH GROUT.
   c. PACK OR POUR NON-SHRINK GROUT SOLIDLY BETWEEN BEARING SURFACE AND BASE OR BEARING PLATE. ENSURE THAT NO VOIDS REMAIN. FINISH EXPOSED SURFACES, PROTECT GROUT AND ALLOW TO CURE.
   d. FOR PROPRIETARY GROUT MATERIALS, COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
   e. BASE PLATES MUST BE GROUTED A MINIMUM OF 72 HOURS PRIOR TO PLACING CONCRETE SLABS ON SUPPORTING STEEL STRUCTURE.
6. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACES. REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTED BY ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR USING DRIFT PINS.
7. SPACE FILLER BEAMS EQUALLY BETWEEN SUPPORTS, U.O.N.
8. DO NOT SPLICE STRUCTURAL STEEL MEMBERS EXCEPT WHERE INDICATED ON THE DRAWINGS.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. REFER TO ARCHITECTURAL DRAWINGS FOR PAINTING AND FIREPROOFING OF STRUCTURAL STEEL. DO NOT PAINT STEEL SURFACES IN CONTACT WITH CONCRETE OR FIREPROOFING.

PRE-ENGINEERED WOOD TRUSSES:

1. DESIGN AND FABRICATE ALL TIMBER IN CONFORMANCE WITH DIVISION 6 SPECIFICATIONS, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND FLORIDA BUILDING CODE, 2020 EDITION, AND THE TPI-1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
2. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS SYSTEM ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE TRUSS SYSTEM, THE TRUSS SYSTEM ENGINEER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR REVIEW TO ARCHITECT/ENGINEER FOR THE ASSEMBLAGE OF PREFABRICATED, ENGINEERED WOOD TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL BRACING, CONNECTIONS AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATION CRITERIA (TRUSS PLACEMENT PLAN), THAT, IN COMBINATION, FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO THE ROOF TRUSS SYSTEM. THE TRUSS SYSTEM DOES NOT INCLUDE WALLS, OR ANY OTHER STRUCTURAL SUPPORT SYSTEMS. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS SYSTEM ENGINEER.
3. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS DESIGN ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE INDIVIDUAL TRUSSES OF THE TRUSS SYSTEM, BUT DOES NOT DESIGN THE TRUSS SYSTEM. THE TRUSS DESIGN ENGINEER SHALL SUBMIT SHOP (PIECE) DRAWINGS AND CALCULATIONS FOR EACH DIFFERENT TRUSS OF THE TRUSS SYSTEM SUCH THAT EACH TRUSS WILL FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO EACH TRUSS AND TRUSS GIRDER THAT TOGETHER COMPRISE THE TRUSS SYSTEM. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS DESIGN ENGINEER.
4. THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER SHALL EACH BE RESPONSIBLE FOR THEIR OWN WORK. HOWEVER, THEY MAY BE THE SAME INDIVIDUAL PROVIDING TWO SEPARATE SERVICES.
5. THE LOADS, LAYOUTS AND CONNECTIONS PROVIDED ON THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE THE MINIMUMS TO BE FOLLOWED BY THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER.
6. USE STRESS-RATED TIMBER FOR ALL WOOD STRUCTURAL MEMBERS. DO NOT USE WOOD STRUCTURAL MEMBERS WITH A BENDING STRESS LESS THAN 1,200 PSI OR A MODULUS OF ELASTICITY LESS THAN 1,400,000 PSI WHEN USED AT 19% MAXIMUM MOISTURE CONTENT.
7. PRESSURE TREATMENT OF ALL STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH AWPA STANDARDS C1 AND C2, LATEST EDITIONS WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5, LATEST EDITION. ALL LUMBER TO BE KILN-DRIED AFTER TREATMENT TO A MOISTURE CONTENT NOT TO EXCEED 19% OVEN-DRY BASIS, PER STANDARD C2. ALL LUMBER 4"X4" IN. (NOMINAL SIZE) AND LARGER IN DIMENSION TO BE TREATED TO THE SOIL AND FRESH WATER RETENTION AND PENETRATION REQUIREMENTS OF STANDARD C2. ALL LUMBER LESS THAN 4"X4" (NOMINAL SIZE) TO BE TREATED TO THE ABOVE GROUND REQUIREMENTS OF STANDARD C2.
8. MINIMUM DESIGN LOADS FOR ROOF TRUSSES:

30 PSF LL TOP CHORD
25 PSF DL TOP CHORD
10 PSF DL BOTTOM CHORD
200 LB CONCENTRATED LL ON ANY SINGLE BOTTOM CHORD PANEL POINT
WIND PRESSURE BASED ON ASCE-7.

9. CD FOR WIND SHALL NOT EXCEED 1.6 FOR WOOD MEMBERS. NO STRESS INCREASE ALLOWED FOR METAL PLATES.

SOIL STATEMENT:

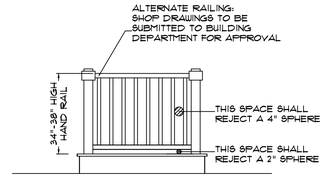
1. THE EXISTING SOIL IS ASSUMED TO HAVE A DESIGN BEARING OF 2,000 PSF. IF SOIL CONDITIONS VARY, CONTACT THE ENGINEER OF RECORD
2. ALL AUGER HOLES AND AUGER PILING SHALL BE DRILLED 3' INTO THE EXISTING PERVIOUS OOLITE ROCK
3. ALL PRECAST CONCRETE PILING SHALL BE DRIVEN TO REFUSAL

LUMBER AND FRAMING NOTES

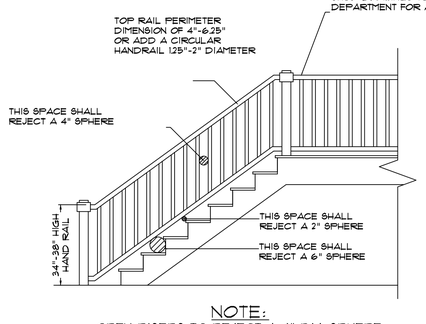
1. FRAMING LUMBER SHALL CONFORM WITH THE PROVISIONS OF THE AMERICAN SOFTWOOD LUMBER STANDARD PS-20-(LATEST EDITION) AND EACH PIECE SHALL BEAR THE GRADE STAMP OF AN APPROVED GRADING AGENCY.
2. FRAMING LUMBER GRADES THE FOLLOWING GRADES SHALL BE THE MINIMUM ACCEPTABLE GRADES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

ITEM	MINIMUM GRADE
STUD ONLY:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL LIGHT FRAMING:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL JOISTS & HEADERS:	
2" TO 4" THICK 6" AND WIDER	NO. 2 SOUTHERN PINE
POSTS:	
4" X 4" AND LARGER	NO. 2 SOUTHERN PINE

3. BOLT HOLES SHALL BE 1/16" LARGER THAT THE BOLT SIZE. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.
4. STANDARD CUT WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD.
5. 5. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR OTHERWISE BE PROTECTED BY AN APPROVED SEPARATING MATERIAL. BOLTS SHALL BE PLACED 9" FROM ANY NOTCH GREATER THAN 1/2 THE WIDTH OF A MEMBER.
6. DO NOT NOTCH JOISTS, RAFTERS OR BEAMS. OBTAIN ENGINEER'S OR ARCHITECTS APPROVAL FOR ANY HOLES OR NOTCHES NOT DETAILED. HOLES THROUGH SILLS, PLATES, STUDS AND DOUBLE PLATED IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED IN THE CENTER OF THE STUD OR PLATE.
7. 2" SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS.
8. ALL NAILING SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2020 FLORIDA BUILDING CODE. NAILS SHALL BE COMMON WIRE NAILS.
9. ALL INTERIOR FRAMING SHALL BE 2" X 4" WALL STUDS @ 16" O.C.



HANDRAIL / GUARDRAIL DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION



NOTE:
OPEN RISERS TO REJECT A 4" DIA SPHERE
OPEN RISERS IN THIS PACKAGE: NONE

HANDRAIL / GUARDRAIL STAIR DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/15/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

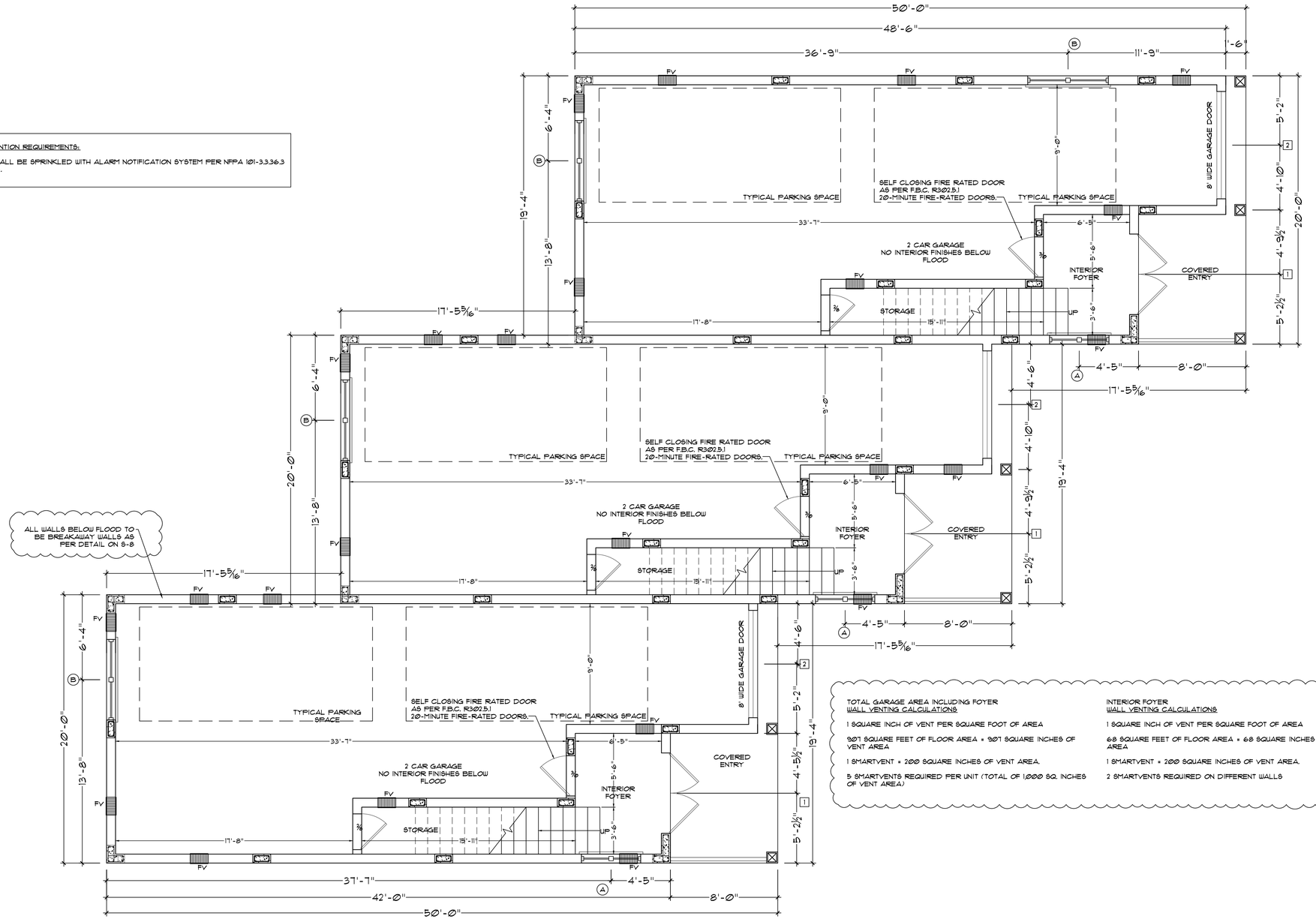
TITLE: TRIPLEX B - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-9

PROJECT No: D-16-047

FIRE PREVENTION REQUIREMENTS:

THIS UNIT SHALL BE SPRINKLED WITH ALARM NOTIFICATION SYSTEM PER NFPA 101-33.3.6.3 AND 302.4.6.



TOTAL GARAGE AREA INCLUDING FOYER WALL VENTING CALCULATIONS	INTERIOR FOYER WALL VENTING CALCULATIONS
1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA	1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA
907 SQUARE FEET OF FLOOR AREA = 907 SQUARE INCHES OF VENT AREA	68 SQUARE FEET OF FLOOR AREA = 68 SQUARE INCHES OF VENT AREA
1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.	1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.
5 SMARTVENTS REQUIRED PER UNIT (TOTAL OF 1,000 SQ. INCHES OF VENT AREA)	2 SMARTVENTS REQUIRED ON DIFFERENT WALLS

GROUND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	REVISION	11/28/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	2/2/2022

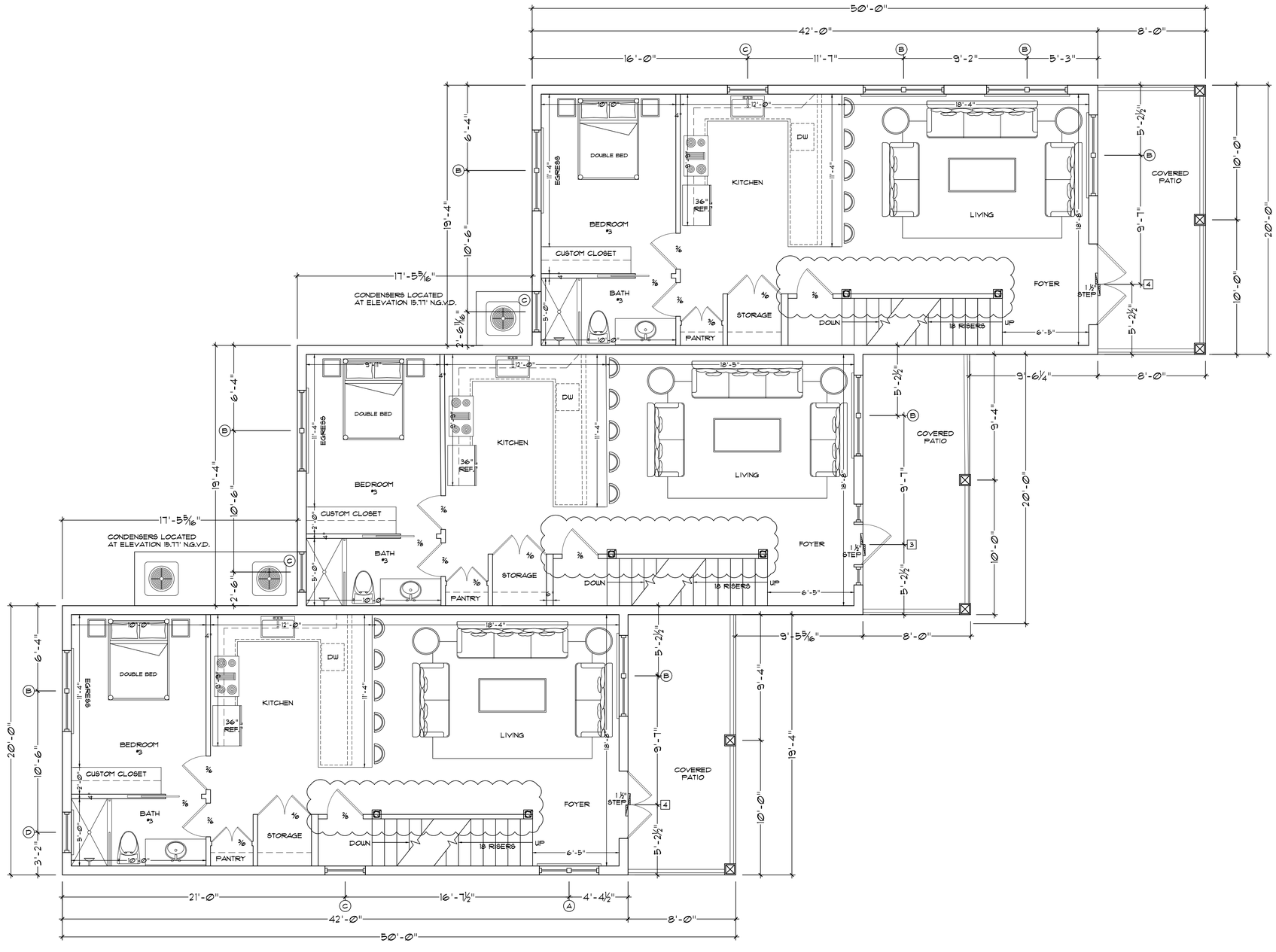
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-1

PROJECT No: D-16-047



SECOND FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021
5	VILLAGE COMMENT	12/17/2021
6	VILLAGE COMMENT	1/9/2022
7	VILLAGE COMMENT	2/2/2022

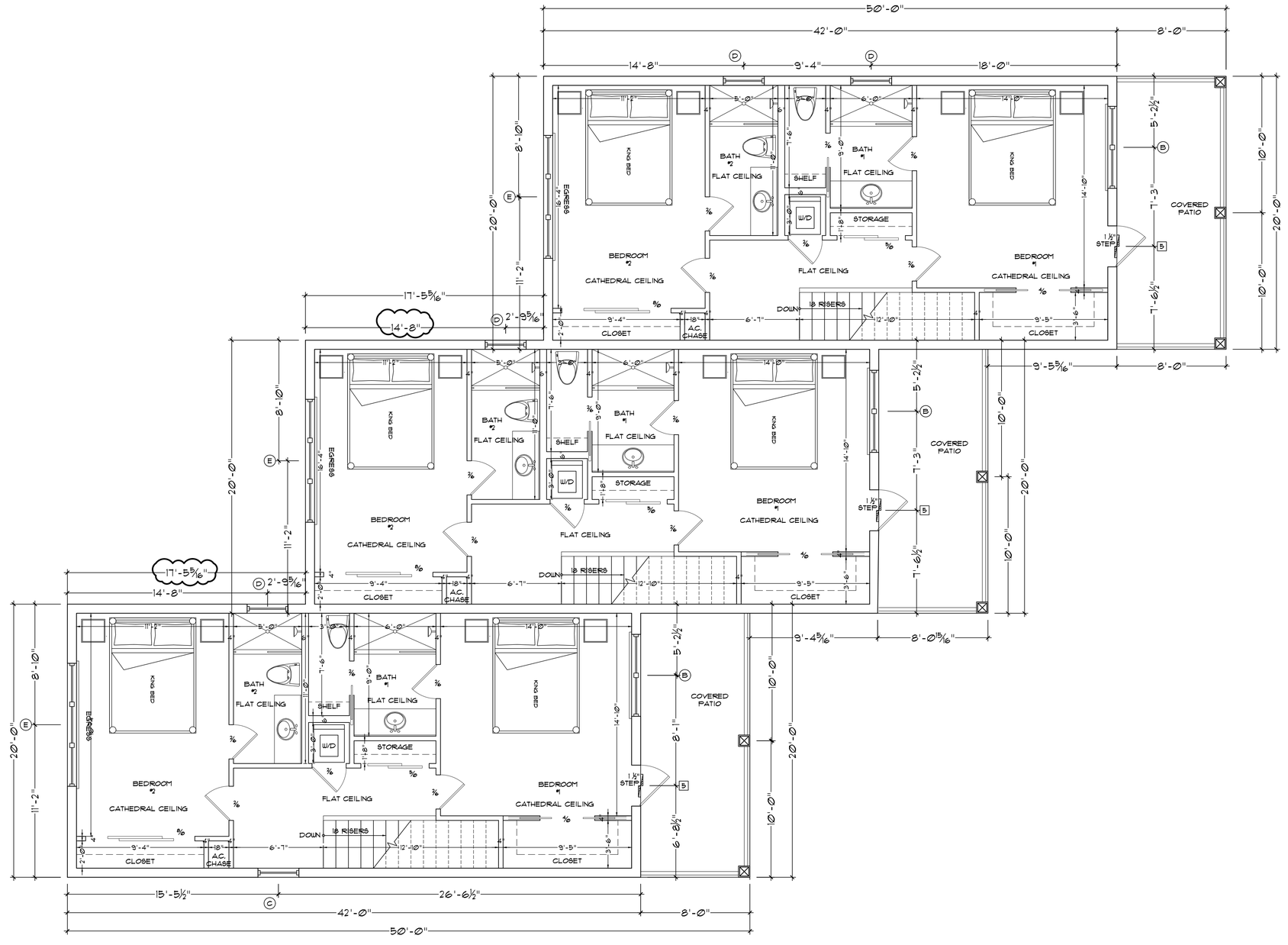
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-2

PROJECT No: D-16-047



THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
4	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-3

PROJECT No: D-16-047



FRONT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019
4	REVISION	11/28/2021

SCALE: AS SHOWN
DATE:
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX C - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-4

PROJECT No: D-16-047



REAR ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

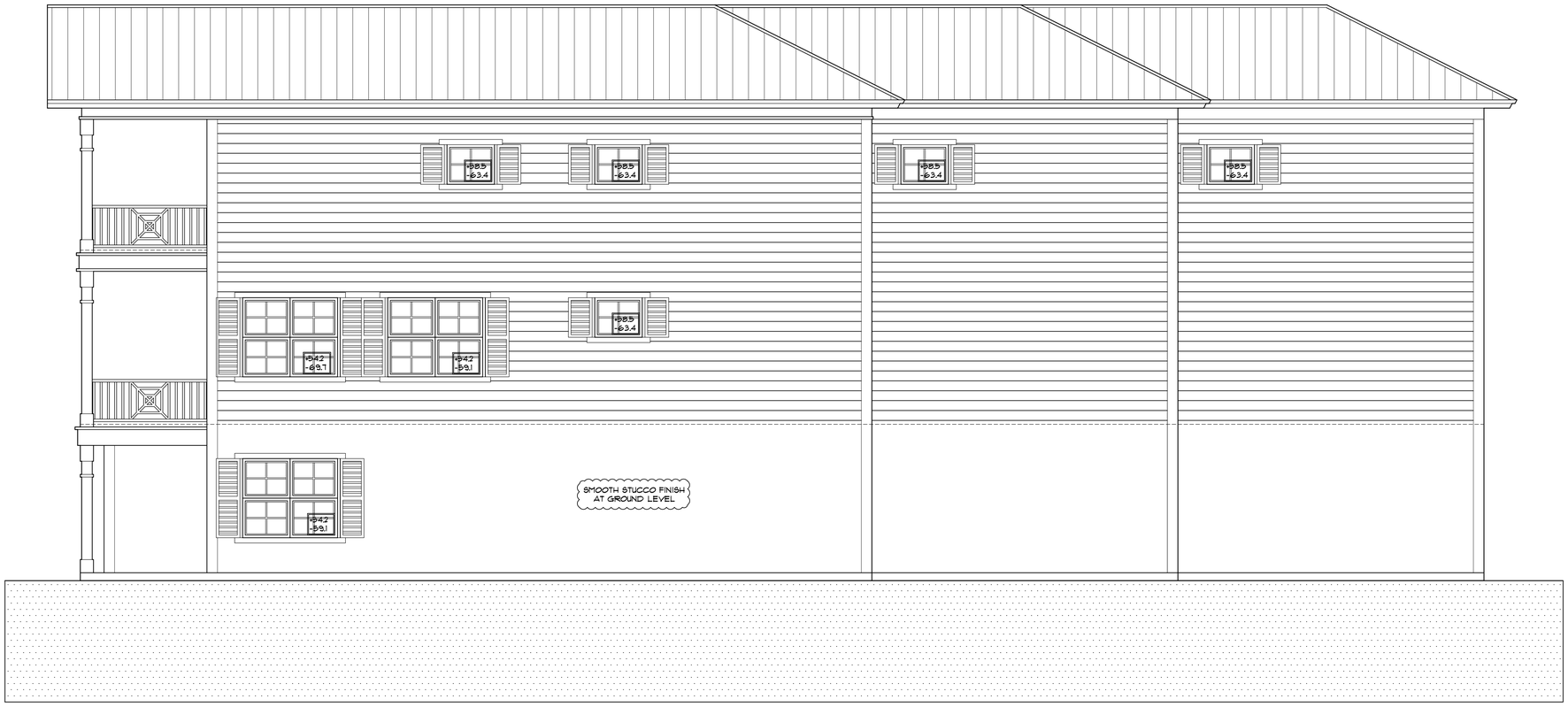
SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-5

PROJECT No: D-16-047



RIGHT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-6

PROJECT No: D-16-047



LEFT ELEVATIONS

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
2	VILLAGE COMMENT	4/17/2019

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-7

PROJECT No: D-16-047

DOOR SCHEDULE

MARK	DOOR SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
1	74 1/2"	80 3/4"	PGT WINGUARD FD1Ø1H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
2	96"	84"	CLOPAY OVERHEAD DOOR	3	HURRICANE RATED
3	38 9/16"	96"	PGT WINGUARD FD1Ø1H FRENCH DOOR	1	FULL VIEW, WHITE ALUMINUM, RHR SWING, 1'-6" SIDELIGHT ON EACH SIDE
4	6Ø"	96"	PGT WINGUARD FD1Ø1H FRENCH DOOR	2	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
5	38 9/16"	8Ø 3/4"	PGT WINGUARD FD1Ø1H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, LHR SWING

WINDOW SCHEDULE

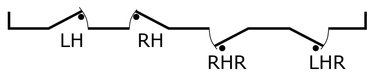
MARK	WINDOW SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
A	PAIR 27 1/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	4	MODEL H34EH
B	PAIR 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	15	MODEL 24EH
C	37 3/4"	38 3/8"	PGT WINGUARD SINGLE HUNG SH1ØØ	5	MODEL 23
D	37 3/4"	5Ø 5/8"	PGT WINGUARD SINGLE HUNG SH1ØØ	5	MODEL 24, FROSTED
E	TRIPLE 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH1ØØ	3	MODEL 24EH

EGRESS WINDOW NOTE

AS DESCRIBED IN FLORIDA BUILDING CODE: ALL EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (GRADE LEVEL 5.Ø SQ FT), HAVING A MINIMUM CLEAR OPENING HEIGHT OF 24 INCHES AND A NET CLEAR WIDTH OF 2Ø INCHES. EGRESS WINDOWS SHALL HAVE THE BOTTOM OF THE NET CLEAR OPENING NO GREATER THAN 44 INCHES AS MEASURED FROM THE FLOOR.

SWING DETERMINATION/DOOR HANDING

INSIDE ROOM, OR SECURE SIDE.



OUTSIDE, CORRIDOR,
OR NON-SECURE SIDE.

• = KEY SIDE

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	1/9/2022

SCALE: AS SHOWN
DATE:
DWG BY: D.G.O.
REVISED:

TITLE: WINDOWS AND DOORS

PROJECT: BG1SLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

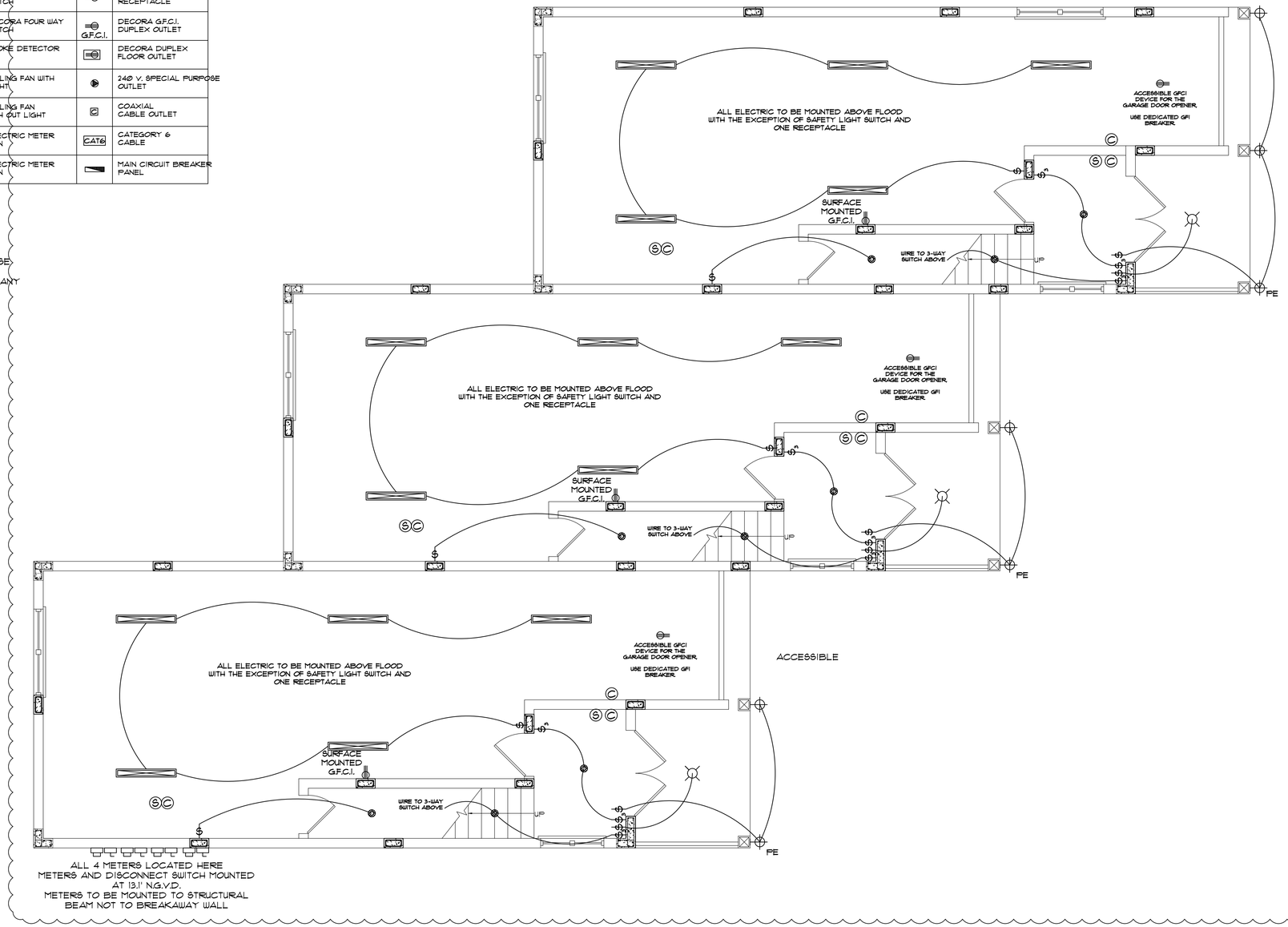
DRAWING No: A-8

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GD	GARAGE DOOR OPENER	3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

NOTE:

1. ALL OUTLETS AND SWITCHES TO BE MOUNTED ABOVE BASE FLOOD (AE-10) - ELEVATION VARIES PER UNIT LOCATION. COORDINATE WITH SURVEYOR PRIOR TO INSTALLATION OF ANY GROUND FLOOR ELECTRICAL



GROUND FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	12/17/2021
5	VILLAGE COMMENT	1/9/2022
6	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - ELECT PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

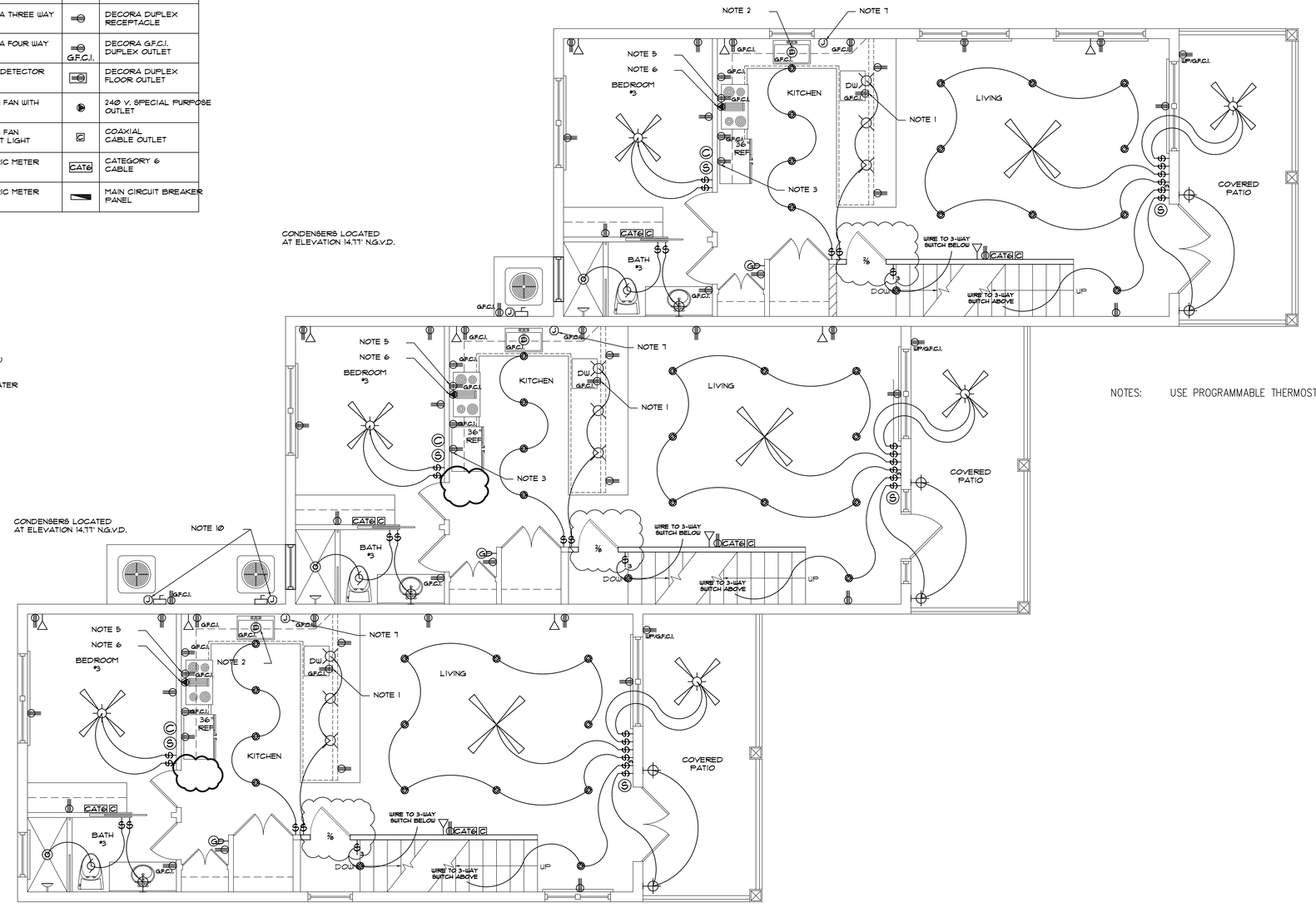
DRAWING No: E-1

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GP	A/C THERMOSTAT CONTROL	3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH AND GFCI PROTECTION
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER



NOTES: USE PROGRAMMABLE THERMOSTAT.

SECOND FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	12/17/2021
5	VILLAGE COMMENT	1/9/2022
6	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - ELECT PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

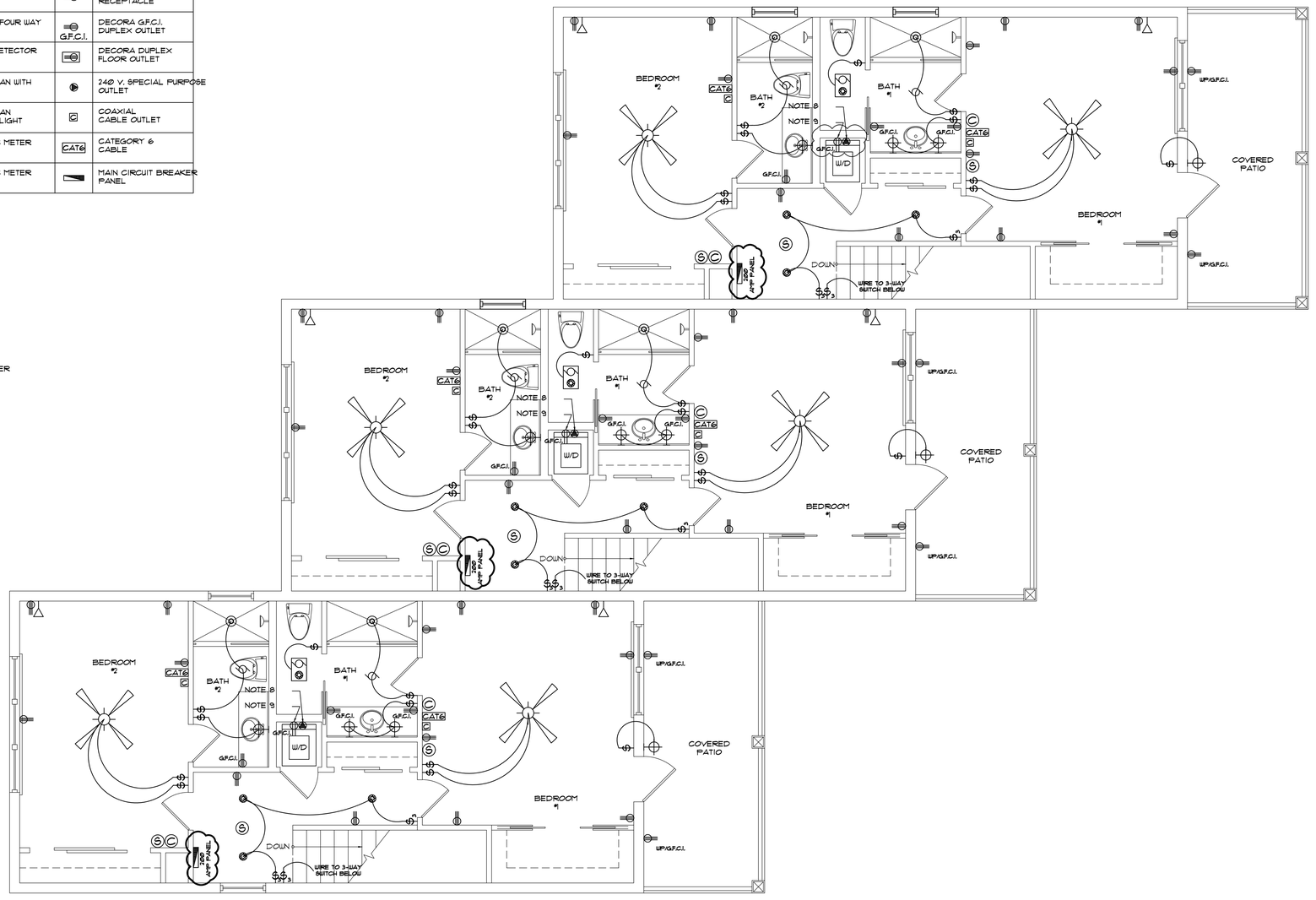
DRAWING No: E-2

PROJECT No: D-16-047

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	GD	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	LED. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	P	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE		ELECTRIC METER CAN	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER



THIRD FLOOR ELECTRICAL PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

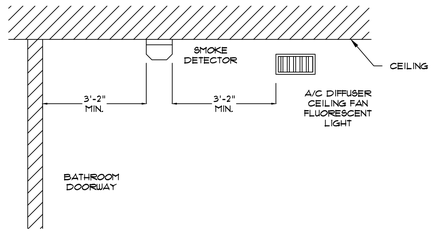
TITLE: TRIPLEX C - ELECT PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

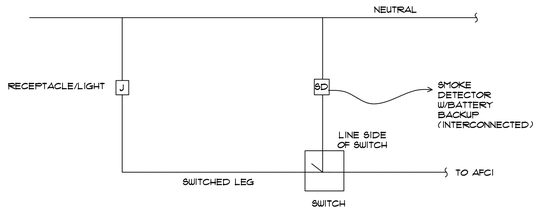
DRAWING No: E - 3

PROJECT No: D-16-047

ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE N.E.C. AND LOCAL BUILDING CODES HAVING JURISDICTION. ALL MATERIALS SHALL BEAR UNDERWRITERS LABORATORY LABEL OR BE U.L. LISTED
2. WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICES.
3. ALL EXCAVATING AND BACKFILLING REQUIRED FOR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR
4. CONNECTIONS TO EQUIPMENT, ELECTRICAL SUBCONTRACTOR SHALL VERIFY NAMEPLATE DATA OF A/C EQUIPMENT, WATER HEATERS AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVER-CURRENT PROTECTION PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING. THE ELECTRICAL SUBCONTRACTOR SHALL MAKE THE ELECTRICAL CONNECTION TO ALL EQUIPMENT REQUIRING CURRENT, ALL CONTROL WIRING SHALL BE CARRIED OUT BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE MECHANICAL SUBCONTRACTORS
5. OVERHEAD ELECTRIC CONDUCTOR CLEARANCES, HORIZONTAL OR VERTICAL SHALL BE MAINTAINED
6. ALL WIRING CONDUCTORS SHALL BE COPPER IN E.N.T. CONDUIT
7. BATHROOM, GARAGE, AND EXTERIOR RECEPTACLES SHALL BE EQUIPPED WITH GROUND FAULT INTERRUPTERS
8. ELECTRICAL INSTALLATION DESIGN IS IN COMPLIANCE AS SET FORTH BY THE STATE OF FLORIDA STATUTES MODEL ENERGY EFFICIENCY CODES
9. SMOKE DETECTORS SHALL BE HARD WIRED (110 VOLT) TO A NON-SWITCHABLE KITCHEN OR BATHROOM LIGHTING CIRCUIT AND SHALL NOT BE CONNECTED ONTO THE LOAD SIDE OF A GROUND FAULT INTERRUPTER
10. ALL PANELS SHALL BE SQUARE D OR EQUAL
11. FURNISH AND INSTALL UNDERGROUND RACEWAYS FOR POWER COMPANY SERVICE AND TELEPHONE COMPANY SERVICE AS PER UTILITY COMPANY SPECIFICATIONS, AND COORDINATE THE EXACT ROUTING OF THESE RACEWAYS WITH THE UTILITY
12. VERIFY EXACT LOCATION OF ELECTRICAL OUTLETS AND LIGHTS PRIOR TO EXECUTION OF ROUGH-IN WORK
13. ALL RACEWAYS AND NON-CURRENT CARRY METAL ENCLOSURES SHALL BE MECHANICALLY AND ELECTRICALLY GROUNDED
14. ALL RACEWAYS AND OUTLETS IN FINISHED AREAS SHALL BE MOUNTED AND SUPPORTED
15. ALL OUTLETS IN FINISHED AREAS SHALL BE MOUNTED FLUSH WITH FINISHED WALLS
16. ALL WORK SHALL BE RIGIDLY MOUNTED AND SUPPORTED
17. ELECTRICAL OUTLETS (RECEPTACLES AND LIGHTING) BELOW THE BASE FLOOD ELEVATION SHALL BE INSTALLED AT THE HIGHEST PERMITTED ELEVATION AND SHALL BE INSTALLED ON SEPARATE CIRCUIT FROM THOSE IN HABITABLE AREAS
18. NO APPLIANCE OUTLETS SHALL BE INSTALLED BELOW THE BASE FLOOD ELEVATION
19. A/C COMPRESSORS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
20. MAIN CIRCUIT BREAKER PANELS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
21. ALL WATER HEATERS SHALL BE MECHANICALLY GROUNDED





SMOKE DETECTOR DETAIL
N.T.S.

NOTE: PROVIDE ARC FAULT PROTECTION FOR ALL OUTLETS PER N.E.C. 210-12

WHERE 120 V. SMOKE DETECTORS ARE INSTALLED IN RESIDENTIAL OCCUPANCIES THEY SHALL BE INSTALLED AHEAD OF ALL SWITCHES AND SHALL BE CONNECTED TO BEDROOM AFCI CIRCUITS. SMOKE DETECTORS SHALL COMPLY WITH THE REQUIREMENTS OF THE F.B.C. 2017 ED

LOAD CALCULATION:

1,680 S.F. OF LIVING AREA x .003	= 5.04
PANEL LOAD	= 18.7
SUBTOTAL	= 23.74
FIRST 10 KW @ 100%	= 10.0
13.74 KW @ 40%	= 5.5
A.C. LOAD	= 7.5
TOTAL DEMAND FACTOR	= 23
23 KW / 230 VOLTS	= 100 AMPS

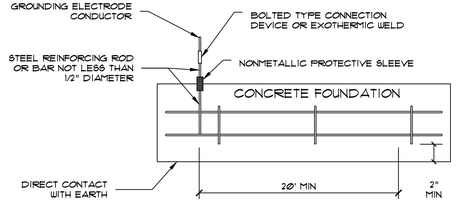
** INSTALL 200 AMP ELECTRICAL PANEL **
** ELECTRICAL LOAD FOR EACH UNIT IS THE SAME **

	MAIN PANEL				120/240V-1PH-3W			200A-MLO			
	CKT	DESCRIPTION	C.B.	POLE	WIRE	LOAD	LOAD	WIRE	POLE	C.B.	DESCRIPTION	CKT
(a)	1	A.C. HANDLER	40	2	#8 THIN - 1/2" CO	5.8	9.6	#6 THIN - 3/4" CO	2	60	A.C. CONDENSER	2 (c)
	3											4
(a)	5	DRYER	40	2	#8 THIN - 1/2" CO	5.2	5.5	#6 THIN - 3/4" CO	2	60	OVEN	6 (a)
	7											8
(c)	9	WATER HEATER	40	2	#8 THIN - 1/2" CO	8	1.5	#12 THIN - 1/2" CO	1	20	WASHER	10 (c)
	11						1.5	#12 THIN - 1/2" CO	1	20	REFRIGERATOR	12 (c)
(c)	13	GARAGE	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	GROUND EXTERIOR	14 (c)
(c)	15	GARAGE DOOR	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	SECOND EXTERIOR	16 (c)
(a)	17	M.B. RECEPTACLE	20	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	DISHWASHER	18 (c)
(a)	19	M.B. LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	MICROWAVE	20 (a)
(a)	21	B.#2 RECEPTACLE	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	KITCHEN G.F.C.I.	22 (c)
(a)	23	B.#2 LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	KITCHEN RECEPT.	24 (a)
(a)	25	B.#3 RECEPTACLE	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	KITCHEN LIGHTS	26 (a)
(a)	27	B.#3 LIGHTS	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	LIVING RECEPT.	28 (a)
(c)	29	BATH #1	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	20	LIVING LIGHTS	30 (a)
(c)	31	BATH #2	15	1	#12 THIN - 1/2" CO	1.5	1.5	#12 THIN - 1/2" CO	1	15	THIRD EXTERIOR	32 (c)
(c)	33	BATH #3	15	1	#12 THIN - 1/2" CO	1.5						34
	35											36
	37											38
	39											40
	41											42
TOTAL						35.5	33.1					TOTAL

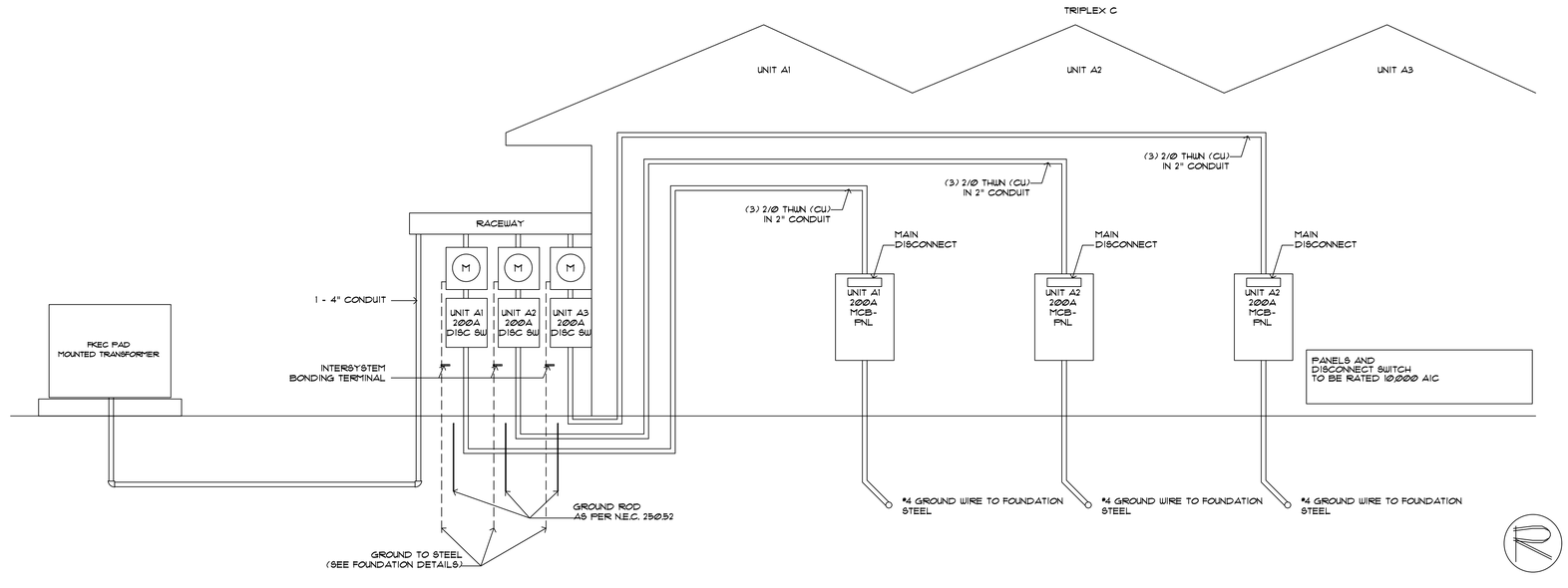
(a) AFCI C/B
(b) ON TIMER
(c) GFCI

NOTES: ALL BRANCH CIRCUITS SHALL COMPLY WITH NEC 2014 ARTICLE 210.12
PART OF 3W PER GF LOAD CALC
PROVIDE ARC FAULT PROTECTION FOR ALL RECEPTACLES

DEFINITION -NFPA 70 (2017 Edition)
(c) CONCRETE ENCASED ELECTRODE. AN ELECTRODE ENCASED BY AT LEAST 2" (50.8mm) OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET (6.1m) OF ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2" (12.7mm) DIAMETER, OR CONSISTING OF AT LEAST 20 FEET (6.1M) OF BARE COPPER CONDUCTOR NOT SMALLER THAN No.4.



NOTE: PER DETAIL THAT CONCRETE ENCASED GROUNDING ELECTRODE EXTENDS OUT OF THE FOOTER FOR CONNECTION TO GROUNDING ELECTRODE CONDUCTOR.



ELECTRICAL RISER DIAGRAM
N.T.S.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020

AS SHOWN
SCALE:
1/4/2017
DATE:
D.G.O.
DWG BY:
REVISED:

TITLE: TRIPLEX C - ELECT NOTES
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

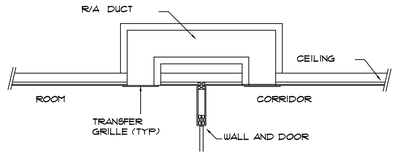
DRAWING No: E-4

PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS, TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVATA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT, EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M1403.11. AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

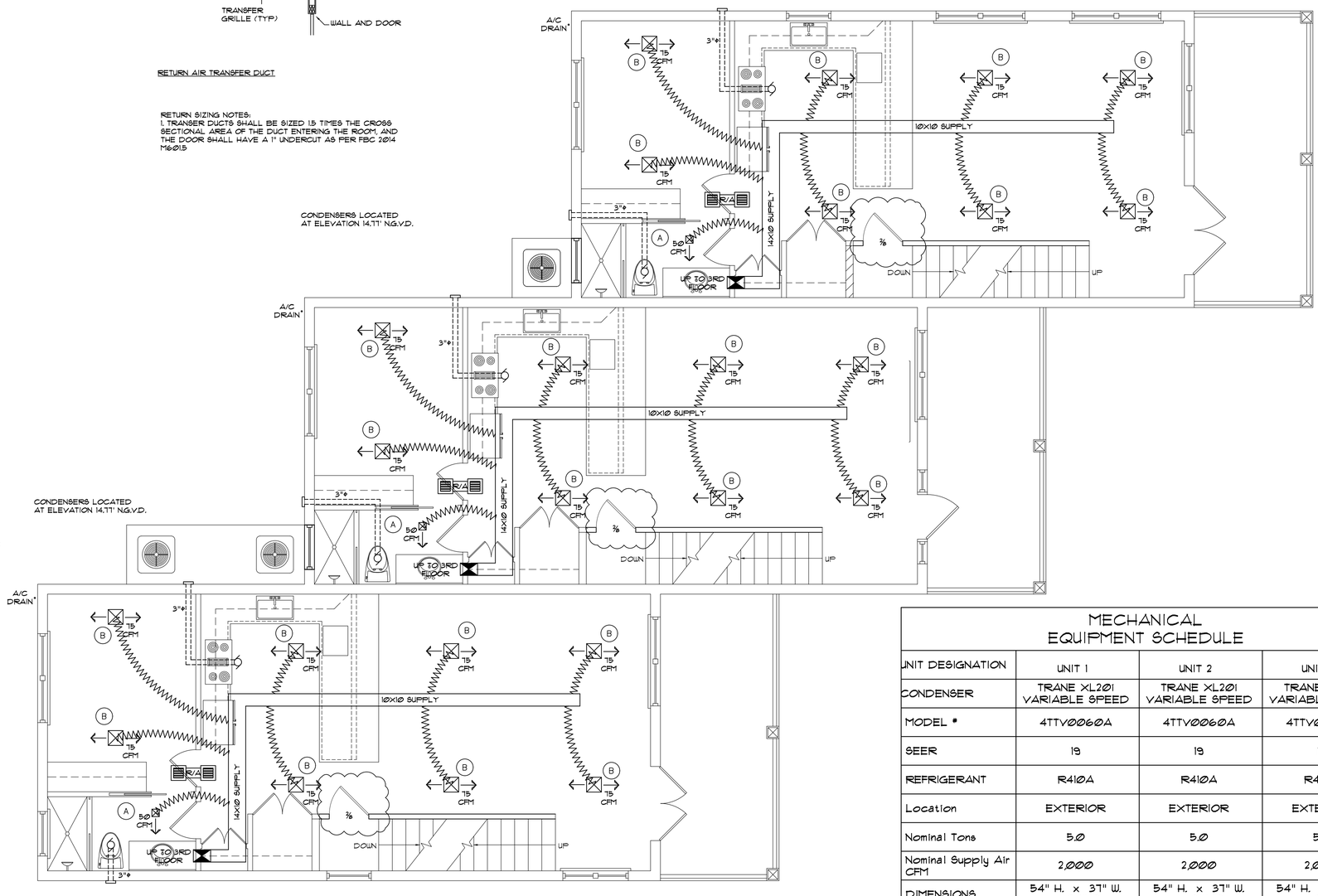


RETURN AIR TRANSFER DUCT

RETURN SIZING NOTES:
1. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M1601.5

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT,
EXHAUSTED DIRECTLY OUTDOORS
OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2
MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

NOTES: USE PROGRAMMABLE THERMOSTAT.
CONTRACTOR SHALL BE VERIFY THE DISTANCE BETWEEN THE INDOOR AND OUTDOOR UNITS AND TO CHECK THE SIZES OF THE REFRIGERANT LINES WITH MANUFACTURER



BALANCED RETURN AIR - FBC M1601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.
2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M1601.5
3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

NOTE:

ALL DUCTS SHALL BE SUPPORTED
WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

NOTE:

RETURN GRILLES BY TITUS ALL RETURN GRILLES ARE 12"x 12"

SECOND FLOOR MECHANICAL PLAN

SCALE @ ¼" = 1'-0"

MECHANICAL EQUIPMENT SCHEDULE			
UNIT DESIGNATION	UNIT 1	UNIT 2	UNIT 3
CONDENSER	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED
MODEL #	4TTV0060A	4TTV0060A	4TTV0060A
SEER	19	19	19
REFRIGERANT	R410A	R410A	R410A
Location	EXTERIOR	EXTERIOR	EXTERIOR
Nominal Tons	5.0	5.0	5.0
Nominal Supply Air CFM	2,000	2,000	2,000
DIMENSIONS	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.
AIR HANDLER	TRANE M SERIES	TRANE M SERIES	TRANE M SERIES
MODEL #	TEM40C60	TEM40C60	TEM40C60
NOMINAL COOLING CAPACITY	60,000	60,000	60,000
DIMENSIONS	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.

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DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	4/25/2018
2	VILLAGE COMMENT	4/17/2019
3	VILLAGE COMMENT	12/1/2020
4	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - MECH PLANS
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-1

PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS. TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVUTA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M601.1.1: AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

BALANCED RETURN AIR - FBC M601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.

2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

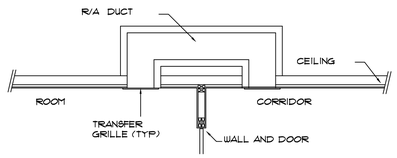
NOTE:

ALL DUCTS SHALL BE SUPPORTED
WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

NOTE:

RETURN GRILLES BY TITUS ALL RETURN GRILLES ARE 12"x 12"



RETURN AIR TRANSFER DUCT

DRYER DUCT.
EXHAUSTED DIRECTLY OUTDOORS, OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2 (TYP)

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT.
EXHAUSTED DIRECTLY OUTDOORS
OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER
AND CORROSION RESISTANT SCREEN. FBC R-1506.2
MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3

CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.

RETURN SIZING NOTES:
1. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

THIRD FLOOR MECHANICAL PLAN

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

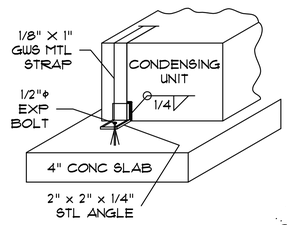
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - MECH PLANS

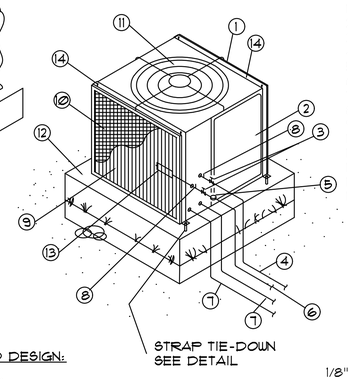
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-2

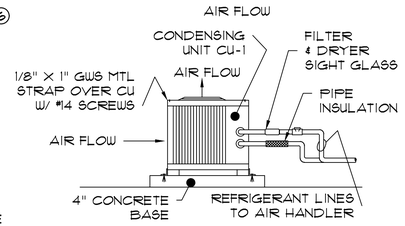
PROJECT No: D-16-047



TIE-DOWN



1. CONDENSING UNIT
2. COMPRESSOR ACCESS PANEL
3. BACK - SEATED REFRIGERANT VALVE
4. REFRIGERANT SUCTION LINE WITH INSULATION
5. SIGHT GLASS WITH MOISTURE INDICATOR
6. REFRIGERANT LIQUID LINE
7. CONDUIT - POWER AND CONTROL.
8. REFRIGERANT GAUGE CONNECTION
9. CONDENSER COIL
10. COIL GUARD
11. FAN GUARD
12. CONCRETE PAD IF REQUIRED
13. REFRIGERANT SUCTION LINE FLEX-CONNECTOR
14. 1/8" X 1" GALVANIZED METAL STRAP OVER CONDENSER SHROUD/FAN COWLING ATTACHED TO CONCRETE BASE W/MIN 1/2" ANCHOR/EXPANSION BOLTS 3" LONG ALL FOUR SIDES, W/MIN (4) #14 SCREWS W/GASKETED WASHERS TO TOP OF CONDENSER SHROUD/FAN COWLING THROUGH STRAPS.



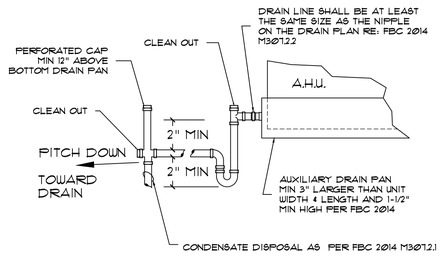
TYP ELEVATION

STRAPS OVER COWLING/SHROUD DESIGN:
UPLIFT: TA 4'x3' = 12 SF
UPLIFT: 57.7 PSF X 12 = 692.4 LBS
USE 1/8" GWS MTL STRAP 1" WIDE OVER CONDENSING UNIT AND ATTACH TO SLAB W/ (4) ANCHORS:
ANCHORS 1/2" = 4/692.4 = 173.1 LBS EACH
ANCHOR PULL-OUT 3" = 1,180 LBS fE O.K.
ALTERNATIVE:
USE (4) 3/8" X 1" "TAPPER" TAPCONS INTO CONC SLAB: 880 LBS EACH fE 173.1 = O.K.

THE STRAPS ARE ALSO ADEQUATE FOR RESISTING OF OVERTURNING OF THE A/C CONDENSER WHEN USED WITH STRAPS AND ANGLES ATTACHMENTS, FOR SIDE WIND LOADS OF -37.9 PSF.

CONDENSING UNIT TO BE ATTACHED TO SLAB WITH 1/4"x2"x2" ANGLES EACH CORNER AS INDICATED IN DETAILS (STRAPS TO BE PROVIDED IN ADDITION TO ANGLES).

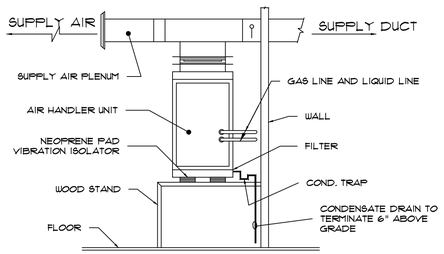
CONDENSING UNIT DETAILS



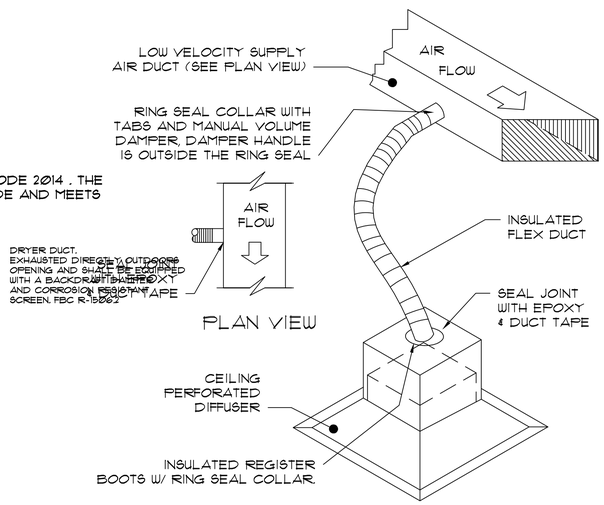
DRAIN TRAP DETAIL

NOTE:
MECHANICAL CONTRACTOR WILL COORDINATE WITH PLUMBING CONTRACTOR CONDENSATE SYSTEM INSTALLATION (TO BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR)
ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014

NOTES: A/C CONDENSING UNIT TO BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014 . THE STRAP TIE-DOWNS AS INDICATED HEREIN IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE CODE AND MEETS THE WIND LOAD REQUIREMENTS IN ACCORDANCE WITH ASCE 7-10.



AHU MOUNTING DETAIL



FLEXIBLE DUCT CONNECTION DETAIL

AIR CONDITIONING GENERAL NOTES

1. WORK INCLUDED: PROVIDING HEAT, VENTILATION, AND AIR CONDITIONING SYSTEMS WHERE SHOWN ON THE DRAWING, AS SPECIFIED HEREIN, AND AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION INCLUDING, BUT NOT NECESSARILY LIMITED TO
   - AIR CONDITIONING SUPPLY AND RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, AND REGISTERS.
   - AIR CONDITIONING UNITS, PIPING AND COMPONENTS, OPERATING AND SAFETY CONTROLS, BLOWERS, MOTORS, FILTERS, AND RELATED ITEM.
   - EXHAUST SYSTEMS INCLUDING TOILET FANS, MOTORS, DUCTWORK, GRILLES, REGISTERS, CONTROLS, AND REGISTERS.
   - TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING.
   - THERMAL INSULATION OF DUCTS AND PIPING.

2. DUCTWORK IN ATTICS SPACE AND ROOF WITH LESS THAN R-12 INSULATION SHALL BE 1-1/2" THICK FIBERGLASS WITH VAPOR BARRIER. DUCT WORK BETWEEN FLOORS, ENCLOSED ATTACHED GARAGES, UNCONDITIONED BASEMENT, UNCONDITIONED INTERIOR SPACES, AND ROOF WITH MIN R=12 INSULATION SHALL BE R-4.3 KNAUF AIR DUCT FIBERGLASS TYPE E1800 WITH VAPOR BARRIER. UNLESS OTHERWISE SPECIFIED DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ACCORDING TO "ASHRAE" AND "NAIMA" STANDARDS

   ALL DUCTWORK SHALL BE 1 ½" FIBERGLASS AND INSTALLED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND ACCORDING TO ASHRAE AND SMACNA STANDARDS, AND FLORIDA BUILDING CODE 2014 ENERGY FOR BUILDING CONSTRUCTION. DUCT DIMENSIONS ARE IN INCHES AND CORRESPOND TO INSIDE DIMENSIONS, WITH x HEIGHT. DUCT SYSTEM SHALL COMPLY WITH "NFPA" STANDARD No. 90A AND/FR 90B DUCTWORK AND COMPONENTS S SHALL BE CLASS 1 MATERIALS IN ACCORDANCE WITH U.L. 181 TESTS. FIBERGLASS DUCT SYSTEM STRAIGHT SECTIONS AND FITTINGS SHALL BE REINFORCED BY EITHER OR BOTH OF THE FOLLOWING METHODS: A) TIE ROD REINFORCEMENT AND OR B) CHANNEL REINFORCEMENT. REFER TO THE FIBROUS GLASS DUCT CONSTRUCTION STANDARDS AND MANUFACTURER RECOMMENDATION. LONGITUDINAL SEAMS AND TRANSVERSE JOINTS CLOSURES SHALL COMPLY WITH UL 181 A/P (PRESSURE SENSITIVE ALUMINUM FOIL TAPE) OR 181 A/H (HEAT SELLABLE ALUMINUM FOIL TAPE OR MANUFACTURER'S RECOMMENDATIONS FOR THE USE OF GLASS FABRIC AND MASTIC. DUCT SUPPORT SHALL BE PLACED SO AS TO PROPERLY SUPPORT ALL FITTINGS AND ACCESSORIES WITHOUT PLACING THE TAPED JOINTS UNDER STRESS.

3. COORDINATE LOCATIONS, SIZES AND OPENINGS WITH OTHER TRADES ON THE JOB. A/C CONTRACTOR SHALL PROVIDE THE COMPLETE DUCT SYSTEM WITH TURNING VANES AT ALL ELBOWS, AND INSTALLED SPLINTERS AND DAMPERS AS REQUIRED OR SHOWN ON THE DRAWING.

4. DIFFUSERS SHALL BE SELECTED, LOCATED AND BALANCED IN ORDER THAT THEY DELIVER THE REQUIRED CFM RELATIVE HUMIDITY TO THE ENTIRE ROOM EVENLY AND DRAFT FREE TO THE FOLLOWING DESIGN CONDITIONS. 50% TO 60% INSIDE OUTSIDE COOLING - 78 dB 91dB -79 wB HEATING - 72 dB

5. ALL FAN, MOTORS, COMPRESSORS, ETC. SHALL BE ISOLATED, AS REQUIRED TO OPERATE QUIETLY SO THAT NO OBJECTIONABLE SOUND WILL BE HEARD IN THE HABITABLE SPACES DUE TO AIR VELOCITY, MOTOR HUM, VIBRATION OR MECHANICAL MOVEMENT.

6. A/C SYSTEM SHALL HAVE 1" AIR FILTERS AS SPECIFIED LOCATION AND AS REQUIRED FOR EASY ACCESSIBILITY.

7. A/C SYSTEM SHALL BE CONTROLLED BY A THERMOSTAT MOUNTED 5' ABOVE FINISH FLOOR.

8. ALL GRILLES AND DIFFUSERS TO BE ALUMINUM CONSTRUCTION. ALL DIFFUSERS SHALL HAVE HIDDEN OPPOSED BLADE DAMPERS. PROVIDE GASKETS ON ALL GRILLES AND DIFFUSERS.

9. ALL REFRIGERANT PIPING SHALL BE COPPER COLD DRAWN TYPE -L-ACR, DEHYDRATED AND SEALED. ALL FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH HIGH TEMPERATURE BRAZING ALLOY OF NOT LESS THAN 5% SILVER. PIPING INSULATION NOT LESS THAN 3/4" THICK "ARMAFLEX". LIQUID AND SUCTION LINES SHALL BE SIZED ACCORDING TO EQUIPMENT MANUFACTURER'S RECOMMENDATION FOR EQUIVALENT LENGTH OF PIPING RUN FOR CONNECTED TONNAGE. ALL PIPING ACCESSORIES SHALL BE CONSTRUCTED AS SUGGESTED BY EQUIPMENT MANUFACTURER. PROVIDE FILTER/DRYER AND SIGHT GLASS ON LIQUID LINE. REFRIGERANT PIPING SYSTEM SHALL BE COMPLETED EVACUATED TO 26" VACUUM OF MERCURY GAUGE PRESSURE USING A VACUUM PUMP AND HOLD FOR A MINIMUM OF 24 HOURS. COMPRESSORS SHALL NOT BE USED TO EVACUATED SYSTEMS. CHANGE THE OIL IN THE VACUUM PUMP BEFORE VACUUM IS FULL. VACUUM SHALL BE BROKEN WITH THE OPENING REFRIGERANT.

10. ALL VENTILATION DUCTWORK SHALL BE 1 ½" FIBERGLASS INSTALLED ACCORDING TO LAST EDITION OF "SAMNA" AND "ASHRAE" FOR LOW PRESSURE DUCT SYSTEM.

11. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.

12. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE SITE, SATISFY HIMSELF TO EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PREFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FIELD CONDITION AFFECTING HIS WORK.

13. ELECTRIC HEATERS: SHALL BE MOUNTED IN BOX CASING WITH CAPACITIES AS SHOWN IN THE SCHEDULE. HEATERS TO BE U.L. LABELED AND LISTED FOR ZERO CLEARANCE AS A DUCT HEATER. ELEMENTS TO BE OPEN TYPE GRADE A NICHROME WIRE. EACH HEATER ASSEMBLY SHALL BE PROVIDED WITH A HIGH TEMPERATURE LIMIT CONTROLLER LIMIT CONTROLLER WITH A MANUAL RESET, AND WITH A SWITCH TO SHUT DOWN HEATER ON NO AIR FLOW CONDITION.

14. TESTING AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR WHO IS A MEMBER OF ASSOCIATED AIR BALANCE COUNCIL. TEST AND BALANCE REPORT SHALL BE APPROVED BY THE ENGINEER OF RECORD BEFORE CERTIFICATION OF OCCUPANCY. ALL SUPPLY DUCT, RETURN AND EXHAUST DUCT SYSTEM SHALL BE TESTED FOR AIR LEAKS, AND ANY AIR LEAKS SHALL BE FIXED AS REQUIRED.

15. PROVIDE A CONDENSATE DRAIN RUNNING TO APPROVED DRAIN. THE CONDENSATE DRAIN SYSTEM SHALL MEET THE LOCAL PLUMBING CODE REQUIREMENTS.

16. PROVIDE ELECTRICAL DISCONNECTS FOR THE AIR HANDLER AND CONDENSING UNIT. THE SIZE OF THE DISCONNECT SHALL COMPLY WITH THE EQUIPMENT MANUFACTURER'S REQUIREMENT.

17. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE MECHANICAL SYSTEMS.

18. INTERLOCK ELECTRIC DUCT HEATERS WITH COMPRESSOR CIRCUIT SO THAT HEATERS DO NOT OPERATE SIMULTANEOUSLY WITH COMPRESSORS.

19. AS PER R402.4.1.2, ANY BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 7 AIR CHANGES PER HOUR IN CLIMATE ZONES 1 AND 2, AND 3 AIR CHANGES PER HOUR IN CLIMATE ZONES 3 THROUGH 8. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY EITHER INDIVIDUALS AS DEFINED IN SECTION 553.993(5) OR (7), FLORIDA STATUTES OR INDIVIDUALS LICENSED AS SET FORTH IN SECTION 489.105(3)(F), (G), OR (I) OR AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - MECH NOTES
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-3

PROJECT No: D-16-047

PLUMBING GENERAL NOTES AND SPECIFICATION

1. A. SCOPE OF WORK.
THE WORK SHALL INCLUDE ALL PLUMBING AND SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING
1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS.
2. SANITARY DRAIN AND VENT SYSTEMS.
3. PLUMBING FIXTURES AND TRIM.
4. AIR CONDITIONING CONDENSATE DRAIN SYSTEMS.
5. PRESSURE AND TEMPERATURE RELIEF FROM WATER HEATER.
6. PIPING INSULATION.
7. SUPPORTS AND HANGERS.

2. CONTRACTOR SHALL VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.

3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING. "BITUMASTIC" OR EQUAL.

4. ALL FIXTURES SHALL BE PROTECTED AGAINST WATER HAMMER WITH AIR CHAMBERS OF SHOCK ABSORBERS AS INDICATED ON PLANS.

5. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH APPROVED MATERIALS, SHALL HAVE SMOOTH IMPERVIOUS SURFACES AND SHALL BE FREE FROM DEFECTS AND CONCEALED FOULING SURFACES. ALL FIXTURE TRIM TO BE CHROME PLATED, FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC.

6. WASTE LINES TO SLOPE 1/8"/FOOT UNLESS OTHERWISE NOTED.

7. VENT LINES TO EXTEND MIN OF 9" ABOVE ROOF AND FLASH WITH LEAD.

8. WATER PIPE BELOW GROUND SHALL BE COPPER TYPE "K", ABOVE GROUND TO BE COPPER TYPE "L".

9. PIPING INSTALLATION.
A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE
B. PROVIDE SLEEVES FOR ALL PIPING THROUGH FOUNDATIONS, SLABS, OR MASONRY WALLS. CAULK OPENINGS BETWEEN PIPE AND SLEEVES.
C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESCUTCHEONS. FIRMLY SECURE TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE SLEEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESCUTCHEONS IN BATHROOMS.
D. WHERE PIPES PASS THROUGH FIRE RATED FLOOR WALLS, OR CEILINGS, PROVIDE FIRE STOPS, OR FIRE BARRIER PENETRATION SEALING SYSTEMS SHALL BE UL. LISTED.

10. INSPECTION AND TESTS.
CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTION TO THE AUTHORITIES HAVING JURISDICTION AS THE WORK PROGRESS. ALL SYSTEMS SHALL BE TESTED BY CODE AND OR LOCAL REGULATIONS. THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE STERILIZED FOLLOWING CODE PROCEDURES. AFTER STERILIZATION FLUSH THE SYSTEM WITH CLEAN WATER UNTIL SAFE TO BE CONSUMED.

11. UTILITIES CONNECTION
PLUMBING CONTRACTOR SHALL VERIFY AT FIELD AND WITH THE UTILITY COMPANIES THE EXACT POINT OF CONNECTION FOR WATER AND SEWER SERVICES BEFORE SUBMITTING A BID OR PRICE FOR HIS WORK.

12. PLUMBING CONTRACTOR IS RESPONSIBLE FOR PERFORMING THE FOLLOWING TEST IN THE PRESENCE OF AN OWNER REPRESENTATIVE.
A. ALL WATER PIPING SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST OF 100 PSI. FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.

B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH WATER TO HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTED

13. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUND OF CHLORINATE LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE.) RETAIN MIXTURE IN PIPE 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.

14. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF INSTALLATION.

15. PLUMBING CONTRACTOR SHALL FURNISH WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE FROM DATE OF FINAL ACCEPTANCE, AND THAT HE WILL AT HIS EXPENSE REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE GUARANTEE PERIOD INCLUDING BUT NOT LIMITED TO NECESSARY DEMOLITION, PATCHING, RE-PATCHING AND REFINISHING.

16. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN HIS BID, THE COST FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO PERFORM THE SCOPE OF THE WORK AND THE INTENT OF THE CONSTRUCTION DOCUMENTS FORM ALL THE LOCAL AND STATE AUTHORITIES.

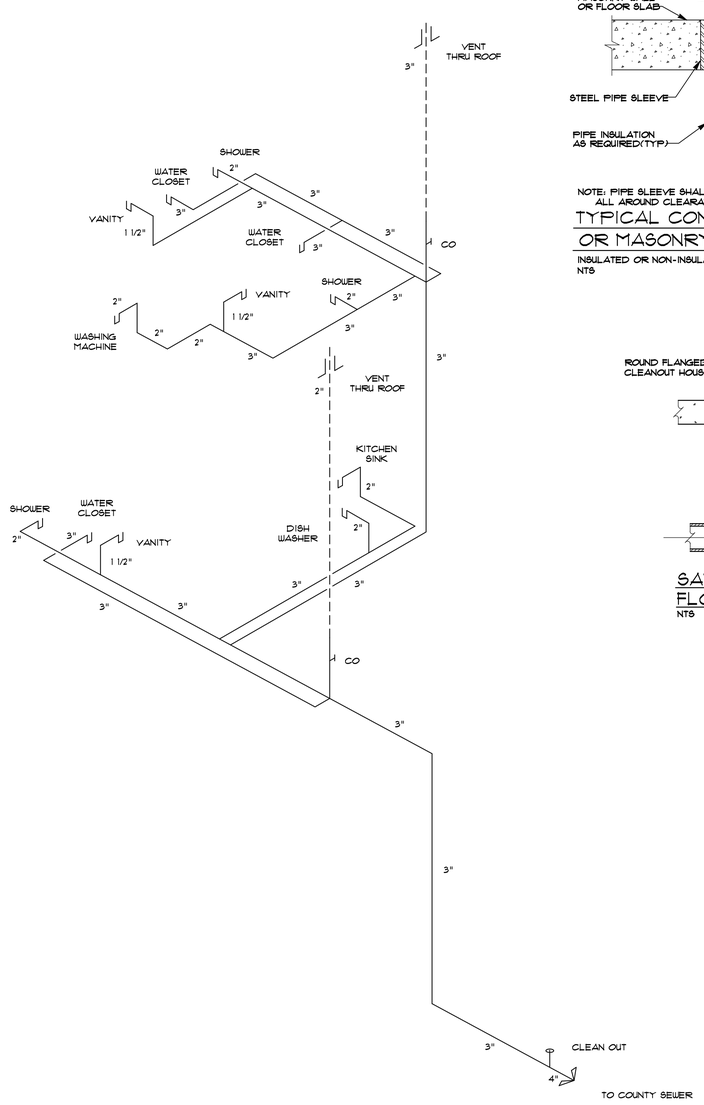
17. CONDENSATE DRAIN FROM AIR CONDITIONING UNITS SHALL BE "PVC" SCHEDULE 40 PIPE AND FITTINGS ALL HORIZONTAL RUN SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX PIPE INSULATION OR EQUAL. SLIP PIPE INSULATION AND SEAT BUTT JOINTS.

18. ALL PIPING MATERIALS SHALL BE NEW AND AS FOLLOWS:
A. SANITARY WASTE, VENT AND STORM DRAIN PIPING: UNDERGROUND AND ABOVE GROUND PIPING SHALL BE "PVC" PIPE AND FITTINGS SCHEDULE 40. MATERIAL SHALL COMPLY WITH ASTMD-1784, TYPE I.
B. DOMESTIC WATER ABOVE GROUND SHALL BE TYPE "K" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
C. DOMESTIC WATER BELOW GROUND SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT AT FITTINGS.
D. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, ELJER OF KOHLER.
E. ELECTRIC WATER HEATERS SHALL BE LOCHINVAR UNLESS OTHERWISE SPECIFIED. SEE SPECIFICATIONS.
F. SOLDER ALLOY SHALL BE LEAD FREE.
J. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.

19. INSULATION:
A. ALL RECALCULATION HOT WATER PIPE SHALL BE INSULATE WITH 1/2" THICK FIBERGLASS MOLDED INSULATION WITH PRE-SIZED FACTORY APPLIED "FRJ" JACKET OF GLASS CLOTH WITH LONGITUDINAL LAP AND BUTT JOINT STRIPS WITH SELF SEALING ADHESIVE.
B. INSULATION SHALL HAVE A MAXIMUM THERMAL CONDUCTIVITY OF Ø.26 K FACTOR AT 75 DEG. F. MEAN TEMPERATURE. JACKET INSULATION AND ADHESIVE SHALL HAVE COMPOSITE FIRE AND SMOKE RATING AS PER ASTM E84-75. FINISHING JACKETS SHALL HAVE A MAXIMUM FLAME SPREAD OF 25.

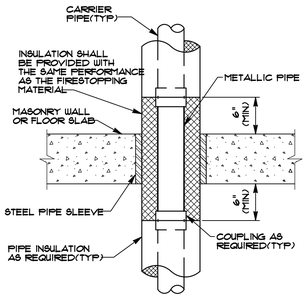
20. HANGERS AND SUPPORTS.
A. PROVIDE ADJUSTABLE HANGERS, INSERTS, BRACKETS, ROLLS, CLAMPS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. PROVIDE HANGERS TO ALLOW FOR EXPANSIONS AND CONTRACTION OF PIPE LINES AND OF ADEQUATE SIZE TO PERMIT COVERING TO RUN CONTINUOUSLY THROUGH HANGERS, PIPING AT EQUIPMENT SUPPORTED INDEPENDENTLY SO THAT NO WEIGHT WILL BE SUPPORTED BY EQUIPMENT. COORDINATE LOCATION OF HANGERS WITH LIGHT FIXTURES, AIR CONDITIONING DUCTWORK AND DIFFUSERS AND WITH EXISTING PIPING SYSTEMS.
B. PROVIDE RISER CLAMPS AT EVERY FLOOR.

21. EXISTING CONDITIONS: CONTRACTOR BY AND THROUGH SUBMISSION OF HIS BID, AGREES THAT HE SHALL BE HELD RESPONSIBLE FOR HAVING EXAMINED THE SITE, THE LOCATION OF ALL PROPOSED WORK AND FOR HAVING SATISFIED HIMSELF FROM HIS OWN PERSONAL KNOWLEDGE AND EXPERIENCE OR PROFESSIONAL ADVICE AS TO THE CHARACTER, AND LOCATION OF THE SITE, THE NATURE OF THE EXISTING CONDITIONS, THE LOCATION OF EXISTING UTILITIES AND ANY OTHER CONDITIONS SURROUNDING AND AFFECTING THE WORK, ANY OBSTRUCTIONS, THE NATURE OF EXISTING CONSTRUCTION, AND ALL OTHER PHYSICAL CHARACTERISTICS OF THE JOB, IN ORDER THAT HE MAY INCLUDE IN THE PRICES WHICH HE BIDS ALL COSTS PERTAINING TO THE WORK AND THEREBY PROVIDE FOR THE SATISFACTORY COMPLETION THEREOF.



PLUMBING ISOMETRIC

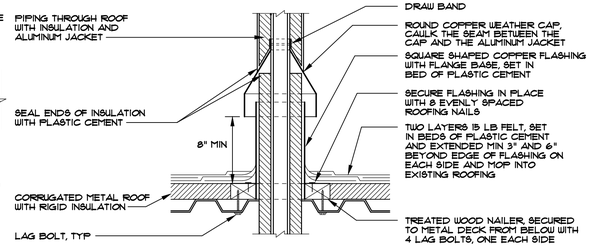
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NOTE: PIPE SLEEVE SHALL BE SIZED TO PROVIDE 1/4" ALL AROUND CLEARANCE.

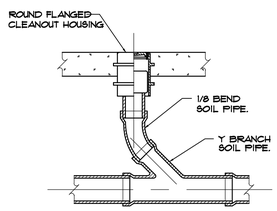
TYPICAL CONCRETE FLOOR OR MASONRY WALL PENETRATION

INSULATED OR NON-INSULATED, ABOVE GRADE
NTS



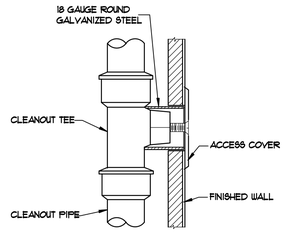
PIPING THROUGH ROOF DETAIL

NTS



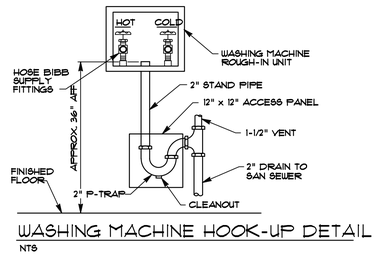
SANITARY CLEANOUT FLOOR SLAB DETAIL

NTS



WALL CLEANOUT DETAIL

NTS



WASHING MACHINE HOOK-UP DETAIL

NTS

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

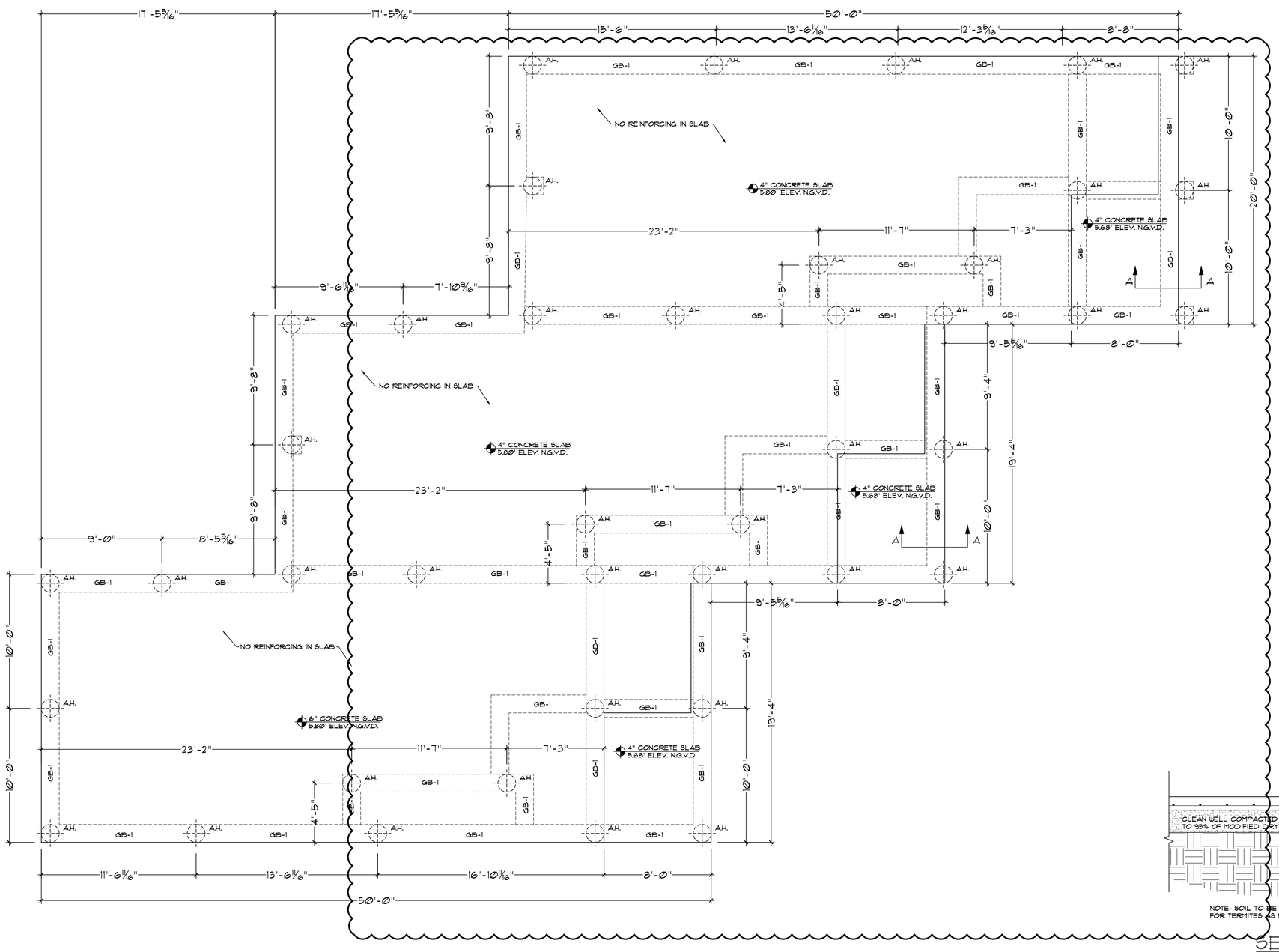
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - PLUMBING

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: P-1

PROJECT No: D-16-047



FOUNDATION PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

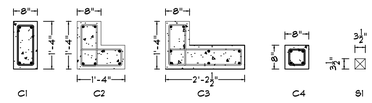
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

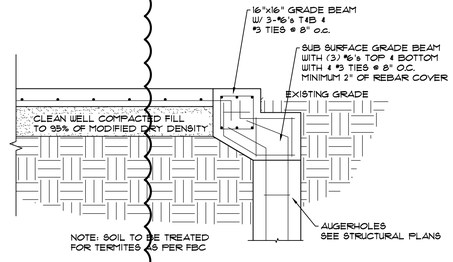
BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
IB-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
IB-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN





SECTION A-A

SCALE @ ½" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	12/17/2021
3	VILLAGE COMMENT	1/3/2022

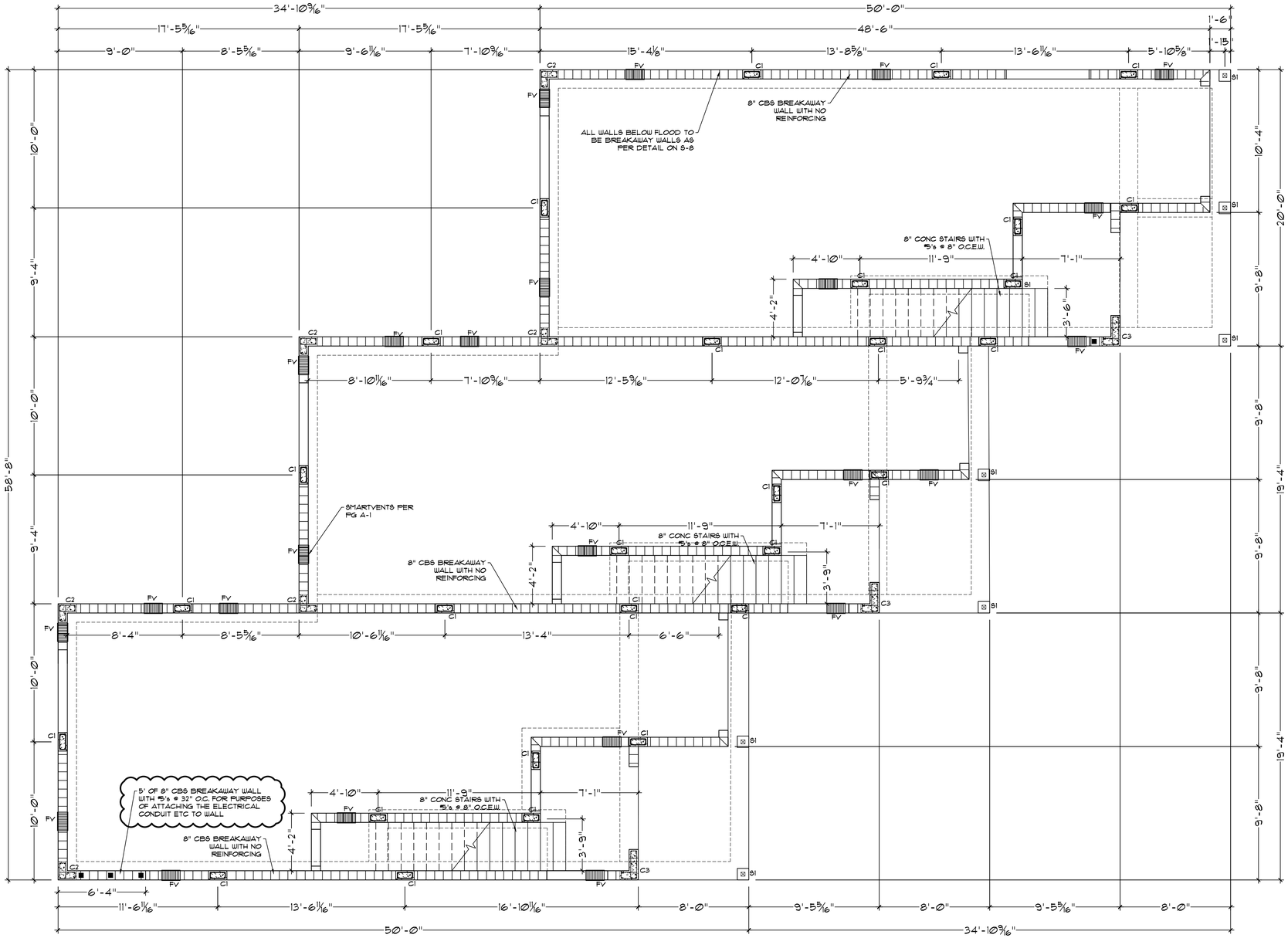
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

PROJECT No: D-16-047



GROUND FLOOR WALL & COLUMN PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

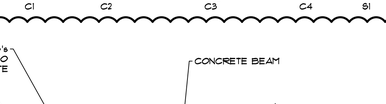
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



EQUIPMENT WALL DETAIL

SCALE @ ½" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
3	VILLAGE COMMENT	12/17/2021
4	VILLAGE COMMENT	1/3/2022
5	VILLAGE COMMENT	2/2/2022
6	VILLAGE COMMENT	8/15/2022

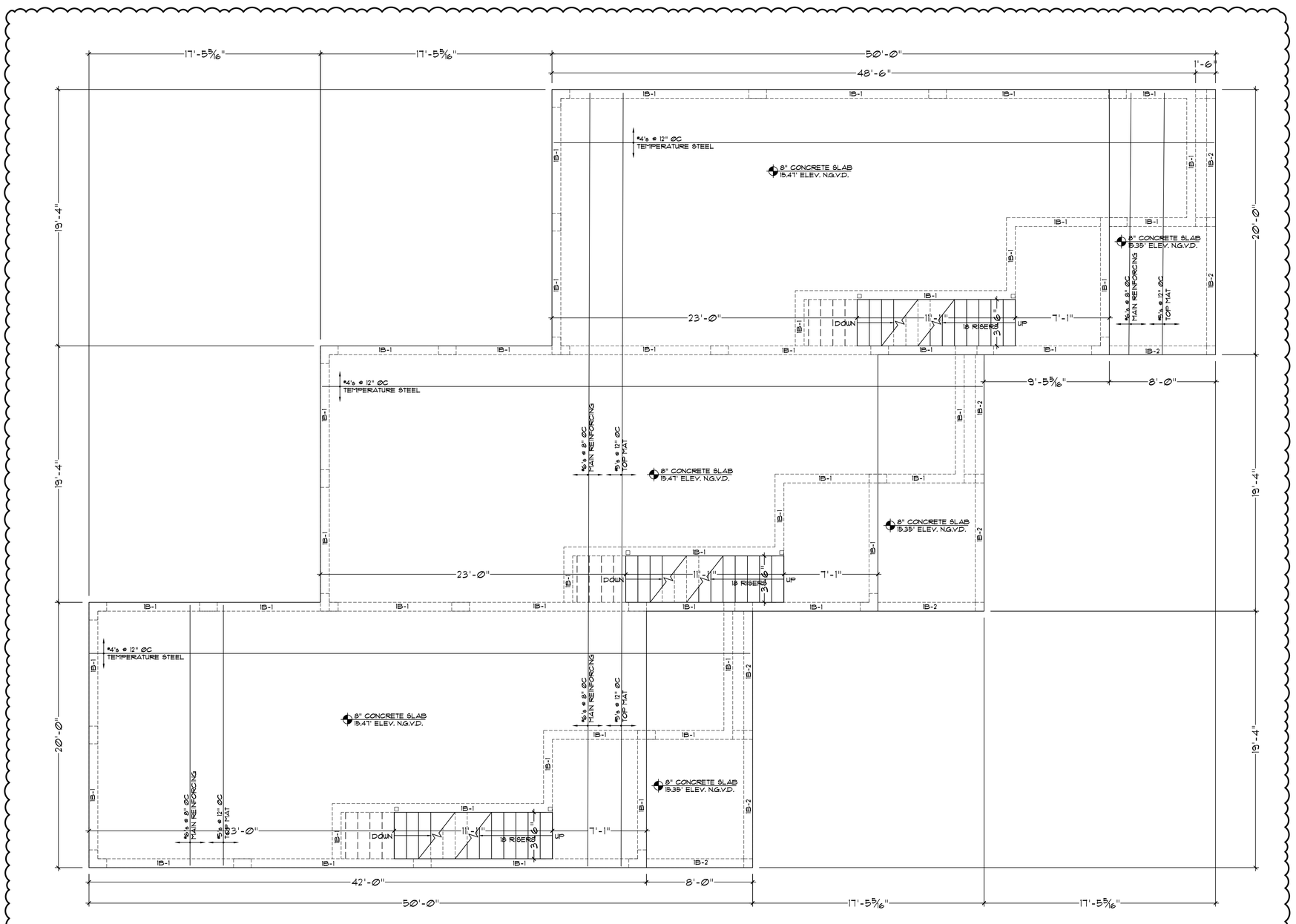
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-2

PROJECT No: D-16-047



SECOND FLOOR SLAB & BEAM PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

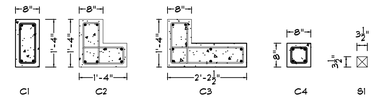
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
IB-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
IB-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



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ENGINEERING SERVICES
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P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENTS	1/3/2022

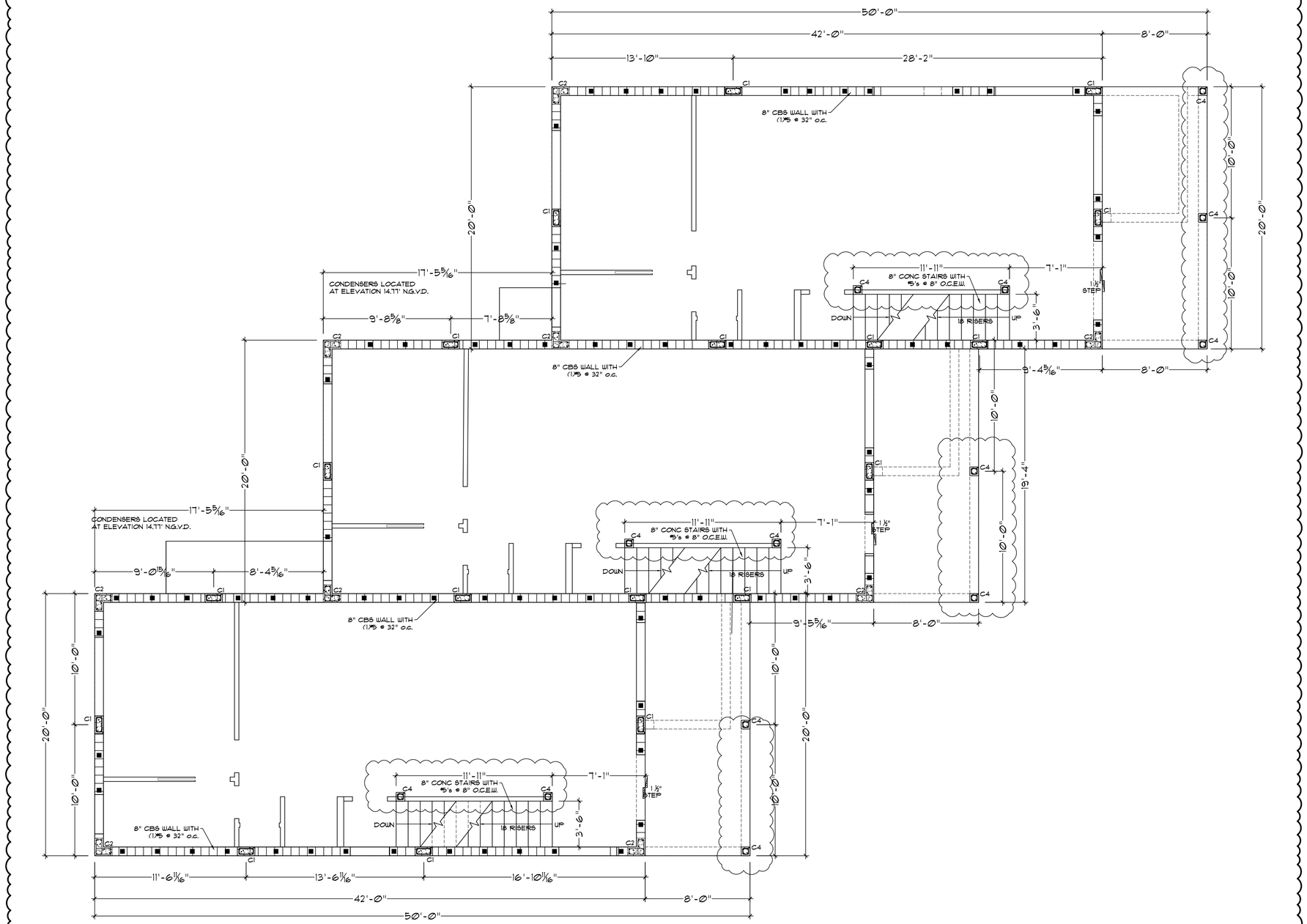
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-3

PROJECT No: D-16-047



LEGEND:	
AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

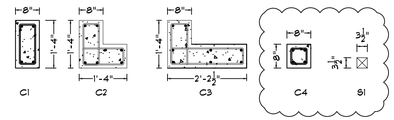
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x½"			STEEL COLUMN



SECOND FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
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P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021

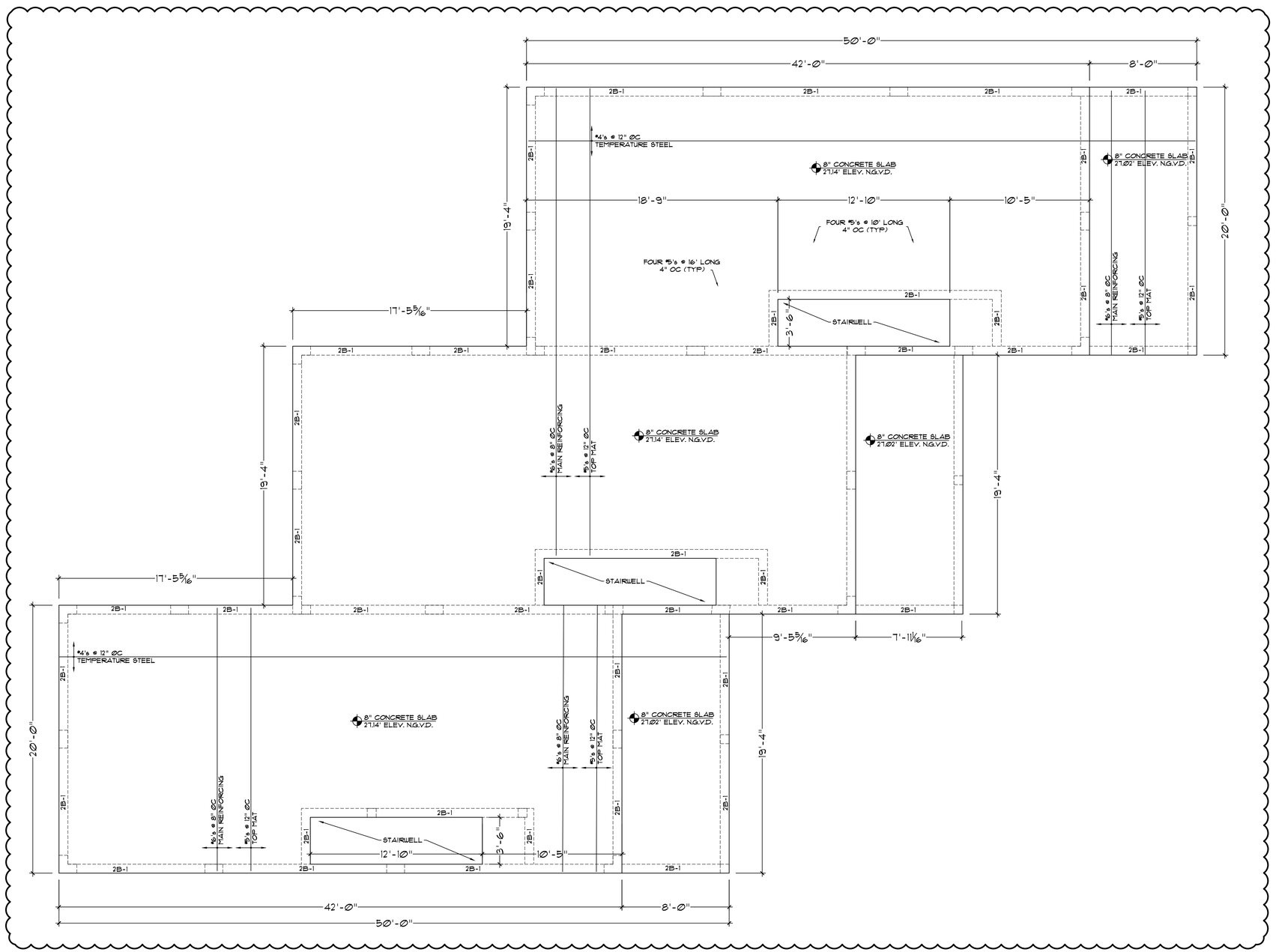
AS SHOWN | SCALE:
1/4/2017 | DATE:
D.G.O. | DWG BY:
REVISED:

TITLE: TRIPLEX C - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-4

PROJECT No: D-16-047



THIRD FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

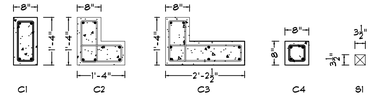
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	21.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



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No.	REVISION	DATE
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1	REVISION 1	11/28/2021

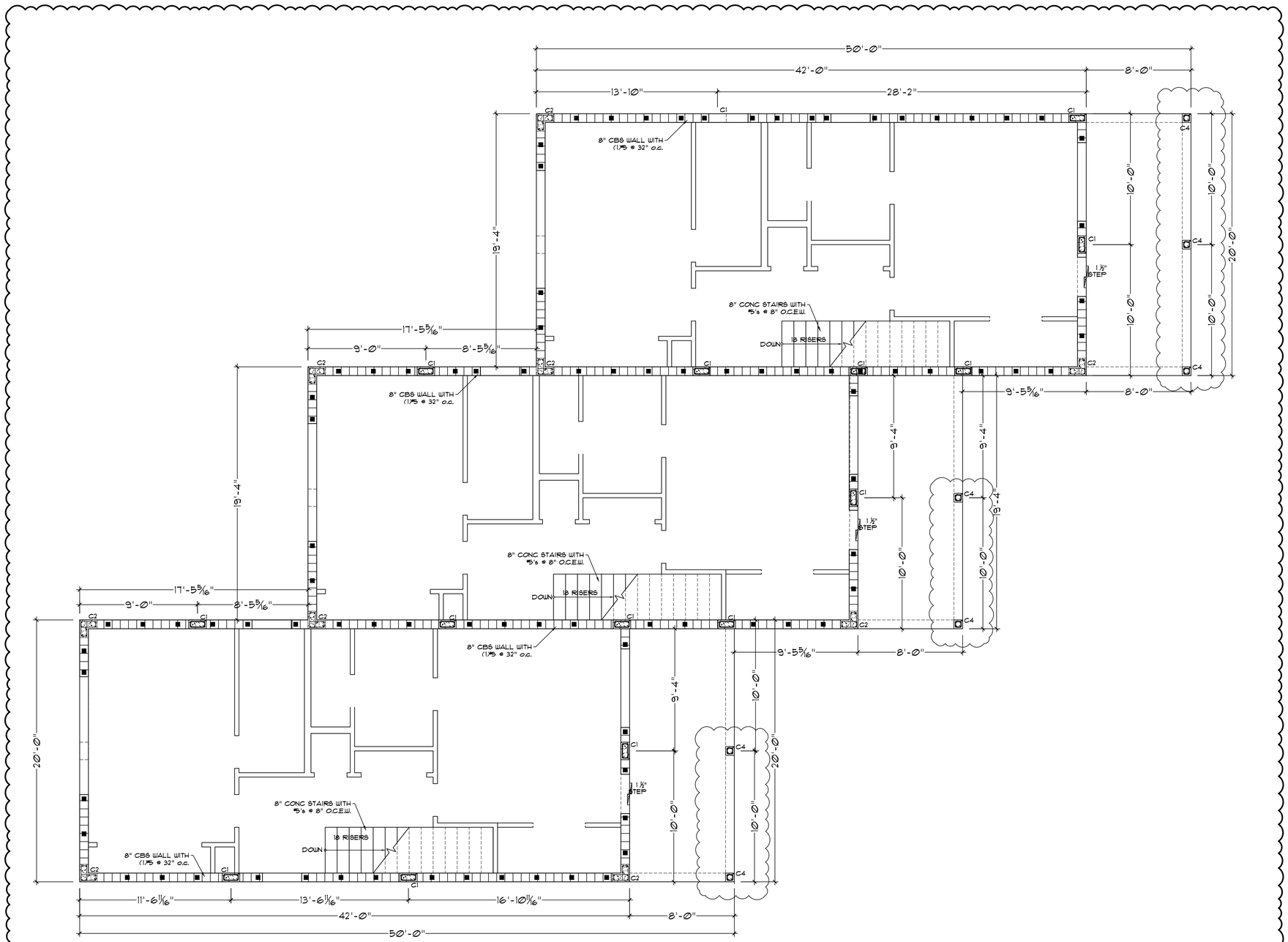
AS SHOWN | SCALE:
1/4/2017 | DATE:
D.G.O. | DWG BY:
REVISED:

TITLE: TRIPLEX C - STRUCTURAL

PROJECT: BG1SLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-5

PROJECT No: D-16-047



THIRD FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE: A.H.
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

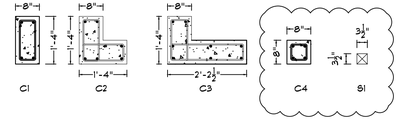
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-¾"x¼"	-	-	STEEL COLUMN



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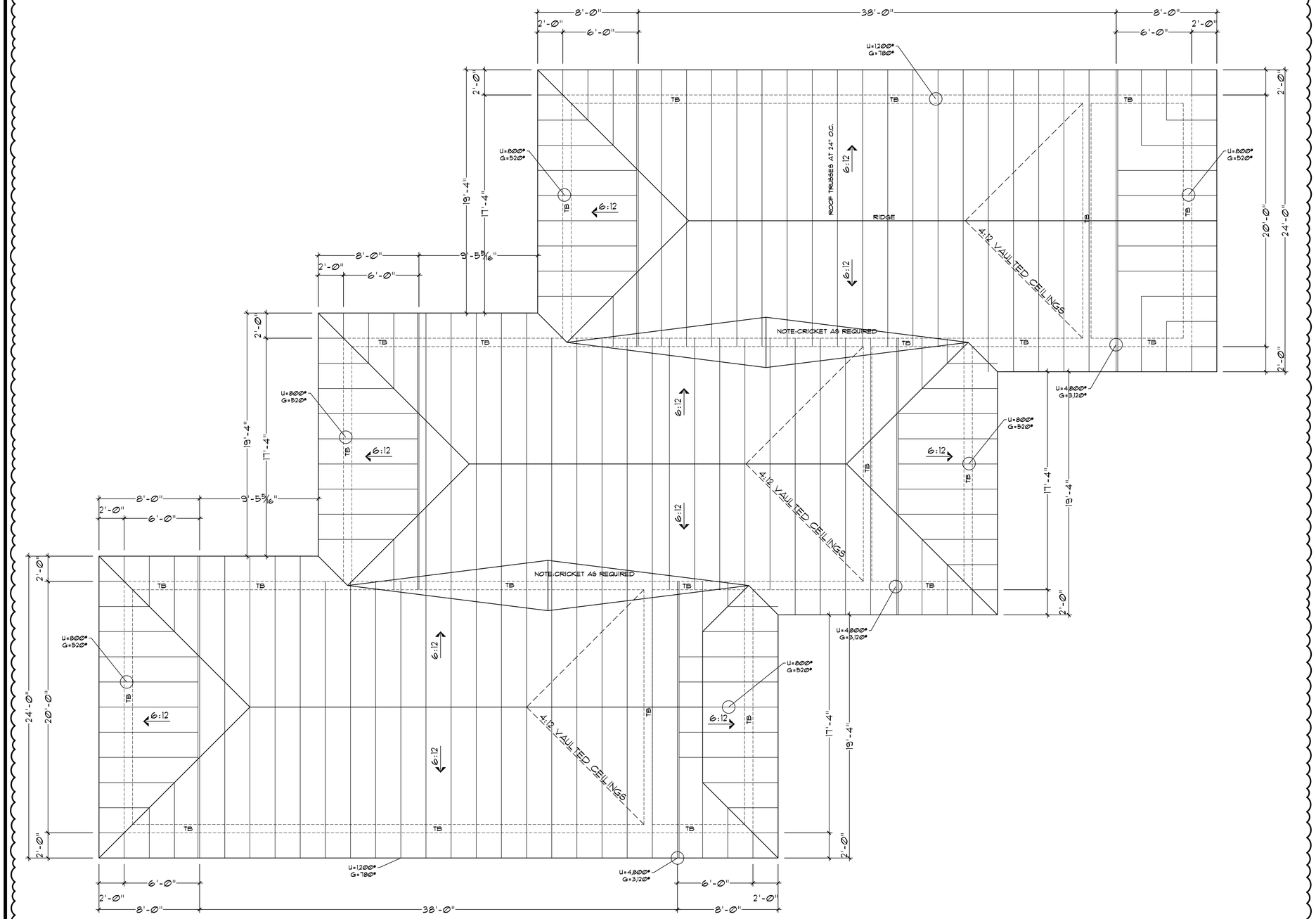
No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/28/2021
2	VILLAGE COMMENT	2/2/2022

AS SHOWN
SCALE: 1/4"=1'-0"
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-6

PROJECT No: D-16-047



ROOF PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:	A.H.
8" CBS WALL:	
DOOR:	
WINDOW:	
COLUMN/BEAM BELOW:	
ELEMENT ABOVE:	
CONCRETE COLUMN:	

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

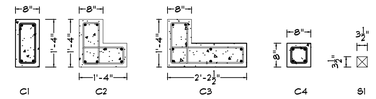
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"xH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	
S1	3-½"x3-½"x¼"	-	-	STEEL COLUMN



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ENGINEERING SERVICES
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No.	REVISION	DATE
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4	REVISION	11/28/2021

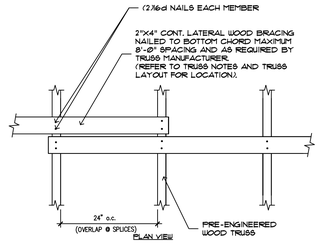
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL

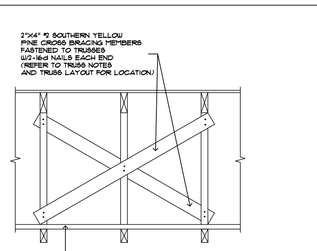
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

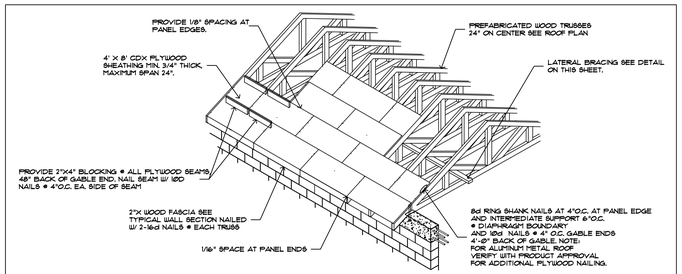
PROJECT No: D-16-047



TYPICAL LATERAL BRACE SPLICE
NOT TO SCALE



TYPICAL X-BRACING
NOT TO SCALE



PLYWOOD NAILING DETAIL
NOT TO SCALE

NOTES:

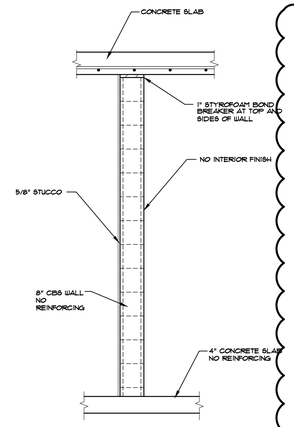
1. ATTIC ACCESS ROUGH OPENING SHALL BE NO LESS THAN 22"x30" WITH A MINIMUM OF 30" UNOBSTRUCTED HEADROOM AS PER THE FLORIDA BUILDING CODE.

2. TOP TIE BEAM SHALL NOT BE POURED UNTIL THE TRUSS LAYOUT AND CALCULATIONS HAVE BEEN APPROVED BY THE MONROE COUNTY BUILDING DEPARTMENT.

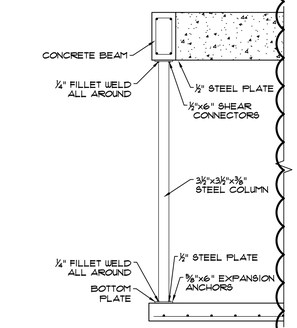
3. BORATE TREATED LUMBER, OR APPROVED EQUAL, SHALL BE USED TO PREVENT ANY INTERACTION BETWEEN FASTERN AND WOOD.

4. ROOF TRUSSES SHALL BE DESIGNED FOR A WINDSPEED OF 180 MPH PER ASCE-7-16

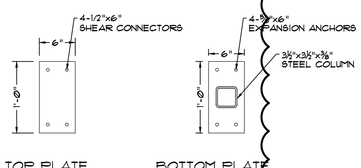
5. HURRICANE STRAPS SHALL BE SPECIFIED AFTER DETERMINATION OF TRUSS UPLIFT LOADS BY TRUSS MANUFACTURER.



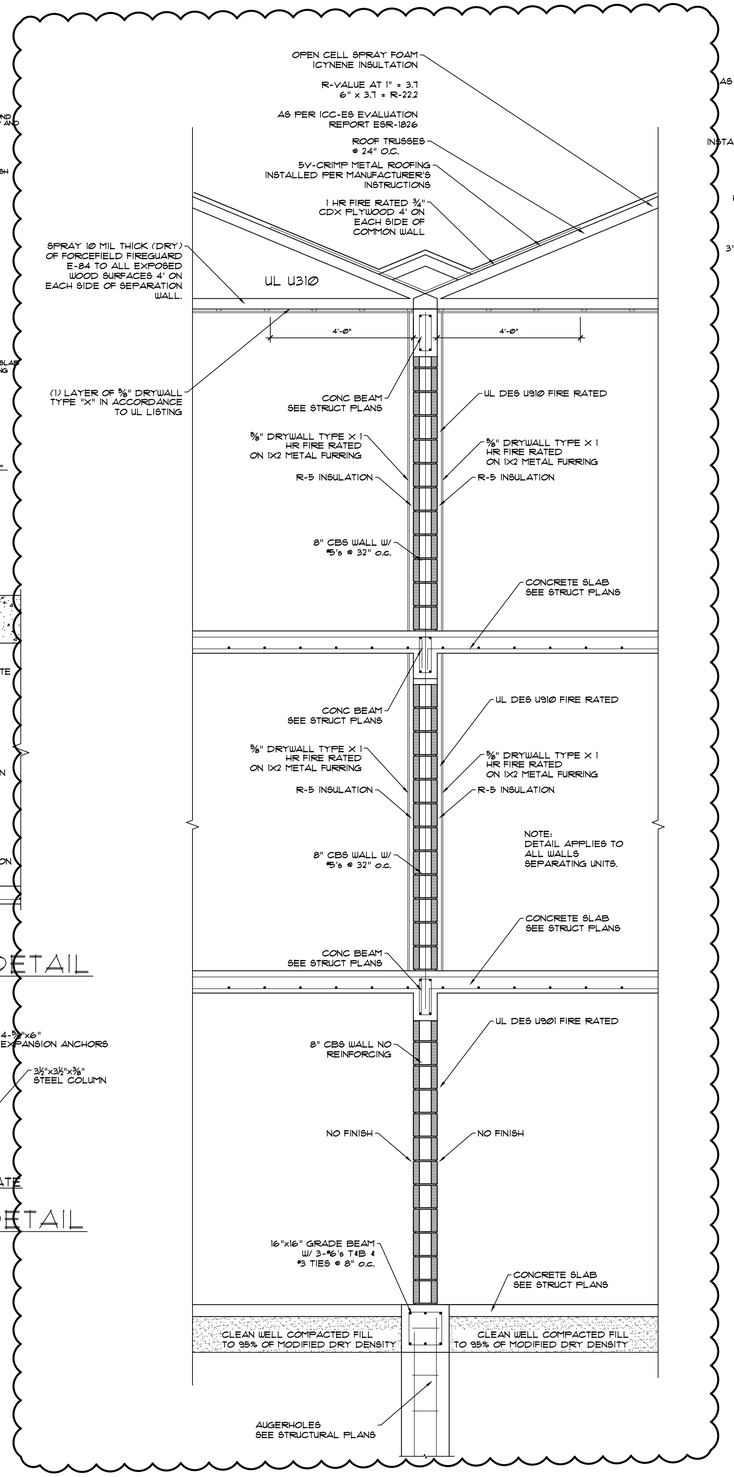
BREAKAWAY WALL SECTION
SCALE @ NTS



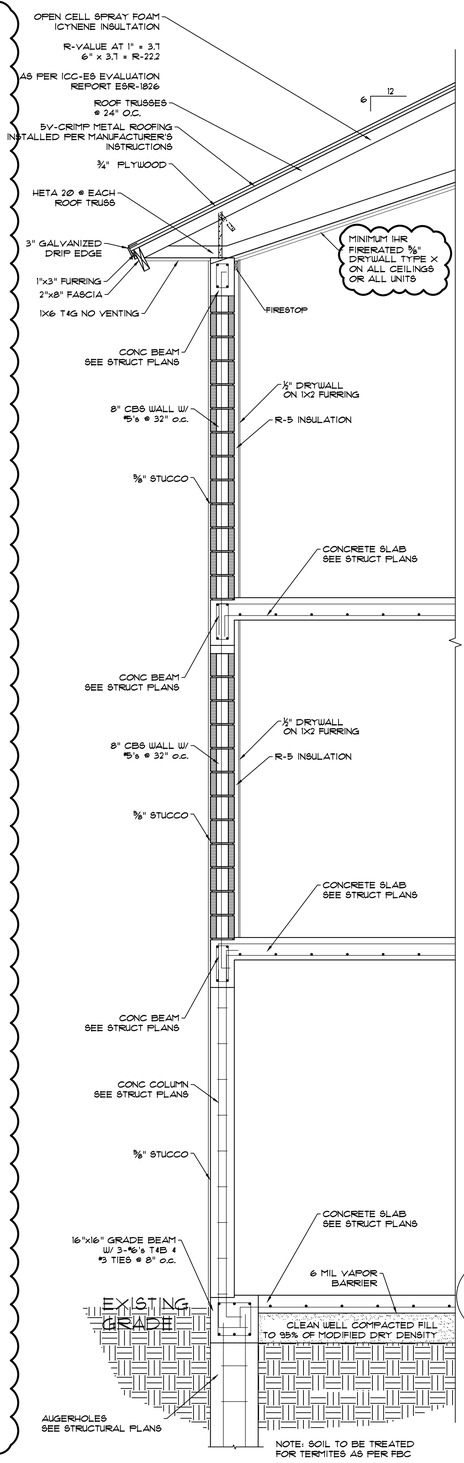
STEEL COLUMN DETAIL
SCALE @ ½" = 1'-Ø"



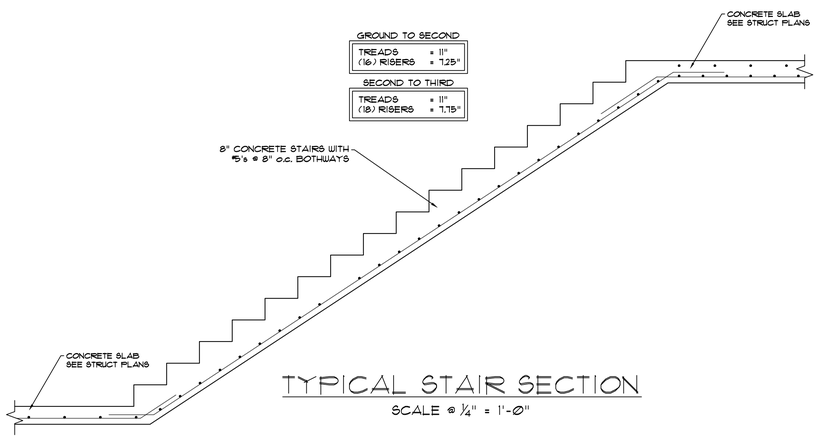
STEEL PLATE DETAIL
SCALE @ 1" = 1'-Ø"



SEPARATION WALL DETAIL
SCALE @ ½" = 1'-Ø"



TYPICAL WALL SECTION
SCALE @ ¼" = 1'-Ø"



TYPICAL STAIR SECTION
SCALE @ ¼" = 1'-Ø"

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NO.	REVISION	DATE
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1	REVISION 1	11/15/2021
2	VILLAGE COMMENT	12/17/2021
3	VILLAGE COMMENT	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-8

PROJECT No: D-16-047

GENERAL NOTES:

1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 2020 EDITION. THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCED STANDARD APPLIES TO THIS PROJECT.
2. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
3. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
4. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE DESIGN DOCUMENTS. IF A CONFLICT EXIST, NOTIFY THE DESIGN PROFESSIONAL.
5. DETAILS LABELLED "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 DESIGN PROFESSIONAL.
6. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL. SEE THE ARCHITECTURAL AND M.E.P. DRAWINGS FOR THE SIZE AND LOCATION OF OPENINGS IN THE STRUCTURE.
7. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE DESIGN PROFESSIONAL PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL O.S.H.A. REQUIREMENTS.
10. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. WHEREVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A FLORIDA LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.
11. DESIGN SUPERIMPOSED LOADS:

OCCUPANCY	LIVE LOAD	DEAD LOAD
ROOF	30 PSF	20 PSF
FLOOR	40 PSF	80 PSF

12. DESIGN WIND LOADS:

GOVERNING CODE	A.S.C.E. 7-16
BASIC WIND SPEED	VULT= 180 MPH/VASD= 139 MPH
RISK CATEGORY	II
BUILDING ENCLOSURE	ENCLOSED
DIRECTIONALITY FACTOR	KD = 0.85
EXPOSURE	D
INTERNAL PRESSURE COEFFICIENT	+0.18

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE PRECAST CONCRETE, PREFABRICATED WOOD COMPONENTS, OPEN WEB STEEL JOISTS AND JOIST GIRDERS, POST-TENSIONING SYSTEMS, TILT-UP PANELS, STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, EXTERIOR ENCLOSURE SYSTEMS AND SHORING AND RESHORING.
2. A DELEGATED ENGINEER IS DEFINED AS A FLORIDA LICENSED ENGINEER 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 OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS.
3. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE ARCHITECT. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTABILITY.
5. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. QUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT SUM. CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.
6. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED 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.

EXPANSION ANCHORS:

1. USE WEDGE-TYPE EXPANSION ANCHORS SUCH AS THE HILTI KWIK BOLT II, ITW RAMSET RED HEAD TRUBOLT WEDGE, POWERS RAWL POWER-STUD, SIMPSON STRONG-TIE WEDGE-ALL OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

CHEMICAL ADHESIVE FOR ANCHORING REINFORCING BARS, THREADED BARS AND ANCHOR BOLTS:

1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE HILTI HIT HY150, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, POWERS RAWL POWER-FAST SYSTEM, SIMPSON STRONG-TIE AT OR ET, ALLIED FASTENER ALLIED GOLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE DRILL SIZE. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.
4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.
5. THREADED RODS ARE A-36 GALVANIZED STEEL, U.O.N.

REINFORCED CONCRETE:

1. COMPLY WITH ACI 301 AND 318.
2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH OF 5,000 PSI IN 28.
3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS, U.O.N.
4. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MID-SPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N. PROVIDE COVER OVER REINFORCING AS FOLLOWS:

ELEMENT	BOTTOM	TOP	SIDES
FOOTINGS	3"	2"	3"
BEAMS ABOVE GRADE	1 1/2"	1 1/2"	1 1/2"
COLUMNS	-	-	1 1/2"
SLABS ON GRADE	2"	1"	2"
SLABS ABOVE GRADE	3/4"	3/4"	1"
SLABS EXPOSED TO WEATHER	1 1/2"	1 1/2"	1 1/2"

5. TENSION DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:

LAP SPLICE LENGTH FOR BARS (IN)

REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED WIRE REINFORCEMENT CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE TWO CROSS WIRE SPACING.
7. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, U.O.N. FOR OPENINGS 24" LONG OR LESS, CUT REINFORCING AND REPLACE ALONGSIDE OPENING WITH SPLICE BARS OF EQUIVALENT AREA WITH 48 BAR DIAMETERS LAP. PREPARE AND SUBMIT SHOP DRAWINGS FOR OPENINGS LONGER THAN 24". FOR RECTANGULAR OPENINGS 12" LONG OR LONGER, ADD 1#5 X 6' MID DEPTH DIAGONAL AT ALL 4 CORNERS.
8. WHERE REINFORCING STEEL CONGESTION PERMITS, CONDUIT AND PIPES UP TO 1" DIAMETER MAY BE EMBEDDED IN CONCRETE PER ACI 318, SECTION 6.3. SPACE AT 3 DIAMETERS O.C. PLACE BETWEEN OUTER LAYERS OF REINFORCING IF CONDUITS ARE SIGNIFICANTLY CONGESTED. ADDITIONAL REINFORCING PERPENDICULAR TO PIPING MAY BE REQUIRED. REQUESTS TO EMBED LARGER PIPES SHALL BE ACCOMPANIED BY A DETAILED DESCRIPTION AND BE SUBMITTED TO THE ARCHITECT FOR EVALUATION.
9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEY-WAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.
10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS.

CONCRETE MASONRY:

1. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530/ASCE 5, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"; AND ACI 530.1/ASCE 6, "SPECIFICATIONS FOR MASONRY STRUCTURES".
2. THE STRUCTURE IS SUPPORTED BY BEARING WALLS, U.O.N. ERECT MASONRY PRIOR TO CASTING CONCRETE COLUMNS WITHIN BEARING WALLS OR CASTING BEAMS AND SLABS SUPPORTED BY BEARING WALLS.
3. USE 50% SOLID, NOMINAL 8"X8"X16", CONCRETE MASONRY UNITS CONFORMING TO ASTM C90. BLOCK NET AREA COMPRESSIVE STRENGTH SHALL BE 1,900 PSI. LAY UP UNITS IN RUNNING BOND. SAWCUT UNITS WHICH ARE NOT IN MULTIPLES OF 8". UNITS SHALL BE AT LEAST 8" LONG. BOND CORNERS BY LAPPING ENDS 8" IN SUCCESSIVE VERTICAL COURSES. DESIGN OF WALLS IS BASED ON A F'M OF 1,500 PSI.
4. USE TYPE S MORTAR IN ACCORDANCE WITH ASTM C270 EXCEPT USE TYPE M MORTAR BELOW GRADE. HEAD AND BED JOINTS SHALL BE 3/8" FOR THE THICKNESS OF THE FACE SHELL. WEBS ARE TO BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS; IN THE STARTING COURSE; AND WHERE AN ADJACENT CELL IS TO BE GROUTED. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO CELLS TO BE GROUTED.
5. USE STANDARD (9 GAUGE) HORIZONTAL JOINT REINFORCING IN EVERY OTHER COURSE. JOINT REINFORCING AND ANCHORS IN EXTERIOR WALLS SHALL CONFORM TO ASTM A 153 CLASS B2, WITH A COATING THICKNESS OF 1.50 OZ/SF+ CONFORM TO ASTM A 641 IN INTERIOR WALLS. OVERLAP DISCONTINUOUS ENDS 6". USE PREFABRICATED CORNERS AND TEES. USE TRUSS TYPE, EXCEPT USE LADDER TYPE IN WALLS WITH VERTICAL REINFORCING. EXTEND JOINT REINFORCING A MINIMUM OF 4" INTO TIE COLUMNS.
6. USE FINE GROUT CONFORMING TO ASTM C476, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI IN 28 DAYS. AGGREGATE TO CONFORM TO ASTM C404 FOR FINE GROUT, WITH SLUMP OF 8" TO 10". GROUT ALL MASONRY CONTAINING REINFORCING, ALL CELLS OF 4 HOUR RATED WALLS, AND WHERE INDICATED ON THE DRAWINGS. ALLOW MORTAR TO CURE 24 HOURS PRIOR TO GROUTING. PROVIDE CLEAN OUT OPENINGS AT THE BASE OF CELLS CONTAINING REINFORCING STEEL TO CLEAN THE CELL AND TO TIE THE VERTICAL BAR TO THE DOWEL. IN HIGH-LIFT GROUTING, USE 4'-0" (MAX.) LIFTS, WITH 1/2 HOUR TO 1 HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT.
7. USE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCE WALLS WHERE INDICATED ON THE DRAWINGS AND AT ALL INTERSECTIONS, EACH SIDE OF OPENINGS AND AT THE ENDS OF WALLS. USE BAR SPACERS AT 10 FT. O.C. WHERE GROUT POUR HEIGHT EXCEEDS 10 FT.
8. AT BOND/TIE BEAM CORNERS AND INTERSECTIONS, PLACE 1 #5 X 5'-0" T + B CORNER BAR, WITH 30" LEGS EACH WAY, AT THE EXTERIOR FACE.
9. BEAMS NOT SCHEDULED ARE MIN. 8" X 12" TIE BEAMS WITH 2 #5 BARS TOP AND BOTTOM AND #3 TIES SPACED AT 12" O.C. TYPICAL U.O.N. COLUMNS NOT SCHEDULED ARE MIN. 8" X 12" TIE COLUMNS WITH 4 #5 VERTICAL BARS AND #3 TIES AT 12" O.C. USE 30" LAP SPLICES. HOOK ALL BARS AT DISCONTINUOUS ENDS.
10. REINFORCED MASONRY WALL CONSTRUCTION SHALL BE INSPECTED BY AN ENGINEER OR ARCHITECT IN ACCORDANCE WITH ACI 530.1/ASCE 6.
11. WHERE ANCHOR BOLTS, WEDGE ANCHORS OR ANCHORS SET IN EPOXY ARE SET IN A MASONRY WALL, FILL CELLS WITH GROUT FOR BOLTED COURSE, ONE COURSE ABOVE AND TWO COURSES BELOW.
12. PROVIDE LINTELS OR HEADERS WITH MIN. 8" BEARING OVER ALL MASONRY OPENINGS.
13. USE PRESSURE-TREATED WOOD FOR WOOD IN CONTACT WITH MASONRY.

STRUCTURAL STEEL:

1. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL O.S.H.A. REQUIREMENTS.
2. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
   a. PLATES AND BARS: ASTM A36, FY=36 KSI.
   b. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS):
      1. SQUARE SECTIONS: ASTM A500, GRADE B, FY=46 KSI.
3. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.
4. USE A-307 BOLTS FOR ALL ERECTION BOLTS AND BOLTS LESS THAN 3/4" DIAMETER, U.O.N. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 THREADED WITH NUTS AND WASHERS EACH END.
5. SETTING BASE AND BEARING PLATES: CLEAN CONCRETE AND MASONRY BEARING SURFACE OF BOND-REDUCING MATERIALS AND CLEAN BOTTOM OF BASE AND BEARING PLATE.
   a. SET BASE OR BEARING PLATE ON WEDGES OR OTHER ADJUSTING DEVICES.
   b. TIGHTEN ANCHOR RODS AFTER STRUCTURAL STEEL FRAME HAS BEEN PLUMBED. DO NOT REMOVE WEDGES OR SHIMS BUT, IF PROTRUDING, CUT OFF FLUSH WITH EDGE OF BASE OR BEARING PLATE PRIOR TO PACKING WITH GROUT.
   c. PACK OR POUR NON-SHRINK GROUT SOLIDLY BETWEEN BEARING SURFACE AND BASE OR BEARING PLATE. ENSURE THAT NO VOIDS REMAIN. FINISH EXPOSED SURFACES, PROTECT GROUT AND ALLOW TO CURE.
   d. FOR PROPRIETARY GROUT MATERIALS, COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
   e. BASE PLATES MUST BE GROUTED A MINIMUM OF 72 HOURS PRIOR TO PLACING CONCRETE SLABS ON SUPPORTING STEEL STRUCTURE.
6. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACES. REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTED BY ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR USING DRIFT PINS.
7. SPACE FILLER BEAMS EQUALLY BETWEEN SUPPORTS, U.O.N.
8. DO NOT SPLICE STRUCTURAL STEEL MEMBERS EXCEPT WHERE INDICATED ON THE DRAWINGS.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. REFER TO ARCHITECTURAL DRAWINGS FOR PAINTING AND FIREPROOFING OF STRUCTURAL STEEL. DO NOT PAINT STEEL SURFACES IN CONTACT WITH CONCRETE OR FIREPROOFING.

PRE-ENGINEERED WOOD TRUSSES:

1. DESIGN AND FABRICATE ALL TIMBER IN CONFORMANCE WITH DIVISION 6 SPECIFICATIONS, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND FLORIDA BUILDING CODE, 2020 EDITION, AND THE TPI-1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
2. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS SYSTEM ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE TRUSS SYSTEM, THE TRUSS SYSTEM ENGINEER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR REVIEW TO ARCHITECT/ENGINEER FOR THE ASSEMBLAGE OF PREFABRICATED, ENGINEERED WOOD TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL BRACING, CONNECTIONS AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATION CRITERIA (TRUSS PLACEMENT PLAN), THAT, IN COMBINATION, FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO THE ROOF TRUSS SYSTEM. THE TRUSS SYSTEM DOES NOT INCLUDE WALLS, OR ANY OTHER STRUCTURAL SUPPORT SYSTEMS. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS SYSTEM ENGINEER.
3. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS DESIGN ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE INDIVIDUAL TRUSSES OF THE TRUSS SYSTEM, BUT DOES NOT DESIGN THE TRUSS SYSTEM. THE TRUSS DESIGN ENGINEER SHALL SUBMIT SHOP (PIECE) DRAWINGS AND CALCULATIONS FOR EACH DIFFERENT TRUSS OF THE TRUSS SYSTEM SUCH THAT EACH TRUSS WILL FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO EACH TRUSS AND TRUSS GIRDER THAT TOGETHER COMPRISE THE TRUSS SYSTEM. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS DESIGN ENGINEER.
4. THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER SHALL EACH BE RESPONSIBLE FOR THEIR OWN WORK. HOWEVER, THEY MAY BE THE SAME INDIVIDUAL PROVIDING TWO SEPARATE SERVICES.
5. THE LOADS, LAYOUTS AND CONNECTIONS PROVIDED ON THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE THE MINIMUMS TO BE FOLLOWED BY THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER.
6. USE STRESS-RATED TIMBER FOR ALL WOOD STRUCTURAL MEMBERS. DO NOT USE WOOD STRUCTURAL MEMBERS WITH A BENDING STRESS LESS THAN 1,200 PSI OR A MODULUS OF ELASTICITY LESS THAN 1,400,000 PSI WHEN USED AT 19% MAXIMUM MOISTURE CONTENT.
7. PRESSURE TREATMENT OF ALL STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH AWPA STANDARDS C1 AND C2, LATEST EDITIONS WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5, LATEST EDITION. ALL LUMBER TO BE KILN-DRIED AFTER TREATMENT TO A MOISTURE CONTENT NOT TO EXCEED 19% OVEN-DRY BASIS, PER STANDARD C2. ALL LUMBER 4"X4" IN. (NOMINAL SIZE) AND LARGER IN DIMENSION TO BE TREATED TO THE SOIL AND FRESH WATER RETENTION AND PENETRATION REQUIREMENTS OF STANDARD C2. ALL LUMBER LESS THAN 4"X4" (NOMINAL SIZE) TO BE TREATED TO THE ABOVE GROUND REQUIREMENTS OF STANDARD C2.
8. MINIMUM DESIGN LOADS FOR ROOF TRUSSES:

30 PSF LL TOP CHORD
25 PSF DL TOP CHORD
10 PSF DL BOTTOM CHORD
200 LB CONCENTRATED LL ON ANY SINGLE BOTTOM CHORD PANEL POINT
WIND PRESSURE BASED ON ASCE-7.

9. CD FOR WIND SHALL NOT EXCEED 1.6 FOR WOOD MEMBERS. NO STRESS INCREASE ALLOWED FOR METAL PLATES.

SOIL STATEMENT:

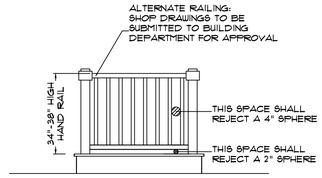
1. THE EXISTING SOIL IS ASSUMED TO HAVE A DESIGN BEARING OF 2,000 PSF. IF SOIL CONDITIONS VARY, CONTACT THE ENGINEER OF RECORD
2. ALL AUGER HOLES AND AUGER PILING SHALL BE DRILLED 3' INTO THE EXISTING PERVIOUS OOLITE ROCK
3. ALL PRECAST CONCRETE PILING SHALL BE DRIVEN TO REFUSAL

LUMBER AND FRAMING NOTES

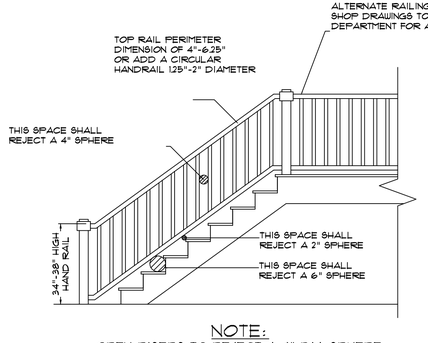
1. FRAMING LUMBER SHALL CONFORM WITH THE PROVISIONS OF THE AMERICAN SOFTWOOD LUMBER STANDARD PS-20-(LATEST EDITION) AND EACH PIECE SHALL BEAR THE GRADE STAMP OF AN APPROVED GRADING AGENCY.
2. FRAMING LUMBER GRADES THE FOLLOWING GRADES SHALL BE THE MINIMUM ACCEPTABLE GRADES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

ITEM	MINIMUM GRADE
STUD ONLY:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL LIGHT FRAMING:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL JOISTS & HEADERS:	
2" TO 4" THICK 6" AND WIDER	NO. 2 SOUTHERN PINE
POSTS:	
4" X 4" AND LARGER	NO. 2 SOUTHERN PINE

3. BOLT HOLES SHALL BE 1/16" LARGER THAT THE BOLT SIZE. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.
4. STANDARD CUT WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD.
5. 5. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR OTHERWISE BE PROTECTED BY AN APPROVED SEPARATING MATERIAL. BOLTS SHALL BE PLACED 9" FROM ANY NOTCH GREATER THAN 1/2 THE WIDTH OF A MEMBER.
6. DO NOT NOTCH JOISTS, RAFTERS OR BEAMS, OBTAIN ENGINEER'S OR ARCHITECTS APPROVAL FOR ANY HOLES OR NOTCHES NOT DETAILED. HOLES THROUGH SILLS, PLATES, STUDS AND DOUBLE PLATED IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED IN THE CENTER OF THE STUD OR PLATE.
7. 2" SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS.
8. ALL NAILING SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2020 FLORIDA BUILDING CODE. NAILS SHALL BE COMMON WIRE NAILS.
9. ALL INTERIOR FRAMING SHALL BE 2" X 4" WALL STUDS @ 16" O.C.



HANDRAIL / GUARDRAIL DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION



NOTE:
OPEN RISERS TO REJECT A 4" DIA SPHERE
OPEN RISERS IN THIS PACKAGE: NONE

HANDRAIL / GUARDRAIL STAIR DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

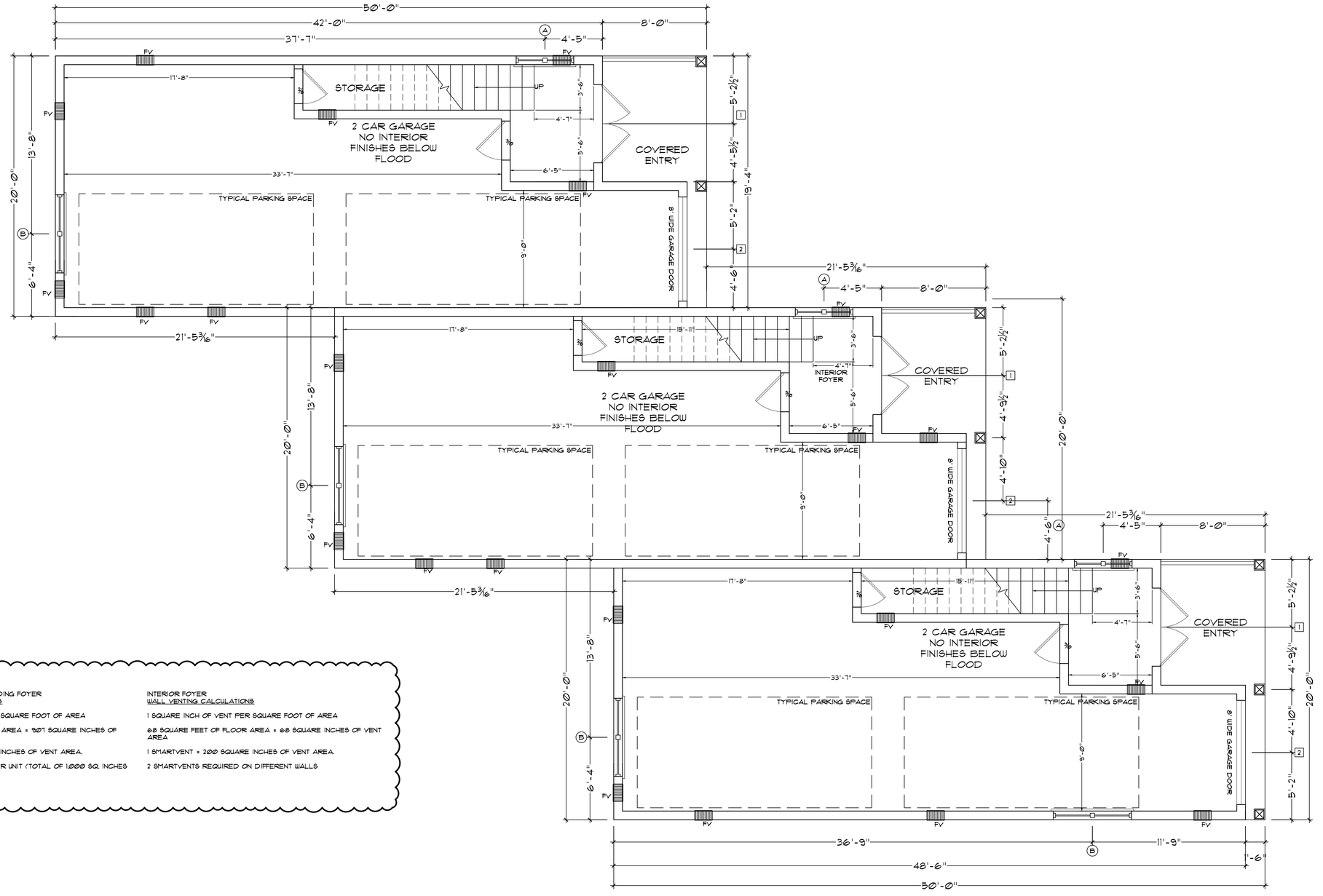
NO	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION 1	11/15/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX C - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-9

PROJECT No: D-16-047



TOTAL GARAGE AREA INCLUDING FOYER
WALL VENTING CALCULATIONS

1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA

907 SQUARE FEET OF FLOOR AREA ÷ 907 SQUARE INCHES OF VENT AREA

1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.

5 SMARTVENTS REQUIRED PER UNIT (TOTAL OF 1,000 SQ. INCHES OF VENT AREA)

INTERIOR FOYER
WALL VENTING CALCULATIONS

1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA

68 SQUARE FEET OF FLOOR AREA ÷ 68 SQUARE INCHES OF VENT AREA

1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.

2 SMARTVENTS REQUIRED ON DIFFERENT WALLS

GROUND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENT	1/3/2022
3	VILLAGE COMMENT	2/2/2022

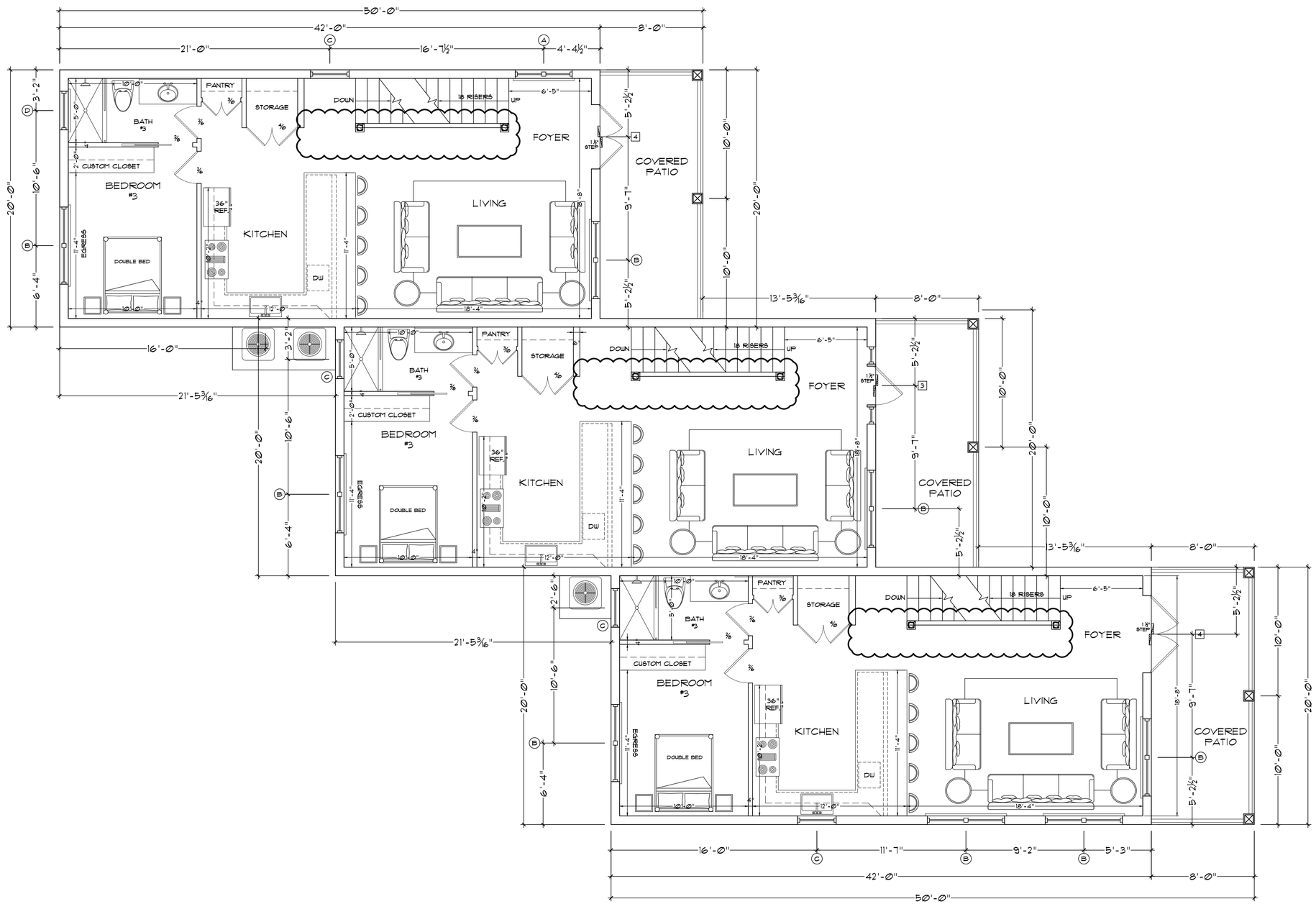
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-1

PROJECT No: D-16-047



SECOND FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENTS	1/3/2022
3	VILLAGE COMMENT	2/2/2022

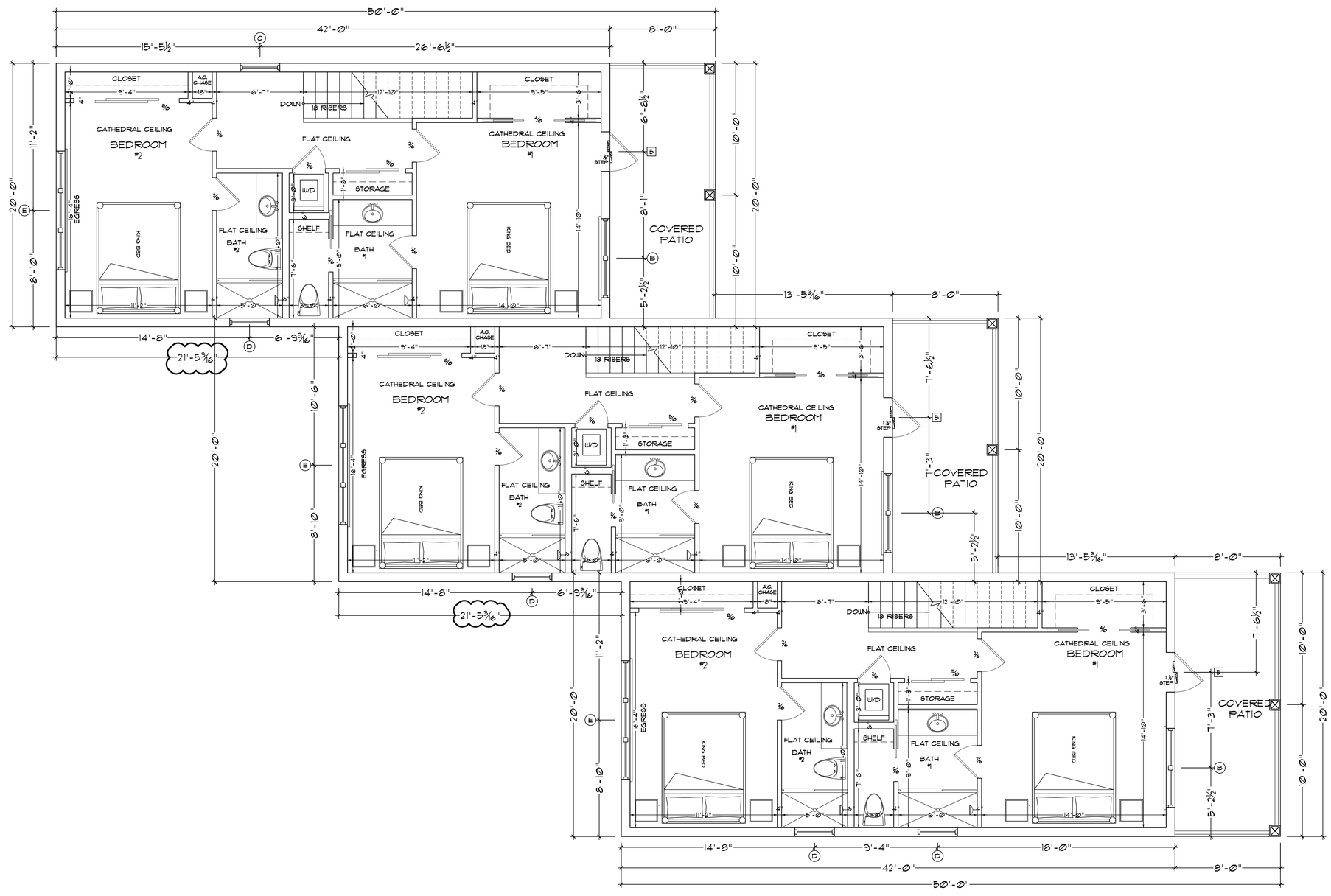
SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX D - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-2

PROJECT No: D-16-047



THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-3

PROJECT No: D-16-047



FRONT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-4

PROJECT No: D-16-047



REAR ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

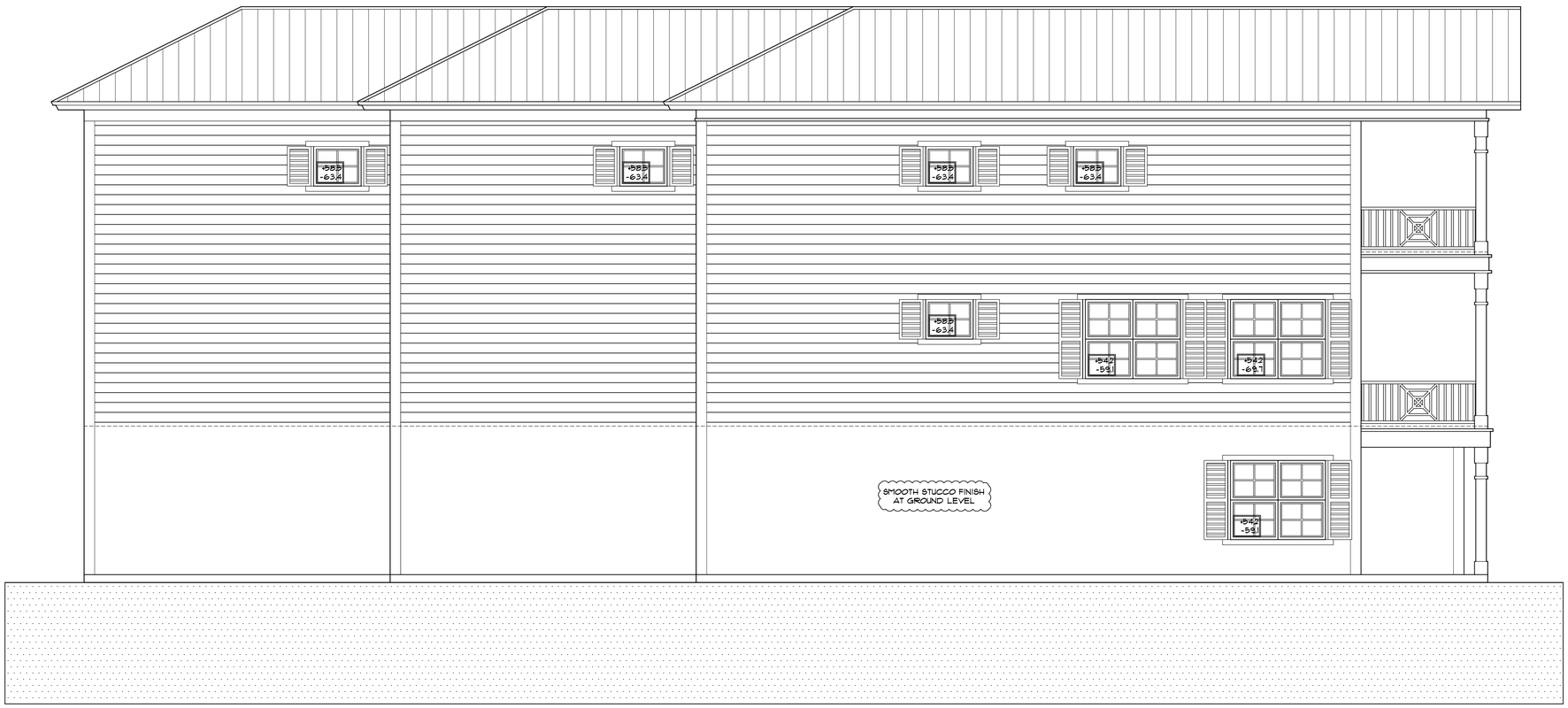
SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX D - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-5

PROJECT No: D-16-047



LEFT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

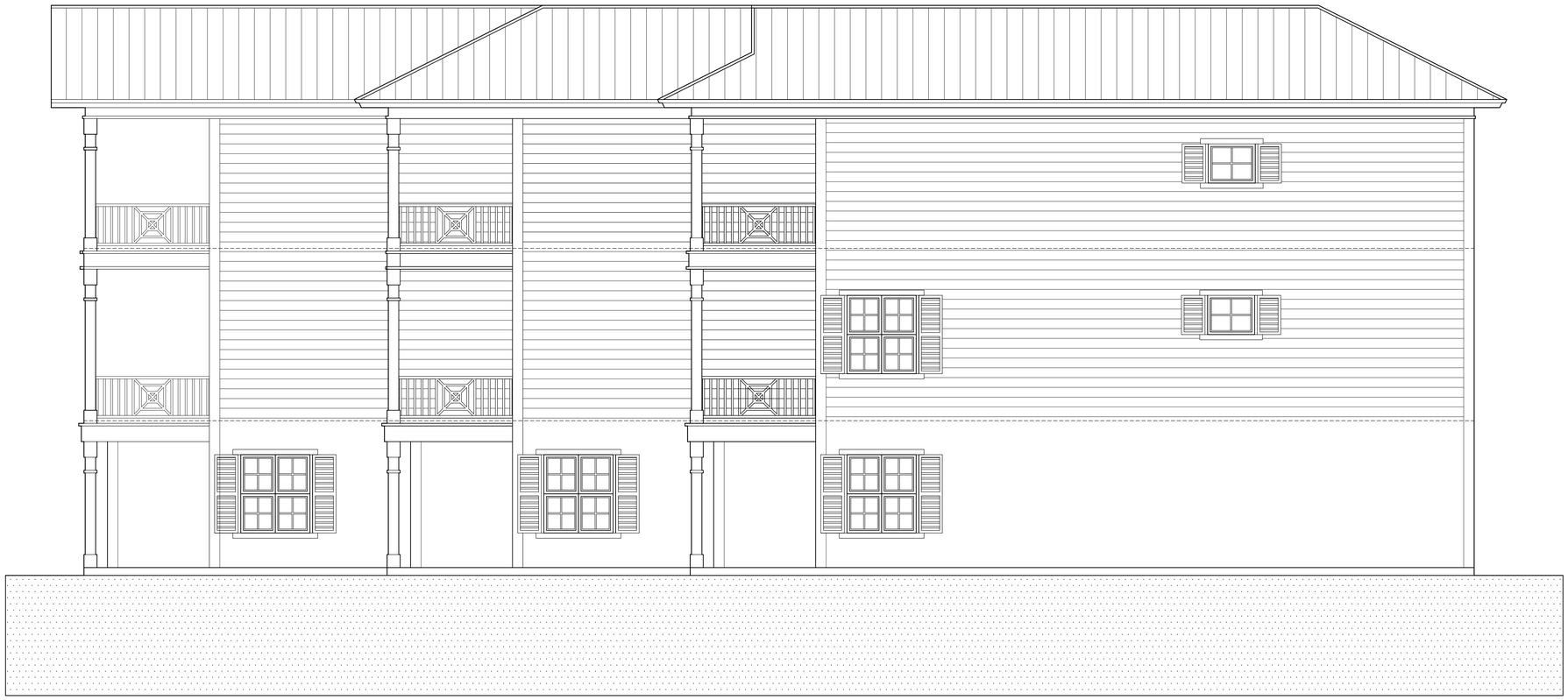
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-6

PROJECT No: D-16-047



RIGHT ELEVATIONS

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX D - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-7

PROJECT No: D-16-047

DOOR SCHEDULE

MARK	DOOR SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
1	74 1/2"	80 3/4"	PGT WINGUARD FD1011H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
2	96"	84"	CLOPAY OVERHEAD DOOR	3	HURRICANE RATED
3	38 9/16"	96"	PGT WINGUARD FD1011H FRENCH DOOR	1	FULL VIEW, WHITE ALUMINUM, RHR SWING, 1'-6" SIDELIGHT ON EACH SIDE
4	60"	96"	PGT WINGUARD FD1011H FRENCH DOOR	2	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
5	38 9/16"	80 3/4"	PGT WINGUARD FD1011H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, LHR SWING

WINDOW SCHEDULE

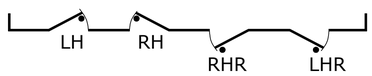
MARK	WINDOW SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
A	PAIR 27 1/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH7000	4	MODEL H34EH
B	PAIR 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH7000	15	MODEL 24EH
C	37 3/4"	38 3/8"	PGT WINGUARD SINGLE HUNG SH7000	5	MODEL 23
D	37 3/4"	50 5/8"	PGT WINGUARD SINGLE HUNG SH7000	5	MODEL 24, FROSTED
E	TRIPLE 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH7000	3	MODEL 24EH

EGRESS WINDOW NOTE

AS DESCRIBED IN FLORIDA BUILDING CODE: ALL EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (GRADE LEVEL 5.0 SQ FT), HAVING A MINIMUM CLEAR OPENING HEIGHT OF 24 INCHES AND A NET CLEAR WIDTH OF 20 INCHES. EGRESS WINDOWS SHALL HAVE THE BOTTOM OF THE NET CLEAR OPENING NO GREATER THAN 44 INCHES AS MEASURED FROM THE FLOOR.

SWING DETERMINATION/DOOR HANDING

INSIDE ROOM, OR SECURE SIDE.



OUTSIDE, CORRIDOR,
OR NON-SECURE SIDE.

• = KEY SIDE

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	1/9/2022

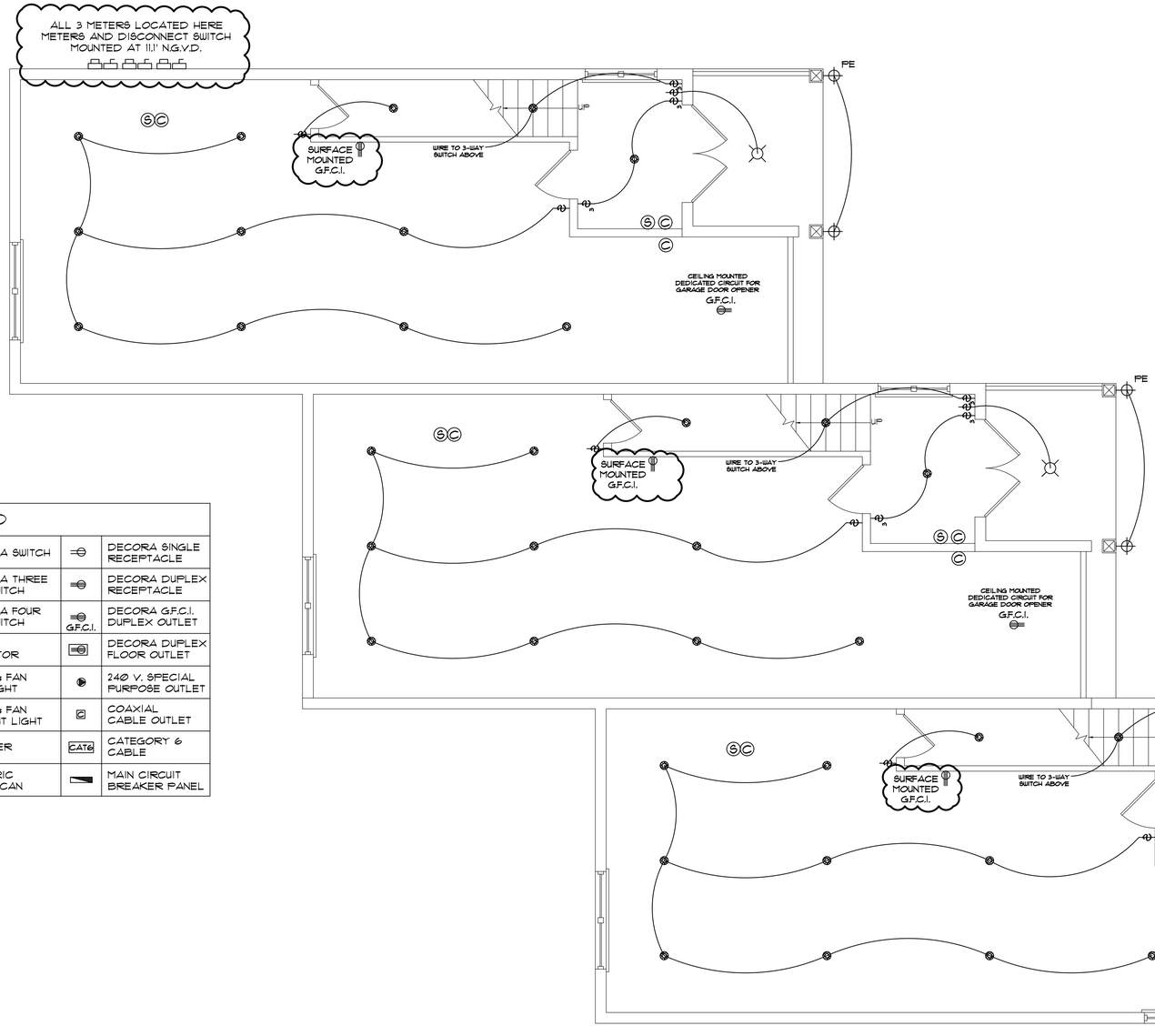
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - WINDOW/DOOR

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-8

PROJECT No: D-16-047



ELECTRICAL LEGEND

	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	T	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	LED, RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE	SP	SPEAKER	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

NOTE:

1. ALL OUTLETS AND SWITCHES TO BE MOUNTED ABOVE BASE FLOOD (AE-10) - ELEVATION VARIES PER UNIT LOCATION, COORDINATE WITH SURVEYOR PRIOR TO INSTALLATION OF ANY GROUND FLOOR ELECTRICAL

GROUND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENTS	1/3/2022

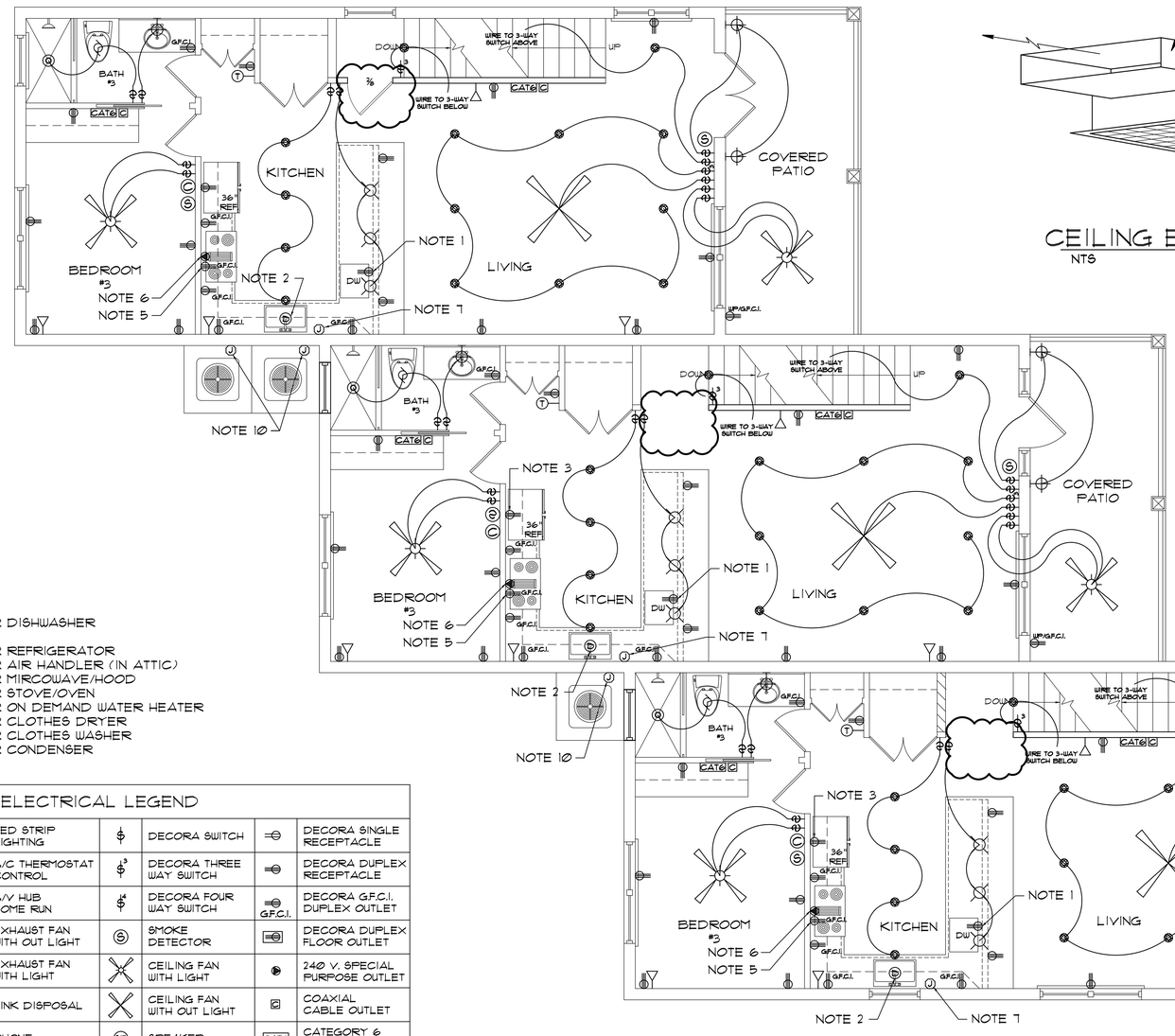
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DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

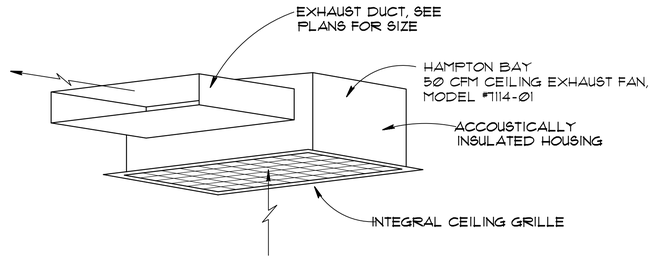
TITLE: TRIPLEX D - ELECTRICAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-1

PROJECT No: D-16-047





CEILING EXHAUST FAN DETAIL

NTS

NOTES: USE PROGRAMMABLE THERMOSTAT.

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER

ELECTRICAL LEGEND

	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	T	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE	SP	SPEAKER	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

SECOND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
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P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	2/2/2022

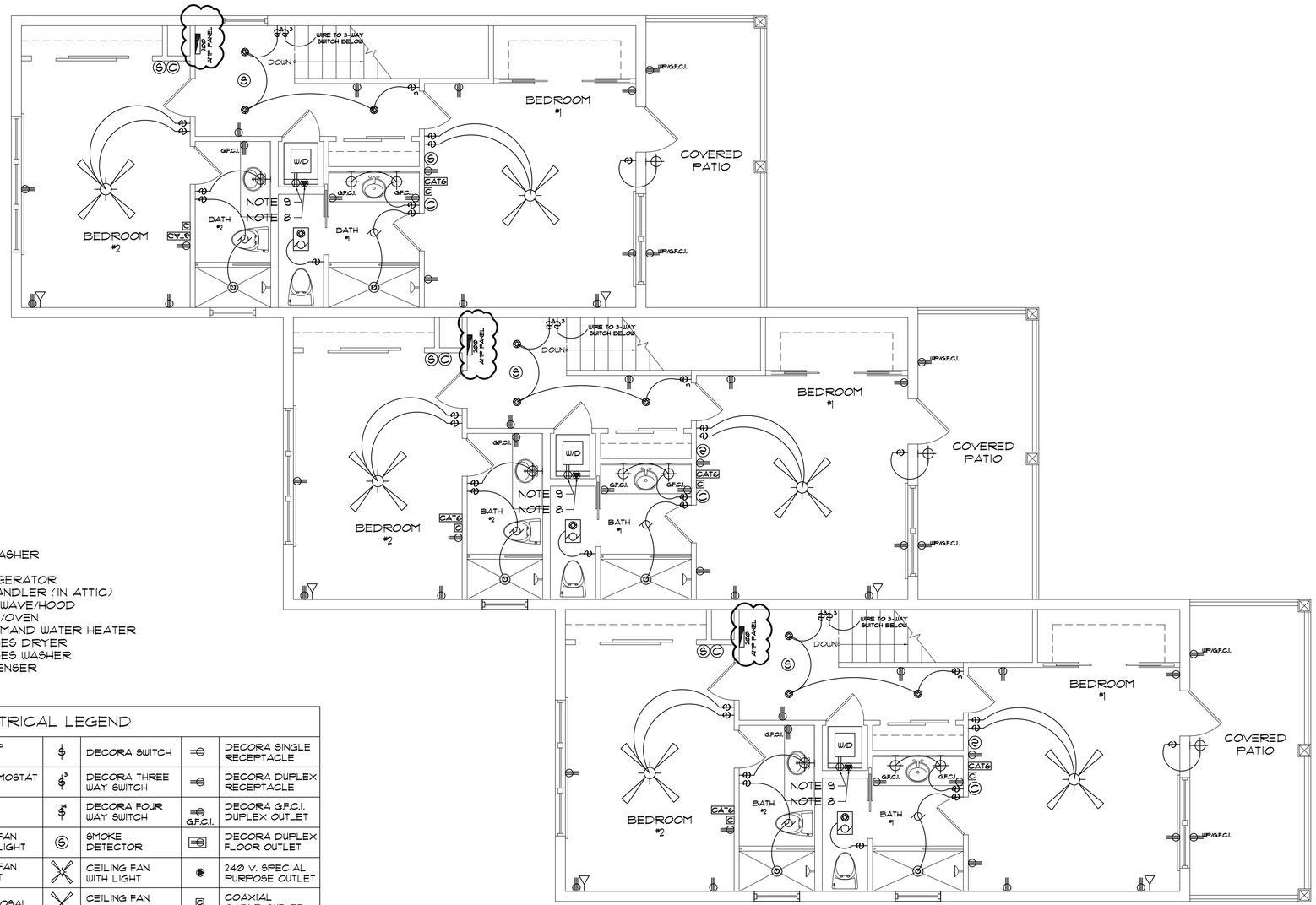
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - ELECTRICAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-2

PROJECT No: D-16-047



ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER

ELECTRICAL LEGEND							
	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	T	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH		DECORA G.F.C.I. DUPLEX OUTLET
	LED RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	P	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE	SP	SPEAKER	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

THIRD FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENTS	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - ELECTRICAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-3

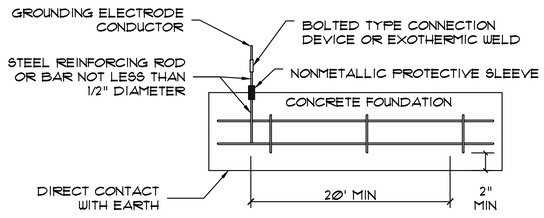
PROJECT No: D-16-047

ELECTRICAL NOTES:

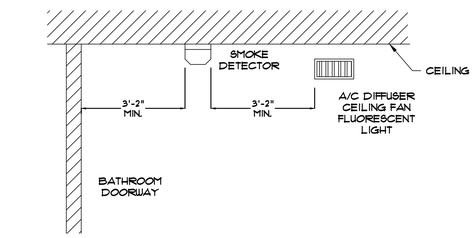
1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE N.E.C. AND LOCAL BUILDING CODES HAVING JURISDICTION. ALL MATERIALS SHALL BEAR UNDERWRITERS LABORATORY LABEL OR BE U.L. LISTED
2. WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICES.
3. ALL EXCAVATING AND BACKFILLING REQUIRED FOR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR
4. CONNECTIONS TO EQUIPMENT, ELECTRICAL SUBCONTRACTOR SHALL VERIFY NAMEPLATE DATA OF A/C EQUIPMENT, WATER HEATERS AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVER-CURRENT PROTECTION PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING. THE ELECTRICAL SUBCONTRACTOR SHALL MAKE THE ELECTRICAL CONNECTION TO ALL EQUIPMENT REQUIRING CURRENT, ALL CONTROL WIRING SHALL BE CARRIED OUT BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE MECHANICAL SUBCONTRACTORS
5. OVERHEAD ELECTRIC CONDUCTOR CLEARANCES, HORIZONTAL OR VERTICAL SHALL BE MAINTAINED
6. ALL WIRING CONDUCTORS SHALL BE COPPER IN E.N.T. CONDUIT
7. BATHROOM, GARAGE, AND EXTERIOR RECEPTACLES SHALL BE EQUIPPED WITH GROUND FAULT INTERRUPTERS
8. ELECTRICAL INSTALLATION DESIGN IS IN COMPLIANCE AS SET FORTH BY THE STATE OF FLORIDA STATUTES MODEL ENERGY EFFICIENCY CODES
9. SMOKE DETECTORS SHALL BE HARD WIRED (110 VOLT) TO A NON-SWITCHABLE KITCHEN OR BATHROOM LIGHTING CIRCUIT AND SHALL NOT BE CONNECTED ONTO THE LOAD SIDE OF A GROUND FAULT INTERRUPTER
10. ALL PANELS SHALL BE SQUARE D OR EQUAL
11. FURNISH AND INSTALL UNDERGROUND RACEWAYS FOR POWER COMPANY SERVICE AND TELEPHONE COMPANY SERVICE AS PER UTILITY COMPANY SPECIFICATIONS, AND COORDINATE THE EXACT ROUTING OF THESE RACEWAYS WITH THE UTILITY
12. VERIFY EXACT LOCATION OF ELECTRICAL OUTLETS AND LIGHTS PRIOR TO EXECUTION OF ROUGH-IN WORK
13. ALL RACEWAYS AND NON-CURRENT CARRY METAL ENCLOSURES SHALL BE MECHANICALLY AND ELECTRICALLY GROUNDED
14. ALL RACEWAYS AND OUTLETS IN FINISHED AREAS SHALL BE MOUNTED AND SUPPORTED
15. ALL OUTLETS IN FINISHED AREAS SHALL BE MOUNTED FLUSH WITH FINISHED WALLS
16. ALL WORK SHALL BE RIGIDLY MOUNTED AND SUPPORTED
17. ELECTRICAL OUTLETS (RECEPTACLES AND LIGHTING) BELOW THE BASE FLOOD ELEVATION SHALL BE INSTALLED AT THE HIGHEST PERMITTED ELEVATION AND SHALL BE INSTALLED ON SEPARATE CIRCUIT FROM THOSE IN HABITABLE AREAS
18. NO APPLIANCE OUTLETS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
19. A/C COMPRESSORS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
20. MAIN CIRCUIT BREAKER PANELS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
21. ALL WATER HEATERS SHALL BE MECHANICALLY GROUNDED

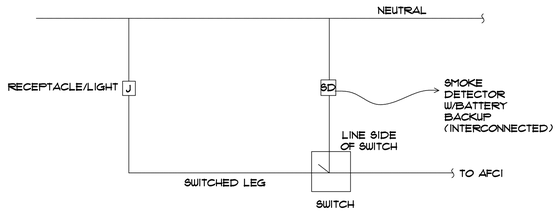
DEFINITION -NFPA 70 (2014 Edition)

(c) CONCRETE ENCASED ELECTRODE. AN ELECTRODE ENCASED BY AT LEAST 2" (50.8mm) OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET (6.1m) OF ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2" (12.7mm) DIAMETER, OR CONSISTING OF AT LEAST 20 FEET (6.1M) OF BARE COPPER CONDUCTOR NOT SMALLER THAN No.4.



NOTE: PER DETAIL THAT CONCRETE ENCASED GROUNDING ELECTRODE EXTENDS OUT OF THE FOOTER FOR CONNECTION TO GROUNDING ELECTRODE CONDUCTOR





SMOKE DETECTOR DETAIL

N.T.S.

NOTE: PROVIDE ARC FAULT PROTECTION FOR ALL OUTLETS PER N.E.C. 2014

WHERE 120 V. SMOKE DETECTORS ARE INSTALLED IN RESIDENTIAL OCCUPANCIES THEY SHALL BE INSTALLED AHEAD OF ALL SWITCHES AND SHALL BE CONNECTED TO BEDROOM AFCI CIRCUITS. SMOKE DETECTORS SHALL COMPLY WITH THE REQUIREMENTS OF THE F.B.C. 2014 ED

LOAD CALCULATION (PER UNIT)

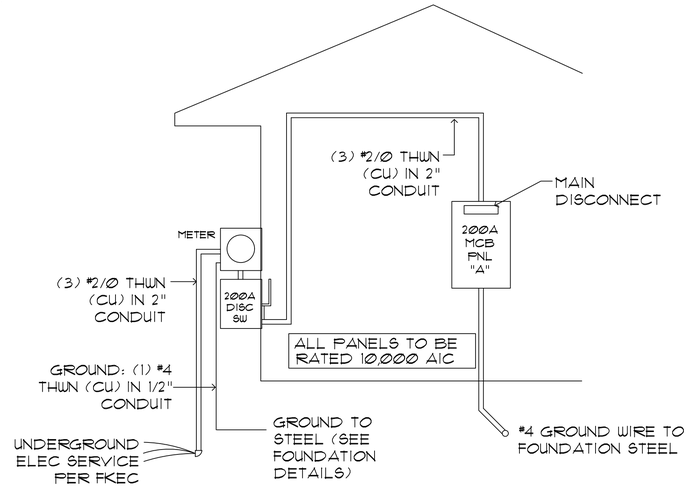
1,680 S.F. OF LIVING AREA x .003	=	5.0 KW
SUBTOTAL	=	54.0 K
FIRST 10 KW @ 100%	=	10.0
44.0 KW @ 40%	=	17.6
TOTAL DEMAND FACTOR	=	27.6
A/C LOAD	=	7.5
TOTAL	=	35.1
35.1 KW / 230 VOLTS	=	152.7 AMPS

** USE 200 AMP SERVICE PER UNIT **

PANEL "A" 120/240V-1PH-3W 200A-MLO

CKT	DESCRIPT	C.B.	POLE	WIRE	LOAD	LOAD	WIRE	POLE	C.B.	DESCRIPT	CKT
1	LIGHTS/FANS	20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	RECEPT	2 (c)
3		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		4
5		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		6
7		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		8
9		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	SMALL APP	10
11		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	SMALL APP	12
13		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	BATH GFI REC	14
15		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		16
17		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		18
19	REFRIGERATOR	20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	DISPOSAL	20
21	DISH WASHER	20	1	#12 IN ½" CONDUIT			#8 IN ¾" CONDUIT	2	40	WATER HEATER	22
23	A/C HANDLER #1	40	2	#8 IN ¾" CONDUIT							24
25							#6 IN ¾" CONDUIT	2	60	A/C COMP #1	26
27	WASHER	20	1	#12 IN ½" CONDUIT							28
29	CLOTHES DRYER	40	2	#8 IN ¾" CONDUIT			#12 IN ½" CONDUIT	1	20	MICROWAVE	30
31							#6 IN ¾" CONDUIT	2	60	OVEN	32
33 (c)	RECEPT	20	1	#12 IN ½" CONDUIT							34
35		20	1	#12 IN ½" CONDUIT							36
37		20	1	#12 IN ½" CONDUIT							38
39		20	1	#12 IN ½" CONDUIT							40
41	OUTSIDE REC	20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	SMOKE	42
TOTAL											

(a) AFCI C/B
(b) ON TIMER
(c) GFI



ELECTRICAL RISER DIAGRAM

N.T.S.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

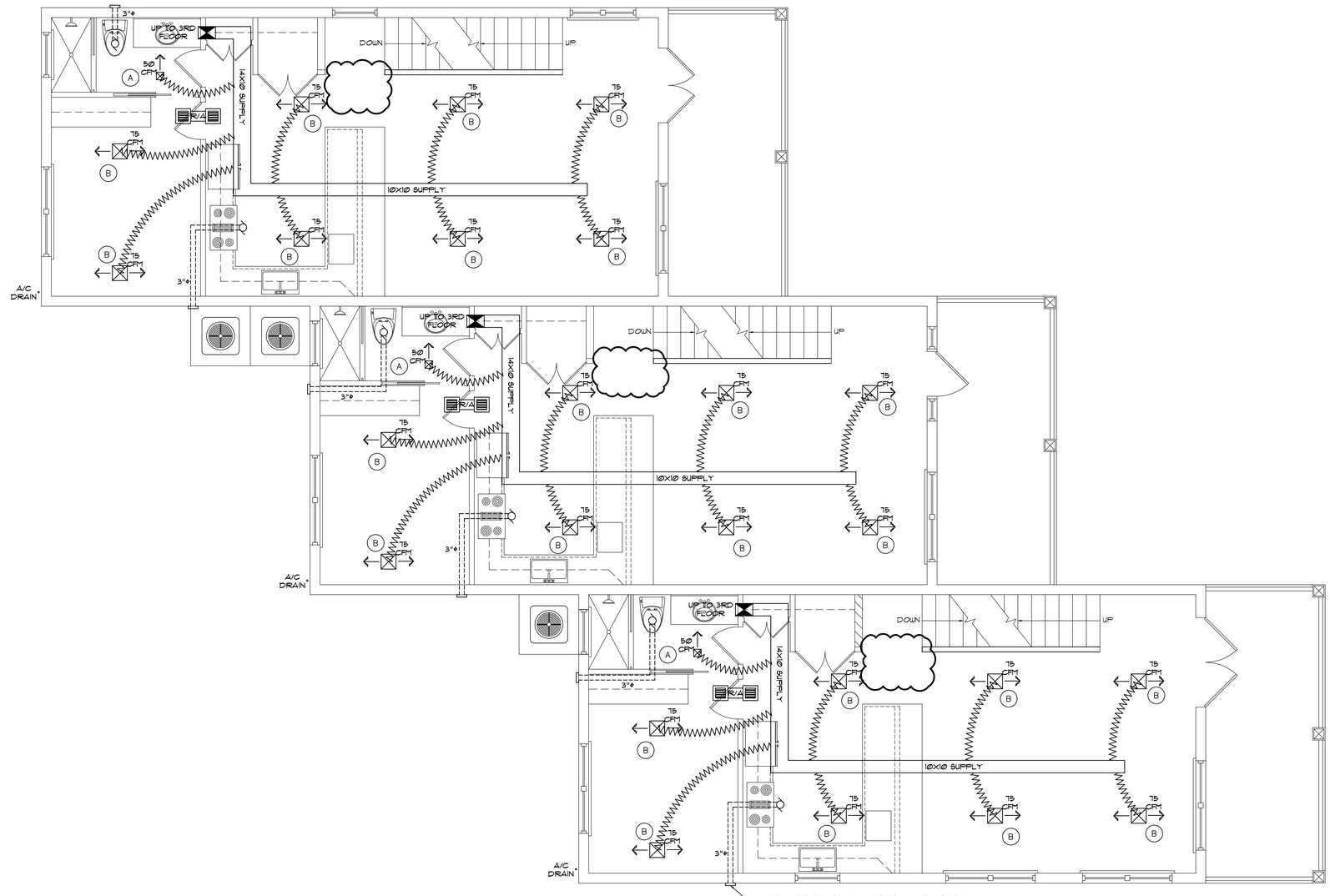
NO.	REVISION	DATE
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SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - ELECTRICAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-4

PROJECT No: D-16-047



MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER AND CORROSION RESISTANT SCREEN. FBC R-1506.2 MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

NOTES:
USE PROGRAMMABLE THERMOSTAT.
CONTRACTOR SHALL BE VERIFY THE DISTANCE BETWEEN THE INDOOR AND OUTDOOR UNITS AND TO CHECK THE SIZES OF THE REFRIGERANT LINES WITH MANUFACTURER

SECOND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
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1	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - MECHANICAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-1

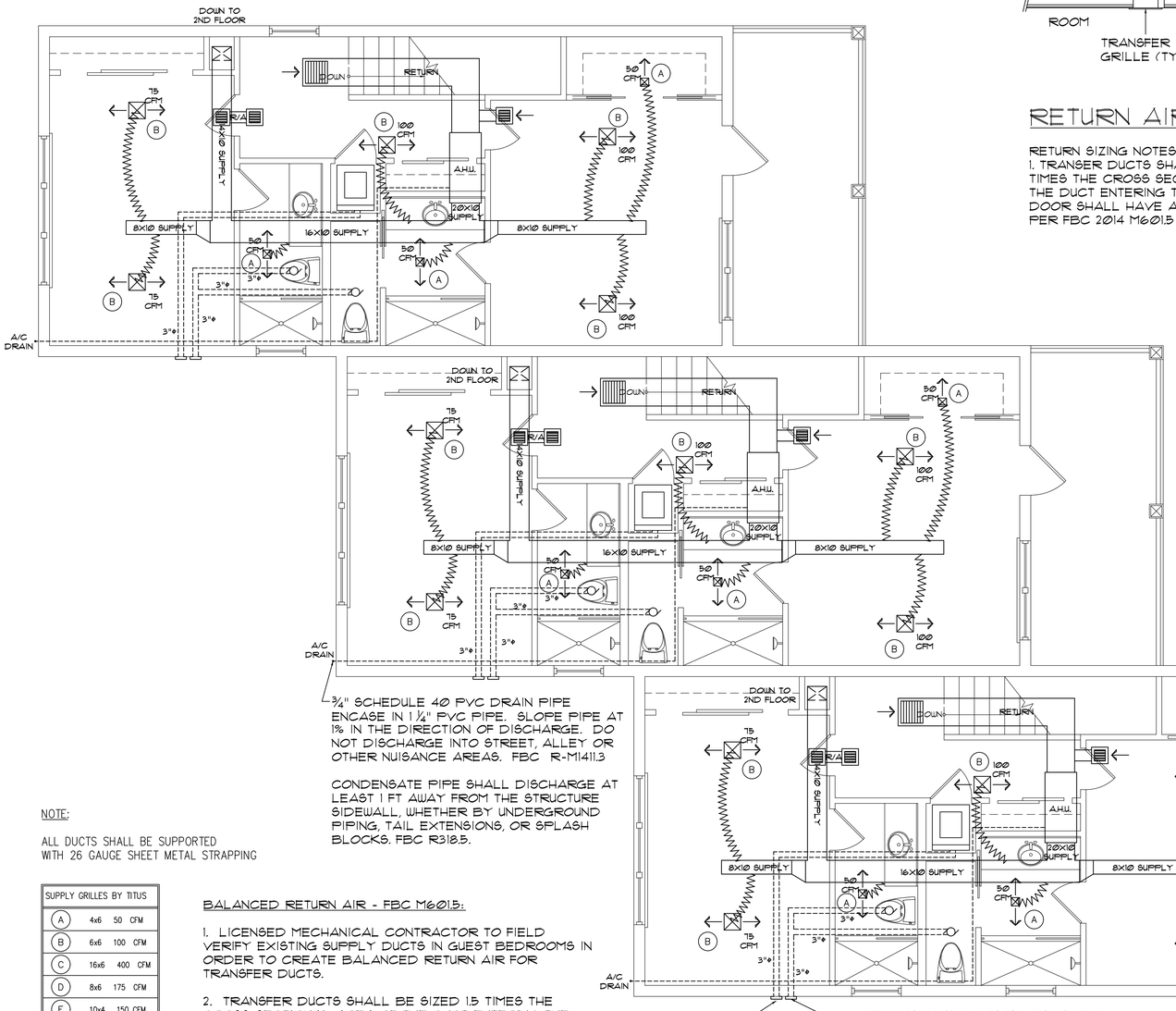
PROJECT No: D-16-047

MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS. TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVUTA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M603.1.1: AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

MECHANICAL EQUIPMENT SCHEDULE			
UNIT DESIGNATION	UNIT 1	UNIT 2	UNIT 3
CONDENSER	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED
MODEL #	4TTV0060A	4TTV0060A	4TTV0060A
SEER	19	19	19
REFRIGERANT	R410A	R410A	R410A
Location	EXTERIOR	EXTERIOR	EXTERIOR
Nominal Tons	5.0	5.0	5.0
Nominal Supply Air CFM	2,000	2,000	2,000
DIMENSIONS	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.
AIR HANDLER	TRANE M SERIES	TRANE M SERIES	TRANE M SERIES
MODEL #	TEM40C60	TEM40C60	TEM40C60
NOMINAL COOLING CAPACITY	60,000	60,000	60,000
DIMENSIONS	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.



¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3

CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.

NOTE:

ALL DUCTS SHALL BE SUPPORTED WITH 26 GAUGE SHEET METAL STRAPPING

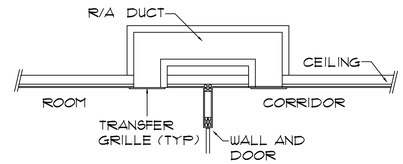
SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

BALANCED RETURN AIR - FBC M601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.

2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.



RETURN AIR TRANSFER DUCT

RETURN SIZING NOTES:
1. TRANSER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

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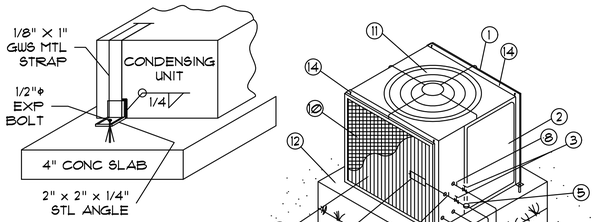
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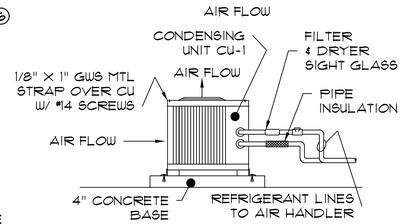
TIE-DOWN

1. CONDENSING UNIT
2. COMPRESSOR ACCESS PANEL
3. BACK - SEATED REFRIGERANT VALVE
4. REFRIGERANT SUCTION LINE WITH INSULATION
5. SIGHT GLASS WITH MOISTURE INDICATOR
6. REFRIGERANT LIQUID LINE
7. CONDUIT - POWER AND CONTROL.
8. REFRIGERANT GAUGE CONNECTION
9. CONDENSER COIL
10. COIL GUARD
11. FAN GUARD
12. CONCRETE PAD IF REQUIRED
13. REFRIGERANT SUCTION LINE FLEX-CONNECTOR
14. 1/8" X 1" GALVANIZED METAL STRAP OVER CONDENSER SHROUD/FAN COWLING ATTACHED TO CONCRETE BASE W/MIN 1/2" ANCHOR/EXPANSION BOLTS 3" LONG ALL FOUR SIDES, W/MIN (4) #14 SCREWS W/GASKETED WASHERS TO TOP OF CONDENSER SHROUD/FAN COWLING THROUGH STRAPS.

STRAPS OVER COWLING/SHROUD DESIGN:
UPLIFT: TA 4'x3' = 12 SF
UPLIFT: 57.7 PSF X 12 = 692.4 LBS
USE 1/8" GWS MTL STRAP 1" WIDE OVER CONDENSING UNIT AND ATTACH TO SLAB W/ (4) ANCHORS:
ANCHORS 1/2" = 4/692.4 = 173.1 LBS EACH
ANCHOR PULL-OUT 3" = 1,180 LBS IE OK.
ALTERNATIVE:
USE (4) 3/8" X 1" "TAPPER" TAPCONS INTO CONC SLAB: 880 LBS EACH IE 173.1 = OK.

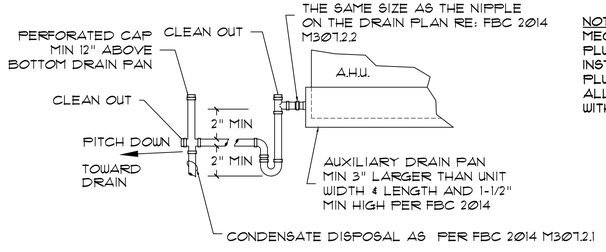
THE STRAPS ARE ALSO ADEQUATE FOR RESISTING OF OVERTURNING OF THE A/C CONDENSER WHEN USED WITH STRAPS AND ANGLES ATTACHMENTS, FOR SIDE WIND LOADS OF -37.9 PSF.

CONDENSING UNIT TO BE ATTACHED TO SLAB WITH 1/4"x2"x2" ANGLES EACH CORNER AS INDICATED IN DETAILS (STRAPS TO BE PROVIDED IN ADDITION TO ANGLES).



TYP ELEVATION

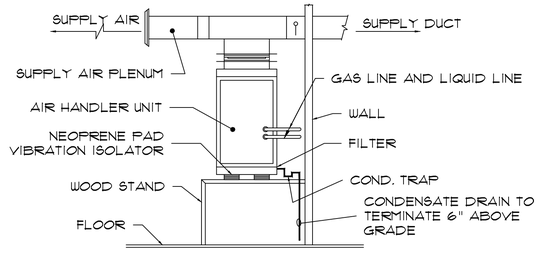
CONDENSING UNIT DETAILS



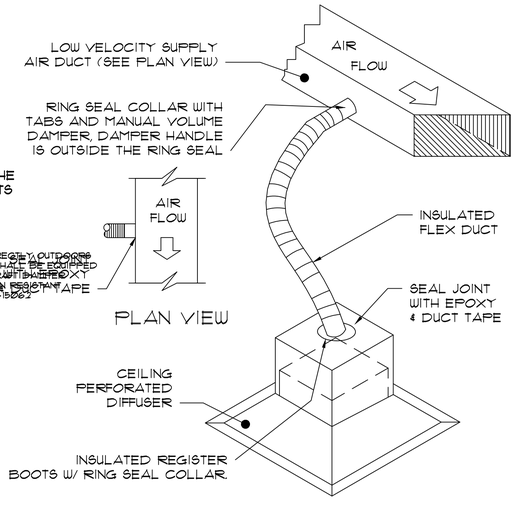
DRAIN TRAP DETAIL

NOTE:
MECHANICAL CONTRACTOR WILL COORDINATE WITH PLUMBING CONTRACTOR CONDENSATE SYSTEM INSTALLATION (TO BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR)
ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014

NOTES: A/C CONDENSING UNIT TO BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014 , THE STRAP TIE-DOWNS AS INDICATED HEREIN IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE CODE AND MEETS THE WIND LOAD REQUIREMENTS IN ACCORDANCE WITH ASCE 7-10.



AHU MOUNTING DETAIL



FLEXIBLE DUCT CONNECTION DETAIL

AIR CONDITIONING GENERAL NOTES

1. WORK INCLUDED: PROVIDING HEAT, VENTILATION, AND AIR CONDITIONING SYSTEMS WHERE SHOWN ON THE DRAWING, AS SPECIFIED HEREIN, AND AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION INCLUDING, BUT NOT NECESSARILY LIMITED TO
   - AIR CONDITIONING SUPPLY AND RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, AND REGISTERS.
   - AIR CONDITIONING UNITS, PIPING AND COMPONENTS, OPERATING AND SAFETY CONTROLS, BLOWERS, MOTORS, FILTERS, AND RELATED ITEM.
   - EXHAUST SYSTEMS INCLUDING TOILET FANS, MOTORS, DUCTWORK, GRILLES, REGISTERS, CONTROLS, AND REGISTERS.
   - TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING.
   - THERMAL INSULATION OF DUCTS AND PIPING.

2. DUCTWORK IN ATTICS SPACE AND ROOF WITH LESS THAN R-12 INSULATION SHALL BE 1-1/2" THICK FIBERGLASS WITH VAPOR BARRIER. DUCT WORK BETWEEN FLOORS, ENCLOSED ATTACHED GARAGES, UNCONDITIONED BASEMENT, UNCONDITIONED INTERIOR SPACES, AND ROOF WITH MIN R-12 INSULATION SHALL BE R-4.3 KNAUF AIR DUCT FIBERGLASS TYPE EI800 WITH VAPOR BARRIER. UNLESS OTHERWISE SPECIFIED DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ACCORDING TO "ASHRAE" AND "NAIMA" STANDARDS

   ALL DUCTWORK SHALL BE 1 ½" FIBERGLASS AND INSTALLED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND ACCORDING TO ASHRAE AND SMACNA STANDARDS, AND FLORIDA BUILDING CODE 2014 ENERGY FOR BUILDING CONSTRUCTION. DUCT DIMENSIONS ARE IN INCHES AND CORRESPOND TO INSIDE DIMENSIONS, WITH x HEIGHT. DUCT SYSTEM SHALL COMPLY WITH "NFPA" STANDARD No. 90A AND/FR 90B DUCTWORK AND COMPONENTS S SHALL BE CLASS 1 MATERIALS IN ACCORDANCE WITH U.L. 181 TESTS. FIBERGLASS DUCT SYSTEM STRAIGHT SECTIONS AND FITTINGS SHALL BE REINFORCED BY EITHER OR BOTH OF THE FOLLOWING METHODS: A) TIE ROD REINFORCEMENT AND OR B) CHANNEL REINFORCEMENT. REFER TO THE FIBROUS GLASS DUCT CONSTRUCTION STANDARDS AND MANUFACTURER RECOMMENDATION. LONGITUDINAL SEAMS AND TRANSVERSE JOINTS CLOSURES SHALL COMPLY WITH UL 181 A/P (PRESSURE SENSITIVE ALUMINUM FOIL TAPE) OR 181 A/H (HEAT SELLABLE ALUMINUM FOIL TAPE OR MANUFACTURER'S RECOMMENDATIONS FOR THE USE OF GLASS FABRIC AND MASTIC. DUCT SUPPORT SHALL BE PLACED SO AS TO PROPERLY SUPPORT ALL FITTINGS AND ACCESSORIES WITHOUT PLACING THE TAPED JOINTS UNDER STRESS.

3. COORDINATE LOCATIONS, SIZES AND OPENINGS WITH OTHER TRADES ON THE JOB. A/C CONTRACTOR SHALL PROVIDE THE COMPLETE DUCT SYSTEM WITH TURNING VANES AT ALL ELBOWS, AND INSTALLED SPLINTERS AND DAMPERS AS REQUIRED OR SHOWN ON THE DRAWING.

4. DIFFUSERS SHALL BE SELECTED, LOCATED AND BALANCED IN ORDER THAT THEY DELIVER THE REQUIRED CFM RELATIVE HUMIDITY TO THE ENTIRE ROOM EVENLY AND DRAFT FREE TO THE FOLLOWING DESIGN CONDITIONS. 50% TO 60% INSIDE OUTSIDE COOLING - 78 dB 91dB -79 wB HEATING - 72 dB

5. ALL FAN, MOTORS, COMPRESSORS, ETC. SHALL BE ISOLATED, AS REQUIRED TO OPERATE QUIETLY SO THAT NO OBJECTIONABLE SOUND WILL BE HEARD IN THE HABITABLE SPACES DUE TO AIR VELOCITY, MOTOR HUM, VIBRATION OR MECHANICAL MOVEMENT.

6. A/C SYSTEM SHALL HAVE 1" AIR FILTERS AS SPECIFIED LOCATION AND AS REQUIRED FOR EASY ACCESSIBILITY.

7. A/C SYSTEM SHALL BE CONTROLLED BY A THERMOSTAT MOUNTED 5' ABOVE FINISH FLOOR.

8. ALL GRILLES AND DIFFUSERS TO BE ALUMINUM CONSTRUCTION. ALL DIFFUSERS SHALL HAVE HIDDEN OPPOSED BLADE DAMPERS. PROVIDE GASKETS ON ALL GRILLES AND DIFFUSERS.

9. ALL REFRIGERANT PIPING SHALL BE COPPER COLD DRAWN TYPE -L- ACR, DEHYDRATED AND SEALED. ALL FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH HIGH TEMPERATURE BRAZING ALLOY OF NOT LESS THAN 5% SILVER. PIPING INSULATION NOT LESS THAN 3/4" THICK "ARMAFLEX". LIQUID AND SUCTION LINES SHALL BE SIZED ACCORDING TO EQUIPMENT MANUFACTURER'S RECOMMENDATION FOR EQUIVALENT LENGTH OF PIPING RUN FOR CONNECTED TONNAGE. ALL PIPING ACCESSORIES SHALL BE CONSTRUCTED AS SUGGESTED BY EQUIPMENT MANUFACTURER. PROVIDE FILTER/DRYER AND SIGHT GLASS ON LIQUID LINE. REFRIGERANT PIPING SYSTEM SHALL BE COMPLETED EVACUATED TO 26" VACUUM OF MERCURY GAUGE PRESSURE USING A VACUUM PUMP AND HOLD FOR A MINIMUM OF 24 HOURS. COMPRESSORS SHALL NOT BE USED TO EVACUATED SYSTEMS. CHANGE THE OIL IN THE VACUUM PUMP BEFORE VACUUM IS PULL. VACUUM SHALL BE BROKEN WITH THE OPENING REFRIGERANT.

10. ALL VENTILATION DUCTWORK SHALL BE 1 ½" FIBERGLASS INSTALLED ACCORDING TO LAST EDITION OF "SAMNA" AND "ASHRAE" FOR LOW PRESSURE DUCT SYSTEM.

11. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.

12. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE SITE, SATISFY HIMSELF TO EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PREFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FIELD CONDITION AFFECTING HIS WORK.

13. ELECTRIC HEATERS: SHALL BE MOUNTED IN BOX CASING WITH CAPACITIES AS SHOWN IN THE SCHEDULE. HEATERS TO BE U.L. LABELED AND LISTED FOR ZERO CLEARANCE AS A DUCT HEATER. ELEMENTS TO BE OPEN TYPE GRADE A NICHROME WIRE. EACH HEATER ASSEMBLY SHALL BE PROVIDED WITH A HIGH TEMPERATURE LIMIT CONTROLLER LIMIT CONTROLLER WITH A MANUAL RESET, AND WITH A SWITCH TO SHUT DOWN HEATER ON NO AIR FLOW CONDITION.

14. TESTING AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR WHO IS A MEMBER OF ASSOCIATED AIR BALANCE COUNCIL. TEST AND BALANCE REPORT SHALL BE APPROVED BY THE ENGINEER OF RECORD BEFORE CERTIFICATION OF OCCUPANCY. ALL SUPPLY DUCT, RETURN AND EXHAUST DUCT SYSTEM SHALL BE TESTED FOR AIR LEAKS, AND ANY AIR LEAKS SHALL BE FIXED AS REQUIRED.

15. PROVIDE A CONDENSATE DRAIN RUNNING TO APPROVED DRAIN. THE CONDENSATE DRAIN SYSTEM SHALL MEET THE LOCAL PLUMBING CODE REQUIREMENTS.

16. PROVIDE ELECTRICAL DISCONNECTS FOR THE AIR HANDLER AND CONDENSING UNIT. THE SIZE OF THE DISCONNECT SHALL COMPLY WITH THE EQUIPMENT MANUFACTURER'S REQUIREMENT.

17. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE MECHANICAL SYSTEMS.

18. INTERLOCK ELECTRIC DUCT HEATERS WITH COMPRESSOR CIRCUIT SO THAT HEATERS DO NOT OPERATE SIMULTANEOUSLY WITH COMPRESSORS.

19. AS PER R402.4.1.2, ANY BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 7 AIR CHANGES PER HOUR IN CLIMATE ZONES 1 AND 2, AND 3 AIR CHANGES PER HOUR IN CLIMATE ZONES 3 THROUGH 8. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF Ø2 INCHES W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY EITHER INDIVIDUALS AS DEFINED IN SECTION 553.993(5) OR (7), FLORIDA STATUTES OR INDIVIDUALS LICENSED AS SET FORTH IN SECTION 489.105(3)(F), (G), OR (I) OR AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - MECH. NOTES

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-3

PROJECT No: D-16-047

PLUMBING GENERAL NOTES AND SPECIFICATION

1. A. SCOPE OF WORK
THE WORK SHALL INCLUDE ALL PLUMBING AND SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING.
1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS.
2. SANITARY DRAIN AND VENT SYSTEMS.
3. PLUMBING FIXTURES AND TRIM.
4. AIR CONDITIONING CONDENSATE DRAIN SYSTEMS.
5. PRESSURE AND TEMPERATURE RELIEF FROM WATER HEATER.
6. PIPING INSULATION.
7. SUPPORTS AND HANGERS.

2. CONTRACTOR SHALL VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.

3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING. "BITUMASTIC" OR EQUAL.

4. ALL FIXTURES SHALL BE PROTECTED AGAINST WATER HAMMER WITH AIR CHAMBERS OF SHOCK ABSORBERS AS INDICATED ON PLANS.

5. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH APPROVED MATERIALS, SHALL HAVE SMOOTH IMPERVIOUS SURFACES AND SHALL BE FREE FROM DEFECTS AND CONCEALED FOULING SURFACES. ALL FIXTURE TRIM TO BE CHROME PLATED, FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC..

6. WASTE LINES TO SLOPE 1/8"/FOOT UNLESS OTHERWISE NOTED.

7. VENT LINES TO EXTEND MIN OF 9" ABOVE ROOF AND FLASH WITH LEAD.

8. WATER PIPE BELOW GROUND SHALL BE COPPER TYPE "K", ABOVE GROUND TO BE COPPER TYPE "L".

9. PIPING INSTALLATION.
A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE
B. PROVIDE SLEEVES FOR ALL PIPING THROUGH FOUNDATIONS, SLABS, OR MASONRY WALLS. CAULK OPENINGS BETWEEN PIPE AND SLEEVES.
C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESCUTCHEONS. FIRMLY SECURE TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE SLEEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESCUTCHEONS IN BATHROOMS.
D. WHERE PIPES PASS THROUGH FIRE RATED FLOOR, WALLS, OR CEILINGS, PROVIDE FIRE STOPS, OR FIRE BARRIER PENETRATION SEALING SYSTEMS SHALL BE U.L. LISTED.

10. INSPECTION AND TESTS.
CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTION TO THE AUTHORITIES HAVING JURISDICTION AS THE WORK PROGRESS. ALL SYSTEMS SHALL BE TESTED BY CODE AND OR LOCAL REGULATIONS. THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE STERILIZED FOLLOWING CODE PROCEDURES. AFTER STERILIZATION FLUSH THE SYSTEM WITH CLEAN WATER UNTIL SAFE TO BE CONSUMED.

11. UTILITIES CONNECTION
PLUMBING CONTRACTOR SHALL VERIFY AT FIELD AND WITH THE UTILITY COMPANIES THE EXACT POINT OF CONNECTION FOR WATER AND SEWER SERVICES BEFORE SUBMITTING A BID OR PRICE FOR HIS WORK.

12. PLUMBING CONTRACTOR IS RESPONSIBLE FOR PERFORMING THE FOLLOWING TEST IN THE PRESENCE OF AN OWNER REPRESENTATIVE.
A. ALL WATER PIPING SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST OF 100 PSI. FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.

B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH WATER TO HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTED

13. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUND OF CHLORINATE LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE). RETAIN MIXTURE IN PIPE 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.

14. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF INSTALLATION.

15. PLUMBING CONTRACTOR SHALL FURNISH WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE FROM DATE OF FINAL ACCEPTANCE, AND THAT HE WILL AT HIS EXPENSE REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE GUARANTEE PERIOD INCLUDING BUT NOT LIMITED TO NECESSARY DEMOLITION, PATCHING, RE-PATCHING AND REFINISHING.

16. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN HIS BID, THE COST FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO PERFORM THE SCOPE OF THE WORK AND THE INTENT OF THE CONSTRUCTION DOCUMENTS FORM ALL THE LOCAL AND STATE AUTHORITIES.

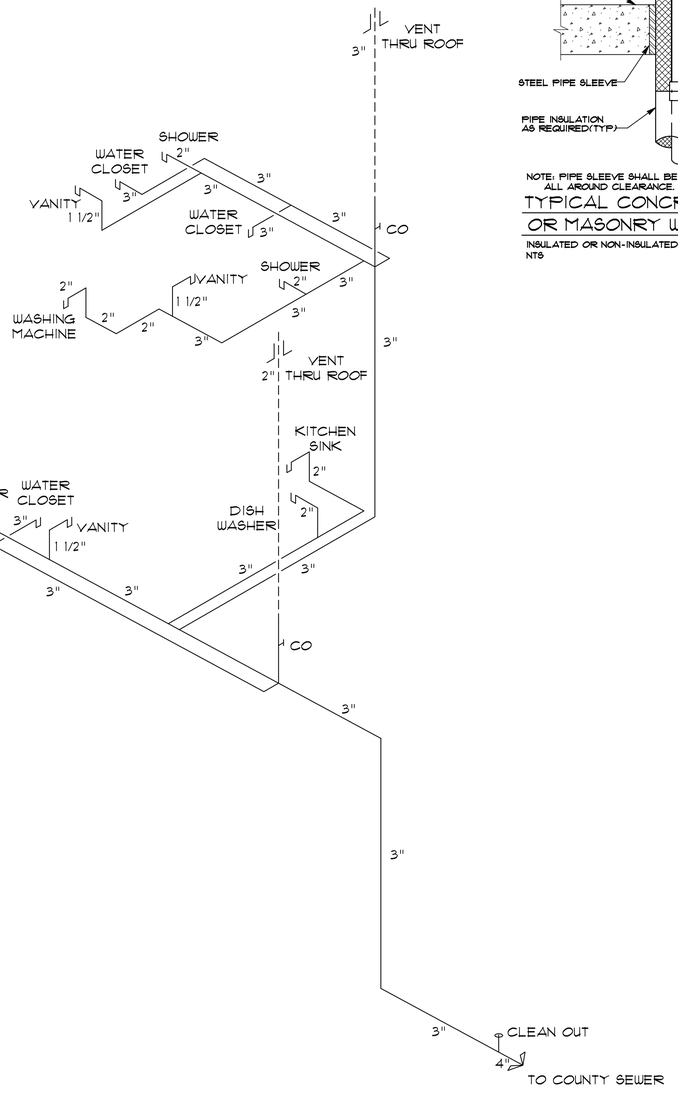
17. CONDENSATE DRAIN FROM AIR CONDITIONING UNITS SHALL BE "PVC" SCHEDULE 40 PIPE AND FITTINGS ALL HORIZONTAL RUN SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX PIPE INSULATION OR EQUAL. SLIP PIPE INSULATION AND SEAT BUTT JOINTS.

18. ALL PIPING MATERIALS SHALL BE NEW AND AS FOLLOWS:
A. SANITARY WASTE, VENT AND STORM DRAIN PIPING: UNDERGROUND AND ABOVE GROUND PIPING SHALL BE "PVC" PIPE AND FITTINGS SCHEDULE 40. MATERIAL SHALL COMPLY WITH ASTMD-1784, TYPE I.
B. DOMESTIC WATER ABOVE GROUND SHALL BE TYPE "K" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
C. DOMESTIC WATER BELOW GROUND SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT AT FITTINGS.
D. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, ELJER OF KOHLER.
E. ELECTRIC WATER HEATERS SHALL BE LOCHINVAR UNLESS OTHERWISE SPECIFIED. SEE SPECIFICATIONS.
F. SOLDER ALLOY SHALL BE LEAD FREE.
J. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.

19. INSULATION:
A. ALL RECALCULATION HOT WATER PIPE SHALL BE INSULATE WITH 1/2" THICK FIBERGLASS MOLDED INSULATION WITH PRE-SIZED FACTORY APPLIED "FRJ" JACKET OF GLASS CLOTH WITH LONGITUDINAL LAP AND BUTT JOINT STRIPS WITH SELF SEALING ADHESIVE.
B. INSULATION SHALL HAVE A MAXIMUM THERMAL CONDUCTIVITY OF .026 K FACTOR AT 75 DEG. F. MEAN TEMPERATURE. JACKET INSULATION AND ADHESIVE SHALL HAVE COMPOSITE FIRE AND SMOKE RATINGS AS PER ASTM E84-75, FINISHING JACKETS SHALL HAVE A MAXIMUM FLAME SPREAD OF 25.

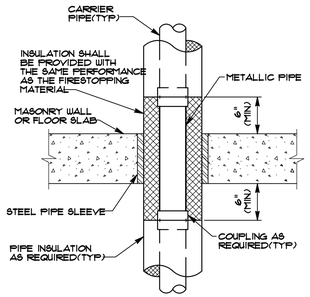
20. HANGERS AND SUPPORTS.
A. PROVIDE ADJUSTABLE HANGERS, INSERTS, BRACKETS, ROLLS, CLAMPS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. PROVIDE HANGERS TO ALLOW FOR EXPANSIONS AND CONTRACTION OF PIPE LINES AND OF ADEQUATE SIZE TO PERMIT COVERING TO RUN CONTINUOUSLY THROUGH HANGERS. PIPING AT EQUIPMENT SUPPORTED INDEPENDENTLY SO THAT NO WEIGHT WILL BE SUPPORTED BY EQUIPMENT. COORDINATE LOCATION OF HANGERS WITH LIGHT FIXTURES, AIR CONDITIONING DUCTWORK AND DIFFUSERS AND WITH EXISTING PIPING SYSTEMS.
B. PROVIDE RISER CLAMPS AT EVERY FLOOR.

21. EXISTING CONDITIONS: CONTRACTOR BY AND THROUGH SUBMISSION OF HIS BID, AGREES THAT HE SHALL BE HELD RESPONSIBLE FOR HAVING EXAMINED THE SITE, THE LOCATION OF ALL PROPOSED WORK AND FOR HAVING SATISFIED HIMSELF FROM HIS OUN PERSONAL KNOWLEDGE AND EXPERIENCE OR PROFESSIONAL ADVICE AS TO THE CHARACTER, AND LOCATION OF THE SITE, THE NATURE OF THE EXISTING CONDITIONS, THE LOCATION OF EXISTING UTILITIES AND ANY OTHER CONDITIONS SURROUNDING AND AFFECTING THE WORK, ANY OBSTRUCTIONS, THE NATURE OF EXISTING CONSTRUCTION, AND ALL OTHER PHYSICAL CHARACTERISTICS OF THE JOB, IN ORDER THAT HE MAY INCLUDE IN THE PRICES WHICH HE BIDS ALL COSTS PERTAINING TO THE WORK AND THEREBY PROVIDE FOR THE SATISFACTORY COMPLETION THEREOF.



PLUMBING ISOMETRIC

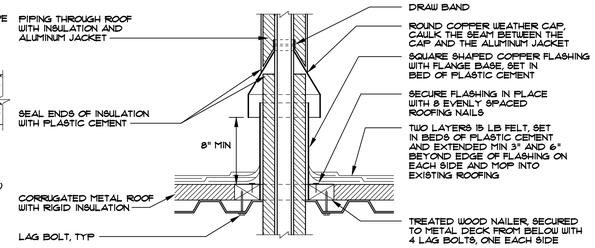
NOT TO SCALE



NOTE: PIPE SLEEVE SHALL BE SIZED TO PROVIDE 1/4" ALL AROUND CLEARANCE.

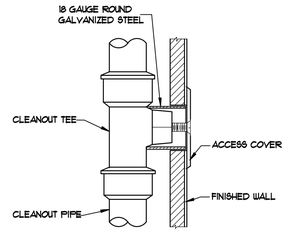
TYPICAL CONCRETE FLOOR OR MASONRY WALL PENETRATION

INSULATED OR NON-INSULATED, ABOVE GRADE
NTS



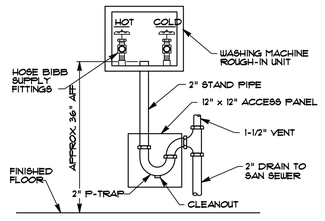
PIPING THROUGH ROOF DETAIL

NTS



WALL CLEANOUT DETAIL

NTS



WASHING MACHINE HOOK-UP DETAIL

NTS

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

REVISION	DATE
NO. 0 FOR SUBMITTAL	8/31/2018

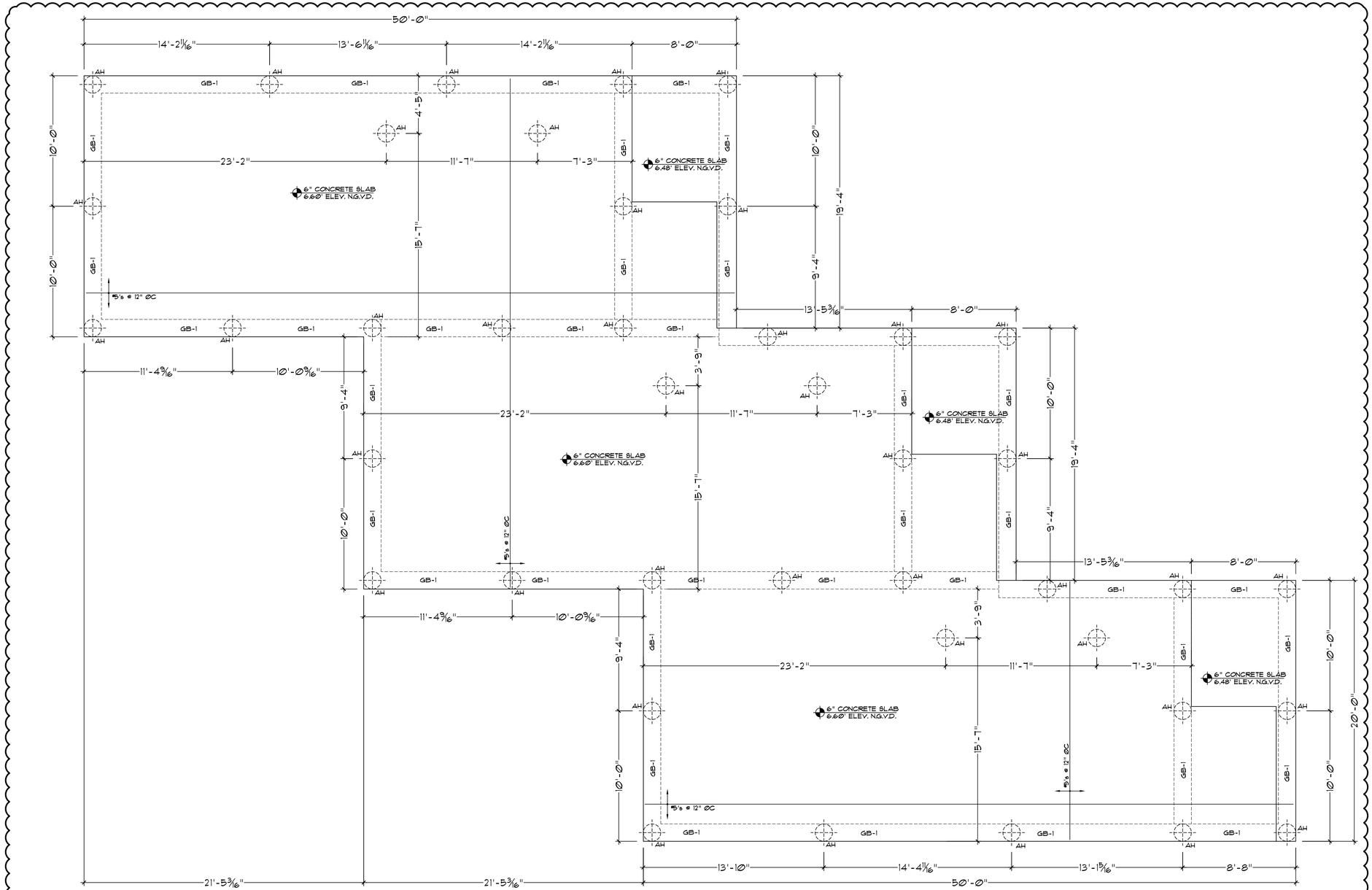
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - PLUMBING

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: P-1

PROJECT No: D-16-047



FOUNDATION PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:

8" CBS WALL:

DOOR:

WINDOW:

COLUMN/BEAM BELOW:

ELEMENT ABOVE:

CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

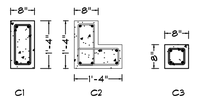
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
IB-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
IB-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.14'
2B-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	27.81'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.93'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

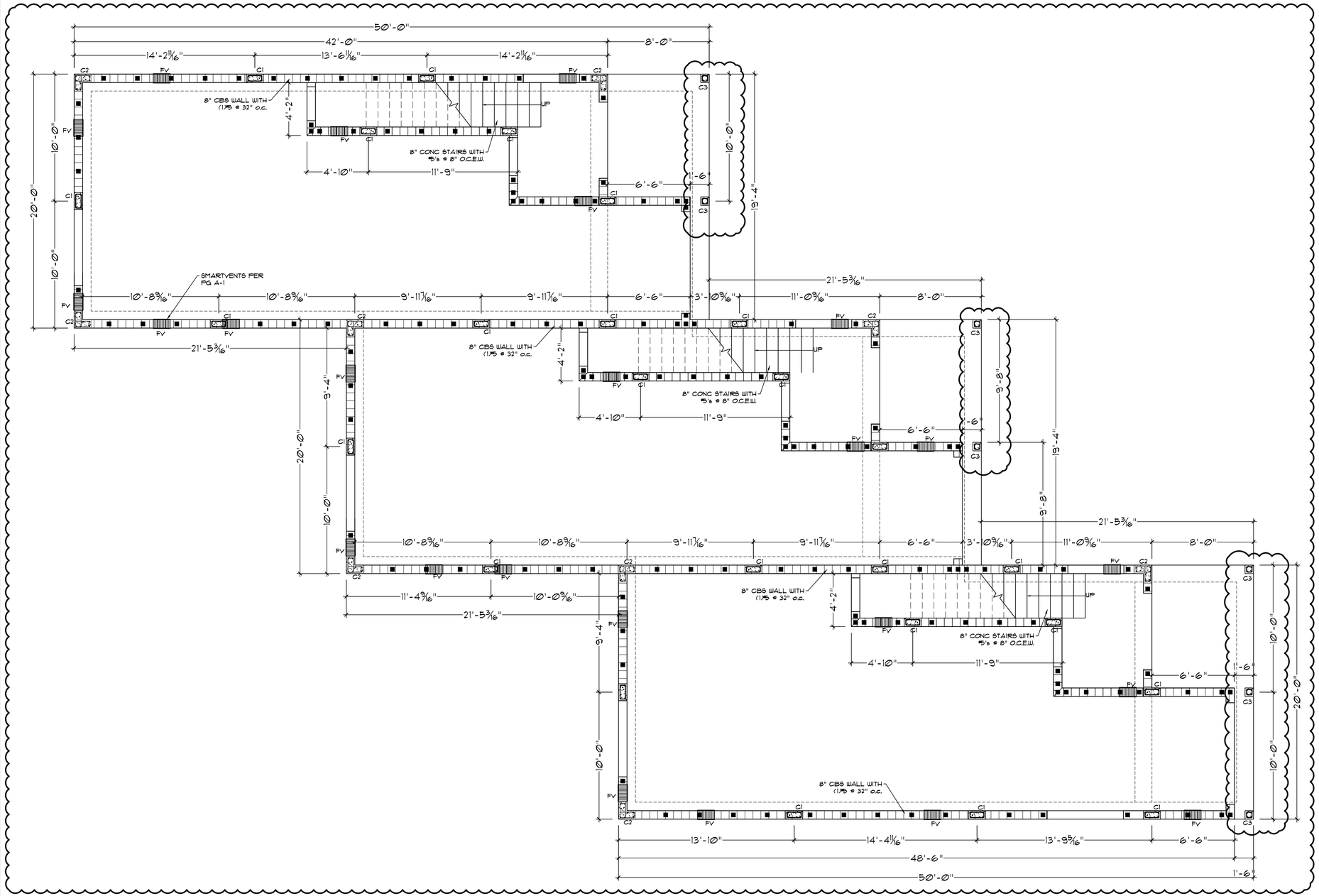
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

PROJECT No: D-16-047



FIRST FLOOR PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

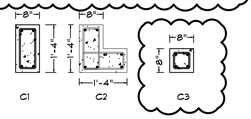
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
IB-1	8x16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
IB-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.14'
2B-1	8x16	2-#6's	-	2-#6's	#3's @ 8" o.c.	27.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.93'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION VILLAGE COMMENTS	11/28/2021
2		1/3/2022
3	VILLAGE COMMENT	2/2/2022

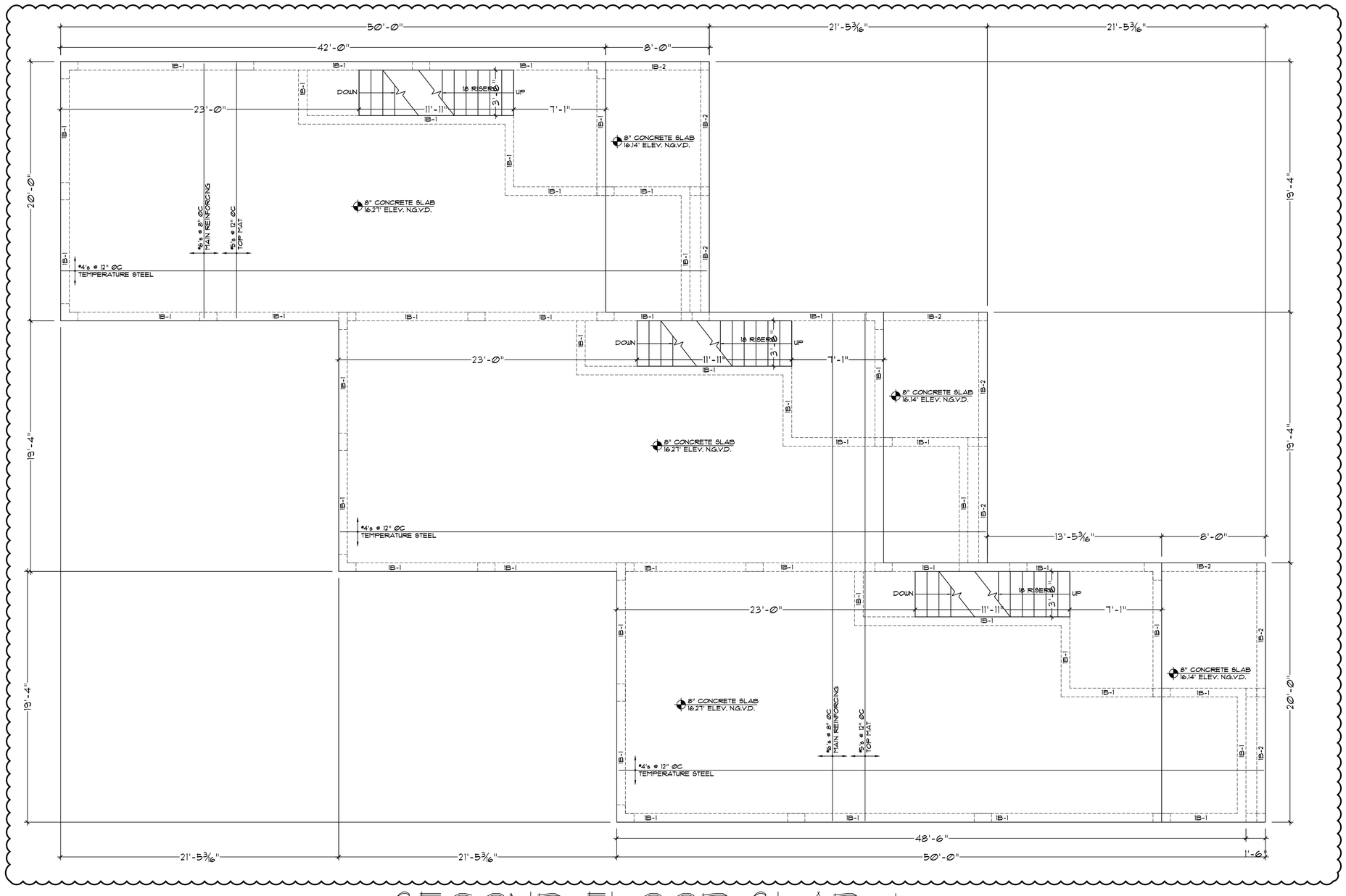
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-2

PROJECT No: D-16-047



SECOND FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:

8" CBS WALL:

DOOR:

WINDOW:

COLUMN/BEAM BELOW:

ELEMENT ABOVE:

CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

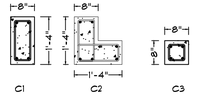
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
IB-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
IB-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.14'
2B-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	27.81'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.93'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8X16X16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

REVISION	DATE
0 FOR SUBMITTAL	8/31/2018
1 REVISION	11/28/2021
2 VILLAGE COMMENTS	1/3/2022

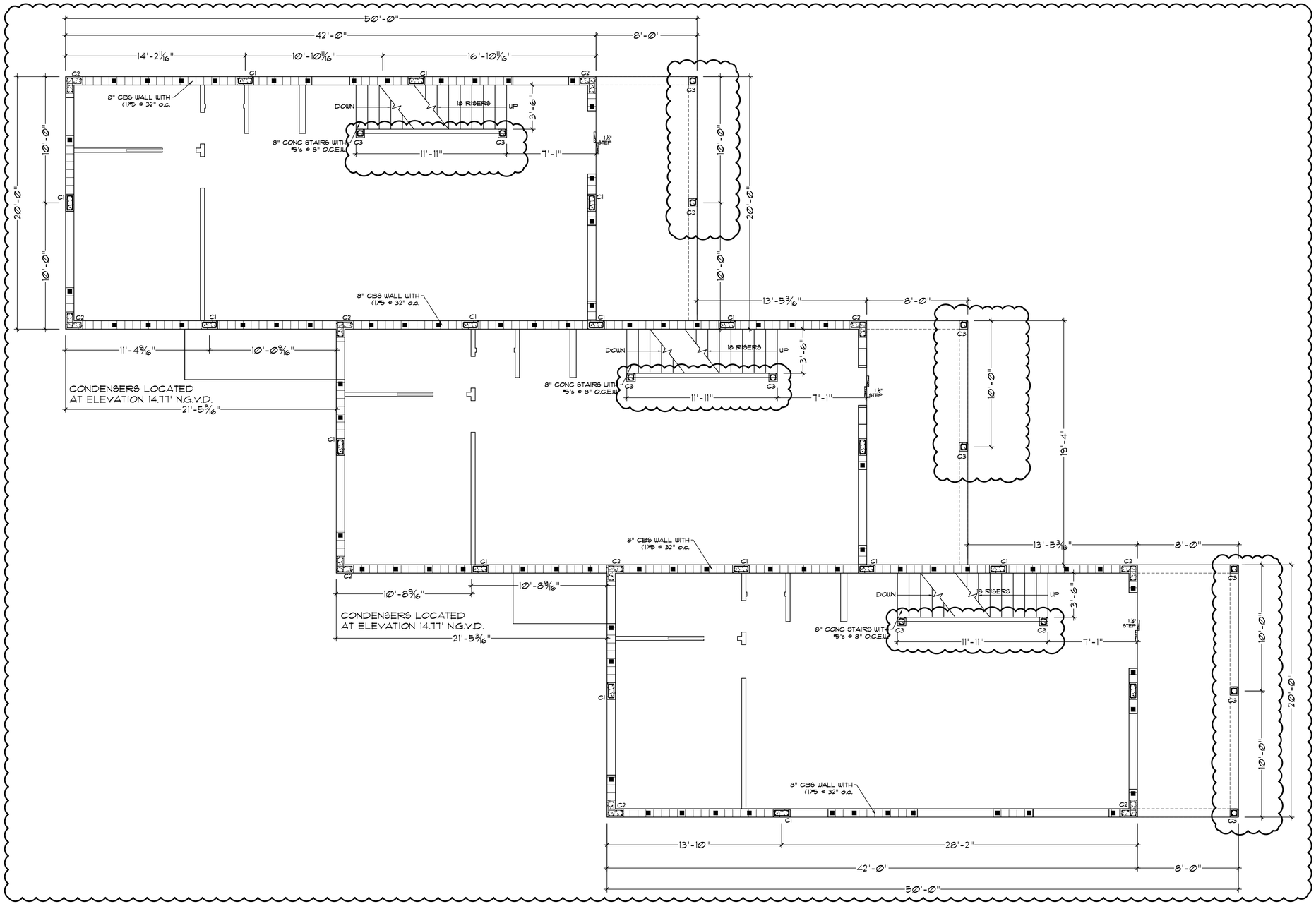
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-3

PROJECT No: D-16-047



SECOND FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:

8" CBS WALL:

DOOR:

WINDOW:

COLUMN/BEAM BELOW:

ELEMENT ABOVE:

CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

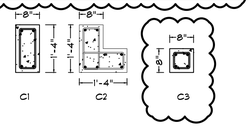
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
IB-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
IB-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.14'
2B-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	27.81'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.93'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENT	2/2/2022

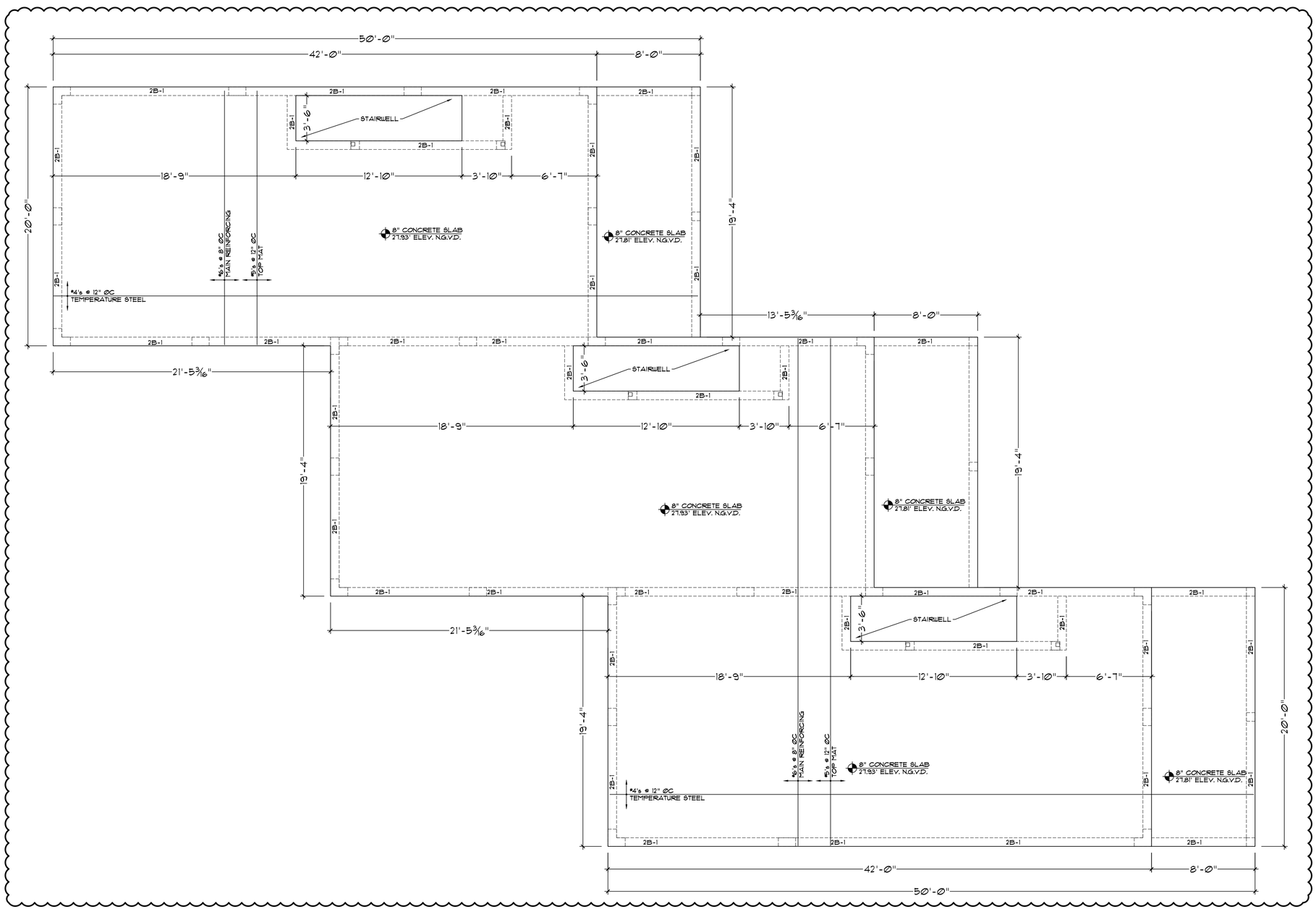
AS SHOWN | SCALE:
1/4/2017 | DATE:
D.G.O. | DWG BY:
REVISED:

TITLE: TRIPLEX D - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-4

PROJECT No: D-16-047



THIRD FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

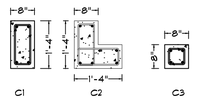
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W'XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
1B-1	8x16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.14'
2B-1	8x16	2-#6's	-	2-#6's	#3's @ 8" o.c.	21.81'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.93'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

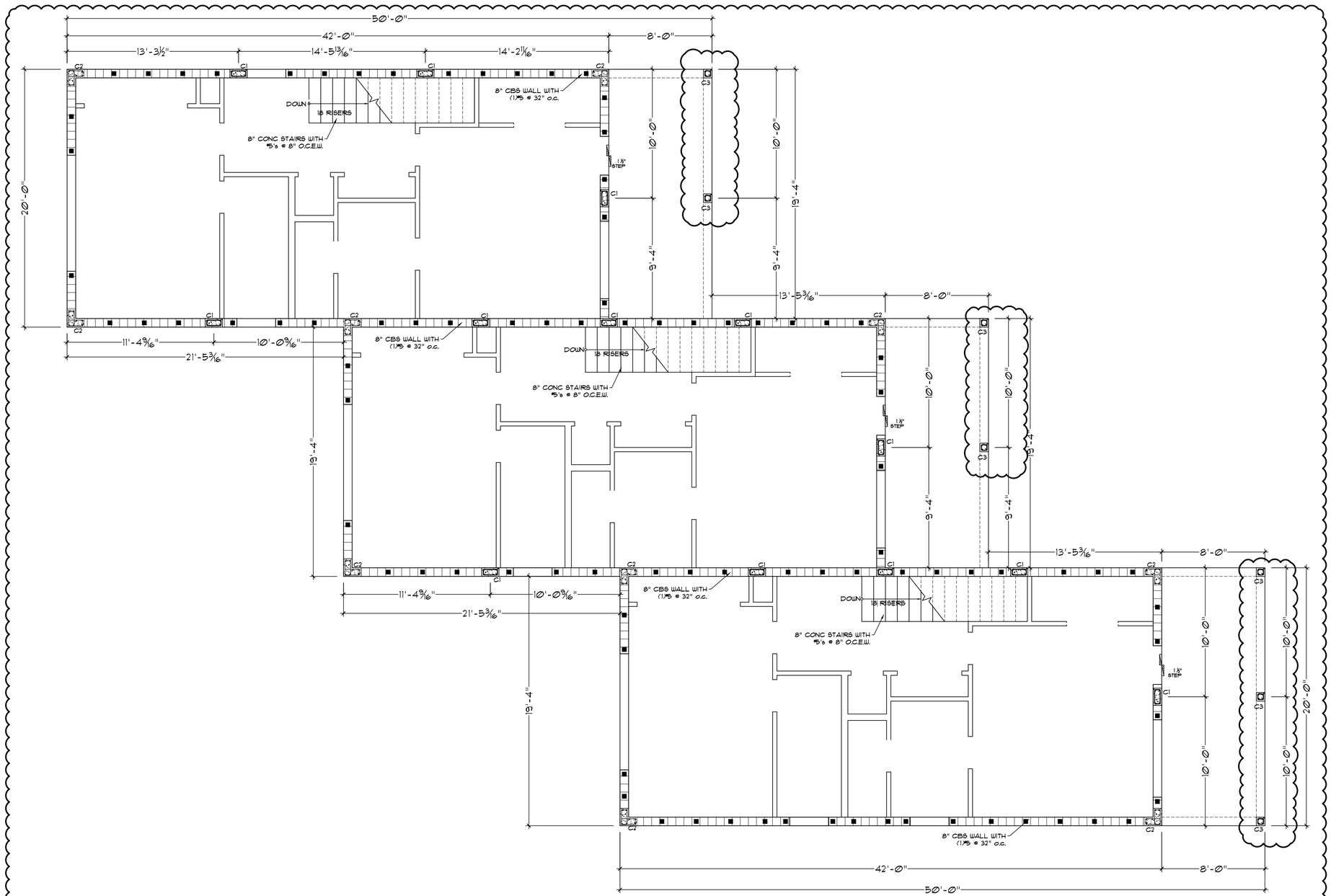
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-5

PROJECT No: D-16-047



THIRD FLOOR WALL & COLUMN PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

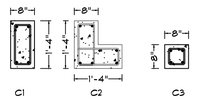
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2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
IB-1	8x16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
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COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
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C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
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91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENT	2/2/2022

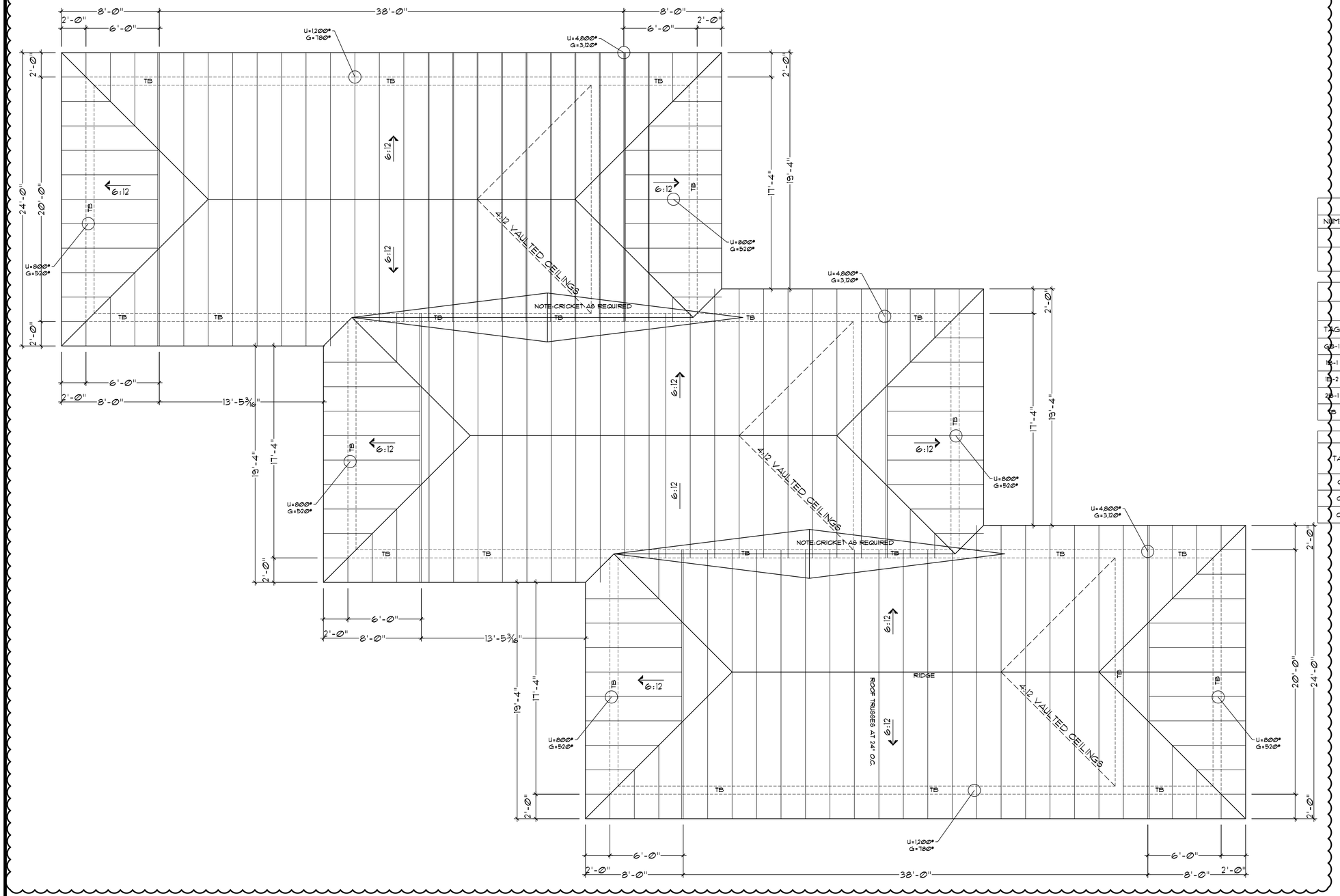
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DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX D - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-6

PROJECT No: D-16-047



THIRD FLOOR TRUSS PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

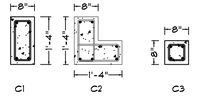
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"XH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	6.48'
B-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	16.14'
B-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	16.14'
GB-1	8X16	2-#6's	-	2-#6's	#3's @ 8" o.c.	27.81'
B	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.93'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8X16X16	6-#6's	#3 @ 12" o.c.	
C3	8X8	4-#6's	#3 @ 12" o.c.	



KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

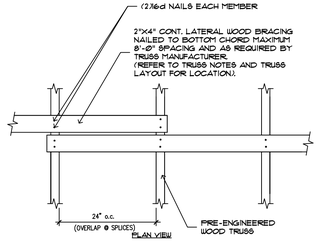
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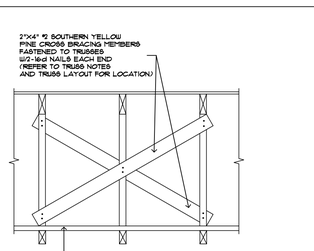
DRAWING No: S-1

PROJECT No: D-16-047

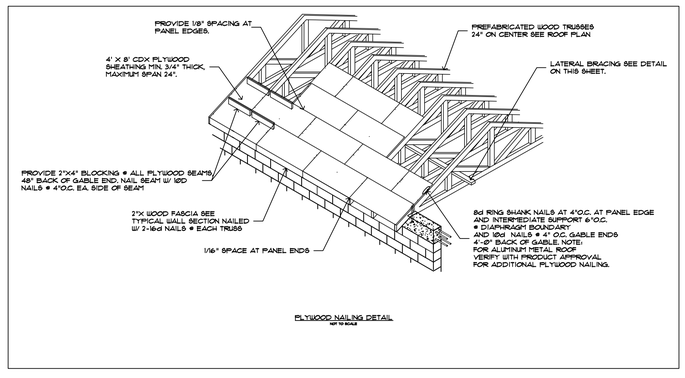


PLAN VIEW

TYPICAL LATERAL BRACE SPLICE
NOT TO SCALE



TYPICAL X-BRACING
NOT TO SCALE



PLYWOOD NAILING DETAIL
NOT TO SCALE

NOTES:

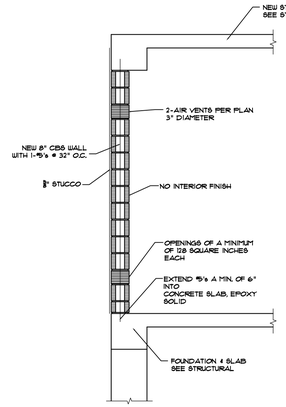
1. ATTIC ACCESS ROUGH OPENING SHALL BE NO LESS THAN 22"x36" WITH A MINIMUM OF 30" UNOBSTRUCTED HEADROOM AS PER THE FLORIDA BUILDING CODE.

2. TOP TIE BEAM SHALL NOT BE POURED UNTIL THE TRUSS LAYOUT AND CALCULATIONS HAVE BEEN APPROVED BY THE MONROE COUNTY BUILDING DEPARTMENT.

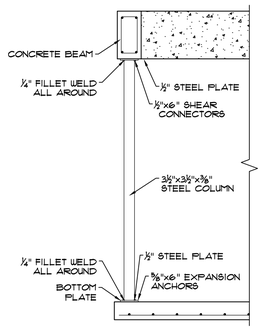
3. BORATE TREATED LUMBER, OR APPROVED EQUAL, SHALL BE USED TO PREVENT ANY INTERACTION BETWEEN FASTERN AND WOOD.

4. ROOF TRUSSES SHALL BE DESIGNED FOR A WINDSPEED OF 180 MPH PER ASCE-7-10

5. HURRICANE STRAPS SHALL BE SPECIFIED AFTER DETERMINATION OF TRUSS UPLIFT LOADS BY TRUSS MANUFACTURER.

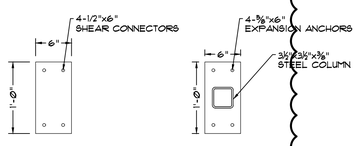


TYPICAL AE - ZONE DETAIL



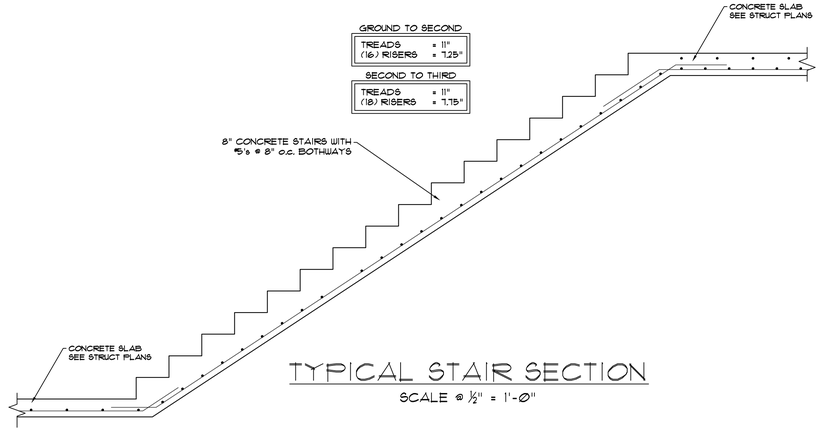
STEEL COLUMN DETAIL

SCALE @ ½" = 1'-0"



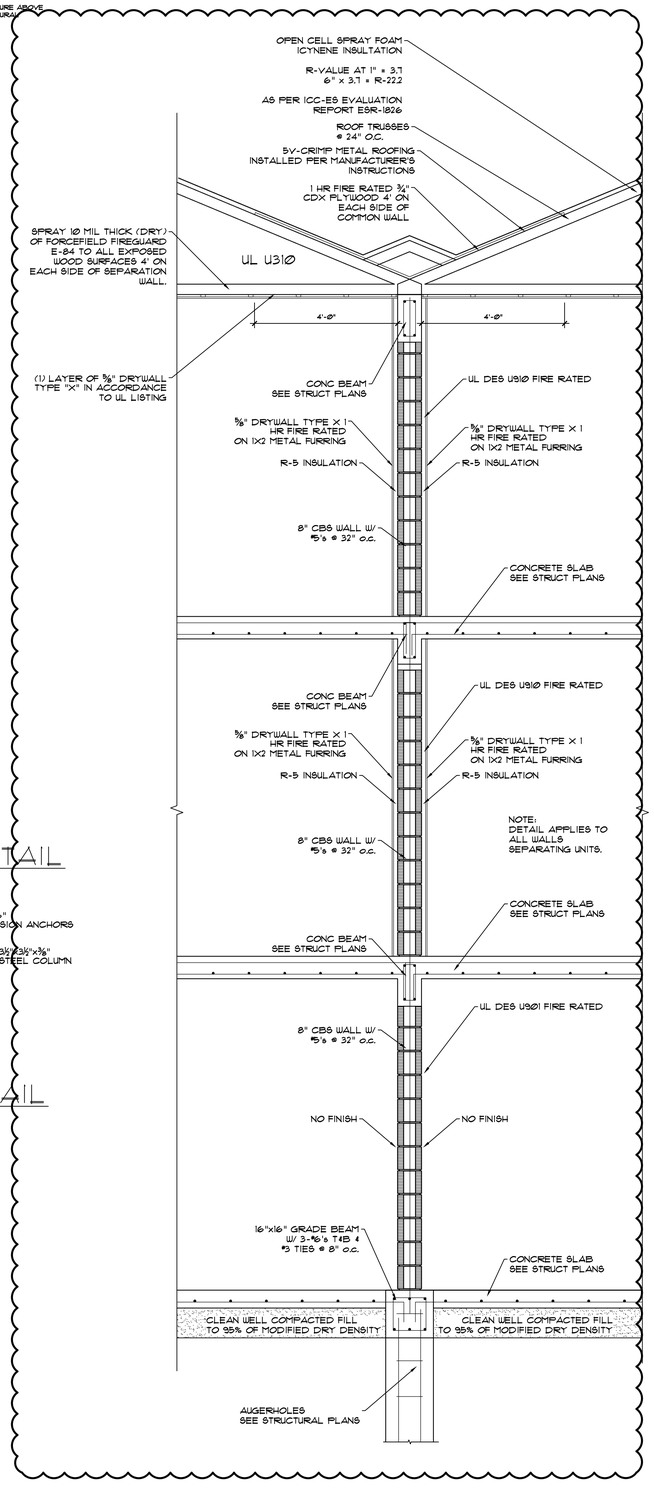
STEEL PLATE DETAIL

SCALE @ ½" = 1'-0"



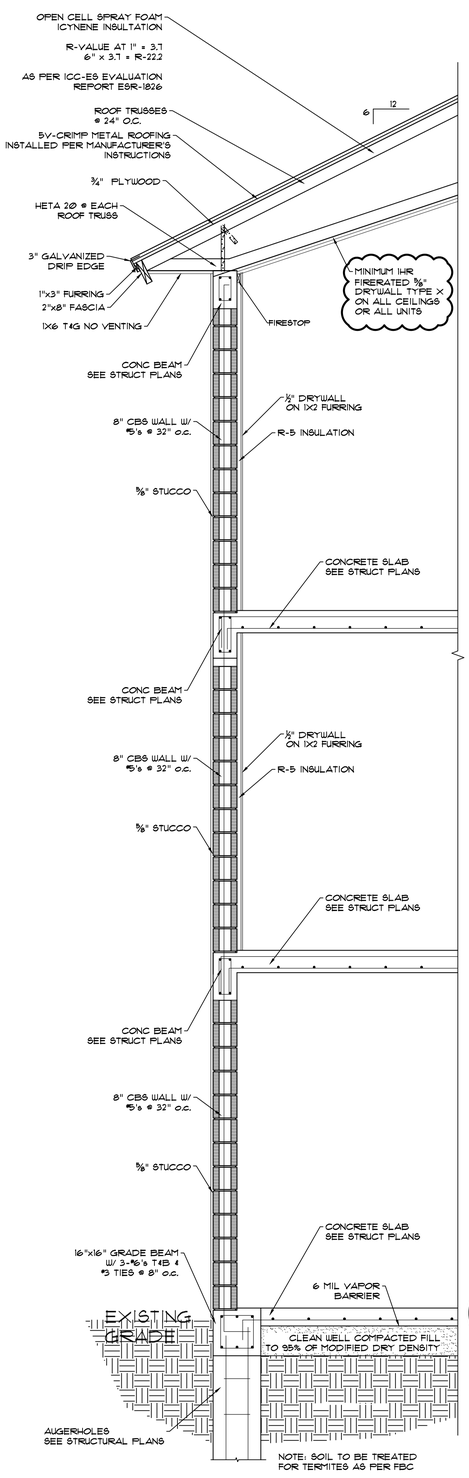
TYPICAL STAIR SECTION

SCALE @ ½" = 1'-0"



SEPARATION WALL DETAIL

SCALE @ ½" = 1'-0"



TYPICAL WALL SECTION

SCALE @ ¼" = 1'-0"

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84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-8

PROJECT No: D-16-047

GENERAL NOTES:

1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 2020 EDITION. THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCED STANDARD APPLIES TO THIS PROJECT.
2. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
3. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
4. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE DESIGN DOCUMENTS. IF A CONFLICT EXIST, NOTIFY THE DESIGN PROFESSIONAL.
5. 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 DESIGN PROFESSIONAL.
6. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL. SEE THE ARCHITECTURAL AND M.E.P. DRAWINGS FOR THE SIZE AND LOCATION OF OPENINGS IN THE STRUCTURE.
7. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS; USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE DESIGN PROFESSIONAL PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL O.S.H.A. REQUIREMENTS.
10. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. WHEREVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A FLORIDA LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.
11. DESIGN SUPERIMPOSED LOADS:

OCCUPANCY	LIVE LOAD	DEAD LOAD
ROOF	30 PSF	20 PSF
FLOOR	40 PSF	80 PSF

12. DESIGN WIND LOADS:

GOVERNING CODE	A.S.C.E. 7-16
BASIC WIND SPEED	VULT= 180 MPH/VASD= 139 MPH
RISK CATEGORY	II
BUILDING ENCLOSURE	ENCLOSED
DIRECTIONALITY FACTOR	KD = 0.85
EXPOSURE	D
INTERNAL PRESSURE COEFFICIENT	+0.18

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE PRECAST CONCRETE, PREFABRICATED WOOD COMPONENTS, OPEN WEB STEEL JOISTS AND JOIST GIRDERS, POST-TENSIONING SYSTEMS, TILT-UP PANELS, STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, EXTERIOR ENCLOSURE SYSTEMS AND SHORING AND RESHORING.
2. A DELEGATED ENGINEER IS DEFINED AS A FLORIDA LICENSED ENGINEER 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 OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS.
3. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE ARCHITECT. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTABILITY.
5. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. QUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT SUM. CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.
6. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED 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.

EXPANSION ANCHORS:

1. USE WEDGE-TYPE EXPANSION ANCHORS SUCH AS THE HILTI KWIK BOLT II, ITW RAMSET RED HEAD TRUBOLT WEDGE, POWERS RAWL POWER-STUD, SIMPSON STRONG-TIE WEDGE-ALL OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

CHEMICAL ADHESIVE FOR ANCHORING REINFORCING BARS, THREADED BARS AND ANCHOR BOLTS:

1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE HILTI HIT HY150, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, POWERS RAWL POWER-FAST SYSTEM, SIMPSON STRONG-TIE AT OR ET, ALLIED FASTENER ALLIED GOLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE DRILL SIZE. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.
4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.
5. THREADED RODS ARE A-36 GALVANIZED STEEL, U.O.N.

REINFORCED CONCRETE:

1. COMPLY WITH ACI 301 AND 318.
2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH OF 5,000 PSI IN 28.
3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS, U.O.N.
4. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MID-SPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N. PROVIDE COVER OVER REINFORCING AS FOLLOWS:

ELEMENT	BOTTOM	TOP	SIDES
FOOTINGS	3"	2"	3"
BEAMS ABOVE GRADE	1 1/2"	1 1/2"	1 1/2"
COLUMNS	-	-	1 1/2"
SLABS ON GRADE	2"	1"	2"
SLABS ABOVE GRADE	3/4"	3/4"	1"
SLABS EXPOSED TO WEATHER	1 1/2"	1 1/2"	1 1/2"

5. TENSION DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:

LAP SPLICE LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED WIRE REINFORCEMENT CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE TWO CROSS WIRE SPACING.
7. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, U.O.N. FOR OPENINGS 24" LONG OR LESS, CUT REINFORCING AND REPLACE ALONGSIDE OPENING WITH SPLICE BARS OF EQUIVALENT AREA WITH 48 BAR DIAMETER LAP. PREPARE AND SUBMIT SHOP DRAWINGS FOR OPENINGS LONGER THAN 24". FOR RECTANGULAR OPENINGS 12" LONG OR LONGER, ADD #5 X 6' MID DEPTH DIAGONAL AT ALL 4 CORNERS.
8. WHERE REINFORCING STEEL CONGESTION PERMITS, CONDUIT AND PIPES UP TO 1" DIAMETER MAY BE EMBEDDED IN CONCRETE PER ACI 318, SECTION 6.3. SPACE AT 3 DIAMETERS O.C. PLACE BETWEEN OUTER LAYERS OF REINFORCING IF CONDUITS ARE SIGNIFICANTLY CONGESTED. ADDITIONAL REINFORCING PERPENDICULAR TO PIPING MAY BE REQUIRED. REQUESTS TO EMBED LARGER PIPES SHALL BE ACCOMPANIED BY A DETAILED DESCRIPTION AND BE SUBMITTED TO THE ARCHITECT FOR EVALUATION.
9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEY-WAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.
10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS.

CONCRETE MASONRY:

1. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530/ASCE 5, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1/ASCE 6, "SPECIFICATIONS FOR MASONRY STRUCTURES".
2. THE STRUCTURE IS SUPPORTED BY BEARING WALLS, U.O.N. ERECT MASONRY PRIOR TO CASTING CONCRETE COLUMNS WITHIN BEARING WALLS OR CASTING BEAMS AND SLABS SUPPORTED BY BEARING WALLS.
3. USE 50% SOLID, NOMINAL 8"X8"X16", CONCRETE MASONRY UNITS CONFORMING TO ASTM C90. BLOCK NET AREA COMPRESSIVE STRENGTH SHALL BE 1,900 PSI. LAY UP UNITS IN RUNNING BOND. SAWCUT UNITS WHICH ARE NOT IN MULTIPLES OF 8". UNITS SHALL BE AT LEAST 8" LONG. BOND CORNERS BY LAPPING ENDS 8" IN SUCCESSIVE VERTICAL COURSES. DESIGN OF WALLS IS BASED ON A F'M OF 1,500 PSI.
4. USE TYPE S MORTAR IN ACCORDANCE WITH ASTM C270 EXCEPT USE TYPE M MORTAR BELOW GRADE. HEAD AND BED JOINTS SHALL BE 3/8" FOR THE THICKNESS OF THE FACE SHELL. WEBS ARE TO BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS; IN THE STARTING COURSE; AND WHERE AN ADJACENT CELL IS TO BE GROUTED. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO CELLS TO BE GROUTED.
5. USE STANDARD (9 GAUGE) HORIZONTAL JOINT REINFORCING IN EVERY OTHER COURSE. JOINT REINFORCING AND ANCHORS IN EXTERIOR WALLS SHALL CONFORM TO ASTM A 153 CLASS B2, WITH A COATING THICKNESS OF 1.50 OZ/SF+ CONFORM TO ASTM A 641 IN INTERIOR WALLS. OVERLAP DISCONTINUOUS ENDS 6". USE PREFABRICATED CORNERS AND TEES. USE TRUSS TYPE, EXCEPT USE LADDER TYPE IN WALLS WITH VERTICAL REINFORCING. EXTEND JOINT REINFORCING A MINIMUM OF 4" INTO TIE COLUMNS.
6. USE FINE GROUT CONFORMING TO ASTM C476, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI IN 28 DAYS. AGGREGATE TO CONFORM TO ASTM C404 FOR FINE GROUT, WITH SLUMP OF 8" TO 10". GROUT ALL MASONRY CONTAINING REINFORCING. ALL CELLS OF 4 HOUR RATED WALLS, AND WHERE INDICATED ON THE DRAWINGS. ALLOW MORTAR TO CURE 24 HOURS PRIOR TO GROUTING. PROVIDE CLEAN OUT OPENINGS AT THE BASE OF CELLS CONTAINING REINFORCING STEEL TO CLEAN THE CELL AND TO TIE THE VERTICAL BAR TO THE DOWEL. IN HIGH-LIFT GROUTING, USE 4'-0" (MAX.) LIFTS, WITH 1/2 HOUR TO 1 HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT.
7. USE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCE WALLS WHERE INDICATED ON THE DRAWINGS AND AT ALL INTERSECTIONS, EACH SIDE OF OPENINGS AND AT THE ENDS OF WALLS. USE BAR SPACERS AT 10 FT. O.C. WHERE GROUT POUR HEIGHT EXCEEDS 10 FT.
8. AT BOND/TIE BEAM CORNERS AND INTERSECTIONS, PLACE 1 #5 X 5'-0" T & B CORNER BAR, WITH 30" LEGS EACH WAY, AT THE EXTERIOR FACE.
9. BEAMS NOT SCHEDULED ARE MIN. 8" X 12" TIE BEAMS WITH 2 #5 BARS TOP AND BOTTOM AND #3 TIES SPACED AT 12" O.C. TYPICAL U.O.N. COLUMNS NOT SCHEDULED ARE MIN. 8" X 12" TIE COLUMNS WITH 4 #5 VERTICAL BARS AND #3 TIES AT 12" O.C. USE 30" LAP SPLICES. HOOK ALL BARS AT DISCONTINUOUS ENDS.
10. REINFORCED MASONRY WALL CONSTRUCTION SHALL BE INSPECTED BY AN ENGINEER OR ARCHITECT IN ACCORDANCE WITH ACI 530.1/ASCE 6.
11. WHERE ANCHOR BOLTS, WEDGE ANCHORS OR ANCHORS SET IN EPOXY ARE SET IN A MASONRY WALL, FILL CELLS WITH GROUT FOR BOLTED COURSE, ONE COURSE ABOVE AND TWO COURSES BELOW.
12. PROVIDE LINTELS OR HEADERS WITH MIN. 8" BEARING OVER ALL MASONRY OPENINGS.
13. USE PRESSURE-TREATED WOOD FOR WOOD IN CONTACT WITH MASONRY.

STRUCTURAL STEEL:

1. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL O.S.H.A. REQUIREMENTS.
2. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
   a. PLATES AND BARS: ASTM A36, FY=36 KSI.
   b. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS):
      1. SQUARE SECTIONS: ASTM A500, GRADE B, FY=46 KSI.
3. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.
4. USE A-307 BOLTS FOR ALL ERECTION BOLTS AND BOLTS LESS THAN 3/4" DIAMETER, U.O.N. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 THREADED WITH NUTS AND WASHERS EACH END.
5. SETTING BASE AND BEARING PLATES: CLEAN CONCRETE AND MASONRY BEARING SURFACE OF BOND-REDUCING MATERIALS AND CLEAN BOTTOM OF BASE AND BEARING PLATE.
   a. SET BASE OR BEARING PLATE ON WEDGES OR OTHER ADJUSTING DEVICES.
   b. TIGHTEN ANCHOR RODS AFTER STRUCTURAL STEEL FRAME HAS BEEN PLUMBED. DO NOT REMOVE WEDGES OR SHIMS BUT, IF PROTRUDING, CUT OFF FLUSH WITH EDGE OF BASE OR BEARING PLATE PRIOR TO PACKING WITH GROUT.
   c. PACK OR POUR NON-SHRINK GROUT SOLIDLY BETWEEN BEARING SURFACE AND BASE OR BEARING PLATE. ENSURE THAT NO VOIDS REMAIN. FINISH EXPOSED SURFACES; PROTECT GROUT AND ALLOW TO CURE.
   d. FOR PROPRIETARY GROUT MATERIALS, COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
   e. BASE PLATES MUST BE GROUTED A MINIMUM OF 72 HOURS PRIOR TO PLACING CONCRETE SLABS ON SUPPORTING STEEL STRUCTURE.
6. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACES. REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTED BY ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR USING DRIFT PINS.
7. SPACE FILLER BEAMS EQUALLY BETWEEN SUPPORTS, U.O.N.
8. DO NOT SPLICE STRUCTURAL STEEL MEMBERS EXCEPT WHERE INDICATED ON THE DRAWINGS.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. REFER TO ARCHITECTURAL DRAWINGS FOR PAINTING AND FIREPROOFING OF STRUCTURAL STEEL. DO NOT PAINT STEEL SURFACES IN CONTACT WITH CONCRETE OR FIREPROOFING.

PRE-ENGINEERED WOOD TRUSSES:

1. DESIGN AND FABRICATE ALL TIMBER IN CONFORMANCE WITH DIVISION 6 SPECIFICATIONS, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND FLORIDA BUILDING CODE, 2020 EDITION, AND THE TPI-1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
2. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS SYSTEM ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE TRUSS SYSTEM. THE TRUSS SYSTEM ENGINEER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR REVIEW TO ARCHITECT/ENGINEER FOR THE ASSEMBLAGE OF PREFABRICATED, ENGINEERED WOOD TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL BRACING, CONNECTIONS AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATION CRITERIA (TRUSS PLACEMENT PLAN), THAT, IN COMBINATION, FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO THE ROOF TRUSS SYSTEM. THE TRUSS SYSTEM DOES NOT INCLUDE WALLS, OR ANY OTHER STRUCTURAL SUPPORT SYSTEMS. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS SYSTEM ENGINEER.
3. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS DESIGN ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE INDIVIDUAL TRUSSES OF THE TRUSS SYSTEM, BUT DOES NOT DESIGN THE TRUSS SYSTEM. THE TRUSS DESIGN ENGINEER SHALL SUBMIT SHOP (PIECE) DRAWINGS AND CALCULATIONS FOR EACH DIFFERENT TRUSS OF THE TRUSS SYSTEM SUCH THAT EACH TRUSS WILL FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO EACH TRUSS AND TRUSS GIRDER THAT TOGETHER COMPRISE THE TRUSS SYSTEM. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS DESIGN ENGINEER.
4. THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER SHALL EACH BE RESPONSIBLE FOR THEIR OWN WORK. HOWEVER, THEY MAY BE THE SAME INDIVIDUAL PROVIDING TWO SEPARATE SERVICES.
5. THE LOADS, LAYOUTS AND CONNECTIONS PROVIDED ON THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE THE MINIMUMS TO BE FOLLOWED BY THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER.
6. USE STRESS-RATED TIMBER FOR ALL WOOD STRUCTURAL MEMBERS. DO NOT USE WOOD STRUCTURAL MEMBERS WITH A BENDING STRESS LESS THAN 1,200 PSI OR A MODULUS OF ELASTICITY LESS THAN 1,400,000 PSI WHEN USED AT 19% MAXIMUM MOISTURE CONTENT.
7. PRESSURE TREATMENT OF ALL STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH AWPA STANDARDS C1 AND C2, LATEST EDITIONS WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5, LATEST EDITION. ALL LUMBER TO BE KILN-DRIED AFTER TREATMENT TO A MOISTURE CONTENT NOT TO EXCEED 19% OVEN-DRY BASIS, PER STANDARD C2. ALL LUMBER 4"X4" IN. (NOMINAL SIZE) AND LARGER IN DIMENSION TO BE TREATED TO THE SOIL AND FRESH WATER RETENTION AND PENETRATION REQUIREMENTS OF STANDARD C2. ALL LUMBER LESS THAN 4"X4" (NOMINAL SIZE) TO BE TREATED TO THE ABOVE GROUND REQUIREMENTS OF STANDARD C2.
8. MINIMUM DESIGN LOADS FOR ROOF TRUSSES:

30 PSF LL TOP CHORD
25 PSF DL TOP CHORD
10 PSF DL BOTTOM CHORD
200 LB CONCENTRATED LL ON ANY SINGLE BOTTOM CHORD PANEL POINT
WIND PRESSURE BASED ON ASCE-7.

9. CD FOR WIND SHALL NOT EXCEED 1.6 FOR WOOD MEMBERS. NO STRESS INCREASE ALLOWED FOR METAL PLATES.

SOIL STATEMENT:

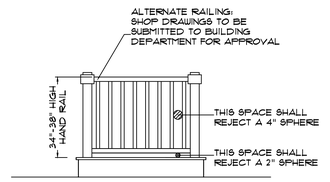
1. THE EXISTING SOIL IS ASSUMED TO HAVE A DESIGN BEARING OF 2,000 PSF. IF SOIL CONDITIONS VARY, CONTACT THE ENGINEER OF RECORD
2. ALL AUGER HOLES AND AUGER PILING SHALL BE DRILLED 3' INTO THE EXISTING PERVIOUS OOLITE ROCK
3. ALL PRECAST CONCRETE PILING SHALL BE DRIVEN TO REFUSAL

LUMBER AND FRAMING NOTES

1. FRAMING LUMBER SHALL CONFORM WITH THE PROVISIONS OF THE AMERICAN SOFTWOOD LUMBER STANDARD PS-20-(LATEST EDITION) AND EACH PIECE SHALL BEAR THE GRADE STAMP OF AN APPROVED GRADING AGENCY.
2. FRAMING LUMBER GRADES THE FOLLOWING GRADES SHALL BE THE MINIMUM ACCEPTABLE GRADES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

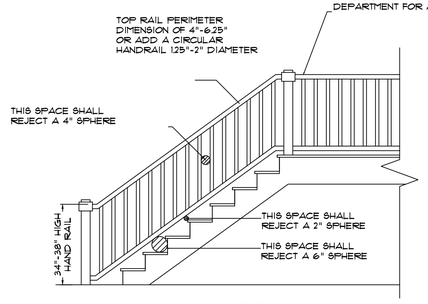
ITEM	MINIMUM GRADE
STUD ONLY:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL LIGHT FRAMING:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL JOISTS & HEADERS:	
2" TO 4" THICK 6" AND WIDER	NO. 2 SOUTHERN PINE
POSTS:	
4" X 4" AND LARGER	NO. 2 SOUTHERN PINE

3. BOLT HOLES SHALL BE 1/16" LARGER THAT THE BOLT SIZE. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.
4. STANDARD CUT WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD.
5. 5. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR OTHERWISE BE PROTECTED BY AN APPROVED SEPARATING MATERIAL. BOLTS SHALL BE PLACED 9" FROM ANY NOTCH GREATER THAN 1/2 THE WIDTH OF A MEMBER.
6. DO NOT NOTCH JOISTS, RAFTERS OR BEAMS. OBTAIN ENGINEER'S OR ARCHITECTS APPROVAL FOR ANY HOLES OR NOTCHES NOT DETAILED. HOLES THROUGH SILLS, PLATES, STUDS AND DOUBLE PLATED IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED IN THE CENTER OF THE STUD OR PLATE.
7. 2" SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS.
8. ALL NAILING SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2020 FLORIDA BUILDING CODE. NAILS SHALL BE COMMON WIRE NAILS.
9. ALL INTERIOR FRAMING SHALL BE 2" X 4" WALL STUDS @ 16" O.C.



HANDRAIL / GUARDRAIL DETAIL:

CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION



NOTE:

OPEN RISERS TO REJECT A 4" DIA SPHERE
OPEN RISERS IN THIS PACKAGE: NONE

HANDRAIL / GUARDRAIL STAIR DETAIL:

CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

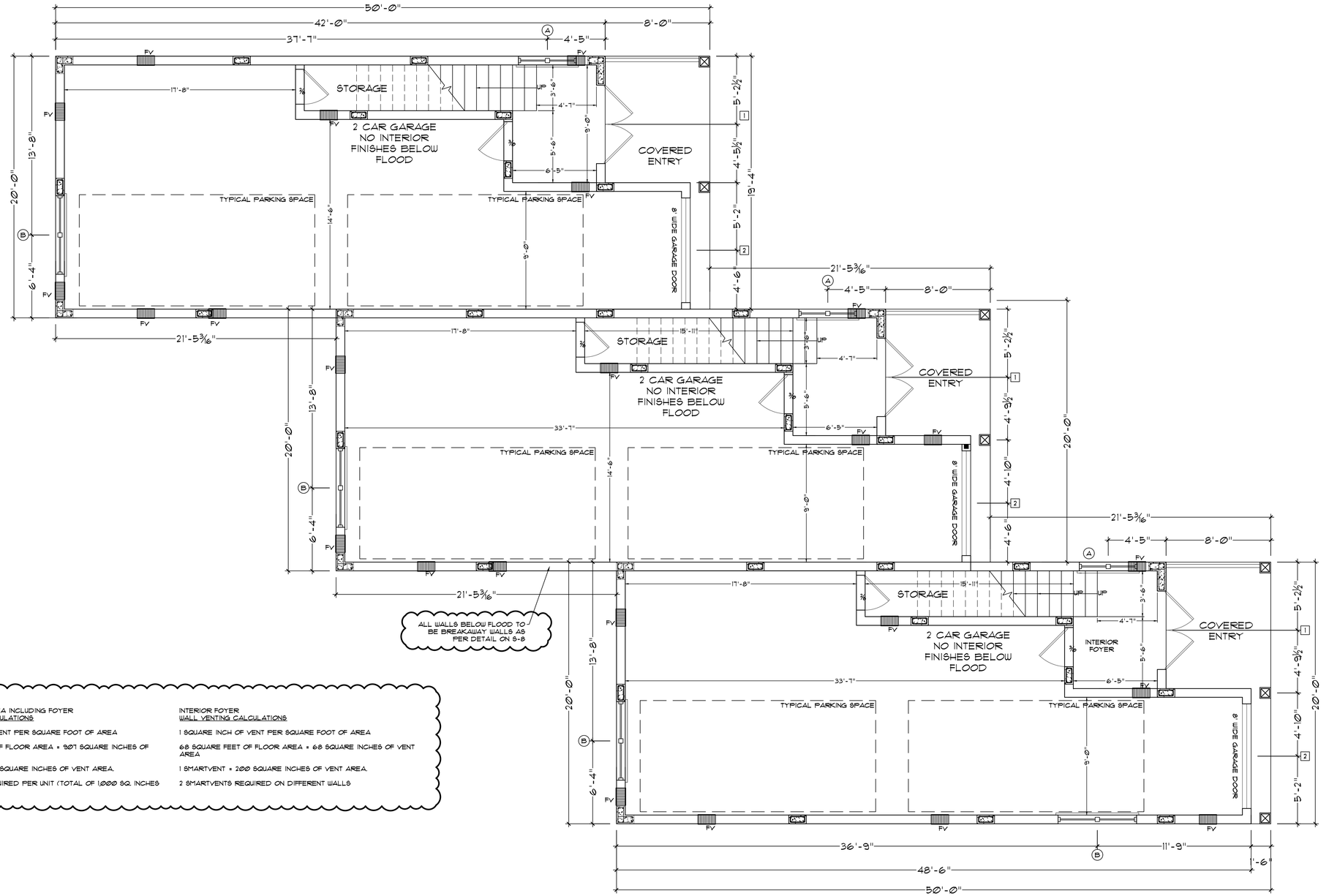
No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX D - STRUCTURAL
PROJECT: BG1SLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-9

PROJECT No: D-16-047



TOTAL GARAGE AREA INCLUDING FOYER WALL VENTING CALCULATIONS	INTERIOR FOYER WALL VENTING CALCULATIONS
1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA	1 SQUARE INCH OF VENT PER SQUARE FOOT OF AREA
907 SQUARE FEET OF FLOOR AREA = 907 SQUARE INCHES OF VENT AREA	68 SQUARE FEET OF FLOOR AREA = 68 SQUARE INCHES OF VENT AREA
1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.	1 SMARTVENT = 200 SQUARE INCHES OF VENT AREA.
5 SMARTVENTS REQUIRED PER UNIT (TOTAL OF 1,000 SQ. INCHES OF VENT AREA)	2 SMARTVENTS REQUIRED ON DIFFERENT WALLS

GROUND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENT	1/3/2022
3	VILLAGE COMMENT	2/2/2022

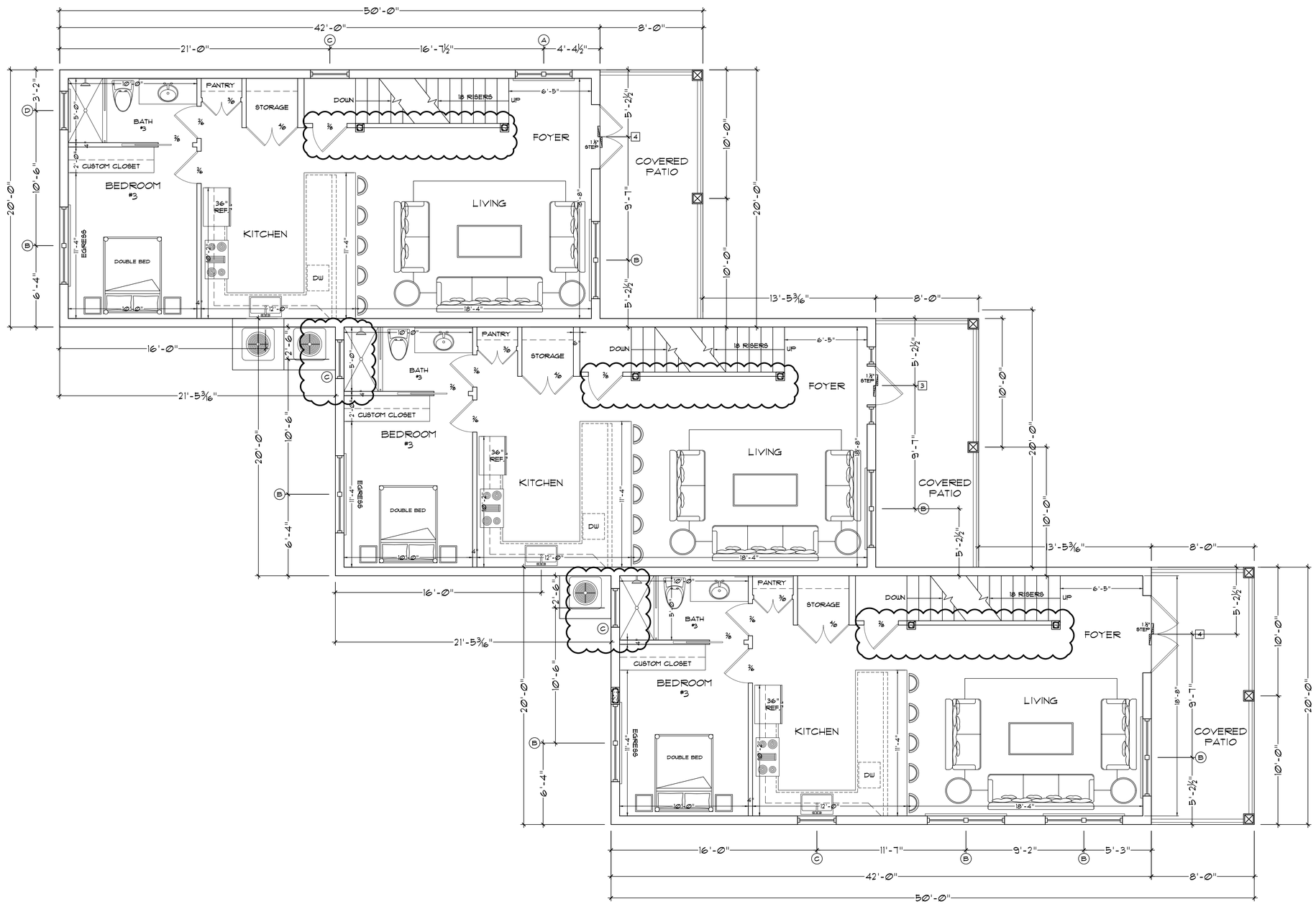
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-1

PROJECT No: D-16-047



SECOND FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

REVISION	DATE
FOR SUBMITTAL	8/31/2018
REVISION	11/28/2021
VILLAGE COMMENTS	1/3/2022
VILLAGE COMMENT	2/2/2022

NO.	REVISION
0	FOR SUBMITTAL
1	REVISION
2	VILLAGE COMMENTS
3	VILLAGE COMMENT

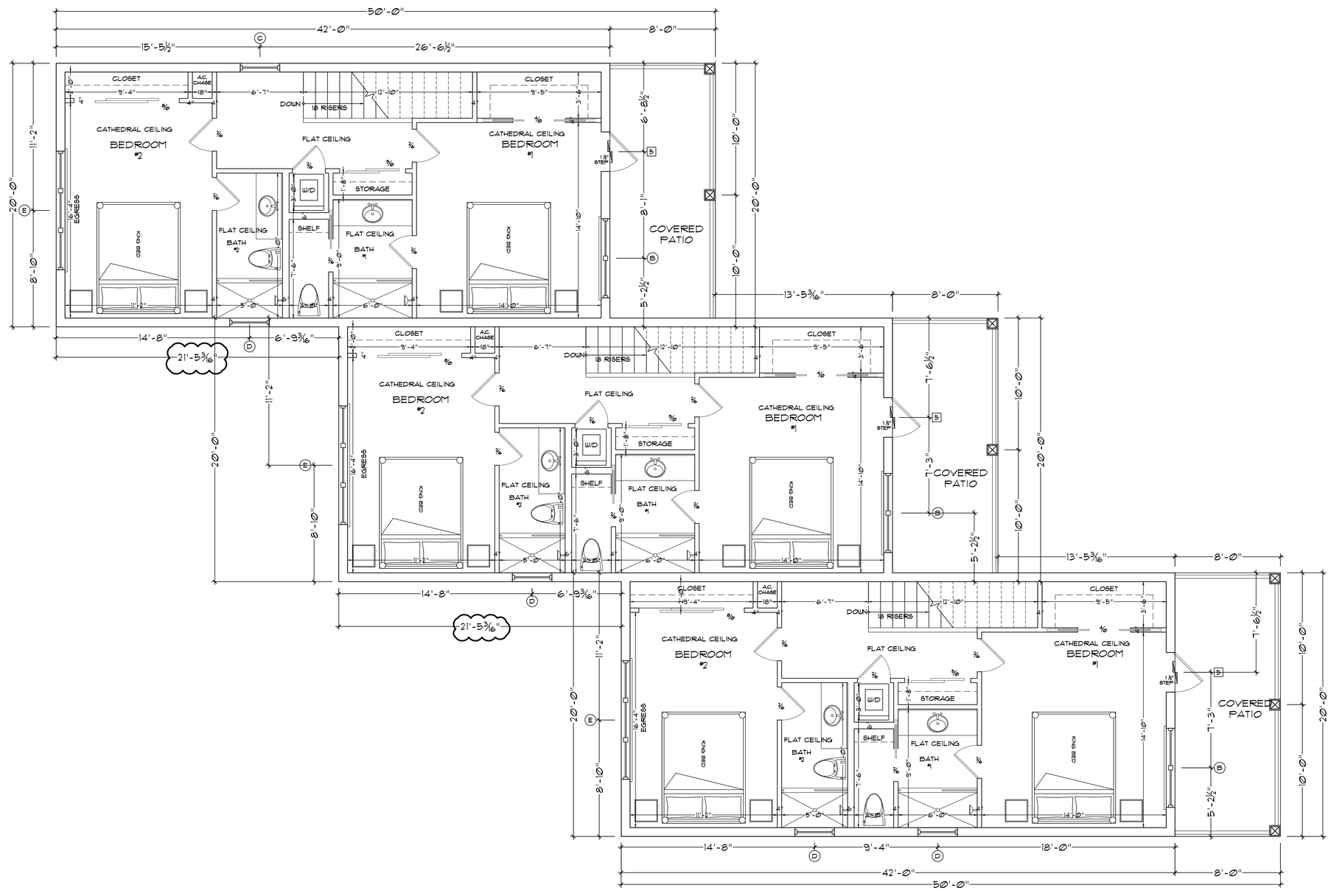
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-2

PROJECT No: D-16-047



THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - FLOOR PLANS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-3

PROJECT No: D-16-047



FRONT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX E - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-4

PROJECT No: D-16-047



REAR ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

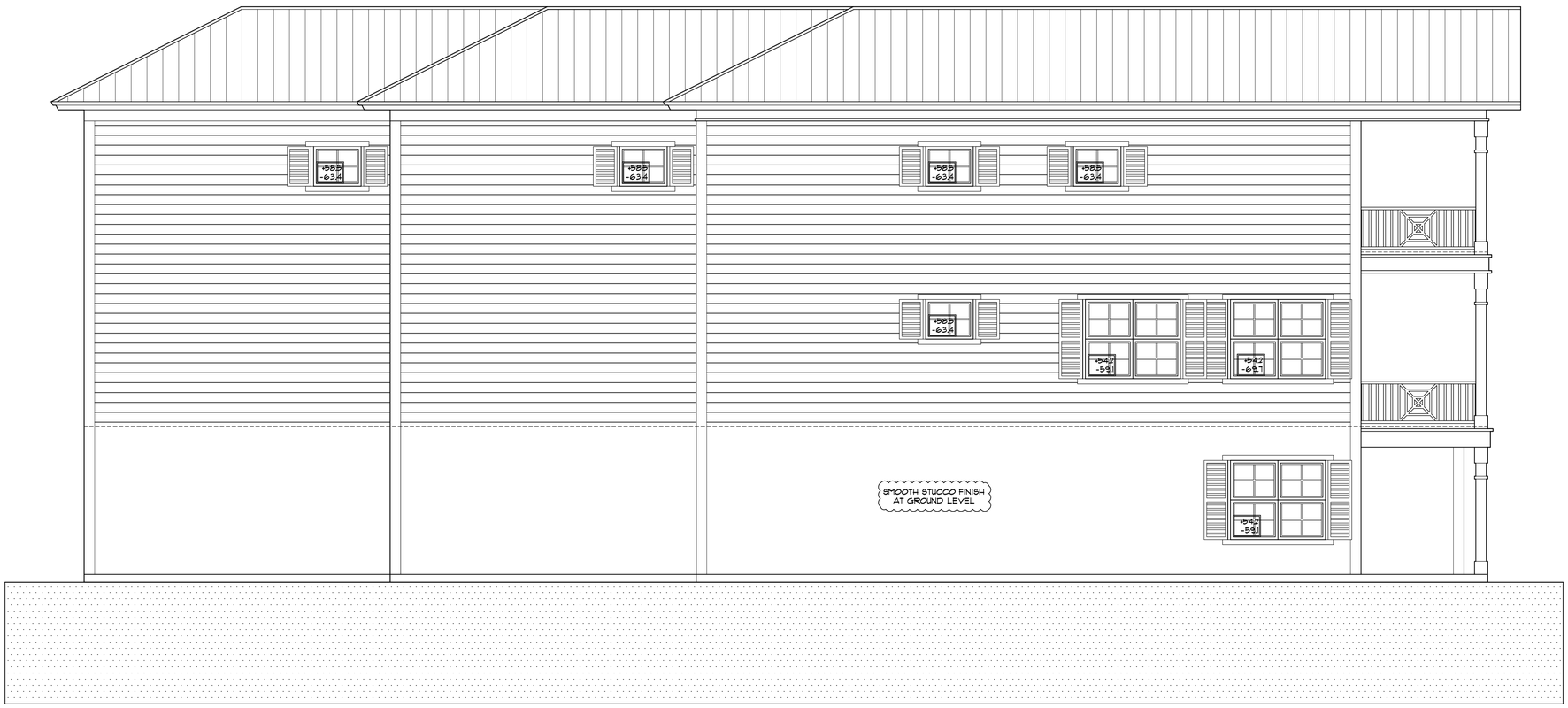
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DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX E - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-5

PROJECT No: D-16-047



LEFT ELEVATION

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

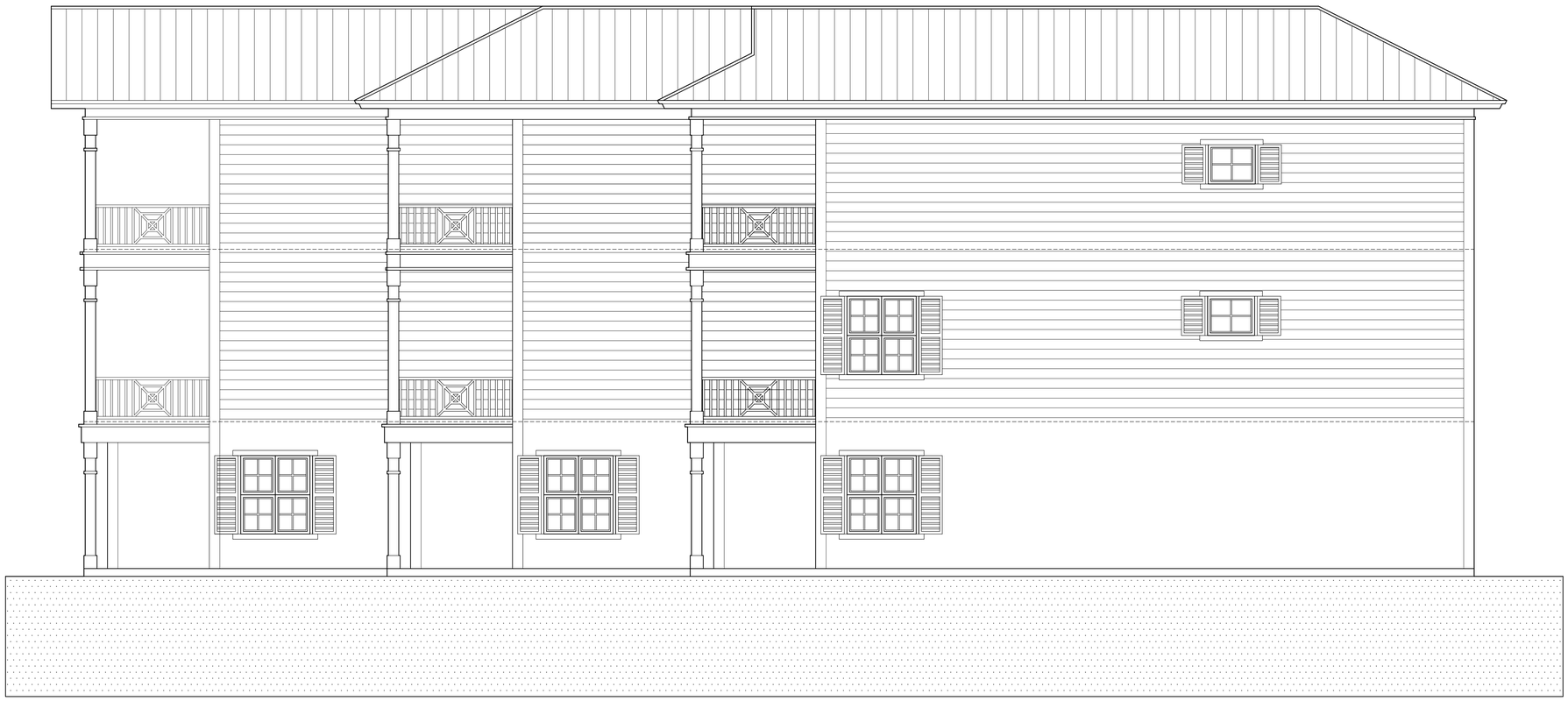
SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX E - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-6

PROJECT No: D-16-047



RIGHT ELEVATIONS

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - ELEVATIONS

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-7

PROJECT No: D-16-047

DOOR SCHEDULE

MARK	DOOR SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
1	74 1/2"	80 3/4"	PGT WINGUARD FD1011H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
2	96"	84"	CLOPAY OVERHEAD DOOR	3	HURRICANE RATED
3	38 9/16"	96"	PGT WINGUARD FD1011H FRENCH DOOR	1	FULL VIEW, WHITE ALUMINUM, RHR SWING, 1'-6" SIDELIGHT ON EACH SIDE
4	60"	96"	PGT WINGUARD FD1011H FRENCH DOOR	2	FULL VIEW, WHITE ALUMINUM, OUTSWING, RIGHT HAND ACTIVE
5	38 9/16"	80 3/4"	PGT WINGUARD FD1011H FRENCH DOOR	3	FULL VIEW, WHITE ALUMINUM, LHR SWING

WINDOW SCHEDULE

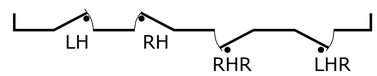
MARK	WINDOW SIZE		MANUFACTURER	QTY.	REMARKS
	WIDTH	HEIGHT			
A	PAIR 27 1/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH7000	4	MODEL H34EH
B	PAIR 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH7000	15	MODEL 24EH
C	37 3/4"	38 3/8"	PGT WINGUARD SINGLE HUNG SH7000	5	MODEL 23
D	37 3/4"	50 5/8"	PGT WINGUARD SINGLE HUNG SH7000	5	MODEL 24, FROSTED
E	TRIPLE 37 3/4"	59 1/2"	PGT WINGUARD SINGLE HUNG SH7000	3	MODEL 24EH

EGRESS WINDOW NOTE

AS DESCRIBED IN FLORIDA BUILDING CODE: ALL EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (GRADE LEVEL 5.0 SQ FT), HAVING A MINIMUM CLEAR OPENING HEIGHT OF 24 INCHES AND A NET CLEAR WIDTH OF 20 INCHES. EGRESS WINDOWS SHALL HAVE THE BOTTOM OF THE NET CLEAR OPENING NO GREATER THAN 44 INCHES AS MEASURED FROM THE FLOOR.

SWING DETERMINATION/DOOR HANDING

INSIDE ROOM, OR SECURE SIDE.



OUTSIDE, CORRIDOR,
OR NON-SECURE SIDE.

• = KEY SIDE

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	1/9/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

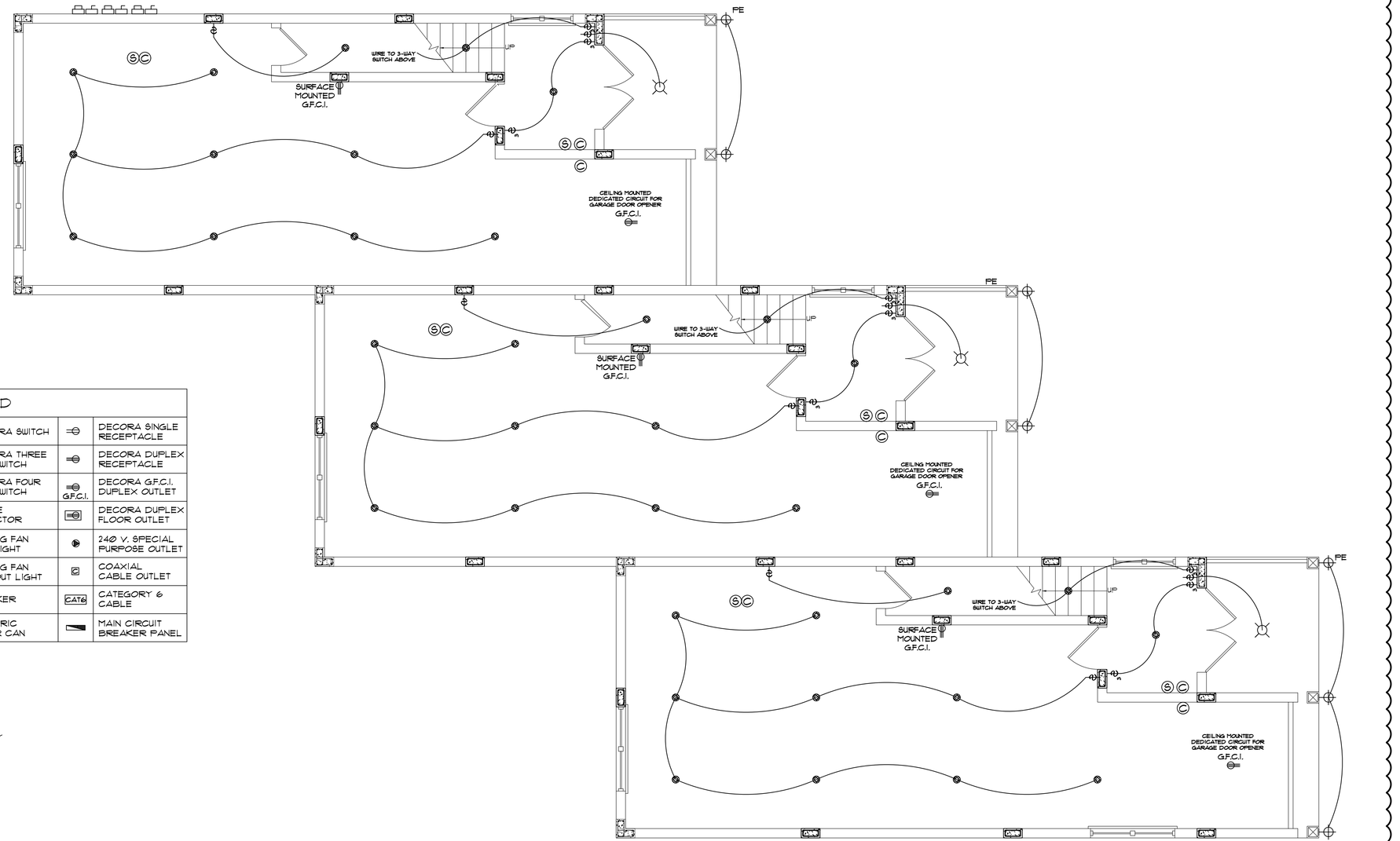
TITLE: TRIPLEX E - WINDOW/DOOR

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: A-8

PROJECT No: D-16-047

ALL 4 METERS LOCATED HERE
METERS AND DISCONNECT SWITCH MOUNTED
AT 13.1' N.G.V.D.
METERS TO BE MOUNTED TO STRUCTURAL
BEAM NOT TO BREAKAWAY WALL



ELECTRICAL LEGEND

	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	T	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE	SP	SPEAKER	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

NOTE:

1. ALL OUTLETS AND SWITCHES TO BE MOUNTED ABOVE BASE FLOOD (AE-10) - ELEVATION VARIES PER UNIT LOCATION. COORDINATE WITH SURVEYOR PRIOR TO INSTALLATION OF ANY GROUND FLOOR ELECTRICAL

GROUND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENTS	1/9/2022
2	VILLAGE COMMENT	2/2/2022

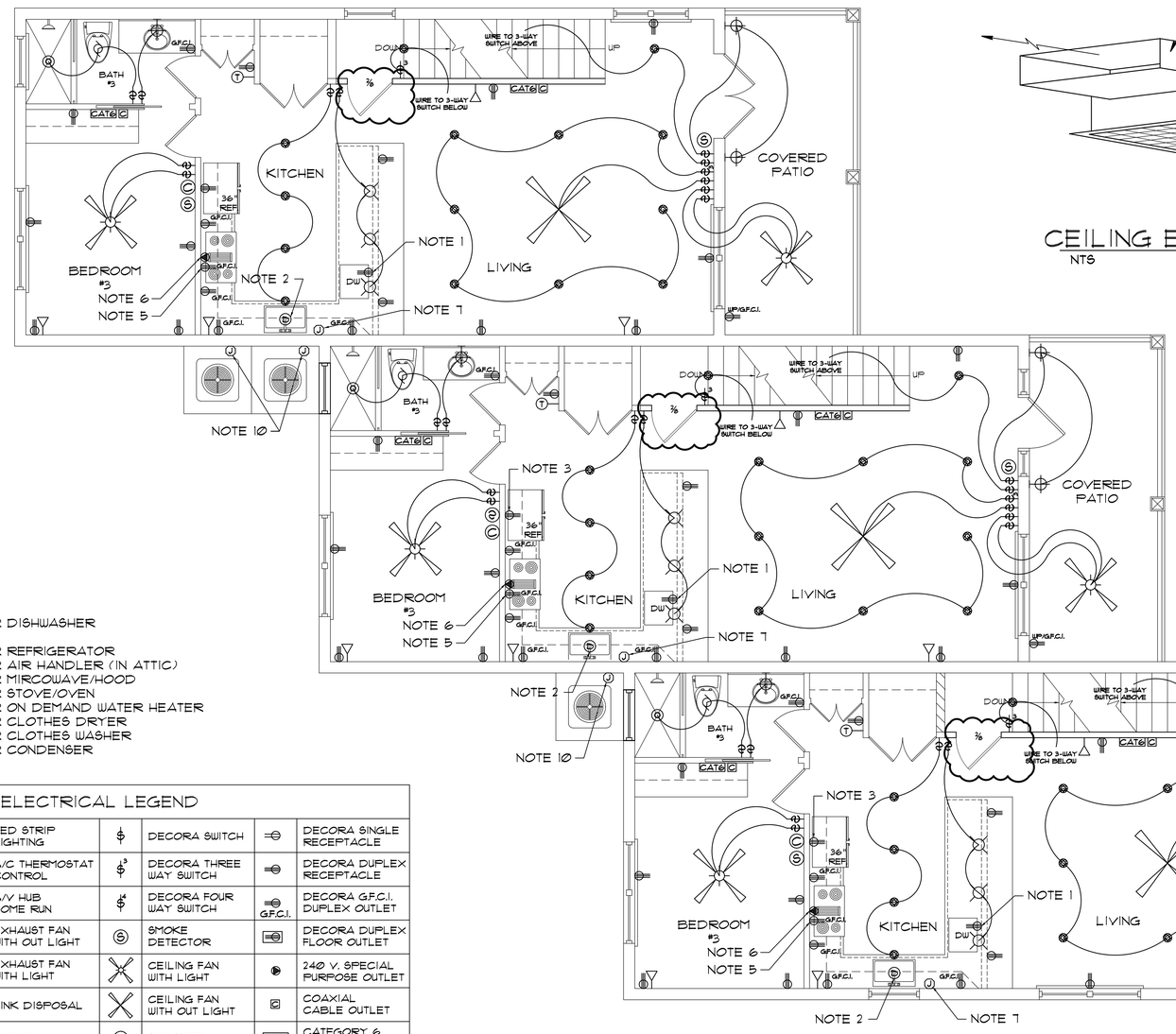
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

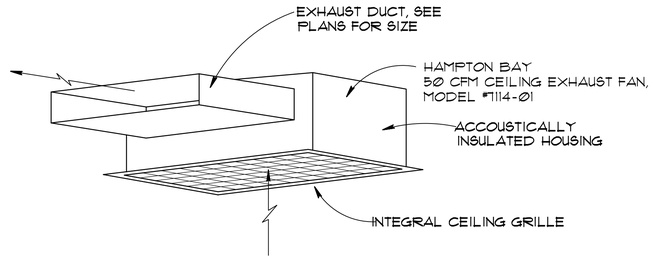
TITLE: TRIPLEX E - ELECTRICAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-1

PROJECT No: D-16-047





CEILING EXHAUST FAN DETAIL

NTS

NOTES: USE PROGRAMMABLE THERMOSTAT.

ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER

ELECTRICAL LEGEND

	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING	$	DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	T	A/C THERMOSTAT CONTROL	$3	DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN	$4	DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	L.E.D. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	D	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE	SP	SPEAKER	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

SECOND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	2/2/2022

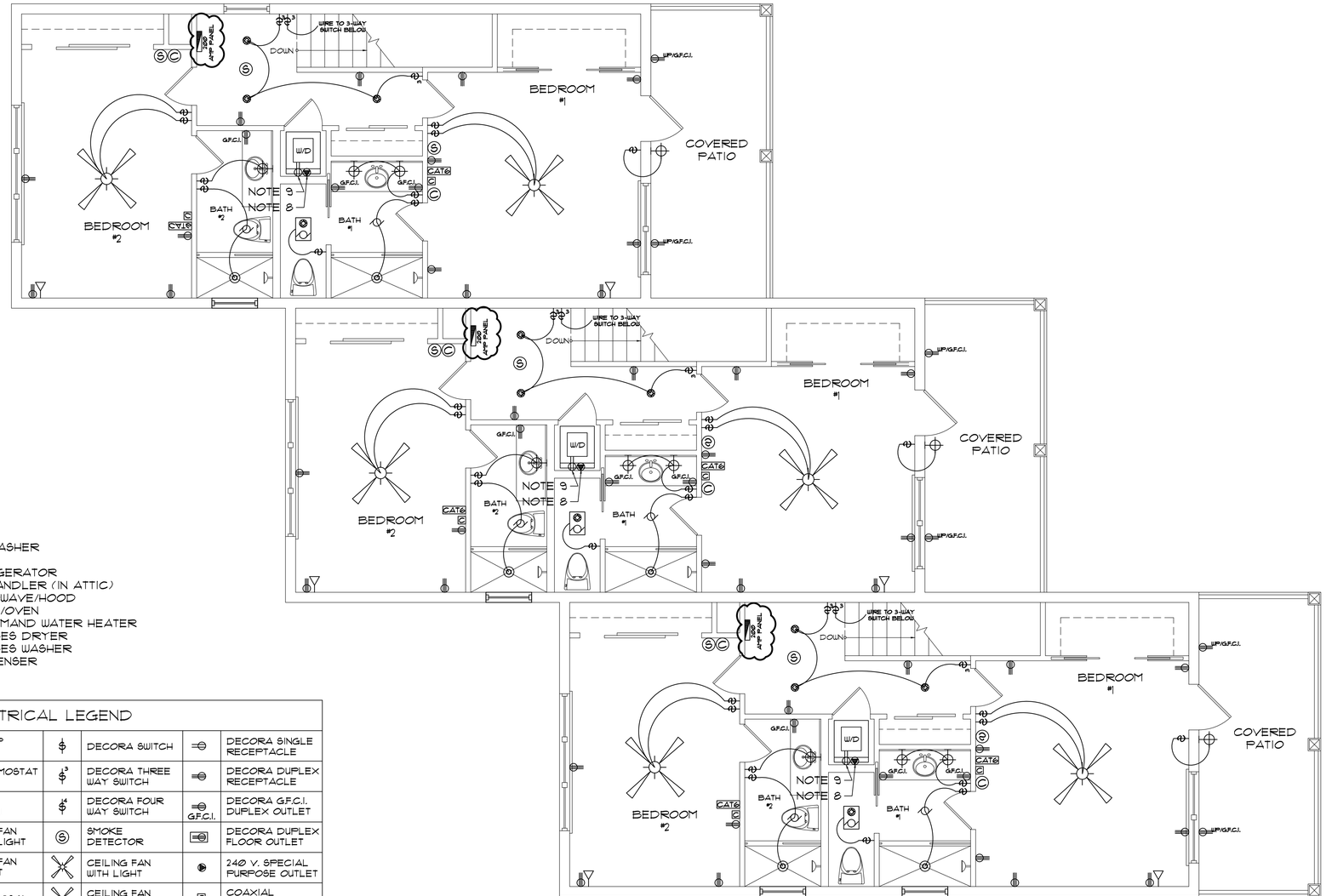
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - ELECTRICAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-2

PROJECT No: D-16-047



ELECTRICAL CIRCUIT NOTES:

1. DEDICATED CIRCUIT FOR DISHWASHER
2. PROVIDE AIR SWITCH
3. DEDICATED CIRCUIT FOR REFRIGERATOR
4. DEDICATED CIRCUIT FOR AIR HANDLER (IN ATTIC)
5. DEDICATED CIRCUIT FOR MIRCOWAVE/HOOD
6. DEDICATED CIRCUIT FOR STOVE/OVEN
7. DEDICATED CIRCUIT FOR ON DEMAND WATER HEATER
8. DEDICATED CIRCUIT FOR CLOTHES DRYER
9. DEDICATED CIRCUIT FOR CLOTHES WASHER
10. DEDICATED CIRCUIT FOR CONDENSER

ELECTRICAL LEGEND

	CEILING MOUNTED FIXTURE		LED STRIP LIGHTING		DECORA SWITCH		DECORA SINGLE RECEPTACLE
	6" RECESSED LIGHTING	T	A/C THERMOSTAT CONTROL		DECORA THREE WAY SWITCH		DECORA DUPLEX RECEPTACLE
	4" RECESSED LIGHTING		A/V HUB HOME RUN		DECORA FOUR WAY SWITCH	G.F.C.I.	DECORA G.F.C.I. DUPLEX OUTLET
	LED. RECESSED DIRECTIONAL		EXHAUST FAN WITH OUT LIGHT	S	SMOKE DETECTOR		DECORA DUPLEX FLOOR OUTLET
	WALL MOUNTED FIXTURE		EXHAUST FAN WITH LIGHT		CEILING FAN WITH LIGHT		240 V. SPECIAL PURPOSE OUTLET
	EXTERIOR FLOOD LIGHTS	P	SINK DISPOSAL		CEILING FAN WITH OUT LIGHT		COAXIAL CABLE OUTLET
C	CO DETECTOR		PHONE	SP	SPEAKER	CAT6	CATEGORY 6 CABLE
	36" 2 BULB FLUORESCENT	J	JUNCTION BOX		ELECTRIC METER CAN		MAIN CIRCUIT BREAKER PANEL

THIRD FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENTS	1/3/2022

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PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-3

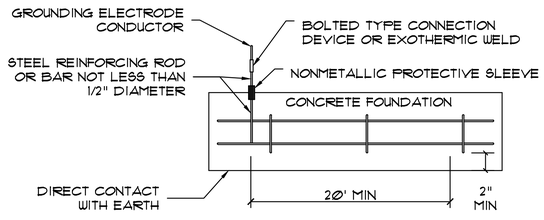
PROJECT No: D-16-047

ELECTRICAL NOTES:

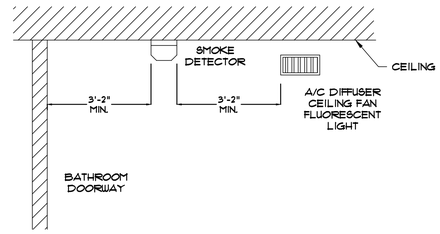
1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE N.E.C. AND LOCAL BUILDING CODES HAVING JURISDICTION. ALL MATERIALS SHALL BEAR UNDERWRITERS LABORATORY LABEL OR BE U.L. LISTED
2. WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICES.
3. ALL EXCAVATING AND BACKFILLING REQUIRED FOR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR
4. CONNECTIONS TO EQUIPMENT, ELECTRICAL SUBCONTRACTOR SHALL VERIFY NAMEPLATE DATA OF A/C EQUIPMENT, WATER HEATERS AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVER-CURRENT PROTECTION PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING. THE ELECTRICAL SUBCONTRACTOR SHALL MAKE THE ELECTRICAL CONNECTION TO ALL EQUIPMENT REQUIRING CURRENT, ALL CONTROL WIRING SHALL BE CARRIED OUT BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE MECHANICAL SUBCONTRACTORS
5. OVERHEAD ELECTRIC CONDUCTOR CLEARANCES, HORIZONTAL OR VERTICAL SHALL BE MAINTAINED
6. ALL WIRING CONDUCTORS SHALL BE COPPER IN E.N.T. CONDUIT
7. BATHROOM, GARAGE, AND EXTERIOR RECEPTACLES SHALL BE EQUIPPED WITH GROUND FAULT INTERRUPTERS
8. ELECTRICAL INSTALLATION DESIGN IS IN COMPLIANCE AS SET FORTH BY THE STATE OF FLORIDA STATUTES MODEL ENERGY EFFICIENCY CODES
9. SMOKE DETECTORS SHALL BE HARD WIRED (110 VOLT) TO A NON-SWITCHABLE KITCHEN OR BATHROOM LIGHTING CIRCUIT AND SHALL NOT BE CONNECTED ONTO THE LOAD SIDE OF A GROUND FAULT INTERRUPTER
10. ALL PANELS SHALL BE SQUARE D OR EQUAL
11. FURNISH AND INSTALL UNDERGROUND RACEWAYS FOR POWER COMPANY SERVICE AND TELEPHONE COMPANY SERVICE AS PER UTILITY COMPANY SPECIFICATIONS, AND COORDINATE THE EXACT ROUTING OF THESE RACEWAYS WITH THE UTILITY
12. VERIFY EXACT LOCATION OF ELECTRICAL OUTLETS AND LIGHTS PRIOR TO EXECUTION OF ROUGH-IN WORK
13. ALL RACEWAYS AND NON-CURRENT CARRY METAL ENCLOSURES SHALL BE MECHANICALLY AND ELECTRICALLY GROUNDED
14. ALL RACEWAYS AND OUTLETS IN FINISHED AREAS SHALL BE MOUNTED AND SUPPORTED
15. ALL OUTLETS IN FINISHED AREAS SHALL BE MOUNTED FLUSH WITH FINISHED WALLS
16. ALL WORK SHALL BE RIGIDLY MOUNTED AND SUPPORTED
17. ELECTRICAL OUTLETS (RECEPTACLES AND LIGHTING) BELOW THE BASE FLOOD ELEVATION SHALL BE INSTALLED AT THE HIGHEST PERMITTED ELEVATION AND SHALL BE INSTALLED ON SEPARATE CIRCUIT FROM THOSE IN HABITABLE AREAS
18. NO APPLIANCE OUTLETS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
19. A/C COMPRESSORS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
20. MAIN CIRCUIT BREAKER PANELS SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION
21. ALL WATER HEATERS SHALL BE MECHANICALLY GROUNDED

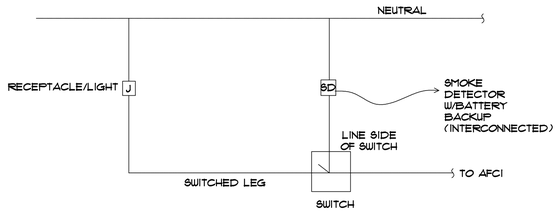
DEFINITION -NFPA 70 (2014 Edition)

(c) CONCRETE ENCASED ELECTRODE. AN ELECTRODE ENCASED BY AT LEAST 2" (50.8mm) OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET (6.1m) OF ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2" (12.7mm) DIAMETER, OR CONSISTING OF AT LEAST 20 FEET (6.1M) OF BARE COPPER CONDUCTOR NOT SMALLER THAN No.4.



NOTE: PER DETAIL THAT CONCRETE ENCASED GROUNDING ELECTRODE EXTENDS OUT OF THE FOOTER FOR CONNECTION TO GROUNDING ELECTRODE CONDUCTOR.





SMOKE DETECTOR DETAIL

N.T.S.

NOTE: PROVIDE ARC FAULT PROTECTION FOR ALL OUTLETS PER N.E.C. 2014

WHERE 120 V. SMOKE DETECTORS ARE INSTALLED IN RESIDENTIAL OCCUPANCIES THEY SHALL BE INSTALLED AHEAD OF ALL SWITCHES AND SHALL BE CONNECTED TO BEDROOM AFCI CIRCUITS. SMOKE DETECTORS SHALL COMPLY WITH THE REQUIREMENTS OF THE F.B.C. 2014 ED

LOAD CALCULATION (PER UNIT)

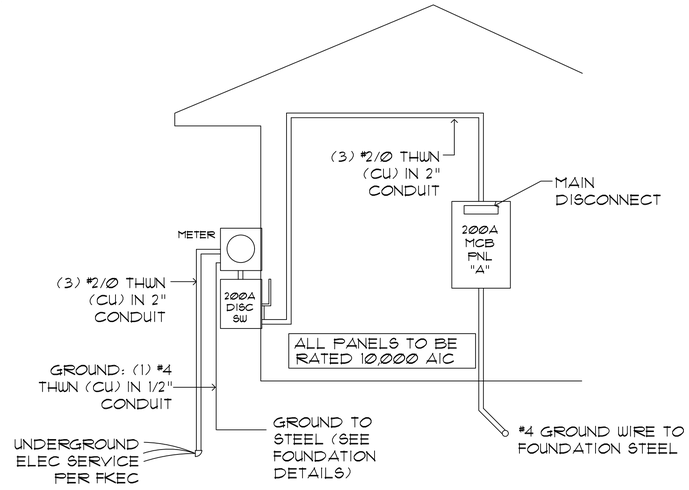
1,680 S.F. OF LIVING AREA x .003	=	5.0 KW
SUBTOTAL	=	54.0 K
FIRST 10 KW @ 100%	=	10.0
44.0 KW @ 40%	=	17.6
TOTAL DEMAND FACTOR	=	27.6
A/C LOAD	=	7.5
TOTAL	=	35.1
35.1 KW / 230 VOLTS	=	152.7 AMPS

** USE 200 AMP SERVICE PER UNIT **

PANEL "A" — 120/240V-1PH-3W — 200A-MLO

CKT	DESCRIPT	C.B.	POLE	WIRE	LOAD	LOAD	WIRE	POLE	C.B.	DESCRIPT	CKT
1	LIGHTS/FANS	20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	RECEPT	2 (c)
3		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		4
5		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		6
7		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		8
9		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	SMALL APP	10
11		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	SMALL APP	12
13		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	BATH GFI REC	14
15		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		16
17		20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20		18
19	REFRIGERATOR	20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	DISPOSAL	20
21	DISH WASHER	20	1	#12 IN ½" CONDUIT			#8 IN ¾" CONDUIT	2	40	WATER HEATER	22
23	A/C HANDLER #1	40	2	#8 IN ¾" CONDUIT							24
25							#6 IN ¾" CONDUIT	2	60	A/C COMP #1	26
27	WASHER	20	1	#12 IN ½" CONDUIT							28
29	CLOTHES DRYER	40	2	#8 IN ¾" CONDUIT			#12 IN ½" CONDUIT	1	20	MICROWAVE	30
31							#6 IN ¾" CONDUIT	2	60	OVEN	32
33 (c)	RECEPT	20	1	#12 IN ½" CONDUIT							34
35		20	1	#12 IN ½" CONDUIT							36
37		20	1	#12 IN ½" CONDUIT							38
39		20	1	#12 IN ½" CONDUIT							40
41	OUTSIDE REC	20	1	#12 IN ½" CONDUIT			#12 IN ½" CONDUIT	1	20	SMOKE	42
TOTAL											

(a) AFCI C/B
(b) ON TIMER
(c) GFI



ELECTRICAL RISER DIAGRAM

N.T.S.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

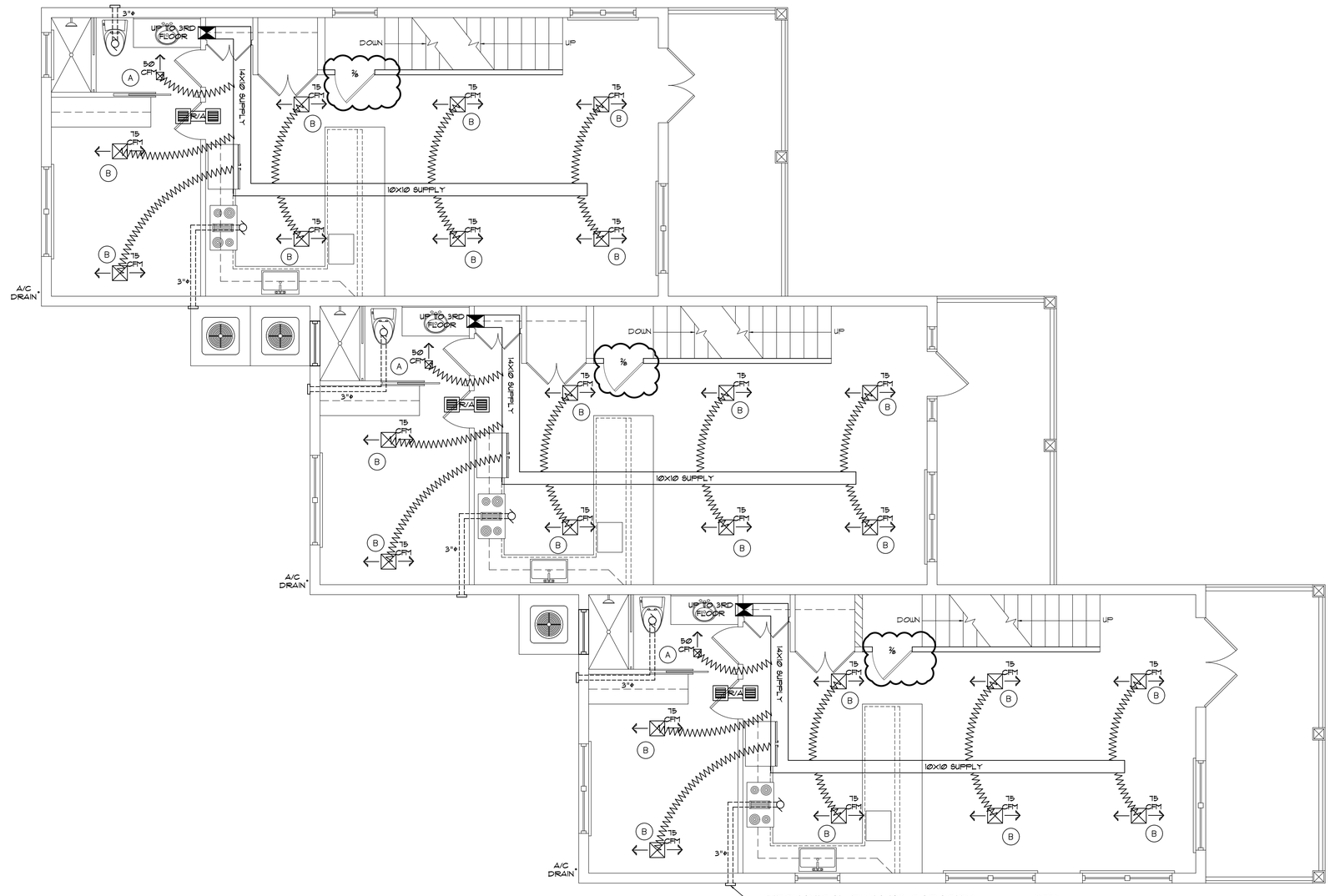
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DWG BY: D.G.O.
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TITLE: TRIPLEX E - ELECTRICAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: E-4

PROJECT No: D-16-047



MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER AND CORROSION RESISTANT SCREEN. FBC R-1506.2 MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)

NOTES:
USE PROGRAMMABLE THERMOSTAT.
CONTRACTOR SHALL BE VERIFY THE DISTANCE BETWEEN THE INDOOR AND OUTDOOR UNITS AND TO CHECK THE SIZES OF THE REFRIGERANT LINES WITH MANUFACTURER

SECOND FLOOR

SCALE @ 1/4" = 1'-0"

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	VILLAGE COMMENT	2/2/2022

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PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-1

PROJECT No: D-16-047

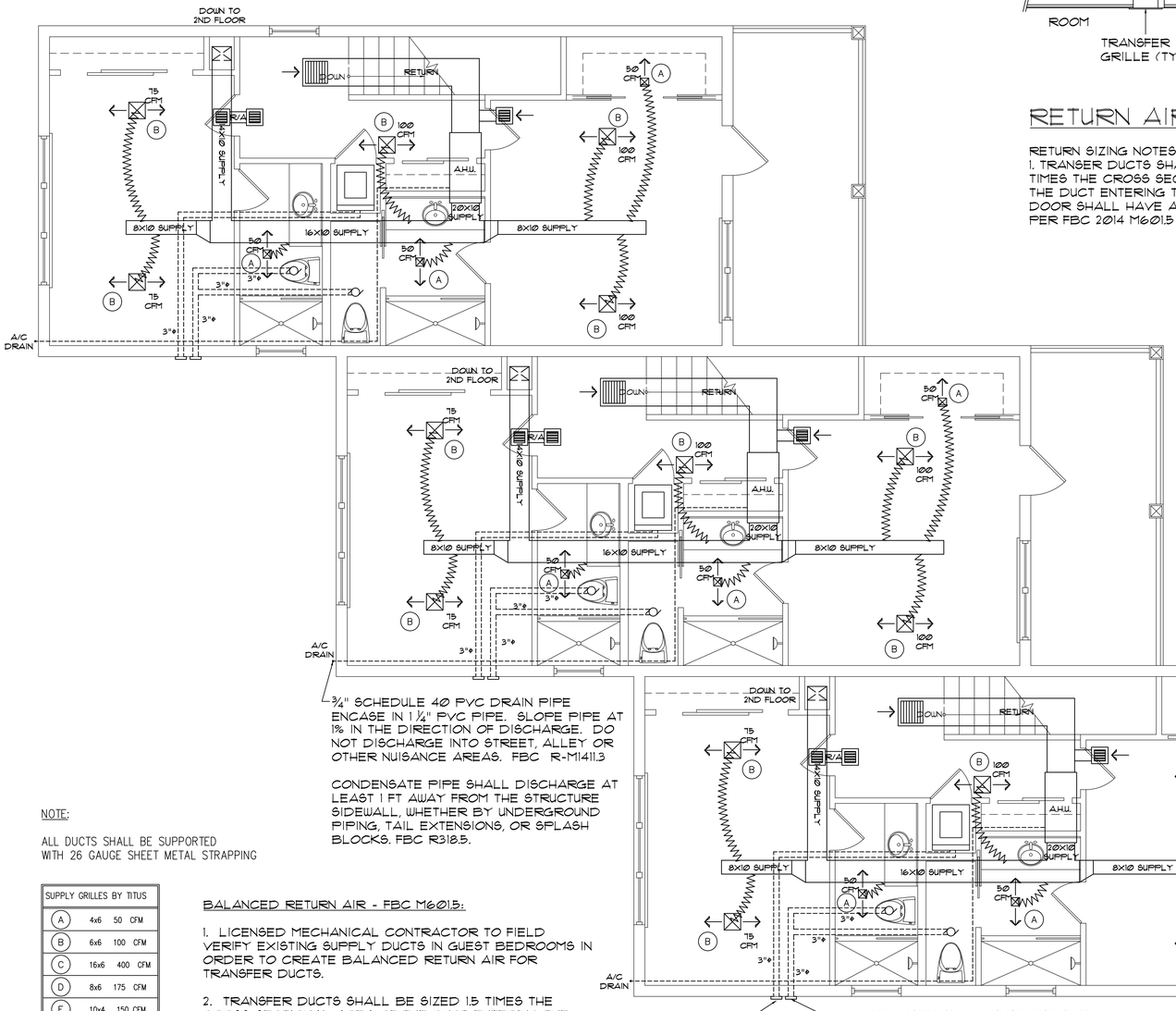
MECHANICAL NOTES:

H.V.A.C. PLAN IS CONCEPTUAL ONLY.
MECHANICAL CONTRACTOR TO DETERMINE EXACT DUCT AND REGISTER SIZE.

1. ALL REFRIGERANT PIPING FOR CONDENSERS. TO BE UNDER GROUND SLAB ENCASED IN 4" SCHEDULE 40 PVC.
2. REFRIGERANT LINES SHALL BE LEFT WITH 150 PSI NITROGEN AFTER SLAB ROUGH-IN AND RE-PRESSURIZED AFTER EXTENDING UP THROUGH BUILDING.
3. AT NO TIME SHALL ANY REFRIGERANT PIPING BE LEFT UN-PRESSURIZED.
4. NO JOINTS, USE 100' ROLLS FOR UNDER SLAB DRAINS.
5. A SEPARATE CONDENSATE DRAIN SHALL BE RUN FOR EACH SYSTEM. ALL CONDENSATE DRAIN PIPING UNDER GROUND SLAB SHALL BE IN 1 ¼" PVC.
6. OUTSIDE MOUNTED EQUIPMENT & SUPPORTS SHALL BE INSTALLED TO RESIST WIND PRESSURES AT VELOCITIES FOR RISK CATEGORY 2: 175 MPH.
7. CONTRACTOR SHALL UTILIZE NON-FERROUS (ALUMINUM) MATERIALS AND PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY LUVUTA, ADVANCOAT (ENSEL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
8. MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER AND CORROSION RESISTANT SCREEN.
9. PIPE AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINE WITH ¾" TUBULAR PIPE INSULATION WITH MIN. R-3 VALUE AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM WHEN TESTED IN ACCORDANCE WITH ASTME 96. FBC R-M1411.5
10. ¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3
11. CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.
12. A.C. CLOSET MUST MEET MINIMUM WORKING SPACE CLEARANCES. M603.1.1: AIR HANDLERS WITHIN COMPARTMENTS SHALL HAVE A MIN. WORKING SPACE CLEARANCE OF 4" ALONG SIDES OF AN AIR HANDLER.

MECHANICAL EQUIPMENT SCHEDULE

UNIT DESIGNATION	UNIT 1	UNIT 2	UNIT 3
CONDENSER	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED	TRANE XL20I VARIABLE SPEED
MODEL #	4TTV0060A	4TTV0060A	4TTV0060A
SEER	19	19	19
REFRIGERANT	R410A	R410A	R410A
Location	EXTERIOR	EXTERIOR	EXTERIOR
Nominal Tons	5.0	5.0	5.0
Nominal Supply Air CFM	2,000	2,000	2,000
DIMENSIONS	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.	54" H. x 37" W. x 34" D.
AIR HANDLER	TRANE M SERIES	TRANE M SERIES	TRANE M SERIES
MODEL #	TEM40C60	TEM40C60	TEM40C60
NOMINAL COOLING CAPACITY	60,000	60,000	60,000
DIMENSIONS	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.	51" H. x 23.5" W. x 21" D.

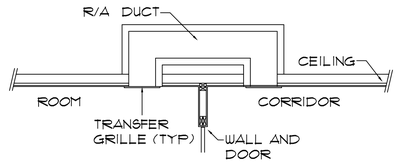


¾" SCHEDULE 40 PVC DRAIN PIPE ENCASE IN 1 ¼" PVC PIPE. SLOPE PIPE AT 1% IN THE DIRECTION OF DISCHARGE. DO NOT DISCHARGE INTO STREET, ALLEY OR OTHER NUISANCE AREAS. FBC R-M1411.3

CONDENSATE PIPE SHALL DISCHARGE AT LEAST 1 FT AWAY FROM THE STRUCTURE SIDEWALL, WHETHER BY UNDERGROUND PIPING, TAIL EXTENSIONS, OR SPLASH BLOCKS. FBC R318.5.

DRYER DUCT. EXHAUSTED DIRECTLY OUTDOORS, OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER AND CORROSION RESISTANT SCREEN. FBC R-1506.2 (TYP)

MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT. EXHAUSTED DIRECTLY OUTDOORS OPENING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER AND CORROSION RESISTANT SCREEN. FBC R-1506.2 MIN. OF 3' FROM ANY OPERABLE OPENING (TYP)



RETURN AIR TRANSFER DUCT

RETURN SIZING NOTES:
1. TRANSER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5

NOTE:

ALL DUCTS SHALL BE SUPPORTED WITH 26 GAUGE SHEET METAL STRAPPING

SUPPLY GRILLES BY TITUS			
A	4x6	50	CFM
B	6x6	100	CFM
C	16x6	400	CFM
D	8x6	175	CFM
E	10x4	150	CFM
F	8x10	375	CFM
G	8x12	425	CFM
H	14x10	750	CFM

BALANCED RETURN AIR - FBC M601.5:

1. LICENSED MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING SUPPLY DUCTS IN GUEST BEDROOMS IN ORDER TO CREATE BALANCED RETURN AIR FOR TRANSFER DUCTS.
2. TRANSFER DUCTS SHALL BE SIZED 1.5 TIMES THE CROSS SECTIONAL AREA OF THE DUCT ENTERING THE ROOM, AND THE DOOR SHALL HAVE A 1" UNDERCUT AS PER FBC 2014 M601.5
3. TRANSFER GRILLS SHALL USE 50 SQUARE INCHES OF GRILLE AREA, TO 100 CFM OF SUPPLY AIR FOR SIZING THROUGH THE WALL TRANSFER GRILLES AND USING AND RESTRICTED 1" UNDERCUTTING OF DOORS TO ACHIEVE PROPER AIR BALANCE.

THIRD FLOOR

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
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P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

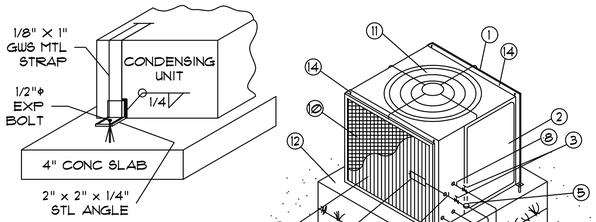
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TIE-DOWN

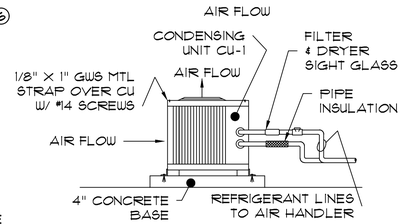
1. CONDENSING UNIT
2. COMPRESSOR ACCESS PANEL
3. BACK - SEATED REFRIGERANT VALVE
4. REFRIGERANT SUCTION LINE WITH INSULATION
5. SIGHT GLASS WITH MOISTURE INDICATOR
6. REFRIGERANT LIQUID LINE
7. CONDUIT - POWER AND CONTROL.
8. REFRIGERANT GAUGE CONNECTION
9. CONDENSER COIL
10. COIL GUARD
11. FAN GUARD
12. CONCRETE PAD IF REQUIRED
13. REFRIGERANT SUCTION LINE FLEX-CONNECTOR
14. 1/8" X 1" GALVANIZED METAL STRAP OVER CONDENSER SHROUD/FAN COWLING ATTACHED TO CONCRETE BASE W/MIN 1/2" ANCHOR/EXPANSION BOLTS 3" LONG ALL FOUR SIDES, W/MIN (4) #14 SCREWS W/GASKETED WASHERS TO TOP OF CONDENSER SHROUD/FAN COWLING THROUGH STRAPS.

STRAP TIE-DOWN SEE DETAIL

STRAPS OVER COWLING/SHROUD DESIGN:
UPLIFT: TA 4'x3' = 12 SF
UPLIFT: 57.7 PSF X 12 = 692.4 LBS
USE 1/8" GWS MTL STRAP 1" WIDE OVER CONDENSING UNIT AND ATTACH TO SLAB W/ (4) ANCHORS:
ANCHORS 1/2" = 4/692.4 = 173.1 LBS EACH
ANCHOR PULL-OUT 3" = 1,180 LBS fE OK.
ALTERNATIVE:
USE (4) 3/8" X 1" "TAPPER" TAPCONS INTO CONC SLAB: 880 LBS EACH fE 173.1 = OK.

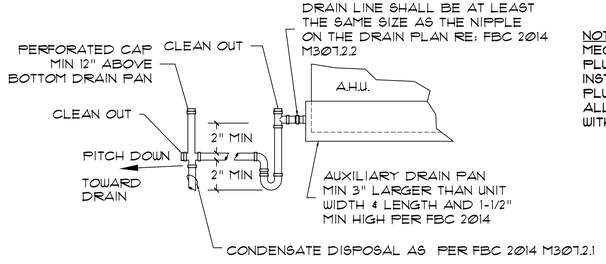
THE STRAPS ARE ALSO ADEQUATE FOR RESISTING OF OVERTURNING OF THE A/C CONDENSER WHEN USED WITH STRAPS AND ANGLES ATTACHMENTS, FOR SIDE WIND LOADS OF -37.9 PSF.

CONDENSING UNIT TO BE ATTACHED TO SLAB WITH 1/4"x2"x2" ANGLES EACH CORNER AS INDICATED IN DETAILS (STRAPS TO BE PROVIDED IN ADDITION TO ANGLES).



TYP ELEVATION

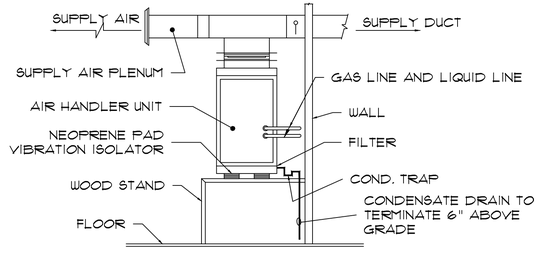
CONDENSING UNIT DETAILS



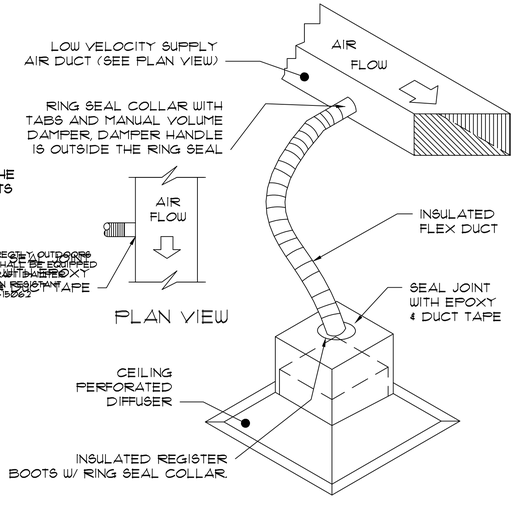
DRAIN TRAP DETAIL

NOTE:
MECHANICAL CONTRACTOR WILL COORDINATE WITH PLUMBING CONTRACTOR CONDENSATE SYSTEM INSTALLATION (TO BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR)
ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014

NOTES: A/C CONDENSING UNIT TO BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014 , THE STRAP TIE-DOWNS AS INDICATED HEREIN IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE CODE AND MEETS THE WIND LOAD REQUIREMENTS IN ACCORDANCE WITH ASCE 7-10.



AHU MOUNTING DETAIL



FLEXIBLE DUCT CONNECTION DETAIL

AIR CONDITIONING GENERAL NOTES

1. WORK INCLUDED: PROVIDING HEAT, VENTILATION, AND AIR CONDITIONING SYSTEMS WHERE SHOWN ON THE DRAWING, AS SPECIFIED HEREIN, AND AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION INCLUDING, BUT NOT NECESSARILY LIMITED TO
   - AIR CONDITIONING SUPPLY AND RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, AND REGISTERS.
   - AIR CONDITIONING UNITS, PIPING AND COMPONENTS, OPERATING AND SAFETY CONTROLS, BLOWERS, MOTORS, FILTERS, AND RELATED ITEM.
   - EXHAUST SYSTEMS INCLUDING TOILET FANS, MOTORS, DUCTWORK, GRILLES, REGISTERS, CONTROLS, AND REGISTERS.
   - TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING.
   - THERMAL INSULATION OF DUCTS AND PIPING.

2. DUCTWORK IN ATTICS SPACE AND ROOF WITH LESS THAN R-12 INSULATION SHALL BE 1-1/2" THICK FIBERGLASS WITH VAPOR BARRIER. DUCT WORK BETWEEN FLOORS, ENCLOSED ATTACHED GARAGES, UNCONDITIONED BASEMENT, UNCONDITIONED INTERIOR SPACES, AND ROOF WITH MIN R-12 INSULATION SHALL BE R-4.3 KNAUF AIR DUCT FIBERGLASS TYPE EI800 WITH VAPOR BARRIER. UNLESS OTHERWISE SPECIFIED DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ACCORDING TO "ASHRAE" AND "NAIMA" STANDARDS

   ALL DUCTWORK SHALL BE 1 ½" FIBERGLASS AND INSTALLED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND ACCORDING TO ASHRAE AND SMACNA STANDARDS, AND FLORIDA BUILDING CODE 2014 ENERGY FOR BUILDING CONSTRUCTION. DUCT DIMENSIONS ARE IN INCHES AND CORRESPOND TO INSIDE DIMENSIONS, WITH x HEIGHT. DUCT SYSTEM SHALL COMPLY WITH "NFPA" STANDARD No. 90A AND/FR 90B DUCTWORK AND COMPONENTS S SHALL BE CLASS 1 MATERIALS IN ACCORDANCE WITH U.L. 181 TESTS. FIBERGLASS DUCT SYSTEM STRAIGHT SECTIONS AND FITTINGS SHALL BE REINFORCED BY EITHER OR BOTH OF THE FOLLOWING METHODS: A) TIE ROD REINFORCEMENT AND OR B) CHANNEL REINFORCEMENT. REFER TO THE FIBROUS GLASS DUCT CONSTRUCTION STANDARDS AND MANUFACTURER RECOMMENDATION. LONGITUDINAL SEAMS AND TRANSVERSE JOINTS CLOSURES SHALL COMPLY WITH UL 181 A/P (PRESSURE SENSITIVE ALUMINUM FOIL TAPE) OR 181 A/H (HEAT SELLABLE ALUMINUM FOIL TAPE OR MANUFACTURER'S RECOMMENDATIONS FOR THE USE OF GLASS FABRIC AND MASTIC. DUCT SUPPORT SHALL BE PLACED SO AS TO PROPERLY SUPPORT ALL FITTINGS AND ACCESSORIES WITHOUT PLACING THE TAPED JOINTS UNDER STRESS.

3. COORDINATE LOCATIONS, SIZES AND OPENINGS WITH OTHER TRADES ON THE JOB. A/C CONTRACTOR SHALL PROVIDE THE COMPLETE DUCT SYSTEM WITH TURNING VANES AT ALL ELBOWS, AND INSTALLED SPLINTERS AND DAMPERS AS REQUIRED OR SHOWN ON THE DRAWING.

4. DIFFUSERS SHALL BE SELECTED, LOCATED AND BALANCED IN ORDER THAT THEY DELIVER THE REQUIRED CFM RELATIVE HUMIDITY TO THE ENTIRE ROOM EVENLY AND DRAFT FREE TO THE FOLLOWING DESIGN CONDITIONS. 50% TO 60% INSIDE OUTSIDE COOLING - 78 dB 91dB -79 wB HEATING - 72 dB

5. ALL FAN, MOTORS, COMPRESSORS, ETC. SHALL BE ISOLATED, AS REQUIRED TO OPERATE QUIETLY SO THAT NO OBJECTIONABLE SOUND WILL BE HEARD IN THE HABITABLE SPACES DUE TO AIR VELOCITY, MOTOR HUM, VIBRATION OR MECHANICAL MOVEMENT.

6. A/C SYSTEM SHALL HAVE 1" AIR FILTERS AS SPECIFIED LOCATION AND AS REQUIRED FOR EASY ACCESSIBILITY.

7. A/C SYSTEM SHALL BE CONTROLLED BY A THERMOSTAT MOUNTED 5' ABOVE FINISH FLOOR.

8. ALL GRILLES AND DIFFUSERS TO BE ALUMINUM CONSTRUCTION. ALL DIFFUSERS SHALL HAVE HIDDEN OPPOSED BLADE DAMPERS. PROVIDE GASKETS ON ALL GRILLES AND DIFFUSERS.

9. ALL REFRIGERANT PIPING SHALL BE COPPER COLD DRAWN TYPE -L- ACR, DEHYDRATED AND SEALED. ALL FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH HIGH TEMPERATURE BRAZING ALLOY OF NOT LESS THAN 5% SILVER. PIPING INSULATION NOT LESS THAN 3/4" THICK "ARMAFLEX". LIQUID AND SUCTION LINES SHALL BE SIZED ACCORDING TO EQUIPMENT MANUFACTURER'S RECOMMENDATION FOR EQUIVALENT LENGTH OF PIPING RUN FOR CONNECTED TONNAGE. ALL PIPING ACCESSORIES SHALL BE CONSTRUCTED AS SUGGESTED BY EQUIPMENT MANUFACTURER. PROVIDE FILTER/DRYER AND SIGHT GLASS ON LIQUID LINE. REFRIGERANT PIPING SYSTEM SHALL BE COMPLETED EVACUATED TO 26" VACUUM OF MERCURY GAUGE PRESSURE USING A VACUUM PUMP AND HOLD FOR A MINIMUM OF 24 HOURS. COMPRESSORS SHALL NOT BE USED TO EVACUATED SYSTEMS. CHANGE THE OIL IN THE VACUUM PUMP BEFORE VACUUM IS PULL. VACUUM SHALL BE BROKEN WITH THE OPENING REFRIGERANT.

10. ALL VENTILATION DUCTWORK SHALL BE 1 ½" FIBERGLASS INSTALLED ACCORDING TO LAST EDITION OF "SAMNA" AND "ASHRAE" FOR LOW PRESSURE DUCT SYSTEM.

11. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.

12. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE SITE, SATISFY HIMSELF TO EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PREFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FIELD CONDITION AFFECTING HIS WORK.

13. ELECTRIC HEATERS: SHALL BE MOUNTED IN BOX CASING WITH CAPACITIES AS SHOWN IN THE SCHEDULE. HEATERS TO BE U.L. LABELED AND LISTED FOR ZERO CLEARANCE AS A DUCT HEATER. ELEMENTS TO BE OPEN TYPE GRADE A NICHROME WIRE. EACH HEATER ASSEMBLY SHALL BE PROVIDED WITH A HIGH TEMPERATURE LIMIT CONTROLLER LIMIT CONTROLLER WITH A MANUAL RESET, AND WITH A SWITCH TO SHUT DOWN HEATER ON NO AIR FLOW CONDITION.

14. TESTING AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR WHO IS A MEMBER OF ASSOCIATED AIR BALANCE COUNCIL. TEST AND BALANCE REPORT SHALL BE APPROVED BY THE ENGINEER OF RECORD BEFORE CERTIFICATION OF OCCUPANCY. ALL SUPPLY DUCT, RETURN AND EXHAUST DUCT SYSTEM SHALL BE TESTED FOR AIR LEAKS, AND ANY AIR LEAKS SHALL BE FIXED AS REQUIRED.

15. PROVIDE A CONDENSATE DRAIN RUNNING TO APPROVED DRAIN. THE CONDENSATE DRAIN SYSTEM SHALL MEET THE LOCAL PLUMBING CODE REQUIREMENTS.

16. PROVIDE ELECTRICAL DISCONNECTS FOR THE AIR HANDLER AND CONDENSING UNIT. THE SIZE OF THE DISCONNECT SHALL COMPLY WITH THE EQUIPMENT MANUFACTURER'S REQUIREMENT.

17. PROVIDE ALL NECESSARY INSTRUCTIONS TO THE OWNER IN THE OPERATION OF THE MECHANICAL SYSTEMS.

18. INTERLOCK ELECTRIC DUCT HEATERS WITH COMPRESSOR CIRCUIT SO THAT HEATERS DO NOT OPERATE SIMULTANEOUSLY WITH COMPRESSORS.

19. AS PER R402.4.1.2, ANY BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 7 AIR CHANGES PER HOUR IN CLIMATE ZONES 1 AND 2, AND 3 AIR CHANGES PER HOUR IN CLIMATE ZONES 3 THROUGH 8. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF Ø2 INCHES W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY EITHER INDIVIDUALS AS DEFINED IN SECTION 553.993(5) OR (7), FLORIDA STATUTES OR INDIVIDUALS LICENSED AS SET FORTH IN SECTION 489.105(3)(F), (G), OR (I) OR AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE.

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
Ø	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - MECH. NOTES

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: M-3

PROJECT No: D-16-047

PLUMBING GENERAL NOTES AND SPECIFICATION

1. A. SCOPE OF WORK
THE WORK SHALL INCLUDE ALL PLUMBING AND SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO THE FOLLOWING.
1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS.
2. SANITARY DRAIN AND VENT SYSTEMS.
3. PLUMBING FIXTURES AND TRIM.
4. AIR CONDITIONING CONDENSATE DRAIN SYSTEMS.
5. PRESSURE AND TEMPERATURE RELIEF FROM WATER HEATER.
6. PIPING INSULATION.
7. SUPPORTS AND HANGERS.

2. CONTRACTOR SHALL VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.

3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING. "BITUMASTIC" OR EQUAL.

4. ALL FIXTURES SHALL BE PROTECTED AGAINST WATER HAMMER WITH AIR CHAMBERS OF SHOCK ABSORBERS AS INDICATED ON PLANS.

5. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH APPROVED MATERIALS, SHALL HAVE SMOOTH IMPERVIOUS SURFACES AND SHALL BE FREE FROM DEFECTS AND CONCEALED FOULING SURFACES. ALL FIXTURE TRIM TO BE CHROME PLATED, FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC..

6. WASTE LINES TO SLOPE 1/8"/FOOT UNLESS OTHERWISE NOTED.

7. VENT LINES TO EXTEND MIN OF 9" ABOVE ROOF AND FLASH WITH LEAD.

8. WATER PIPE BELOW GROUND SHALL BE COPPER TYPE "K", ABOVE GROUND TO BE COPPER TYPE "L".

9. PIPING INSTALLATION.
A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE
B. PROVIDE SLEEVES FOR ALL PIPING THROUGH FOUNDATIONS, SLABS, OR MASONRY WALLS. CAULK OPENINGS BETWEEN PIPE AND SLEEVES.
C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESCUTCHEONS. FIRMLY SECURE TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE SLEEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESCUTCHEONS IN BATHROOMS.
D. WHERE PIPES PASS THROUGH FIRE RATED FLOOR, WALLS, OR CEILINGS, PROVIDE FIRE STOPS, OR FIRE BARRIER PENETRATION SEALING SYSTEMS SHALL BE U.L. LISTED.

10. INSPECTION AND TESTS.
CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTION TO THE AUTHORITIES HAVING JURISDICTION AS THE WORK PROGRESS. ALL SYSTEMS SHALL BE TESTED BY CODE AND OR LOCAL REGULATIONS. THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE STERILIZED FOLLOWING CODE PROCEDURES. AFTER STERILIZATION FLUSH THE SYSTEM WITH CLEAN WATER UNTIL SAFE TO BE CONSUMED.

11. UTILITIES CONNECTION
PLUMBING CONTRACTOR SHALL VERIFY AT FIELD AND WITH THE UTILITY COMPANIES THE EXACT POINT OF CONNECTION FOR WATER AND SEWER SERVICES BEFORE SUBMITTING A BID OR PRICE FOR HIS WORK.

12. PLUMBING CONTRACTOR IS RESPONSIBLE FOR PERFORMING THE FOLLOWING TEST IN THE PRESENCE OF AN OWNER REPRESENTATIVE.
A. ALL WATER PIPING SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST OF 100 PSI. FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.

B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH WATER TO HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTED

13. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUND OF CHLORINATE LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE). RETAIN MIXTURE IN PIPE 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.

14. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF INSTALLATION.

15. PLUMBING CONTRACTOR SHALL FURNISH WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE FROM DATE OF FINAL ACCEPTANCE, AND THAT HE WILL AT HIS EXPENSE REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING THE GUARANTEE PERIOD INCLUDING BUT NOT LIMITED TO NECESSARY DEMOLITION, PATCHING, RE-PATCHING AND REFINISHING.

16. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN HIS BID, THE COST FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO PERFORM THE SCOPE OF THE WORK AND THE INTENT OF THE CONSTRUCTION DOCUMENTS FORM ALL THE LOCAL AND STATE AUTHORITIES.

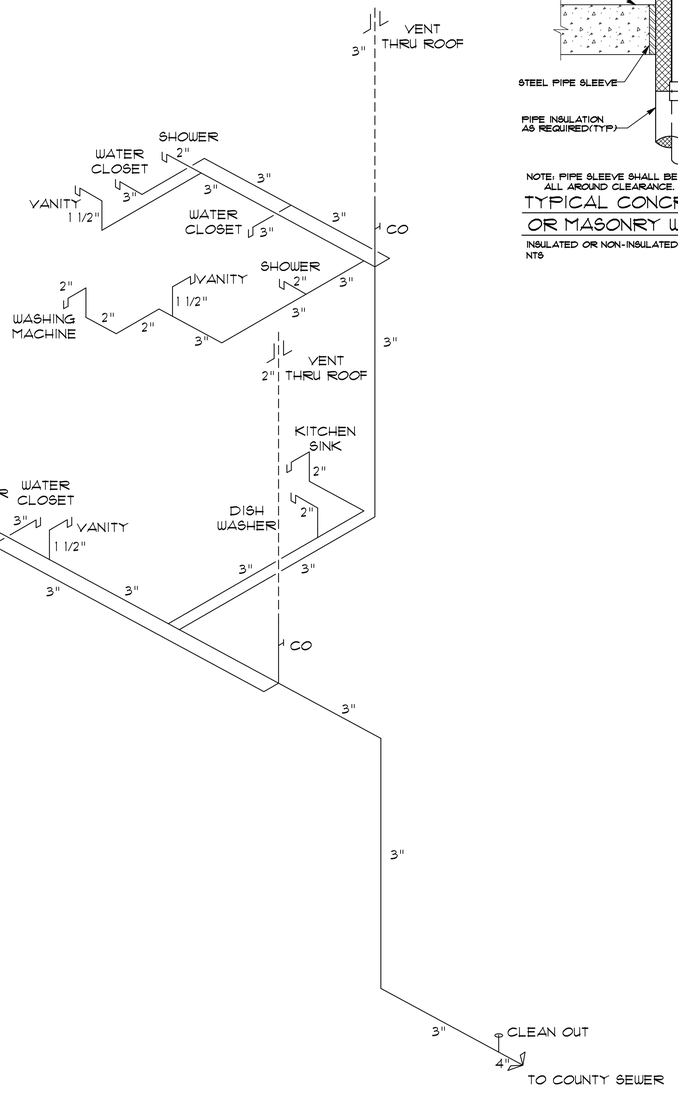
17. CONDENSATE DRAIN FROM AIR CONDITIONING UNITS SHALL BE "PVC" SCHEDULE 40 PIPE AND FITTINGS ALL HORIZONTAL RUN SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX PIPE INSULATION OR EQUAL. SLIP PIPE INSULATION AND SEAT BUTT JOINTS.

18. ALL PIPING MATERIALS SHALL BE NEW AND AS FOLLOWS:
A. SANITARY WASTE, VENT AND STORM DRAIN PIPING: UNDERGROUND AND ABOVE GROUND PIPING SHALL BE "PVC" PIPE AND FITTINGS SCHEDULE 40. MATERIAL SHALL COMPLY WITH ASTMD-1784, TYPE I.
B. DOMESTIC WATER ABOVE GROUND SHALL BE TYPE "K" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
C. DOMESTIC WATER BELOW GROUND SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDERED JOINT AT FITTINGS.
D. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, ELJER OF KOHLER.
E. ELECTRIC WATER HEATERS SHALL BE LOCHINVAR UNLESS OTHERWISE SPECIFIED. SEE SPECIFICATIONS.
F. SOLDER ALLOY SHALL BE LEAD FREE.
J. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.

19. INSULATION:
A. ALL RECALCULATION HOT WATER PIPE SHALL BE INSULATE WITH 1/2" THICK FIBERGLASS MOLDED INSULATION WITH PRE-SIZED FACTORY APPLIED "FRJ" JACKET OF GLASS CLOTH WITH LONGITUDINAL LAP AND BUTT JOINT STRIPS WITH SELF SEALING ADHESIVE.
B. INSULATION SHALL HAVE A MAXIMUM THERMAL CONDUCTIVITY OF .026 K FACTOR AT 75 DEG. F. MEAN TEMPERATURE. JACKET INSULATION AND ADHESIVE SHALL HAVE COMPOSITE FIRE AND SMOKE RATINGS AS PER ASTM E84-75, FINISHING JACKETS SHALL HAVE A MAXIMUM FLAME SPREAD OF 25.

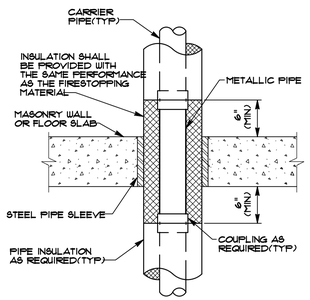
20. HANGERS AND SUPPORTS.
A. PROVIDE ADJUSTABLE HANGERS, INSERTS, BRACKETS, ROLLS, CLAMPS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. PROVIDE HANGERS TO ALLOW FOR EXPANSIONS AND CONTRACTION OF PIPE LINES AND OF ADEQUATE SIZE TO PERMIT COVERING TO RUN CONTINUOUSLY THROUGH HANGERS, PIPING AT EQUIPMENT SUPPORTED INDEPENDENTLY SO THAT NO WEIGHT WILL BE SUPPORTED BY EQUIPMENT. COORDINATE LOCATION OF HANGERS WITH LIGHT FIXTURES, AIR CONDITIONING DUCTWORK AND DIFFUSERS AND WITH EXISTING PIPING SYSTEMS.
B. PROVIDE RISER CLAMPS AT EVERY FLOOR.

21. EXISTING CONDITIONS: CONTRACTOR BY AND THROUGH SUBMISSION OF HIS BID, AGREES THAT HE SHALL BE HELD RESPONSIBLE FOR HAVING EXAMINED THE SITE, THE LOCATION OF ALL PROPOSED WORK AND FOR HAVING SATISFIED HIMSELF FROM HIS OUN PERSONAL KNOWLEDGE AND EXPERIENCE OR PROFESSIONAL ADVICE AS TO THE CHARACTER, AND LOCATION OF THE SITE, THE NATURE OF THE EXISTING CONDITIONS, THE LOCATION OF EXISTING UTILITIES AND ANY OTHER CONDITIONS SURROUNDING AND AFFECTING THE WORK, ANY OBSTRUCTIONS, THE NATURE OF EXISTING CONSTRUCTION, AND ALL OTHER PHYSICAL CHARACTERISTICS OF THE JOB, IN ORDER THAT HE MAY INCLUDE IN THE PRICES WHICH HE BIDS ALL COSTS PERTAINING TO THE WORK AND THEREBY PROVIDE FOR THE SATISFACTORY COMPLETION THEREOF.



PLUMBING ISOMETRIC

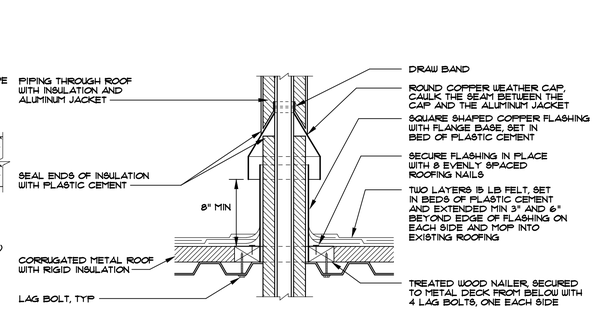
NOT TO SCALE



NOTE: PIPE SLEEVE SHALL BE SIZED TO PROVIDE 1/4" ALL AROUND CLEARANCE.

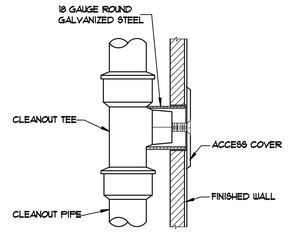
TYPICAL CONCRETE FLOOR OR MASONRY WALL PENETRATION

INSULATED OR NON-INSULATED, ABOVE GRADE
NTS



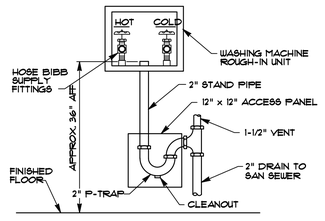
PIPING THROUGH ROOF DETAIL

NTS



WALL CLEANOUT DETAIL

NTS



WASHING MACHINE HOOK-UP DETAIL

NTS

KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

REVISION	DATE
FOR SUBMITTAL	8/31/2018

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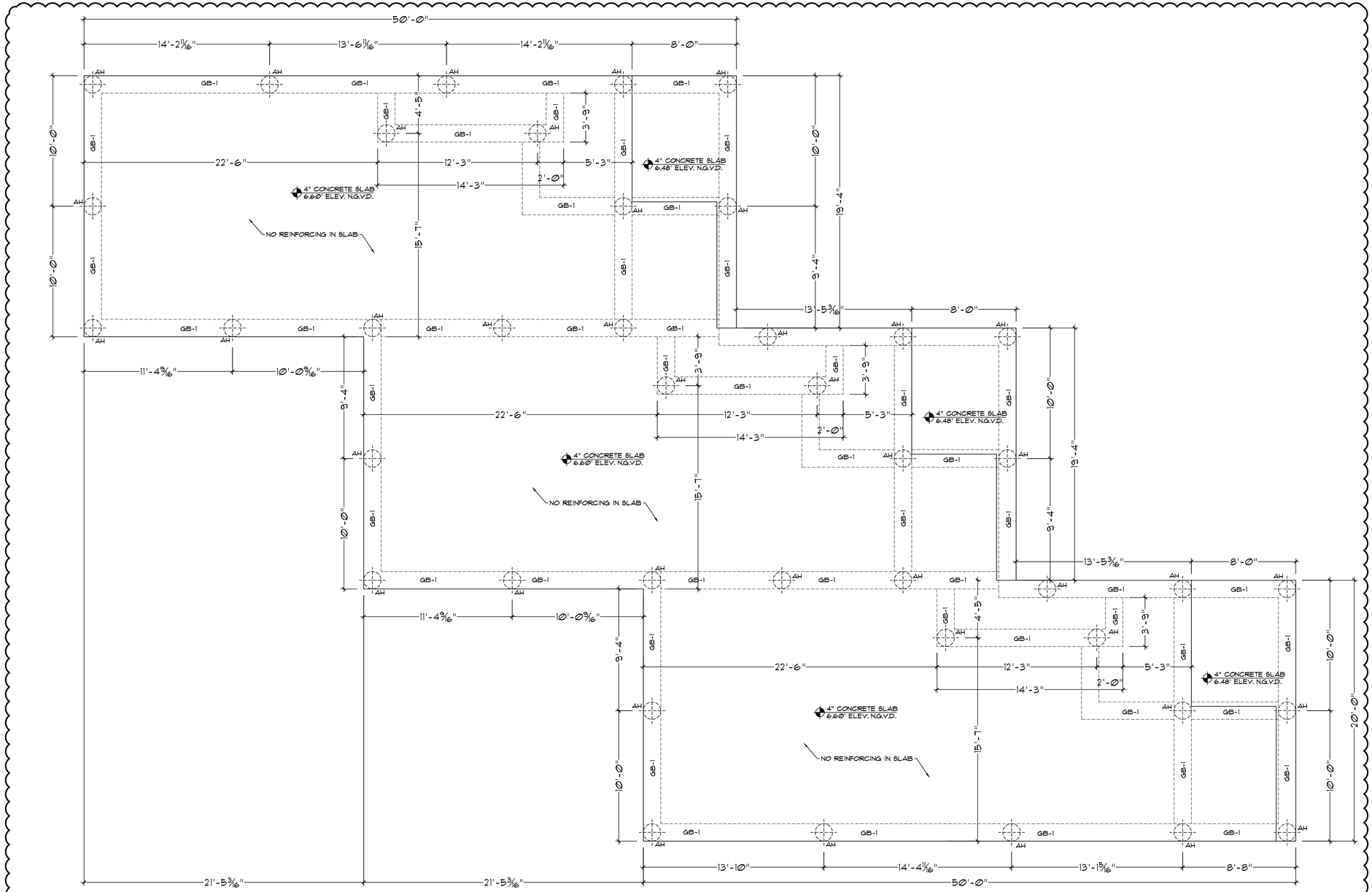
SCALE:	AS SHOWN
DATE:	1/4/2017
DWG BY:	D.G.O.
REVISED:	

TITLE: TRIPLEX E - PLUMBING

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: P-1

PROJECT No: D-16-047



FOUNDATION PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

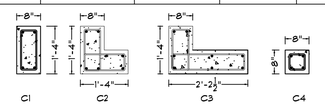
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
IB-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
IB-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	



KEYS
ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION VILLAGE COMMENTS	11/28/2021
2		1/3/2022

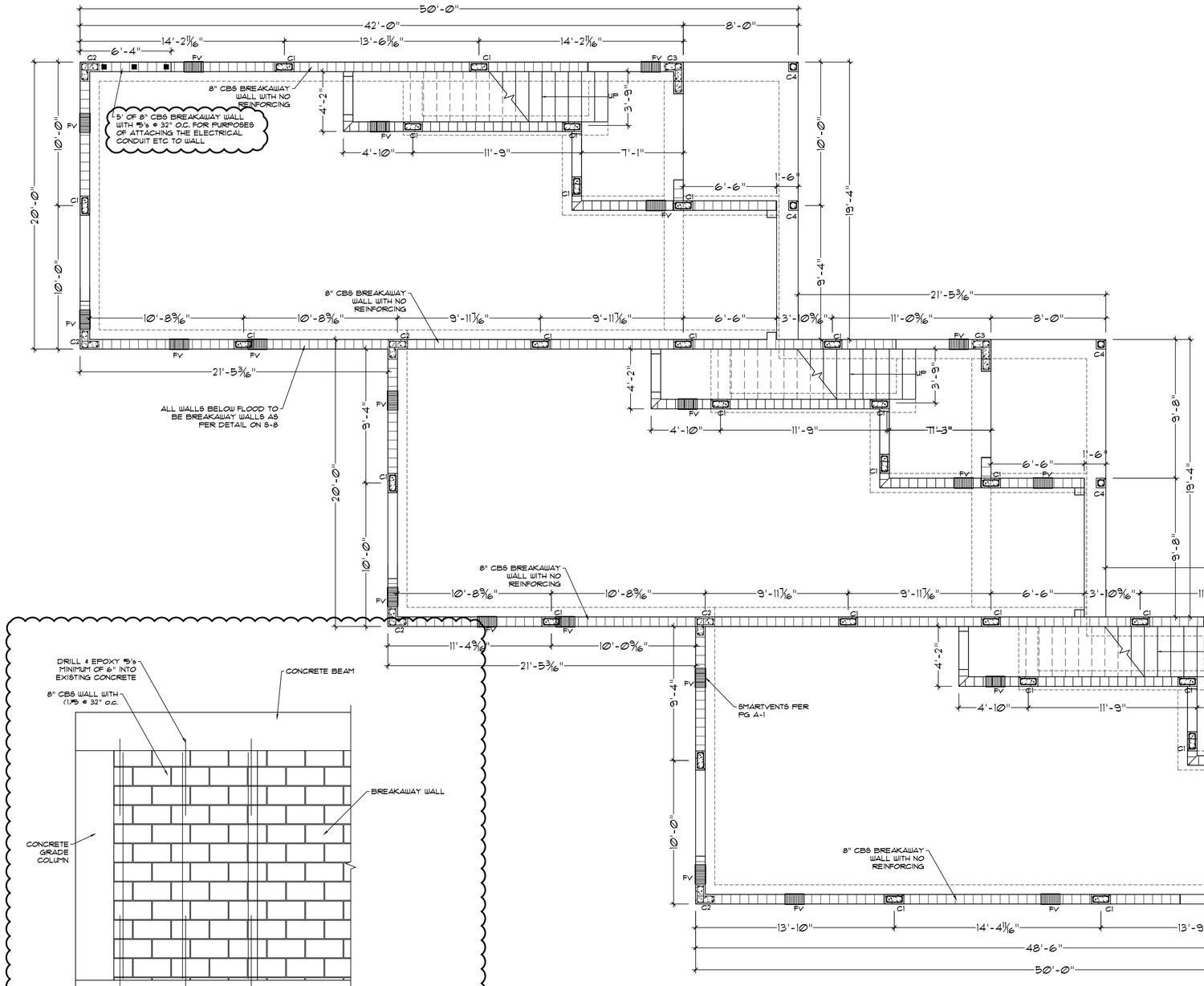
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL

PROJECT: BG1SLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

PROJECT No: D-16-047



EQUIPMENT WALL DETAIL

SCALE @ ½" = 1'-0"

FIRST FLOOR PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6's VERTICAL WITH #3 TIES AT 12" O.C.

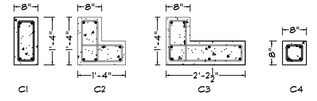
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
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TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8x16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0162

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENTS	1/3/2022
3	VILLAGE COMMENTS	8/15/2022

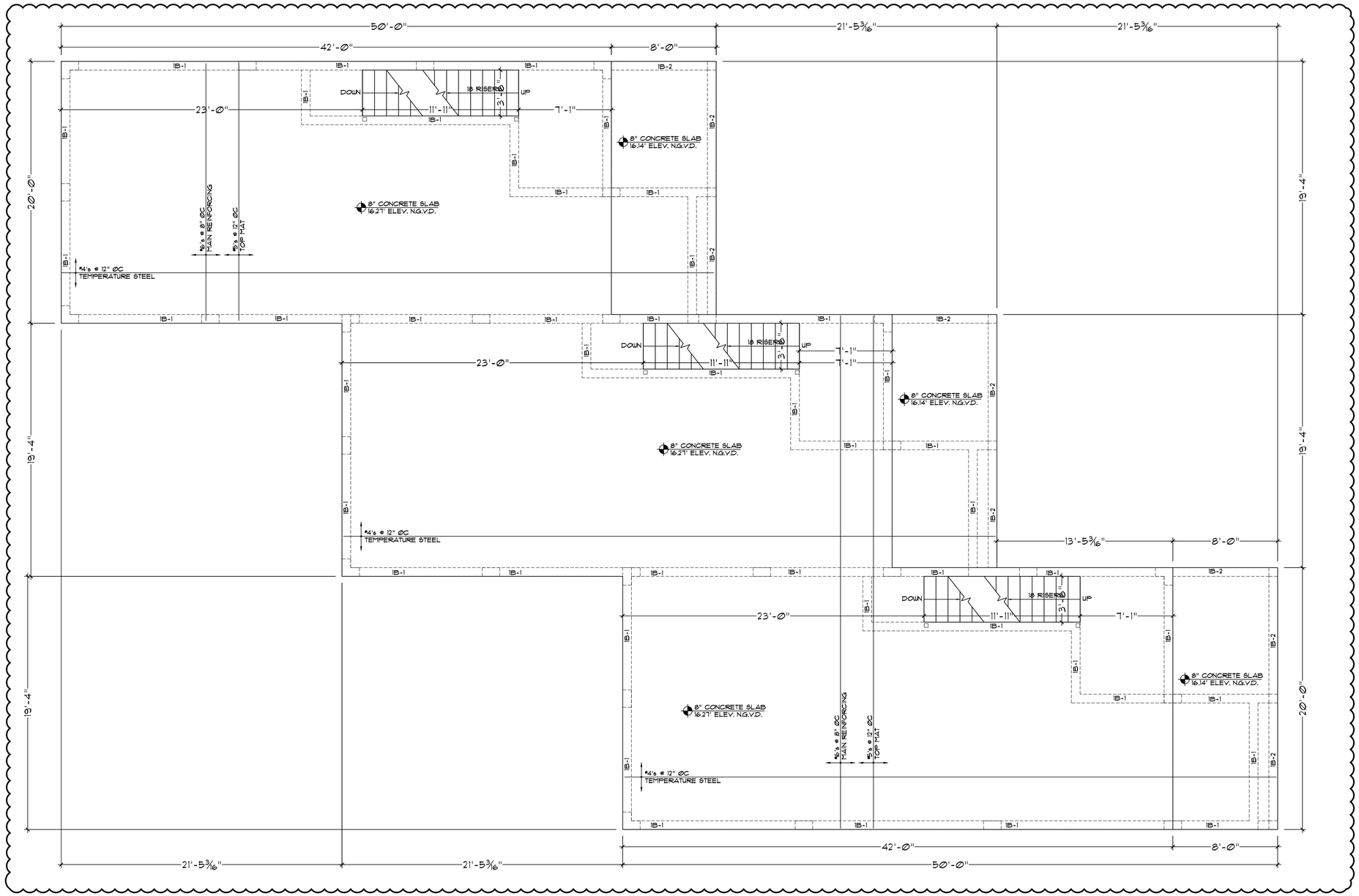
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-2

PROJECT No: D-16-047



SECOND FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

AUGER HOLE:

8" CBS WALL:

DOOR:

WINDOW:

COLUMN/BEAM BELOW:

ELEMENT ABOVE:

CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

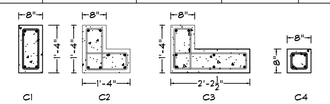
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
IB-1	8X16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
IB-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8X16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8X16X16	6-#6's	#3 @ 12" o.c.	
C3	8X16X26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENTS	1/3/2022

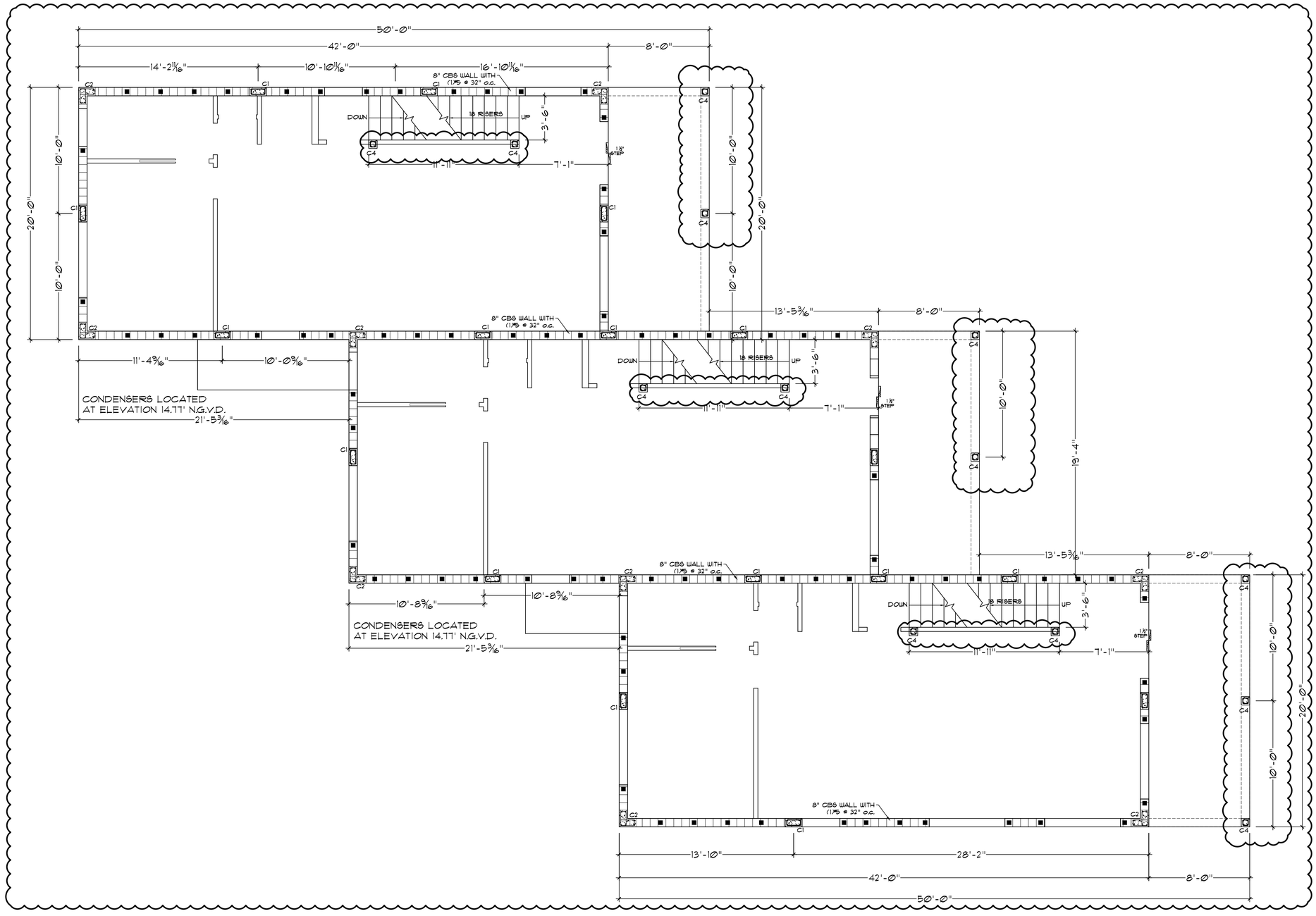
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-3

PROJECT No: D-16-047



LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
IB-1	8X16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
IB-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8X16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8X16X16	6-#6's	#3 @ 12" o.c.	
C3	8X16X24	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	

SECOND FLOOR WALL & COLUMN PLAN

SCALE @ 1/4" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

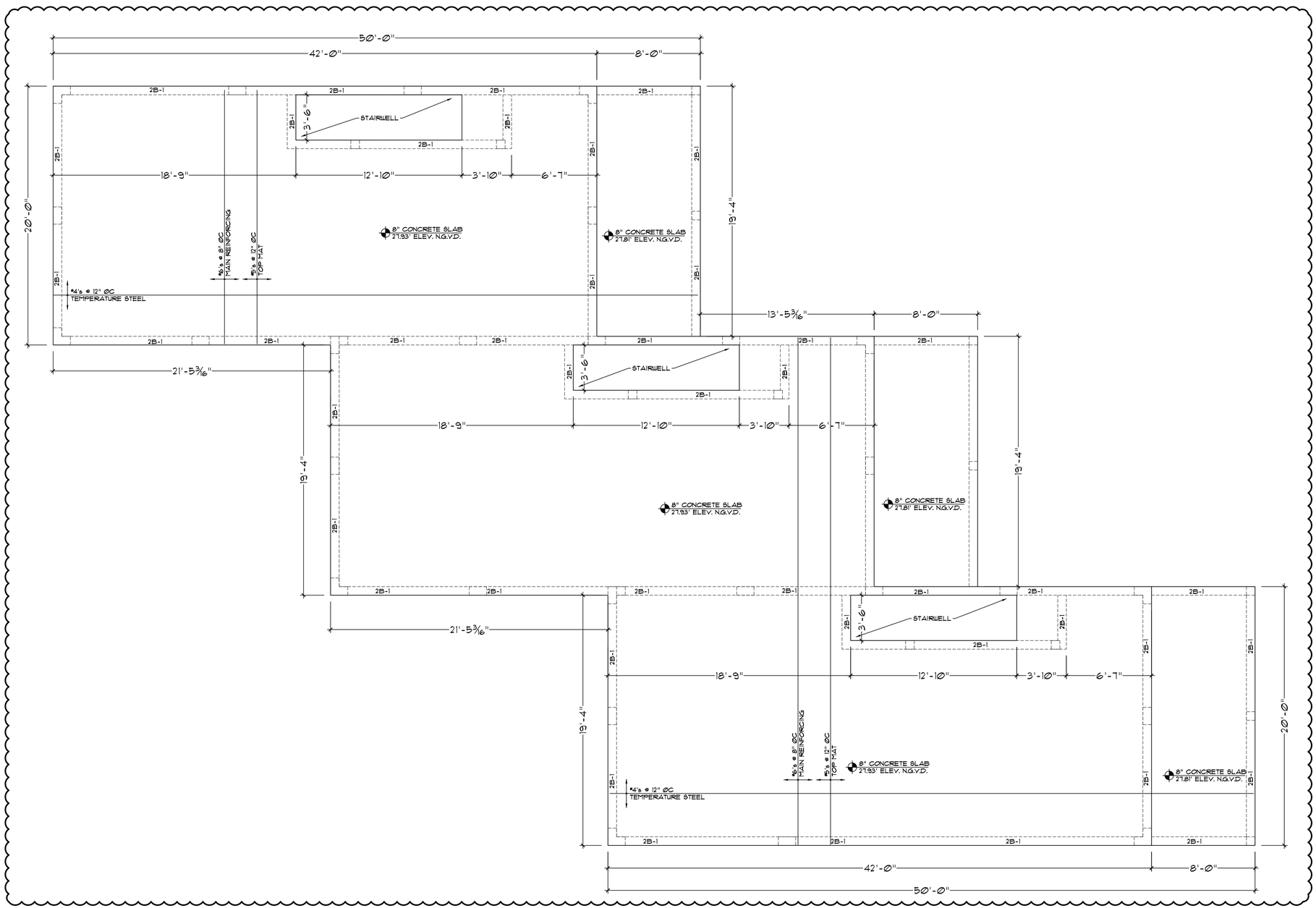
No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENT	2/2/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-4

PROJECT No: D-16-047



THIRD FLOOR SLAB & BEAM PLAN

SCALE @ 1/4" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

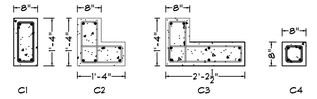
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16X16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
IB-1	8X16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
IB-2	8X12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8X16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8X12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
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91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

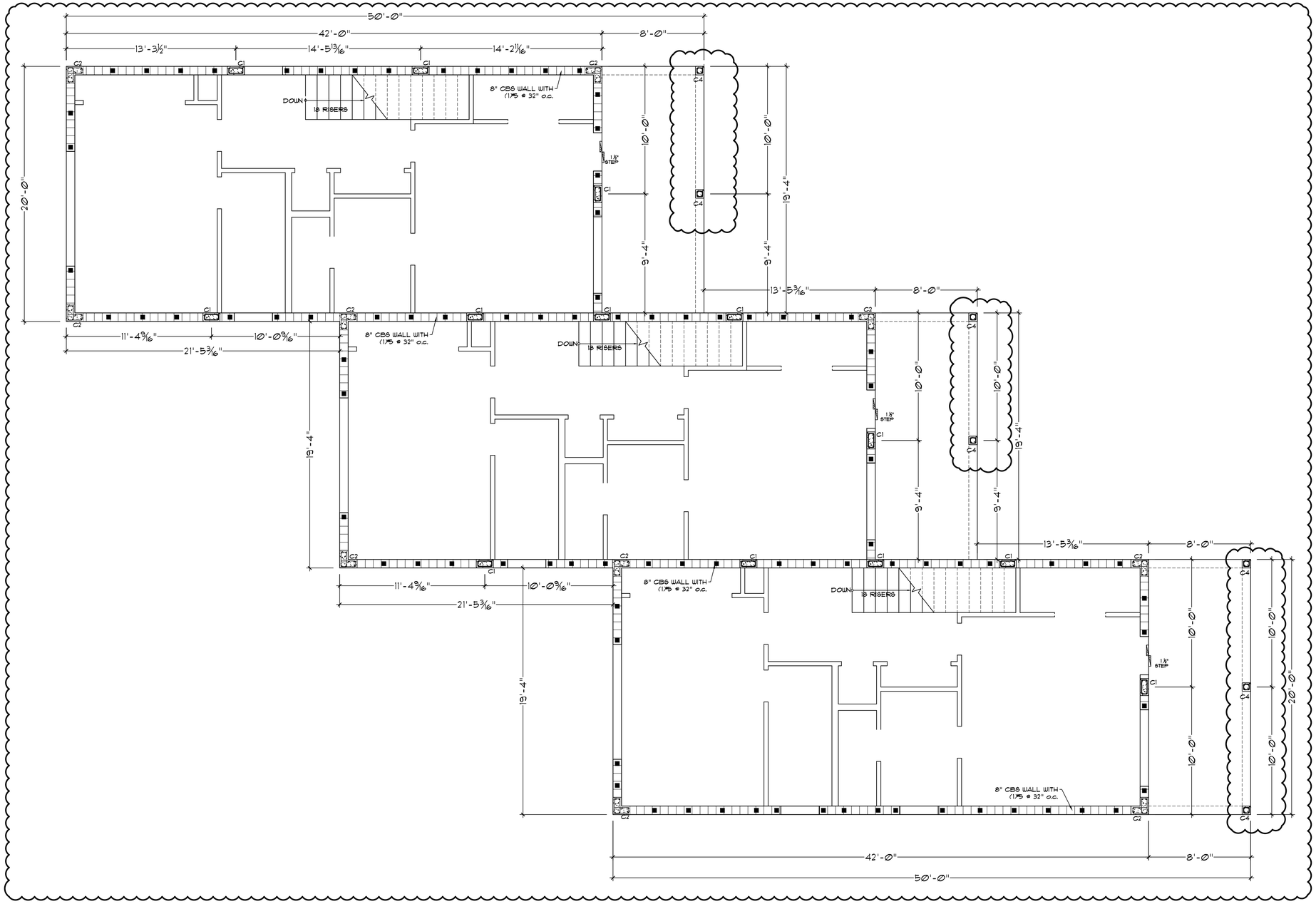
No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-5

PROJECT No: D-16-047



THIRD FLOOR WALL & COLUMN PLAN

SCALE @ ¼" = 1'-0"

LEGEND:

- AUGER HOLE:
- 8" CBS WALL:
- DOOR:
- WINDOW:
- COLUMN/BEAM BELOW:
- ELEMENT ABOVE:
- CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

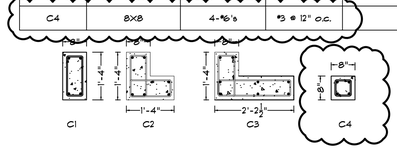
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

		REINFORCING STEEL				
TAG	DIMENSIONS W"XH"	TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
1B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
1B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	



KEYS ENGINEERING SERVICES
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P.E. No. FL. 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENT	2/2/2022

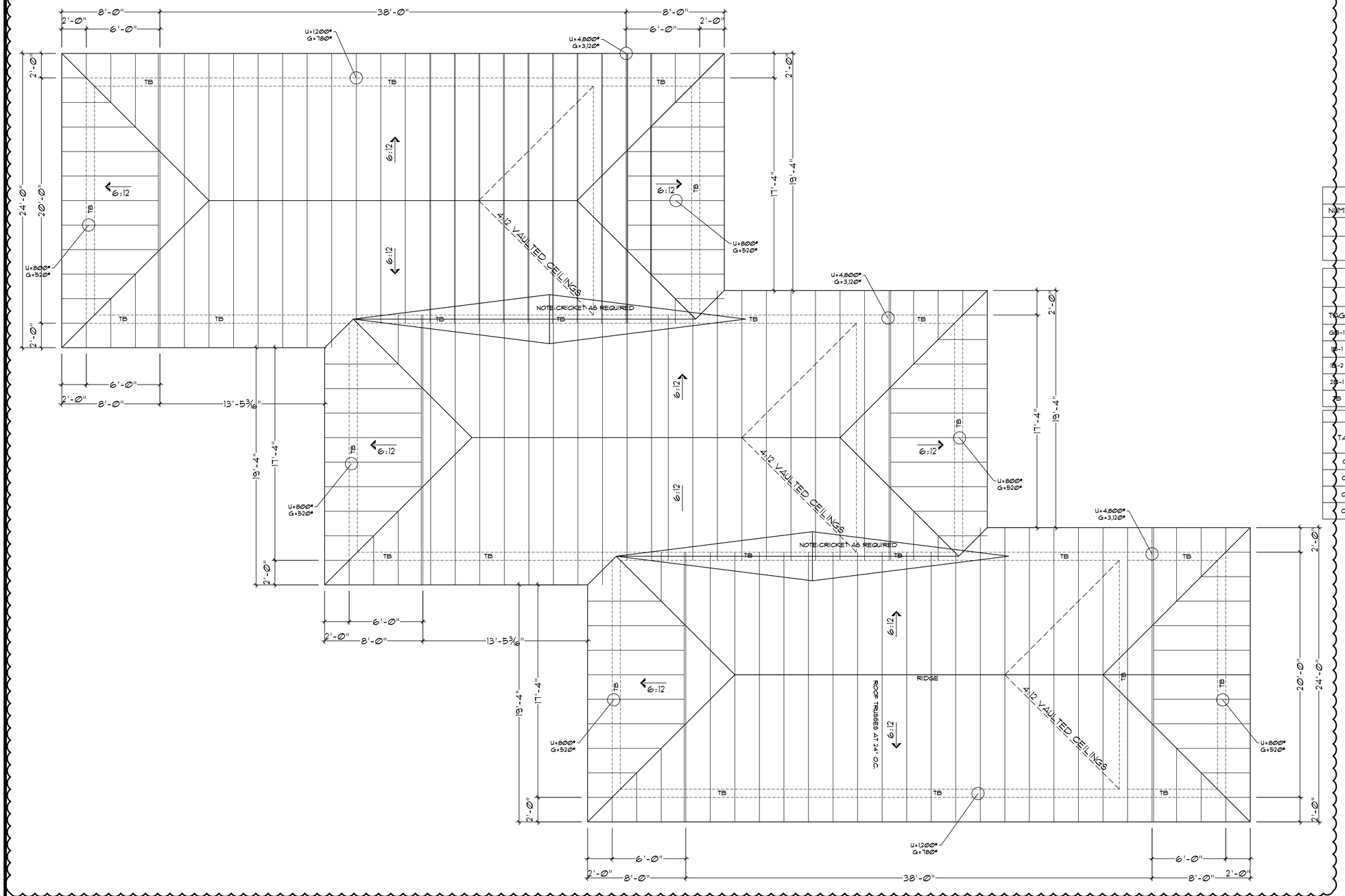
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL

PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-6

PROJECT No: D-16-047



LEGEND:

AUGER HOLE:

8" CBS WALL:

DOOR:

WINDOW:

COLUMN/BEAM BELOW:

ELEMENT ABOVE:

CONCRETE COLUMN:

AUGER SCHEDULE

NUMBER	SIZE	DESCRIPTION
AH	16"DIA	DRILLED 3' INTO ROCK W/4-#6'S VERTICAL WITH #3 TIES AT 12" O.C.

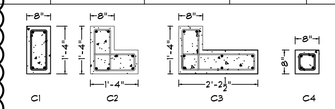
NOTES: 1. ALL AUGERS ARE IDENTICAL
2. CONTACT ENGINEER IF CAP ROCK IS GREATER THAN 9' BELOW SURFACE

BEAM SCHEDULE

TAG	DIMENSIONS W"XH"	REINFORCING STEEL TOP	MID	BOT	STIRRUPS	ELEV N.G.V.D.
GB-1	16x16	3-#6's	-	3-#6's	#3's @ 8" o.c.	5.68'
B-1	8x16	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
B-2	8x12	2-#5's	-	2-#5's	#3's @ 8" o.c.	15.35'
2B-1	8x16	2-#6's	-	2-#5's	#3's @ 8" o.c.	27.02'
TB	8x12	2-#5's	-	2-#5's	#3's @ 12" o.c.	36.14'

COLUMN SCHEDULE

TAG	DIMENSIONS"	VERTICAL REINFORCING	STIRRUPS	REMARKS
C1	8X16	4-#6's	#3 @ 12" o.c.	
C2	8x16x16	6-#6's	#3 @ 12" o.c.	
C3	8x16x26½	8-#6's	#3 @ 12" o.c.	
C4	8X8	4-#6's	#3 @ 12" o.c.	



THIRD FLOOR TRUSS PLAN

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021

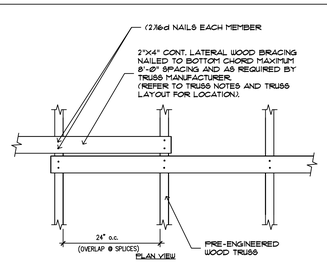
SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL

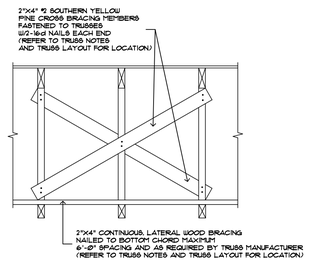
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-1

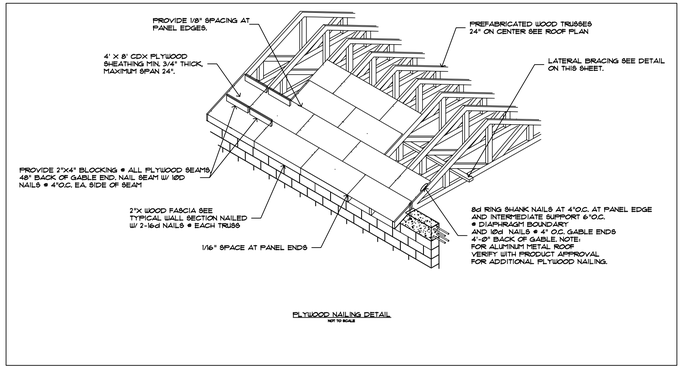
PROJECT No: D-16-047



TYPICAL LATERAL BRACE SPLICE
NOT TO SCALE



TYPICAL X-BRACING
NOT TO SCALE



PLYWOOD NAILING DETAIL
NOT TO SCALE

NOTES:

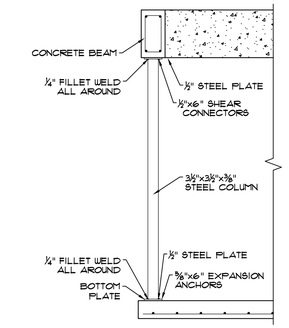
1. ATTIC ACCESS ROUGH OPENING SHALL BE NO LESS THAN 22"x30" WITH A MINIMUM OF 30" UNOBSTRUCTED HEADROOM AS PER THE FLORIDA BUILDING CODE.

2. TOP TIE BEAM SHALL NOT BE POURED UNTIL THE TRUSS LAYOUT AND CALCULATIONS HAVE BEEN APPROVED BY THE MONROE COUNTY BUILDING DEPARTMENT.

3. BORATE TREATED LUMBER, OR APPROVED EQUAL, SHALL BE USED TO PREVENT ANY INTERACTION BETWEEN FASTERN AND WOOD.

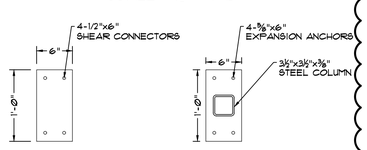
4. ROOF TRUSSES SHALL BE DESIGNED FOR A WINDSPEED OF 180 MPH PER ASCE-7-10

5. HURRICANE STRAPS SHALL BE SPECIFIED AFTER DETERMINATION OF TRUSS UPLIFT LOADS BY TRUSS MANUFACTURER.



STEEL COLUMN DETAIL

SCALE @ ½" = 1'-0"

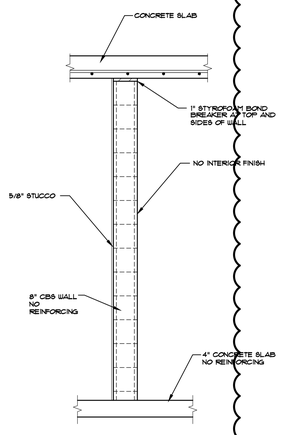


STEEL PLATE DETAIL

SCALE @ ½" = 1'-0"

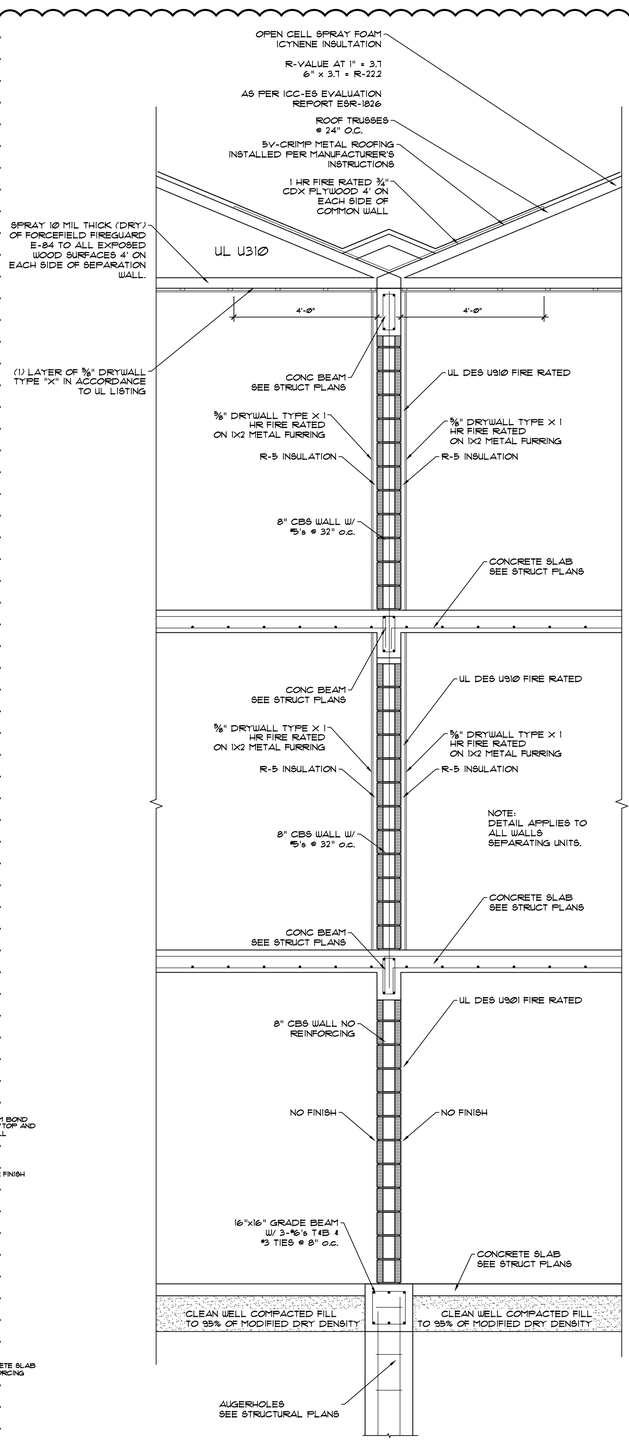
TYPICAL STAIR SECTION

SCALE @ ½" = 1'-0"



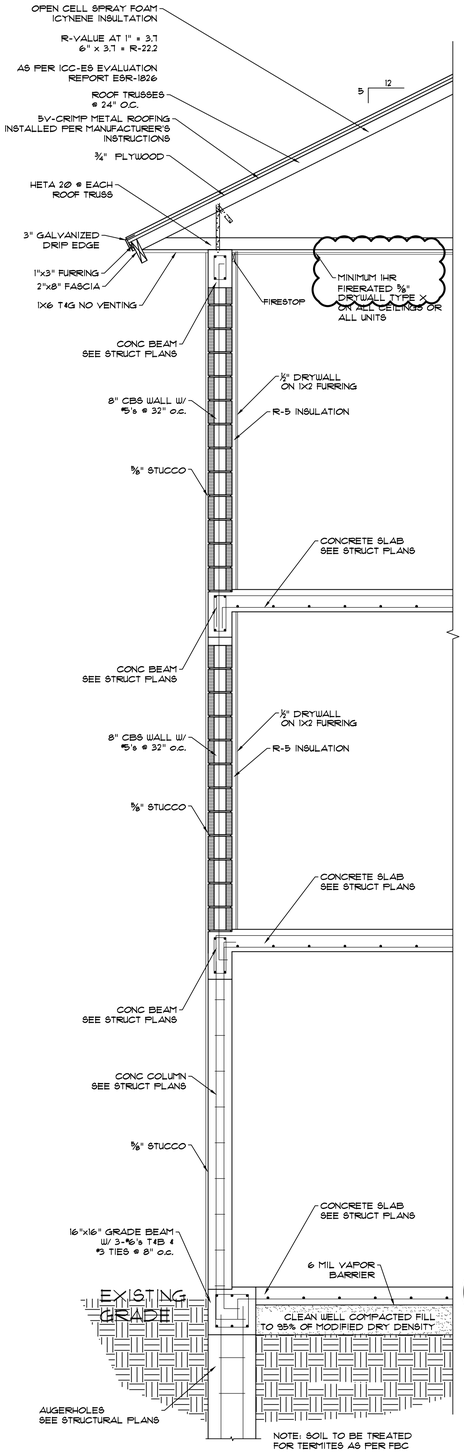
BREAKAWAY WALL SECTION

SCALE @ NTS



SEPARATION WALL DETAIL

SCALE @ ½" = 1'-0"



TYPICAL WALL SECTION

SCALE @ ¼" = 1'-0"

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91100 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

NO.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018
1	REVISION	11/28/2021
2	VILLAGE COMMENTS	1/3/2022

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: DGO.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-8

PROJECT No: D-16-047

GENERAL NOTES:

1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 2020 EDITION. THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCED STANDARD APPLIES TO THIS PROJECT.
2. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
3. CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.
4. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE DESIGN DOCUMENTS. IF A CONFLICT EXIST, NOTIFY THE DESIGN PROFESSIONAL.
5. 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 DESIGN PROFESSIONAL.
6. OPENINGS SHOWN ON STRUCTURAL DRAWINGS ARE ONLY PICTORIAL. SEE THE ARCHITECTURAL AND M.E.P. DRAWINGS FOR THE SIZE AND LOCATION OF OPENINGS IN THE STRUCTURE.
7. CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS DURING BIDDING SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS AND DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS: USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES IN WRITING TO THE DESIGN PROFESSIONAL PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL O.S.H.A. REQUIREMENTS.
10. THE STRUCTURE IS DESIGNED TO BE STRUCTURALLY SOUND WHEN COMPLETED. PRIOR TO COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING, INCLUDING, BUT NOT LIMITED TO, MASONRY WALLS. WHEREVER THE CONTRACTOR IS UNSURE OF THESE REQUIREMENTS, THE CONTRACTOR SHALL RETAIN A FLORIDA LICENSED ENGINEER TO DESIGN AND INSPECT THE TEMPORARY BRACING AND STABILITY OF THE STRUCTURE.
11. DESIGN SUPERIMPOSED LOADS:

OCCUPANCY	LIVE LOAD	DEAD LOAD
ROOF	30 PSF	20 PSF
FLOOR	40 PSF	80 PSF

12. DESIGN WIND LOADS:

GOVERNING CODE	A.S.C.E. 7-16
BASIC WIND SPEED	VULT= 180 MPH/VASD= 139 MPH
RISK CATEGORY	II
BUILDING ENCLOSURE	ENCLOSED
DIRECTIONALITY FACTOR	KD = 0.85
EXPOSURE	D
INTERNAL PRESSURE COEFFICIENT	+0.18

SHOP DRAWINGS AND OTHER SUBMITTALS:

1. SUBMITTALS FOR SPECIAL STRUCTURAL, LOAD-CARRYING ITEMS THAT ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES MUST BE PREPARED BY, OR UNDER THE DIRECT SUPERVISION OF, A DELEGATED ENGINEER. EXAMPLES INCLUDE PRECAST CONCRETE, PREFABRICATED WOOD COMPONENTS, OPEN WEB STEEL JOISTS AND JOIST GIRDERS, POST-TENSIONING SYSTEMS, TILT-UP PANELS, STRUCTURAL STEEL CONNECTIONS, STRUCTURAL LIGHT GAGE STEEL FRAMING, EXTERIOR ENCLOSURE SYSTEMS AND SHORING AND RESHORING.
2. A DELEGATED ENGINEER IS DEFINED AS A FLORIDA LICENSED ENGINEER 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 OF, OR CONSULTANT TO, THE CONTRACTOR OR FABRICATOR RESPONSIBLE FOR THE SUBMITTAL. THE DELEGATED ENGINEER SHALL SIGN, SEAL AND DATE THE SUBMITTAL, INCLUDING CALCULATIONS AND DRAWINGS.
3. THE TRADE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT THE JOB SITES, FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND APPROVE SUBMITTALS AND SHALL SIGN AND DATE EACH DRAWING PRIOR TO SUBMITTING TO THE ARCHITECT. THIS APPROVAL IS TO CONFIRM THAT THE SUBMITTAL IS COMPLETE, COMPLIES WITH THE SUBMITTAL REQUIREMENTS AND IS COORDINATED WITH FIELD DIMENSIONS, OTHER TRADES, ERECTION SEQUENCING AND CONSTRUCTABILITY.
5. THE STRUCTURAL ENGINEER REVIEWS SUBMITTALS TO CONFIRM THAT THE SUBMITTAL IS IN GENERAL CONFORMANCE WITH THE DESIGN CONCEPT PRESENTED IN THE CONTRACT DOCUMENTS. QUANTITIES AND DIMENSIONS ARE NOT CHECKED. NOTATIONS ON SUBMITTALS DO NOT AUTHORIZE CHANGES TO THE CONTRACT. SUN CHECKING OF THE SUBMITTAL BY THE STRUCTURAL ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS AND FROM ERRORS OR OMISSIONS IN THE SUBMITTAL.
6. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED ENGINEER SUBMITTALS IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED ENGINEER AND THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED 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.

EXPANSION ANCHORS:

1. USE WEDGE-TYPE EXPANSION ANCHORS SUCH AS THE HILTI KWIK BOLT II, ITW RAMSET RED HEAD TRUBOLT WEDGE, POWERS RAWL POWER-STUD, SIMPSON STRONG-TIE WEDGE-ALL OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

CHEMICAL ADHESIVE FOR ANCHORING REINFORCING BARS, THREADED BARS AND ANCHOR BOLTS:

1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE HILTI HIT HY150, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, POWERS RAWL POWER-FAST SYSTEM, SIMPSON STRONG-TIE AT OR ET, ALLIED FASTENER ALLIED GOLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.
2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A 1/4" DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
3. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE DRILL SIZE. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.
4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.
5. THREADED RODS ARE A-36 GALVANIZED STEEL, U.O.N.

REINFORCED CONCRETE:

1. COMPLY WITH ACI 301 AND 318.
2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH OF 5,000 PSI IN 28.
3. USE NORMAL WEIGHT CONCRETE FOR ALL STRUCTURAL MEMBERS, U.O.N.
4. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP BOTTOM STEEL OVER SUPPORTS AND TOP STEEL AT MID-SPAN (U.O.N.). HOOK DISCONTINUOUS ENDS OF ALL TOP BARS AND ALL BARS IN WALLS, U.O.N. PROVIDE COVER OVER REINFORCING AS FOLLOWS:

ELEMENT	BOTTOM	TOP	SIDES
FOOTINGS	3"	2"	3"
BEAMS ABOVE GRADE	1 1/2"	1 1/2"	1 1/2"
COLUMNS	-	-	1 1/2"
SLABS ON GRADE	2"	1"	2"
SLABS ABOVE GRADE	3/4"	3/4"	1"
SLABS EXPOSED TO WEATHER	1 1/2"	1 1/2"	1 1/2"

5. TENSION DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:

LAP SPLICE LENGTH FOR BARS (IN)		
REBAR	TOP BARS	OTHER BARS
#3	22	17
#4	29	22
#5	36	28
#6	43	33
#7	63	48
#8	72	55

6. WHERE SPECIFIED, PROVIDE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED WIRE REINFORCEMENT CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY. LAP SPLICE TWO CROSS WIRE SPACING.
7. UTILITIES SHALL NOT PENETRATE BEAMS OR COLUMNS BUT MAY PASS THROUGH SLABS AND WALLS INDIVIDUALLY, U.O.N. FOR OPENINGS 24" LONG OR LESS, CUT REINFORCING AND REPLACE ALONGSIDE OPENING WITH SPLICE BARS OF EQUIVALENT AREA WITH 48 BAR DIAMETER LAP. PREPARE AND SUBMIT SHOP DRAWINGS FOR OPENINGS LONGER THAN 24". FOR RECTANGULAR OPENINGS 12" LONG OR LONGER, ADD #5 X 6' MID DEPTH DIAGONAL AT ALL 4 CORNERS.
8. WHERE REINFORCING STEEL CONGESTION PERMITS, CONDUIT AND PIPES UP TO 1" DIAMETER MAY BE EMBEDDED IN CONCRETE PER ACI 318, SECTION 6.3. SPACE AT 3 DIAMETERS O.C. PLACE BETWEEN OUTER LAYERS OF REINFORCING IF CONDUITS ARE SIGNIFICANTLY CONGESTED. ADDITIONAL REINFORCING PERPENDICULAR TO PIPING MAY BE REQUIRED. REQUESTS TO EMBED LARGER PIPES SHALL BE ACCOMPANIED BY A DETAILED DESCRIPTION AND BE SUBMITTED TO THE ARCHITECT FOR EVALUATION.
9. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318, SECTION 6.4. PROVIDE KEY-WAYS AND ADEQUATE DOWELS. SUBMIT DRAWINGS SHOWING LOCATION OF CONSTRUCTION JOINTS AND DIRECTION OF POUR FOR REVIEW.
10. PROVIDE 3/4" CHAMFER FOR ALL EXPOSED CORNERS.

CONCRETE MASONRY:

1. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530/ASCE 5, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1/ASCE 6, "SPECIFICATIONS FOR MASONRY STRUCTURES".
2. THE STRUCTURE IS SUPPORTED BY BEARING WALLS, U.O.N. ERECT MASONRY PRIOR TO CASTING CONCRETE COLUMNS WITHIN BEARING WALLS OR CASTING BEAMS AND SLABS SUPPORTED BY BEARING WALLS.
3. USE 50% SOLID, NOMINAL 8"X8"X16", CONCRETE MASONRY UNITS CONFORMING TO ASTM C90. BLOCK NET AREA COMPRESSIVE STRENGTH SHALL BE 1,900 PSI. LAY UP UNITS IN RUNNING BOND. SAWCUT UNITS WHICH ARE NOT IN MULTIPLES OF 8". UNITS SHALL BE AT LEAST 8" LONG. BOND CORNERS BY LAPPING ENDS 8" IN SUCCESSIVE VERTICAL COURSES. DESIGN OF WALLS IS BASED ON A F'M OF 1,500 PSI.
4. USE TYPE S MORTAR IN ACCORDANCE WITH ASTM C270 EXCEPT USE TYPE M MORTAR BELOW GRADE. HEAD AND BED JOINTS SHALL BE 3/8" FOR THE THICKNESS OF THE FACE SHELL. WEBS ARE TO BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS. IN THE STARTING COURSE: AND WHERE AN ADJACENT CELL IS TO BE GROUTED. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO CELLS TO BE GROUTED.
5. USE STANDARD (9 GAUGE) HORIZONTAL JOINT REINFORCING IN EVERY OTHER COURSE. JOINT REINFORCING AND ANCHORS IN EXTERIOR WALLS SHALL CONFORM TO ASTM A 153 CLASS B2, WITH A COATING THICKNESS OF 1.50 OZ/SF+ CONFORM TO ASTM A 641 IN INTERIOR WALLS. OVERLAP DISCONTINUOUS ENDS 6". USE PREFABRICATED CORNERS AND TEES. USE TRUSS TYPE, EXCEPT USE LADDER TYPE IN WALLS WITH VERTICAL REINFORCING. EXTEND JOINT REINFORCING A MINIMUM OF 4" INTO TIE COLUMNS.
6. USE FINE GROUT CONFORMING TO ASTM C476, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI IN 28 DAYS. AGGREGATE TO CONFORM TO ASTM C404 FOR FINE GROUT, WITH SLUMP OF 8" TO 10". GROUT ALL MASONRY CONTAINING REINFORCING, ALL CELLS OF 4 HOUR RATED WALLS, AND WHERE INDICATED ON THE DRAWINGS. ALLOW MORTAR TO CURE 24 HOURS PRIOR TO GROUTING. PROVIDE CLEAN OUT OPENINGS AT THE BASE OF CELLS CONTAINING REINFORCING STEEL TO CLEAN THE CELL AND TO TIE THE VERTICAL BAR TO THE DOWEL. IN HIGH-LIFT GROUTING, USE 4'-0" (MAX.) LIFTS, WITH 1/2 HOUR TO 1 HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT.
7. USE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCE WALLS WHERE INDICATED ON THE DRAWINGS AND AT ALL INTERSECTIONS, EACH SIDE OF OPENINGS AND AT THE ENDS OF WALLS. USE BAR SPACERS AT 10 FT. O.C. WHERE GROUT POUR HEIGHT EXCEEDS 10 FT.
8. AT BOND/TIE BEAM CORNERS AND INTERSECTIONS, PLACE 1 #5 X 5'-0" T & B CORNER BAR, WITH 30" LEGS EACH WAY, AT THE EXTERIOR FACE.
9. BEAMS NOT SCHEDULED ARE MIN. 8" X 12" TIE BEAMS WITH 2 #5 BARS TOP AND BOTTOM AND #3 TIES SPACED AT 12" O.C. TYPICAL U.O.N. COLUMNS NOT SCHEDULED ARE MIN. 8" X 12" TIE COLUMNS WITH 4 #5 VERTICAL BARS AND #3 TIES AT 12" O.C. USE 30" LAP SPLICES. HOOK ALL BARS AT DISCONTINUOUS ENDS.
10. REINFORCED MASONRY WALL CONSTRUCTION SHALL BE INSPECTED BY AN ENGINEER OR ARCHITECT IN ACCORDANCE WITH ACI 530.1/ASCE 6.
11. WHERE ANCHOR BOLTS, WEDGE ANCHORS OR ANCHORS SET IN EPOXY ARE SET IN A MASONRY WALL, FILL CELLS WITH GROUT FOR BOLTED COURSE, ONE COURSE ABOVE AND TWO COURSES BELOW.
12. PROVIDE LINTELS OR HEADERS WITH MIN. 8" BEARING OVER ALL MASONRY OPENINGS.
13. USE PRESSURE-TREATED WOOD FOR WOOD IN CONTACT WITH MASONRY.

STRUCTURAL STEEL:

1. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL O.S.H.A. REQUIREMENTS.
2. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
   a. PLATES AND BARS: ASTM A36, FY=36 KSI.
   b. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS):
      1. SQUARE SECTIONS: ASTM A500, GRADE B, FY=46 KSI.
3. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.
4. USE A-307 BOLTS FOR ALL ERECTION BOLTS AND BOLTS LESS THAN 3/4" DIAMETER, U.O.N. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 THREADED WITH NUTS AND WASHERS EACH END.
5. SETTING BASE AND BEARING PLATES: CLEAN CONCRETE AND MASONRY BEARING SURFACE OF BOND-REDUCING MATERIALS AND CLEAN BOTTOM OF BASE AND BEARING PLATE.
   a. SET BASE OR BEARING PLATE ON WEDGES OR OTHER ADJUSTING DEVICES.
   b. TIGHTEN ANCHOR RODS AFTER STRUCTURAL STEEL FRAME HAS BEEN PLUMBED. DO NOT REMOVE WEDGES OR SHIMS BUT, IF PROTRUDING, CUT OFF FLUSH WITH EDGE OF BASE OR BEARING PLATE PRIOR TO PACKING WITH GROUT.
   c. PACK OR POUR NON-SHRINK GROUT SOLIDLY BETWEEN BEARING SURFACE AND BASE OR BEARING PLATE. ENSURE THAT NO VOIDS REMAIN. FINISH EXPOSED SURFACES, PROTECT GROUT AND ALLOW TO CURE.
   d. FOR PROPRIETARY GROUT MATERIALS, COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
   e. BASE PLATES MUST BE GROUTED A MINIMUM OF 72 HOURS PRIOR TO PLACING CONCRETE SLABS ON SUPPORTING STEEL STRUCTURE.
6. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACES. REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTED BY ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR USING DRIFT PINS.
7. SPACE FILLER BEAMS EQUALLY BETWEEN SUPPORTS, U.O.N.
8. DO NOT SPLICE STRUCTURAL STEEL MEMBERS EXCEPT WHERE INDICATED ON THE DRAWINGS.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. REFER TO ARCHITECTURAL DRAWINGS FOR PAINTING AND FIREPROOFING OF STRUCTURAL STEEL. DO NOT PAINT STEEL SURFACES IN CONTACT WITH CONCRETE OR FIREPROOFING.

PRE-ENGINEERED WOOD TRUSSES:

1. DESIGN AND FABRICATE ALL TIMBER IN CONFORMANCE WITH DIVISION 6 SPECIFICATIONS, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND FLORIDA BUILDING CODE, 2020 EDITION, AND THE TPI-1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
2. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS SYSTEM ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE TRUSS SYSTEM. THE TRUSS SYSTEM ENGINEER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR REVIEW TO ARCHITECT/ENGINEER FOR THE ASSEMBLAGE OF PREFABRICATED, ENGINEERED WOOD TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL BRACING, CONNECTIONS AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATION CRITERIA (TRUSS PLACEMENT PLAN), THAT, IN COMBINATION, FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO THE ROOF TRUSS SYSTEM. THE TRUSS SYSTEM DOES NOT INCLUDE WALLS, OR ANY OTHER STRUCTURAL SUPPORT SYSTEMS. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS SYSTEM ENGINEER.
3. IN ACCORDANCE WITH RULE 61G15-31.003 OF THE FLORIDA ADMINISTRATIVE CODE, THE TRUSS DESIGN ENGINEER, A DELEGATED ENGINEER, SHALL DESIGN THE INDIVIDUAL TRUSSES OF THE TRUSS SYSTEM, BUT DOES NOT DESIGN THE TRUSS SYSTEM. THE TRUSS DESIGN ENGINEER SHALL SUBMIT SHOP (PIECE) DRAWINGS AND CALCULATIONS FOR EACH DIFFERENT TRUSS OF THE TRUSS SYSTEM SUCH THAT EACH TRUSS WILL FUNCTION TO SUPPORT THE DEAD, LIVE AND WIND LOADS APPLICABLE TO EACH TRUSS AND TRUSS GIRDER THAT TOGETHER COMPRISE THE TRUSS SYSTEM. THESE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE TRUSS DESIGN ENGINEER.
4. THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER SHALL EACH BE RESPONSIBLE FOR THEIR OWN WORK, HOWEVER, THEY MAY BE THE SAME INDIVIDUAL PROVIDING TWO SEPARATE SERVICES.
5. THE LOADS, LAYOUTS AND CONNECTIONS PROVIDED ON THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE THE MINIMUMS TO BE FOLLOWED BY THE TRUSS SYSTEM ENGINEER AND THE TRUSS DESIGN ENGINEER.
6. USE STRESS-RATED TIMBER FOR ALL WOOD STRUCTURAL MEMBERS. DO NOT USE WOOD STRUCTURAL MEMBERS WITH A BENDING STRESS LESS THAN 1,200 PSI OR A MODULUS OF ELASTICITY LESS THAN 1,400,000 PSI WHEN USED AT 19% MAXIMUM MOISTURE CONTENT.
7. PRESSURE TREATMENT OF ALL STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH AWPA STANDARDS C1 AND C2, LATEST EDITIONS WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD P5, LATEST EDITION. ALL LUMBER TO BE KILN-DRIED AFTER TREATMENT TO A MOISTURE CONTENT NOT TO EXCEED 19% OVEN-DRY BASIS, PER STANDARD C2. ALL LUMBER 4"X4" IN. (NOMINAL SIZE) AND LARGER IN DIMENSION TO BE TREATED TO THE SOIL AND FRESH WATER RETENTION AND PENETRATION REQUIREMENTS OF STANDARD C2. ALL LUMBER LESS THAN 4"X4" (NOMINAL SIZE) TO BE TREATED TO THE ABOVE GROUND REQUIREMENTS OF STANDARD C2.
8. MINIMUM DESIGN LOADS FOR ROOF TRUSSES:

30 PSF LL TOP CHORD
25 PSF DL TOP CHORD
10 PSF DL BOTTOM CHORD
200 LB CONCENTRATED LL ON ANY SINGLE BOTTOM CHORD PANEL POINT
WIND PRESSURE BASED ON ASCE-7.

9. CD FOR WIND SHALL NOT EXCEED 1.6 FOR WOOD MEMBERS. NO STRESS INCREASE ALLOWED FOR METAL PLATES.

SOIL STATEMENT:

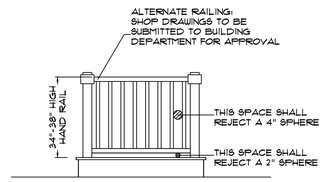
1. THE EXISTING SOIL IS ASSUMED TO HAVE A DESIGN BEARING OF 2,000 PSF. IF SOIL CONDITIONS VARY, CONTACT THE ENGINEER OF RECORD
2. ALL AUGER HOLES AND AUGER PILING SHALL BE DRILLED 3' INTO THE EXISTING PERVIOUS OOLITE ROCK
3. ALL PRECAST CONCRETE PILING SHALL BE DRIVEN TO REFUSAL

LUMBER AND FRAMING NOTES

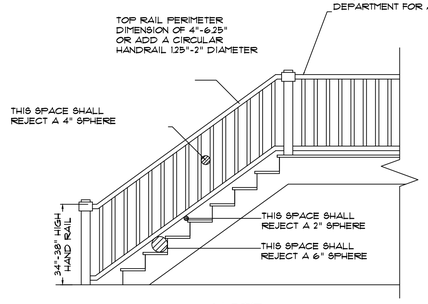
1. FRAMING LUMBER SHALL CONFORM WITH THE PROVISIONS OF THE AMERICAN SOFTWOOD LUMBER STANDARD PS-20-(LATEST EDITION) AND EACH PIECE SHALL BEAR THE GRADE STAMP OF AN APPROVED GRADING AGENCY.
2. FRAMING LUMBER GRADES THE FOLLOWING GRADES SHALL BE THE MINIMUM ACCEPTABLE GRADES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

ITEM	MINIMUM GRADE
STUD ONLY:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL LIGHT FRAMING:	
2" TO 4" THICK 2" TO 4" WIDE	NO. 2 SOUTHERN PINE
STRUCTURAL JOISTS & HEADERS:	
2" TO 4" THICK 6" AND WIDER	NO. 2 SOUTHERN PINE
POSTS:	
4" X 4" AND LARGER	NO. 2 SOUTHERN PINE

3. BOLT HOLES SHALL BE 1/16" LARGER THAT THE BOLT SIZE. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.
4. STANDARD CUT WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD.
5. 5. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR OTHERWISE BE PROTECTED BY AN APPROVED SEPARATING MATERIAL. BOLTS SHALL BE PLACED 9" FROM ANY NOTCH GREATER THAN 1/2 THE WIDTH OF A MEMBER.
6. DO NOT NOTCH JOISTS, RAFTERS OR BEAMS. OBTAIN ENGINEER'S OR ARCHITECTS APPROVAL FOR ANY HOLES OR NOTCHES NOT DETAILED. HOLES THROUGH SILLS, PLATES, STUDS AND DOUBLE PLATED IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED IN THE CENTER OF THE STUD OR PLATE.
7. 2" SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS.
8. ALL NAILING SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2020 FLORIDA BUILDING CODE. NAILS SHALL BE COMMON WIRE NAILS.
9. ALL INTERIOR FRAMING SHALL BE 2" X 4" WALL STUDS @ 16" O.C.



HANDRAIL / GUARDRAIL DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION



NOTE:
OPEN RISERS TO REJECT A 4" DIA SPHERE
OPEN RISERS IN THIS PACKAGE: NONE

HANDRAIL / GUARDRAIL STAIR DETAIL:
CONSTRUCTED TO WITHSTAND A CONCENTRATED LOAD OF 200 LBS APPLIED AT ANY POINT IN ANY DIRECTION

KEYS ENGINEERING SERVICES
DARYLE L. OSBORN
P.E. No. FL 27428
91700 OVERSEAS HIGHWAY TAVERNIER, FL. 33070 - PH. (305) 852-0262

No.	REVISION	DATE
0	FOR SUBMITTAL	8/31/2018

SCALE: AS SHOWN
DATE: 1/4/2017
DWG BY: D.G.O.
REVISED:

TITLE: TRIPLEX E - STRUCTURAL
PROJECT: BGISLA LLC
84745 OLD HIGHWAY
WINDLEY KEY, FLORIDA

DRAWING No: S-9

PROJECT No: D-16-047