SECOND FLOOR ADDITION FOR

455 U.S. HIGHWAY #1

DEERFIELD BEACH, FLORIDA

BUILDING INFORMATION:

BUILDING CODE:

FLORIDA BUILDING CODE - 5th EDITION (2014) EXIST. BUILDING - ADDITION

2010 FLORIDA FIRE PREVENTION CODE, 5th EDITION NFPA I 2012, NFPA 101 2012,

DATA:

OCCUPANCY: GROUP 'B' CONSTRUCTION TYPE: TYPE 'V-B'

NUMBER OF STORIES: 2 (TWO) ± 26'-8" (TOP OF ROOF MANSARD) BUILDING HEIGHT:

GROSS FLOOR AREA: EXISTING: 3,745 S.F. 1,734 S.F.

LIFE SAFETY SYSTEM:

SPRINKLED:	YES	<u>X</u> NO
EMERGENCY LIGHTING	X YES	NO
EXIT SIGNS:	X YES	NO
FIRE ALARMS:	YES	_X_ NO
SMOKE DETECTION SYSTEM:	X YES	NO

SYMBOL LEGEND

DRAWING TITLE

AI.OI FLOOR PLAN SCALE: 1/4" = 1'-0"

A2.02 SECTION MARK

ELEVATION VIEW MARK

ELEVATION MARK TOP OF FLOOR SLAB ELEV. +0'-0"

A2.03

DRAWING INDEX

CS LOCATION MAP, VICINITY MAP, BUILDING CODE INFORMATION AND GENERAL NOTES

ARCHITECTURAL

SPI SITE PLAN, SITE DATA, PARKING CALC'S AND NOTES

- LSI SECOND FLOOR LIFE SAFETY PLAN AND LEGEND
- AI FIRST FLOOR PLAN, SECOND FLOOR PLAN AND LEGEND
- A2 BUILDING ELEVATIONS
- A3 BUILDING ELEVATIONS
- A4 SECOND FLOOR REFLECTED CEILING PLAN A5 ROOF PLAN AND STAIR DETAILS
- A6 BUILDING SECTIONS AND DETAILS
- A7 ROOM FINISH, WINDOW AND DOOR SCHEDULE, DETAILS

STRUCTURAL

- SI STRUCTURAL FLOOR PLAN AND SCHEDULE
- 52 ROOF FRAMING PLAN AND SCHEDULE
- 53 SECTIONS, DETAILS AND NOTES

PLUMBING

PI PLUMBING PLAN, RISERS, SCHEDULES, DETAILS AND NOTES

MECHANICAL

MI MECHANICAL PLAN, SPECIFICATIONS AND CALCULATIONS

M2 MECHANICAL NOTES AND DETAILS

ELECTRICAL

- EL POWER PLAN AND SCHEDULE
- E2 LIGHTING PLAN AND SCHEDULE
- E3 PANEL SCHEDULE, RISER DIAGRAM LOAD CALC'S AND NOTES

GENERAL NOTES:

- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY PROJECT MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLANS OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS, IF SUCH NOTIFICATIONS HAS NOT BEEN GIVEN.
- 2. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- 3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS ALL WORK AND MATERIALS SHALL COMPLY WITH 2014 FLORIDA BUILDING CODE AND ALL OTHER LOCAL ORDINANCES.
- 4. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROVIDING PEDESTRIAN PROTECTION, DURING CONSTRUCTION, TO COMPLY WITH ALL FEDERAL, STATE & LOCAL CODES AND OSHA REGULATIONS.
- 5. CONTRACTOR SHALL VISIT THE SITE AND BE RESPONSIBLE FOR KNOWING ALL OBSERVABLE CONDITIONS.
- 6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FINISHES WITH OWNER.
- 7. GENERAL CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS FROM THE JOB SITE AND LEAVE THE BUILDING BROOM CLEAN. ALL GLASS SHALL BE THOROUGHLY CLEANED AT COMPLETION OF CONSTRUCTION. ANY PAINT SPECKS AND OTHER CONSTRUCTION MARKS SHALL BE REMOVED FROM ALL FINISHED SURFACES.

VICINITY MAP





LOCATION MAP





H. DeMello H. DeMello AUG. 21, 2015

ADDITION

SECOND

revisions

Z М



AS SHOWN

SITE LIGHTING NOTE

ALL LIGHT POLES AND FIXTURES ARE EXISTING AND WILL NOT BE AFFECTED BY THE PROPOSED WORK. SITE LIGHTING/PHOTOMETRICS TO REMAIN UNDISTURBED.

SITE DRAINAGE NOTE

ALL PAVED AREAS ARE EXISTING TO REMAIN UNDISTURBED.

LEGAL DESCRIPTION

SOUTH, RANGE 43 EAST, BEING MORE FULLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4, SECTION 6, TOWNSHIP 48 SOUTH, RANGE 43 EAST, THENCE SOUTH 00^35'36" EAST. ON THE WEST LINE OF THE SAID NE 1/4 OF SECTION 6, A DISTANCE OF 2,959.52 FEET, THENCE NORTH 89^23'43" EAST ON THE NORTH LINE OF THE SE 1/4 SECTION 6, TOWNSHIP 48 SOUTH, RANGE 43 EAST, A DISTANCE OF 662.07 FEET TO THE NORTHWEST CORNER OF THE NE 1/4 OF THE NW 1/4 OF THE SE 1/4 OF SECTION 6, TOWNSHIP 48 SOUTH, RANGE 43 EAST, THENCE SOUTH 00^43'22" WEST OF THE WEST LINE OF THE SAID NE 1/4 OF THE NW 1/4 OF THE SE 1/4 A DISTANCE OF 216.88 FEET TO THE NORTHWEST CORNER OF PARCEL "A" SEILER TWO, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 160, PAGE 27 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, THENCE NORTH 89^24'09" EAST OF THE NORTH LINE OF THE SAID PARCEL "A", A DISTANCE OF 334.95 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "A" AND THE POINT OF BEGINNING, THENCE CONTINUING NORTH 89^24'08" EAST OF THE EASTERLY EXTENSION OF THE NORTH LINE OF SAID PARCEL "A" AND ON THE SOUTH LINE OF TRACK "A", CAMPBELL CORNER, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 113, PAGE 25 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, A DISTANCE OF 202.56 FEET TO A POINT TO THE WEST RIGHT-OF-WAY LINE OF U.S. HIGHWAY No. I THENCE SOUTH 08^32'38" ON THE SAID WEST RIGHT-OF-WAY LINE A DISTANCE OF 149.60 FEET, THENCE SOUTH 85^23'53" WEST, A DISTANCE 205.35 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL "A", THENCE NORTH 08^31'38" EAST ON THE EAST LINE OF SAID PARCEL "A", A DISTANCE OF 164.12 FEET TO THE POINT OF BEGINNING.

A PORTION OF THE NE 1/4 OF THE NW 1/4 OF THE SE 1/4 OF SECTION 6, TOWNSHIP 48

SAID LANDS SITUATED, LYING AND BEING IN THE CITY OF DEERFIELD BEACH, BROWARD COUNTY, FLORIDA AND CONTAINING 31,372 SQUARE FEET OR 0.72 ACRES MORE OR LESS.

ZONING INFORMATION

B-2 HIGHWAY BUSINESS EXISTING ZONING:

EXISTING LAND USE: RETAIL

SITE DATA

EXISTING

GROSS LOT AREA: 31,359 S.F. 0.72 AC. 4,550 S.F. (14.5%) LOT COVERAGE: 24,237 S.F. (77.3%) IMPERVIOUS AREA: 7,122 S.F. (22.7%) PERVIOUS AREA: BUILDING AREA: 3,745 S.F.

COVERED PATIO: 805 S.F.

TOTAL NO. OF FLOORS: 24'-6" (T.O. TOWER) BUILDING HEIGHT:

NEW

GROSS LOT AREA: 31,359 S.F. 0.72 AC. 4,550 S.F. (14.5%) LOT COVERAGE: 23,982 S.F. (76.5%) IMPERVIOUS AREA: 7,377 S.F. (23.5%) PERVIOUS AREA: BUILDING AREA: 3,745 S.F. 1,735 S.F. 2nd FLOOR ADDITION: COVERED PATIO: 805 S.F.

TOTAL NO. OF FLOORS:

26'-8" (T.O. MANSARD) BUILDING HEIGHT:

PARKING CALCULATION

RETAIL AREA

CLASSROOM (DIVING LESSONS) OFFICE

STORAGE

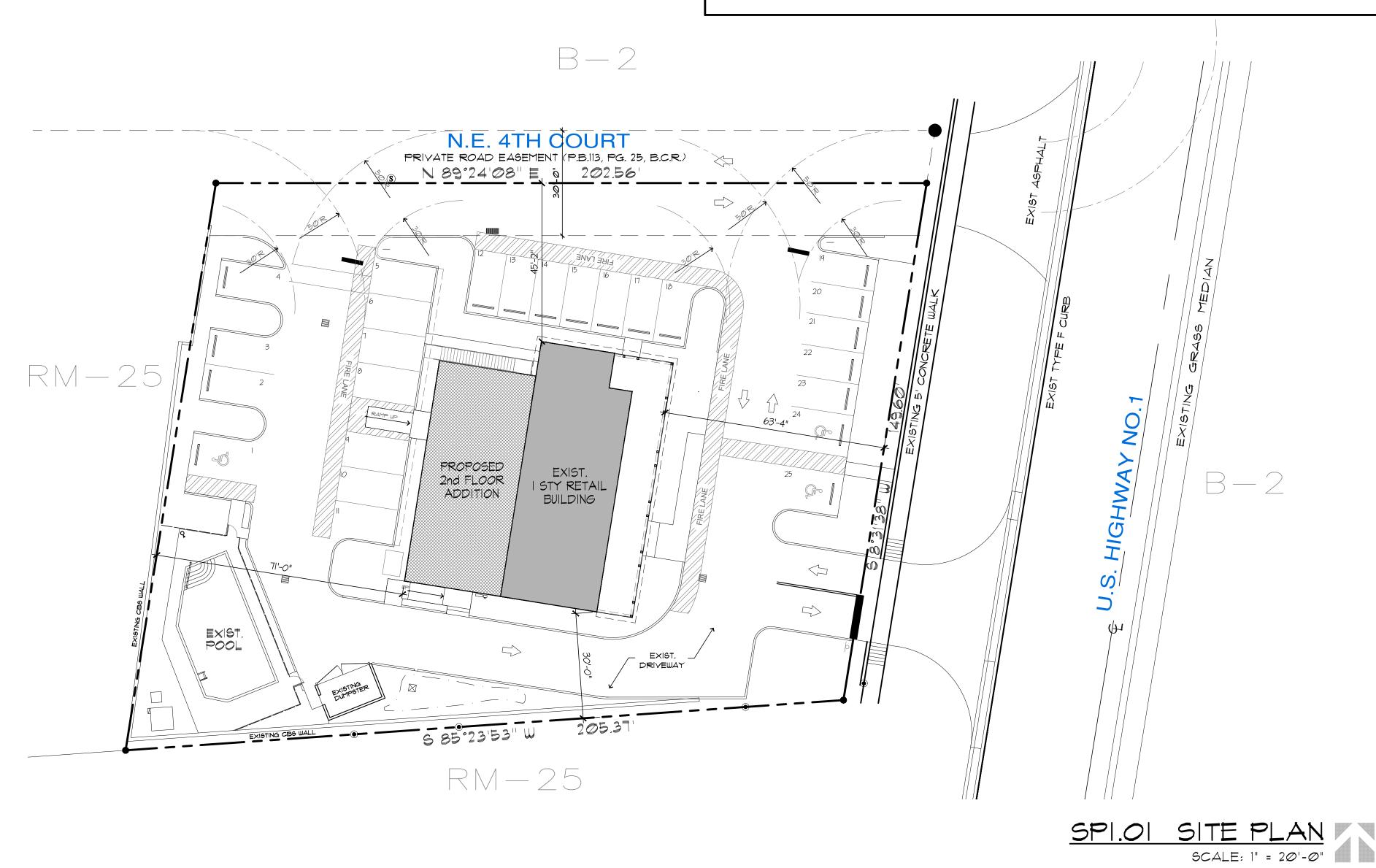
TOTAL REQUIRED PARKING

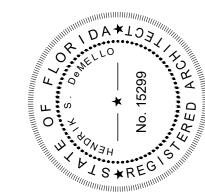
2,525 S.F. @ | SPACE/300 S.F. = 8.5 SPACES 5/CLASSROOM + 214 S.F. @ 1/50 S.F. = 9.3 SPACES

1,500 S.F. @ 1/250 S.F. = 6 SPACES 342 S.F. @ 1/750 S.F. = 1 SPACES

25 SPACES

25 SPACES (INCLUDING 3 HC SPACES) TOTAL PROVIDED PARKING











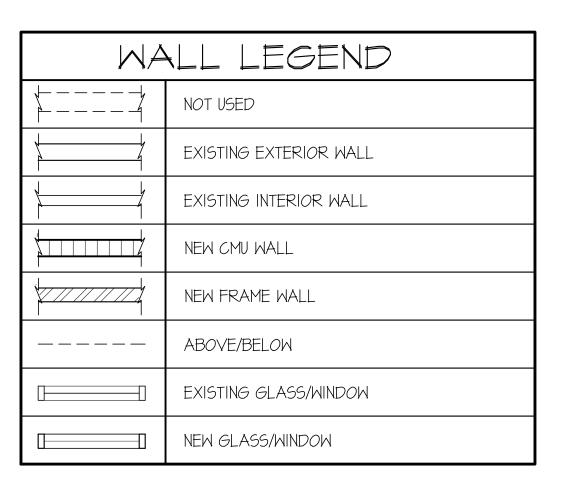
CHITE

ADDITION FOR

SECOND FLOOR

AUG. 21, 2015





FIRE DEPT. NOTES

- I. NUMERICAL ADDRESS SHALL BE POSTED ON ALL EXTERIOR DOORS IF REQUIRED BY CITY ORDINANCE.
- 2. A REDUCES FIXTURE AND SEATING LAYOUT PLAN ON A $8\frac{1}{2}$ " x II" SHEET WILL BE PROVIDED WITHIN THE SET OF PLANS, TO THE FIELD FIRE INSPECTOR AT TIME OF FINAL INSPECTION, AND A LEGIBLE COPY PERMANENTLY POSTED NEAR THE MAXIMUM CAPACITY SIGN.
- 3. MAXIMUM CAPACITY AND MAXIMUM SEATING SIGNS TO BE POSTED IN ACCORDANCE WITH NFPA-101: 12.7.9.3.1.
- 4. PORTABLE FIRE EXTINGUISHERS WITH MIN. RATING OF 2A IOBC SHALL BE INSTALLED NOT MORE THAN 75' FROM EXITS. FIRE EXTINGUISHERS SHALL BE MOUNTED 48" AFF TO TOP OF HANDLE AND MUST BE CURRENTLY DATED AND TAGGED BY A LICENSED FIRE EQUIPMENT COMPANY.
- 5. DOORS THAT OPEN UP INTO EGRESS MUST BE PROVIDED WITH DOOR CLOSURE SEE DOOR SCHEDULE.
- 6. ADDITION EXIT AND EMERGENCY LIGHTS MAY BE REQUIRED BY THE FIELD FIRE INSPECTOR AT THE TIME OF FIRE FINAL INSPECTION.

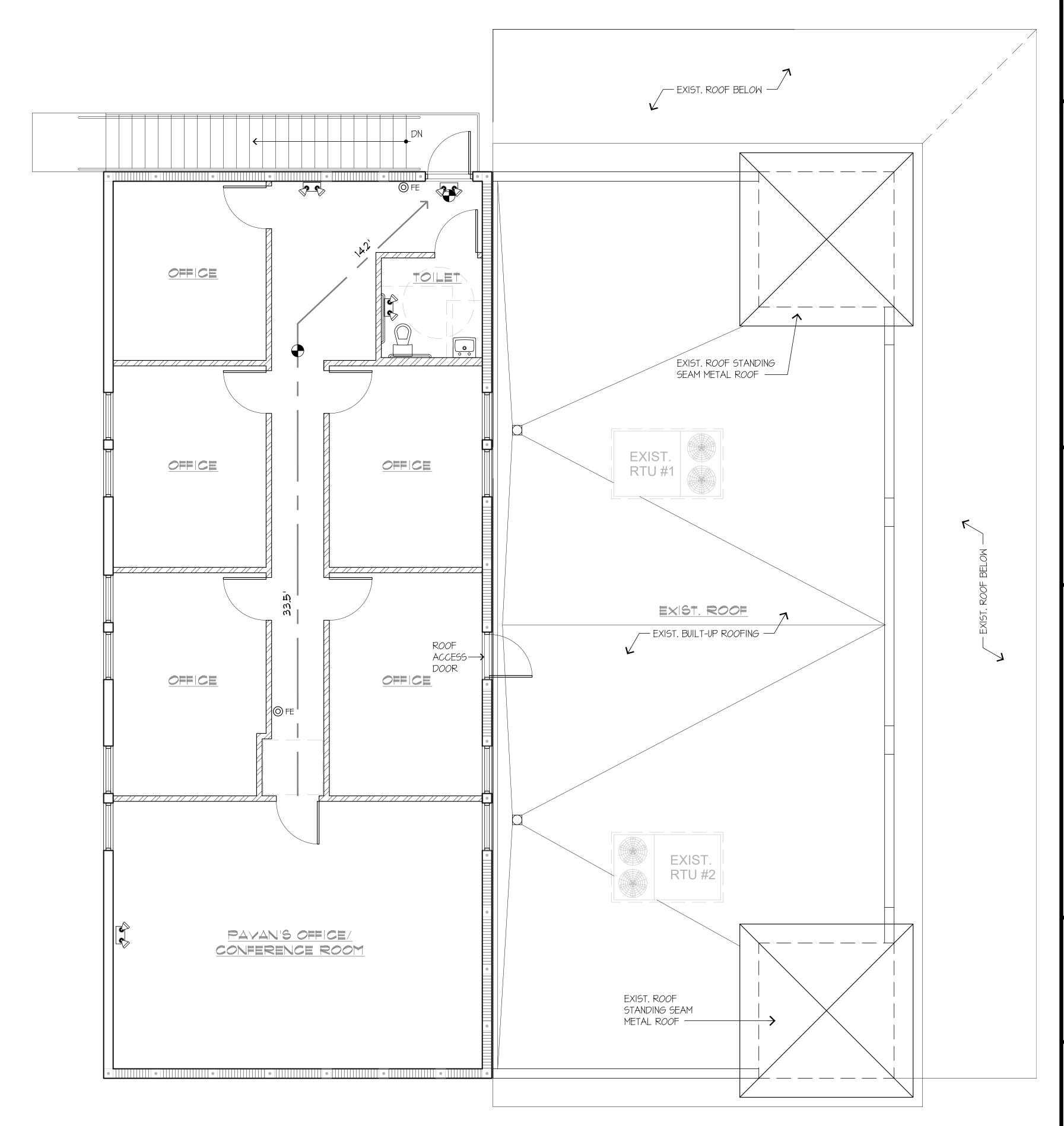
INTERIOR FIN. NOTES

- I. ALL INTERIOR FINISHES SHALL BE CLASS 'C' RATED AS PER FBC TABLE 803.5.
- 2. FLOOR COVERING MATERIAL IN PASSAGEWAY AND CORRIDORS SHALL NOT BE LESS THAN CLASS II MATERIAL.

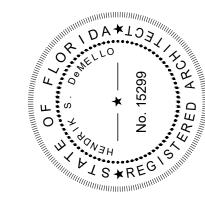
	LEGEND
\otimes	EXIT LIGHT WITH BATTERY BACK-UP
	EMERGENCY/EXIT LIGHT COMBO
	EMERGENCY LIGHT WITH BATTERY BACK-UP
⊚f£	PORTABLE FIRE EXTINGUISHER - 2A IOBC

F.B.C. OCCUP. LO	DAD CALC.
BUSINESS 1,734 S.F. @	1/100 S.F. = 18 OCC.
TOTAL OCCUPANT LOAD	18 OCCUPANTS

F.B.C. EGRESS CALCS.
REQUIRED EGRESS WIDTH OCCUPANT LOAD 18 × 0.2" 3.6"
<u>PROVIDED EGRESS WIDTH</u> (I) 36" DOOR 72.0"







HITECTS 6001907 A & LENGTH COMMINION CONTROL OF THE COMMINION CONTROL O

MEMBER:
AMERICAN
INSTITUTE
ARCHITECT
AA2600190

HITECTURE

vest 18 Street, Boca Raton, Flo

Il ideas and designs indicated ar represented by this drawing are the property of DeMELLO ARCHITECTURE and were created and eveloped for use in connection with the specific project. None

DEFERENCE DIVERS

455 DEER awing name:

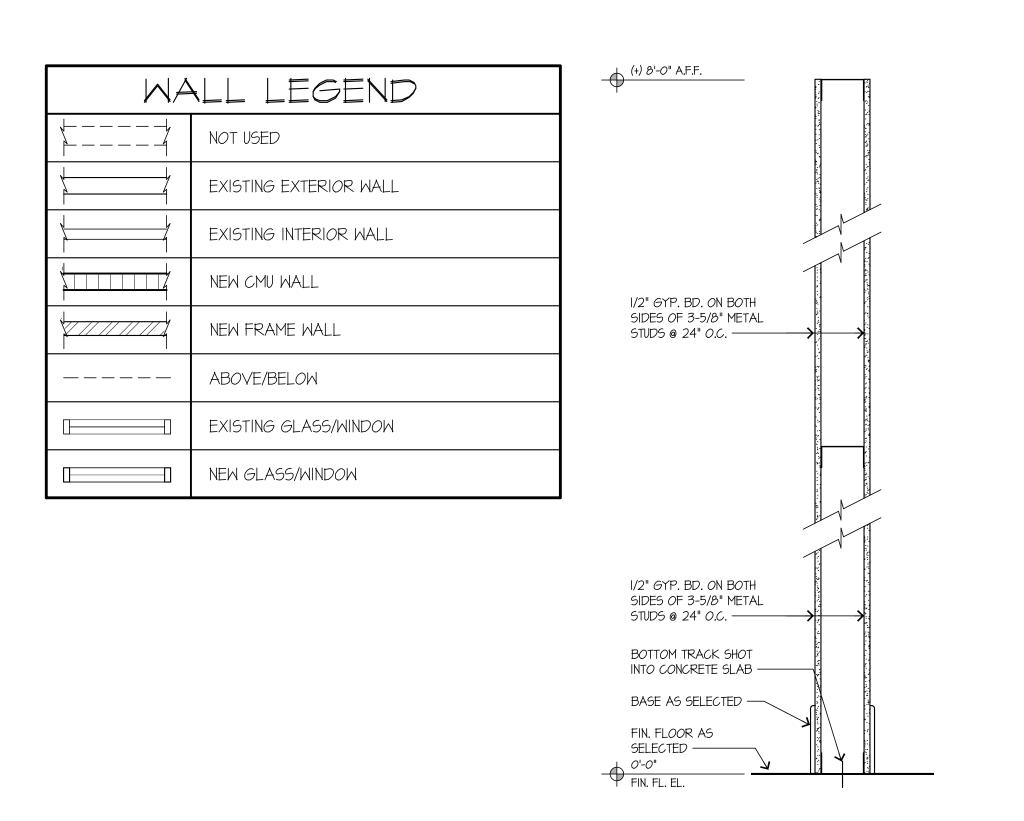
evisions

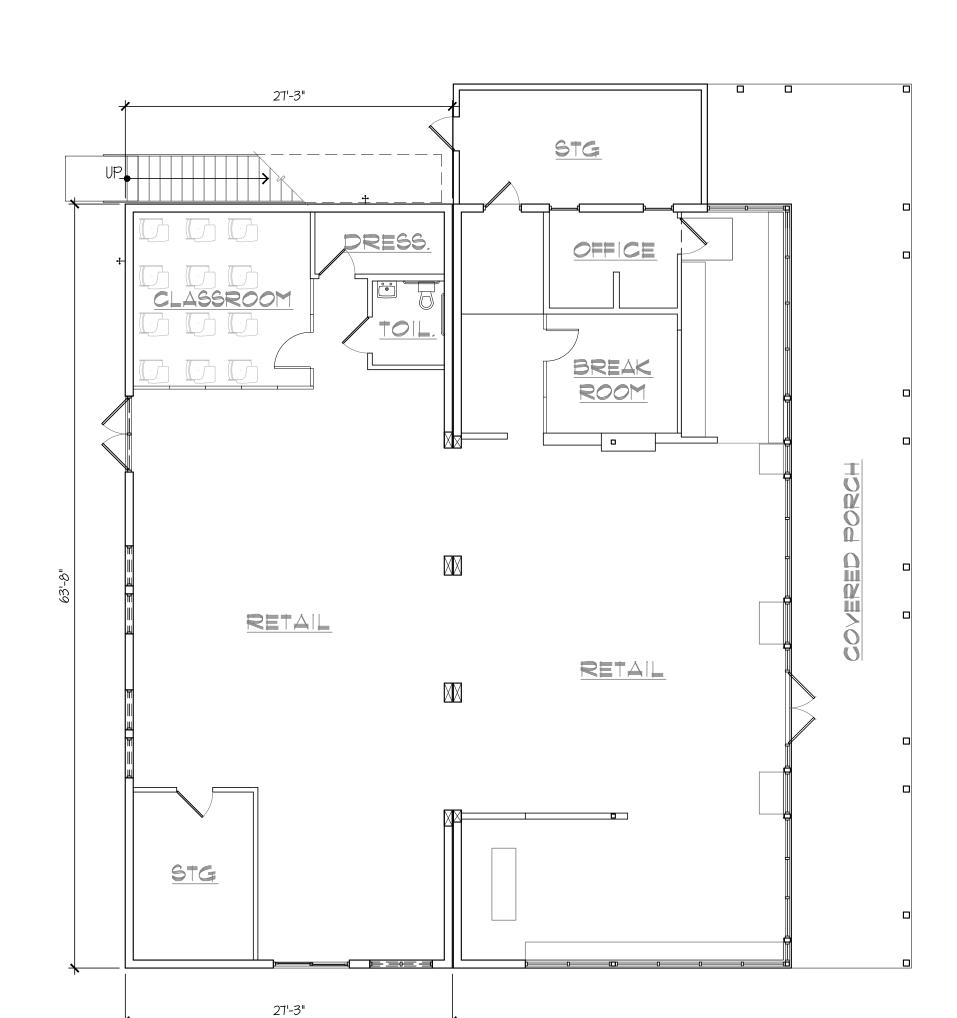
ADDITION FOR

SECOND FLOOR

designed H. DeMello
drawn H. DeMello
date AUG. 2I, 20I5
scale AS SHOWN
project # I5.I38



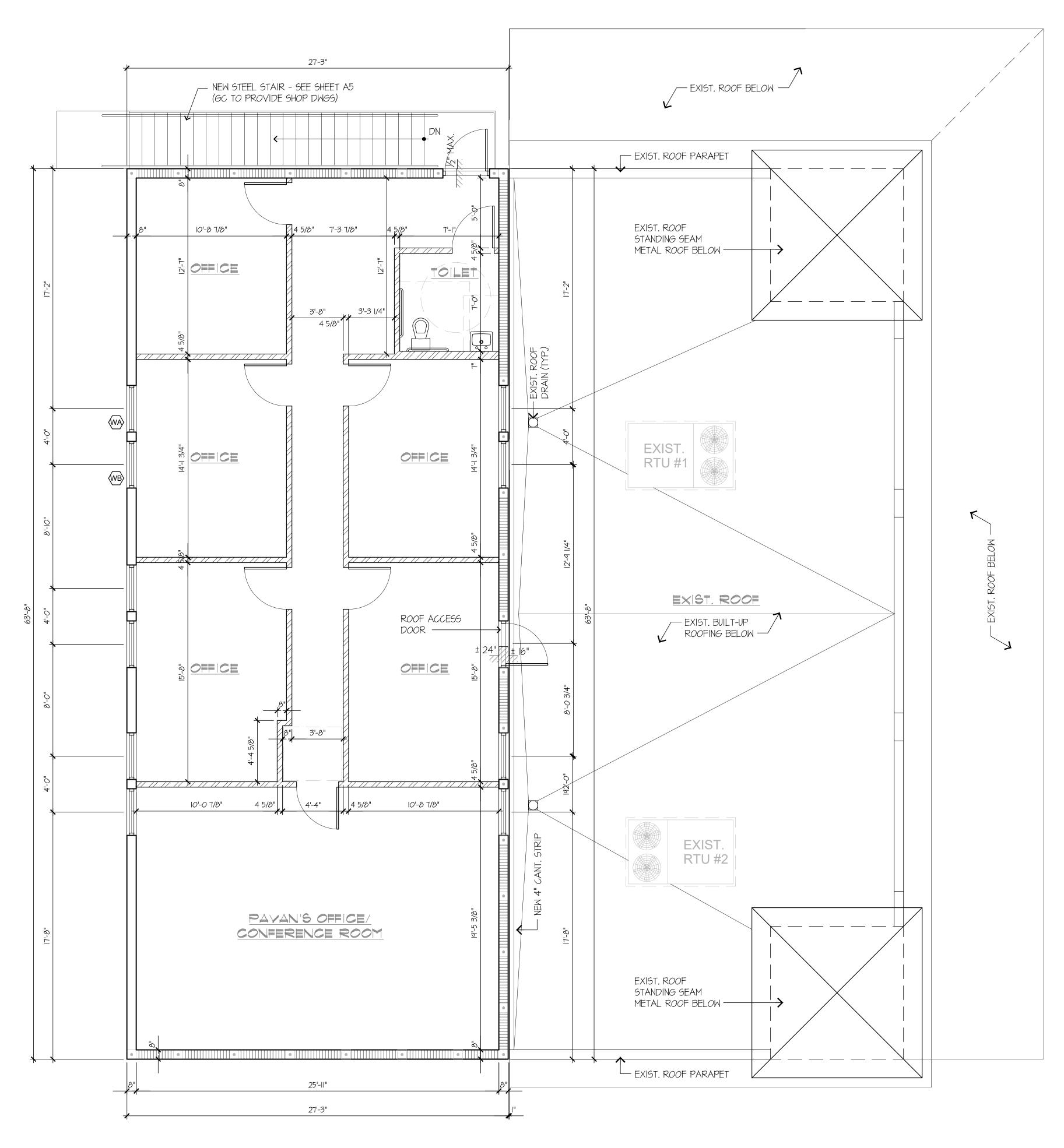




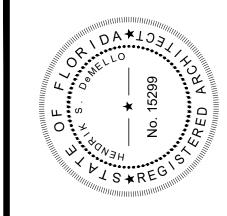
AI.03 INT. WALL SECTION

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









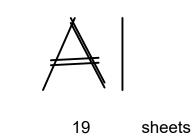


ADDITION FOR

SECOND FLOOR

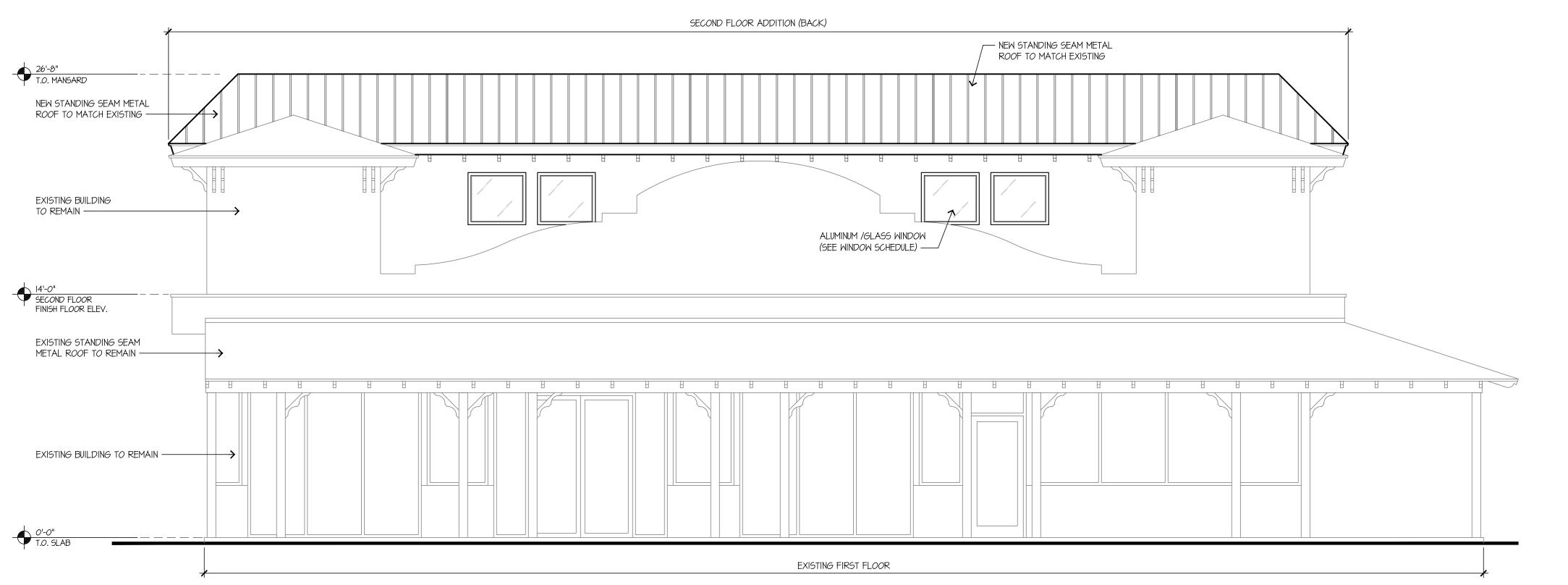
ロ X Ⅲ

H. DeMello AUG. 21, 2015 AS SHOWN

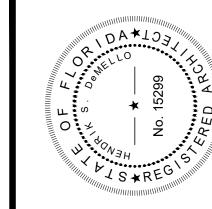


A2.02 WEST ELEVATION

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



A2.01 EAST ELEVATION SCALE: 1/4"=1'-0"



ADDITION FOR

SECOND FLOOR

designed	H. DeMello
drawn	H. DeMello
date	AUG. 21, 2015
scale	AS SHOWN
project #	15.138



or represented by this drawing are the property of DeMELLO ARCHITECTURE and were created and developed for use in connection with the specific project. None of such ideas and designs shall

TEDYERS

U.S. HIGHWAY #I

ADDITION FOR

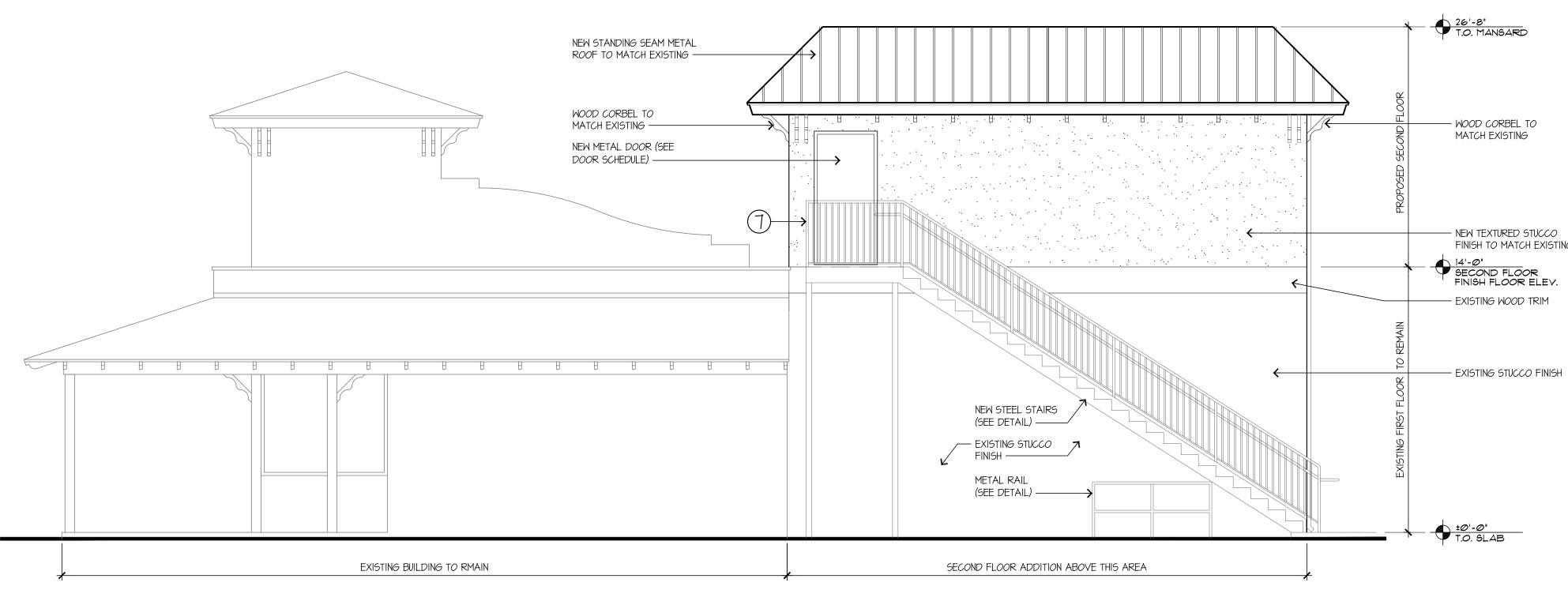
SECOND FLOOR

ОХП ОХ 455 U.S. НІОНМ DEFREIELD BEA

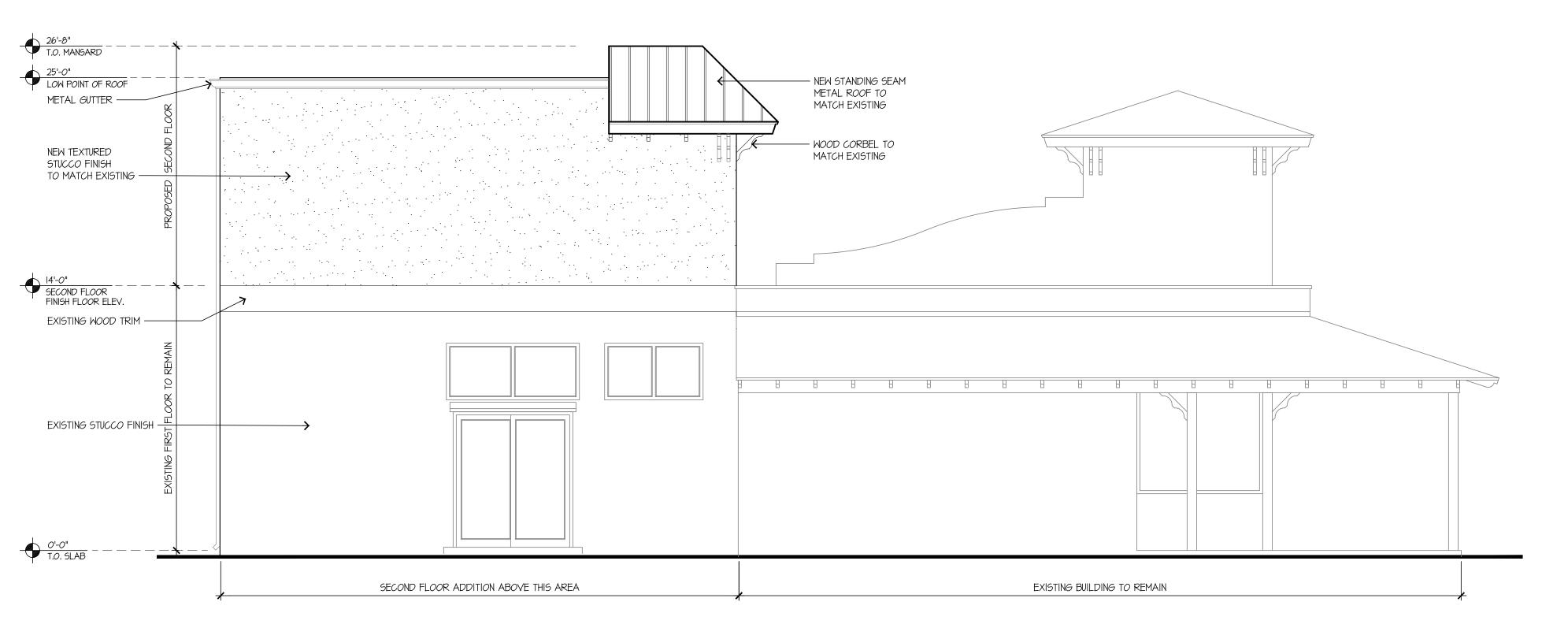
isions

designed H. DeMello
drawn H. DeMello
date AUG. 2I, 20I5
scale AS SHOWN
project # I5.I38

AS



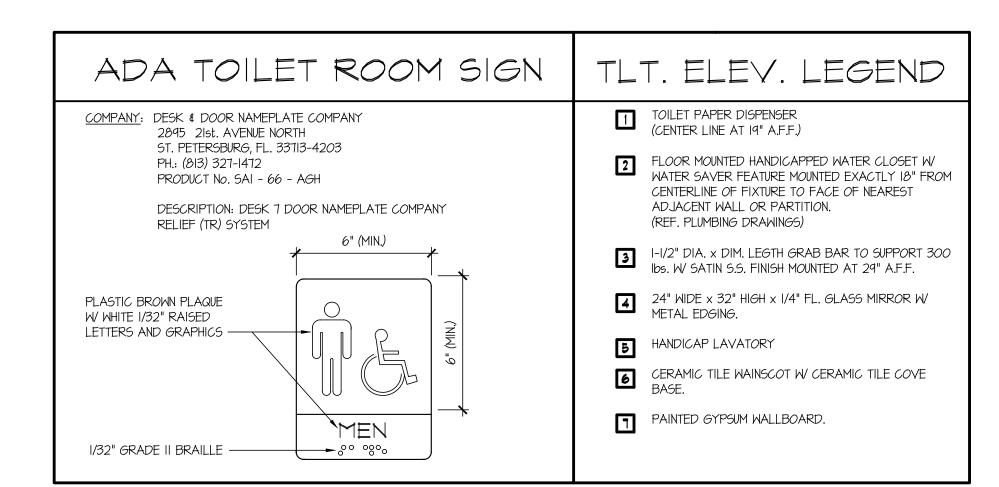
A3.02 NORTH ELEVATION SCALE: 1/4"=1'-0"

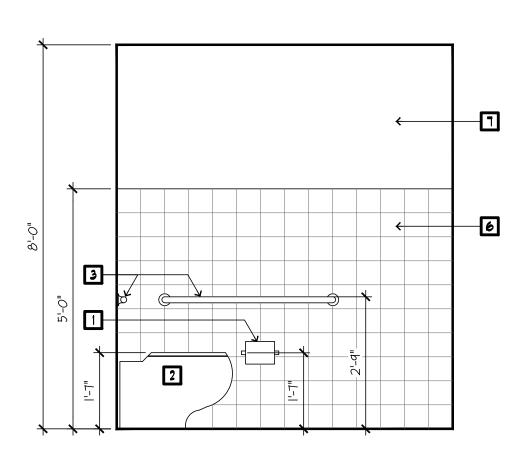


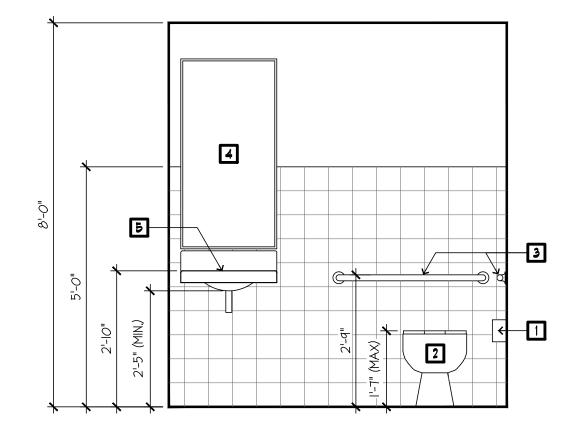
A3.01 SOUTH ELEVATION

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

NOTE: OPEN CEILING TO STRUCTURE ABOVE. SEE E2 FOR SWITCHES LOCATION.



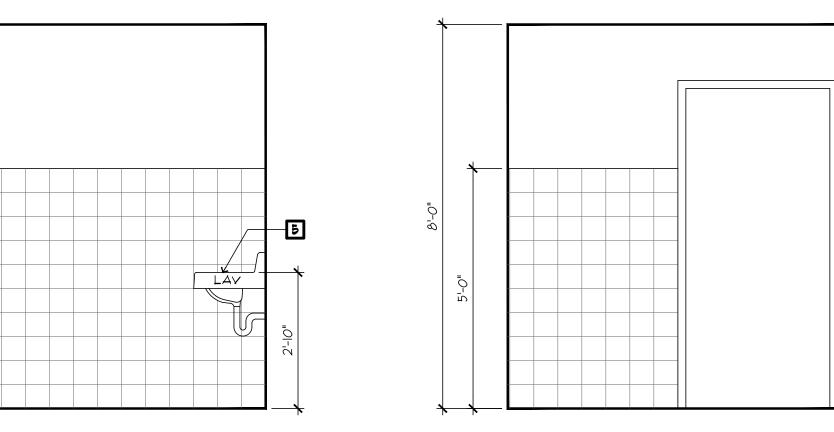




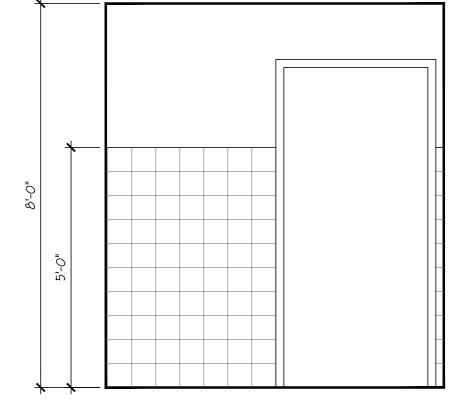
A4.05 ELEVATION

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

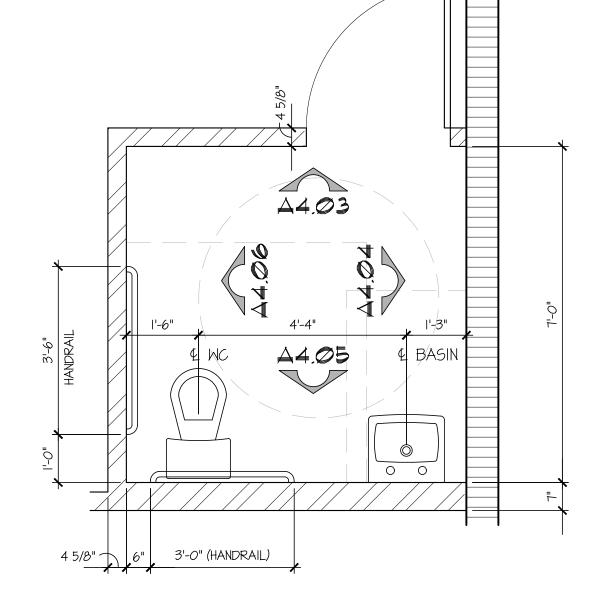




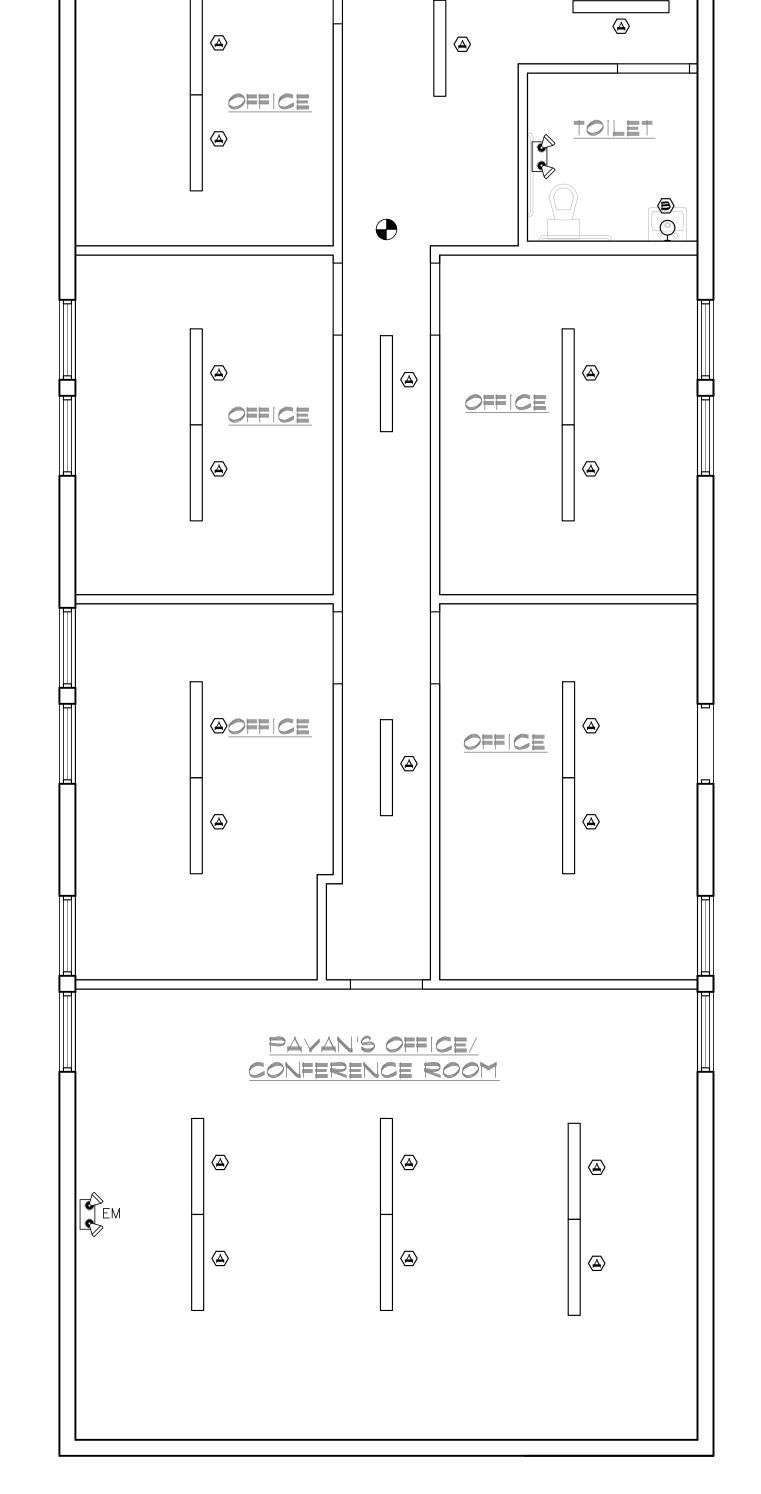
A4.4 ELEVATION SCALE: 1/2"=1'-Ø"



A4.03 ELEVATION SCALE: 1/2"=1'-0"

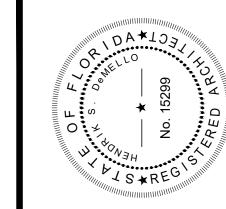


A4.02 TOILETROOM PLAN SCALE: 1/2"=1'-0"



EM





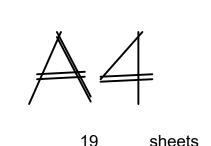


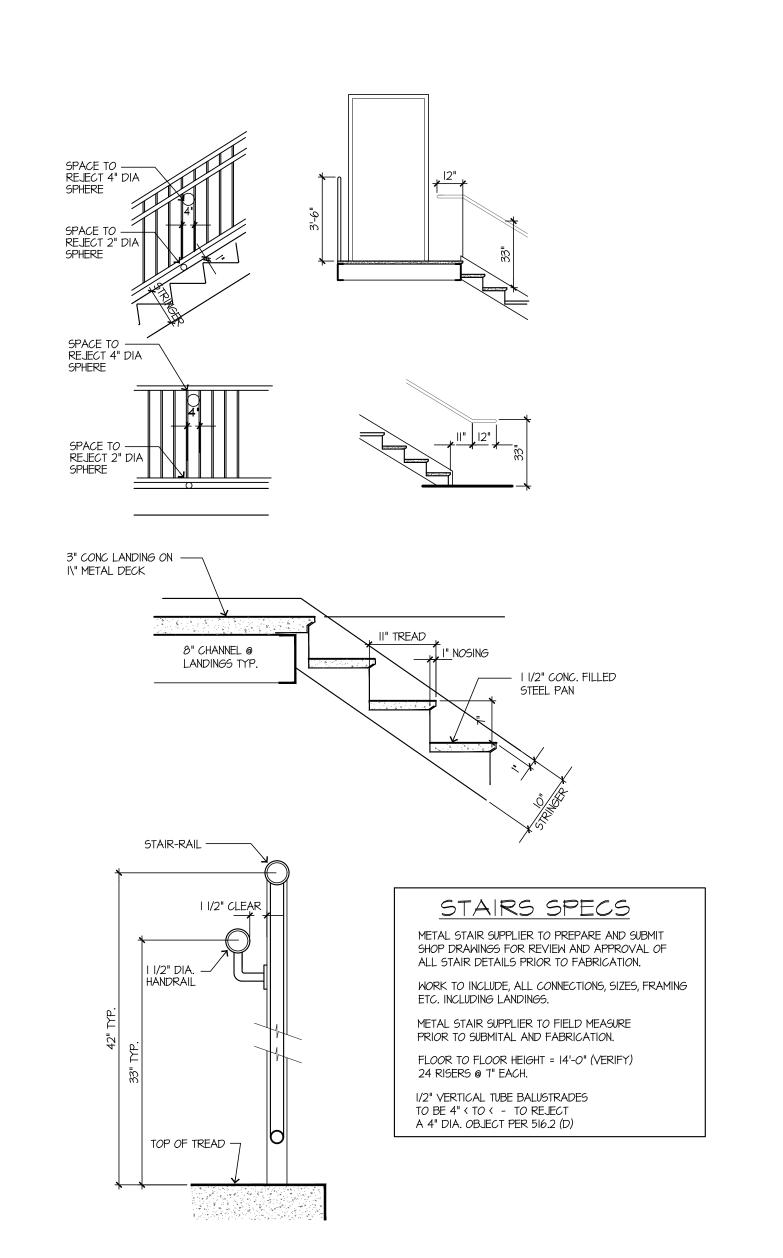
四×四

ADDITION FOR

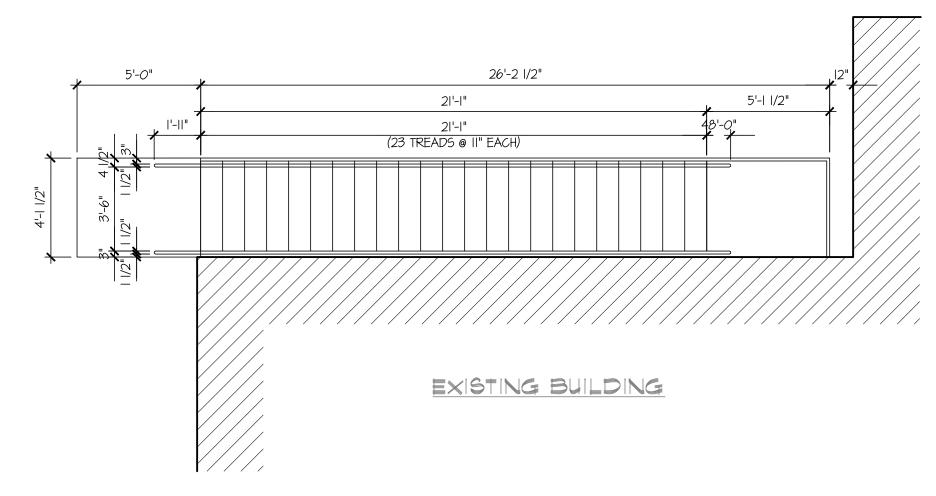
SECOND FLOOR

designed	H. DeMello
drawn	H. DeMello
date	AUG. 21, 2015
scale	AS SHOWN
project #	15.138
sheet	

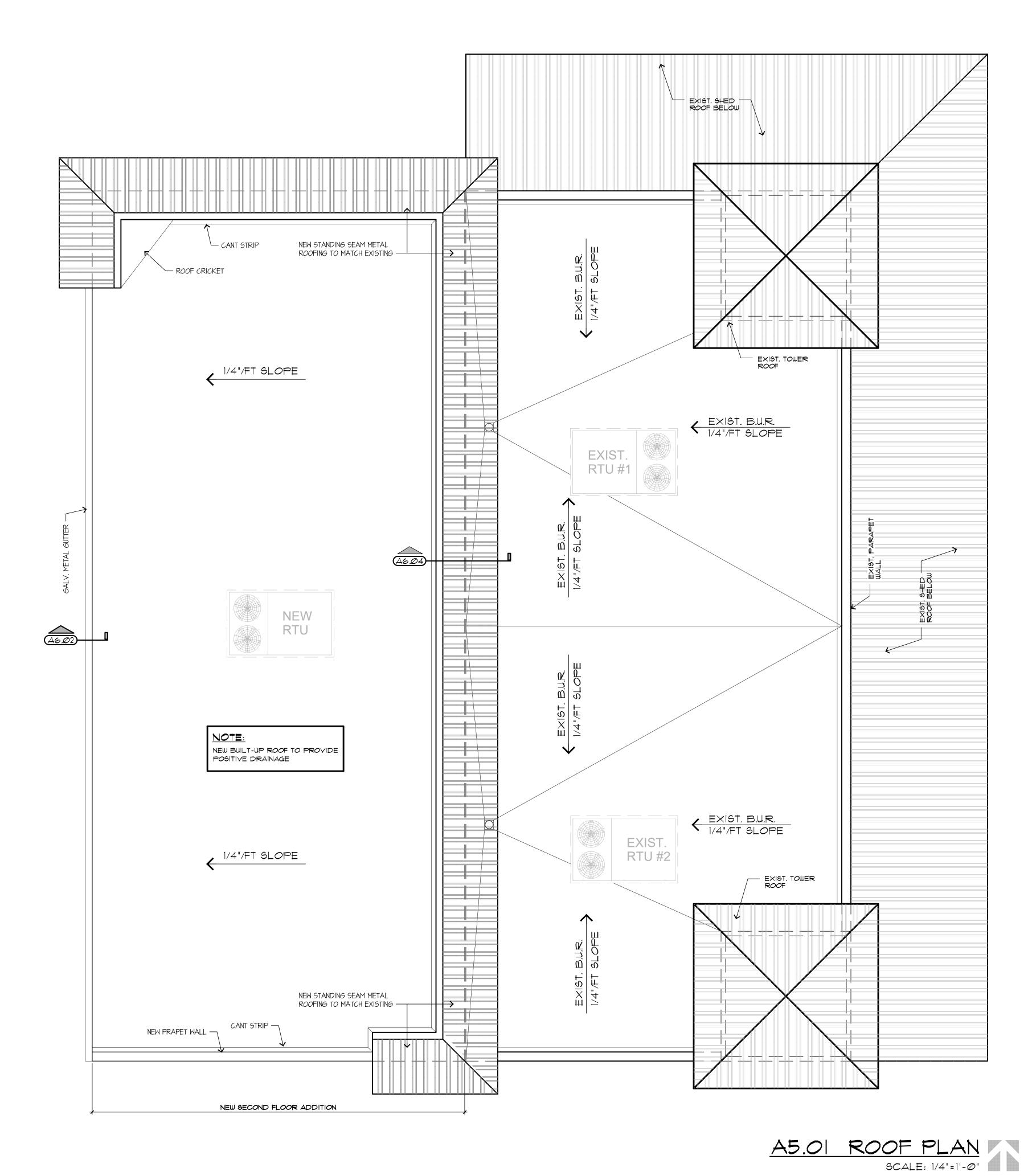


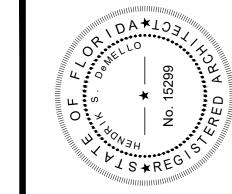


A5.03 STAIR DETAIL



A5.02 STAIR PLAN SCALE: 1/4"=1'-0"



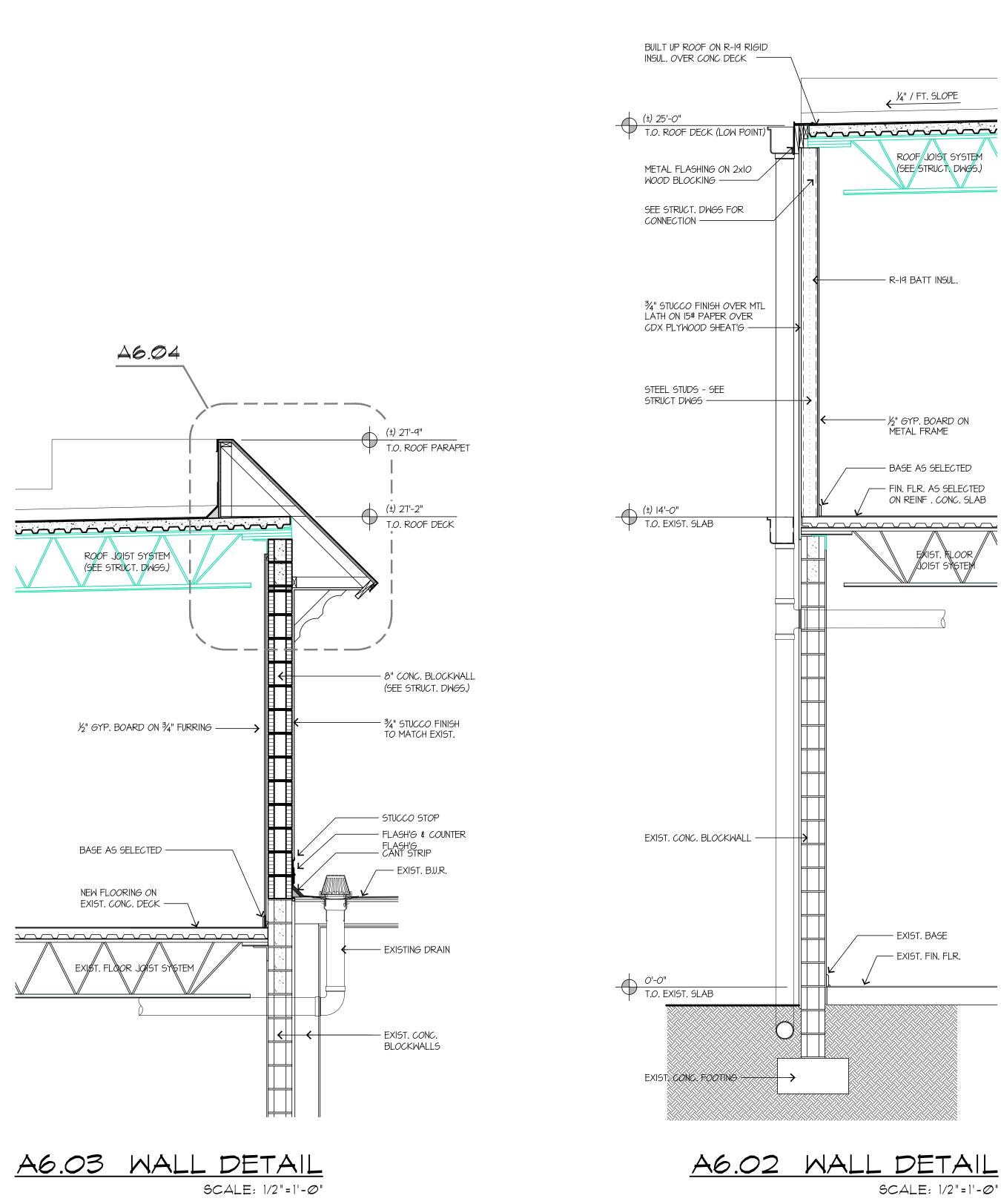


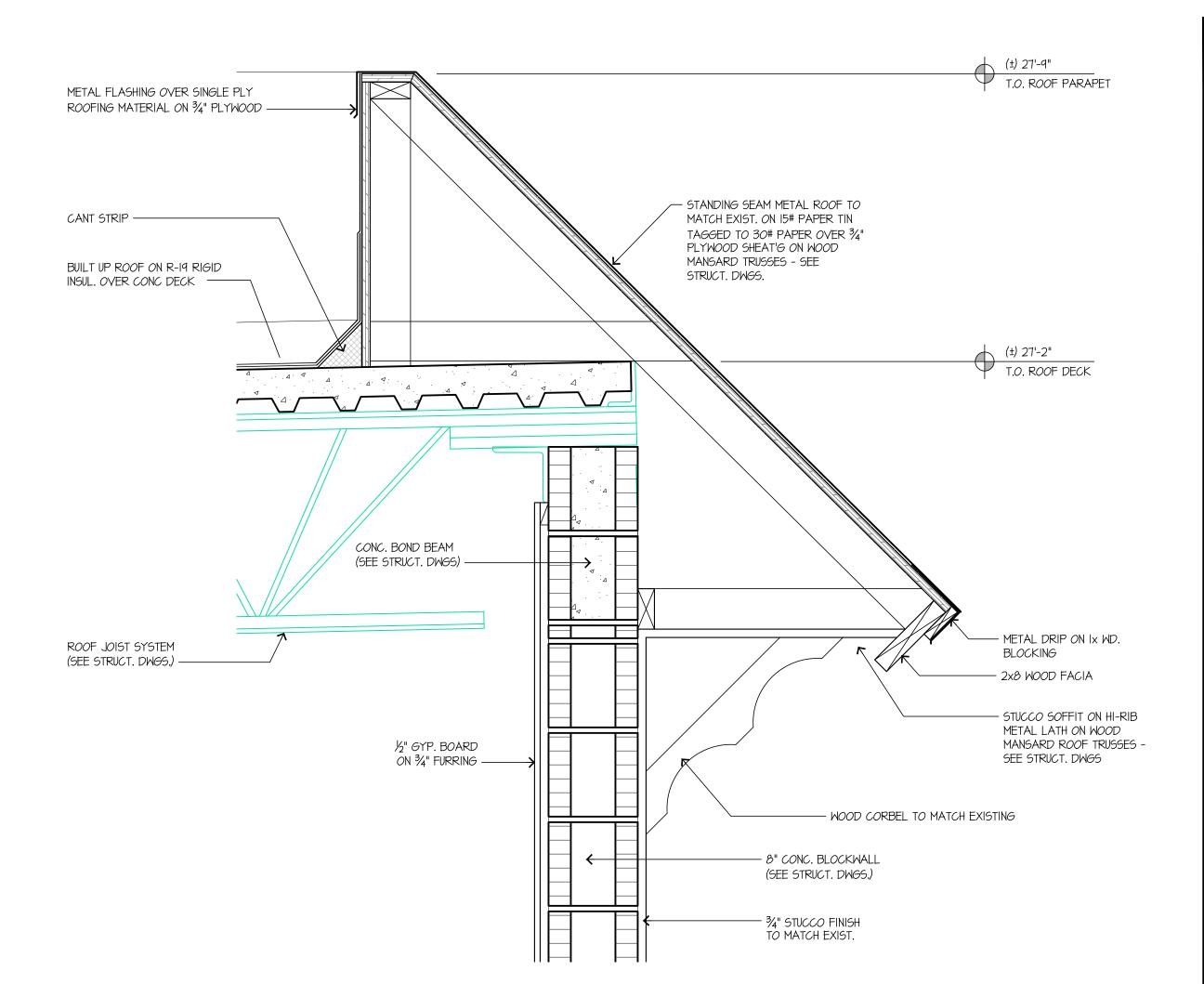
ADDITION FOR SECOND FLOOR

D X T T

H. DeMello H. DeMello AUG. 21, 2015 AS SHOWN





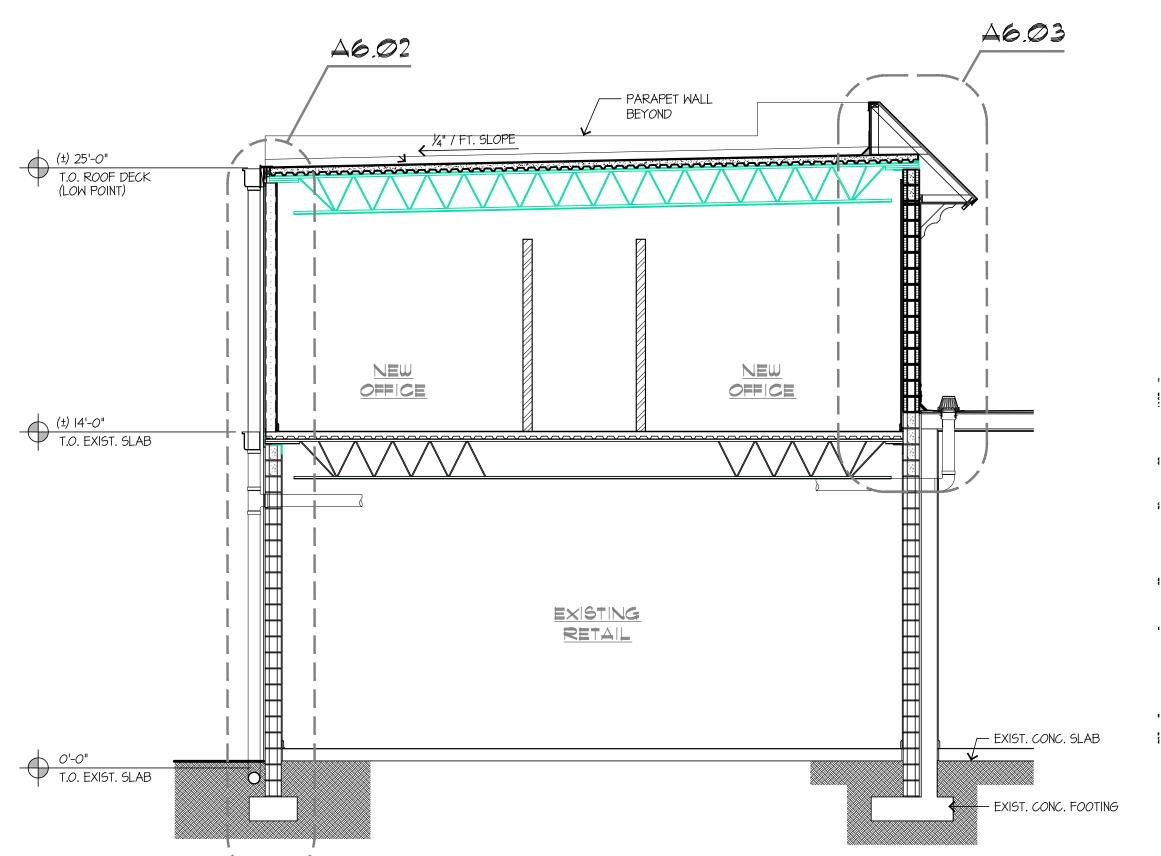


A6.04 BUILDING SECTION

A6.01 BUILDING SECTION

SCALE: 1/4"=1'-Ø"

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



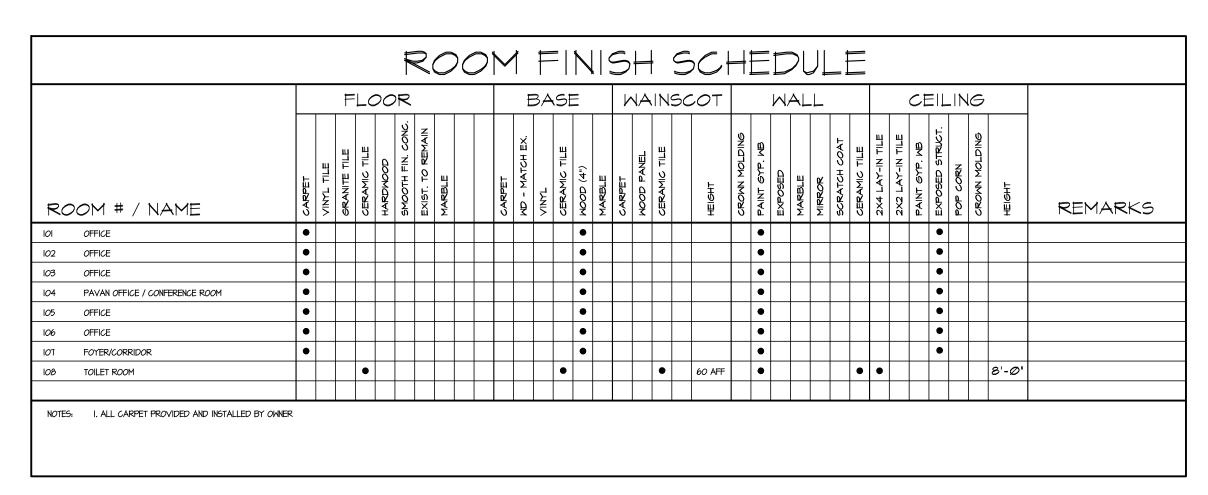


H. DeMello

H. DeMello

AS SHOWN

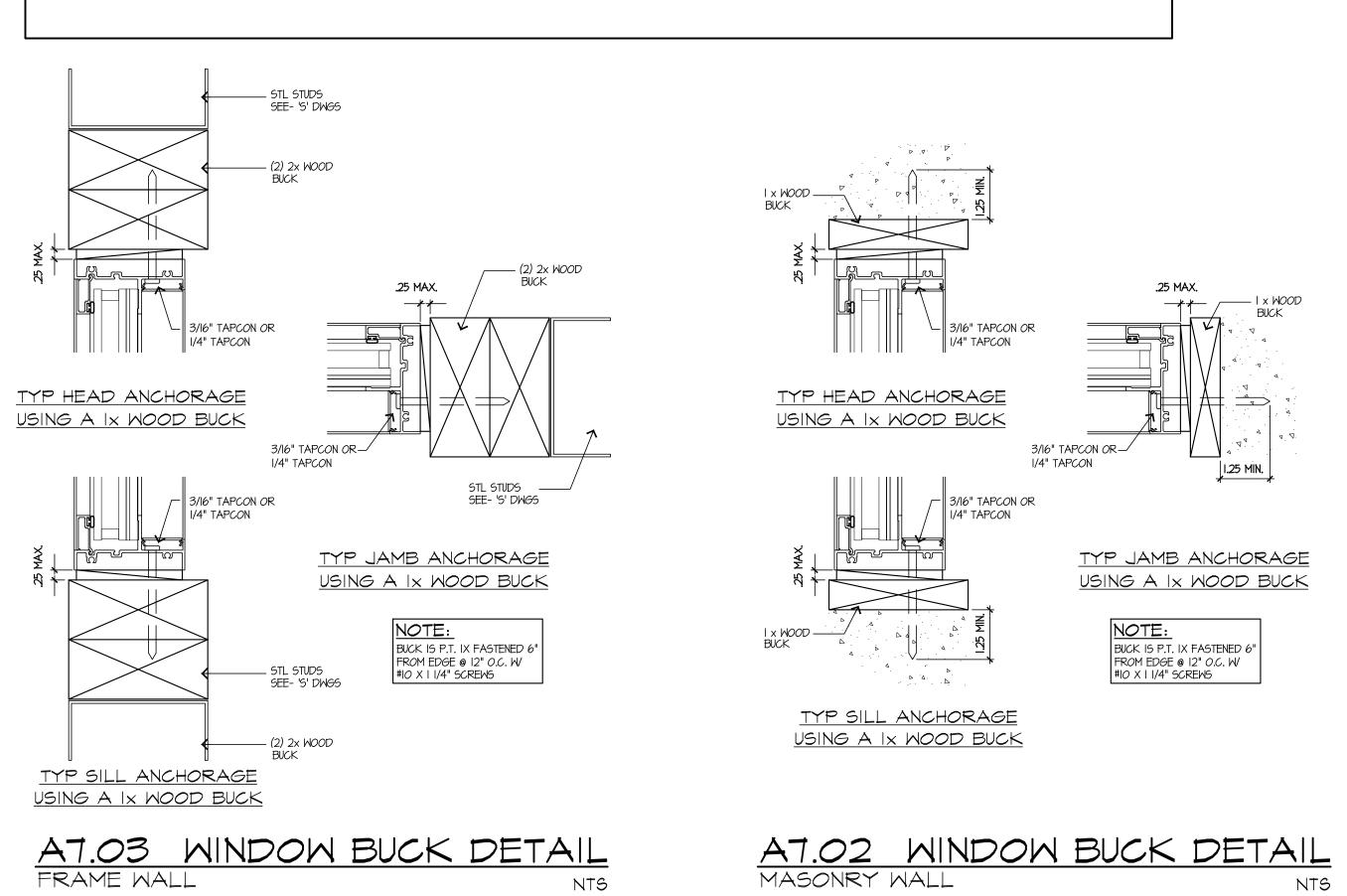
AUG. 21, 2015

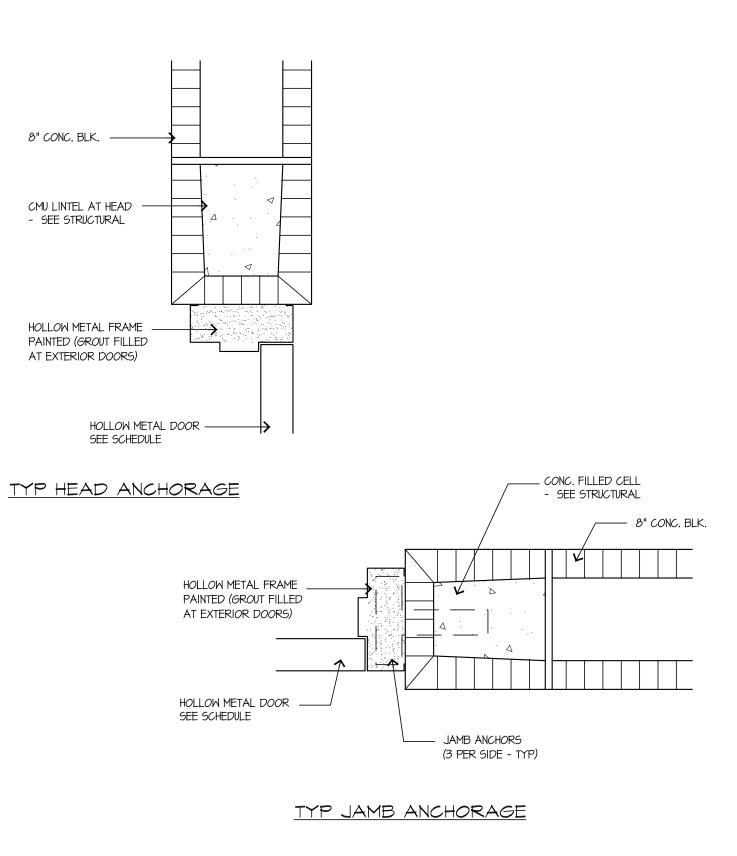


	LOCATION	(51 <i>Z</i> E			MA	ΑT	<u>'</u> _		T,	YP	E		C)F	Œ	V	EΝ	EEF	2 F	R/	\ME	E A	CT	ION		NOA	PRESSURE	REMARKS
1ARK		MIDTH	HEIGHT	THICKNESS	ILLUSTRATION	HOLLOW METAL	COMPOSITE	ALUMINUM	FLUSH 2 DANEI S	W SIDE LTS	SLIDING/BI-PASS PATIO W/ SIDE LTS	1 1	LOWER	SOLID	HOLLOW METAL INSULATED	HOLLOW CORE	MOOD	PAINT	FACTORY FIN.		HOLLOW METAL	ALUMINUM	AUTO. CLOSER	FIRE RATED DOOR STOP	HOLD OPEN HDWR.	THRESHOLD			
Α	ENTRY	3'-0"	6'-8"	1 3/4"	П	•			•		\neg				•			•			•	-	•		Π,	-	BY G.C.	(+) 46.8 / (-) 60.7	
В	OFFICE	3'-0"	6'-8"	1 3/8"	•	,			•							•		•		•	,			•					
С	OFFICE	3'-0"	6'-8"	1 3/8"	•				•							•		•		-	•			•					
D	OFFICE	3'-0"	6'-8"	1 3/8"	•	,			•							•		•		•	•			•					
E	OFFICE	3'-0"	6'-8"	1 3/8"	•				•							•		•		•	•			•					
F	OFFICE	3'-0"	6'-8"	1 3/8"	•	,			•							•		•		•	•			•					
6	OFFICE/CONF. ROOM	3'-0"	6'-8"	1 3/8"	•	,			•							•		•		•	•			•					
H	TOIL. ROOM	3'-0"	6'-8"	1 3/8"	•	,			•							•		•		•	•			•					
I	ROOF ACCESS	3'-0"	6'-8"	1 3/4"		•			•						•			•			•				111	•	BY <i>6.</i> C.	(+) 46.8 / (-) 51.0	

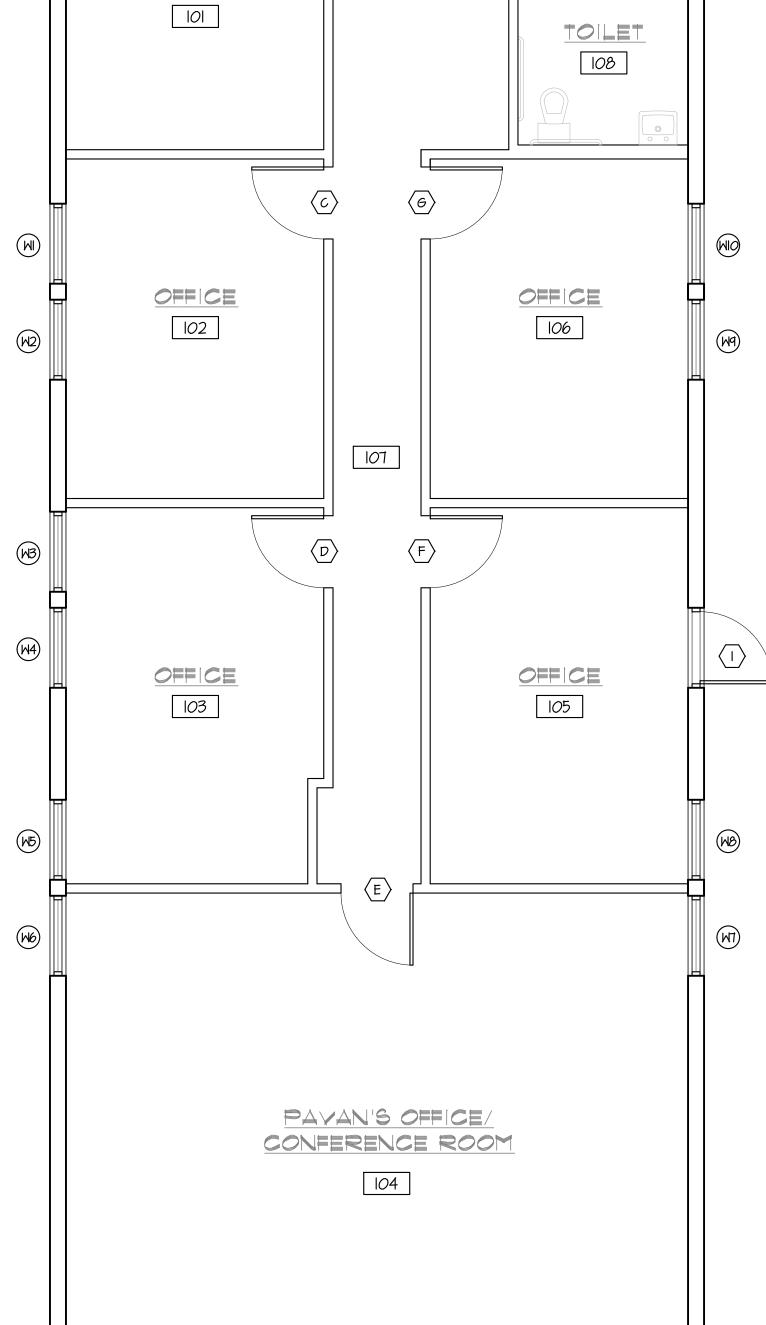
	MINDOM SCHEDULE										
MK	MFR	TYPE	CAT. NO.	M.O./R.O.	GL. TYPE	PRESSURE	N.O.A.	REMARKS			
M	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	¾" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
W2	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
W3	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
W4	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
W5	PGT OR EQUAL	FIX. GLASS	N/A	40" × 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
W6	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
MI	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
WB	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
W9	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3%" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					
WIO	PGT OR EQUAL	FIX. GLASS	N/A	40" x 36"	3/6" GLASS PLATE	(+)50.5 PSF (-)54.8 PSF					

NOTE:





A7.04 DOOR BUCK DETAIL

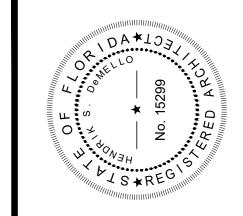


A7.01 KEY PLAN

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

107

OFFICE



AA26001907

AA26001907

AA3486

MEMBER:
AMERICAN
INSTITUTE O
ARCHITECTS
AA2600190

FECTURE
Street, Boca Raton, Flori

ARCHITEC any 11 Southwest 18 Street, Bouth

are the property of are the property of DeMELLO ARCHITECTURE and were created and developed for use in connection with the specific project. None of such ideas and designs shall be used by or disclosed to any

SECOND FLOOR ADDITION FOR

DIXIE DIVERS

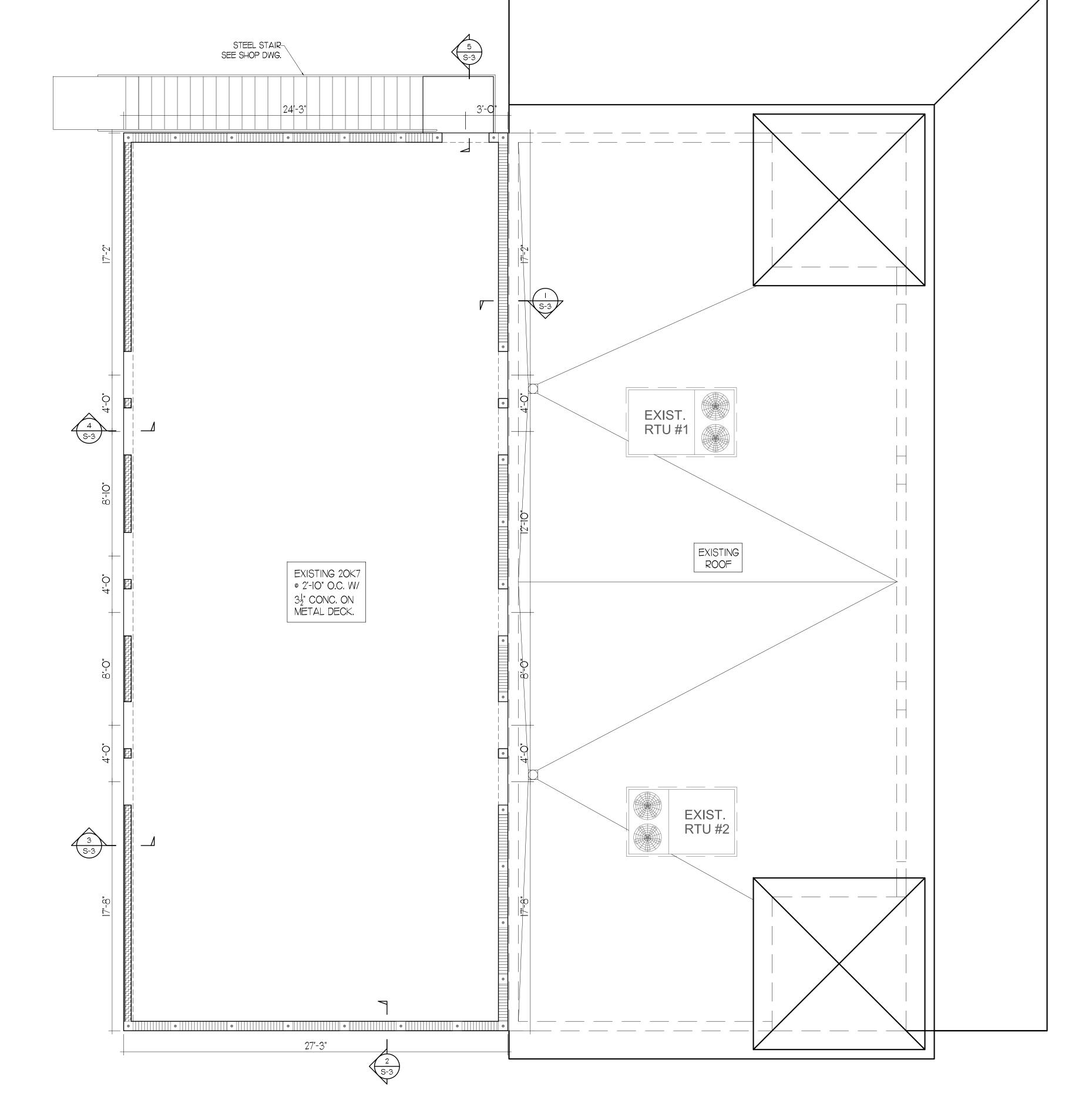
455 U.S. HIGHWAY #1

455 U DEERFI drawing name:

signed H. DeMello
H. DeMello
H. DeMello
te AUG. 2I, 2015
ale AS SHOWN
oject # I5.I38

designed H. DeMello

drawn H. DeMello
date AUG. 2I, 20I5
scale AS SHOWN

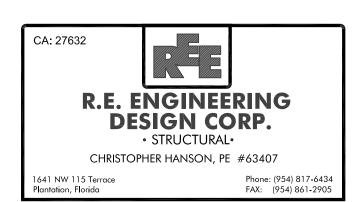


2ND FLOOR FRAMING PLAN

3/16"=1'-0"

- I. CONTRACTOR SHALL REMOVE ROOFING MATERIAL AT 2ND FLOOR CONVERSION DOWN TO THE CONCRETE SLAB DECK AND NOTIFY E.O.R. OF ANY SLAB DAMAGE OR SIGNIFICANT CRACKS.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL AS-BUILT DIMENSIONS & ELEVATIONS PRIOR TO BIDDING..
- 3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR STEEL STAIRS DEVELOPED BY A PROFESSIONAL ENGINEER, WHICH MUST BE APPROVED PRIOR TO FABRICATION.
- INDICATES #5 VERTICAL IN NEW CMU WALL ⊕ EA. CORNER, EA. SIDE OF OPNG. & 48" MAX IN SOLID WALL.

 INDICATES FRAMED WALL W/ 5.5" I6GA STUDS ⊕ I6" O.C. W/ 5.5" I6GA TRACK TOP & BOTTOM.

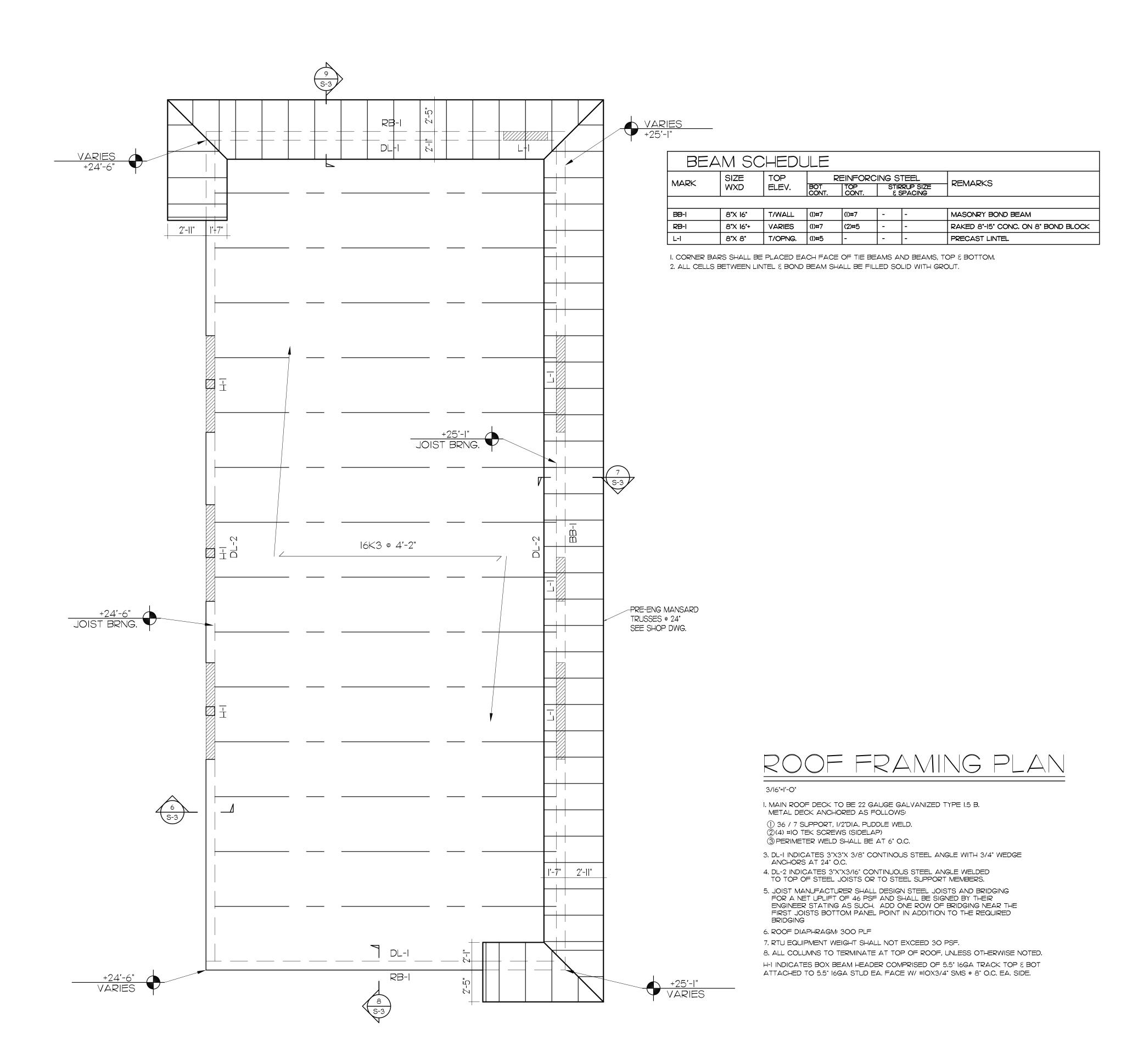


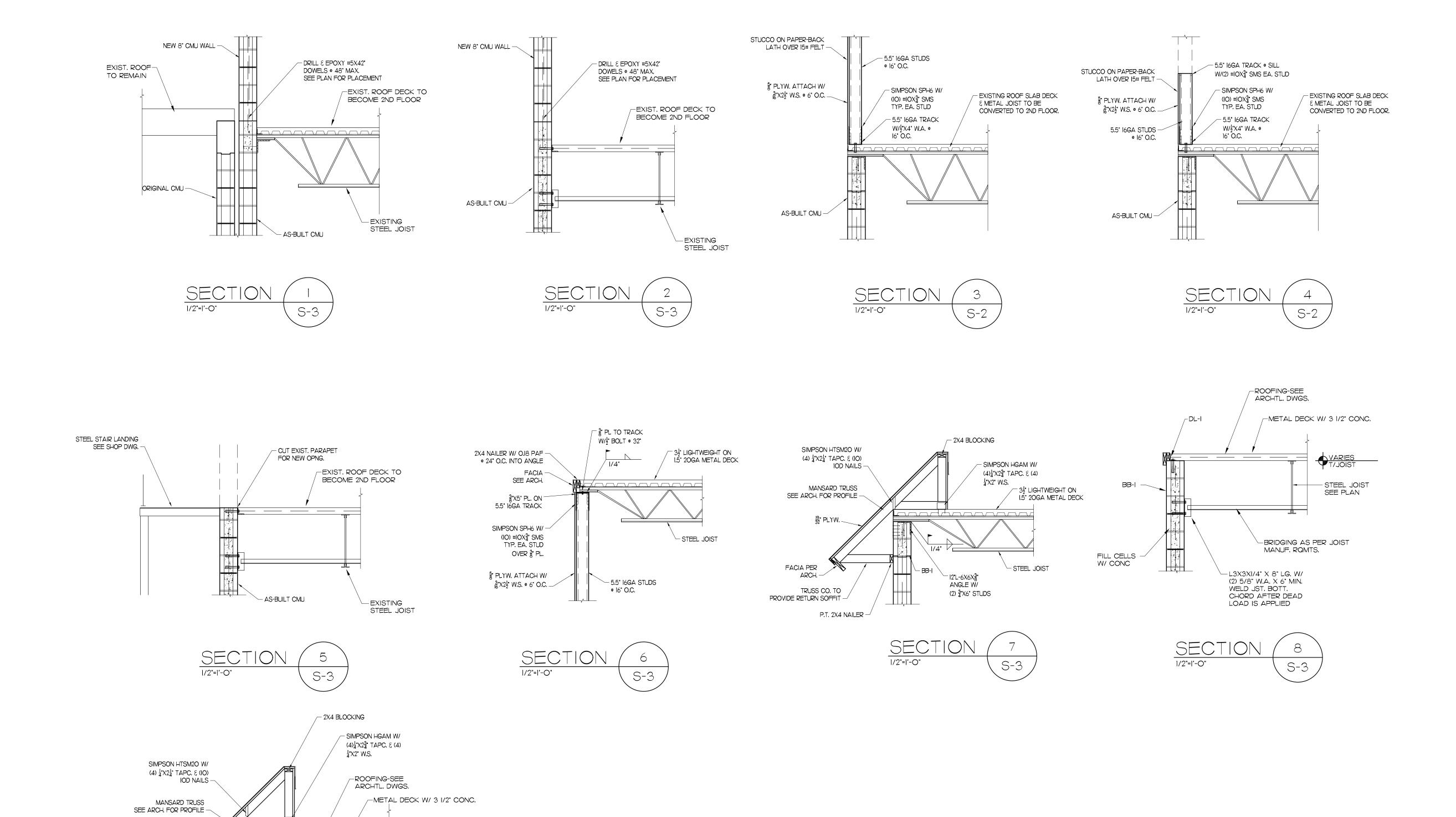
project#

designed	H. DeMello
drawn	H. DeMello
date	AUG. 21, 2015
scale	AS SHOWN

STRUCTURAL







19₃₂" PLYW. _

P.T. 2X4 NAILER —

FACIA PER ARCH.

TRUSS CO. TO PROVIDE RETURN SOFFIT —

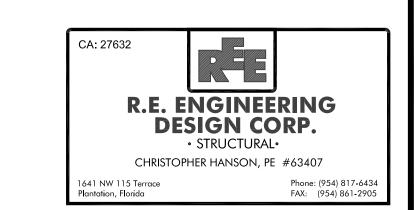
DL-I

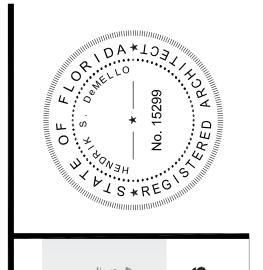
1/2"=1'-0"

- STEEL JOIST SEE PLAN

-BRIDGING AS PER JOIST MANUF, RQMTS.

- L3X3XI/4" X 8" LG, W/ (2) 5/8" W.A. X 6" MIN. WELD JST. BOTT. CHORD AFTER DEAD LOAD IS APPLIED





ADDITION FOR

sheet

designed H. DeMello H. DeMello AUG. 21, 2015 AS SHOWN project# 15.138

S-3

- NO CHANGES SHALL BE MADE WITHOUT THE PRIOR PERMISSION OF THE ARCHITECT THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS OF THE JOB SITE
- PRIOR TO INITIATING CONSTRUCTION AND REPORT ANY DISCREPANCIES OR CONDITIONS THAT ARE UNSATISFACTORY. 3. THE CONTRACTOR SHALL PERFORM ALL WORK IN STRICT COMPLIANCE WITH THE PLANS,
- SOUTH FLORIDA BUILDING CODE AND OTHER APPLICABLE CODES. 4. CONTRACTOR SHALL NOT SCALE DRAWINGS. INFORMATION SHALL BE OBTAINED FROM
- 5. SHOP DRAWINGS BEARINGS THE SEAL OF A FLORIDA REGISTERED ENGINEER SHALL BE SUBMITTED FOR APPROVAL OF ALL PREFABRICATED STRUCTURAL SYSTEMS,
 . ALL WOOD IN DIRECT CONTACT WITH CONCRETE SHALL BE PROPERLY PRESSURE
- TREATED WITH A WOOD PRESERVATIVE. . AIR CONDITIONING (A/C) CONTRACTOR TO PROVIDE COMPLETE SHOP DRAWINGS OF
- DESIGN AND LAY-OUT FOR REVIEW. 8. AIR HANDLER UNIT (AHU) TO HAVE BUILT-IN FACTORY DISCONNECTS.

CODES AND STANDARDS

- I) WIND LOADS WAS CALCULATED IN ACCORDNACE WITH ASCE 7-10.
- 2) THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE 2014 FLORIDA BUILDING CODE 3) BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE, ACI 318-11. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES
- 4) SPECIFICATION FOR THE DESIGN, FABRICATION © ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. AISC ASD 360-05.
- 5) BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES, ACI 530-II.

FOUNDATION DESIGN:

- ALLOWABLE SOIL BEARING CAPACITY OF 2500 PSF WAS USED FOR DESIGN OF FOOTINGS. VERIFICATION SHALL BE PROVIDED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
- SET TOP OF ALL FOOTINGS AT -1'-4" (U.N.O.)
- FOOTING SHALL BE EXCAVATED TO CLEAN SOIL, FREE OF VEGETATION AND DELETERIOUS MATTER, AND CONCRETE SHALL BE PLACED ON AN UNDISTURBED BASE. (SEE SITE PREPARATION NOTE)

CONCRETE:

CONCRETE TO REACH DESIRED STRENGTH, AS NOTED ON PLANS AND SCHEDULES IN 28 DAYS (MINIMUM CONCRETE STRENGTH SHALL BE F'C = 5000 PSI IN 28 DAYS.) AND HAVE A MINIMUM OF 517 LBS, OF CEMENT PER CUBIC YARD. ALL CONCRETE SHALL BE "READY MIXED" AND IN ACCORDANCE WITH ASTM SPECIFICATIONS C-9 A CERTIFICATE OF MANUFACTURERS MIX AND STRENGTH IS TO BE PROVIDED. NO WATER TO BE ADDED AFTER TRUCK LEAVES PLANT WITHOUT APPROVAL OF ENGINEER OR PLANT ENGINEER. PLANT CONTROL IS REQUIRED. MAXIMUM MIX TIME AT POINT OF DEPOSIT IS 90 MINUTES.

REINFORCING:

REINFORCING STEEL SHALL BE DEFORMED, NEW BILLET STEEL ASTM A-615 GRADE 6C SPLICES TO BE IN ACCORDANCE WITH ACI 318-11 FOR "STRENGTH DESIGN". FABRICATION AND PLACING OF STEEL SHALL BE IN ACCORDANCE WITH 2002 ACI CODE STANDARDS AND PRACTICE PROCEDURES.

REINFORCED MASONRY:

I. HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C-90, TYPE, II, GRADE N, SQUARE END, WITH A MINIMUM AVERAGE CONCRETE STRENGTH ON OF FM = 1500 P.S.I.

- 2. A) MORTAR SHALL CONFORM TO ASTM C-270, TYPE "M" WITH A 28-DAY STREBGHT OF 2,500 P.S.I. B) FILL CELLS GROUT SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI, W/ HIGH W/C RATIO AND A
- MINIMUM OF 8" SLUMP. GROUT SHALL CONFORM TO ASTM C-476
- 3. REINFORCED MASONRY WALLS ARE DESIGNED PER ACI 530-II.
- 4. SPECIAL INSPECTION IS REQUIRED FOR THE REINFORCED MASONRY WALL 5. LAY ALL MASONRY WITH FULL FACE HEAD JOINTS AND WITH FACE SHELL MORTAR BEDDING.
- 6. MASONRY ANCHORAGE TO SUPERSTRUCTURE SHALL BE PROVIDED IN ACCORDANCE W/ STRUCTURAL DRAWINGS AND DETAILS.
- 7. THE USE OF ADMIXTURES SHALL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF ENGINEER.
- 8. VERTICAL REINFORCING: (A) ASTM A 615-60 PER REINFORCING SECTION.
- (B) WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN SIX VERTICAL FOR ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL
- WALL REINORCING (C) VERTICAL REINFORCING STEEL SHALL HAVE A MINIMUM CLEARANCE OF ONE-QUARTER INCH FROM THE MASONRY.
- (D) VERTICAL REINFORCEMENT SHALL BE PROVIDED AT EACH SIDE OF OPENINGS IN WALL, AT WALL INTERSECTIONS, CORNERS AND ENDS. THIS REINFORCING SHALL BE THE SAME SIZE AS THE SCHEDULD WALL REINFORCING FOR THE PARTICULAR WALL BUT NEVER LESS THAN I #5 - UNLESS NOTED OTHERWISE. SPECIAL CARE SHALL BE TAKEN TO INSURE THAT CELLS TO BE GROUTED LINE
- JP PROPERLY. 9. HORIZONTAL REINFORCING: NO. 9 LADDER TYPE AT 16" O.C. VERTICALLY. MIN LAP OF 6". IO. PROVIDE "DOVE TAIL" ANCHORS AT 16"O.C. VERTICAL FOR ALL MASONRY PLACED ADJASCENT TO COLUMNS OR EXTEND HORIZONTAL REINFORCING 4" INTO COLUMN.
- II. HOOK ALL VERTICAL REINFORNCING INTO BEAM ABOVE WHERE REBAR TERMINATES. 2. PROVIDE CORNER BARS AT ALL CONCRETE/BOND BEAM INTERSECTIONS. BARS SHALL BE SAME SIZE AND QUANTITY AS BEAM REINFORCING, EXTENDING 48 DB IN BOTH DIRECTIONS.

13. IF ONE END OF A WALL IS HIGHER THAN THE INTERSECTED WALL, THE CORNER BARS SHALL BE

- TURNED DOWN INTO THE VERTICAL FILLED CELL. 14. REFER TO FLOOR PLANS FOR VERTICAL STEEL SIZE AND SPACING IN THE REINFORCED MASONRY
- 15. SPLICE SHALL BE A MINIMUM OF 48 BAR DIAMETER FOR #5 ε 52 BAR DIA. FOR #6.

SLAB ON FILL:

INTERIOR CONCRETE SLABS POURED ON FILL TO BE POURED OVER A WATERPROOF MEMBRANE OVER CLEAN NON ORGANIC FILL. ALL SLABS TO BE REINFORCED WITH 6"X6" WI.4XWI.4 WELDED WIRE FABRIC PLACED AT MID DEPTH OF SLAB , UNLESS NOTED OTHERWISE. MINIMUM SLAB THICKNESS EQUALS 4" UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL:

- I. STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM WITH THE REQUIREMENTS OF THE "AISC'S SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF
- STRUCTURAL STEEL OR BUILDINGS", LATEST EDITION. 2. STRUCTURAL STEEL PLACEMENT DRAWINGS AND MATERIAL LISTS SHALL CONFORM TO AISC'S "STRUCTURAL STEEL DETAILING", LATEST EDITION. SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF A REGISTERED ENGINEER AND SUBMITTED FOR REVIEW PRIOR TO FABRICATION. (ONE PAPER SEPIA AND ONE PRINT OF EACH DRAWING.)
- 3. ALL STRUCTURAL MEMBERS AND MISC. METALS SHALL CONFORM WITH ASTM A-36 UNLESS NOTED OTHERWISE.
- 4. SHOP CONNECTIONS SHALL BE WELDED IN ACCORDANCE WITH AWS DI.I, "STRUCTURAL
- WELDING CODE". USE E70XX ELECTRODE. 5. ALL FILED BOLTS SHALL BE ASTM A-325N 3/4"~ BOLTS
- STEEL TUBING TO BE ASTM A500 GRADE B(46). ALL STEEL TO HAVE A SHOP COAT OF RUST INHIBITIVE PAINT.
- 8. DELETE PAINT ON ALL STEEL TO RECEIVE SPRAYED ON FIREPROOFING OR CONCRETE ENCASEMENT. 9. FULL DEPTH CONNECTIONS ARE TO BE USED ON ALL GIRDER AND BEAM CONNECTIONS
- TO COLUMNS. BOLTS TO BE AT 3" O.C. VERT. (U.N.O.) IO. MINIMUM BEARING OF STEEL BEAMS AND LINTELS, ON MASONRY SHALL BE 4".

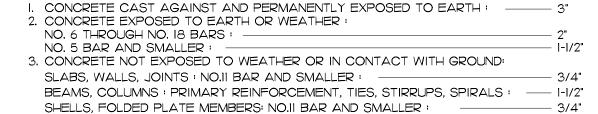
FORM WORK:

SHORING AND BRACING PROCEDURES SHALL FOLLOW THE "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK" BASED UPON AMERICAN CONCRETE INSTITUTE STANDARD, ACI 347-04. ARTICLES 2.4 THROUGH 2.7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BRACING OF VERTICAL MEMBERS (WALL BEAMS AND COLUMNS) DURING CONSTRUCTION PHASE UNTIL FLOOR AND ROOF SYSTEM ARE IN PLACE AND PROPERLY ATTACHED TO SUCH MEMBERS.

RELATIVE ELEVATION TOP OF FLOOR SLAB TAKEN TO O'-O". (SEE PLANS AND SCHEDULES) VERIFY ALL SLAB RECESSES WITH ARCHITECTURAL DRAWINGS.

CONCRETE COVERAGE

PER ACI 318, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:



MECHANICAL EQUIPMENT:

LOCATION FOR ALL OPENINGS, MECHANICAL TRENCHES, ENCASED CONDUIT OR PIPING AND ANCHOR BOLTS SHALL BE VERIFIED WITH MANUFACTURER'S SHOP DRAWINGS PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES.

I. SUBMIT (I) REPRODUCIBLE AND (2) COPIES OF EACH REQUIRED SUBMITTAL, (I) COPY OF WHICH WILL BE KEPT IN THIS OFFICE.

2. ALLOW 5 WORKING DAYS FOR REVIEW TIME. CONCRETE CYLINDER AND SLUMP TESTS:

AT LEAST ONE SET OF CYLINDERS SHALL BE PROVIDED FOR STRENGTH AND SLUMP TESTS PER POUR OR FOR EACH 50 CUBIC YARDS OF CONCRETE, WHICHEVER IS LESS. AT LEAST TWO SETS OF TESTS ARE RECOMMENDED FOR COLUMN POURS. FOR EACH POUR THE ENGINEER SHALL BE PROVIDED WITH ONE (1) 3-DAY TEST, ONE (1) 7-DAY TEST, ONE (1) 28-DAY TEST, ONE (1) SPARE, AND ONE (1) SLUMP TEST.

FILL COMPACTION:

SHOP DRAWINGS:

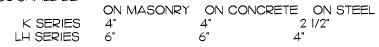
SOIL SHALL BE COMPACTED TO 95 %. MODIFIED PROCTOR (ASTM DIS57-78) WITHIN A DISTANCE OF FIVE FEET BEYOND ALL BUILDING EDGES. AT LEAST ONE FIELD DENSITY TEST SHALL BE PERFORMED FOR EACH 1600 SQUARE FEET OF AREA. DENSITY TESTS ARE TO BE MADE 12 BELOW THE COMPACTED SURFACE. RESULTS OF PROCTOR TEST(S) AND FIELD DENSITY TEST(S) SHALL BE FURNISHED TO THE ENGINEER.

STEEL JOIST GIRDER DESIGN:

- I. CHORD AND WEB MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR JOIST GIRDERS OF THE STEEL JOIST INSTITUTE WITH THE FOLLOWING ADDITIONAL REQUIREMENTS.
- 2. TOP CHORD THE TOP CHORD SHALL BE DESIGNED AS A COMPRESSION MEMBER WITH PARTIAL LATERAL RESTRAINT. THE UNBRACED LENGTH IN THE LATER DIRECTION SHALL BE TAKEN AS THE SPACING BETWEEN THE JOISTS BEARING ON THE GIRDER.
- 3. TENSION WEBS IN ADDITION TO ALL OTHER DESIGN REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF GIRDER JOIST, TENSION WEBS OF JOIST GIRDERS SHALL BE DESIGNED FOR A STRESS REVERALS (COMPRESSION) EQUIVALENT TO A
- VERTICAL SHEAR OF NOT LESS THAN 25% OF THE END REACTION. 4. COMPRESSION WEBS - COMPRESSION WEBS SHALL BE DESIGNED USING A STIFFNESS FACTOR OF K=1. 5. BEARING - JOIST GIRDERS SHALL BEAR AT LEAST 4" OVER STEEL ANCHOR SEATS (SEE
- DETAIL SHEET) AND FULLY WELDED TO SUPPORT 6. BRIDGING - JOIST GIRDERS SHALL BE PROPORTIONED SUCH THAT THEY CAN BE ERECTED WITHOUT BRIDGING. BOTTOM CHORD "X" BRACES SHALL BE FINISHED TO
- LIMITS THE L/RY OF THE BOTTOM CHORD TO 240. 7. STABILIZER PLATES - BOTTOM CHORD SHALL BE STABILIZED LATERALLY AT EACH END OF JOIST GIRDERS AS DETAILED ON PLANS. BOTTOM CHORDS SHALL NOT BE WELDED TO STABILIZER PLATES UNTIL ALL DEAD LOADS ARE PRESENT ON THE GIRDER JOIST.

OPEN WEB STEEL JOIST:

- ALL JOISTS SHALL HAVE A SHOP COAT OF RUST INHIBITIVE NON BITUMINOUS PAINT. JOIST FABRICATOR SHALL HAVE AN ENGINEER REGISTERED IN THE STATE OF FLORIDA CERTIFY IN WRITING THAT THE STEEL JOISTS CAN SAFELY RESIST THE WIND UPLIFT FORCES AS SHOWN ON PLANS, AS PER THE ANSI/ASCE 7-02.
- 3. STEEL JOISTS SHALL BE DESIGNED, FABRICATED, AND ERECTED TO THE REQUIREMENTS OF THE SPECIFICATIONS OF THE STEEL JOIST INSTITUTE. MANUFACTURER SHALL BE A MEMBER OF THE STEEL JOIST INSTITUTE. PROVIDE BRIDGING IN ACCORDANCE WITH SJI STANDARDS (U.N.O.)
- 4. MINIMUM BEARING OWSJ SHALL BE:



- CAMBER JOISTS FOR DEAD LOAD. WELD OR BOLT EVERY OWS J TO SUPPORTING STEEL AND/ OR WALL PLATES. MAXIMUM DEFLECTION OF JOISTS AND ROOF DECK 1/360 OF SPAN UNDER LIVE LOAD. FABRICATOR SHALL ADD WEIGHTS OF ALL MECHANICAL ROOF UNITS IN THE DESIGN LOAD OF OWSJ AND VERIFY WITH THE OWNER OR MECHANICAL ENGINEER.
- 9. FABRICATOR SHALL SUBMIT DESIGN DATA AND ERECTION DIAGRAMS, SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF A REGISTERED
- IO. FRAME ROOF OPENING LARGER THAN 12"X12" WITH C5X6.7 SADDLES UNLESS NOTED II. FRAME ROOF TOP AC OPENINGS AS PER DETAIL SHOWN ON THIS SHEET.

1) STEEL ROOF DECK SHALL BE 1 1/2" (22) GA. (U.N.O.) TYPE B METAL DECK GALVANIZED AS EQUAL. MANUFACTURER SHALL BE A MEMBER OF THE STEEL DECK INSTITUTE, ROOF DECK SHALL COMPLY WITH STEEL DECK INSTITUTE STANDARDS.

3) STEEL ROOF DECK SHALL BE FASTENED TO SUPPORT AS PER NOTES ON ROOF PLAN

- 2) STEEL ROOF DECK SHALL BE FASTENED TO PERFORM AS A HORIZONTAL DIAPHRAGM CAPABLE OF RESISTING LOAD SPECIFIED ON PLAN
- MISC. STEEL:

CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF 1,000 POUNDS OF ADDITIONAL STRUCTURAL STEEL. INCLUDING FABRICATION, FURNISHING, AND INSTALLING AS REQUIRED FOR USES DIRECTED BY THE: ARCHITECTS, THE ARCHITECT'S AGENT OR BY THE OWNERS'S REPRESENTATIVE.

CAST IN PLACE LINTELS:

SPANS UP TO 6'-4" - 8"XI2" WITH 4-#5 AND TIES AT 4" (MIN.) EXTEND LINTEL 8" BEYOND OPENING. (MIN.) PROVIDE DOWELS FROM COLUMNS TO MATCH LINTEL STEEL WHEN FRAMING INTO COLUMNS. PROVIDE I" X 8" SHEAR KEY AT COLUMN FACE. LAP STEEL 5"

PRECAST-PRESTRESSED CONCRETE LINTELS:

I. CONCRETE FOR PRECAST-PRESTRESSED UNITS SHALL BE DESIGNED TO ATTAIN A

SHALL INCLUDE COMPLETE DESIGN CALCULATIONS, SHALL BE SEALED BY A

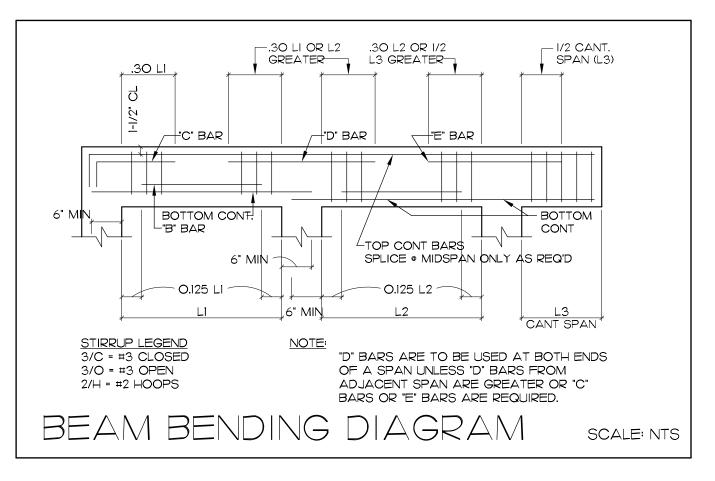
- MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI CONCRETE. PRESTRESSING STRANDS SHALL BE EQUIVALENT TO LATEST ASTM A416-59T. MANUFACTURER TO SUBMIT SHOP DRAWINGS TO ARCHITECT PRIOR TO FABRICATION. 4. THE PRE STRESSED CONCRETE SHOP DRAWINGS SUBMITTED BY MANUFACTURER, WHICH
- PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA. 5. ALL PRE STRESSED CONCRETE MEMBERS SHALL MAINTAIN A POSITIVE UPWARD CAMBER UNDER FULL DEAD LOAD. MEMBERS WITH ZERO OR NEGATIVE CAMBER WILL NOT BE ACCEPTABLE. CAMBER DATA SHALL BE INCLUDED IN CALCULATIONS SUBMITTED BY MANUFACTURER AND VERIFIED IN THE FIELD.

CONTROL JOINTS:

CONTRACTOR SHALL SAW CUT CONTROL JOINTS IN CONCRETE SLAB WITHIN 24 HOURS OF PLACING CONCRETE. CONTROL JOINTS SHALL BE LAID OUT AT CENTER LINES OF COLUMNS WHERE POSSIBLE, AND SHALL NOT EXEED 15'-O" X 15'-O" SQUARE PANELS. LONGER DIMENSION OF PANEL SHALL NOT EXCEED 1.5 TIMES THE SHORTER ONE. SAWCUT SHALL BE 1/4 OF THE SLAB DEPTH AND 1/8" WIDE.

COLUMN TIES:

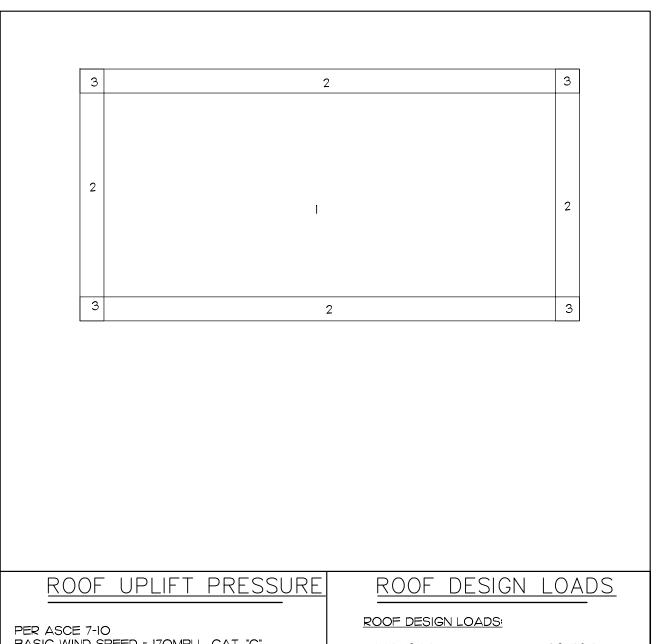
- I. COLUMN TIE SPACING SHALL BE EQUAL TO THE LEAST DIMENSION OF THE COLUMN
- UNLESS NOTED OTHERWISE. TIES SHALL BE #3 FOR VERTICAL BARS #10 AND SMALLER, AND #4 FOR VERTICAL
- BARS LARGER THAN #10. 3. TIE SPACING SHALL BEGIN NOT MORE THAN HALF A TIE SPACING ABOVE THE FLOOR (FOUNDATION AT FIRST FLOOR) AND SHALL END NOT MORE THAN HALF A TIE SPACING
- BELOW THE BOTTOM SLAB REINFORCING ABOVE. 4. TO BE 48 BAR DAIMETER FOR SPLICE LENGTHS.

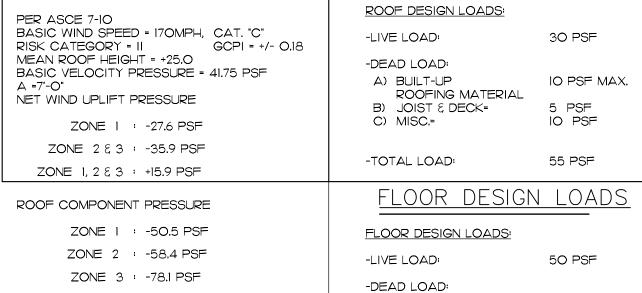


GENERAL BEAM SCHEDULE NOTES:

- I. SCHEDULED HOOPS OR STIRRUPS SHALL BE PLACED AT EACH END OF BEAM UNLESS OTHERWISE NOTED.
- 2. BUNDLE ALL STRUCTURAL BEAM TOP BARS IN PAIRS OVER SUPPORT WITH TOP BARS FROM ADJACENT BEAMS.
- 3. ALL CONCRETE BEAMS OTHER THAN THOSE WITH THE PREFIX TB SHALL BE POURED PRIOR TO PLACING BLOCK BELOW.
- 4. ALL TIE BEAM REINFORCING SHALL EXTEND INTO SPAN OF ANY ADJACENT STRUCTURAL BEAM AS PER BENDING DIAGRAM. 5. DROP BOTTOM OF TIE BEAM AS REQUIRED AT WINDOW AND DOOR HEADS (28" MAXIMUM)
- AND ADD 2 #5 BOTTOM IF DROP EXCEEDS 8". 6. TIE BEAM SCHEDULED DEPTHS ARE MINIMUM AND MAY BE INCREASED (8" MAXIMUN) TO FIT BLOCK WORK.
- 7. ALL ADDED LONGITUDINAL BEAM REINFORCING SHALL EXTEND 6" MINIMUM INTO SUPPORT AND BEAMS SHALL HAVE 8" MIN. BEARING 8. PROVIDE CORNER BARS AT ALL CONCRETE TIE BEAM INTERSECTIONS. BARS SHALL BE

SAME SIZE AND QUANTITY AS BEAM REINFORCING, EXTENDING 48 BAR DIAMETER.





A) JOIST & DECK=

B) S.I.D.=

C) MISC.=

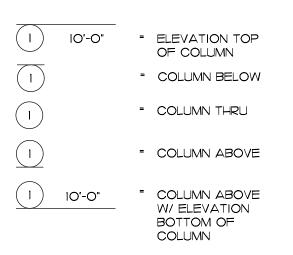
-TOTAL LOAD:

IO PSF MAX.

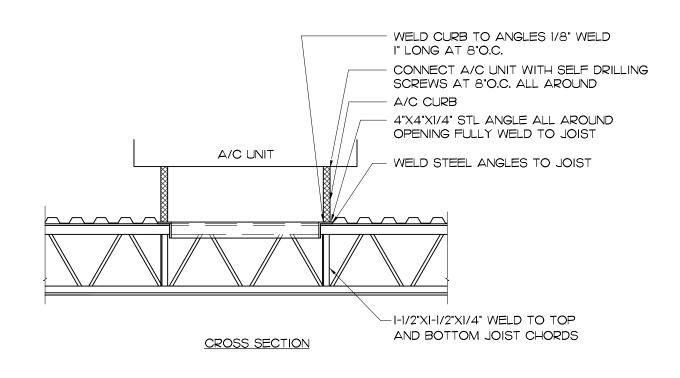
5 PSF

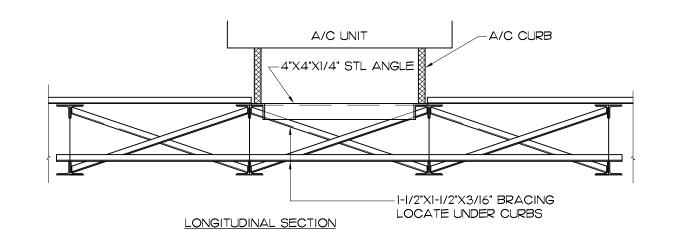
5 PSF

70 PSF



COLUMN MARK LEGEND

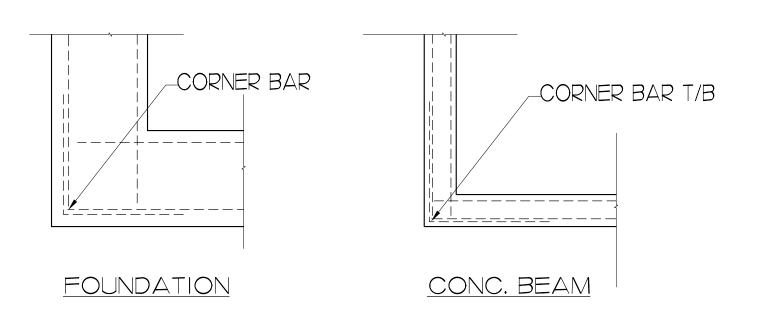




1) WELD STEEL ANGLES TO JOISTS.

2) WELD CURB TO ANGLES WITH 1/8" WELD X 1" LONG AT 8"O.C.

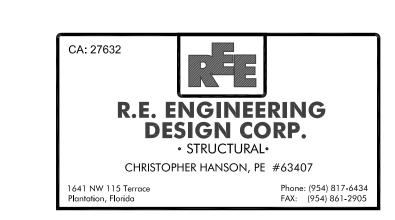
3) CONNECT A/C UNIT TO CURB WITH SELF DRILLING SCREWS AT 8"O.C. ALL AROUND. (.165" MINIMUM DIA. X I" MIN LENGTH)) 4) IF UNIT SIZE DOES NOT MATCH JOIST SPACING, STEEL SUPPORT ANGLE SHALL SPAN BETWEEN JOISTS WITH BRIDGING AS SHOWN IN SPACE TO EITHER SIDE OF END OF ANGLE AS WELL AS UNDERNEATH AS SHOWN



CORNER BARS

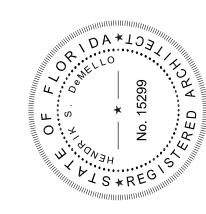
- 1) CORNER BARS SHALL BE PLACED AT OUTSIDE FACE OF ALL BEAMS & FTG'S
- 2) CONCRETE BEAMS SHALL HAVE CORNER BARS AT TOP & BOTTOM 3) CORNER BARS SHALL BE THE SAM SIZE BD AS TEH BEAM REINF. AND SHALL
- HAVE A 48 BD SPLICE IN EACH DIRECTION (30" FOR #5, 36" FOR #6, ETC..) 4) IF UNIT SIZE DOES NOT MATCH JOIST SPACING, STEEL SUPPORT ANGLE SHALL SPAN BETWEEN JOISTS WITH BRIDGING AS SHOWN IN SPACE

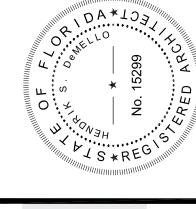
TO EITHER SIDE OF END OF ANGLE AS WELL AS UNDERNEATH AS SHOWN



A/C UNITS MUST BE SUPPORTED

OVER 2 JOISTS (TYPICAL)





 \mathcal{N}

ADDITI

revisions

designed H. DeMello H. DeMello AUG. 21, 2015 AS SHOWN project# 15.138

sheet

GENERAL PLUMBING NOTES

PLUMBING FIXTURES SHALL COMPLY WITH (F.B.C. 2014 PLUMBING TABLE 604.4)

DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES, EQUIPMENT, ETC. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE AND ACCEPTABLE WORKING INSTALLATION.

ALL WORK AND MATERIALS SHALL COMPLY WITH LATEST EDITIONS OF THE NATIONAL, STATE, AND ALL LOCAL CODES AND ORDINANCES HAVING JURISDICTION.

THE PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL EXISTING CONDITIONS. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE PART OF THIS CONTRACT.

ALL MATERIALS SHALL BE NEW AND FREE OF NOTICEABLE DEFECTS.

ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR AND IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY THE ENGINEER/ARCHITECT AS SUCH.

ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.

VERIFY LOCATION, SIZE AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. IMMEDIATELY ADVISE THE ENGINEER/ARCHITECT OF ANY DISCREPANCIES. ALL EXISTING PLUMBING SHOWN ON THE PLANS IS ESTIMATED AND MAY NOT BE IN THE SAME LOCATION AS SHOWN, CONTRACTOR MUST VERIFY EXISTING

PLUMBING PRIOR TO COMMENCING WORK. PROVIDE A MINIMUM PITCH OF 1/8" FOR 3" OR LARGER PIPES, 1/4" PITCH FOR LESS THAN 3" PIPES.

PROVIDE A CLEANOUT AT THE BASE OF EACH SOIL AND WASTE STACK. PROVIDE MEANS OF RESEALING ALL FLOOR DRAINS.

AN OPEN VENT TERMINAL FROM A DRAIGAGE SYSTEM SHALL NOT BE LOCATED DIRECTLY BENEATH ANY DOOR. OPENABLE WINDOW, OR OTHER AIR INTAKE OPENING OF THE BUILDING OR OF AN ADJACENT BUILDING, AND ANY SUCH VENT TERMINAL SHALL NOT BE WITHIN 10 FEET HORIZONTALLY OF SUCH AN OPENING UNLESS IT IS AT LEAST 2 FEET ABOVE THE TOP OF SUCH OPENING. (F.B.C. 2014 PLUMBING 904.5)

PROVIDE 1/2" COLD WATER TRAP PRIMER FOR ALL DRAINS FROM THE NEAREST PLUMBING FIXTURE, WHERE APPLICABLE.

SHUTOFF VALVE SHALL BE INSTALLED ON THE WATER SUPPLY PIPE TO EACH APPLIANCE OR MECHANICAL EQUIPMENT AS PER (F.B.C. 2014 PLUMBING 606.2.3)

A WATER HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK - CLOSING VALVES ARE UTILIZED, UNLESS OTHERWISE APPROVED. THE ARRESTOR SHALL BE LOCATED WITHIN AN EFFECTIVE RANGE OF THE QUICK - CLOSING VALVE. ACCESS SHALL BE PROVIDED TO WATER HAMMER ARRESTORS.

NO HOT WATER WITH A TEMPERATURE HIGHER THAN 140° TO DISCHARGE INTO SANITARY. THE DEVELOPED LENGTH OF HOT WATER PIPING FROM THE SOURCE OF HOT WATER SUPPLY TO THE FARTHEST FIXTURE SHALL BE LESS THAN 100 FT.

THE HOT WATER SUPPLY TO ANY FIXTURE REQUIRING HOT WATER SHALL BE INSTALLED ON THE LEFT SIDE OF THE FIXTURE. (F.B.C. 2014 PLUMBING 607.4)

ALL INDIRECT WASTE PIPING SHALL DISCHARGE THROUGH AN AIR GAP OR AIR BREAK INTO A WASTE RECEPTOR OR STANDPIPE. WASTE RECEPTORS AND STANDPIPES SHALL BE TRAPPED AND VENTED AND SHALL CONNECT TO THE BUILDING DRAINAGE SYSTEM. ALL INDIRECT WASTE PIPING THAT EXCEEDS 2 FT IN DEVELOPED LENGTH MEASURED HORIZONTALLY, OR 4 FT IN TOTAL DEVELOPED LENGTH, SHALL BE TRAPPED. (F.B.C. 2014 PLUMBING 802.2)

ALL DEVICES INTENDED TO SERVE SOME SPECIAL FUNCTION AND THAT CONNECT TO THE WATER SUPPLY SYSTEM SHALL BE PROVIDED WITH PROTECTION AGAINST BACKFLOW AND CONTAMINATION OF THE WATER SUPPLY SYSTEM. (F.B.C. 2014 PLUMBING 608.3)

NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE PURGED OF DELETERIOUS MATTER AND, DISINFECTED PRIOR TO UTILIZATION. (F.B.C. 2014 PLUMBING 610.1)

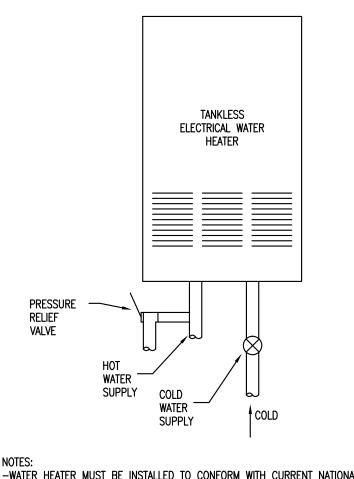
THE WATER SUPPLY CONNECTION TO CARBONATED BEVERAGE DISPENSERS SHALL BE PROTECTED AGAINST BACKFLOW BY A DOUBLE CHECK VALVE WITH AN INTERMEDIATE ATMOSPHERIC VENT CONFORMING TO ASSE 1022 OR BY AN AIR GAP. (F.B.C. 2014 PLUMBING 608.16.1)

DISCHARGE FROM A COMMERCIAL DISHWASHING MACHINE SHALL BE THROUGH AN AIR GAP OR AIR BREAK INTO A STANDPIPE OR WASTE RECEPTOR. (F.B.C. 2014 PLUMBING

HOT WATER AND DRAIN PIPES UNDER SINKS AND/OR LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.

PROVIDE BACKFLOW PREVENTER FOR COFFEE AND TEA BREWER, ICE WATER STATION, BAG IN BOX SYSTEM AND HOT FOOD UNIT.

HOT WATER PIPES OF SIZE <1-1/2" TO HAVE MINIMUM 1" INSULATION AND HOT WATER PIPES OF SIZE >1-1/2" TO HAVE 1.5" INSULATION AS PER FLORIDA CONSERVATION CODE 2014 TABLE C403.2.8.



-WATER HEATER MUST BE INSTALLED TO CONFORM WITH CURRENT NATIONAL ELECTRIC CODE. NATIONAL FUEL GAS CODE. AND ANY APPLICABLE LOCAL PLUMBING. ELECTRICAL. HEATING AND AIR CONDITIONING CODES, AND MANUFACTURER INSTALLATION INSTRUCTIONS -PROTECT HEATER FROM FREEZING

TANKLESS ELEC. WATER HEATER

NTS

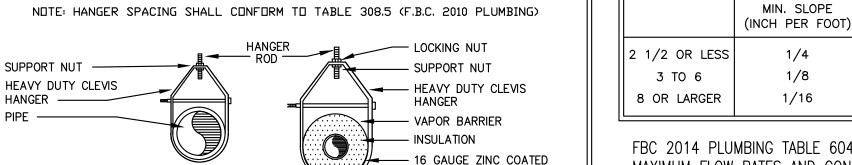
TANKLESS WATER HEATER NOTES:

POTABLE WATER EXPANSION TANK IS <u>NOT</u> REQUIRED FOR TANKLESS WATER HEATER. (F.B.C. 2014 PLUMBING 607.3.2)

SET WATER HEATER TEMP @ 110°

THE RELIEF VALVE SHALL DISCHARGE FULL SIZE TO A SAFE PLACE OF DISPOSAL. THE DISCHARGE PIPE SHALL NOT HAVE ANY TRAPPED SECTIONS AND SHALL HAVE A VISIBLE AIR GAP LOCATED IN THE SAME ROOM AS THE WATER HEATER. (F.B.C. 2014 PLUMBING 504.6.1)

THE MINIMUM DIAMETER OF WATER SERVICE PIPE SHALL BE 3/4 INCH WATER SERVICE SHALL BE SIZED IN ACCORDANCE WITH TABLE 603.1 OR OTHER APPROVED METHODS. (F.B.C. 2014 PLUMBING 603.1)

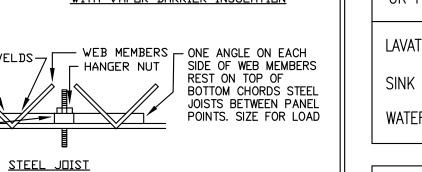


<u>CLEVIS HANGER</u> SINGLE HORIZONTAL RUNS NO VAPOR BARRIER INSULATION

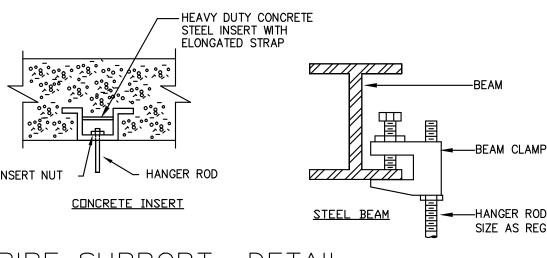
BENT STRAP 1-1/2" 3/16" OVER VERT. LÉSS OF ANGLES BOTTOM CHORDS

OF STEEL JOIST

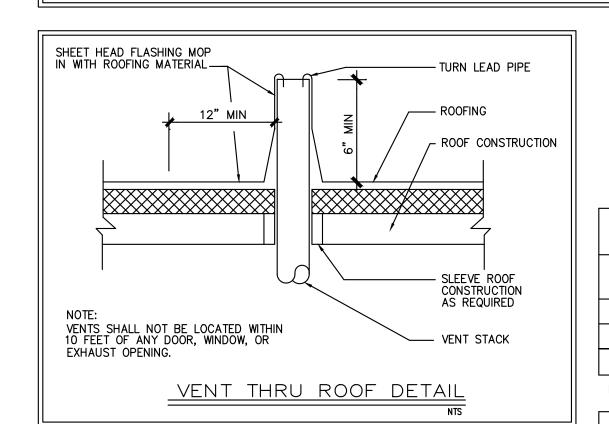
CLEVIS HANGER SINGLE HORIZONTAL RUNS WITH VAPOR BARRIER INSULATION



SHEET STEEL SADDLE AT LEAST 8" LONG



CONCRETE INSERT STEEL BEAM	HANGER ROD. SIZE AS REG.
PIPE SUPPORT DETAIL	
(FOR SANITARY & WATER PIPING)	NTS



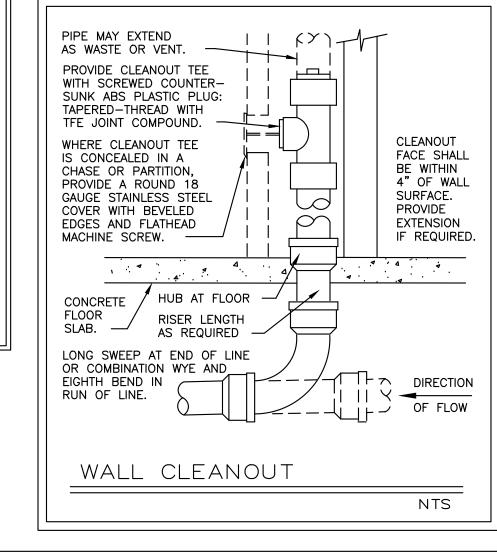
PIPING NOTES:
- SANITARY PIPING TO BE SCHEDULE 40 PVC PIPE. - ALL VENT PIPING SHALL BE SCH. 40 PVC PIPE.

- COLD WATER PIPING OUTSIDE BUILDING SHALL BE TYPE "K" COPPER. - HOT AND COLD WATER PIPING ABOVE GROUND SHALL BE TYPE "L" COPPER

WITH APPROVED CAST BRASS OR WROUGHT COPPER SOLDER JOINT FITTINGS.

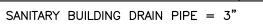
FBC 2014 PLUMBING TABLE 604.4 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS.

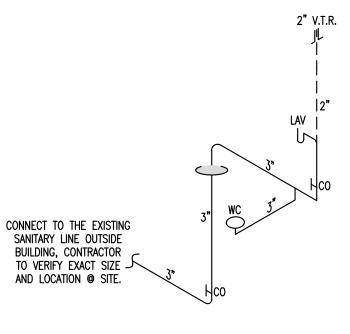
PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY
LAVATORY, PUBLIC	0.5 GPM AT 60 PSI
SINK FAUCET	2.2 GPM AT 60 PSI
WATER CLOSET	1.28 GALLON PER FLUSHING CYCLE



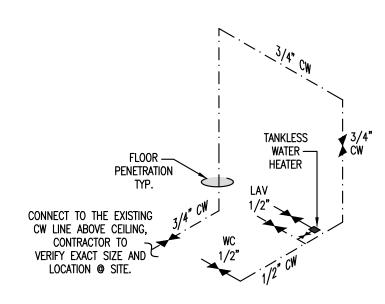
WATER SIZING CALCULATION — FLUSH TANK WC TABLE E103.3(2)							
	110	LOAD VALUES IN	WATER SUPPLY FI	XTURE UNITS	TOTAL		
FIXTURE TYPE	NO.	COLD WATER	HOT WATER	TOTAL	TOTAL		
WATER CLOSET	1	5.0	_	5.0	5		
LAVATORY	1	1.5	1.5	2.0	2		
TOTAL					7		
IIN. WATER PIPE DI	AMETER R	$\overline{\text{EQUIRED} = 3/4}$,	_			

SANITARY SIZING CALCULATION TABLE 709.1					
FIXTURE TYPE	NO.	F.U. EACH	TOTAL		
WATER CLOSET	1	6	6		
LAVORATORY	1	1	1		
TOTAL			7		



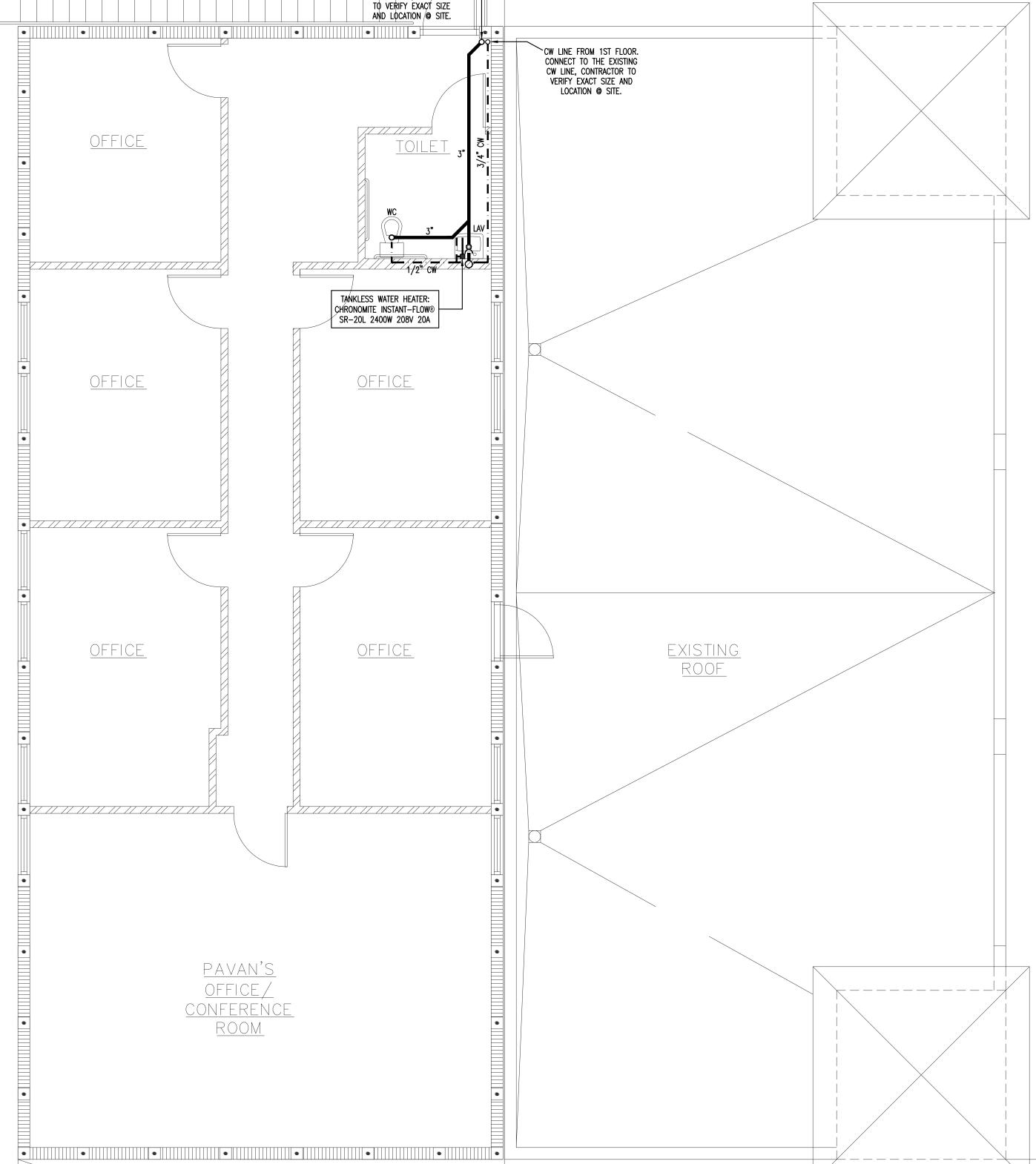


SANITARY ISOMETRIC SCALE: N.T.S.



WATER ISOMETRIC SCALE: N.T.S.

> 2ND FLOOR PLUMBING PLAN SCALE: 1/4" = 1'-0"



DOWN TO 1ST FLOOR.

| CONNECT TO THE EXISTING —

SANITARY LINE, CONTRACTOR

BUCHANAN P.E CONSULTING INC. ELECTRICAL DMECHANICAL DPLUMBING ENGINEERING 6191 W. ATLANTIC BLVD, SUITE# 2 MARGATE, FL 33063 Ph: 954-590-3300 Fax: 954-590-2232 Email: BUCHANAN@MEPENGINEERS.COM

CERTIFICATE OF AUTHORIZATION # 8842

□RAJA BUCHANAN P.E # 48916 □MAURICE L□RD P.E # 72550 | DATE: ____

project #

ADDITION

FLOOR

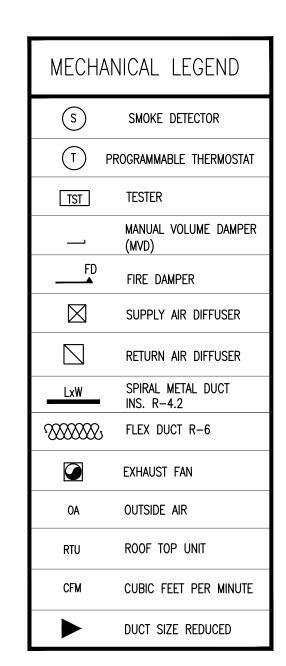
SECOND

H. DeMello

AUG. 21, 2015

AS SHOWN

15.138



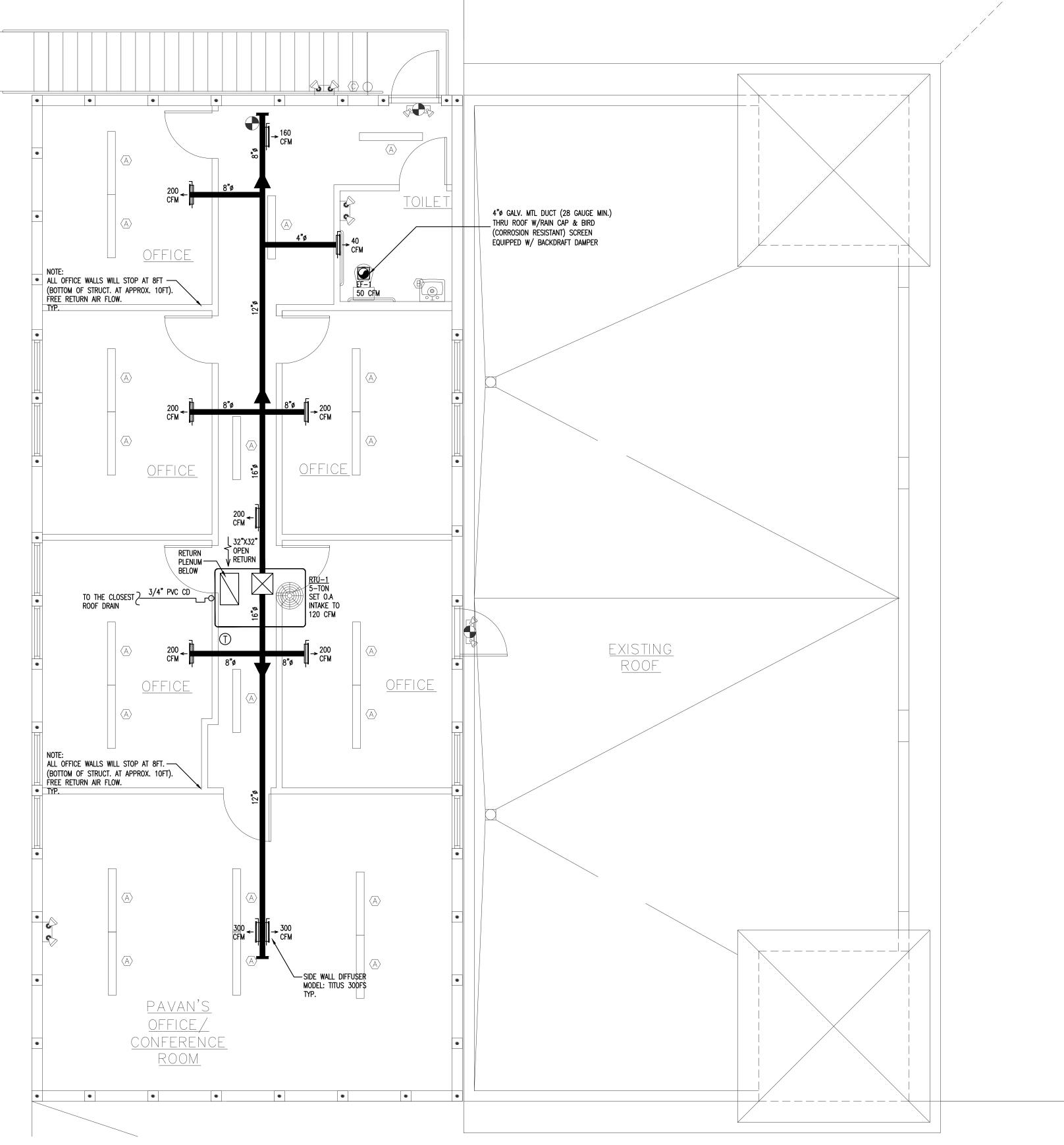
Manufacturer	TRANE OR EQUA
Model Number	THC067
Nominal Tons	5.0
Total Capacity (MBH)	60.0
Sensible Capacity (MBH)	45.3
CFM	2000
ESP (" WG)	0.5"
Entering Air DB/WB	80 / 67
SEER/EER	17.2
Voltage/Phase/Hertz	208/3/60
Heater kW	6.0
Heating Capacity (MBH)	15.4
MCA	32.2
MOCP	45.0
Compressor RLA	16.2
Condenser Fan FLA	2.5
Blower HP	1.0
Blower FLA	9.4
Evaporator Rows/FPI	4/16
Evaporator Face Area	9.9
R-410A (lbs)	11.8
Unit Weight	780
Filters	(4) 16x25x2
Unit Dimensions	88.6 x 53.3 x 40.9

Office		Ventilation Zone Name
Office	Outlet Voz:	Minimum O/A required at Supply
5	Occupant Rate Requirements Rp =) Occupant Category (table 6-1)
0.06	Building Rate Requirements Ra =	
8	Zone Pz =) Estimated No. of Occupants in the
1200		Zone Net Occupied Area Az =
112	6-1 Vbz =RpPz + RaAz) Vbz =	O/A required in Breathing Zone (eq.
1	table 6-2) <i>Ez =</i>	Zone Air Distribution Effectiveness
112	s (Eq. 6-2 Voz = Vbz/Ez) <i>Voz =</i>	Min. O/A required at Supply Oultelt

PER FBC 2014 COMMERCIAL ENERGY EFFICIENCY 5HT EDITION SECTION C403.2.4.4

SHUTOFF DAMPER CONTROLS:

BOTH OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE EQUIPPED WITH DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE. VENTILATION OUTSIDE AIR DAMPERS SHALL BE CAPABLE OF AUTOMATICALLY SHUTTING OFF DURING PREOCCUPANCY BUILDING WARMUP, COOLDOWN, AND SETBACK, EXCEPT WHEN VENTILATION REDUCES ENERGY COSTS (E.G., NIGHT PURGE) OR WHEN VENTILATION MUST BE SUPPLIED TO MEET CODE REQUIREMENTS.





H. DeMello AUG. 21, 2015 AS SHOWN project# 15.138

ADDITION FOR

SECOND FLOOR

BUCHANAN P.E CONSULTING INC.

ELECTRICAL DECHANICAL DELUMBING

ENGINEERING

CERTIFICATE OF AUTHORIZATION # 8842

□RAJA BUCHANAN P.E # 48916 □MAURICE L□RD P.E # 72550 □DATE: _____

6191 W. ATLANTIC BLVD, SUITE# 2 MARGATE, FL 33063
Phi 954-590-3300 Fax: 954-590-2232
Email: BUCHANAN@MEPENGINEERS,COM

M-1

ON ALL EQUIPMENT, FOR REVIEW PRIOR TO PURCHASING.

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH FBC-2014, 2012 NFPA-101, 2012 NFPA-1, 2011 NFPA-70. 1.ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY THE OWNER AND/OR ARCHITECT MUST BE CONDITION OF THE CONTRACT. SUBMIT SHOP DRAWINGS
- 2. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES IN ORDER TO AVOID CONFLICTS. NO CHARGES WILL BE ACCEPTED UNLESS A PRIOR WRITTEN APPROVAL HAS BEEN ISSUED BY THE OWNER/ARCHITECT.
- 3. THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE WITH EXISTING CONDITIONS. PRIOR TO INSTALLING EQUIPMENT AND/OR FABRICATING DUCTWORK, A.C. CONTRACTOR SHALL CHECK THAT THERE IS SUFFICIENT CLEARANCES FOR EQUIPMENT, DUCTWORK, ETC. AND ALSO TO AVOID ANY INTERFERENCE WITH THE PROCESS OF CONSTRUCTION.
- 4. DRAWINGS ARE DIAGRAMMATIC ILLUSTRATIONS. DO NOT SCALE DRAWINGS FOR THE EXACT LOCATION OF EQUIPMENT. PIPING, DUCTWORK, ETC. THESE DRAWINGS ARE NOT INTENDED TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE ACCEPTABLE WORKING SYSTEM.
- 5. CONTRACTOR WILL PAY FOR ALL PERMITS, FEES, INSPECTIONS, AND TESTS.
- 6. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE LATEST ASHRAE GUIDE. ALL MATERIALS SHALL BE NEW AND SHALL BEAR UNDERWRITER'S LABEL WHERE APPLICABLE.
- 7. AIR FILTERS SHALL BE INSTALLED ON ALL RETURN AIR EQUIPMENT INLETS. PROVIDE AN EXTRA FILTER, INSTALL AT END OF
- 8. ALL REQUIRED INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OD THE WORK. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE APPLICABLE NATIONAL, STATE, AND LOCAL CODES, RULES, AND ORDINANCES.
- 9. PROVIDE MAIN CONDENSATE DRAIN AND AUXILLIARY DRAIN PAN (AUXILIARY DRAIN PAN SHALL BE EQUIPPED WITH A WATER-LEVEL DETECTION DEVICE THAT WILL SHUT OFF THE EQUIPMENT SERVED PRIOR TO OVERFLOW OF THE PAN AS PER FMC 2014 SECTION

307.2.3) FOR ALL AIR CONDITIONING UNITS AND DRAIN TO EXTERIOR PERMEABLE SOIL OR AS SHOWN ON THE PLANS.

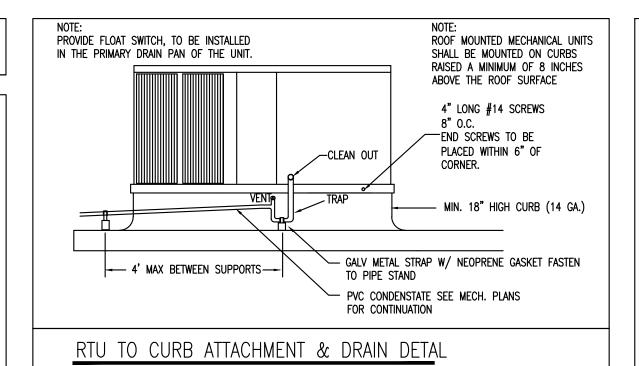
- 10. AIR CONDITIONING CONDENSATE PIPING AND FITTINGS SHALL BE PVC OR DWV (ASTM-D2662). COPPER IN PLENUM AREAS. ALL INTERIOR CONDENSATE PIPING IN UNCONDITIONED SPACES SHALL BE WRAPPED WITH A MINIMUM 1/2" SELF SEALING INSULATING FOAM JACKET. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY CONTROLS FOR THE OPERATION OF THE HVAC SYSTEM.
- 11. MAINTAIN 4" MINIMUM CLEARANCE AROUND ALL AIR HANDLING UNITS.
- 12. THERMOSTAT MUST BE PROGRAMMABLE TO BE ABLE TO SET THE TEMPERATURE BACK (OR OFF) WHEN SPACE IS UNOCCUPIED OR AT OTHER TIMES AS NEEDED BY USER.
- 13. ALL MATERIAL EXPOSED WITHIN PLENUM MUST BE NON COMBUSTIBLE OR RATED 25/50 FLAME SPREAD.
- 14. ALL AIR CONDITIONING AND VENTILATION DUCTS MUST CONFORM WITH SMACNA STANDARDS AND ALL LOCAL CODES. DUCT DROPS TO CEILINGS MAY BE INSULATED FLEXIBLE DUCT AS INDICATED ON THE HVAC PLAN. "FLEX" DUCTS SHALL BE FULLY EXTENDED AND OPEN. FIBERGLASS DUCT INSULATION VALUE SHALL BE MIN. R-6 IN ATTICS AND MIN. R-4.2 IN AIR CONDITIONED SPACE.
- 15. ALL VENTILATION DUCTWORK SHALL BE GALVANIZED SHEET METAL

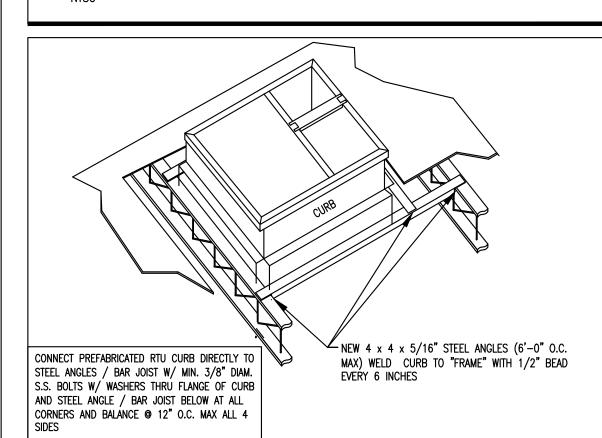
2. EQUIPMENT OPERATION AND MAINTENANCE MANUALS.

- 16. DUCT SIZES SHOWN OR INDICATED ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.
- 17. HANGERS SHALL BE PROVIDED IN ACCORDANCE WITH S.M.A.C.N.A. RECOMMENDATIONS.
- 18. AIR DISTRIBUTION ACCESSORIES SHALL BE AIR GUIDE, ANEMOSTAT, TITUS, OR APPROVED EQUAL. ALL SUPPLY A.C. DUCT ELBOWS MUST BE FURNISHED WITH APPROVED TURNING VANES. BRANCH TAKEOFFS MUST BE PROPORTIONAL SPLITS.
- 19. THE OWNER SHALL APPROVE THE FINISH COLOR OF ALL EXPOSED AIR DISTRIBUTION DEVICES.
- 20. PROVIDE FIRE DAMPERS IN ALL DUCTS PASSING THROUGH FIRE DIVISION ASSEMBLIES. FIRE DAMPERS MUST HAVE FIRE RATING EQUAL TO OR GREATER THAN THE PENETRATED ASSEMBLY RATING. FIRE DAMPER INSTALLATIONS SHALL COMPLY WITH ALL LOCAL CODES. PROVIDE ACCESS PANEL TO ALL FIRE DAMPERS.
- 21. ELECTRIC STRIP HEATERS SHALL BE BLAST COIL TYPE WITH NICKEL CHROMIUM WIRE AND INSULATING BUSHINGS FACTORY MOUNTED AND WIRED INCLUDING ALL HEAT LIMITERS, HOGH LIMIT SWITCHES, AND CONTRACTORS IN ACCORDANCE WITH THE "NATIONAL ELECTRIC CODE".

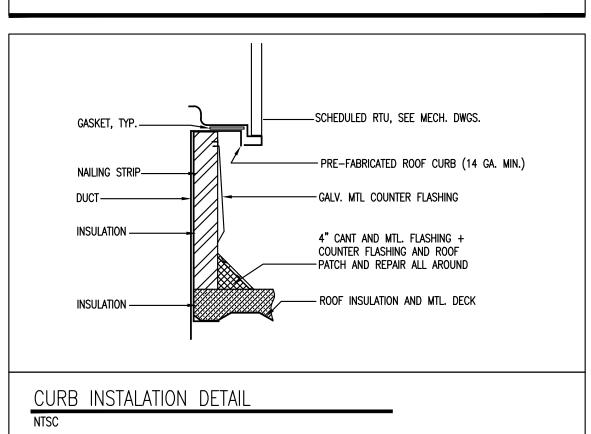
22. EXHAUST FANS SHALL HAVE THE CAPACITIES AS STATED ON THE DRAWINGS AND BE PROVIDED WITH BACK DRAFT DAMPER, BIRD SCREEN.

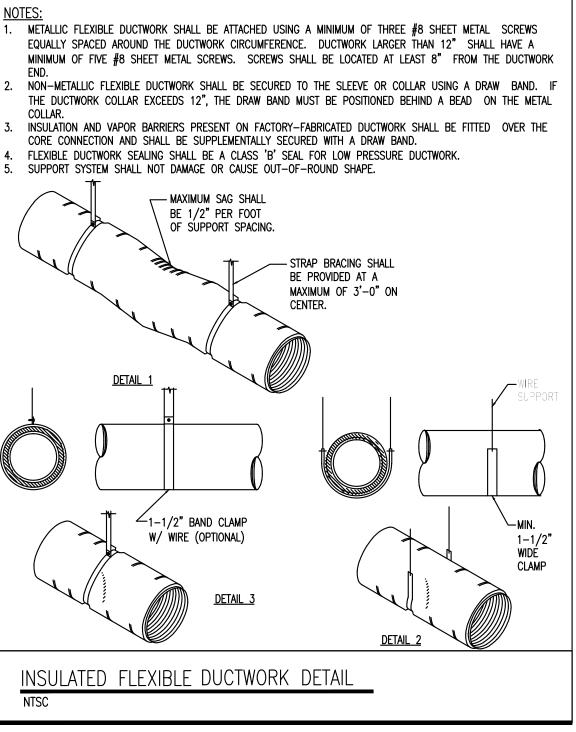
- 23. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD NOT LESS THAN 1 YEAR FROM THE DATE OF ACCEPTANCE, UNLESS OTHERWISE NOTED. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENTS OR REPAIRS OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED OR IS NOT OPERATING PROPERLY.
- 24. ARCHITECTURAL AND/OR ENGINEERING EXPENSES THAT ARE INCURRED DUE TO REVISIONS FOR SUBSTITUTIONS BY THE CONTRACTOR
- 25. AIR DISTRIBUTION SYSTEM TESTING, ADJUSTING AND BALANCING. A WRITTEN BALANCE REPORT SHALL BE PROVIDED TO THE OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER FOR HVAC SYSTEMS SERVING ZONES WITH A TOTAL CONDITIONED AREA EXCEEDING 5000 SQUARE FEET. AIR DISTRIBUTION SYSTEMS SHALL BE TESTED, ADJUSTED, AND BALANCED BY AN ENGINEER LICENSED IN 'HIS STATE OR A COMPANY OR INDIVIDUAL HOLDING A CURRENT CERTIFICATION FROM A RECOGNIZED TESTING AND BALANCING AGENCY ORGANIZATION IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS.
- FXCFPTIONS: 1. BUILDINGS WITH COOLING OR HEATING SYSTEM CAPACITIES OF 15 TONS OR LESS PER SYSTEM MAY BE TESTED AND BALANCED BY A MECHANICAL CONTRACTOR LICENSED TO DESIGN AND INSTALL SUCH SYSTEM(S). 2. BUILDINGS WITH COOLING OR HEATING SYSTEM CAPACITIES OF 65,000 BTU/H OR LESS PER SYSTEM ARE EXEMPT FROM THE
- REQUIREMENTS OF THIS SECTION. AIR SYSTEM BALANCING SHALL COMPLY WITH FBC 2014 ENERGY CONSERVATION 5TH EDITION SECTION C408.2.2.
- 26. AS PER FBC 2014 ENERGY CONSERVATION 5HT EDITION SECTION C480.2.5.2, AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER BY THE MECHANICAL CONTRACTOR. THE MANUAL SHALL INCLUDE, AT LEAST, THE FOLLOWING: 1. EQUIPMENT CAPACITY (INPUT AND OUTPUT) AND REQUIRED MAINTENANCE ACTIONS.
- 3. HVAC SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SET POINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS, AT CONTROL DEVICES OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS. 4. A COMPLETE WRITTEN NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE.
- 27. ALL PIPING SERVING AS PART OF A HEATING OR COOLING SYSTEM SHALL BE THERMALLY INSULATED IN ACCORDANCE WITH FBC 2014 ENERGY CONSERVATION 5HT EDITION SECTION C403.2.8.
- 28. IF THERE ARE ANY CHANGES IN ENGINEER'S DRAWINGS, IN DESIGN OR IN EQUIPMENT, WITHOUT ENGINEER'S CONSENT, THE A.C. CONTRACTOR SHALL ASSUME ALL RESPONSIBILITIES FOR THE PROJECT.
- 29. SMOKE DETECTORS ARE REQUIRED ON ALL PRIMARY AIR CONDITIONING SYSTEMS WHERE TOTAL AIR VOLUME EXCEEDS 2,000 C.F.M. (FBC-MECHANICAL 2014, SECTION 606.2.1) A DUCT ACCESS DOOR IS REQUIRED TO ACCESS THE DETECTOR. 606.4 CONTROLS OPERATION. UPON ACTIVATION, THE SMOKE DETECTORS SHALL SHUT DOWN THE AIR DISTRIBUTION SYSTEM. AIR DISTRIBUTION SYSTEMS THAT ARE PART OF A SMOKE CONTROL SYSTEM SHALL SWITCH TO THE SMOKE CONTROL MODE UPON ACTIVATION OF A DETECTOR.
- 606.4.1 SUPERVISION. THE DUCT SMOKE DETECTORS SHALL BE CONNECTED TO A FIRE ALARM SYSTEM WHERE A FIRE ALARM SYSTEM IS REQUIRED BY THE FLORIDA FIRE PREVENTION CODE. THE ACTUATION OF A DUCT SMOKE DETECTOR SHALL ACTIVATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION.
- 1. THE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION IS NOT REQUIRED WHERE THE DUCT SMOKE DETECTOR ACTIVATES THE BUILDING'S ALARM-INDICATING APPLIANCES.
- 2. IN OCCUPANCIES NOT REQUIRED TO BE EQUIPPED WITH A FIRE ALARM SYSTEM, ACTUATION OF A SMOKE DETECTOR SHALL ACTIVATE A VISIBLE AND AUDIBLE SIGNAL IN AN APPROVED LOCATION. DUCT SMOKE DETECTOR TROUBLE CONDITIONS SHALL ACTIVATE A VISIBLE OR AUDIBLE SIGNAL IN AN APPROVED LOCATION AND SHALL BE IDENTIFIED AS AIR DUCT DETECTOR TROUBLE.
- 30. AS PER FBC 2014 ENERGY CONSERVATION SECTION 5HT EDITION SECTION C403.2.4.4 (SHUTOFF DAMPER CONTROLS) PROVIDE MOTORIZED DAMPERS FOR O/A INTAKE FOR AHU. CONNECT MOTORIZED DAMPER TO TIME CLOCK TO CLOSE OUTSIDE AIR INTAKE AUTOMATICALLY WHEN THE SPACE SERVED IS NOT IN USE (OFF BUSINESS HOURS).
- 31. GRAVITY HOODS. VENTS. AND VENTILATORS. ALL OUTDOOR AIR SUPPLY AND EXHAUST HOODS, VENTS, AND VENTILATORS SHALL BE EQUIPPED WITH DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SPACES SERVED ARE NOT IN USE. EXCEPTION: VENTILATION SYSTEMS SERVING UNCONDITIONED SPACES.
- 32. MINIMUM DUCT INSULATION R-VALUES, HEATING AND COOLING SUPPLY AND RETURN DUCTS SHALL BE PER FBC 2014 ENERGY CONSERVATION 5HT EDITION TABLE C403.2.7.1.
- 33. AS PER FBC-301.4 ALL APPLIANCES REGULATED BY THIS CODE SHALL BE LISTED AND LABELED UNLESS OTHERWISE APPROVED IN ACCORDANCE WITH SECTIONS 301.4.1 THROUGH 301.4.4.
- 34. AS PER FMC-304.10 GUARDS SHALL BE PROVIDED WHERE APPLIANCES, EQUIPMENT, FANS OR OTHER COMPONENTS THAT REQUIRE SERVICE AND ROOF HATCH OPENINGS ARE LOCATED WITHIN 10 FT. OF ROOF EDGE OR OPEN SIDE OF A WALKING SURFACE AND SUCH EDGE OR OPEN SIDE IS LOCATED MORE THAN 30" ABOVE THE FLOOR, ROOF OR GRADE BELOW.
- 35. AS PER 306.5.1 SLOPED ROOFS. WHERE APPLIANCES, EQUIPMENT, FANS OR OTHER COMPONENTS THAT REQUIRE SERVICE ARE INSTALLED ON A ROOF HAVING A SLOPE OF THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL OR GREATER AND HAVING AN EDGE MORE THAN 30" ABOVE GRADE AT SUCH EDGE A LEVEL PLATFORM SHALL BE PROVIDED ON EACH SIDE OF THE APPLIANCE TO WHICH ACCESS IS REQUIRED FOR SERVICE, REPAIR OR MAINTENANCE. THE PLATFORM SHALL BE NOT LESS THAN 30" IN ANY DIMENSION AND SHALL BE PROVIDED WITH GUARDS. THE GUARDS SHALL EXTEND NOT LESS THAN 42"ABOVE THE PATFORM, SHALL BE CONSTRUCTED SO AS TO PREVENT. THE PASSAGE
- OF A 21" DIAMETER SPHERE AND SHALL COMPLY WITH THE LOADING REQUIREMENTS FOR QUARDS SPECIFIED IN THE FBC. 36. ANY INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10FT. FROM ANY HAZARDOUS OR NOXIOUS CONTAMINANT SOURCE.
- 37. ALL COOKING APPLIANCES THAT ARE DESIGNED FOR PERMANENT INSTALLATION SHALL BE LISTED, LABELED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTION.
- 38. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE PROJECT ENGINEER AND ARCHITECT OF ANY DISCREPANCY BETWEEN THESE PLANS AND THE EXISTING CONDITIONS. THE CONTRACTOR SHALL INCLUDE IN HIS BID TO CORRECT SUCH CONDITION AS DIRECTED. THE ENGINEER AND ARCHITECT ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED.

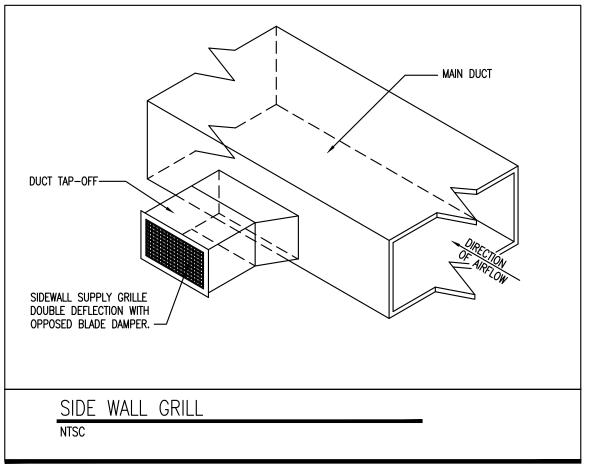


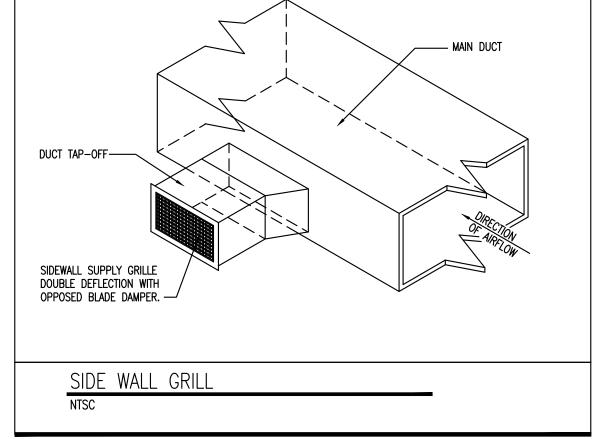


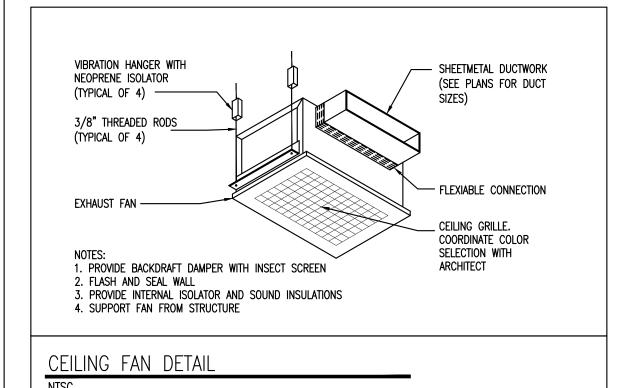
CURB TO ROOF JOIST ATTACHMENT DETAIL











EXHAUST FAN SCHEDULE									
TAG	BASIS OF DESIGN		FLOW RATE	STATIC RPM		CAL DATA	PANEL (LxW)	WEIGHT	
	MANUFACTURER	MODEL OR SERIES	CFM	T KESSOKE		POWER (W)	VOLT	Inch	(lb)
EF-1	GREENHECK OR EQUAL	SP-B70	50	0.25	675	40	115	13.25x14.875	9

MECHANICAL NOTES & DETAILS

BUCHANAN P.E CONSULTING INC. ELECTRICAL DMECHANICAL DPLUMBING ENGINEERING 6191 W. ATLANTIC BLVD, SUITE# 2 MARGATE, FL 33063 Phi 954-590-3300 Fax: 954-590-2232 Email: BUCHANAN@MEPENGINEERS.COM CERTIFICATE OF AUTHORIZATION # 8842

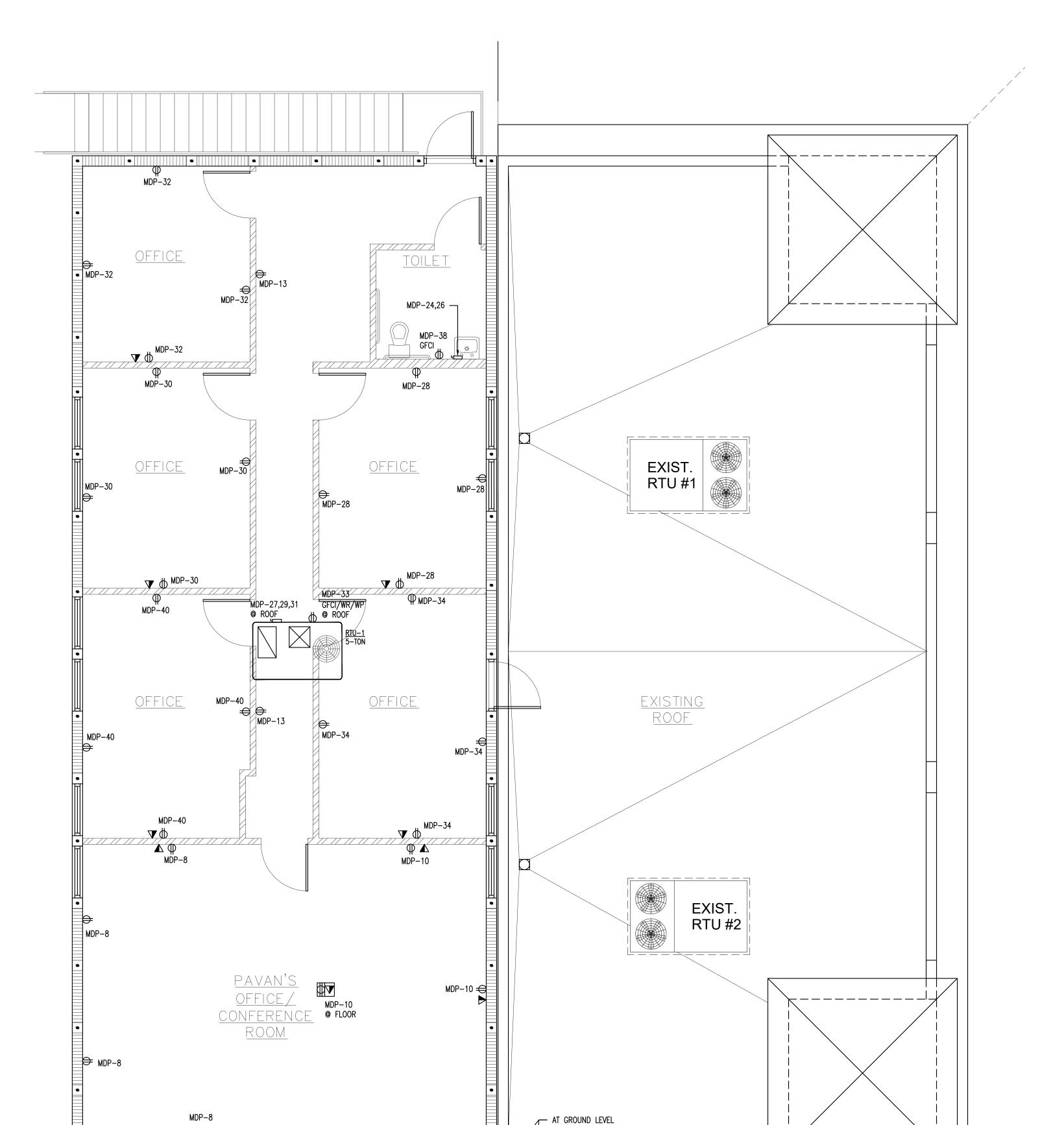
□RAJA BUCHANAN P.E # 48916 □MAURICE L□RD P.E # 72550 | DATE: _____

ADDITION

FLOOR

SECOND

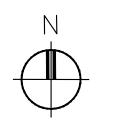
H. DeMello H. DeMello AUG. 21, 2015 AS SHOWN project # 15.138

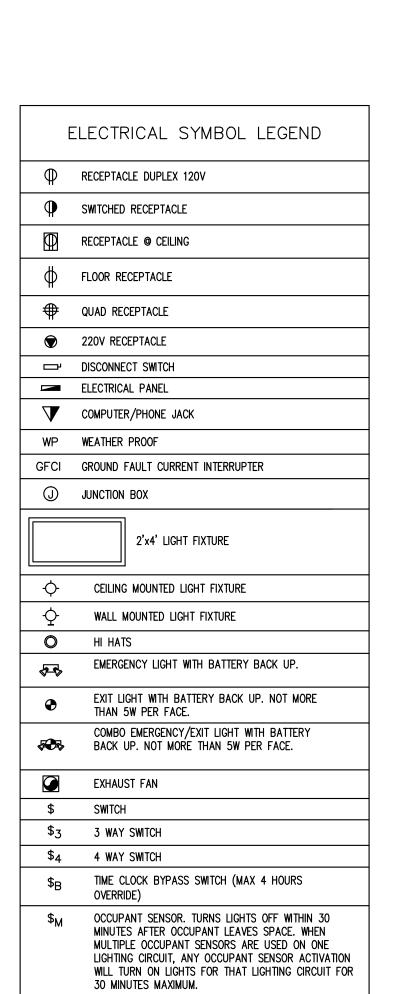


2ND FLOOR POWER PLAN SCALE: 1/4" = 1'-0"

ФМDР−10

EXISTING EXISTING PANEL-MDP METER





ULTRASONIC CEILING MOUNTED OCCUPANCY SENSOR.
TURNS LIGHTS OFF WITHIN 30 MINUTES AFTER OCCUPANT LEAVES SPACE. WHEN MULTIPLE MOTION SENSORS ARE USED ON ONE LIGHTING CIRCUIT, ANY OCCUPANCY SENSOR ACTIVATION WILL TURN ON LIGHTS FOR THAT LIGHTING CIRCUIT FOR 30 MINUTES MAXIMUM. OCCUPANCY SENSOR SHALL BE SELECTED TO PROVIDE FULL COVERAGE FOR THE AREA IT SERVES. T PROGRAMMABLE THERMOSTAT TST TESTER

ALL RECEPTACLES TO BE @ 15" AFF TO BOTTOM OF RECEPTACLE UNLESS NOTED OTHERWISE OR ABOVE COUNTER.

ALL SWITCHES TO BE @ 48" AFF TO TOP OF SWITCH UNLESS NOTED OTHERWISE.

ADDITION FOR

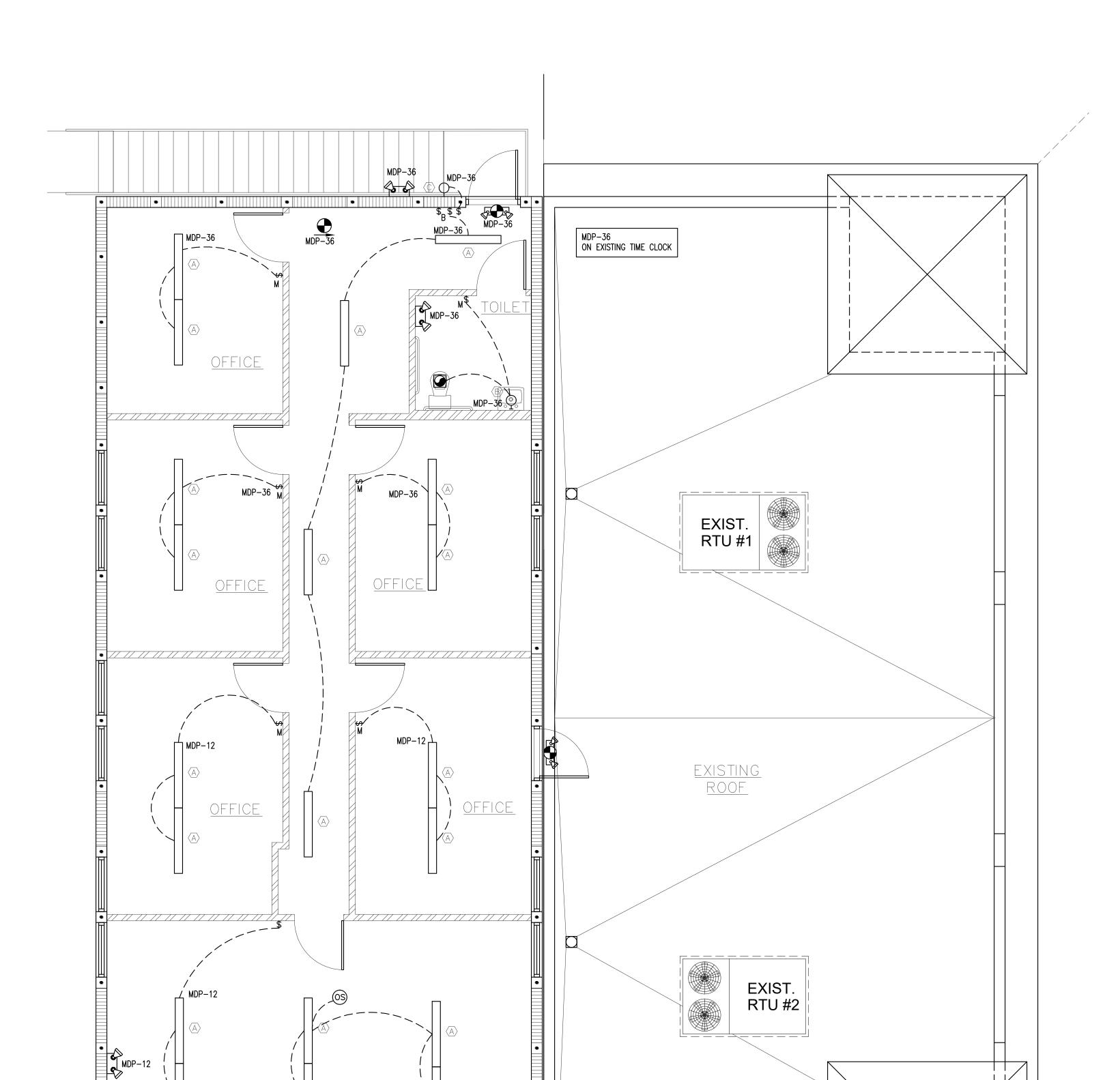
SECOND FLOOR

H. DeMello H. DeMello AUG. 21, 2015 AS SHOWN project# 15.138

BUCHANAN P.E CONSULTING INC. ELECTRICAL MECHANICAL PLUMBING ENGINEERING 6191 W. ATLANTIC BLVD, SUITE# 2 MARGATE, FL 33063 Ph: 954-590-3300 Fax: 954-590-2232 Email: BUCHANAN@MEPENGINEERS.COM CERTIFICATE OF AUTHORIZATION # 8842

RAJA BUCHANAN P.E # 48916 MAURICE LORD P.E # 72550 DATE: _____

E-1



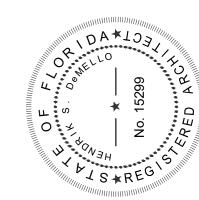


OFFICE/ CONFERENCE

	<u> </u>	LIGHTING FIX	TURE	SCHEDULE			
SYMBOL	LABEL	TYPE OF FIXTURE	FINISH	LENS TYPE	VOLT	LAMP	MANUFACTURER & MODEL NO.
	А	4' 2L Paralinear Fluorescent - 4' Cable	WHITE	L□UVER	-	(2) F32T8/35K	LSI # 482-ACK4-232-16-SSD-CAN
Q	В	Wall Mounted Incand. Fixt.			-		(as approved by owner)
Q	С	Wall Mounted Exterior Incand. Fixt.					(as approved by owner)
	EXIT EM	Combination EM / Exit	WHITE	RED LETTERS	-	L.E.D.	LSI # EMEX 1/2 R W 120/277
4	ЕМ	Emergency Lt.	WHITE			L.E.D.	LSI # EM
•	EXIT	EXIT LIGHT WITH BATTERY BACK UP. NOT MORE THAN 5W PER FACE.	WHITE	RED LETTERS		L.E.D.	

NOTE 1: VERIFY CEILING TYPES PRIOR TO ORDERING

INTERIOR LIGHTII	NG POWER AL	LOWANCE	CALC	ULATIONS	-					
SPACE TYPE	ALLOWED			AREA			ALLOWED		USED	
SPACE TYPE	(W/SQ FT)			(SQ FT)			(W)		(W)	
OFFICE	0.9	W/SQ FT	X	<u>1734</u>	SQ FT	=	<u>1561</u>	WATT	1472	WAT
TOTALS							1561	WATT	1472	W



SECOND FLOOR

ADDITION FOR

designed	H. DeMello
drawn	H. DeMello
date	AUG. 21, 2015
scale	AS SHOWN
project #	15.138
sheet	

□RAJA BUCHANAN P.E # 48916 □ MAURICE L□RD P.E # 72550 □ DATE: _____

GENERAL ELECTRICAL NOTES

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (N.E.C. 2011) AND GOVERNING MUNICIPAL, STATE AND LOCAL CODES. ALL MATERIAL SHALL BE NEW AND SHALL BEAR THE U.L. LABEL WHERE APPLICABLE.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY THE OWNER.
- 3. 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.
- 4. CONTRACTOR SHALL MAKE ALL NECESSARY CUTTING AND DO ALL THE REPATCHING AS NECESSARY FOR THE PROPER EXECUTION OF THIS WORK.
- 5. AFTER COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS.
- 6. WHERE ELECTRICAL CONDUCTORS ARE INSTALLED IN CONDUIT, THE CONDUIT SHALL COMPLY WITH THE N.E.C. REQUIREMENTS.
- 7. ALL CONDUCTORS SHALL BE COPPER. NO CONDUCTOR SHALL BE SMALLER THAN #12 AWG AND SHALL BE RATED FOR 600VOLTS THWN OR THHN INSULATION. INSTALL A GROUNDING CONDUCTOR WITH ALL CIRCUITS, UNLESS NOTED OTHERWISE, SIZED PER N.E.C. 250—122.
- 8. VERIFY BREAKER AND CORRESPONDING WIRE SIZES FOR ALL ELECTRICAL EQUIPMENT. DO NOT ORDER MATERIAL BEFORE VERIFYING BREAKER & WIRE SIZE. REPORT ANY DISCREPANCY IMMEDIATELY TO THE ENGINEER OF RECORD.
- 9. ALL OUTDOOR DISCONNECTS AND ELECTRICAL PANELS TO BE NEMA—3R. ALL OUTDOOR DISCONNECTS AND ELECTRICAL PANELS IN A SALT SPRAY AREA TO BE NEMA—4X.
- 10. PANELS SHALL BE SQUARE 'D', GENERAL ELECTRIC OR EQUAL, TYPE AND NUMBER OF BREAKERS AS INDICATED ON PANEL SCHEDULE. STENCIL PANEL DESIGNATION ON INSIDE OF PANEL. ALL TWO—POLE BREAKERS SHALL BE COMMON TRIP. PROVIDE TYPE WRITTEN SCHEDULE IN EACH LOAD CENTERS. CONNECTION TO MAIN BUS SHALL BE WITH BURNDY ANNULAR COMPRESSION LUGS. PANELS AIC RATING SHALL BE AS INDICATED ON PLANS.
- 11. PROVIDE NAMEPLATES FOR ALL PANEL BOARDS, DISCONNECTS, TRANSFORMER, TERMINAL CABINETS AND ALL ELECTRICAL EQUIPMENT IDENTIFIED BY NAME ON DRAWINGS.
- 12. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
- 13. LOAD DATA IS BASED ON INFORMATION GIVEN ENGINEER AT TIME OF DESIGN. VERIFY ALL EQUIPMENT AND PANEL SIZES BEFORE ORDERING AND BEFORE INSTALLATION.
- 14. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO COMPLY WITH LOCAL CODE FOR WIND RESISTANCE.
- 15. ALL ELECTRICAL AND COMMUNICATIONS OUTLETS TO BE AT 15" A.F.F TO BOTTOM OF OUTLET UNLESS
- OTHERWISE NOTED, ALL LIGHT SWITCHES SHALL BE @ 48" AFF. TO TOP OF SWITCH.

 16. TIME CLOCK FOR LIGHTING CONTROL TO BE AN ASTRONOMICAL TIME CLOCK.
- 17. THE CONTRACTOR SHALL CONTACT THE LOCAL POWER COMPANY AND OBTAIN, IN WRITING, THE AVAILABLE FAULT CURRENT OF THE UTILITY TRANSFORMER. THE CONTRACTOR SHALL ENSURE THAT ALL ELECTRICAL EQUIPMENT HAS AN AMP INTERRUPTING CAPACITY (AIC) GREATER THAN THE AVAILABLE FAULT CURRENT AT ANY POINT IN THE ELECTRICAL DISTRIBUTION SYSTEM.
- 18. WIRING METHOD:
- ALL CONDUCTORS SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING (EMT) OR MC CABLE & FLEXIBLE METAL CONDUIT (GREENFIELD) AS PER NEC 330-10, PROVIDED IT IS USED IN NON DESTRUCTIVE OR CORROSIVE SURROUNDINGS AS SPECIFIED IN NEC 2011 330-12. ALL FITTINGS AND COUPLINGS FOR EMT CONDUIT SHALL BE ALL STEEL RAIN TIGHT COMPRESSION TYPE OR ALL STEEL CONCRETE TIGHT SET SCREW TYPE. SCHEDULE 40 PVC CONDUIT, WITH FITTINGS AND COUPLINGS APPROPRIATE FOR THE USE, SHALL BE USED UNDERGROUND OR BELOW SLABS ON GRADE.
- 19. BRANCH-CIRCUIT WIRING, OTHER THAN 2-WIRE OR MULTIWIRE BRANCH CIRCUITS SUPPLYING POWER TO LUMINAIRES CONNECTED TOGETHER, SHALL NOT BE PASSED THROUGH AN OUTLET BOX THAT IS AN INTEGRAL PART OF A LUMINAIRE UNLESS THE LUMINAIRE IS IDENTIFIED FOR THROUGH-WIRING.
- LUMINAIRES SHALL NOT BE USED AS A RACEWAY FOR CIRCUIT CONDUCTORS UNLESS LISTED AND MARKED FOR USE AS A RACEWAY. PROVIDE J-BOXES AS REQUIRED.
- 20. SEAL ALL NEW CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS, FLOORS, ETC., TO MAINTAIN EXISTING FIRE RATING CONDITIONS. FURNISH AND INSTALL FIRE RATED ENCLOSURES FOR ALL EQUIPMENTS PENETRATING FIRE RATED ENVELOPES, SPACES, ECT.
- 21. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE WIRING FOR HVAC SYSTEM: A/C EQUIPMENT(S), SMOKE DETECTORS, THERMOSTATS, TEST STATIONS, MOTORIZED VOLUME DAMPERS, ETC. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING. ELECTRICAL CONTRACTOR TO THOROUGHLY REVIEW MECHANICAL PLANS AND PROVIDE POWER TO ANY MECHANICAL EQUIPMENT OR DEVICE THAT IS NOT SHOWN ON ELECTRICAL PLANS BUT IS SHOWN ON MECHANICAL PLANS.
- 22. INSTALL "GFCI" GROUND FAULT INTERRUPTER RECEPTACLES WITH WEATHERPROOF COVER WITHIN 25 FT OF HVAC EQUIPMENT, MOUNT RECEPTACLE ON UNISTRUT (UNLESS HVAC EQUIPMENT IS SPECIFIED WITH FACTORY INSTALLED CONVENIENT RECEPTACLE).
- 23. WHEN NEW ELECTRIC SERVICE IS BEING INSTALLED, IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH FPL/FPL ENGINEERS ON THE SIZE OF THE FPL TRANSFORMER THAT IS REQUIRED TO PROVIDE THE NEW ELECTRIC SERVICE SHOWN ON ELECTRIC PLANS, GC HAS TO INFORM THE OWNER ABOUT ANY EXTRA FPL CHARGES THAT MIGHT OCCUR IN ORDER TO PULL NEW SERVICE. THIS HAS TO BE DONE AS EARLY AS POSSIBLE DURING THE BIDDING PROCESS.
- 24. ELECTRICAL SERVICE EQUIPMENT MUST BE 3' ABOVE MSL, AND 8' ABOVE N.V.G.D. VERIFY AT SITE. ALL ELECTRICAL EQUIPMENTS SHALL BE INSTALLED ABOVE FLOOD LEVEL.
- 25. CONTRACTOR MUST VISIT THE SITE PRIOR TO BID OR CONSTRUCTION TO VERIFY ALL EXISTING CONDITIONS. BEFORE SUBMITTING BID, BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS AT THE BUILDING SITE. THE INTENT OF THE WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREINAFTER. BY THE ACT OF SUBMITTING A BID PROPOSAL FOR WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS PRESENT AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT SHALL BE CONSIDERED AS VALID, DUE TO THE FAILURE TO ALLOW FOR CONDITIONS WHICH MAY EXIST. CONTRACTOR TO REPLACE ANY EXISTING DEVICE OR COMPONENT THAT IS CALLED AS EXISTING IF IT IS NOT FULLY OPERATIONAL.
- 26. WIRING METHODS IN ALL PATIENT CARE AREAS TO BE IN COMPLIANCE WITH REDUNDANT GROUNDING REQUIREMENTS OF NEC 2011 SECTION 517.13.
- 27. ALL DIMMING MECHANISMS HAVE TO BE COMPATIBLE WITH FIXTURE DIMMING REQUIREMENTS. CONTRACTOR MUST VERIFY ALL DIMMING MECHANISM AND FIXTURE DIMMING REQUIREMENTS BEFORE ANY ORDERING, INSTALLING, OR WIRING OF ANY DIMMING MECHANISMS AND FIXTURES.
- 28. ALL OUTDOOR RECEPTACLES TO BE GFCI & WEATHER PROOF.

PER FLORIDA BUILDING CODE 2014 ENERGY CONSERVATION:

405.7.3 VOLTAGE DROP.

405.7.3.1 FEEDERS AND CUSTOMER OWNED SERVICE CONDUCTORS.
FEEDER AND CUSTOMER OWNED SERVICE CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 2 PERCENT AT DESIGN LOAD.

405.7.3.2 BRANCH CIRCUITS. BRANCH CIRCUIT CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3 PERCENT AT DESIGN LOAD.

405.7.4 COMPLETION REQUIREMENTS.

- 405.7.4.1 DRAWINGS. CONSTRUCTION DOCUMENTS SHALL REQUIRE THAT WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER, INCLUDING:

 1. A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND

 2. FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.
- 405.7.4.2 MANUALS. CONSTRUCTION DOCUMENTS SHALL REQUIRE THAT AN OPERATING MANUAL AND MAINTENANCE MANUAL BE PROVIDED TO THE BUILDING OWNER. THE MANUALS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:

 1. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF FOUIPMENT REQUIRING MAINTENANCE.

EXISTING

3 13176 EX EX EX

20 1 360 1/2" 12 12 RECEPT.

EX EX EX

20 1 720 EX EX EX FRONT OUTLETS

20 1 720 EX EX EX CHANGING ROOM

20 1 180 1/2" 12 12 RECEPT. @ ROOF

 200
 2
 2,100
 EX
 EX
 EX
 EX

 200
 2
 EX
 EX
 EX
 EX

125 2 15,916 EX EX EX PANEL-P

20 1 900 EX EX EX OUTLETS CLASSROOM

600 EX EX EX SLIDING DOOR

1 720 EX EX EX COLOUMN OUTLETS

EX EX EX AIR COMPRESSOR

900 EX EX EX FAN/EQUIPMENT ROOM

TOTAL RECEP. LOAD

LIGHTING LOAD @ 125%

LARGEST MOTOR @125%

OTHER MOTORS @ 100%

AIR CONDITIONERS @ 100%

KITCHEN EQUIPMENT @ 65%

CURRENT PER PHASE

REST @ 50%

VERIFY ALL EQUIPMENT LOAD AND BREAKER AND WIRE SIZES PRIOR TO INSTALLATIONS

RECEP. 1st 10,000 VA @ 100%

60 | 3 | EX | EX | AC

100 3 28800 EX EX EX

100 3 EX EX EX

45 3 10100 3/4" 8 10

SUBTOT. 75192 VA

* NON SIMULTANEOUS LOAD

120/208V, 3PH, 4WIRE

AMPS POLE TOTAL COND. WIRE GRD
VA SIZE SIZE SIZE

400 AMPS

SPECIFICATIONS:

AMPACITY

- 2. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.

 3. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.

 NOTE: ENFORCEMENT AGENCIES SHOULD ONLY CHECK TO BE
- SURE THAT THE CONSTRUCTION DOCUMENTS REQUIRE THIS INFORMATION TO BE TRANSMITTED TO THE OWNER AND SHOULD NOT EXPECT COPIES OF ANY OF THE MATERIALS.

 405.3 TANDEM WIRING (MANDATORY). THE FOLLOWING LUMINAIRES LOCATED WITHIN THE SAME AREA SHALL BE TANDEM WIRED:

 1. FLUORESCENT LUMINAIRES EQUIPPED WITH ONE, THREE OR ODD—NUMBERED LAMP
- CONFIGURATIONS, THAT ARE RECESS—MOUNTED WITHIN 10 FEET (3048 MM) CENTER—TO—CENTER OF EACH OTHER.

 2. FLUORESCENT LUMINAIRES EQUIPPED WITH ONE, THREE OR ANY ODD—NUMBERED LAMP CONFIGURATION, THAT ARE PENDANT— OR SURFACE—MOUNTED WITHIN 1 FOOT (305 MM) EDGE—TO—EDGE OF EACH OTHER.
- WHERE ELECTRONIC HIGH-FREQUENCY BALLASTS ARE USED.
 LUMINAIRES ON EMERGENCY CIRCUITS.
 LUMINAIRES WITH NO AVAILABLE PAIR IN THE SAME AREA.

NOTE:

THE LIGHTING SPECIFICATIONS WERE SUPPLIED BY OTHERS.
CONTRACTOR TO COORDINATE WITH OWNER/OWNER REP OR OWNER'S INTERIOR DESIGNER. VERIFY THAT THE SPECIFICATIONS ON THIS PLAN ARE WHAT THE OWNER ASKED FOR AND PROPERLY WIRE CONTROLS PER MANUFACTURER SPECIFICATIONS. ELECTRICAL CONTRACTOR TO CHECK MANUFACTURER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR LIGHTS AND CONTROLS FOR LIGHTS PRIOR TO ORDERING AND ROUGH—IN.

NOTE: FOR FLUORESCENT LUMINAIRES, PROVIDE DISCONNECTS AS PER

BRANCH CIRCUIT VOLTAGE DROP MAXIMUM 3% PER 2014FBC ENERGY CONSERVATION CODE SECTION 405.7.3.2

NEC 410.130(G).

	CIRCUIT LOAD IN AMPS	WIRE SIZE COPPER	MAXIMUM LENGTH IN FEET
	5 AMPS OR LESS	#12 AWG	180
l	6 AMPS	#12 AWG	150
l	7 AMPS	#12 AWG	130
l	8 AMPS	#12 AWG	115
l	9 AMPS	#12 AWG	100
l	10 AMPS	#12 AWG	90
l	11 AMPS	#12 AWG	83
l	12 AMPS	#12 AWG	75
l	13 AMPS	#12 AWG	70
l	14 AMPS	#12 AWG	65
l	15 AMPS	#12 AWG	60
l	16 AMPS	#12 AWG	57
l	17 AMPS	#12 AWG	54
1	18 AMPS	#12 AWG	51
1	19 AMPS	#12 AWG	48
	20 AMPS	#12 AWG	45

ELECTRICAL NOTES & DETAILS

WHITHIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
No. 15299	MINING STATES ARCHITECTURAL ST

AA26001907
AA26001907

ECTURE
reet, Boca Raton, Flo

ARCHITECTI
911 Southwest 18 Street, Boca

and were created and seveloped for use in connection with the specific project. None f such ideas and designs shall e used by or disclosed to any person or corporation for any purpose whatsoever without

SHWAY #1

455 U.S. HIGHW

rovisions

OR.

ADDITION

FLOOR

SECOND

designed	H. DeMello
drawn	H. DeMello
date	AUG. 21, 2015
scale	AS SHOWN
project #	15.138
sheet	

BUCHANAN P.E CONSULTING INC.

ELECTRICAL DMECHANICAL PLUMBING

ENGINEERING

6191 W. ATLANTIC BLVD, SUITE# 2 MARGATE, FL 33063

Phi 954-590-3300 Faxi 954-590-2232

Email: BUCHANAN@MEPENGINEERS.CDM

CERTIFICATE DF AUTHORIZATION # 8842

DATE: _______

MAINS:

PANEL-MDP

NEMA-3R

CIRC No. CIRC No.

3 4

11 12 LIGHTS

19 20 EAST LIGHTS

35 36 LIGHTS

TOTAL LOAD

REST OF ALL OTHER LOADS @ 100% 14,716 @100%

PANEL-MDP

DEMAND LOAD CALCULATIONS

10,000 @100%

5,720 @50%

6292 @125%

28800 @125%

36,452 @100%

0 @65%

= 299 AMPS

0 @100%

TOTAL LOAD =

TOTAL LOAD (VA) / (208Vx1.732)

8 RECEPT. PAVAN'S OFFICE

10 RECEPT. PAVAN'S OFFICE

14 BATH / CLASSROOM

16 WEST LIGHTS

18 CENTER LIGHTS

28 RECEPT. OFFICE

30 RECEPT. OFFICE

32 RECEPT. OFFICE

34 RECEPT. OFFICE

40 RECEPT. OFFICE

101,980

10,000

2,860

7,865

36,000

14,716

VA

VA

VA

VA

VA

VA

107,893 VA

37 38 RECEPT. BATHROOM

22 DRINKING FOUNT AIN

400A

LOCATION: EXTERIOR WALL

GRD WIRE COND. TOTAL POLE AMPS

EX EX EX 13176 3 60

EX EX EX 3 60

EX EX EX 3 60

12 | 12 | 1/2" | 896 | 1 | 20

EX EX EX 900 1 20

EX EX EX 600 1 20

EX EX EX 600 1 20

12 | 12 | 1/2" | 720 | 1 | 20

12 | 12 | 1/2" | 896 | 1 | 20

12 12 1/2" 720 1

EX EX EX 900 1

EX EX EX 1200 1

12 12 1/2" 2400

12 12 1/2" 720

12 12 1/2" 720

12 12 1/2" 180 1

VA SUBTOT. 26788 VA

12 12 1/2" 720 1

12 12 1/2" 720 1

E-3