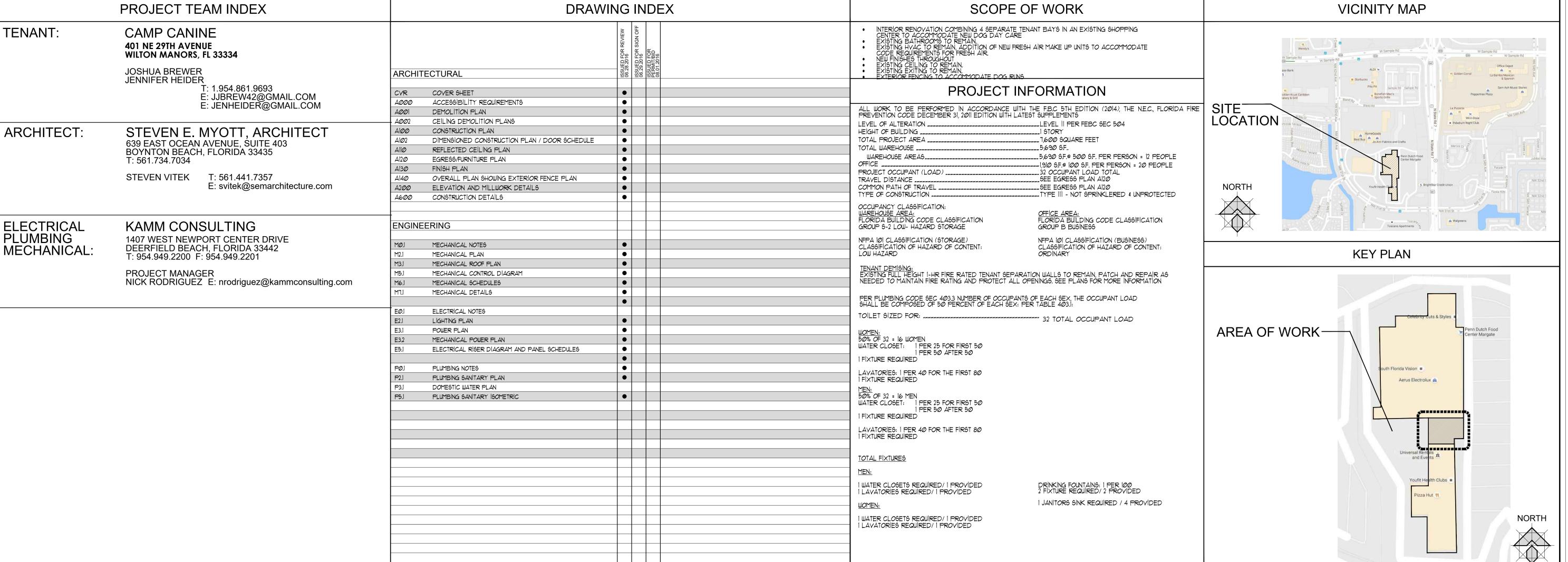
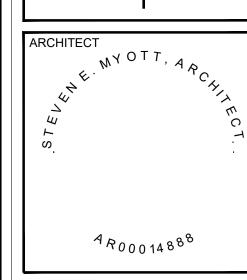
Camp Caning

- INTERIOR RENOVATION -

PROJECT TEAM & INDEX

PENN DUTCH PLAZA 3191 SR7 MARGATE, FLORIDA 33063





ALL DRAWINGS AND WRITTEN MATERIA
APPEARING HEREIN CONSTITUTE ORIGINAL AN
UNPUBLISHED WORK OF THE ARCHITECT AN
MAY NOT BE USED, DUPLICATED OR DISCLOSE
IN ANY FORM WITHOUT THE EXPRESSE
WRITTEN CONSENT OF THE ARCHITEC

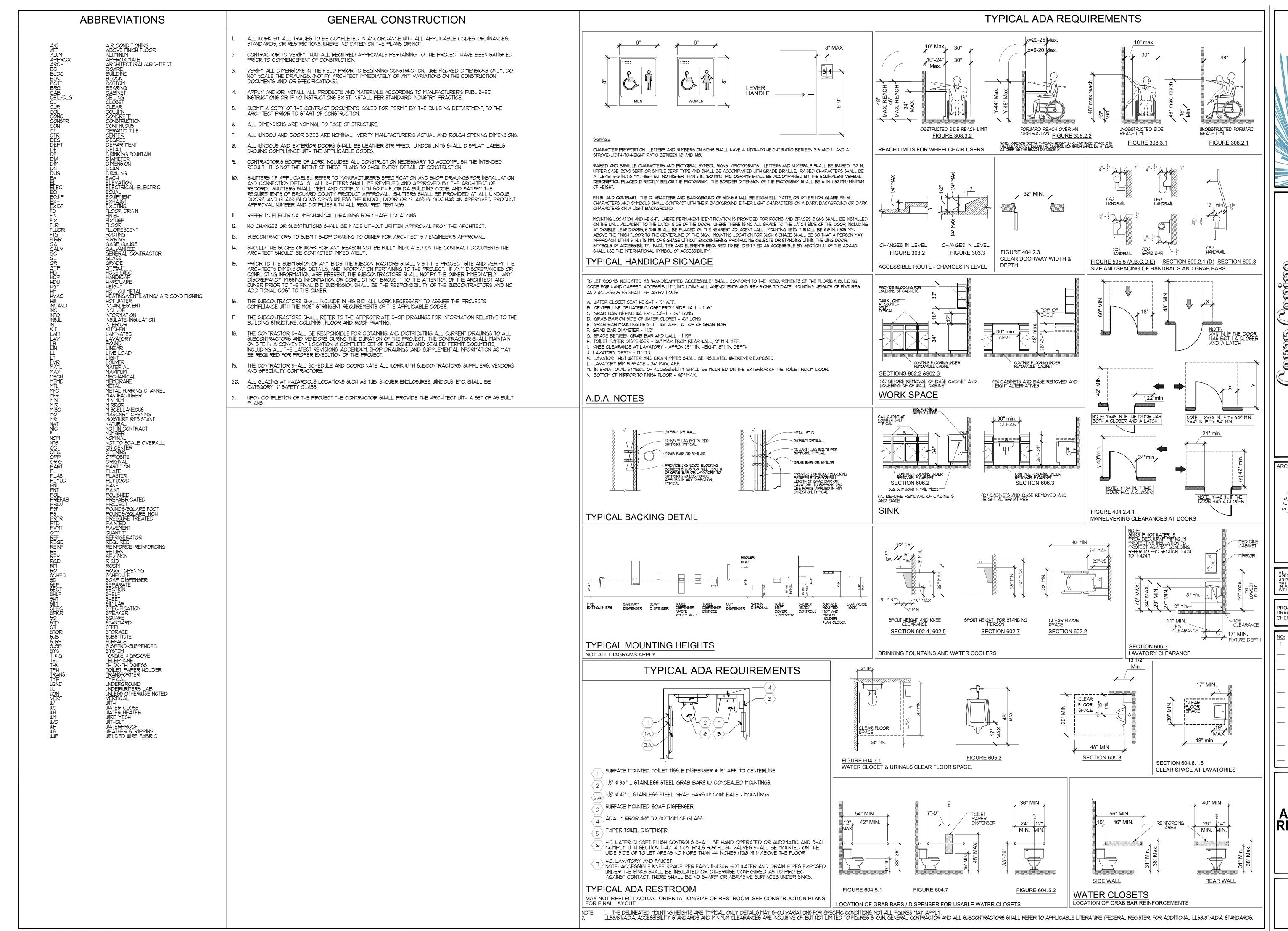
PROJECT NO:

 NO:
 DATE:
 ISSUED FOR:

 1
 Ø520206
 PRELIMINARY REVIEW

COVER SHEET

CVR

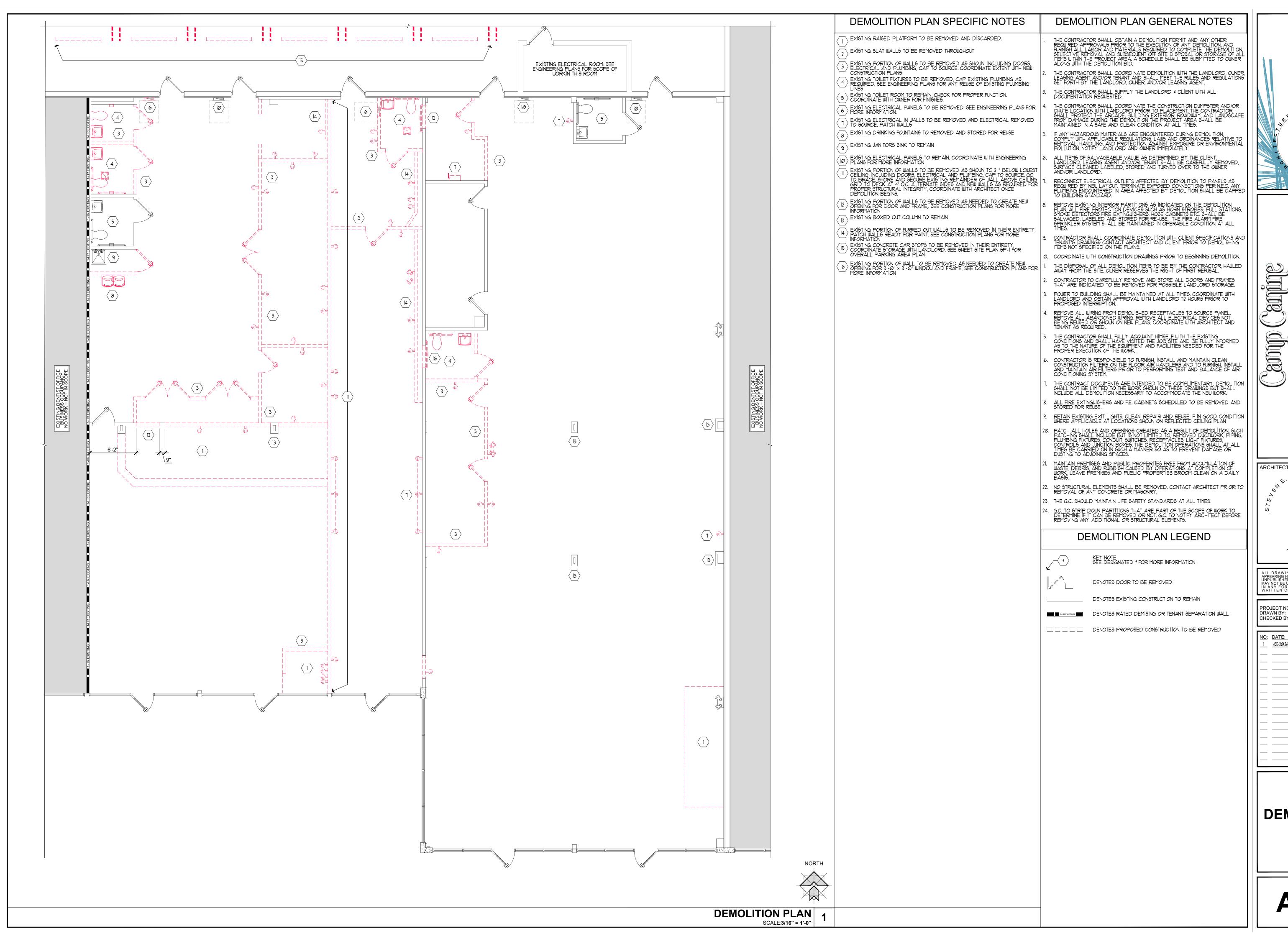


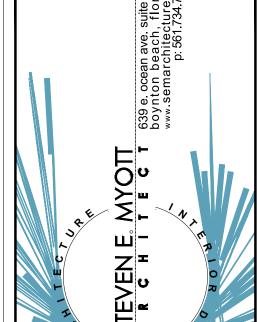
(SO) $^{\pm}$ lpha lpha C. S. O.F \vdash \vdash \dashv <u>_</u> െ ⊩ D1 31 Е,

ARCHITECT MYOTT, AP. AR00014888

PROJECT NO: DRAWN BY: CHECKED BY: NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW

ACCESSIBILITY REQUIREMENTS





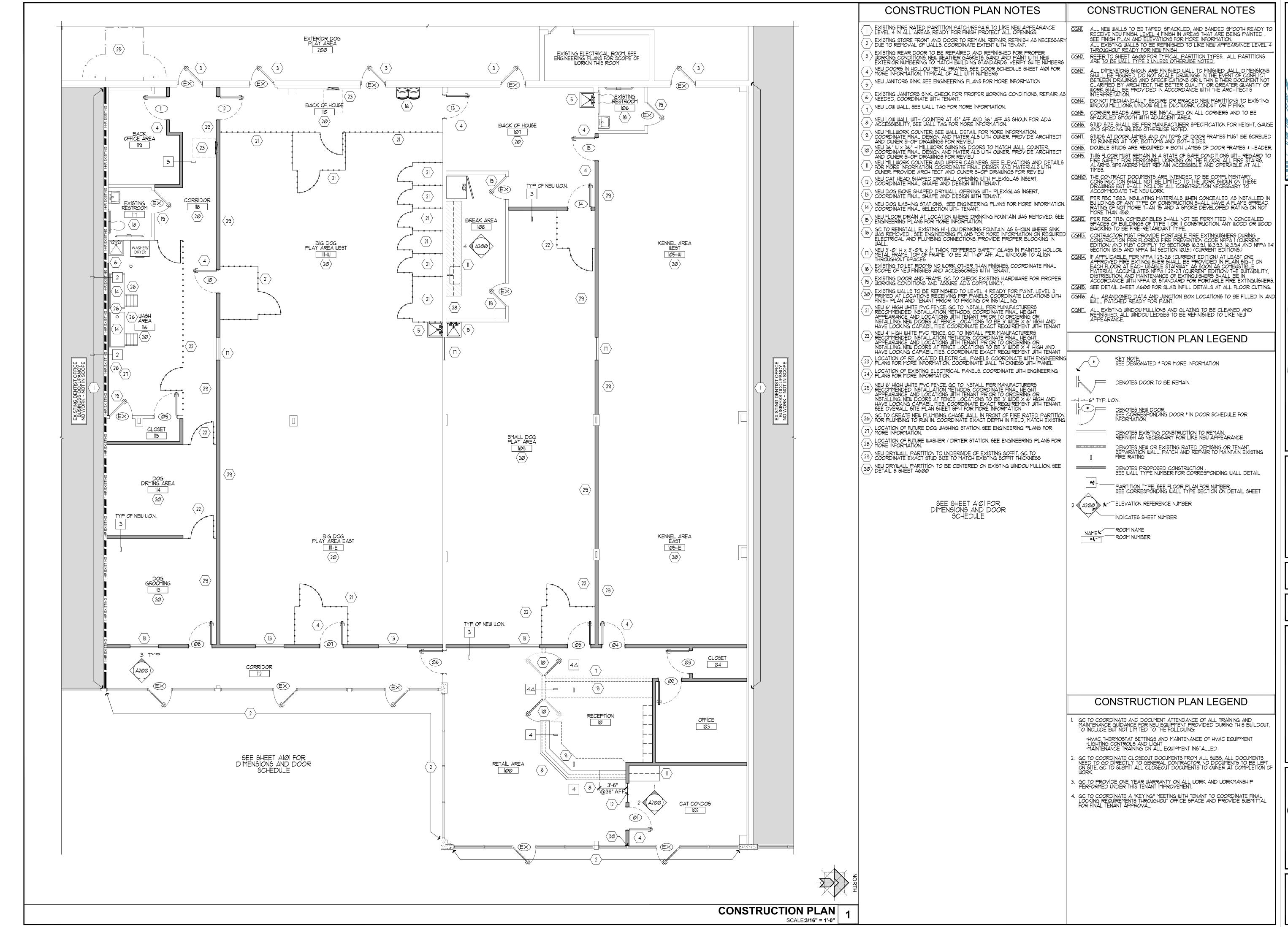
AR00014888

PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW

DEMOLITION PLAN





Oo

CH SR OR DUT(3191 E, FL

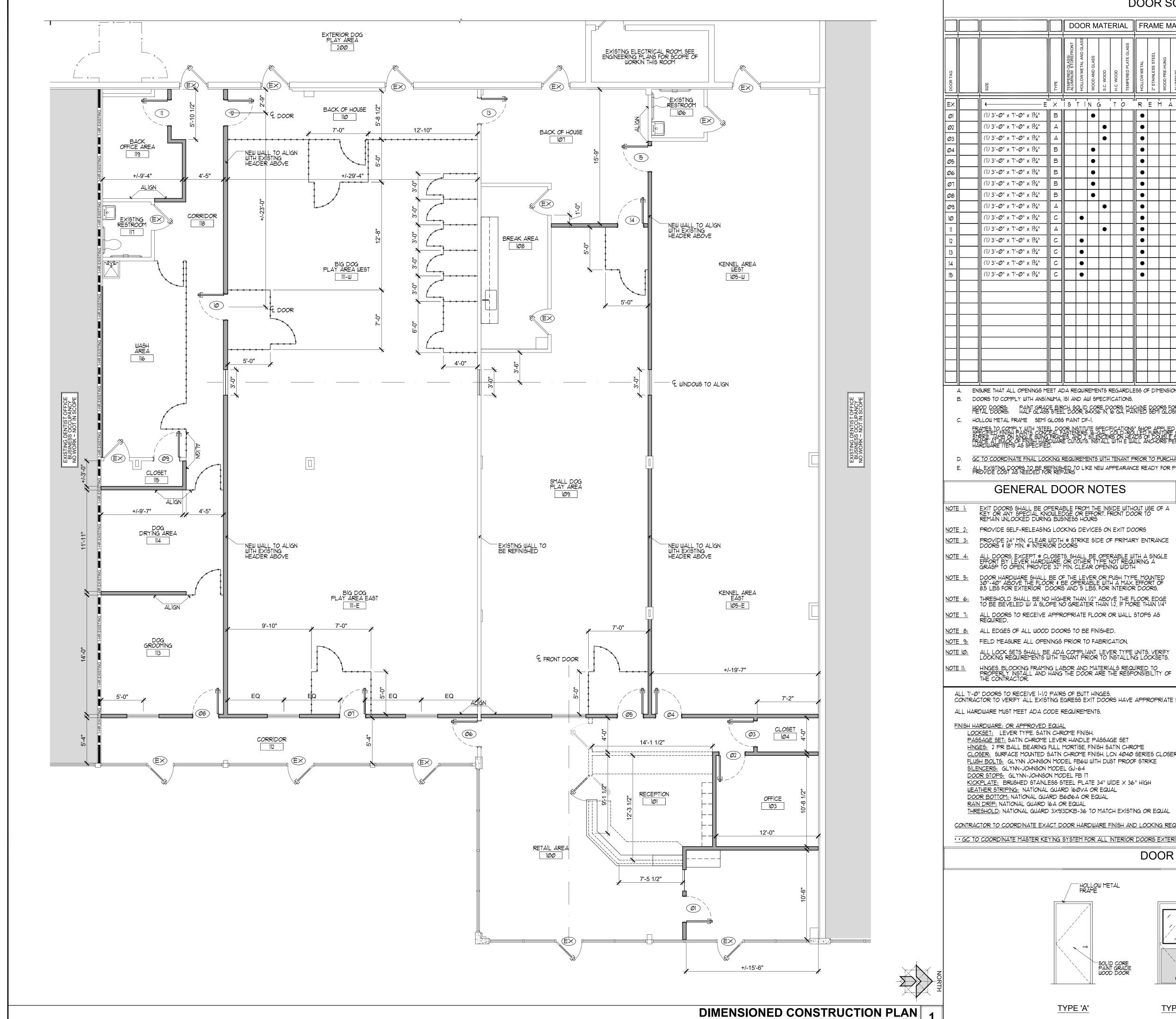
ARCHITECT MYOTT, ARCX AR00014888

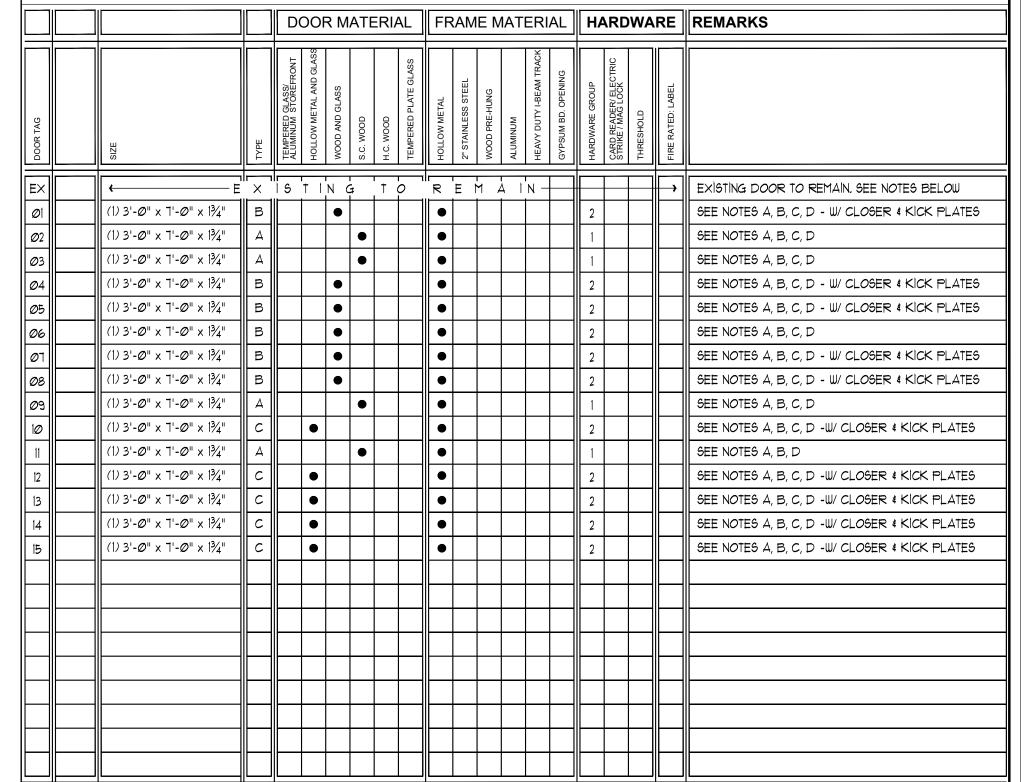
PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW

CONSTRUCTION **PLAN**

A100





DOOR SCHEDULE

ENSURE THAT ALL OPENINGS MEET ADA REQUIREMENTS REGARDLESS OF DIMENSIONS ON DRAWINGS.

B. DOORS TO COMPLY WITH ANSI/NUMA, ISI AND AWI SPECIFICATIONS.

WOOD DOORS: PAINT GRADE BIRCH, SOLID CORE DOORS, MACHINE DOORS FOR SPECIFIED HARDWARE AND SEAL CUT SURFACES AFTER FITTING, AND MACHINING, METAL DOORS: HALF GLASS STEEL DOOR, 84X36 IN, 16 GA, PAINTED SEMI GLOSS PAINT

D. GC TO COORDINATE FINAL LOCKING REQUIREMENTS WITH TENANT PRIOR TO PURCHACING OR INSTALLING

ALL EXISTING DOORS TO BE REFINISHED TO LIKE NEW APPEARANCE READY FOR PAINT, CHECK ALL HARDWARE IS ADA COMPLIANT AND IN GOOD WORKING ORDER, PROVIDE COST AS NEEDED FOR REPAIRS

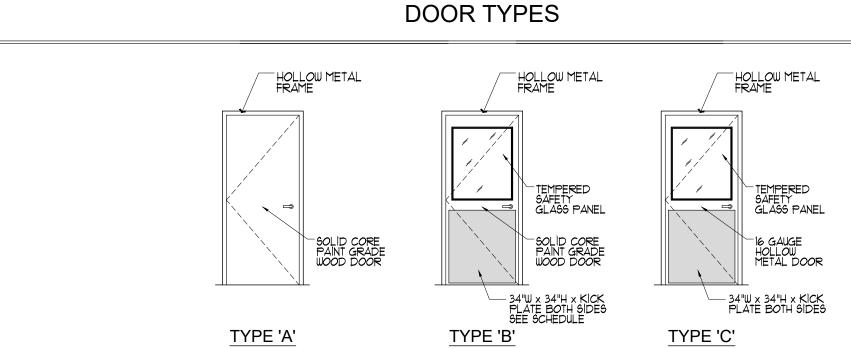
| | GENERAL DOOR NOTES | DOOR HARDWARE | | | | | | |
|----------|--|---------------|--|--|--|--|--|--|
| NOTE 1: | EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT, FRONT DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS | CODE | DESCRIPTION | | | | | |
| NOTE 2: | PROVIDE SELF-RELEASING LOCKING DEVICES ON EXIT DOORS | 1 | FUNCTION: OFFICE (TYPICAL) | | | | | |
| NOTE 3: | PROVIDE 24" MIN. CLEAR WIDTH @ STRIKE SIDE OF PRIMARY ENTRANCE DOORS & 18" MIN. @ INTERIOR DOORS | | EQUIPMENT: (1) EACH - FLOOR STOP, LOCKSET | | | | | |
| NOTE 4: | ALL DOORS, EXCEPT © CLOSETS, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER HARDWARE, OR OTHER TYPE NOT REQUIRING A GRASP TO OPEN. PROVIDE 32" MIN. CLEAR OPENING WIDTH | 2 | FUNCTION: PASSAGE | | | | | |
| | | | EQUIPMENT: CLOSER - MATCH HARDWARE FINISH. | | | | | |
| NOTE 5: | DOOR HARDWARE SHALL BE OF THE LEVER OR PUSH TYPE, MOUNTED 30"-40" ABOVE THE FLOOR & BE OPERABLE WITH A MAX. EFFORT OF 8.5 LBS FOR EXTERIOR DOORS. | | 3 BUTTS EACH LEAF | | | | | |
| | | | FRAME SILENCERS | | | | | |
| NOTE 6: | THRESHOLD SHALL BE NO HIGHER THAN 1/2" ABOVE THE FLOOR. EDGE TO BE BEVELED W/ A SLOPE NO GREATER THAN 1:2, IF MORE THAN 1/4" | | FLOOR MOUNTED DOOR STOP | | | | | |
| NOTE 7: | ALL DOORS TO RECEIVE APPROPRIATE FLOOR OR WALL STOPS AS REQUIRED. | | KICK PLATE BOTH SIDES WHERE NOTED | | | | | |
| NOTE 8: | ALL EDGES OF ALL WOOD DOORS TO BE FINISHED. | | | | | | | |
| NOTE 9: | FIELD MEASURE ALL OPENINGS PRIOR TO FABRICATION. | | | | | | | |
| NOTE 10: | ALL LOCK SETS SHALL BE ADA COMPLIANT, LEVER TYPE UNITS, VERIFY LOCKING REQUIREMENTS WITH TENANT PRIOR TO INSTALLING LOCKSETS, | | | | | | | |
| NOTE 11: | HINGES, BLOCKING FRAMING LABOR AND MATERIALS REQUIRED TO | | | | | | | |

ALL 1'-0" DOORS TO RECEIVE 1-1/2 PAIRS OF BUTT HINGES. CONTRACTOR TO VERIFY ALL EXISTING EGRESS EXIT DOORS HAVE APPROPRIATE PANIC HARDWARE TO MEET STRICTEST ZONING REGULATIONS.

PASSAGE SET: SATIN CHROME LEVER HANDLE PASSAGE SET HINGES: 2 PR BALL BEARING FULL MORTISE, FINISH SATIN CHROME CLOSER: SURFACE MOUNTED SATIN CHROME FINISH, LCN 4040 SERIES CLOSER FLUSH BOLTS: GLYNN JOHNSON MODEL FB6W WITH DUST PROOF STRIKE KICKPLATE: BRUSHED STAINLESS STEEL PLATE 34" WIDE X 36" HIGH WEATHER STRIPING: NATIONAL GUARD 160VA OR EQUAL

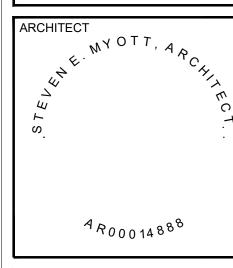
CONTRACTOR TO COORDINATE EXACT DOOR HARDWARE FINISH AND LOCKING REQUIREMENTS WITH TENANT PRIOR TO PURCHASING AND INSTALLING.

* * GC TO COORDINATE MASTER KEYING SYSTEM FOR ALL INTERIOR DOORS EXTERIOR DOORS, COORDINATE FINAL REQUIREMENTS WITH TENANT PRIOR TO INSTALLATION :



MYOTT 1 E C 1

anjing

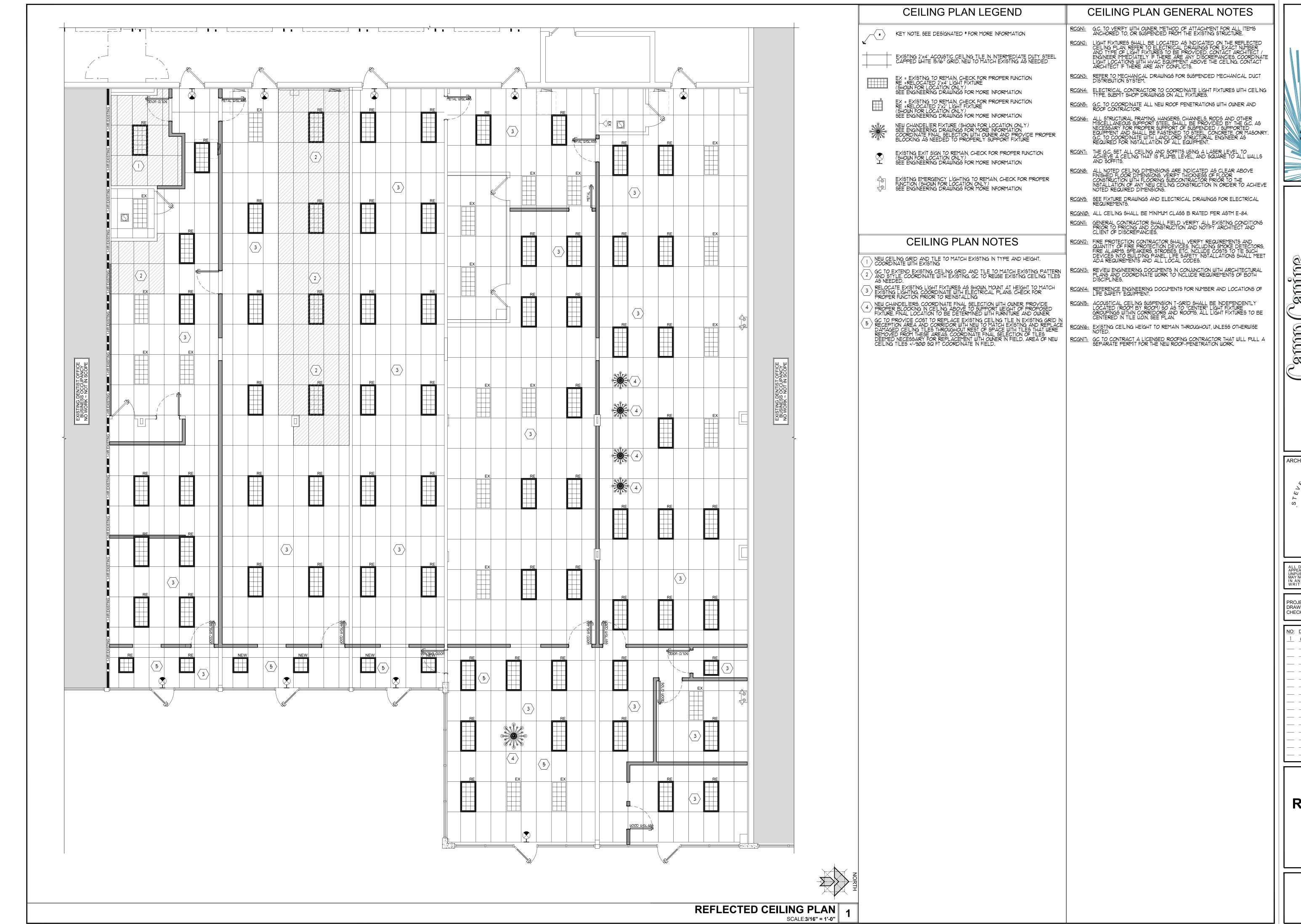


PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW

DOOR SCHEDULE

DIMENSIONED CONSTRUCTION **PLAN**



STEVEN E, MYOTT

A R C H I T E C T 639 e. ocean ave. suite 4 boynton beach, flori www.semarchitecture.
p: 561.734.70

Cann Dutch Plaza
3191 SR7
MARGATE, FLORIDA 33063

ARCHITECT

ARCHITECT

ARCHITECT

ARCHITARECT

ARCHITARECT

ARCHITARECT

ARCHITARECT

ARCHITARECT

ARCHITARECT

ARCHITARECT

ARCHITECT

ARCHITARECT

ALL DRAWINGS AND WRITTEN MATERIA APPEARING HEREIN CONSTITUTE ORIGINAL AN UNPUBLISHED WORK OF THE ARCHITECT AN MAY NOT BE USED, DUPLICATED OR DISCLOSE IN ANY FORM WITHOUT THE EXPRESSE WRITTEN CONSENT OF THE ARCHITEC

PROJECT NO: DRAWN BY: CHECKED BY:

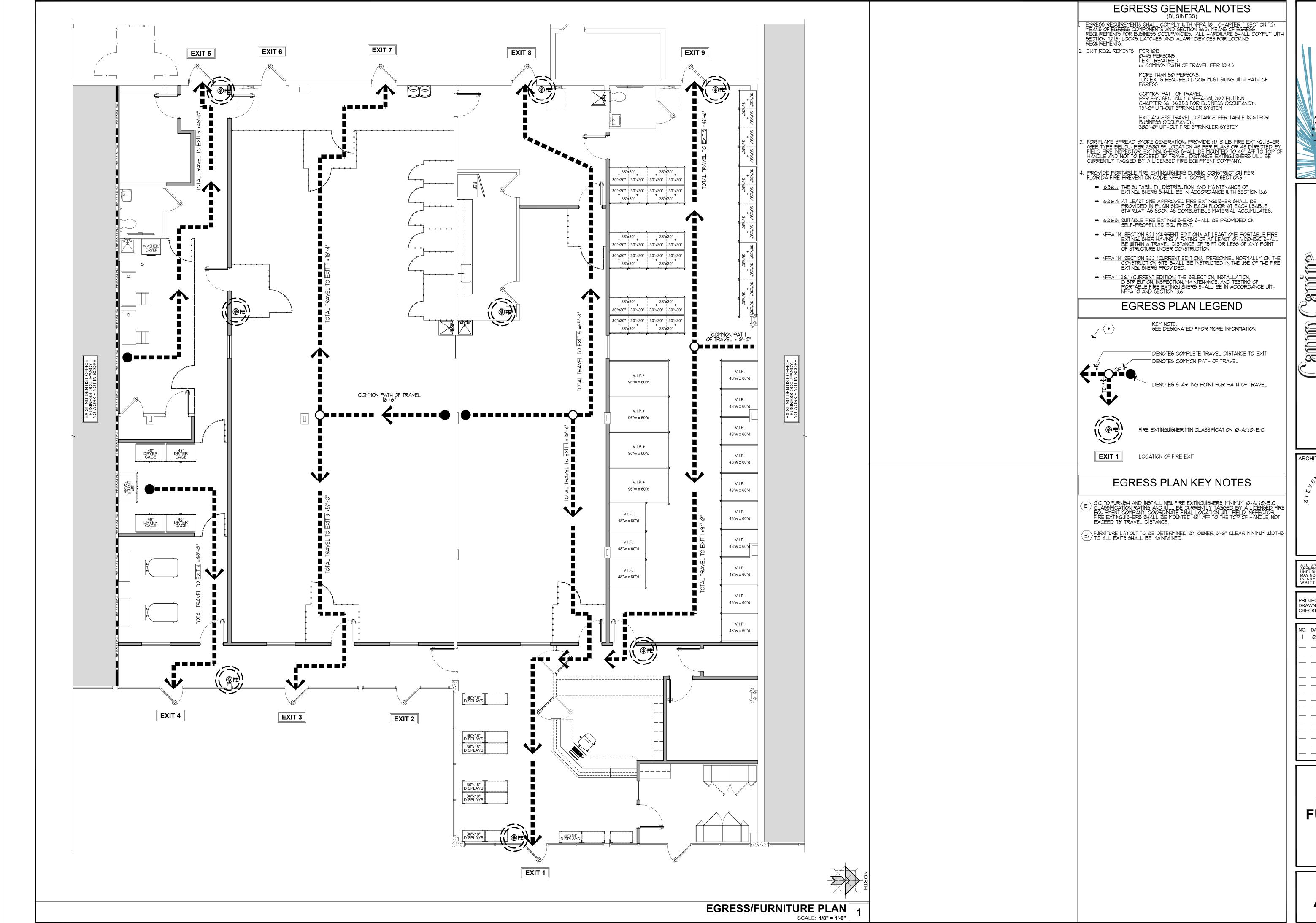
NO: DATE: ISSUED FOR:

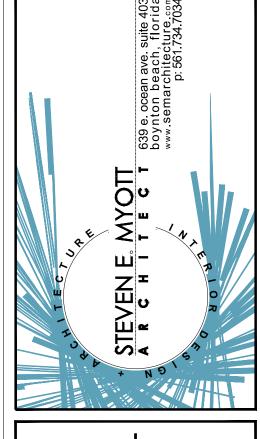
| 05202016 | PRELIMINARY REVIEW

REFLECTED CEILING PLAN

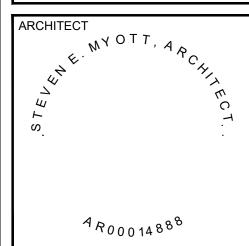
A110

PRINTED ON: 52020





Camp Camping
- INTERIOR RENOVATION PENN DUTCH PLAZA
3191 SR7
MARGATE, FLORIDA 33063



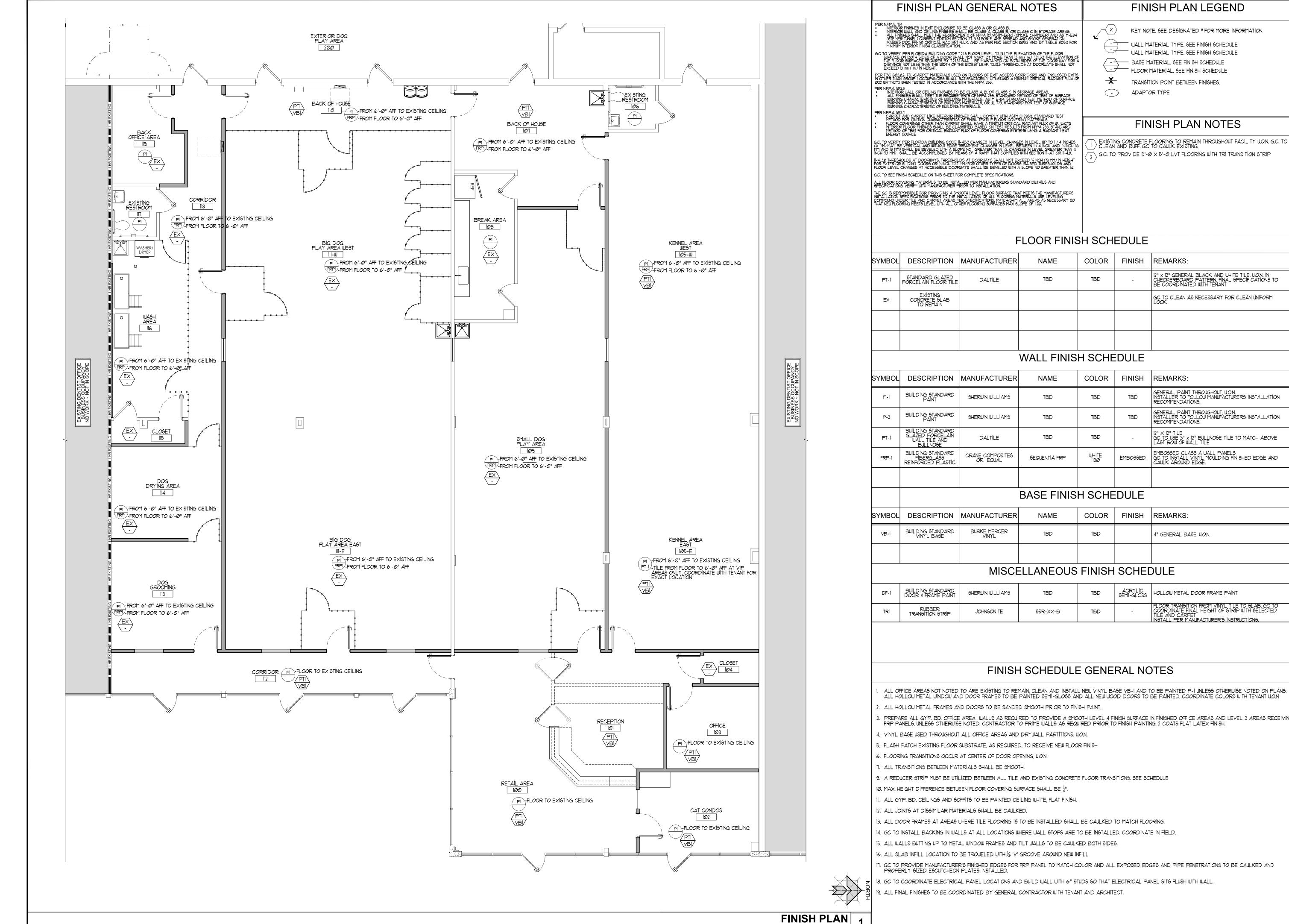
ALL DRAWINGS AND WRITTEN MATERIA APPEARING HEREIN CONSTITUTE ORIGINAL AN UNPUBLISHED WORK OF THE ARCHITECT AN MAY NOT BE USED, DUPLICATED OR DISCLOSE IN ANY FORM WITHOUT THE EXPRESSE WRITTEN CONSENT OF THE ARCHITEC

PROJECT NO: DRAWN BY: CHECKED BY:

EGRESS/ FURNITURE PLAN

A120

PRINTED ON: 5202010



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

MYOTT 1 6 1 STEVEN E

anjing LAZA I DUTCH PLAZ 3191 SR7 TE, FLORIDA 3 and a

ARCHITECT AR00014888

PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW

FINISH PLAN

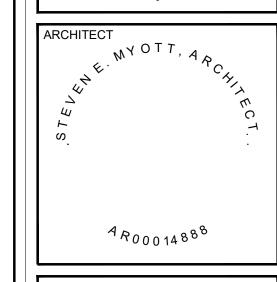
FINISH SCHEDULE



Samine .

LAZA

PENN DUTCH PLAZ 3191 SR7 MARGATE, FLORIDA 3

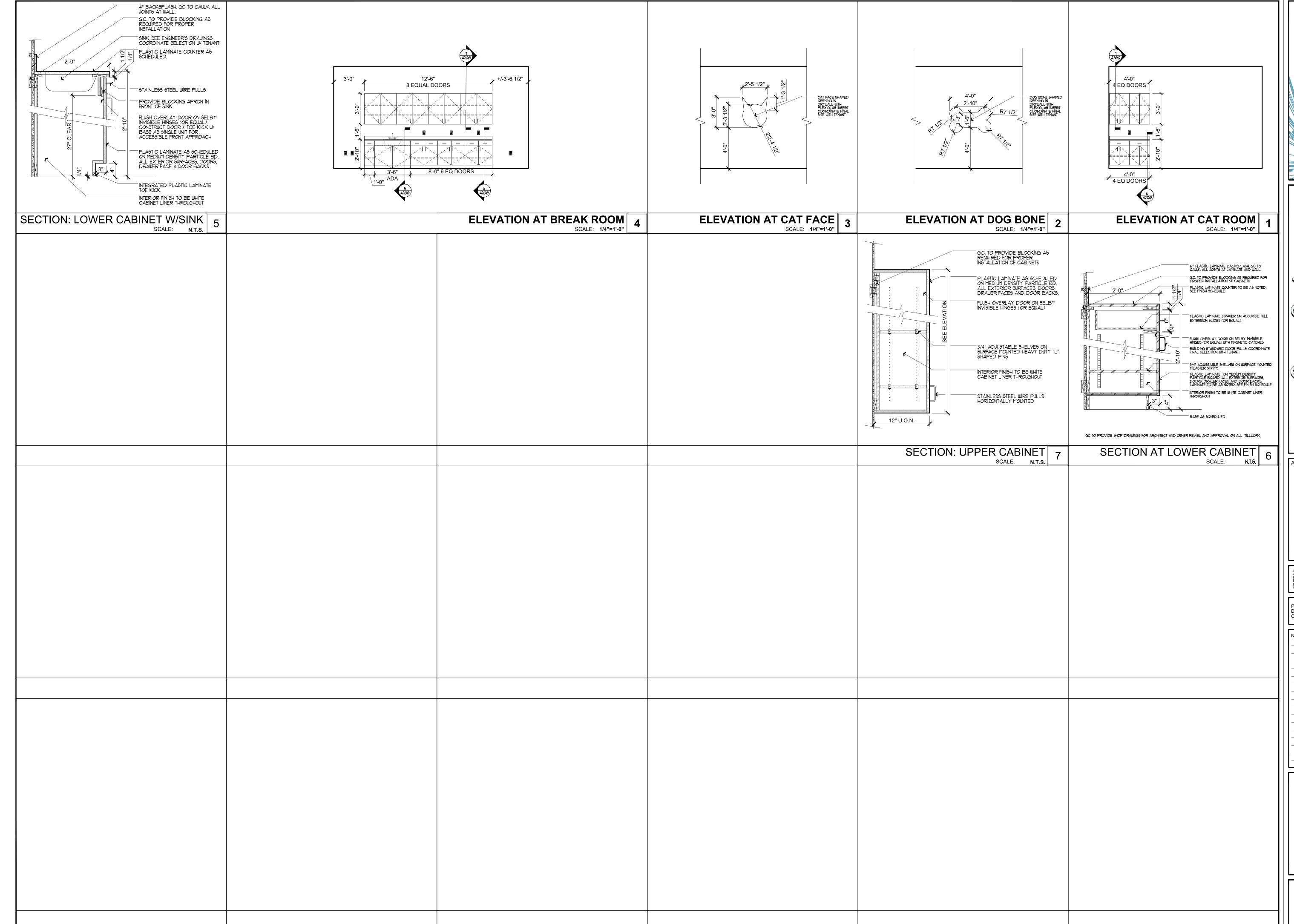


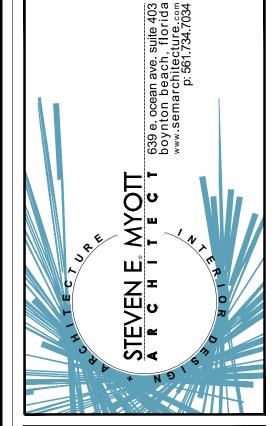
| ROJECT NO: RAWN BY: HECKED BY: | 16.2 |
|--------------------------------------|------|
| | |

 NO:
 DATE:
 ISSUED FOR:

 1
 05202016
 PRELIMINARY REVIEW

OVERALL
PLAN
SHOWING
OUTDOOR
PLAY AREA





Camp Campe
- INTERIOR RENOVATION PENN DUTCH PLAZA
3191 SR7
MARGATE, FLORIDA 33063

ARCHITECT

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE USED, DUPLICATED OR DISCLOSED IN ANY FORM WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ARCHITECT

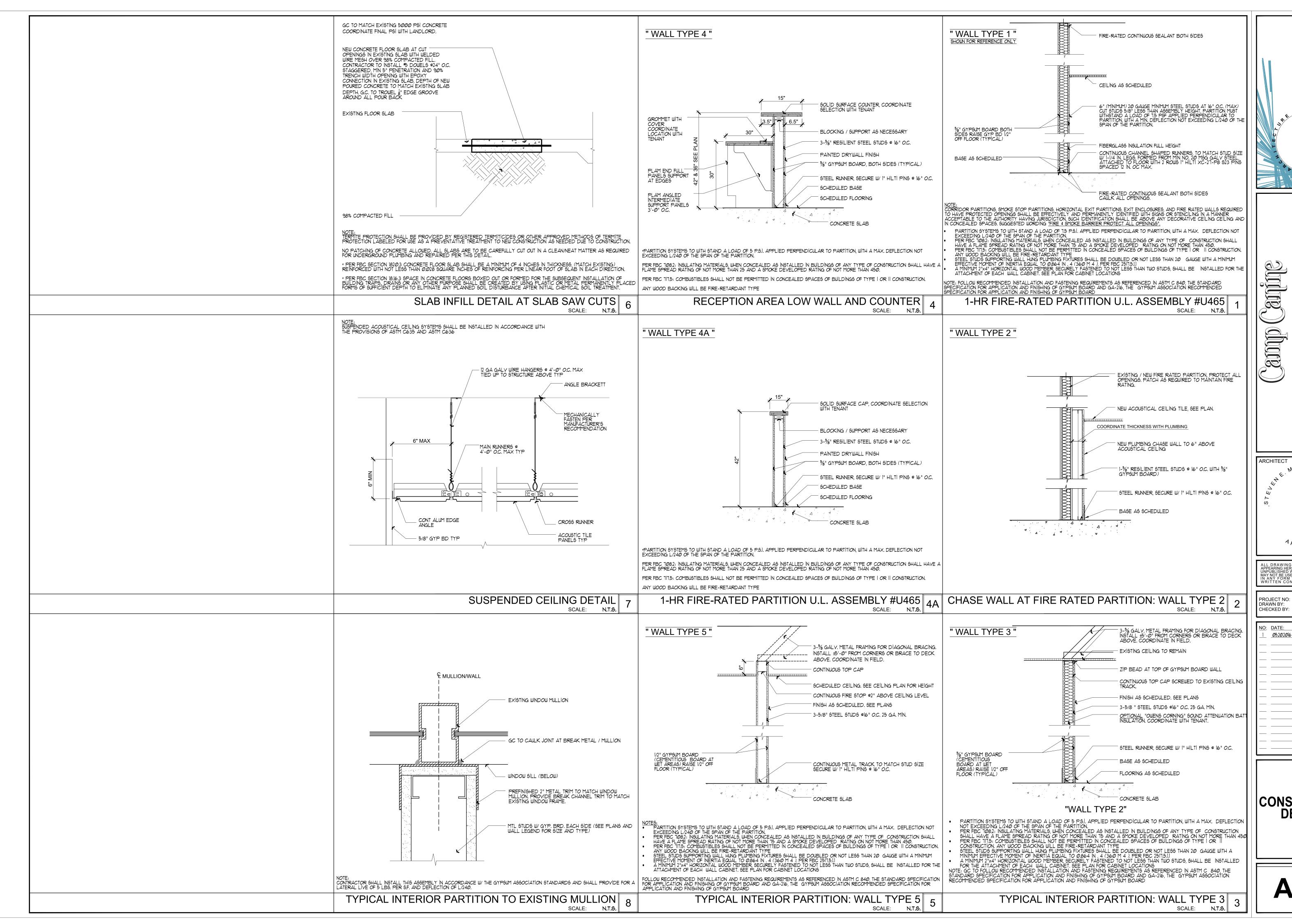
PROJECT NO: DRAWN BY: CHECKED BY:

| ı | NO: | DATE: | ISSUED FOR: |
|---|-----|----------|--------------------|
| I | 1 | 05202016 | PRELIMINARY REVIEW |
| | l | | |
| | | | |
| | | | |
| | | | |
| 1 | | | |
| | | | |
| | | | |
| 1 | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| ı | | | |
| ı | | | |
| I | | | |

ELEVATIONS

MILLWORK
DETAILS

A200



AZ, CH SR: OR<u>I</u> UT(91 FL DU 319 E, Z Z

⋖ RG

MYOTT, AR AR00014888

NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW

CONSTRUCTION **DETAILS**

| UNIT TAG | SUPPLY AIR (CFM) | RETURN (CFM) | OUTSIDE AIR (CFM) | EXHAUST AIR (CFM) |
|-------------|---------------------|-----------------|----------------------|----------------------|
| AHU-1 | 3000 | 2700 | 300 | - |
| OARTU-1 | - | - | 3000 | _ |
| OARTU-2 | - | - | 3000 | - |
| EF-1 | - | - | - | 2700 |
| EF-2 | - | - | - | 2700 |
| EF-3 | - | ı | - | 75 |
| EF-4 | - | _ | - | 75 |
| TOTAL | 3000 | 2700 | 6300.0 | 5550.0 |

1. BLDG IS 6300-5550=750 CFM POSITIVE WHEN A/C UNITS ARE OPERATING.

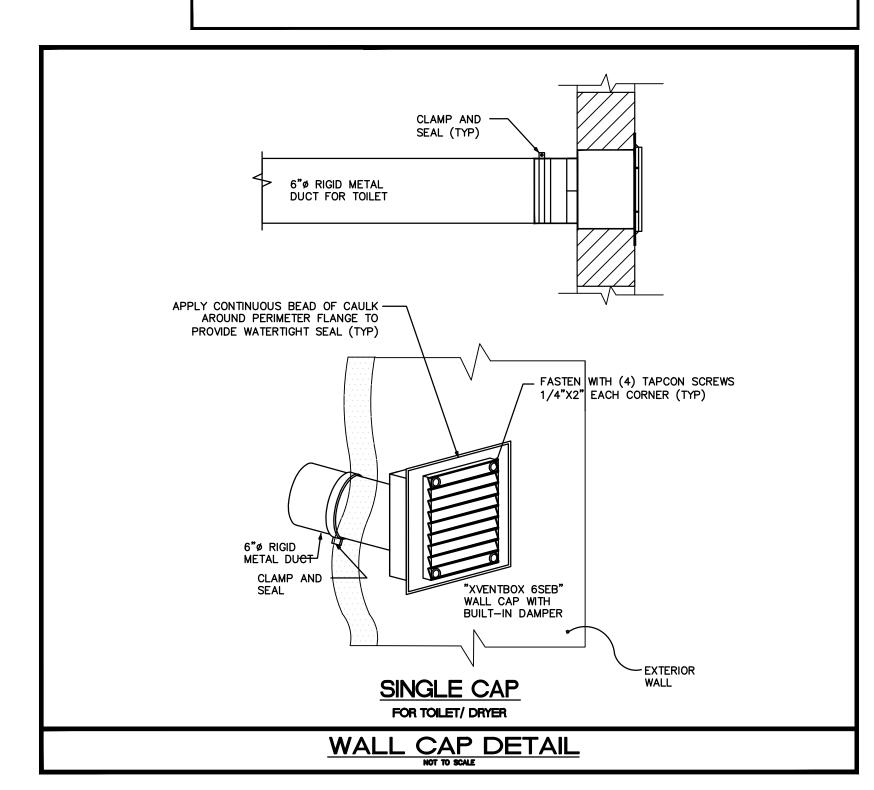
| (BASED ON FLORIDA BUILDING CODE; MECHANICAL) | | | | | | | | | | | | | |
|--|-------------------------------|------------------------------------|--------------------------------|------------------------------------|---------------------------------|----------------------------------|-----|--|--|--|--|--|--|
| | | C | CAMP CAN | INE | | | | | | | | | |
| AREA SERVED OR UNIT TAG | NET OCCUPIABLE AREA SQ.FT. | VENTILATION RATE O/A CFM/SQ.FT. | ACTUAL OCCUP. NO. OF PEOPLE | VENTILATION RATE O/A CFM/PERSON | COMBINED TOTAL CFM O/A REQ'D | COMBINED TOTAL CFM O/A PROV'D | | | | | | | |
| RETAIL AREA/ RECEPTIONIST | 920 | .18 | 16 | 7.5 | 120+166=286 | 290 | 1,2 | | | | | | |
| OFFICE 1 | 130 | .06 | 1 | 5 | 5+8=13 | 15 | 1,2 | | | | | | |
| OFFICE 2 | 105 | .06 | 1 | 5 | 5+6=12 | 15 | 1,2 | | | | | | |
| BREAK AREA | 150 | .06 | 1 | 5 | 5+9=14 | 15 | 1,2 | | | | | | |
| EXISTING RESTROOM 1 & 2 | 70 | .06 | 0 | 5 | 0+4=4 | 5 | 1,2 | | | | | | |
| CLOSET | 30 | .12 | 0 | 0 | 0+4=4 | 5 | 1,2 | | | | | | |
| CORRIDOR | 225 | .06 | 0 | 0 | 0+14=14 | 15 | 1,2 | | | | | | |
| ANIMAL AREA | 5625 | 1 | 0 | - | 5625 | 5625 | 1,2 | | | | | | |
| TOTAL | 7255.0 | | 19.0 | | 5972 | 5985.0 | | | | | | | |

NOTES:

1. CALCULATIONS ARE BASED ON ESTIMATED MAX. OCCUPANCY RATES PER ARCHITECTURAL PLANS AND FBC-2014: 2. FOR OFFICE AND OTHER SIMILAR AREAS CALCULATIONS ARE BASED ON CONTINUOUS OCCUPANCY.

| SPACE SERVED OR UNIT TAG | SPACE AREA (SQ.FT.) | SPACE HEIGHT (FT) | | VENTILATION REQ'D AC/HR OR CFM | TOTAL CFM REQUIRED | TOTAL CFM PROVIDED | EXHAUS FAN |
|-----------------------------|------------------------|-------------------|---|-----------------------------------|-----------------------|-----------------------|---------------|
| EXIST BATHROOM 1 | 35 | _ | _ | 50 CFM/W.C. | 50 | 75 | EF-1 |
| EXIST BATHROOM 2 | 35 | - | - | 50 CFM/W.C. | 50 | 75 | EF-2 |
| ANIMAL AREA | 5625 | _ | - | .90 CFM/SF | 5062 | 5065 | OARTU- |
| TOTAL | 5695.0 | | | | 5162.0 | 5215.0 | |

1. CALCULATIONS ARE BASED ON LOCAL CODE REQUIREMENTS, FBC-2014 AND ICC.



MECHANICAL NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR. MATERIALS. AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS. THE FLORIDA BUILDING CODE 2014 AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LISTED EDITION OF THE FOLLOWING PUBLICATIONS; SMACNA/ANSI-2005, SMACNA-10, 85; ASHRAE 15-2010; 34-2010 62.1-2010; NFPA 70-2011, 72-2010, 90A-2012, 90B-2012, 91-2010, 96-2008, 101-2012; NEBB-2005; NAIMA-2002; NFRC-100-2010, 200-2010, 400-2010; ANSI Z10.1-98, Z10.3-98, Z21.8-94, Z21.83-98.
- 2. THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
- 3. THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
- 4. THE CONTRACTOR SHALL SUPPLY THE ARCHITECT/ENGINEER WITH "AS-BUILT" DRAWINGS.
- 5. CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE [5] COPIES OF A COMPLETE SET OF SHOP DWGS, MANUFACTURER'S SUBMITTALS FOR EACH PIECE OF EQUIPMENT & CONTROLS INCLUDED IN CONTRACT.
- 6. ALL MATERIAL SHALL BE NEW OF U.S. MANUFACTURER OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED AT INDUSTRY STANDARD QUALITY LEVEL BY CERTIFIED PROFESSIONALS. ALL EQUIPMENT SHALL BE UL OR ETL LISTED. ALL INSTALLATIONS SHALL COMPLY WITH FMC 2014, CH. 3, GENERAL REGULATIONS.

FOR BUILDINGS LOCATED WITHIN 3,000 FT FROM THE OCEAN, CONTRACTOR SHALL UTILIZE NON-FERROUS MATERIALS OR PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED METAL/STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY BLYGOLD, LUVATA, ADVANCOAT (ENSEAL CR) OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.

A. ALL AIR CONDITIONING DUCT WORK SHALL BE OF 1" (R-4.2) STANDARD DUTY FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER ALL FLEXIBLE DUCT TO BE R-4.2 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXRIGHT" BY TITUS OR "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".

SMACNA DUCT PRESSURE CLASSES BASED ON OPERATING PRESSURE ARE: 1/2", 1", 2", 3", 4", 6", AND 10". EACH DUCT SYSTEM SHALL BE CONSTRUCTED FOR THE SPECIFIC DUCT PRESSURE CLASS SHOWN ON PLANS. WHERE NO PRESSURE CLASS IS SPECIFIED FOR CONSTANT VOLUME SYSTEMS. 1" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS REGARDLESS OF VELOCITY. WHERE NO PRESSURE CLASS IS SPECIFIED FOR VARIABLE VOLUME SYSTEMS, 2" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS FOR DUCTWORK UPSTREAM OF VAV BOXES. ALL DUCTWORK SHALL BE SEALED TO SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" FOR ITS PRESSURE CLASS

- B. ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS. ALL OUTSIDE AIR DUCT SHALL BE INSULATED WITH EXTERNAL BLANKET INSULATION R-4.2 MIN. ALL METAL EXHAUST, MAKE-UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOIN' CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R-4.2 MIN. AIR INTAKE AND EXHAUST OPENINGS SHALL BE SCREENED WITH A CORROSION RESISTANT MATERIAL PER FMC 2014,
- 9. O/A INTAKES SHALL NOT BE TAKEN FROM A LOCATION CLOSER THAN 10 FT FROM ANY CHIMNEY, VENT OUTLET OR SANITARY SEWER VENT OUTLET PER FMC 2014, SEC. 401.4.1. OUTSIDE AIR INTAKE VENTS LOCATED ON ROOFS WILL BE PROPERLY MARKED WITH A UNIVERSAL MARKING "INTAKE", PERMANENTLY
- 10. DUCT SIZES SHOWN ON PLANS ARE INSIDE DIMENSIONS.

PROVIDED IT SHALL MATCH BUILDING STANDARDS.

- · ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE AS SPECIFIED OR EQUAL TO TITUS, PRICE OR METALAIRE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS AS INDICATED ON PLANS. PROVIDE BALANCING DAMPERS FOR ALL SUPPLY AND RETURN DIFFUSERS AND REGISTERS AND TO ENSURE COMPLIANCE WITH FMC 2014 PAR.601.5 FOR BALANCED RETURN/TRANSFER AIR FLOW.
- 2. TEMPERATURE CONTROLS/THERMOSTAT: CONTRACTOR SHALL PROVIDE A FULLY INTEGRATED BUILDING CONTROL SYSTEM. PROVIDE EMS INTERFACE FOR ALL HVAC EQUIPMENT, WHERE APPLICABLE AS REQUIRED BY THE EXISTING CONTROLS A. FOR NEW UNITS: SHALL BE COMBINATION COOLING/HEATING, WITH SYSTEM "COOL-AUTO- HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE AS RECOMMENDED BY MANUFACTURER, HONEYWELL OR EQUAL. PROVIDE TAMPER PROOF COVERS. B. FOR EXISTING EQUIPMENT: SHALL BE SERVICED AND RELOCATED AS SHOWN. IF NEW THERMOSTAT IS
- 5. THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEER BEFORE INSTALLATION. INSTALL THERMOSTAT PER A.D.A REQUIREMENTS WHERE APPLICABLE; MAX. 48" HIGH FOR FORWARD REACH, MAX. 54" HIGH FOR SIDE REACH. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO PURCHASING/INSTALLATION.

WHENEVER THERE ARE MORE THAN ONE SENSOR OR THERMOSTAT, SIDE BY SIDE, THEY SHALL BE GANGED TOGETHER WITHIN THE SAME COVER PLATE WHEREVER POSSIBLE. CONTRACTOR SHALL COORDINATE THIS ISSUE WITH ARCHITECT/OWNER PRIOR TO INSTALLATION AND SHALL BRING ANY DISCREPANCY TO THE ENGINEER'S ATTENTION.

- REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER BRAZING-JOINT TYPE FITTINGS. USE BRAZING MATERIALS FOR HIGH PRESSURE PIPING PER AWS A5.8: BCuP SERIES COPPER-PHOSPHORUS ALLOY OR BAg1 SILVER ALLOY. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. SOFT COPPER TYPE "M" SHALL BE ALLOWED FOR RISER PIPING INSIDE CHASE TO LIMIT NUMBER OF JOINTS. COORDINATE WITH ENGINEER FOR PRIOR APPROVAL. ALL EXPOSED INSULATION SHALL BE PROTECTED WITH A PROTECTIVE, PUNCTURE AND TEAR RESISTANT JACKETING SYSTEM EQUAL TO "VENTURE CLAD".
- "ARMAFLEX" OR EQUAL INSULATION SHALL BE USED FOR SUCTION REFRIGERANT LINES WITH THICKNESS PER FLORIDA ENERGY CODE TABLE 503.2.8. FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID
- 5. ALL BRANCH TAKE-OFFS TO BE PROVIDED W/ MANUAL VOLUME DAMPERS. PROVIDE RADIUS ELBOWS WHERE FEASIBLE, SQUARE ELBOWS AND TEE'S SHALL BE FURNISHED W/SINGLE FOIL TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE-OFFS. PROVIDE REMOTE, CABLE OPERATED VOLUME DAMPERS IN INACCESIBLE AND HARD CEILING AREAS, "YOUNG REGULATOR" OR EQUAL.
- . PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE START-UP, REPLACE PRIOR TO FINAL ACCEPTANCE BY OWNER.
- 8. PROVIDE SMOKE DETECTORS WITH SERVICE ACCESS DOORS IN ALL AIR DISTRIBUTION SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2000 CFM COMPLIANT WITH FMC 2014, SEC 606.2. FOR SMOKE DETECTORS NOT VISIBLE, IN CONCEALED SPACES, PROVIDE REMOTE ANNUNCIATION/TEST STATION AS REQUIRED BY AUTHORITY HAVING JURISDICTION, COORDINATE PRIOR TO INSTALLATION. DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.

- ALL INSTALLED ELECTRICAL DEVICES, ACTUATORS, APPURTENANCES, AUXILIARY EQUIPMENT, ETC. REQUIRING ENVIRONMENTAL PROTECTION SHALL BE PROVIDED WITH ADEQUATE NEMA ENCLOSURES FOR THE CONDITIONS WHERE INSTALLED, WEATHER INDOORS OR OUTDOORS, EVEN IF NOT SPECIFICALLY INDICATED ON PLANS.
- 19. CORROSION COATING: CONTRACTOR SHALL PROVIDE CORROSION COATING TO CONDENSER/EVAPORATOR COILS, EQUIPMENT CASINGS/CABINETS AND ALL EXPOSED COPPER PIPING/ COMPRESSORS/ CONDENSER SECTION, AS WELL AS, ANY EXPOSED METAL WITHIN AIRSTREAM BY 3RD PARTY AS APPLIED BY BLYGOLD, LUVATA, ADVANCOAT OR APPROVED EQUAL WITH STANDARD 5-YEAR WARRANTY.
- 20. HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PER FEC 2014, SEC.C 408.2.2. FOR SYSTEMS OVER 15 TONS, THE T & B SHALL BE PERFORMED BY A CERTIFIED, INDEPENDENT COMPANY FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AND ANY AIR MOVING SYSTEMS. THE TEST AND BALANCE REPORT SHALL BE IN ACCORDANCE WITH THE AABC OR NEBB STANDARDS AND PROCEDURES AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES AND EXHAUST GRILLES AND THE LEAVING AND ENTERING AIR TEMPERATURE (F) FROM SUPPLY GRILLES, EVAPORATORS, ENERGY RECOVERY UNITS AND ANY TYPE OF HEAT EXCHANGERS. BUILDING ENVELOPE SHALL BE POSITIVELY PRESSURIZED TO PREVENT INFILTRATION PER FEC 2014, SEC.

SPECIAL NOTE:
AS PART OF BID, CONTRACTOR SHALL INCLUDE COSTS NECESSARY TO MAKE ONE CHANGE IN EACH UNITS SHEAVE, BUSHINGS AND BELTS, BALANCING DAMPERS REQUIRED AND ANY OTHER DEVICES REQUIRED FOR THE CORRECT BALANCE OF THE SYSTEM AS REQUIRED BY THE TAB FIRM.

- 21. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
- 22. HVAC CONTRACTOR SHALL PROVIDE VENTILATION CONTROLS COMPLIANT WITH FMC 2014, SEC. 403.5-403.7 AND 405. FOR ALL SYSTEMS AND SHALL VERIFY EXISTING CONDITIONS FOR COMPLIANCE, AS REQUIRED, FOR A FULLY OPERATIONAL SYSTEM. VENTILATION FOR ENCLOSED PARKING GARAGES SHALL COMPLY WITH FMC 2014, SEC. 404.
- 23. MECHANICAL EQUIPMENT ON ROOF OR ELEVATED STRUCTURES SHALL COMPLY WITH FMC 2014 PAR. 306.5 IF INSTALLED HIGHER THAN 16 FEET A.F.F. MECHANICAL EQUIPMENT INSTALLED IN ATTICS SHALL MEET THE REQUIREMENTS OF FMC 2014 PAR. 306.3 IF THE EQUIPMENT CAN NOT BE SERVICED/REMOVED THROUGH REQUIRED OPENING, MECHANICAL EQUIPMENT SHALL BE PROTECTED WITH MECHANICAL BARRIERS IF EXPOSED TO MECH. DAMAGE. ALL EQUIPMENT SHALL BE INSTALLED ON CONCRETE PADS AT GRADE LEVEL, SIZED PER STRUCTURAL PLANS.

SPECIAL NOTE: ALL WIND LOAD AND OTHER COMPLIANCE CALCULATIONS AND/OR INSTALLATION DETAILS FOR ROOF MOUNTED EQUIPMENT AS REQUIRED BY FBC 2014, SEC. 1509, 1522 AND CHAPTER 16, SHALL BE PROVIDED BY A STRUCTURAL ENGINEER AND ARE SHOWN ON THESE PLANS FOR REFERENCE ONLY. SUCH CALCULATIONS SHALL BE PROVIDED BY THE EQUIPMENT MANUFACTURER OR BY THE GENERAL/MECHANICAL CONTRACTOR ON BEHALF OF CLIENT. CONTRACTOR TO PROVIDE WIND LOAD CALCULATIONS SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER FOR NON

24. PROVIDE A MIN. OF 36" CLEARANCE IN FRONT OF ALL 120-208/240 VOLT PANELS AND MIN. 42" CLEARANCE IN FRONT OF ANY 277-480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC 110.26

PRE-APPROVED CONFIGURATIONS DEVIATING FROM THE ORIGINAL CONSTRUCTION DOCUMENTS.

- 25. MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS SHALL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN DUCTWORK SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ENGINEER IF DUCT AREA WILL NOT FIT
- 26. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT, IN ORDER TO PROVIDE A FULLY INTEGRATED MECHANICAL AND CONTROLS SYSTEMS WITH THE EXISTING ONES. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND PLANS, OR ADDITIONAL CLARIFICATION REQ'D SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR
- 27. MATERIALS ALLOWED IN RETURN AIR PLENUMS OR ABOVE CEILINGS USED AS RETURN AIR PLENUM SHALL COMPLY WITH FMC 2014, SEC. 602.2.1. IF SPACE WITH RETURN AIR PLENUM HAS ANY DECK TO DECK PARTITIONS, AIR TRANSFER DUCTS MUST BE INSTALLED. WHEN CPVC PIPING IS USED FOR FIRE SPRINKLER SYSTEMS, THE R/A GRILLES LAYOUT SHALL BE (FIELD) COORDINATED WITH SUCH PIPING SO THAT NO PORTION OF THE GRILLES WILL BE DIRECTLY BELOW THE CPVC PIPING. STUD CAVITIES AND JOIST SPACE PLENUMS SHALL COMPLY WITH FMC 2014, SEC. 602.3.
- 28. CONDENSATE DRAIN PIPING TO BE AS SPECIFIED PER PLUMBING PLANS. IF NOT SPECIFIED THEY SHALL BE TYPE "L" COPPER OR PVC WHERE ALLOWED BY CODE WITH INSULATION THICKNESS PER FEC 2014 TABLE 503.2.8. PROVIDE APPROVED WATER LEVEL DETECTOR OR FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN THE AIR COND. UNIT, AS A SECONDARY DRAIN SYSTEM TO COMPLY WITH FMC 2014, SEC. 307 SUPPLY CONDENSATE PUMP WHERE NECESSARY AS IMPOSED BY FIELD CONDITIONS OR INSTALLATION CHANGES AND PIPE TO CONDENSATE DRAIN PER PLUMBING PLANS.
- 29. MANUFACTURER'S WARRANTY: CONTRACTOR SHALL PROVIDE WARRANTY FOR A PERIOD OF (1) ONE YEAR AFTER BUILDING C.O. FOR ALL MECHANICAL SYSTEMS, DUCTWORK, CONTROLS ACCESSORIES AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE WARRANTY FOR COMPRESSORS FOR (5) FIVE YEARS. ANY REPAIRS REQUIRING SYSTEM SHUTDOWN WILL BE DONE DURING NON-OPERATIONAL PERIÓDS OR AS AGREED WITH OWNER.
- 30. CLEARANCE FOR MAINTENANCE, SERVICE, REPAIRS, AND REPLACEMENT FOR ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED TO COMPLY WITH FMC 2014. SEC. 306. SERVICE ACCESS PANELS FOR MECH. EQUIPMENT IN CONCEALED SPACES SHALL BE PROVIDED TO COMPLY WITH THE REQUIREMENTS OF SEC. 306.

31. IF REMODELLING AN EXISTING SPACE, THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID. CONTRACTOR SHALL INSPECT ALL EXISTING AND NEW COMPONENTS OF THE MECHANICAL SYSTEMS AND ENSURE THAT

ALL ARE OPERATIONAL AND WORKING AS SHOWN ON THE APPROVED CD PLANS AT THE TIME OF C.O.

| | | MECHANICAL SHEET INDEX | | | | | | | | | | |
|----|--------|----------------------------------|--|--|--|--|--|--|--|--|--|--|
| l | SHEET# | DESCRIPTION | | | | | | | | | | |
| l | MO.1 | MECHANICAL NOTES, LEGEND & INDEX | | | | | | | | | | |
| | M2.1 | MECHANICAL PLAN | | | | | | | | | | |
| | МЗ.1 | MECHANICAL ROOF PLAN | | | | | | | | | | |
| | M6.1 | MECHANICAL SCHEDULES & DETAILS | | | | | | | | | | |
| ΙĪ | M7.1 | MECHANICAL DETAILS | | | | | | | | | | |

HVAC ABBREVIATION LEGEND AFF ABOVE FINISH FLOOR GR GRILLE AHU AIR HANDLING UNIT MCA MINIMUM CIRCUIT AMPS (FOR WIRE SIZING) CU CONDENSING UNIT MOCP MAXIMUM OVERCURRENT PROTECTION DEVICE AMPS EWT ENTERING WATER TEMPERATURE LEAVING WATER TEMPERATURE EAG EXHAUST AIR GRILLE R/A RETURN AIR EXHAUST FAN RETURN AIR GRILLE 0/A OUTSIDE AIR EXHAUST MAKE-UP AIR FD FIRE DAMPER WIRE MESH SCREEN E/A EXHAUST AIR CG CEILING S/A SUPPLY AIR

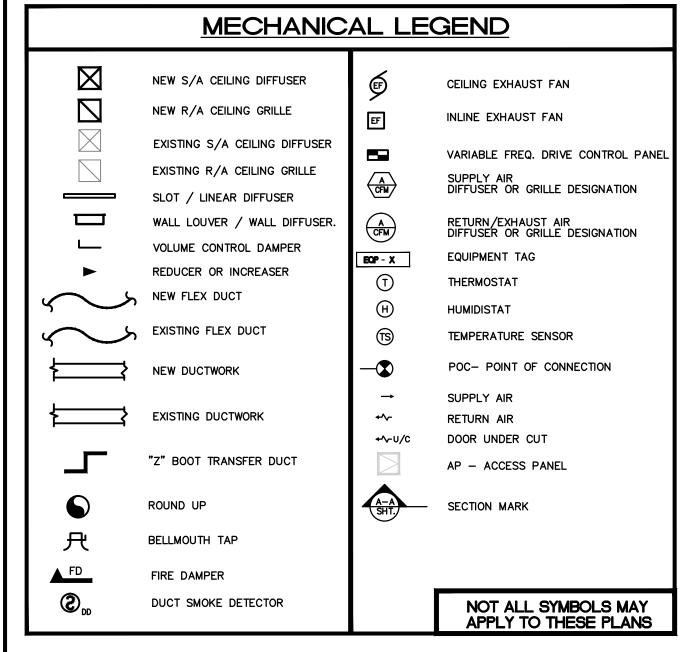
BDD

NEW

EXISTING

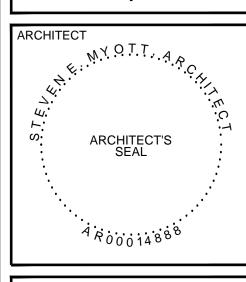
BACK DRAFT DAMPER

RELOCATED





1 SO



MAY NOT BE USED, DUPLICATED OR DISCLO IN ANY FORM WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ARCHITE

PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: <u>05202016</u> <u>PRELIMINARY REVIEW</u> <u>08.042016</u> <u>PERMIT / BIDDING</u>

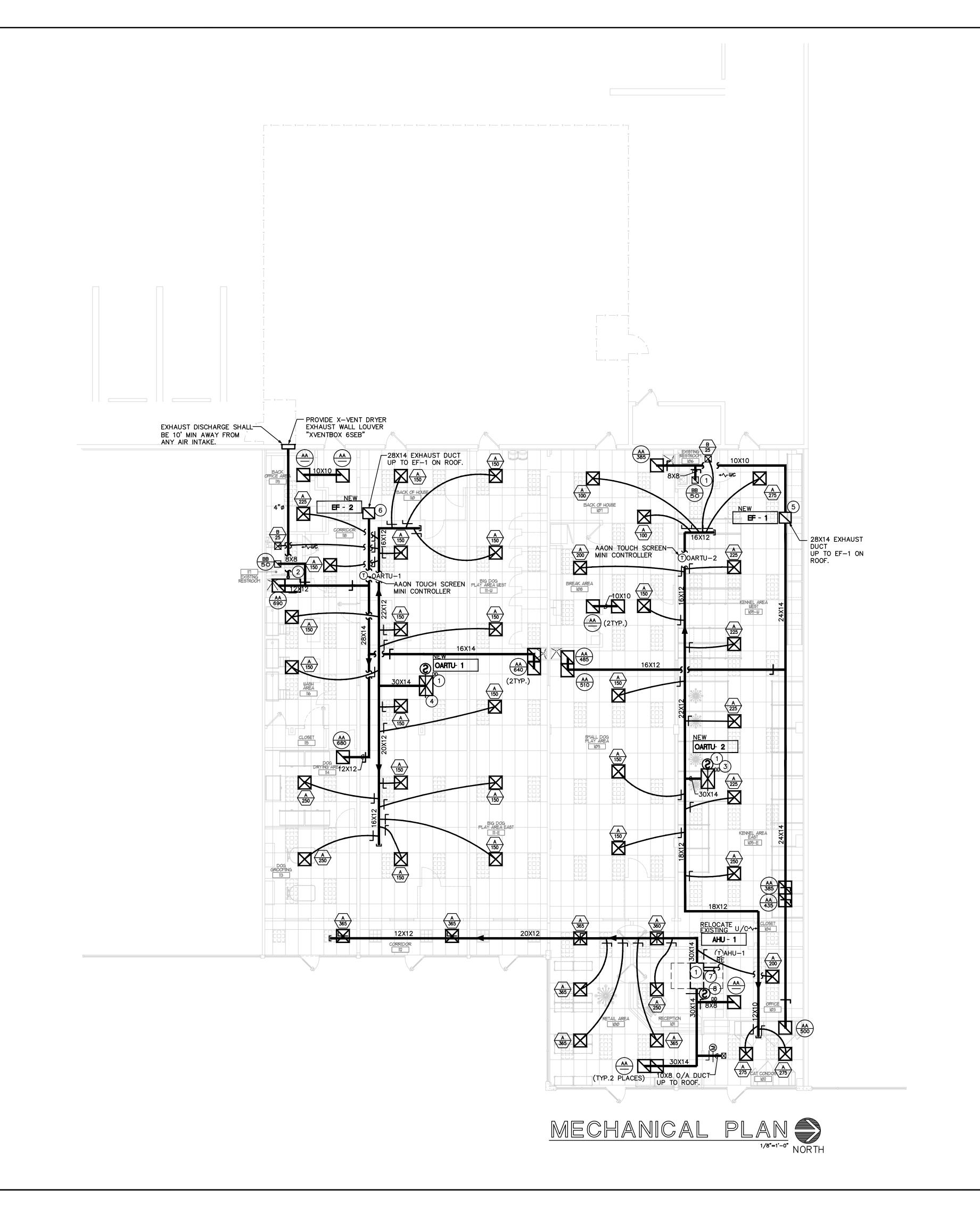
MECHANICAL NOTES

KAMM CONSULTING PROJECT #: 2016-050 PROJECT MANAGER: NICK RODRIGUEZ 1407 West Newport Center Drive Deerfield Beach, Florida 33442 Phone 954.949.2200 Fax 954.949.2201 engineering@kammconsulting.com

signed

ISSUED FOR PERMIT

ISSUED FOR CONSTRUCTION



GENERAL NOTES

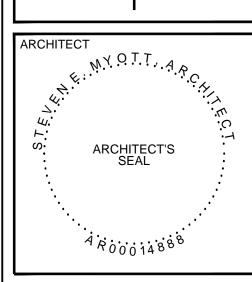
- 1. CONTRACTOR SHALL REMOVE ALL DUCTWORK AND UNITS THAT ARE BEING LINUSED
- CONTRACTOR SHALL CAP OR SEAL ANY UNUSED OPENINGS OR EXISTING PENETRATIONS AT UNITS THAT WERE REMOVED.

KEY NOTES

- 1 PROVIDE SERVICE ACCESS PER MANUFACTURER REQUIREMENTS AND NEC.
- 2 4" DRYER EXHAUST DUCT TO X-VENT WALL LOUVER..
- 3 30X14 SUPPLY AIR DUCT UP TO 0ARTU-2 ON ROOF
- 30X14 SUPPLY AIR DUCT UP TO OARTU-1 ON ROOF
- 5 INTERLOCK EXHAUST FAN WITH OARTU-2
- (6) INTERLOCK EXHAUST FAN WITH OARTU-1
- 7 CONTRACTOR SHALL ROUTE EXISTING REFRIGERANT LINES BACK TO EXISTING CONDENSING UNIT.
- 8 RELOCATE EXISTING SMOKE DETECTOR AS SHOWN; PROVIDE NEW IF EXISTING NOT FUNCTIONAL.



FERIOR RENOVATION PENN DUTCH PLAZA
3191 SR7
RGATE, FLORIDA 33063



L DRAWINGS AND WRITTEN MATERIAI PEARING HEREIN CONSTITUTE ORIGINAL AND PUBLISHED WORK OF THE ARCHITECT AND Y NOT BE USED, DUPLICATED OR DISCLOSEI ANY FORM WITHOUT THE EXPRESSEI RITTEN CONSENT OF THE ARCHITEC

PROJECT NO: DRAWN BY: CHECKED BY:

 NO:
 DATE:
 ISSUED FOR:

 1
 Ø5202016
 PRELIMINARY REVIEW

 2
 Ø8042016
 PERMIT / BIDDING

MECHANICAL PLAN

ISSUED FOR PERMIT

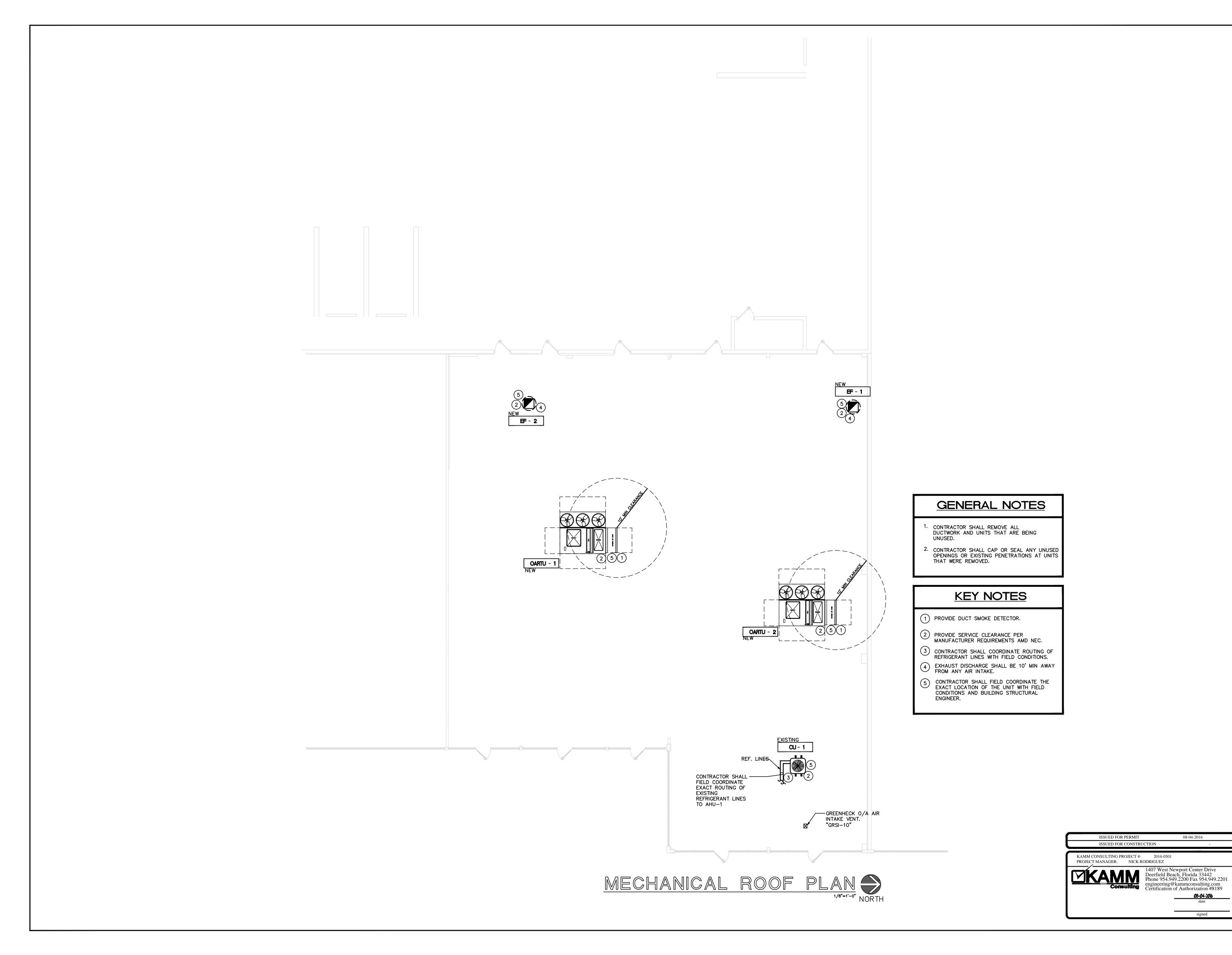
ISSUED FOR CONSTRUCTION

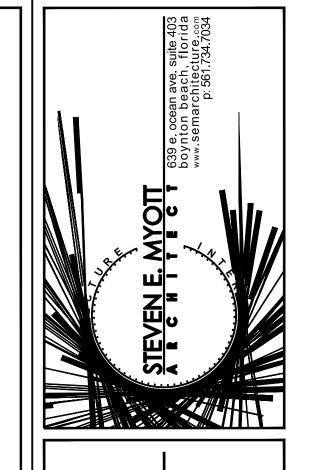
KAMM CONSULTING PROJECT #: 2016-0501
PROJECT MANAGER: NICK RODRIGUEZ

1407 West Newport Center Drive Deerfield Beach, Florida 33442
Phone 954.949.2200 Fax 954.949.2201 engineering@kammconsulting.com
Certification of Authorization #8189

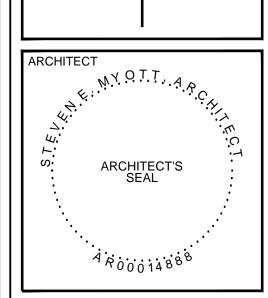
M2.1

politico al a 42





NTERIOR RENOVATION PENN DUTCH PLAZA



ALL DRAWINGS AND WRITTEN MATERIA
APPEARING HEREIN CONSTITUTE ORIGINAL AN
UNPUBLISHED WORK OF THE ARCHITECT AN
MAY NOT BE USED, DUPLICATED OR DISCLOSE
IN ANY FORM WITHOUT THE EXPRESSE
WRITTEN CONSENT OF THE ARCHITEC

PROJECT NO: DRAWN BY: CHECKED BY:

2 08.042016 PERMIT / BIDDING

MECHANICAL ROOF PLAN

M3.1

SOLUTED ON A 4

| | FAN SCHEDULE | | | | | | | | | | | | | | | |
|--------------|--------------|-----------|----------|---------|----------|-----------|-------|----------|------|--------|----------|-----------------|------------------------|------------------|-----------------|-------------|
| SELECTION DA | ATA | | | | FAN DATA | \ | | MOTOR DA | TA | | | GENERAL | DATA | | | |
| TAG | SERVICE AREA | MANUF.(*) | MODEL | CONFIG. | CFM | ESP ("WG) | SONES | HP/WATTS | RPM | DRIVE | VOLTAGE | WEIGHT (LBS) | DIMENSIONS L"xW"xH" | OPENING L"xW" | CONTROL | ACCESSORIES |
| EF-1,2 | PET AREAS | GREENHECK | G-163-VG | ROOF | 2700 | .75 | 15.3 | 2/- | 1725 | DIRECT | 208/1/60 | 71 | 22X22X24 | 18.5x18.5 | 0ARTU INTERLOCK | 1-4 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

(*) APPROVED EQUAL MANUFACTURER: COOK, TWIN—CITY, ACME, PENN **ACCESSORIES NOTES:**

1. PROVIDE BACK DRAFT DAMPER 2. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH AND INTEGRAL THERMAL OVERLOAD PROTECTION, COORDINATE WITH ELECTRICAL CONTRACTOR PRIOR TO ANY PURCHASING.

3. PROVIDE BIRD SCREEN

4. PROVIDE ROOF CURB

GENERAL FAN NOTES:

a. MOTOR STARTERS, FUSED DISCONNECTS AND ALL EQUIPMENT POWER WIRING PROVIDED BY ELEC. CONTRACTOR MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE PRIOR TO ANY WORK AND PURCHASING

b. ALL CONTINUOUS-DUTY MOTORS SHALL BE PROVIDED WITH OVERLOAD PROTECTION

ACCORDING TO NATIONAL ELECTRICAL CODE PAR. 430-32. c. FIELD ADJUST OPENINGS WITH STRUCTURE.

d. ALL OUTDOOR EQUIPMENT SHALL COMPLY WITH LOCAL ZONING NOISE ORDINANCE OR NOT EXCEED A NOISE LEVEL OF 65dB AS MEASURED RADIALLY 30 FT. FROM THE EQUIPMENT IN ALL DIRECTIONS.

e. COORDINATE WITH ELECTRICAL CONTRACTOR BEFORE BIDDING OR ORDERING ANY EQUIPMENT.

f. AS APPLICABLE, ALL FANS MANUFACTURE AND INSTALLATION SHALL COMPLY WITH FMC 301.12 FOR WIND RESISTANCE

9. ALL MOTORS DRIVEN BY A VARIABLE FREQUENCY DRIVE (PWM) SHALL INCLUDE A MAINTENENCE FREE, CIRCUMFERENCIAL, CONDUCTIVE MICRO-FIBER SHAFT GROUNDING RING EQUAL TO AEGIS SGR

h. WARRANTY COATING BY SURFSIL, LUVATA, THERMOGUARD OR BYGOLD.

TO DISCHARGE SHAFT CURRENTS TO THE GROUND.

| | EXISTING AIR CONDITIONING SPLIT SYSTEM EQUIPMENT SCHEDULE | | | | | | | | | | | | | | | |
|----------|---|-----------|--------------|-------------|-------------|---------------|------------|-------------|-------------|------------|--------------|------------|----------|--------------|----------------|-----------|
| | CONDENSING UNIT | | | | | | | | | | | | | | | |
| CU TAG | MANUFACTURER & MODEL | NOMINAL | TONNAGE | CAP. STAGES | (S)EER/IPLV | REFRIG./LBS | LIQ./SUCT. | NO. FANS | FAN FLA(EA) | NO. COMP. | COMP.RLA(EA) | VOLTAGE/PH | MCA/MOCP | WEIGHT (LBS) | L x W x H (IN) | NOTES |
| (E)CU-1 | YORK H1RA078625H | - | - | * | * | * | * | 1 | 2.2 | 1 | 18.5 | 208-3-60 | 25.8/60 | 516 | 46X59X50 | SEE BELOW |
| | | | | | | | AIR H | ANDLING | UNIT | | | | | | | |
| AHU TAG | MANUFACTURER & MODEL | TOTAL MBH | SENSIBLE MBH | TOTAL CFM | O/A CFM | E.S.P.("W.G.) | ENT. DB/WB | LEAV. DB/WB | ROWS/FPI | FAN HP/FLA | HEATER KW | VOLTAGE/PH | MCA/MOCP | WEIGHT (LBS) | L x W x H (IN) | NOTES |
| (E)AHU-1 | YORK K4EU090A33B | 90.0 | 67.5 | 3000 | - | 0.77 | 95/72 | 55/54 | 3/13 | 1.5/6.6 | 16.0 | 208-230/3 | 51/60 | 391 | 25X48X51 | SEE BELOW |
| | | | | | | | | | | | | | | | | |

EXISTING SCHEDULE IS USED AS REFERANCE ONLY.

COORDINATION NOTE:

SEQUENCE OF OPERATION

SET-BACK MODE:

OCCUPIED MODE:

COOLING MODE:

HEATING MODE:

DEHUMIDIFICATION MODE:

MECHANICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS AND ACCESSORIES WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASING AND INSTALLATION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF ENGINEER

| | OARTU- | -1 UNIT SCHEDULE |
|----------------------------|---------------------|---|
| A/C UNIT TAG | OARTU-1,2 | (*) EQUIVALENT TO CARRIER, GREENHECK, CORS- |
| MANUFACTURER | AAON | Specification Notes for AAON RM |
| MODEL | RN-020-8-A-EB19-142 | Provide the following features: |
| TOTAL SENSIBLE CAP. MBH. | 115.12 | Basis of design is AADN. Any approved alternate manufa listed below. Contractor is responsible for coordinating 2. Unit shall be UL or ETL listed and labeled by the origin |
| TOTAL COOLING CAP. MBH. | 248.63 | after shipping from original manufacturer are not acce |
| ENT. AIR TEMP D.B./W.B. F | 91'/79' | Provide G90 galvanized steel construction inside and our coated to exceed 10,000 Hr salt spray test in accordar manufacturer's coating does not neet this requirement, |
| LEAV. AIR TEMP D.B./W.B. F | 54.01 /53.81° | coated with Adsil. 4. Provide double wall cabinet construction with minimum of |
| SUPPLY AIR CFM | 3000 | fiberglass. 5. Provide access doors with same construction as above |
| OUTSIDE AIR CFM | 3000 | tool—less 1/4 turn handles. Provide access doors for t Section, Colls Section, and Control/Compressors Cabinet. |
| VOLTAGE | 208/3ø/60 | 6. The unit shall have Scroll Compressors with independent include liquid line filter driers, TXV, cranckase heaters, |
| MCA/MOCP | 114/125 | service fittings on the high and low pressure sides of inside an enclosed compartment with full size service ac |
| SEER/EER | -/ 12.2 | 7. Provide single point power connection with phase and br 8. Provide an Butside Air Intake Damper with a factory mo |
| OPERATING WEIGHT LBS. | 2570 | 9. Provide notor overload and thermal protection. |
| DIMENSIONS L x W x H (IN.) | 137x100x59 | 10. Provide a 2' filter rack and 30% pleated filters |
| | 13/x100x39 | 11. Provide a double sloped and pitched 304 stainless steel |
| ROOF OPENING (IN.) | | 12. Provide a cooling coll with a MINIMUM of 6-rows for dehi |
| DEE 4.00 | 5 404 | 13. Provide Modulating Hot Gas Reheat and Digital Scroll Corcompressor units) or on the first two stages (on 4 co-modulation for fully modulating temperature and humidity |
| REF./LBS. | R-410A | capacity modulation. |
| NOMINAL TONNAGE/STAGES | 20/MODULATING | 14. Provide Space Temperature and Humidity Sensors to ove 15. Provide an Electric Heating with Stainless Steel filament |
| NO. OF COMPRESSORS | 2 | temperature limit switch. |
| COMP. R.L.A. EACH | 30.1 | 16. Provide Backward Inclined, direct driven plenum type far mounted Variable Frequency Drive and NEMA Premium Eff |
| NO. OF OUTDOOR FANS | 2 | 17. Provide copper tubes / aluminum finned condenser colls, must be coated to exceed 10,000 Hr salt spray test in |
| FAN FLA. EACH | 7.0 | 18. Provide a factory 5-year compressor parts warranty. |
| | | 19. Provide a factory mounted Make-up Air Unit DDC Contro and holiday scheduling stored in a non volatile EPRIM me cooling, heating and dehumidification cycles. Provide one tool must remain in the building for future service onc |
| INDOOR FAN TYPE | BI - PLENUM TYPE | 20. Provide Dehunidification Control that stages the compre |
| FAN E.S.P. (IN. W.G.) | 2.08 | supplies discharge air based on supply air temperature supply air set-point will automatically be reset based o note 16 |
| FAN H.P./B.H.P. | 2 / 1.44 | 21. Provide a galvanized roof-curb minimum of 24' high. The |
| FAN F.L.A. | 7.5 | roof-curb with the roof pitch to assure the curb is in requirements. Roof Curb to comply with latest FBC. Prov |
| COIL ROWS/FPI | 6/12 | 22. Provide service clearances per manufacturer recommend 23. Provide duct mounted and field wired smoke detector in |
| HEATER TYPE | ELECTRIC | 24. Provide Variable Speed Condenser Fan with Head Pressu |
| HEATER CAPACITY - KW | 30 | 25. Unit controller shall have a space mounted Touchscreer and shall include Space Temperature and Humidity Sensor |
| | | |

*) EQUIVALENT TO CARRIER, GREENHECK, CORS-AIR specification Notes for AAON RM

rovide the following features: asis of design is AAON. Any approved alternate manufacturer must provide ALL of the features sted below. Contractor is responsible for coordinating all dimensional, weight and electrical changes.

Jnit shall be UL or ETL listed and labeled by the original manufacturer. Units that have been modified after shipping from original manufacturer are not accepted. Provide G90 galvanized steel construction inside and out. Unit interior and exterior surfaces shall be coated to exceed 10,000 Hr salt spray test in accordance with ASTM B-117-95 procedures. If the manufacturer's coating does not neet this requirement, the contractor shall have the entire cabinet coated with Adsil.

Provide double wall cabinet construction with minimum of 2' injected polyurethane foam insulation. ND liberglass.

Provide access doors with same construction as above and with full plano stainless steel hinges and tool-less 1/4 turn handles. Provide access doors for the Filters section, Blower Section, Heater Section, Colls Section, and Control/Compressors Cabinet.

The unit shall have Scroll Compressors with independent Refrigerant Circuits.Refrigerant Circuits shall include liquid line filter driers, TXV, cranckase heaters, high and low pressure cutouts and Shrader service fittings on the high and low pressure sides of the system. Compressors shall be installed inside an enclosed compartment with full size service access doors.

rovide single point power connection with phase and brownout protection. ovide an Dutside Air Intake Damper with a factory mounted and wired 2-position actuator.

Provide Modulating Hot Gas Reheat and Digital Scroll Compressors on the first stage (on two compressor units) or on the first two stages (on 4 compressor units) to achieve infinite capacity condulation for fully modulating temperature and humidity control. Hot Gas Bypass NOT acceptable for the control of the control of

rovide Space Temperature and Humidity Sensors to override discharge setpoint and dewpoint control Provide an Electric Heating with Stainless Steel filaments. Provide 2-step control and resetable high temperature limit switch.

Provide Backward Inclined, direct driven plenum type fans with aluminum wheels. Provide factory mounted Variable Frequency Drive and NEMA Premium Efficiency motors.

Provide copper tubes / aluminum finned condenser colls, evaporator colls and reheat colls. ALL colls nust be coated to exceed 10,000 Hr salt spray test in accordance with ASTM B-117-95 procedures.

Provide a factory mounted Make-up Air Unit DDC Controller to include programmable 365 day scheduler and holiday scheduling stored in a non volatile EPROM memory. The controller must have logic for cooling, heating and dehumidification cycles. Provide one Hand Held service tool for the project. This tool must remain in the building for future service once the project is completed.

Provide Dehumidification Control that stages the compressors based on outside air enthalpy and supplies discharge air based on supply air temperature (adjustable modulating hot gas reheat). The supply air set-point will automatically be reset based on a space temperature reset sensor as pernote 16

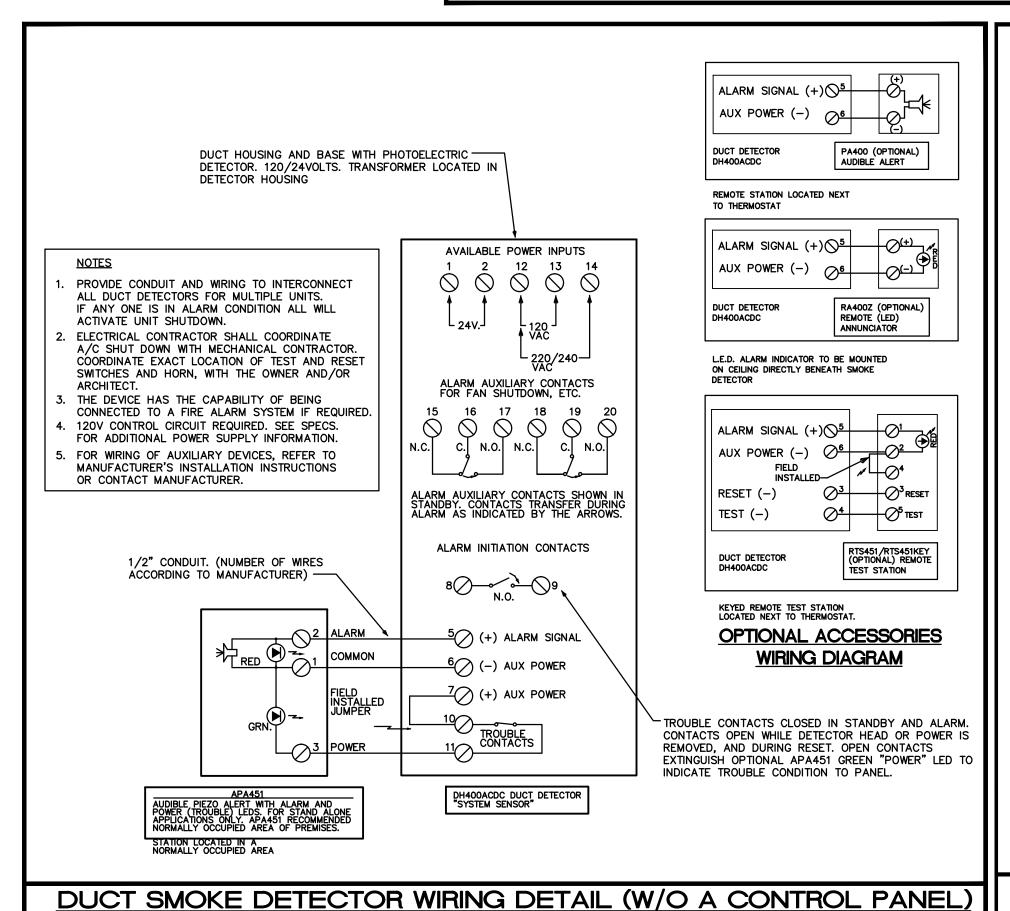
rovide a galvanized roof-curb minimum of 24' high. The contractor shall check and coordinate with oof-curb with the roof pitch to assure the curb is installed level in accordance with manufacturer's equirements. Roof Curb to comply with latest FBC. Provide tie down clips.

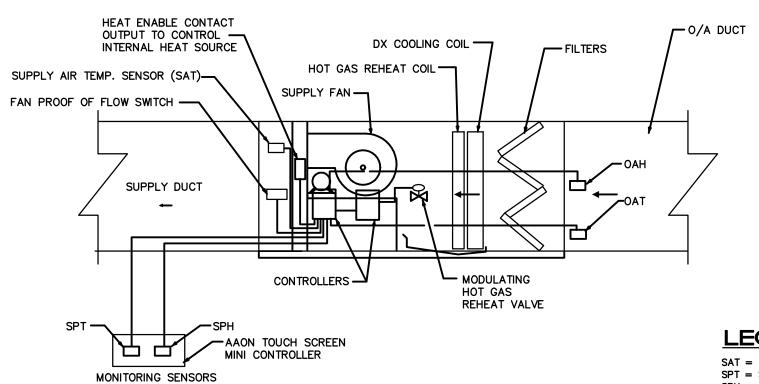
rovide duct mounted and field wired smoke detector in the supply duct.

Unit controller shall have a space mounted Touchscreen with BACnet MS/TP communications capability and shall include Space Temperature and Humidity Sensors to override unit control if necessary

26. Provide factory Start-up. 27. Provide AAON Touch screen mini controller.

> ERW NOT REQUIRED: PER SEC. C403.2.6 EXCEPTION 1 (FMC SEC. 514, EXCEPTION 1 FOR SEC. 510)





IN THIS MODE THE CONTROLLER WILL RESET THE HVAC UNIT COOLING, HEATING, DEHUMIDIFICATION MODES USER CONFIGURED.

REGARDLESS OF SPACE TEMPERATURE, WHENEVER THE SPACE (SPH) HUMIDITY LEVEL RISES ABOVE THE (SPH) SETPOINT.

THE CONTROLLER WILL MODULATE HOT GAS REHEAT VALVE TO CONTROL THE HVAC UNIT TO MAINTAIN THE SPT SETPOINT

THE CONTROLLER WILL PLACE THE HVAC UNIT INTO DEHUMIDIFICATION MODE. ONCE IN THE DEHUMIDIFICATION MODE,

THE CONTROLLER WILL BRING ON HVAC UNIT COOLING STAGES BASED ON THE CALCULATED OUTDOOR AIR ENTHALPY

WHEN THE SPACE AIR TEMPERATURE FALLS BELOW THE HEATING SETPOINT, (65°F, ADJUSTABLE)

IN REFERENCE TO THE OUTDOOR AIR ENTHALPY SETPOINT AND OUTDOOR AIR ENTHALPY DEADBANDS.

DURING DEHUMIDIFICATION MODE THE REHEAT CONTROL WILL BE ACTIVATED TO MAINTAIN THE SPT SETPOINT.

THE MUA II CONTROLLER WILL REMAIN IN THE SET-BACK MODE OF OPERATION BASED ON A TIME SCHEDULE AS DETERMINED BY USER.

WHEN THE SPACE AIR TEMPERATURE RISES ABOVE THE COOLING SETPOINT, THE CONTROLLER WILL PLACE THE HVAC UNIT INTO THE COOLING MODE. THE SPACE COOLING SETPOINT SHALL BE MAINTAINED AT 74° (SPT) PLUS A COOLING DEADBAND OF A MAX OF 2°F. ONCE IN THE COOLING MODE, THE CONTROLLER WILL BRING ON THE HVAC UNIT COLLING STAGES TO MAINTAIN THE SPT AT ITS SETPOINT.

THE CONTROLLER WILL PLACE THE HVAC UNIT INTO THE HEATING MODE. THE HEATING SETPOINT WILL MAINTAIN HEATING DEADBAND OF 2F.

ONCE IN THE HEATING MODE, THE CONTROLLER WILL CLOSE A CONTACT TO ENABLE THE HEATER TO MAINTAIN THE SPT AT ITS SETPOINT.

SHALL BE CAPABLE TO BE PROGRAMMED FOR A SEVEN DAY PERIOD WITH NIGHT SET-BACK MODE, WORKDAY AND WEEKEND SCHEDULE. ALL SETPOINTS SHALL BE FIELD ADJUSTABLE TO ALLOW FOR TWO SETS OF SPACE CONDITIONS DEPENDING ON THE TYPE OF SPACE ACTIVITY.

MECHANICAL CONTROL DIAGRAM FOR 100% O/A AAON UNIT

LEGEND

SAT = SUPPLY AIR TEMPERATURE SENSOR SPT = SPACE TEMPERATURE SENSOR SPH = SPACE HUMIDITY SENSOR OAH = OUTSIDE AIR HUMIDITY SE

OAT = OUTSIDE TEMPERATURE SE

| NOUR | / . | 1 110 11 |
|--------|-----|----------|
| } | 8. | ADJUS |
| ENSOR | 9. | PROVID |
| SENSOR | | |
| | | |

NO. OF STEPS

FILTER TYPE/EFF.

| | | | | | | | | | | <u> </u> | | | |
|-----|--|-------|---------|-------|------------------|-----------|-----|-------|---------|----------|-----------|--|--|
| В | TITUS TMS-AA | 12X12 | SEE SCH | ALUM. | LAY-IN | OFF WHITE | OBD | 4-WAY | MAX. 30 | SEE SCH. | SEE BELOV | | |
| AA | TITUS 350-FL | 24X24 | SEE SCH | ALUM. | SURFACE MOUNT | OFF WHITE | OBD | 4-WAY | MAX. 30 | SEE SCH. | SEE BELOW | | |
| ВВ | TITUS 350-FL | 12X12 | SEE SCH | ALUM. | SURFACE MOUNT | OFF WHITE | OBD | 4-WAY | MAX. 30 | SEE SCH. | SEE BELOV | | |
| ` ' | (*) EQUIVALENT MANUFACTURER: TITUS, METALAIRE, KRUEGER, AIRGUIDE, T & B, NAILOR ENERAL NOTES: | | | | | | | | | | | | |

AIR DISTRIBUTION SCHEDULE

MANUF. & MODEL FACE SIZE NECK SIZE MATERIAL FRAME FINISH DAMPER THROW NC CFM RANGE NOTES

TITUS TMS-AA | 24X24 | SEE SCH | ALUM. | LAY-IN | OFF WHITE | OBD | 4-WAY | MAX. 30 | SEE SCH. | SEE BELOW

PROVIDE SPIN-IN COLLAR WITH VOLUME DAMPER AT TRUNK TO FLEX DUCT CONNECTION (SEE DETAIL). PROVIDE TYPICAL 4-WAY DIFFUSION, 2-WAY OR 3-WAY ONLY WHERE INDICATED ON PLANS.

REFER TO ARCHITECT PLANS FOR CEILING TYPE. . FINAL COLOR SELECTION SUBJECT TO ARCHITECT APPROVAL FLEX DUCT SIZE TO BE SAME AS DIFFUSER NECK SIZE.

7. PROVIDE VOLUME CONTROL DAMPERS FOR ALL RETURN GRILLES OR REGISTERS FOR BALANCED AIRFLOW. IST LENGTHS TO LINE UP WITH INTERIOR DESIGNER'S PLANS. DE INTERNAL CABLE CONTROL FOR LINEARS IN HARD CEILINGS.

6. PROVIDE INSULATION ON THE BACK OF DIFFUSER IF IN UNCONDITIONED SPACE

2" PLEATED/30%

| | ۵۶ | 130-200 CF |
|---|--------------|------------|
| CONTRACTOR SHALL VERIFY WITH ARCHITECT AND TENANT/OWNER, | 10ø" | 205-330 CF |
| PRIOR TO ANY PURCHASING OR INSTALLATION, IF A BUILDING STANDARD HAS TO BE FOLLOWED REGARDING A SPECIFIC MODEL | 12ø " | 335-450 CF |
| OR MANUFACTURER AND SHALL BRING ANY DISCREPANCY TO THE ATTENTION OF ENGINEER. | 14ø" | 455-700 CF |

W.Y.O.T.T. A.A.C. ARCHITECT'S AR00014888

Section

MAY NOT BE USED, DUPLICATED OR DISCLOS IN ANY FORM WITHOUT THE EXPRESSI WRITTEN CONSENT OF THE ARCHITE

PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: 05202016 PRELIMINARY REVIEW <u>08.042016</u> PERMIT / BIDDING

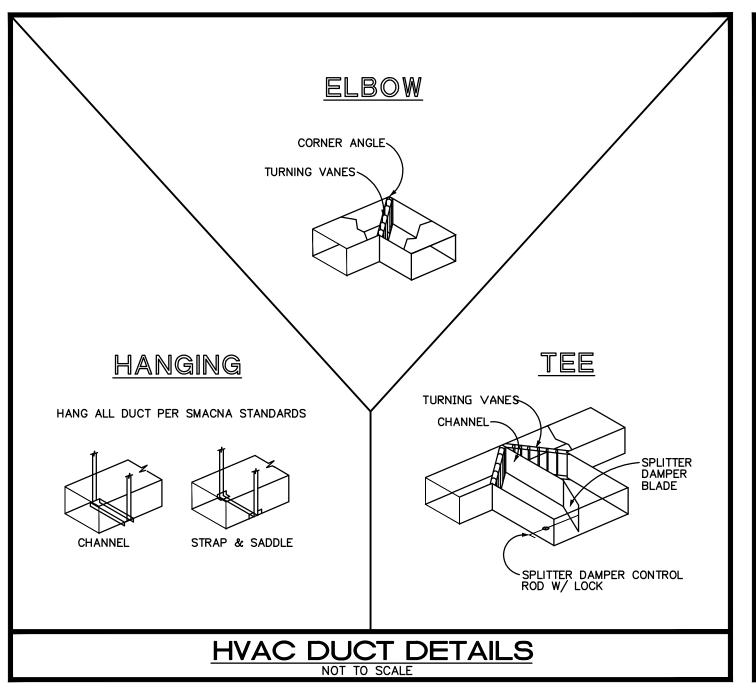
MECHANICAL SCHEDULES

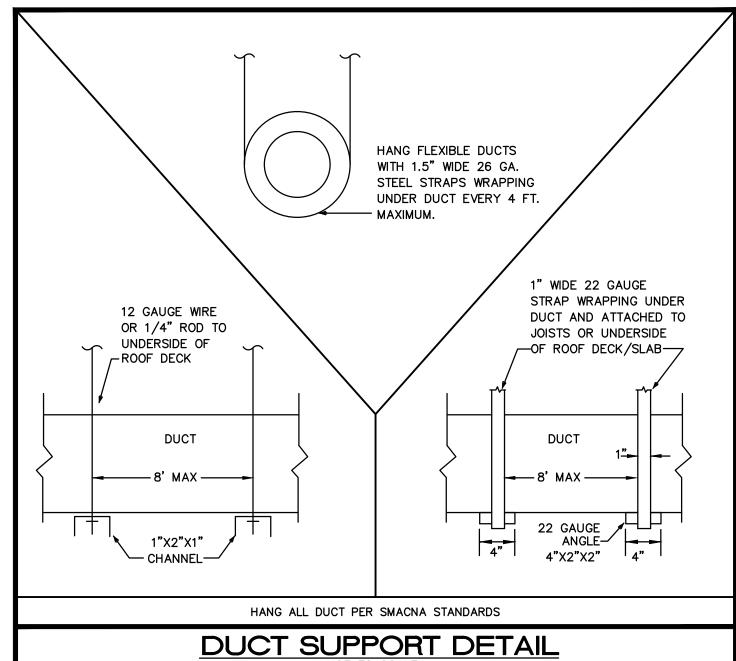
1407 West Newport Center Drive Deerfield Beach, Florida 33442 Phone 954.949.2200 Fax 954.949.2201 engineering@kammconsulting.com signed

S/A FLEX SCHEDULE

50-125 CFM

ISSUED FOR PERMIT ISSUED FOR CONSTRUCTION KAMM CONSULTING PROJECT #: 2016-050 PROJECT MANAGER: NICK RODRIGUEZ





TOP OF ROOF WITHIN CURB.

ALL WIRING BY ELECTRICAL CONTRACTOR.

WITHSTAND WIND LOAD PER LOCAL CODES.

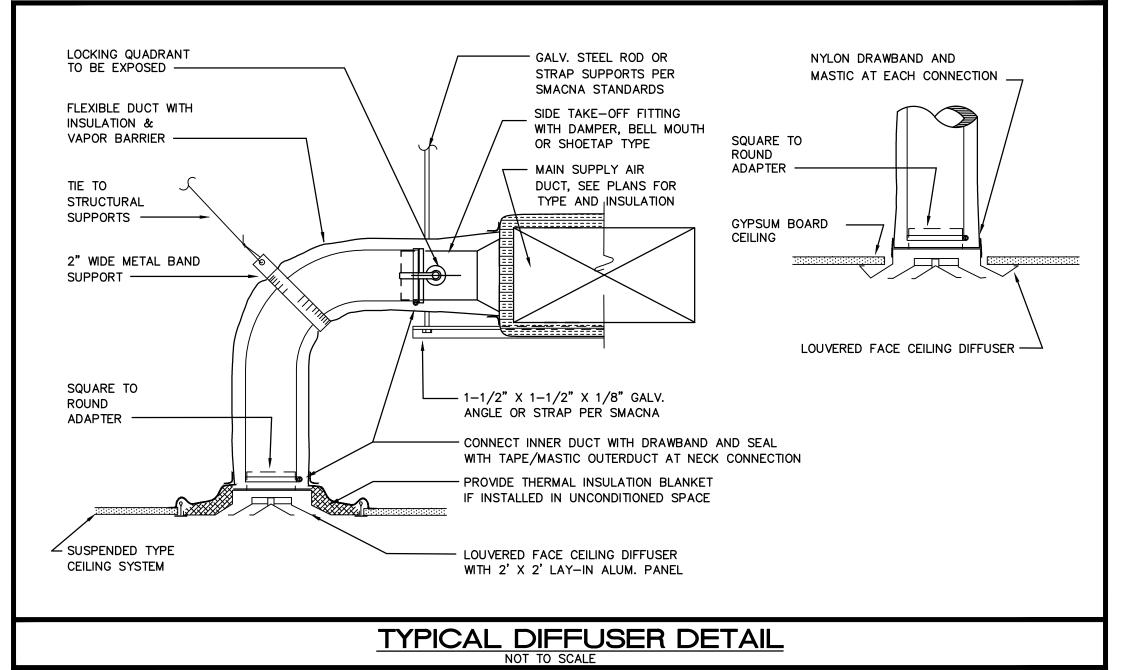
PROTECTED IF EXPOSED TO OUTDOORS.

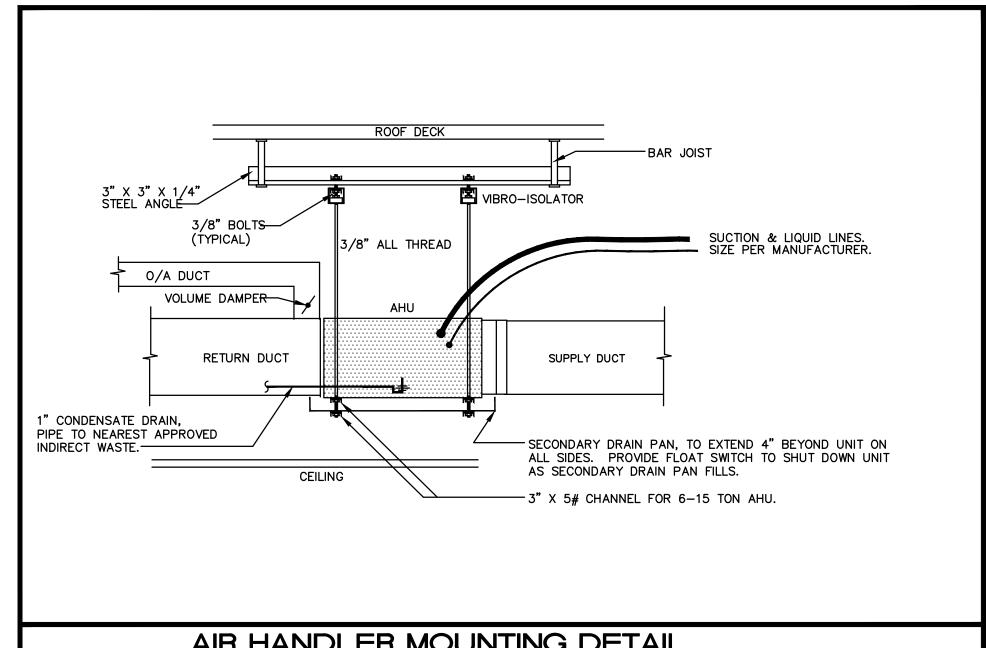
INSTALL PER MANUFACTURER'S RECOMMENDATION AND INSTALLATION MANUAL.

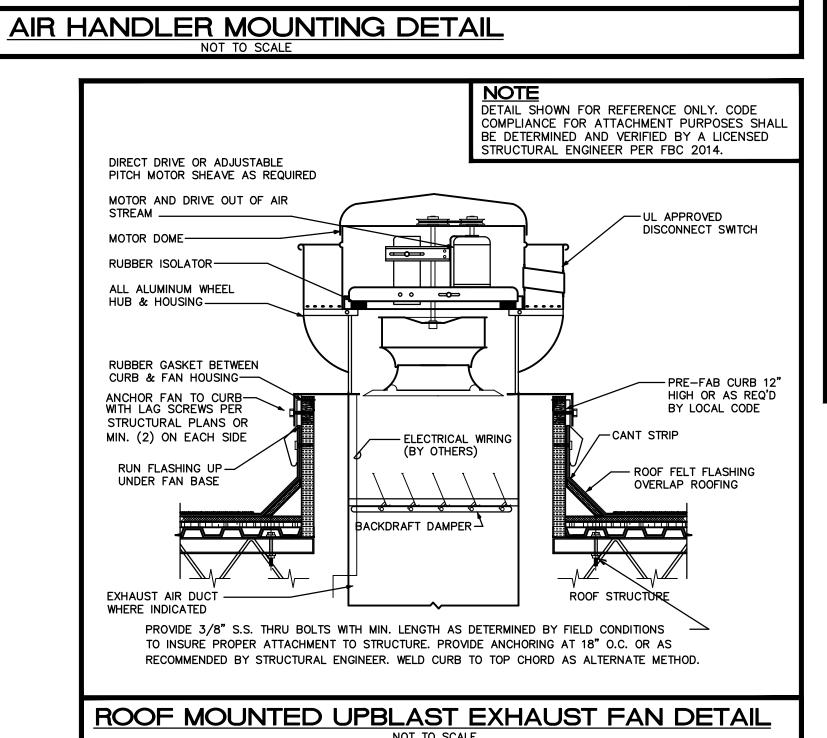
5. SHIM CURB AS REQUIRED TO PROVIDE HORIZONTAL INSTALLATION OF UNIT WITHIN PRESCRIBED TOLERANCES

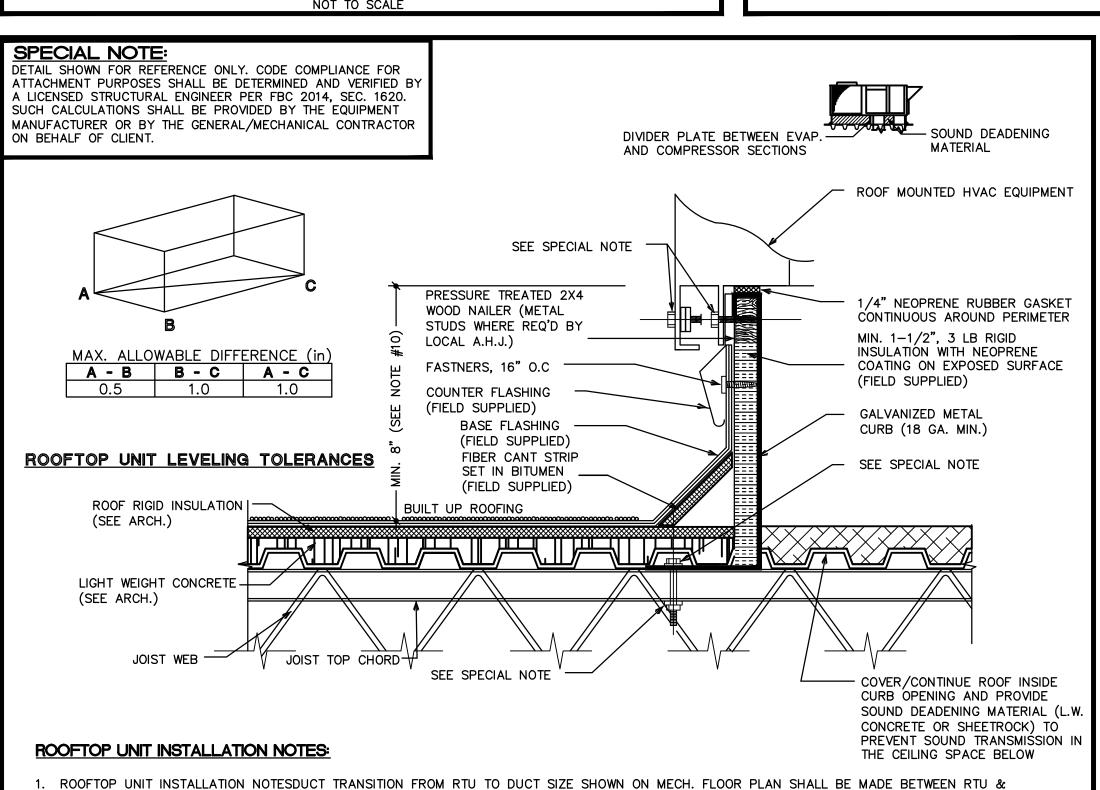
CONTRACTOR SHALL COORDINATE LOCATION OF ROOF CURB WITH STRUCTURE PRIOR TO INSTALLATION.

PROVIDE NUMBER AND SIZE OF FASTENERS/ATTACHMENTS AS RECOMMENDED BY STRUCTURAL ENGINEER.









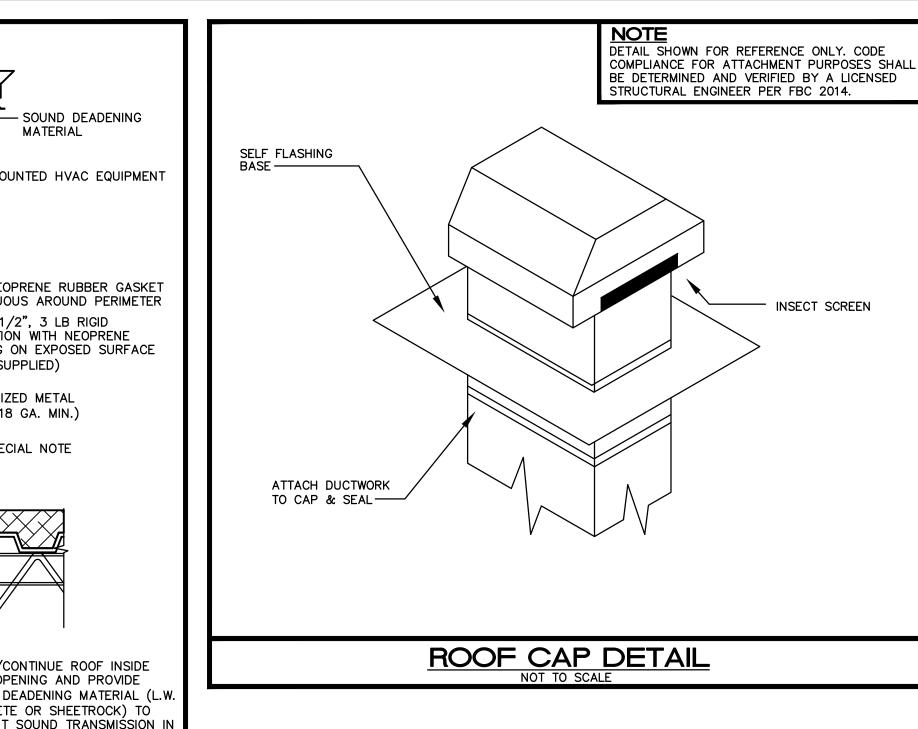
SIZE OF OPENING IN ROOF DECK TO BE AS SMALL AS POSSIBLE, 6" MAX. LARGER THAN DUCT SIZE SHOWN. COORDINATE W/STRUCTURAL PLANS.

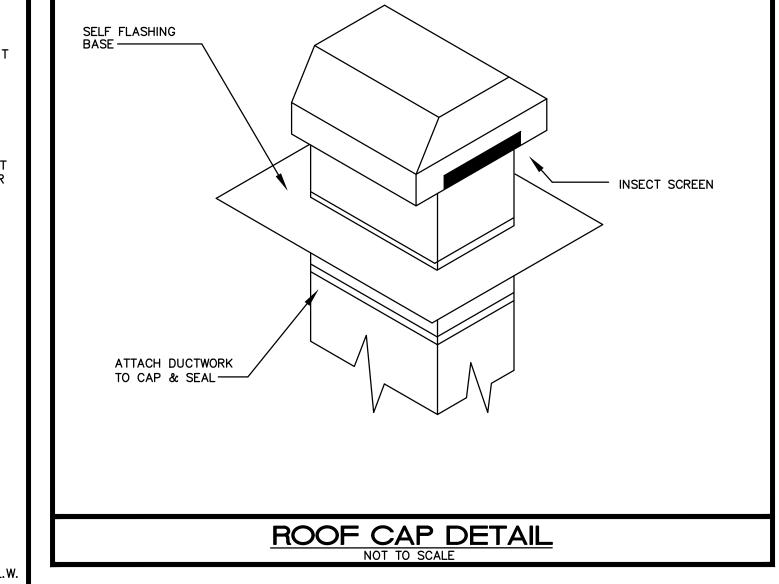
ROOF CURB BY AIR CONDITIONER MANUFACTURER. PROVIDE ADDITIONAL BRACING AND SUPPORT. AS REQUIRED FOR ROOF CURB INSTALLATION TO

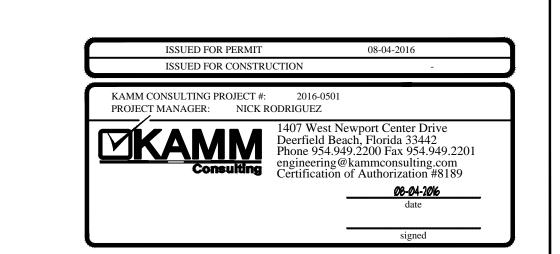
HVAC EQUIPMENT ROOF CURB DETAIL

8. CURB TO BE HEAVY GAUGE GALVANIZED STEEL CONSTRUCTION AS RECOMMENDED BY MANUFACTURER, ALL FASTENERS SHALL BE CORROSION

10. CLEARANCE OF UNIT TO ABOVE FINISHED ROOF SHALL COMPLY WITH LOCAL CODE REQUIREMENTS: PAR. 1509.7 FOR FLORIDA BUILDING CODE,







ARCHITECT W.Y.O.T.T. A.A.C. ARCHITECT'S SEAL AR00014888

UNPUBLISHED WORK OF THE ARCHITECT AL MAY NOT BE USED, DUPLICATED OR DISCLOS IN ANY FORM WITHOUT THE EXPRESS! WRITTEN CONSENT OF THE ARCHITE

PROJECT NO: DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR: <u>08.042016</u> <u>PERMIT / BIDDING</u>

<u>05202016</u> <u>PRELIMINARY REVIEW</u>

MECHANICAL DETAILS

| | ELECTRICAL SYMBOLS |
|---|---|
| T | TELEPHONE/DATA OUTLET WITH 3/4" CONDUIT STUBBED OUT FROM WALL 6" ABOVE CEILING. MOUNT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED. |
| 7 | TELEPHONE/DATA OUTLET, RECESSED FLOOR MOUNTED, WITH 3/4" CONDUIT RUN TO THE NEAREST STUD WALL AND STUBBED OUT FROM WALL 6" ABOVE CEILING. PROVIDE BRASS COVER PLATE AND CARPET FLANGE. |
| ф | TELEVISION OUTLET WITH 3/4" CONDUIT STUBBED OUT FROM WALL 6" ABOVE CEILING. MOUNT AT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED. |
| Ф | DUPLEX RECEPTACLE (AMPERAGE RATING TO MATCH BRANCH CIRCUIT RATING) MOUNTED AT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE. |
| | QUADRUPLEX RECEPTACLE (AMPERAGE RATING TO MATCH BRANCH CIRCUIT RATING) MOUNTED AT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE. |
| Φ^{GFI} | DUPLEX RECEPTACLE (AMPERAGE RATING TO MATCH BRANCH CIRCUIT RATING) WITH GROUND FAULT CIRCUIT INTERRUPTER, MOUNT AT 18" A.F.F. TO CENTER LINE OF OUTLET. UNLESS NOTED OTHERWISE. |
| | DUPLEX RECEPTACLE (AMPERAGE RATING TO MATCH BRANCH CIRCUIT RATING) MOUNTED ABOVE COUNTER SEE ARCHITECTUAL DRAWINGS FOR SPECIFIC REQUIREMENTS. |
| | DUPLEX RECEPTACLE (AMPERAGE RATING TO MATCH BRANCH CIRCUIT RATING), RECESSED FLOOR MOUNTED. PROVIDE BRASS COVER PLATE AND CARPET FLANGE. |
| | DUPLEX RECEPTACLE (AMPERAGE RATING TO MATCH BRANCH CIRCUIT RATING), CEILING MOUNTED. |
| | SPECIAL-PURPOSE RECEPTACLE |
| J | JUNCTION BOX |
| (EF) | EXHAUST FAN. SEE MECHANICAL DRAWINGS FOR SPECIFICATIONS. |
| \$ | SINGLE POLE, 20 AMP, SWITCH. MOUNT 42" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED. |
| \$3 | 3-WAY, 20 AMP, SWITCH. MOUNT 42" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED. |
| \$₀ | SINGLE POLE, 20 AMP, SWITCH WITH DIMMER. MOUNT 42" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED. |
| \$M | MOTOR RATED SWITCH |
| Sos | DUAL TECHNOLOGY WALL SWITCH/OCCUPANCY SENSOR, WATT STOPPER DW-100 SERIES. MOUNT 42" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED. SEE DETAIL ON SHEET E0.1 30 MINUTE MAXIMUM TIME DELAY. |
| (OS) | 24VDC/VAC DUAL TECHNOLOGY OCCUPANCY SENSOR, WATT STOPPER DT-300 SERIES. MOUNT IN CEILING. PROVIDE WITH POWER PACK BZ-150 SET FOR MANUAL ON. 30 MINUTE MAXIMUM TIME DELAY. |
| \$osd | UNIVERSAL DECORATOR STYLE DIMMABLE WALL SWITCH, WATT STOPPER WD-280 SERIES. MOUNT 48" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED. SEE SHEET E7.1. |
| \$ _{ov} | DECORATOR LOW VOLTAGE MOMENTARY OVERRIDE SWITCH. WATTSTOPPER #DCC2, UNLESS OTHERWISE NOTED. FOUR HOUR MAXIMUM TIME DELAY. |
| ⊐ <u>B</u> A | FUSIBLE DISCONNECT SWITCH A = POLES, B= FRAME SIZE, C= FUSE RATING |
| Ť | GROUNDING ELECTRODE & CONDUCTOR SYSTEM |
| | TRANSFORMER |
| | ELECTRICAL PANELBOARD |
| | TELEPHONE WOOD BACKBOARD |
| WP | WEATHERPROOF |
| T/C | TIME CLOCK |
| RE | RELOCATED |
| E | EXISTING TO REMAIN |
| A.F.F. | ABOVE FINISH FLOOR |
| O.C. | OVER COUNTER |
| REC. | RECEPTACLES |

LIGHTING

| | ELECTRICAL SHEET INDEX |
|--------|--|
| SHEET# | DESCRIPTION |
| E0.1 | ELECTRICAL NOTES, LEGEND & INDEX |
| E2.1 | ELECTRICAL LIGHTING PLAN |
| E3.1 | ELECTRICAL POWER PLAN |
| E3.2 | ELECTRICAL ROOF PLAN |
| E5.1 | ELECTRICAL RISER DIAGRAM AND PANEL SCHEDULES |

ELECTRICAL SPECIFICATIONS

CORRECTIVE ACTION TO BE TAKEN.

A. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL ARCHITECT/ENGINEER HAS DIRECTED

- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BID AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATIONS INSTALLATION AND MAKE PROVISIONS AS TO
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION) AND ALL CODES AND ORDINANCES OF THE AUTHORITY HAVING JURISDICTION. THE SPECIFICATION, CODES AND STANDARDS LISTED BELOW ARE UTILIZED IN THIS PROJECT.
 - NATIONAL ELECTRICAL CODE (NFPA-70, 2011 EDITION)
 - 2. CODE FOR SAFETY TO LIFE (NFPA-101, 2012 EDITION) 3. STANDARD FOR THE INSTALLATION, MAINTENANCE AND USE OF LOCAL PROTECTIVE SIGNALING
 - SYSTEMS (NFPA-72, 2010 EDITION) 4. UNDERWRITERS' LABORATORIES (UL)
 - . NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 - AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) FEDERAL SPECIFICATION (FED. SPEC.)
 - 8. INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA) 9. FLORIDA BUILDING CODE. 2014 EDITION (AS AMENDED)
 - 10. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE) 11. CITY OF MARGATE BUILDING CODE. (AMENDMENTS TO FLORIDA BUILDING CODE 2014)
- 12. ADDITIONALLY, DESIGNS, WORK PRACTICES AND CONDITIONS MUST CONFORM WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA)
- DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS
- FOR EXACT LOCATION OF ALL EQUIPMENT. CONFIRM WITH OWNER'S REPRESENTATIVE. 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. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FROM A
- PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE
- REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED . ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND
- PROPERTY DAMAGE FOR THE DURATION OF THE WORK. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR
- TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. THE TERM "PROVIDE" USED IN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL MEAN THAT THE CONTRACTOR IS TO FURNISH, INSTALL AND CONNECT COMPLETE.
- A. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. (EXCEPT AS NOTED OTHERWISE FOR CONTROL WIRING).
- B. ALL CONDUCTORS SHALL BE 98% CONDUCTIVITY, COPPER WITH "THHN-THWN" INSULATION UNLESS
- B. ELECTRICAL METALLIC TUBING (EMT) SHALL BE OF BEST QUALITY STEEL, SMOOTH INSIDE AND OUT AND SHALL BE HOT-DIPPED GALVANIZED.
- C. RIGID NONMETALLIC CONDUIT SHALL BE SCHEDULE 40 PVC. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS. CAST ALLOY WITH THREADED HUBS
- IN WET OR DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
- - 1. CURRENT CARRYING BUSES SHALL BE COPPER. GROUND BUS BARS SHALL BE COPPER. 2. ALL CIRCUIT BREAKERS SHALL BE BOLT ON. PLUG-IN BREAKERS ARE NOT ACCEPTABLE. 3. CIRCUIT BREAKERS USED AS SWITCHES IN FLUORESCENT OR HID LIGHTING CIRCUITS SHALL
 - BE LISTED AND MARKED "SWD" OR "HID" AS REQUIRED.
 - 4. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE. 5. A.I.C. RATINGS SHALL BE AS INDICATED ON PANELBOARD SCHEDULES.
 - 6. ALL PANELBOARDS SHALL BE FURNISHED WITH PLASTIC LAMINATE NAMEPLATES WITH 1/4"
- ENGRAVED LETTERING FOR PANEL IDENTIFICATION. 7. ALL PANELBOARDS SHALL BE PROVIDED WITH TYPE-WRITTEN DIRECTORY OF BRANCH CIRCUIT DESIGNATIONS. PROVIDE ELECTRICAL EQUIPMENT WITH FIELD MARKING TO WARN OF POTENTIAL ELECTRIC ARC FLASH HAZARDS AS REQUIRED BY THE NEC ARTICLE 110.16.
- DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK—MAKE, QUICK—BREAK.
- ENCLOSURES SHALL BE NEMA-1 FOR INDOOR LOCATIONS, NEMA 3R FOR OUTDOOR LOCATIONS OR AS OTHERWISE NOTED.
- WIRING DEVICES (GENERAL PURPOSE RECEPTACLES AND WALL SWITCHES) SHALL BE WHITE COLOR UNLESS OTHERWISE NOTED. FACEPLATES SHALL BE SMOOTH, WHITE NYLON.

| PART | 3 - | - EXECUTION |
|--------|-----|-------------|
| 1 (71) | J | LALGO HON |

- A. COLOR CODING OF CONDUCTORS SHALL BE AS FOLLOWS:
 - 1. 208/120 VOLTS, 3 PHASE, 4-WIRE SYSTEM: UNGROUNDED CONDUCTORS: 1 BLACK, 1 RED AND 1 BLUE. GROUNDED (NEUTRAL) CONDUCTOR; WHITE. GROUNDING CONDUCTORS SHALL BE GREEN. 2. BRANCH CIRCUIT WIRING (#6 AND SMALLER) SHALL BE COLOR CODED BY CONTINUOUS INSULATION COLOR AND FEEDERS AND SERVICES (#4 AND LARGER) SHALL BE CODED AT ALL JUNCTION OR PULL POINTS (EXCEPT LB'S OR LBD'S) USING COLOR MARKERS OR PLASTIC TAPE MANUFACTURED FOR THE PURPOSE.
- B. WIRING METHODS
 - 1. ALL CONDUCTORS SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING (EMT) UNLESS OTHERWISE NOTED, SPECIFIED OR AS SPECIFICALLY PROHIBITED BY THE AUTHORITY HAVING JURISDICTION. ALL FITTINGS AND COUPLINGS FOR EMT CONDUIT SHALL BE ALL STEEL RAIN TIGHT COMPRESSION TYPE OR ALL STEEL CONCRETE TIGHT SET SCREW TYPE.
 - BE INSTALLED UNDERGROUND OR BELOW SLABS ON GRADE. 3. TYPE MC CABLE WITH ALUMINUM ARMOR AND INTERNAL GROUND IS ACCEPTABLE FOR USE AS GENERAL BRANCH CIRCUIT WIRING FOR CIRCUITS 20 AMPERES OR LESS AND CONCEALED IN WALLS OR ABOVE SUSPENDED CEILING AND AS APPROVED BY THE AUTHORITY HAVING

2. SCHEDULE 40 PVC CONDUIT, WITH FITTINGS AND COUPLINGS APPROPRIATE FOR THE USE, SHALL

- C. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE LATEST
- EDITION OF THE N.E.C. AND LOCAL CODES. D. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS
- WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE.
- E. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS
- F. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES, AND SHALL BE FULLY COORDINATED WITH THEM PRIOR TO COMMENCEMENT OF WORK.
- G. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, AND WIRING DEVICES, FOR ALL OUTLETS AS INDICATED.
- H. MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UL LIST OF APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF NEC, NEMA, AND IECE.
- CONTRACTOR SUBMITTALS: I. SUBMIT AT LEAST FIVE (5) SETS OF SHOP DRAWINGS OR CUT SHEETS OF LIGHTING FIXTURES, SWITCHES, AND OTHER ELECTRICAL ITEMS FOR APPROVAL BY ENGINEER/ARCHITECT.
- 2. AS-BUILT ELECTRICAL DRAWINGS SHALL BE PROVIDED TO THE OWNER AS REQUIRED BY FLORIDA BUILDING CODE, ARTICLE 505.7.4.1
- 3. OPERATING AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE OWNER AS REQUIRED BY FLORIDA BUILDING CODE, ARTICLE 505.7.4.2.
- J. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED OF HIS WORK. K. ALL LAY—IN LIGHTING FIXTURES SHALL BE SECURED TO THE SUSPENDED CEILING GRID AT EACH CORNER. L. CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL
- M. ALL ELECTRICAL POWER WIRING FOR THE HVAC SYSTEM INCLUDING WIRING THRU LINE VOLTAGE CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- N. VOLTAGE DROP 1. CONDUCTORS FOR ALL FEEDERS SHALL BE INCREASED FROM SIZES INDICATED ON DRAWINGS TO PREVENT VOLTAGE DROP EXCEEDING 2%.
- 2. CONDUCTORS FOR ALL BRANCH CIRCUITS SHALL BE INCREASED FROM SIZES INDICATED ON
- DRAWINGS TO PREVENT VOLTAGE DROP EXCEEDING 3%. FROM THE FURTHEST DEVICE. 3. DETERMINING CONDUCTOR SIZES SHALL BE BASED ON 80% OF THE BREAKER RATING.
- 4. FOR DETERMINATION OF WIRE SIZE FOR BID PURPOSES: * INCREASE WIRE BY 1 WIRE SIZE FOR RUNS 60 FT. TO 100 FT.
- * INCREASE WIRE BY 2 WIRE SIZES FOR RUNS 100 FT. TO 150 FT. * INCREASE WIRE BY 3 WIRE SIZES FOR RUNS FROM 150 FT. TO 230 FT.
- O. PROVIDE CABLE LUGS SIZED FOR THE LINE AND/OR LOAD SIDE FEEDERS AS SCHEDULED FOR ALL SWITCHBOARDS, PANELBOARDS AND DISCONNECTS. WHERE CABLE LUGS ARE NOT AVAILABLE FOR THE SPECIFIC WIRE SIZE AND NUMBER OF SETS SCHEDULED, PROVIDE A TAP BOX ADJACENT TO THE EQUIPMENT WITH "POLARIS" TAPS TO TRANSITION TO CONDUCTORS TO MATCH THE CABLE LUGS AVAILABLE AND THE AMPERE RATING OF THE OVER-CURRENT DEVICE PROTECTING THE FEEDER.
- P. THE CONTRACTOR SHALL CONFIRM WITH THE ELECTRICAL UTILITY COMPANY ANY AND ALL REQUIREMENTS SUCH AS: METERING EQUIPMENT REQUIREMENTS AND METERING EQUIPMENT LOCATION, TRANSFORMER
- SIZE AND LOCATION OR SERVICE POINT, CONDUIT ENTRY AND LUG SIZE RESTRICTIONS. Q. THE CONTRACTOR SHALL SCHEDULE ALL REQUIRED DOWN TIME FOR THE OWNERS CONFIRMATION.
- R. ANY CONFLICTS AND DESCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK.

| | LIGHTING FIXTURE S | SCł | HEDUL | <u>.E</u> | | | | |
|--------------|---|-----|-----------------------|-------------|--------------------------|----------------|----------------------|---------|
| SYMBOL | DESCRIPTION | NO. | LAMPS TYPE | WATT | BALLAST TYPE | INPUT WATTS | MOUNTING | REMARKS |
| | 2'x4' FLUORESCENT PARABOLIC TROFFER WITH 3" DEEP, 18 CELL LOUVER, LOW IRIDESCENT SILVER FINISH AND BLACK REVEAL. EXISTING. | 3 | T8 3500 ° K | 32 | HIGH FREQ. ELECTRONIC | 101 | CEILING RECESSED | |
| | 2'x2' FLUORESCENT PARABOLIC TROFFER WITH 3" DEEP, 9 CELL LOUVER, LOW IRIDESCENT SILVER FINISH AND BLACK REVEAL. MATCH EXISTING. | 2 | T8 3500 ° K | 32 | HIGH FREQ. ELECTRONIC | 67 | CEILING RECESSED | |
| | PENDANT LUMINAIRE, SELECTED BY OWNER, PROVIDED BY CONTRACTOR. | - | - - | 1600 MAX | | 1600 MAX | CEILING SUSPENDED | |
| | DUAL FACE THERMOPLASTIC EXIT SIGN/LIGHT LITHONIA "LQMS" SERIES. PROVIDE FIXTURE WITH 90 MINUTE BATTERY BACK UP. | _ | LED | _ | <u>-</u> | - | UNIVERSAL | |
| \bigotimes | SINGLE FACE THERMOPLASTIC EXIT SIGN/LIGHT LITHONIA "LQMS" SERIES. PROVIDE FIXTURE WITH 90 MINUTE BATTERY BACK UP. | - | LED | _ | - - | - | UNIVERSAL | |
| 4 | THERMOPLASTIC EMERGENCY BATTERY PACK LITHONIA "ELM2" SERIES. | 2 | HALOGEN | 12 | - - | 25 | _ | |
| | | | | | | | | |

NOTES: A. VERIFY CEILING TYPES PRIOR TO ORDERING FIXTURES.

- B. PROVIDE ALL FLUORESCENT FIXTURES THAT UTILIZE DOUBLE-ENDED LAMPS AND CONTAIN BALLAST'S WITH A BUILT-IN MEANS TO DISCONNECT THE BALLAST
- FROM THE SOURCE OF SUPPLY. C. VERIFY FINISH WITH ARCHITECT PRIOR TO PURCHASING.
- D. FIXTURE SHALL COMPLY WITH 2011 NEC-410.130(G) DISCONNECTING MEANS FOR BALLAST.

ISSUED FOR PERMIT ISSUED FOR CONSTRUCTION KAMM CONSULTING PROJECT #: 2016-0501 PROJECT MANAGER: NICK RODRIGUEZ

> 1407 West Newport Center Drive Deerfield Beach, Florida 33442 Phone 954.949.2200 Fax 954.949.2201 engineering@kammconsulting.com

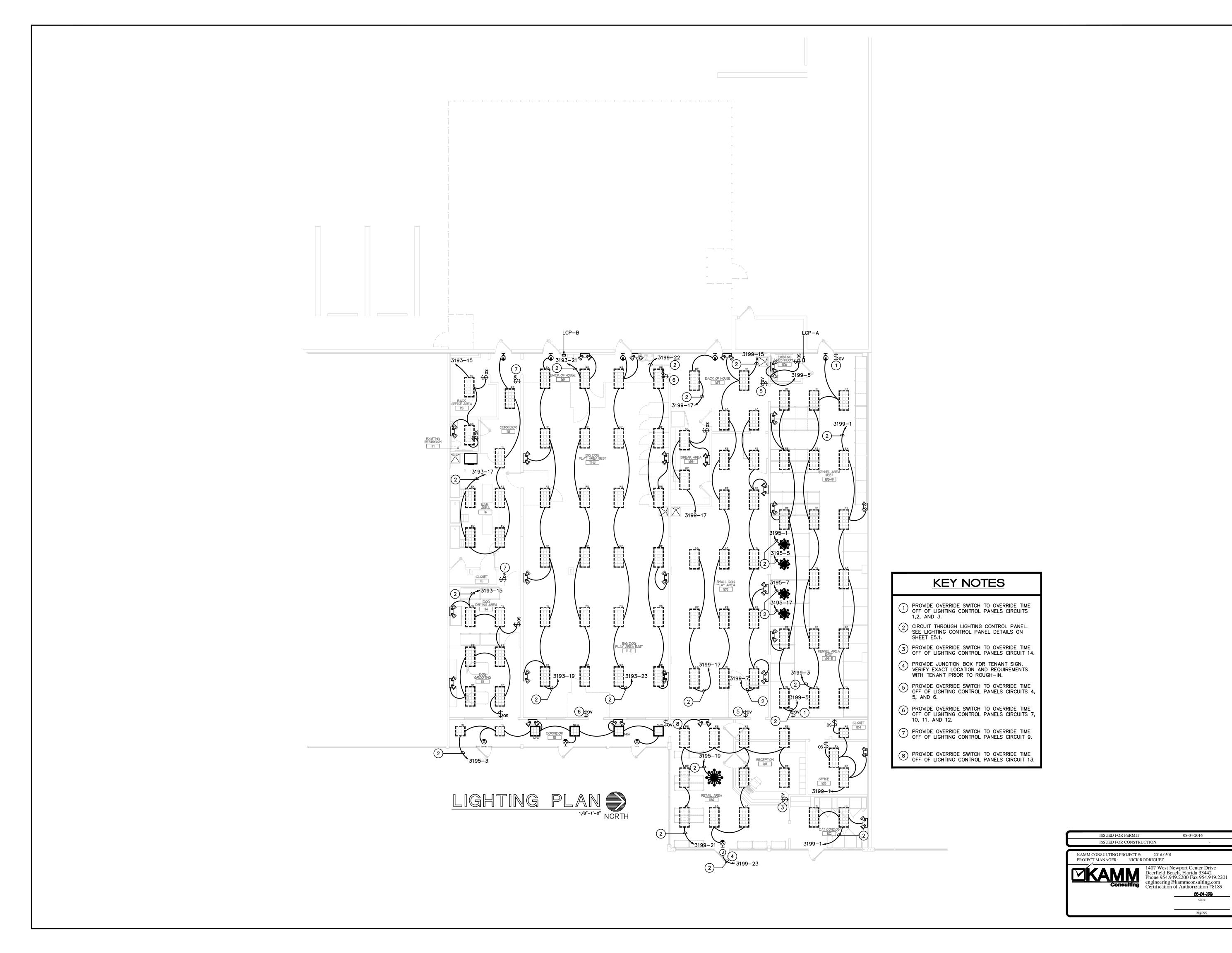
> > signed

MY O.T.T. A.P.C. ARCHITECT'S 4 8 0 0 0 14 8 8 8 L DRAWINGS AND WRITTEN MATERIA PEARING HEREIN CONSTITUTE ORIGINAL AN MAY NOT BE USED, DUPLICATED OR DISCLOS IN ANY FORM WITHOUT THE EXPRESSI WRITTEN CONSENT OF THE ARCHITE

> DRAWN BY: CHECKED BY: NO: DATE: ISSUED FOR: <u>05202016</u> PRELIMINARY REVIEW <u>08.042016</u> <u>PERMIT / BIDDING</u>

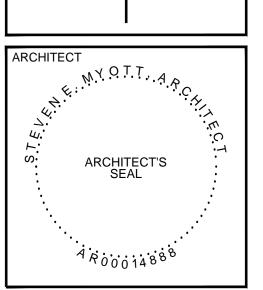
PROJECT NO:

ELECTRICAL NOTES





TERIOR RENOVATION -



ALL DRAWINGS AND WRITTEN MATERIA
APPEARING HEREIN CONSTITUTE ORIGINAL AN
UNPUBLISHED WORK OF THE ARCHITECT AN
MAY NOT BE USED, DUPLICATED OR DISCLOSE
IN ANY FORM WITHOUT THE EXPRESSE
WRITTEN CONSENT OF THE ARCHITEC

PROJECT NO: DRAWN BY: CHECKED BY:

 NO:
 DATE:
 ISSUED FOR:

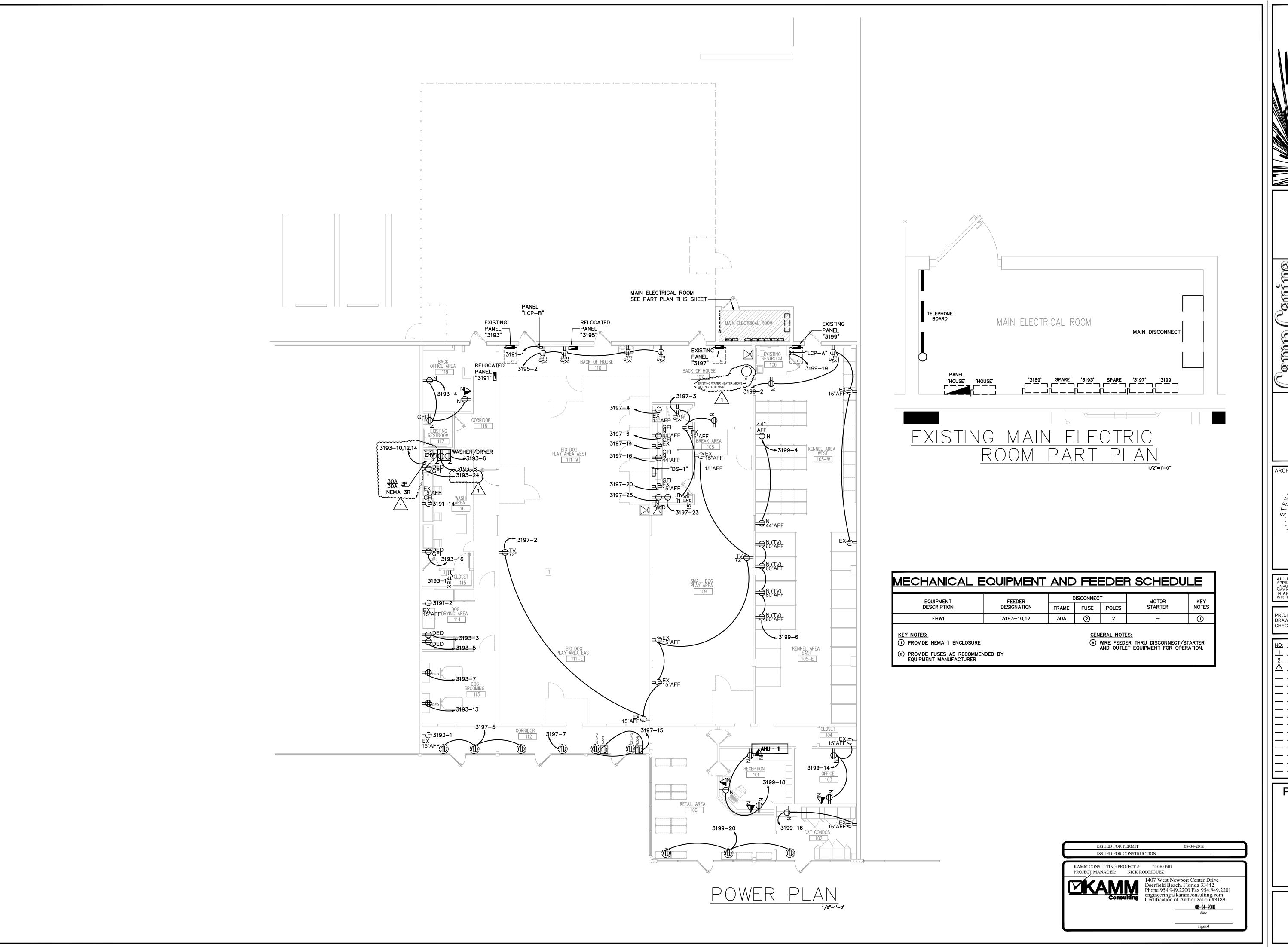
 I
 0520206
 PRELIMINARY REVIEW

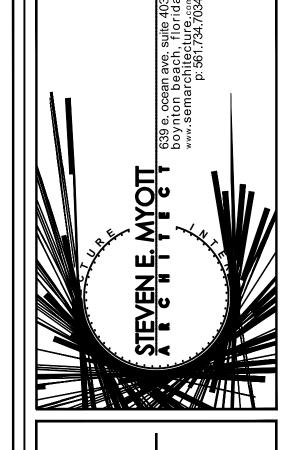
 2
 08.04206
 PERMIT / BIDDING:

LIGHTING PLAN

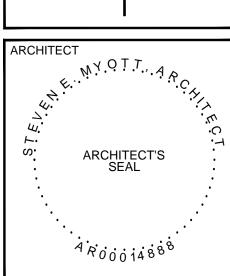
E2.1

PRINTED ON: 8-4-2





- INTERIOR RENOVATION PENN DUTCH PLAZA
3191 SR7



ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND JNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE USED, DUPLICATED OR DISCLOSED N ANY FORM WITHOUT THE EXPRESSED

PROJECT NO: 16.0 DRAWN BY: CHECKED BY:

NO: DATE: ISSUED FOR:

1 05.20.2016 PRELIMINARY REVIEW

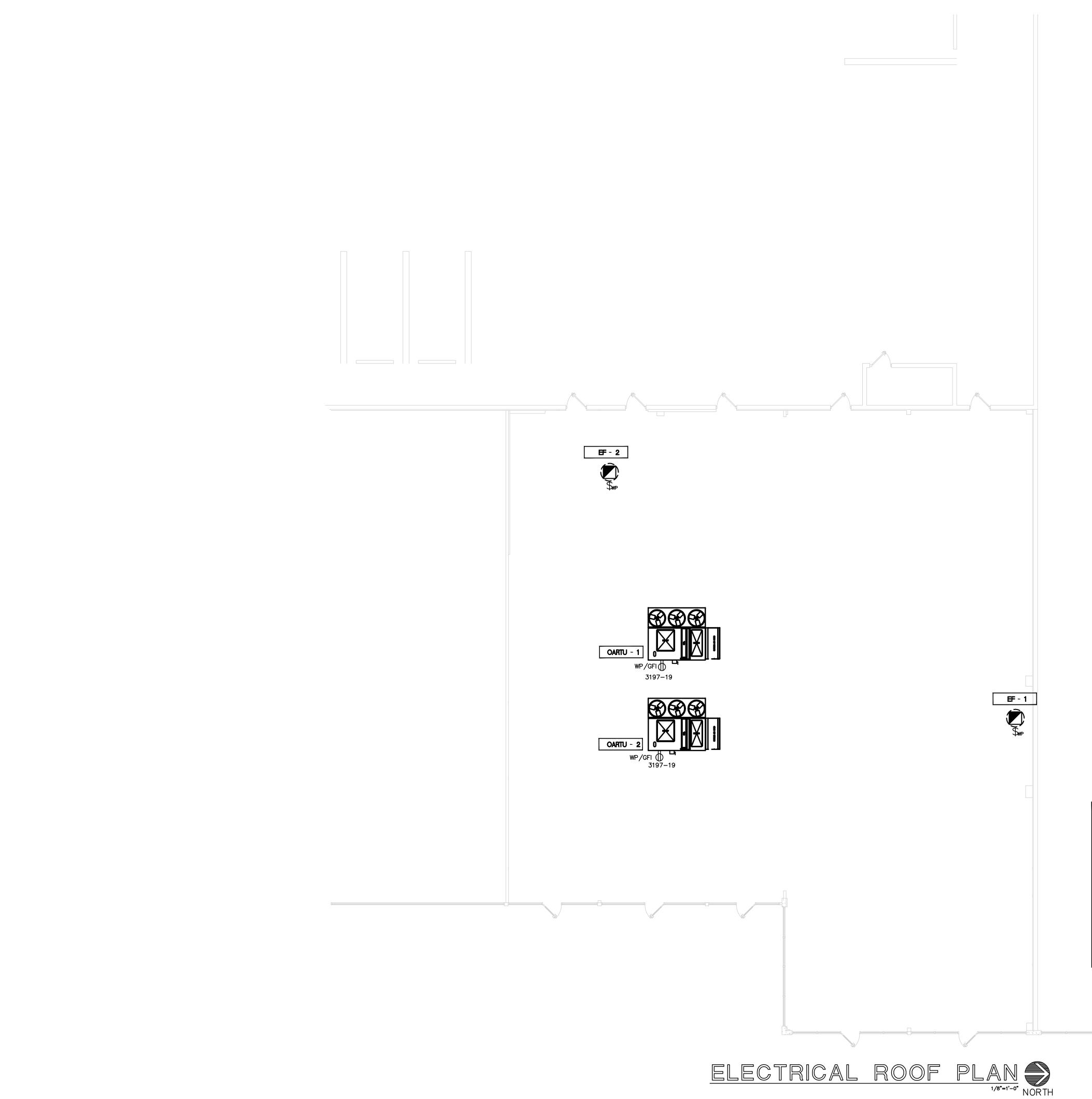
2 08.04.2016 PERMIT / BIDDING

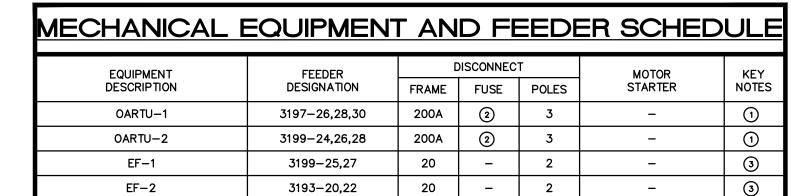
△ 08.09.2016 COORDINATION

POWER PLAN

E3.1

Printed on: 8–4–2016





KEY NOTES: ① PROVIDE NEMA 3R ENCLOSURE

2 PROVIDE FUSES AS RECOMMENDED BY EQUIPMENT MANUFACTURER 3 PROVIDE 20A/2P TOGGLE SWITCH IN WEATHER-PROOF ENCLOSURE FOR DISCONNECT. **GENERAL NOTES:**

(A) WIRE FEEDER THRU DISCONNECT/STARTER AND OUTLET EQUIPMENT FOR OPERATION.

ISSUED FOR PERMIT ISSUED FOR CONSTRUCTION

KAMM CONSULTING PROJECT #: 2016-0501 PROJECT MANAGER: NICK RODRIGUEZ 1407 West Newport Center Drive Deerfield Beach, Florida 33442 Phone 954.949.2200 Fax 954.949.2201 engineering@kammconsulting.com Certification of Authorization #8189

ELECTRICAL

ROOF PLAN

ARCHITECT'S SEAL

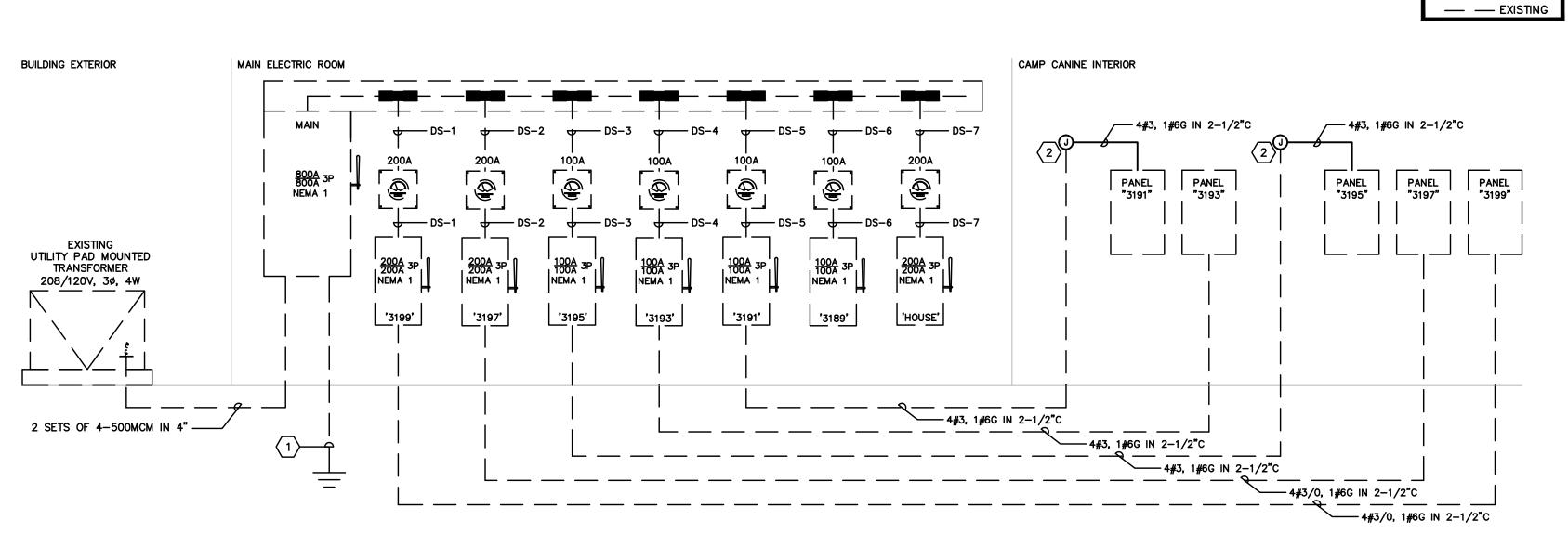
^À RO0014888

 NO:
 DATE:
 ISSUED FOR:

 1
 05202016
 PRELIMINARY REVIEW

 2
 08.042016
 PERMIT / BIDDING

PROJECT NO: DRAWN BY: CHECKED BY:



ELECTRICAL ONE-LINE DIAGRAM N.T.S. ONE-LINE KEY NOTES

EXISTING BUILDING GROUNDING ELECTRODE SYSTEM.

 PROVIDE JUNCTION BOX WITH POLARIS TAPS ABOVE CEILING, INTERCEPT AND EXTEND EXISTING CONDUCTORS TO NEW PANEL LOCATION AND CONNECT FOR OPERATION.

4 REMOVE EXISTING SPARE BREAKER, PROVIDE NEW CIRCUIT BREAKER AS INDICATED, INSTALL

IN SPACE IN PANEL AND CONNECT NEW BRANCH CIRCUIT FOR OPERATION.

LEGEND

----- NEW

MAIN LIGHTING CONTROL PANEL SCHEDULE PANEL SCHEDULE PANEL MFG LIGHTING CONTROL & DESIGN PANEL SIZE LC&D BLUE BOX MODEL "GR1408 LT" SERIES PANEL NAME LCP-A LOCATION BACK OF HOUSE LOAD CIRCUITS CIRCUIT NOTES TYPE PANEL NCL 1 LIGHTING KENNEL, CAT CONDOS NCL 2 LIGHTING KENNEL 3 LIGHTING KENNEL RECEPTIONIST NCL NCL 3199 4 LIGHTING STORAGE, DOG PLAY RETAIL 5 LIGHTING STORAGE, DOG PLAY RETAIL NCL 3199 6 LIGHTING STORAGE, DOG PLAY RETAIL NCL 3199 7 LIGHTING DOG PLAY NCL 3199 NCL 3199 8 TENANT SIGN 23

| | SLE THR STING | OW, FUSIB | LE SAFETY SWI | TCH | | | | | V | DLTAGE: 2 | 08/120V, | 3ø, 4 WIRI |
|-------------|------------------|------------|---------------|------------------------|-------|-------------------|-----------|--------------------------|------|--------------|----------|------------|
| FRAME | TRIP | POLE | | | | | | | A | C SYMM: 1 | 00,000 | |
| 800 | 800 | 3 | | | | | | | | | | |
| | | | | | | | <u>Di</u> | STRIBUTION SECTION | | | | |
| DESIGNATION | DI | ESCRIPTION | AMPERE | METER | | SAFETY YPE "HD | Y SWITCH | FEEDER | | E B PHASE | | NOTES |
| | | | RATING | VOLTAGE | FRAME | FUSE | POLES | | KVA | KVA | KVA | |
| DS-1 | | '3199' | 200 | 208/120 VOLT 3ø, 4W | 200 | 200 | 3 | 4#3/0, 1#2/0G IN 2-1/2°C | 16.1 | 17.3 | 16.1 | _ |
| DS-2 | PANEL | '3197' | 200 | 208/120 VOLT 3ø, 4W | 200 | 200 | 3 | 4#3/0, 1#2/0G IN 2-1/2°C | 15.9 | 16.8 | 18.4 | _ |
| DS-3 | PANEL | '3195' | 100 | 208/120 VOLT 3ø, 4W | 100 | 100 | 3 | 4#3, 1#3G IN 2-1/2"C | 7.3 | 2.9 | 3.2 | _ |
| DS-4 | PANEL | '3193' | 100 | 208/120 VOLT 3ø, 4W | 100 | 100 | 3 | 4#3, 1#3G IN 2-1/2"C | 10.1 | 9.2 | 9.8 | _ |
| DS-5 | PANEL | '3191' | 100 | 208/120 VOLT 3ø, 4W | 100 | 100 | 3 | 4#3, 1#3G IN 2-1/2"C | 9.4 | 9.6 | 9.6 | _ |
| DS-6 | PANEL | '3189' | 100 | 208/120 VOLT 3ø, 4W | 100 | 100 | 3 | EXISTING | 6.0 | 6.0 | 6.0 | _ |
| DS-7 | PANEL | 'HOUSE' | 200 | 208/120 VOLT 3ø, 4W | 200 | 200 | 3 | EXISTING | 12.0 | 12.0 | 12.0 | _ |
| | | | | | | | | | | | | |
| | | | | | | | | KVA PER PHASE | 82.8 | 81.2 | 80.9 | |
| | | | | | | | | AMPS PER PHASE TOTAL KVA | 690 | 677 244.9 | 674 | |

SATELLITE LIGHTING CONTROL PANEL SCHEDULE PANEL SCHEDULE PANEL MFG LIGHTING CONTROL & DESIGN PANEL SIZE LC&D BLUE BOX MODEL "GR1408 LT" SERIES PANEL NAME LCP-B LOCATION BACK OF HOUSE LOAD CIRCUITS CIRCUIT PANEL 9 LIGHTING - WASH AREA NCL NCL 10 LIGHTING - WASH AREA 3193 11 LIGHTING - WASH AREA 21 12 LIGHTING - DOG PLAY AREA NCL 3193 13 LIGHTING - CORRIDOR NCL 14 LIGHTING - RETAIL/RECEPTION NCL 3199 15 SPARE NCL NCL 16 SPARE

| | | 3ø, 4W | | | | " " " | • | | | | - |
|--------------|-----|------------------------|-----|-----|---|--------------------------|-----------|----------------------|--------------|----------|--|
| ANEL '3189' | 100 | 208/120 VOLT 3ø, 4W | 100 | 100 | 3 | EXISTING | | 6.0 | 6.0 | 6.0 | _ |
| ANEL 'HOUSE' | 200 | 208/120 VOLT 3ø, 4W | 200 | 200 | 3 | EXISTING | | 12.0 | 12.0 | 12.0 | - |
| | | | | | | KVA PER PHASE | | 82.8 | 81.2 | 80.9 | |
| | | | | | | AMPS PER PHASE TOTAL KVA | | 690 | 677 244.9 | 674 | 1 |
| | | | | | | | | | | | • |
| | | | | | | | | | | | |
| | | | | | | _ | | | | | |
| | | | | | | | NOTES F | OR BR | ANCH C | | PANELS |
| | | | | | | - | | | | | |
| | | | | | | | 1 EXISTIN | NG BRANC ER TO RE | CH CIRCUIT | Γ AND CI | RCUIT |
| | | | | | | | | | | | ID CONNECT INDICATED. |
| | | | | | | | INSTAL | L IN EXIS | TING SPA | CE IN PA | S INDICATED, NEL AND OR OPERATION. |

| SCHEDULE | Ξ C | F | BR | AN | C | H CII | RCU | T PA | NE | L ": | 3199 |)"(E | XISTING) | | |
|--|---|------|-------|------------|------|------------|------------|------------|---------|-------------|-----------|----------|-----------------------|----|--|
| MAIN: 200 AMP MAIN LUGS SPEC: EXISTING | S ONLY | | | | | | | | | | TAGE: | · | 20V, 3ø, 4 WIRE | | |
| MOUNTING: SURFACE DESCRIPTION | WRE | GND. | COND. | TRIP | CKT. | A PHASE | | C PHASE | CKT. TR | | | WIRE | GN 10,000 DESCRIPTION | | |
| | TG. KENNEL,CAT CONDOS (2) 2#12 1#12 3/4" 20 1 1.3 0.8 — 2 20 3/4" 1#12 2#12 GENERAL REC. KENNEL (2) | | | | | | | | | | | | | | |
| | | | | | 1 | 1.3 0.8 | 43104 | | | ——— | | | | | |
| LTG. KENNEL (2 | 1 " | | 3/4" | 20 | 3 | | 1.3 0.4 | | 4 20 | | | 2#12 | GENERAL REC. KENNEL | (2 | |
| LTG. KENNEL, RECIONIST (2) | | 1#12 | 3/4" | 20 | 5 | | | 1.3 0.8 | 6 20 | | 1#12 | 2#12 | GENERAL REC. KENNEL | (2 | |
| LTG. STORAGE,DOG P,RETAIL (2) | 2#12 | 1#12 | 3/4" | 20 | | 1.3 – | | | 8 60 | / | | | | | |
| | | | | 30/ | 9 | | - - | | 10 | - | - | - | SPARE | | |
| SPARE | _ | _ | _ | /_ | 11 | | | _ | 12 / 3 | | | | | | |
| | | | _ /.* | / 3 | 13 | - 0.6 | | | 14 20 | | · // · – | 2#12 | REC. OFFICE | (2 | |
| LTG. STORAGE,DOG P,RETAIL (2) | | 1#12 | 3/4" | 20 | 15 | | 1.3 0.4 | | 16 20 | | | 2#12 | REC. CAT CONDOS | (2 | |
| LTG. STORAGE, DOG P, RETAIL (2) | | 1#12 | 3/4" | 20 | 17 | | | 1.3 0.6 | 18 20 | | | 2#12 | REC. RECIONIST | (2 | |
| 'LCP-A' (2) | | 1#12 | 3/4" | 20 | 19 | 0.2 0.6 | | | 20 20 | | // | 2#12 | REC. STORE FRONT | (2 | |
| LTG. RETAIL/RECEPTION (2) | 2#12 | 1#12 | 3/4" | 20 | 21 | | 1.3 1.3 | | 22 _2 | <u> </u> | | 2#12 | LIG_DOG_PLAY | (2 | |
| TENANT SIGN (2) | 2#12 | 1#12 | 3/4" | 20 | 23 | | | 1.6 10.5 | | 5/ 1-1/ | '2" 1#6 | 3#1 | | ઉ | |
| EF-1 (4 | 2#12 | 1#12 | 3/4" | 29/ | 25 | 0.8 10.5 | | | 26(/ | | | | OARTU-2 | | |
| (• | | | | $\sqrt{2}$ | 27 | | 0.8 10.5 | | 28(/3 | | | 1 | <u> </u> | | |
| NOTE: MULTI-WIRE BRANCH CIRCL | | | | | J OF | 16.1 | 17.3 | 16.1 | KVA PE | PHAS | | | | | |
| THE SINGLE POLE BRANCH CIRCUI | | | | | | 134 | 144 | 134 | AMPS P | ER PHA | SE | | /1\ | | |
| MULTI-POLE BREAKERS FOR ALL | | | | | | | 49.5 | | TOTAL I | (VA | | | _ ' \ | | |
| REQUIRED BY THE NATIONAL ELECTOR OF POLICE FOR ALL SINGLE POLICE | | | | | | | | | | · | | _ | | | |

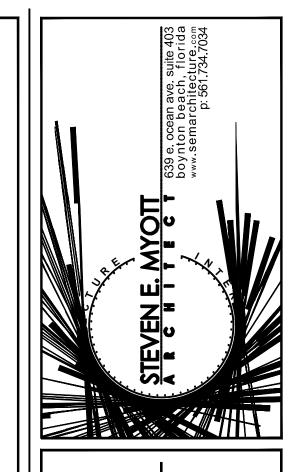
| AIN: 200 AMP MAIN LUGS ONLY VOLTAGE: 208/120V, 3ø, 4 WIRE | | | | | | | | | | | | | | | OV 74 4 MIDE |
|---|-------------|------|------|------|-----|------|--------------|------------|--------------|-------|-----------|--------|------|---------|-----------------------------|
| SPEC: EXISTING | LUGS | UNLT | | | | | | | | | | VULTA | IGE: | 200/12 | UV, 39, 4 WIRE |
| MOUNTING: SURFACE | | | | | | | | | | | | AIC S | YMM: | EXISTIN | G 10,000 |
| DESCRIPTION | KVA KVA KVA | | | | | | | | | | | | | | |
| SPARE | | - | _ | _ | 20 | 1 | - 1.2 | | | 2 | 20 | 3/4" | 1#12 | 2#12 | REC. DOG PLAY AREA (|
| GEN.REC. KITCHEN AREA | | 2#12 | 1#12 | 3/4" | 20 | 3 | | 0.8 1.0 | | 4 | 20 | 3/4" | 1#12 | 2#12 | REFRIGERATOR KITCHEN AREA (|
| REC. STORE FRONT | (2) | 2#12 | 1#12 | 3/4" | 20 | 5 | | | 0.6 1.6 | 6 | 20 | 3/4" | 1#12 | 2#12 | REC. O.C. |
| REC. STORE FRONT | 2 | 2#12 | 1#12 | 3/4" | 20 | 7 | 0.6 – | | | 8 | 60/ | | | | |
| | | | | | 40/ | 9 | | | | 10 | | - | _ | – | SPARE |
| SPARE | | - | _ | - | | 11 | | | | 12 | / 3 | | | | |
| | | | | | / 3 | 13 | – 1.6 | | | 14 | 20 | 3/4" | 1#12 | 2#12 | REC. O.C. |
| FLOOR REC. | (2) | 2#12 | 1#12 | 3/4" | 20 | 15 | | 0.4 1.6 | | 16 | 20 | 3/4" | 1#12 | 2#12 | REC. O.C. |
| SPARE | | - | _ | - | 20 | 17 | | | – 1.6 | 18 | 20 | 3/4" | 1#12 | 2#12 | REC. O.C. |
| ROOFTOP RECEPTACLES | (2) | 2#12 | 1#12 | 3/4" | 20 | 19 | 0.4 - | | | 20 | 30 | - | _ | _ | SPARE |
| SPARE | | - | _ | _ | 20 | 21 | | _ _ | | 22 | 30 | _ | _ | | SPARE |
| WASHER | | 2#12 | 1#12 | 3/4" | 20 | 23 | | | 1.6 - | 24 | <u>~~</u> | | ~~ | حقم | SPACE |
| DRYER | (2) | 2#12 | 1#12 | 3/4" | 20 | 25 | 1.6 10.5 | | | 26(| 125/ | 1-1/2" | 1#6 | 3#1 |) (|
| WATER HEATER | વ | - | _ | - | 30/ | 27 | | 2.5 10.5 | | 28(| | | | | OARTU-1) |
| | | | | | /2 | 29 | | | 2.5 10.5 | | | ليبيا | | | |
| NOTE: MULTI-WIRE BRANCH | | | | | | U OF | 15.9 | 16.8 | 18.4 | | PER | | | | |
| THE SINGLE POLE BRANCH C MULTI-POLE BREAKERS FOR | | | | | _ | | 133 | 140 | 153 | I AMP | 'S PER | PHASE | | l | /1\ |

| <u>SCHEDULI</u> | <u> </u> |)F | BR. | <u> </u> | C | H CI | <u>RCU</u> | T PA | <u> </u> | <u>EL</u> | . "3 | <u> 195</u> | 5"(E | XIS | TING) |
|--|----------|----------|----------|----------|------|----------------|----------------|----------------|----------|-----------|----------|-------------|----------|---------|-------------|
| MAIN: 150 AMP MAIN LUGS SPEC: EXISTING MOUNTING: SURFACE | S ONLY | | | | | | | | | | VOLTA | | • | 0V, 3ø, | |
| DESCRIPTION | WIRE | GND. | COND. | TRIP | скт. | A PHASE KVA | B PHASE KVA | C PHASE KVA | скт. | TRIP | COND. | GND. | WIRE | | DESCRIPTION |
| CHANDELIER KENNEL (2 | 2#12 | 1#12 | 3/4" | 20 | 1 | 1.6 - | | | 2 | 20 | _ | _ | _ | SPARE | |
| LTG. CORRIDOR (3 | 2#12 | 1#12 | 3/4" | 20 | 3 | | 0.4 - | | 4 | 20 | _ | _ | | SPARE | |
| CHANDELIER KENNEL (2 | 2#12 | 1#12 | 3/4" | 20 | 5 | | | 1.6 - | 6 | 20 | _ | _ | | SPARE | |
| CHANDELIER KENNEL (2 | ** | 1#12 | 3/4" | 20 | 7 | 1.6 - | | | 8 | 40/ | - | _ | | SPARE | |
| SPARE | T ''- | - | - | 50/ | 9 | | - - | | 10 | /2 | | | | | |
| | | | | /2 | 11 | | | - - | 12 | 20 | _ | _ | | SPARE | |
| WATER HEATER (1 | 2#8 | 1#10 | 3/4" | 30/ | 13 | 2.5 - | | | 14 | 20 | _ | _ | | SPARE | |
| | 1 " | " | ' | /2 | 15 | | 2.5 - | | 16 | 20 | _ | _ | | SPARE | |
| CHANDELIER KENNEL (2 | 2#12 | 1#12 | 3/4" | 20 | 17 | | | 1.6 - | 18 | 20 | _ | _ | | SPARE | |
| CHANDELIER KENNEL (2 | ** | | 3/4" | 30 | 19 | 1.6 - | | | 20 | 20 | _ | _ | | SPARE | |
| SPARE | 1 – | | | 30 | 21 | | - - | | 22 | 35/ | _ | _ | | SPARE | |
| SPARE | _ | _ | _ | 30 | 23 | | | - - | 24 | /2 | | | | | |
| NOTE: MULTI-WRE BRANCH CIRC | UITS AR | E ACCE | PTABLE | IN LIEU | J OF | 7.3 | 2.9 | 3.2 | KVA | PER F | HASE | | İ | • | |
| THE SINGLE POLE BRANCH CIRCU | | | | | | 61 | 24 | 27 | AMF | S PER | PHASE | | 1 | | |
| MULTI-POLE BREAKERS FOR ALL | | | | | | | 13.4 | • | тот | AL KVA | <u> </u> | | 1 | | |
| REQUIRED BY THE NATIONAL ELECTRICAL FOR ALL SINGLE POLE | | | | | | | | | | | | | | | |

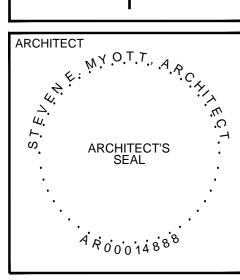
| SCHEDULE | E C | F | BR | AN | C | H CII | RCUI | T PA | /N | EL | . "3 | 193 | 3"(E | XISTING) | |
|---|--|------|-------|------|---------|----------------|----------------|----------------|------|-------|-------|------|------|---|------------|
| MAIN: 100 AMP MAIN LUGS SPEC: EXISTING MOUNTING: SURFACE | ONLY | | | | | | | | | | | | • | OV, 3ø, 4 WIRE | |
| DESCRIPTION | WIRE | GND. | COND. | TRIP | CKT. | A PHASE KVA | B PHASE KVA | C PHASE KVA | скт. | TRIP | COND. | GND. | WIRE | DESCRIPTION | |
| GENERAL REC. (2) | 2#12 | 1#12 | 3/4" | 20 | 1 | 0.4 0.8 | | | 2 | 20 | 3/4" | 1#12 | 2#12 | REC. STORAGE | (2 |
| DEDICATED REC. DRY AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 3 | | 1.6 0.6 | | 4 | 20 | 3/4" | 1#12 | 2#12 | REC. OFFICE | (2 |
| DEDICATED REC. DRY AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 5 | | | 1.6 1.6 | 6 | 20 | 3/4" | 1#12 | 2#12 | WASHER | (2 |
| DEDICATED REC. GROOM AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 7 | 1.6 1.6 | | | 8 | 20 | 3/4" | 1#12 | 2#12 | DRYER | (2 |
| SPARE | _ | _ | _ | 69/ | 9 | | - 2.0 | | 10\$ | 30/ | 3/4" | 1#10 | 3#10 | EWH1) | (4 |
| | | | | /2 | 11 | | | - 2.0 | | _ | | | | l 3/ | 1\ |
| DEDICATED REC. GROOM AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 13 | 1.6 2.0 | | | 14{ | /3 | | | l | <i>ــــــــــــــــــــــــــــــــــــ</i> | <u> </u> |
| LTG. GROOMING/DRYING AREA (3) | 2#12 | 1#12 | 3/4" | 20 | 15 | | 1.3 1.6 | | 16 | 20 | 3/4" | 1#12 | 2#12 | DEDICATED REC. WASH | |
| LTG. WASH AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 17 | | | 1.3 0.4 | 18 | 20 | 3/4" | 1#12 | 2#12 | REC. WASH AREA | (2 |
| LTG. WASH AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 19 | 1.3 0.8 | ŀ | | 20 | 20/ | 3/4" | 1#12 | 2#12 | EF-2 | (3 |
| LTG. WASH AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 21 | | 1.3 0.8 | | 22 | /2 | | | | | |
| LTG. DOG PLAY AREA (2) | 2#12 | 1#12 | 3/4" | 20 | 23 | | | 1.3 1.6 | 24 | 20 | 3/4" | 1#12 | 2#12 | DEDICATED REC. WASH | AREA (2 |
| | | | | |) OF | 10.1 | 9.2 | 9.8 | KVA | PER F | PHASE | | | | |
| | 100 AMP MAIN LUGS ONLY EXISTING NG: SURFACE AIC SYMM: 10,000 | | | | | | | | | | | | | | |
| DESCRIPTION WIRE GND. COND. TRIP CKT. A PHASE KVA | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | |

| <u>SCH</u> | EDULI | E |)F | BR | AN | | H CI | RCU | IT P | 41 | 1EL | _ "3 | 3191 | " (E | XISTING) | |
|---|---------------|--------------|---------|--------|---------|--------------|----------------|----------------|------------------|----------|---------|-------|------|------------------|----------------|----|
| MAIN: 150 A SPEC: EXIST MOUNTING: SURFA | | ONLY | | | | | | | | | | VOLTA | | 208/12 10,000 | OV, 3ø, 4 WIRE | |
| DESCRIP | TION | WIRE | GND. | COND. | TRIP | скт. | A PHASE KVA | B PHASE KVA | C PHASE KVA | скт. | TRIP | COND. | GND. | WIRE | DESCRIPTION | |
| 'LCP-B' | (2) | 2#12 | 1#12 | 3/4" | 20 | 1 | 0.2 1.6 | | | 2 | 20 | 3/4" | 1#12 | 2#12 | DRYER | (3 |
| SPARE | | ı | - | - | 20 | 3 | | | | 4 | 20 | - | _ | _ | SPARE | |
| SPARE | | ı | _ | - | 50 | 5 | | | | 6 | 20 | - | _ | - | SPARE | |
| CU | • | 3 # 8 | 1#10 | 3/4" | 40/3 | 7 9 11 | 2.4 3.6 | 2.4 3.6 | | 10 12 | 60/ | 1" | 1#10 | 3#6 | AHU | Œ |
| SPACE | | _ | _ | _ | _ | 13 | - 1.6 | | | 14 | 20 | 3/4" | 1#12 | 2#12 | DRYER | (3 |
| SPACE | | _ | _ | _ | _ | 15 | | - - | | 16 | 20 | | _ | - "- | SPARE | |
| SPACE | | _ | _ | _ | _ | 17 | | | - - | 18 | 20 | _ | _ | - | SPARE | |
| SPARE | | - | _ | - | 20 | 19 | | | l —— | 20 | _ | _ | _ | - | SPACE | |
| SPARE | | - | _ | _ | 20 | 21 | | - 3.6 | | 22 | 60/ | 1" | 1#10 | 2#6 | WATER HEATER | (1 |
| SPARE | | _ | _ | _ | 20 | 23 | l —— | | - 3.6 | 24 | /2 | | " | - | | |
| NOTE: MULTI-WIRE | BRANCH CIRCU | JITS AR | E ACCE | PTABLE | IN LIE | J OF | 9.4 | 9.6 | 9.6 | KV/ | PER F | PHASE | | | - | |
| THE SINGLE POLE | | | | | _ | | 78 | 80 | 80 | AMI | PS PER | PHASE | |] | | |
| MULTI-POLE BREA REQUIRED BY THE NEUTRAL FOR ALL | NATIONAL ELEC | TRIC C | ODE. PF | ROVIDE | DEDICA" | ΓED | | 28.6 | | T01 | TAL KVA | \ | |] | | |

| ISSUED FOR PERMIT ISSUED FOR CONSTRU | 08-04-2016 UCTION - |
|---|---|
| KAMM CONSULTING PROJECT #: PROJECT MANAGER: NICK R | 2016-0501 ODRIGUEZ |
| EXAMM Consulting | 1407 West Newport Center Drive Deerfield Beach, Florida 33442 Phone 954.949.2200 Fax 954.949.2201 engineering@kammconsulting.com Certification of Authorization #8189 |
| | |
| | signed |



- INTERIOR RENOVATION PENN DUTCH PLAZA
3191 SR7



ALL DRAWINGS AND WRITTEN MATERIA
APPEARING HEREIN CONSTITUTE ORIGINAL AI
UNPUBLISHED WORK OF THE ARCHITECT AI
MAY NOT BE USED, DUPLICATED OR DISCLOSI
IN ANY FORM WITHOUT THE EXPRESSE
WRITTEN CONSENT OF THE ARCHITEC

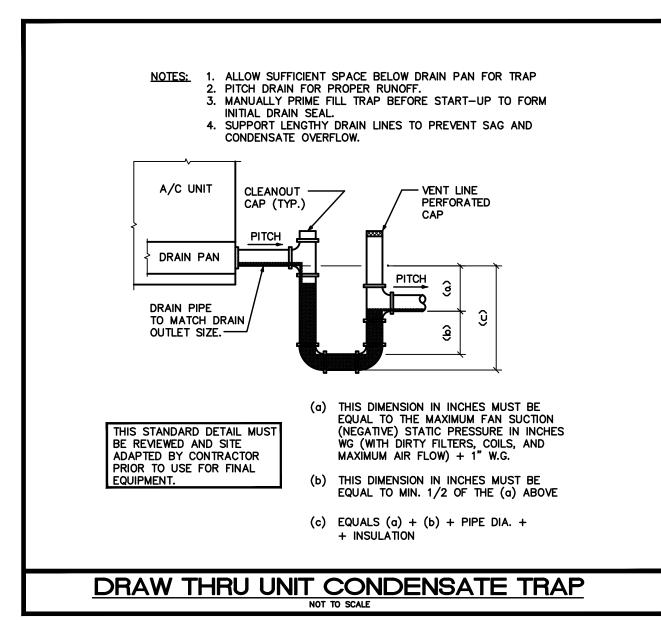
PROJECT NO: DRAWN BY: CHECKED BY:

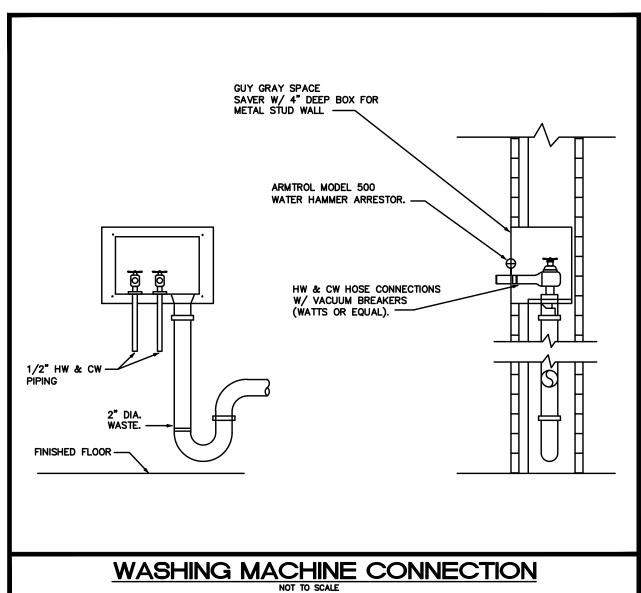
| NO: | DATE: | ISSUED FOR: |
|------------|------------|--------------------|
| 1_1 | 05.20.2016 | PRELIMINARY REVIEW |
| 2 | 08.04.2016 | PERMIT / BIDDING |
| △ | 08.09.2016 | COORDINATION |
| | | |
| | | |
| — | | |
| — | | |
| | | |
| - | | |
| - | | |
| - | | |
| - | | |
| - | | |
| - | | |
| | | • |

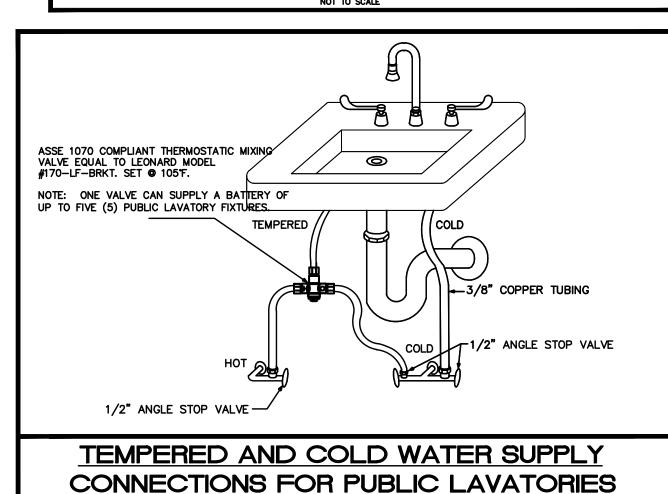
ELECTRICAL RISER DIAGRAM

E5.1

DDINTED ON. 9 4

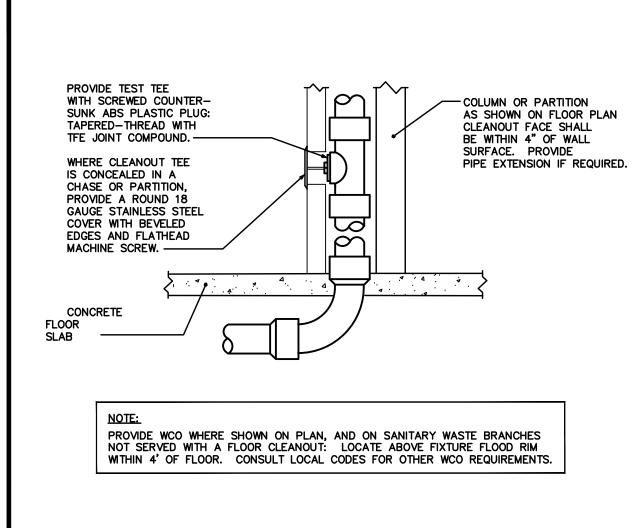






NOT TO SCALE

PLUMBING LEGEND CLEAN OUT SANITARY SEWER PIPING FLOOR DRAIN S VENT PIPING DOMESTIC COLD WATER DOMESTIC COLD WATER PIPING DOMESTIC HOT WATER HOT WATER PIPING (110°) ← CD ← CONDENSATE PIPING S— CA—S COMPRESSED AIR PIPING GATE VALVE PIPE RISE UP WATER HAMMER ARRESTER (PDI No.) PIPE DOWN OR DROP FLOOR DRAIN CAPPED END OF PIPE P-TRAP POINT OF CONNECTION



| PROVIDE TEST TEE WITH SCREWED COUNTER— SUNK ABS PLASTIC PLUG: TAPERED—THREAD WITH THE JOINT COMPOUND. WHERE CLEANOUT TEE IS CONCEALED IN A CHASE OR PARTITION, PROVIDE A ROUND 18 GAUGE STAINLESS STEEL COVER WITH BEVELED EDGES AND FLATHEAD MACHINE SCREW. CONCRETE FLOOR SLAB |
|--|
| NOTE: PROVIDE WCO WHERE SHOWN ON PLAN, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT: LOCATE ABOVE FIXTURE FLOOD RIM WITHIN 4' OF FLOOR. CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS. |
| WALL CLEANOUT DETAIL NOT TO SCALE |

| TYPICAL PLUMBING FIXTURE CONNECTION SCHEDULE | | | | | | |
|--|--------------|------|------|----|----|--|
| TYPE | SOIL / WASTE | VENT | TRAP | cw | HW | REMARKS |
| 2" HUB DRAIN | 2* | 2" | 2" | _ | _ | PROVIDE 1/2" CW TRAP PRIMER CONNECTION. |
| 3" HUB DRAIN | 3" | 2** | 3" | _ | _ | PROVIDE 1/2" CW TRAP PRIMER CONNECTION. |
| COFFEE MAKER/WATER FILTER | _ | - | _ | ½" | _ | PROVIDE WITH VACUUM BREAKER. |
| ELECTRIC WATER COOLER | 2" | 2" | 1¼" | ½" | _ | _ |
| SINK | 2" | 2" | 1½" | ½" | ½" | 1.0 GPM AT 60 PSI MAXIMUM. |
| MOP SINK | 3" | 2" | 3" | ½" | ½" | PROVIDE HOSE THREAD FAUCET WITH INTEGRAL VACUUM BREAKER. |
| LAVATORY (PUBLIC) | 2" | 2" | 1¼" | ½" | ½" | 0.5 GPM AT 60 PSI MAXIMUM. (0.25 GALLON METERING CYCLE) |
| REFRIGERATOR | _ | - | _ | ½" | _ | PROVIDE WITH VACUUM BREAKER. |

NOTE: PLUMBING FIXTURE CONNECTION SCHEDULE IS SHOWN FOR CONVENIENCE ONLY. PLUMBING CONTRACTOR TO CONFIRM FINAL PLUMBING FIXTURE CONNECTION SIZES WITH PLUMBING FIXTURE MANUFACTURER'S REQUIREMENTS. ALL FIXTURES SHALL COMPLY WITH LOCAL WATER-USE EFFICIENCY REQUIREMENTS.

2" | INTEGRAL

2" | INTEGRAL |

2" INTEGRAL 34"

| CONDENSATE DRAIN PIPE SIZING | | |
|--|----------------------------------|--|
| HVAC EQUIPMENT CAPACITY | MINIMUM CONDENSATE PIPE DIAMETER | |
| UP TO 20 TONS OF REFRIGERATION | 1" | |
| OVER 21 TONS TO 40 TONS OF REFRIGERATION | 1-1/4" | |
| OVER 41 TONS TO 60 TONS OF REFRIGERATION | 1-1/2" | |
| OVER 61 TONS TO 100 TONS OF REFRIGERATION | 2" | |
| OVER 101 TONS TO 250 TONS OF REFRIGERATION | 3" | |
| OVER 251 TONS & LARGER OF REFRIGERATION | 4" | |
| | | |

WATER CLOSET (FLUSH VALVE)

WATER CLOSET (FLUSH TANK)

| HEAT TRAP (OMIT IF HEAT TRAP IS AN INTEGRAL PART OF HEATER)—— | | EXPANSION TANK. SIZED PER MANU- FACTURER | COLD WATER SUPPLY TO WATER HEATER |
|---|--------|---|---|
| HOT WATER TO FIXTURES AS SHOWN ON PLANS | | 150 PSI PF WITH TEST | 210°F TEMPERATURE AND RESSURE RELIEF VALVE LEVER SIZED WITH AGA/CG JRE STEAM RATING 10% OVE PUT |
| PROVIDE FULL PORT BALL SHUTOFF VALVES | | / / COPPER | E A HARD R RELIEF DISCHARGE |
| PROVIDE PIPE UNIONS, DIELECTRIC IF REQUIRED FOR DISSIMILAR METALS. | | LINE FU VALVE TO TER 6" ABO | JLL SIZE OF OUTLET RUN MINATE VE DRAIN PAN WITH |
| ATTACH STRAP W/ 3/8" LAG SCREWS INTO BLOCKING OR STUDS | 1/3H | T / FBC PL | LE AIR GAP PER UMBING 2007 N 504.6 (5). |
| 2" 16 GAGE STRAP AROUND HEATER | 2/3H / | DRAIN VAL | |
| THERMOSTAT AND PRESSURE REGULATOR FURNISHED WITH WATER HEATER. | | 1/2" PLYWO ABOVE MOR | OOD PLATFORM 'SINK ® 8'-0"AFF |
| DRAIN PAN WITH | | BLDG. | MOUNTING HEIGHT W/LOCAL OFFICIAL & ARCHITECT. |
| MINIMUM 2" HIGH SIDES ———— STUD WALL ———— | | | . B3066 CKET (TYP.2) DRAIN PAN, RUN OVERFLOV |
| 2× BLOCKING BETWEEN STUDS (TYP) | 2'-0"— | LINE TO AE | BOVE MOP SINK WITH AN AII |
| _ | | 3/8" LAG INTO BLOCI | SCREW (4 MIN.) KING OR STUDS |
| PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO ISOMETRIC RISER FOR PIPE SIZES. SET HEATER THERMOSTAT AT 120° F. | | | |

PLUMBING FIXTURE SCHEDULE

THERMOSTATIC MIXING VALVE NOT TO EXCEED 110 DEGREES. PROVIDE 0.5 GPM

SUPPLY PLUMBEREX MODEL# 4333 INSULATION KIT. MUST MEET A.D.A. CODE.

FLOOR DRAIN, SIOUX CHIEF 863 SERIES. PROVIDE TRAP PRIMER SIOUX CHIEF 695 SERIES.

WC1 3 FLOWISE ELONGATED TOILET HIGH EFFICIENCY (1.28 GPF). PROVIDE WHITE

COMFORT SEAT MODEL # C8033, OPEN FRONT WITH COVER.

DISC CARTRIDGE AND SIDE-SPRAY ACCESSORY.

ELECTRIC WATER HEATER, LOCHINVAR MODE

- ALL FIXTURES SHALL COMPLY WITH TABLE 604.4 OF FBC 2014.

SPECIFIED FAUCET AND PER ARCHITECTURAL FINISH SCHEDULE.

FIXTURES SHALL BE AS SHOWN OR EQUAL.

MSK1

WCO

GENERAL NOTES:

LOOSE KEY STOPS.

MODEL #BIM875QTSAB.

ADA LAVATORY, AMERICAN STANDARD, DECLYN WALL HUNG LAVATORY MODEL #0321.075.

WHITE W/ FAUCET, AMERICAN STANDARD COLONY MODEL 2175.207 WITH EBF-650, W BDT

WATER CLOSET, TANK TYPE BOWL, AMERICAN STANDARD 2832.128 FLOOR MOUNTED, CADET

KITCHEN SINK, JUST MODEL #SL-ADA-2122-A-GR, ADA-COMPLIANT, 6-1/2" DEEP SINGLE-BASIN,

LEDGE-BACK, SELF-RIMMING, 18-GAUGE TYPE 304 STAINLESS STEEL, WITH GRID STRAINER AND T&S

BRASS FAUCET MODEL #B-2730-WS, SINGLE-LEVER, 9" SWING SPOUT, 1.5 GPM AERATOR, CERAMIC

MOP SINK, STERN WILLIAMS MODEL #SBC-1700, TERRAZZO WITH RIM GUARDS & WALL GUARDS.

PROVIDE WITH T&S BRASS FAUCET MODEL #B-0674-RGH-00JJ, ROUGH CHROME WITH INTEGRAL

WALL CLEANOUT, MIFAB C1430-RD WITH BRONZE PLUG, STAINLESS STEEL COVER, AND SCREW.

GROOMING TABLE, SHOR-LINE CLASSIC GROOMING TABLE. SEE ARCHITECTURAL PLANS FOR DETAILS.

- ALL FIXTURE TRIM PACKAGES INCLUDING BUT NOT LIMITED TO TRAP, ANGLE STOP, FLUSH VALVE,

SUPPLY TUBES. AND CLEANOUT COVER PLATES SHALL BE OF THE SAME FINISH AS THE ABOVE

- ALL FIXTURES SHALL BE ROUGHED IN PER MANUFACTURER CUT SHEET TO MAINTAIN UNIFORMITY.

FINAL FIXTURE, FAUCET, AND TRIM SELECTIONS SHALL BE REVIEWED AND APPROVED BY ARCHITECT AND OWNER PRIOR TO SUBMITTAL TO ENGINEER OF RECORD.

SHOCK ARRESTOR SCHEDULE

SIOUX CHIEF SHOCK ARRESTORS APPROVED FOR INSTALLATION WITH NO ACCESS DOOR REQUIRED. CONFORMS TO ANSI/ASSE 1010 STANDARDS.

SLOPE OF HORIZ. DRAINAGE PIPE

SIZE (inches)

2-1/2 or less

3 to 6

8 or larger

TABLE 704.1 OF THE FLORIDA PLUMBING CODE 2014

1.28 GALLONS PER FLUSHING CYCLE MAXIMUM.

1.28 GALLONS PER FLUSHING CYCLE MAXIMUM.

0.128 GALLONS PER FLUSHING CYCLE MAXIMUM.

FIXTURE UNITS

12-32

33-60

MANUF. & MODEL

SIOUX CHIEF 652-A

SIOUX CHIEF 653-B

SIOUX CHIEF 654-C

#EST050PD, 50 GALLON, 208V/3PH/6.0KW.

CONNECTION

1/2"

3/4"

MINIMUM SLOPE (inch per foot)

1/4

1/8

1/16

GUY GRAY GALVANIZED ICE MAKER OUTLET BOX WITH LEAD FREE QUARTER TURN VALVE

AERATOR. ARM SUPPORT CARRIER FOR MOUNTING OF LAV. WADE MODEL # 520-M36.

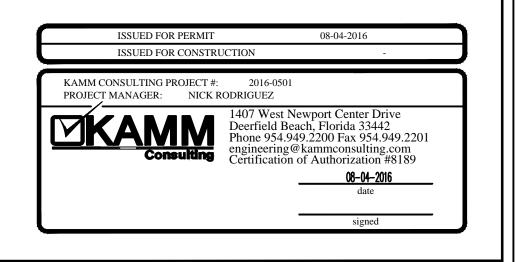
| PLUMBING SHEET INDEX | | | |
|----------------------|--------------------------------------|--|--|
| SHEET# DESCRIPTION | | | |
| P0.1 | PLUMBING NOTES, LEGENDS, AND DETAILS | | |
| P2.1 | SANITARY PLAN | | |
| P3.1 | DOMESTIC WATER PLAN | | |
| P5.1 | PLUMBING ISOMETRICS | | |
| | | | |

PLUMBING NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SCOPE OF WORK. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE FLORIDA BUILDING CODE 5th EDITION (2014) - PLUMBING, APPLICABLE LOCAL CODES, RULES, AND ORDINANCES.
- PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL
- ALL MATERIALS SHALL BE NEW AND OF GOOD QUALITY.
- ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY-OPERATIONAL. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS
- REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTS. PLUMBING CONTRACTOR SHALL OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
- CONTRACTOR SHALL SUBMIT TO ARCHITECT/ENGINEER, FOR REVIEW & APPROVAL, FIVE (5) SETS OF MANUFACTURER'S CUT SHEETS FOR EACH FIXTURE, PIPING/FITTING MATERIAL AND EQUIPMENT ITEM WITH ASSOCIATED CONTROLS, THAT ARE INCLUDED IN THE CONTRACT.
- DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING,
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ARCHITECT/ENGINEER PRIOR TO
- 10. VERIFY LOCATION, SIZE, DIRECTION OF FLOW AND INVERT ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
- 11. WATER DISTRIBUTION PIPING ABOVE AND BELOW GROUND SHALL BE TYPE "L" COPPER. ALTERNATE PIPING & FITTING MATERIALS MAY BE USED IN ACCORDANCE WITH FLORIDA BUILDING CODE 5th EDITION (2014) - PLUMBING, TABLES 605.3, 605.4 & 605.5, WHEN APPROVED BY ENGINEER OF RECORD AND LOCAL AUTHORITY HAVING JURISDICTION. PROVIDE ALTERNATE FOR CPVC PIPING & FITTINGS EQUAL TO LUBRIZOL CORZAN OR FLOW-GUARD GOLD. PROVIDE ALTERNATE FOR PEX TYPE 'A' PIPING & FITTINGS EQUAL TO UPONOR. ALTERNATES ARE PERTINENT FOR WATER SERVICES KNOWN OR DETERMINED TO HAVE ACIDIC CHARACTERISTICS OR OTHER PARTICULAR CIRCUMSTANCES AS DEEMED APPROPRIATE BY DIRECTIVE FROM THE OWNER. CONTRACTOR SHALL PERFORM A WATER TEST TO DETERMINE WATER CHEMISTRY PRIOR TO ANY WORK OR PIPING INSTALLATION AND SHALL SUBMIT TEST RESULTS TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL. DISINFECTION OF POTABLE WATER SYSTEM SHALL COMPLY WITH FLORIDA BUILDING CODE 5th EDITION (2014) -PLUMBING, SECTION 610. ALL WATER PIPING & FITTINGS SHALL BE OF DOMESTIC MANUFACTURE; SPECIFICALLY IN THE UNITED STATES OF AMERICA.
- 12. SOIL, WASTE, VENT, AND RAINWATER (DWV) PIPING & FITTINGS SHALL BE CAST IRON OR PVC, WHERE CODE ALLOWS. PVC MAY NOT BE USED THRU RATED ASSEMBLIES OR IN PLENUMS. PVC PIPING SHALL BE SOLID-CORE ONLY; FOAM-CORE PIPING SHALL NOT BE ACCEPTED. CAST IRON PIPING & FITTINGS SHALL BEAR THE CISPI-301 MARK. ALL DWV PIPING & FITTINGS SHALL BE OF DOMESTIC MANUFACTURE; SPECIFICALLY IN THE UNITED STATES OF AMERICA.
- 13. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE ANGLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS (WHERE REQUIRED). COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
- 14. PROVIDE APPROVED WATER HAMMER ARRESTORS FOR ALL (GROUP) PLUMBING FIXTURES, SIZED & LOCATED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS & PDI-WH201.
- 15. PROVIDE DIELECTRIC COUPLINGS OR FLANGES BETWEEN ALL DISSIMILAR METALS IN PIPING AND EQUIPMENT CONNECTIONS.
- 16. ISOLATE COPPER PIPING FROM METALLIC HANGERS OR SUPPORTS WITH ISOLATOR PADS OR
- 17. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING ANNULAR SPACE BETWEEN PIPING AND SLEEVES WITH INTUMESCENT CAULK, TO ACHIEVE THE SAME RATING AS WALLS OR FLOORS, AS PART OF THE PLUMBING CONTRACTOR'S WORK.
- 18. PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
- 19. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES. ACCESS PANELS IN RATED WALLS SHALL MAINTAIN THE SAME RATING AND SHALL MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED.
- 20. PROVIDE COMBINATION CLEANOUT PLUG AND COVER PLATE OR ACCESS PANEL FOR ALL WALL CLEANOUTS. FINISH TO MATCH NEARBY FIXTURE TRIM.
- 21. NO COMBUSTIBLE MATERIAL SHALL BE INSTALLED IN MECHANICAL ROOMS NOR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
- 22. NO WATER, SANITARY OR DRAINAGE PIPING SHALL BE INSTALLED IN ELECTRICAL OR ELEVATOR EQUIPMENT ROOMS.
- 23. ALL CONTROL VALVES SHALL BE TAGGED AND MARKED. A REPRODUCIBLE DIAGRAM LOCATING ALL VALVES SHALL BE FURNISHED FOR OWNER/OPERATOR.
- 24. CONDENSATE DRAIN PIPING SHALL BE TYPE "L" COPPER WITH ARMAFLEX INSULATION AND A VAPOR-BARRIER JACKET PER FLORIDA BUILDING CODE 5th EDITION (2014) - ENERGY CONSERVATION. TABLE C403.2.8. PVC WITHOUT INSULATION IS ACCEPTABLE FOR RISERS AND BELOW GRADE PIPING. WHEN USED IN A RETURN AIR PLENUM, PVC PIPING WITH INSULATION IS ACCEPTABLE IN LOCATIONS WHERE ALLOWED BY LOCAL CODES. CONDENSATE PIPING SHALL NOT DRAIN ONTO THE ROOFING SYSTEM NOR ANY OF ITS COMPONENTS. CONDENSATE PIPING ARRANGEMENT IS EXEMPT FROM MINIMUM EQUIPMENT CLEARANCE REQUIREMENTS PER FLORIDA BUILDING CODE 5th EDITION (2014),

SECTION 1522.3.5. ALL HORIZONTAL RAINWATER PIPING RUN ABOVE FINISHED FLOOR THAT RECEIVES

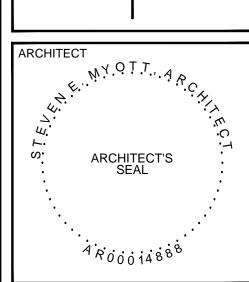
- CONDENSATE DISCHARGE SHALL BE INSULATED WITH ARMAFLEX AND A VAPOR-BARRIER JACKET. 25. HOT WATER PIPING INSULATION SHALL BE PROVIDED IN ACCORDANCE WITH FLORIDA BUILDING CODE 5th EDITION (2014) - PLUMBING, TABLE 607.5 & FLORIDA BUILDING CODE 5th EDITION (2014) -ENERGY CONSERVATION, TABLE C403.2.8. CONTRACTOR SHALL USE ARMAFLEX OR EQUAL WHERE APPLICABLE. WHERE DOMESTIC WATER TEMPERATURES CAN CAUSE SWEATING, ALL COLD WATER PIPING SHALL BE INSULATED WITH ARMAFLEX INSULATION AND A VAPOR-BARRIER JACKET, PER FLORIDA BUILDING CODE 5th EDITION (2014) - ENERGY CONSERVATION, TABLE C403.2.8.
- 26. AIR ADMITTANCE VALVES MAY BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF WHERE ACCEPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.





<

محر



LL DRAWINGS AND WRITTEN MATERIA UNPUBLISHED WORK OF THE ARCHITECT AN MAY NOT BE USED, DUPLICATED OR DISCLOSE IN ANY FORM WITHOUT THE EXPRESSE WRITTEN CONSENT OF THE ARCHITEC

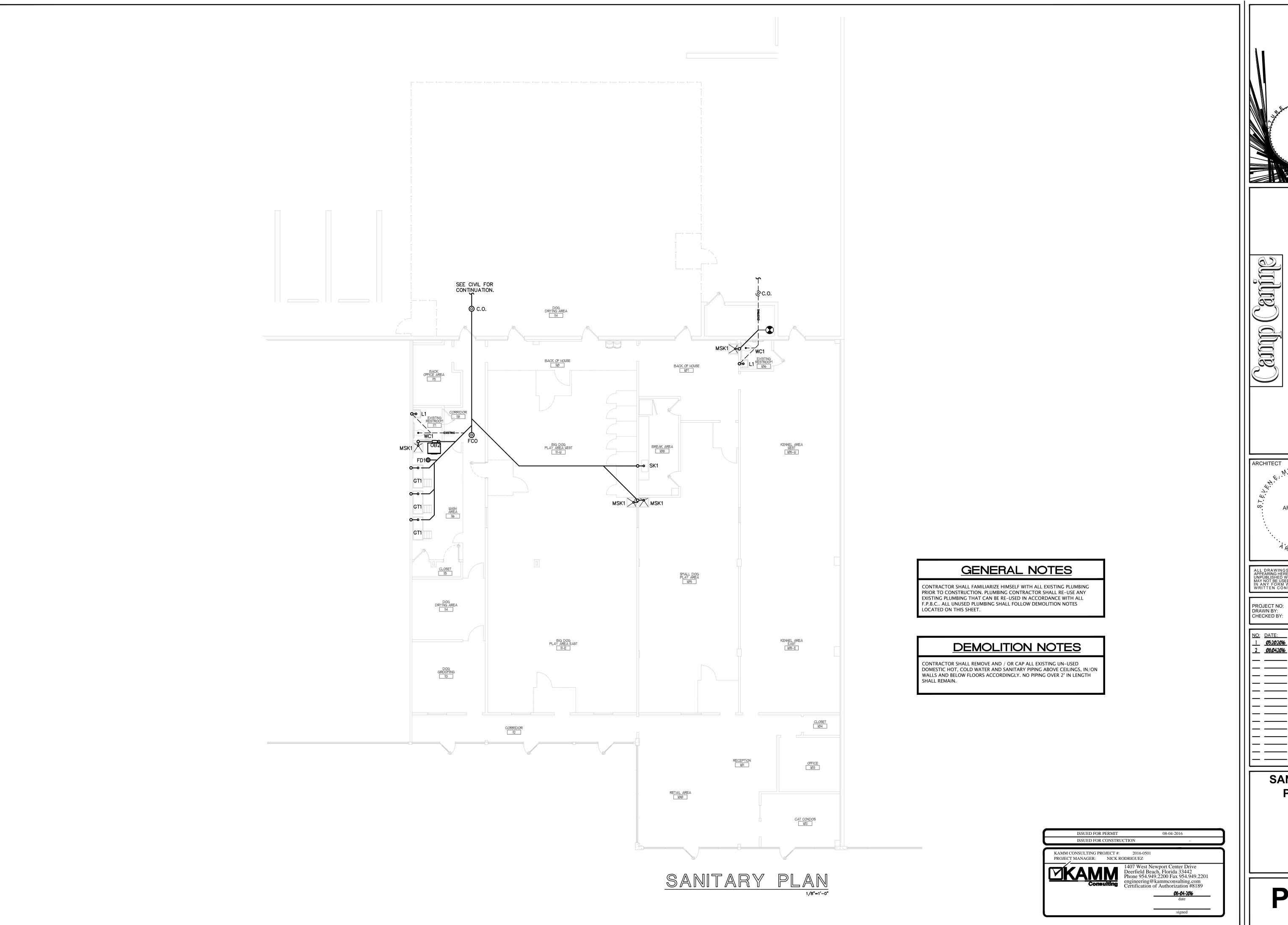
| PROJECT NO: |
|-------------|
| |
| DRAWN BY: |

CHECKED BY:

05.20.2016 PRELIMINARY REVIEW <u>08.04.2016</u> <u>PERMIT / BIDDING</u> 08.09.2016 COORDINATION

PLUMBING

NOTES



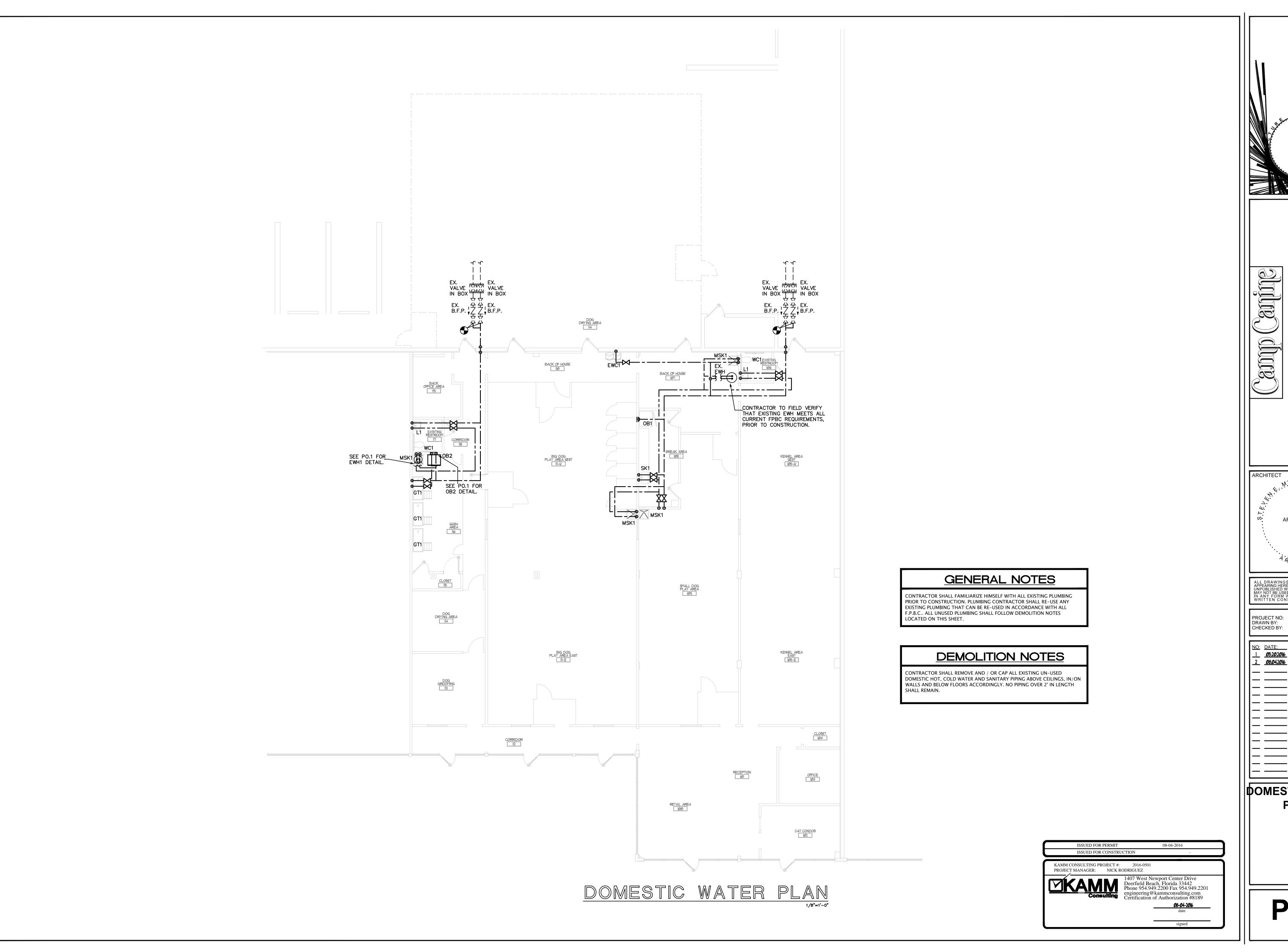
ARCHITECT'S SEAL 4 7000014888

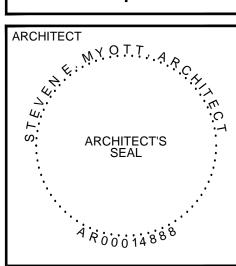
 NO:
 DATE:
 ISSUED FOR:

 1
 05202016
 PRELIMINARY REVIEW

 2
 08.042016
 PERMIT / BIDDING

SANITARY PLAN



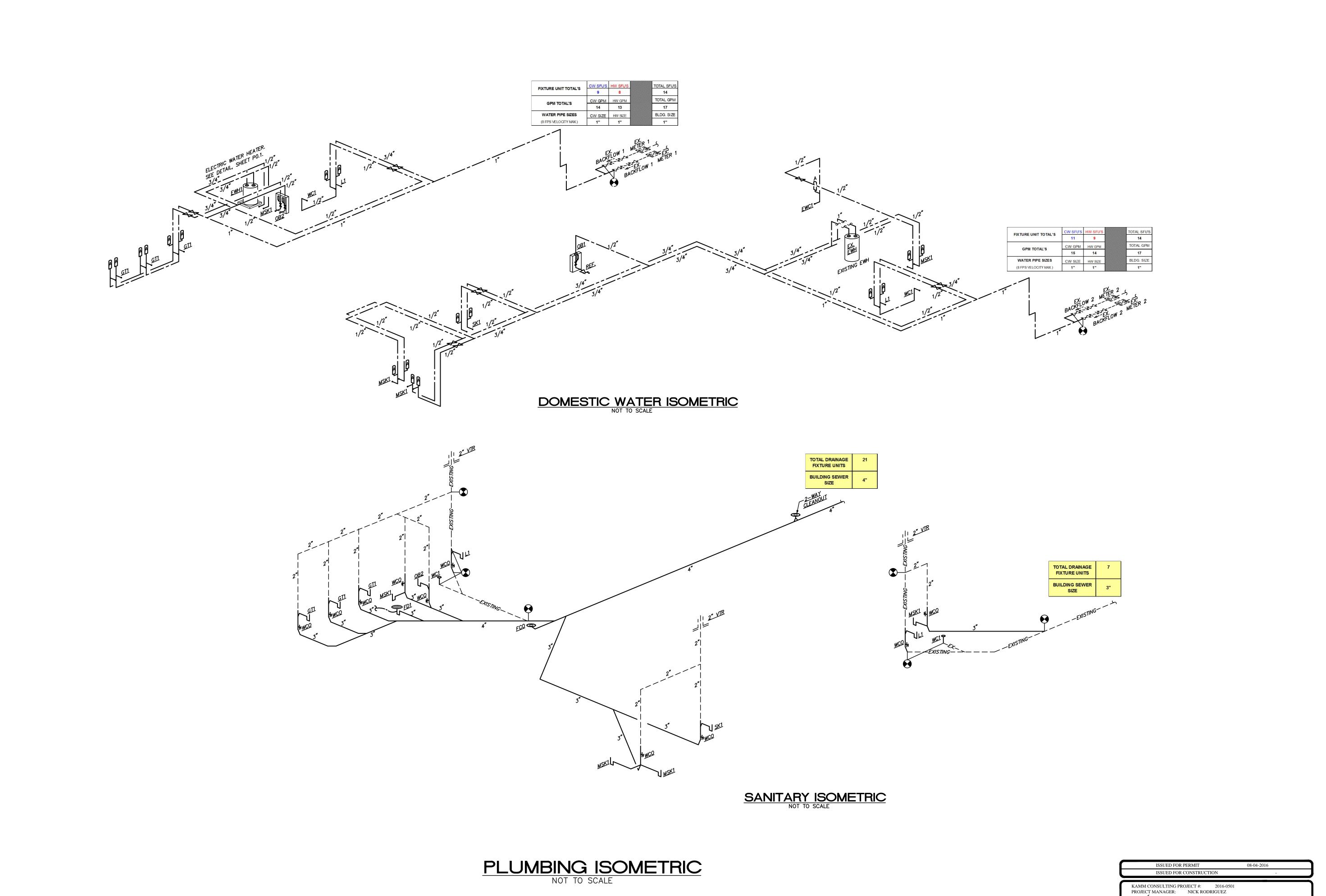


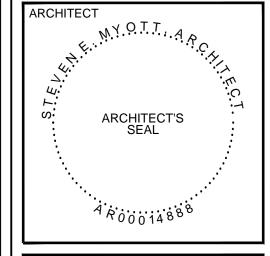
 NO:
 DATE:
 ISSUED FOR:

 1
 05202016
 PRELIMINARY REVIEW

 2
 06.042016
 PERMIT / BIDDING

| DOMESTIC WATER **PLAN**





PROJECT NO: DRAWN BY: CHECKED BY:

| NO: | DATE: | ISSUED FOR: |
|-----|------------|--------------------|
| | | PRELIMINARY REVIEW |
| 2 | 08.04.2016 | PERMIT / BIDDING |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| _ | | |
| | | |

SANITARY ISOMETRICS