

#### MATERIAL LEGEND

G.W.B. GYPSUM WALLBOARD

DRAWING CONVENTIONS

THIS MARK DESIGNATES

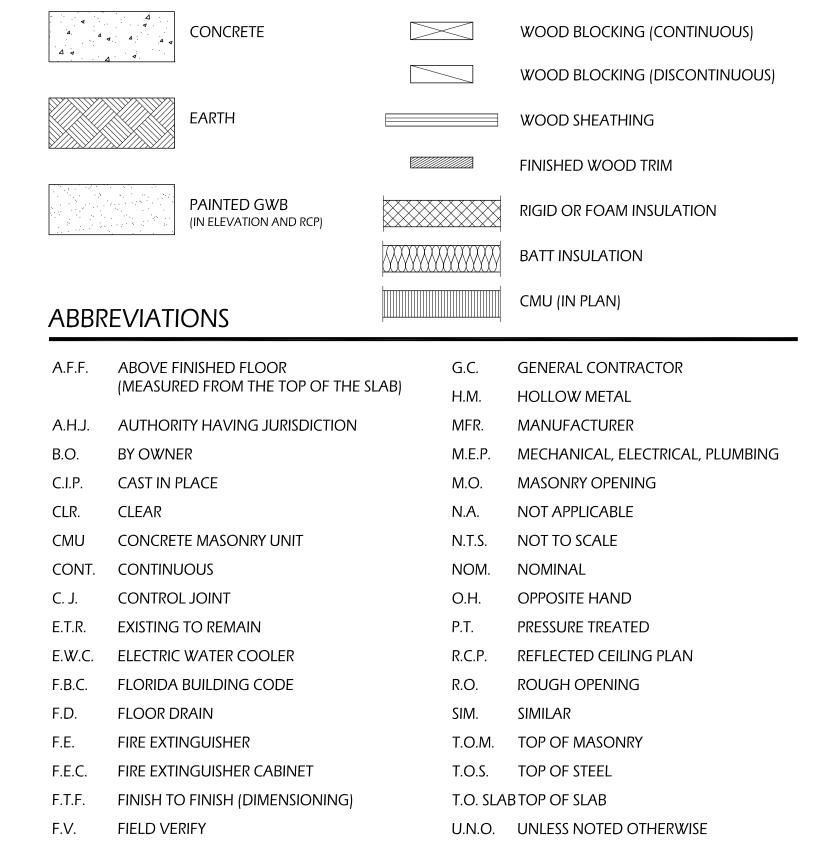
DOOR 108A - THE ARROW

DEFINES THE ROOM TO

IS ASSOCIATED

WHICH THE DOOR NUMBER

DOOR REFERENCING:



W.P. WORKING POINT

SECTION/ELEVATION MARK:

REFER TO

SHEET A3

V.W.C. VINYL WALLCOVERING

DETAIL 2

Tenant Improvements For:

# Claritas Eye Care

at

# Shoppes at Palencia Commons

at

7458 U.S. Highway 1 North, Suite B-105 St. Augustine, Florida 32081

Architectural Services:



LANE ARCHITECTURE, P.A. 904 Margaret Street Jacksonville, Florida 32204 904.355.9020 J. Lane, Reg. No. AR 12715

Plumbing, Mechanical & Electrical Engineering:

Powell & Hinkle Engineering 1409 Kingsley Avenue Building 12A Orange Park, Florida 904 264 5570 Robert Hinkle, PE No. 29302 Lane Hinkle, PE No. 48076 Thomas Elder, PE No. 56121

# 11 September 2019

#### LIST OF DRAWINGS

#### COVER

# ARCHITECTURAL DRAWINGS

A1 FLOOR AND REFLECTED CEILING PLANS
A2 LIFE SAFETY PLAN, SCHEDULES, DIAGRAMS

AND PARTITION TYPES

#### PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS

- 1 PLUMBING LEGEND, SCHEDULES, SPECS, NOTES & DETAILS
- P2 PLUMBING FLOOR PLAN & RISER DIAGRAMS
- M1 HVAC FLOOR PLAN
- 12 HVAC SCHEDULES AND DETAILS
- E1 LIGHTING PLAN
- POWER PLAN
- E3 POWER RISER AND PANEL SCHEDULE
- E4 ELECTRICAL DETAILS
- E5 LEGEND, DETAILS AND NOTES

#### GENERAL CONDITIONS/SPECIFICATIONS:

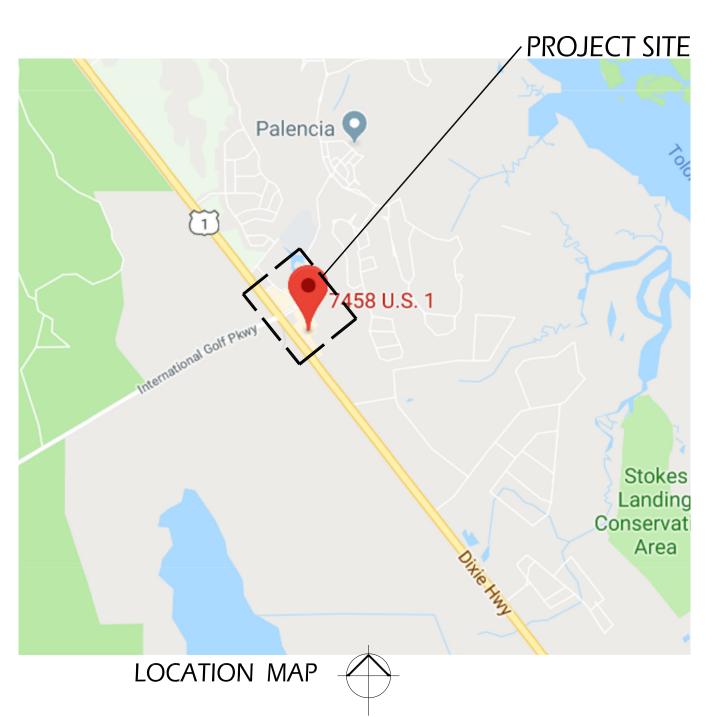
1. COMPLY WITH BUILDING OWNER'S REQUIREMENTS FOR INSURANCE, CONSTRUCTION AND SUBMITTAL REQUIREMENTS.

2. UNLESS DIRECTED OTHERWISE, AIA A201 2017 - "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" SHALL BE AN INTEGRAL PART OF THE AGREEMENT.

3. UNLESS THE CONTRACT DOCUMENTS INCLUDE MORE STRINGENT REQUIREMENTS, APPLICABLE CONSTRUCTION INDUSTRY STANDARDS HAVE THE SAME FORCE AND EFFECT AS IF BOUND OR COPIES DIRECTLY INTO THE CONTRACT DOCUMENTS.

4. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR DELIVERY, STORAGE, HANDLING AND INSTALLATION OF ALL MATERIALS. USE MEANS AND METHODS THAT WILL PREVENT DAMAGE, DETERIORATION AND LOSS, INCLUDING THEFT. SHOULD QUESTIONS ARISE, CONTACT THE ARCHITECT.

5. DELIVER, STORE AND HANDLE PRODUCTS USING THE MEANS AND METHODS THAT WILL PREVENT DAMAGE, DETERIORATION AND LOSS, INCLUDING THEFT. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.



#### PROJECT DATA AND BUILDING CODE SUMMARY

#### PROJECT DESCRIPTION:

THIS SUITE IS FOR A NEW BUSINESS OCCUPANCY FOR A TENANT BUILDOUT IN AN EXISTING BUILDING SHELL CONSISTING OF CONCRETE SLAB FLOOR, A COMBINATION OR CMU AND METAL STUD EXTERIOR WALLS AND STEEL BAR JOIST ROOF TRUSSES. PROJECT INCLUDES NEW ADA COMPLIANT TOILET ROOM. DRINKING FOUNTAIN, AND SERVICE SINK NOT REQUIRED. SEE SHEET A-3 FOR LIFE SAFETY PLAN INFORMATION.

GOVERNING BUILDING CODE:

FLORIDA BUILDING CODE, SIXTH EDITION (2017) - BUILDING FLORIDA BUILDING CODE, SIXTH EDITION (2017) - PLUMBING FLORIDA BUILDING CODE, SIXTH EDITION (2017) - MECHANICAL FLORIDA BUILDING CODE, SIXTH EDITION (2017) - ENERGY CONSERVATION FLORIDA FIRE PREVENTION CODE, SIXTH EDITION (2017)

NFPA 70A - 2014 NATIONAL ELECTRIC CODE.

OCCUPANCY: BUSINESS

AREAS (SF): 1,415 SF
CONSTRUCTION TYPE: 11 B

FIRE PROTECTION SYSTEM: SHALL BE SPRINKLERED

NUMBER OF STORIES: 1

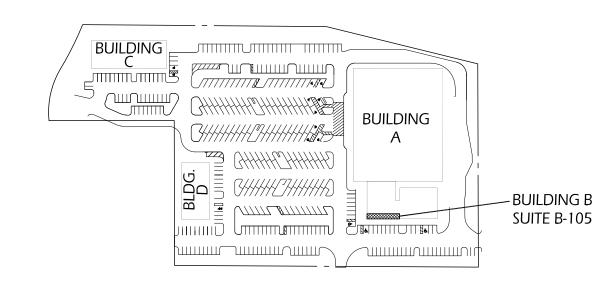
BUILDING HEIGHT: 34

#### HANDICAP ACCESSIBILITY

EXISTING PARKING, BUILDING ACCESS ARE ADA COMPLIANT. NEW COMPLIANT TOILET ROOMS, DRINKING FOUNTAIN, MILLWORK, AND OTHER ADA REQUIREMENTS SHALL BE INSTALLED.

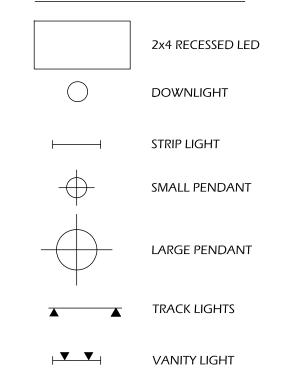
## FIRE RATINGS PER TABLE 601 - CONSTRUCTION TYPE 11-B:

PRIMARY STRUCTURAL FRAME	0 H
BEARING WALLS	
EXTERIOR	0 HF
INTERIOR - NOT APPLICABLE	0 HF
NON-BEARING WALLS AND PARTITIONS	0 HF
EXTERIOR WALLS PER TABLE 602 (EXISTING)	0 HF
INTERIOR - NOT APPLICABLE	0 HF
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0 H
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0 HI



SITE/REFERENCE PLAN





#### LIGHTING NOTES

1. PROVIDE EXHAUST FANS IN RESTROOMS SWITCHED WITH LIGHT.

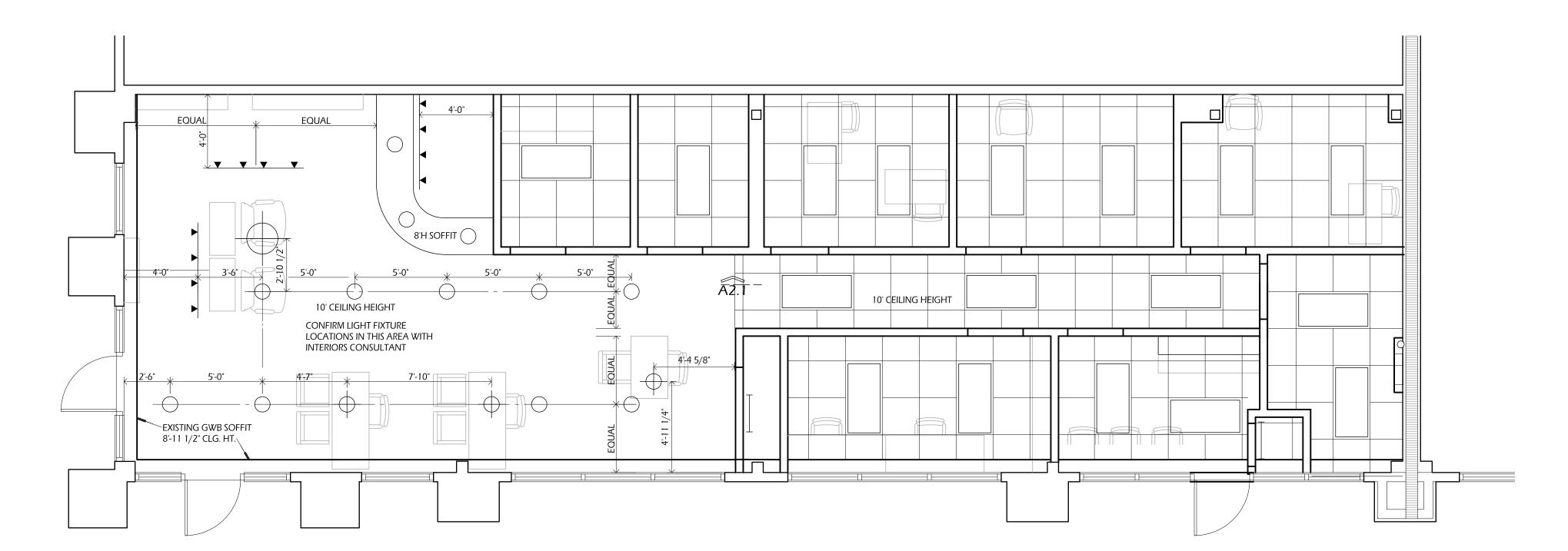
2. PROVIDE EXIT DOOR TACTILE SIGNAGE AT EACH EXIT DOOR REQURING AN EXIT SIGN THAT READS "EXIT" AND COMPLIES WITH ICC/ANSI A117.1.

3. ALL CEILINGS SHALL BE MOUNTED AT 9'-0" U.N.O.

4. REFER TO ELECTRICAL DRAWINGS FOR EMERGENCY AND EXIT LIGHTING.

5. ALL LIGHTING SHALL BE CONTROLLED VIA DIMMER UNLESS NOTED OTHERWISE.

6. ALL LED SHALL BE 3000K UNLESS NOTED OTHERWISE.



# REFLECTED CEILING PLAN

# WALL LEGEND

EXISTING WALLS

NEW PARTITION - 5/8" GWB ON 25GA. 3 5/8" METAL FRAMING

NEW DEMISING PARTITION - 5/8" GWB ON 25GA 3 5/8" METAL

FRAMING

#### **GENERAL NOTES**

1. DIMENSIONS ARE TO FACE OF FRAME UNLESS NOTED OTHERWISE.

2. WHOLE OFFICE AUDIO SYSTEM TO BE INSTALLED. COORDINATE WITH TENANT.

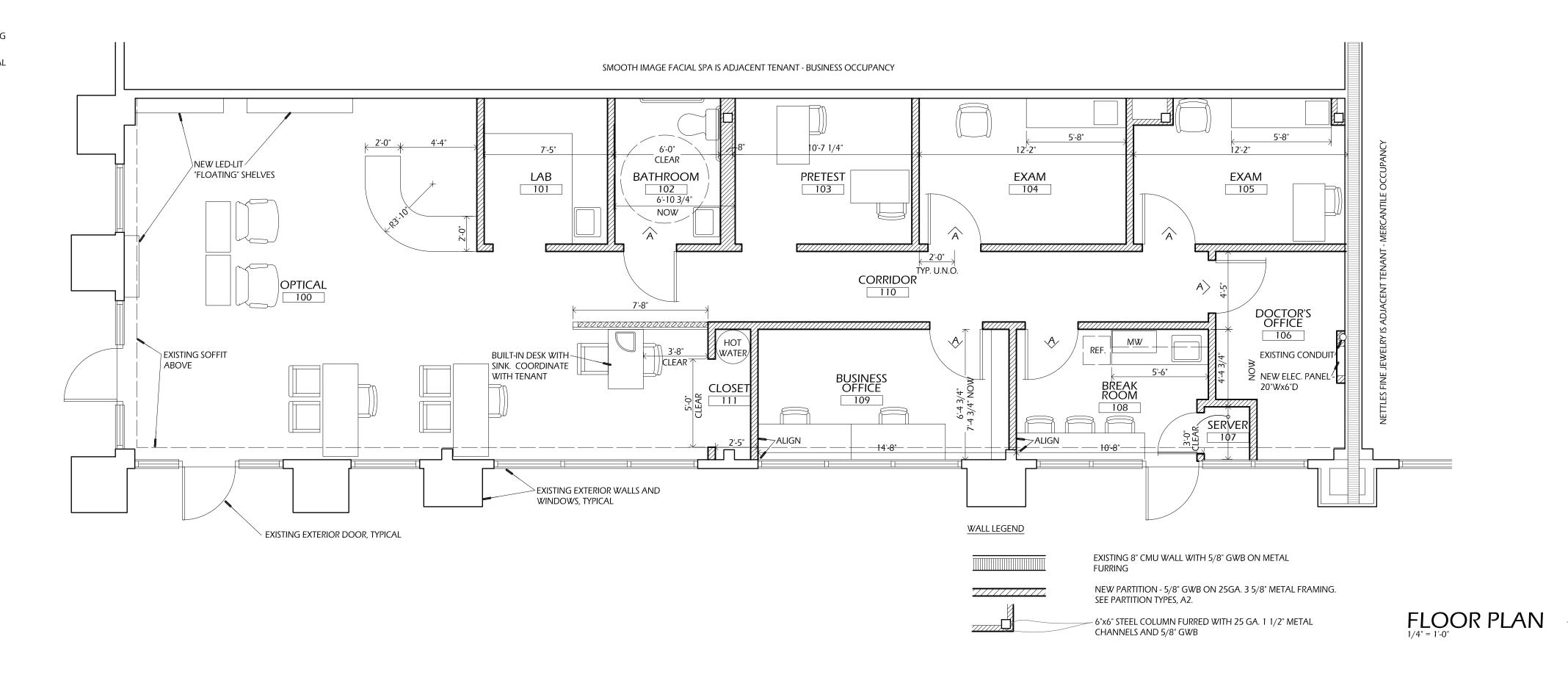
3. SEPARATE TOILET FACILITIES NOT REQUIRED BECAUSE OCCUPANT LOAD IS LESS THAN 15 PER FBC - PLUMBING, 403.2#2

4. SERVICE SINK NOT REQUIRED BECAUSE OCCUPANT LOAD IS LESS THAN 15 PER FBC - PLUMBING TABLE 403.1e.

5. DRINKING FOUNTAIN IS NOT REQUIRED BECAUSE OCCUPANT LOAD

IS LESS THAN 15 PER FBC - PLUMBING 410.2.

6. VERIFY EQUIPMENT, FURNITURE, LIGHT FIXTURE AND OUTLET LOCATIONS WITH INTERIORS CONSULTANT. VERIFY MILLWORK SIZE AND DESIGN WITH INTERIORS CONSULTANT.



Revisions:

Date: 9.11.2019

File: ClaritasEyeCarePlan

Tenant Buildout for:

Claritas Eye

7458 US Highway 1 North

St. Augustine, FL 32095

LANE ARCHITECTURE

Jacksonville, Florida 32204

J. Lane, Reg. No. AR 12715

Powell & Hinkle Engineering

Robert Hinkle, PE No. 29302 Lane Hinkle, PE No. 48076

Thomas Elder, PE No. 56121

Optical Marketing Group 312 South Cedros Avenue

Solana Beach, CA 92075

Plumbing, Mechanical &

Electrical Engineering:

1409 Kingsley Avenue

Orange Park, Florida

904 Margaret Street

904.355.9020

Building 12A

904 264 5570

Interior Design:

#200

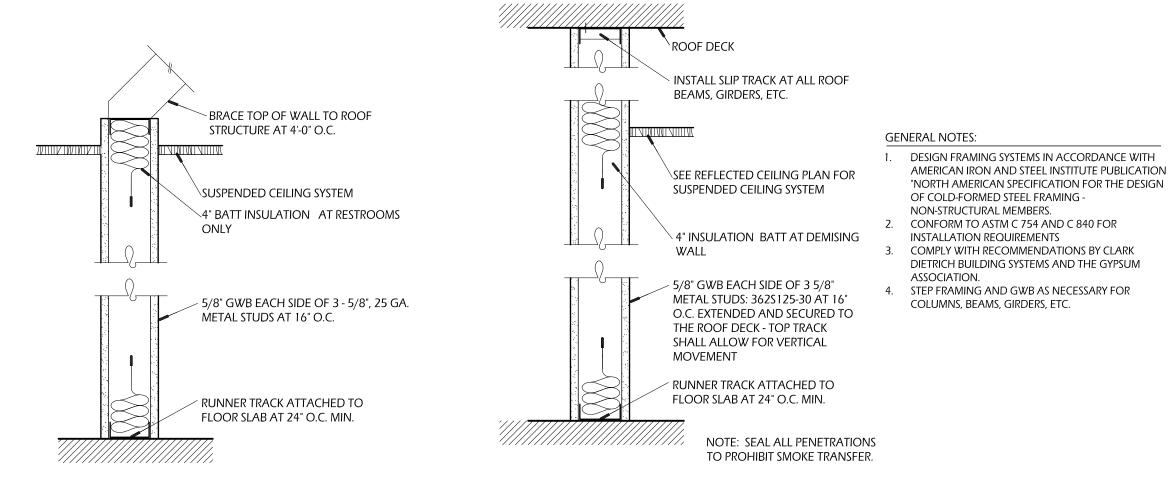
Architectural Services:

Care

Suite B-105

FLOOR AND REFLECTED CEILING PLANS

A 1



# A2.1 CEILING DETAIL

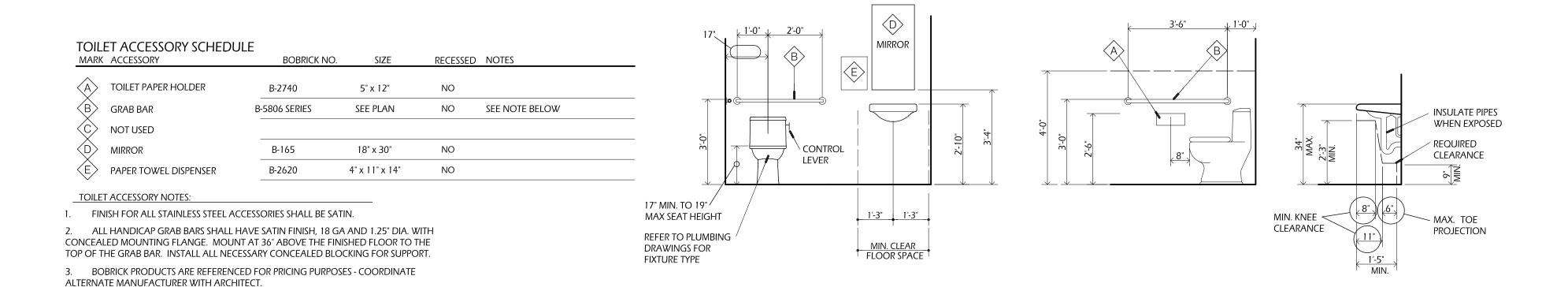
ACT CEILING

SYSTEM

/ SUPPORT GWB

AS NECESSARY

# PARITITION TYPES



# TOILET ACCESSORIES AND ACCESSIBILITY DIAGRAMS

CEILING REMARKS

DOOR NO.	DOOR SIZE	DOOR MATERIAL	FRAME MATERIAL	DOOR ELEVATION	NOTES:
102A	3'-0"x 6'-8"	SCW	WOOD	Α	
104A	3'-0"x 6'-8"	SCW	WOOD	А	
105A	3'-0"x 6'-8"	SCW	WOOD	Α	
106A	3'-0"x 6'-8"	SCW	WOOD	Α	
107A	2'-4"x 6'-8"	SCW	WOOD	Α	16"x16" LOUVER @ BOTTOM
108A	3'-0"x 6'-8"	SCW	WOOD	Α	
109A	3'-0"x 6'-8"	SCW	WOOD	Α	
DOOR	? ABBREVIATIONS				
ALUM	ALUMINUM				
FG	FIBERGLASS				
НМ	HOLLOW METAL				
SCW	SOLID CORE WOO	)D			

3.	LOCKS AND OTHER DETAILS WITH TENANT.
DO	OOR ELEVATIONS

1. ALL INTERIOR DOORS SHALL BE 1 3/4" THICK SOLID CORE WOOD.

3. GC. SHALL PROVIDE ADA COMPATIBLE HARDWARE. COORDINATE

EXTERIOR DOORS ARE EXISTING.

ELEV. "A" (FLUSH)

NO.	NAME	FLOOR	
100	OPTICAL	LVT	
101	LAB	CPT	
102	BATHROOM	CT	
103	PRETEST	LVT	
104	EXAM	LVT	
105	EXAM	LVT	
106	DOCTOR'S OFFICE	CPT	

FINISH SCHEDULE

101	LAB	CPT	VB	P-GWB	ACT	
102	BATHROOM	CT	СТ	P-GWB	ACT	
103	PRETEST	LVT	VB	P-GWB	ACT	
104	EXAM	LVT	VB	P-GWB	ACT	
105	EXAM	LVT	VB	P-GWB	ACT	
106	DOCTOR'S OFFICE	CPT	VB	P-GWB	ACT	
107	SERVER	LVT	VB	P-GWB	ACT	
108	BREAK ROOM	LVT	VB	P-GWB	ACT	
109	BUSINESS OFFICE	CPT	VB	P-GWB	ACT	
110	CORRIDOR	LVT	VB	P-GWB	ACT	
111	CLOSET	LVT	VB	P-GWB	ACT	

WALLS

#### ABBREVIATIONS AND DESCRIPTIONS ACOUSTIC CEILING SYSTEM CARPET CERAMIC TILE LUXURY VINYL TILE P-GWB PAINTED GWB STONE VENEER VINYL BASE

#### FINISH SCHEDULE GENERAL NOTES

- 1. ALL FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S AND TRADE ASSOCIATION'S
- RECOMMENDATIONS 2. PREPARE SUBSTRATES ACCORDING TO MANUFACTURER'S REQUIREMENTS.
- 3. COORDINATE ALL COLORS NOT LISTED HERE WITH THE TENANT
- 4. AREAS PRONE TO MOISTURE SHALL USE MOISTURE RESISTANT GWB.

	ADJACENT TENANT IS BUSINESS OCCUPANCY. NO FIRE-RESISTANCE SEPARATION IS REQUIRED PENETRATIONS SHALL BE SEALED TO PREVENT THE TRANSFER OF SAME  WAX. ACTUAL TRAVEL DISTANCE - 74-3"  AS USOI.	
EXISTING EXIT SIGNS TO REMAIN	ADJACENT TENAN 1 HOUR FIRE-RESI EXISTING 8° CMU AS U901.	
EXISTING LIGHT FRAME TRUSS ROOF SYMBOL	LIFE SAFETY PLAN  LIFE SAFETY LEGEND  EXIT SIGN  FIRE EXTINGUISHER	_

BUILDING \_

1. THIS BUILDING IS SPRINKLERED

3. OCCUPANT LOAD CALCULATION:

EXIT SIGNS, FIRE ALARM SYSTEMS, ETC.

SURFACE MOUNTED BRACKETS.

8. ORDINARY HAZARD CONTENTS

TRAVEL DISTANCE IS LESS THAN 75'.

11. MAXIMUM TRAVEL DISTANCE = 200 FT.

13. COMMON PATH OF TRAVEL = 100' MAX.

12. DEAD END CORRIDOR = 20' MAX.

CLASS I OR II PER FBC 804.

18. NO FIRE ALARM SYSTEM IS REQUIRED.

OCCUPANCY:

1,415 SF AT 1:100

SITE/REFERENCE PLAN

LIFE SAFETY AND FIRE EXTINGUISHER GENERAL NOTES:

BUILDING CODE SUMMARY. REFER TO THE ELECTRICAL DRAWINGS FOR

4. REFER TO THE PROJECT DESCRIPTION ON THE COVER SHEET FOR

A. MAXIMUM FLOOR ARE PER UNIT OF "A" IS 3,000 SF

IN COMPLIANCE WITH N.F.P.A. 101, 7.10.1.3.

B. MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER IS 75'

5. A SINGLE FIRE EXTINGUISHER (TYPE A HAZARD) SHALL BE INSTALLED

7. LIGHT-FRAME TRUSS-TYPE ROOF CONSTRUCTION SYMBOL IS EXISTING.

9. SINGLE EXIT PERMITTED BECAUSE OCCUPANCY IS LESS THAN 50 AND

10. INSTALL TACTILE SIGNAGE READING "EXIT" COMPLIANT WITH ICC/ANSI

14. NO FIRE RESISTANCE RATED SEPARATION OF TENANT DEMISING WALL

RATED WALL IS REQUIRED FOR TENANT WALL TO EAST.

16. REFER TO ELECTRICAL DRAWINGS FOR EMERGENCY LIGHTING.

17. INTERIOR WALL & CEILING FINISHES SHALL HAVE A FLAME SPREAD INDEX NO GREATER THAN C AT CORRIDORS, ROOMS AND ENCLOSED

19. THIS TENANT SPACE SHALL BE SPRINKLERED. DRAWINGS BY OTHERS.

20. THE DESIGN TO THE BEST OF ARCHITECT'S KNOWLEDGE COMPLIES WITH 6TH EDITION FLORIDA FIRE PREVENTION CODE.

SPACES PER FBC TABLE 803.11. INTERIOR FLOOR FINISH SHALL BE

15. CORRIDOR WALLS ARE NOT REQUIRED TO BE FIRE RATED.

IS REQUIRED FOR TENANT WALL TO NORTH. 1 HOUR FIRE RESISTANCE

AND SHALL BE 2A-10BC MULTI-PURPOSE DRY CHEMICAL EQUAL TO

"COSMIC 5E" BY JL INDUSTRIES. EXTINGUISHER SHALL BE MOUNTED ON

INSTALL TACTILE SIGNAGE AT EACH EXIT DOOR READING "EXIT" AND

BUILDING

BUSINESS

15 OCCUPANTS

- 3 HOUR FIRE WALL —1 HOUR FIRE WALL

- BUILDING B

SUITE B-105

# Tenant Buildout for: Claritas Eye Care

7458 US Highway 1 North Suite B-105 St. Augustine, FL 32095



LANE ARCHITECTURE 904 Margaret Street Jacksonville, Florida 32204

904.355.9020 J. Lane, Reg. No. AR 12715 Plumbing, Mechanical &

Electrical Engineering:

Powell & Hinkle Engineering 1409 Kingsley Avenue Building 12A Orange Park, Florida 904 264 5570 Robert Hinkle, PE No. 29302 Lane Hinkle, PE No. 48076 Thomas Elder, PE No. 56121

Interior Design:

Optical Marketing Group 312 South Cedros Avenue #200 Solana Beach, CA 92075

Revisions:

Date: 9.11.2019 File: ClaritasEyeCarePlan

SCHEDULES

#### PLUMBING SPECIFICATIONS

1. COMPLY WITH ALL CODES APPLYING TO THE WORK OF THIS CONTRACT INCLUDING FLORIDA BUILDING CODE 2014, FLORIDA BUILDING CODE 2014 — MECHANICAL, AND FLORIDA BUILDING CODE 2014 — PLUMBING. OBTAIN INFORMATION ON ALL CODE RESTRICTIONS AND REQUIREMENTS. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE, SUCH CONFLICT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR RESOLUTION. EXTRA PAYMENT WILL NOT BE ALLOWED FOR WORK REQUIRED BY CODE RESTRICTIONS EXCEPT THROUGH WRITTEN AGREEMENT WITH THE OWNER.

2. SCOPE: PROVIDE A COMPLETE PLUMBING SYSTEM AS SHOWN ON DRAWINGS AND MEETING REQUIREMENTS OF APPLICABLE STATE AND LOCAL CODES. OBTAIN ALL REQUIRED PERMITS AND CERTIFICATES.

3. GUARANTEE: PROVIDE ALL NEW MATERIALS AND EQUIPMENT, AND GUARANTEE SAME AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE. AS FAR AS PRACTICAL, SIMILAR PRODUCTS SHALL BE BY ONE MFG.

4. ALL PRODUCTS DESIGNED FOR DISPENSING POTABLE WATER MUST MEET BOTH THE NSF 61 AND NSF 372 TEST STANDARDS VIA THIRD-PART TESTING AND CERTIFICATION.

5. FIXTURES: PLUMBING FIXTURES SHALL BE AS SCHEDULED ON THE DRAWINGS, APPROVED MANUFACTURERS ARE AMERICAN STANDARD, BRADLEY, CHICAGO, CRANE, DELTA, ELKAY, KOHLER. WATER COOLERS SHALL BE AS SCHEDULED ON DRAWINGS, APPROVED MANUFACTURERS ARE OASIS, ELKAY, HALSEY TAYLOR. FIXTURE TRIM AND FITTINGS SHALL BE C.P. BRASS INCLUDING PIPING SERVING FIXTURES EXPOSED BEYOND FACE OF FINISHED WALL. PROVIDE STOPS IN WATER SUPPLIES TO EACH AND EVERY FIXTURE. FIXTURE MOUNTING HEIGHT SHALL BE AS SHOWN ON THE ARCH. DRAWINGS.

6. SANITARY WASTE PIPING: SOIL, WASTE AND VENT PIPING SHALL BE SOLID WALL DWV POLYVINYL CHLORIDE (PVC), SCHEDULE 40, SOLVENT WELD JOINTS. EXPOSED SANITARY PIPING UNDER LAVATORIES SHALL BE CHROME PLATED COPPER/BRASS. SUPPORT ALL SOIL AND VENT STACKS AT BASE. PROVIDE CLEANOUTS AS REQUIRED BY CODE. USE SCREW TYPE CLEANOUTS FOR PIPING CONCEALED IN WALL WITH CHROMIUM PLATED BRONZE COVER PLATES. PITCH ALL 2 1/2" AND SMALLER DRAIN PIPING AT LEAST 1/4" PER FOOT AND 3" AND LARGER DRAIN PIPING AT LEAST 1/8" PER FOOT UNLESS OTHERWISE NOTED.

7. WATER SUPPLY PIPING: HOT AND COLD WATER SUPPLY PIPING SHALL BE CHLORINATED POLYVINYL CHLORIDE (CPVC), SOLVENT WELD JOINTS, SUITABLE FOR USE AT MINIMUM WORKING PRESSURE OF 160 PSI AT 73 DEG. F. AND 100 PSI AT 180 DEG. F. EXPOSED HOT OR COLD WATER PIPING UNDER LAVATORIES, AND CONNECTIONS TO WATER CLOSETS AND URINALS SHALL BE CHROME PLATED COPPER/BRASS. PIPING SERVING WATER CLOSETS SHALL MAKE TRANSITION FROM THE WATER RISER(S) WITHIN CHASES/WALLS FROM CPVC TO COPPER. PIPES 1/2" THRU 2" SHALL BE CPVC-CT (COPPER PIPE SIZE) MEETING TEST REQUIREMENTS OF SDR 11. WATER HAMMER ARRESTERS SHALL BE BELLOWS OR PISTON TYPE SIZED PER MFG. RECOMMENDATIONS. VALVES SHALL BE LINE SIZE UNLESS SPECIFICALLY SHOWN OTHERWISE. ALL EQUIPMENT SERVICE VALVES AND ALL SHUT-OFF VALVES 2" AND SMALLER SHALL BE BRONZE BODY FULL PORT BALL VALVES WITH STAINLESS STEEL BALL AND NYLON SEAT. INSTALL BALL VALVES UPSTREAM OF ALL EQUIPMENT CONNECTIONS AND WHERE SHOWN ON DRAWINGS. PROVIDE UNIONS AT EACH THREADED VALVE, FIXTURE OR APPARATUS TO FACILITATE REMOVAL.

8. INSULATION: PIPING INSULATION SHALL BE PRE-FORMED, FLAME-RETARDANT, ELASTOMERIC POLYETHYLENE, PIPE INSULATION SIMILAR TO AP ARMAFLEX, AP ARMAFLEX SS, IMCOA IMOLOCK OR NOMACO NOMALOCK, AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PRE-FORMED OWENS-CORNING 3.5 POUND DENSITY FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET AND SELF-SEALING LAP WILL BE APPROVED FOR PIPE INSTALLED IN DRY LOCATIONS. INSULATION THICKNESSES SHALL BE AS FOLLOWS: INSULATE COLD WATER PIPING WITH 1/2" THICK PIPE INSULATION PER MANUFACTURERS' RECOMMENDATIONS. INSULATE HOT WATER PIPING WITH 1" THICK PIPE INSULATION PER MANUFACTURERS' RECOMMENDATIONS. INSULATE ALL OTHER PVC/CPVC PIPING LOCATED IN SUPPLY OR RETURN AIR PLENUMS WITH MINIMUM 1/2" THICK PIPE INSULATION. INSULATION SHALL MEET ALL STATE AND LOCAL REQUIREMENTS FOR PLENUM USE. AT ALL EXPOSED PIPING UNDER HANDICAPPED SINKS, PROVIDE PRE MOLDED VINYL INSULATION. INSULATION SHALL BE "HANDI LAV-GUARD" INSULATION KITS AS MANUFACTURED BY TRUEBRO INC. OR APPROVED EQUAL. TRUEBRO INC. PHONE NO. IS (203) 875-2868. ALL INSULATION MATERIALS SHALL MEET FLAME SPREAD AND SMOKE DEVELOPED RATINGS PER NFPA BULLETIN 90-A WHEN TESTED IN ACCORDANCE WITH ASTM STANDARD E 84. SMOKE DEVELOPED LESS THAN OR EQUAL TO 50, AND FLAME SPREAD LESS THAN OR EQUAL TO 25.

9. PIPE HANGERS: PIPE HANGERS SHALL BE GALVANIZED STEEL CLEVIS HANGERS SELECTED WITHIN THE MANUFACTURER'S PUBLISHED LOAD RATINGS AND SHALL BE AUTO-GRIP, FEE AND MASON, OR GRINNEL HANGERS FOR COPPER PIPE SHALL BE EITHER COPPER-PLATED TYPE OR THERE SHALL BE A SHIELD OF 4 POUNDS SHEET LEAD TO COMPLETELY SURROUND THE PIPE TO PREVENT DIRECT CONTACT WITH THE HANGER SUPPORTS FOR PIPES WITH VAPOR BARRIER TYPE COVERING SHALL NOT CONTACT THE PIPE BUT SHALL SURROUND THE UNBROKEN COVERING. PROVIDE GALVANIZED STEEL SHIELDS WITH MITERED CORNERS PROPERLY FORMED TO THE JACKET OUTSIDE DIAMETER BETWEEN HANGER CLEVISES AND THE LOWER 1/3 OF THE CIRCUMFERENCE.

10. PIPE SLEEVES: PROVIDE PIPE SLEEVES OR CORE BORE FOR ALL PIPES PASSING THROUGH CONCRETE OR MASONRY WALLS. SLEEVES THROUGH FLOOR SLABS OR FIRE WALLS SHALL BE GALVANIZED STEEL PIPE OF PROPER SIZE. FILL ALL SPACES BETWEEN PIPING AND SLEEVES PASSING THROUGH FIRE-RATED WALLS, FLOORS, OR CEILINGS WITH MATERIAL CAPABLE OF MAINTAINING THE FIRE-RESISTANCE RATING OF THE WALL. FLOOR OR CEILING. USE METACAULK 950GW-1 OR APPROVED EQUAL CAULKING MATERIAL FOR PVC AND CPVC PIPING.

11. ESCUTCHEONS: PROVIDE ESCUTCHEONS ON ALL FINISHED SURFACES WHERE PIPING PENETRATE. FASTEN SECURELY TO PIPE OR PIPE COVERING.

12. CONTROLS: PROVIDE ALL PRESSURE CONTROLS. TEMPERING VALVES, AQUASTATS, TEMPERATURE AND PRESSURE RELIEF VALVES AND CONTROL VALVES NECESSARY FOR THE OPERATION OR ADJUSTMENT OF EQUIPMENT AND NOT SUPPLIED AS PART OF THE EQUIPMENT. INSTALL ALL HIGH VOLTAGE (120 V OR ABOVE) CONTROL WIRING IN EMT CONDUIT. INSTALL LOW VOLTAGE CONTROL WIRING IN CONDUIT UNLESS CONCEALED IN WALLS OR ABOVE FINISHED CEILINGS. DO NOT RUN LOW VOLTAGE CONTROL WIRING IN THE SAME CONDUIT AS HIGH VOLTAGE CONTROL OR POWER WIRING.

13. TESTING: ALL DRAINAGE, VENT AND INSIDE CONDUCTOR PIPING SHALL BE TESTED BEFORE FIXTURES ARE INSTALLED BY CAPPING OR PLUGGING THE OPENINGS AND FILLING THE ENTIRE SYSTEM WITH WATER, ALLOWING IT TO STAND THUS FILLED FOR 24 HOURS WITH AT LEAST 10 FEET OF PRESSURE. IF REQUIRED TO TEST SYSTEM IN SECTIONS, PROVIDE NECESSARY TEST TEES, PLUGS AND STAND PIPE TO TEST THE SYSTEM WITH AT LEAST 10 FEET OF PRESSURE. REMAKE ALL LEAKING JOINTS AND RETEST. TEST ALL WATER SUPPLY PIPING BEFORE FIXTURES, EQUIPMENT AND/OR HYDRANTS ARE CONNECTED. CAP OR PLUG THE OPENINGS, FILL THE SYSTEM WITH WATER AND APPLY A HYDROSTATIC PRESSURE OF 1.5 TIMES THE OPERATING PRESSURE OR 125 PSIG, WHICH EVER IS HIGHER. HOLD TEST PRESSURES FOR AT LEAST 24 HOURS. REMAKE ALL LEAKING JOINTS AND RETEST UNTIL SYSTEMS PROVE TIGHT. THESE TESTS ARE MINIMUM AND ARE NOT INTENDED TO BE LIMITING WHERE ADDITIONAL TESTING METHODS ARE REQUIRED BY GOVERNING AUTHORITY. TEST EACH FIXTURE FOR SOUNDNESS, STABILITY OF SUPPORT, AND SATISFACTORY OPERATION OF ALL ITS PARTS.

14. DISINFECTION OF POTABLE WATER PIPING: DISINFECT ANY PART OF POTABLE WATER SYSTEM INSTALLED OR REPAIRED IN ACCORDANCE WITH ONE OF THE FOLLOWING METHODS BEFORE IT IS PLACED IN SERVICE:

AFTER TESTS ARE COMPLETED, FILL ALL WATER SUPPLY SYSTEMS WITH A SOLUTION CONTAINING 50 PPM OF AVAILABLE CHLORINE AND ALLOW TO STAND FOR A PERIOD OF AT LEAST 24 HOURS BEFORE BEING FLUSHED WITH CLEAN WATER. DELIVER A DATED LETTER CERTIFYING STERILIZATION TO THE ARCHITECT.

AFTER TESTS ARE COMPLETED, FILL ALL WATER SUPPLY SYSTEMS WITH A SOLUTION CONTAINING 200 PPM OF AVAILABLE CHLORINE AND ALLOW TO STAND FOR A PERIOD OF AT LEAST 3 HOURS BEFORE BEING FLUSHED WITH CLEAN WATER. DELIVER A DATED LETTER CERTIFYING STERILIZATION TO THE ARCHITECT.

15. CLEANING AND RUBBISH: DURING THE WORK, KEEP THE PREMISES CLEAR OF RUBBISH CREATED AS A RESULT OF THE WORK. PROTECT AND PREVENT UNNECESSARY INDUCTION OF DIRT INTO PIPING, FIXTURES AND EQUIPMENT. ON COMPLETION OF THE WORK, REMOVE ALL RUBBISH AND DEBRIS RESULTING FROM THE WORK AND DISPOSE OF SAME. THOROUGHLY CLEAN AND LEAVE IN A SATISFACTORY CONDITION FOR USE OF ALL EQUIPMENT, PIPE, FIXTURES, ETC.

#### **LEGEND**

	FLOOR DRAIN		PIPE RISERS (DROP)
<b>—</b>	FLOOR CLEANOUT	-0 -0-	PIPE RISERS (UP)
<u> </u>	WALL CLEANOUT	—н —э	PIPE END (CAPPED)
$-\infty$	TRAPPED DRAIN	s	SANITARY SEWER LINE
J	TRAP	v	VENT LINE
INV. EL.	INVERT ELEVATION	J¦Ł∨⊤R	VENT THRU ROOF
	COLD WATER		HOT WATER
st	UNDERGROUND STORM WATER	<del>  -</del>	WALL HYDRANT
RW	OVERHEAD RAIN WATER	S.A.	SHOCK ABSORBER
OF	OVERHEAD OVERFLOW DRAIN	A.P.	ACCESS PANEL
	UNION	<b>─</b> ►►	CHECK VALVE
$-\!\!\bowtie\!\!-$	BALL VALVE (EXCEPT OTHERWISE NOTED)	Т	
<b>——</b>	VALVE (NORMAL CLOSE)	<b>—</b>	VERTICAL MOUNT DOUBL COMBINATION WYE (TYP.
—— <del>\</del>	PRESSURE RELIEF VALVE	_	FOR DETAIL).

#### PLUMBING GENERAL NOTES

1. SEE SPECIFICATION FOR ADDITIONAL INFORMATION AND REQUIREMENTS

2. COORDINATE HVAC EQUIPMENT AND DUCT LOCATION WITH HVAC CONTRACTOR. SEE MECH DWGs. FOR ADDITIONAL INFORMATION.

\_\_\_\_\_\_\_

3. DO NOT INSTALL PIPING ABOVE ELECTRICAL PANELS OR EQUIPMENT. COORDINATE ELECTRICAL PANEL AND EQUIPMENT LOCATION WITH ELECTRICAL CONTRACTOR.

4. RUN ALL HORIZONTAL COLD & HOT WATER PIPING ABOVE CEILINGS UNLESS OTHERWISE NOTED.

5. EXTERIOR HOSE BIBS TO BE LOCATED 18" ABOVE GRADE UNLESS OTHERWISE NOTED.

6. INSTALL ALL WORK IN A NEAT AND WORKMANLIKE MANNER, USING ONLY WORKMEN THOROUGHLY QUALIFIED IN THE TRADE OR DUTIES THEY ARE TO PERFORM. ROUGH WORK WILL BE REJECTED.

7. MAINTAIN A MINIMUM 10' CLEARANCE BETWEEN HVAC EQUIPMENT FRESH AIR INTAKES AND SANITARY VENTS.

8. DOMESTIC WATER SHUT-OFF VALVES LOCATED ABOVE DRYWALL CEILINGS SHALL BE GROUPED TOGETHER TO PROVIDE ACCESS FROM SINGLE ACCESS PANELS IF POSSIBLE. PROVIDE WITH IDENTIFICATION TAG INDICATING AREAS THE VALVE CONTROLS.

9. UNLESS OTHERWISE DIRECTED, ALL DOMESTIC WATER SHALL BE LOCATED AS HIGH AS POSSIBLE, TIGHT TO BOTTOM OF STRUCTURE. UNLESS OTHERWISE DIRECTED. SANITARY AND VENT PIPING SHALL BE LOCATED AS HIGH AS POSSIBLE, TIGHT TO BOTTOM OF STRUCTURE, WITH MINIMUM SLOPE REQUIRED BY APPLICABLE CODE REQUIREMENTS.

COORDINATE ALL LATERAL CONNECTIONS WITH CIVIL ENGINEERING DRAWINGS, ANY CONFLICTS TO BE RESOLVED PRIOR TO START OF CONSTRUCTION.

11. CLEANOUTS ON 6" AND SMALLER PIPING SHALL BE PROVIDED WITH A CLEARANCE OF NOT LESS THAN 18" FOR RODDING.

L\_\_\_\_\_

#### PLUMBING EQUIPMENT SCHEDULE

OWNER SELECTED SINK AND FAUCET, LK-35 DRAIN, 17 GA. OFF-SET CAST BRASS P-TRAP AND CAST BRASS LOOSE KEY WALL SUPPLIES. PROVIDE WITH LEONARD POINT OF USE MIXING VALVE MODEL 170-BP.

WHITE VITREOUS CHINA FLOOR MOUNTED, TANK TYPE, SIPHON JET WATER CLOSET WITH ELONGATED BOWL, 17" HIGH RIM FOR HANDICAPPED USE: KOHLER "HIGHLINE" MODEL K-3493-T WITH COMMERCIAL GRADE OPEN FRONT SEAT LESS COVER AND CHROME PLATED LOOSE T-KEY STOP AND SUPPLY. PROVIDE RIGHT HAND OR LEFT HAND TRIP LEVER AS REQUIRED TO MEET A.D.A. REQUIREMENTS.

WHITE VITREOUS CHINA WALL HUNG LAVATORY FOR HANDICAPPED. KOHLER KINGSTON MODEL K-2007 WITH DELTA SINGLE HANDLE DECK MOUNT FAUCET MODEL 561T, KOHLER K-7131 OFFSET GRID DRAIN, K-8998 P-TRAP, K-7601-P LOOSE KEY WALL SUPPLIES AND HEAVY DUTY CHAIR CARRIER. INSTALL FIXTURE AND INSULATE SUPPLY AND DRAIN LINES TO COMPLY WITH A.D.A. REQUIREMENTS. PROVIDE WITH LEONARD POINT OF USE MIXING VALVE MODEL 170 WITH RECESS MOUNTED LOCKING VALVE BOX. INSULATE SUPPLY AND DRAIN LINES TO COMPLY WITH A.D.A. REQUIREMENTS.

COUNTER TOP MOUNTED SINGLE COMPARTMENT DEEP BOWL STAINLESS STEEL SINK WITH GOOSENECK FAUCET. ELKAY MODEL LR2522 WITH ELKAY MODEL 4301 FAUCET WITH SWIVEL SPOUT AND SINGLE LEVER HANDLE, LK-35 DRAIN, 17 GA. OFF-SET CAST BRASS P-TRAP AND CAST BRASS LOOSE KEY WALL SUPPLIES. PROVIDE WITH LEONARD POINT OF USE MIXING VALVE MODEL 170-BP.

COUNTER TOP MOUNTED SINGLE COMPARTMENT DEEP BOWL STAINLESS STEEL SINK WITH GOOSENECK FAUCET. ELKAY MODEL LR2522-10 DEEP WITH ELKAY MODEL LK810GN04L2 FAUCET WITH SWIVEL GOOSENECK AND DUAL LEVER HANDLES, LK-35 DRAIN, 17 GA. OFF-SET CAST BRASS P-TRAP AND CAST BRASS LOOSE KEY WALL SUPPLIES. PROVIDE WITH LEONARD POINT OF USE MIXING VALVE MODEL 170-BP.

COUNTER TOP MOUNTED SINGLE COMPARTMENT DEEP BOWL STAINLESS STEEL SINK WITH GOOSENECK FAUCET. ELKAY MODEL LR2219-10 DEEP WITH ELKAY MODEL LKD2423BHC FAUCET WITH SWIVEL GOOSENECK AND 4" BLADE HANDLES, LK-35 DRAIN, 17 GA, OFF-SET CAST BRASS P-TRAP AND CAST BRASS LOOSE KEY WALL SUPPLIES. PROVIDE WITH LEONARD POINT OF USE MIXING VALVE MODEL 170-BP.

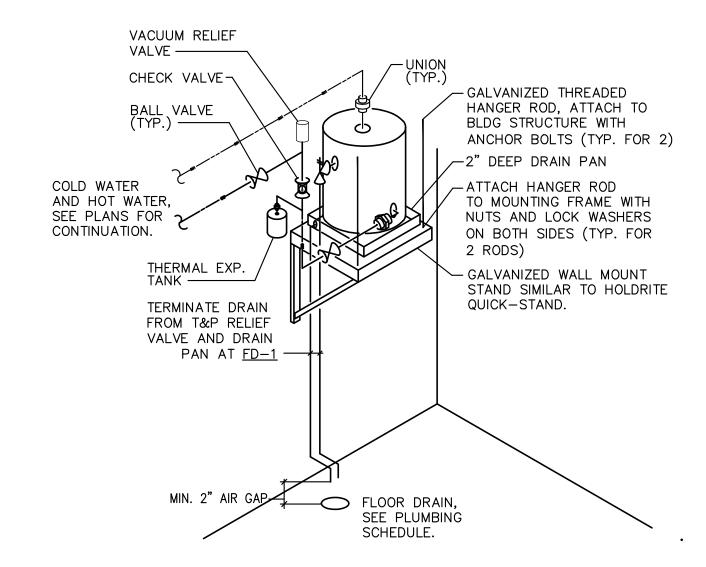
FLOOR CLEAN OUT, SIOUX CHIEF SERIES 834, NICKEL BRONZE, ABS THREADED BRASS INSERT, SCHEDULE 40 HUB CONNECTION.

WALL CLEAN OUT, J. R. SMITH 4472-U WITH VANDAL PROOF SCREW AND STAINLESS STEEL COVER.

FLOOR DRAIN; ZURN MODEL Z415-VP-P-Y WITH VANDAL-PROOF SECURE TOP, 1/2" TRAP SEAL PRIMER CONNECTION AND SEDIMENT BUCKET.

TRAP PRIMER, MIFAB MODEL MR-500-NPB WITH LEAD FREE MATERIAL AND MODEL MI-DU DISTRIBUTION UNIT (WHERE REQUIRED).

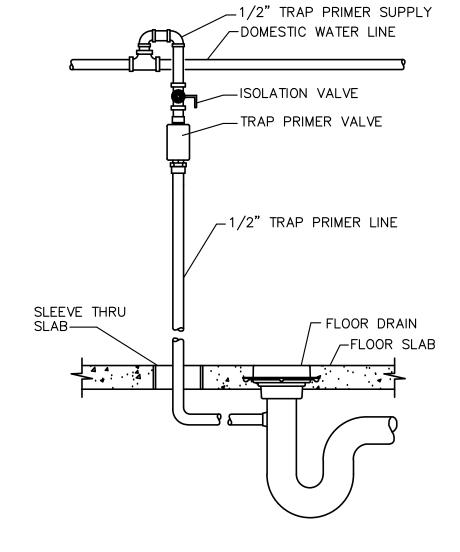
A.O. SMITH PROMAX WATER HEATER WITH GLASS LINED 30 GALLON STORAGE TANK, MODEL ENB-30. PROVIDE WITH HEAT TRAP, T&P RELIEF VALVE, 2" DEEP DRAIN PAN AND WATTS SERIES DET-12 THERMAL EXPANSION TANK. WATER HEATER SHALL BE RATED AT 4.5KW/208V/1 PHASE WITH NON-SIMULTANEOUS ELEMENTS.



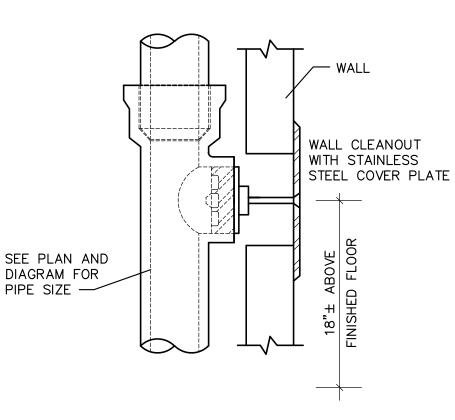
MOUNT WATER HEATER ON GALVANIZED WALL STAND. PROVIDE 24" MINIMUM CLEARANCE ABOVE WATER HEATER.

> DETAIL - WATER HEATER NOT TO SCALE

> > MODEL







DETAIL — WALL CLEANOUT NOT TO SCALE

<u>∤ B</u> ∤	
	N
	2

1250XL-F	F	1	10 7/8	2 7/8	34.4	155-330
NOTES:						
1. "PDI" REFE	RS TO	THE PL	JMBING AI	ND DRAIN	AGE INSTITU	TE.
2. MODEL NU		•				
INDICATED IN				/ED FROM	ZURN/WILK	INS WATER

Α

in.

**DIMENSIONS** 

(APPROXIMATE)

9 5/16 | 1 3/4 |

В

in.

CHÁMBER

VOLUME

cubic in.

3.5

4.3

6.5

22.4

1-11

12-32

33–60

61-113

114-154

PDI | MIPS

| SIZE | THREAD

1250XL-D | D | 1

1250XL-A | A | 1/2 | 5 1/4 | 1 1/8

1250XL-B | B | 3/4 | 5 5/8 | 1 5/8

1250XL-C | C | 1 | 7 1/2 | 1 5/8

1250XL-E | E | 1 | 10 1/4 | 2 1/2 |

|HAMMER ARRESTERS PRODUCT LINE 3. WATER HAMMER ARRESTERS ARE REQUIRED TO BE "LEAD-FREE" AND SHALL MEET THE REQUIREMENTS OF BOTH NSF 61 AND NSF 372.

> WATER HAMMER ARESTOR NOT TO SCALE

# Tenant Buildout for: Claritas Eye

7458 US Highway 1 North Suite B-105 St. Augustine, FL 32095



LANE ARCHITECTURE 904 Margaret Street Jacksonville, Florida 32204 904.355.9020 J. Lane, Reg. No. AR 12715

Plumbing, Mechanical & Electrical Engineering:

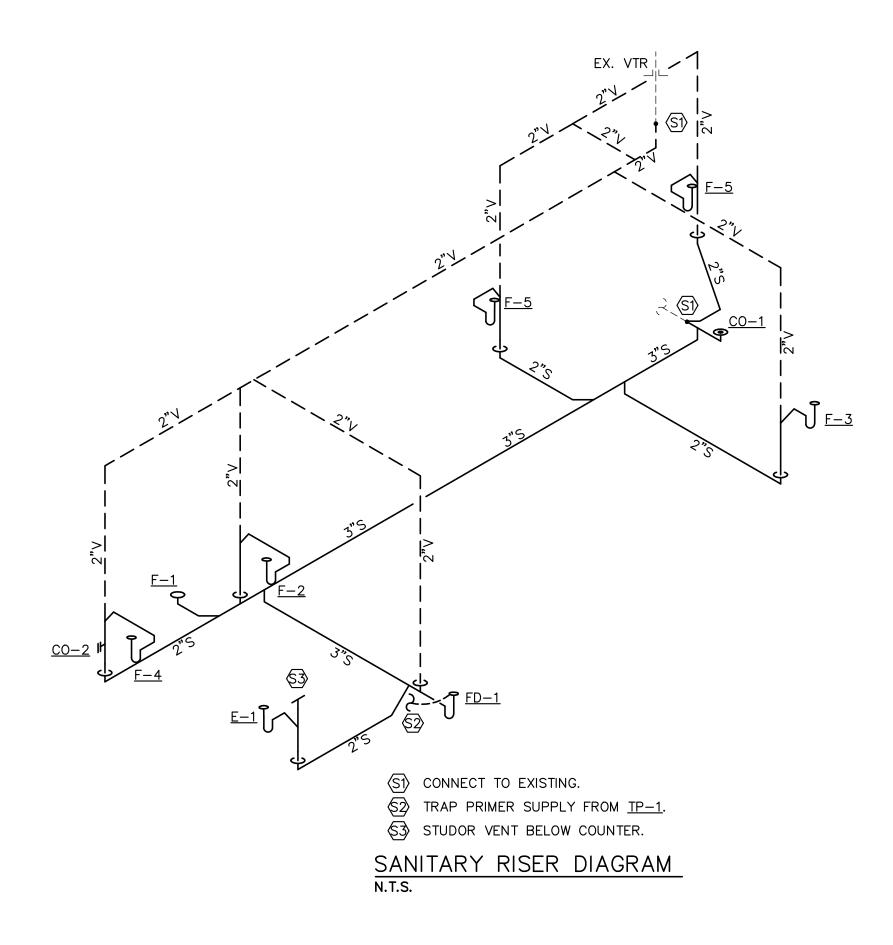
Powell & Hinkle Engineering 1409 Kingsley Avenue Building 12A Orange Park, Florida 904 264 5570 Robert Hinkle, PE No. 29302 Lane Hinkle, PE No. 48076 Thomas Elder, PE No. 56121

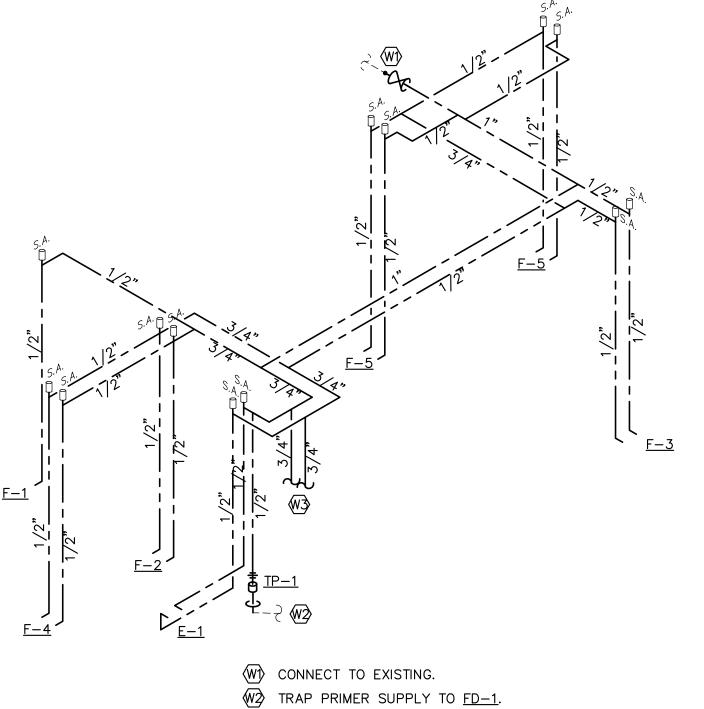
Revisions:

PLUMBING LEGEND SCHEDULES, SPECS **NOTES & DETAILS** 

3164 PLBG

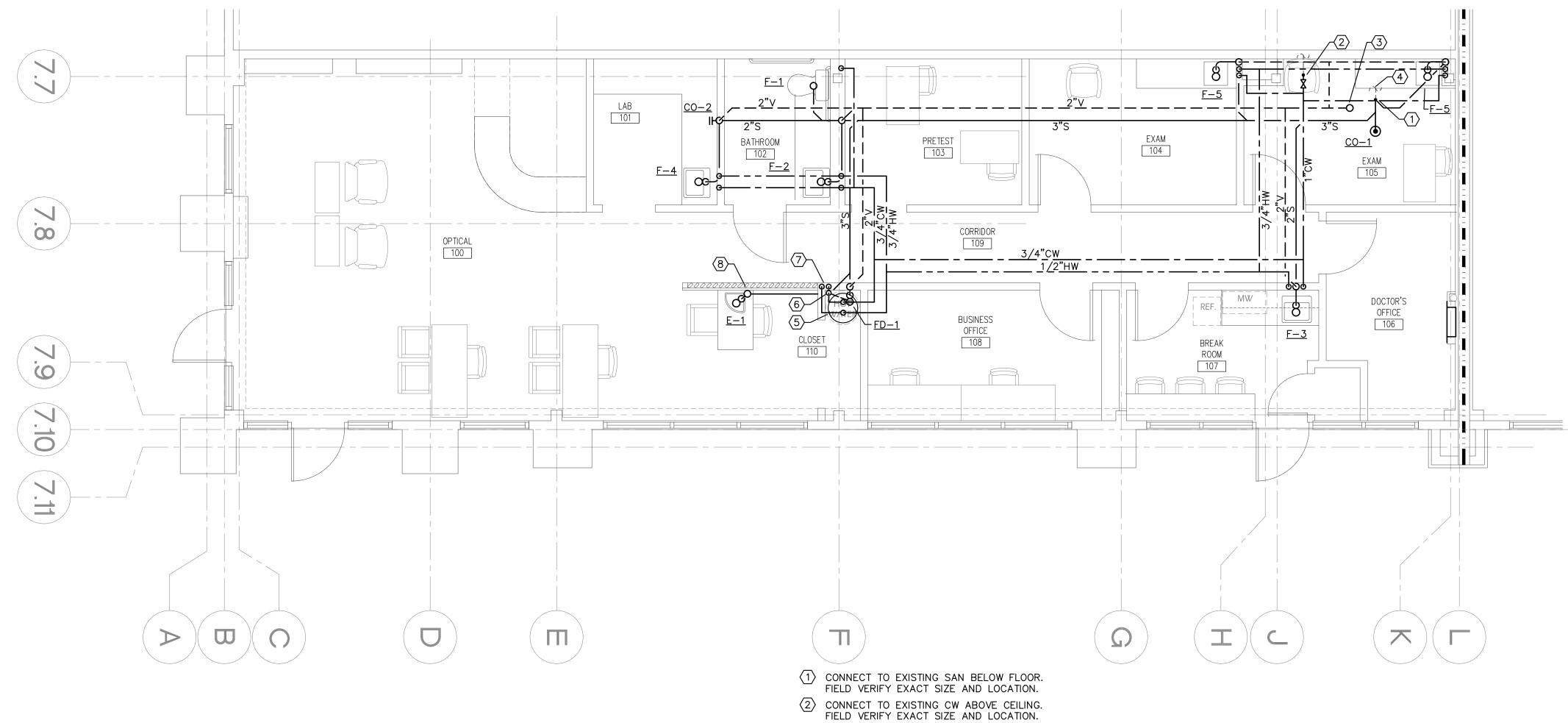
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W3 DOWN TO WATER HEATER <u>EWH-1</u>.

DOMESTIC WATER RISER DIAGRAM N.T.S.



(3) CONNECT TO EXISTING VTR BELOW ROOF. FIELD VERIFY EXACT SIZE AND LOCATION.

4 ANTICIPATED LOCATION OF EXISTING SAN. FIELD VERIFY EXACT SIZE AND LOCATION.

6 1/2" CW DOWN TO TRAP PRIMER <u>TP-1</u>.

(8) 2" STUDOR VENT BELOW COUNTER.

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

5 30-GALLON ELECTRIC WATER HEATER <u>EWH-1</u>. MOUNTED HIGH ON SHELF WITH DRAIN PAN.

 $\overline{7}$  1/2" CW & HW ROUTED THRU WALL TO <u>E-1</u>.

PLUMBING OVERALL FLOOR PLAN

Revisions:

Date: 09.11.2019

File: 3164PLBG
PLUMBING

FLOMBING FLOOR PLAN & RISER DIAGRAMS

Tenant Buildout for: Claritas Eye Care

7458 US Highway 1 North Suite B-105

LANE ARCHITECTURE

904 Margaret Street
Jacksonville, Florida 32204
904.355.9020
J. Lane, Reg. No. AR 12715

Plumbing, Mechanical & Electrical Engineering:

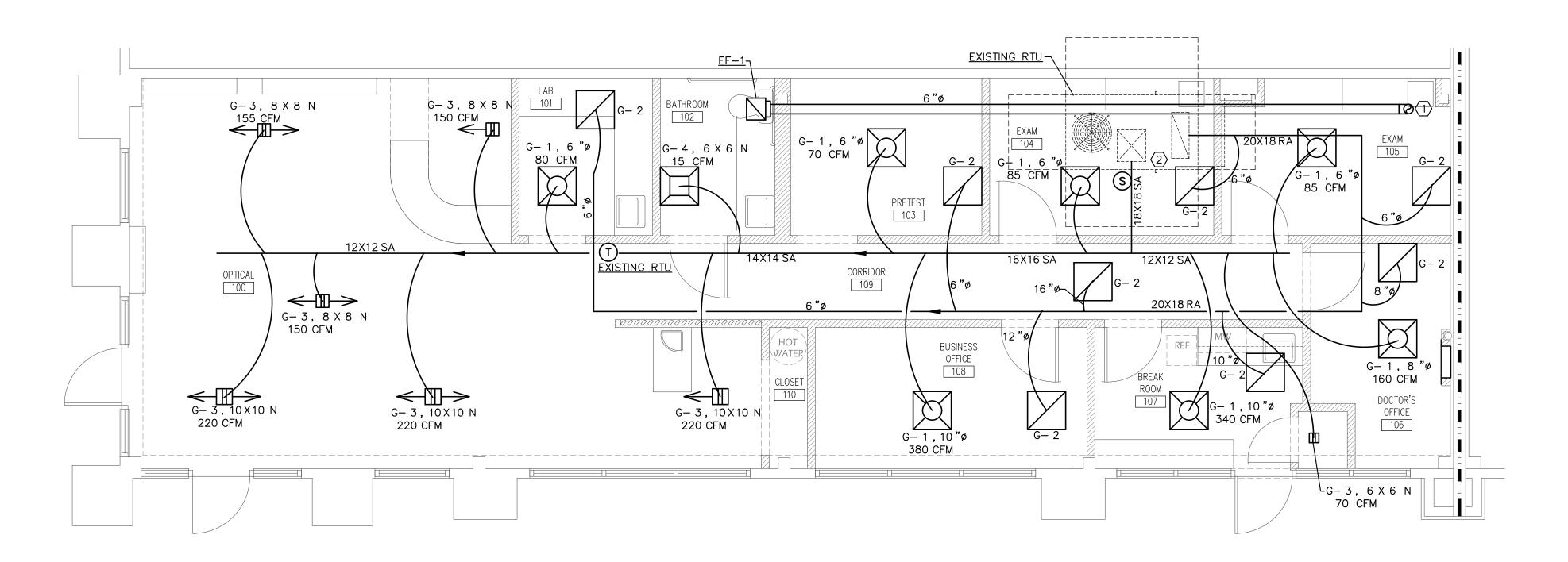
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Robert Hinkle, PE No. 29302 Lane Hinkle, PE No. 48076

Thomas Elder, PE No. 56121

St. Augustine, FL 32095

Architectural Services:





#### FLAG NOTES:

- (1) CONNECT NEW 6"Ø EXHAUST DUCT TO EXISTING GOOSENECK LOCATED ON ROOF. FIELD VERIFY EXACT LOCATION.
- FIELD VERIFY EXACT LOCATION OF EXISTING 6 TON STRAIGHT COOL PACKAGE ROOFTOP UNIT. SET OUTSIDE AIR MOTORIZED DAMPER TO 240 CFM. IF EXISTING UNIT DOES NOT HAVE MOTORIZED DAMPER PROVIDE ONE. PROVIDE SMOKE DETECTOR IN SUPPLY DUCT.

# Tenant Buildout for: Claritas Eye Care

7458 US Highway 1 North Suite B-105 St. Augustine, FL 32095

Architectural Services:



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Revisions:

Date: 09.11.2019

File: 3164M101

HVAC FLOOR PLAN



#### HEATING, VENTILATING, AND AIR CONDITIONING SPECIFICATIONS

1. SCOPE: PROVIDE A COMPLETE HEATING, AND AIR CONDITIONING SYSTEM AS SHOWN ON DRAWINGS AND MEETING THE REQUIREMENTS OF APPLICABLE STATE AND LOCAL CODES. OBTAIN ALL PERMITS AND NECESSARY CERTIFICATES. PROVIDE AIR TEST AND BALANCE FOR ALL HVAC SYSTEMS AND CONTROL SYSTEM SUPPORT DURING TAB WORK.

2. GUARANTEE: PROVIDE ALL NEW MATERIALS AND EQUIPMENT, AND GUARANTEE SAME AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.

3. VISIT THE SITE AND THOROUGHLY INSPECT CONDITIONS AFFECTING THE WORK BEFORE SUBMITTING BID. ASSUME RESPONSIBILITY FOR MEETING ALL EXISTING CONDITIONS INCLUDING ACCESS AND WORK SPACE LIMITATIONS.

4. SUBMIT SHOP DRAWINGS OR CATALOG DATA FOR THE ARCHITECT'S APPROVAL BEFORE PURCHASING OR INSTALLING THE FOLLOWING: GRILLES, DIFFUSERS AND REGISTERS, EXHAUST FANS, INSULATION, AND CONTROL SYSTEMS.

5. PROVIDE FOUR (4) COMPLETE SETS OF A COMPILATION OF CATALOG DATA OF EACH MANUFACTURED ITEM OF EQUIPMENT USED IN THE MECHANICAL WORK. IN ADDITION TO THE CATALOG DATA, INSTALLATION, OPERATING AND MAINTENANCE DATA AND BILL OF MATERIALS FOR ALL OPERATING EQUIPMENT SHALL BE SUBMITTED. EACH OF THE FOUR SETS OF DATA SHALL BE BOUND IN LOOSE LEAF BINDERS AND SUBMITTED TO THE ARCHITECT BEFORE FINAL PAYMENT IS MADE.

6. MECHANICAL/ELECTRICAL COORDINATION: UNLESS SPECIFICALLY REQUIRED OTHERWISE, ELECTRICAL CONTRACTOR SHALL FURNISH, SET AND WIRE DISCONNECT DEVICES FOR AHU AND AC UNITS. AND SHALL PROVIDE ALL POWER WIRING. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL A/C CONTROL DEVICES AND CONTROL WIRING. FURNISH DETAILED INFORMATION TO THE ELECTRICAL CONTRACTOR ON POWER WIRING REQUIREMENTS FOR ALL MECHANICAL EQUIPMENT ACTUALLY PURCHASED AS SOON AS PRACTICAL. THIS SHALL INCLUDE ALL DIAGRAMS AND INSTRUCTIONS NECESSARY FOR THE ELECTRICAL CONTRACTOR TO MAKE CONNECTIONS PROPERLY. IF EQUIPMENT ACTUALLY PURCHASED REQUIRES LARGER ELECTRICAL SERVICE THAN EQUIPMENT SCHEDULED, ARRANGE AND PAY FOR REQUIRED ELECTRICAL SERVICE CHANGE. PROVIDE ALL AIR CONDITIONING CONTROL DEVICES, INCLUDING THERMOSTATS, AND COMPLETE ALL CONTROL WIRING, INCLUDING FINAL CONNECTIONS. COORDINATE LOCATION OF EQUIPMENT, PIPING, AND DUCTWORK WITH ELECTRICAL CONTRACTOR, FIRE PROTECTION CONTRACTOR, AND PLUMBING CONTRACTOR TO MAINTAIN CLEARANCE FOR EQUIPMENT MAINTENANCE, PREVENT INTERFERENCE WITH DUCT AND PIPING RUNS, AND TO PREVENT DUCTS AND PIPING FROM BEING INSTALLED OVER ELECTRICAL PANELS. IF INTERFERENCE DEVELOPS, THE ARCHITECT WILL DECIDE WHICH EQUIPMENT, CONDUIT, DUCT, PIPING, ETC., MUST BE RELOCATED REGARDLESS OF INSTALLATION ORDER. TAKE RESPONSIBILITY FOR RELOCATING MECHANICAL WORK, IF SO ORDERED, INCLUDING ALL ASSOCIATED COSTS. WITHIN 30 DAYS FOLLOWING AWARD OF THE CONTRACT, REPORT TO THE ARCHITECT IN WRITING, ALL REAL OR POTENTIAL ERRORS, AMBIGUITIES AND/OR CONFLICTS ON THE MECHANICAL WORK OR BETWEEN THE TRADES AND OBTAIN AN AGREEMENT WITH THE ARCHITECT ON A SOLUTION. THOSE REPORTED AFTER 30 DAYS, EXCEPT AS A RESULT OF UNFORESEEN CIRCUMSTANCES, SHALL BE RESOLVED AT THE DISCRETION OF THE ARCHITECT. REPORT CONFLICTS RESULTING FROM THE PROGRESS OF WORK TO THE ARCHITECT IMMEDIATELY OR ACCEPT THE EXPENSE FOR CORRECTIVE WORK CAUSED BY FAILURE TO REPORT SUCH A CONFLICT.

7. DUCT WORK: HVAC DUCT WORK SHALL BE GALVANIZED SHEET STEEL. FABRICATE SHEET METAL DUCT WORK IN ACCORDANCE WITH LATEST EDITION OF "HVAC DUCT" CONSTRUCTION STANDARDS — METAL AND FLEXIBLE" AS PUBLISHED BY SMACNA AND DESIGNED FOR 1-1/2" W.G. MINIMUM STATIC PRESSURE. HVAC SUPPLY AND RETURN DUCT CHANGES IN DIRECTION, INCLUDING TEES, SHALL BE MADE WITH MITERED ELBOWS FITTED WITH CLOSELY SPACED TURNING VANES DESIGNED FOR MAINTAINING CONSTANT VELOCITY THROUGH ELBOW. CHANGES IN DIRECTION IN RETURN DUCTS MAY BE MADE WITH RADIUS ELBOWS INSTEAD OF MITERED ELBOWS AND TURNING VANES.

8. FLEXIBLE DUCT SHALL BE PRE-INSULATED TYPE, LISTED BY UNDERWRITERS' LABORATORIES, INC., CLASS 1 DUCTS, AND SHALL CONFORM TO NFPA BULLETIN 90-A. INSULATION SHALL BE THE REQUIRED THICKNESS AND MATERIAL TO PROVIDE A MINIMUM THERMAL RESISTANCE "R" OF 5.0 WHEN DUCT IS LOCATED IN ATTIC SPACES ABOVE THE BUILDING INSULATION AND 3.3 WHEN LOCATED BELOW THE BUILDING INSULATION UNLESS OTHERWISE NOTED ON THE DRAWINGS.

9. DUCT INSULATION: DUCT INSULATION SHALL BE THE REQUIRED THICKNESS AND MATERIAL TO PROVIDE A MINIMUM THERMAL RESISTANCE "R" OF 6.0 WHEN DUCT IS LOCATED IN ATTIC SPACES ABOVE THE BUILDING INSULATION AND 4.2 WHEN LOCATED BELOW THE BUILDING INSULATION UNLESS OTHERWISE NOTED ON THE DRAWINGS. THESE R VALUES ARE "AS-INSTALLED" MINIMUMS. INSULATION NOMINAL THICKNESS SHALL NOT EXCEED 2". FLEXIBLE EXTERNAL INSULATION SHALL HAVE AN "AS-PACKAGED" R VALUE NOT LESS THAN 25% GREATER THAN THE REQUIRED "AS—INSTALLED" VALUE AND SHALL HAVE A DUPLEX LAMINATED, REINFORCED ALUMINUM FOIL VAPOR BARRIER. RIGID EXTERNAL INSULATION SHALL HAVE AN "AS-PACKAGED" R VALUE NOT LESS THAN THE REQUIRED "AS-INSTALLED" VALUE AND SHALL HAVE ALL SERVICE JACKET (ASJ) FACING. INSULATE ALL SHEET METAL SUPPLY, AND RETURN AIR DUCTWORK LOCATED IN CONCEALED SPACES AND BACKS AND NECKS OF DIFFUSERS WITH FLEXIBLE EXTERNAL INSULATION. INSULATE ALL SHEET METAL SUPPLY AND RETURN AIR DUCTWORK LOCATED IN AREAS EXPOSED TO VIEW WHETHER AREAS ARE AIR CONDITIONED OR NOT, AND RETURN AIR PLENUM FOR VERTICAL AIR HANDLING UNITS WITH SEMI—RIGID EXTERNAL INSULATION. LAP ALL JOINTS A MINIMUM OF 2" WITH GLASS CLOTH AND EMBED GLASS FABRIC IN COAT OF WHITE MASTIC AND COVER GLASS FABRIC WITH WHITE MASTIC (DUCT TAPE SHALL NOT BE USED). ADHERE INSULATION TO DUCT WITH ADHESIVE APPLIED WITH A 2" WIDE BRUSH AT 8" ON CENTERS. ON DUCTS OVER 24" ON ANY SIDE, ADDITIONALLY ATTACH INSULATION TO DUCTWORK ON BOTTOM AND SIDES WITH GRAHAM PIN STUDS AND SPEED WASHER OR STICK CLIPS PLACED 18" ON CENTER EACH WAY.

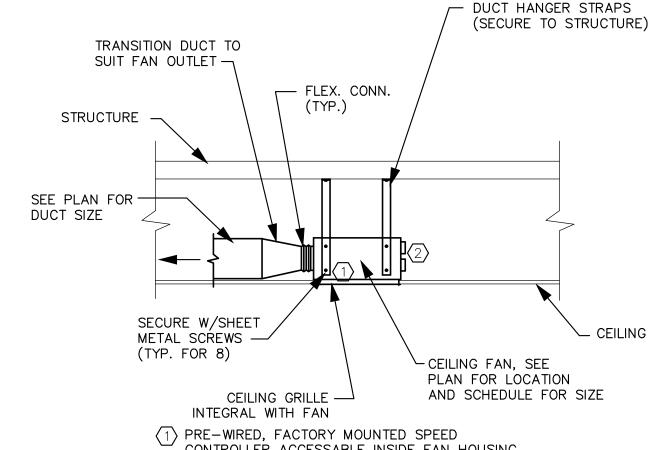
10. AIR DISTRIBUTION EQUIPMENT: AIR DISTRIBUTION DEVICES SHALL BE SELECTED TO DELIVER INDICATED VOLUME OF SUPPLY AIR WITHOUT EXCEEDING THE AVAILABLE THROW AND WITH AN NC RATING NOT EXCEEDING 30, INCLUDING HALF OPEN DAMPER. SUBMITTAL DATA SHALL INDICATE PERFORMANCE OF SELECTED DEVICES INCLUDING AIR QUANTITY, PATTERN, THROW, PRESSURE DROP, SOUND LEVEL, FINISH, DIMENSIONS AND CONSTRUCTION. SUPPLY DIFFUSERS AND RETURN GRILLS SHALL BE AS SCHEDULED ON DRAWINGS AND SHALL HAVE BAKED ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT.

11. EXHAUST FAN SHALL BE OF SIZE, TYPE AND CAPACITY INDICATED ON THE DRAWINGS. POWER SUPPLY SHALL BE AS SCHEDULED. THE COMPLETE UNITS SHALL BE APPROVED BY THE UNDERWRITERS' LABORATORIES AND BE IN FULL ACCORDANCE WITH ALL PROVISIONS OF THE NATIONAL ELECTRIC CODE.

12. TEST, BALANCE AND OPERATION: PROVIDE TEMPORARY FILTERS PRIOR TO OPERATING EQUIPMENT. TEST AND BALANCE ALL AIR SYSTEMS IN ACCORDANCE WITH AABC NATIONAL STANDARDS. PROVIDE TAB AGENCY WITH TECHNICAL SUPPORT TO OPERATE ALL CONTROL FUNCTIONS DURING TAB WORK. PROVIDE 24-HOUR OPERATIONAL TESTS TO SATISFACTION OF OWNER, INSTRUCT OWNER, AND PROVIDE OPERATING, PARTS LIST, AND MAINTENANCE MANUAL. AFTER CONSTRUCTION DUST HAS BEEN REMOVED FROM BUILDING BY TEMPORARY FILTERS, INSTALL NEW FILTERS.

13. LEAVE ALL SYSTEMS COMPLETELY OPERATIVE IN ALL DETAILS AND IN SATISFACTORY WORKING CONDITION, AS DETERMINED BY THE ARCHITECT. FURNISH AND INSTALL AS PART OF THIS CONTRACT ALL APPARATUS AND MATERIAL OBVIOUSLY A PART OF THE SYSTEMS AND NECESSARY FOR THEIR OPERATION.

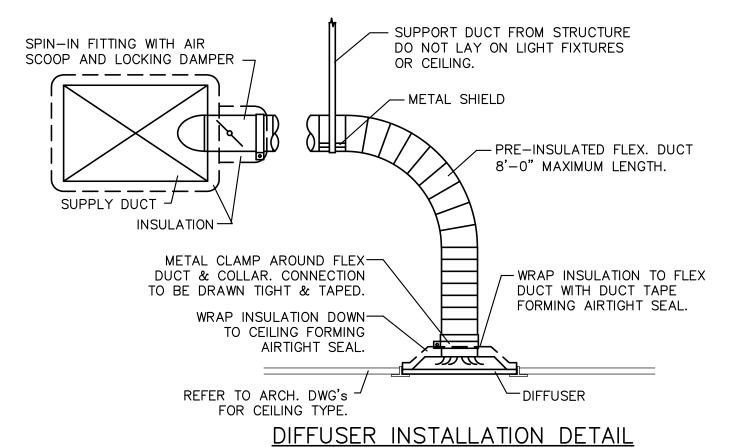
14. EQUIPMENT IDENTIFICATION: PROVIDE IDENTIFICATION NAMEPLATES ON ALL MECHANICAL RELATED EQUIPMENT INCLUDING CONTROL DEVICES, GIVING THE NAME AND NUMBER OF THE ITEM OF EQUIPMENT TO WHICH IT IS CONNECTED.



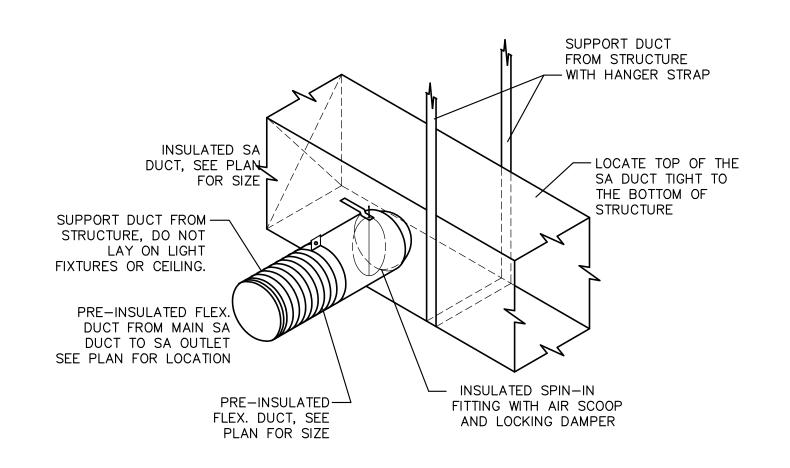
CONTROLLER ACCESSABLE INSIDE FAN HOUSING.

(2) UNIT MOUNTED DISCONNECT SWITCH.

TYPICAL CEILING FAN MOUNTING DETAIL



N.T.S.



<u>DETAIL - SUPPLY AIR BRANCH</u>

EQUIPMENT SCHEDULE - FAN					
APPROVED MAI	NUFACTURER	LOREN COOK CO.			
EQUIPMENT NU	MBER	EF-1			
MOUNTING TYP	E	CEILING			
	TYPE	CENTRIFUGAL			
	DRIVE	DIRECT			
FAN	RPM	833			
	CFM	70			
	S.P.	.25			
MOTOR	HP	56 WATTS			
MOTOR	VOLTS/PHASE	120V/1ø			
MODEL NUMBER		GC-124			
ACCESSORIES/	REMARK	(1)(2)(3)(4)			
NOTF:					

(1): BACK DRAFT DAMPER SPEED CONTROLLER

3): UNIT MOUNTED DISCONNECT (4): LIGHT SWITCH CONTROLLED

| EQUIPMENT SCHEDULE - DIFFUSERS, GRILLES & REGISTERS

NOTES: SEE ARCH. REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DIFFUSERS. ALL FLEXIBLE DUCT CONNECTIONS TO RECTANGULAR DUCT TO BE SPIN-INS WITH AIR SCOOP AND BALANCE DAMPER NECK SIZE AS SHOWN ON THE DRAWINGS.

	DALANCE DAMI EN. NECK 3	IZE AS SHOWN ON THE	DIAMINGS.
APPROVED I	MANUFACTURER: TIT	US (EXCEPT AS NOTED	*)
EQUIP. NO.	MOUNTING TYPE	MODEL NUMBER	ACCESSORIES/REMARKS
G-1	LAY-IN CEILING (SUPPLY)	TMS (24X24)	
G-2	LAY-IN CEILING (RETURN)	PAR (24X24)	
G-3	SURFACE (SUPPLY)	250	AG-15 DAMPER
G-4	LAY-IN (SUPPLY)	250	AG-15 DAMPER, BORDER 3

AIR BALANCE SCHEDULE							
MARK	SUPPLY	RETURN	OUTSIDE	EXHAUST	DIFFERENTIAL		
	AIR CFM	AIR CFM	AIR CFM	AIR CFM	CFM		
AHU-1	2400	2160	240	0	+240		
EF-1	0	0	0	70	-70		
TOTAL	2400	2160	240	70	+170		

#### HVAC LEGEND

RTU ROOFTOP UNIT EXISTING DUCT AND EQUIPMENT TO REMAIN NEW FLEXIBLE DUCT **NEW DUCT** SA SUPPLY AIR RA RETURN AIR EXHAUST AIR SUPPLY DIFFUSER RETURN GRILLE SMOKE DETECTOR **THERMOSTAT** 

Revisions:

Tenant Buildout for:

7458 US Highway 1 North

LANE ARCHITECTURE

Jacksonville, Florida 32204

J. Lane, Reg. No. AR 12715

Powell & Hinkle Engineering

Robert Hinkle, PE No. 29302

Thomas Elder, PE No. 56121

Lane Hinkle, PE No. 48076

Plumbing, Mechanical &

Electrical Engineering:

1409 Kingsley Avenue

Orange Park, Florida

St. Augustine, FL 32095

Architectural Services:

904 Margaret Street

904.355.9020

Building 12A

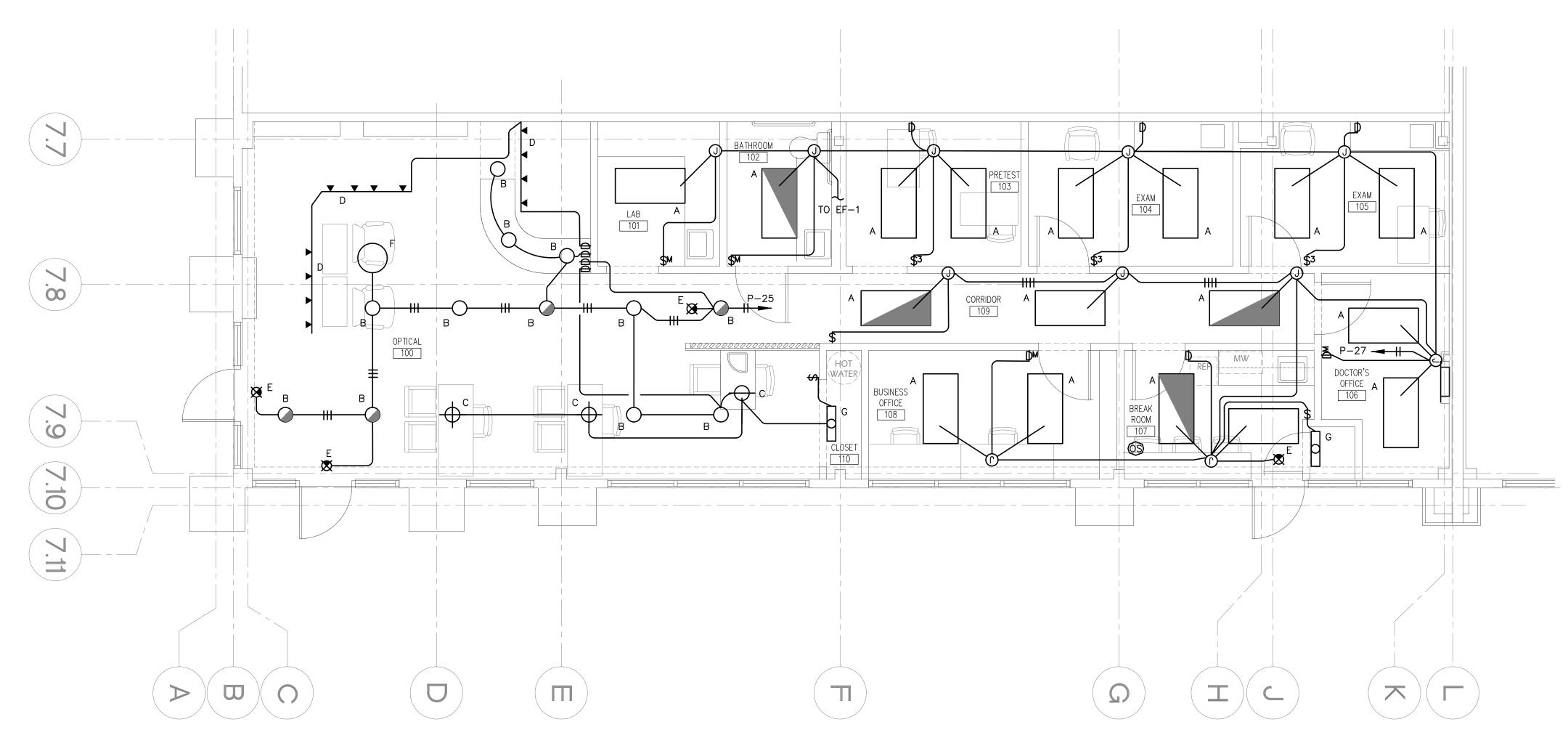
904 264 5570

Claritas Eye

Suite B-105

Date: 09.11.2019

File: 3164M201 HVAC **SCHEDULES** AND DETAILS



			(1)(2)(4)					
MARK	DESCRIPTION	MANUFACTURER (OR APPROVED EQUAL)	VOLT	QTY	LAMPS TYPE	INPUT WATTS	MTG/INSTALLATION (UNLESS INDICATED OTHERWISE)	NOTES
Α	2X4 LED TROFFER, FLAT PANEL	PHILIPS- 2 FXP 43 830 4 DS UNV DIM	120	_	39W LED, 3000K	39	CEILING/RECESSED	
В	6" LED DOWNLIGHT	WILLIAMS- 6DR TL L20 9 35 DIM UNV O W OF CS MWT N		_	19W LED, 3000K	19	CEILING/RECESSED	
С	DECORATIVE PENDANT	ROCKFORD- BCMH3670 1 LIGHT SINGLE BELL PENDANT		1	10W LED E26,3000K	10	PENDANT	(3)
D	LED TRACK LIGHT	OMG- SCORPIO TH720L (FINISH) W/ 6 FT TRACK		4	15W LED, 3000K	60	CEILING	(3)
Ε	EDGELIT EMERGENCY EXIT SIGN	BEGHELLI- CRV SA LR 1 1 C S WH		_	3W LED, RED	3	CEILING/SEMIRECESSED	
F	LED PENDANT	BALLARD DESIGNS- LR008 REMINGTON CHANDELIER		6	5W LED CAND. 3000K	30	PENDANT	(3)
G	LED STRIP, 2'	WILLIAMS- 75 2 L30/835 DIM UNV		_	24W LED	24	SURFACE	

## ⟨#⟩ NOTES:

EMERGENCY LIGHTING REQUIREMENTS:

WHERE 'SYMBOL HALF SHADED' IS INDICATED, PROVIDE FIXTURE WITH BUILT-IN EMERGENCY BATTERY UNIT FOR EMERGENCY LIGHTING (1100 LUMEN MIN. FOR 4FT LAMPS). FOR FIXTURES WHICH DO NOT HAVE AN INTEGRAL BATTERY BACKUP, PROVIDE INVERTER TO OPERATE INDIVIDUAL FIXTURE AT FULL LUMEN OUTPUT. INVERTER SHALL BE SIMILAR TO BODINE #ELI SERIES AND SHALL BE SIZED AS REQUIRED FOR FIXTURE INPUT WATTAGE(S). BATTERY OPERATED FIXTURES SHALL BE PROVIDED WITH FACTORY INSTALLED INTEGRAL TEST PUSH BUTTON MOUNTED IN TOP OF FIXTURE REFLECTOR. CONNECT FIXTURE TO OPERATE WITH SWITCH AND BATTERY/INVERTER TO OPERATE FIXTURE UPON BRANCH CIRCUIT FAILURE.

- 2. THE FIXTURE CATALOG NUMBERS GIVEN MAY NOT CONTAIN ALL PARTS & PIECES REQUIRED. CONTRACTOR TO INCLUDE ALL PARTS REQUIRED FOR A FULLY FUNCTIONING FIXTURE INCLUDING (BUT NOT LIMITED TO) HOUSINGS, TRIMS, REFLECTORS, BALLAST, TRANSFORMER(S), DRIVERS, LAMPS ETC. IN-ADDITION DIMMER SWITCHES SHALL BE COMPATIBLE WITH FIXTURE PROVIDED.
- 3. VERIFY FIXTURE TYPE/MANUFACTURER WITH OWNER. OBTAIN FIXTURE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. IF FIXTURE REQUIRES A 120V CONNECTION
- TIE TO NEAREST RECÉPTACLE. PROVIDE PENDANT LENGTH PER ARCHITECT. 4. CONFIRM ALL FINISHES WITH ARCHITECT BEFORE ORDERING.



# LIGHTING PLAN

# LIGHTING PLAN NOTES:

- 1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL CEILING
- 2. TYPICAL CEILING MOUNTED OCCUPANCY SENSOR CONNECTIONS (VIA LOW VOLT CABLES NOT
- A.) WHERE NO CIRCUIT NUMBERS OR SWITCH LETTERS ARE DESIGNATED; CONNECT ALL CEILING MOUNTED OCCUPANCY SENSORS FOR AUTOMATIC CONTROL OF AREA LIGHT FIXTURES IN TANDEM WITH LOCAL SWITCH AS INDICATED.
- 3. ALL SENSORS LOCATED IN AREAS SUCH AS OFFICES AND BREAK ROOMS SHALL BE PROGRAMMED AS VACANCY TYPE SENSORS. ALL SENSORS LOCATED IN AREAS SUCH AS OPEN AREAS, CORRIDORS & RESTROOMS SHALL BE PROGRAMMED AS OCCUPANCY TYPE SENSORS.

Tenant Buildout for: Claritas Eye Care

7458 US Highway 1 North Suite B-105 St. Augustine, FL 32095 Architectural Services:



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Plumbing, Mechanical & Electrical Engineering:

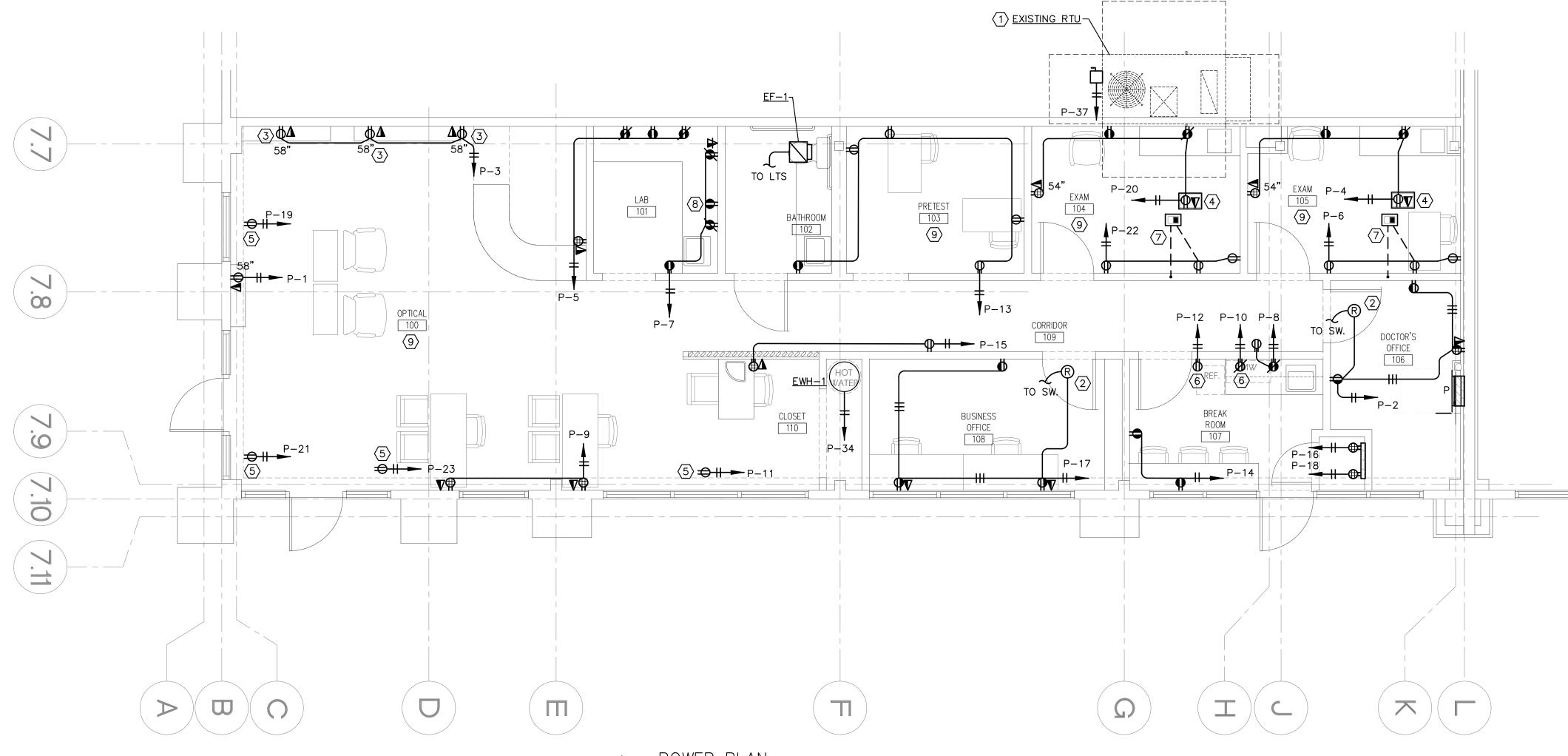
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Revisions:

Date: 09.11.2019

LIGHTING

PLAN



# POWER PLAN NOTES:

1. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND REQUIREMENTS OF ALL HVAC

EQUIPMENT.

- 2. PROVIDE SWITCHED CONNECTION FROM OCCUPANCY SENSOR CONTROLLED RELAY FOR 50% SWITCHING OF OUTLETS AS REQUIRED BY CODE. SEE 'TYPICAL OFFICE AREA VACANCY SENSOR WIRING DIAGRAM' FOR ADDITIONAL REQUIREMENTS.
- 3. PROVIDE RECEPTACLES AND DATA OUTLET AT 58" AFF FOR LED SHELF LIGHTING POWER SUPPLY AND DISPLAY. PROVIDE CONNECTIONS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONFIRM EXACT LOCATIONS OF SHELF RECEPTACLES AND DATA OUTLETS WITH ARCHITECT AND OMG LAYOUTS BEFORE ROUGH-IN. USE COMBINATION FACEPLATE.
- 4. RECEPTACLE & DATA OUTLET RECESSED IN CEILING. COORDINATE EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.
- 5. PROVIDE RECEPTACLE IN CEILING.
- 6. PROVIDE GFI BREAKER IN PANEL. 7. COORDINATE FLOOR OUTLET LOCATION WITH ARCHITECT AND OMG LAYOUTS BEFORE FLOOR
- 8. BELOW COUNTER RECEPTACLE FOR EDGER. COORDINATE WITH MANUFACTURER INSTALLATION
- INSTRUCTIONS. 9. COORDINATE ALL RECEPTACLE LOCATIONS IN THIS ROOM WITH ARCHITECT, OMG LAYOUTS AND OWNER BEFORE ROUGH-IN.

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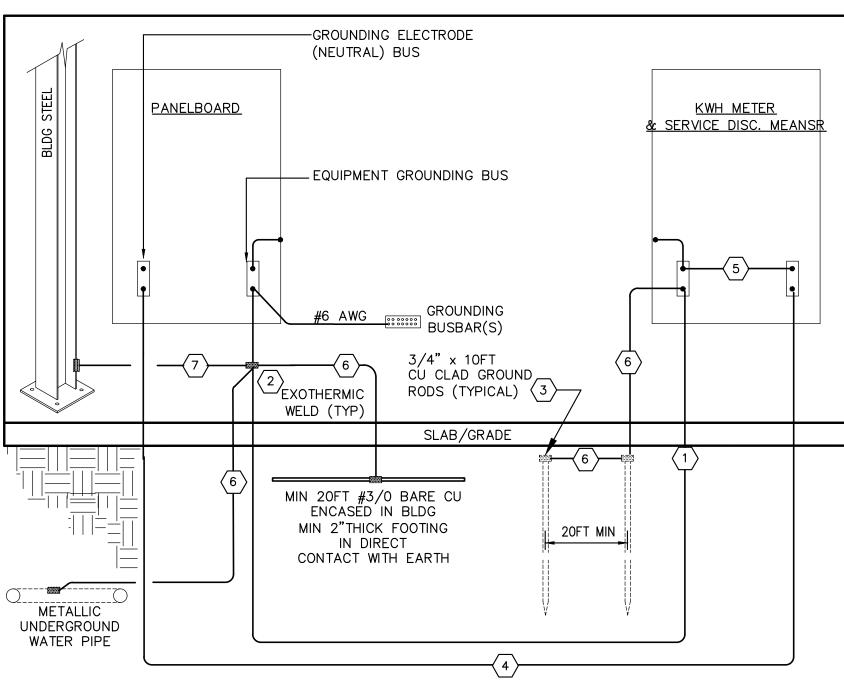
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Revisions:

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**POWER** PLAN



SYSTEM GROUNDING DETAIL

NO SCALE

# $\langle \# \rangle$ grounding detail notes:

- 1. EQUIPMENT GROUNDING CONDUCTOR (GND) -REFER TO POWER RISER FOR WIRE SIZE.
- ALL SERVICE GROUNDING CONNECTIONS SHALL BE DONE WITH EXOTHERMIC WELDS.
   AFTER GROUNDING SYSTEM IS INSTALLED, GROUND RESISTANCE SHALL BE MEASURED, TO ASSURE THAT GROUND VALUE OF 10 OHM MAXIMUM RESISTANCE IS ACHIEVED. IF NOT, ADDITIONAL GROUNDING SHALL BE PROVIDED TO MEET SPECIFIC VALUE.
- 4. GROUNDING ELECTRODE CONDUCTOR (NEUTRAL) REFER TO POWER RISER FOR WIRE SIZE.
- 5. MAIN BONDING JUMPER SIZE PER NEC 250-66. 6. #4 AWG GROUNDING ELECTRODE CONDUCTOR.

7. GROUNDING ELECTRODE CONDUCTOR PER NEC TABLE 250.66

ROOF (EXTERIOR) TENANT 105 **EXTERIOR** KWH METER TROUGH (TYP)UTILITY COMPANY TRANSFORMER 1600A ENC BKR (NEMA 3R) | 200A | 208/120V/3PH/4W ENCL BKR 200A GRADE 1ST FLR  $\langle 3 \rangle \langle 3 \rangle \langle 3 \rangle \langle 3 \rangle$  $\langle \overline{3} \rangle$ SERVICE ENTRANCE (2)---<u>}-----</u> 91.9A ADDED TO EXISTING 1600A SERVICE GROUNDING GND. PER NEC VERIFY EXISTING SERVICE CAPACITY. (PER UTILITY CO) (SEE GND DETAIL) PARTIAL EXISTING POWER RISER NO SCALE

# # RISER NOTES:

- EXISTING PRIMARY.
   EXISTING 1600A SECONDARY.
- 3. TO EXISTING TENANT SPACE.4. PROVIDE (200A) 4-#3/0, 1-#6 IN EXISTING 4"C.

(EXISTING) EQUIPMENT NOTES:

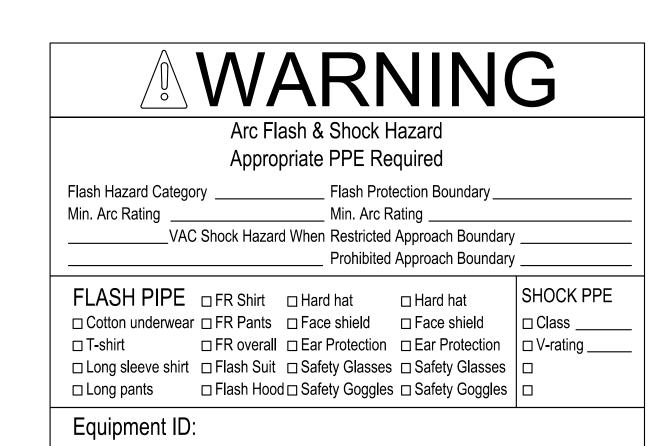
1. ALL EQUIPMENT/APPARATUS/INFORMATON INDICATED BY 'LIGHT, DASHED LINETYPE' IS EXISTING ALL OTHER EQUIPMENT SHALL BE NEW.

\_\_\_\_\_\_

SERVING RECEPTS-OPTICAL 100		G KVA E LOAD	<b>AMP</b> 20	СКТ	- PHASE A B C		АМР	KVA LOAD	AWG SIZE	SERVING	
		0.3		1	$\frown$	2	20	0.8	12	RECEPTS-DOCTOR 106	
OPTICAL 100		0.6	20	3		4	20	1.0		EXAM 105	
LAB, RECEPTION		1.0	20	5	$\frown$	6	20	0.8		EXAM 105	
OPTICAL 100		0.8	20	7	$\frown$	8	20	0.4		BREAK 107	
OPTICAL 100		0.8	20	9		10	20	1.0			
SHOW WINDOW		0.2	20	11	$\frown$	12	20	1.0			
PRETEST 103		1.0	20	13		14	20	0.4		<b> </b>	
CORRIDOR 109		0.6	20	15		16	20	0.4		ТВВ	
→ BUSINESS 109		0.6	20	17	$\frown + + \frown$	18	20	0.4		ТВВ	
LIGHTS- SHOW WINDOW		0.2	20	19	$\frown$	20	20	1.0		EXAM 104	
		0.2	20	21	$\frown$	22	20	0.8	$  \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	<b>♦</b> EXAM 104	
4		0.2	20	23	$\frown$	24	20			SPARE	
LIGHTS- OPTICAL 100		0.5	20	25	$\frown$	26	20				
	$\mid \; \downarrow$	0.6	20	27	$ \frown + + \frown $	28	20				
SPARE			20	29	$\frown$	30	20				
			20	31	$ \frown $	32	20			<b>V</b>	
			20	33	$\uparrow + \uparrow \uparrow$	34		4.5	10	EWH-1	
₩			20	35		36			$\downarrow \downarrow$	<b>↓</b>	
RTU	6	13.0	50	37	$\uparrow + \uparrow \uparrow$	- 38	30	_	10	SPD	
				39	$\uparrow \downarrow \downarrow \uparrow \uparrow$	40					
4	4		4	41		42	4		4	4	

## (#) PANEL SCHEDULE(S) NOTES:

- 1. PROVIDE ARC FLASH WARNING LABEL ON ALL PANELBOARDS. ALL BRANCH CIRCUIT CONDUCTORS SHALL SE SIZED FOR LESS THAN 3% VOLTAGE DROP AT DESIGN LOAD. SEE ARCH FLASH WARNING AND BRANCH CIRCUIT CONDUCTOR DETAILS.
- WIRE/BREAKER SIZES ARE FOR REFERENCE ONLY. PRIOR TO ROUGH—IN FIELD VERIFY EXACT EQUIPMENT SELECTION AND PROVIDE WIRE AND BREAKER SIZE & TYPE TO MATCH MECHANICAL EQUIPMENT REQUIREMENTS.
- 3. PROVIDE (GFI) TYPE BREAKER.
- 4. PROVIDE LOCK OUT TYPE CIRCUIT BREAKER FOR WATER HEATER.
- 5. ALL DIRECT CONNECTED APPLIANCES RATED OVER 0.3 KVA OR 1/8HP SHALL BE PROVIDED WITH LOCK-OUT TYPE CIRCUIT BREAKER.
- 6. FROM SPD CIRCUIT BREAKER TO SPD DEVICE- KEEP CONDUCTOR LENGTHS TO A MINIMUM.



TYPICAL ARC FLASH LABEL DETAIL NOT TO SCALE

1. PROVIDE ELECTRICAL GEAR SUBMITTAL PACKAGE WITH ARCH FLASH CALCULATIONS FOR ALL EQUIPMENT. EACH ITEM TO BEAR THE WARNING LABEL (AS SHOWN ABOVE) WITH ALL APPROPRIATE INFORMATION INDICATED AS A RESULT OF THE ARC FLASH CALCULATION.

Revisions:

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7458 US Highway 1 North

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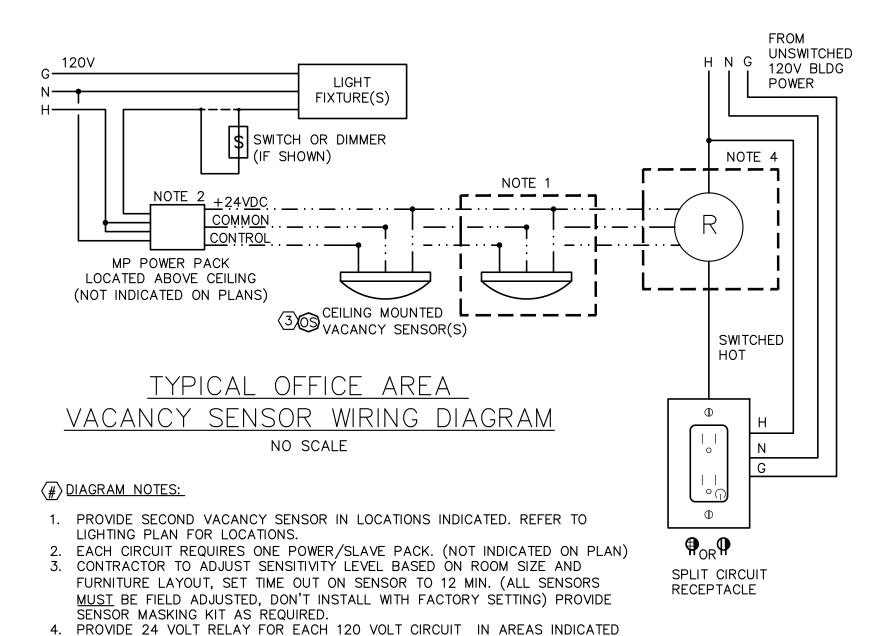
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POWER RISER & PANEL

SCHEDULE

9/10/19 **3**164E3



TO AUTOMATICALLY DISCONNECT RECEPTACLE POWER WHEN NO OCCUPANCY IS DETECTED. RELAY SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS

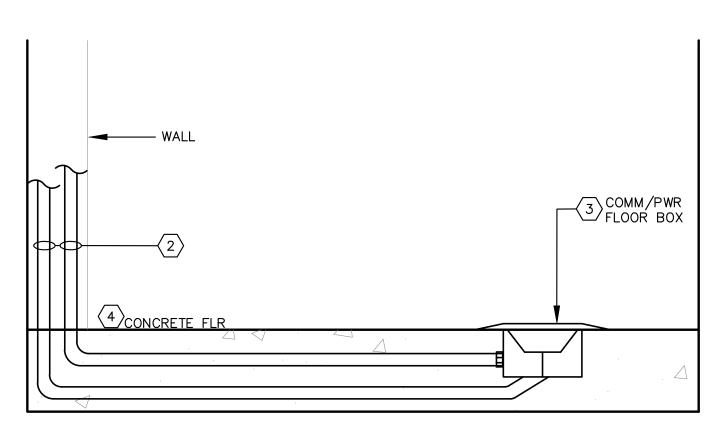
THE POWER PACK TO INSURE COMPATIBLE VOLTAGE AND POWER RATING

OUTLET. OUTLET SHALL HAVE A PERMANENT LABEL INDICATING WHICH PLUG

LOAD IS CONTROLED. LEGRAND CATALOG #5262CH, OR APPROVED EQUAL.

5. PROVIDE DUPLEX RECEPTACLES IN AREAS INDICATED WITH HALF-SWITCHED

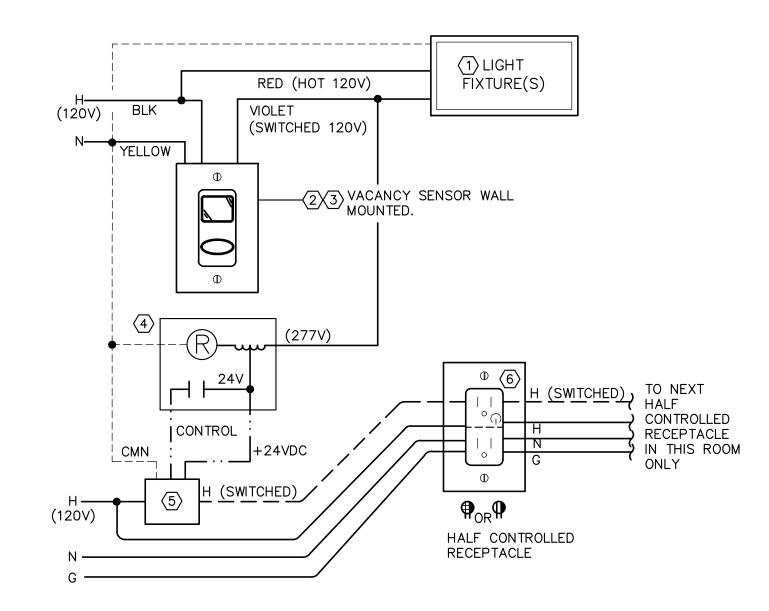
REQUIRED TO CONTROL RECEPTACLE AS INDICATED.



## COMBINATION FLOOR OUTLET DETAIL NO SCALE

## # DETAIL NOTES:

- 1. VERIFY EXACT LOCATIONS OF ALL FLOOR BOX ASSEMBLIES WITH ARCHITECTURAL PLANS & FURNITURE LAYOUT PRIOR TO ROUGH-IN.
- 2. COMBINATION FLOOR BOX WITH 1"C FOR COMMUNICATIONS CABLES AND 3/4"C FOR 120V OUTLETS TO ABOVE CEILING.
- 3. COMBINATION COMM/PWR TYPE WIREMOLD #RFB4-4DB SERIES WITH FLANGED TILE/CARPET BRUSHED ALUMINUM COVER PLATE & INTERNAL BRACKETS FOR (2)DUPLEX AND (2)COMMUNICATION OUTLETS.
- 4. SAW CUT ALL TRENCHES FOR FLOOR BOX & CONDUIT. FIELD VERIFY EXACT LOCATION(S) WITH FURNITURE VENDOR PRIOR TO ROUGH-IN.



# TYPICAL OFFICE VACANCY SENSOR DETAIL

NO SCALE

#### #> DIAGRAM NOTES:

- 1. SEE 'LTG FIXTURE SCHEDULE' FOR PART NUMBERS.
- 2. UTILIZE VACANCY SENSOR FOR CONTROL OF POWER/SLAVE PACK (POWER
- PACKS NOT INDICATED ON PLAN).
- 3. CONTRACTOR TO ADJUST SENSITIVITY LEVEL BASED ON ROOM SIZE AND FURNITURE LAYOUT, SET TIME OUT ON SENSOR TO 12 MIN. (ALL SENSORS MUST BE FIELD ADJUSTED, DON'T INSTALL WITH FACTORY SETTING) PROVIDE SENSOR MASKING KIT AS REQUIRED TO AVOID NUANCE TRIPPING.
- 4. PROVIDE 277/120 VOLT RELAY WITH BUILT-IN TRANSFORMER FOR CONTROLLED 24V OUTPUT. HUBBELL #RR1SPDTCXXX, OR EQUAL.
- 5. PROVIDE 277/120 VOLT POWER PACK RELAY TO AUTOMATICALLY DISCONNECT
- 120 VOLT RECEPTACLE POWER WHEN NO OCCUPANCY IS DETECTED. 6. PROVIDE DUPLEX RECEPTACLES IN AREAS INDICATED WITH HALF-SWITCHED OUTLETS. OUTLETS SHALL EACH HAVE A PERMANENT LABEL INDICATING WHICH

PLUG IS CONTROLLED. LEGRAND CATALOG #5362, OR APPROVED EQUAL.

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**ELECTRICAL DETAILS** 

#### **ELECTRICAL SPECIFICATION**

- 1. SCOPE: PROVIDE A COMPLETE ELECTRICAL SYSTEM AS SHOWN AND MEET THE REQUIREMENTS OF APPLICABLE STATE AND LOCAL CODES INCLUDING BUT NOT LIMITED TO CURRENT VERSIONS OF THE FLORIDA BUILDING CODE, AND THE NATIONAL ELECTRICAL CODE (NEC). OBTAIN AND PAY FOR ALL PERMITS, INSPECTIONS AND CONNECTIONS NECESSARY FOR THIS WORK.
- 2. SITE INSPECTION: VISIT AND THOROUGHLY INSPECT SITE BEFORE SUBMITTING BID. ASSUME RESPONSIBILITY FOR MEETING ALL EXISTING SITE CONDITIONS AFFECTING THE WORK
- 3. GUARANTEE: PROVIDE ALL NEW MATERIALS AND EQUIPMENT, AND GUARANTEE SAME FOR ONE YEAR FROM DATE OF ACCEPTANCE.
- 4. SUBMITTALS: SUBMIT SHOP DRAWINGS, CATALOG SHEETS, OR OTHER DESCRIPTIVE DATA WITH SUFFICIENT INFORMATION TO ESTABLISH DESIGN, QUALITY AND PERFORMANCE. MANUFACTURER CATALOG SHEETS SUBMITTED WITHOUT SPECIFIC MODEL NUMBERS INDICATED WILL BE REJECTED. DATA SHALL DESCRIBE APPARATUS, EQUIPMENT, PANELS, FIXTURES, AND OTHER ITEMS REQUIRING DESCRIPTIVE LITERATURE. SUBMITTALS SHALL INCLUDE THE FOLLOWING:
- B. PANELBOARDS C. SAFETY SWITCHES D. WIRING DEVICES E. OCCUPANCY SENSORS F. FLOOR OUTLET BOXES G. SURGE PROTECTIVE DEVICE (SPD)

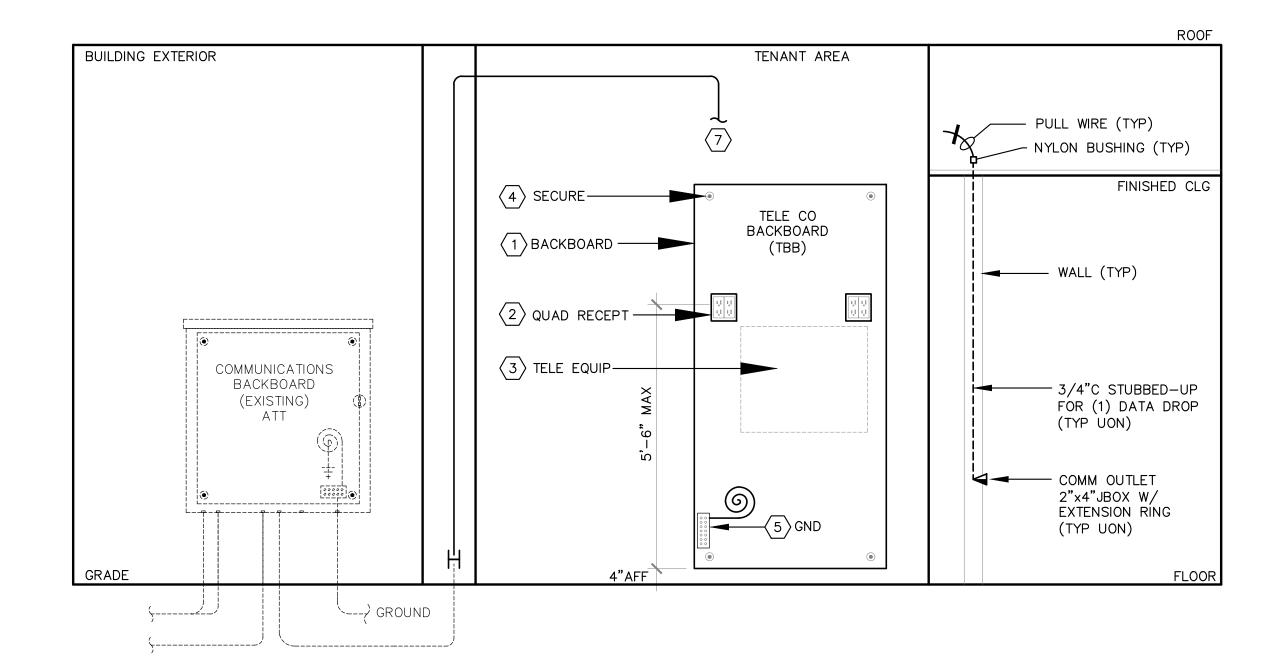
A. LIGHT FIXTURES

- 5. PANELBOARDS SHALL BE MOLDED CASE CIRCUIT BREAKER TYPE WITH COMPLETELY DEAD FRONTS ENCLOSED IN CODE GAUGE, GALVANIZED SHEET STEEL CABINETS WITH ADEQUATE WIRING GUTTERS TOP, BOTTOM AND SIDES. NEUTRAL BUS BARS SHALL BE 100% RATED, INSULATED FOR PANELBOARDS SHOWN WITH NEUTRAL. RATED NEUTRAL BUSING SHALL BE SUPPLIED FOR PANELS DESIGNATED ON DRAWINGS WITH OVERSIZED NEUTRAL CONDUCTORS. FRONT TRIM SHALL CONTAIN HINGED DOOR WITH KEYED LOCK AND CATCH. DOOR SHALL BE PROVIDED WITH PLASTIC ENCLOSED CIRCUIT DIRECTORY. UPON COMPLETION OF INSTALLATION, CIRCUIT DIRECTORY SHALL BE TYPEWRITTEN INDICATING USAGE AND LOCATION OF CIRCUITS AS INDICATED ON DRAWINGS.
- CIRCUIT BREAKERS SHALL BE MOLDED CASE, WITH QUICK-MAKE AND QUICK-BREAK ACTION FOR BOTH MANUAL AND AUTOMATIC OPERATION, WITH THERMAL MAGNETIC TRIP ELEMENTS. SAFETY SWITCHES SHALL BE QUICK-MAKE, QUICK-BREAK TYPE, IN GENERAL PURPOSE OR WEATHER PROOF ENCLOSURE. PROVIDE PROPERLY SIZED FUSES WHERE INDICATED ON THE DRAWINGS.
- WIRING DEVICES: WALL SWITCHES SHALL BE QUIET AC TYPE, 120/277V, 20A, COLOR AS DIRECTED BY ARCHITECT. RECEPTACLES SHALL BE DUPLEX, 120V, 20A, 3 WIRE GROUNDING TYPE, COLOR AS DIRECTED BY ARCHITECT. WALL PLATES FOR SWITCHES, RECEPTACLES, AND TELEPHONE/DATA OUTLETS SHALL BE PLASTIC, COLOR AS DIRECTED BY ARCHITECT. DUPLEX RECEPTACLE TO BE INSTALL WITH THE GROUND ON BOTTOM. SPECIAL RECEPTACLES SHALL BE AS SHOWN. DIMMER SWITCHES SHALL BE SOLID-STATE TYPE WITH TWIST ON-OFF SWITCH AND WATTAGE AS REQUIRED OR INDICATED. DAYLIGHT HARVESTING SENSORS SHALL HAVE AUTOMATIC DIMMING AND BE COMPATIBLE WITH SPECIFIED FIXTURES. MANUFACTURER SHALL BE WATTSTOPPER MODEL #LS-301, OR APPROVED EQUAL. WALL SWITCH OCCUPANCY SENSORS SHALL BE WALL MOUNTED COMBINATION ULTRASONIC AND PASSIVE INFRARED TYPE, WITH INTEGRAL ON/OFF MANUAL SWITCH. OCCUPANCY SENSOR SHALL BE LINE VOLTAGE AND INTRINSICALLY GROUNDING TYPE. MANUFACTURER SHALL BE WATTSTOPPER MODEL #DW-100, COLOR PER OWNER/ARCH, OR APPROVED EQUAL. OPEN AREA AND CORRIDOR OCCUPANCY SENSORS SHALL BE CEILING MOUNTED COMBINATION ULTRASONIC AND PASSIVE INFRARED TYPE. MANUFACTURER SHALL BE WATTSTOPPER MODEL #DT-300 WITH BZ-50 POWER PACK, OR APPROVED EQUAL BY HUBBELL OR SENSOR SWITCH. ALL SENSORS SHALL BE EQUIPPED WITH AUTOMATIC GAIN CONTROL THEREBY ALLOWING SELF CALIBRATION. CONNECT FOR USE VIA WALL SWITCH GENERALLY AS INDICATED ON DRAWINGS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND COORDINATE LOCATION(S) IN FIELD TO MAINTAIN 5' CLEAR BETWEEN CEILING MOUNTED SENSOR AND HVAC SUPPLY GRILLES. CONTRACTOR TO ADJUST SENSITIVITY LEVEL BASED ON ROOM SIZE AND FURNITURE LAYOUT. SET TIME OUT ON SENSOR TO 12 MINUTES (ALL SENSORS MUST BE FIELD ADJUSTED, DON'T INSTALL WITH FACTORY SETTING).
- 8. LIGHT FIXTURES: LIGHT FIXTURES SHALL BE FURNISHED AS SCHEDULED AND SHALL BE FACTORY WIRED, ASSEMBLED AND COMPLETE WITH NEW LAMPS. ALL FLUORESCENT FIXTURES SHALL BE EQUIPPED WITH CBM CERTIFIED BALLASTS TYPE P.
- 9. ELECTRICAL CONDUIT: INSTALL ALL WIRING IN MINIMUM SIZE 1/2" CONDUIT. EMT SHALL BE USED GENERALLY FOR INTERIOR WIRING, M/C CABLE MAY BE USED AS PERMITTED BY CODE, HOWEVER IN ALL CASES WHERE MC IS USED IT SHALL BE PROVIDED WITH ONE (1) ADDITIONAL CONDUCTOR (CAPPED AT BOTH ENDS) FOR USE AS A SPARE. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR FINAL CONNECTION TO ALL MOTORIZED EQUIPMENT. UNDERGROUND CONDUIT SHALL BE PVC.
- 10. OUTLET BOXES: OUTLET BOXES FOR SWITCHES, RECEPTACLES AND TELEPHONE/DATA OUTLETS IN FINISHED WALLS SHALL BE STANDARD GANG TYPE (1-1/2) DEEP) WITH COVERS SIZED FOR BOX. WALL SWITCH OUTLETS SHALL BE FLUSH MOUNTED 48 INCHES ABOVE FLOOR TO TOP. RECEPTACLE AND TELEPHONE/DATA OUTLET BOXES SHALL BE FLUSH MOUNTED 15 INCHES ABOVE FLOOR TO BOTTOM, UNLESS OTHERWISE NOTED.
- 11. WIRE AND CABLE: ALL WIRING SHALL BE COPPER WITH THHN OR XHHW INSULATION. WIRING SUBJECTED TO ELEVATED TEMPERATURES SHALL BE DERATED AS REQUIRED BY THE NEC. WIRE SIZES NO. 6 AND LARGER SHALL BE STRANDED.
- 12. BRANCH CIRCUITS: INSTALL ALL WIRING IN CONDUIT AS SHOWN. NO SMALLER THAN NO. 12 SHALL BE USED FOR ANY BRANCH CIRCUIT. WIRING FOR MOTORS, HEATING AND OTHER MISCELLANEOUS EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS. ALTHOUGH NOT SHOWN AND NOT REQUIRED BY CODE, ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR.
- 13. TELEPHONE/DATA CONDUIT SYSTEM: PROVIDE EMPTY CONDUITS, OUTLETS AND BACKBOARDS AS SHOWN. INSTALL PULL WIRE IN EACH CONDUIT. PROVIDE EACH OUTLET WITH BLANK COVER
- 14. TESTING AND MARKING: COMPLETELY TEST AND MARK ALL WIRING AND EQUIPMENT INSTALLED AND LEAVE THE INSTALLATION IN PERFECT WORKING ORDER.
- 15. ELECTRICAL/MECHANICAL COORDINATION: UNLESS SPECIFICALLY REQUIRED OTHERWISE, PROVIDE ALL DISCONNECT DEVICES FOR A/C EQUIPMENT AND PROVIDE ALL POWER WIRING. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL A/C CONTROL DEVICES AND WIRING.
- 20. SURGE PROTECTIVE DEVICES SHALL BE LISTED OR COMPLY WITH THE MOST RECENT EDITIONS OF: UNDERWRITERS LABORATORIES: UL1449 (\*3RD EDITION) AND UL 1283. ANSI/IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002, NATIONAL ELECTRICAL CODE: ARTICLE 285. SUBJECT TO COMPLIANCE, THE FOLLOWING MANUFACTURERS ARE ACCEPTABLE: ADVANCED PROTECTION TECHNOLOGIES OR SURGE SUPPRESSION INCORPORATED. SPD SHALL BE UL LABELED WITH A 200KA SHORT CIRCUIT CURRENT RATING (SCCR), AS A TYPE 1 DEVICE, AND A 20KA I-NOMINAL (I-N) RATING. THE MINIMUM SURGE CURRENT CAPABILITY (SINGLE PULSE RATED) PER PHASE SHALL BE A FUNCTION OF THE APPLICATION AS FOLLOWS:
- a. BRANCH PANELBOARDS:

UL 1449 LISTED VOLTAGE PROTECTION RATINGS (VPRS) SHALL NOT EXCEED THE FOLLOWING:

SYSTEM VOLTAGE L-N <u>L-G</u> <u>L-L</u> <u>N-G</u> 208Y/120 700V 700V 1200V 700V 150V

SPD SHALL INCLUDE VISUAL LED DIAGNOSTICS INCLUDING A MINIMUM OF ONE GREEN LED INDICATOR PER PHASE. PROVIDE ALL WIRING/CONDUIT CONNECTIONS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TRANSIENT SURGE SUPPRESSORS SHALL BE PROVIDED FOR ALL FIRE ALARM WIRING ENTERING/LEAVING BUILDING PROVIDE EDCO-SLCT (SINGLAING LINE CIRCUIT PROTECTOR) -30 MODULE WITH EDCO PCBIB BASE OR APPROVED EQUAL.



(EXISTING) EQUIPMENT NOTES:

. ALL EQUIPMENT/APPARATUS/INFORMATON INDICATED BY 'LIGHT, DASHED LINETYPE' IS EXISTING ALL OTHER EQUIPMENT SHALL BE NEW.

------

TELEPHONE BACKBOARD RISER

NO SCALE

#### (#) BACKBOARD RISER NOTES:

- BACKBOARD SHALL BE PLYWOOD 2'x4'x3/4" W/FIRE RETARDANT PAINT ON ALL 6 SIDES. (SMOOTH SIDE VISIBLE) 2. FLUSH MTD QUADRAPLEX RECEPTACLES.
- 3. TELE CO'S TERMINAL BLOCK.
- 4. SECURE TO WALL WITH ANCHOR BOLT & 1" WASHER (TYP) 5. GROUNDING BAR WITH 5FT COILED #6AWG GREEN INSULATED CONDUCTOR FOR COMMUNICATIONS CO CONNECTION TO GROUND. CONTRACTOR OPTION: BOND TENANT TBB GROUNDING BAR WITH #6AWG GREEN INSULATED CONDUCTOR IN
- 1/2"C TO SHELL BUILDING GROUNDING BAR. 6. BOND #6AWG GREEN INSULATED CONDUCTOR IN 1/2"C TO SERVICE ENTRANCE ELEC SYSTEM GROUND.
- 7. EXTEND EXISTING COMMUNICATIONS CONDUIT IN SPACE TO NEW TBB. COORDINATE IN FIELD. PROVIDE ANY REQUIRED PULL BOXES.

#### ELECTRICAL LEGEND

(1/2 SHADED LT FIXTURES ON DWGS INDICATE EMERGENCY)

₩ EXIT SIGN

2X4 LED FIXTURE LED STRIP LIGHT

 LED DOWNLIGHT \_\_\_\_\_ LED TRACK LIGHT

CIRCUIT/CONDUIT UNDERFLOOR/GRADE

CIRCUIT/ CONDUIT BRANCH CIRCUIT HOMERUN

SWITCH SINGLE POLE

\$3 SWITCH, THREE WAY

DIMMER SWITCH

DM DIMMING MOTION SENSOR SWITCH \$M MOTION SENSOR SWITCH

CEILING MOUNTED OCCUPANCY SENSOR

DUPLEX RECEPTACLE DUPLEX RECEPTACLE- HORIZ. 2" ABOVE BACKSPLASH

DUPLEX GFI TYPE RECEPTACLE

DUPLEX GFI RECEPTACLE- HORIZ. 2" ABOVE BACKSPLASH

QUADRAPLEX RECEPTACLE

QUADRAPLEX RECEPTACLE- HALF-SWITCHED

REC QUADRAPLEX- HORIZ. 2" ABOVE BACKSPLASH

COMBINATION FLOOR OUTLET

CONTROL RELAY

PANELBOARD (PNL)

JUNCTION BOX

COMM OUTLET- SEE DETAIL TELEPHONE BACKBOARD (TBB)

#### **ABBREVIATIONS**

AFF ABOVE FINISHED FLOOR/GRADE

COMM COMMUNICATIONS

EF EXHAUST FAN

EL EMERGENCY LIGHT

GROUND FAULT INTERRUPT

GND GROUND RTU ROOF TOP UNIT

TBB TELEPHONE BACKBOARD

SPD SURGE PROTECTION DEVICE

WH WATER HEATER

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J. Lane, Reg. No. AR 12715

Powell & Hinkle Engineering 1409 Kingsley Avenue Building 12A Orange Park, Florida 904 264 5570 Robert Hinkle, PE No. 29302 Lane Hinkle, PE No. 48076 Thomas Elder, PE No. 56121

Revisions:

Date: 09.11.2019

LEGEND, **DETAILS** 

& NOTES