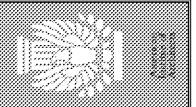


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Construction Documents for:
TIRE CHOICE - GOLDENROD
7412 HOFFNER AVE
ORLANDO, FLORIDA

Jose A. Rosario, P.E. FL. 74457

commercial residential architecture

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SHEET TITLE
 ELECTRICAL
 COVER SHEET

SHEET NUMBER
E-1

SYMBOL	DESCRIPTION	MOUNTING
	2 X 2 FLUORESCENT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	2 X 4 FLUORESCENT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	SHADING DENOTES FIXTURE WITH EM BATTERY PACK. 'NL' DENOTES FIXTURE UNSWITCHED FOR NIGHT LIGHT	SEE FIXTURE SCHEDULE
	2 X 4 FLUORESCENT FIXTURE (LETTER INDICATES TYPE) SHADING DENOTES FIXTURE FED FROM EMERGENCY SUPPLY	SEE FIXTURE SCHEDULE
	FLUORESCENT STRIP FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	FLUORESCENT WALL BRACKET FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	RECESSED DOWNLIGHT LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR DOWNLIGHT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR WALL MOUNTED FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	INTERIOR PENDANT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR SURFACE MOUNT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR BOLLARD	SEE FIXTURE SCHEDULE
	WALL LOW MOUNTED FIXTURE	SEE FIXTURE SCHEDULE
	CEILING FAN	SEE FIXTURE SCHEDULE
	EXIT-SHADING DENOTES FACEPLATE LOCATION. LETTER INDICATES TYPE. PROVIDE ARROWS AS REQUIRED.	SEE FIXTURE SCHEDULE
	DENOTES EMERGENCY WALL PACK. LETTER INDICATES TYPE.	SEE FIXTURE SCHEDULE
	DENOTES TRACK LIGHTING. LETTER INDICATES TYPE.	SEE FIXTURE SCHEDULE
	SINGLE POLE SWITCH (20A-120/277) '3' DENOTES 3-WAY 'D' DENOTES DIMMER	48" AFF OR AS NOTED
	'T' DENOTES TOGGLE SWITCH	ABOVE CEILING
	OCCUPANCY SENSOR	48" AFF OR AS NOTED
	LOW VOLTAGE LIGHTING SWITCH	48" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 20A 'IG' DENOTES ISOLATED GROUND	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 20A	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 20A	48" AFF OR AS NOTED
	QUAD RECEPTACLE, 125V, 20A	18" AFF OR AS NOTED
	SINGLE RECEPTACLE, 208V OR 240V	18" AFF OR AS NOTED
	CEILING MOUNTED COILED REEL EXTENSION RECP.	CEILING MOUNTED
	CEILING/WALL MOUNTED BOX WITH 20A DUPLEX RECP. AND DATA OUTLET.	AS NOTED
	JUNCTION BOX	SEE DETAIL OR AS NOTED
	POWER/TELEPHONE POLE	SEE DETAIL OR AS NOTED
	OUTLET BOX OR J-BOX FOR POWER AND DATA SUPPLY TO FURNITURE SYSTEMS	18" AFF OR AS NOTED
	FLOOR BOX WITH 20A DUPLEX RECP. AND DATA OUTLET.	SEE DETAIL OR AS NOTED
	COMBINATION VOICE/DATA OUTLET	18" AFF OR AS NOTED
	DATA OUTLET	18" AFF OR AS NOTED
	VOICE OUTLET	18" AFF OR AS NOTED
	FAX OUTLET	18" AFF OR AS NOTED
	CARD READER	COORDINATE WITH SECURITY INSTALLER
	SURVEILLANCE CAMERA	COORDINATE WITH SECURITY INSTALLER
	T.V. OUTLET	18" AFF OR AS NOTED
	PANELBOARD 120/208V	SEE SPECIFICATIONS
	PANELBOARD 277/480V	SEE SPECIFICATIONS
	RACEWAY CONCEALED IN WALL OR ABOVE CEILING	SEE SPECIFICATIONS
	UNDERGROUND OR UNDER FLOOR CONDUIT	SEE SPECIFICATIONS
	HOMERUN TO PANEL LETTERS INDICATE PANEL NUMBERS INDICATE CIRCUIT. NOTE: 'M' INDICATES THE NUMBER OF WIRES EXCEEDING THE REQUIRED EQUIPMENT GROUND.	SEE SPECIFICATIONS
	MOTOR, NUMERAL INDICATES HORSEPOWER	AS NOTED
	MOTOR RATED SWITCH WITH OVERLOAD RELAYS AS REQUIRED.	MOUNTED ADJACENT TO EQUIPMENT
	NON-FUSIBLE SAFETY SWITCH-SIZE AS NOTED	SEE SPECIFICATIONS
	FUSIBLE SAFETY SWITCH-SIZE AS NOTED	SEE SPECIFICATIONS

*NOTE - ALL SYMBOLS SHOWN MAY NOT BE USED.

ABBREVIATIONS:	
AFF - ABOVE FINISHED FLOOR	HVAC - HEATING, VENTILATING, AIR CONDITIONING
AHU - AIR HANDLING UNIT	JB - JUNCTION BOX
BFG - BELOW FINISHED GRADE	LRA - LOCKED ROTOR AMPERES
C - CONDUIT	MCB - MAIN CIRCUIT BREAKER
CW - COOL WHITE	MLO - MAIN LUGS ONLY
DACP - DOOR ALARM CONTROL PANEL	N - NEUTRAL
DN - FEED DOWNWARD	NL - NIGHT LIGHT
EF - EXHAUST FAN	OB - OUTLET BOX
EG - EQUIPMENT GROUND	PB - PULL BOX, PUSH-BUTTON
ENCL - ENCLOSURE	PS - PAY STATION
EWC - ELECTRIC WATER COOLER	SF - SUPPLY FAN
EW - ELECTRIC WATER HEATER	SPEC - SPECIFICATIONS
WX - EXPLOSION PROOF	THHW - TYPE OF BUILDING WIRE
FCU - FAN COIL UNIT	TL - TWISTLOCK
FHP - FRACTIONAL HORSEPOWER	TTB - TELEPHONE TERMINAL BOARD
FLA - FULL LOAD AMPERES	TVTB - TELEVISION TERMINAL BOARD
G - GROUND	UNO - UNLESS NOTED OTHERWISE
GFI - GROUND FAULT INTERRUPTER	UP - FEED UPWARD
HID - HIGH INTENSITY DISCHARGE	VERT - VERTICAL
HORIZ - HORIZONTAL	WM - WATT METER
IG - ISOLATED GROUND	WP - WEATHERPROOF
LW - LIGHT WHITE	WW - WARM WHITE
HP - HORSEPOWER, HEAT PUMP	XFMR - TRANSFORMER

NATIONAL ELECTRIC CODE NOTES:
 ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF NFPA 70 - 2014 NATIONAL ELECTRIC CODE

ELECTRICAL SUBMITTAL NOTES:
 SUBMIT ALL ELECTRICAL SYSTEMS SUBMITTALS AT ONE (1) TIME IN ONE (1) INTEGRAL GROUP. PIECE-BY-PIECE SUBMISSION OF INDIVIDUAL ITEMS WILL NOT BE ACCEPTABLE. ENGINEER MAY CHECK CONTENTS OF EACH SUBMITTAL SET UPON INITIAL DELIVERY; IF NOT COMPLETE AS SET FORTH HEREIN, SUBMITTAL SETS MAY BE RETURNED TO CONTRACTOR WITHOUT REVIEW AND APPROVAL AND WILL NOT BE ACCEPTED UNTIL MADE COMPLETE. SHOP DRAWINGS WILL BE REVIEWED MAXIMUM TWICE AS PART OF THIS CONTRACT. ADDITIONAL SHOP DRAWING REVIEWS SHALL BE INVOICED AT \$85.00 PER HOUR, BILLABLE TO THE SUB-CONTRACTOR.

NOTE:
 1. ALL MOUNTING HEIGHTS SHOWN ARE TO THE TOP OF THE DEVICE UNLESS NOTED OTHERWISE.
 2. NOT ALL SYMBOLS APPEAR ON PLANS.

GENERAL SCOPE:
 THIS PROJECT WILL FURNISH AND INSTALL ELECTRICAL LIGHTING AND POWER IN NEW TIRE CHOICE RETAIL BUILDING.
 FIRE ALARM SHALL BE PROVIDED BY OTHERS (IF NEEDED).

DRAWING INDEX	
SHEET NUMBER	DRAWING TITLE
E-1	ELECTRICAL COVER SHEET
E-2	POWER PLAN
E-3	LIGHTING PLAN
E-4	LIGHTING SCHEDULE
E-5	POWER RISER & PANELS
E-6	ELECTRICAL SPECIFICATIONS

ELECTRICAL GENERAL NOTES:

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2017 - NATIONAL ELECTRIC CODE 2014, NFPA 70, NFPA 101 & NFPA 72 (CURRENT ADOPTED EDITIONS). ANY OTHER APPLICABLE CODE REFERENCES AND ALL LOCAL ORDINANCES.
- BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF WORK AND THE EXTENT OF DEMOLITION. THE SUBMISSION OF A BID WILL BE EVIDENCED THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD AN EXAMINATION BEEN MADE, WILL NOT BE ALLOWED.
- ELECTRICAL CONTRACTOR SHALL BE EXPERIENCED IN PERFORMING AND INSTALLATION OF WORK SIMILAR TO THAT REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL SUBMIT A LIST OF AT LEAST FIVE PROJECTS THAT THEY BEEN CONTRACTED AND COMPLETED CONSTRUCTION WITH SIMILAR PROJECT SCOPE OF WORK.
- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL HAVE STUDIED AND COMPARED THE CONTRACT DOCUMENTS WITH EXISTING/PROPOSED CONDITIONS AND NOT LATER THAN TEN (10) DAYS PRIOR TO THE BID OPENING SHALL REPORT TO THE ENGINEER ANY ERROR, INCONSISTENCY, OR OMISSION IN THE CONTRACT DOCUMENTS.
- ELECTRICAL EQUIPMENT SHALL BE AS SPECIFIED. ARCHITECT AND ENGINEER WILL REVIEW ANY SUBSTITUTION FOR COMPATIBILITY.
- ALL CUTTING, PATCHING AND REPAIR WORK SHALL BE THE RESPONSIBILITY OF THE TRADE INVOLVED.
- PROTECT ELECTRICAL EQUIPMENT AND INSTALLATIONS AS NECESSARY. IF DAMAGED OR DISTURBED IN THE COURSE OF THE WORK, REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL CAPACITY, QUALITY, AND FUNCTIONALITY.
- THE CONTRACTOR SHALL INCLUDE WITHIN THE BID ALL REQUIRED OFF HOUR, OVERTIME, AND NON-BUSINESS HOUR WORK AS REQUIRED.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES FOR ITEMS IN THEIR SCOPE OF WORK WHICH WOULD REQUIRE ELECTRICAL WORK (DISCONNECTION/RECONNECTION ETC.) AND ARE NOT INDICATED ON THE ELECTRICAL PLANS. ALL SUBCONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH OTHER TRADES. LACK OF THIS COORDINATION RESULTING IN ADDITIONAL COST TO THE CONTRACT WILL BE BORNE BY THE SUBCONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS FOR ELECTRICAL EQUIPMENT SHOWN ON THE PLANS AND SPECIFICATIONS FOR THE ENGINEER'S APPROVAL. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO REDUCE ANY WORK WHICH WAS NOT APPROVED, OR THE ENGINEER MAY REQUIRE A CREDIT TO THE OWNER. PROVIDE A SET OF AS-BUILTS AFTER JOB IS COMPLETED. THIS SET SHALL BE CONTINUOUSLY UPDATED DURING CONSTRUCTION.
- PROVIDE IDENTIFICATION FOR ALL LIGHT FIXTURES AND ALL ELECTRICAL COVER PLATES WITH PERMANENT MARKER ON A SELF-ADHERING TAG INDICATING PANEL AND CIRCUIT NUMBER. TYPICAL FOR ALL LIGHTING AND POWER DEVICES.
- ALL WORK SHALL BE PERFORMED DURING TIME PERIODS ACCEPTABLE TO THE OWNER'S SCHEDULE. ALL WORK WITH THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING.
- THE CONTRACTOR SHALL PERFORM ALL TEMPORARY WORK NECESSARY TO MAINTAIN CONTINUITY OF ELECTRICAL SERVICE (LIKE SAWPOLE SERVICE) WHEN CONNECTION IS MADE. THIS SERVICE SHALL NOT BE INTERRUPTED WITHOUT PRIOR CONSENT OF THE OWNER'S REPRESENTATIVE AND MAY BE INTERRUPTED ONLY AT A TIME FOR THE SPECIFIED TIME DESIGNATED BY OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE GUIDED BY THE OWNER'S REPRESENTATIVE AT ALL TIMES IN MATTERS AFFECTING THE FACILITIES.
- THE CONTRACTOR SHALL COORDINATE ALL PHASING OF ELECTRICAL WORK AS REQUIRED AND INDICATED ON THE ELECTRICAL DRAWINGS.
- THE OWNER PROJECT REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO CUTTING OF ANY STRUCTURAL ITEM (I.E. CONCRETE FLOOR, MASONRY, WALL, ETC.) WITHIN EXISTING BUILDING. METHOD OF CUTTING SHALL BE APPROVED BY THE OWNER PROJECT REPRESENTATIVE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE BUILDING WATERTIGHT DURING CONSTRUCTION.
- ALL WORKING IN CEILING SPACE OR IN AIR HANDLING PLENUMS NOT IN CONDUIT SHALL BE UL LISTED AS SUITABLE FOR PLENUM USE.
- ALL JUNCTION BOXES AND COVER PLATES SHALL BE PAINTED AND LABELED.
- RECEPTACLES WITHIN (6) FEET OF PLUMBING FIXTURES SHALL BE PROVIDED WITH 5 MILLIAMP GROUND FAULT INTERRUPTERS. (GFCI RECEPTACLES)
- EXIT SIGNS AND ALL EMERGENCY LIGHTING SHALL BE WIRED AHEAD OF ANY SWITCHING OR CONTACTORS. DO NOT SWITCH EXIT SIGNS OR EMERGENCY NIGHT LIGHTS. CONTRACTOR SHALL PROVIDE AN UNSWITCHED HOT TO BYPASS ANY SWITCHING AND/OR CONTACTORS FOR ALL SWITCHED EMERGENCY LIGHTING.
- EDGE OF LIGHT SWITCH WALL PLATE SHALL BE NOT MORE THAN 4" AWAY FROM METAL/WOOD DOOR FRAME. TYPICAL FOR SINGLE OR MULTIPLE WALL SWITCHES.
- CONFIRM MOUNTING HEIGHTS AND COORDINATE LOCATION OF ALL OUTLETS, SWITCHES, AND OTHER DEVICES WITH ARCHITECTURAL ELEVATIONS (FURNITURE LAYOUT) PRIOR TO ROUGH-IN.
- PROVIDE SEAL FOR PENETRATION OF FIRE RATED WALLS BY CONDUIT.
- BACK TO BACK RECEPTACLES IN ALL ONE HOUR FIRE RATED WALLS SHALL BE LOCATED A MINIMUM OF 24" ON CENTER.
- BRANCH CIRCUIT CONDUCTORS SHALL NOT BE SMALLER THAN NO. 12 AND WHERE BRANCH CIRCUIT CONDUCTOR RUNS FROM SOURCE (PANEL) TO THE LAST DEVICE ON THE CIRCUIT EXCEEDS 75 FT. IN LENGTH, THE CONDUCTORS SHALL BE NO. 10 MINIMUM AND FOR THE ENTIRE LENGTH OF THE CIRCUIT. FOR RUNS OVER 150 FT. IN LENGTH THE CONDUCTOR SHALL BE NO. 8 MINIMUM AND FOR THE ENTIRE LENGTH OF THE CIRCUIT. THE ABOVE APPLIES TO 120 VOLT CIRCUITS ONLY.
- THE CONTRACTOR SHALL COORDINATE WITH THE OWNER THE REMOVAL AND DISPOSAL OF ALL ELECTRICAL MATERIAL WHICH IS NOT TO BE USED ON THE PROJECT. CONTRACTOR SHALL REMOVE AND STORE ANY ELECTRICAL MATERIAL IF SO DIRECTED BY OWNER. PATCH AND PAINT WALLS AND CEILINGS AS REQUIRED. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF NEW LIGHTING FIXTURES, RECEPTACLES, PANEL BOARDS, ETC. WITH EXISTING STRUCTURE, PIPING, ETC. AND MAKE ADJUSTMENTS AS REQUIRED.
- REFER TO ELECTRICAL SPECIFICATIONS SHEET FOR REQUIREMENTS.
- UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL INSURE THAT ALL SYSTEMS OPERATE AS DESIGNED AND REQUIRED AND SHALL REVIEW THEIR OPERATION WITH THE OWNER AND PROVIDE TRAINING OF THE MAINTENANCE PERSONNEL. COMPLETE SET OF AS-BUILT DRAWINGS SHALL BE COMPILED (BY THE CONTRACTOR) AND ISSUED (1 EACH) TO THE ARCHITECT AND BUILDING MAINTENANCE PERSONNEL UPON COMPLETION OF CONSTRUCTION AND TESTING.
- ALL FEEDERS SIZING (BRANCH AND SERVICE ENTRANCE CONDUCTORS) BASED IN AMPACITY OF ALUMINUM THHW CONDUCTORS (NEC 2014 TABLE 310.15(B)(16)) UNLESS OTHERWISE NOTED.

This item has been electronically signed and sealed by Jose A. Rosario using a Digital Signature and data. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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ALL DIMENSIONS AND JOB CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR. ANY AND ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

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