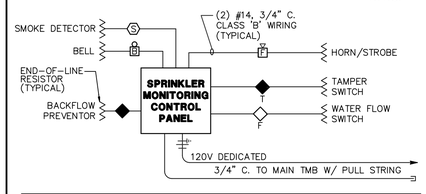
CITY OF Goodyear Approved 07/01/21 21-2119 - VIP PRODUCTS

CLASS 'B' SPRINKLER MONITORING ONE-LINE DIAGRAM

N.T.S.



SPRINKLER MONITORING NOTES

1. CONTROL PANEL (HONEYWELL GAMEWELL "FCI" OR EQUAL) '8' ZONE MINIMUM, SHALL SUPERVISE SPRINKLER SYSTEM WATER FLOW & TAMPER SWITCH. UPON ACTIVATION OF WATER FLOW SWITCH PANEL WILL ACTIVATE HORN/STROBE. PROVIDE DRY CONTACTS FOR CENTRAL STATION MONITORING. UPON ACTIVATION OF TAMPER SWITCH OR BACK FLOW PREVENTOR, THE SONALERT IN F.A.C.P. (ONLY) WILL SOUND CONTROL PANEL AND WIRING TO BE COMPLETELY SUPERVISED. ANY OPEN GROUNDS OR SHORTS TO INDICATE A TROUBLE SIGNAL.
2. PROVIDE A COMPLETE AND OPERATING SPRINKLER MONITORING SYSTEM, TO INCLUDE ALL PIPING, WIRING, BOXES AND DEVICES AS SHOWN ON FIRE ALARM PLANS. VERIFY ANY ADDITIONAL REQ'MTS PRIOR TO BID.
3. ALL DEVICES SHALL BE COMPATIBLE WITH FACP.
4. ALL SPRINKLER MONITORING DEVICES SHALL BE A.D.A. APPROVED AND MOUNTED PER A.D.A. REQUIREMENTS.
5. MINIMUM OF #14 CU (1) PAIR CABLE IN MINIMUM OF 3/4" EMT. ALL FIRE ALARM J-BOX COVERS SHALL BE PAINTED RED AND MARKED "FIRE ALARM" IN BLACK LETTERS. UNBROKEN CONDUIT RUNS OF OVER 50' SHALL BE IDENTIFIED AS "FIRE ALARM" WITH EITHER AN APPROVED CONDUIT MARKER WRAP OR RED BANDS PAINTED ON CONDUIT WITH BLACK LETTERS MARKED "SPRINKLER MONITORING" AT APROX 50' INTERVALS.
6. MINIMUM OF 6" SEPARATION ON ALL SPRINKLER MONITORING CONDUIT RUNS.
7. COORDINATE TYPE OF WIRE WITH SPRINKLER MONITORING VENDOR.
8. VERIFY ALL DEVICE QUANTITIES ON FIRE ALARM PLANS.
9. ALL DEVICES TO COMPLY W/ A.D.A.

NOTE: FIRE ALARM SYSTEM SHALL BE A DEFERRED SUBMITTAL. DIAGRAM SHOWN FOR REFERENCE ONLY.

HVAC ELECT. REQUIREMENTS

- ● ELECTRICAL CONTRACTOR SHALL PROVIDE CORRECT SIZE/TYPE/VOLTAGE/QUANTITY OF DUAL-ELEMENT, TIME-DELAY FUSE(S) SIZED PER HVAC EQUIPMENT MANUFACTURER UNLESS OTHERWISE SPECIFIED BY UNIT NAMEPLATE/MANUFACTURER DATA.
- ◆ ALL CONDUCTORS SHALL BE IN ACCORDANCE WITH THE ELECTRICAL SYSTEM SPEC'S (3.2). ALL TAP CONDUCTORS SHALL MEET THE REQUIREMENTS OF NEC ARTICLE 240.21(B)(2).
- ■ PROVIDE MAGNETIC MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION, (2) AUXILIARY CONTACT SWITCHES, INTERNAL LINE VOLTAGE TO 24 VOLT TRANSFORMER (250VA. MIN) WITH PROPER PRIMARY/SECONDARY PROTECTION, AMBIENT COMPENSATED, RED RUNNING LIGHT, HAND-OFF-AUTO, ACROSS THE LINE STARTERS TO 25HP. WILL BE PROVIDED WITH EACH MOTOR ON THE DRAWINGS (ONE HORSEPOWER TO 25 H.P.).

EQUIPMENT INDICATED HERE SHALL BE LISTED TO THE APPROPRIATE U.L. LISTING FOR THE USE AND BEAR A NAMEPLATE WITH THIS INFORMATION. WHEN REQUIRED, ANY NON-COMPLIANT EQUIPMENT MUST BE MADE COMPLIANT AT THE OWNERS EXPENSE AND IS NOT A PART OF THIS WORK EFFORT.

UNIT	VOLTS/ø	FULL LOAD AMPS		DISCONNECTING MEANS ● ■	CONDUCTORS/ CONDUIT ◆
HP# 5T	480V/3ø	COOLING	MCA/MOCP	HEAVY DUTY 30AMP 600V 3P/3F NEMA 3R DISCONNECT SWITCH	(3) #10's Cu., (1) #10 Cu. E.G. - 3/4" C.
		15.7FLA	19.6/25		
HP# 20T	480V/3ø	COOLING	MCA/MOCP	HEAVY DUTY 30AMP 600V 3P/3F NEMA 3R DISCONNECT SWITCH	(3) #10's Cu., (1) #10 Cu. E.G. - 3/4" C.
		38.7FLA	48.4/50		
WH 1,2	120V/1ø	kW		PASS & SEYMOUR PS20AC1	(2) #10's Cu., (1) #10 Cu. E.G. - 3/4" C.
		1.65			

LUMINAIRE SCHEDULE

1. PROVIDE 90-MINUTE EMERGENCY BATTERY BACK-UP FOR ALL EMERGENCY FIXTURES. SEE SCHEDULE BELOW FOR SPECIFICATIONS AND LUMEN REQUIREMENTS.
2. MODULAR WIRING SYSTEM FOR LIGHT FIXTURES IS AN ACCEPTABLE ALTERNATE.
3. BASE BID FOR LUMINAIRES SHALL BE BASED ON MANUFACTURERS LISTED IN CONTRACT DOCUMENTS. UPON AWARD OF PROJECT, ALTERNATES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED WITH WRITTEN OWNER APPROVAL & AN ITEMIZED DEDUCT TO BASE BID.
4. ALTERNATE FIXTURE SELECTIONS MAY REQUIRE ADDITIONAL TIME FOR SUBMITTAL REVIEW & POSSIBLE ENGINEERING DESIGN CHANGES, TO BE BILLED TO THE CONTRACTOR.
5. PROVIDE MINIMUM 10 MINUTE TIME DELAY ON EMERGENCY FIXTURES WHEN HID AREA LIGHTING IS USED.

MARK	MANUFACTURER MODEL NUMBER	VOLTS	LAMPS CRI/CCT INPUT WATTS	REMARKS/MOUNTING
L1	COLUMBIA LCL-4-35-LW-ED-U-ELL14	277V	LED's - 25W	4' STRIP LIGHT. PROVIDE WITH 1400LUMEN BATTERY BACKUP WHERE NOTED "EM".
L2	COLUMBIA LSER-24-35-ML-G-C-ED--U-ELL14	277V	LED's - 52W	2x4 RECESSED LED TROFFER. PROVIDE WITH 1400LUMEN BATTERY BACK UP WHERE NOTED "EM".
L3	PRESCOLITE LOBLED-277-6LCLED-6-35-8	277V	LED's - 22W	6" RECESSED LED DOWN LIGHT.
L4	COLUMBIA PEL4-40MX-FAW-EDU -NXESPH-ELL40	277V	LED's - 230W	WAREHOUSE HIGHBAY MOUNTED AT 30' WITH INTERNAL OCCUPANCY SENSORS AND PHOTOCELLS. PROVIDE WITH 3000LUMEN BATTERY BACK UP WHERE NOTED "EM".
L5	COLUMBIA PEL4-40MX-FAN-EDU -NXESPH-ELL40	277V	LED's - 230W	WAREHOUSE AISLEWAY HIGHBAY MOUNTED AT 30' WITH INTERNAL OCCUPANCY SENSORS AND PHOTOCELLS. PROVIDE WITH 3000LUMEN BATTERY BACK UP WHERE NOTED 'EM'.
⊗	DUAL LITE LES SERIES	277V	INCLUDED <5	EMERGENCY EXIT SIGN WITH 90MINUTE BATTERY BACK UP.
⊕	DUAL LITE PGN SERIES	277V	INCLUDED (2LAMPS)	EXTERIOR EMERGENCY FIXTURE WITH 90MINUTE BATTERY BACK UP.

IECC WATT PER SQUARE FOOT COMPLIANCE

OFFICES	=	3000 s.f.	x 0.78 W =	2340W
WAREHOUSE	=	91125 s.f.	x 0.49 W =	44651W
		TOTAL AVAILABLE WATTS =		46991W

FIXT.	QTY		INPUT WATTS		SUB-TOTAL
L1	3	x	25	=	75 W
L2	23	x	52	=	1196 W
L3	8	x	22	=	176 W
L4	24	x	230	=	5520 W
L5	92	x	230	=	21160 W
			TOTAL WATTS USED	=	28127 W
			WATTS AVAILABLE	=	46991 W
			CODE COMPLIANCE BY	=	18864 W

TABLE PROVIDED AS COMPLIANCE MATERIAL TO MEET IECC POWER ALLOWANCE. METHOD IS ACCEPTABLE PER IECC C101.5.1

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52649
ARMANDO GARCIA
Expires 12/31/2021
ARIZONA, U.S.A.

SUN STATE BUILDERS

DESIGN CODES
IECC: 2018 NEC: 2017

ELECTRICAL CONTRACTOR SHALL NOTIFY DESIGNER/ENGINEER PRIOR TO ANY DEVIATION FROM THIS SET OF ELECTRICAL DESIGN PLANS. ANY CHANGES TO THE DESIGN, IF APPROVED BY ENGINEER, WILL REQUIRE REVISIONS TO PLANS AND POSSIBLE ADDITIONAL SERVICE FEE.

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IF DRAWING IS NOT PLOTTED AT 24 X 36 THEY ARE NOT FULL SIZE

BALMER architectural group

VIP PRODUCTS
GOODYEAR, AZ.
ELECTRICAL SCHEDULES

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