NEW PANELBOARD SCHEDULE — HA

VOLTAGE	PHASE	WIRE	MCB (A)	MLO (A)	AIC RATING	MOUNTING	LOCATION	NEMA ENCLOSURE
277/480	3	4		60	42,000	SURFACE	-	3R

LOAD TYPE LEGEND

L	LIGHTING/CONT-LD	K	KITCHEN EQUIP	REMARKS	PROVIDE EQUIPMENT GROUNDING BUS AND FEED THRU AND/OR SUB FEED LUGS
R	RECEPTACLES	E	EXISTING		
M	MECHANICAL EQUIP	O	OTHER/MISC		

CKT #	LOAD DESCRIPTION	LOAD TYPE	WIRE SIZE	CONDUIT SIZE	CIRCUIT BREAKER TRIP	CIRCUIT BREAKER P	LOAD (VA)	PHASE	LOAD (VA)	CIRCUIT BREAKER P	CIRCUIT BREAKER TRIP	CONDUIT SIZE	WIRE SIZE	LOAD TYPE	LOAD DESCRIPTION	CKT #
1	CANOPY/WALL LTG	L	#10	3/4"	20A	1	900	A	1000	3	20A	2"	#8	L	SITE SIGNAGE	2
3	WALL PACK LTG	L	#10	3/4"	20A	1	900	B	1000						-	4
5	SITE LIGHTING	L	#8	1"	20A	2	1275	C	1000						-	6
7							1275	A	1000	1	20A	3/4"	#10	L	FRONT WALL GLAZER	8
9	SITE LIGHTING (NL)	L	#8	1"	20A	2	425	B	0	1	20A				SPARE	10
11							425	C	0	1	20A				SPARE	12
13	SPARE				20A	1	0	A	0	1	20A				SPARE	14
15	SPARE				20A	1	0	B	0	1	20A				SPARE	16
17	SPARE				20A	1	0	C	0	1	20A				SPARE	18
19	SPACE						0	A	0						SPACE	20
21	SPACE						0	B	0						SPACE	22
23	SPACE						0	C	0						SPACE	24
25	SPACE						0	A		3	20A	SEE RISER	O		9KVA XFMR	26
27	SPACE						0	B							PANEL "LA"	28
29	SPACE						0	C							-	30

	A	B	C	TOTAL
CONNECTED LOAD ABOVE (VA)	4175	2325	2700	9200
CONNECTED AMPACITY ABOVE (A)	15.07	8.39	9.75	

LOAD TYPE	CONN LD(VA)	SUBPANELS (VA) LA	PNL	PNL	PNL	CONN LD (VA)	SIZING FACTOR	SIZING LOAD (VA)
LIGHTING/CONT-LD	9200	800	-	-	-	10000	125%	12500
RECEPTACLES	0	2000	-	-	-	2000	*	2000
MECHANICAL EQU	0	0	-	-	-	0	100%	0
KITCHEN EQUIP	0	0	-	-	-	0	100%	0
#OF KITCHEN EQU	0	0	-	-	-	0		**
EXISTING	0	0	-	-	-	0	125%	0
OTHER/MISC	0	0	-	-	-	0	100%	0
TOTAL CONNECTED (VA)						12000		14500 SIZING TOTAL (VA) PER NEC
CONNECTED AMPACITY (A)						14.43		17.44 SIZING AMPACITY (A) PER NEC

NOTES
* 1ST 10KVA @ 100%, REMAINING @ 50%
** SIZE PER NEC TABLE 220.56
*** NON-SIMULTANEOUS LOAD
G: PROVIDE GFI CIRCUIT BREAKER
S: PROVIDE SHUNT TRIP CIRCUIT BREAKER
L: PROVIDE LOCK-ON CIRCUIT BREAKER

NEW PANELBOARD SCHEDULE — LA

VOLTAGE	PHASE	WIRE	MCB (A)	MLO (A)	AIC RATING	MOUNTING	LOCATION	NEMA ENCLOSURE
120/208	3	4	30		10,000	SURFACE	-	3R

LOAD TYPE LEGEND

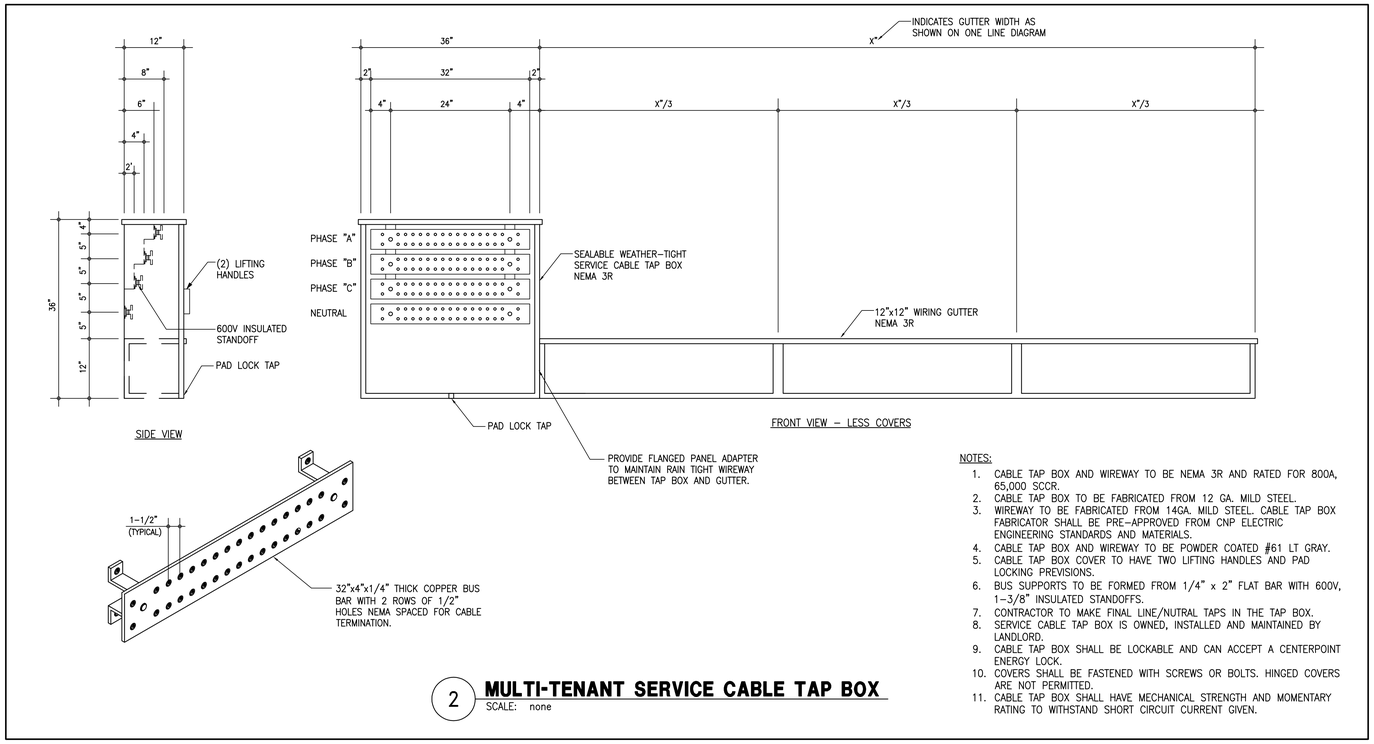
L	LIGHTING/CONT-LD	K	KITCHEN EQUIP	REMARKS	PROVIDE EQUIPMENT GROUNDING BUS AND FEED THRU AND/OR SUB FEED LUGS
R	RECEPTACLES	E	EXISTING		
M	MECHANICAL EQUIP	O	OTHER/MISC		

CKT #	LOAD DESCRIPTION	LOAD TYPE	WIRE SIZE	CONDUIT SIZE	CIRCUIT BREAKER TRIP	P	LOAD (VA)	PHASE	LOAD (VA)	CIRCUIT BREAKER P	CIRCUIT BREAKER TRIP	CONDUIT SIZE	WIRE SIZE	LOAD TYPE	LOAD DESCRIPTION	CKT #
1	IRRIGATION RECEPT	R	#8	1"	20A	1	1000	A	400	1	20A-G	3/4"	#10	L	LTG PARAPET RECEPT	2
3	SPARE				20A	1	0	B	400	1	20A-G	3/4"	#10	L	LTG PARAPET RECEPT	4
5	SPARE				20A	1	0	C	500	1	20A	3/4"	#10	R	PARAPET RECEPT	6
7	SPARE				20A	1	0	A	500	1	20A	3/4"	#10	R	PARAPET RECEPT	8
9	SPARE				20A	1	0	B	0	1	20A				SPARE	10
11	SPARE				20A	1	0	C	0	1	20A				SPARE	12
13	SPACE						0	A	0						SPACE	14
15	SPACE						0	B	0						SPACE	16
17	SPACE						0	C	0						SPACE	18

	A	B	C	TOTAL
CONNECTED LOAD ABOVE (VA)	1900	400	500	2800
CONNECTED AMPACITY ABOVE (A)	15.83	3.33	4.17	

LOAD TYPE	CONN LD(VA)	SUBPANELS (VA) PNL	PNL	PNL	PNL	CONN LD (VA)	SIZING FACTOR	SIZING LOAD (VA)
LIGHTING/CONT-LD	800	-	-	-	-	800	125%	1000
RECEPTACLES	2000	-	-	-	-	2000	*	2000
MECHANICAL EQU	0	-	-	-	-	0	100%	0
KITCHEN EQUIP	0	-	-	-	-	0	100%	0
#OF KITCHEN EQU	0	-	-	-	-	0		**
EXISTING	0	-	-	-	-	0	125%	0
OTHER/MISC	0	-	-	-	-	0	100%	0
TOTAL CONNECTED (VA)						2800		3000 SIZING TOTAL (VA) PER NEC
CONNECTED AMPACITY (A)						7.77		8.33 SIZING AMPACITY (A) PER NEC

NOTES
* 1ST 10KVA @ 100%, REMAINING @ 50%
** SIZE PER NEC TABLE 220.56
*** NON-SIMULTANEOUS LOAD
G: PROVIDE GFI CIRCUIT BREAKER
S: PROVIDE SHUNT TRIP CIRCUIT BREAKER
L: PROVIDE LOCK-ON CIRCUIT BREAKER



2 MULTI-TENANT SERVICE CABLE TAP BOX
SCALE: none

NOTES:
1. CABLE TAP BOX AND WIREWAY TO BE NEMA 3R AND RATED FOR 800A, 65,000 SCCR.
2. CABLE TAP BOX TO BE FABRICATED FROM 12 GA. MILD STEEL.
3. WIREWAY TO BE FABRICATED FROM 14GA. MILD STEEL. CABLE TAP BOX FABRICATOR SHALL BE PRE-APPROVED FROM CNP ELECTRIC ENGINEERING STANDARDS AND MATERIALS.
4. CABLE TAP BOX AND WIREWAY TO BE POWDER COATED #61 LT GRAY.
5. CABLE TAP BOX COVER TO HAVE TWO LIFTING HANDLES AND PAD LOCKING PREVISIONS.
6. BUS SUPPORTS TO BE FORMED FROM 1/4" x 2" FLAT BAR WITH 600V, 1-3/8" INSULATED STANDOFFS.
7. CONTRACTOR TO MAKE FINAL LINE/NUTRAL TAPS IN THE TAP BOX.
8. SERVICE CABLE TAP BOX IS OWNED, INSTALLED AND MAINTAINED BY LANDLORD.
9. CABLE TAP BOX SHALL BE LOCKABLE AND CAN ACCEPT A CENTERPOINT ENERGY LOCK.
10. COVERS SHALL BE FASTENED WITH SCREWS OR BOLTS. HINGED COVERS ARE NOT PERMITTED.
11. CABLE TAP BOX SHALL HAVE MECHANICAL STRENGTH AND MOMENTARY RATING TO WITHSTAND SHORT CIRCUIT CURRENT GIVEN.

ELECTRICAL SERVICE LOAD ANALYSIS	
BUILDING/SPACE SQUARE FOOTAGE:	11000.00
LOAD DESCRIPTION	(KVA)
ESTIMATED TOTAL LOAD @40W/SQ.FT.	440.00
HOUSE SERVICE:	
LIGHTING @ 125% PER NEC	12.50
RECEPTACLES @ (10KVA + 50%) PER NEC	2.00
HVAC @ 100% PER NEC	0.00
KITCHEN EQUIPMENT PER NEC	0.00
EXISTING @ 125%	0.00
MISCELLANEOUS @ 100% PER NEC	0.00
WATER HEATING @ 100%	0.00
LARGEST MOTOR @ 25%	0.00
TOTAL (KVA)	**454.50**
TOTAL (AMPS)	**546.68**
SERVICE SHALL BE 670A, 277/480V, 3PH, 4W	

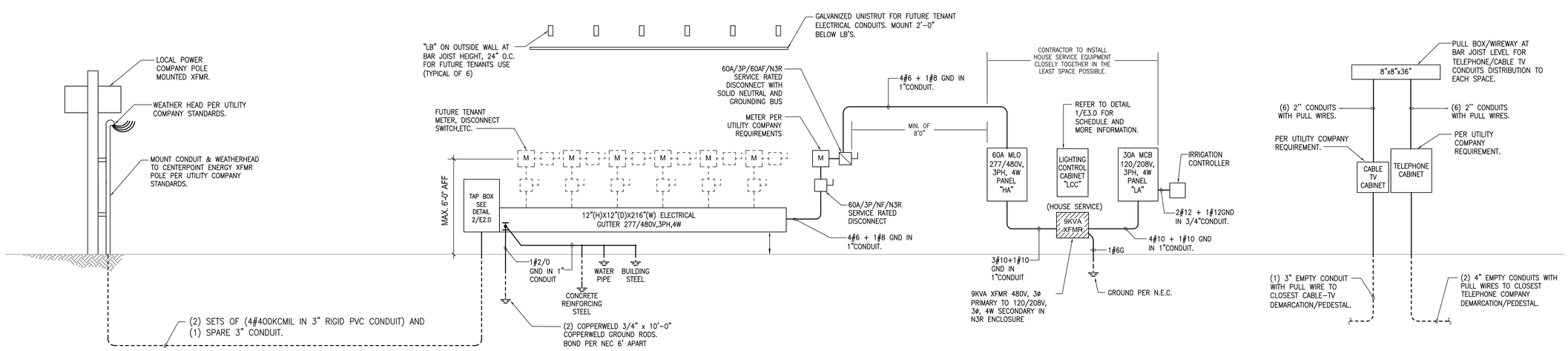
CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF MAIN ELECTRICAL SERVICE AND TELEPHONE DEMARC LOCATION, AND TO COORDINATE WITH UTILITY COMPANIES PRIOR TO BIDDING AND COMMENCEMENT OF WORK.

ALL ELECTRICAL EQUIPMENT, DEVICES, JUNCTION BOXES, OUTLETS, PANELS...ETC. SHALL BE PLACED ABOVE THE BASE FLOOD ELEVATION OR PROTECTED TO PREVENT WATER FROM ENTERING/ACCUMULATING WITHIN EQUIPMENT DURING FLOOD CONDITIONS.

ALL CONDUCTORS TO BE THHN/THWN 75 DEG C. INSULATION TYPE UNLESS SPECIFICALLY NOTED OTHERWISE.

VERIFY LOCATION OF ALL WIREWAYS, PANELS, ETC. WITH OWNER PRIOR TO INSTALLATION.

ALL EXTERIOR EQUIPMENT TO BE IN NEMA 3R ENCLOSURES



1 ELECTRICAL ONE LINE DIAGRAM
SCALE: NONE

SALASO'BRIEN [expect a difference]
10930 W. Sam Houston Parkway N., Suite 900
Houston, Texas 77064
281.664.1900 | Registration No. F-4111
Project No. 009-190647

02/13/2019 ISSUE FOR PERMIT/BID

02/13/19

CDA Architects
Member American Institute of Architects
20445 State Hwy 249, Suite 200
Houston, Texas 77070
832/678-9232 Fax 832/678-9240

ASHTON GRAY DEVELOPMENT

ELECTRICAL SPECIFICATIONS, NOTES AND ONE-LINE DIAGRAM

10,720 SF Retail Shell
SPRING STUEBNER @ SPRING PLAZA
SPRING, TEXAS 77389

SCALE AS NOTED
PROJECT 19007
DATE 02/13/19

E200