MAKE-UP AIR ROOFTOP UNIT SCHEDULE

MARK	MANUF.	HEAT OPTIONS	NOMINAL TONNAGE	MODEL NO.	COOLING COIL TC(MBH)	SHC(MBH)	EAT(DB/WB)	LAT(DB/WB)	DESIGN TEMP	HEATING (MBH) INPUT	OUTPUT	DESIGN TEMP	REHEAT REQUIRED	BURNER TYPE	OUTSIDE AIR (CFM)	FAN CFM	ESP	HP	DRIVE	EER	VOLTS/Ø	MCA	MOCP	REMARKS
MUA-1	GREENHECK	MODUL.	10	RV-35	118.0	49.2	85.8/77.3	61.1/58.0	72°F	150	120	17°F	42.3 MBH	MODULATING	1500	1500	1.00"	1.0	VFD	13.05	208/3	51.0	60	① ② ③

1) PROVIDE COMPLETE MAKEUP AIR PACKAGED ROOFTOP UNIT WITH MODULATING GAS HEAT, MODULATING HOT GAS REHEAT, DIGITAL SCROLL COMPRESSORS (2), UNIT DISCONNECT, REMOTE DDC INTERFACE, DDC CONTROLS, LOW-LEAKAGE MOTORIZED SUPPLY DAMPER, ROOFCURB, MERV-8 FILTERS WITH ADDITIONAL MERV-13 FILTERS, MICROPROCESSOR ROOM DEHUMIDISTAT, HEAD PRESSURE CONTROLLER, COMPRESSOR SAFETIES, PHASE AND BROWN OUT PROTECTION.

2) UNIT WEIGHT NOT TO EXCEED 2300 LBS, R410A REFRIGERANT, WEATHERHOOD WITH SCREEN, AMCA AND ARI RATING CLASSIFIED, 2-INCH DOUBLE WALL CONSTRUCTION, FACTORY MOUNTED VFD, PREMIUM MOTOR CONTROL CENTER.

3) COMPRESSOR OPERATION IS CONTROLLED TO MAINTAIN SUPPLY TEMPERATURE SETPOINT. MECHANICAL COOLING WILL BE LOCKED OUT WHEN THE OA TEMPERATURE IS <55 DEG/F – 2 DEG/F HYSTERESIS (ADJUSTABLE), COMPRESSORS WILL MODULATE DOWN TO 10% OF UNITS TOTAL CAPACITY TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT, HEATING SETPOINT WILL BE LOCKED OUT AT 70 DEG/F – 2 DEG/F HYSTERESIS (ADJUSTABLE), DDC CONTROLLER SHALL CONTAIN THE FOLLOWING ALARMS: BUILDING FREEZE PROTECTION (ADJUSTABLE), DIRTY FILTER ALARM, SUPPLY AIR ALARM, DX ALARM, TEMPERATURE SENSOR ALARM, HUMDITY SENSOR ALARM.

MINI-SPLIT UNIT

GENERAL DATA SYMBOL	MITSUBISHI MODEL	ROOM SERVING	DIMENSIONS (LxWxH)	FAN CFM	COOLING TOTAL (MBH)	HEATING TOTAL (MBH)	ELECTRICAL VOLTAGE (V)	MCA	MOCP	GENERAL DATA SYMBOL	MITSUBISHI MODEL	LOCATION	DIMENSIONS (LxWxH)	EFFICIENCY SEER	ELECTRICAL VOLTAGE (V)	MCA	MOCP	AMBIENT ENTERING AIR (F)
SSI-1	MSZ-D18NA	PBX	44"x11"x14"	500	18.2	N/A	208/1	1	15	SSO-1	MUZ-D18NA	OUTSIDE	34"x13"x34"	14.5	208/1	14	15	95
SSI-2	MSZ-D18NA	EL. EQUIP	44"x11"x14"	500	18.2	N/A	208/1	1	15	SSO-2	MUZ-D18NA	OUTSIDE	34"x13"x34"	14.5	208/1	14	15	95
SSI-3	MSZ-D18NA	SERVER	44"x11"x14"	500	18.2	N/A	208/1	1	15	SSO-3	MUZ-D18NA	OUTSIDE	34"x13"x34"	14.5	208/1	14	15	95

NOTES: PROVIDE CONDENSATE PUMP FOR INDOOR UNIT.
LOW AMBIENT CONTROLS, LONG LINE-SETS ARE REQUIRED.
PROVIDE AUXILLARY DRAIN PAN W/ FLOAT SWITCH FOR EMERGENCY SHUT DOWN. PER IMC 307.2.3

ELECTRIC WALL HEATER SCHEDULE

EWH-1 MARKEL E3322TTD-RP
1 KW; 120V-1ø; 3413 BTUH; 175 CFM; WITH:
BUILT-IN DISCONNECT SWITCH AND THERMOSTAT,
PENCIL-PROOF LOUVERS, CABINET FOR SURFACE MOUNTING.

POOL DEHUMIDIFICATION - CONDENSING UNIT

MARK	MODEL	ELECTRICAL V/C/P	MCA (A)	MOP (A)	TOTAL UNIT EER	UNIT CAPACITY (MBH)	COMPRESSORS TYPE	REFRIGERANT	STAGES	TOTAL UNIT WEIGHT (Lb)
PDCU-1	SERESCO NC-B-1V	208/60/3	7	15	13.0	–	SCROLL	R410A	1	130

NOTES

1. PROVIDE CONTROL SYSTEM DDC INTERFACE TO POOL DEHUMIDIFICATION SYSTEM
2. PROVIDE LIQUID LINE SOLENOID
3. PROVIDE ANTI-SHORT CYCLE TIMER
4. PROVIDE INTERCONNECTING REFRIGERANT PIPING TO POOL DEHUMIDIFICATION SYSTEM
5. PROVIDE DISCONNECT
6. PROVIDE MOUNTING PLATFORM

POOL DEHUMIDFICATION UNIT SCHEDULE

UNIT TAG	SERVED	MANUF. MODEL	FAN CFM	FAN HP	O.A. CFM	E.S.P.	COOLING CAPACITY (BTUH)	MOISTURE REMOVAL (LBS/HR)	COMP. (EA.) NO.	COMP. (EA.) RLA	ELECT. HEAT (KW)	FAN ELECTRICAL DATA VOLTAGE (V/PH)	MCA	MOCP (A)
PDU-1	POOL	SERESCO NE-004-PV-L-A2NT1182	1800	2.5	520	1.0"	53.3	23.7	1	17.6	12.5	208/3ø	71	80

NOTES:

1. INDOOR DESIGN CONDITIONS BASED ON 82°F/50% R.H.
2. PROVIDE UNIT WITH: THERMOSTAT WITH LOCKABLE COVER, FILTER, U.L. LABEL, IONIZATION TYPE SMOKE DETECTOR INSTALLED IN THE RETURN DUCT, ELECTRIC HEATER (UNIT MOUNTED), POOL WATER HEATING, SINGLE POINT ELECTRICAL CONNECTION.
3. AN IONIZATION TYPE SMOKE DETECTOR SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR, INSTALLED IN THE RETURN DUCT BY THE MECHANICAL CONTRACTOR, AND WIRED TO SHUT DOWN THE UNIT BY THE ELECTRICAL CONTRACTOR.

MECHANICAL LEGEND

- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- (T) WALL MOUNTED THERMOSTAT
- (U) ¾" DOOR UNDERCUT
- MANUAL VOLUME DAMPER
- BI-POLAR IONIZATION DEVICE (DUCT MOUNTED)
- TURNING VANES
- (SD) DUCT MOUNTED SMOKE DETECTOR
- (M) MOTOR OPERATED DAMPER

SPLIT SYSTEM HEAT PUMP SCHEDULE

TAG	TRANE AIR HANDLER MODEL NO.	NOMINAL TONS	LOCATION	TOTAL CFM	OA CFM	MAX. FAN HP	ESP	MBH TOT. COOL	MBH SEN. COOL	MIN. SEER	HEAT HEAT PUMP	HEAT KW	VOLTS /PHASE	MCA	MOCP	TAG	TRANE HEAT PUMP MODEL NO.	VOLTS /PHASE	MCA	MOCP	NOTES
AH-1	GAT2A0B42	3.5	SEE PLAN	1400	65	1/2	0.40"	41.3	31.0	13.5	40.5	7.7	208/1ø	38.0	40	HP-1	4TWR3042	208/1ø	26.0	45	1 THRU 7
AH-2	GAF2A0A18	1.5	SEE PLAN	600	80	1/3	0.40"	18.6	13.8	14.0	16.3	4.8	208/1ø	24.0	25	HP-2	4TWR3018	208/1ø	9.0	15	1 THRU 7
AH-3	GAT2A0B60	5.0	SEE PLAN	2000	270	1.0	0.40"	59.0	44.7	13.0	58.6	9.6	208/1ø	53.0	60	HP-3	4TWR3060	208/1ø	34.0	60	1 THRU 7
AH-4	GAF2A0A18	1.5	SEE PLAN	600	55	1/3	0.40"	18.6	13.8	14.0	16.3	4.8	208/1ø	24.0	25	HP-4	4TWR3018	208/1ø	9.0	15	1 THRU 7
AH-5	GAF2A0A30	2.5	SEE PLAN	1000	155	1/3	0.40"	30.4	22.7	13.5	28.6	7.7	208/1ø	38.0	40	HP-5	4TWR3030	208/1ø	15.0	25	1 THRU 7
AH-6	GAF2A0A36	3.0	SEE PLAN	1200	195	1/2	0.40"	35.3	26.1	13.0	34.6	7.7	208/1ø	38.0	40	HP-6	4TWR3036	208/1ø	18.0	30	1 THRU 7
AH-7	GAT2A0B42	3.5	SEE PLAN	1400	230	1/2	0.40"	41.3	31.0	13.5	40.5	7.7	208/1ø	38.0	40	HP-7	4TWR3042	208/1ø	26.0	45	1 THRU 7
AH-8	GAF2A0A30	2.5	SEE PLAN	1000	150	1/3	0.40"	30.4	22.7	13.5	28.6	7.7	208/1ø	38.0	40	HP-8	4TWR3030	208/1ø	15.0	25	1 THRU 7

NOTE:
1 COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/290 AT 95°F AMBIENT OUTDOOR AIR TEMP., 80°F DRY BULB, 67°F WET BULB ENTERING AIR TEMP., AND NOMINAL AIR QUANTITY LISTED.
2 REFRIG. PIPING TO BE SIZED PER TOTAL INSTALL. EQUIV. LENGTH. LONG-LINE APP.TO BE PROVIDED WHENEVER MFG. RECOMM. LENGTHS ARE EXCEEDED, INCL. LIQ. LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX T.E.L. IS 100'
3 PROVIDE SINGLE POINT ELECTRICAL CONNECTION
4 PROVIDE HONEYWELL "VISION-PRO 8000" THERMOSTAT/HUMIDISTAT
5 PROVIDE NEW FILTERS IN UNIT WHEN BUILDING IS TURNED OVER TO OWNER/TENANT.
6 FACTORY INSTALLED RAWAL APR VALVE, AS WELL AS EQUIPMENT AND CONTROLS AS REQUIRED TO MEET SEQUENCE OF OPERATION. PROVIDE WITH 3 SHUT-OFF VALVES AS RECOMMENDED BY RAWAL.
7 HEAT PUMP TO BE INSTALLED LEVEL ON MANUFACTURERS PREFORMED PAD.

AIR DISTRIBUTION SCHEDULE

SYMBOL	CFM	NECK SIZE	MODULE SIZE	PATTERN	BLADE/SLOT SPACING	DAMPER	MATERIAL	SERVICE	MANUFACTURER & MODEL NO.	NOTES
A	0-100	6"ø	12"x12"	LOUVERED	–	YES	STEEL	SUPPLY	PRICE SMD	1-4
B	0-100	6"ø	24"x24"	LOUVERED	–	YES	STEEL	SUPPLY	PRICE SMD	1-4
C	105-175	8"ø	24"x24"	LOUVERED	–	YES	STEEL	SUPPLY	PRICE SMD	1-4
D	180-270	10"ø	24"x24"	LOUVERED	–	YES	STEEL	SUPPLY	PRICE SMD	1-4
E	275-390	12"ø	24"x24"	LOUVERED	–	YES	STEEL	SUPPLY	PRICE SMD	1-4
F	120-250	8"ø	48"x4"	SLOT	(1)1½" SLOT	YES	STEEL	SUPPLY	PRICE AS215	1-5
G	260-380	10"ø	48"x4"	SLOT	(1)2½" SLOT	YES	STEEL	SUPPLY	PRICE AS225	1-5
H	385-450	12"ø	48"x4"	SLOT	(1)3" SLOT	YES	STEEL	SUPPLY	PRICE AS230	1-5
J	0-175	8"ø	24"x24"	PERFORATED	–	NO	STEEL	RETURN	PRICE PDDR	1-4
K	180-270	10"ø	24"x24"	PERFORATED	–	NO	STEEL	RET/TRANS	PRICE PDDR	1-4
L	395-500	12"x12"	24"x24"	PERFORATED	–	NO	STEEL	RET/EXH	PRICE PDDR	1-4
M	505-885	16"x16"	24"x24"	PERFORATED	–	NO	STEEL	RETURN	PRICE PDDR	1-4
N	890-1,850	22"x22"	24"x24"	PERFORATED	–	NO	STEEL	RETURN	PRICE PDDR	1-4
P	250	48"x5"	48"x5"	SLOT	(3)½" SLOTS	NO	STEEL	RETURN	PRICE SDR50	1-5
R	120-250	8"ø	48"x4"	SLOT	(1)1½" SLOT	YES	STEEL	ALUM	PRICE AS215	1-5
S	260-380	10"ø	48"x4"	SLOT	(1)2½" SLOT	YES	STEEL	ALUM	PRICE AS225	1-5
T	1280	28"x20"	30"x22"	LOUVERED	–	NO	ALUM	RETURN	PRICE 635	1-4
V	100	6"x5"	8"x7"	LOUVERED	–	YES	STEEL	SUPPLY	PRICE 540	1-4

NOTES:
1. FINISH TO MATCH / BE ABLE MATCH CEILING OR WALL OR DOOR. COORDINATE WITH ARCHITECT.
2. SQUARE TO ROUND TRANSITIONS PROVIDED BY AIR DISTRIBUTION SUPPLIER.
3. FURNISH WITH FRAME SUITABLE FOR INSTALLATION REQUIRED.
4. DIFFUSERS AT RATED CEILINGS SHALL BE ALL STEEL CONSTRUCTION WITH RADIATION DAMPER. PROVIDE RADIATION INSULATION BLANKET ON TOP SIDE OF DIFFUSER AS REQUIRED TO MAINTAIN RATING OF CEILING.
5. ALL LINEAR DIFFUSERS SHALL BE FURNISHED WITH PLENUM AND END CAPS.

FAN SCHEDULE

SYMBOL	# OF FANS	TYPE	CFM	APPROX. S.P.	DRIVE	RPM	ELECTRICAL DATA WATTS	H.P.	VOLTAGE	MANUFACTURER GREENHECK	CONTROL	ACCESSORIES
EF-1	95	EXHAUST	50	0.2	DIRECT	596	45	–	120V/1ø	SP-B70	D	1 2 5 6 13
EF-2	2	EXHAUST	120	0.2	DIRECT	824	150	–	120V/1ø	SP-B150	C	1 2 5 6 8 13
EF-3	1	EXHAUST	100	0.25	DIRECT	950	100	–	120V/1ø	SP-B110	A	1 2 5 6 8 13
EF-4	2	EXHAUST	100	0.25	DIRECT	950	100	–	120V/1ø	SP-B110	C	1 2 5 6 8 13
EF-5	2	EXHAUST	300	0.2	DIRECT	1124	150	–	120V/1ø	SP-B390	D	1 2 5 6 8 13
EF-6	5	EXHAUST	200	0.25	DIRECT	908	83	–	120V/1ø	SP-A250	E	1 2 5 6 8 13
EF-7	1	EXHAUST	240	0.25	DIRECT	1004	108	–	120V/1ø	SP-A290	A	1 2 5 6 8 13
EF-8	1	EXHAUST	100	0.25	DIRECT	950	100	–	120V/1ø	SP-B110	F	1 2 5 6 8 13
EF-9	1	EXHAUST	250	0.25	DIRECT	1032	108	–	120V/1ø	SP-A290	G	1 2 5 6 8 13
EF-10	1	EXHAUST	50	0.2	DIRECT	596	45	–	120V/1ø	SP-B70	E	1 2 5 6 8 13
EF-11	1	EXHAUST	520	0.2	DIRECT	837	350	–	120V/1ø	SP-A700	E	1 2 5 6 8 13
EF-12	1	EXHAUST	100	0.25	DIRECT	950	100	–	120V/1ø	SP-B110	D	1 2 5 6 8 13

ACCESSORIES
1: DISCONNECT BY E.C.
2: BACKDRAFT DAMPER
3: PREFAB. ROOF CURB
4: BIRDSCREEN
5: SPEED CONTROLLER
6: HANGING BRACKETS WITH VIBRATION ISOLATION
7: DISCHARGE HOOD
8: WL, WALL LOUVER DISCHARGE
9: MFG ROOF CAP
10: REMOTE MTD. SPEED CONTROLLER
11: MOTOR SIDE FAN GUARD
12: PROVIDE EXTENDED ROOF CURB
13: EXHAUST GRILLE
14: UL 762

CONTROL:
A: WALL MOUNTED SWITCH
B: WALL MOUNTED PUSH BUTTON SWITCH
C: WALL MOUNTED THERMOSTAT
D: INTERLOCK WITH ROOM LIGHT SWITCH
E: CONTINUOUS OPERATION
F: INTERLOCK WITH AH-1
G: INTERLOCK WITH AH-4

NOTES:
1. ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED.
2. ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.
3. MECHANICAL CONTRACTOR SHALL PROVIDE MAGNETIC STARTER WITH AUXILLARY CONTACTS AS REQUIRED.
4. BACKDRAFT DAMPER ON ROOF SUPPLY FANS SHALL BE MOTORIZED.
5. WHEN A SPEED CONTROLLER IS REQUIRED AND MOUNTED TO EXHAUST FAN, SPEED SHALL BE ADJUSTED TO PROVIDE LISTED AIRFLOW PRIOR TO CEILING BEING INSTALLED.

PTAC UNITS

UNIT TAG	AMANA MODEL	FAN CFM	OSA CFM	ESP (WG)	EER	COOLING (MBH)	ELECT. HEAT (KW)	HEATING (MBH)	VOLTAGE (V)	MCA (A)	MOCP (A)	WEIGHTS (LBS)
PTAC-A	PTH073G	340	50	0.4	11.7	7.6	2.1	6.8	208V/1ø	14.1	15	102

NOTES:
1) PROVIDE SUB-BASE KIT WITH DISCONNECT SWITCH FOR ALL PTAC'S.
2) SHALL COMPLY W/ THE LOCAL 2012 ENERGY CODE
3) PROVIDE W/ REMOTE THERMOSTAT.
4) PROVIDE W/ MATCHING WALL SLEEVE..

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REVISIONS No.	Date	Description
1		

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JOHN DEAN GREEK — REGISTERED PROFESSIONAL ENGINEER — 20706 — STATE OF MISSISSIPPI — 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
MECHANICAL LEGEND & SCHEDULES

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	CRM	M001
Checked by	EDB	
Date	Feb. 27, 2015	

Holiday Inn Express & Suites

HVAC GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH APPLICABLE CODES AND STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.

2. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS, LICENSE, INSPECTIONS, APPROVALS, AND FEES.

3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES BEFORE INSTALLATION OF ANY MATERIALS OR EQUIPMENT.

4. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.

5. DO NOT SCALE DRAWINGS FOR MEASUREMENTS.

6. ALL DUCT DIMENSIONS SHOWN ARE INTERIOR OPEN AREA DIMENSIONS. CONTRACTOR SHALL ADJUST DUCT SIZE WHEN USING INTERNAL INSULATION IN LIEU OF EXTERNAL WRAP.

7. ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTERFLASHED IN A WATERPROOF MANNER. (COLOR TO MATCH EXTERIOR).

8. SEAL ALL PENETRATIONS OF RATED WALLS WITH FIRE DAMPER, SEALANT MATERIAL APPROVED BY LOCAL CODE.

9. ALL SUSPENDED MATERIALS AND EQUIPMENT SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING STRUCTURE. DO NOT SUSPEND ITEMS FROM THE CEILING OR ITS SUPPORT SYSTEM.

10. INSTALL ALL CONTROL DEVICES, INCLUDING THERMOSTATS AND SWITCHES, 4'-0" ABOVE FINISHED FLOOR. PROVIDE THE REQUIRED DEVICE(S) FOR ALL SYSTEMS WHETHER LOCATED ON THE PLANS OR NOT. ANY THERMOSTAT LOCATED ON AN EXTERIOR WALL SHALL BE PROVIDED WITH AN INSULATED BASE.

11. LOCATE CEILING DIFFUSERS IN ACCORDANCE WITH ARCHITECTURAL REFLECTED CEILING PLANS (IF PROVIDED).

12. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND MECHANICAL UNITS FOR MAINTENANCE AND FILTER REMOVAL.

13. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED W/ WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.

14. ALL SUPPLY AND RETURN DUCT SHALL BE INSULATED. CONCEALED SHEET METAL DUCT MAY BE EXTERNALLY INSULATED WITH MINERAL FIBER BOARD OR BLANKET OR MAY BE INTERNALLY INSULATED WITH DUCT LINER (R-VALUE = 5). THE FIRST 15' FROM THE AIR HANDLER SHALL BE INTERNALLY LINED. INTERNALLY LINED INSULATION SHALL MEET BACTERIOLOGICAL STANDARD ASTM C 665. INTERNALLY LINED INSULATION SHALL MEET BACTERIOLOGICAL STANDARD ASTM C 665. ALL SPIRAL DUCTWORK SHALL BE DOUBLE WALL. IF CONTRACTOR USES INTERNAL INSULATION, SINGLE WALL DUCTWORK MAY BE USED INSTEAD.

15. THE EXTERNAL STATIC PRESSURE FOR ALL FANS, HVAC UNITS, ETC IS BASED ON DUCT ROUTING AS INDICATED ON PLANS. THE MECHANICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DEVIATIONS IN THE FIELD AS AIR QUANTITIES MAY BE AFFECTED.

16. CERTIFIED TEST AND BALANCE CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNER'S REPRESENTATIVE WITH COMPLETE BALANCE REPORT. BALANCE REPORT SHALL INCLUDE: SUPPLY & RETURN AIR FLOWS, ALL STATIC PRESSURES, SUPPLY & RETURN AIR TEMPERATURES AS WELL AS OUTDOOR AIR TEMPS AT TIME OF TEST. IF BALANCING DAMPERS ARE NOT PROVIDED IN RETURN DUCTWORK, CONTRACTOR SHALL BALANCE SUPPLY SIDE TO AIR QUANTITIES INDICATED ON PLANS AND SHALL BALANCE OUTSIDE AIR AND RETURN AIR FLOWS AT THE AIR HANDLER TO AIR QUANTITIES INDICATED IN THE SCHEDULE. PROVIDE NEW AIR FILTERS FOR EACH UNIT.

17. AS REQUIRED BY LOCAL CODES, MECHANICAL CONTRACTOR SHALL PROVIDE U.L. LISTED FIRE DAMPERS WHERE REQUIRED FOR FIRE PROTECTION REQUIREMENTS OF THE HVAC SYSTEM & THE UL ASSEMBLY.

18. PROVIDE 1 YEAR WARRANTY ON ALL EQUIPMENT AND 5 YEAR WARRANTY ON ALL COMPRESSORS.

19. ALL INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL EXHAUST LOCATIONS.

20. CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC PIPE AND FITTINGS. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED.

21. A COMPLETE SYSTEM OF SEISMIC RESTRAINTS SHALL BE DESIGNED BY MASON INDUSTRIES & SEALED BY THEIR REGISTERED ENGR & INSTALLED BY THIS CONTR. AS REQ'D BY APPLICABLE CODES FOR THE LOCALE OF THIS PROJECT.

22. ALL MAIN DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS. RUNOUTS FROM MAIN/BRANCH DUCTS MAY BE FLEXIBLE DUCT CONFORMING TO THE REQUIREMENTS OF UL 181 FOR CLASS 1 FLEXIBLE AIR DUCTS. MAX 5' FLEX PER RUNOUT.

23. THE MECHANICAL CONTRACTOR SHALL PROVIDE REFRIGERANT AND LOW VOLTAGE CONTROL LINES FROM THE CONDENSER TO THE AIR HANDLING UNIT. COORDINATE ROUTING AND INSTALLATION WITH THE GENERAL CONTRACTOR. SIZE REFRIGERANT LINES PER MANUFACTURER'S REQUIREMENTS.

24. ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH VOLTAGE ELECTRICAL WIRING, CONDUIT, DISCONNECT SWITCHES, FUSES, ECT. TO SPLIT SYSTEM UNITS. ALL FINAL ELECTRICAL CONNECTIONS ARE BY ELECTRICAL CONTRACTOR.

25. OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 1" FIBERGLASS DUCT WRAP WITH VAPOR BARRIER.

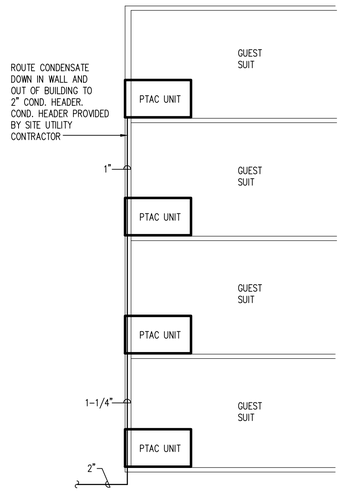
26. REFRIGERANT PIPING, NOT SHOWN ON PLANS, SHALL BE SIZED & INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTALLATION INSTRUCTIONS AND LOCAL CODES.

27. MECHANICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL PENETRATIONS FOR RELIEF HOODS, OUTSIDE AIR HOODS, LOUVERS, AND WALL CAPS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.

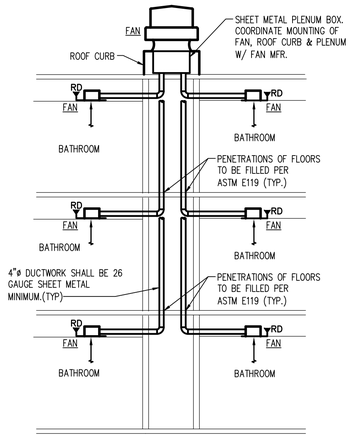
28. MECHANICAL CONTRACTOR SHALL PAINT ALL RELIEF HOODS, INTAKE HOODS, LOUVERS, AND VENT CAPS. CONFIRM COLOR WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.

29. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE SHOP DRAWINGS ARE PROVIDED TO THE ARCHITECT AND ENGINEER FOR APPROVAL PRIOR TO PURCHASE OF ANY PIECE OF EQUIPMENT, DUCTWORK OR DEVICE.

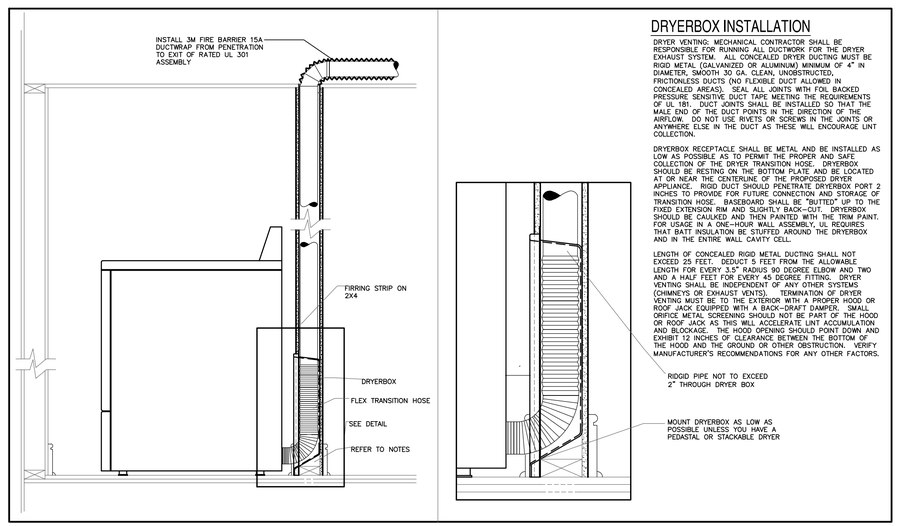
30. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD A MINIMUM OF TEN BUSINESS DAYS IN ADVANCE FOR COMPLETION OF FIELD INSPECTION FOR APPENDIX 5 OF THE 2012 NC ENERGY CODE, IF ENFORCED.



1 M002 **CONDENSATE RISER** N.T.S.



2 M002 **GUESTROOM EXHAUST RISER** N.T.S.



DRYERBOX INSTALLATION

DRYER VENTING: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING ALL DUCTWORK FOR THE DRYER EXHAUST SYSTEM. ALL CONCEALED DRYER DUCTING MUST BE RIGID METAL (GALVANIZED OR ALUMINUM) MINIMUM OF 4" IN DIAMETER, SMOOTH 30 GA. CLEAN, UNOBSTRUCTED, FRICTIONLESS DUCTS (NO FLEXIBLE DUCT ALLOWED IN CONCEALED AREAS). SEAL ALL JOINTS WITH FOIL BACKED PRESSURE SENSITIVE DUCT TAPE MEETING THE REQUIREMENTS OF UL 181. DUCT JOINTS SHALL BE INSTALLED SO THAT THE MALE END OF THE DUCT POINTS IN THE DIRECTION OF THE AIRFLOW. DO NOT USE RIVETS OR SCREWS IN THE JOINTS OR ANYWHERE ELSE IN THE DUCT AS THESE WILL ENCOURAGE LINT COLLECTION.

DRYERBOX RECEPTACLE SHALL BE METAL AND BE INSTALLED AS LOW AS POSSIBLE AS TO PERMIT THE PROPER AND SAFE COLLECTION OF THE DRYER TRANSITION HOSE. DRYERBOX SHOULD BE RESTING ON THE BOTTOM PLATE AND BE LOCATED AT OR NEAR THE CENTERLINE OF THE PROPOSED DRYER APPLIANCE. RIGID DUCT SHOULD PENETRATE DRYERBOX PORT 2 INCHES TO PROVIDE FOR FUTURE CONNECTION AND STORAGE OF TRANSITION HOSE. BASEBOARD SHALL BE "BUTTED" UP TO THE FIXED EXTENSION RIM AND SLIGHTLY BACK-CUT. DRYERBOX SHOULD BE CAULKED AND THEN PAINTED WITH THE TRIM PAINT. FOR USAGE IN A ONE-HOUR WALL ASSEMBLY, UL REQUIRES THAT BATT INSULATION BE STUFFED AROUND THE DRYERBOX AND IN THE ENTIRE WALL CAVITY CELL.

LENGTH OF CONCEALED RIGID METAL DUCTING SHALL NOT EXCEED 25 FEET. DEDUCT 5 FEET FROM THE ALLOWABLE LENGTH FOR EVERY 3.5" RADIUS 90 DEGREE ELBOW AND TWO AND A HALF FEET FOR EVERY 45 DEGREE FITTING. DRYER VENTING SHALL BE INDEPENDENT OF ANY OTHER SYSTEMS (CHIMNEYS OR EXHAUST VENTS). TERMINATION OF DRYER VENTING MUST BE TO THE EXTERIOR WITH A PROPER HOOD OR ROOF JACK EQUIPPED WITH A BACK-DRAFT DAMPER. SMALL ORIFICE METAL SCREENING SHOULD NOT BE PART OF THE HOOD OR ROOF JACK AS THIS WILL ACCELERATE LINT ACCUMULATION AND BLOCKAGE. THE HOOD OPENING SHOULD POINT DOWN AND EXHIBIT 12 INCHES OF CLEARANCE BETWEEN THE BOTTOM OF THE HOOD AND THE GROUND OR OTHER OBSTRUCTION. VERIFY MANUFACTURER'S RECOMMENDATIONS FOR ANY OTHER FACTORS.

3 M002 **RESIDENTIAL DRYER VENT DETAIL** N.T.S.

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No.	Date	Description
1		

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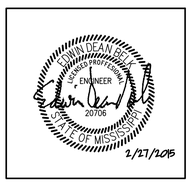


KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

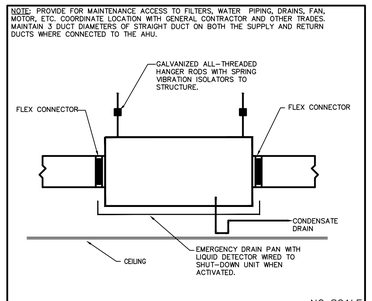
Drawing Title

MECHANICAL NOTES & DETAILS

Phase
Construction Documents

Project No.	14-081	Sheet No.	M002
Prepared by	CRM		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites



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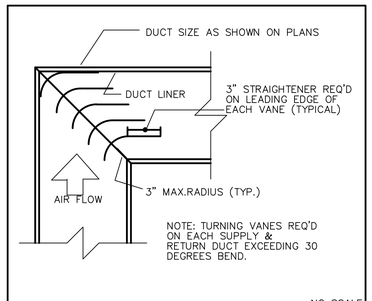
AIR HANDLING UNIT 1



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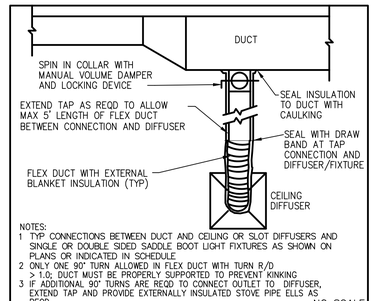
TURNING VANE DETAIL 2



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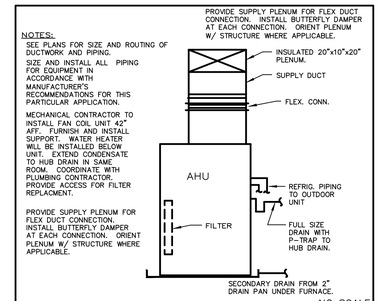
CONNECTIONS TO MAIN DUCT 3



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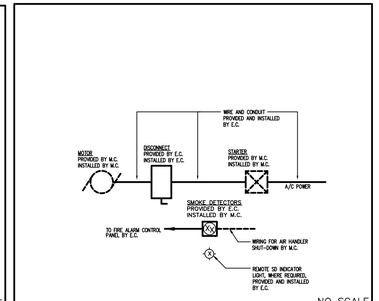
AIR HANDLING UNIT 4



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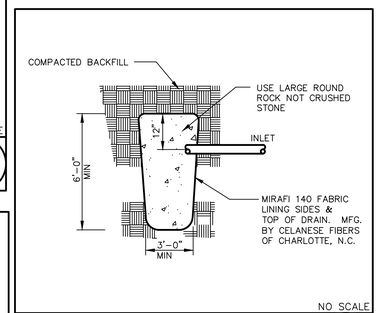
MECH-ELEC COORDINATION 5



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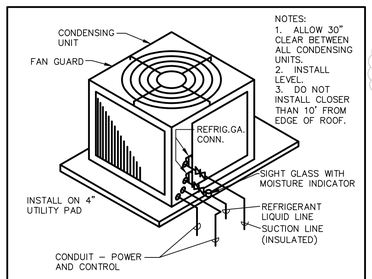
DRYWELL DETAIL 6



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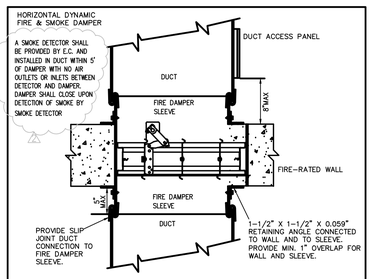
CONDENSING UNIT 7



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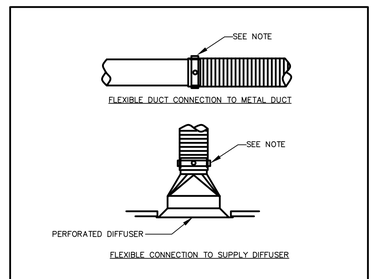
FIRE + SMOKE DAMPER TYPICAL DETAIL 8



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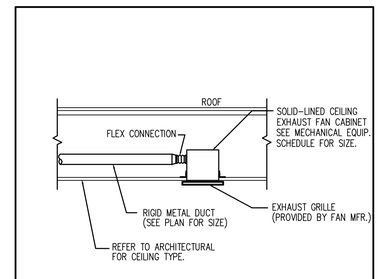
FLEX CONNECTIONS 9



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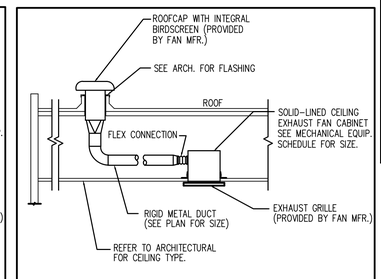
EXHAUST FAN DETAIL 10



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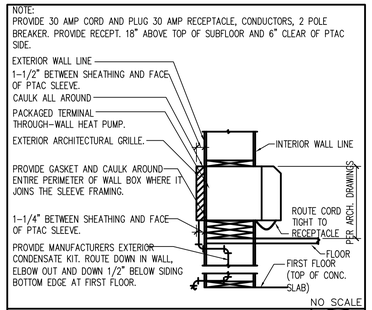
EXHAUST FAN DETAIL 11



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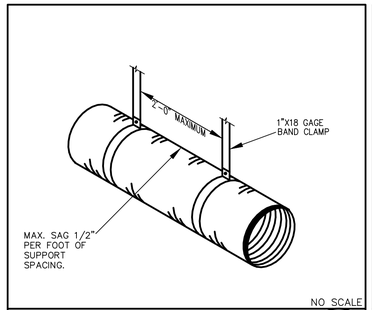

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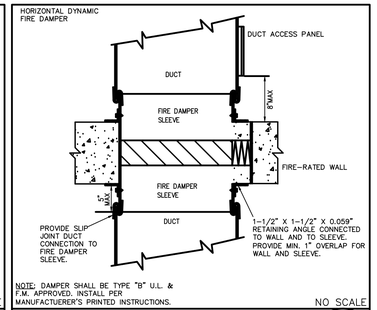
FLEXIBLE DUCT SUPPORT 13



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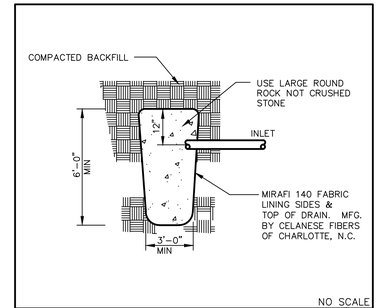
FIRE DAMPER TYPICAL DETAIL 14



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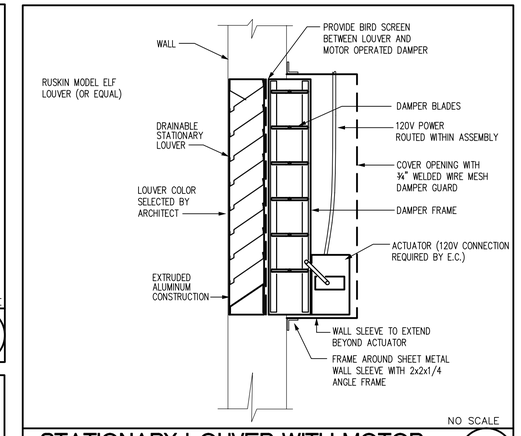
DRYWELL DETAIL 15



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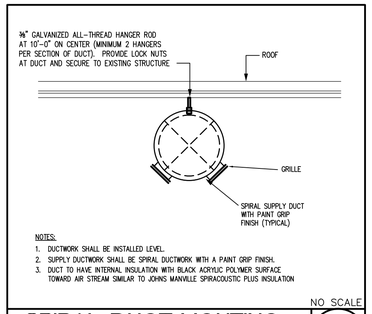
STATIONARY LOUVER WITH MOTOR OPERATED DAMPER DETAIL 20



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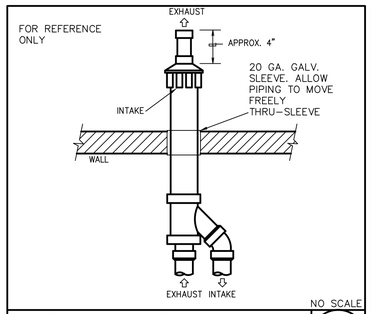
SPIRAL DUCT MOUTING DETAILS 16



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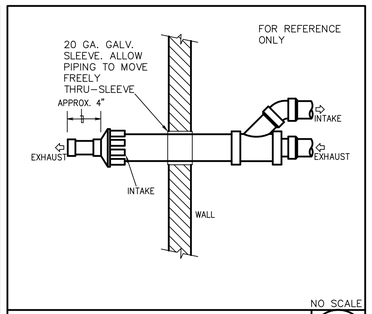
CONCENTRIC TERMINATION 17



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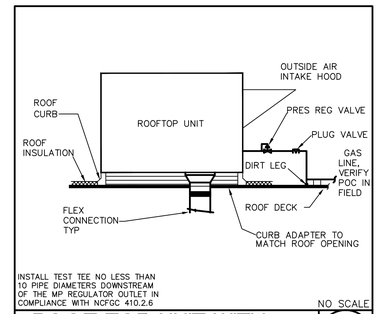
SIDEWALL CONCENTRIC TERMINATION 18



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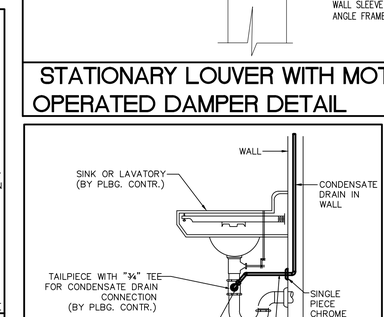
ROOF TOP UNIT WITH GAS HEAT (AAON UNIT) 19



NO SCALE

CONDENSATE DRAIN IN SINK CONNECTION 21

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EDWIN DEAN BUCK JR. REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

REVISIONS		
No.	Date	Description
1		

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
MECHANICAL DETAILS

Phase
Construction Documents

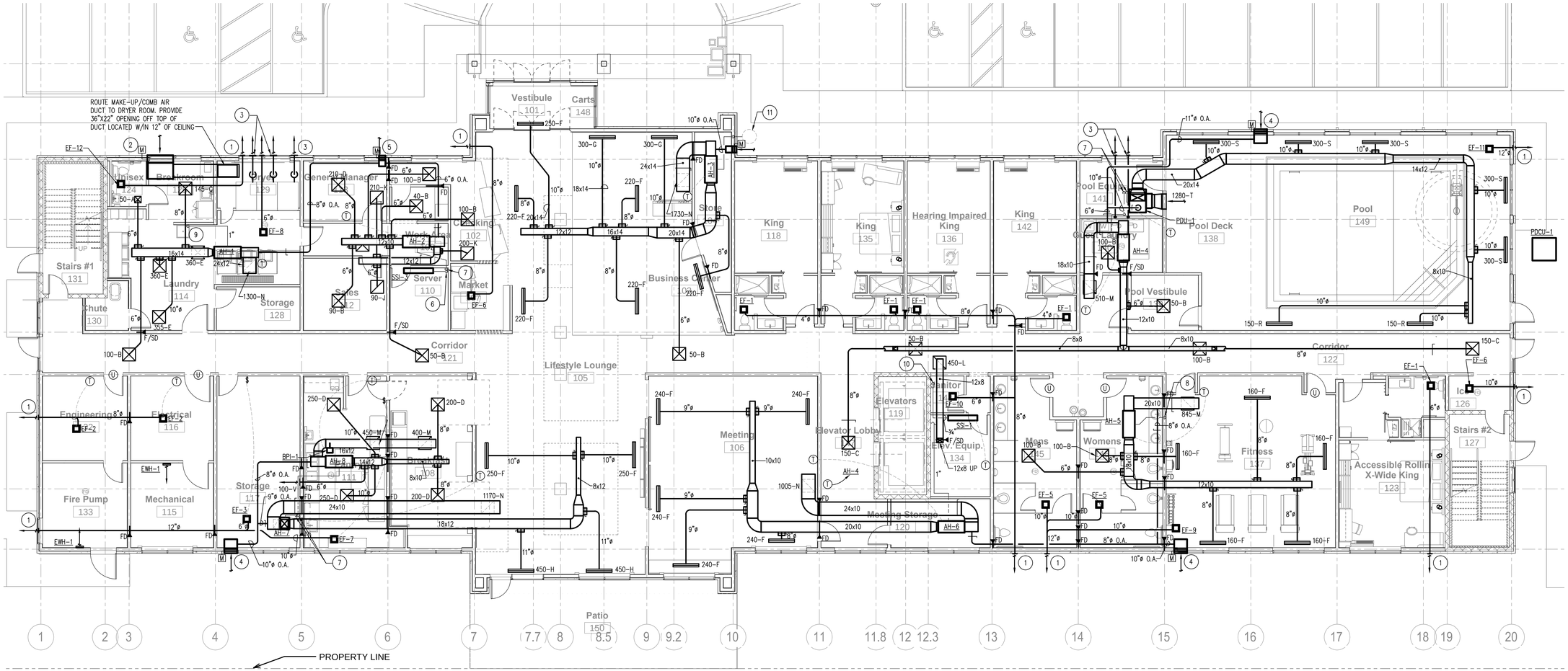
Project No.	14-081	Sheet No.	M003
Prepared by	CRM		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

MECHANICAL KEYED NOTES

1. FAN MFR. WALL CAP.
2. 48"x36" RUSKIN ELF 375 MAKE-UP/COMBUSTION AIR LOUVER W/ 48"x36"x30" FULLY INSULATED PLENUM AND MOTOR OPERATED DAMPER. DAMPER SHALL REMAIN IN CLOSED POSITION AND OPEN UP FULLY WHEN DRYERS ARE IN USE.
3. SINGLE WALL RIGID SHEET METAL DRYER VENTS, SIZED PER MANUFACTURER. VENT CAP BY M.C. VERIFY SIZE W/ DRYER MANUFACTURER.
4. 24"x12" RUSKIN ELF375 OUTSIDE AIR INTAKE LOUVER W/ 24"x12"x18" FULLY INSULATED PLENUM.
5. 12"x12" RUSKIN ELF375 OUTSIDE AIR INTAKE LOUVER W/ 12"x12"x12" FULLY INSULATED PLENUM.
6. ROUTE ¾" CONDENSATE DOWN TO FLOOR DRAIN. FLOOR DRAIN BY P.C.
7. ROUTE 1" CONDENSATE DOWN TO FLOOR DRAIN. FLOOR DRAIN BY P.C.
8. ROUTE 1" CONDENSATE DOWN IN WALL AND TIE INTO SINK TAILPIECE.
9. ROUTE 1" COND DOWN AND DUMP INTO MOP SINK.
10. ROUTE 1" & ¾" COND DOWN AT WALL DUMP INTO FLOOR SINK. FLOOR SINK BY P.C.
11. ROUTE 1" DOWN IN WALL AND OUT OF BUILDING TO CONDENSATE DRY WELL.

ALL DUCTWORK, GRILLES, DIFFUSERS, AND HANGERS IN POOL AREA TO BE OF ALUMINUM CONSTRUCTION. COORDINATE W/ ARCHITECTURAL CEILING PLAN AND STRUCTURAL BEFORE CONSTRUCTION.



1 M101 MECHANICAL 1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"

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JOHN DEAN GIRK — 20706 — REGISTERED PROFESSIONAL ENGINEER — STATE OF MISSISSIPPI — 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
MECHANICAL
1ST FLOOR PLAN

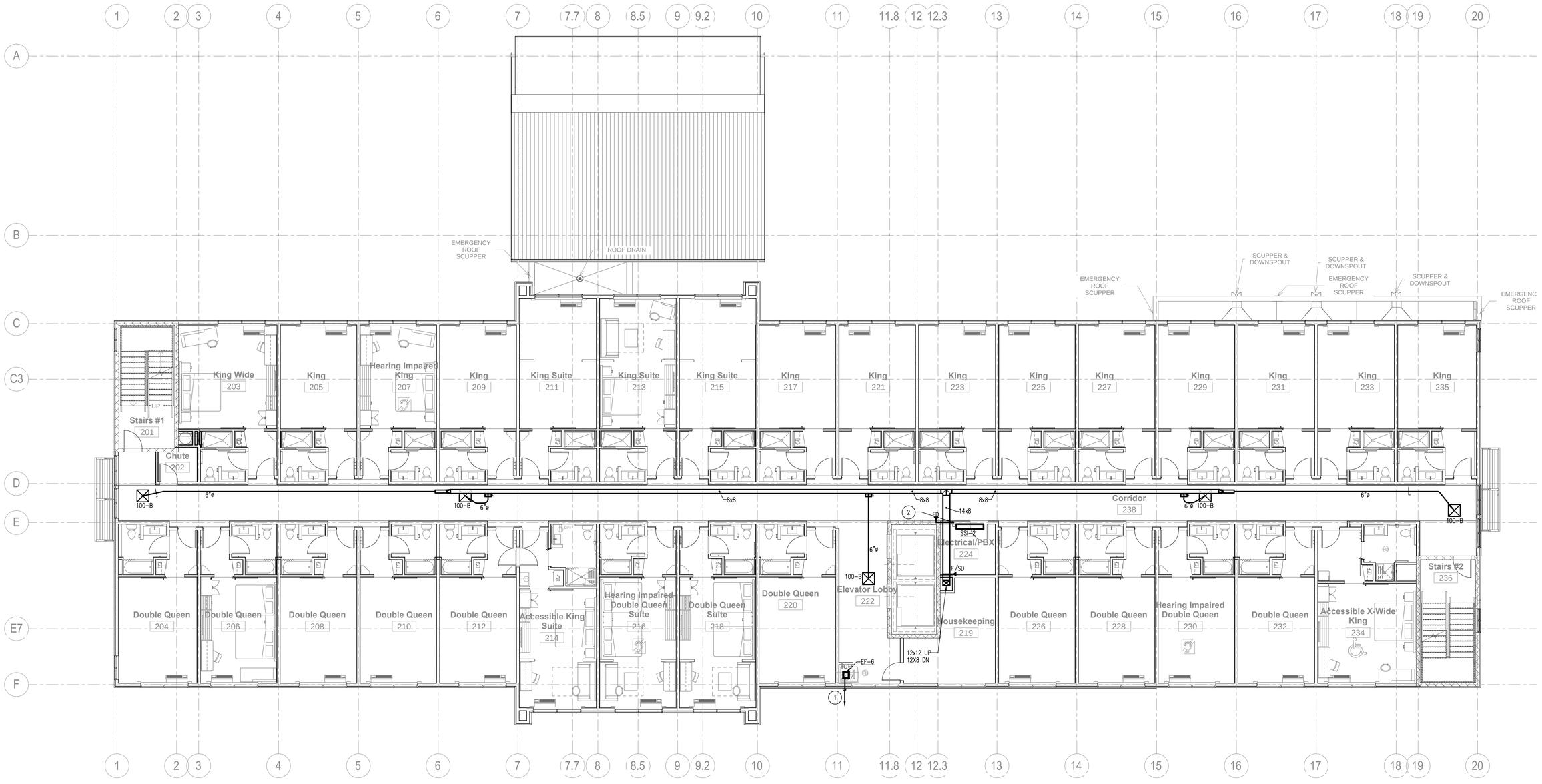
Phase
Construction Documents

Project No.	14-081	Sheet No.	M101
Prepared by	CRM		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

MECHANICAL KEYED NOTES

1. FAN MFR. WALL CAP.
2. ROUTE ¾" COND DOWN IN WALL TO FLOOR SINK IN JANITOR'S CLOSET ON 1ST FLOOR BELOW. FLOOR SINK BY P.C.



1 M102 MECHANICAL 2ND FLOOR PLAN
SCALE: 1/8" = 1'-0"

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2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
MECHANICAL
2ND FLOOR PLAN

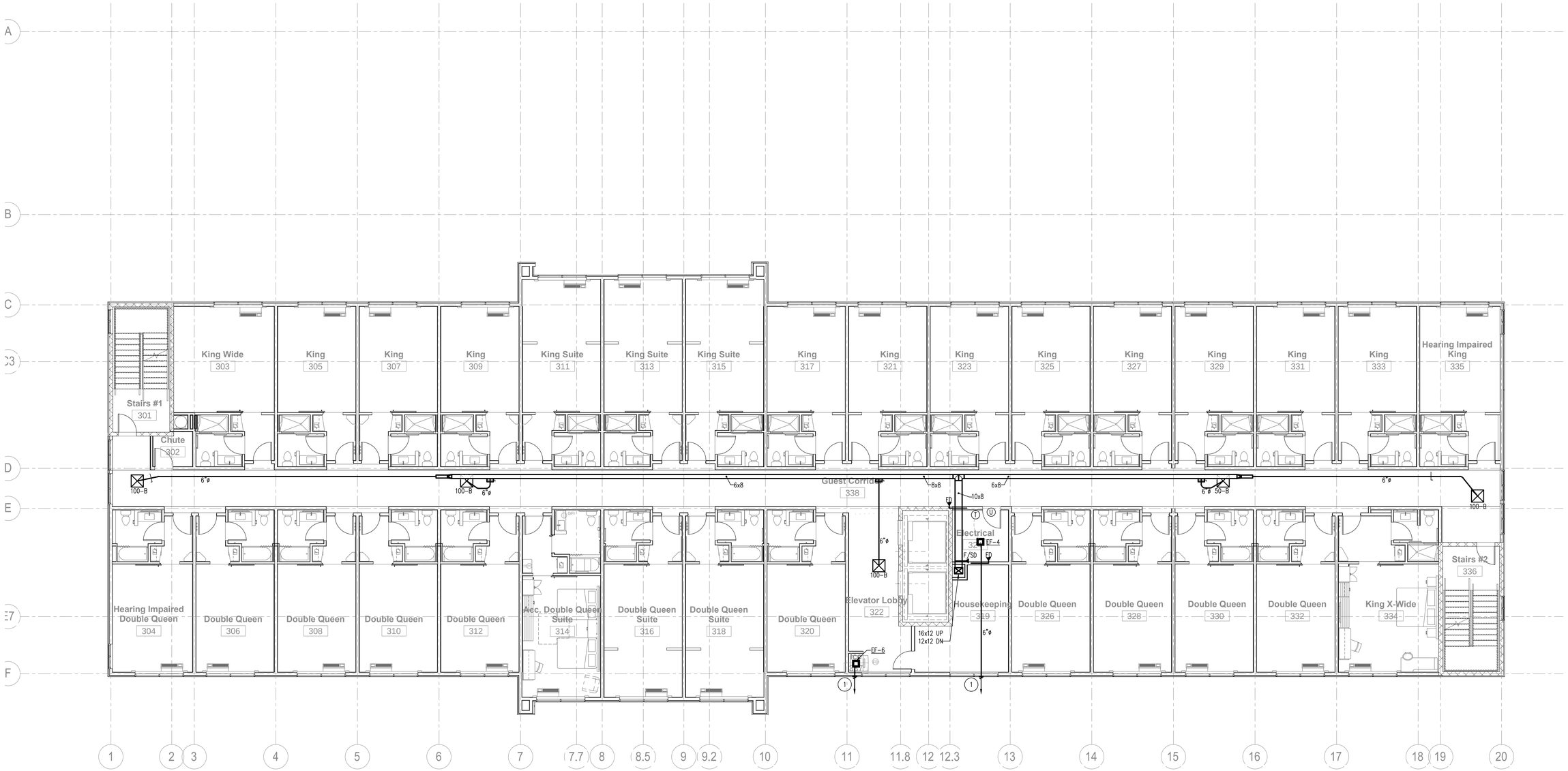
Phase
Construction Documents

Project No.	14-081
Prepared by	CRM
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	M102

Holiday Inn Express & Suites

MECHANICAL KEYED NOTES

1. FAN MFR. WALL CAP.



1 M103 MECHANICAL 3RD FLOOR PLAN
SCALE: 1/8" = 1'-0"

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MEP:
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Phone: (704) 399-3943
Email: asoler@allied-engineers.com

REVISIONS		
No.	Date	Description
1		

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JOHN DEAN BELL
REGISTERED PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
MECHANICAL
3RD FLOOR PLAN

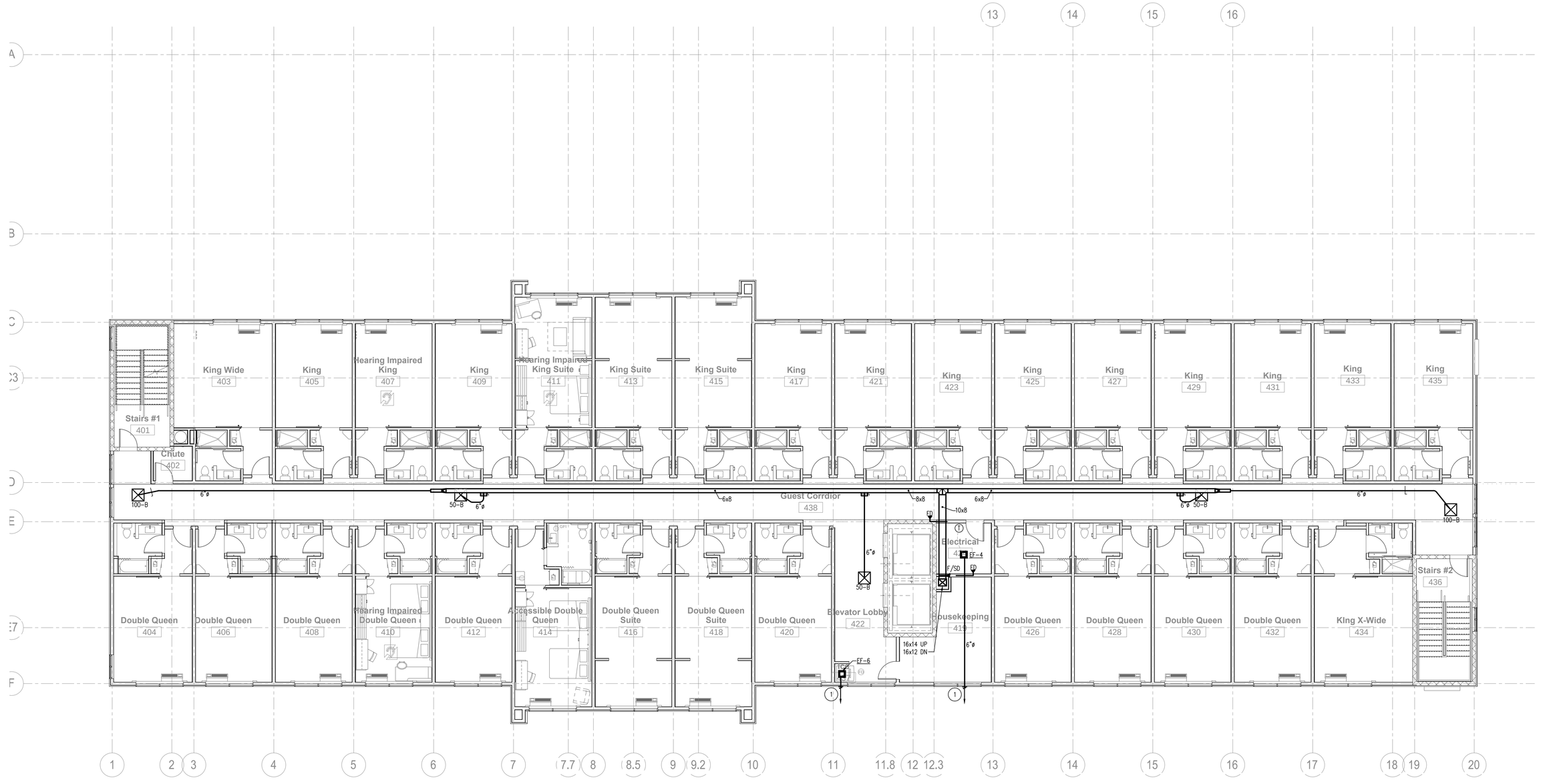
Phase
Construction Documents

Project No.	14-081	Sheet No.	M103
Prepared by	CRM		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

MECHANICAL KEYED NOTES

1	FAN MFR. WALL CAP.



1 MECHANICAL 4TH FLOOR PLAN
M104 SCALE: 1/8" = 1'-0"

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KEY PLAN

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Holiday Inn Express & Suites

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Drawing Title
MECHANICAL
4TH FLOOR PLAN

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	CRM	M104
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Date	Feb. 27, 2015	

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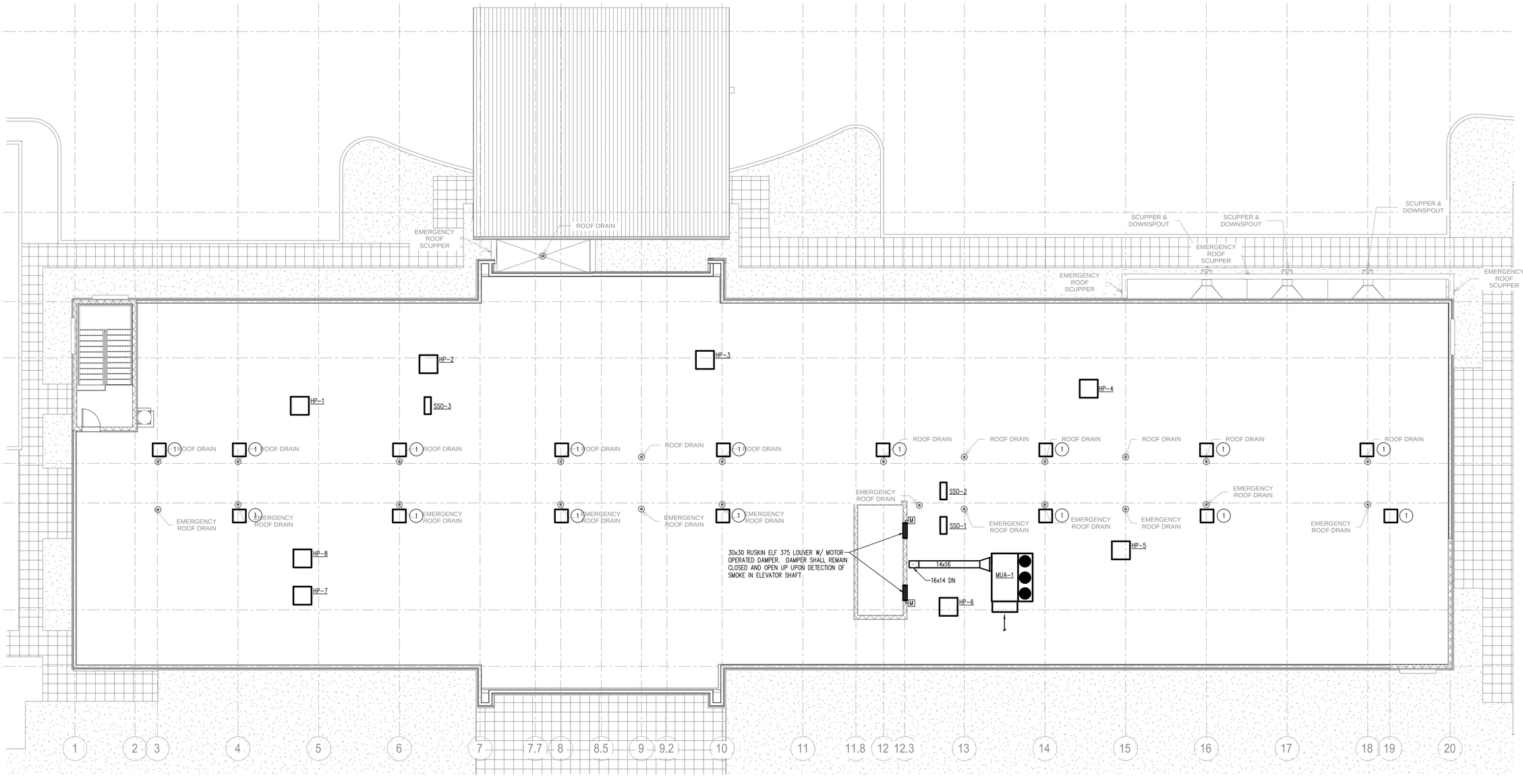
DUCTWORK EXPOSED OUTSIDE SHALL BE INSULATED WITH 2" THICK RIGID EXTERNAL FIBERGLASS INSULATION IN ADDITION TO 1" THICK DUCT LINER. COVER EXTERNAL INSULATION WITH AN ALUMINUM OUTER ENCLOSURE AND SEAL WATER-TIGHT. ENCLOSURE SHALL BE SLOPED AS TO SHED WATER.

MECHANICAL KEYED NOTES

1. GREENHCECK 26"x26" FGR GRAVITY RELIEF CAP.



1 M201 MECHANICAL ROOF PLAN
SCALE: 1/8" = 1'-0"

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EDWIN DEAN BECK — 20706 — REGISTERED PROFESSIONAL ENGINEER — STATE OF MISSISSIPPI — 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

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Southaven, MS 38671

Drawing Title
MECHANICAL ROOF PLAN

Phase
Construction Documents

Project No.	14-081
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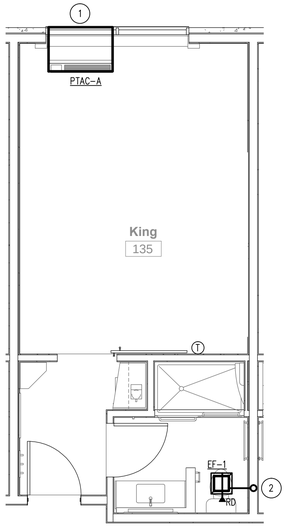
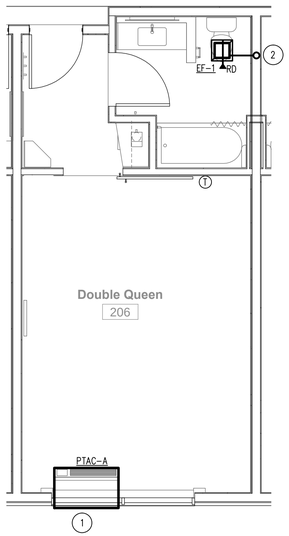
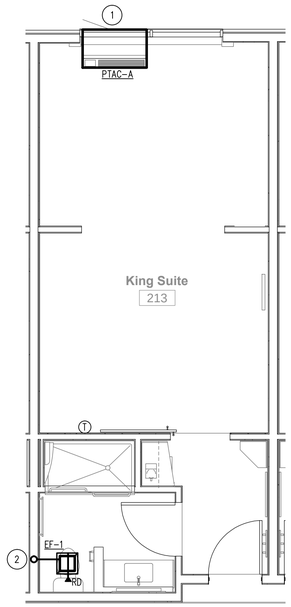
Holiday Inn Express & Suites



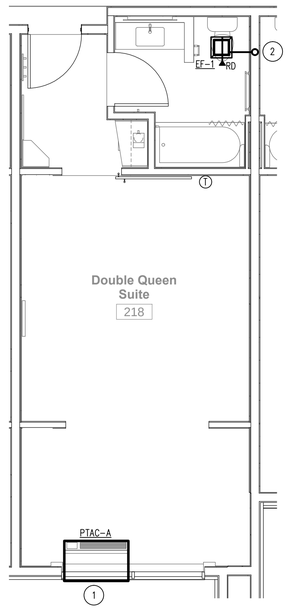
1 M301 **KING**
SCALE: 1/4" = 1'-0"



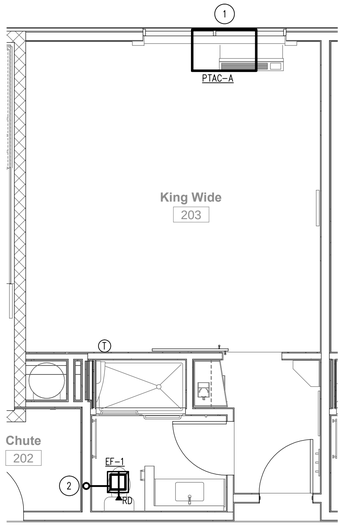
2 M301 **DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



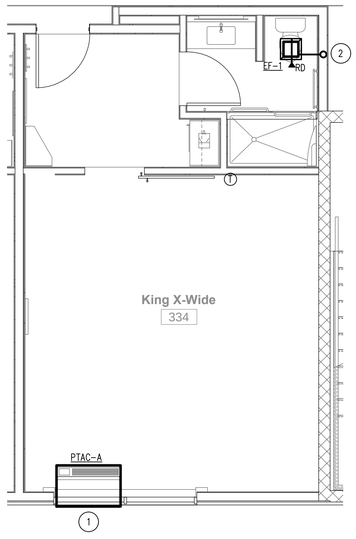
3 M301 **KING SUITE**
SCALE: 1/4" = 1'-0"



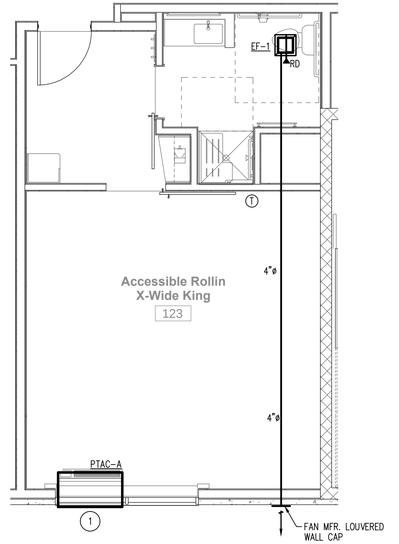
4 M301 **DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"



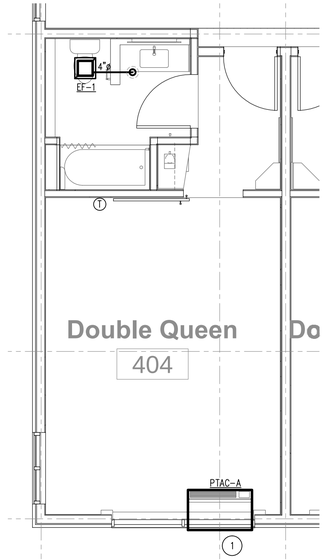
5 M301 **KING WIDE**
SCALE: 1/4" = 1'-0"



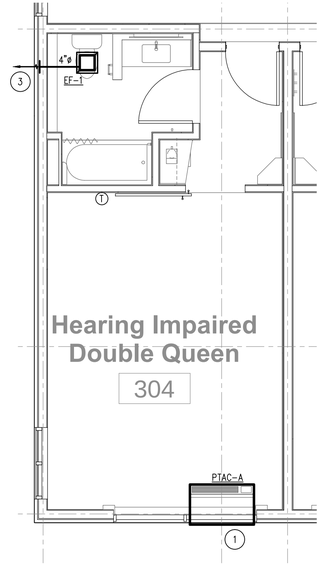
6 M301 **KING X-WIDE**
SCALE: 1/4" = 1'-0"



7 M301 **ACCESSIBLE ROLLIN X-WIDE KING -1st FLOOR**
SCALE: 1/4" = 1'-0"



8 M301 **DOUBLE QUEEN - END**
SCALE: 1/4" = 1'-0"



9 M301 **H.I. DOUBLE QUEEN - END**
SCALE: 1/4" = 1'-0"

KEYED NOTES
(THIS SHEET ONLY)

1. SEE 1/M002 FOR CONDENSATE ROUTING.
2. 4" (26 GAUGE) SHEET METAL EXHAUST DUCT UP TO ROOF.
3. FAN MFR. WALL CAP.
4. ROUTE 4" EXHAUST DUCT UP THROUGH ROOF. TERMINATE AT ROOF W/ GREENHECK GRSR-6 ROOF CAP. PROVIDE W/ INSECT SCREEN AND ROOF CURB.

NOTE:
ALL PENETRATIONS SHALL MEET ASTME 119 STANDARDS

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TOWN DEAN SMITH REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title

MECHANICAL ENLARGED GUESTROOM PLANS

Phase
Construction Documents

Project No.	14-081	Sheet No.	M301
Prepared by	CRM		
Checked by	EDB		
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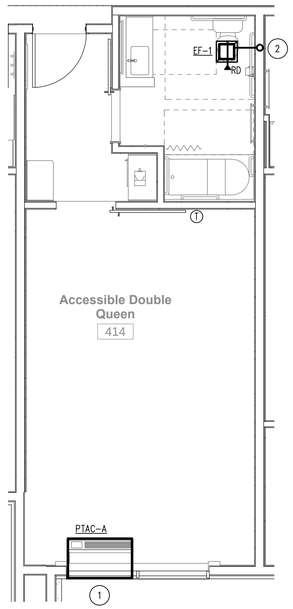
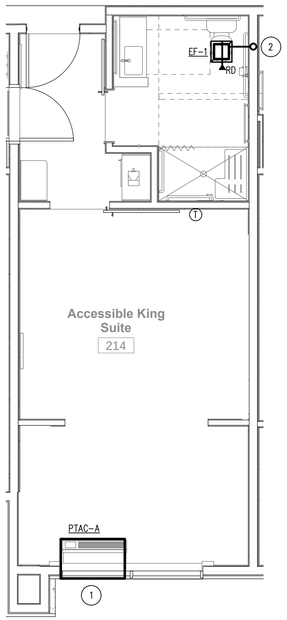
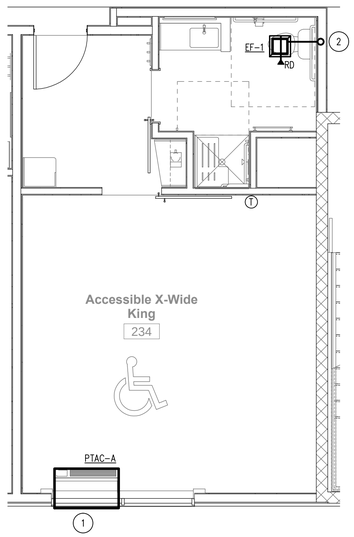
Holiday Inn Express & Suites



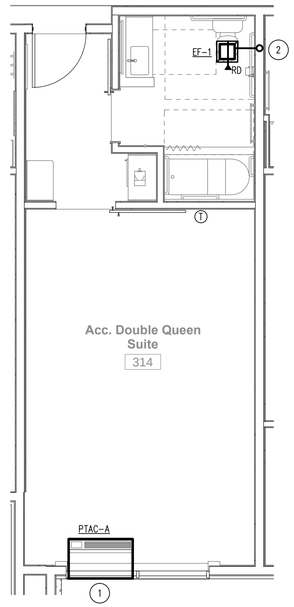
1 M302 ACCESSIBLE DOUBLE QUEEN
SCALE: 1/4" = 1'-0"



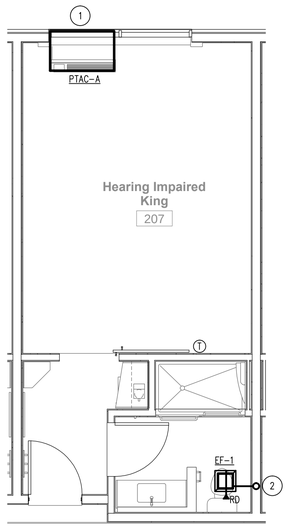
2 M302 ACCESSIBLE KING SUITE
SCALE: 1/4" = 1'-0"



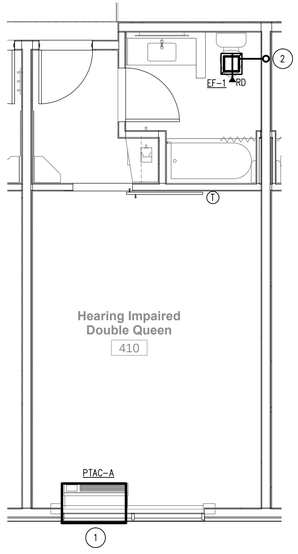
3 M302 ACCESSIBLE X-WIDE KING
SCALE: 1/4" = 1'-0"



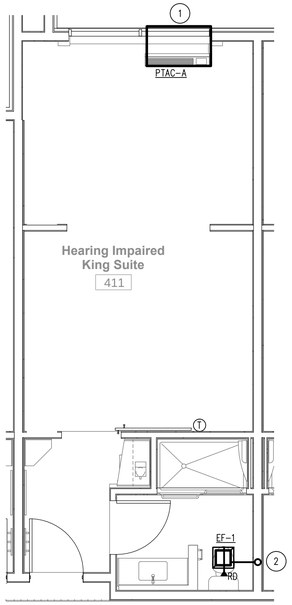
4 M302 ACCESSIBLE DOUBLE QUEEN SUITE
SCALE: 1/4" = 1'-0"



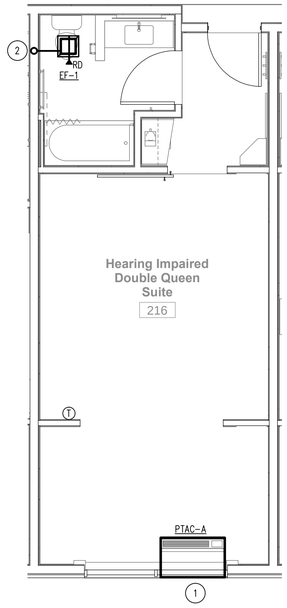
5 M302 HEARING IMPAIRED KING
SCALE: 1/4" = 1'-0"



6 M302 HEARING IMPAIRED DOUBLE QUEEN
SCALE: 1/4" = 1'-0"



7 M302 HEARING IMPAIRED KING SUITE
SCALE: 1/4" = 1'-0"



8 M302 HEARING IMPAIRED DOUBLE QUEEN SUITE
SCALE: 1/4" = 1'-0"

KEYED NOTES
(THIS SHEET ONLY)

1. SEE 1/M002 FOR CONDENSATE ROUTING.
2. 4" (26 GAUGE) SHEET METAL EXHAUST DUCT UP TO ROOF.

NOTE:
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EDWIN DEAN BERRY
EXPIRES 12/31/2015
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
MECHANICAL ENLARGED GUESTROOM PLANS

Phase
Construction Documents

Project No.	14-081	Sheet No.	M302
Prepared by	CRM		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

1. GENERAL AND SPECIAL CONDITIONS: GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THIS DIVISION OF THE SPECIFICATIONS INSOFAR AS SAME ARE APPLICABLE TO THE WORK UNDER THIS DIVISION AND UNLESS OTHERWISE SPECIFIED.
2. SCOPE: PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK.
3. CODE COMPLIANCE: ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION, BUILDING DEPARTMENTS, AND DEPARTMENT OF HEALTH. APPLICABLE NATIONAL, STATE, AND LOCAL CODES, LAWS, AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK SHALL BE INCORPORATED INTO AND MADE A PART OF THESE CONTRACT DOCUMENTS AND SPECIFICATIONS. THE CONTRACTOR IS TO NOTIFY THE ARCHITECT/ENGINEER OF ANY WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE CODES, LAWS, OR REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH A VIOLATION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE AND AT NO EXPENSE TO THE OWNER.
4. PERMITS: APPLY FOR AND PAY FOR ALL NECESSARY PERMITS, FEES, AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION.
5. WARRANTY: PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT UNDER THIS SECTION OF THE SPECIFICATIONS WITH A ONE YEAR WARRANTY FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER.
6. RECORD DRAWINGS: CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ALL AS-BUILT CONDITIONS DURING CONSTRUCTION AND TURN OVER ONE COPY EACH TO THE OWNER AND THE ARCHITECT AFTER COMPLETION.
7. OPERATING MANUALS: CONTRACTOR SHALL FURNISH TO THE OWNER 3 SETS OF OPERATION AND MAINTENANCE MANUALS FOR ALL MAJOR PIECES OF EQUIPMENT.
8. COORDINATION: VERIFY ALL ROUGH-IN LOCATIONS AND COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID CONFLICTS. CONTRACTOR MUST COORDINATE WITH OTHER TRADES FOR ALL STRUCTURES, PIPING, CONDUIT, DUCTWORK, LIGHTING, ETC TO PROPERLY BE INSTALLED. ANY CONFLICTS SHALL BE RESOLVED AT NO EXPENSE TO THE OWNER.
9. PROVIDE CONCRETE HOUSE KEEPING PADS FOR ALL PLUMBING EQUIPMENT SET ON FLOORS, UNLESS OTHERWISE NOTED. PADS SHALL BE A MINIMUM OF 4" HIGH AND A MINIMUM OF 6" LARGER THAN EQUIPMENT BASES ON ALL SIDES. CHAMFER ALL EDGES.
10. LABEL ALL PLUMBING PIPING WITH ADHESIVE PIPE LABELS INDICATING SERVICE AND DIRECTION OF FLOW. PIPE LABELS SHALL BE LOCATED NEAR ALL BRANCH CONNECTIONS, NEAR ALL FLOOR AND WALL PENETRATIONS, AND AT MAXIMUM INTERVALS OF 25' ALONG EACH RUN.
11. PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO:
    - -PLUMBING FIXTURES AND EQUIPMENT
    - -FIRE STOPPING
    - -DOMESTIC WATER SYSTEM
    - -SANITARY WASTE AND VENT SYSTEM
    - -NATURAL GAS SYSTEM
    - -STORM DRAIN/SEWER SYSTEM

FIXTURES:

1. PROVIDE COMPLETE FIXTURES AND INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAILPIECES, ESCUTCHEONS, ETC. EXPOSED COPPER OR BRASS MATERIALS SHALL BE CHROME PLATED.
2. SEAL ALL EDGES OF PLUMBING FIXTURES IN CONTACT WITH FLOORS, WALLS, OR COUNTERTOPS USING SANITARY-TYPE, ONE-PART, MILDEW RESISTANT SILICONE SEALANT. MATCH SEALANT COLOR TO FIXTURE COLOR.
3. PROVIDE PERMANENTLY ATTACHED VACUUM BREAKERS FOR ALL FIXTURES/FAUCETS TO WHICH HOSES MAY BE CONNECTED.
4. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF PLUMBING FIXTURES.

FIRE STOPPING:

1. FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS, AND PARTITIONS. PROVIDE DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

DOMESTIC WATER PIPING:

1. FURNISH AND INSTALL A COMPLETE SYSTEM OF DOMESTIC HOT AND COLD WATER SUPPLIES TO ALL FIXTURES AND/OR EQUIPMENT REQUIRING DOMESTIC WATER SUPPLIES.
2. DOMESTIC WATER PIPING BELOW GROUND: ASTM B 88 TYPE 'K' SOFT COPPER TUBE WITH WROT COPPER FITTINGS, AND BRAZED OR PRESSURE-SEALED JOINTS.
3. DOMESTIC WATER PIPING ABOVE GROUND: ASTM B 88 TYPE 'L' HARD COPPER TUBE WITH WROT COPPER FITTINGS, AND SOLDERED OR PRESSURE-SEALED JOINTS FOR PIPING LARGER THAN 2", AND FOR EXPOSED PIPING IN EQUIPMENT ROOMS AND BACK-OF-HOUSE AREAS; UPONOR AQUAPEX ASTM F876 CROSSLINKED POLYETHYLENE PEX-A TUBING, AND ASTM F1960 PEX-A COLD EXPANSION FITTINGS FOR DISTRIBUTION PIPING 2" AND SMALLER. ALL FIXTURE ROUGH-INS MUST BE COPPER. PROVIDE AQUAPEX BLUE TUBING FOR COLD WATER PIPING 1" AND SMALLER, AQUAPEX RED TUBING FOR HOT WATER PIPING 1" AND SMALLER, AND AQUAPEX WHITE TUBING FOR HOT WATER RETURN PIPING AND ALL PIPING LARGER THAN 1". CONTRACTOR MUST BE TRAINED AND CERTIFIED BY AN UPONOR REPRESENTATIVE, AND MUST OBTAIN SHOP DRAWINGS FROM UPONOR FOR PIPING INSTALLATION.
4. STERILIZE DOMESTIC WATER PIPING IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
5. INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH 1" THICKNESS ENGINEERED POLYMER FOAM INSULATION, OR MINERAL-FIBER PREFORMED PIPE INSULATION WITH FACTORY-APPLIED ASJ.
6. DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS, AND ADHESIVES SHALL NOT EXCEED A FLAME SPREAD RATING OF 25 AND A SMOKE DEVELOPED RATING OF 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.
7. ALL PIPE INSULATION SHALL RUN CONTINUOUSLY THROUGH FLOORS, WALLS, AND PARTITIONS.
8. DO NOT INSTALL DOMESTIC WATER PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL DOMESTIC WATER PIPING IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
9. SHUT-OFF VALVES SHALL BE NIBCO TWO-PIECE, BRONZE, FULL PORT, BALL TYPE. PROVIDE SHUT-OFF VALVES ON ALL BRANCH PIPING TO GUEST ROOM RISERS, AND WHERE INDICATED ON THE DRAWINGS. INSTALL VALVES IN A LOCATION THAT PERMITS ACCESS FOR SERVICE AND OPERATION WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. PROVIDE ACCESS DOORS IF REQUIRED.
10. PROVIDE DRAIN VALVES IN THE DOMESTIC HOT AND COLD WATER PIPING AT ALL LOW POINTS TO ALLOW FOR COMPLETE DRAINAGE OF THE SYSTEMS.
11. PROVIDE A PRESSURE REDUCING VALVE WITH STRAINER AT THE SERVICE ENTRANCE TO THE BUILDING IF THE INCOMING WATER PRESSURE EXCEEDS 80 PSI.
12. PROVIDE EXPANSION COMPENSATION AS REQUIRED TO ABSORB THERMAL EXPANSION IN PIPE RUNS 50' AND LONGER.
13. PROVIDE CHECK VALVES IN THE HOT AND COLD WATER SUPPLY PIPING TO ALL FAUCETS TO WHICH HOSES MAY BE CONNECTED (MOP BASINS, CAN WASHES, SERVICE SINKS, ETC.), AND TO ALL SPRAY FAUCETS (PRE-RINSE, ETC.), UNLESS FAUCET HAS INTEGRAL CHECK VALVES.
14. PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER-PLATED.

SANITARY WASTE AND VENT PIPING:

1. FURNISH AND INSTALL COMPLETE SYSTEMS OF SANITARY WASTE AND VENT PIPING FROM ALL PLUMBING FIXTURES AND/OR EQUIPMENT REQUIRING WASTE AND VENT CONNECTIONS. ALL WASTE AND VENT PIPING SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION WHERE POSSIBLE.
2. SANITARY WASTE AND VENT PIPING BELOW GROUND: ASTM A 74, SERVICE WEIGHT, HUB AND SPIGOT, CAST IRON SOIL PIPE AND FITTINGS; AND GASKETED JOINTS. ALL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE, AND LISTED BY NSF INTERNATIONAL.
3. SANITARY WASTE AND VENT PIPING ABOVE GROUND: ASTM A 888 AND CISPI 301, HUBLESS, CAST IRON SOIL PIPE AND FITTINGS; AND HEAVY DUTY SHIELDED, STAINLESS STEEL COUPLINGS. ALL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE, AND LISTED BY NSF INTERNATIONAL.
4. IF PERMITTED BY LOCAL CODES, ASTM D 2665 SCHEDULE 40 SOLID WALL PVC PIPE WITH ASTM D 3311 SCHEDULE 40 SOCKET-TYPE FITTINGS MAY BE USED FOR ALL VENT PIPING, SANITARY PIPING BELOW GROUND, AND SANITARY PIPING IN GUEST ROOMS 2" AND SMALLER. PVC PIPING INSTALLED IN RETURN AIR PLENUMS MUST BE PROTECTED WITH 3M FIRE BARRIER PLENUM WRAP 5A+, OR SIMILAR PRODUCT.
5. INVERT ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE SANITARY PIPING IS INSTALLED IN ORDER THAT PROPER SLOPES WILL BE MAINTAINED. SLOPE SANITARY PIPING 2-1/2" AND SMALLER AT 1/4" PER FOOT MINIMUM, AND SLOPE SANITARY PIPING 3" AND LARGER AT 1/8" PER FOOT MINIMUM.
6. WHERE SANITARY PIPING IS EXPOSED IN TOILET ROOMS, PROVIDE CHROME-PLATED BRASS PIPING WITH MATCHING STOPS AND ESCUTCHEONS. PROVIDE REMOVABLE TRAPS WITH INTEGRAL CLEANOUT PLUG FOR ALL LAVATORIES AND SINKS.
7. INSTALL CLEANOUTS IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS. PROVIDE CLEANOUTS IN HORIZONTAL PIPING NOT MORE THAN 100 FEET APART, AT THE BASE OF ALL SOIL AND WASTE STACKS, AND FOR EVERY FOUR 45° CHANGES LOCATED IN SERIES (A LONG SWEEP IS EQUIVALENT TO TWO 45° BENDS).
8. INSULATE ALL ABOVE GROUND WASTE PIPING FROM DRAINS SERVING ICE MACHINES, UP TO AND INCLUDING 10'-0" FROM DRAIN.
9. DO NOT CONNECT HORIZONTAL BRANCHES WITHIN 10 PIPE DIAMETERS DOWNSTREAM OF THE BASE OF ANY SANITARY STACK.
10. ALL INDIRECT WASTE PIPING SHALL DISCHARGE THROUGH AN AIR GAP INTO AN APPROVED WASTE RECEPTOR. THE AIR GAP BETWEEN THE INDIRECT WASTE PIPE AND THE FLOOD LEVEL RIM OF THE WASTE RECEPTOR SHALL BE A MINIMUM OF TWICE THE EFFECTIVE OPENING OF THE INDIRECT WASTE PIPE.

NATURAL GAS PIPING:

1. WORK TO INCLUDE PIPING FROM GAS METER TO ALL GAS-FIRED EQUIPMENT SERVING BUILDING, INCLUDING FINAL CONNECTIONS TO EQUIPMENT.
2. ALL WORK SHALL BE IN ACCORDANCE WITH IFGC, ALL APPLICABLE LOCAL CODE REQUIREMENTS, THE PROVISIONS OF NFPA 54, AND THE REGULATIONS OF THE GAS COMPANY PROVIDING SERVICE.
3. NATURAL GAS PIPING: ASTM A 53 SCHEDULE 40 SEAMLESS BLACK STEEL PIPE WITH MALLEABLE FITTINGS AND THREADED JOINTS.
4. VALVES SHALL BE FULL PORT BALL VALVES APPROVED FOR USE IN NATURAL GAS PIPING SYSTEMS.
5. PROVIDE SHUT-OFF VALVE, UNION, VENTLESS GAS REGULATOR, DRIP LEG, AND TEST CONNECTION AT EACH PIECE OF GAS-FIRED EQUIPMENT TO PROVIDE PRESSURE TO EQUIPMENT AS REQUIRED BY MANUFACTURER.
6. ALL GAS PIPING LOCATED ON ROOFS SHALL BE INSTALLED ON MANUFACTURED PIPE SUPPORTS SIMILAR TO ERICO CADDY PYRAMID 50. WOOD BLOCKING WILL NOT BE PERMITTED.
7. ALL PIPING EXPOSED TO THE OUTDOORS OR EXPOSED IN FINISHED SPACES SHALL BE PAINTED WITH TWO COATS OF ENAMEL. COLOR SELECTED BY ARCHITECT, OR AS REQUIRED BY GAS COMPANY.

STORM DRAIN PIPING:

1. WORK INCLUDES ROOF DRAINS AND PIPING TO A POINT 5'-0" OUTSIDE OF THE BUILDING, AND OVERFLOW DRAINS AND PIPING TO WALL MOUNTED DISCHARGE NOZZLES. ALL PIPING SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION WHERE POSSIBLE.
2. INVERT ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE STORM PIPING IS INSTALLED IN ORDER THAT PROPER SLOPES WILL BE MAINTAINED. SLOPE STORM PIPING AT 1/8" PER FOOT MINIMUM.
3. STORM DRAIN PIPING BELOW GROUND: ASTM A 74, SERVICE WEIGHT, HUB AND SPIGOT, CAST IRON SOIL PIPE AND FITTINGS; AND GASKETED JOINTS. ALL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE, AND LISTED BY NSF INTERNATIONAL.
4. STORM DRAIN PIPING ABOVE GROUND: ASTM A 888 AND CISPI 301, HUBLESS, CAST IRON SOIL PIPE AND FITTINGS; AND HEAVY DUTY SHIELDED, STAINLESS STEEL COUPLINGS. ALL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE, AND LISTED BY NSF INTERNATIONAL.
5. IF PERMITTED BY LOCAL CODES, ASTM D 2665 SCHEDULE 40 SOLID WALL PVC PIPE WITH ASTM D 3311 SCHEDULE 40 SOCKET-TYPE FITTINGS MAY BE USED FOR STORM PIPING BELOW GROUND ONLY.
6. INSULATE STORM PIPING ABOVE GROUND AND ROOF DRAIN BODIES WITH 1" THICKNESS ENGINEERED POLYMER FOAM INSULATION, OR MINERAL-FIBER PREFORMED PIPE INSULATION WITH FACTORY-APPLIED ASJ. THIS INCLUDES THE PRIMARY AND OVERFLOW STORM DRAIN SYSTEMS.
7. STORM DRAIN PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS, AND ADHESIVES SHALL NOT EXCEED A FLAME SPREAD RATING OF 25 AND A SMOKE DEVELOPED RATING OF 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.
8. INSTALL CLEANOUTS IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS. PROVIDE CLEANOUTS IN HORIZONTAL PIPING NOT MORE THAN 100 FEET APART, AT THE BASE OF ALL RAINWATER CONDUCTORS, AND FOR EVERY FOUR 45° CHANGES LOCATED IN SERIES (A LONG SWEEP IS EQUIVALENT TO TWO 45° BENDS).

WATER HAMMER ARRESTER REQUIREMENTS:

1. PROVIDE WATER HAMMER ARRESTERS FOR COPPER PIPING SYSTEMS CONFORMING TO PDI-WH201 OR ASSE 1010, INSTALLED PER MANUFACTURER'S SPECIFICATIONS, WHERE QUICK CLOSING VALVES ARE UTILIZED. A QUICK CLOSING VALVE IS A VALVE OR FAUCET THAT CLOSES AUTOMATICALLY WHEN RELEASED, OR THAT IS CONTROLLED BY MECHANICAL MEANS FOR FAST-ACTION CLOSING. REFER TO WATER HAMMER ARRESTER SCHEDULE.
2. AS A MINIMUM, PROVIDE ONE WATER HAMMER ARRESTER FOR EACH BRANCH LINE TO EACH TOILET ROOM LESS THAN 20' IN LENGTH, LOCATED BETWEEN THE LAST TWO FIXTURES SERVED. FOR BRANCH LINES GREATER THAN 20' IN LENGTH, A SECOND WATER HAMMER ARRESTER IS REQUIRED.

BACKFLOW PREVENTER REQUIREMENTS:

1. VERIFY BACKFLOW PREVENTER REQUIREMENTS OF LOCAL AUTHORITY AND PROVIDE BACKFLOW PREVENTER AS REQUIRED, IF NOT PROVIDED BY SITE UTILITY CONTRACTOR.

WATER METER REQUIREMENTS:

1. VERIFY WATER METER REQUIREMENTS OF LOCAL AUTHORITY AND PROVIDE WATER METER AS REQUIRED, IF NOT PROVIDED BY SITE UTILITY CONTRACTOR.

PLUMBING LEGEND

	DOMESTIC COLD WATER PIPING (CW)
	DOMESTIC HOT WATER PIPING (HW)
	DOMESTIC HOT WATER RETURN PIPING (HWR)
G	NATURAL GAS PIPING (G)
PD	PUMP DISCHARGE PIPING (PD)
	SANITARY PIPING (SAN)
	STORM PIPING
	VENT PIPING (V)
	BACKFLOW PREVENTER (BFP)
	BALANCING VALVE
	BALL VALVE
	CHECK VALVE
OR	FLOOR CLEANOUT (FCO)
	FLOOR DRAIN (FD)
	FLOOR SINK (FS)
	GAS COCK
OR	PIPE DOWN
OR	PIPE UP
	PRESSURE GAUGE
	ROOF DRAIN (RD)
	STRAINER
	T&P RELIEF VALVE
	THERMOMETER
	UNION
	WALL CLEANOUT (WCO)

ABV	ABOVE
AHAP	AS HIGH AS POSSIBLE
BLDG	BUILDING
BLW	BELOW
CLG	CEILING
CONT	CONTINUATION
DN	DOWN
E.C.	ELECTRICAL CONTRACTOR
FLR	FLOOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
RWC	RAINWATER CONDUCTOR
SF, SQ FT	SQUARE FOOT
T&P	TEMPERATURE AND PRESSURE
TYP	TYPICAL
VTR	VENT THROUGH ROOF
W	WASTE

PLUMBING BID NOTE

THE CONTRACTOR SHALL INCLUDE IN THE BID PRICE A LINE ITEM COST FOR INSTALLING A DOMESTIC BOOSTER PUMP AND ALL ASSOCIATED CONTROLS, EQUIPMENT, AND ACCESSORIES REQUIRED FOR A COMPLETE SYSTEM. BOOSTER PUMP SHALL BE A TRIPLEX SYSTEM WITH EACH PUMP SIZED FOR 50% OF THE TOTAL LOAD. UPON COMPLETION OF A FLOW TEST, IF IT IS DETERMINED THAT A BOOSTER PUMP IS NOT REQUIRED, THE CONTRACTOR SHALL RETURN TO THE OWNER A CREDIT IN THE AMOUNT OF THE LINE ITEM COST SUBMITTED WITH THE BID.

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REVISIONS		
No.	Date	Description
1		

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JOHN DEAN BECK
REGISTERED PROFESSIONAL ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Notes and Legend

Phase
Construction Documents

Project No.	14-081	Sheet No.	P001
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

PLUMBING FIXTURE SPECIFICATIONS AND CONNECTION SCHEDULE

MARK	FIXTURE	TYPE	MATERIAL	PIPE SIZES				SPECIFICATION
				SAN	VENT	CW	HW	
WC-1	WATER CLOSET	FLOOR MOUNTED FLUSH TANK STANDARD HEIGHT	VITREOUS CHINA	3"	2"	½"	–	FIXTURE: AMERICAN STANDARD CADET PRO MODEL 215CA.004, 1.6 GALLONS PER FLUSH, ELONGATED RIM, SIPHON JET FLUSH ACTION, 3" FLUSH VALVE, EVERCLEAN SURFACE. SUPPLY: McGUIRE 1/2" X 3/8" CHROME-PLATED CAST BRASS FLEXIBLE CLOSET SUPPLY KIT, WITH WHEEL HANDLE ANGLE STOP. SEAT: BEMIS MODEL 7800TDG HEAVY DUTY, SOLID PLASTIC, CLOSED FRONT, WITH COVER, CHECK HINGES WITH STAINLESS STEEL POSTS AND PINTLES, STA-TITE FASTENING SYSTEM, ANTIMICROBIAL.
WC-2	WATER CLOSET	FLOOR MOUNTED FLUSH TANK ADA HEIGHT	VITREOUS CHINA	3"	2"	½"	–	FIXTURE: AMERICAN STANDARD CADET PRO RIGHT HEIGHT MODEL 215AA.004, 1.6 GALLONS PER FLUSH, ELONGATED RIM, SIPHON JET FLUSH ACTION, 3" FLUSH VALVE, EVERCLEAN SURFACE. PROVIDE WITH TRIP LEVER ON APPROACH SIDE OF TOILET TANK. SUPPLY: McGUIRE 1/2" X 3/8" CHROME-PLATED CAST BRASS FLEXIBLE CLOSET SUPPLY KIT, WITH WHEEL HANDLE ANGLE STOP. SEAT: BEMIS MODEL 7800TDG HEAVY DUTY, SOLID PLASTIC, CLOSED FRONT, WITH COVER, CHECK HINGES WITH STAINLESS STEEL POSTS AND PINTLES, STA-TITE FASTENING SYSTEM, ANTIMICROBIAL.
WC-3	WATER CLOSET	FLOOR MOUNTED FLUSH VALVE STANDARD HEIGHT	VITREOUS CHINA	4"	2"	1"	–	FIXTURE: AMERICAN STANDARD MADERA FLOWISE MODEL 3451.001, 1.28 GALLONS PER FLUSH, ELONGATED RIM, SIPHON JET FLUSH ACTION, 1-1/2" TOP SPUD, EVERCLEAN SURFACE. FLUSH VALVE: AMERICAN STANDARD MODEL 6047.121.002, EXPOSED PISTON TYPE WITH METAL NON-HOLD-OPEN HANDLE, 1.28 GALLONS PER FLUSH. SEAT: BEMIS MODEL 2155SSCT HEAVY DUTY, SOLID PLASTIC, OPEN FRONT, LESS COVER, SELF-SUSTAINING CHECK HINGES WITH STAINLESS STEEL POSTS AND PINTLES, STA-TITE FASTENING SYSTEM, ANTIMICROBIAL.
WC-4	WATER CLOSET	FLOOR MOUNTED FLUSH VALVE ADA HEIGHT	VITREOUS CHINA	4"	2"	1"	–	FIXTURE: AMERICAN STANDARD MADERA FLOWISE MODEL 3461.001, 1.28 GALLONS PER FLUSH, ELONGATED RIM, SIPHON JET FLUSH ACTION, 1-1/2" TOP SPUD, EVERCLEAN SURFACE. FLUSH VALVE: AMERICAN STANDARD MODEL 6047.121.002, EXPOSED PISTON TYPE WITH METAL NON-HOLD-OPEN HANDLE, 1.28 GALLONS PER FLUSH. SEAT: BEMIS MODEL 2155SSCT HEAVY DUTY, SOLID PLASTIC, OPEN FRONT, LESS COVER, SELF-SUSTAINING CHECK HINGES WITH STAINLESS STEEL POSTS AND PINTLES, STA-TITE FASTENING SYSTEM, ANTIMICROBIAL.
U-1	URINAL	WALL HUNG FLUSH VALVE STANDARD HEIGHT	VITREOUS CHINA	2"	2"	¾"	–	FIXTURE: AMERICAN STANDARD WASHBROOK FLOWISE MODEL 6590.001, 0.5 GALLONS PER FLUSH, WASHOUT FLUSHING ACTION, 3/4" TOP SPUD. FLUSH VALVE: AMERICAN STANDARD MODEL 6045.051.002, EXPOSED PISTON TYPE WITH METAL NON-HOLD-OPEN HANDLE, 0.5 GALLONS PER FLUSH. CARRIER: ZURN Z1222 SERIES WALL URINAL SUPPORT SYSTEM WITH TOP AND BOTTOM SUPPORT PLATES.
U-2	URINAL	WALL HUNG FLUSH VALVE ADA HEIGHT	VITREOUS CHINA	2"	2"	¾"	–	FIXTURE: AMERICAN STANDARD WASHBROOK FLOWISE MODEL 6590.001, 0.5 GALLONS PER FLUSH, WASHOUT FLUSHING ACTION, 3/4" TOP SPUD. MOUNT AT ADA HEIGHT. FLUSH VALVE: AMERICAN STANDARD MODEL 6045.051.002, EXPOSED PISTON TYPE WITH METAL NON-HOLD-OPEN HANDLE, 0.5 GALLONS PER FLUSH. CARRIER: ZURN Z1222 SERIES WALL URINAL SUPPORT SYSTEM WITH TOP AND BOTTOM SUPPORT PLATES.
L-1	LAVATORY	UNDERMOUNT ADA COMPLIANT	VITREOUS CHINA	1½"	1½"	½"	½"	FIXTURE: AMERICAN STANDARD STUDIO MODEL 0614.000, 18-1/4" X 12-1/8" X 6-3/4" DEEP RECTANGLE BOWL, FRONT OVERFLOW, UNGLAZED RIM. FAUCET: AMERICAN STANDARD RELIANT 3 MODEL 7385.008.002, POLISHED CHROME-PLATED, SINGLE CONTROL CENTERSET, WITH METAL POP-UP DRAIN, 1.5 GPM SPRAY. TRAP: McGUIRE 1-1/4" X 1-1/2" 17 GAUGE CHROME-PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG. SUPPLIES: McGUIRE 1/2" X 3/8" CHROME-PLATED CAST BRASS FLEXIBLE LAVATORY SUPPLY KITS, WITH WHEEL HANDLE ANGLE STOPS. INCLUDE TRUEBRO LAV GUARD 2 MODEL #102 E-Z UNDERSINK PIPING COVERS, WITH P-TRAP COVER, TWO ANGLE VALVE AND SUPPLY COVERS IN ALL ADA GUESTROOMS.
L-2	LAVATORY	UNDERMOUNT ADA COMPLIANT	VITREOUS CHINA	1½"	1½"	½"	½"	FIXTURE: AMERICAN STANDARD OVALYN MODEL 0496.221, 17" X 14" X 5-1/2" DEEP OVAL BOWL, FRONT OVERFLOW, UNGLAZED RIM. FAUCET: AMERICAN STANDARD RELIANT 3 MODEL 7385.003.002, POLISHED CHROME-PLATED, SINGLE CONTROL CENTERSET, WITH GRID DRAIN, 1.5 GPM SPRAY. TRAP: McGUIRE 1-1/4" X 1-1/2" 17 GAUGE CHROME-PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG. SUPPLIES: McGUIRE 1/2" X 3/8" CHROME-PLATED CAST BRASS FLEXIBLE LAVATORY SUPPLY KITS, WITH WHEEL HANDLE ANGLE STOPS. INCLUDE TRUEBRO LAV GUARD 2 MODEL #102 E-Z UNDERSINK PIPING COVERS, WITH P-TRAP COVER, TWO ANGLE VALVE AND SUPPLY COVERS.
L-3	LAVATORY	WALL HUNG ADA COMPLIANT	VITREOUS CHINA	1½"	1½"	½"	½"	FIXTURE: AMERICAN STANDARD LUCERNE MODEL 0355.012, 20" X 18", FRONT OVERFLOW, SELF-DRAINING DECK WITH SPLASH SHIELDS, FAUCET LEDGE WITH FAUCET HOLES ON 4" CENTERS. FAUCET: AMERICAN STANDARD RELIANT 3 MODEL 7385.003.002, POLISHED CHROME-PLATED, SINGLE CONTROL CENTERSET, WITH GRID DRAIN, 1.5 GPM SPRAY. TRAP: McGUIRE 1-1/4" X 1-1/2" 17 GAUGE CHROME-PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG. SUPPLIES: McGUIRE 1/2" X 3/8" CHROME-PLATED CAST BRASS FLEXIBLE LAVATORY SUPPLY KITS, WITH WHEEL HANDLE ANGLE STOPS. INCLUDE TRUEBRO LAV GUARD 2 MODEL #102 E-Z UNDERSINK PIPING COVERS, WITH P-TRAP COVER, TWO ANGLE VALVE AND SUPPLY COVERS.
MB-1	MOP BASIN	24" X 24"	MOLDED STONE	3"	2"	½"	½"	FIXTURE: FIAT MSB-2424, 10" HIGH WALLS, STAINLESS STEEL FACTORY INSTALLED DRAIN BODY, WITH 1453BB FLAT STAINLESS STEEL STRAINER, E77AA24 VINYL BUMPER GUARDS ON ALL CURBS. FAUCET: AMERICAN STANDARD EXPOSED YOKE WALL-MOUNT UTILITY FAUCET NO. 8354.112.004, ROUGH CHROME-PLATED CAST BRASS, ADJUSTABLE CENTERS, INTEGRAL SUPPLY STOPS, OFFSET SHANKS WITH INTEGRAL CHECK VALVES, CAST BRASS SPOUT WITH VACUUM BREAKER, HOSE THREAD OUTLET, PAIL HOOK, AND TOP BRACE. ADDITIONAL EQUIPMENT: PROVIDE 8890C MOP BRACKET, 832AA HOSE AND BRACKET, MSC2424 STAINLESS STEEL WALL GUARD PANELS.
S-1	SINK	COUNTERTOP SINGLE BOWL ADA COMPLIANT	STAINLESS STEEL	1½"	1½"	½"	½"	FIXTURE: ELKAY GOURMET (LUSTERTONE) MODEL LRAD2022, 6-1/2" DEEP, 18 GAUGE TYPE 304 STAINLESS STEEL, SELF-RIMMING, FULLY COATED UNDERSIDE, 3 HOLE DRILLING, OFF-CENTERED REAR DRAIN. FAUCET: AMERICAN STANDARD RELIANT+ MODEL 4205.000.002, POLISHED CHROME-PLATED, SINGLE CONTROL, METAL LEVER HANDLE, SWIVEL SPOUT, LESS HAND SPRAY. TRAP: ELKAY LK35 TYPE 304 STAINLESS STEEL DRAIN WITH CRUMB CUP STRAINER AND CHROME-PLATED BRASS TAILPIECE, McGUIRE 1-1/2" 17 GAUGE CHROME-PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG. SUPPLIES: McGUIRE 1/2" X 3/8" CHROME-PLATED CAST BRASS FLEXIBLE SUPPLY KITS, WITH WHEEL HANDLE ANGLE STOPS.
EWC-1	ELECTRIC WATER COOLER	WALL MOUNTED DUAL HEIGHT	STAINLESS STEEL	1½"	1½"	½"	–	FIXTURE: ELKAY MODEL EZSTL8SC, BARRIER-FREE, SELF-CONTAINED, 8.0 GPH, EASY-TOUCH CONTROLS ON FRONT AND SIDES, ONE PIECE STAINLESS STEEL TOPS WITH INTEGRAL DRAINS, FLEXIBLE BUBBLERS, STAINLESS STEEL LOWER SHROUDS. TRAP: McGUIRE 1-1/2" 17 GAUGE P-TRAP. SUPPLY: McGUIRE 1/2" X 3/8" CAST BRASS STOP WITH WHEEL HANDLE, OR 1/2" FULL PORT BALL VALVE.
BT-1	BATHTUB	ALCOVE	AMERICAST	2"	2"	½"	½"	FIXTURE: AMERICAN STANDARD PRINCETON MODEL 2394.202.020 (LEFT DRAIN) OR 2395.202.020 (RIGHT DRAIN), 60" X 34" BATH WITH INTEGRAL APRON AND TILING FLANGE, SLIP-RESISTANT FINISH. VALVE: AMERICAN STANDARD MODEL R120SS PRESSURE BALANCING ROUGH VALVE BODY WITH SCREWDRIVER STOPS. TRIM: AMERICAN STANDARD RELIANT 3 MODEL T385.501WDXH.002 SHOWER TRIM KIT, LESS SHOWER HEAD, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 8888.055.002 DELUXE DIVERTER TUB SPOUT, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10284-CP MULTI-FUNCTION SHOWER HEAD, 2.5 GPM FLOW RATE, POLISHED CHROME FINISH. DRAIN: DEARBORN BRASS MODEL 227-3 UNI-LIFT BRASS TUBULAR – 17 GAUGE BATH DRAIN WITH OVERFLOW, POLISHED CHROME FINISH.
BT-2	BATHTUB	ALCOVE ADA COMPLIANT	AMERICAST	2"	2"	½"	½"	FIXTURE: AMERICAN STANDARD PRINCETON MODEL 2394.202.020 (LEFT DRAIN) OR 2395.202.020 (RIGHT DRAIN), 60" X 34" BATH WITH INTEGRAL APRON AND TILING FLANGE, SLIP-RESISTANT FINISH. VALVE: AMERICAN STANDARD MODEL R120SS PRESSURE BALANCING ROUGH VALVE BODY WITH SCREWDRIVER STOPS, AND AMERICAN STANDARD MODEL R420 2-WAY IN-WALL DIVERTER VALVE BODY. TRIM: AMERICAN STANDARD RELIANT 3 MODEL T385.501WDXH.002 SHOWER TRIM KIT, LESS SHOWER HEAD, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 8888.056.002 DELUXE DIVERTER TUB SPOUT, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10284-CP MULTI-FUNCTION SHOWER HEAD, 2.5 GPM FLOW RATE, POLISHED CHROME FINISH; AMERICAN STANDARD SERIN MODEL T064.430.002 DIVERTER VALVE TRIM, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10298-CP MULTI-FUNCTION HANDSHOWER, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 8888.038.002 WALL SUPPLY BRACKET, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 888.035.002 59" METAL SHOWER HOSE, POLISHED CHROME FINISH; AND AMERICAN STANDARD MODEL 1660.400.002 IN-LINE VACUUM BREAKER, POLISHED CHROME FINISH. ALL CONTROLS SHALL BE OFFSET 8" FROM CENTER TOWARDS FRONT OF TUB. DRAIN: DEARBORN BRASS MODEL 228-3 TOUCH-TOE BRASS TUBULAR – 17 GAUGE BATH DRAIN WITH OVERFLOW, POLISHED CHROME FINISH.
SH-1	SHOWER	SHOWER FLOOR	CAST MARBLE	2"	2"	½"	½"	FIXTURE: MINCEY MARBLE MODEL CFP-30-3660-OS/SF-L (LEFT DRAIN) OR CFP-30-3660-OS/SF-R (RIGHT DRAIN), 30"-36" X 60", CURVED FRONT SHOWER PAN, SEAMLESS, GEL COAT SURFACE, WITH INTEGRAL FRONT CURB, SIDE AND BACK FLANGES, CENTER DRAIN, TEXTURED NON-SLIP FLOOR FINISH, PRE-LEVELED FOR ON FLOOR INSTALLATION. VALVE: AMERICAN STANDARD MODEL R120SS PRESSURE BALANCING ROUGH VALVE BODY WITH SCREWDRIVER STOPS. TRIM: AMERICAN STANDARD RELIANT 3 MODEL T385.501WDXH.002 SHOWER TRIM KIT, LESS SHOWER HEAD, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10284-CP MULTI-FUNCTION SHOWER HEAD, 2.5 GPM FLOW RATE, POLISHED CHROME FINISH. DRAIN: OATEY MODEL 42150, BRASS DRAIN WITH STAINLESS STEEL PERFORATED STRAINER.
SH-2	SHOWER	SHOWER FLOOR ADA COMPLIANT ROLL-IN	CAST MARBLE	2"	2"	½"	½"	FIXTURE: MINCEY MARBLE MODEL SP-3162-C/SF, 31" X 62" ROLL-IN SHOWER PAN, SEAMLESS, GEL COAT SURFACE, WITH FIBERGLASS SIDE AND BACK CURBS, FIBERGLASS FLANGE, CENTER DRAIN, TEXTURED NON-SLIP FLOOR FINISH, PRE-LEVELED FOR ON FLOOR INSTALLATION. VALVE: AMERICAN STANDARD MODEL R120SS PRESSURE BALANCING ROUGH VALVE BODY WITH SCREWDRIVER STOPS, AND AMERICAN STANDARD MODEL R420 2-WAY IN-WALL DIVERTER VALVE BODY. TRIM: AMERICAN STANDARD RELIANT 3 MODEL T385.501WDXH.002 SHOWER TRIM KIT, LESS SHOWER HEAD, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10284-CP MULTI-FUNCTION SHOWER HEAD, 2.5 GPM FLOW RATE, POLISHED CHROME FINISH; AMERICAN STANDARD SERIN MODEL T064.430.002 DIVERTER VALVE TRIM, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10298-CP MULTI-FUNCTION HANDSHOWER, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 8888.038.002 WALL SUPPLY BRACKET, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 888.035.002 59" METAL SHOWER HOSE, POLISHED CHROME FINISH; AND AMERICAN STANDARD MODEL 1660.400.002 IN-LINE VACUUM BREAKER, POLISHED CHROME FINISH. MOUNT FIXED SHOWER HEAD ON END WALL, AND MOUNT ALL CONTROLS AND HANDHELD SHOWER ON BACK WALL 27" MAX FROM SEAT WALL. DRAIN: OATEY MODEL 42150, BRASS DRAIN WITH STAINLESS STEEL PERFORATED STRAINER.
SH-3	SHOWER	SHOWER FLOOR ADA COMPLIANT TRANSFER	CAST MARBLE	2"	2"	½"	½"	FIXTURE: MINCEY MARBLE MODEL TP-3838-C/SF, 38" X 38" TRANSFER SHOWER PAN, SEAMLESS, GEL COAT SURFACE, WITH FIBERGLASS SIDE AND BACK CURBS, FIBERGLASS FLANGE, CENTER DRAIN, TEXTURED NON-SLIP FLOOR FINISH, PRE-LEVELED FOR ON FLOOR INSTALLATION. VALVE: AMERICAN STANDARD MODEL R120SS PRESSURE BALANCING ROUGH VALVE BODY WITH SCREWDRIVER STOPS, AND AMERICAN STANDARD MODEL R420 2-WAY IN-WALL DIVERTER VALVE BODY. TRIM: AMERICAN STANDARD RELIANT 3 MODEL T385.501WDXH.002 SHOWER TRIM KIT, LESS SHOWER HEAD, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10284-CP MULTI-FUNCTION SHOWER HEAD, 2.5 GPM FLOW RATE, POLISHED CHROME FINISH; AMERICAN STANDARD SERIN MODEL T064.430.002 DIVERTER VALVE TRIM, POLISHED CHROME FINISH; KOHLER FORTE MODEL K-10298-CP MULTI-FUNCTION HANDSHOWER, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 8888.038.002 WALL SUPPLY BRACKET, POLISHED CHROME FINISH; AMERICAN STANDARD MODEL 888.035.002 59" METAL SHOWER HOSE, POLISHED CHROME FINISH; AND AMERICAN STANDARD MODEL 1660.400.002 IN-LINE VACUUM BREAKER, POLISHED CHROME FINISH. MOUNT FIXED SHOWER HEAD ON END WALL, AND MOUNT ALL CONTROLS AND HANDHELD SHOWER ON BACK WALL 27" MAX FROM SEAT WALL. DRAIN: OATEY MODEL 42150, BRASS DRAIN WITH STAINLESS STEEL PERFORATED STRAINER.

WATER HAMMER ARRESTER SCHEDULE

PDI SIZE	FIXTURE UNITS	MODEL
A	1 – 11	SIOUX CHIEF 652-AS
B	12 – 32	SIOUX CHIEF 653-BS
C	33 – 60	SIOUX CHIEF 654-CS
D	61 – 113	SIOUX CHIEF 655-DS
E	114 – 154	SIOUX CHIEF 656-ES
F	155 – 330	SIOUX CHIEF 657-FS

WATER HAMMER ARRESTERS SHALL BE SEAMLESS, PISTON-TYPE, SIZED AND INSTALLED IN ACCORDANCE WITH PDI-WH201. INSTALL WATER HAMMER ARRESTER IN STANDARD TEE, SAME SIZE AS CONNECTED PIPING. AIR CHAMBERS WILL NOT BE PERMITTED.

PLUMBING EQUIPMENT SCHEDULE

MARK	EQUIPMENT	MANUFACTURER & MODEL NO.	SPECIFICATION
FD-1	FLOOR DRAIN	ZURN ZN415S-P	CAST IRON BODY, MEMBRANE CLAMP, ADJUSTABLE COLLAR, 6" SQUARE "TYPE S" POLISHED NICKEL BRONZE STRAINER, 1/2" TRAP PRIMER CONNECTION.
FD-2	FLOOR DRAIN	ZURN Z550-Y-P	9" DIAMETER MEDIUM DUTY SLOTTED TOP, CAST IRON BODY, COMBINATION MEMBRANE FLASHING CLAMP AND FRAME, SEDIMENT BUCKET, 1/2" TRAP PRIMER CONNECTION.
FD-3	FLOOR DRAIN	ZURN Z550-G	9" DIAMETER MEDIUM DUTY GALVANIZED SLOTTED TOP, GALVANIZED CAST IRON BODY, COMBINATION MEMBRANE FLASHING CLAMP AND FRAME.
FD-4	FLOOR DRAIN	ZURN Z1731	9" DIAMETER HEAVY DUTY FLOOR DRAIN, TYPE 304 STAINLESS STEEL BODY WITH INTEGRAL ANCHOR FLANGE, TYPE 304 STAINLESS STEEL NON-TILT GRATE.
FS-1	FLOOR SINK	ZURN ZN1910-KC-2	8"x8"x6" DEEP CAST IRON BODY WITH WHITE ACID RESISTING PORCELAIN ENAMEL INTERIOR, ANCHOR FLANGE WITH SEEPAGE HOLES AND CLAMP COLLAR, NICKEL BRONZE FRAME WITH 1/2 GRATE.
FS-2	FLOOR SINK	ZURN ZN1901-KC-2	12"x12"x8" DEEP CAST IRON BODY WITH WHITE ACID RESISTING PORCELAIN ENAMEL INTERIOR, ANCHOR FLANGE WITH SEEPAGE HOLES AND CLAMP COLLAR, NICKEL BRONZE FRAME WITH 1/2 GRATE.
RD	MAIN ROOF DRAIN	ZURN ZA100	15" DIAMETER, DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD, ALUMINUM DOME.
ORD	OVERFLOW ROOF DRAIN	ZURN ZA100-W2	15" DIAMETER, DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD, ALUMINUM DOME, 2" HIGH INTERNAL WATER DAM.
DSN	DOWNSPOUT NOZZLE FOR OVERFLOW ROOF DRAINS	ZURN ZANB199-SS	NICKEL BRONZE BODY WITH REMOVABLE STAINLESS SCREEN.
FCO	FLOOR CLEAN OUT	ZURN ZN1400-BP	ADJUSTABLE, COATED CAST IRON BODY, ROUND SCORIATED NICKEL BRONZE TOP, BRONZE PLUG.
WCO	WALL CLEAN OUT	ZURN Z1446-BP	CAST IRON NO-HUB CLEANOUT TEE, WITH ROUND STAINLESS STEEL WALL ACCESS COVER, BRONZE PLUG, SECURING SCREW.
BFP	BACKFLOW PREVENTER	WATTS SERIES 909QT-S	BRONZE REDUCED PRESSURE ZONE ASSEMBLY, WITH QUARTER-TURN BALL VALVES AND STRAINER. INCLUDE SERIES 909AG AIR GAP FITTING.
HB-1	HOSE BIBB	PRIER MODEL C-155NP.75	ANTI-SIPHON ANGLE SILL FAUCET, CAST BRASS, SATIN NICKEL PLATED, ¾" FLANGED THREADED INLET, ¾" HOSE THREAD OUTLET, METAL WHEEL HANDLE, VACUUM BREAKER BACKFLOW CHECK VALVE.
HB-2	HOSE BIBB	PRIER MODEL C-255CP.50	ANTI-SIPHON ANGLE SILL FAUCET, CAST BRASS, POLISHED CHROME PLATED, ½" FLANGED THREADED INLET, ¾" HOSE THREAD OUTLET, LOOSE KEY OPERATION, VACUUM BREAKER BACKFLOW CHECK VALVE.
FWH-1	FREEZELESS WALL HYDRANT	PRIER MODEL C-634N	ENCASED, ANTI-SIPHON, CAST BRASS HYDRANT, SATIN NICKEL FINISH, ¾" INLET, ¾" HOSE THREAD OUTLET, LOOSE KEY OPERATION, SELF DRAINING, WITH INTEGRAL VACUUM BREAKER/BACKFLOW PREVENTER. INCLUDE PRIER MODEL C-634BX1 SATIN NICKEL HYDRANT BOX, WITH HINGED COVER AND OPERATING KEY LOCK.
FWH-2	FREEZELESS WALL HYDRANT	PRIER MODEL C-754N	ENCASED, ANTI-SIPHON, CAST BRASS MIXING HYDRANT, SATIN NICKEL FINISH, ¾" HOT AND COLD INLETS, ¾" HOSE THREAD OUTLET, LOOSE KEY OPERATION, SELF DRAINING, WITH INTEGRAL VACUUM BREAKER/BACKFLOW PREVENTER. INCLUDE PRIER MODEL C-754BX1 SATIN NICKEL HYDRANT BOX, WITH HINGED COVER AND OPERATING KEY LOCK.
FRH	FREEZELESS ROOF HYDRANT	MAPA PRODUCTS MODEL MPH-24FP:24/9	PEDESTAL MOUNT, GRADE 304 STAINLESS STEEL SHROUD WITH WELDED STAINLESS STEEL FLANGE, POWDER COATED CAST ALUMINUM WEATHER-GUARD HANDLE, ¾" INLET, BRONZE GLOBE ANDGLE VALVE WITH ¾" HOSE THREAD OUTLET, QUICK DISCONNECT, BUILT-IN VACUUM BREAKER, SELF DRAINING WITH INTEGRAL STAINLESS STEEL RESERVOIR.
IMB	ICE MAKER OUTLET BOX	OATEY FIRE-RATED ICE MAKER OUTLET BOX NO. 39124	RECESSED FIRE-RATED PLASTIC BOX, WITH FYREWRAP INSULATION PAD, 1/4 TURN BRASS BALL VALVE WITH WATER HAMMER ARRESTER, ASTM F1960 PEX FITTING, LOW LEAD, ADJUSTABLE GALVANIZED STEEL SUPPORT BRACKETS, SNAP-ON FACEPLATE.
WMB	WASHING MACHINE OUTLET BOX	OATEY FIRE-RATED WASHING MACHINE OUTLET BOX NO. 38481	RECESSED FIRE-RATED PLASTIC BOX, WITH FYREWRAP INSULATION PAD, 1/4 TURN BRASS BALL VALVES WITH WATER HAMMER ARRESTERS, ASTM F1960 PEX FITTINGS, 2" PVC DRAIN WITH GALVANIZED STEEL SLEEVE, ADJUSTABLE GALVANIZED STEEL SUPPORT BRACKETS, SNAP-ON FACEPLATE.
DWH-1	DOMESTIC WATER HEATER	AO SMITH CYCLONE Mxi MODEL BTH-199	COMMERCIAL GAS-FIRED, CONDENSING, DIRECT VENT, 100 GALLON CAPACITY, 199.9 MBH INPUT, 235 GPH AT 100° TEMPERATURE RISE, GLASS-LINED STEEL TANK, WITH FACTORY INSTALLED T&P RELIEF VALVE AND DRAIN VALVE, THREE (3) REQUIRED.
DWH-2	DOMESTIC WATER HEATER	AO SMITH CYCLONE Mxi MODEL BTH-150	COMMERCIAL GAS-FIRED, CONDENSING, DIRECT VENT, 100 GALLON CAPACITY, 150 MBH INPUT, 178 GPH AT 100° TEMPERATURE RISE, GLASS-LINED STEEL TANK, WITH FACTORY INSTALLED T&P RELIEF VALVE AND DRAIN VALVE, TWO (2) REQUIRED.
TMV	THERMOSTATIC MIXING VALVE	LEONARD NEXT GENERATION HIGH LOW SYSTEM MODEL TM-1520B-LF-DT	FACTORY ASSEMBLED THERMOSTATIC CONTROLLERS, WITH ADJUSTABLE HIGH TEMPERATURE LIMIT STOPS, INLET CHECKSTOPS, WALL SUPPORT, OUTLET BALL VALVES, 1-1/4" INLETS, 1-1/2" OUTLET, 1.0 GPM MINIMUM FLOW, OUTLET THERMOMETER, 65 GPM MAXIMUM FLOW AT 10 PSI PRESSURE DROP.
ESP	ELEVATOR SUMP PUMP	STANCOR OIL-MINDER MODEL SE-200	SUBMERSIBLE EFFLUENT PUMP SYSTEM WITH OIL-MINDER CONTROL, 2 HP STAINLESS STEEL PUMP, 100 GPM @ 35' TDH, CONTROL PANEL WITH AUDIBLE AND VISIBLE ALARM, JUNCTION BOX WITH INTERCONNECTING CABLES TO PUMP AND CONTROL PANEL.
LINT	LINT INTERCEPTOR	ZURN Z1185 SERIES SIZE #20	200 GPM, ACID RESISTANT COATED FABRICATED STEEL INTERCEPTOR WITH NON-SKID SECURED COVER, MODIFIED WITH 6" INLET AND OUTLET.

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REVISIONS		
No.	Date	Description
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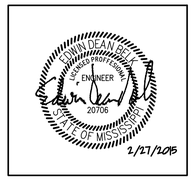


KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

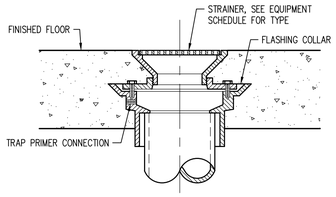
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing Schedules

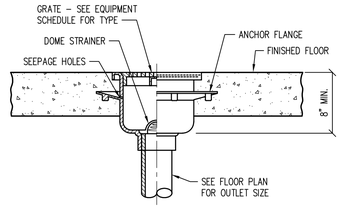
Phase
Construction Documents

Project No.	14-081	Sheet No. P002
Prepared by	MJS	
Checked by	EDB	
Date	Feb. 27, 2015	

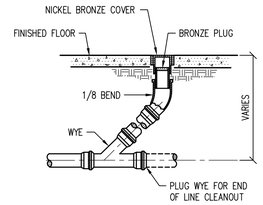
Holiday Inn Express & Suites



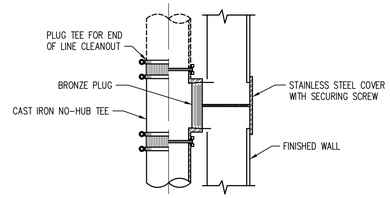
1 P003 **FLOOR DRAIN DETAIL**
NOT TO SCALE



2 P003 **FLOOR SINK DETAIL**
NOT TO SCALE



3 P003 **FLOOR CLEANOUT DETAIL**
NOT TO SCALE



4 P003 **WALL CLEANOUT DETAIL**
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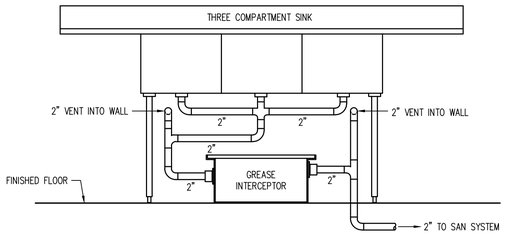


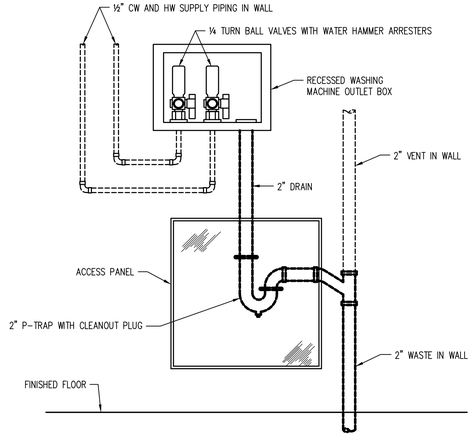
5 P003 **THREE COMPARTMENT SINK DETAIL**
NOT TO SCALE

GREASE INTERCEPTOR SIZING

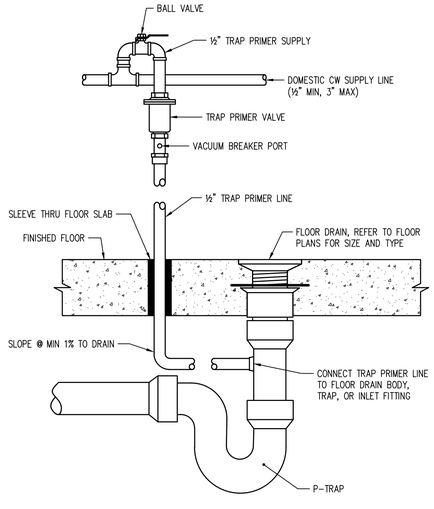
(1) 3 COMPARTMENT SINK W/ 16" X 20" X 12" BOWLS
(16x20x12)(3) = 11,520 CUBIC INCHES / 231 = 50 GALLONS
50 GALLONS x 75% LOADING FACTOR = 37 GALLONS
FOR A 2 MINUTE DRAINAGE PERIOD = 19 GPM

TOTAL = 19 GPM

GREASE INTERCEPTOR: ASHLAND MODEL 4820, 20 GPM FLOW, 40 LBS GREASE CAPACITY, WITH FLOW CONTROL, 2" INLET AND OUTLET, BOLTED AND GASKETED COVER. INSTALL INTERCEPTOR ON FLOOR IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND CODE COMPLIANT INSTALLATION.

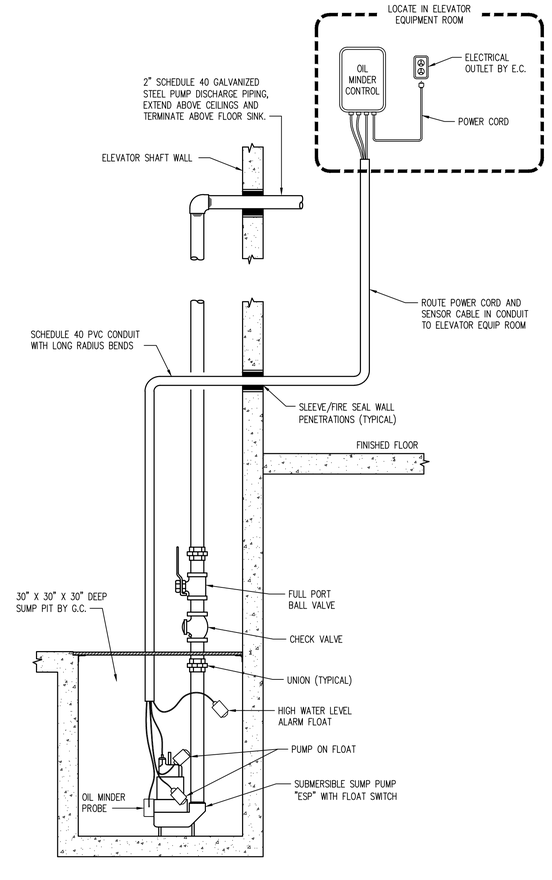


6 P003 **WASHING MACHINE OUTLET BOX DETAIL**
NOT TO SCALE



TRAP PRIMER NOTES:
1. PROVIDE TRAP PRIMER VALVES FOR ALL FLOOR DRAINS, EXCEPT SHOWER DRAINS.
2. TRAP PRIMER VALVES SHALL BE SIOUX CHIEF PRIME PERFECT SERIES 695, OR EQUAL.
3. CONNECT TRAP PRIMER VALVE TO CW LINE: ½" MIN. – 3" MAX.
4. PROVIDE SIOUX CHIEF WYE SPLITTER AND/OR DISTRIBUTOR FOR TRAP PRIMER VALVES SERVING MORE THAN ONE FLOOR DRAIN.
5. MAXIMUM OF EIGHT FLOOR DRAINS MAY BE SERVED BY ONE TRAP PRIMER VALVE.

7 P003 **TRAP PRIMER DETAIL**
NOT TO SCALE



8 P003 **ELEVATOR SUMP PUMP DETAIL**
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REVISIONS		
No.	Date	Description
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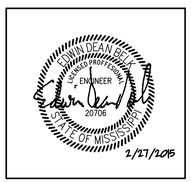


KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

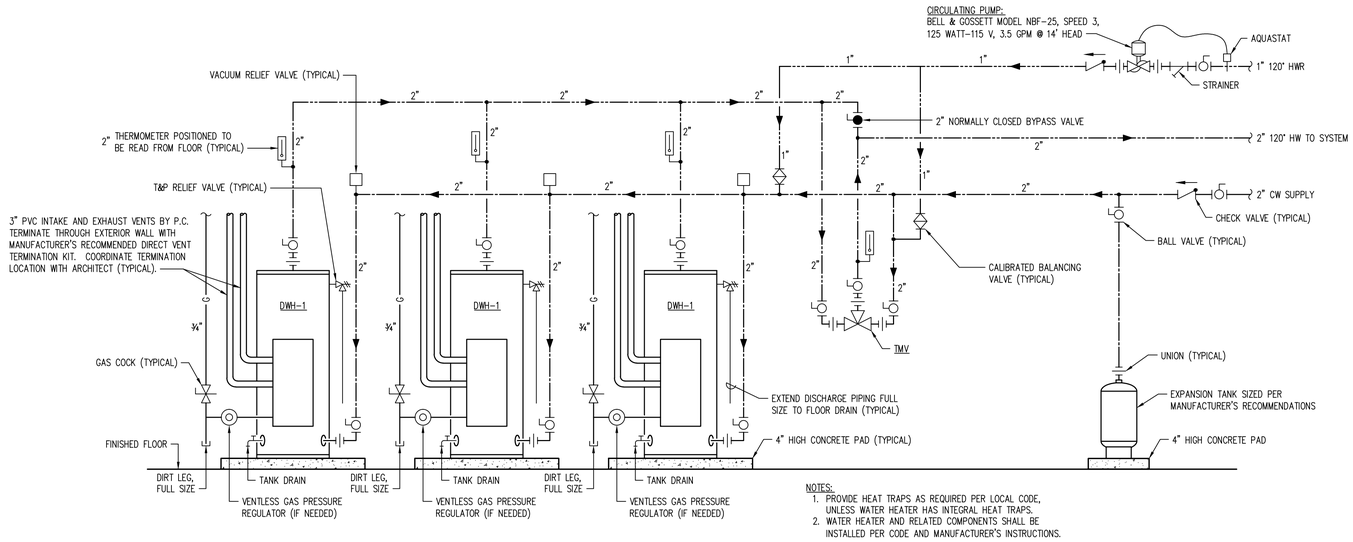
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing Details

Phase
Construction Documents

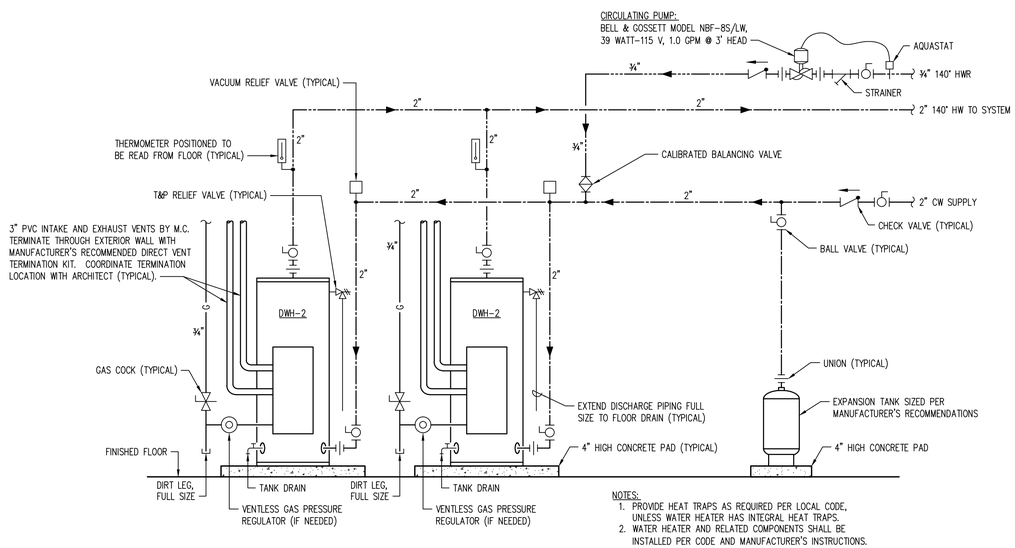
Project No.	14-081	Sheet No. P003
Prepared by	MJS	
Checked by	EDB	
Date	Feb. 27, 2015	

Holiday Inn Express & Suites



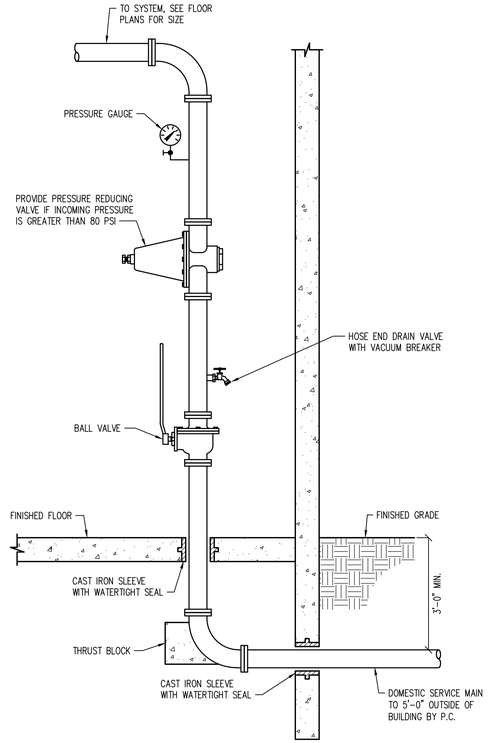
1 P004 **GUEST ROOM WATER HEATER DETAIL**

NOT TO SCALE



2 P004 **LAUNDRY AND PANTRY WATER HEATER DETAIL**

NOT TO SCALE



3 P004 **DOMESTIC SERVICE RISER DETAIL**

NOT TO SCALE

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No.	Date	Description
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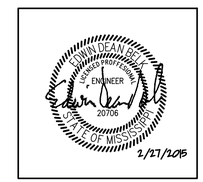


KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

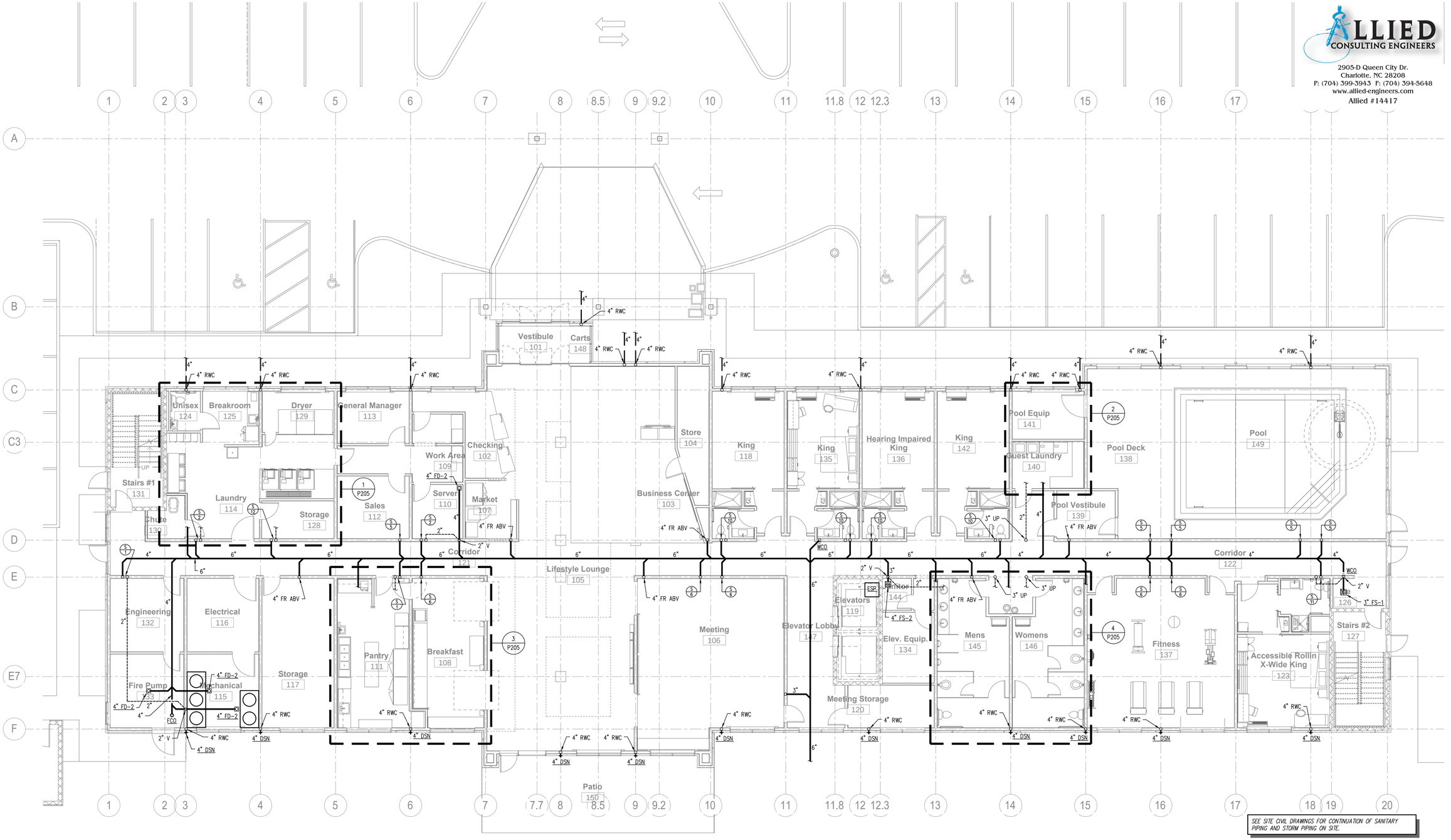
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing Details

Phase
Construction Documents

Project No.	14-081	Sheet No. P004
Prepared by	MJS	
Checked by	EDB	
Date	Feb. 27, 2015	

Holiday Inn Express & Suites



1 P100 FIRST FLOOR PLAN - SANITARY AND STORM

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

SEE SITE CIVIL DRAWINGS FOR CONTINUATION OF SANITARY PIPING AND STORM PIPING ON SITE.

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P201 AND P202 FOR PIPING IN GUEST ROOMS.

SEE SANITARY & VENT PIPING RISER DIAGRAMS ON SHEETS P.301 THROUGH P.303 FOR PIPE SIZES AND ADDITIONAL INFORMATION.

MINIMUM SIZE FOR SANITARY AND VENT PIPING BELOW GROUND SHALL BE 2".

ALL VENT PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED; ALL SANITARY PIPING AND ALL STORM PIPING SHOWN ON THIS SHEET SHALL BE RUN BELOW FLOORS, UNLESS OTHERWISE NOTED.

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JOHN DEAN BELL
LICENSED PROFESSIONAL ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

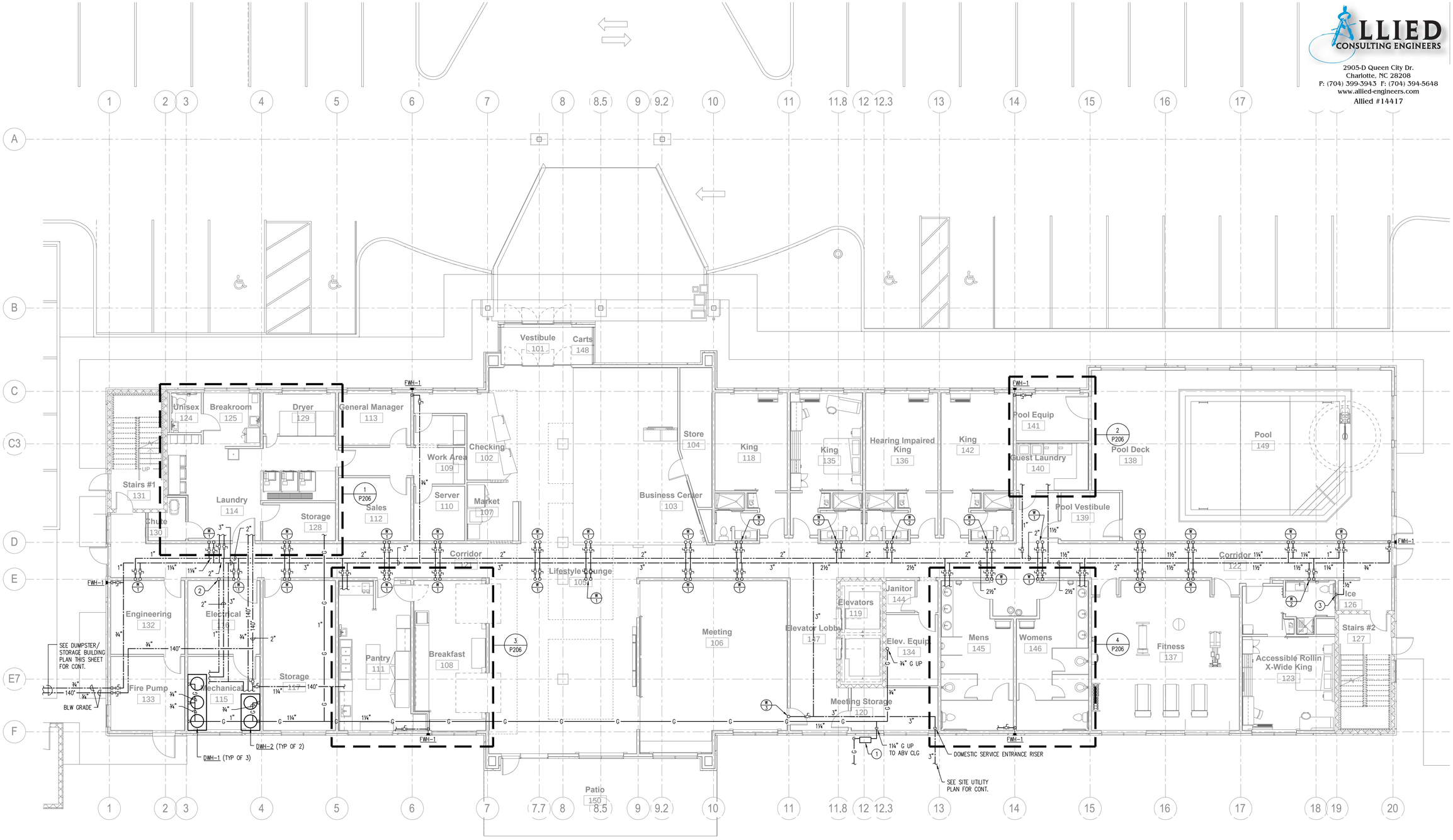
Drawing Title
Plumbing
First Floor Plan
Sanitary and Storm

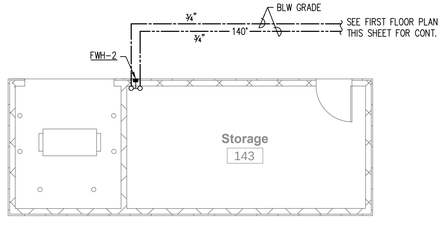
Phase
Construction Documents

Project No.	14-081
Prepared by	MJS
Checked by	EDB
Date	Feb. 27, 2015

Sheet No. P100

Holiday Inn Express & Suites





2 P101 DUMPSTER/STORAGE BUILDING PLAN
SCALE: 1/8" = 1'-0"

1 P101 FIRST FLOOR PLAN - WATER AND GAS
SCALE: 1/8" = 1'-0"

KEYED NOTES THIS SHEET

1. COORDINATE GAS SERVICE WITH LOCAL GAS COMPANY. TOTAL CONNECTED LOAD = 1544.7 MBH, SYSTEM DEVELOPED LENGTH = 300', SYSTEM PRESSURE = 2 PSI.
2. 1" HWR FROM ABOVE.
3. CONNECT ½" CW TO ICE MACHINE WITH BALL VALVE AND WATTS SERIES LF7 DUAL CHECK VALVE. VERIFY EXACT LOCATION AND SIZE OF CONNECTION WITH EQUIPMENT SUPPLIER.

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P203 AND P204 FOR PIPING IN GUEST ROOMS.

SEE WATER PIPING RISER DIAGRAMS ON SHEET P304 FOR PIPE SIZES AND ADDITIONAL INFORMATION.

ALL WATER PIPING AND ALL GAS PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED.

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EDWIN DEAN SMITH REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
First Floor Plan
Water and Gas

Phase
Construction Documents

Project No.	14-081
Prepared by	MJS
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	P101

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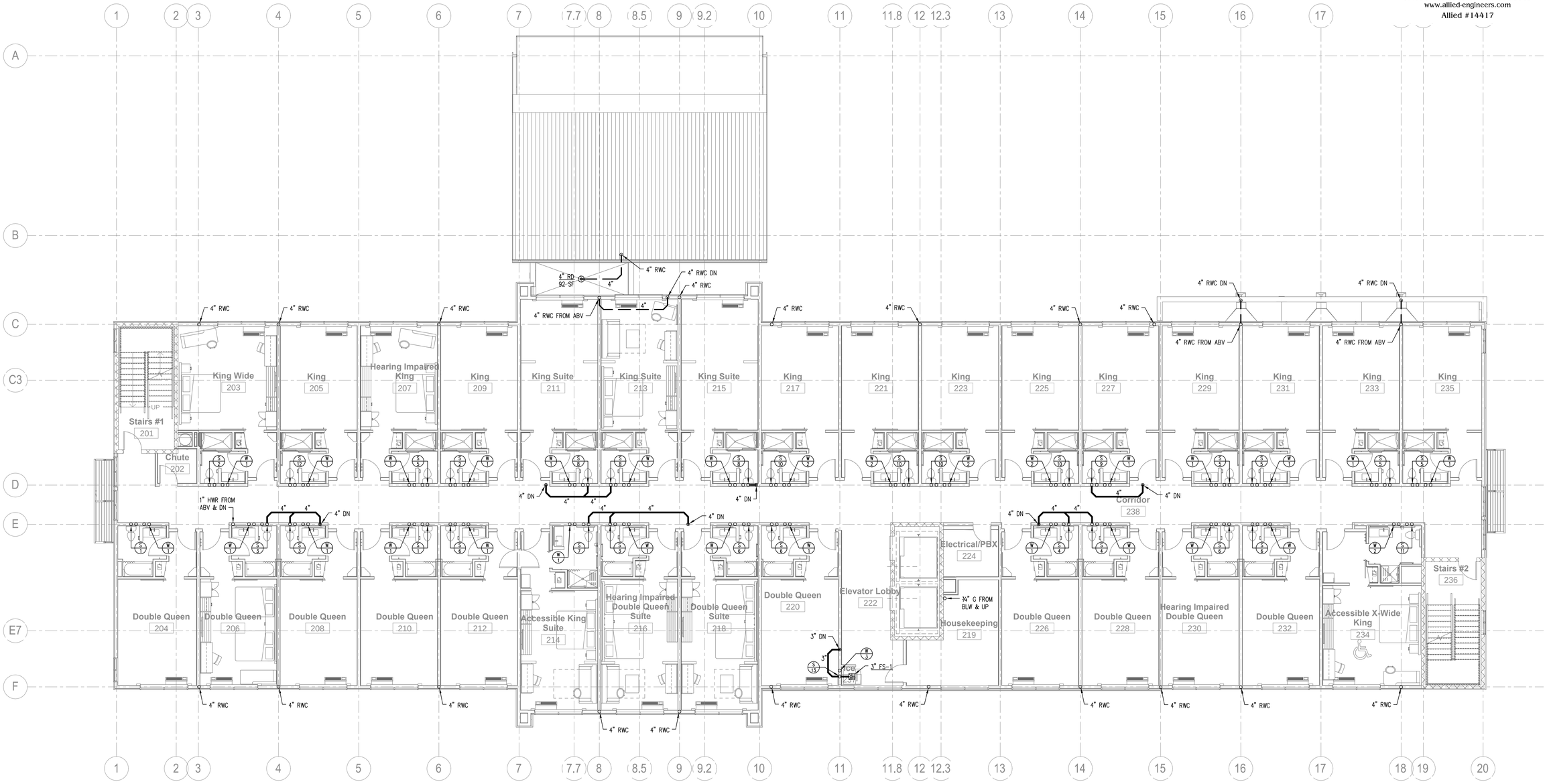

1 P102 **SECOND FLOOR PLAN**
SCALE: 1/8" = 1'-0"

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P.201 THROUGH P.204 FOR PIPING IN GUEST ROOMS.

SEE RISER DIAGRAMS ON SHEETS P.301 THROUGH P.304 FOR PIPE SIZES AND ADDITIONAL INFORMATION.

ALL WATER PIPING AND ALL GAS PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED.

ALL VENT PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED; ALL SANITARY PIPING AND ALL STORM PIPING SHOWN ON THIS SHEET SHALL BE RUN BELOW FLOORS, UNLESS OTHERWISE NOTED.

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EDWIN DEAN BERRY JR. REGISTERED ENGINEER 20706 STATE OF MISSISSIPPI 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Second Floor Plan

Phase
Construction Documents

Project No.	14-081
Prepared by	MJS
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	P102

Holiday Inn Express & Suites

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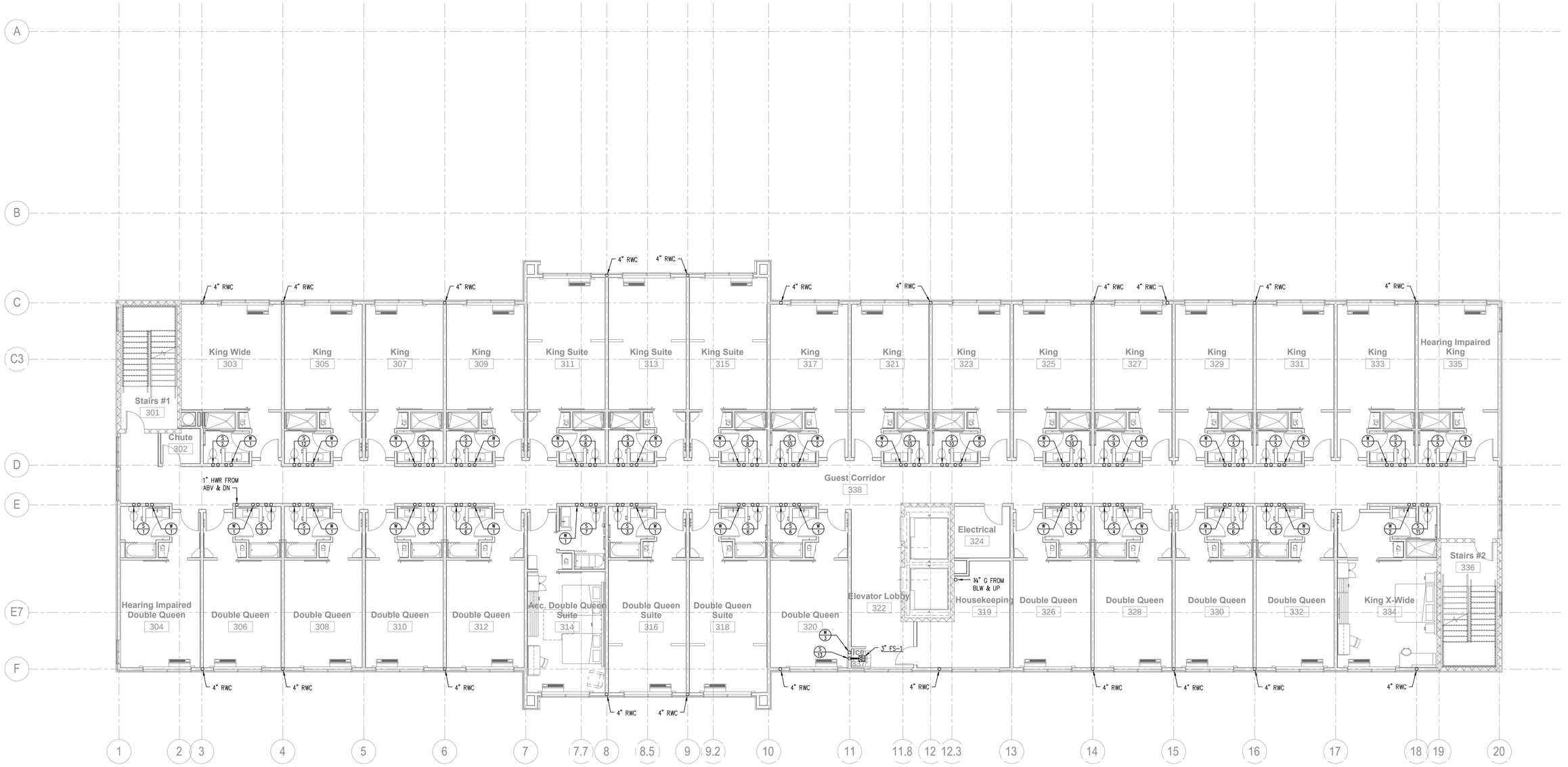

1 P103 THIRD FLOOR PLAN
SCALE: 1/8" = 1'-0"

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P.201 THROUGH P.204 FOR PIPING IN GUEST ROOMS.

SEE RISER DIAGRAMS ON SHEETS P.301 THROUGH P.304 FOR PIPE SIZES AND ADDITIONAL INFORMATION.

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EDWIN DEAN SIKES — 029706 — ENGINEER — STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Third Floor Plan

Phase
Construction Documents

Project No.	14-081
Prepared by	MJS
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	P103

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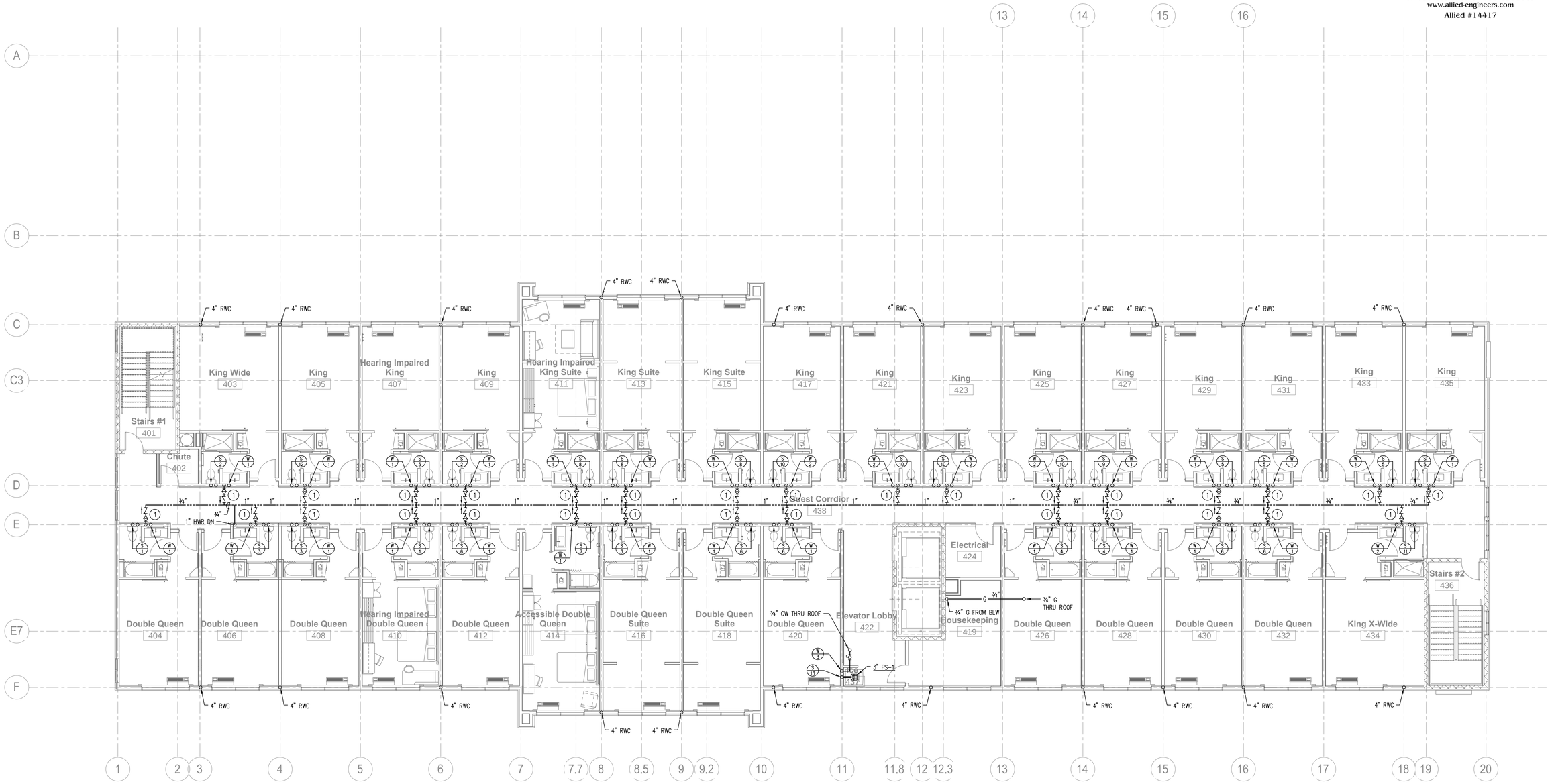

1 P104 FOURTH FLOOR PLAN
SCALE: 1/8" = 1'-0"

KEYED NOTES THIS SHEET

1 BALANCING STATION: PROVIDE BRONZE CALIBRATED BALANCING VALVE, CHECK VALVE, AND THERMOWELL.

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P.201 THROUGH P.204 FOR PIPING IN GUEST ROOMS.

SEE RISER DIAGRAMS ON SHEETS P.301 THROUGH P.304 FOR PIPE SIZES AND ADDITIONAL INFORMATION.

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JOHN DEAN GERICK
STATE OF MISSISSIPPI
REGISTERED PROFESSIONAL
ENGINEER
20706
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Fourth Floor Plan

Phase
Construction Documents

Project No.	14-081
Prepared by	MJS
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	P104

Holiday Inn Express & Suites

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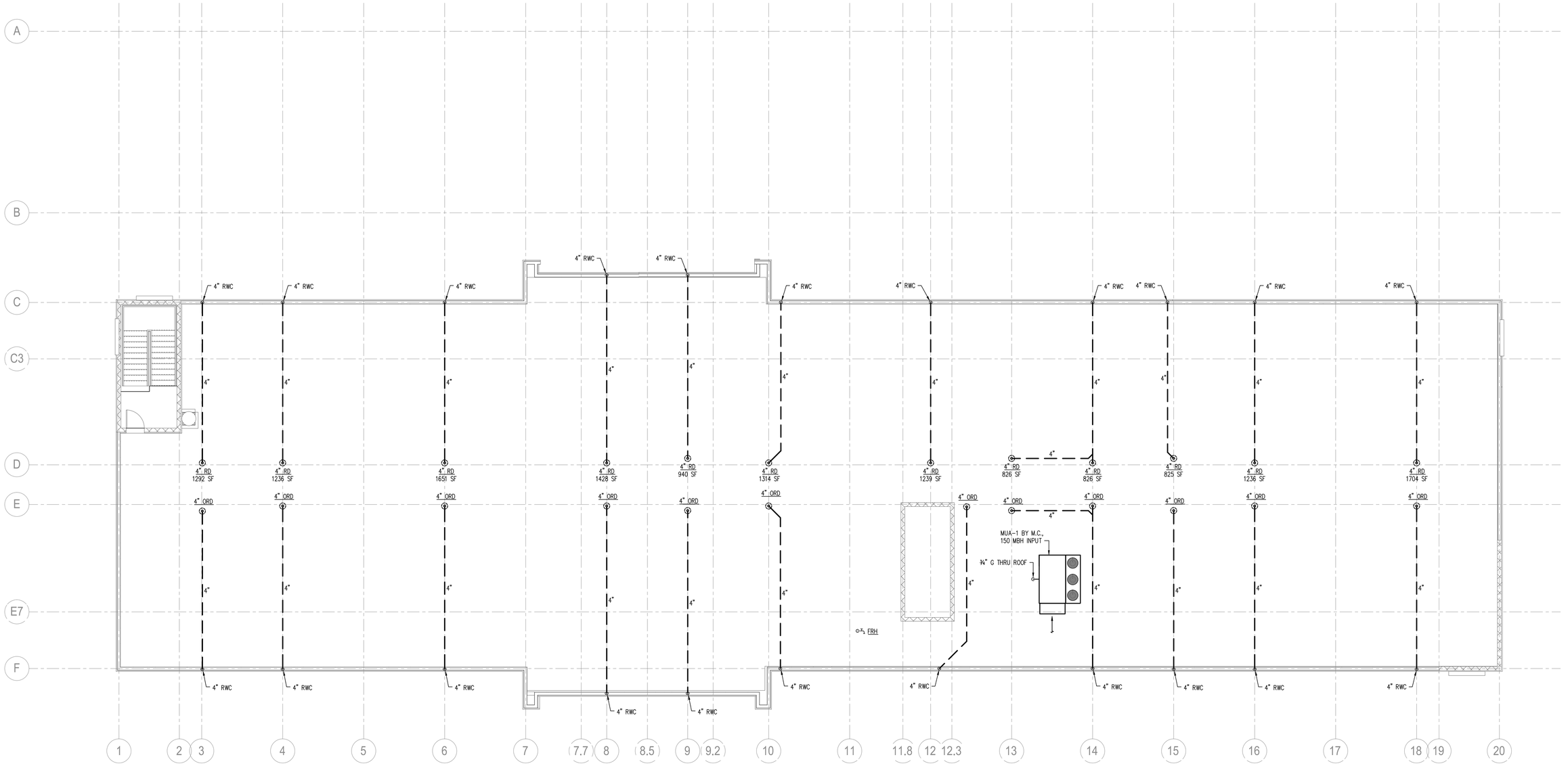

1 P105 ROOF PLAN
SCALE: 1/8" = 1'-0"

ALL GAS PIPING SHOWN ON THIS SHEET SHALL BE RUN ON ROOF, UNLESS OTHERWISE NOTED.

ALL MAIN ROOF DRAINS, OVERFLOW ROOF DRAINS, AND ASSOCIATED STORM PIPING SIZED FOR 100-YEAR, 1-HOUR RAINFALL RATE OF 3.75 INCHES/HOUR AT 1% SLOPE.

ALL STORM PIPING SHOWN ON THIS SHEET SHALL BE RUN BELOW ROOF, ABOVE FOURTH FLOOR CEILINGS, UNLESS OTHERWISE NOTED.

REVISIONS		
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TOWN DEAN SMITH REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

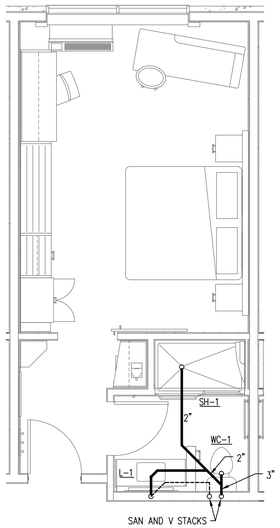
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Roof Plan

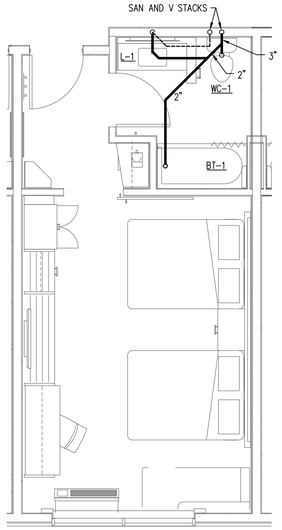
Phase
Construction Documents

Project No.	14-081	Sheet No.	P105
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

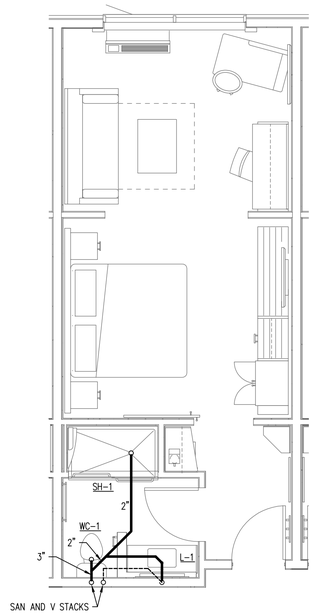
Holiday Inn Express & Suites



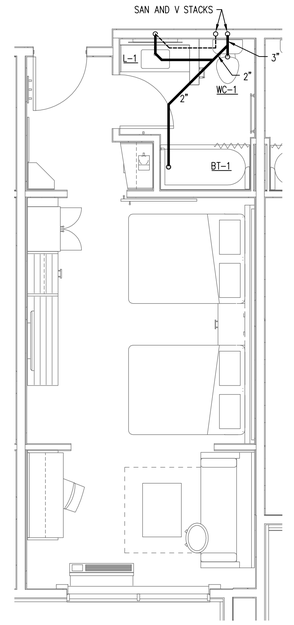
1 P201 **KING**
SCALE: 1/4" = 1'-0"



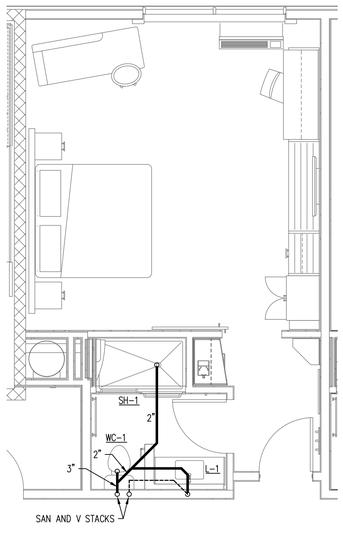
2 P201 **DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



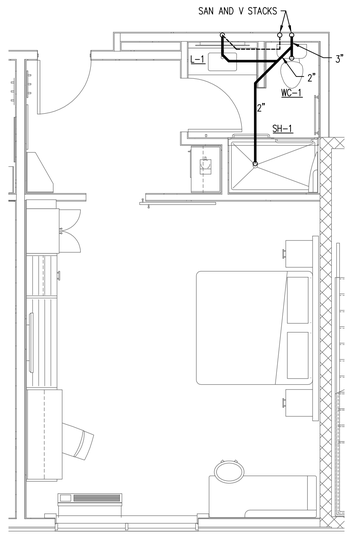
3 P201 **KING SUITE**
SCALE: 1/4" = 1'-0"



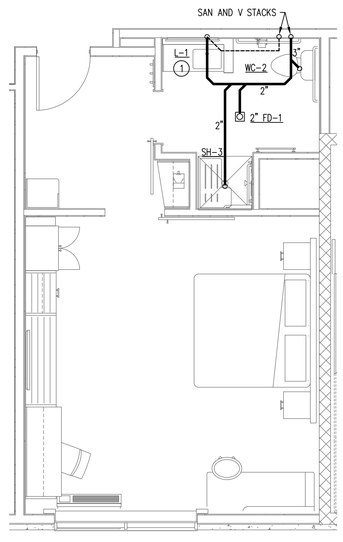
4 P201 **DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"



5 P201 **KING WIDE**
SCALE: 1/4" = 1'-0"



6 P201 **KING X-WIDE**
SCALE: 1/4" = 1'-0"



7 P201 **ACCESSIBLE ROLLIN X-WIDE KING**
SCALE: 1/4" = 1'-0"

KEYED NOTES THIS SHEET

1. IN LIEU OF SPECIFIED P-TRAP, PROVIDE ZURN Z1021 WATER SAVER TRAP PRIMER P-TRAP WITH CLEANOUT PLUG AND PRIMER HOSE. CONNECT ½" TRAP PRIMER LINE TO PRIMER HOSE, DROP DOWN IN WALL TO BELOW BELOW FLOOR, AND EXTEND BELOW FLOOR TO CONNECTION ON FLOOR DRAIN.

GUEST ROOM PIPING LAYOUTS ARE TYPICAL FOR EACH TYPE OF GUEST ROOM INDICATED. SEE FLOOR PLANS FOR ROOM LOCATIONS AND ADDITIONAL INFORMATION.

SEE FIXTURE SCHEDULE ON SHEET P002 FOR SIZES OF SANITARY AND VENT CONNECTIONS TO INDIVIDUAL FIXTURES.

MINIMUM SIZE FOR SANITARY AND VENT PIPING BELOW GROUND SHALL BE 2".

ALL VENT PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED; ALL SANITARY PIPING SHOWN ON THIS SHEET SHALL BE RUN BELOW FLOORS, UNLESS OTHERWISE NOTED.

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EDWIN DEAN SHELL REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

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Drawing Title
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Phase
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Project No.	14-081	Sheet No.	P201
Prepared by	MJS		
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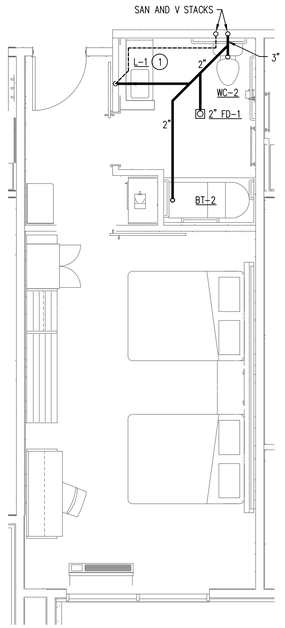
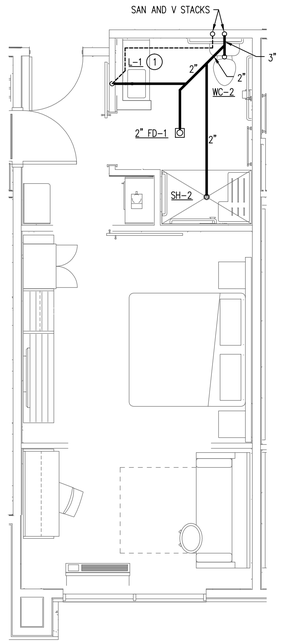
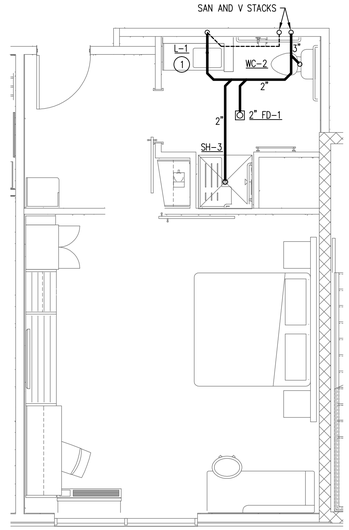
Holiday Inn Express & Suites



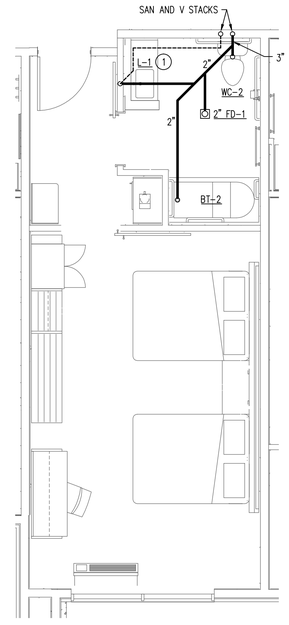
1 P202 **ACCESSIBLE DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



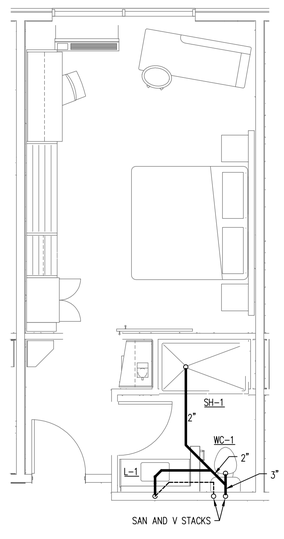
2 P202 **ACCESSIBLE KING SUITE**
SCALE: 1/4" = 1'-0"



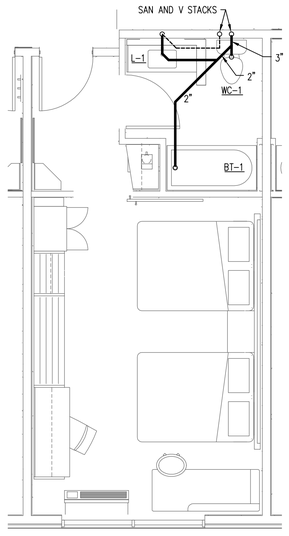
3 P202 **ACCESSIBLE X-WIDE KING**
SCALE: 1/4" = 1'-0"



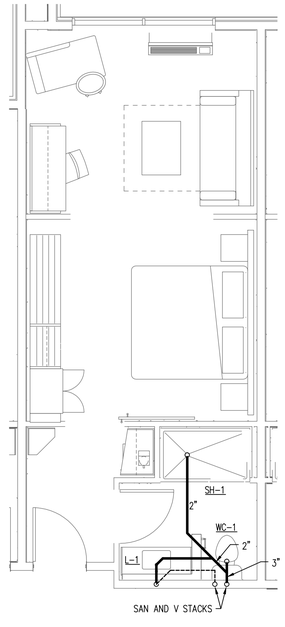
4 P202 **ACCESSIBLE DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"



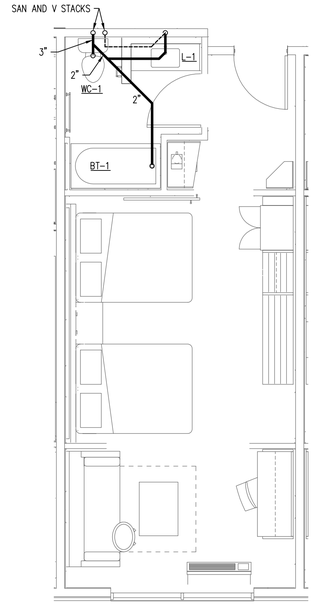
5 P202 **HEARING IMPAIRED KING**
SCALE: 1/4" = 1'-0"



6 P202 **HEARING IMPAIRED DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



7 P202 **HEARING IMPAIRED KING SUITE**
SCALE: 1/4" = 1'-0"



8 P202 **HEARING IMPAIRED DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"

KEYED NOTES THIS SHEET

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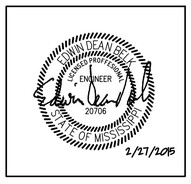

KEY PLAN

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Holiday Inn Express & Suites

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Southcrest Subdivision
Southaven, MS 38671

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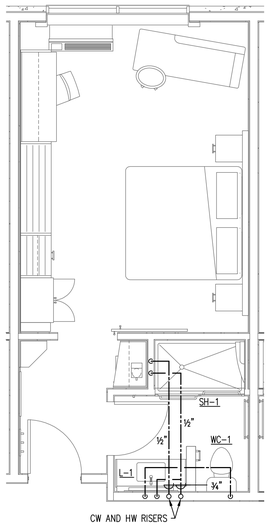
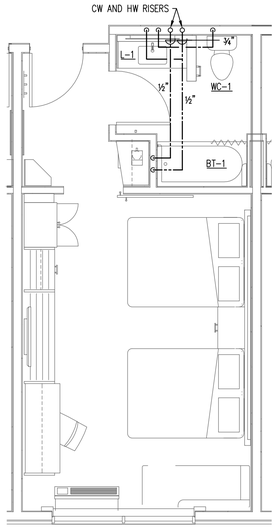
Phase
Construction Documents

Project No.	14-081	Sheet No.	P202
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

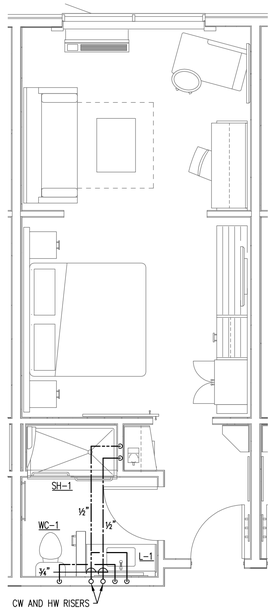
Holiday Inn Express & Suites



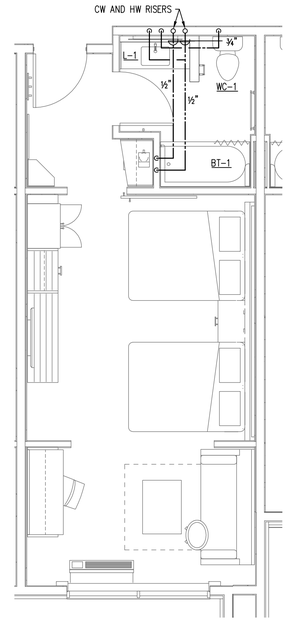
1 P203 **KING**
SCALE: 1/4" = 1'-0"



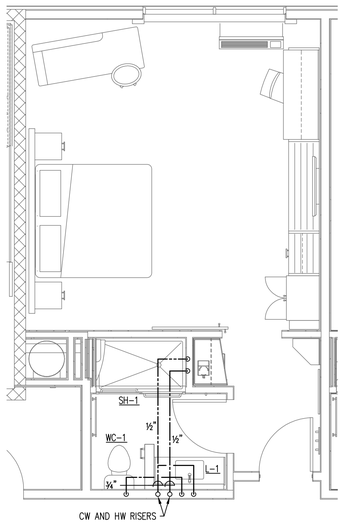
2 P203 **DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



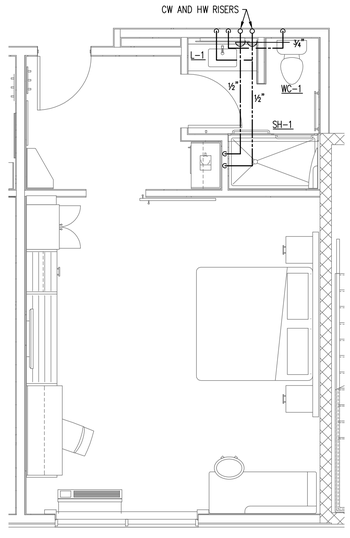
3 P203 **KING SUITE**
SCALE: 1/4" = 1'-0"



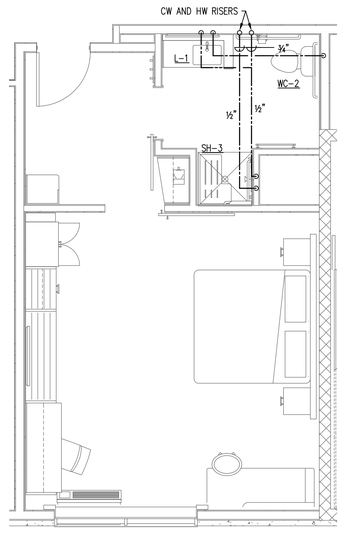
4 P203 **DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"



5 P203 **KING WIDE**
SCALE: 1/4" = 1'-0"



6 P203 **KING X-WIDE**
SCALE: 1/4" = 1'-0"



7 P203 **ACCESSIBLE ROLLIN X-WIDE KING**
SCALE: 1/4" = 1'-0"

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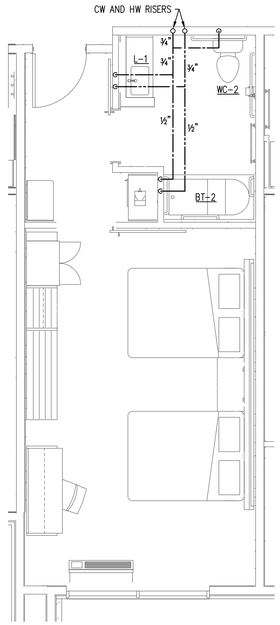
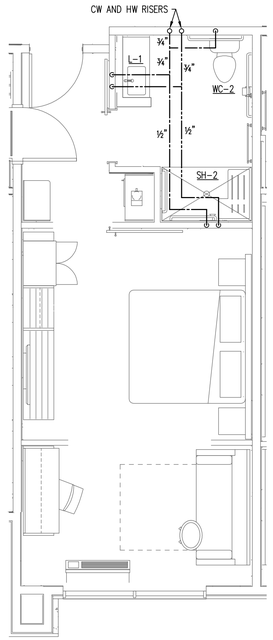
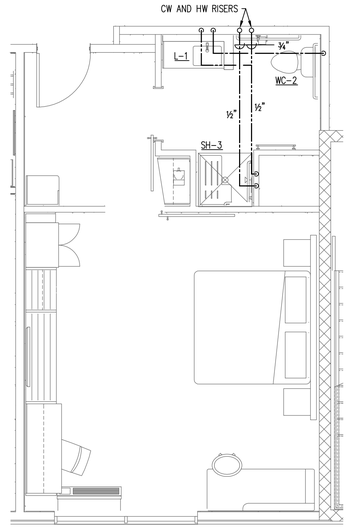


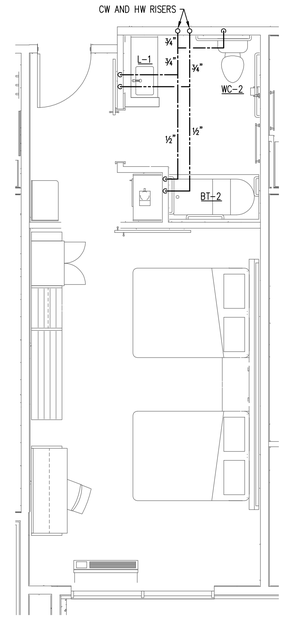
1 P204 **ACCESSIBLE DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



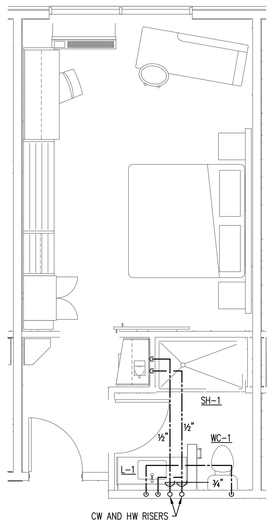
2 P204 **ACCESSIBLE KING SUITE**
SCALE: 1/4" = 1'-0"



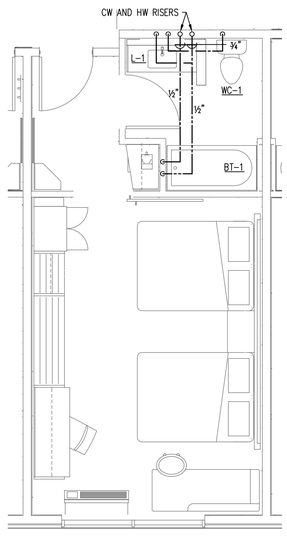
3 P204 **ACCESSIBLE X-WIDE KING**
SCALE: 1/4" = 1'-0"



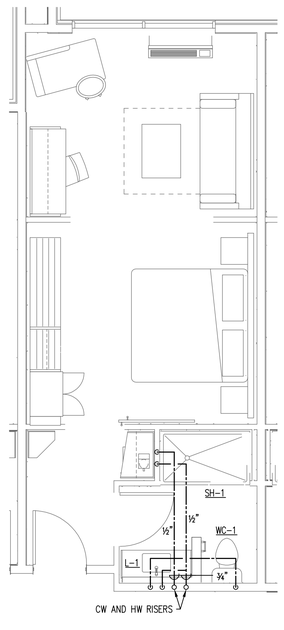
4 P204 **ACCESSIBLE DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"



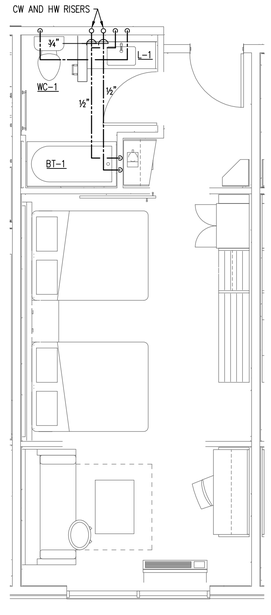
5 P204 **HEARING IMPAIRED KING**
SCALE: 1/4" = 1'-0"



6 P204 **HEARING IMPAIRED DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



7 P204 **HEARING IMPAIRED KING SUITE**
SCALE: 1/4" = 1'-0"



8 P204 **HEARING IMPAIRED DOUBLE QUEEN SUITE**
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20706
STATE OF MISSISSIPPI
2/27/2015

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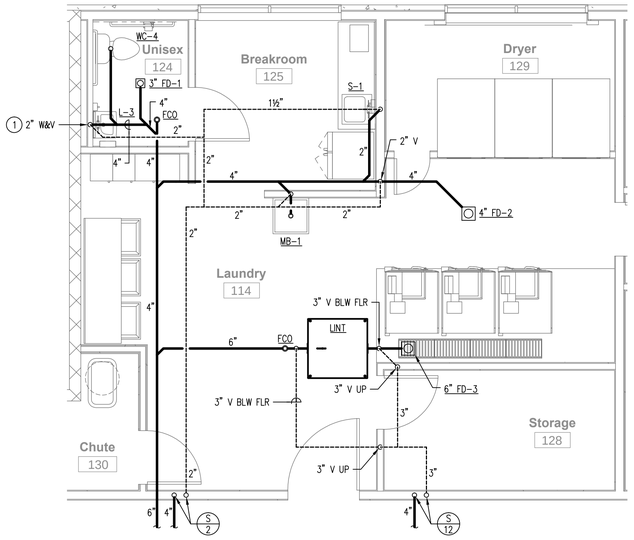
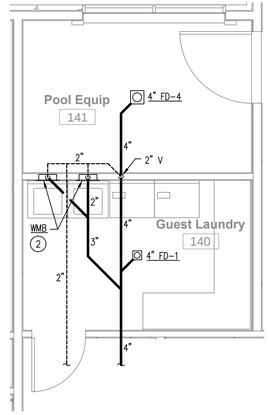
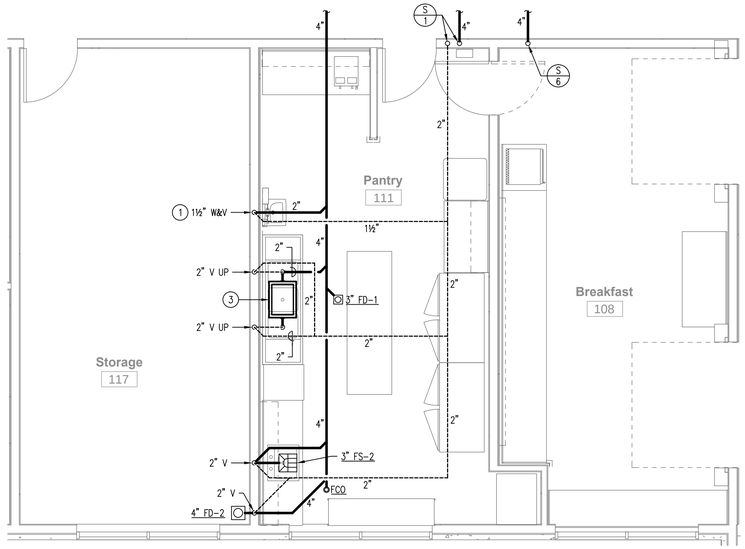


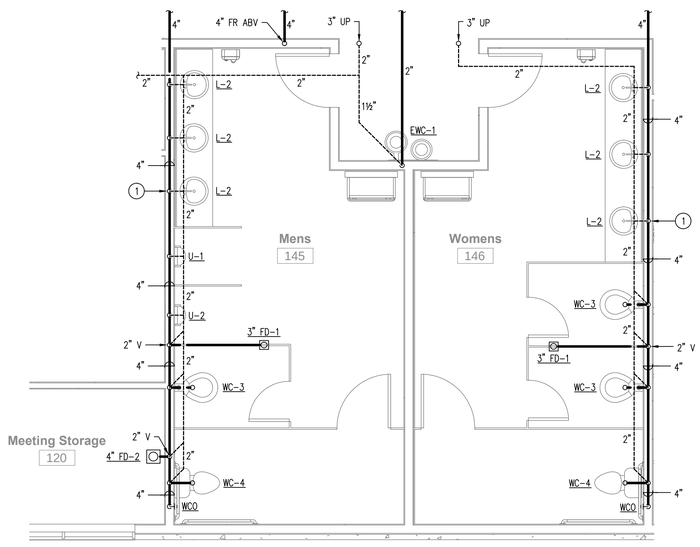
1 P205 **LAUNDRY AREA PLAN**
SCALE: 1/4" = 1'-0"



2 P205 **POOL EQUIP AND GUEST LAUNDRY**
SCALE: 1/4" = 1'-0"



3 P205 **PANTRY AREA PLAN**
SCALE: 1/4" = 1'-0"



4 P205 **PUBLIC RESTROOMS**
SCALE: 1/4" = 1'-0"

KEYED NOTES THIS SHEET

1. IN LIEU OF SPECIFIED P-TRAP, PROVIDE ZURN Z1021 WATER SAVER TRAP PRIMER P-TRAP WITH CLEANOUT PLUG AND PRIMER HOSE. CONNECT ½" TRAP PRIMER LINE TO PRIMER HOSE, DROP DOWN IN WALL TO BELOW BELOW FLOOR, AND EXTEND BELOW FLOOR TO CONNECTION ON FLOOR DRAIN.
2. PROVIDE FILTROL-160 IN-LINE LINT FILTER MOUNTED ON WALL IN AN ACCESSIBLE LOCATION. CONNECT WASHING MACHINE DRAIN HOSE TO FILTER INLET, AND CONNECT HOSE PROVIDED WITH FILTER TO OUTLET AND TERMINATE IN WASHING MACHINE OUTLET BOX.
3. GREASE INTERCEPTOR SET ON FLOOR. REFER TO DETAIL #5 ON SHEET P003.

SEE FIXTURE SCHEDULE ON SHEET P002 FOR SIZES OF SANITARY AND VENT CONNECTIONS TO INDIVIDUAL FIXTURES.

MINIMUM SIZE FOR SANITARY AND VENT PIPING BELOW GROUND SHALL BE 2".

ALL VENT PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED; ALL SANITARY PIPING SHOWN ON THIS SHEET SHALL BE RUN BELOW FLOORS, UNLESS OTHERWISE NOTED.

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EDWIN DEAN SHIVA 20706 REGISTERED PROFESSIONAL ENGINEER STATE OF MISSISSIPPI 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

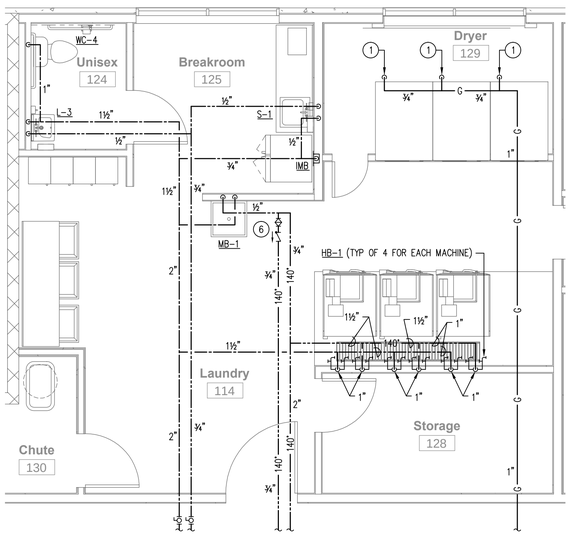
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Enlarged Plans
Sanitary

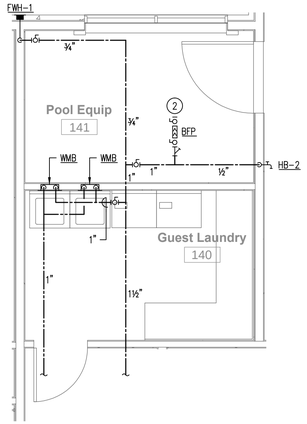
Phase
Construction Documents

Project No.	14-081	Sheet No.	P205
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

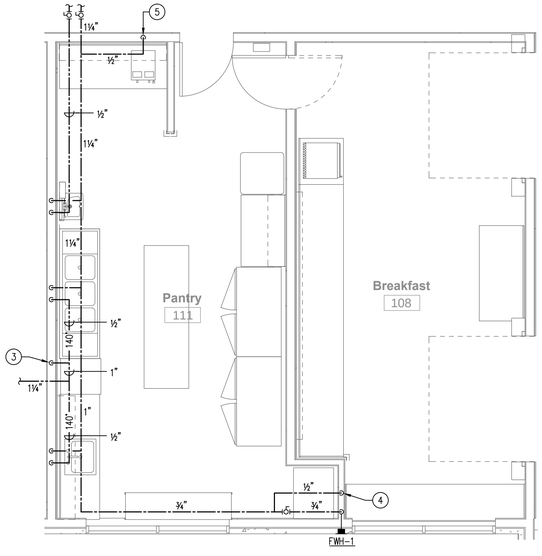
Holiday Inn Express & Suites



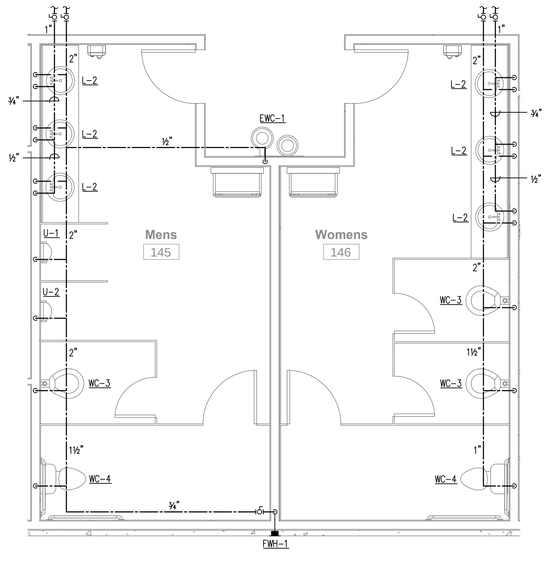
1 P206 **LAUNDRY AREA PLAN**
SCALE: 1/4" = 1'-0"



2 P206 **POOL EQUIP AND GUEST LAUNDRY**
SCALE: 1/4" = 1'-0"



3 P206 **PANTRY AREA PLAN**
SCALE: 1/4" = 1'-0"



4 P206 **PUBLIC RESTROOMS**
SCALE: 1/4" = 1'-0"

KEYED NOTES THIS SHEET

1. ¾" GAS TO DRYER, 165 MBH INPUT.
2. PROVIDE CW CONNECTION FOR POOL SYSTEM. VERIFY SIZE AND LOCATION OF CONNECTION WITH POOL EQUIPMENT CONTRACTOR.
3. CONNECT ½" HW TO DISHWASHER. PROVIDE BALL VALVE AND PROVIDE WATTS SERIES LF7 DUAL CHECK VALVE, UNLESS DISHWASHER HAS AN INTEGRAL BACKFLOW PREVENTER.
4. CONNECT ½" CW TO ICE MACHINE WITH BALL VALVE AND WATTS SERIES LF7 DUAL CHECK VALVE. VERIFY EXACT LOCATION AND SIZE OF CONNECTION WITH EQUIPMENT SUPPLIER.
5. CONNECT ½" CW TO COFFEE MACHINE WITH BALL VALVE AND WATTS SERIES LF7 DUAL CHECK VALVE. VERIFY EXACT LOCATION AND SIZE OF CONNECTION WITH EQUIPMENT SUPPLIER.
6. BALANCING STATION: PROVIDE BRONZE CALIBRATED BALANCING VALVE, CHECK VALVE, AND THERMOWELL.

SEE FIXTURE SCHEDULE ON SHEET P002 FOR SIZES OF WATER CONNECTIONS TO INDIVIDUAL FIXTURES.

ALL WATER PIPING AND ALL GAS PIPING SHOWN ON THIS SHEET SHALL BE RUN ABOVE CEILINGS IN AREAS WITH CEILINGS AND SHALL BE RUN AS HIGH AS POSSIBLE IN AREAS WITHOUT CEILINGS, UNLESS OTHERWISE NOTED.

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TOWN DEAN SMITH REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Enlarged Plans
Water and Gas

Phase
Construction Documents

Project No.	14-081	Sheet No.	P206
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

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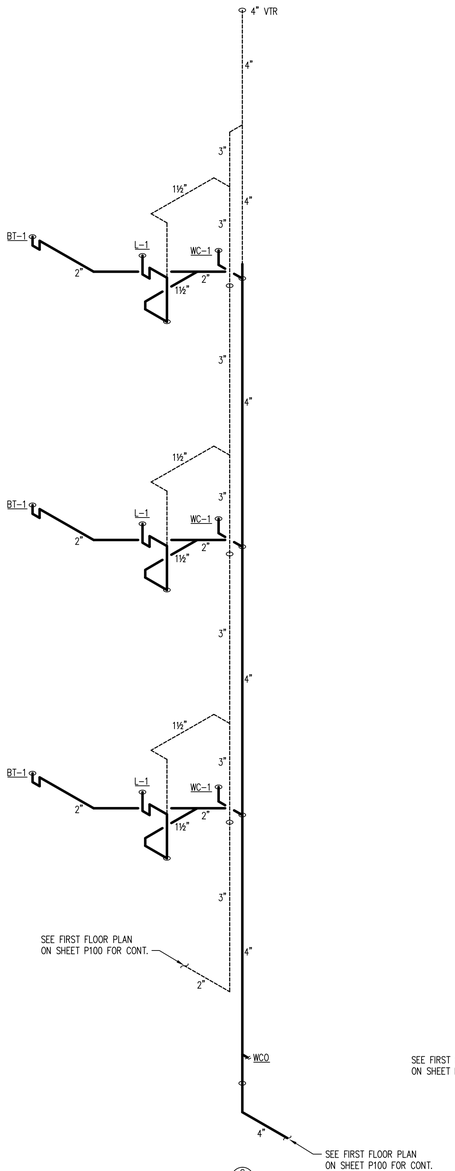

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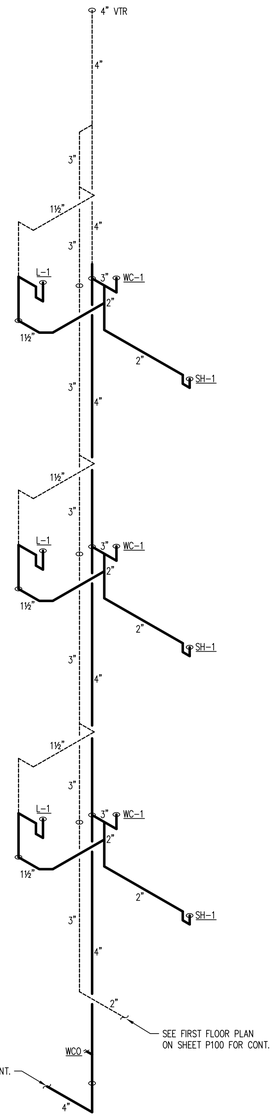

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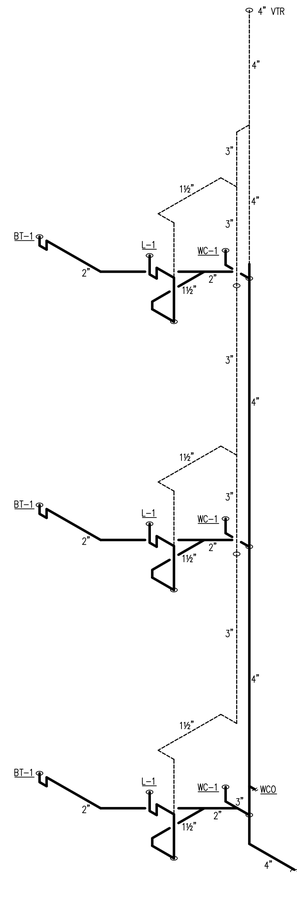

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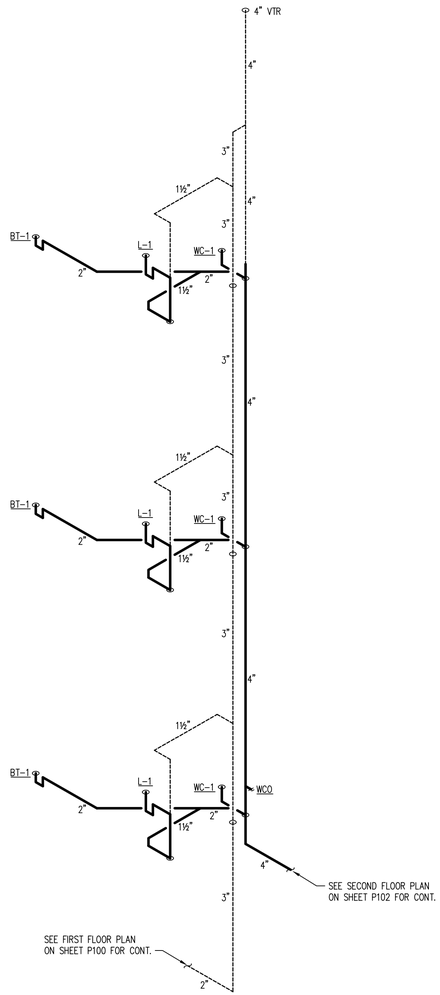

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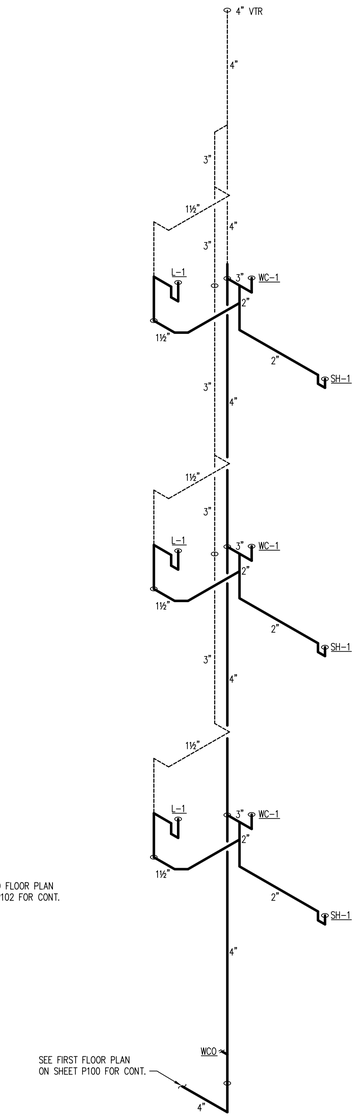

S5

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P201 AND P202 FOR ADDITIONAL INFORMATION.

SEE FIXTURE SCHEDULE ON SHEET P002 FOR SIZES OF SANITARY AND VENT CONNECTIONS TO INDIVIDUAL FIXTURES.

ALL RISER DIAGRAMS ARE SCHEMATIC AND ARE NOT TO SCALE. PROVIDE OFFSETS AS NECESSARY BETWEEN FLOORS.

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2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

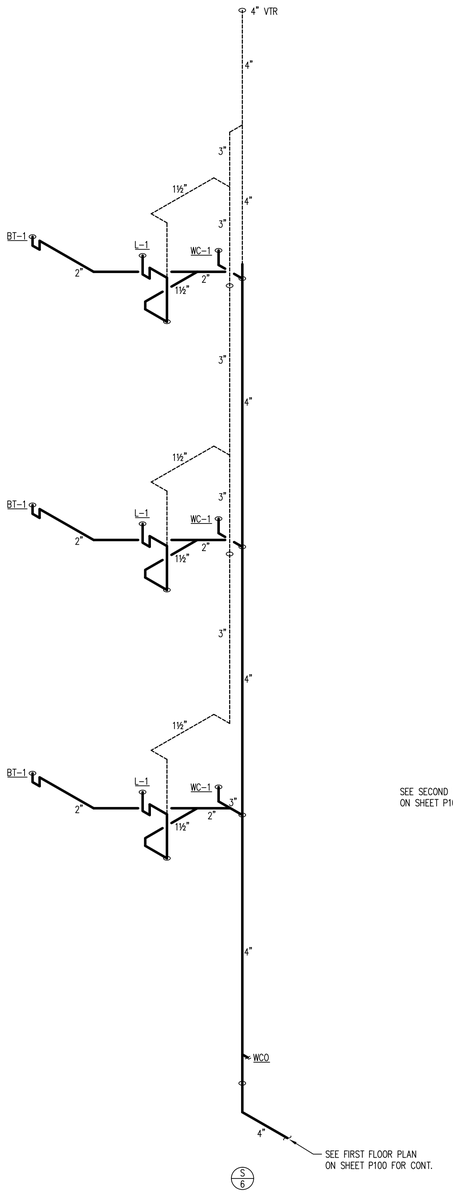
Drawing Title

Plumbing
Riser Diagrams
Sanitary

Phase
Construction Documents

Project No.	14-081	Sheet No.	P301
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites



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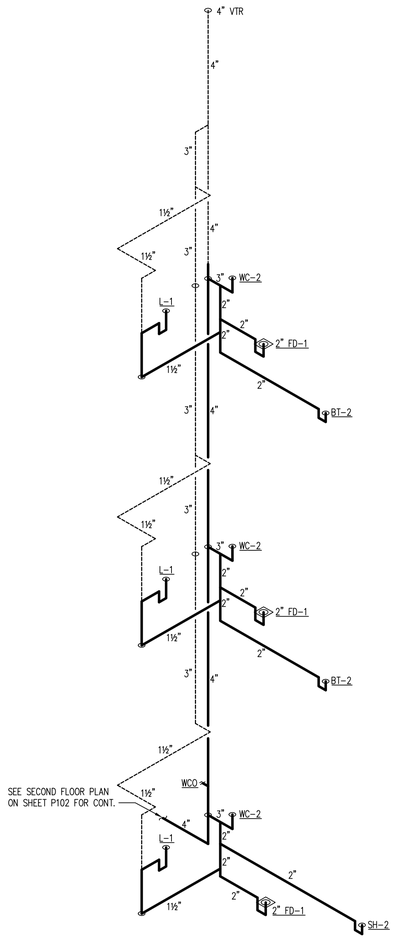

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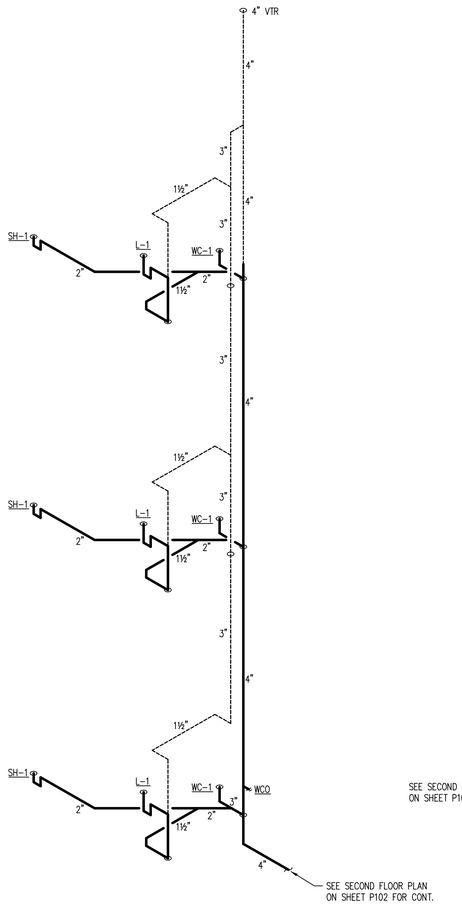

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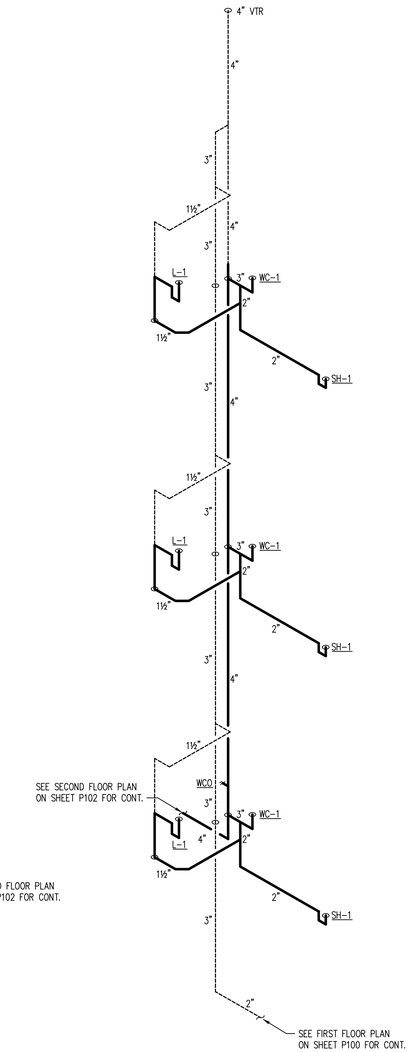

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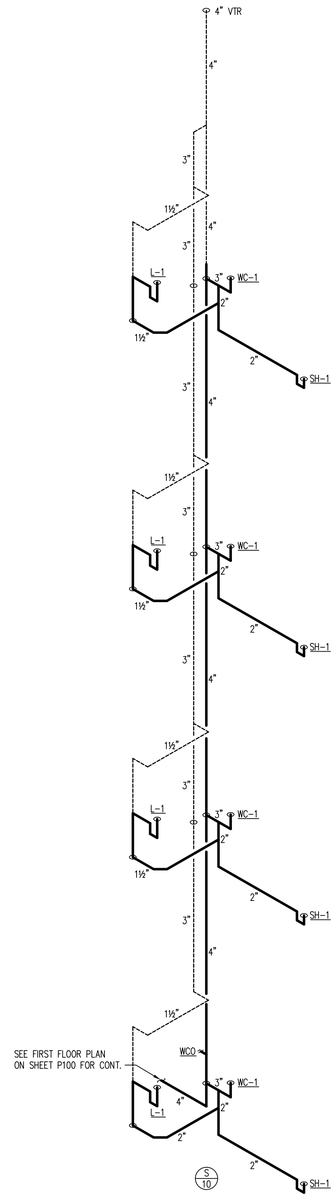

S 10

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P201 AND P202 FOR ADDITIONAL INFORMATION.

SEE FIXTURE SCHEDULE ON SHEET P002 FOR SIZES OF SANITARY AND VENT CONNECTIONS TO INDIVIDUAL FIXTURES.

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2/27/2015

KEY PLAN

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Holiday Inn Express & Suites

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Southcrest Subdivision
Southaven, MS 38671

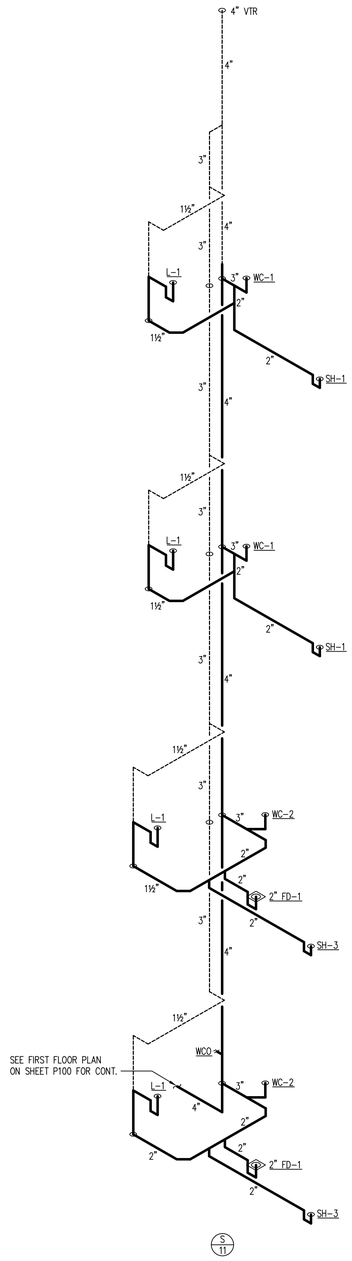
Drawing Title

Plumbing
Riser Diagrams
Sanitary

Phase
Construction Documents

Project No.	14-081	Sheet No.	P302
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites



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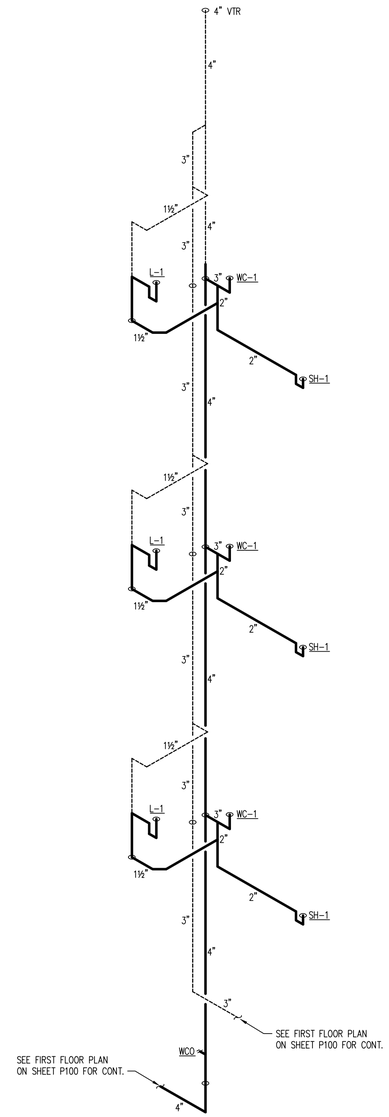

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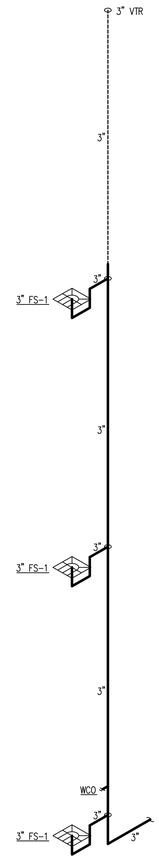

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13

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P201 AND P202 FOR ADDITIONAL INFORMATION.

SEE FIXTURE SCHEDULE ON SHEET P002 FOR SIZES OF SANITARY AND VENT CONNECTIONS TO INDIVIDUAL FIXTURES.

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2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

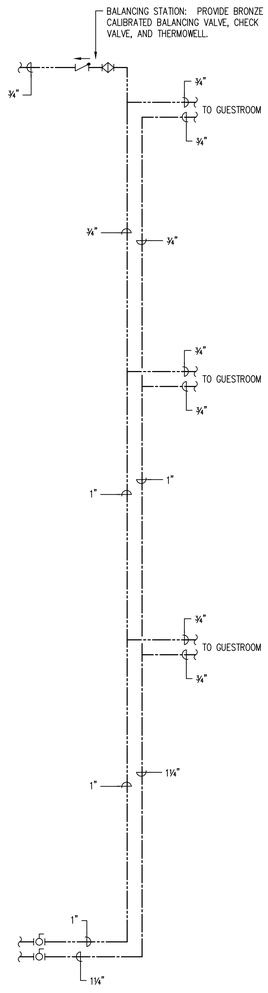
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Riser Diagrams
Sanitary

Phase
Construction Documents

Project No.	14-081	Sheet No.	P303
Prepared by	MJS		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites



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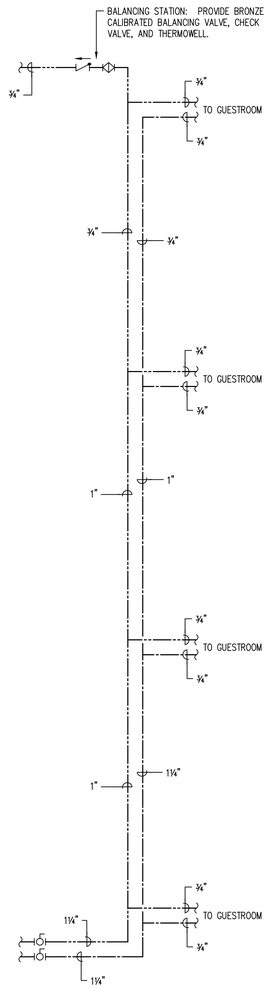

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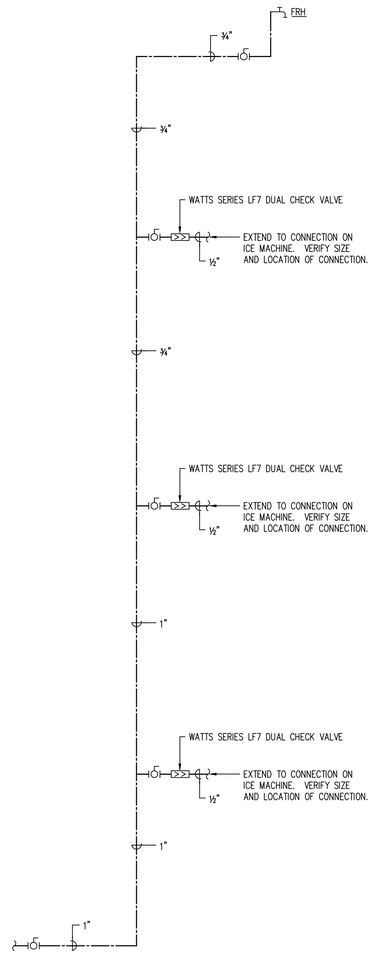

W 3

SEE ENLARGED TYPICAL GUEST ROOM PLANS ON SHEETS P.203 AND P.204 FOR PIPING IN GUEST ROOMS.

SEE FIRST FLOOR PLAN ON SHEET P.101 AND FOURTH FLOOR PLAN ON SHEET P.104 FOR CONTINUATION OF ALL RISERS ON FIRST FLOOR AND FOURTH FLOOR.

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EDWIN DEAN SLAY — REGISTERED PROFESSIONAL ENGINEER — 20706 — STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
Plumbing
Riser Diagrams
Water

Phase
Construction Documents

Project No.	14-081
Prepared by	MJS
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	P304

Holiday Inn Express & Suites

ELECTRICAL SPECIFICATIONS

PART 1: GENERAL

A. PROVIDE ALL WORK AND MATERIALS FOR THE INSTALLATION OF COMPLETE WIRING SYSTEMS AS SPECIFIED HEREIN AND INDICATED ON THE DRAWINGS.

B. ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.

C. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.

D. THE ELECTRICAL CONTRACTOR SHALL HAVE A MINIMUM OF 5 YEARS COMMERCIAL EXPERIENCE TO BE QUALIFIED TO PERFORM THE WORK HERE-IN. ANY CONTRACTOR THAT DOES NOT HAVE THE EXPERIENCE REQUIRED MAY BE REMOVED FROM THE PROJECT AT ANYTIME.

E. WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, OSHA, STATE BUILDING CODE AND ALL OTHER APPLICABLE LOCAL REQUIREMENTS. ALL WORK SHALL COMPLY WITH THE LATEST ADDITION OF NECA STANDARDS OF INSTALLATION.

F. ALL MATERIALS, DEVICES, AND APPLIANCES SHALL BE NEW, EXCEPT WHERE OTHERWISE NOTED, AND SHALL BE LISTED BY AN APPROVED TESTING AGENCY WHERE SUCH A LISTING IS AVAILABLE. FACTORY ASSEMBLED EQUIPMENT SHALL BE LISTED AND LABELED AS AN ASSEMBLY, ANY EQUIPMENT NOT LISTED SHALL HAVE PRIOR APPROVAL FROM THE LOCAL AUTHORITY HAVING JURISDICTION. ALL MATERIALS SHALL COMPLY WITH APPLICABLE ANSI, IEEE AND NEMA STANDARDS.

G. PROVIDE ALL CUTTING, PATCHING, CHANNELING AND CHASING FOR INSTALLATION OF WORK AND REPAIR ANY DAMAGE OF EXISTING OR NEW INSTALLATIONS AT THE CONTRACTORS EXPENSE.

H. SHOP DRAWINGS AND CATALOG DATA SHALL BE SUBMITTED FOR APPROVAL PRIOR TO BEGINNING WORK. SUBMIT FOUR COPIES OF SHOP DRAWINGS FOR LIGHTING FIXTURES, LAMPS, BALLASTS AND PANELBOARDS. SUBMIT FOUR COPIED OF CATALOG DATA FOR DISCONNECT SWITCHES AND WIRING DEVICES.

I. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR PANELBOARDS, WIRING TROUGHS, AND FUSED SWITCHES, WHITE LETTERS ON BLACK FOR 120/208 VOLT SYSTEMS. LABEL ALL BREAKERS INSIDE THE PANEL NEXT TO THE BREAKER USING THE NUMBER SCHEME INDICATED ON THE DRAWINGS.

J. AN ELECTRICAL INSPECTION CERTIFICATE SHALL BE ISSUED BY THE LOCAL INSPECTION AUTHORITIES BEFORE APPROVAL FOR FINAL PAYMENT.

K. THE CONDUIT AND NEUTRAL SYSTEM SHALL BE GROUNDED AT THE MAIN SERVICE EQUIPMENT. GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED PER N.E.C. ARTICLE 250 AND AS INDICATED ON THE DRAWINGS.

L. WIRING SHALL BE TESTED FOR CONTINUITY AND GROUNDS BEFORE BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.

M. IF, DURING THE COURSE OF WORK, THE ELECTRICAL CONTRACTOR DISCOVERS A PROBLEM WITH THE PERFORMANCE OF THE INSTALLATION RELATIVE TO THE PLANS AND SPECIFICATIONS OR NEC OR OTHER CODES, THE CONTRACTOR SHALL IMMEDIATELY BRING THE PROBLEM TO THE ATTENTION OF THE ARCHITECT OR ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK.

N. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS, UNLESS OTHERWISE NOTED, EXCEPT FOR CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING FOR SUCH EQUIPMENT SHALL BE PROVIDED BY THE RESPECTIVE DISCIPLINE.

O. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE POWER COMPANY. WHERE MORE THAN ONE SERVICE IS SUPPLIED TO A BUILDING, PROVIDE IDENTIFICATION AT EACH SERVICE PER NEC 230-2(B) AND AS INDICATED ON THE DRAWINGS.

P. COORDINATE LOCATION AND REQUIREMENTS FOR TELEPHONE SERVICE WITH THE TELEPHONE COMPANY AND AS INDICATED ON THE DRAWINGS.

Q. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PROVIDING TEMPORARY POWER.

PART 2: RACEWAY

A. CONDUIT SHALL BE ZINC-COATED EMT INDOORS. EMT FITTINGS SHALL BE STEEL SCREW. MINIMUM SIZE SHALL BE ½"C, UNLESS OTHERWISE NOTED. USE SCHEDULE 40 PVC OUTDOORS ABOVE 8'-0" OR BELOW GRADE. USE IMC WHERE REQUIRED BY CODE OR EXPOSED BELOW 8'-0".

B. SUPPORT ALL CONDUITS WITH STRAPS AND CLAMPS. RUN ALL CONDUIT PARALLEL OR PERPENDICULAR TO BUILDING WALLS.

C. JUNCTION AND PULL BOXES SHALL BE CODE GAUGE GALVANIZED SHEET METAL.

D. LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED FOR EQUIPMENT CONNECTIONS, BUT NOT AS A WIRING METHOD OTHERWISE.

E. MC CABLE MAY BE USED AS A WIRING METHOD WHERE ALLOWED BY CODE.

F. RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE-RATED WALLS SHALL BE FILLED WITH IMPERVIOUS, NON-SHRINK GROUT SUFFICIENTLY TIGHT TO PREVENT THE TRANSFER OF SMOKE, WATER, AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT CURB WHERE POSSIBLE.

G. CONDUIT INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATER-TIGHT BY USE OF POLYTETRA-FLUOROETHYLENE TAPE. AAPPROVED SEALS SHALL BE PROVIDED IN HAZARDOUS LOCATIONS AS REQUIRED BY THE N.E.C.

PART 3: CONDUCTORS

A. ALL CONDUCTORS SHALL BE SINGLE CONDUCTOR COPPER. THHN/THWN, SOLID FOR SIZES #14 THROUGH #10. THHN/THWN STRANDED FOR SIZES #8 AND LARGER.

B. BRANCH CIRCUITS SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14 AWG.

C. CONDUCTORS SHALL BE COLOR CODED BLACK/RED/BLUE FOR 120/208 VOLT SYSTEMS FOR A, B, AND C PHASES, RESPECTIVELY.

D. WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY UL LABEL.

E. ALL BRANCH CIRCUIT CONDUITS OR CABLE ASSEMBLIES SHALL CONTAIN AN INSULATED GREEN GROUNDING CONDUCTOR SIZED PER NEC 250-122.

F. ALL CONDUCTORS INSTALLED IN VERTICAL RACEWAYS SHALL BE SUPPORTED AT INTERVALS AS REQUIRED PER NEC ARTICLE 300-19.

G. ALL EQUIPMENT AND DEVICE TERMINATIONS SHALL BE UL LISTED FOR USE WITH 75°C INSULATED CONDUCTORS AT THEIR 75°C AMPACITY.

H. PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR IN ALL BRANCH CIRCUITS.

PART 4: WIRING DEVICES

A. WIRING DEVICES SHALL BE ALMOND WITH MATCHING PLASTIC COVER PLATES, SPECIFICATION GRADE AS INDICATED BELOW, EQUAL TO THE COOPER QUALITY INDICATED.

TOGGLE SWITCHES SHALL BE AS FOLLOWS:

SINGLE POLE 20 AMP	COOPER 1221
DOUBLE POLE 20 AMP	COOPER 1222
THREE WAY 20 AMP	COOPER 1223
FOUR WAY 20 AMP	COOPER 1224
SINGLE POLE/KEY 20 AMP	COOPER 1221L
DOUBLE POLE/KEY 20 AMP	COOPER 1222L
THREE WAY/KEY 20 AMP	COOPER 1223L
FOUR WAY/KEY 20 AMP	COOPER 1224L

DUPLEX RECEPTACLES SHALL HAVE A NYLON FACE AND SHALL BE AS FOLLOWS:

15 AMP DUPLEX	COOPER 5252
20 AMP DUPLEX	COOPER 5362
15 AMP DUPLEX-GFCI	COOPER GF5262
20 AMP DUPLEX-GFCI	COOPER GF5362
15 AMP DUPLEX-IG	COOPER IG5252
20 AMP DUPLEX-IG	COOPER IG5362
15 AMP DUPLEX-TVSS	COOPER 5262S
20 AMP DUPLEX-TVSS	COOPER 5362S

B. DUPLEX RECEPTACLES ON DEDICATED CIRCUIT SHALL BE 20 AMP. OTHER DUPLEX RECEPTACLES MAY BE 15 AMP, UNLESS OTHERWISE NOTED.

C. OUTLET BOXES SHALL NOT BE MOUNTED BACK-TO-BACK.

D. A MAXIMUM OF 10 RECEPTACLES SHALL BE ON EACH BRANCH CIRCUIT.

E. WEATHERPROOF COVERS SHALL HAVE A LID SO THAT PLUGS MAY BE INSTALLED WITHOUT COMPROMISING THE WP FUNCTION, EQUAL TO INTERMATIC GUARDIAN ONE #WP1020C.

F. ALL OUTLETS (INCLUDING TELEPHONE, CABLE TV AND DATA) SHALL HAVE COVER PLATES, BLANK IF NOT USED.

PART 5: DISCONNECT SWITCHES

A. DISCONNECT SWITCHES SHALL BE HEAVY-DUTY TYPE IN NEMA 1 ENCLOSURES (UNLESS OTHERWISE INDICATED), FUSED OR NON-FUSED AS INDICATED. FUSED SWITCHES SHALL HAVE REJECTION-TYPE FUSE CLIPS. SWITCHES SHALL BE SQUARE D, OR EQUAL. FUSES SHALL BE CLASS R-5, TIME DELAY. A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER.

PART 6: PANELBOARDS

A. PANELBOARDS SHALL BE DEAD-FRONT SAFETY TYPE. ALL CIRCUIT BREAKERS SHALL BE MOLDED-CASE, BOLT-ON, AUTOMATIC THERMAL MAGNETIC TYPE, CALIBRATED FOR 40°C, OR AMBIENT COMPENSATION. CABINET SHALL BE 20 INCHES WIDE MINIMUM, WITH NOT LESS THAT 4-INCH WIRING GUTTERS AT TOP, SIDES, AND BOTTOM, SQUARE D "NF", "NQOD", OR EQUAL. BUS SHALL BE ALUMINUM WITH RATINGS AS INDICATED ON DRAWINGS. LUGS SHALL BE SIZED TO ACCOMMODATE CONDUCTORS INDICATED ON THE POWER RISER DIAGRAM.

B. PROVIDE HANDLE LOCK-ON DEVICES ON ALL CIRCUIT BREAKERS CONNECTED TO EMERGENCY, EXIT, AND NIGHT LIGHTING, FIRE ALARM, TELEPHONE AND SECURITY SYSTEMS.

C. CIRCUIT BREAKERS USED FOR SWITCHING OF LIGHTING OR SIGN CIRCUITS SHALL BE SWITCHING DUTY RATED AND SHALL BE MARKED "SWD".

PART 7: LIGHT FIXTURES

A. CATALOG NUMBERS GIVEN DENOTE MINIMUM QUALITY AND PERFORMANCE REQUIRED. EQUAL EQUIPMENT BY OTHER MANUFACTURERS IS ACCEPTABLE AS INDICATED ON THE LIGHT FIXTURE SCHEDULE.

B. H.I.D. BALLASTS SHALL BE HIGH POWER FACTOR WITH QUIETEST SOUND RATING.

C. LAY-IN FIXTURES SHALL BE SUSPENDED FROM STRUCTURE WITH 2 WIRES AT OPPOSITE CORNERS. DO NOT SUPPORT FROM CEILING GRID.

D. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHT FIXTURES.

E. ALL RECESSED LIGHTING FIXTURES SHALL BE THERMALLY PROTECTED.

F. COMPACT FLUORESCENT BALLASTS SHALL BE ELECTRONIC WITH END OF LIFE PROTECTION.

PART 8: TELEPHONE/DATA SYSTEM

A. FURNISH AND INSTALL A COMPLETE TELEPHONE/DATA CONDUIT SYSTEM AS INDICATED ON THE DRAWINGS. ALL OUTLET BOXES FOR TELEPHONE AND/OR DATA JACKS SHALL BE DOUBLE GANG WITH A SINGLE-GANG OPENING.

B. PULL AND LEAVE IN EACH CONDUIT ONE PULL CORD FOR PULLING IN CABLE. ALL WIRING, OUTLETS AND EQUIPMENT SHALL BE PROVIDED AND INSTALLED BY THE OWNERS TELE/DATA SUPPLIER.

C. TELEPHONE SERVICE CONDUITS SHALL BE PROVIDED TO THE PROPERTY LINE OR AS INDICATED ON THE DRAWINGS.

D. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A #6 AWG GREEN COPPER WIRE IN A 3/4" CONDUIT FROM THE NEAREST COLD WATER METAL MAIN TO A LUG AT THE TELEPHONE/DATA BACKBOARD.

PART 9: LIGHTING CONTROLS

A. FURNISH AND INSTALL AN ELECTRONIC TIME CONTROLLER WHERE INDICATED. CONTROLLER SHALL BE CAPABLE OF SWITCHING 40 AMPERES PER POLE CONTINUOUSLY AT 120 VOLTS AND SHALL BE SPST (DPST, 3PST, DPTDT, SPDT, AS REQUIRED).

B. LIGHTING CONTACTORS SHALL SWITCH A LOAD AT 120 VOLTS, 60 HZ AND SHALL HAVE THE NUMBER OF POLES INDICATED ON THE DRAWINGS. THE CONTACTOR SHALL BE CONTINUOUSLY RATED 20 AMPERES PER POLE FOR ALL TYPES OF BALLAST AND TUNGSTEN LIGHTING AND RESISTANCE LOADS.

C. ALL LIGHTING CONTACTORS SHALL BE ELECTRICALLY HELD AND HAVE A NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED.

PART 10: FIRE ALARM SYSTEM

A. SYSTEM SHALL BE A CENTRALIZED, ANALOG, ADDRESSABLE, FULLY ELECTRONICALLY SUPERVISED (INCLUDING AUXILIARY SYSTEMS INTERCONNECT WIRING) SYSTEM LISTED BY UL IN COMPLIANCE WITH ALL APPLICABLE NFPA 72 AND OTHER STANDARDS AS WELL AS THE AMERICAN'S WITH DISABILITIES ACT (ADA). ALL FINAL CONNECTIONS, TESTING AND ADJUSTMENTS SHALL BE PERFORMED BY OR UNDER DIRECT SUPERVISION OF AN AUTHORIZED FACTORY REPRESENTATIVE. SYSTEM SHALL BE SIMPLEX, NOTIFIER, EDWARDS OR EQUAL, AS ACCEPTED BY THE ENGINEER. SYSTEM SHALL HAVE A 24HR MINIMUM BATTERY BACKUP. OR NEW DEVICES SHALL BE CONNECTED TO THE EXISTING FIRE ALARM SYSTEM IN COMPLIANCE WITH ALL APPLICABLE NFPA 72 AND OTHER STANDARDS AS WELL AS THE AMERICAN'S WITH DISABILITIES ACT (ADA). ALL FINAL CONNECTIONS, TESTING AND ADJUSTMENTS SHALL BE PERFORMED BY OR UNDER DIRECT SUPERVISION OF AN AUTHORIZED FACTORY REPRESENTATIVE. NEW DEVICES SHALL BE COMPATIBLE WITH THE EXISTING FIRE ALARM SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY EXACT SYSTEM MANUFACTURER AND TYPE. THE FIRE ALARM SUPPLIER SHALL VERIFY THE EXISTING SYSTEM CAN ACCOMMODATE THE NEW DEVICES PRIOR TO BID. WHEN THE EXISTING SYSTEM CAN NOT HANDLE THE DEVICES, THE FIRE ALARM SUPPLIER SHALL INCLUDE IN THEIR PRICE THE ADDITION OF NOTIFICATION APPLIANCE CIRCUITS (NAC) POWER EXTENDERS AS REQUIRED. SUPPLIER SHALL INCLUDE THE UPDATING OF EXISTING STROBES IN THE RENOVATED AREA SO THAT ALL STROBES, NEW AND EXISTING, ARE SYNCHRONIZED.

B. INITIATING DEVICE ACTIVATION SHALL CAUSE OPERATION OF THE PROPER ZONE ALARM CIRCUIT IN THE CONTROL PANEL, AND OPERATE ALL AUDIBLE INDICATING ALARMS. ALL AIR HANDLING UNITS SHALL BE STOPPED UPON ANY ALARM INPUT. EACH AIR HANDLER UNIT SHALL BE PROVIDED WITH A SYSTEM CONTROLLED RELAY TO EFFECT SHUTDOWN. ALL ALARM DEVICES AND LAMPS SHALL CONTINUE TO OPERATE UNTIL THE INITIATING DEVICE IS RESET. SUBSEQUENT ALARMS SHALL RESOUND THE SYSTEM. AN AUDIBLE AND VISUAL SIGNAL SHALL INDICATE SYSTEM TROUBLE. THE CONTROL PANEL SHALL PROVIDE FOR ACTIVATING A UL LISTED CENTRAL STATION SIGNAL.

C. MANUAL STATIONS SHALL BE NON-CODED, WITH PULL LEVER AND GLASS ROD, SEMI-FLUSH MOUNTED. COMBINATION LIGHT AND HORN SIGNALS SHALL BE FLUSH MOUNTED. WIRING SHALL BE IN CONDUIT AS PREVIOUSLY SPECIFIED, #14 AWG MINIMUM, THHN, THE USE OF PLENUM RATED CABLE IS NOT ALLOWED. ALL JUNCTION BOXES USED FOR THE FIRE ALARM SYSTEM SHALL BE PAINTED RED.

D. SPRINKLER SYSTEM TAMPER SWITCHES SHALL BE CONNECTED INTO A COMMON ZONE WHICH SHALL DISTINGUISH BETWEEN A CIRCUIT FAULT AND A CLOSED VALVE. A CLOSED VALVE SHALL BE INDICATED AS AN ALARM CONDITION, BUT WILL NOT ACTIVATE THE AUDIBLE-VISUAL DEVICES OR CAUSE A SIGNAL TO BE TRANSMITTED TO THE CENTRAL STATION.

E. WHERE REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION, THE FIRE ALARM SUPPLIER SHALL A SEPARATE SET OF PLANS FOR A SEPARATE FIRE ALARM PERMIT. THE ENGINEER IS NOT RESPONSIBLE FOR PRODUCING THESE DRAWINGS OR FOR SUBMITTING FOR THIS PERMIT, IT IS THE SOLE RESPONSIBILITY OF THE FIRE ALARM SUPPLIER.

F. ALL STROBES LOCATED WITHIN THE SAME AREA SHALL BE SYNCHRONIZED.

PART 11: FIRE STOPPING

A. ALL PENETRATIONS OF NON-RATED PENETRATIONS SHALL BE SEALED WITH RATED MATERIALS MEETING ASTM E-814.

B. PROVIDE FIRE STOPPING DEVICE(S) OR SYSTEM(S) WHICH HAVE BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE THE APPROPRIATE DEVICE(S) OR SYSTEM(S) WITH AN "F" RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

C. DEVICE(S) AND/OR SYSTEM(S) SHALL BE BY HILTI, 3M OR EQUIVALENT.

D. WHERE OPENINGS FOR INSTALLATION OF ELECTRICAL BOXES EXCEEDS 16 SQUARE INCHES IN RATED WALLS OR PARTITIONS, THE OPENING SHALL BE PROTECTED AS REQUIRED BY THE APPROPRIATE WALL LISTING TYPE.

SEISMIC RESTRAINT OF ELECTRICAL SYSTEMS – DESIGN/BUILD SPECIFICATION

THE ELECTRICAL CONTRACTOR SHALL RETAIN THE SERVICES OF A STRUCTURAL ENGINEER TO DETERMINE SITE CLASSIFICATION AND SEISMIC RESTRAINT REQUIREMENTS FOR ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ETC. REQUIRED FOR THIS PROJECT. WHERE REQUIRED, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RESTRAINTS TO RESIST THE EARTHQUAKE EFFECTS ON THE ELECTRICAL SYSTEM. THE REQUIREMENTS FOR THESE RESTRAINTS ARE FOUND IN THE INTERNATIONAL BUILDING CODE, 2006.

THE ELECTRICAL CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA TO DESIGN SEISMIC RESTRAINT ELEMENTS REQUIRED FOR THIS PROJECT. THE ENGINEER'S COMPUTATIONS, BEARING HIS PROFESSIONAL SEAL, SHALL ACCOMPANY SHOP DRAWINGS WHICH SHOW INTERNATIONAL BUILDING CODE, 2006 COMPLIANCE. COMPUTATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO THE PURCHASING OF MATERIALS, EQUIPMENT, SYSTEMS AND ASSEMBLIES.

THE ELECTRICAL CONTRACTOR SHALL INCLUDE SHOP DRAWINGS OF THE SPECIFIC METHODS OF SEISMIC RESTRAINT TO BE USED FOR THIS PROJECT PRIOR TO INSTALLATION OF PIPING, DUCTWORK AND EQUIPMENT.

INTERNAL SEISMIC RESTRAINT ELEMENTS OF MANUFACTURED EQUIPMENT SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER RETAINED BY THE MANUFACTURER. SUCH CERTIFICATE APPLIES ONLY TO INTERNAL ELEMENTS OF THE EQUIPMENT. ALL EQUIPMENT ANCHORAGE REQUIREMENTS SHALL BE COORDINATED WITH THE BUILDING STRUCTURE AND SHALL BE COMPATIBLE THERETO. ALL SUCH ANCHORAGE SHALL BE REVIEWED BY THE PROJECT'S ELECTRICAL ENGINEER PRIOR TO INSTALLATION.

THE PROFESSIONAL ENGINEER RETAINED BY THE ELECTRICAL CONTRACTOR FOR SEISMIC RESTRAINT CALCULATIONS AND DESIGN SHALL VISIT THE JOB SITE UPON COMPLETION OF THE SEISMIC RESTRAINT INSTALLATION. THIS ENGINEER SHALL PROVIDE IN WRITING, VERIFICATION OF COMPLIANCE WITH THE APPROVED SEISMIC SUBMITTAL. THIS ENGINEER SHALL ALSO PERFORM ANY SPECIAL INSPECTIONS REQUIRED BY THE INTERNATIONAL BUILDING CODE, 2006. THIS VERIFICATION SHALL BEAR THE ENGINEER'S PROFESSIONAL SEAL. JOB SITE INSPECTION BY OTHER THAN THIS ENGINEER IS NOT ACCEPTABLE.

REVIEW OF THE SEISMIC DESIGN AND SHOP DRAWINGS BY THE PROJECT'S ELECTRICAL ENGINEER, STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY WITH THE SEISMIC OR ANY OTHER REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2006.

SURGE PROTECTION DEVICE SPECIFICATION

A. SPD SHALL COMPLY WITH THE FOLLOWING STANDARDS:
1. UNDERWRITERS LABORATORIES, INC. STANDARD NO. 1449, SECOND EDITION.
2. IEEE STANDARD C62.11-1987;C62.33-1982;C62.41-1991; AND C62.45-1987.
3. NATIONAL ELECTRICAL CODE ARTICLE 240-21 (EQUIPMENT COMPLYING WITH TAP CONDUCTOR RULES) AND ARTICLE 110-9 (INTERRUPTING CAPACITY).
4. NEMA LS-1,1992.

B. SPECIFICATIONS FOR THE LIFE OF THE UNIT SHALL BE INCLUDED IN TERMS OF THE NUMBER OF "HITS" EACH UNIT CAN WITHSTAND IN THE LINE-TO-NEUTRAL MODE AT SPECIFIC SURGE CURRENT LEVELS BEFORE UNIT FAILURE UTILIZING THE CATEGORY C2 8X20 MICROSECOND CURRENT WAVEFORM TEST.

C. JOULE RATINGS SHALL BE INCLUDED ON THE SUBMITTALS.

D. SUBMIT TEST RESULTS (GRAPHS) FOR THE APPROPRIATE NEMA LS1 TESTS FOR ALL MODELS SUBMITTED SHOWING ACTUAL LET THROUGH VOLTAGES (USING 6" LEAD LENGTH AS MEASURED FROM THE POINT WHERE THE CONNECTION CONDUCTORS EXIT THE SPD ENCLOSURE).
1. LEAD LENGTH MUST BE SPECIFIED AS WELL AS ALL APPLICABLE TEST PARAMETERS NECESSARY TO PERFORM A COMPLETE EVALUATION OF TEST RESULTS.
2. H1 & H2 UNITS SHALL BE STATIC TESTED.
3. L1 & L2 UNITS SHALL BE DYNAMIC TESTED @ 90 DEGREE PHASE ANGLE.

E. UNITS SHALL CONSIST OF PARALLEL CONNECTIONS ONLY. SERIES ELEMENTS ARE NOT ACCEPTABLE.

F. THE TRANSIENT SUPPRESSION DEVICE MUST BE UL LISTED UNDER THE UL 1449, JULY 1987 REVISION, AS A COMPLETE ENTITY. LISTED UL LET THROUGH VOLTAGE RATING MUST BE CLEARLY STATED.

G. UNIT SHALL EMPLOY METAL OXIDE VARISTORS AS THE PRIMARY SUPPRESSION TECHNOLOGY.

H. SYSTEM VOLTAGES:
1. 480Y/277V, 3ø, 4 WIRE
2. 208Y/120V, 3ø, 4 WIRE

I. THE FOLLOWING MODELS ARE ACCEPTABLE (OR APPROVED EQUAL):
1. TYPE L1(120/208V, 3ø,4 WIRE SERVICE PANEL DEVICE) (400kA PER PHASE 200kA MIN. PER MODE.)
   a. CURRENT TECHNOLOGY #TG 200 120/208 3GY L1
   b. PSP #H2C400-MHWID
   c. CUTLER HAMMER #CPS-S3-208Y-SD-RSX-CX
   d. LIEBERT #LM 200-120Y-ANSE
2. TYPE L2(120/208V, 3ø,4 WIRE BRANCH PANEL DEVICE) (160kA PER PHASE, 80kA MIN. PER MODE.)
   a. CURRENT TECHNOLOGY #TG 100 120/208 3GY
   b. PSP #H2C200-04-N
   c. CUTLER HAMMER #CPS-BX-208Y-SD-RSX-CX
   d. LIEBERT #LM 100-120Y-ANSE

J. ADDITIONAL FEATURES
1. UNLIMITED KVA OR AMPERE RATING OF PROTECTED LOAD.
2. LED INDICATORS SHALL BE UTILIZED TO INDICATE FAILURE OF PROTECTION MODULES.
3. ALL UNITS SHALL BE ENCLOSED IN A WALL MOUNTABLE HEAVY DUTY ENCLOSURE EQUIVALENT TO A NEMA 12 RATING.
4. 5 YEAR UNCONDITIONAL WARRANTY.

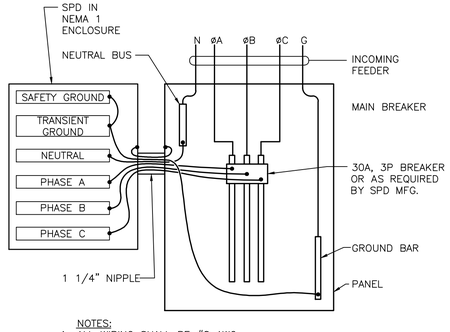
K. UNITS SHALL BE INSTALLED OF THE SAME VOLTAGE RATING AS THE INTENDED PROTECTED EQUIPMENT.

L. INSTALL UNITS WITH SHORTEST POSSIBLE LEAD LENGTH (MAXIMUM OF 18" FOR TYPE H1 AND H2 UNITS, MAXIMUM OF 6" FOR TYPE L1 AND L2 UNITS). WHERE CONDUIT IS NECESSARY TO INSTALL LEAD CONNECTION CONDUCTORS, LEADS SHALL BE INSTALLED IN RIGID NON-METALLIC CONDUIT AND SHALL NOT CONTAIN UNNECESSARY BENDS OR LOOPS.

M. INSTALL ALL H1 AND L1 UNITS ON OR IMMEDIATELY ADJACENT TO THE DISTRIBUTION SECTION OF THE SERVICE GEAR ENCLOSURES WHERE THE CONNECTION LEAD LENGTH CAN BE KEPT AS SHORT AS POSSIBLE BUT ALSO SO THAT THE INSTALLATION WILL NOT INTERFERE WITH REMOVAL OF SERVICE GEAR PANELS. PROVIDE A DEDICATED 30A,3-POLE CIRCUIT BREAKER IN SERVICE GEAR FOR CONNECTION TO EACH UNIT.

N. INSTALL ALL H2 AND L2 UNITS IMMEDIATELY ADJACENT TO THE PANEL ENCLOSURES.

O. SPD SHALL HAVE A SHORT CIRCUIT RATING EXCEEDING THE FAULT CURRENT AVAILABLE AT THE SERVICE ENTRANCE POINT.



NOTES:
1. ALL WIRING SHALL BE #8 AWG.
2. AVOID SHARP BENDS IN WIRES. ALL WIRE LENGTHS SHALL NOT EXCEED 18" (WHERE POSSIBLE).
3. SEE SPD SPECIFICATION FOR EXACT TYPE (H1, H2, L1, L2) FOR LOCATION AS INDICATED ON THE POWER RISER DIAGRAM.

1 E001 SPD CONNECTION DETAIL
NO SCALE

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REVISIONS		
No.	Date	Description
1		

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JOHN DEANDERK
LICENSED PROFESSIONAL ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL SPEICIFICATIONS

Phase
Construction Documents

Project No.	14-081	Sheet No.	E001
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

SYMBOL SCHEDULE

CONDUIT AND/OR WIRING SYSTEM CONCEALED IN CONSTRUCTION IN FINISHED AREAS, EXPOSED IN UNFINISHED AREAS. NUMBER OF TICKS INDICATED NUMBER OF CONDUCTORS, HOT AND NEUTRAL. NO TICKS INDICATES TWO CONDUCTORS (GROUND WIRES NOT SHOWN)

CONDUIT AND/OR WIRING SYSTEM CONCEALED BELOW FLOOR OR FLOOR SLAB.

CONDUIT TURNING UP

CONDUIT TURNING DOWN

CONDUIT STUB. TERMINATE WITH BUSHING OR CAP IF UNDERGROUND.

BREAK IN CONDUIT, SEE PLAN FOR CONTINUATION.

NON-RIGID RACEWAY SYSTEM

BRANCH CIRCUIT HOMERUN TO PANEL.

J JUNCTION BOX SIZED PER NEC.

S SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER 1221, OR EQUAL.

S_3 THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL.

S_D DIMMER SWITCH, 1200W, 120V. LUTRON NT-SERIES, UNLESS OTHERWISE NOTED. PROVIDE DOUBLE GANG J-BOX FOR DIMMERS 1600W AND ABOVE.

S_M FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER WITH O.L.'S

S_{OC} SENSOR SWITCH OR EQUAL. WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY MANUAL ON-AUTO OFF-30MIN. TIMEOUT.

S_{2OC} SENSOR SWITCH OR EQUAL. WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY CAPABLE OF INBOARD/OUTBOARD SWITCHING. MANUAL ON-AUTO OFF-30MIN. TIMEOUT.

OC SENSOR SWITCH OR EQUAL. CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY MANUAL VIA WALL SWITCH AUTO OFF-30MIN. TIMEOUT. 2000 SQFT COVERAGE. PROVIDE POWER PACKS AND LOW VOLTAGE CONNECTIONS AS REQUIRED.

DUPLEX RECEPTACLE, 15 AMP, 120 VOLT (USE 20 AMP FOR SINGLE RECEPTACLE ON A CIRCUIT.) MOUNT 18" A.F.F., U.O.N., COOPER 5252 OR EQUAL.

DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER BACKSPLASH, OR AT 48" A.F.F. U.O.N., COOPER 5252 OR EQUAL.

DOUBLE DUPLEX RECEPTACLE MOUNT AT 18" A.F.F. TWO NEMA 5-15R DUPLEX RECEPTACLES IN A COMMON BOX AND COVER PLATE.

GFCI GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.

EWC GROUND FAULT NEMA 5-20R DUPLEX RECEPTACLE FOR ELECTRIC WATER COOLER COORDINATE LOCATION WITH PLUMBING CONTRACTOR.

WP WEATHERPROOF RECEPTACLE. NEMA 5-15R DUPLEX. COVER SHALL BE COOPER #1991 WHERE MOUNTED HORIZONTAL AND #4966 WHERE MOUNTED VERTICAL.

DUPLEX RECEPTACLE MOUNTED IN "F" FOR FLOOR AND "C" FOR CEILING. FLOOR BOX SHALL BE CAST ALUMINUM WITH BRASS COVER.

D 125/250V, 30A, 3-POLE, 4-WIRE GROUNDING RECEPTACLE FOR DRYER BLACK WITH STAINLESS STEEL COVER, MOUNT 18" A.F.F., COOPER 5744N OR EQUAL.

M FRACTIONAL HORSEPOWER MOTOR CONNECTION.

3 MOTOR CONNECTION, NUMBER INDICATES HORSEPOWER.

CONNECTION FOR WATER HEATER, VOLTAGE, PHASE AND SIZE AS INDICATED.

CONNECTION FOR WALL HEATER, VOLTAGE, PHASE AND SIZE AS INDICATED.

TV TELEVISION OUTLET, DOUBLE GANG BOX WITH SINGLE GANG OPENING, MOUNT AT 18" A.F.F. WITH 3/4" E.C. TO ABOVE ACCESSIBLE CEILING. CABLE PROVIDED BY OTHERS.

TELEPHONE OUTLET, DOUBLE GANG BOX WITH SINGLE GANG OPENING, MOUNT AT 18" A.F.F. WITH 3/4" E.C. TO ABOVE ACCESSIBLE CEILING. CABLE PROVIDED BY OTHERS.

TELEPHONE OUTLET, DOUBLE GANG BOX WITH SINGLE GANG OPENING, MOUNT ABOVE COUNTER BACKSPLASH OR AT HEIGHT NOTED, ALL OTHER THE SAME AS ABOVE.

TELE/DATA OUTLET, DOUBLE GANG BOX WITH SINGLE GANG OPENING, MOUNT AT 18" A.F.F. WITH 3/4" E.C. TO ABOVE ACCESSIBLE CEILING. CABLE PROVIDED BY OTHERS.

TELE/DATA OUTLET, DOUBLE GANG BOX WITH SINGLE GANG OPENING, MOUNT ABOVE COUNTER BACKSPLASH OR AT HEIGHT NOTED, ALL OTHER THE SAME AS ABOVE.

TELE/DATA OUTLET MOUNTED IN "F" FOR FLOOR AND "C" FOR CEILING. FLOOR BOX SHALL BE CAST ALUMINUM WITH BRASS COVER.

LIGHTING AND/OR POWER PANEL BOARD, SURFACE MOUNTED WITH REQUIRED CODE CLEARANCE. SEE PANEL SCHEDULE FOR AMPERAGE.

LIGHTING AND/OR POWER PANEL BOARD, RECESSED MOUNTED WITH REQUIRED CODE CLEARANCE. SEE PANEL SCHEDULE FOR AMPERAGE.

DISTRIBUTION PANEL BOARD, SURFACE MOUNTED WITH REQUIRED CODE CLEARANCE. SEE PANEL SCHEDULE FOR AMPERAGE.

DISTRIBUTION PANEL BOARD, RECESSED MOUNTED WITH REQUIRED CODE CLEARANCE. SEE PANEL SCHEDULE FOR AMPERAGE.

PLYWOOD TELEPHONE OR DATA BACKBOARD. SIZE AS INDICATED ON THE RESPECTIVE RISER DIAGRAM.

WALL MOUNTED UTILITY METER.

ACRYLIC LENSED FLUORESCENT LIGHTING FIXTURE. LETTER IS FIXTURE TYPE, SEE LIGHT FIXTURE SCHEDULE. SUSPEND TWO OPPOSITE CORNERS WITH #10 AWG WIRE TO STRUCTURE AND ATTACH THE REMAINING TWO CORNERS TO THOSE WIRES. GRID ALONE SHALL NOT SUPPORT FIXTURE.

STRIP FLUORESCENT LIGHT FIXTURE. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE. INDEPENDENTLY SUPPORT FIXTURE TO STRUCTURE UNLESS MOUNTED ON STRUCTURAL CEILING.

ROUND RECESSED OR SURFACE MOUNTED LIGHT FIXTURE. LETTER INDICATES FIXTURE TYPE, SEE LIGHT FIXTURE SCHEDULE. INDEPENDENTLY SUPPORT FIXTURE TO STRUCTURE UNLESS SURFACE MOUNTED TO A STRUCTURAL CEILING.

WALL MOUNTED ROUND LIGHT FIXTURE. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

WALL MOUNTED LINEAR LIGHT FIXTURE. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

ROUND, RECESSED OR SURFACE MOUNTED WALL WASH FIXTURE. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE. INDEPENDENTLY SUPPORT FIXTURE TO STRUCTURE UNLESS SURFACE MOUNTED TO A STRUCTURAL CEILING.

DIRECTIONAL LIGHT FIXTURE, ARROW INDICATES DIRECTION OF AIMING. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE. FIXTURE USUALLY MOUNTED ON TRACK, BUT IF NOT INDEPENENTLY SUPPORT TO STRUCTURE.

LIGHTING TRACK WITH NUMBER OF FIXTURES AS INDICATED. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

FIXTURE WITH INTEGRAL 1100 LUMEN BATTERY INVERTER AND/OR ON EMERGENCY LIGHTING CIRCUIT. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE FOR TYPE AND FOR BATTERY REQUIREMENT. SUPPORT FIXTURES IN SAME MANNER AS LISTED ABOVE.

FIXTURE WITH INTEGRAL 600 LUMEN BATTERY INVERTER AND/OR ON EMERGENCY LIGHTING CIRCUIT. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE FOR TYPE AND FOR BATTERY REQUIREMENT. SUPPORT FIXTURES IN SAME MANNER AS LISTED ABOVE.

WALL MOUNTED EMERGENCY LIGHTING BATTERY PACK FIXTURE, SEE LIGHT FIXTURE SCHEDULE.

CEILING OR WALL MOUNTED EXIT SIGN RESPECTIVELY. SOLID SPACES INDICATE FACES. PROVIDE ARROWS AS INDICATED ON PLANS. SEE LIGHT FIXTURE SCHEDULE.

WALL MOUNTED COMBINATION EMERGENCY BATTERY PACK AND EXIT SIGN. SEE LIGHT FIXTURE SCHEDULE.

BOLLARD SITE LIGHT. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

SINGLE SQUARE LUMINAIRE POLE MOUNTED FIXTURE WITH ARM. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

SIMILAR TO ABOVE EXCEPT TWIN LUMINAIRE FIXTURE.

SINGLE ROUND LUMINAIRE POST TOP MOUNTED FIXTURE. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

GROUND MOUNTED FLOOD LIGHT, SEE DETAIL FOR MOUNTING. LETTER INDICATES TYPE, SEE LIGHT FIXTURE SCHEDULE.

PUSHBUTTON.

VISUAL DOORBELL

CR CARD READER.

F FIRE ALARM MANUAL STATION, MOUNT 48"A.F.F.

FH FIRE ALARM HORN-STROBE COMBINATION, 15CD, MOUNT 80" TO BOTTOM.

S FIRE ALARM STROBE, 15CD, MOUNT 80" TO BOTTOM.

S FIRE ALARM SMOKE/CARBON MONOXIDE DETECTOR, CEILING MOUNTED.

S_D FIRE ALARM DUCT SMOKE DETECTOR.

S_{SB} FIRE ALARM SYSTEM WALL MOUNTED COMBINATION SMOKE/CO DETECTOR, MULTI-MODE SOUNDER BASE

H FIRE ALARM HEAT DETECTOR, CEILING MOUNTED.

CO FIRE ALARM CARBON MONOXIDE DETECTOR, CEILING MOUNTED.

FS FIRE ALARM FLOW SWITCH ON SPRINKLER SYSTEM.

TS FIRE ALARM TAMPER SWITCH ON SPRINKLER SYSTEM.

DH FIRE ALARM DOOR HOLD OPEN DEVICE.

FIRE ALARM FIREMANS PHONE MOUNT 48"A.F.F.

SV SOLENOID VALVE CONNECTION.

FIRE ALARM DUCT DETECTOR REMOTE INDICATING LIGHT.

D/FS CONNECTION FOR FIRE/SMOKE DAMPER. PROVIDE 120V CONNECTION, RIB RELAY, AND FIRE ALARM CONNECTION AS REQUIRED FOR OPERATION.

PIV CONNECTION TO SPRINKLER POST INDICATOR VALVE.

FACP FIRE ALARM CONTROL PANEL

AN FIRE ALARM ANNUNCIATOR PANEL

KB KNOX BOX

NONFUSED DISCONNECT SWITCH, SIZE AS INDCIATED ON DRAWINGS, NEMA 1 ENCLOSURE U.O.N.

FUSED DISCONNECT SWITCH, SIZE AS INDICATED ON DRAWINGS, FUSE PER NAMEPLATE DATA OR AS INDICATED, NEMA 1 ENCLOSURE U.O.N.

ENCLOSED CIRCUIT BREAKER, SIZE AS INDICATED ON DRAWINGS, NEMA 1 ENCLOSURE U.O.N.

NOTES:
1. SEE DEVICE MOUNTING ELEVATION FOR MOUNTING HEIGHTS.
2. SEE SPECIFICATIONS FOR DEVICE COLOR AND COVER PLATE STYLE.

ABBREVIATIONS

A	AMPERE	NC	NORMALLY CLOSED
AF	AMP FRAME	NEC	NATIONAL ELECTRIC CODE
AFF	ABOVE FINISHED FLOOR	NL	NIGHT LIGHT
AFG	ABOVE FINISHED GRADE	NO	NORMALLY OPEN
C	CONDUIT	#	NUMBER
CKT	CIRCUIT	NTS	NOT TO SCALE
EWC	ELECTRIC WATER COOLER	P	POLE
FLA	FULL LOAD AMPS	ø	PHASE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	PNL	PANELBOARD
G	GROUND	SCWT	SCREW COVER WIRE TROUGH
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	SPD	SURGE PROTECTION DEVICE
IG	ISOLATED GROUND	SW	SWITCH
KV	KILOVOLT	TELE/DATA	TELEPHONE/DATA
KVA	KILOVOLT AMPERE	TYP	TYPICAL
KCMIL	THOUSAND CIRCULAR MILS	UG	UNDERGROUND
KW	KILOWATT	V	VOLT
MCB	MAIN CIRCUIT BREAKER	UON	UNLESS OTHERWISE NOTED
MCC	MOTOR CONTROL CENTER	WP	WEATHERPROOF
MISC	MISCELLANEOUS	XFMR	TRANSFORMER
MLO	MAIN LUGS ONLY	3R	NEMA 3R ENCLOSURE
MTS	MANUAL TRANSFER SWITCH		
N/A	NOT APPLICABLE		

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NUMBER	LAMPS	BALLASTS	FIXTURE WATTAGE	VOLTAGE	DESCRIPTION
A	METALUX DAYBRITE LITHONIA HE WILLIAMS	WE232A CAN232R 1/2 EB SB 2 32 MV 23-4-232-A-EBLH2	2-F032/835/XPS/ECO T8 OCTRON	OSRAM SYLVANIA QUICKTRONIC QTP2X32T8/UNV PSX-TC BALLAST. BALLAST FACTOR SHALL BE 0.71	47W	120V	4 FT. FLUORESCENT SURFACE MOUNTED WRAP. MATTE WHITE FINISH, ACRYLIC LENS.
B	SCOTT ARCHITECTURAL OR AS APPROVED BY HIX	S3780-2C18E-XX	2-18W CF QUAD	ELECTRONIC BALLAST	40W	120V	ADA WALL SCONCE MOUNTED NEXT TO VANITY MIRROR. SEE ARCHITECTURAL DETAILS FOR MOUNTING LOCATIONS. COORDINATE WITH ARCHITECT/INTERIORS FOR FINISH TYPE.
B2	SCOTT ARCHITECTURAL OR AS APPROVED BY HIX	S3755-1FP24-XX	1-BI-PIN T5-HO	ELECTRONIC BALLAST	30W	120V	ADA WALL SCONCE MOUNTED ABOVE VANITY MIRROR. SEE ARCHITECTURAL DETAILS FOR MOUNTING LOCATIONS. COORDINATE WITH ARCHITECT/INTERIORS FOR FINISH TYPE.
CE	LITHONIA	WC232-A12-EL	2-F032/835/XPS/ECO T8 OCTRON	OSRAM SYLVANIA QUICKTRONIC QTP2X32T8/UNV PSX-TC BALLAST. BALLAST FACTOR SHALL BE 0.71	47W	120V	4' WALL MOUNTED FLUORESCENT WITH STEEL HOUSING CLEAR PRISMATIC #12 ACRYLIC LENS. WHITE BAKED ENAMEL FINISH. 90 MINUTE BATTERY BACK UP.
D	LITHONIA	2PM3N-G-B-332-18LD-MVOLT	3-F17/835/RS T8	OSRAM SYLVANIA QUICKTRONIC QTP3XF1718/UNV PSN-F BALLAST. BALLAST TO FACTOR SHALL BE 0.78	51W	120V	RECESSED 2X2 PARABOLIC LAY-IN FLUORESCENT. 3 INCH DEEP, SEMI-SPECULAR NATURAL ANODIZED ALUMINUM LOUVERS. WHITE BAKED ENAMEL FINISH WITH BLACK REVEAL AROUND LOUVER.
E	SELECTED BY OWNER APPROVED BY HIX		LED/2600 LUMEN		30W	120V	6" APERATURE RECESSED FLUORESCENT DOWNLIGHT HORIZONTALLY MOUNTED LAMP. CLEAR ALZAK REFLECTOR.
F	SELECTED BY OWNER APPROVED BY HIX		LED/1600 LUMEN		24W	120V	6" APERATURE RECESSED FLUORESCENT DOWNLIGHT HORIZONTALLY MOUNTED LAMP. CLEAR ALZAK REFLECTOR. PROVIDE FIRE RATED ENCLOSURE AS REQUIRED IN RATED CEILINGS.
H	CANLET	6802FEF26H11 GSC	1-CF 26W TWT	ELECTRONIC BALLAST	30W	120V	VAPORTIGHT GLOBE IN ELEVATOR PIT, COMPACT FLUORESCENT.
J	SELECTED BY OWNER APPROVED BY HIX		LED/1600 LUMEN		24W	120V	4" APERATURE RECESSED FLUORESCENT DOWNLIGHT HORIZONTALLY MOUNTED LAMP. CLEAR ALZAK REFLECTOR. PROVIDE CLEAR LENS OVER FOOD PREP/SERVING AREAS.
K	SELECTED BY OWNER APPROVED BY HIX	.	LED/1500 LUMEN		24W	120V	LIGHT FIXTURE OVER TABLE. . .
L	SELECTED BY OWNER APPROVED BY HIX	.	LED/1500 LUMEN		24W	120V	ADA WALL SCONCE. .
M	SELECTED BY OWNER APPROVED BY HIX	.	LED/1500 LUMEN		24W	120V	PUBLIC RESTROOM VANITY WALL SCONCE. . .
N	GOTHAM		LED/1600 LUMEN		24W	120V	4" APERATURE RECESSED FLUORESCENT WALL WASH DOWNLIGHT .
P1	SELECTED BY OWNER APPROVED BY HIX	.	.	ELECTRONIC BALLASTS FIXTURE MUST BE DIMMABLE	200W	120V	UL LISTED PENDANT FIXTURE. SELECTED BY OTHERS AND INSTALLED BY THE CONTRACTOR. VERIFY MOUNTING HEIGHT AND OTHER OPTIONS WITH OWNER PRIOR TO ORDERING. FIXTURE MUST BE DIMMABLE
P2	SELECTED BY OWNER APPROVED BY HIX			ELECTRONIC DIMMING BALLAST .	95W	120V	UL LISTED PENDANT FIXTURE. SELECTED BY OTHERS AND INSTALLED BY THE CONTRACTOR. VERIFY MOUNTING HEIGHT AND OTHER OPTIONS WITH OWNER PRIOR TO ORDERING. FIXTURE MUST BE DIMMABLE
R	LITHONIA	LG7FWT73	52 MB/CAP HALOGEN	N/A	52W	120V	7" APERATURE. FLUSH PRISMATIC LENS. WHITE FINISH. WET LOCATION LABEL. SHOWER LIGHT. PROVIDE FIRE RATED ENCLOSURE AS REQUIRED IN RATED CEILINGS.
S	DAYBRITE PORTFOLIO GOTHAM SPECTRUM	OM670ED17PMH-CS MD6-670E-6701J AH 70M 6AR SP7MH70-ED-EX-7210-SG-BH27	1-MP70/C/U	OSRAM SYLVANIA QUICKTRONIC QTP1X70MH/UNV BALLAST.	80W	120V	6" APERATURE RECESSED METAL HALIDE DOWNLIGHT VERTICALLY MOUNTED LAMP. ALZAK REFLECTOR. DAMP LOCATION LABEL.
T	SELECTED BY OWNER APPROVED BY HIX	.	2-CF26W	ELECTRONIC BALLAST	58W	120V	SURFACE OR PENDANT COMPACT FLUORESCENT. PROVIDE FIRE RATED ENCLOSURE AS REQUIRED IN RATED CEILINGS.
U	LITHONIA	C 2 32 MVOLT ES	2-F032/835/XPS/ECO T8 OCTRON	OSRAM SYLVANIA QUICKTRONIC QTP1X32T8/UNV PSX-TC BALLAST. BALLAST FACTOR SHALL BE 0.71	48W	120V	4 FT. FLUORESCENT STRIP WITH WIRE GUARD. .
W	USA ILLUMINATION	3340 CLRA4 8400 C1 3530	1-10W DRIVER	LED DRIVER - 0-10V DIMMING .	10W	120/277V	4.5" RECESSED DOWN LIGHTING, ADJ. 30° REF 40° BEAM PATTERN, NEW CONSTRUCTION INSTALLATION. .
X	LITHONIA	SELECTED BY OWNER	2-CF13W	ELECTRONIC BALLAST	28W	120V	GUESTROOM ENTRY FIXTURE. SURFACE MOUNTED OR RECESSED. COORDINATE WITH ARCHITECT/OWNEN. PROVIDE RATED ENCLOSURE AS DETERMINED NECESSARY.
Z	LITHONIA	2SP8 G 4 32 A12125	4-F032/835/XPS/ECO T8 OCTRON	OSRAM SYLVANIA QUICKTRONIC 2-QTP2X32T8/UNV PSX-TC BALLAST 2-QTP2X32T8/UNV PSX-TC BALLAST BALLAST FACTOR SHALL BE 0.71	94W	120V	RECESSED 2X4 ACRYLIC LAY-IN FLUORESCENT. 0.125" THICK, #12 ACRYLIC LENS, FLAT WHITE STEEL DOOR. WHITE BAKED ENAMEL FINISH. NOTE 4.
UC	ALKCO	8UC-132-W-120	1-32W T8	ELECTRONIC BALLAST	35W	120V	UNDER COUNTER LIGHT. 48", WHITE LENS
OA	SELECTED BY OWNER APPROVED BY HIX		1-150W METAL HALIDE		165W	120V	BUILDING ACCENT LIGHTING, BLUE BRAND UP-LIGHTING. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING ELEVATIONS.
OB	SELECTED BY OWNER APPROVED BY HIX	.	1-70W MH	ELECTRONIC BALLAST	80W	120V	WALL MOUNTED FLOOD FIXTURE, BRONZE FINISH, SUITABLE FOR WET LOCATION.
OD	INSIGHT LIGHTING	MQ1-70CMH	1-70W MH	OSRAM SYLVANIA QUICKTRONIC QTP1X70MH/UNV BALLAST.	80W	120V	BUILDING ACCENT LIGHTING, BLUE BRAND LIGHTING. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING ELEVATIONS. .
Y	OWNER SELECTED		70W MAX	ELECTRONIC BALLAST	77W	120V	POOL AREA WALL SCONCE DAMP LOCATION LABEL .
	LITHONIA	LHQM SW R 120/277 EL N	LED		2.5W/FACE	120V	COMBINATION EXIT AND WALL MOUNTED SELF CONTAINED EMERGENCY LIGHT. POLYCARBONATE HOUSING WITH SELF-CONTAINED POWER PACK FOR 90MIN. OPERATION. WHITE HOUSING.
	LITHONIA	LQM SW R 120/277 EL N	LED		2.5W/FACE	120V	PACK FOR 90MIN OPERATION. NICAD BATTERY. WHITE HOUSING. RED LETTERS.
	LITHONIA	ELM4 H 1212	2-12W HALOGEN		50W	120V	WALL MOUNTED SELF CONTAINED EMERGENCY LIGHT POLYCARBONATE HOUSING WITH SELF-CONTAINED POWER PACK FOR 90MIN. OPERATION. WHITE HOUSING.
	LITHONIA	AFN SERIES	TWO LAMPS INCLUDED		20W MAX	120V	EXTERIOR EMERGENCY LIGHT WITH BATTERY BACKUP, TWO LAMPS AND UL WET LABEL, BLACK FINISH.

FIXTURE NOTES:

1. ALL FLUORESCENT LAMPS SHALL BE T8 OCTRON XPS/ECO 3500°K AS SPECIFIED. ALL FLUORESCENT BALLASTS SHALL BE ELECTRONIC AS SPECIFIED. SUBMITTAL SHEETS SHALL BE SUBMITTED WITH FIXTURE SUBMITTALS. FLUORESCENT LAMP AND BALLAST WARRANTY SHALL BE COMPLETED BY CONTRACTOR AND TURNED OVER OWNER AT END OF PROJECT.
2. SUBSTITUTIONS MUST BE EQUAL IN CONSTRUCTION, FINISH, ENERGY USAGE AND PHOTOMETRY. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER, WITH CUTSHEETS AND PHOTOMETRY. THE ENGINEER MUST RECEIVE THESE WITH TIME ALLOWED TO REVIEW AND ISSUE A WRITTEN APPROVAL BACK TO THE SUBMITTING PARTY TEN(10) DAYS PRIOR TO BID. SUBSTITUTE FIXTURES SHALL BE LISTED SEPARATELY AND UNIT PRICED AT TIME OF BID, SO THAT THE ENGINEER AND OWNER CAN MAKE AN INFORMED DECISION. NO SUBSTITUTIONS WILL BE CONSIDERED AFTER THE 10 DAY PRIOR BID PROCESS ENDED.
3. ALL INCANDESCENT LIGHT FIXTURES SHALL HAVE AN U.L. LABEL INDICATING THAT THE LAMP WATTAGE SPECIFIED ABOVE IS THE MAXIMUM ALLOWABLE IN FIXTURE.
4. ALL 3 AND 4 LAMP ELECTRONIC BALLASTS SHALL HAVE INBOARD/OUTBOARD SWITCHING AS INDICATED ON THE DRAWINGS. TANDEM FIXTURES ARE ALLOWED TO FACILITATE INBOARD/OUTBOARD SWITCHING.
5. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS.
6. ALIGN ALL HORIZONTAL FLUORESCENT LIGHTS SO THAT THE LAMPS ARE ALIGNED IN THE SAME DIRECTION.
7. ALL METAL HALIDE LAMPS SHALL HAVE A CRI OF NOT LESS THAN 70.
8. ALL ELECTRONIC BALLAST FOR T5(5/8" DIAMETER) LAMPS AND BELOW SHALL HAVE END OF LIFE SHUTDOWN PROTECTION.
9. SUSPEND TWO OPPOSITE CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
10. WHERE FIXTURE IS INDICATED AS EMERGENCY PROVIDE AN 1100 LUMEN INVERTER BATTERY PACK AND CONNECT AS INDICATED ON DETAIL THIS SHEET.
11. FIXTURE FLANGES AND TRIMS SHALL MATCH CEILING TYPES.
12. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

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REVISIONS		
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1		

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JOHN DEAN BELK
STATE OF MISSISSIPPI
REGISTERED PROFESSIONAL
ENGINEER
20706
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

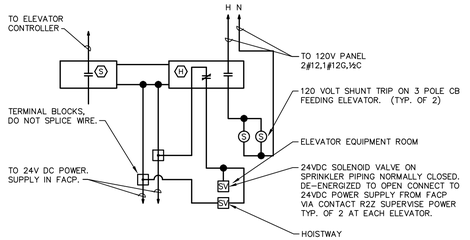
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL SCHEDULES

Phase
Construction Documents

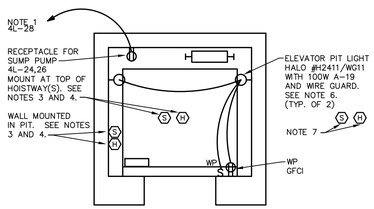
Project No.	14-081
Prepared by	MAH
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	E002

Holiday Inn Express & Suites



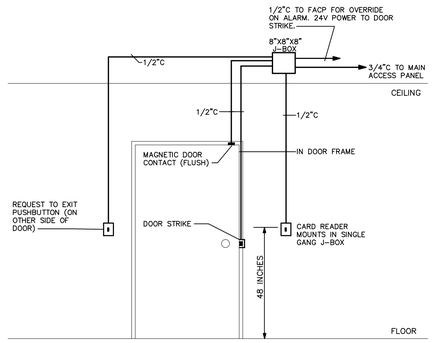
NOTES:
1. SMOKE DETECTOR SHALL, UPON ALARM, RECALL ELEVATOR TO THE DESIGNATED FIRST FLOOR, AND LOCK OUT ELEVATOR VIA ELEVATOR EQUIPMENT. HEAT DETECTOR SHALL BE FIXED TYPE WITH 135° SETTING AND WHEN IN ALARM AND ACTIVATES 120V SHUNT-TRIP TO ELEVATOR FEEDER BREAKER WITHIN PANEL. ALL DISCONNECTS SERVING ELEVATOR MOTOR CONTROLLER AND ELEVATOR CAB LIGHTS SHALL BE NEMA 3R CONSTRUCTION WITH EMBOSSED CONDUIT HUBS.
2. HEAT DETECTOR WITHIN ELEVATOR EQUIPMENT ROOM SHALL BE CONNECTED TO A DEDICATED FIRE ALARM ZONE SERVING THIS ROOM ONLY. THE SMOKE DETECTOR SHALL BE CONNECTED TO A SEPARATE DEDICATED FIRE ALARM ZONE.

4 ELEVATOR FIRE ALARM SHUTDOWN CONTROL SCHEMATIC
E003 NO SCALE

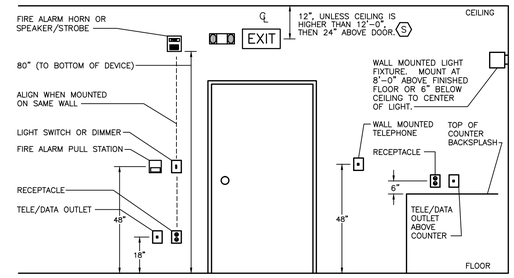


NOTES:
1. CONNECT TO 120V CIRCUIT. SEE PLANS FOR EXACT CIRCUIT DESIGNATION.
2. COORDINATE EXACT LOCATION OF ALL DEVICES WITH THE ELEVATOR SHOP DRAWINGS.
3. MOUNT SMOKE AND HEAT DETECTORS WITHIN 2'-0" OF SPRINKLER HEADS. SMOKE DETECTORS SHALL, UPON ALARM, RECALL ELEVATOR TO THE APPROPRIATE LEVEL, AND LOCK OUT ELEVATOR VIA ELEVATOR EQUIPMENT. HEAT DETECTORS SHALL CONTROL MAIN ELEVATOR POWER. SEE ELEVATOR FIRE ALARM SHUTDOWN CONTROL SCHEMATIC. HEAT DETECTORS SHALL HAVE A LOWER RESPONSE TIME INDEX (135°F) COMPARED TO THE SPRINKLER HEADS IN THE HOISTWAY.
4. WHERE HOISTWAY IS NOT SPRINKLERED, DO NOT PROVIDE SMOKE OR HEAT DETECTORS IN THE HOISTWAY.
5. LOCATE PIT LIGHT SWITCH AND CONVENIENCE RECEPTACLE ADJACENT TO ACCESS DOOR.
6. LIGHTS SHALL NOT BE CONNECTED TO THE LOAD SIDE TERMINALS OF THE CONVENIENCE RECEPTACLE.
7. MOUNT CENTERED IN ELEVATOR MACHINE ROOM.
8. MOUNT IN ELEVATOR LOBBY AT EACH LEVEL WITHIN 15'-0" OF DOOR.
9. THE SMOKE DETECTOR(S) LOCATED IN THE DESIGNATED ELEVATOR RECALL LOBBY(S) SHALL ACTUATE THE FIRST ELEVATOR CONTROL CIRCUIT. THE SMOKE DETECTORS IN THE REMAINING ELEVATOR LOBBIES SHALL ACTUATE THE SECOND ELEVATOR CONTROL CIRCUIT. THE SMOKE DETECTORS IN THE HOISTWAY(S) AND ELEVATOR MACHINE ROOM(S) SHALL ACTUATE THE THIRD ELEVATOR CONTROL CIRCUIT, AND WHERE A MACHINE ROOM IS LOCATED AT THE DESIGNATED LEVEL, THAT ELEVATOR MACHINE ROOM SMOKE DETECTOR SHALL ALSO ACTUATE THE FIRST ELEVATOR CONTROL CIRCUIT.

3 ELEVATOR HOISTWAY DETAIL
E003 NO SCALE

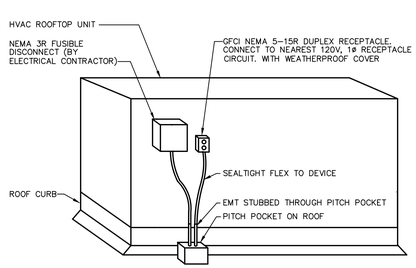


2 DOOR ACCESS CONTROL ELEVATION
E003 NO SCALE



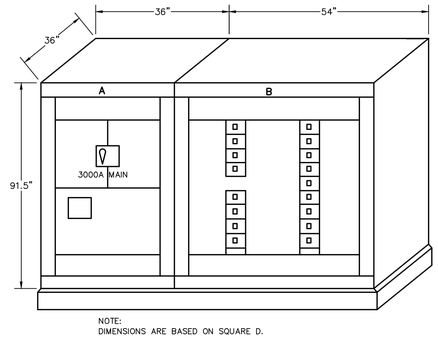
NOTES:
1. ALL DIMENSIONS ARE TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED.

1 DEVICE MOUNTING ELEVATION
E003 NO SCALE



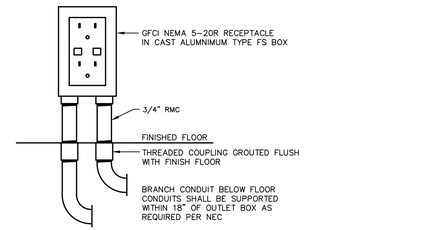
NOTE: TYPICAL FOR ALL ROOF MOUNTED HVAC EQUIPMENT.

7 ROOFTOP RECEPTACLE DETAIL
E003 NO SCALE

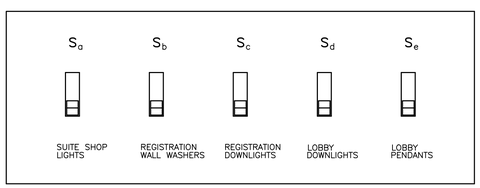


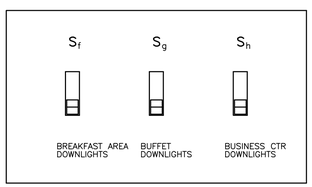
NOTE:
DIMENSIONS ARE BASED ON SQUARE D.

6 ELEVATION - MSB
E003 NO SCALE

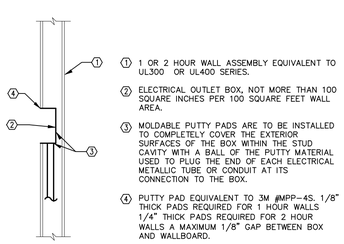


5 STUBBED UP RECEPTACLE DETAIL
E003 NO SCALE



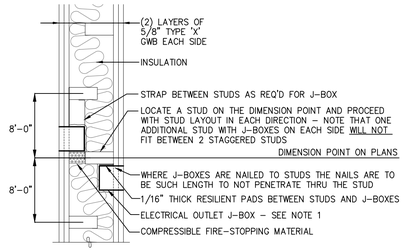


12 LOBBY SWITCH BANK DETAIL
E003 NO SCALE



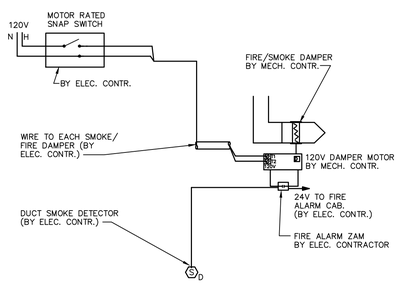
NOTE: THIS DETAIL APPLIES TO 1 AND 2 HOUR WALL ASSEMBLIES WITH 4"x4" FLUSH ELECTRICAL BOXES ON OPPOSITE SIDE OF WALLS THAT HAVE LESS THAN 24" SEPARATION BETWEEN THEM. BOXES NOT PERMITTED BACK-TO-BACK.

11 PENETRATION DETAIL
E003 NO SCALE



NOTES: 1. ELECTRICAL OUTLET BOXES AND SIMILAR BOXES FOR T.V., PHONE, ETC. IN PARTY WALLS MUST BE STEEL AND NOT OVER 16" SQUARE. SUCH BOXES ARE TO BE SEALED WITH 3M MPP-4S FIRE BARRIER PUDDY PAD OR EQUAL. STACK MULTIPLE BOXES VERTICALLY WHEN ON SAME SIDE OF WALL.
2. CONTRACTOR TO VERIFY ACCEPTABILITY OF THIS DETAIL WITH LOCAL JURISDICTION'S BUILDING INSPECTOR.

10 OUTLET J-BOX OFFSET DETAIL
E003 NO SCALE



NOTES:
1. ALL FIRE/SMOKE DAMPERS SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ALL FIRE ALARM WIRING INSTALLED BY ELECTRICAL CONTRACTOR. 120V WIRING TO DAMPER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.

8 SMOKE/FIRE DAMPER WIRING DETAIL
E003 NO SCALE

ALLIED CONSULTING ENGINEERS
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REVISIONS		
No.	Date	Description
1		

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EDWIN DEAN BRYAN JR. LICENSED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL DETAILS

Phase
Construction Documents

Project No.	14-081	Sheet No.	E003
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

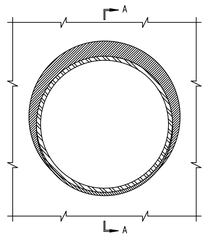
Holiday Inn Express & Suites

U.L. SYSTEM NO. WL1054

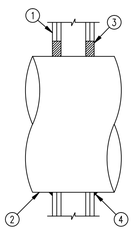
METAL PIPE THROUGH GYPSUM WALL ASSEMBLY

F RATING = 1–HR. OR 2–HR.
T RATING = 0–HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = LESS THAN 4 CFM/SQ. FT.

FRONT VIEW



SECTION A–A



1. GYPSUM WALL ASSEMBLY (1–HR. OR 2–HR. FIRE–RATING)(2–HR. SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
   A. MAXIMUM 30" DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 6" DIAMETER COPPER PIPE.
   C. MAXIMUM 6" DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" DIAMETER STEEL EMT.
3. HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT :
   A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1–HR. FIRE–RATING.
   B. MINIMUM 1–1/4" DEPTH OF SEALANT FOR A 2–HR. FIRE–RATING.
4. MINIMUM 1/2" BEAD HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 32–1/4".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2–1/4".

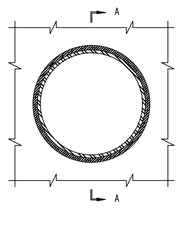
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. WL1085

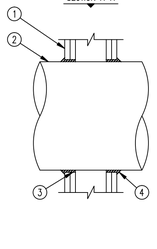
EMT THROUGH 1–HR. OR 2–HR. GYPSUM WALL ASSEMBLY

F RATING = 1–HR. AND 2–HR.
T RATING = 0–HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.

FRONT VIEW



SECTION A–A



1. GYPSUM WALL ASSEMBLY (1–HR. OR 2–HR. FIRE–RATING)(2–HR. SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
   A. MAXIMUM 12" DIAMETER STEEL PIPE (SCHEDULE 20 OR HEAVIER).
   B. MAXIMUM 12" DIAMETER CAST IRON PIPE.
   C. MAXIMUM 6" DIAMETER COPPER PIPE.
   D. MAXIMUM 6" DIAMETER EMT.
   E. MAXIMUM 6" DIAMETER STEEL CONDUIT.
3. HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT FORCED INTO ANNULAR SPACE TO MAXIMUM EXTENT.
4. MINIMUM 1/2" BEAD HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT AT PIPE/GYPSUM WALLBOARD INTERFACE.

NOTE : ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/4".

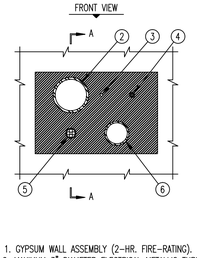
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. WL8004

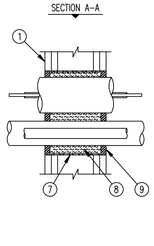
MULTIPLE METAL PIPE AND CABLE THROUGH 2–HR. GYPSUM WALL

F RATING = 2–HR.
T RATING = 1/4–HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.

FRONT VIEW



SECTION A–A



1. GYPSUM WALL ASSEMBLY (2–HR. FIRE–RATING).
2. MAXIMUM 3" DIAMETER ELECTRICAL METALLIC TUBING (EMT).
3. MAXIMUM 25 PAIR NO. 24 AWG (OR SMALLER) TELEPHONE CABLES.
4. MAXIMUM 3/C NO. 10 AWG NM (WITH GROUND) POWER CABLE WITH PVC INSULATION.
5. MAXIMUM 300 KCMIL (OR SMALLER) POWER CABLE WITH PVC INSULATION & NYLON JACKET.
6. MAXIMUM 2" DIAMETER STEEL PIPE, COPPER PIPE, EMT, OR STEEL CONDUIT.
7. NO. 8 STEEL WIRE MESH, 4–3/4" LONG (OR STANDARD METAL DRYWALL TRACK SCREWED SECURELY IN PLACE) CENTERED IN OPENING.
8. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
9. MIN. 1/2" DEPTH HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM AREA OF OPENING = 96 SQUARE INCHES WITH A MAX. DIM. OF 12".
2. DISTANCE BETWEEN ITEMS = MINIMUM 1–3/4", MAXIMUM 7".
3. DISTANCE FROM EDGE OF OPENING = MINIMUM 1/2", MAXIMUM 7". (EXCEPTION: 300 KCMIL POWER CABLE MUST BE MINIMUM 1–1/2" FROM EDGE OF OPENING.

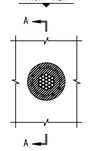
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. WL3065

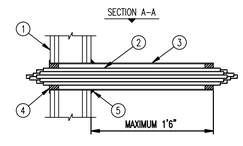
CABLE BUNDLE THROUGH 1–HR. OR 2–HR. FIRE–RATED GYPSUM WALL

F RATING = 1–HR. OR 2–HR. L RATING AT AMBIENT = 5 CFM/SQ. FT.
T RATING = 0–HR. L RATING AT 400°F = 2 CFM/SQ. FT.

FRONT VIEW



SECTION A–A



1. GYPSUM WALL ASSEMBLY (1–HR. OR 2–HR. FIRE–RATING)(2–HR. SHOWN).
2. CABLE BUNDLE TO CONSIST OF ANY OF THE FOLLOWING :
   A. 7/C NO. 12 AWG CAGLES.
   B. 12 PAIR 24 AWG PHONE CABLES.
   C. 25 PAIR 24 AWG PHONE CABLES.
   D. RG 59 COAXIAL CABLES.
   E. 2/C (+GND) NO. 14 AWG METAL–CLAD CABLES.
   F. 2/C NO. 8 AWG METAL–CLAD CABLES.
   G. MAXIMUM 1/2" DIAMETER FIBER–OPTIC CABLES.
3. OPTIONAL : MAX. 4" NOM. DIA. STEEL PIPE SLEEVE (SCH. 40 OR THINNER)(SEE NOTE NO. 4).
4. HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT :
   A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1–HR. FIRE–RATING.
   B. MINIMUM 1–1/4" DEPTH OF SEALANT FOR A 2–HR. FIRE–RATING.
5. SEE NOTE NO. 4 BELOW.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 4–1/2".
2. CABLES TO FILL MAXIMUM 33% OF AREA OF OPENING.
3. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 3/4".
4. STEEL SLEEVE MAY BE FLUSH WITH WALL SURFACE OR EXTEND UP TO 18" BEYOND WALL SURFACE IN ANY COMBINATION. WHEN SLEEVE IS FLUSH WITH WALL, APPLY HILTI FS–ONE FIRESTOP SEALANT ONTO WALL SURFACE. WHEN SLEEVE IS EX–TENDED BEYOND ONE OR BOTH SIDES OF WALL, APPLY 1/2" CROWN HILTI FS–ONE FIRESTOP SEALANT TO WALL/SLEEVE INTERFACE.

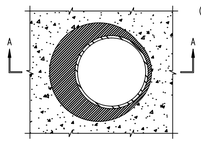
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. CAJ1149

METAL PIPE THROUGH CONCRETE FLOOR, WALL, OR BLOCK WALL

F RATING = 2–HR.
T RATING = 0–HR.

TOP VIEW



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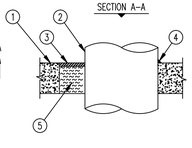


1. CONCRETE FLOOR OR WALL ASSEMBLY :
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4–1/2" THICK).
   B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 4–1/2" THICK).
   C. ANY U.L. CLASSIFIED CONCRETE BLOCK WALL.
2. THROUGH PENETRANTS TO INCLUDE ANY OF THE FOLLOWING :
   A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE.
   B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
   C. MAXIMUM 4" NOMINAL DIAMETER EMT.
   D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
3. MIN. 1/2" DEPTH HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.
4. MIN. 1/2" BEAD HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 4" THICK MINERAL WOOL (MIN. 4 PCF DENSITY) (SEE NOTE NO. 4).

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 12".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2".
3. WALLS REQUIRE 1/2" DEPTH OF SEALANT FLUSH WITH BOTH SIDES.
4. IF MAXIMUM PIPE SIZE IS 4" NOM. DIA., A MINIMUM 3" THICKNESS OF MINERAL WOOL MAY BE USED.

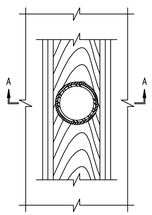
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. FC1009

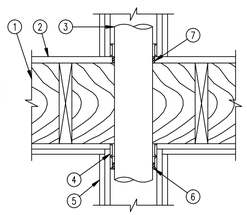
METAL PIPE/CONDUIT THROUGH 1–HR. OR 2–HR. WOOD FLOOR ASSEMBLY

F RATING = 1–HR. OR 2–HR. L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
T RATING = 1–HR. OR 2–HR. L RATING AT 400°F = 4 CFM/SQ. FT.

TOP VIEW



SECTION A–A



1. WOOD FLOOR ASSEMBLY : DESIGN NO. L500 SERIES IN THE U.L. FIRE RESISTANCE DIRECTORY.
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD, OR FLOOR TOP MIXTURE.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
   A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
   B. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
   C. MAX. 4" NOM. DIA. NOM. OR STANDARD COPPER WATER TUBE (TYPE L OR HEAVIER).
   D. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
   E. MAXIMUM 4" NOMINAL DIAMETER EMT.
4. TOP PLATE :
5. GYPSUM WALL ASSEMBLY (1–HR. OR 2–HR. FIRE–RATING)(2–HR. SHOWN).
6. PROVIDE A GENEROUS BEAD OF HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRE–STOP SEALANT AT THE TOP PLATE.
7. MIN. 3/4" DEPTH HILTI FS 601 ELASTOMERIC FIRESTOP SEALANT OR FS–ONE FIRESTOP SEALANT.

NOTE : ANNULAR SPACE = MINIMUM 1/8", MAXIMUM 3/4".

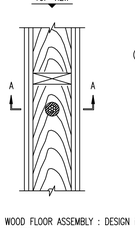
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. FC3012

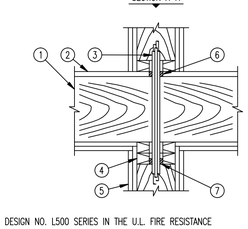
CABLE/CABLE BUNDLE THROUGH 1–HR. OR 2–HR. WOOD FLOOR ASSEMBLY

F RATING = 1–HR. OR 2–HR. L RATING AT AMBIENT = 5 CFM/SQ. FT.
T RATING = 1–HR. OR 2–HR. L RATING AT 400°F = 2 CFM/SQ. FT.

TOP VIEW



SECTION A–A



1. WOOD FLOOR ASSEMBLY : DESIGN NO. L500 SERIES IN THE U.L. FIRE RESISTANCE DIRECTORY.
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OR LUMBER, PLYWOOD, OR FLOOR TOPPING MIXTURE.
3. MAXIMUM 2" DIAMETER CABLE BUNDLE MAY CONSIST OF ANY OF THE FOLLOWING :
   A. RG 59 COAXIAL CABLE.
   B. MAXIMUM 8/C NO. 22 AWG TELEPHONE CABLE.
   C. MAXIMUM 3/C NO. 10 AWG CABLE (ROMEX).
   D. MAXIMUM 3/C (+GRND) 2/0 AWG SER CABLE (ALUMINUM OR COPPER).
   E. MAXIMUM 2/C NO. 12 AWG CABLE.
4. TOP PLATE.
5. GYPSUM WALL ASSEMBLY (1–HR. OR 2–HR. FIRE–RATING)(2–HR. SHOWN).
6. MINIMUM 3/4" DEPTH HILTI FS–ONE FIRESTOP SEALANT.
7. PROVIDE A GENEROUS BEAD OF HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRE–STOP SEALANT AT THE TOP PLATE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 2–1/2".
2. ANNULAR SPACE BETWEEN CABLE BUNDLE AND OPENING = MIN. 0", MAX. 1/2".
3. CABLES TO FILL A MAXIMUM OF 45% OF CROSS–SECTIONAL AREA OF OPENING.

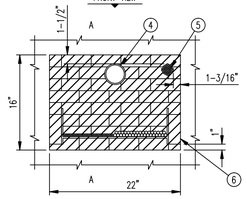
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. WL8013

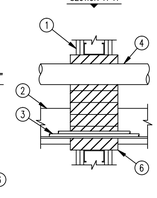
MULTIPLE PENETRATIONS THROUGH 1–HR. OR 2–HR. GYPSUM WALL

F RATING = 1–HR. OR 2–HR. L RATING AT AMBIENT = 5 CFM/SQ. FT.
T RATING = 0–HR. L RATING AT 400°F = 2 CFM/SQ. FT.

FRONT VIEW



SECTION A–A



1. GYPSUM WALL ASSEMBLY (1–HR. OR 2–HR. FIRE–RATING)(2–HR. SHOWN).
2. STEEL OR ALUMINUM CABLE TRAY (MAXIMUM SIZE : 18" x 6").
3. ANY OF THE FOLLOWING TYPES OF CABLE MAY BE USED WITH MAX. 30% FILL ON CABLE TRAY :
   A. 500 KCMIL SINGLE CONDUCTOR POWER CABLE.
   B. 7/C NO. 12 AWG COPPER CONDUCTOR CABLE.
   C. 300 PAIR NO. 24 AWG TELEPHONE CABLE.
4. MAXIMUM 3" DIAMETER PVC PLASTIC PIPE (SCHEDULE 40)(CLOSED OR VENTED PIPING SYSTEM).
5. CABLE BUNDLE (MAX. 2" DIA.) TO CONSIST OF ANY OF THE FOLLOWING:
   A. FIBER–OPTIC CABLE.
   B. RG 59 COAXIAL CABLE.
   C. 25 PAIR NO. 24 AWG TELEPHONE CABLE.
   D. 7/C NO. 12 AWG COPPER CONDUCTOR.
6. HILTI FS 657 FIRESTOP BLOCKS (2" x 5" x 8" DEEP, REF: FRONT VIEW).

NOTES : 1. NOT SHOWN: PENETRATING ITEMS MAY ALSO INCLUDE A MAX. 4" DIA. STEEL OR COPPER PIPE, EMT, OR STEEL CONDUIT WITH A MAX. 1–1/2" GLASS–FIBER PIPE INSULATION OR NON–INSULATED MAX. 4" STEEL PIPE, EMT, OR CONDUIT.
2. ANNULAR SPACE = MINIMUM 1".
3. INSTALL HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT IN ANY VOID THAT MAY EXIST (AROUND PENETRATING ITEMS, OR BETWEEN BLOCKS).

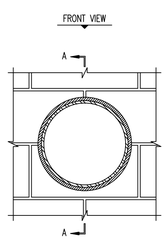
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. WJ1042

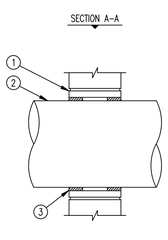
METALLIC PIPE THROUGH 4–HR. CONCRETE OR CONCRETE BLOCK WALL

F RATING = 4–HR.
T RATING = 0–HR.

FRONT VIEW



SECTION A–A



1. CONCRETE WALL ASSEMBLY (4–HR. FIRE–RATING) :
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL.
   B. ANY U.L. CLASSIFIED CONCRETE BLOCK WALL ASSEMBLY.
2. PENETRATING ITEM TO BE ANY ONE OF THE FOLLOWING :
   A. MAXIMUM 12" DIAMETER STEEL PIPE.
   B. MAXIMUM 6" DIAMETER COPPER PIPE.
   C. MAXIMUM 6" DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" DIAMETER EMT.
3. MIN. 2" DEPTH HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 13–3/4".
2. ANNULAR SPACE = MINIMUM 3/8", MAXIMUM 1/2".

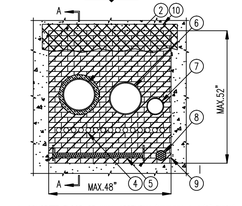
SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

U.L. SYSTEM NO. WJ8007

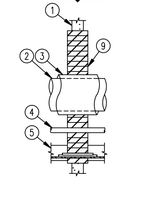
MULTIPLE PENETRATING ITEMS THROUGH CONCRETE FLOOR OR WALL

F RATING = 4–HR.
T RATING = 0–HR.

FRONT VIEW



SECTION A–A



1. CONCRETE FLOOR OR WALL ASSEMBLY (MINIMUM 4–1/2" THICK).
2. MAXIMUM 12" DIAMETER STEEL PIPE OR MAXIMUM 6" DIAMETER COPPER PIPE.
3. MAXIMUM 1–1/2" THICK GLASS–FIBER PIPE INSULATION.
4. 1–1/2" DIAMETER STEEL CONDUIT (MAXIMUM QUANTITY = 15).
5. STEEL OR ALUMINUM CABLE TRAY (MAXIMUM SIZE : 36" x 6") WITH ANY OF THE FOLLOWING TYPES OF CABLE MAY BE USED WITH MAXIMUM 30% FILL OF CABLE TRAY :
   A. MAXIMUM 500 KCMIL SINGLE CONDUCTOR POWER CABLE.
   B. MAXIMUM 7/C NO. 12 AWG COPPER CONDUCTOR CABLE.
   C. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLES.
6. MAXIMUM 30" DIAMETER STEEL PIPE (12" DIAMETER PIPE SHOWN).
7. 6" DIAMETER STEEL PIPE.
8. MAXIMUM 4" DIAMETER CABLE BUNDLE TO INCLUDE ANY OF THE FOLLOWING :
   A. FIBER–OPTIC CABLE (MAX. 1/2" DIA).
   B. ROMEX (2/C NO. 10 +GROUND).
   C. 25 PAIR NO. 24 AWG TELEPHONE CABLES.
   D. 7/C NO. 12 AWG CABLES.
   E. RG 62A COAXIAL CABLES.
   F. METAL CLAD CABLE (MAX. 3/4" DIA.).
9. HILTI FS 657 INTUMESCENT FIRESTOP BLOCK (2" TALL x 5" WIDE x 8" DEEP, REF: FRONT VIEW).
10. SEE NOTE NO. 4 BELOW.

NOTES : 1. ANNULAR SPACING FOR CABLE TRAY = MINIMUM 1–1/2".
2. ANNULAR SPACING FOR PIPE AND CABLE PENETRATIONS = MINIMUM 1".
3. INSTALL HILTI FS–ONE HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT IN ANY VOID THAT MAY EXIST (AROUND CABLE TRAY, CABLES, OR PIPE PENETRATIONS).
4. IF THE ANNULAR SPACE IS GREATER THAN 5", PROVIDE A STEEL WIRE MESH (NOMINAL 2" SQUARES, NO. 16 SWG). INSTALL ON EACH SIDE OF WALL ASSEMBLY.
5. MAXIMUM AREA OF OPENING = 2496 SQUARE INCHES.

SEE HILTI FIRESTOP INSTALLATION MANUAL FOR ADDITIONAL INSTRUCTIONS
HILTI, INC. TULSA, OK 1–800–879–8000

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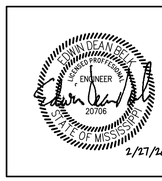


KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

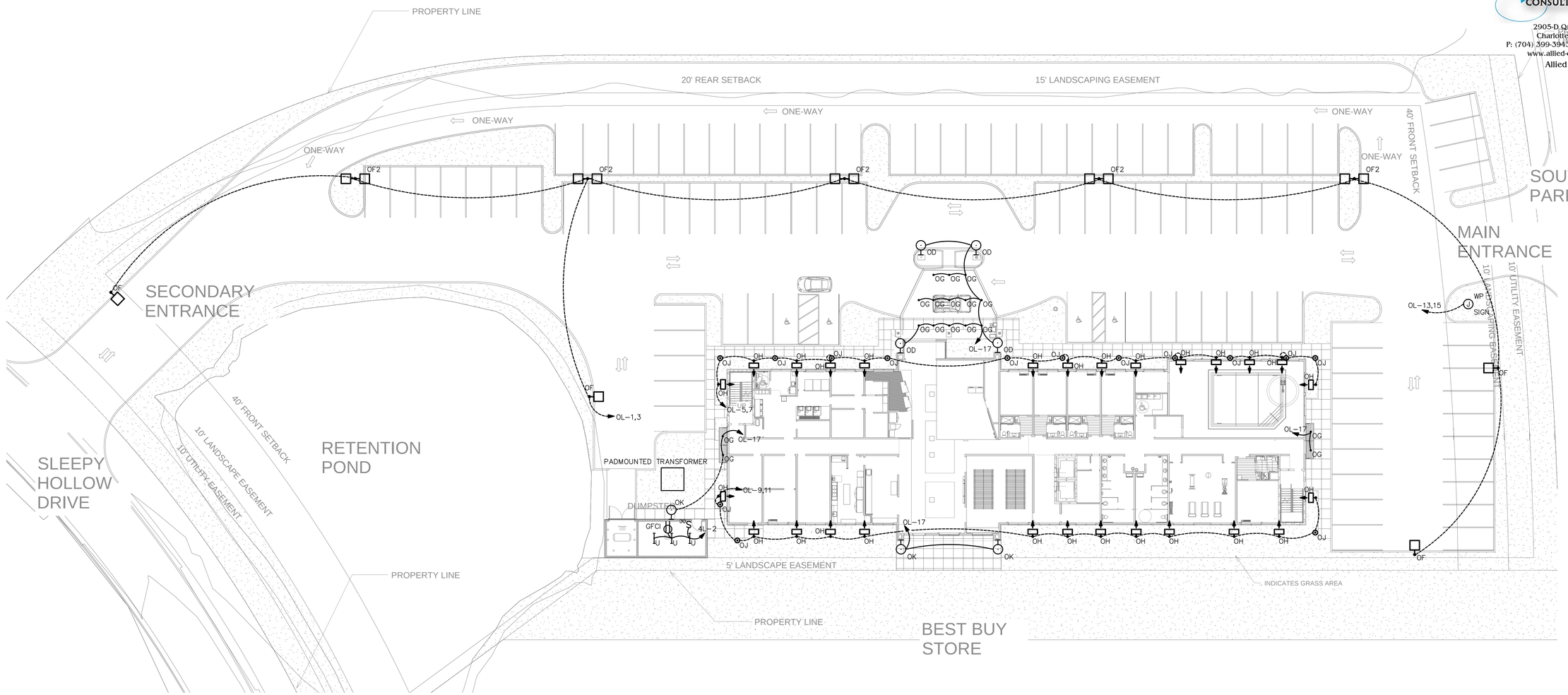
Drawing Title

ELECTRICAL DETAILS

Phase
Construction Documents

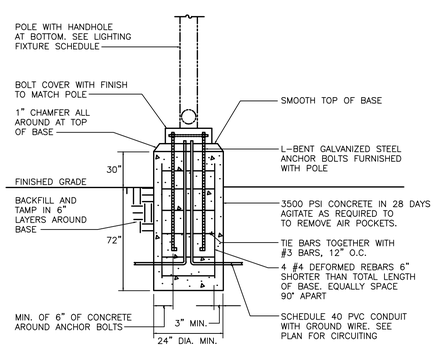
Project No.	14-081
Prepared by	MAH
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	E004

Holiday Inn Express & Suites



1 E100 SITE PLAN - ELECTRICAL

1" = 20'



2 E100 POLE BASE DETAIL

NO SCALE

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EDWIN DEAN CRICK — EXPIRES 12/31/2015 — ENGINEER — 20706 — STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title

SITE PLAN - ELECTRICAL

Phase
Construction Documents

Project No.	14-081	Sheet No.	E100
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

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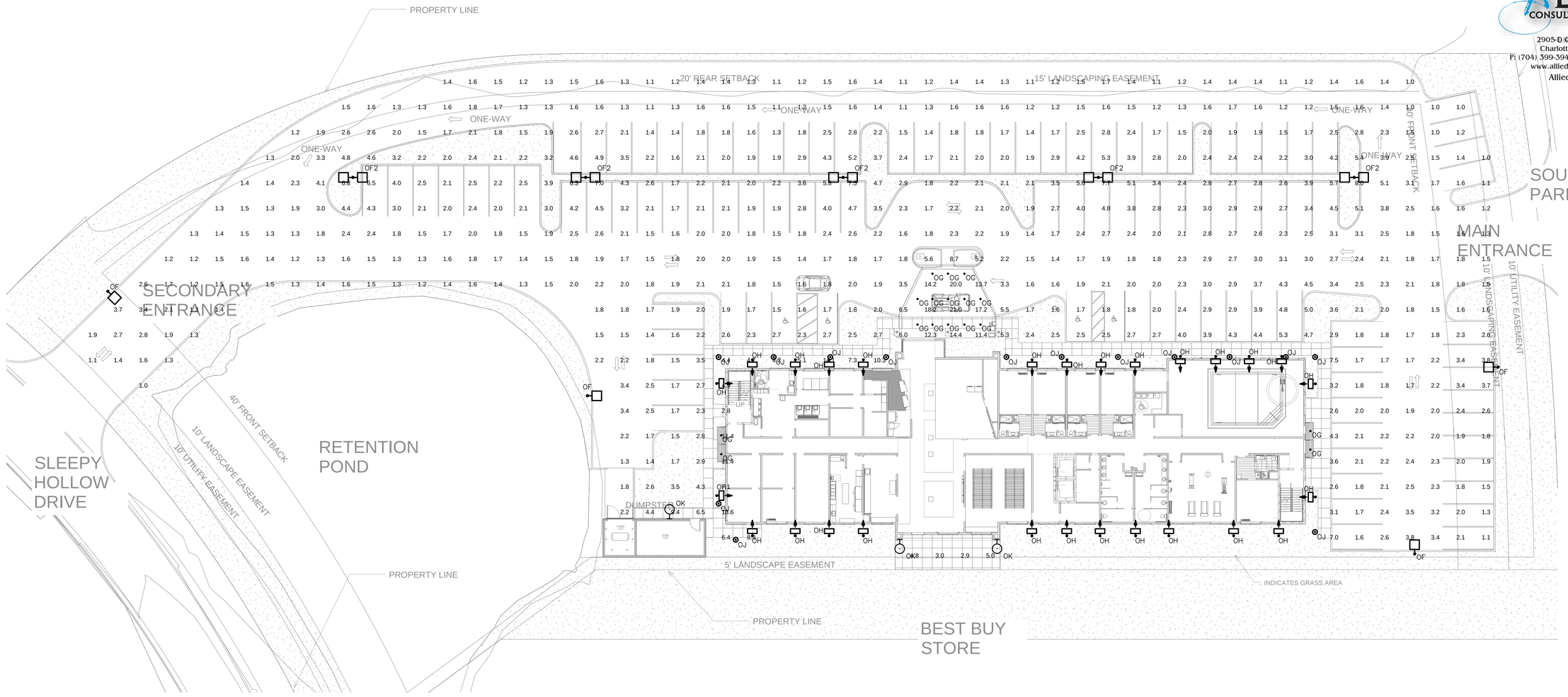

EXTERIOR LIGHT FIXTURE SCHEDULE											
Symbol	Label	Image	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	
	OF		5	TLM-B06-LED-E1-SL4 COOPER	TALON MEDIUM LED SITE LUMINAIRE (6) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET		126	94.05752	0.91	146	
	OF2		5	TLM-B06-LED-E1-SL4 COOPER	TALON MEDIUM LED SITE LUMINAIRE (6) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET		126	94.05752	0.91	292	
	OG		17	FFLD6A15D010TE FERM6A15835 FV6LM0LI FVBT682 COOPER	FAIL-SAFE 6INCH LED RECESSED VANDAL RESISTANT DOWNLIGHT MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM AND PRISMATIC POLYCARBONATE LENS	(1) 3500K CITIZEN LED	1	1449.474	0.91	21.9	
	OJ		14	DSXB LED 16C 700 30K SYM LITHONIA	D-SERIES BOLLARD WITH 16 3000K LEDS OPERATED AT 700mA AND SYMMETRIC DISTRIBUTION	LED	1	1633.567	0.91	39	
	OK		3	WSR LED 2 10A700/30K SR3 MVOLT COOPER	WSR LED WITH 1 MODULE, 20 LED's, 700mA DRIVER, 3000K COLOR TEMPERATURE, TYPE 3 LENS	LED	1	3422.5	0.91	47	
	OH		27	NFFLD-A40 COOPER	LED FLOOD LIGHT	LED	1	14683	0.91	129	

1 E100A **SITE PLAN - PHOTOMETRICS**
1" = 20'

Statistics						
Description	Avg	Max	Min	Max/Min	Avg/Min	
Parking Area	2.7 fc	21.0 fc	1.0 fc	21.0:1	2.7:1	

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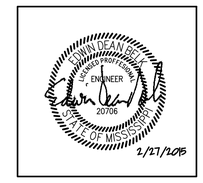

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
SITE PLAN - PHOTOMETRICS

Phase
Construction Documents

Project No.	14-081	Sheet No.	E100A
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

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JOHN DEAN DEAL
REGISTERED PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title

1ST FLOOR PLAN - LIGHTING

Phase
Construction Documents

Project No.	14-081	Sheet No.	E101
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites

1 / E101 1ST FLOOR PLAN - LIGHTING

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

NOTES:
1. CONNECT EXIT/EMERGENCY LIGHTS TO NEAREST CIRCUIT AHEAD OF ALL CONTROLS.

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KEY PLAN

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Drawing Title

2ND FLOOR PLAN - LIGHTING

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	MAH	E102
Checked by	EDB	
Date	Feb. 27, 2015	

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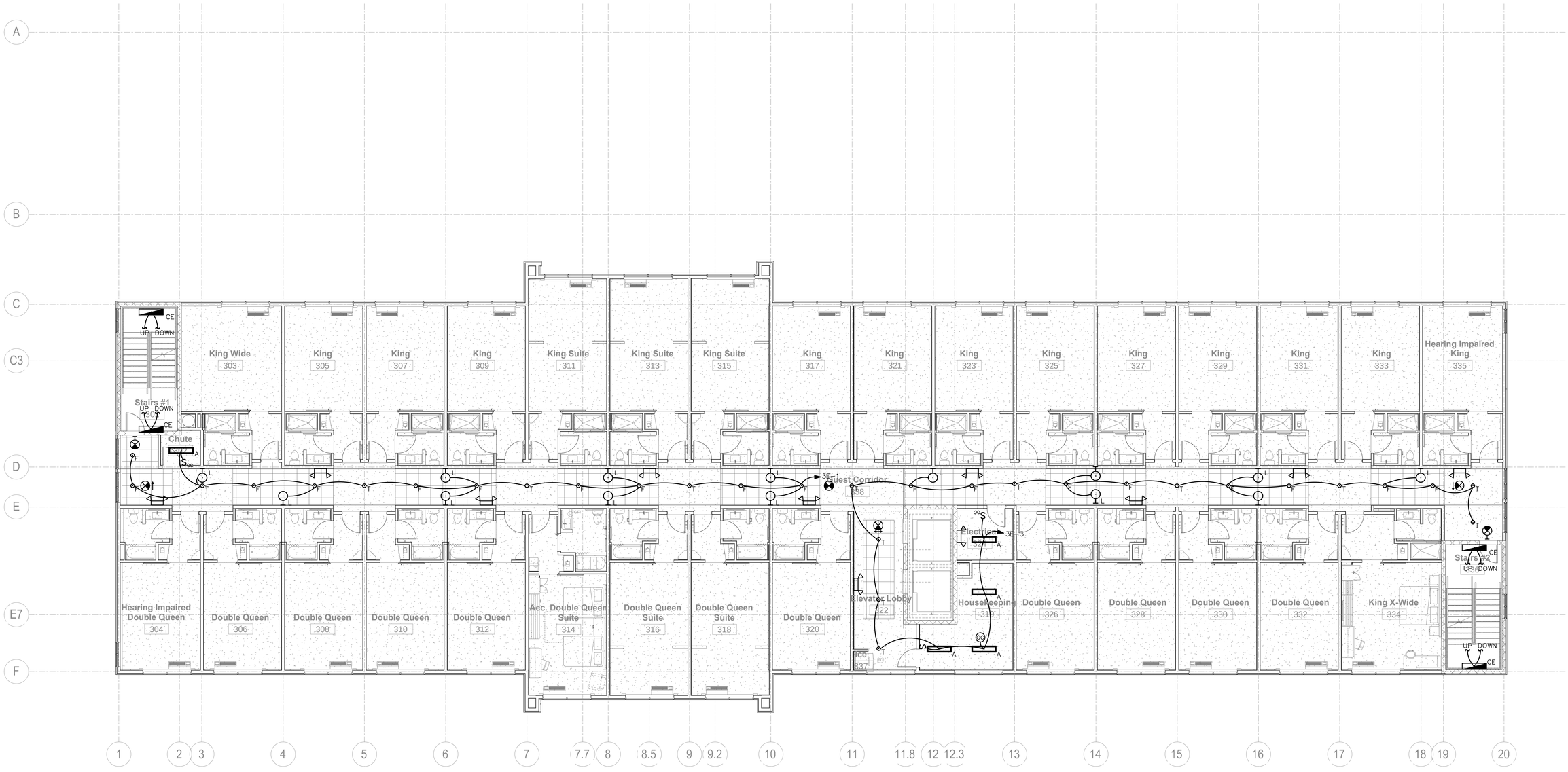
1 E102 2ND FLOOR PLAN - LIGHTING

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

NOTES:
1. CONNECT EXIT/EMERGENCY LIGHTS TO NEAREST CIRCUIT AHEAD OF ALL CONTROLS.



1 E103 **3RD FLOOR PLAN - LIGHTING**

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

NOTES:

1. CONNECT EXIT/EMERGENCY LIGHTS TO NEAREST CIRCUIT AHEAD OF ALL CONTROLS.

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EDWIN DEAN BELL III — LICENSED PROFESSIONAL ENGINEER — 20706 — STATE OF MISSISSIPPI
2/27/15

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
3RD FLOOR PLAN - LIGHTING

Phase
Construction Documents

Project No.	14-081
Prepared by	MAH
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	E103

Holiday Inn Express & Suites

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1 / E104 **4TH FLOOR PLAN - LIGHTING**

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

NOTES:
1. CONNECT EXIT/EMERGENCY LIGHTS TO NEAREST CIRCUIT AHEAD OF ALL CONTROLS.

KEY PLAN

Shiva Southaven Inc.

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Drawing Title
4TH FLOOR PLAN - LIGHTING

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	MAH	E104
Checked by	EDB	
Date	Feb. 27, 2015	

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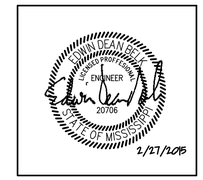

KEY PLAN

Shiva Southaven Inc.

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Southcrest Subdivision
Southaven, MS 38671

Drawing Title

1ST FLOOR PLAN - POWER

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	MAH	E201
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Date	Feb. 27, 2015	

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1 E201 1ST FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"

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JOHN DEAN BERRY III — REG. PROFESSIONAL ENGINEER — 20706 — STATE OF MISSISSIPPI — 2/27/2015

KEY PLAN

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Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
2ND FLOOR PLAN - POWER

Phase
Construction Documents

Project No.	14-081	Sheet No.	E202
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

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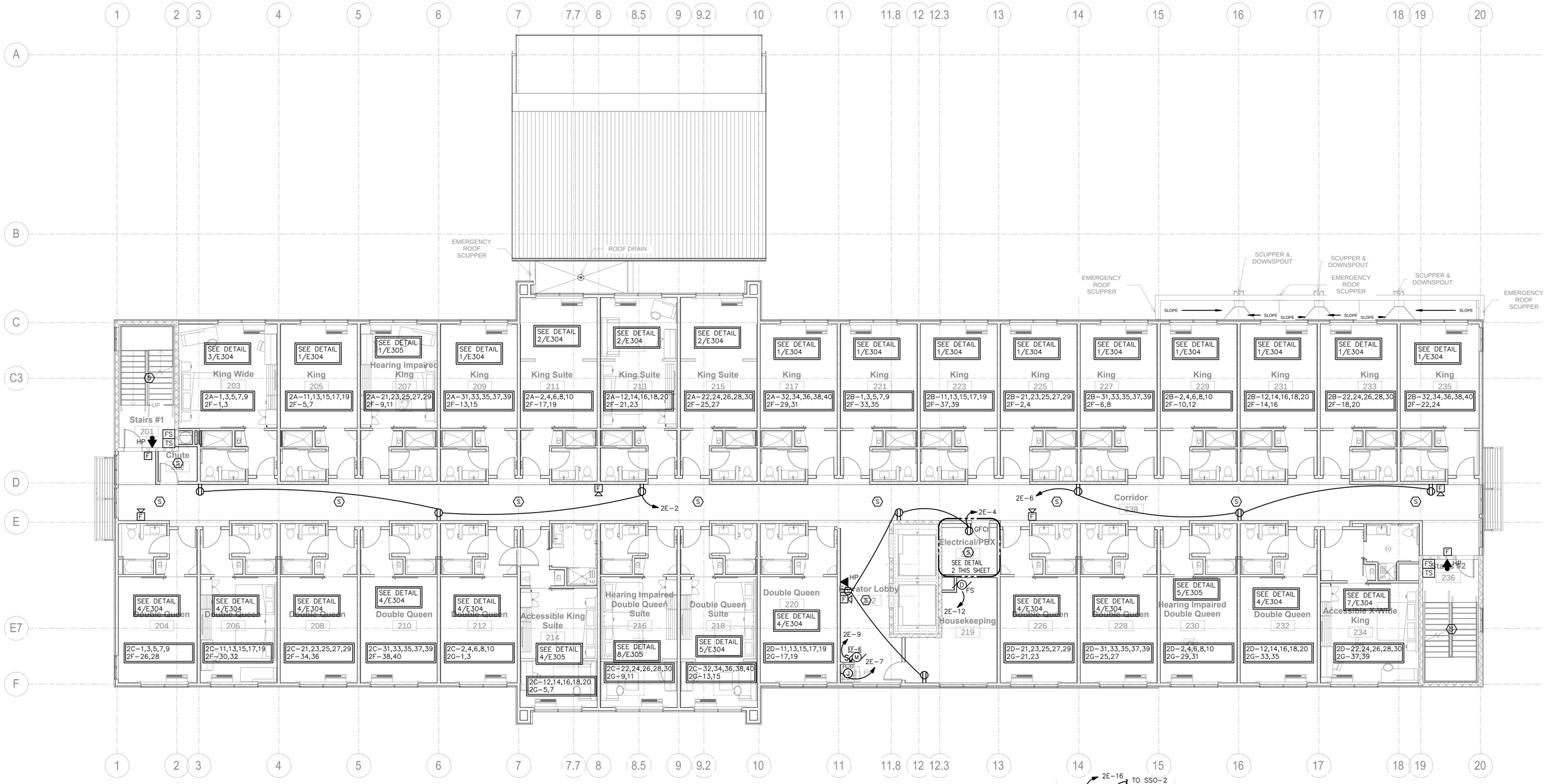
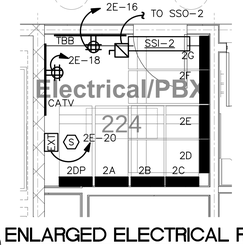


1 E202 **2ND FLOOR PLAN - POWER**
SCALE: 1/8" = 1'-0"



2 E202 **ENLARGED ELECTRICAL ROOM**
SCALE: 1/4" = 1'-0"

NOTES:
FIELD COORDINATE THIS ROOM WITH OWNER'S IT REPRESENTATIVE PRIOR TO ANY ROUGH IN WORK. INSURE PROPER CLEARANCES ARE MET FOR WORKING SPACES OF ELECTRICAL PANELS.

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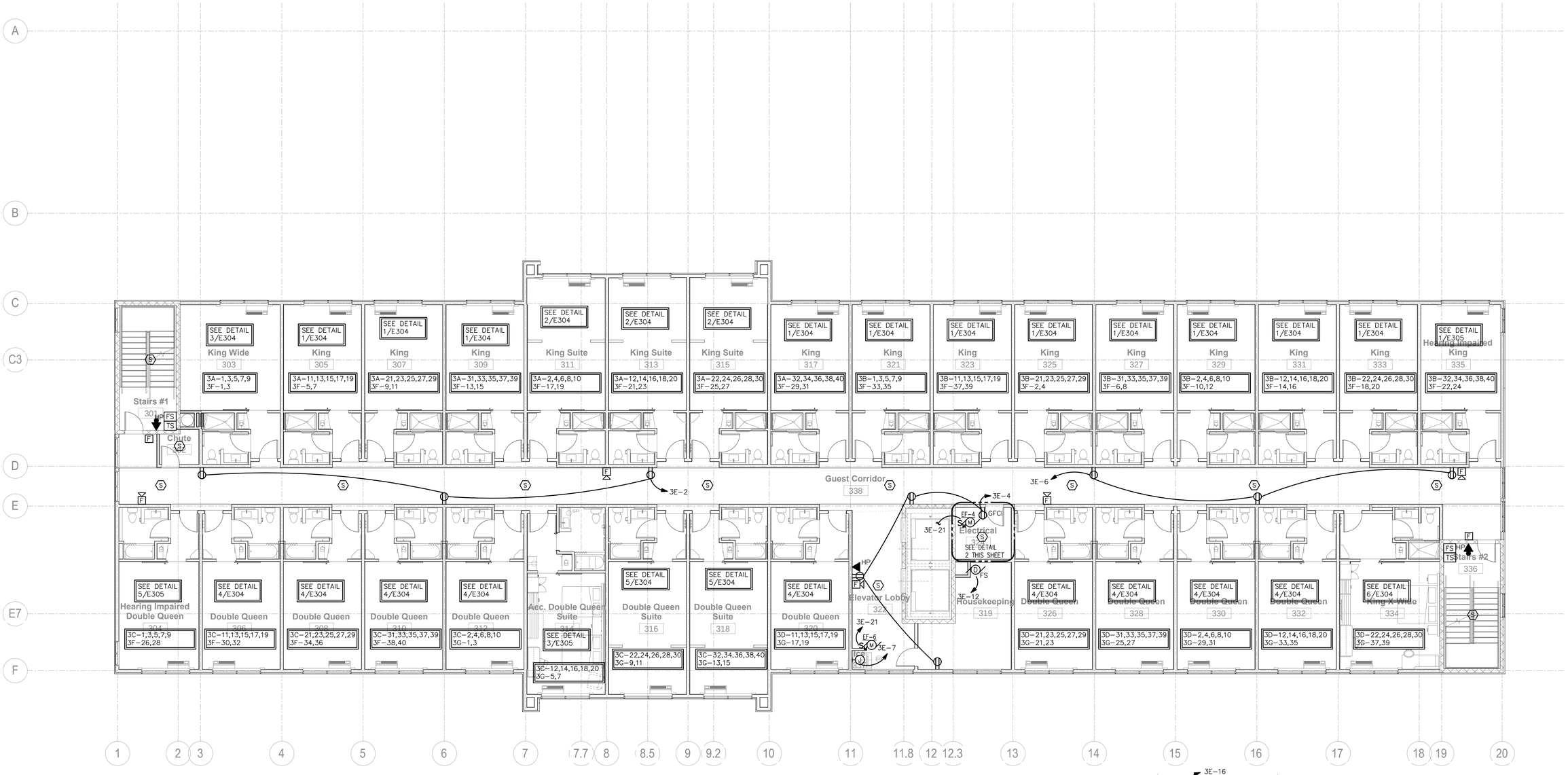
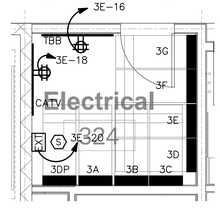
EDWIN DEANE GRIK
REGISTERED
PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN



1 E203 **3RD FLOOR PLAN - POWER**
SCALE: 1/8" = 1'-0"



2 E203 **ENLARGED ELECTRICAL ROOM**
SCALE: 1/4" = 1'-0"

Shiva Southaven Inc.

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Drawing Title
3RD FLOOR PLAN - POWER

Phase
Construction Documents

Project No.	14-081
Prepared by	MAH
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	E203

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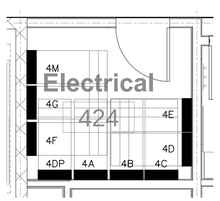
1 E204 **4TH FLOOR PLAN - POWER**
SCALE: 1/8" = 1'-0"



2 E204 **ENLARGED ELECTRICAL ROOM**
SCALE: 1/4" = 1'-0"

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Drawing Title
4TH FLOOR PLAN - POWER

Phase
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Project No.	14-081	Sheet No.	E204
Prepared by	MAH		
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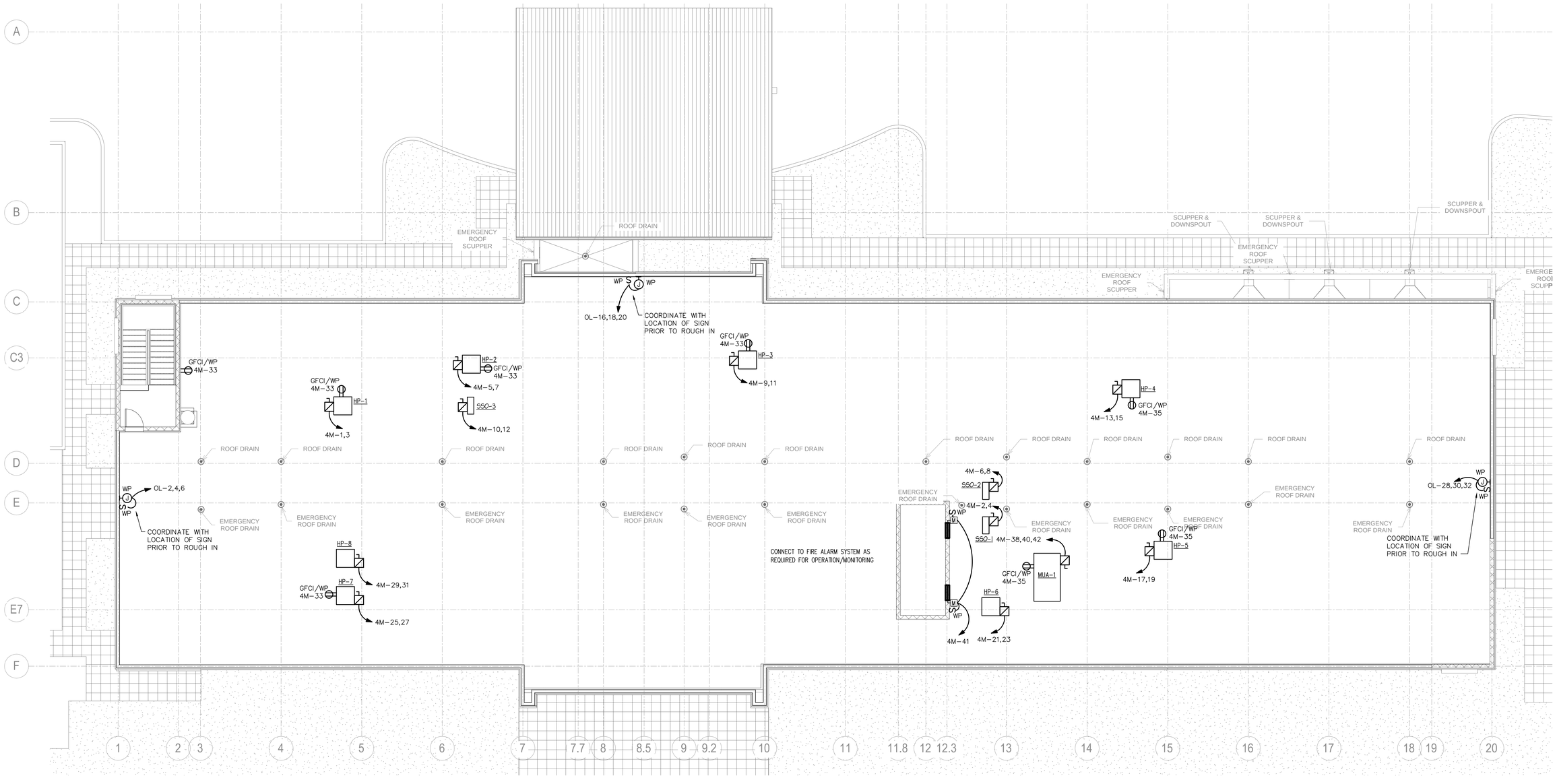

1 E205 **ROOF PLAN - POWER**
SCALE: 1/8" = 1'-0"

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TODD DEAN BELL REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI
2/27/105

KEY PLAN

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ROOF PLAN - POWER

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Prepared by	MAH		
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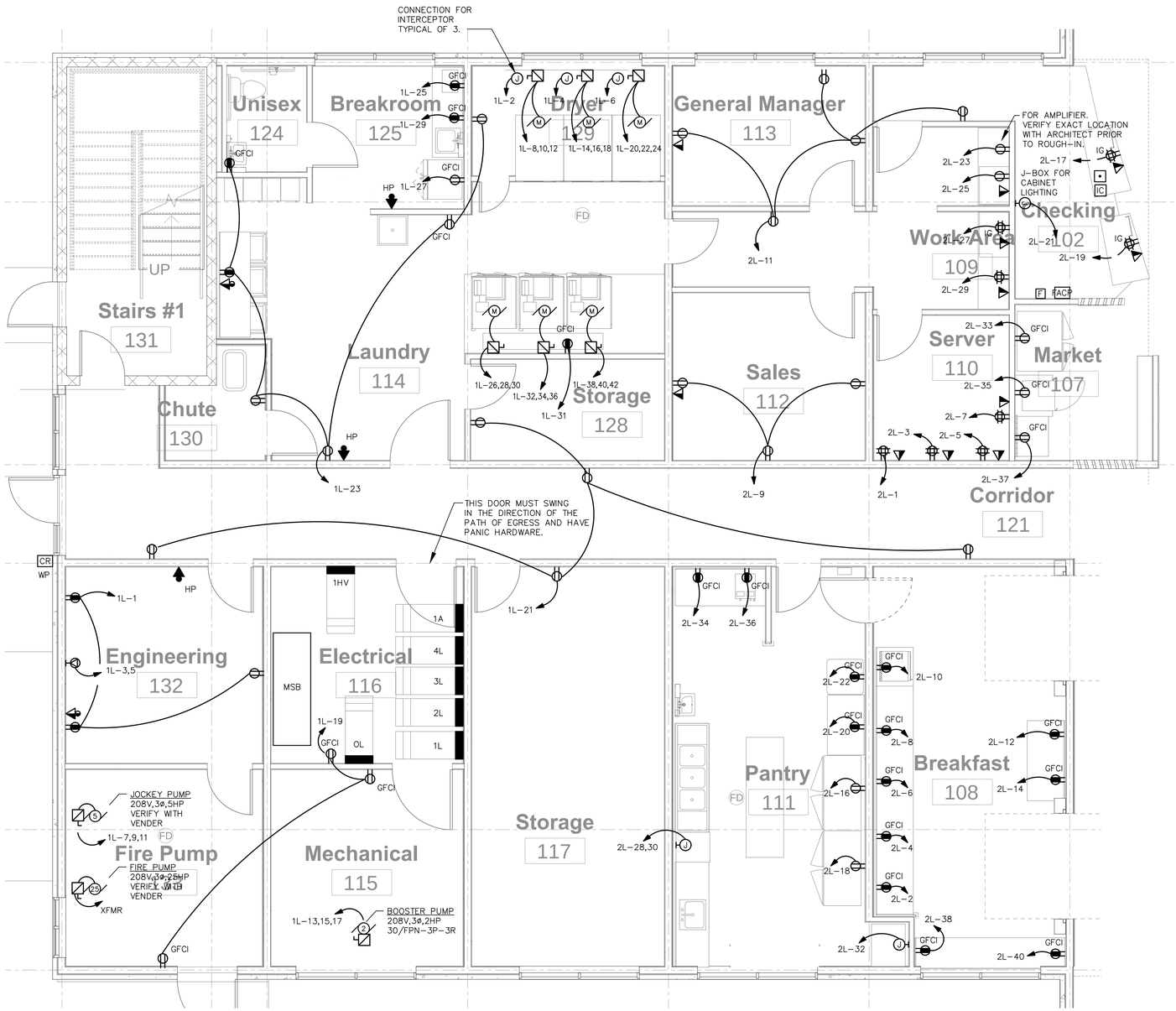

1 E301 ENLARGED PUBLIC AREA PLAN - POWER

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

NOTES:

1. COORDINATE EXACT LAYOUT OF THE EXERCISE ROOM WITH OWNER'S EQUIPMENT VENDOR PRIOR TO PROJECT START UP.
2. ALL 120V, 15 AND 20 AMP RECEPTACLES IN KITCHEN TO HAVE GFCI PROTECTION.
3. COORDINATE ALL FOOD PREP/SERVING EQUIPMENT WITH EQUIPMENT VENDOR. VERIFY ALL POWER REQUIREMENTS PRIOR TO ROUGH-IN.

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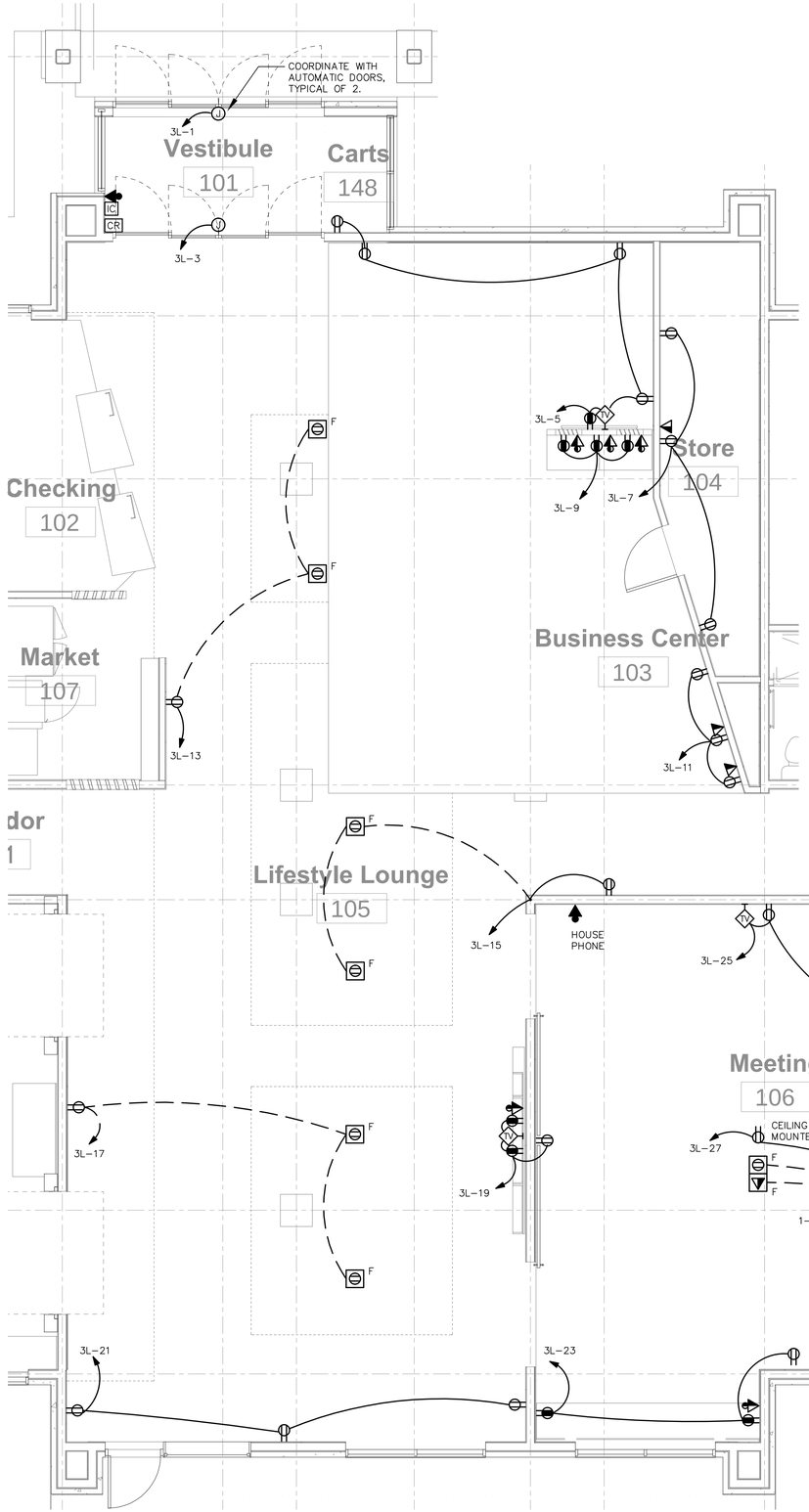

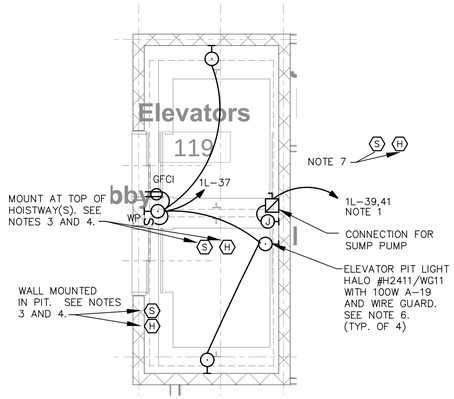

2 / E302 ENLARGED ELEVATOR

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

NOTES:

1. CONNECTION FOR 208V CIRCUIT FOR SUMP PUMP. COORDINATE WITH PLUMBING DRAWINGS.
2. COORDINATE EXACT LOCATION OF ALL DEVICES WITH THE ELEVATOR SHOP DRAWINGS.
3. MOUNT SMOKE AND HEAT DETECTORS WITHIN 2'-0" OF SPRINKLER HEADS. SMOKE DETECTORS SHALL, UPON ALARM, RECALL ELEVATOR TO THE APPROPRIATE LEVEL, AND LOCK OUT ELEVATOR VIA ELEVATOR EQUIPMENT. HEAT DETECTORS SHALL CONTROL MAIN ELEVATOR POWER. SEE ELEVATOR FIRE ALARM SHUTDOWN CONTROL SCHEMATIC. HEAT DETECTORS SHALL HAVE A LOWER RESPONSE TIME INDEX (135°F) COMPARED TO THE SPRINKLER HEADS IN THE HOISTWAY.
4. WHERE HOISTWAY IS NOT SPRINKLERED, DO NOT PROVIDE SMOKE OR HEAT DETECTORS IN THE HOISTWAY.
5. LOCATE PIT LIGHT SWITCH AND CONVENIENCE RECEPTACLE ADJACENT TO ACCESS DOOR.
6. LIGHTS SHALL NOT BE CONNECTED TO THE LOAD SIDE TERMINALS OF THE CONVENIENCE RECEPTACLE.
7. MOUNT CENTERED IN ELEVATOR MACHINE ROOM.
8. MOUNT IN ELEVATOR LOBBY AT EACH LEVEL WITHIN 15'-0" OF DOOR.
9. THE SMOKE DETECTOR(S) LOCATED IN THE DESIGNATED ELEVATOR RECALL LOBBY(S) SHALL ACTUATE THE FIRST ELEVATOR CONTROL CIRCUIT. THE SMOKE DETECTORS IN THE REMAINING ELEVATOR LOBBIES SHALL ACTUATE THE SECOND ELEVATOR CONTROL CIRCUIT. THE SMOKE DETECTORS IN THE HOISTWAY(S) AND ELEVATOR MACHINE ROOM(S) SHALL ACTUATE THE THIRD ELEVATOR CONTROL CIRCUIT, AND WHERE A MACHINE ROOM IS LOCATED AT THE DESIGNATED LEVEL. THAT ELEVATOR MACHINE ROOM SMOKE DETECTOR SHALL ALSO ACTUATE THE FIRST ELEVATOR CONTROL CIRCUIT.

1 / E302 ENLARGED PUBLIC AREA PLAN - POWER

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

NOTES:

1. COORDINATE EXACT LAYOUT OF THIS ROOM WITH ALL OTHER TRADES PRIOR TO PROJECT START UP. ELECTRICAL CONTRACTOR TO LAY-OUT ALL ELECTRICAL EQUIPMENT LOCATIONS TO MAINTAIN NEC CODE CLEARANCES OF 36". NOTIFY G.C./OWNER IF THE REQUIRED 36" NEC CLEARANCE REQUIREMENT CAN NOT BE MET. ALL COORDINATION TO BE DONE PRIOR TO PROJECT START AND SLAB BEING POURED.
2. FIELD COORDINATE WITH G.C. TO PROVIDE 120V CONNECTION FOR AUTOMATIC DOORS.
3. COORDINATE WITH G.C./OWNER TO PROVIDE (2) CONNECTIONS FOR THE ELECTRIC STRIKE ON THE VESTIBULE DOORS. DOORS TO OPEN UPON RELEASE SWITCH ACTIVATION AT LOBBY DESK OR FIRE ALARM ACTIVATION.
4. PROVIDE RECESSED KNOX BOX WITH BUILDING AND ENCLOSURE KEYS PER LOCAL FIRE DEPARTMENT REQUIREMENTS.

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ENLARGED PUBLIC AREA PLAN - POWER

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Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

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POOL NOTES

1. ALL ELECTRICAL EQUIPMENT IN POOL AREA SHALL BE BONDED TOGETHER WITH #8 CU. GND. PER N.E.C. #680-22.

2. ALL RECEPTACLES IN POOL AREA WITHIN 10' OF POOL AND IN POOL EQUIPMENT ROOM SHALL BE WEATHERPROOF G.F.C.I. TYPE.

3. ELECTRICAL INSTALLATION IS TO BE IN COMPLIANCE WITH ARTICLE 680 OF THE N.E.C.

4. THE FOLLOWING ITEMS ARE REQUIRED TO BE BONDED WITH INSULATED #8 COPPER WIRE, OR AS OTHERWISE REQUIRED BY THE N.E.C. OR EQUIPMENT MANUFACTURERS:
   - A. ALL METALLIC PARTS OF THE POOL STRUCTURE, INCLUDING REINFORCING STEEL, IN ALL CONCRETE SLABS.
   - B. UNDERWATER LIGHT FIXTURES, INCLUDING FORMING SHELLS, MOUNTING BRACKETS AND JUNCTION BOXES AS REQUIRED.
   - C. HANDRAILS.
   - D. LADDERS.
   - E. PUMP MOTORS, FOR ALL POOLS AND THE SLIDE.
   - F. WINDOW FRAMES, WHERE NOTED.
   - G. LIGHT FIXTURES ABOVE THE POOL OR SPA AND WITHIN 5 FEET HORIZONTALLY OF THE POOL OR SPA WALLS.
   - H. ALL METAL PARTS ASSOCIATED WITH THE SLIDE AND THE SPRAY AREA.
   - I. ANY OTHER METALLIC PARTS REQUIRED BY THE N.E.C.

5. THE FOLLOWING ITEMS ARE REQUIRED TO BE GROUNDED WITH INSULATED #12 COPPER WIRE MINIMUM, OR AS OTHERWISE REQUIRED BY THE N.E.C. OR EQUIPMENT MANUFACTURERS:
   - A. UNDERWATER LIGHTING FIXTURES.
   - B. ALL ELECTRIC EQUIPMENT WITHIN 5'-0" OF THE POOL OR SPA.
   - C. ALL ELECTRIC EQUIPMENT ASSOCIATED WITH THE CIRCULATION SYSTEM OF THE POOL OR SPA.
   - D. JUNCTION BOXES.
   - E. TRANSFORMER ENCLOSURES.
   - F. PANELBOARDS SUPPLYING POWER TO ANY EQUIPMENT ASSOCIATED WITH THE POOL OR SPA.
   - G. GROUND FAULT INTERRUPT CIRCUITS.

6. GROUNDING FOR POOL AND SPA LIGHTS AND FOR PUMP MOTORS IS TO BE IN CONDUIT.

7. ALL UNDERWATER LIGHT FIXTURES MUST BE SUBMERGED BEFORE BEING OPERATED.

8. UNDERWATER LIGHT FIXTURES MUST BE REMOVABLE FROM THE WATER FOR RELAMPING OR NORMAL MAINTENANCE WITHOUT REQUIRING DRAINAGE OF THE POOL.

9. NICHE LIGHT FIXTURES SHALL BE SUPPLIED WITH CORDS WHICH ARE 50 FEET LONG, EXCEPT AS NOTED. CONDUIT RUNS FROM EACH NICHE TO THE APPROPRIATE CONNECTION POINT (DECK BOX, SUBMERSIBLE JUNCTION BOX, ETC.) MUST BE AS DIRECT AS POSSIBLE AND A TOTAL LENGTH SHORTER THAN THE CORD WHEN PROPERLY INSTALLED. TO PROPERLY INSTALL FIXTURE AND CORD, LEAVE ENOUGH CORD IN THE NICHE SO THAT WHEN SERVICING IS REQUIRED THE FIXTURE CAN BE LIFTED ABOVE WATER LEVEL WITHOUT DRAINING THE POOL (WRAP EXTRA CORD LENGTH AROUND THE FIXTURE WHEN PLACING IN NICHE).

10. WHEN RESEALING A FIXTURE (SUCH AS AFTER RELAMPING, ETC.) CARE MUST BE TAKEN TO TIGHTEN THE SCREWS OR BOLTS IN SUCH A FASHION AS TO CREATE EQUAL PRESSURE ON THE GASKET ALL THE WAY AROUND THE FIXTURE.

11. ALL THREADED CONNECTIONS MUST BE MADE WITH NATIONAL TAPERED PIPE THREADS (N.P.T.) AND APPROVED THREAD SEALANT.

12. AN APPROVED POTTING COMPOUND (LOW MELTING PARAFFIN OR RTV SILASTIC) MUST BE USED TO FILL THE ENTRY OF THE JUNCTION BOX TO PREVENT MOISTURE MIGRATION INTO THE CONDUIT. AFTER POTTING THE JUNCTION BOX, ATTACH THE COVER PLATE SO THAT IT IS WATERTIGHT.

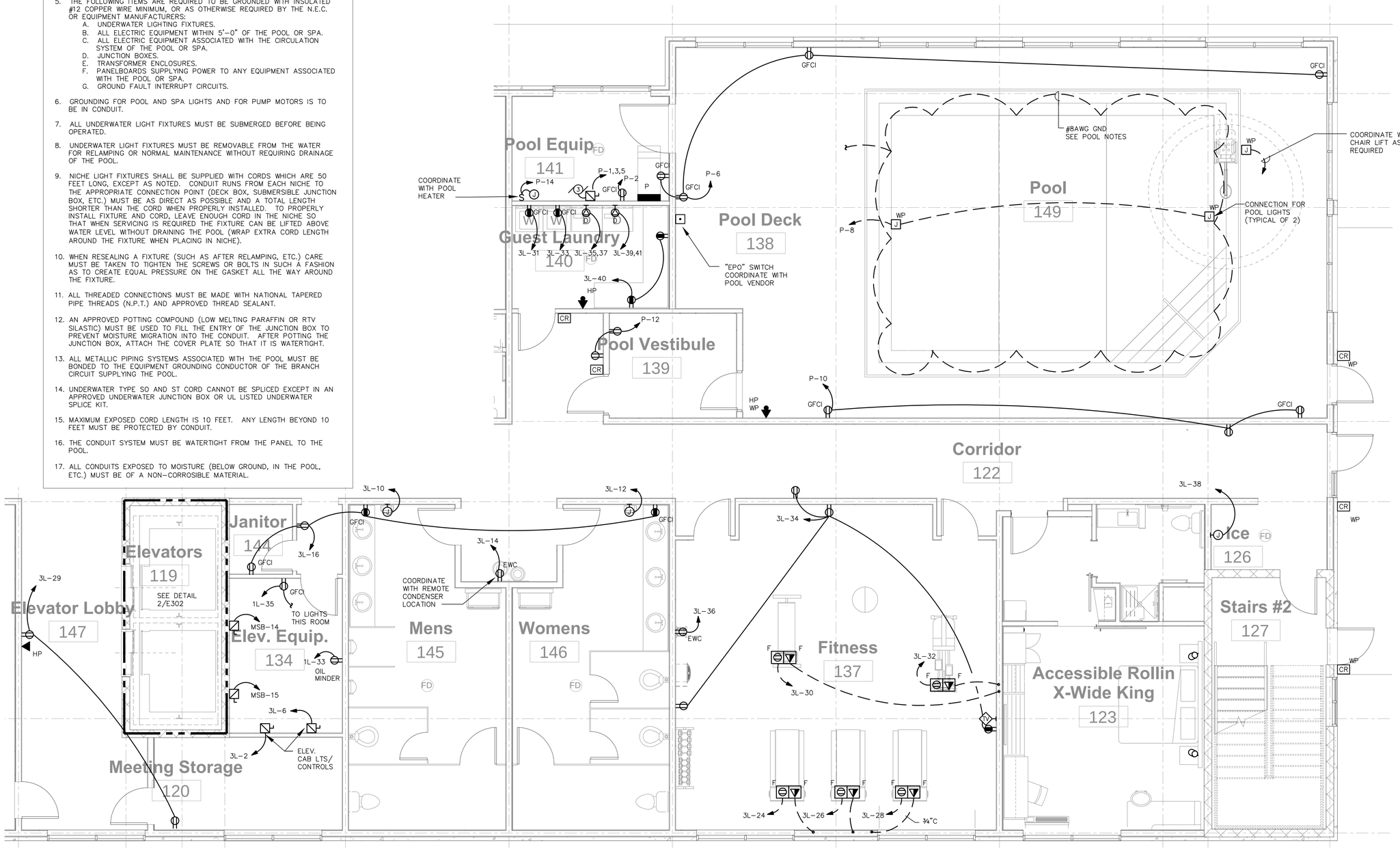
13. ALL METALLIC PIPING SYSTEMS ASSOCIATED WITH THE POOL MUST BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR OF THE BRANCH CIRCUIT SUPPLYING THE POOL.

14. UNDERWATER TYPE SO AND ST CORD CANNOT BE SPLICED EXCEPT IN AN APPROVED UNDERWATER JUNCTION BOX OR UL LISTED UNDERWATER SPLICE KIT.

15. MAXIMUM EXPOSED CORD LENGTH IS 10 FEET. ANY LENGTH BEYOND 10 FEET MUST BE PROTECTED BY CONDUIT.

16. THE CONDUIT SYSTEM MUST BE WATERTIGHT FROM THE PANEL TO THE POOL.

17. ALL CONDUITS EXPOSED TO MOISTURE (BELOW GROUND, IN THE POOL, ETC.) MUST BE OF A NON-CORROSIBLE MATERIAL.



1 E303 ENLARGED PUBLIC AREA PLAN - POWER

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

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REVISIONS		
No.	Date	Description
1		

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JOHN DEAN GERK
REGISTERED PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

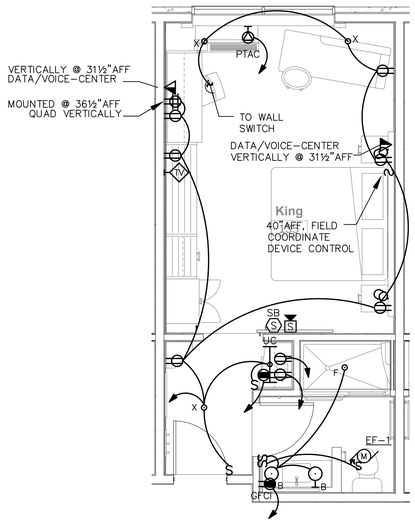
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ENLARGED PUBLIC AREA PLAN - POWER

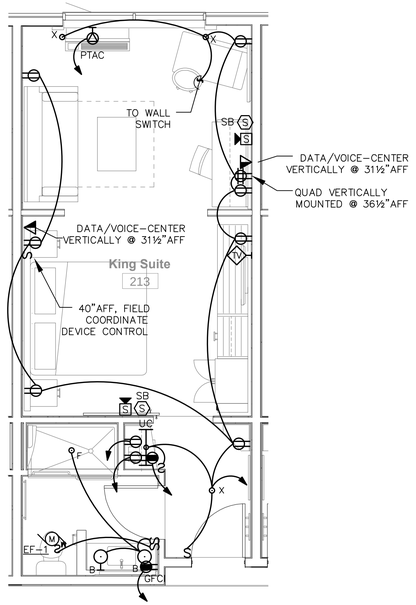
Phase
Construction Documents

Project No.	14-081
Prepared by	MAH
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	E303

Holiday Inn Express & Suites



1 E304 **KING UNIT**
SCALE: 1/4" = 1'-0"



2 E304 **KING SUITE**
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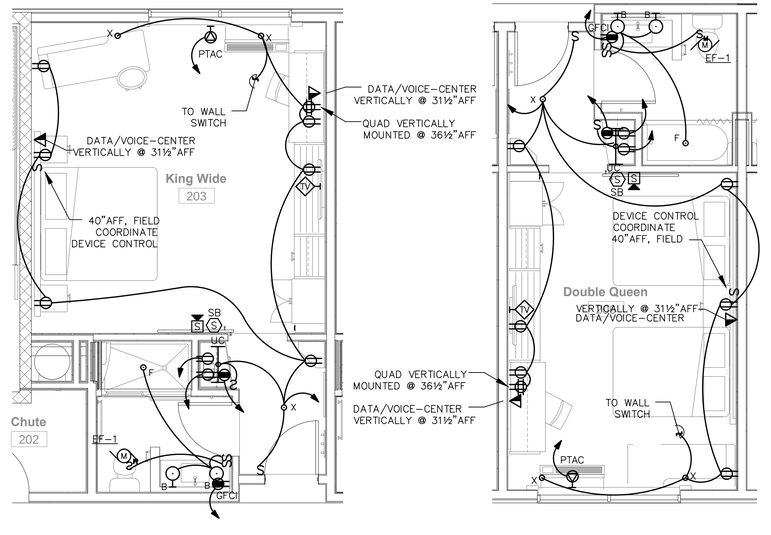
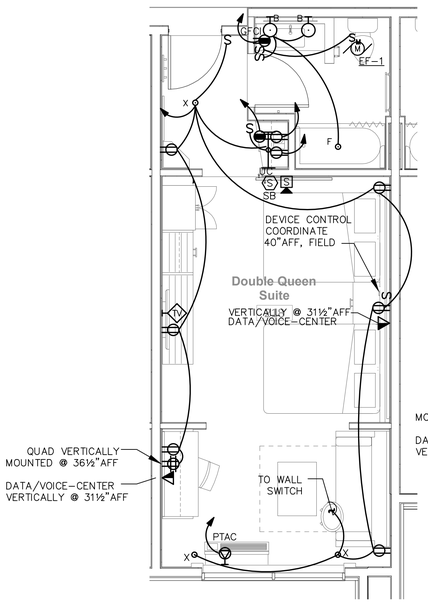


3 E304 **KING WIDE UNIT**
SCALE: 1/4" = 1'-0"

4 E304 **DOUBLE QUEEN UNIT**
SCALE: 1/4" = 1'-0"



5 E304 **DOUBLE QUEEN SUITE**
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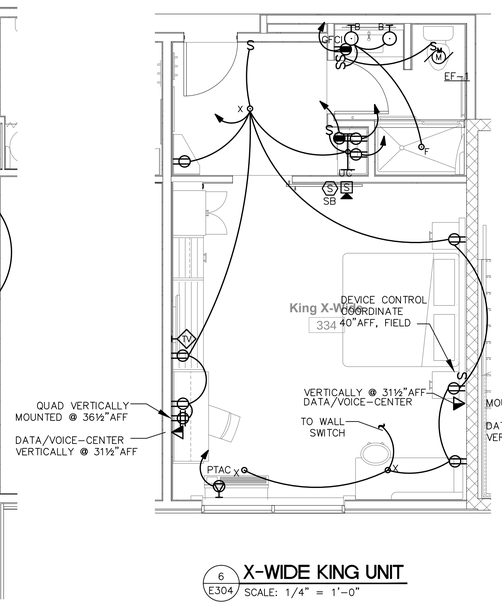
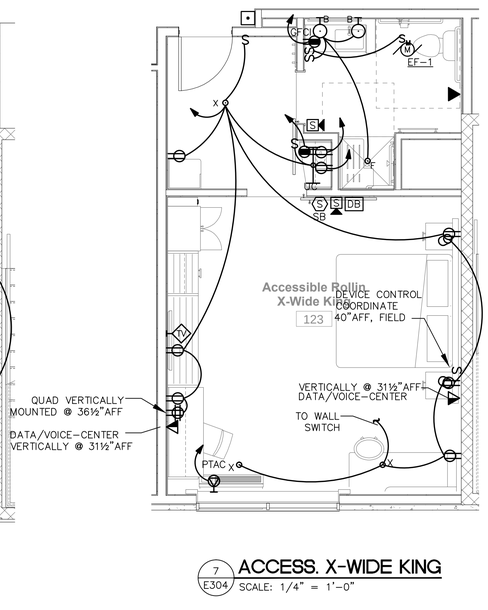


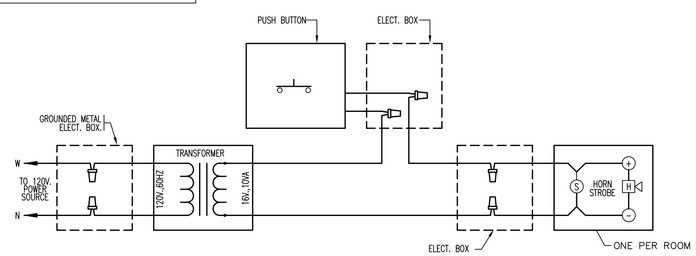
6 E304 **X-WIDE KING UNIT**
SCALE: 1/4" = 1'-0"



7 E304 **ACCESS. X-WIDE KING**
SCALE: 1/4" = 1'-0"

ALL 120 VOLT, 15 AND 20 AMP RECEPTACLES IN DWELLING UNITS SHALL BE TAMPER RESISTANT PER NEC 2011 SECTION 406.13.

ELECTRICAL OUTLET HEIGHTS (U.N.O.)
TYPICAL WALL OUTLET – 12" A.F.F.
TYPICAL ACCESSIBLE WALL OUTLET – 18" A.F.F.
BATHROOM VANITY OUTLET – 48" A.F.F.
GUESTROOM STUDIO WET BAR – 48" A.F.F.
TYPICAL KITCHEN OUTLET – 42" A.F.F.
ACCESSIBLE KITCHEN OUTLET – 46" A.F.F. MAX.
ACCESSIBLE BATHROOM VANITY OUTLET – 44" A.F.F. MAX.



NOTES:
1. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF DEVICES. COORDINATE THE LOCATIONS OF DEVICES WITH ARCHITECT

8 E304 **WIRING DIAGRAM OF VISUAL/AUDIBLE NOTIFICATION DEVICES FOR HEARING IMPAIRED AND ACCESSIBLE UNITS (10VA)**
NTS

GUESTROOM GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND OWNER FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL DEVICES PRIOR TO ELECTRICAL ROUGH-IN.
2. SEE 1/8 SCALE PLANS FOR CIRCUIT NUMBERS. CONTRACTOR SHALL REFER TO PANEL SCHEDULES AND RISER DIAGRAM.
3. AT WALLS BETWEEN ADJACENT ROOMS, ELECTRICAL OUTLET LOCATIONS, INCLUDING TV AND TELEPHONE OUTLETS, SHALL BE OFFSET 6" MIN. HORIZONTALLY FOR INSTALLATION. ELECTRICAL CORDS SHOULD BE HIDDEN FROM VIEW. BACK TO BACK OUTLETS ARE NOT ALLOWED.
4. LIGHT SWITCH AND GFCI OUTLETS CAN BE MOUNTED IN A COMMON BOX WITH COVER PLATE. COORDINATE CLEARANCE WITH MIRROR.
5. HEIGHT OF ALL SWITCHES, OUTLETS, ETC., TO MEET ACCESSIBILITY STANDARDS FOR MAXIMUM AND MINIMUM REACH RANGE. FEDERAL AND LOCAL CODES APPLY AND THE MOST STRINGENT STANDARD PREVAILS. SWITCHES ON LAMPS MUST BE TOGGLE TYPE.
6. ELECTRICAL OUTLETS AT DESKS ARE TO BE COORDINATED WITH FRANCHISE STANDARDS. DEPENDING ON FF&E PROVIDED, CERTAIN OUTLETS MAY NOT BE REQUIRED.
7. CEILING MOUNTED LIGHT FIXTURE AND EXHAUST FAN AT ALL GUESTROOM BATHROOMS TO BE SWITCHED SEPARATELY. CONTRACTOR SHALL COORDINATE WITH MECHANICAL FOR EXACT LOCATIONS AND REQUIREMENTS PRIOR TO ELECTRICAL ROUGH-IN.
8. HEARING IMPAIRED ROOMS SHALL BE EQUIPPED WITH ACCESSIBLE DEVICES SUCH AS, BUT NOT LIMITED TO THE FOLLOWING: FIRE ALARM STROBES, SMOKE DETECTOR STROBES AND DOOR BUZZER STROBES, TELEPHONES WITH VOLUME CONTROLS COMPATIBLE WITH THE PHONE SYSTEM. ALSO PROVIDE DOORBELL ON/OFF SWITCH WITH SIGNAGE AS REQUIRED.
9. AT ALL ADA AND HEARING IMPAIRED ROOMS:
   A. 177CD FIRE ALARM HORN/STROBE IN ROOM.
   B. FIRE ALARM STROBE IN BATH ROOM.
   C. SYSTEM, PHOTOELECTRIC SMOKE DETECTORS ON CEILING.
10. ALL NON-ADA GUESTROOMS:
   A. SYSTEM, PHOTOELECTRIC SMOKE DETECTORS ON CEILING.
   B. MINI-HORN ON WALL.
11. ALL GUESTROOMS SHALL HAVE 70DBA MINIMUM AT PILLOW.
12. PTAC - PREFERRED MANUFACTURERS AS REFERENCED IN BRANDS STANDARDS MANUAL OR APPROVED EQUAL MUST BE PROVIDED.
13. ALL CONTROLS FOR USE BY GUESTS MUST BE MOUNTED AT BETWEEN 15" AFF AND 48" AFF AND PROVIDE A 30" X 48" FLOOR AREA IN COMPLIANCE WITH ACCESSIBILITIES STANDARDS. OPERABLE CONTROLS LOCATED OVER AN OBSTRUCTION DEEPER THAN 10" MUST BE MOUNTED NO HIGHER THAN 46" AFF. ACCESSIBLE CONTROLS MUST NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST.
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15. OBJECTS MOUNTED WITHIN THE CIRCULATION PATH IN ACCESSIBLE ROOMS BETWEEN 27" AND 80" AFF SHALL NOT PROTRUDE FURTHER THAN 4" FROM WALL.
16. ALL GUESTROOM LIGHT FIXTURES TO HAVE WARM WHITE, INSTANT START, FLICKER FREE, 2700K LAMPS.
17. ALL GUESTROOM LOW VOLTAGE WIRING MUST BE INSTALLED IN CONDUIT FROM ROOMS TO THE ACCESSIBLE CEILING IN CORRIDOR. THIS INCLUDES CATV, HSIA, AND TELEPHONE WIRING.
18. MOUNT ALL MICROWAVE RECEPTACLES ABOVE COUNTER. ALL REFRIGERATOR RECEPTACLES SHALL BE MOUNTED UNDER COUNTER. COORDINATE WITH OWNER FOR EXACT MOUNTING HEIGHT PRIOR TO ELECTRICAL ROUGH-IN.
19. CONTRACTOR TO COORDINATE WITH FIRE ALARM CONTRACTOR THE LOCATION OF 120V UNIT SMOKE/CO DETECTORS AND PROVIDE CONNECTION APPROPRIATELY.
20. AT ALL HEARING IMPAIRED ROOMS:
   A. PROVIDE AUDIBLE/VISUAL DOORBELL/ANNUNCIATOR EQUIVALENT TO EDWARDS MODEL 7005-G5 WITH EDWARDS MODEL 620 PUSHBUTTON.
   B. 177CD FIRE ALARM HORN/STROBE IN ROOM.
   C. FIRE ALARM STROBE IN BATH ROOM.
   D. AUDIBLE/VISUAL DOORBELL IN BATHROOM.

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No.	Date	Description
1		

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JOHN DEAN GERIK
REGISTERED PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

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Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

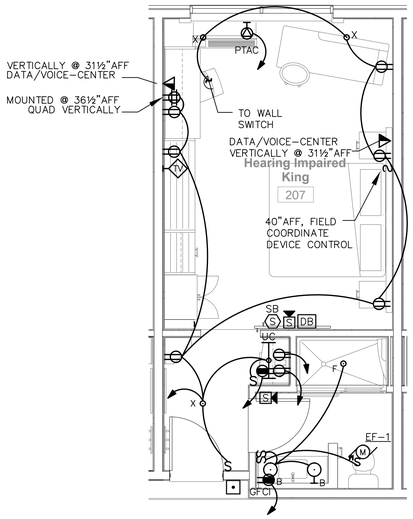
Drawing Title

ENLARGED GUESTROOM PLANS

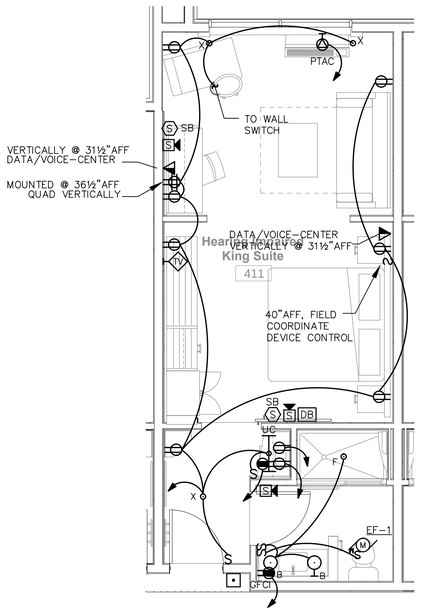
Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	MAH	E304
Checked by	EDB	
Date	Feb. 27, 2015	

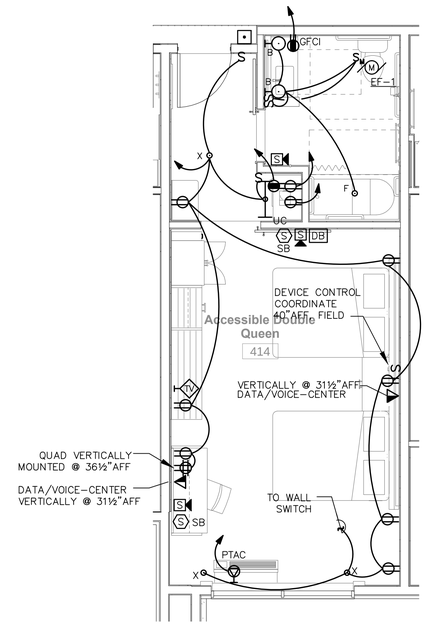
Holiday Inn Express & Suites



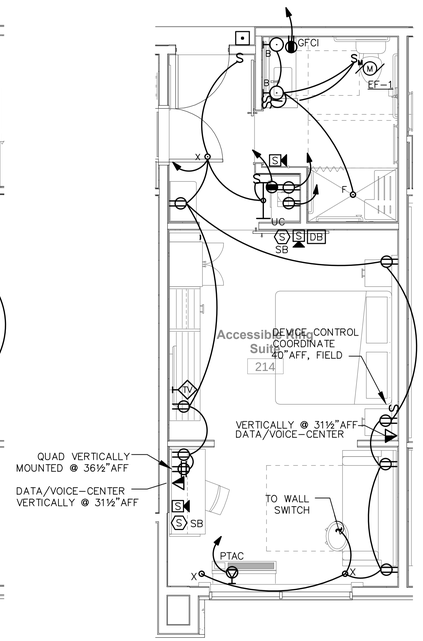
1 E305 **H.I. KING UNIT**
SCALE: 1/4" = 1'-0"



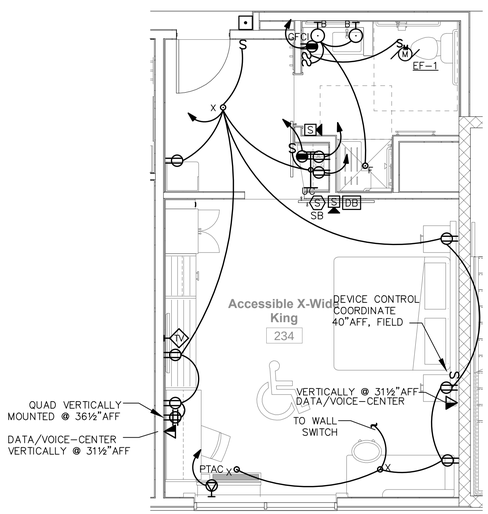
2 E305 **H.I. KING SUITE**
SCALE: 1/4" = 1'-0"



3 E305 **ACCESS. QUEEN SUITE**
SCALE: 1/4" = 1'-0"



4 E305 **ACCESS. KING SUITE**
SCALE: 1/4" = 1'-0"



4 E305 **ACCESS. X-WIDE KING**
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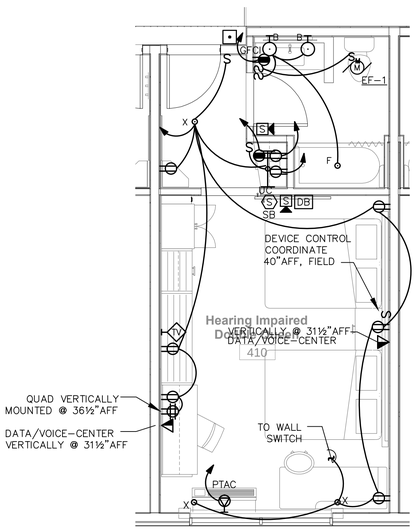
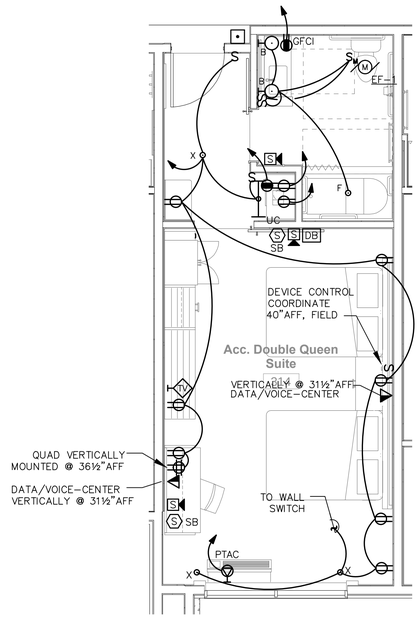
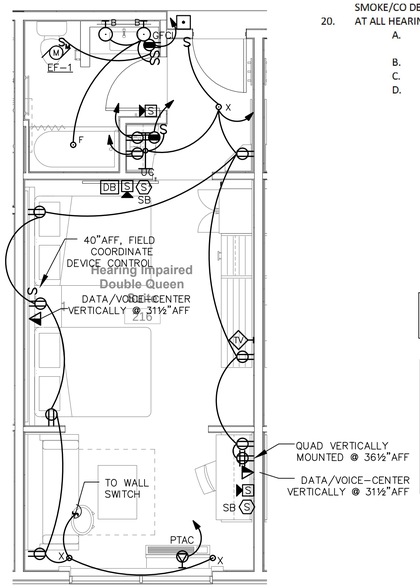


5 E305 **H.I. DOUBLE QUEEN**
SCALE: 1/4" = 1'-0"



7 E305 **ACCESS. DOUBLE QUEEN SUITE**
SCALE: 1/4" = 1'-0"



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REVISIONS		
No.	Date	Description
1		

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JOHN DEAN GEIK
LICENSED PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

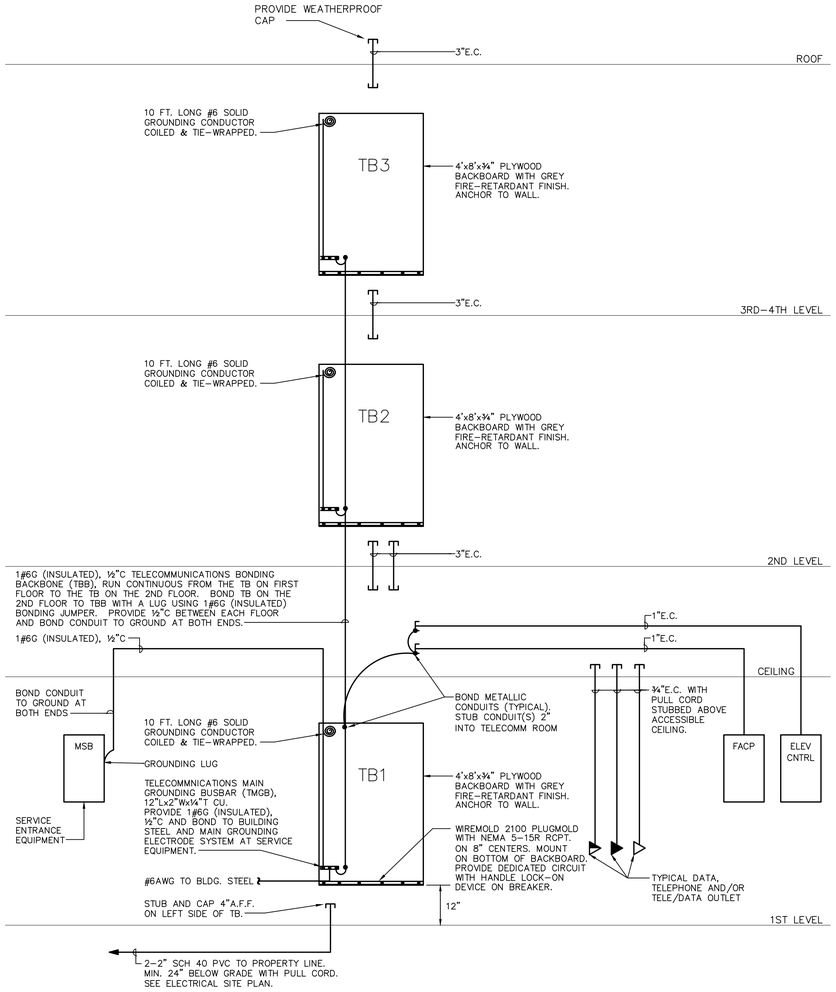
Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ENLARGED GUESTROOM PLANS

Phase
Construction Documents

Project No.	14-081	Sheet No.	E305
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

Holiday Inn Express & Suites



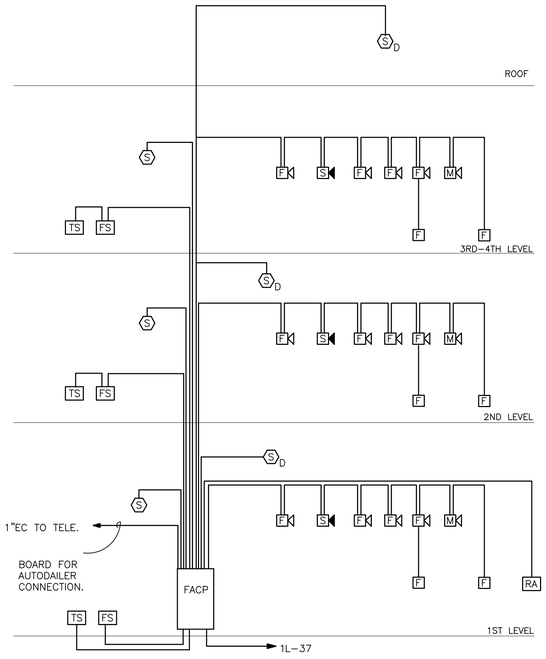
TELE/DATA RISER DIAGRAM NOTES:
1. FLOOR PLANS INDICATE THE EXACT QUANTITY AND LOCATION OF ALL TELEPHONE AND/OR DATA OUTLETS.
2. ALL TELEPHONE AND/OR DATA WIRING AND EQUIPMENT SHALL BE PROVIDED BY THE OWNER'S TELE/DATA SUPPLIER.

2 E401 TELEPHONE RISER DIAGRAM
NO SCALE

FIRE ALARM SEQUENCE

SEQUENCE OF OPERATIONS — ALARM SOURCE AND TYPE	BUILDING SYSTEM OUTPUTS: ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTIVATE GENERAL EVACUATION SIGNAL	DISPLAY CHANGE OF STATUS	ACTIVATE EXTERNAL HORN STROBE	TRANSMIT F.A. SIGNAL TO CENTRAL COMMUNICATOR	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL COMM.	TRANSMIT TROUBLE SIGNAL TO CENTRAL COMM.	CENTRAL COMM.: SHOW CHANGE OF STATUS ON ANNUNCIATOR	SHOW CHANGE OF STATUS ON CENTRAL PANEL	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION
1. MANUAL PULL STATION ALARM	■	■					■	■	■	■			■	■	■		
2. BUILDING SMOKE DETECTOR	■	■					■	■	■	■			■	■	■		
3. DUCT DETECTOR ALARM			■	■			■				■		■	■		■	
4. SMOKE DETECTOR DIRTY/MALFUNCTION – ALL					■	■	■					■	■	■	■		■
5. SPRINKLER WATERFLOW	■	■					■	■	■	■			■	■	■		
6. SPRINKLER TAMPER			■	■			■				■		■	■		■	
7. FIRE ALARM AC POWER FAILURE					■	■	■					■	■	■	■		■
8. FIRE ALARM SYSTEM LOW BATTERY					■	■	■					■	■	■	■		■
9. OPEN CIRCUIT					■	■	■					■	■	■	■		■
10. GROUND FAULT					■	■	■					■	■	■	■		■
11. NOTIFICATION APPLIANCE CIRCUIT SHORT					■	■	■					■	■	■	■		■
12. SYSTEM RESET	(SEE NOTES 1 AND 2 BELOW FOR ACTIONS)																

NOTES:
1. 'SYSTEM RESET' SHALL CLEAR ALL DETECTOR AND MANUAL ALARM SIGNALS, STOP AND RESET THE PRE-DISCHARGE COUNTDOWN, AND STOP TRANSMISSION OF ALL ALARM SIGNALS TO THE MAIN PANEL
2. SYSTEM SHALL BE PROGRAMMED SUCH THAT THE SYSTEM CAN BE RESET WHILE THE MANUAL ABORT BUTTON IS ACTIVATED.
3. SYSTEM SHALL HAVE A 3 BEAT TEMPORAL SOUND PATTERN.



1 E401 FIRE ALARM RISER DIAGRAM
NO SCALE

FIRE ALARM RISER NOTES:
1. FACP SHALL HAVE A MINIMUM 24HR. BATTERY BACKUP.
2. FACP SHALL BE CONNECTED TO A UL APPROVED CENTRAL STATION.
3. ZONE PER NFPA 72 AND MANUFACTURER'S RECOMMENDATIONS WITH NO ONE ZONE EXCEEDING 15,000 S.F. PER FLOOR.
4. SEE PLANS FOR EXACT DEVICE QUANTITY AND LOCATIONS.
5. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
6. LOCATE ANNUNCIATOR AS DIRECTED BY LOCAL OFFICIAL
7. ALL FIRE ALARM WIRING SHALL BE PLENUM-RATED.
8. FIRE ALARM DEVICES IN GUEST ROOMS SHALL COMPLY WITH I.B.C. 907.9.1.2 AND NFPA 72.
9. PROVIDE ELEVATOR RECALL

HVAC EQUIPMENT - ELECTRICAL

MARK	SUPPLY FAN HP OR WATTS	ELECTRICAL DATA VOLTAGE	HEAT KW	MCA	MAX FUSE	DISCONNECT
PDU-1		208/3	12.5	71.0	80	100/F80-3P-4X
PDCU-1		208/3		7.0	15	30/F15-3P-3R
SSI-1		208/1		1.0	15	30/F15-2P
SSO-1		208/1		14.0	15	30/F15-2P-3R
SSI-2		208/1		1.0	15	30/F15-2P
SSO-2		208/1		14.0	15	30/F15-2P-3R
SSI-3		208/1		1.0	15	30/F15-2P
SSO-3		208/1		14.0	15	30/F15-2P-3R
AH-1		208/1	7.7	38.0	40	60/F40-2P
AH-2		208/1	4.8	24.0	25	30/F25-2P
AH-3		208/1	9.6	53.0	60	60/F60-2P
AH-4		208/1	4.8	24.0	25	30/F25-2P
AH-5		208/1	7.7	38.0	40	60/F40-2P
AH-6		208/1	7.7	38.0	40	60/F40-2P
AH-7		208/1	7.7	38.0	40	60/F40-2P
AH-8		208/1	7.7	38.0	40	60/F40-2P
HP-1		208/1		26.0	45	60/F45-2P-3R
HP-2		208/1		9.0	15	30/F15-2P-3R
HP-3		208/1		34.0	60	60/F60-2P-3R
HP-4		208/1		9.0	15	30/F15-2P-3R
HP-5		208/1		15.0	25	30/25-2P-3R
HP-6		208/1		18.0	30	30/F30-2P-3R
HP-7		208/1		26.0	45	60/45-2P-3R
HP-8		208/1		15.0	25	30/F25-2P-3R
EF-1	45W	120/1				WALL SWITCH
EF-2	150W	120/1				S_{M-}
EF-3	100W	120/1				WALL SWITCH
EF-4	100W	120/1				S_M
EF-5	150W	120/1				SWITCH WITH LIGHTS
EF-6	83W	120/1				S_M
EF-7	108W	120/1			S_M	SWITCH
EF-8	100W	120/1			S_M	INTERLOCKW/AH-1
EF-9	108W	120/1			S_M	INTERLOCKW/AH-4
EF-10	45W	120/1				S_M
EF-11	350W	120/1				S_M
EF-12	100W	120/1	1			SWITCH WITH LIGHTS
EWH-1		120/1	1			SWITCH
PTAC-A		208/1	2.1	14.1	15	30/15-2P (VERIFY)
MUA-1		208/3		51	60	60/F60-3P-3R

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TOWN DEAN BELL REGISTERED PROFESSIONAL ENGINEER 20706 STATE OF MISSISSIPPI 2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
TELEPHONE & FIRE ALARM RISER DIAGRAMS

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	MAH	E401
Checked by	EDB	
Date	Feb. 27, 2015	

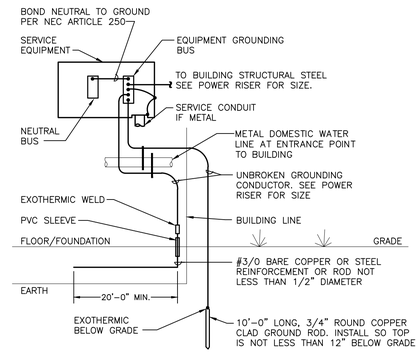
Holiday Inn Express & Suites

CU FEEDER SCHEDULE / AL FEEDERS

STD. FUSE OR C/B TRIP SIZE	# OF SETS	BUILDING WIRE QUANTITY & SIZE. TYPE THHN – DRY TYPE THWN – WET	MINIMUM CONDUIT SIZE	# OF SETS	BUILDING WIRE QUANTITY & SIZE. TYPE THHN – DRY TYPE THWN – WET	MINIMUM CONDUIT SIZE
30	1	4 #10, #10 G	1/2"	N/A	N/A	N/A
35	1	4 #8, #10 G	3/4"	N/A	N/A	N/A
40	1	4 #8, #10 G	3/4"	N/A	N/A	N/A
45	1	4 #6, #10 G	1"	N/A	N/A	N/A
50	1	4 #6, #10 G	1"	N/A	N/A	N/A
60A	1	3 #6, #10 G	1"	N/A	#2, #2, #2 W/ #4 G SER	N/A
60	1	4 #6, #10 G	1"	N/A	N/A	N/A
70	1	4 #4, #8 G	1 1/4"	N/A	N/A	N/A
80	1	4 #3, #8 G	1 1/4"	N/A	N/A	N/A
90	1	4 #2, #8 G	1 1/4"	N/A	N/A	N/A
100A	1	3 #1, #8 G	1 1/4"	1	1/0, 1/0, 1/0 W/ #2 G SER	N/A
100	1	4 #3, #8 G	1 1/4"	1	4 #1, #6 G	2"
110	1	4 #1, #6 G	1 1/2"	1	4 #1/0, #4 G	2"
125	1	4 #1, #6 G	1 1/2"	1	4 #2/0, #4 G	2"
150	1	4 #1/0, #6 G	2"	1	4 #3/0, #4 G	2 1/2"
175	1	4 #2/0, #6 G	2"	1	4 #4/0, #4 G	2 1/2"
200	1	4 #3/0, #6 G	2"	1	4 –250KCMIL, #4 G	3"
225	1	4 #4/0, #4 G	2 1/2"	1	4 –300KCMIL, #2 G	3"
250	1	4 – 250KCMIL, #4 G	2 1/2"	1	4 – 350KCMIL, #2 G	3"
300	1	4 – 350KCMIL, #4 G	2 1/2"	1	4 – 500KCMIL, #2 G	3 1/2"
350	2	4 #2/0, #3 G	2"	1	4 – 750KCMIL, #1 G	5"
400	2	4 – #3/0, #3 G	2 1/2"	2	4 – 250KCMIL, #1 G	3"
450	2	4 #4/0, #2 G	2 1/2"	2	4 – 300KCMIL, #1/0 G	3"
500	2	4 – 250KCMIL, #2 G	2 1/2"	2	4 – 350KCMIL, #1/0 G	3"
600	2	4 – 350KCMIL, #1 G	3"	2	4 – 500KCMIL, #2/0 G	3 1/2"
700	2	4 – 500KCMIL, #1/0 G	3"	2	4 – 700KCMIL, #3/0 G	4"
800	3	4 – 300KCMIL, #1/0 G	3"	3	4 – 400KCMIL, #3/0 G	3 1/2"
1000	3	4 – 400KCMIL, #2/0 G	3"	3	4 – 600KCMIL, #4/0 G	4"
1200	4	4 – 350KCMIL, #3/0 G	3"	4	4 – 500KCMIL, 250KCMIL G	3 1/2"
3000	8	4 – 600KCMIL, 500KCMIL G	4"	10	4 – 750KCMIL, 800KCMIL G	5"

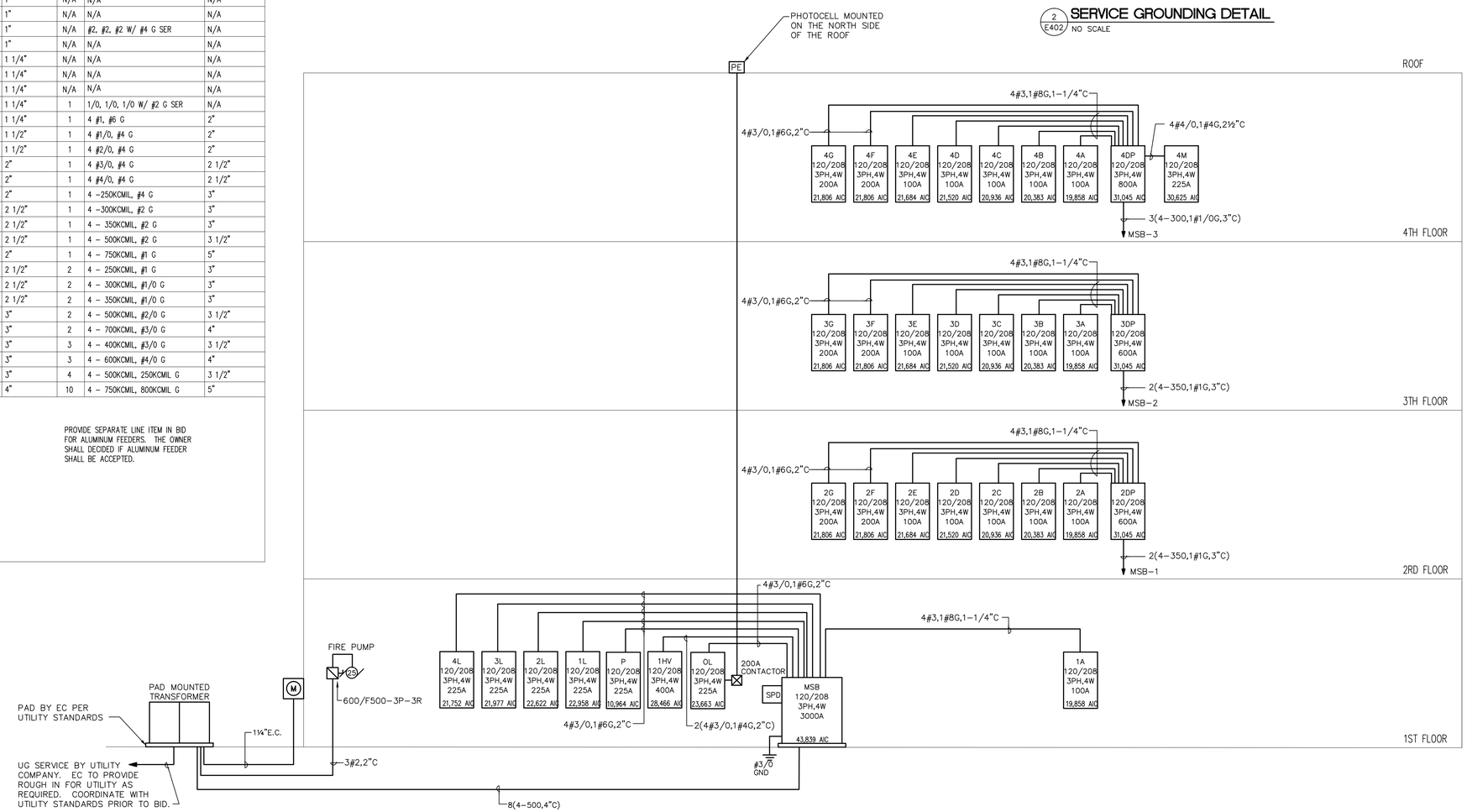
NOTES:
1. ALL FEEDER SIZES LISTED MAY NOT BE USED IN PROJECT RISER DIAGRAM.
2. ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED.
3. REFER TO LATEST EDITION OF NEC FOR CONDUIT TYPES REQUIRED PER THEIR LOCATION. IF CONDUIT OTHER THAN 'EMT' IS REQUIRED USE SIZE PER MAXIMUM FILL TABLES.
4. FEEDER SIZES SHOWN IN PROJECT RISER WITH A DELTA SYMBOL ' D' ARE 3Ø, 3 WIRE FEEDERS, A NEUTRAL WIRE IS NOT REQUIRED.
5. FEEDER SIZES SHOWN IN PROJECT RISER WITH A DELTA SYMBOL ' F' ARE 1Ø, 3 WIRE FEEDERS.

PROVIDE SEPARATE LINE ITEM IN BID FOR ALUMINUM FEEDERS. THE OWNER SHALL DECIDED IF ALUMINUM FEEDER SHALL BE ACCEPTED.



RESISTANCE TO GROUND SHALL BE LESS THAN 25 OHMS

2 / E402 SERVICE GROUNDING DETAIL
NO SCALE



1 / E402 POWER RISER DIAGRAM
NTS

NOTE:
WHERE ELECTRICAL PANELS ARE PLACED IN STORAGE ROOMS, ALL NEC CLEARANCES MUST BE MAINTAINED.

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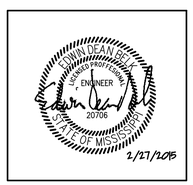

KEY PLAN

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Holiday Inn Express & Suites

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Drawing Title
POWER RISER DIAGRAM

Phase
Construction Documents

Project No.	14-081	Sheet No.	E402
Prepared by	MAH		
Checked by	EDB		
Date	Feb. 27, 2015		

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SWITCHBOARD: **MSB**
120/208 VOLTS, 3 Ø 4 WIRE, TYPE: QED SWITCHBOARD AIC: 65,000
FLOOR MOUNTED, 3000A MAIN BREAKER 3000 AMPS
BY: SHEET: JOB #: OF: CHECKED: DB DATE: 2/27/2015

CIRCUIT NO.	FRAME	TRIP	POLE	LOAD SERVED	A	B	C	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
1	65K	600	3	PANEL 2DP	86.3	83.4	73.6	2.0	1.8	0.1	88.0		4.5	147.0
2	65K	600	3	PANEL 3DP	86.3	83.4	73.6	2.0	1.8	0.1	88.0		4.5	147.0
3	65K	800	3	PANEL 4DP	105.7	104.9	93.1	2.0	3.1	59.2	88.0		4.5	147.0
4	65K	200	3	PANEL P	13.0	12.0	11.8	1.0	2.1	6.9	26.6		0.3	
5	65K	200	3	PANEL OL	9.1	8.6	8.0	22.4			3.0		0.2	
6	65K	200	3	PANEL 1L	15.0	16.3	15.7	0.6	2.7	37.6	2.8		3.3	
7	65K	200	3	PANEL 2L	11.7	12.5	12.5	0.3	3.2			15.2	18.0	
8	65K	200	3	PANEL 3L	11.5	10.7	12.5		10.4	2.4	12.0		9.9	
9	65K	200	3	PANEL 4L	5.7	3.9	4.4	13.9	0.0					
10	65K	400	3	PANEL 1HV	24.6	24.4	23.9	0.0	0.0	10.0	62.5	0.0	0.4	0.0
11	65K	100	3	PANEL 1A	13.7	13.0	11.9	0.0	0.0	0	14.0	0	0	24.5
12	65K	200	3	SPARE										
13	65K	200	3	SPARE										
14	65K	200	3	ELEVATOR *	18.0	18.0	18.0			54.0				
15	65K	200	3	ELEVATOR *	18.0	18.0	18.0			54.0				
16	65K	200		SPARE										
17	65K	200		SPARE										
				SUBTOTALS	418.4	409.2	377.0							
* - INDICATES SHUNT TRIP BREAKER				1204.7 TOTALS	1204.7			44.2	25.1	224.3	384.8	15.2	45.6	465.5

LOAD	KVA CONN.	D.F.	KVA NET
LIGHTING	44.2	1.25	55.2
RECEPTACLES	10.0	1.00	10.0
RECEPTACLES	15.1	0.50	7.5
MOTORS	224.3	1.00	224.3
LARGEST MOTOR	54.0	1.75	94.5
HEAT	384.8	1.00	384.8
KITCHEN	15.2	0.65	9.9
OTHER	45.6	1.00	45.6
GUESTROOMS	465.5	NEC	188.2
TOTAL	1258.7		1020.1

CALCULATIONS: 1020.1 / 0.36 2833.7 A

NOTES:
1 * - INDICATES SHUNT TRIP BREAKER — 465500 FIRST 20000 AT 50% — 10000.0
2 PANEL LISTED UL RATED FOR SERVICE ENTRANCE — UP TO 100,000 AT 40% — 178200.0
3 ** - PROVIDE ISOLATED GROUNDING BAR IN PANEL — REMAINDER AT 30% — 0.0
4 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42 — 188200

PANEL: **OL**
120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 30,000
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: 3 JOB #: OF: 33 CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
L	1.02			SITE LIGHTING *	8	20	2	1	2	1	20	10	BUILDING SIGN	1.20			L	2.22						
L		1.02						3	4	1	20	10	BUILDING SIGN		1.20		L	2.22						
L			1.54	SITE LIGHTING *	8	20	2	5	6	1	20	10	BUILDING SIGN			1.20	L	2.74						
L	1.54							7	8	1	20	8	BACKFLOW *	1.50			H	1.54			1.50			
L		1.27		SITE LIGHTING *	8	20	2	9	10	1	20	8	BACKFLOW *		1.50		H	1.27			1.50			
L			1.27					11	12	1	20	10	FLAG LIGHTING ***			0.70	L	1.97						
L	1.20			ENTRY SIGNAGE *	8	20	1	13	14	1	20	12	LIGHTING CONTROL *	0.20			O	1.20					0.20	
L		1.20		ENTRY SIGNAGE *	8	20	1	15	16	1	20	10	BUILDING SIGN		1.20		L	2.40						
L			0.87	PORT COCHERE LTS	10	20	1	17	18	1	20	10	BUILDING SIGN			1.20	L	2.07						
				SPARE		20	1	19	20	1	20	10	BUILDING SIGN	1.20			L	1.20						
				SPARE		20	1	21	22	1	20		SPARE											
				SPARE		20	1	23	24	1	20		SPARE											
				SPARE		20	1	25	26	1	20		SPARE											
				SPARE		20	1	27	28	1	20	10	BUILDING SIGN		1.20		L	1.20						
				SPARE		20	1	29	30	1	20	10	BUILDING SIGN			1.20	L	1.20						
				SPARE		20	1	31	32	1	20	10	BUILDING SIGN	1.20			L	1.20						
				SPARE		20	1	33	34	1	20		SPARE											
				SPARE		20	1	35	36	1	20		SPARE											
				SPARE		20	1	37	38	1	20		SPARE											
				SPARE		20	1	39	40	1	20		SPARE											
				SPARE		20	1	41	42	1	20		SPARE											
	3.76	3.49	3.68	SUBTOTALS										5.30	5.10	4.30								
													TOTALS			25.6		22.43			3.00		0.20	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	22.43	1.25	28.04
RECEPTACLES	0.00	1.00	0.00
RECEPTACLES	0.00	0.50	0.00
MOTORS	0.00	1.00	0.00
LARGEST MOTOR	0.00	1.75	0.00
HEAT	3.00	1.00	3.00
KITCHEN	0.00	0.65	0.00
OTHER	0.20	1.00	0.20
SPARE	0.00	1.00	0.00
TOTAL	25.63		31.24

CALCULATIONS: 31.2 / 0.36 86.8 A

NOTES:
1 CONTRACTOR TO FIELD VERIFY DISTANCE RUNS WITH TABLE ON SHEET E401 FOR VOLTAGE DROP.
2 * - CONTRACTOR SHALL VERIFY CONDUCTOR SIZE WITH ROUTING FOR VOLTAGE DROP.
3 *** - FLAG POLE LOCATION NOT INDICATED ON SITE PLAN. US THIS CIRCUIT ONCE LOCATION IS DETERMINED.

PANEL: **P**
120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD NEMA 4X AIC: 22,000
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
M	1.3							1	2	1	20	12	POOL CONTROLLER *	0.3			O			1.3			0.3	
M		1.3		POOL PUMP 3 HP *	12	20	3	3	4	1	20		SPARE							1.3				
M			1.3					5	6	1	20	12	POOL RECEPTS			0.8	R		0.8	1.3				
				SHUNT TRIP SPACE			1	7	8	1	20	12	POOL LIGHTS **	1.0			L	1.0						
				SPARE		20	1	9	10	1	20	12	POOL RECEPTS		0.9		R		0.9					
				SPARE		20	1	11	12	1	20	12	POOL RECEPTS			0.4	R		0.4					
H	8.5							13	14	1	20	12	HEATER	1.0			H				9.5			
H		8.5		PDU-1	4	80	3	15	16						0.8		M			0.8	8.5			
H			8.5					17	18	3	15	12	PDCU-1			0.8	M			0.8	8.5			
				SPACE ONLY			1	19	20					0.8			M			0.8				
				SPACE ONLY			1	21	22	1	15	12	EF-11		0.4		M			0.4				
				SPACE ONLY			1	23	24	1	20		SPARE											
				SPACE ONLY			1	25	26	1			SPACE ONLY											
				SPACE ONLY			1	27	28	1			SPACE ONLY											
				SPACE ONLY			1	29	30	1			SPACE ONLY											
	9.8	9.8	9.8	SUBTOTALS										3.1	2.1	2.0								
													TOTALS			36.8		1.0	2.1	6.9	26.6		0.3	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	1.0	1.25	1.3
RECEPTACLES	2.1	1.00	2.1
RECEPTACLES	0.0	0.50	0.0
MOTORS	6.9	1.00	6.9
LARGEST MOTOR	0.0	1.75	0.0
HEAT	26.6	1.00	26.6
KITCHEN	0.0	0.65	0.0
OTHER	0.3	1.00	0.3
SPARE	0.0	1.00	0.0
TOTAL	36.8		37.1

CALCULATIONS: 37.1 / 0.36 102.9 A

NOTES:
1 * - COORDINATE ALL EQUIPMENT WITH BREAKERS & WIRE SIZES PRIOR TO ANY ROUGH IN.
2 ** - INDICATES GFCI BREAKER

PANEL: **1L**
120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 30,000
SURFACE MOUNTED 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
R	0.5			ENGINEERING RECS.	12	20	1	1	2	1	20	12	LINT INTERCEPTOR	1.0			M		0.5	1.0				
H		1.4		ENGINEERING PTAC	12	15	2	3	4	1	20	12	LINT INTERCEPTOR		1.0		M			1.0	1.4			
H			1.4					5	6	1	20	12	LINT INTERCEPTOR			1.0	M			1.0	1.4			
M	2.1							7	8					1.2			M			3.3				
M		2.1		JOCKEY PUMP **	6	60	3	9	10	3	20	12	DRYER **		1.2		M			3.3				
M			2.1					11	12			12				1.2	M			3.3				
M	2.1							13	14					1.2			M			3.3				
M		2.1		BOOSTER PUMP **	6	60	3	15	16	3	20	12	DRYER **		1.2		M			3.3				
M			2.1					17	18							1.2	M			3.3				
R	0.5			GENERAL RECEPTS	12	20	1	19	20					1.2			M		0.5	1.2				
R		0.7		GENERAL RECEPTS	12	20	1	21	22	3	20	12	DRYER **		1.2		M		0.7	1.2				
R			0.9	GENERAL RECEPTS	12	20	1	23	24							1.2	M		0.9	1.2				
O	0.8			BREAK REFRIGE.	12	20	1	25	26					1.0			M			1.0			0.8	
O		1.0		BREAK MICROWAVE	12	20	1	27	28	3	20	12	WASHER **		1.0		M			1.0			1.0	
O			0.2	BREAK GENERAL REC	12	20	1	29	30							1.0	M			1.0			0.2	
O	1.0			ECO LAB RECEPTACLE	12	20	1	31	32					1.0			M			1.0			1.0	
O		0.3		OIL MINDER SYSTEM	12	20	1	33	34	3	20	12	WASHER **		1.0		M			1.0			0.3	
L			0.3	ELEV. MACHINE ROOM	12	20	1	35	36							1.0	M	0.3		1.0				
L	0.3			PIT LIGHT/REC	12	20	1	37	38					1.0			M	0.3		1.0				
M		1.1		SUMP PUMP	12	20	2	39	40	3	20	12	WASHER **		1.0		M			2.1				
M			1.1					41	42							1.0	M			2.1				
	7.4	8.7	8.1	SUBTOTALS										7.6	7.6	7.6								
													TOTALS			47.0		0.6	2.7	37.6	2.8		3.3	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.6	1.25	0.8
RECEPTACLES	2.7	1.00	2.7
RECEPTACLES	0.0	0.50	0.0
MOTORS	37.6	1.00	37.6
LARGEST MOTOR	0.0	1.75	0.0
HEAT	2.8	1.00	2.8
KITCHEN	0.0	0.65	0.0
OTHER	3.3	1.00	3.3
SPARE	0.0	1.00	0.0
TOTAL	47.0		47.1

CALCULATIONS: 47.1 / 0.36 130.9 A

NOTES:
1 ** - FIELD COORDINATE BREAKER AND WIRING SIZES WITH VENDOR PRIOR TO ANY ROUGH IN AND/OR ORDERING.
2

PANEL: **2L**
120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 30,000
SURFACE MOUNTED 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
O	1.5			SERVER RECEPT.	12	20	1	1	2	1	20	12	BREAKFAST RECEPT	1.0			O						2.5	
O		1.5		SERVER RECEPT.	12	20	1	3	4	1	20	12	BREAKFAST RECEPT		1.0		O						2.5	
O			1.5	SERVER RECEPT.	12	20	1	5	6	1	20	12	BREAKFAST RECEPT			1.0	O						2.5	
O	1.5			SERVER RECEPT.	12	20	1	7	8	1	20	12	BREAKFAST RECEPT	1.0			O						2.5	
R		0.8		OFFICE RECEPTS	12	20	1	9	10	1	20	12	BREAKFAST RECEPT		1.0		O		0.8				1.0	
R			0.8	OFFICE RECEPTS	12	20	1	11	12	1	20	12	BREAKFAST RECEPT			1.0	O		0.8				1.0	
				SPARE		20	1	13	14	1	20	12	BREAKFAST RECEPT	1.0			O						1.0	
				SPARE		20	1	15	16	1	20	12	REFRIGERATOR		1.0		K					1.0		
R			0.4	CHECK IN DESK	12	20	1	17	18	1	20	12	FREEZER			1.0	K		0.4			1.0		
R	0.4			CHECK IN DESK	12	20	1	19	20	1	20	12	PANTRY RECEPT	1.0			K		0.4			1.0		
L		0.3		CABINET LIGHTING	12	20	1	21	22	1	20	12	PANTRY RECEPT		1.0		K	0.3				1.0		
O			1.0	AMPLIFIER	12	20	1	23	24	1	20	12	PANTRY RECEPT			1.0	K					1.0	1.0	
R	0.2			WORK RECEPTACLE	12	20	1	25	26	1	20	12	PANTRY RECEPT	1.0			K		0.2			1.0		
R		0.4		WORK RECEPTACLE	12	20	1	27	28	2	40	8	PANTRY CIRCUIT **		2.5		K		0.4			2.5		
R			0.4	WORK RECEPTACLE	12	20	1	29	30							2.5	K		0.4			2.5		
				SPARE		20	1	31	32	1	20	12	ICE MACHINE **	1.2			K					1.2		
O		1.0		MARKET RECEPTACLE	12	20	1	33	34	1	20	12	PANTRY RECEPT		1.0		K					1.0	1.0	
O			1.0	MARKET RECEPTACLE	12	20	1	35	36	1	20	12	PANTRY RECEPT			1.0	K					1.0	1.0	
O	1.0			MARKET RECEPTACLE	12	20	1	37	38	1	20	12	BREAKFAST RECEPT	1.0			O						2.0	
				SPARE		20	1	39	40	1	20	12	BREAKFAST RECEPT		1.0		K					1.0		
				SPARE		20	1	41	42	1	20		SPARE											
	4.5	4.0	5.0	SUBTOTALS										7.2	8.5	7.5								
													TOTALS			36.7		0.3	3.2			15.2	18.0	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.3	1.25	0.4
RECEPTACLES	3.2	1.00	3.2
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0.0	1.00	0.0
KITCHEN	15.2	0.65	9.9
OTHER	18.0	1.00	18.0
SPARE	0.0	1.00	0.0
TOTAL	36.7		31.5

CALCULATIONS: 31.5 / 0.36 87.4 A

NOTES:
1 ** - COORDINATE WITH OWNER'S EQUIPMENT VENDOR PRIOR TO ANY ROUGH IN WORK. PANEL.

PANEL: **3L**
120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
O	1.0			AUTODOOR	12	20	1	1	2	1	20	12	ELEV. CAB/CONTORLS	1.2			O						2.2	
O		1.0		AUTODOOR	12	20	1	3	4	1	20		SPARE										1.0	
R			0.9	LOBBY RECEPTS	12	20	1	5	6	1	20	12	ELEV. CAB/CONTORLS			1.2	O		0.9				1.2	
R	0.5			RECEPTS STORE	12	20	1	7	8	1	20		SPARE						0.5					
R		0.5		BUSINESS RECEPTS	12	20	1	9	10	1	20	12	HAND DRYER		1.5		H		0.5		1.5			
R			0.5	BUSINESS RECEPTS	12	20	1	11	12	1	20	12	HAND DRYER			1.5	H		0.5		1.5			
R	0.5			FLOOR RECEPTS	12	20	1	13	14	1	20	12	EWC.	0.3			O		0.5				0.3	
R		0.5		FLOOR RECEPTS	12	20	1	15	16	1	20	12	GENERAL RECEPTS		0.7		R		1.3					
R			0.5	FLOOR RECEPTS	12	20	1	17	18	1	20	10	EXTERIOR RECEPTS			0.8	R		1.3					
R	0.5			THEATER RECEPTS	12	20	1	19	20	1	20	10	EXTERIOR RECEPTS	0.8			R		1.3					
R		0.5		GENERAL RECEPTS	12	20	1	21	22	1	20		SPARE						0.5					
R			0.5	MEETING ROOM REC	12	20	1	23	24	1	20	12	TREADMILL			1.0	O		0.5				1.0	
R	0.5			MEETING ROOM REC	12	20	1	25	26	1	20	12	TREADMILL	1.0			O		0.5				1.0	
R		0.4		MEETING ROOM REC	12	20	1	27	28	1	20	12	TREADMILL		1.0		O		0.4				1.0	
R			0.4	GENERAL RECEPTS	12	20	1	29	30	1	20	12	FITNESS			0.4	O		0.4				0.4	
M	1.2			WASHER	12	20	1	31	32	1	20	12	FITNESS	0.4			O			1.2			0.4	
M		1.2		WASHER	12	20	1	33	34	1	20	12	RECEPTACLES		0.7		R		0.7	1.2				
H			2.3	DRYER	10	30	2	35	36	1	20	12	EWC.			0.3	O				2.3		0.3	
H	2.3							37	38	1	20	12	ICE MACHINE	1.2			O				2.3		1.2	
H		2.3		DRYER	10	30	2	39	40	1	20	12	GUEST LAUNDRY		0.4		R		0.4		2.3			
H			2.3					41	42	1	20		SPARE								2.3			
	6.6	6.4	7.4	SUBTOTALS										4.9	4.3	5.2								
													TOTALS			34.7			10.4	2.4	12.0		9.9	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	10.0	1.00	10.0
RECEPTACLES	0.4	0.50	0.2
MOTORS	2.4	1.00	2.4
LARGEST MOTOR	0.0	1.75	0.0
HEAT	12.0	1.00	12.0
KITCHEN	0.0	0.65	0.0
OTHER	9.9	1.00	9.9
SPARE	0.0	1.00	0.0
TOTAL	34.7		34.5

CALCULATIONS: 34.5 / 0.36 95.9 A

NOTES:

PANEL: **4L**
120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
L	0.4			STAIR LIGHTS	12	20	1	1	2	1	20	10	STORAGE LTS/REC	0.3			L	0.7						
L		0.4		STAIR LIGHTS	12	20	1	3	4	1	20		SPARE					0.4						
L			0.5	CORRIDOR LIGHTS	12	20	1	5	6	1	20		SPARE					0.5						
L	0.8			CORRIDOR LIGHTS	12	20	1	7	8	1	20		SPARE					0.8						
L		1.1		STORAGE LIGHTS	12	20	1	9	10	1	20		SPARE					1.1						
L			0.5	BREAKFAST LIGHTS	12	20	1	11	12	1	20		SPARE					0.5						
L	1.4			LAUNDRY LIGHTS	12	20	1	13	14	1	20		SPARE					1.4						
L		0.7		REGISTRATION LIGHTS	12	20	1	15	16	1	20		SPARE					0.7						
L			1.4	LOBBY LIGHTS	12	20	1	17	18	1	20		SPARE					1.4						
L	0.9			LOBBY PENDANTS	12	20	1	19	20	1	20		SPARE					0.9						
L		0.3		BUS. CTR LIGHTS	12	20	1	21	22	1	20		SPARE					0.3						
L			1.0	MEETING RM LIGHTS	12	20	1	23	24	1	20		SPARE					1.0						
L	0.3			ELEV. RM LIGHTS	12	20	1	25	26	1	20		SPARE					0.3						
L		0.5		BATHROOM LIGHTS	12	20	1	27	28	1	20		SPARE					0.5						
L			1.0	FITNESS RM LIGHTS	12	20	1	29	30	1	20		SPARE					1.0						
L	1.5			POOL RM LIGHTS *	12	20	1	31	32	1	20		SPARE					1.5						
L		0.9		POOL RM LIGHTS *	12	20	1	33	34	1	20		SPARE					0.9						
L				SPARE	12	20	1	35	36	1	20		SPARE					0.0						
				SPARE		20	1	37	38	1	20		SPARE											
				SPARE		20	1	39	40	1	20		SPARE											
				SPARE		20	1	41	42	1	20		SPARE											
	5.3	3.9	4.4	SUBTOTALS										0.3	0.0	0.0								
													TOTALS			13.9		13.9	0.0					

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	13.9	1.25	17.4
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0.0	1.00	0.0
KITCHEN	0.0	0.65	0.0
OTHER	0.0	1.00	0.0
SPARE	0.0	1.00	0.0
TOTAL	13.9		17.4

CALCULATIONS: 17.4 / 0.36 48.3 A

NOTES:
* DENOTES GFCI BREAKER

REVISIONS		
No.	Date	Description
1		

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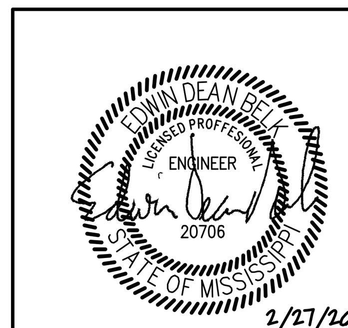

KEY PLAN

MSB	–	–
OL	P	1L
2L	3L	4L

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL PANEL SCHEDULES

Phase
Construction Documents

Project No. 14-081
Prepared by MAH
Checked by EDB
Date Feb. 27, 2015
Sheet No. E501

Holiday Inn Express & Suites

PANEL: 1HV

120/208 VOLT: 3 Ø 4 WIRE, TYPE NQOD AIC: 30,000
SURFACE MOUNTED, 400 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 400
BY: GKG SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
H	4.0			AH-1	8	40	2	1	2	1	20		SPARE								4.0			
H		4.0						3	4	1	20		SPARE								4.0			
H			2.5	AH-2	10	25	2	5	6	1	20	12	EWH-1			1.0	H				3.5			
H	2.5							7	8	1	20	12	EWH-1	1.0			H				3.5			
H		5.5		AH-3	6	60	2	9	10	1	20		SPARE								5.5			
H			5.5					11	12	1	20		SPARE								5.5			
H	2.5			AH-4	10	25	2	13	14	1	20	12	ELEC RM FANS	0.2			M			0.2	2.5			
H		2.5						15	16	1	20	12	EXHAUST FANS EF7/3		0.2		M			0.2	2.5			
H			4.0	AH-5	8	40	2	17	18	1	20	12	EXHAUST FANS EF9/6			0.5	M			0.5	4.0			
H	4.0							19	20	1	20	12	EXHAUST FANS	0.4			M			0.4	4.0			
H		4.0		AH-6	8	40	2	21	22	2	25	8	SSO-1		2.2		M			2.2	4.0			
H			4.0					23	24			8				2.2	M			2.2	4.0			
H	4.0			AH-7	8	40	2	25	26	2	25	8	SSO-2	2.2			M			2.2	4.0			
H		4.0						27	28			8			2.2		M			2.2	4.0			
H			4.0	AH-8	8	40	2	29	30	1	20		SPARE								4.0			
H	4.0				8			31	32	1			SPACE ONLY								4.0			
				SPACE ONLY			1	33	34	1			SPACE ONLY											
				SPACE ONLY			1	35	36	1			SPACE ONLY											
				SPACE ONLY			1	37	38	1			SPACE ONLY											
				SPACE ONLY			1	39	40	1			SPACE ONLY											
O			0.4	BPI RECEPTACLES	12	20	1	41	42	1			SPACE ONLY										0.4	
	20.8	19.9	20.3	SUBTOTALS										3.8	4.6	3.7								
				TOTALS												73.0		0.0	0.0	10.0	62.5	0.0	0.4	0.0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	10.0	1.00	10.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	62.5	1.00	62.5
KITCHEN	0.0	0.65	0.0
OTHER	0.4	1.00	0.4
SPARE	0.0	1.00	0.0
TOTAL	73.0		73.0

CALCULATIONS: 73.0 / 0.36 202.7 A

NOTES:
1 FIELD COORDINATE ALL ELECTRICAL CONNECTION LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ANY ROUGH IN WORK.
2 * - INDICATES SHUNT TRIP RATED BREAKER.

PANEL: 1A

120/208 VOLT: 3 Ø 4 WIRE, TYPE NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DATE 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
S	1.2			KING 118 *	12	20	1	1	2	1	20	12	KING 142 *	1.2			S							2.3
S		1.0		KING 118	12	20	1	3	4	1	20	12	KING 142		1.0		S							2.0
S			1.0	KING 118	12	20	1	5	6	1	20	12	KING 142			1.0	S							2.0
S	1.0			KING 118	12	20	1	7	8	1	20	12	KING 142	1.0			S							2.0
S		0.8		KING 118	12	20	1	9	10	1	20	12	KING 142		0.8		S							1.5
H			1.4	KING 118 PTAC	12	15	2	11	12	2	15	12	KING 142 PTAC			1.4	H				2.8			
H	1.4							13	14					1.4			H				2.8			
S		1.2		KING 135 *	12	20	1	15	16	1	20	12	ACC ROLLIN W/KING *		1.2		S							2.3
S			1.0	KING 135	12	20	1	17	18	1	20	12	ACC ROLLIN W/KING			1.0	S							2.0
S	1.0			KING 135	12	20	1	19	20	1	20	12	ACC ROLLIN W/KING	1.0			S							2.0
S		1.0		KING 135	12	20	1	21	22	1	20	12	ACC ROLLIN W/KING		1.0		S							2.0
S			0.8	KING 135	12	20	1	23	24	1	20	12	ACC ROLLIN W/KING			0.8	S							1.5
H	1.4			KING 135 PTAC	12	15	2	25	26	2	15	12	XKING 123 PTAC	1.4			H				2.8			
H		1.4						27	28						1.4		H				2.8			
S			1.2	HI KING 136 *	12	20	1	29	30	1	20		SPARE											1.2
S	1.0			HI KING 136	12	20	1	31	32	1	20		SPARE											1.0
S		1.0		HI KING 136	12	20	1	33	34	1	20		SPARE											1.0
S			1.0	HI KING 136	12	20	1	35	36	1	20		SPARE											1.0
S	0.8			HI KING 136	12	20	1	37	38	1	20		SPARE											0.8
H		1.4		HI KING 136 PTAC	12	15	2	39	40	1	20		SPARE								1.4			
H			1.4					41	42	1	20		SPARE								1.4			
	7.7	7.7	7.7	SUBTOTALS										6.0	5.3	4.2								
				TOTALS												38.5		0.0	0.0	0	14.0	0	0	24.5

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	14.0	1.00	14.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	24.5	NEC	11.8
TOTAL	38.5		25.8

CALCULATIONS: 25.8 / 0.36 71.7 A

NOTES:
1 * - INDICATES ARC FAULT RATED BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

24500 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	1800.0
REMAINDER AT 30%	0
	11800

PANEL: 2DP

120/208 VOLTS, 3 Ø 4 WIRE, TYPE NQOD AIC: 42,000
SURFACE MOUNTED, PANEL SIZE 600A MAIN LUG ONLY AMPS 600
BY: SHEET: JOB #: OF: CHECKED: DB DATE 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
	14.1													14.1				0.0	0	0	0	0	0	39.2
		13.3		PANEL 2A	3	100	3	1	2	3	100	3	PANEL 2B		13.3			0	0	0	0	0	0	39.2
			11.8													11.8								
	14.1													9.8						0	0	0	0	39.2
		13.3		PANEL 2C	3	100	3	3	4	3	100	3	PANEL2D		9.8					0	0	0	0	29.4
			11.8													9.8								
	3.4													20.5				2.0	1.8	0.1			4.5	
		2.9		PANEL 2E	3	100	3	5	6	3	200	3/0	PANEL 2F		20.5			0	0	0	58.7	0	0	0
			2.0													17.6								
														10.3										
				SPARE		100	3	7	8	3	200	3/0	PANEL 2G		10.3			0	0.0	0	29.3	0	0	0
																8.8								
				SPARE		100	3	9	10	3			SPACE ONLY											
				SPACE ONLY			3	11	12	3			SPACE ONLY											
				SPACE ONLY			3	13	14	3			SPACE ONLY											
	31.6	29.5	25.6	SUBTOTALS										54.7	53.9	48.0								
				TOTALS												243.4		2.0	1.8	0.1	88.0		4.5	147.0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	2.0	1.25	2.5
RECEPTACLES	1.8	1.00	1.8
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.1	1.00	0.1
LARGEST MOTOR	0.0	1.75	0.0
HEAT	88.0	1.00	88.0
KITCHEN	0.0	0.65	0.0
OTHER	4.5	1.00	4.5
GUESTROOMS	147.0	NEC	60.8
TOTAL	243.4		157.7

CALCULATIONS: 157.7 / 0.36 437.9 A

NOTES:
1. DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

147,000 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	50800.0
REMAINDER AT 30%	0.0
	60800

PANEL: 2A

120/208 VOLT: 3 Ø 4 WIRE, TYPE NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DATE 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
S	1.2			KING WIDE 203 *	12	20	1	1	2	1	20	12	KING SUITE 211 *	1.2			S							2.3
S		1.0		KING WIDE 203	12	20	1	3	4	1	20	12	KING SUITE 211		1.0		S							2.0
S			1.0	KING WIDE 203	12	20	1	5	6	1	20	12	KING SUITE 211			1.0	S							2.0
S	1.0			KING WIDE 203	12	20	1	7	8	1	20	12	KING SUITE 211	1.0			S							2.0
S		0.8		KING WIDE 203	12	20	1	9	10	1	20	12	KING SUITE 211		0.8		S							1.5
S			1.2	KING 205 *	12	20	1	11	12	1	20	12	KING SUITE 213 *			1.2	S							2.3
S	1.0			KING 205	12	20	1	13	14	1	20	12	KING SUITE 213	1.0			S							2.0
S		1.0		KING 205	12	20	1	15	16	1	20	12	KING SUITE 213		1.0		S							2.0
S			1.0	KING 205	12	20	1	17	18	1	20	12	KING SUITE 213			1.0	S							2.0
S	0.8			KING 205	12	20	1	19	20	1	20	12	KING SUITE 213	0.8			S							1.5
S		1.2		KING 207 *	12	20	1	21	22	1	20	12	KING SUITE 215 *		1.2		S							2.3
S			1.0	KING 207	12	20	1	23	24	1	20	12	KING SUITE 215			1.0	S							2.0
S	1.0			KING 207	12	20	1	25	26	1	20	12	KING SUITE 215	1.0			S							2.0
S		1.0		KING 207	12	20	1	27	28	1	20	12	KING SUITE 215		1.0		S							2.0
S			0.8	KING 207	12	20	1	29	30	1	20	12	KING SUITE 215			0.8	S							1.5
S	1.2			KING 209 *	12	20	1	31	32	1	20	12	KING 217 *	1.2			S							2.3
S		1.0		KING 209	12	20	1	33	34	1	20	12	KING 217		1.0		S							2.0
S			1.0	KING 209	12	20	1	35	36	1	20	12	KING 217			1.0	S							2.0
S	1.0			KING 209	12	20	1	37	38	1	20	12	KING 217	1.0			S							2.0
S		0.8		KING 209	12	20	1	39	40	1	20	12	KING 217		0.8		S							1.5
				SPARE		20	1	41	42	1	20		SPARE											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
				TOTALS												39.2		0.0	0	0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT RATED BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	7680.0
REMAINDER AT 30%	0
	17680

PANEL: 2B

120/208 VOLT: 3 Ø 4 WIRE, TYPE NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DB DATE 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
S	1.2			KING 221 *	12	20	1	1	2	1	20	12	KING 229 *	1.2			S							2.3
S		1.0		KING 221	12	20	1	3	4	1	20	12	KING 229		1.0		S							2.0
S			1.0	KING 221	12	20	1	5	6	1	20	12	KING 229			1.0	S							2.0
S	1.0			KING 221	12	20	1	7	8	1	20	12	KING 229	1.0			S							2.0
S		0.8		KING 221	12	20	1	9	10	1	20	12	KING 229		0.8		S							1.5
S			1.2	KING 223 *	12	20	1	11	12	1	20	12	KING 231 *			1.2	S							2.3
S	1.0			KING 223	12	20	1	13	14	1	20	12	KING 231	1.0			S							2.0
S		1.0		KING 223	12	20	1	15	16	1	20	12	KING 231		1.0		S							2.0
S			1.0	KING 223	12	20	1	17	18	1	20	12	KING 231			1.0	S							2.0
S	0.8			KING 223	12	20	1	19	20	1	20	12	KING 231	0.8			S							1.5
S		1.2		KING 225 *	12	20	1	21	22	1	20	12	KING 233 *		1.2		S							2.3
S			1.0	KING 225	12	20	1	23	24	1	20	12	KING 233			1.0	S							2.0
S	1.0			KING 225	12	20	1	25	26	1	20	12	KING 233	1.0			S							2.0
S		1.0		KING 225	12	20	1	27	28	1	20	12	KING 233		1.0		S							2.0
S			0.8	KING 225	12	20	1	29	30	1	20	12	KING 233			0.8	S							1.5
S	1.2			KING 227 *	12	20	1	31	32	1	20	12	KING 235 *	1.2			S							2.3
S		1.0		KING 227	12	20	1	33	34	1	20	12	KING 235		1.0		S							2.0
S			1.0	KING 227	12	20	1	35	36	1	20	12	KING 235			1.0	S							2.0
S	1.0			KING 227	12	20	1	37	38	1	20	12	KING 235	1.0			S							2.0
S		0.8		KING 227	12	20	1	39	40	1	20	12	KING 235		0.8		S							1.5
				SPARE		20	1	41	42	1	20		SPARE											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
				TOTALS												39.2		0	0	0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	7680.0
REMAINDER AT 30%	0
	17680

PANEL: 2C

120/208 VOLT: 3 Ø 4 WIRE, TYPE NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB#: OF: CHECKED BY DB DATE 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
S	1.2			DOUBLE QUEEN 204 *	12	20	1	1	2	1	20	12	DOUBLE QUEEN 212 *	1.2			S							2.3
S		1.0		DOUBLE QUEEN 204	12	20	1	3	4	1	20	12	DOUBLE QUEEN 212		1.0		S							2.0
S			1.0	DOUBLE QUEEN 204	12	20	1	5	6	1	20	12	DOUBLE QUEEN 212			1.0	S							2.0
S	1.0			DOUBLE QUEEN 204	12	20	1	7	8	1	20	12	DOUBLE QUEEN 212	1.0			S							2.0
S		0.8		DOUBLE QUEEN 204	12	20	1	9	10	1	20	12	DOUBLE QUEEN 212		0.8		S							1.5
S			1.2	DOUBLE QUEEN 206 *	12	20	1	11	12	1	20	12	ACC. KING STE 214 *			1.2	S							2.3
S	1.0			DOUBLE QUEEN 206	12	20	1	13	14	1	20	12	ACC. KING STE 214	1.0			S							2.0
S		1.0		DOUBLE QUEEN 206	12	20	1	15	16	1	20	12	ACC. KING STE 214		1.0		S							2.0
S			1.0	DOUBLE QUEEN 206	12	20	1	17	18	1	20	12	ACC. KING STE 214			1.0	S							2.0
S	0.8			DOUBLE QUEEN 206	12	20	1	19	20	1	20	12	ACC. KING STE 214	0.8			S							1.5
S		1.2		DOUBLE QUEEN 208 *	12	20	1	21	22	1	20	12	HI DBL QQ STE 216 *		1.2		S							2.3
S			1.0	DOUBLE QUEEN 208	12	20	1	23	24	1	20	12	HI DBL QQ STE 216			1.0	S							2.0
S	1.0			DOUBLE QUEEN 208	12	20	1	25	26	1	20	12	HI DBL QQ STE 216	1.0			S							2.0
S		1.0		DOUBLE QUEEN 208	12	20	1	27	28	1	20	12	HI DBL QQ STE 216		1.0		S							2.0
S			0.8	DOUBLE QUEEN 208	12	20	1	29	30	1	20	12	HI DBL QQ STE 216			0.8	S							1.5
S	1.2			DOUBLE QUEEN 210 *	12	20	1	31	32	1	20	12	DBL QUEEN STE 218 *	1.2			S							2.3
S		1.0		DOUBLE QUEEN 210	12	20	1	33	34	1	20	12	DBL QUEEN STE 218		1.0		S							2.0
S			1.0	DOUBLE QUEEN 210	12	20	1	35	36	1	20	12	DBL QUEEN STE 218			1.0	S							2.0
S	1.0			DOUBLE QUEEN 210	12	20	1	37	38	1	20	12	DBL QUEEN STE 218	1.0			S							2.0
S		0.8		DOUBLE QUEEN 210	12	20	1	39	40	1	20	12	DBL QUEEN STE 218		0.8		S							1.5
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
				TOTALS												39.2				0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	7680.0
REMAINDER AT 30%	0
	17680

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REVISIONS		
No.	Date	Description
1		

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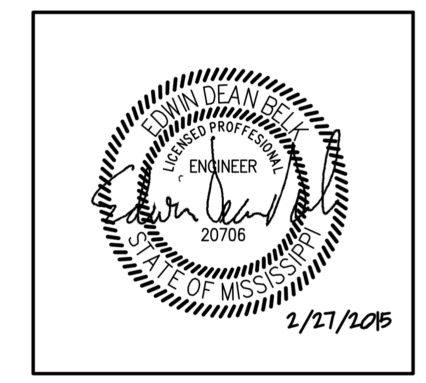

KEY PLAN

1HV	1A	—
—	DP2	2A
2B	2C	—

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL PANEL SCHEDULES

Phase
Construction Documents

Project No.	14-081	Sheet No. E502
Prepared by	MAH	
Checked by	EDB	
Date	Feb. 27, 2015	

Holiday Inn Express & Suites

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PANEL: 2D

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100 | CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
				SPARE		20	1	1	2	1	20	12	HI DBL QQ 230 *	1.2			S							1.2
				SPARE		20	1	3	4	1	20	12	HI DBL QQ 230		1.0		S							1.0
				SPARE		20	1	5	6	1	20	12	HI DBL QQ 230			1.0	S							1.0
				SPARE		20	1	7	8	1	20	12	HI DBL QQ 230	1.0			S							1.0
				SPARE		20	1	9	10	1	20	12	HI DBL QQ 230		0.8		S							0.8
S			1.2	DOUBLE QUEEN 220 *	12	20	1	11	12	1	20	12	DOUBLE QUEEN 232 *			1.2	S							2.3
S	1.0			DOUBLE QUEEN 220	12	20	1	13	14	1	20	12	DOUBLE QUEEN 232	1.0			S							2.0
S		1.0		DOUBLE QUEEN 220	12	20	1	15	16	1	20	12	DOUBLE QUEEN 232		1.0		S							2.0
S			1.0	DOUBLE QUEEN 220	12	20	1	17	18	1	20	12	DOUBLE QUEEN 232			1.0	S							2.0
S	0.8			DOUBLE QUEEN 220	12	20	1	19	20	1	20	12	DOUBLE QUEEN 232	0.8			S							1.5
S		1.2		DOUBLE QUEEN 226 *	12	20	1	21	22	1	20	12	KING X 234 *		1.2		S							2.3
S			1.0	DOUBLE QUEEN 226	12	20	1	23	24	1	20	12	KING X 234			1.0	S							2.0
S	1.0			DOUBLE QUEEN 226	12	20	1	25	26	1	20	12	KING X 234	1.0			S							2.0
S		1.0		DOUBLE QUEEN 226	12	20	1	27	28	1	20	12	KING X 234		1.0		S							2.0
S			0.8	DOUBLE QUEEN 226	12	20	1	29	30	1	20	12	KING X 234			0.8	S							1.5
S	1.2			DOUBLE QUEEN 228 *	12	20	1	31	32	1			SPACE ONLY											1.2
S		1.0		DOUBLE QUEEN 228	12	20	1	33	34	1			SPACE ONLY											1.0
S			1.0	DOUBLE QUEEN 228	12	20	1	35	36	1			SPACE ONLY											1.0
S	1.0			DOUBLE QUEEN 228	12	20	1	37	38	1			SPACE ONLY											1.0
S		0.8		DOUBLE QUEEN 228	12	20	1	39	40	1			SPACE ONLY											0.8
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	4.9	4.9	4.9	SUBTOTALS										4.9	4.9	4.9								
				TOTALS												29.4				0	0	0	0	29.4

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	29.4	NEC	13.8
TOTAL	29.4		13.8

CALCULATIONS: 13.8 / 0.36 38.2 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

29400 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	3760.0
REMAINDER AT 30%	0
	13760

PANEL: 2E

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100 | CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
L	0.9			CORRIDOR LIGHTS	12	20	1	1	2	1	20	12	RECEPTS - CORRIDOR	0.5			R	0.9	0.5					
L		1.1		CORRIDOR LIGHTS	12	20	1	3	4	1	20	12	RECEPTS - CORRIDOR		0.7		R	1.1	0.7					
L				SPARE		20	1	5	6	1	20	12	RECEPTS - CORRIDOR			0.5	R	0.0	0.5					
O	1.5			REC-ICE MACHINE *	12	20	1	7	8	1	20		SPARE										1.5	
M		0.1		EF-6	12	15	1	9	10	1	20		SPARE							0.1				
				SPARE		20	1	11	12	1	20	12	FIRE/SMOKES **			0.5	O						0.5	
				SPARE		20	1	13	14	1	20		SPARE											
				SPARE		20	1	15	16	1	20	12	RECEPT-CATV **		1.0		O						1.0	
				SPARE		20	1	17	18	1	20	12	RECEPT-TB **			1.0	O						1.0	
				SPARE		20	1	19	20	1	20	12	FACP EXTENDER **	0.5			O						0.5	
				SPARE		20	1	21	22	1	20		SPARE											
				SPARE		20	1	23	24	1	20		SPARE											
				SPARE		20	1	25	26	1	20		SPARE											
				SPARE		20	1	27	28	1	20		SPARE											
				SPARE		20	1	29	30	1	20		SPARE											
	2.4	1.2	0.0	SUBTOTALS										1.0	1.7	2.0								
				TOTALS												8.4		2.0	1.8	0.1			4.5	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	2.0	1.25	2.5
RECEPTACLES	1.8	1.00	1.8
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.1	1.00	0.1
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0.0	1.00	0.0
KITCHEN	0.0	0.65	0.0
OTHER	4.5	1.00	4.5
SPARE	0.0	1.00	0.0
TOTAL	8.4		8.9

CALCULATIONS: 8.9 / 0.36 24.7 A

NOTES:
1 ** - INDICATES BREAKER WITH LOCKING DEVICE.
2 * - INDICATES GFCI RATED BREAKER.

PANEL: 2F

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200 | CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
H	1.5			PTAC-A	12	15	2	1	2	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						3	4						1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	5	6	2	15	12	PTAC-A			1.5	H				2.9			
H	1.5							7	8					1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	9	10	2	15	12	PTAC-A		1.5		H				2.9			
H			1.5					11	12							1.5	H				2.9			
H	1.5			PTAC-A	12	15	2	13	14	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						15	16						1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	17	18	2	15	12	PTAC-A			1.5	H				2.9			
H	1.5							19	20					1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	21	22	2	15	12	PTAC-A		1.5		H				2.9			
H			1.5					23	24							1.5	H				2.9			
H	1.5			PTAC-A	12	15	2	25	26	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						27	28						1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	29	30	2	15	12	PTAC-A			1.5	H				2.9			
H	1.5							31	32					1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	33	34	2	15	12	PTAC-A		1.5		H				2.9			
H			1.5					35	36							1.5	H				2.9			
H	1.5			PTAC-A	12	15	2	37	38	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						39	40						1.5		H				2.9			
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	10.3	10.3	8.8	SUBTOTALS										10.3	10.3	8.8								
				TOTALS												58.7		0	0	0	58.7	0	0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	58.7	1.00	58.7
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	58.7		58.7

CALCULATIONS: 58.7 / 0.36 162.9 A

NOTES:

PANEL: 2G

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200 | CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
H	1.5			PTAC-A	12	15	2	1	3	1			SPACE ONLY								1.5			
H		1.5						3	5	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	5	7	1			SPACE ONLY								1.5			
H	1.5							7	9	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	9	11	1			SPACE ONLY								1.5			
H			1.5					11	13	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	13	15	1			SPACE ONLY								1.5			
H		1.5						15	17	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	17	19	1			SPACE ONLY								1.5			
H	1.5							19	21	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	21	23	1			SPACE ONLY								1.5			
H			1.5					23	25	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	25	27	1			SPACE ONLY								1.5			
H		1.5						27	29	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	29	31	1			SPACE ONLY								1.5			
H	1.5							31	33	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	33	35	1			SPACE ONLY								1.5			
H			1.5					35	37	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	37	39	1			SPACE ONLY								1.5			
H		1.5						39	41	1			SPACE ONLY								1.5			
				SPACE ONLY			1	41	43	1			SPACE ONLY											
	10.3	10.3	8.8	SUBTOTALS										0.0	0.0	0.0								
				TOTALS												29.3		0	0.0	0	29.3	0	0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	29.3	1.00	29.3
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	29.3		29.3

CALCULATIONS: 29.3 / 0.36 81.5 A

NOTES:

PANEL: 3DP

120/208 VOLTS, 3 Ø 4 WIRE, TYPE: NQOD AIC: | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, PANEL SIZE 600A MAIN LUG ONLY AMPS 600 | CHECKED: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
	14.1													14.1				0.0	0	0	0	0	0	39.2
		13.3		PANEL 3A	3	100	3	1	2	3	100	3	PANEL 3B		13.3			0	0	0	0	0	0	39.2
			11.8													11.8								
	14.1													9.8						0	0	0	0	39.2
		13.3		PANEL 3C	3	100	3	3	4	3	100	3	PANEL3D		9.8					0	0	0	0	29.4
			11.8													9.8								
	3.4													20.5				2.0	1.8	0.1			4.5	
		2.9		PANEL 3E	3	100	3	5	6	3	200	3/0	PANEL 3F		20.5			0	0	0	58.7	0	0	0
			2.0													17.6								
														10.3										
				SPARE		100	3	7	8	3	200	3/0	PANEL 3G		10.3			0	0.0	0	29.3	0	0	0
																8.8								
				SPARE		100	3	9	10	3			SPACE ONLY											
				SPACE ONLY			3	11	12	3			SPACE ONLY											
				SPACE ONLY			3	13	14	3			SPACE ONLY											
	31.6	29.5	25.6	SUBTOTALS										54.7	53.9	48.0								
				TOTALS												243.4		2.0	1.8	0.1	88.0		4.5	147.0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	2.0	1.25	2.5
RECEPTACLES	1.8	1.00	1.8
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.1	1.00	0.1
LARGEST MOTOR	0.0	1.75	0.0
HEAT	88.0	1.00	88.0
KITCHEN	0.0	0.65	0.0
OTHER	4.5	1.00	4.5
GUESTROOOMS	147.0	NEC	60.8
TOTAL	243.4		157.7

CALCULATIONS: 157.7 / 0.36 437.9 A

NOTES:
1. DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

147,000 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	50800.0
REMAINDER AT 30%	0.0
	60800

PANEL: 3A

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100 | CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
S	1.2			KING WIDE 303 *	12	20	1	1	2	1	20	12	KING SUITE 311 *	1.2			S							2.3
S		1.0		KING WIDE 303	12	20	1	3	4	1	20	12	KING SUITE 311		1.0		S							2.0
S			1.0	KING WIDE 303	12	20	1	5	6	1	20	12	KING SUITE 311			1.0	S							2.0
S	1.0			KING WIDE 303	12	20	1	7	8	1	20	12	KING SUITE 311	1.0			S							2.0
S		0.8		KING WIDE 303	12	20	1	9	10	1	20	12	KING SUITE 311		0.8		S							1.5
S			1.2	KING 305 *	12	20	1	11	12	1	20	12	KING SUITE 313 *			1.2	S							2.3
S	1.0			KING 305	12	20	1	13	14	1	20	12	KING SUITE 313	1.0			S							2.0
S		1.0		KING 305	12	20	1	15	16	1	20	12	KING SUITE 313		1.0		S							2.0
S			1.0	KING 305	12	20	1	17	18	1	20	12	KING SUITE 313			1.0	S							2.0
S	0.8			KING 305	12	20	1	19	20	1	20	12	KING SUITE 313	0.8			S							1.5
S		1.2		KING 307 *	12	20	1	21	22	1	20	12	KING SUITE 315 *		1.2		S							2.3
S			1.0	KING 307	12	20	1	23	24	1	20	12	KING SUITE 315			1.0	S							2.0
S	1.0			KING 307	12	20	1	25	26	1	20	12	KING SUITE 315	1.0			S							2.0
S		1.0		KING 307	12	20	1	27	28	1	20	12	KING SUITE 315		1.0		S							2.0
S			0.8	KING 307	12	20	1	29	30	1	20	12	KING SUITE 315			0.8	S							1.5
S	1.2			KING 309 *	12	20	1	31	32	1	20	12	KING 317 *	1.2			S							2.3
S		1.0		KING 309	12	20	1	33	34	1	20	12	KING 317		1.0		S							2.0
S			1.0	KING 309	12	20	1	35	36	1	20	12	KING 317			1.0	S							2.0
S	1.0			KING 309	12	20	1	37	38	1	20	12	KING 317	1.0			S							2.0
S		0.8		KING 309	12	20	1	39	40	1	20	12	KING 317		0.8		S							1.5
				SPARE		20	1	41	42	1	20		SPARE											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
				TOTALS												39.2		0.0	0	0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT RATED BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	7680.0
REMAINDER AT 30%	0
	17680

PANEL: 3B

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100 | CHECKED BY: DB DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
S	1.2			KING 321 *	12	20	1	1	2	1	20	12	KING 329 *	1.2			S							2.3
S		1.0		KING 321	12	20	1	3	4	1	20	12	KING 329		1.0		S							2.0
S			1.0	KING 321	12	20	1	5	6	1	20	12	KING 329			1.0	S							2.0
S	1.0			KING 321	12	20	1	7	8	1	20	12	KING 329	1.0			S							2.0
S		0.8		KING 321	12	20	1	9	10	1	20	12	KING 329		0.8		S							1.5
S			1.2	KING 323 *	12	20	1	11	12	1	20	12	KING 331 *			1.2	S							2.3
S	1.0			KING 323	12	20	1	13	14	1	20	12	KING 331	1.0			S							2.0
S		1.0		KING 323	12	20	1	15	16	1	20	12	KING 331		1.0		S							2.0
S			1.0	KING 323	12	20	1	17	18	1	20	12	KING 331			1.0	S							2.0
S	0.8			KING 323	12	20	1	19	20	1	20	12	KING 331	0.8			S							1.5
S		1.2		KING 325 *	12	20	1	21	22	1	20	12	KING 333 *		1.2		S							2.3
S			1.0	KING 325	12	20	1	23	24	1	20	12	KING 333			1.0	S							2.0
S	1.0			KING 325	12	20	1	25	26	1	20	12	KING 333	1.0			S							2.0
S		1.0		KING 325	12	20	1	27	28	1	20	12	KING 333		1.0		S							2.0
S			0.8	KING 325	12	20	1	29	30	1	20	12	KING 333			0.8	S							1.5
S	1.2			KING 327 *	12	20	1	31	32	1	20	12	HI KING 335 *	1.2			S							2.3
S		1.0		KING 327	12	20	1	33	34	1	20	12	HI KING 335		1.0		S							2.0
S			1.0	KING 327	12	20	1	35	36	1	20	12	HI KING 335			1.0	S							2.0
S	1.0			KING 327	12	20	1	37	38	1	20	12	HI KING 335	1.0			S							2.0
S		0.8		KING 327	12	20	1	39	40	1	20	12	HI KING 335		0.8		S							1.5
				SPARE		20	1	41	42	1	20		SPARE											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
				TOTALS												39.2		0	0	0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	1.00	39.2
TOTAL	39.2		39.2

CALCULATIONS: 39.2 / 0.36 108.9 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	7680.0
REMAINDER AT 30%	0
	17680

PANEL: 3C

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000 | BY: SHEET:
JOB #: OF:
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100 | CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
S	1.2			HI DOUB. QUEEN 304 *	12	20	1	1	2	1	20	12	DOUBLE QUEEN 312 *	1.2			S							2.3
S		1.0		HI DOUB. QUEEN 304	12	20	1	3	4	1	20	12	DOUBLE QUEEN 312		1.0		S							2.0
S			1.0	HI DOUB. QUEEN 304	12	20	1	5	6	1	20	12	DOUBLE QUEEN 312			1.0	S							2.0
S	1.0			HI DOUB. QUEEN 304	12	20	1	7	8	1	20	12	DOUBLE QUEEN 312	1.0			S							2.0
S		0.8		HI DOUB. QUEEN 304	12	20	1	9	10	1	20	12	DOUBLE QUEEN 312		0.8		S							1.5
S			1.2	DOUBLE QUEEN 306 *	12	20	1	11	12	1	20	12	ACC DBL QUEEN 314 *			1.2	S							2.3
S	1.0			DOUBLE QUEEN 306	12	20	1	13	14	1	20	12	ACC DBL QUEEN 314	1.0			S							2.0
S		1.0		DOUBLE QUEEN 306	12	20	1	15	16	1	20	12	ACC DBL QUEEN 314		1.0		S							2.0
S			1.0	DOUBLE QUEEN 306	12	20	1	17	18	1	20	12	ACC DBL QUEEN 314			1.0	S							2.0
S	0.8			DOUBLE QUEEN 306	12	20	1	19	20	1	20	12	ACC DBL QUEEN 314	0.8			S							1.5
S		1.2		DOUBLE QUEEN 308 *	12	20	1	21	22	1	20	12	DBL QUEEN STE 316 *		1.2		S							2.3
S			1.0	DOUBLE QUEEN 308	12	20	1	23	24	1	20	12	DBL QUEEN STE 316			1.0	S							2.0
S	1.0			DOUBLE QUEEN 308	12	20	1	25	26	1	20	12	DBL QUEEN STE 316	1.0			S							2.0
S		1.0		DOUBLE QUEEN 308	12	20	1	27	28	1	20	12	DBL QUEEN STE 316		1.0		S							2.0
S			0.8	DOUBLE QUEEN 308	12	20	1	29	30	1	20	12	DBL QUEEN STE 316			0.8	S							1.5
S	1.2			DOUBLE QUEEN 310 *	12	20	1	31	32	1	20	12	DBL QUEEN STE 318 *	1.2			S							2.3
S		1.0		DOUBLE QUEEN 310	12	20	1	33	34	1	20	12	DBL QUEEN STE 318		1.0		S							2.0
S			1.0	DOUBLE QUEEN 310	12	20	1	35	36	1	20	12	DBL QUEEN STE 318			1.0	S							2.0
S	1.0			DOUBLE QUEEN 310	12	20	1	37	38	1	20	12	DBL QUEEN STE 318	1.0			S							2.0
S		0.8		DOUBLE QUEEN 310	12	20	1	39	40	1	20	12	DBL QUEEN STE 318		0.8		S							1.5
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
				TOTALS												39.2				0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	7680.0
REMAINDER AT 30%	0
	17680

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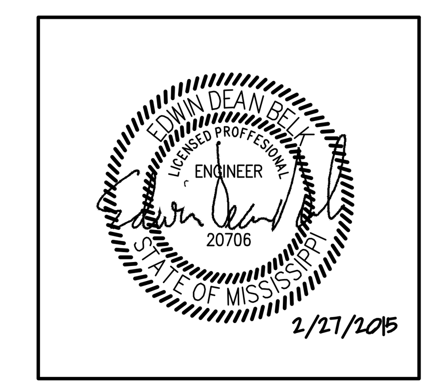

KEY PLAN

2D	2E	2F
2G	DP3	3A
3B	3C	–

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL PANEL SCHEDULES

Phase
Construction Documents

Project No.	14-081	Sheet No. E503
Prepared by	MAH	
Checked by	EDB	
Date	Feb. 27, 2015	

Holiday Inn Express & Suites

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PANEL: 3D

120/208 VOLTS 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOMS
				SPARE		20	1	1	2	1	20	12	DOUBLE QUEEN 330 *	1.2			S							1.2
				SPARE		20	1	3	4	1	20	12	DOUBLE QUEEN 330		1.0		S							1.0
				SPARE		20	1	5	6	1	20	12	DOUBLE QUEEN 330			1.0	S							1.0
				SPARE		20	1	7	8	1	20	12	DOUBLE QUEEN 330	1.0			S							1.0
				SPARE		20	1	9	10	1	20	12	DOUBLE QUEEN 330		0.8		S							0.8
S			1.2	DOUBLE QUEEN 320 *	12	20	1	11	12	1	20	12	DOUBLE QUEEN 332 *			1.2	S							2.3
S	1.0			DOUBLE QUEEN 320	12	20	1	13	14	1	20	12	DOUBLE QUEEN 332	1.0			S							2.0
S		1.0		DOUBLE QUEEN 320	12	20	1	15	16	1	20	12	DOUBLE QUEEN 332		1.0		S							2.0
S			1.0	DOUBLE QUEEN 320	12	20	1	17	18	1	20	12	DOUBLE QUEEN 332			1.0	S							2.0
S	0.8			DOUBLE QUEEN 320	12	20	1	19	20	1	20	12	DOUBLE QUEEN 332	0.8			S							1.5
S		1.2		DOUBLE QUEEN 326 *	12	20	1	21	22	1	20	12	KING X 334 *		1.2		S							2.3
S			1.0	DOUBLE QUEEN 326	12	20	1	23	24	1	20	12	KING X 334			1.0	S							2.0
S	1.0			DOUBLE QUEEN 326	12	20	1	25	26	1	20	12	KING X 334	1.0			S							2.0
S		1.0		DOUBLE QUEEN 326	12	20	1	27	28	1	20	12	KING X 334		1.0		S							2.0
S			0.8	DOUBLE QUEEN 326	12	20	1	29	30	1	20	12	KING X 334			0.8	S							1.5
S	1.2			DOUBLE QUEEN 328 *	12	20	1	31	32	1			SPACE ONLY											1.2
S		1.0		DOUBLE QUEEN 328	12	20	1	33	34	1			SPACE ONLY											1.0
S			1.0	DOUBLE QUEEN 328	12	20	1	35	36	1			SPACE ONLY											1.0
S	1.0			DOUBLE QUEEN 328	12	20	1	37	38	1			SPACE ONLY											1.0
S		0.8		DOUBLE QUEEN 328	12	20	1	39	40	1			SPACE ONLY											0.8
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	4.9	4.9	4.9	SUBTOTALS										4.9	4.9	4.9								
													TOTALS			29.4				0	0	0	0	29.4

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	29.4	NEC	13.8
TOTAL	29.4		13.8

CALCULATIONS: 13.8 / 0.36 38.2 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

29400	FIRST 20000 AT 50%	10000.0
	UP TO 100,000 AT 40%	3760.0
	REMAINDER AT 30%	0
		13760

PANEL: 3E

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
L	0.9			CORRIDOR LIGHTS	12	20	1	1	2	1	20	12	RECEPTS - CORRIDOR	0.5			R	0.9	0.5					
L		1.1		CORRIDOR LIGHTS	12	20	1	3	4	1	20	12	RECEPTS - CORRIDOR		0.7		R	1.1	0.7					
L				SPARE		20	1	5	6	1	20	12	RECEPTS - CORRIDOR			0.5	R	0.0	0.5					
O	1.5			REC-ICE MACHINE *	12	20	1	7	8	1	20		SPARE										1.5	
				SPARE		20	1	9	10	1	20		SPARE											
				SPARE		20	1	11	12	1	20	12	FIRE/SMOKES **			0.5	O						0.5	
				SPARE		20	1	13	14	1	20		SPARE											
				SPARE		20	1	15	16	1	20	12	RECEPT-CATV **		1.0		O						1.0	
				SPARE		20	1	17	18	1	20	12	RECEPT-TB **			1.0	O						1.0	
				SPARE		20	1	19	20	1	20	12	FACP EXTENDER **	0.5			O						0.5	
M		0.1		EF-6	12	15	1	21	22	1	20		SPARE							0.1				
				SPARE		20	1	23	24	1	20		SPARE											
				SPARE		20	1	25	26	1	20		SPARE											
				SPARE		20	1	27	28	1	20		SPARE											
				SPARE		20	1	29	30	1	20		SPARE											
	2.4	1.2	0.0	SUBTOTALS										1.0	1.7	2.0								
													TOTALS			8.4		2.0	1.8	0.1			4.5	

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	2.0	1.25	2.5
RECEPTACLES	1.8	1.00	1.8
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.1	1.00	0.1
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0.0	1.00	0.0
KITCHEN	0.0	0.65	0.0
OTHER	4.5	1.00	4.5
SPARE	0.0	1.00	0.0
TOTAL	8.4		8.9

CALCULATIONS: 8.9 / 0.36 24.7 A

NOTES:
1 ** - INDICATES BREAKER WITH LOCKING DEVICE
2 * - INDICATES GFCI RATED BREAKER

PANEL: 3F

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
H	1.5			PTAC-A	12	15	2	1	2	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						3	4						1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	5	6	2	15	12	PTAC-A			1.5	H				2.9			
H	1.5							7	8					1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	9	10	2	15	12	PTAC-A		1.5		H				2.9			
H			1.5					11	12							1.5	H				2.9			
H	1.5			PTAC-A	12	15	2	13	14	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						15	16						1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	17	18	2	15	12	PTAC-A			1.5	H				2.9			
H	1.5							19	20					1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	21	22	2	15	12	PTAC-A		1.5		H				2.9			
H			1.5					23	24							1.5	H				2.9			
H	1.5			PTAC-A	12	15	2	25	26	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						27	28						1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	29	30	2	15	12	PTAC-A			1.5	H				2.9			
H	1.5							31	32					1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	33	34	2	15	12	PTAC-A		1.5		H				2.9			
H			1.5					35	36							1.5	H				2.9			
H	1.5			PTAC-A	12	15	2	37	38	2	15	12	PTAC-A	1.5			H				2.9			
H		1.5						39	40						1.5		H				2.9			
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	10.3	10.3	8.8	SUBTOTALS										10.3	10.3	8.8								
													TOTALS			58.7		0	0	0	58.7	0	0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	58.7	1.00	58.7
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	58.7		58.7

CALCULATIONS: 58.7 / 0.36 162.9 A

NOTES:

REVISIONS		
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1		

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PANEL: 3G

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET: JOB #: OF: CHECKED BY: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	SPARE
H	1.5			PTAC-A	12	15	2	1	3	1			SPACE ONLY								1.5			
H		1.5						3	5	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	5	7	1			SPACE ONLY								1.5			
H	1.5							7	9	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	9	11	1			SPACE ONLY								1.5			
H			1.5					11	13	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	13	15	1			SPACE ONLY								1.5			
H		1.5						15	17	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	17	19	1			SPACE ONLY								1.5			
H	1.5							19	21	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	21	23	1			SPACE ONLY								1.5			
H			1.5					23	25	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	25	27	1			SPACE ONLY								1.5			
H		1.5						27	29	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	29	31	1			SPACE ONLY								1.5			
H	1.5							31	33	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	33	35	1			SPACE ONLY								1.5			
H			1.5					35	37	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	37	39	1			SPACE ONLY								1.5			
H		1.5						39	41	1			SPACE ONLY								1.5			
				SPACE ONLY			1	41	43	1			SPACE ONLY											
	10.3	10.3	8.8	SUBTOTALS										0.0	0.0	0.0								
													TOTALS			29.3		0	0.0	0	29.3	0	0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	29.3	1.00	29.3
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	29.3		29.3

CALCULATIONS: 29.3 / 0.36 81.5 A

NOTES:

PANEL: 4DP

120/208 VOLTS, 3 Ø 4 WIRE, TYPE: NQOD AIC: 42,000
SURFACE MOUNTED, PANEL SIZE 800A MAIN LUG ONLY AMPS 800A
BY: SHEET: JOB #: OF: CHECKED: DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
	14.1													14.1				0.0	0	0	0	0	0	39.2
		13.3		PANEL 4A	3	100	3	1	2	3	100	3	PANEL 4B		13.3			0	0	0	0	0	0	39.2
			11.8													11.8								
	14.1													9.8						0	0	0	0	39.2
		13.3		PANEL 4C	3	100	3	3	4	3	100	3	PANEL 4D		9.8					0	0	0	0	29.4
			11.8													9.8								
	3.4													20.5				2.0	1.8	0.1			4.5	
		2.9		PANEL 4E	3	100	3	5	6	3	200	3/0	PANEL 4F		20.5			0	0	0	58.7	0	0	0
			2.0													17.6								
	19.4													10.3				0	1.3	59.1	0.0	0	0.0	0
		21.5		PANEL 4M	4/0	225	3	7	8	3	200	3/0	PANEL 4G		10.3			0	0.0	0	29.3	0	0	0
			19.4													8.8								
				SPARE		100	3	9	10	3			SPACE ONLY											
				SPACE ONLY			3	11	12	3			SPACE ONLY											
				SPACE ONLY			3	13	14	3			SPACE ONLY											
	51.0	51.0	45.1	SUBTOTALS										54.7	53.9	48.0								
													TOTALS			303.7		2.0	3.1	59.2	88.0		4.5	147.0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	2.0	1.25	2.5
RECEPTACLES	3.1	1.00	3.1
RECEPTACLES	0.0	0.50	0.0
MOTORS	59.2	1.00	59.2
LARGEST MOTOR	0.0	1.75	0.0
HEAT	88.0	1.00	88.0
KITCHEN	0.0	0.65	0.0
OTHER	4.5	1.00	4.5
GUESTROOMS	147.0	NEC	60.8
TOTAL	303.7		218.0

CALCULATIONS: 218.0 / 0.36 605.6 A

NOTES:
1. DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

147,000	FIRST 20000 AT 50%	10000.0
	UP TO 100,000 AT 40%	50800.0
	REMAINDER AT 30%	0.0
		60800

PANEL: 4A

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DATE: 2/27/2015

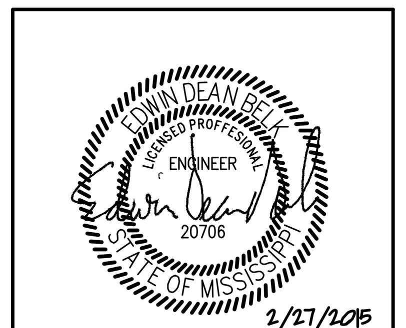
LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
S	1.2			KING WIDE 403 *	12	20	1	1	2	1	20	12	HI KING SUITE 411 *	1.2			S							2.3
S		1.0		KING WIDE 403	12	20	1	3	4	1	20	12	HI KING SUITE 411		1.0		S							2.0
S			1.0	KING WIDE 403	12	20	1	5	6	1	20	12	HI KING SUITE 411			1.0	S							2.0
S	1.0			KING WIDE 403	12	20	1	7	8	1	20	12	HI KING SUITE 411	1.0			S							2.0
S		0.8		KING WIDE 403	12	20	1	9	10	1	20	12	HI KING SUITE 411		0.8		S							1.5
S			1.2	KING 405 *	12	20	1	11	12	1	20	12	KING SUITE 413 *			1.2	S							2.3
S	1.0			KING 405	12	20	1	13	14	1	20	12	KING SUITE 413	1.0			S							2.0
S		1.0		KING 405	12	20	1	15	16	1	20	12	KING SUITE 413		1.0		S							2.0
S			1.0	KING 405	12	20	1	17	18	1	20	12	KING SUITE 413			1.0	S							2.0
S	0.8			KING 405	12	20	1	19	20	1	20	12	KING SUITE 413	0.8			S							1.5
S		1.2		HI KING 407 *	12	20	1	21	22	1	20	12	KING SUITE 415 *		1.2		S							2.3
S			1.0	HI KING 407	12	20	1	23	24	1	20	12	KING SUITE 415			1.0	S							2.0
S	1.0			HI KING 407	12	20	1	25	26	1	20	12	KING SUITE 415	1.0			S							2.0
S		1.0		HI KING 407	12	20	1	27	28	1	20	12	KING SUITE 415		1.0		S							2.0
S			0.8	HI KING 407	12	20	1	29	30	1	20	12	KING SUITE 415			0.8	S							1.5
S	1.2			KING 409 *	12	20	1	31	32	1	20	12	KING 417 *	1.2			S							2.3
S		1.0		KING 409	12	20	1	33	34	1	20	12	KING 417		1.0		S							2.0
S			1.0	KING 409	12	20	1	35	36	1	20	12	KING 417			1.0	S							2.0
S	1.0			KING 409	12	20	1	37	38	1	20	12	KING 417	1.0			S							2.0
S		0.8		KING 409	12	20	1	39	40	1	20	12	KING 417		0.8		S							1.5
				SPARE		20	1	41	42	1	20		SPARE											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
													TOTALS			39.2		0.0	0	0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT RATED BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200	FIRST 20000 AT 50%	10000.0
	UP TO 100,000 AT 40%	7680.0
	REMAINDER AT 30%	0
		17680



KEY PLAN

PANEL: 4B

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
S	1.2			KING 421 *	12	20	1	1	2	1	20	12	KING 429 *	1.2			S							2.3
S		1.0		KING 421	12	20	1	3	4	1	20	12	KING 429		1.0		S							2.0
S			1.0	KING 421	12	20	1	5	6	1	20	12	KING 429			1.0	S							2.0
S	1.0			KING 421	12	20	1	7	8	1	20	12	KING 429	1.0			S							2.0
S		0.8		KING 421	12	20	1	9	10	1	20	12	KING 429		0.8		S							1.5
S			1.2	KING 423 *	12	20	1	11	12	1	20	12	KING 431 *			1.2	S							2.3
S	1.0			KING 423	12	20	1	13	14	1	20	12	KING 431	1.0			S							2.0
S		1.0		KING 423	12	20	1	15	16	1	20	12	KING 431		1.0		S							2.0
S			1.0	KING 423	12	20	1	17	18	1	20	12	KING 431			1.0	S							2.0
S	0.8			KING 423	12	20	1	19	20	1	20	12	KING 431	0.8			S							1.5
S		1.2		KING 425 *	12	20	1	21	22	1	20	12	KING 433 *		1.2		S							2.3
S			1.0	KING 425	12	20	1	23	24	1	20	12	KING 433			1.0	S							2.0
S	1.0			KING 425	12	20	1	25	26	1	20	12	KING 433	1.0			S							2.0
S		1.0		KING 425	12	20	1	27	28	1	20	12	KING 433		1.0		S							2.0
S			0.8	KING 425	12	20	1	29	30	1	20	12	KING 433			0.8	S							1.5
S	1.2			KING 427 *	12	20	1	31	32	1	20	12	KING 435 *	1.2			S							2.3
S		1.0		KING 427	12	20	1	33	34	1	20	12	KING 435		1.0		S							2.0
S			1.0	KING 427	12	20	1	35	36	1	20	12	KING 435			1.0	S							2.0
S	1.0			KING 427	12	20	1	37	38	1	20	12	KING 435	1.0			S							2.0
S		0.8		KING 427	12	20	1	39	40	1	20	12	KING 435		0.8		S							1.5
				SPARE		20	1	41	42	1	20		SPARE											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
													TOTALS			39.2		0	0	0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER.
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200	FIRST 20000 AT 50%	10000.0
	UP TO 100,000 AT 40%	7680.0
	REMAINDER AT 30%	0
		17680

PANEL: 4C

120/208 VOLT: 3 Ø 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET: JOB #: OF: CHECKED BY DB DATE: 2/27/2015

LOAD	A	B	C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.	CIRCUIT NO.	POLES	TRIP AMPS	WIRE SIZE	REMARKS OR EQUIPMENT SERVED	A	B	C	LOAD	LIGHTS	RECEPTS	MOTORS	HEAT	KITCHEN	OTHER	GUESTROOM
S	1.2			DOUBLE QUEEN 404 *	12	20	1	1	2	1	20	12	DOUBLE QUEEN 412 *	1.2			S							2.3
S		1.0		DOUBLE QUEEN 404	12	20	1	3	4	1	20	12	DOUBLE QUEEN 412		1.0		S							2.0
S			1.0	DOUBLE QUEEN 404	12	20	1	5	6	1	20	12	DOUBLE QUEEN 412			1.0	S							2.0
S	1.0			DOUBLE QUEEN 404	12	20	1	7	8	1	20	12	DOUBLE QUEEN 412	1.0			S							2.0
S		0.8		DOUBLE QUEEN 404	12	20	1	9	10	1	20	12	DOUBLE QUEEN 412		0.8		S							1.5
S			1.2	DOUBLE QUEEN 406 *	12	20	1	11	12	1	20	12	ACC DBL QUEEN 414 *			1.2	S							2.3
S	1.0			DOUBLE QUEEN 406	12	20	1	13	14	1	20	12	ACC DBL QUEEN 414	1.0			S							2.0
S		1.0		DOUBLE QUEEN 406	12	20	1	15	16	1	20	12	ACC DBL QUEEN 414		1.0		S							2.0
S			1.0	DOUBLE QUEEN 406	12	20	1	17	18	1	20	12	ACC DBL QUEEN 414			1.0	S							2.0
S	0.8			DOUBLE QUEEN 406	12	20	1	19	20	1	20	12	ACC DBL QUEEN 414	0.8			S							1.5
S		1.2		DOUBLE QUEEN 408 *	12	20	1	21	22	1	20	12	DBL QUEEN STE 416 *		1.2		S							2.3
S			1.0	DOUBLE QUEEN 408	12	20	1	23	24	1	20	12	DBL QUEEN STE 416			1.0	S							2.0
S	1.0			DOUBLE QUEEN 408	12	20	1	25	26	1	20	12	DBL QUEEN STE 416	1.0			S							2.0
S		1.0		DOUBLE QUEEN 408	12	20	1	27	28	1	20	12	DBL QUEEN STE 416		1.0		S							2.0
S			0.8	DOUBLE QUEEN 408	12	20	1	29	30	1	20	12	DBL QUEEN STE 418 *			0.8	S							1.5
S	1.2			HI DOUB. QUEEN 410 *	12	20	1	31	32	1	20	12	DBL QUEEN STE 418	1.2			S							2.3
S		1.0		HI DOUB. QUEEN 410	12	20	1	33	34	1	20	12	DBL QUEEN STE 418		1.0		S							2.0
S			1.0	HI DOUB. QUEEN 410	12	20	1	35	36	1	20	12	DBL QUEEN STE 418			1.0	S							2.0
S	1.0			HI DOUB. QUEEN 410	12	20	1	37	38	1	20	12	DBL QUEEN STE 418	1.0			S							2.0
S		0.8		HI DOUB. QUEEN 410	12	20	1	39	40	1	20	12	DBL QUEEN STE 418		0.8		S							1.5
				SPACE ONLY			1	41	42	1			SPACE ONLY											
	7.1	6.7	5.9	SUBTOTALS										7.1	6.7	5.9								
													TOTALS			39.2				0	0	0	0	39.2

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	39.2	NEC	17.7
TOTAL	39.2		17.7

CALCULATIONS: 17.7 / 0.36 49.1 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

39200	FIRST 20000 AT 50%	10000.0
	UP TO 100,000 AT 40%	7680.0
	REMAINDER AT 30%	0
		17680

3D	3E	3F
3G	DP4	4A
4B	4C	–

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL PANEL SCHEDULES

Phase
Construction Documents

Project No.	14-081	Sheet No.
Prepared by	MAH	E504
Checked by	EDB	
Date	Feb. 27, 2015	

Holiday Inn Express & Suites

PANEL: 4D

120/208 V OLT: 3 ∅ 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET:
JOB #: OF:
CHECKED BY: DB DATE: 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.				REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	KVA A	KVA B	KVA C	LOAD	KVA LIGHTS	KVA RECEPTS	KVA MOTORS	KVA HEAT	KVA KITCHEN	KVA OTHER	KVA GUESTROOM
				SPARE	20	1	1	2	1	20	12	DOUBLE QUEEN 430 *	12	20	1	1.2			S							1.2
				SPARE	20	1	3	4	1	20	12	DOUBLE QUEEN 430	12	20	1		1.0		S							1.0
				SPARE	20	1	5	6	1	20	12	DOUBLE QUEEN 430	12	20	1			1.0	S							1.0
				SPARE	20	1	7	8	1	20	12	DOUBLE QUEEN 430	12	20	1	1.0			S							1.0
				SPARE	20	1	9	10	1	20	12	DOUBLE QUEEN 430	12	20	1		0.8		S							0.8
S			1.2	DOUBLE QUEEN 420 *	12	20	1	11	12	1	20	12	DOUBLE QUEEN 432 *	12	20	1			1.2	S							2.3
S	1.0			DOUBLE QUEEN 420	12	20	1	13	14	1	20	12	DOUBLE QUEEN 432	12	20	1	1.0			S							2.0
S		1.0		DOUBLE QUEEN 420	12	20	1	15	16	1	20	12	DOUBLE QUEEN 432	12	20	1		1.0		S							2.0
S			1.0	DOUBLE QUEEN 420	12	20	1	17	18	1	20	12	DOUBLE QUEEN 432	12	20	1			1.0	S							2.0
S	0.8			DOUBLE QUEEN 420	12	20	1	19	20	1	20	12	DOUBLE QUEEN 432	0.8						S							1.5
S		1.2		DOUBLE QUEEN 426 *	12	20	1	21	22	1	20	12	KING X 434 *		1.2					S							2.3
S			1.0	DOUBLE QUEEN 426	12	20	1	23	24	1	20	12	KING X 434				1.0			S							2.0
S	1.0			DOUBLE QUEEN 426	12	20	1	25	26	1	20	12	KING X 434	1.0						S							2.0
S		1.0		DOUBLE QUEEN 426	12	20	1	27	28	1	20	12	KING X 434		1.0					S							2.0
S			0.8	DOUBLE QUEEN 426	12	20	1	29	30	1	20	12	KING X 434				0.8			S							1.5
S	1.2			DOUBLE QUEEN 428 *	12	20	1	31	32	1			SPACE ONLY														1.2
S		1.0		DOUBLE QUEEN 428	12	20	1	33	34	1			SPACE ONLY														1.0
S			1.0	DOUBLE QUEEN 428	12	20	1	35	36	1			SPACE ONLY														1.0
S	1.0			DOUBLE QUEEN 428	12	20	1	37	38	1			SPACE ONLY														1.0
S		0.8		DOUBLE QUEEN 428	12	20	1	39	40	1			SPACE ONLY														0.8
				SPACE ONLY			1	41	42	1			SPACE ONLY														
	4.9	4.9	4.9	SUBTOTALS									SUBTOTALS				4.9	4.9	4.9								
				TOTALS									TOTALS						29.4		0	0	0	0	0	0	29.4

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
GUESTROOMS	29.4	NEC	13.8
TOTAL	29.4		13.8

CALCULATIONS: 13.8 / 0.36 38.2 A

NOTES:
1 * - INDICATES ARC FAULT BREAKER
2 DEMAND FACTOR FOR GUESTROOM LOADS PER NEC TABLE 220.42

29400 FIRST 20000 AT 50%	10000.0
UP TO 100,000 AT 40%	3760.0
REMAINDER AT 30%	0
	13760

PANEL: 4E

120/208 V OLT: 3 ∅ 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 100 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 100
BY: SHEET:
JOB #: OF:
CHECKED BY: DB DATE: 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.				REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	KVA A	KVA B	KVA C	LOAD	KVA LIGHTS	KVA RECEPTS	KVA MOTORS	KVA HEAT	KVA KITCHEN	KVA OTHER	KVA SPARE
L	0.9			CORRIDOR LIGHTS	12	20	1	1	2	1	20	12	RECEPTS - CORRIDOR	0.5			R	0.9	0.5							
L		1.1		CORRIDOR LIGHTS	12	20	1	3	4	1	20	12	RECEPTS - CORRIDOR		0.7		R	1.1	0.7							
				SPARE		20	1	5	6	1	20	12	RECEPTS - CORRIDOR			0.5	R		0.5						
O	1.5			REC-ICE MACHINE *	12	20	1	7	8	1	20		SPARE												1.5	
M		0.1		EF-6	12	15	1	9	10	1	20		SPARE									0.1			
				SPARE		20	1	11	12	1	20	12	FIRE/SMOKES **			0.5	O							0.5	
				SPARE		20	1	13	14	1	20		SPARE												
				SPARE		20	1	15	16	1	20	12	RECEPT-CATV **		1.0		O							1.0	
				SPARE		20	1	17	18	1	20	12	RECEPT-TB **			1.0	O							1.0	
				SPARE		20	1	19	20	1	20	12	FACP EXTENDER **	0.5			O							0.5	
				SPARE		20	1	21	22	1	20		SPARE												
				SPARE		20	1	23	24	1	20		SPARE												
				SPARE		20	1	25	26	1	20		SPARE												
				SPARE		20	1	27	28	1	20		SPARE												
				SPARE		20	1	29	30	1	20		SPARE												
	2.4	1.2	0.0	SUBTOTALS									SUBTOTALS				1.0	1.7	2.0							
				TOTALS									TOTALS						8.4		2.0	1.8	0.1			4.5

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	2.0	1.25	2.5
RECEPTACLES	1.8	1.00	1.8
RECEPTACLES	0.0	0.50	0.0
MOTORS	0.1	1.00	0.1
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0.0	1.00	0.0
KITCHEN	0.0	0.65	0.0
OTHER	4.5	1.00	4.5
SPARE	0.0	1.00	0.0
TOTAL	8.4		8.9

CALCULATIONS: 8.9 / 0.36 24.7 A

NOTES:
1 ** - INDICATES BREAKER WITH LOCKING DEVICE.
2 * - INDICATES GFCI RATED BREAKER.

PANEL: 4F

120/208 V OLT: 3 ∅ 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET:
JOB #: OF:
CHECKED BY: DB DATE: 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.				REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	KVA A	KVA B	KVA C	LOAD	KVA LIGHTS	KVA RECEPTS	KVA MOTORS	KVA HEAT	KVA KITCHEN	KVA OTHER	KVA SPARE
H	1.5			PTAC-A	12	15	2	1	2	2	15	12	PTAC-A	1.5			H							2.9			
H		1.5						3	4								1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	5	6	2	15	12	PTAC-A			1.5	H							2.9			
H	1.5							7	8							1.5			H				2.9			
H		1.5		PTAC-A	12	15	2	9	10	2	15	12	PTAC-A			1.5	H							2.9			
H			1.5					11	12								1.5		H				2.9			
H	1.5			PTAC-A	12	15	2	13	14	2	15	12	PTAC-A	1.5			H							2.9			
H		1.5						15	16								1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	17	18	2	15	12	PTAC-A			1.5	H							2.9			
H	1.5							19	20								1.5		H				2.9			
H		1.5		PTAC-A	12	15	2	21	22	2	15	12	PTAC-A			1.5	H							2.9			
H			1.5					23	24								1.5		H				2.9			
H	1.5			PTAC-A	12	15	2	25	26	2	15	12	PTAC-A			1.5	H							2.9			
H		1.5						27	28								1.5		H				2.9			
H			1.5	PTAC-A	12	15	2	29	30	2	15	12	PTAC-A			1.5	H							2.9			
H	1.5							31	32								1.5		H				2.9			
H		1.5		PTAC-A	12	15	2	33	34	2	15	12	PTAC-A			1.5	H							2.9			
H			1.5					35	36								1.5		H				2.9			
H	1.5			PTAC-A	12	15	2	37	38	2	15	12	PTAC-A	1.5			H							2.9			
H		1.5						39	40								1.5		H				2.9			
				SPACE ONLY			1	41	42	1			SPACE ONLY														
	10.3	10.3	8.8	SUBTOTALS									SUBTOTALS				10.3	10.3	8.8							
				TOTALS									TOTALS						58.7		0	0	0	58.7	0	0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	58.7	1.00	58.7
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	58.7		58.7

CALCULATIONS: 58.7 / 0.36 162.9 A

NOTES:

PANEL: 4G

120/208 V OLT: 3 ∅ 4 WIRE, TYPE: NQOD AIC: 22,000
SURFACE MOUNTED, 200 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 200
BY: SHEET:
JOB #: OF:
CHECKED BY: DB DATE: 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	FRAME SIZE	POLES	CIRCUIT NO.				REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	KVA LIGHTS	KVA RECEPTS	KVA MOTORS	KVA HEAT	KVA KITCHEN	KVA OTHER	KVA SPARE
H	1.5			PTAC-A	12	15	2	1	3	1			SPACE ONLY								1.5			
H		1.5						3	5	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	5	7	1			SPACE ONLY								1.5			
H	1.5							7	9	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	9	11	1			SPACE ONLY								1.5			
H			1.5					11	13	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	13	15	1			SPACE ONLY								1.5			
H		1.5						15	17	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	17	19	1			SPACE ONLY								1.5			
H	1.5							19	21	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	21	23	1			SPACE ONLY								1.5			
H			1.5					23	25	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	25	27	1			SPACE ONLY								1.5			
H		1.5						27	29	1			SPACE ONLY								1.5			
H			1.5	PTAC-A	12	15	2	29	31	1			SPACE ONLY								1.5			
H	1.5							31	33	1			SPACE ONLY								1.5			
H		1.5		PTAC-A	12	15	2	33	35	1			SPACE ONLY								1.5			
H			1.5					35	37	1			SPACE ONLY								1.5			
H	1.5			PTAC-A	12	15	2	37	39	1			SPACE ONLY								1.5			
H		1.5						39	41	1			SPACE ONLY								1.5			
				SPACE ONLY			1	41	43	1			SPACE ONLY											
	10.3	10.3	8.8	SUBTOTALS									SUBTOTALS	0.0	0.0	0.0								
				TOTALS									TOTALS			29.3		0	0.0	0	29.3	0	0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	0.0	1.00	0.0
RECEPTACLES	0.0	0.50	0.0
MOTORS	0	1.00	0.0
LARGEST MOTOR	0.0	1.75	0.0
HEAT	29.3	1.00	29.3
KITCHEN	0	0.65	0.0
OTHER	0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	29.3		29.3

CALCULATIONS: 29.3 / 0.36 81.5 A

NOTES:

PANEL: 4M

120/208 V OLT: 3 ∅ 4 WIRE, TYPE: NQOD AIC: 42,000
SURFACE MOUNTED, 225 AMP MAIN LUG ONLY NEUTRAL SIZE AMPS 225
BY: SHEET:
JOB #: OF:
CHECKED BY: DB DATE: 2/27/2015

LOAD	KVA A	KVA B	KVA C	REMARKS OR EQUIPMENT SERVED	WIRE SIZE	TRIP AMPS	POLES	CIRCUIT NO.				REMARKS OR EQUIPMENT SERVED	KVA A	KVA B	KVA C	LOAD	KVA LIGHTS	KVA RECEPTS	KVA MOTORS	KVA HEAT	KVA KITCHEN	KVA OTHER	KVA SPARE
M	2.7			HP-1	8	45	2	1	2	2	15	12	SSO-1	1.5			M			4.2				
M		2.7						3	4					1.5		M			4.2				
M			0.9	HP-2	12	15	2	5	6	2	15	12	SSO-2		1.5		M			2.4				
M	0.9							7	8							M			2.4				
M		3.5		HP-3	6	60	2	9	10	2	15	12	SSO-3		1.5		M			5.0				
M			3.5					11	12						1.5	M			5.0				
M	0.9			HP-4	12	15	2	13	14	1	20		SPARE							0.9				
M		0.9						15	16	1	20		SPARE							0.9				
M			1.6	HP-5	10	25	2	17	18	1	20		SPARE							1.6				
M	1.6							19	20	1	20		SPARE							1.6				
M		1.9		HP-6	10	30	2	21	22	1			SPACE ONLY							1.9				
M			1.9					23	24	1			SPACE ONLY							1.9				
M	2.7			HP-7	8	45	2	25	26	1			SPACE ONLY							2.7				
M		2.7						27	28	1			SPACE ONLY							2.7				
M			1.6	HP-8	10	25	2	29	30	1			SPACE ONLY							1.6				
M	1.6							31	32	1			SPACE ONLY							1.6				
R		0.7		ROOF RECEPTS.	12	20	1	33	34	1			SPACE ONLY						0.7					
R			0.5	ROOF RECEPTS.	12	20	1	35	36	1			SPACE ONLY						0.5					
				SPARE		20	1	37	38					6.1			M			6.1				
				SPARE		20	1	39	40	3	60	6	MUA-1		6.1		M			6.1				
M			0.4	DAMPERS	12	20	1	41	42							6.1	M			6.5				
	10.4	12.5	10.4	SUBTOTALS									SUBTOTALS	9.0	9.0	9.0								
				TOTALS									TOTALS			60.4		0	1.3	59.1	0.0	0	0.0	0

LOAD	KVA CONNECTED	D.F.	KVA NET
LIGHTING	0	1.25	0.0
RECEPTACLES	1.3	1.00	1.3
RECEPTACLES	0.0	0.50	0.0
MOTORS	59.1	1.00	59.1
LARGEST MOTOR	0.0	1.75	0.0
HEAT	0.0	1.00	0.0
KITCHEN	0	0.65	0.0
OTHER	0.0	1.00	0.0
SPARE	0	1.00	0.0
TOTAL	60.4		60.4

CALCULATIONS: 60.4 / 0.36 167.7 A

NOTES:
1 * - COORDINATE REQUIREMENTS WITH SIGN VENDOR PRIOR TO ROUGH IN. PROVIDE AND INSTALL CONTACTOR FOR BUILDING MOUNTED SIGN LIGHTING. CONTACTOR CONTROLED BY TIME CLOCK.

4D	4E	4F
4G	4M	–
–	–	–

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REVISIONS		
No.	Date	Description
1		

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EDWIN DEAN SIKES
REGISTERED PROFESSIONAL
ENGINEER
20706
STATE OF MISSISSIPPI
2/27/2015

KEY PLAN

Shiva Southaven Inc.

Holiday Inn Express & Suites

Lot 16 (Rev Lot 3) Southcrest Pkwy.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title
ELECTRICAL PANEL SCHEDULES

Phase
Construction Documents

Project No.	14-081
Prepared by	MAH
Checked by	EDB
Date	Feb. 27, 2015
Sheet No.	E505

Holiday Inn Express & Suites