ABBREVIATIONS

A.B. ABV ACT A/C AC. ADJ. AFF AGGR. ALUM ALT APPROX ARCH BD. BLDG. BLKG. BLKG. BLKG. BLKG. BLW BM. B.O.B. B.O.C. B.O.F. B.O.S. BOT.	ANCHOR BOLT ABOVE ACOUSTIC CEILING TILE ASPHALTIC CONCRETE ACOUSTICAL ADJUSTABLE ABOVE FINISH FLOOR AGGREGATE ALUMINUM ALTERNATE APPROXIMATE ARCHITECT OR ARCHITECTURAL BOARD BUILDING BLOCK BLOCKING BELOW BEAM BENCHMARK BOTTOM OF BEAM BACK OF CURB BOTTOM OF STRUCTURE BOTTOM OF STRUCTURE BOTTOM
CAB. CATV CB CEM CI CJ CJ. CLG. CHK. BD CLKG CL CLR. CMU CNTR. COL. CONC. CONC. CONC. CONT. CONT. CONTR. CO	CABINET CABLE TELEVISION CATCH BASIN CEMENT CAST IRON CONTROL JOINT CONSTRUCTION JOINT CEILING CHALK BOARD CAULKING CENTERLINE CLEAR CONCRETE MASONRY UNIT COUNTER CLEANOUT COLUMN CONCRETE CONNECT OR CONNECTION CONTINUOUS CONTRACTOR COORDINATE CORRIDOR OR CORRUGATED CARPET CARPET TILE COUNTERSUNK CERAMIC TILE CENTER COLD WATER
DBL. DET. DF DG D.I. DIA. DIM. DISP. DIV. DN DR. DS DW DWG. DWR.	DOUBLE DETAIL DRINKING FOUNTAIN DECOMPOSED GRANITE DROP INLET DIAMETER DIMENSION DISPENSER DIVISION DOWN DOOR OR DRAIN DOWNSPOUT DOMESTIC WATER OR DISHWASHER DRAWING DRAWER
E. (E) EA. EF EJ EL. ELEC. ELEV. ENG. ENCL. ENT. EP EPDM EQ. EQUIP. EQUIP. EST. E.W.C. EXIST. EXIST. EXP. EXPO. EXT. EXH.	EAST EXISTING EACH EXHAUST FAN EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR ENGINEER ENCLOSURE ENTRANCE EDGE OF PAVEMENT EDGE OF PAVEMENT ETHYLENE PROPYLENE DIENE M-CLASS ROOFING EQUAL EQUIPMENT ESTIMATE OR ESTIMATED ELECTRIC WATER COOLER EXISTING EXPANSION EXPOSED EXTERIOR EXHAUST
F. to F. FAB. FAU F.B. F.C.O. FD FEC F.EX. F.F. F.G. F.H. FHC F.H. FIN.	FACE TO FACE FABRICATE FORCED AIR UNIT FLAT BAR FLOOR CLEAN OUT FLOOR DRAIN FIRE EXTINGUISHER CABINET FIRE EXTINGUISHER FINISH FLOOR FINISH FLOOR FINISH GRADE FLAT HEAD FIRE HOSE CABINET FIRE HYDRANT FINISH

FL.	FLOOR
F.L.	FLOW LINE
FLASH	FLASHING
FLEX.	FLEXIBLE
FLUOR.	FLUORESCENT
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUDS
FNDN.	FOUNDATION
FPRF.	FIREPROOF
FP/HB	FROSTPROOF HOSE BIBB
FR.	FRAME
FRP	FIBER REINFORCED PANEL
FT.	FOOT OR FEET
FTG.	FOOTING
FURR.	FURRING
FUT.	FUTURE
GA. GALV. G.B. GL. GL. GLU-LAN GND. GR. GSF GYP. BD.	GAUGE GALVANIZED GRAB BAR GARBAGE DISPOSAL GALVANIZED IRON GLASS OR GLAZE GLUE-LAMINATED BEAM GLUE-LAMINATED GROUND GRADE GROSS SQUARE FEET GYPSUM BOARD
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
HDBD.	HARDBOARD
HDWD.	HARDWOOD
HDWR.	HARDWARE
HM	HOLLOW METAL
HORIZ.	HORIZONTAL
HR.	HOUR
HT.	HEIGHT
I.D.	INSIDE DIAMETER
I.E.	INVERT ELEVATION
IN.	INCH
INCL.	INCLUDING
INSUL.	INSULATION
INT.	INTERIOR
JAN.	JANITOR
JT.	JOINT
K.D.	KILN DRIED
KIT.	KITCHEN
KO	KNOCKOUT
K.P.	KICK PLATE
LAB. LAM. LAV. LB. LF LSL LT. LV. LVL	LABORATORY LAMINATE LAVATORY POUND LINEAR FEET LAMINATED STRAND LUMBER LEFT LOUVER LAMINATED VENEER LUMBER LUXURY VINYL TILE
MACH. MATL. MAX. M.B. MECH. MEZZ. MFG MFR MH MIN. MIR. MISC. M.O. M.S. MTD. MTL. MULL.	MACHINE MATERIAL MAXIMUM MACHINE BOLT MECHANICAL MEZZANINE MANUFACTURING MANUFACTURER MANHOLE MINIMUM OR MINUTE MIRROR MISCELLANEOUS MASONRY OPENING MASONRY OPENING MACHINE SCREW MOUNTED METAL MULLION
N.	NORTH
N.A.P.	NOT A PART
N.I.C.	NOT IN CONTRACT
NO. or #	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
OBS. O.C. O.D. OFF. O.F/O.I. O.H. OPNG. OPP. O.R.D. OSB O.T.S.	OBSCURE ON CENTER OCCUPANCY OUTSIDE DIAMETER OFFICE OWNER FURNISHED/OWNER INSTALLED OVERHEAD OPENING OPPOSITE OVERFLOW ROOF DRAIN ORIENTED STRAND BOARD OPEN TO STRUCTURE
OBS. O.C. O.D. OFF. O.F/O.I. O.H. OPNG. OPP. O.R.D. OSB O.T.S.	OBSCURE ON CENTER OCCUPANCY OUTSIDE DIAMETER OFFICE OWNER FURNISHED/OWNER INSTALLED OVERHEAD OPENING OPPOSITE OVERFLOW ROOF DRAIN ORIENTED STRAND BOARD OPEN TO STRUCTURE

PART.	PARTITION
PART. BD.	PARTICLE BOARD
PI	PLATE
PLAS.	PLASTER
PL.GL.	PLATE GLASS
PLAM	PLASTIC LAWINATE
PLYWD	PLYWOOD
PNL.	PANEL
P.O.C.	POINT OF CONNECTION
PR.	PAIR
PRCST.	PRECAST
PT.	POINT
PVC	POLYVINYL CHLORIDE
Q.T.	
R. RAD. R.B.	RADIUS RESILIENT BASE
R.D.	ROOF DRAIN
RECOM.	RECOMMENDED
REF.	REFERENCE
REFR.	REFRIGERATOR
REINF.	REINFORCED
REOD	REQUIRED
RESIL. RET.	RESILIENT RETAINING DEVISE OR DEVISION
RM.	ROOM
R.O.	ROUGH OPENING
RDWD.	REDWOOD
R.W.L.	RAIN WATER LEADER
S.	SOUTH
S.B.	SPLASH BLOCK
SCWD	SOLID CORE WOOD DOOR
SCHED.	SCHEDULE
SCUP.	SCUPPER
SD	STORM DRAIN
SECT.	SECTION
SG	SPANDREL GLASS
SHT. SHTR.	SHEEF SHEET SHOWER
SIM.	SIMILAR
S&P	SHELF & POLE
SPEC.	SPECIFICATION
SQ.	SQUARE
SS	SANITARY SEWER
SSMH	SANITARY SEWER MAN HOLE
S.STL.	STAINLESS STEEL
STA.	STATION
STD	STANDARD
STL.	STEEL
STOR.	STORAGE
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
S.GL.	SOLAR GLASS
S. to S.	STUD TO STUD
T	TREAD or TEMPERED
T.B.	TACK BOARD
T.O.BM.	TOP OF BEAM
T.O.C.	TOP OF CURB
T.D.	TOILET PAPER DISPENSER
T&G	TONGUE & GROOVE
T.O.BL.	TOP OF BLOCK
T.O.P.	TOP OF PLATE
T.O.S	TOP OF STEEL
T.P.	TOP OF PAVEMENT
TV	TELEVISION
TPO	THERMOPLASTIC POLYOLEFIN
TEL.	TELEPHONE
TEMP.	TEMPERED OR TEMPORARY
TERR.	TERRAZZO
THK.	THICK
THRESH.	THRESHOLD
TRANS.	TRANSFORMER
TYP.	TYPICAL
U.L.	UNDERWRITERS LABORATORY
U.H.	UNIT HEATER
U.N.O.	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VERT.	VERTICAL
VEST.	VESTIBULE
V.I.F.	VERIFY IN FIELD
VT	VINYL TILE
VWC	VINYL WALL COVERING
W.	WEST
W/	WITH
W C	WATER CLOSET
WD.	WOOD
WDW.	WINDOW
WH	WATER HEATER
W.I.	WROUGHT IRON
WP	WATERPROOF
W.R.	WASTE RECEPTACLE
WSCT.	WAINSCOT
WT.	WEIGHT
WUI	WILDLAND-URBAN INTERFACE
WV	WATER VALVE
WWM	WELDED WIRE MESH
YD.	YARD
YD	YARD DRAIN

GENERAL NOTES

1. THESE GENERAL NOTES PERTAIN TO WORK DESCRIBED ON ALL CONTRACT DOCUMENTS.

2. THE CONTRACT DOCUMENTS CONSIST OF THE OWNER CONTRACTOR AGREEMENT, THE CONDITIONS OF CONTRACT (GENERAL, SUPPLEMENTARY, AND OTHER CONDITIONS), THE DRAWINGS, THE SPECIFICATIONS, AND ALL ADDENDA ISSUED PRIOR TO AND ALL MODIFICATIONS ISSUED AFTER EXECUTION OF THE CONTRACT.

3. FORMGREY STUDIO, LLC IS THE AUTHOR OF THESE PLANS AND CLAIMS A COPYRIGHT IN THESE PLANS AND THE DESIGNS CONTAINED IN THESE PLANS. THIS CLAIM IS MADE UNDER TITLE 17 OF THE UNITED STATES CODE AND ALL APPLICABLE TREATIES AND FOREIGN LAWS. THESE COPYRIGHTED DRAWING FILES ARE TO BE USED FOR REFERENCE ONLY. FORMGREY STUDIO, LLC WILL TAKE NO RESPONSIBILITY FOR ANY CHANGES MADE TO THESE DOCUMENTS BY ANOTHER PARTY AND NO LICENSE IS GIVEN FOR TRANSFER OF THESE COPYRIGHTS TO ANOTHER PARTY.

4. THE WORK COMPRISES THE COMPLETED CONSTRUCTION REQUIRED BY THE CONTRACT DOCUMENTS AND INCLUDES ALL LABOR NECESSARY TO PRODUCE SUCH CONSTRUCTION, AND ALL MATERIALS AND EQUIPMENT INCORPORATED OR TO BE INCORPORATED IN SUCH CONSTRUCTION.

5. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES ARE NOT A PART OF THE CONTRACT DOCUMENTS. THE ARCHITECT WILL REVIEW THEM, BUT ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE ARCHITECTS REVIEW OF SHOP DRAWINGS, PRODUCT DATA OR SAMPLES.

6. THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONTRACT DOCUMENTS AND SHALL AT ONCE REPORT TO THE ARCHITECT ANY ERROR, INCONSISTENCY OR OMISSIONS HE MAY DISCOVER. THE CONTRACTOR SHALL PERFORM NO PORTION OF THE WORK AT ANY TIME WITHOUT CONTRACT DOCUMENTS OR, WHERE REQUIRED, APPROVED SHOP DRAWINGS, PRODUCT DATA OR SAMPLES FOR SUCH PORTION OF THE WORK.

7. ALL WORK IS TO CONFORM WITH THE CONTRACT DOCUMENTS. DRAWINGS ARE NOT TO BE SCALED FOR INFORMATION IF UNABLE TO LOCATE DIMENSIONS FOR ANY ITEM OF WORK, CONSULT WITH THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.

8. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONTRACT DOCUMENTS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR AND SHALL BE REVIEWED BY THE ARCHITECT.

9. ALL WORK SHALL BE PERFORMED WITHIN STRICT CONFORMANCE TO THE MINIMUM STANDARDS OF THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE AND ALL APPLICABLE NATIONAL, STATE, AND LOCAL LAWS, REGULATIONS AND ORDINANCES.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL SAFETY DURING CONSTRUCTION, AND ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS.

11. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ANY AND ALL MECHANICAL, TELEPHONE, ELECTRICAL, LIGHTING AND PLUMBING INCLUDING ALL PIPING, DUCT WORK AND CONDUIT. COORDINATE ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF THE ABOVE EQUIPMENT.

12. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS/HER BEST SKILL AND ATTENTION, HE/SHE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTS AND OMISSIONS OF HIS/HER EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY WORK UNDER A CONTRACT WITH THE CONTRACTOR.

14. THE CONTRACTOR SHALL PURSUE WORK IN A CONTINUOUS AND DILIGENT MANNER TO INSURE TIMELY COMPLETION OF THE PROJECT.

15. THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS/HER OPERATIONS. AT THE COMPLETION OF THE WORK, HE/SHE SHALL REMOVE ALL HIS/HER WASTE MATERIALS AND RUBBISH FROM AND ABOUT THE PROJECT AS WELL AS ALL HIS/HER TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, AND SURPLUS MATERIALS.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR PROTECTION OF ALL EXISTING AND PROPOSED PIPING, UTILITIES, STRUCTURES, ADJACENT STREETS, AND IMPROVEMENTS DURING THE PERIOD OF CONSTRUCTION.

17. UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, WATER, HEAT, UTILITIES, TRANSPORTATION, AND OTHER FACILITIES AND SERVICES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF

18. THE CONTRACTOR SHALL SUBMIT WEEKLY JOB STATUS REPORTS TO THE ARCHITECT. THE REPORT SHALL STATE ACTUAL PROGRESS OF THE JOB AND LIST ANY CHANGES OR CONDITIONS WITHIN THE SCOPE OF THE CONTRACT DOCUMENTS AFFECTING THE JOB

THE WORK.

PROGRESS.

INSTALL

19. WHERE CONFLICTS OCCUR, COORDINATE THE LAYOUT AND EXACT LOCATION OF ALL PARTITIONS, DOORS, TELEPHONES AND ELECTRICAL/COMMUNICATION OUTLETS AND SWITCHES WITH ARCHITECT IN THE FIELD BEFORE PROCEEDING WITH CONSTRUCTION.

20. WHERE CONFLICT IS ENCOUNTERED BETWEEN THE CONTRACT DOCUMENTS THAT WILL MATERIALLY AFFECT THE QUALITY OR EXTENT OF THE WORK, SUCH CONFLICT SHALL BE RESOLVED TO THE SATISFACTION OF THE ARCHITECT BEFORE THE AFFECTED ITEMS AND/OR MATERIALS ARE PURCHASED, FABRICATED AND/OR INSTALLED.

21. WHERE PRE-MANUFACTURED OR PRE-FABRICATED ITEMS AND/OR MATERIALS ARE TO BE INSTALLED - THE CONTRACTOR SHALL VERIFY ROUGH OR FINISHED DIMENSIONS IN THE FIELD PRIOR TO PURCHASE OR FABRICATION.

22. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS TO BE FREE FROM DEFECTS FOR A MINIMUM OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE, AND PROMPTLY REMEDY SUCH DEFECTS AND ANY SUBSEQUENT DAMAGE CAUSED BY THE DEFECTS OR REPAIR THEREOF, AT NO EXPENSE TO THE OWNER. GUARANTEE PERIODS OF GREATER THAN ONE YEAR MAY BE REQUIRED AND CONTAINED WITHIN THE CONTRACT DOCUMENTS.

23. UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL SECURE AND PAY FOR THE BUILDING PERMIT AND FOR ALL OTHER PERMITS AND GOVERNMENTAL FEES, LICENSES AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.

24. WHERE ANY ITEM AND/OR MATERIAL IS INDICATED IN THE CONTRACT DOCUMENTS, AND NOT NECESSARILY DETAILED IN EACH SPECIFIC CASE, BUT IS REQUIRED FOR A COMPLETE AND PROFESSIONAL INSTALLATION - SUCH ITEM AND/OR MATERIAL SHALL BE PROVIDED AS IF SHOWN AND DETAILED IN FULL. PROVIDE MEANS TO FURNISH AND

PROPERTY INFORMATION

ADDRESS	1701 E PRATER WAY, SPARKS NV 89434
APN	037-271-31
BLOCK	N/A
LOT	N/A
SUBDIVISION	N/A
ZONE	MUD
F.A.R.	N/A

CODES

PER CITY OF SPARKS, BASED ON THE 2018 BUILDING CODES:

2010 ADA STANDARDS

- 2018 INTERNATIONAL BUILDING CODE
- 2018 UNIFORM MECHANICAL CODE 2018 UNIFORM PLUMBING CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE

2018 INTERNATIONAL EXISTING BUILDING CODE 2017 NATIONAL ELECTRICAL CODE

2018 NORTHERN NEVADA AMENDMENTS

OCCUPANCY GROUP NON-SEPARATED OR SEPARATED USES	В
CONSTRUCTION TYPE	III-B
FULLY SPRINKLERED	YES

OCCUPANT LOAD (AREA OF WORK): 49

PLUMBING FIXTURES

WHOLE BUILDING EXISTING PLUMBING FIXTURE COUNT: SINKS

MOP SINKS FLOOR SINKS LAVATORIES TOILETS URINALS SHOWERS

WHOLE BUILDING FINAL PLUMBING FIXTURE COUNT:

SINKS	5
MOP SINKS	3
FLOOR SINKS	1
LAVATORIES	21
TOILETS	20
URINALS	7
MOP SINKS	3
SHOWERS	<u> </u>
	59





OWNER **CITY OF SPARKS**

ARCHITECTURAL FORMGREY STUDIO LLC 525 ROBERTS STREET #100, RENO NV 89502 (775) 507-7200 NATE HUDSON: NHUDSON@FORMGREY.COM

5370 KIETSKE LAND, SUITE 100, RENO NV 89511 (775) 787-7552

JON R. ERICSON, PE, P.T.O.E. DATE AREA OF WORK **KEY PLAN - SECOND FLOOR**

PROJECT TEAM

431 PRATER WAY, SPARKS NV 89431 O (775) 353-2306; C (775) 224-2976 ROB BIDART: RBIDART@CITYOFSPARKS.US

MECHANICAL, PLUMBING, & ELECTRICAL KIMLEY-HORN AND ASSOCIATES, INC.

MATT MYRES: MATT.MYRES@KIMLEY-HORN.COM

CITY ENGINEER

SHEET INDEX

GENERAL

a001 TITLE SHEET - PROJECT INFORMATION, CODES

ARCHITECTURAL

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201	FLOOR PLAN, SECTIONS, INTERIOR ELEVATIONS & FINISH SCHEDULE
600	CEILING DEMOLITION PLAN
601	REFLECTED CEILING PLAN & DOOR SCHEDULE

MECHANICAL & PLUMBING

nn001	MECHANICAL SCHEDULES SPECIFICATIONS AND SYMBOLS
np100	MECHANICAL DEMO ENLARGED PLAN
np200	MECHANICAL ENI ARGED PLAN AND DETAILS
119200	

ELECTRICAL

e001	ELECTRICAL SYMBOL LEGEND & ABBREVIATIONS
e002	ELECTRICAL SPECIFICATIONS
e101	LEVEL 2 DISPATCH POWER PLAN - DEMOLITION
e102	LEVEL 2 DISPATCH LIGHTING PLAN - DEMOLITION
e201	LEVEL 2 DISPATCH POWER PLAN

- LEVEL 2 DISPATCH LIGHTING PLAN e202
- e601 PANEL SCHEDULES e602 LIGHTING FIXTURE SCHEDULES & DETAILS

BID # 20/21-009 PWP # WA-2021-153

TITLE SHEET, PROJECT INFORMATION, CODES



Description 1 PLAN REVIEW #1

REVISIONS

Date 12-07-20

> FORMGREY STUDIO 525 Roberts Street #100, Reno NV 89502 | www.formgrey.com (775) 507-7200

PD DISPATCH REMODEL City Of Sparks Bldg. Permit #SBLD20-23787

1701 E Prater Way Sparks NV 89434



CONSTRUCTION SET 01-29-21

FGS #2019-15 2/1/2021 8:03:27 AM





1/29/2021 4:54:25 PM



ROOM FINISH SCHEDULE								
#	NAME	BASE FINISH	CEILING FINISH	FLOOR FINISH	NORTH WALL	SOUTH WALL	E	
1	(E) DISPATCH CENTER	6" RUBBER	AC TILE	CARPET	PAINTED GYP. BD	PAINTED GYP. BD	PAINTE	
2	OFFICE	6" RUBBER	AC TILE	CARPET	PAINTED GYP. BD	PAINTED GYP. BD	PAINTE	
3	CLOSET	6" RUBBER	AC TILE	LVT	PAINTED GYP. BD	PAINTED GYP. BD	PAINTE	
4	BREAK AREA	6" RUBBER	PAINTED GYP. BD.	LVT	PAINTED GYP. BD	PAINTED GYP. BD	PAINTE	
5	CLOSET	6" RUBBER	AC TILE	LVT	PAINTED GYP. BD	PAINTED GYP. BD	PAINTE	
6	(E) OFFICE	6" RUBBER	AC TILE	LVT	PAINTED GYP. BD	PAINTED GYP. BD	PAINTE	
11	(E) CORRIDOR	MATCH EXISTING	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	MATCH	

FLOOR PLAN, SECTIONS, INTERIOR **ELEVATIONS & FINISH** SCHEDULE

a201

Date 12-07-20

> FORMGREY STUDIO 525 Roberts Street #100, Reno NV 89502 | www.formgrey.com (775) 507-7200

PD DISPATCH REMODEL City Of Sparks Bldg. Permit #SBLD20-23787

> 1701 E Prater Way Sparks NV 89434



CONSTRUCTION SET 01-29-21

FGS #2019-15 2/1/2021 10:39:57 AM







#	TYPE	ROOM #.	WIDTH	HEIGHT	MATERIAL	FINISH	FIRE RATING	HARDWARE	FRAME MATERIAL	FRAME FINISH	COMMENTS
1	А	2 - OFFICE	3' - 0"	6' - 8"	WOOD	STAIN		RE-USE SALVAGED	HOLLOW METAL	PAINT	SALVAGED
2	А	3 - CLOSET	3' - 0"	6' - 8"	WOOD	STAIN		RE-USE SALVAGED	HOLLOW METAL	PAINT	SALVAGED
3	А	5 - CLOSET	3' - 0"	6' - 8"	WOOD	STAIN		RE-USE SALVAGED	HOLLOW METAL	PAINT	SALVAGED
4	А	6 - (E) OFFICE	3' - 0"	6' - 8"	WOOD	STAIN		RE-USE SALVAGED	HOLLOW METAL	PAINT	SALVAGED



MECHANICAL SPECIFICATIONS

A. GENERAL

- THE INFORMATION INDICATED ON THESE DRAWINGS AS EXISTING IS BASED UPON INFORMATION TAKEN FROM AS-BUILT DRAWINGS, FIELD INVESTIGATION, AND INFORMATION OBTAINED FROM SUBMITTAL DATA, ETC. THE PLANS DO NOT GUARANTEE ACCURACY BUT ARE ONLY AN INDICATION OF EXISTING CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXACT CONDITIONS SUCH AS EQUIPMENT PLACEMENT, DUCTWORK (SIZE, ROUTING, AND ELEVATION), PIPING (SIZE, ROUTING, AND ELEVATION), ETC. THE DRAWINGS ARE INTENDED TO PROVIDE THE CONTRACTOR AN INDICATION OF THE SYSTEM INSTALLED IN THE FACILITY TO DATE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ADJUSTMENTS TO THE DRAWING INFORMATION AS REQUIRED TO MATCH EXISTING FIELD CONDITIONS.
- 2. THE CONTRACTOR SHALL INSTALL THE NEW EQUIPMENT, DUCTWORK, AND PIPING AROUND ALL EXISTING OBSTACLES INCLUDING: ELECTRICAL CONDUIT, DOMESTIC WATER PIPING, WASTE AND VENT PIPING, ACID WASTE AND VENT PIPING, CHILLED AND HEATING WATER PIPING, AND FIRE SPRINKLER PIPING. PROVIDE OFFSETS TO AVOID RELOCATION OF OTHER UTILITIES. RELOCATE UTILITIES IF THEY ARE IN CONFLICT WITH THE MECHANICAL SYSTEM INSTALLATION, CAUSE DEVIATIONS IN THE DESIGN INTENT, UNSATISFACTORY OPERATION, NOISY CONDITIONS, OR INTERFERE WITH MAINTENANCE. IT IS THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE ANY UTILITY RELOCATION WITH THE APPROPRIATE SUBCONTRACTOR.
- 3. PROVIDE ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, SERVICES AND INSURANCES TO COMPLETE THE HEATING, VENTILATING AND AIR CONDITIONING WORK WITHIN THE FULL INTENT OF THE DRAWINGS AND SPECIFICATIONS CONTAINED HEREON AND TO THE ENTIRE SATISFACTION OF THE ARCHITECT/ENGINEER.
- 4. PROVIDE ALL PERMITS AND FEES AS REQUIRED FOR THE MECHANICAL WORK.
- 5. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE PROJECT BEFORE BIDDING.
- 6. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC), 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), 2018 INTERNATIONAL FIRE CODE (IFC), 2018 UNIFORM MECHANICAL CODE (UMC), 2018 UNIFORM PLUMBING CODE (UPC), 2017 NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS, AND ALL OTHER APPLICABLE CODES, RULES, AND LOCAL REQUIREMENTS.
- 7. GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR.
- 8. ALL DIMENSIONS AND MEASUREMENTS SHALL BE VERIFIED AT THE JOBSITE BEFORE FABRICATION AND/OR INSTALLATION OF THE EQUIPMENT.
- 9. PROVIDE AND INSTALL ALL EQUIPMENT, DUCT, PIPING, AND CONTROLS AS SHOWN ON THE DRAWINGS.

B. SUBMITTALS

1. ELECTRONIC SUBMITTALS IN ADOBE PDF FORMAT, IN LIEU OF PAPER COPIES, WILL BE ACCEPTABLE.

- 2. SUBSTITUTED ITEMS SHALL BE SUBMITTED WITH MANUFACTURER'S DESCRIPTIVE DATA AND MUST SHOW EQUALITY TO EQUIPMENT SPECIFIED. INFORMATION ON SUBSTITUTED ITEMS MUST BE COMPLETE, INCLUDING, BUT NOT LIMITED TO: DESIGN, CONSTRUCTION MATERIALS, CONSTRUCTION QUALITY, AND SOUND LEVELS. ENGINEER WILL NOT RESEARCH INFORMATION REQUIRED TO COMPARE EQUIPMENT. ENGINEER RESERVES THE RIGHT TO REQUIRE SPECIFIED EQUIPMENT.
- 3. SUBMIT MANUFACTURER'S DESCRIPTIVE DATA WITHIN TEN (10) WORKING DAYS AFTER AWARD OF THE CONTRACT. MATERIALS AND EQUIPMENT SHALL NOT BE ORDERED PRIOR TO SUBMITTAL APPROVAL. ALLOW TEN (10) WORKING DAYS AFTER RECEIPT OF SUBMITTALS IN THE ENGINEER'S OFFICE BEFORE REVIEWED SUBMITTALS WILL BE RETURNED.
- 4. UPON COMPLETION OF THE PROJECT, AND PRIOR TO FINAL ACCEPTANCE PAYMENT, SUBMIT AS-BUILT DRAWINGS AND OPERATING AND MAINTENANCE INSTRUCTIONS.
- C. WORKMANSHIP
 - 1. ALL WORK TO BE PERFORMED BY QUALIFIED PERSONNEL NORMALLY ENGAGED IN THE RESPECTIVE LINE OF WORK.
 - 2. PERFORM ALL WORK IN A MANNER NOT TO DISTURB THE NORMAL OPERATION OF THE BUILDING.
 - 3. COORDINATE ALL WORK WITH THE OWNER'S REPRESENTATIVE.
 - 4. COORDINATE ALL WORK WITH THE OTHER TRADES.
 - 5. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK ACCEPTABLE TO THE OWNER'S REPRESENTATIVE.

D. DEMOLITION

1. DEMOLITION WORK SHALL NOT CREATE ANY DUST PROBLEMS IN THE WORKING SPACES.

- E.. CUTTING, PATCHING, AND PAINTING 1. ALL CUTTING AND PATCHING TO BE PERFORMED BY THE GENERAL CONTRACTOR.

 - 2. CUTTING OF ALL OPENINGS SHALL BE COORDINATED WITH THE OWNER'S ENGINEERING REPRESENTATIVE.
 - 3. WATER WILL NOT BE USED FOR CONCRETE CUTTING WITHOUT THE DIRECT SUPERVISION OF THE OWNER'S ENGINEERING REPRESENTATIVE.
 - 4. WALL SURFACES SHALL BE PRIMED AND PAINTED. PAINT TYPE AND COLOR SHALL BE AS SPECIFIED BY THE OWNER'S REPRESENTATIVE.

MAKE AND UNIT ST/ MODEL DESIGNATION OF NUMBER MULTI-POINT AVER FIBERGLASS INSUL ENVIRO-TEC VAV S10 WIRING ENCLOSURE SDR REHEAT COIL, MOI INCLUDING ISOLATIO

- F. PRODUCT HANDLING 1. USE ALL MEANS NE BEFORE, DURING, AND WORK OF THE
- ADDITIONAL COST TO THE OWNER.
- G. SEISMIC RESTRAINTS RESTRAINED PER THE 2018 IBC.
- H. EQUIPMENT APPROVED EQUAL IF NOTED.
- I. IDENTIFICATION

ADHESIVE.

- J. RELATED WORK SYSTEM OPERATIONAL
- K. DUCTWORK
- BE PERMITTED.
- ENGINEERING REPRESENTATIVE.
- QUANTITIES.

MECHANICAL SYMBOL LIST

ECESSARY TO PROTECT ALL MATERIALS AND EQUIPMENT
AND AFTER INSTALLATION AND TO PROTECT THE MATERIAL
OTHER TRADES.

2. IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE APPROVAL OF THE ENGINEER AND AT NO

1. ALL EQUIPMENT, DUCTWORK, PIPING, AND CONDUIT SHALL BE SEISMICALLY

2. REFERENCES: INTERNATIONAL BUILDING CODE (IBC) SECTION 1613.1, AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE 7) SECTION 13.6, SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION (SMACNA) SEISMIC RESTRAINT MANUAL, AND AMERICAN SOCIETY OF PLUMBING ENGINEERS (ASPE) PLUMBING ENGINEERING DESIGN HANDBOOK.

1. EQUIPMENT SHALL BE AS SPECIFIED IN THE EQUIPMENT SCHEDULE OR AN

2. INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.

3. GENERAL CONTRACTOR SHALL PROVIDE ALL CURBED OPENINGS IN ROOF FOR ALL ROOF MOUNTED EQUIPMENT.

1. PLASTIC NAMEPLATES: LAMINATED THREE LAYER WITH ENGRAVED BLACK LETTERS ON A LIGHT CONTRASTING BACKGROUND COLOR. INSTALL PLASTIC NAMEPLATES WITH CORROSION RESISTANT MECHANICAL FASTENERS, OR

1. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL POWER WIRING AND EQUIPMENT DISCONNECTS, UNLESS INCLUDED WITH EQUIPMENT, TO MAKE

AIR DISTRIBUTION DUCT SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH CURRENT EDITIONS OF THE ASHRAE GUIDE AND WITH S.M.A.C.N.A. DUCT CONSTRUCTION STANDARDS.

2. FLEXIBLE DUCTWORK LOCATED IN UNCONDITIONED SPACE SHALL BE A FACTORY FABRICATED ASSEMBLY CONSISTING OF A FLAME RESISTANT, DOUBLE LAMINATION OF POLYESTER INNER LINER BONDED TO A COATED SPRING STEEL WIRE HELIX, 2" THICK FIBERGLASS INSULATION FOR AN INSULATING VALUE OF R6, AND AN OUTER VAPOR BARRIER JACKET OF METALIZED POLYESTER FILM. FLEXIBLE DUCT TO BE ATCO UPC-036. FLEXIBLE DUCT RUNOUTS SHALL NOT EXCEED 5 FEET IN LENGTH.

3. MANUAL VOLUME DAMPERS: AIR BALANCE INC. MODELS AC-111 AND AC-112 OR APPROVED EQUAL. DAMPERS SHALL BE FURNISHED WITH INSULATION STANDOFFS AND LOCKING QUADRANT HANDLES. RESIDENTIAL TYPE WILL NOT

4. TEST & BALANCE TO BE CONDUCTED BY RAGLEN SYSTEM BALANCE OR A MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL, AND THEY SHALL SUBMIT THREE (3) COPIES OF A FINAL SYSTEM PERFORMANCE REPORT TO THE ENGINEER FOR APPROVAL AND BEFORE THE FINAL INSPECTION.

5. AFTER COMPLETION OF THE INSTALLATION WORK, TEST AND REGULATE ALL COMPONENTS OF THE NEW SYSTEMS TO THE SATISFACTION OF THE OWNER'S

6. DIFFUSERS, GRILLES, REGISTERS: ADJUST THROW PATTERN AS SHOWN ON THE DRAWINGS. ADJUST AIR QUANTITIES WITHIN -0 TO +10% OF THE DESIGN AIR

RL	RL	REFRIGERANT LIQUID PIPING
RS	RS	REFRIGERANT SUCTION PIPING
	U	UNION
	P.D.	PIPING TEE DOWN
O	P.U.	PIPING TEE UP
O	P.U.	PIPING ELBOW UP
	P.D.	PIPING ELBOW DOWN
		BRANCH - TOP CONNECTION
		BRANCH - BOTTOM CONNECTION
		ARROW INDICATES DIRECTION OF FLOW
	P.O.C.	POINT OF CONNECTION - NEW ITEMS TO EXISTING ITEMS
	S.A.	SUPPLY AIR DUCT DOWN
	S.A.	SUPPLY AIR DUCT UP
	R.A.	RETURN AIR DUCT DOWN
	R.A.	RETURN AIR DUCT UP
	E.A.	EXHAUST AIR DUCT DOWN
	E.A.	EXHAUST AIR DUCT UP
	S.A.D.	SUPPLY AIR DIFFUSER WITH FLEX CONNECTION
	R.A.G.	RETURN AIR GRILLE OPEN TO CEILING SPACE
EQ #		MECHANICAL EQUIPMENT INDICATED (SEE SCHEDULE)
T	Т.	THERMOSTAT
R	R.	ROOM TEMPERATURE SENSOR
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	BDD	BACKDRAFT DAMPER
	BTUH	BRITISH THERMAL UNITS PER HOUR
	CFM	CUBIC FEET PER MINUTE

	0001011							
		PLUMBI	NG EQUIPMENT SCHEDU	LE				
SVM	DESCRIPTION	TDIM		CONNE	CTIONS	5	ELECTRICAL	
3110	& MODEL NO.		T I XIIVI		V	HW	CW	(VOLTS/□/Hz)
GD-1	GARBAGE DISPOSAL	BADGER 1 (1/3 HP)	WATERBORNE GREY ENAMEL, QUIET DURA-DRIVE INDUCTION MOTOR	1 ½"	N/A	N/A	N/A	120 / 1 / 60
<u>(5.1)</u>	BREAKROOM SINK, SEE DETAIL 2 / MP200	AMERICAN STANDARD COLONY PRO MODEL No. 22DB.6332283C.075	3 HOLE DOUBLE COMPARTMENT STAINLESS STEEL ADA SINK WITH AMERICAN STANDARD STAINLESS STEEL FAUCET #7074000.075	2"	N/A	1/2"	1/2"	

					E	XISTING	VAV BC	OX SCH	EDULE				
	MAKE AND		CONTROL	NEW MAX AIR	NEW MIN AIR					F	REHEAT COIL		
UNI I DESIGNATION	MODEL NUMBER	UNI I SIZE	VALVE TYPE	FLOW (CFM) @ 1.0" W.G.	FLOW (CFM) @ 0.03" W.G.	VOLUME (CFM)	CAPACITY (MBH)	EAT (^F)	LAT (^F)	WPD. (ft. wg)	COIL APD. (IN W.C.)	FLOW (GPM)	EWT
(E) S9	ENVIRO-TEC SDR	08	2-WAY	750	375	375	15	55	87	0.23	0.46	1	15
(E) S12	ENVIRO-TEC SDR	10	2-WAY	1,180	525	525	20.6	55	92	0.4	0.33	1.25	15

					NEW VA	AV BOX	SCHE	EDULE	E (BY	OTHE	RS)										
			MAX AIR FLOW	MIN AIR FLOW	REHEAT AIR					REHEAT CO	L						DISCHARGE SOL	JND CRITERIA	RADIATED SOUN	ID CRITERIA	_
NDARD FEATURES AND PTIONAL ACCESSORIES	UNIT SIZE VA	E VALVE TYPE (CFM) @ W.G	(CFM) @ 1.0" W.G.	(CFM) @ 1.0" W.G. (CFM) @ 0.03" W.G.		CAPACITY (MBH)	EAT (°F)	LAT (°F)	WPD. (ft. wg)	COIL APD. (IN W.C.)	FLOW (GPM)	EWT (°F)	LWT (°F)	ROWS	CONTROLS	(in wc)	SOUND PWR. LVL. (OCTAVES 2-7)	NC	SOUND PWR. LVL. (OCTAVES 2-7)	NC	
RAGING VELOCITY SENSOR, 1/2" THICK ATION, 22 GAUGE UNIT CASING, NEMA 1 UL 277V/1Ø TRANSFORMER, HOT WATER DULATING CONTROL VALVE PACKAGE N BALL VALVES, UNIONS, AND P/T PORTS	14	2-WAY	2,400	1,200	1,200	46.6	55	96.1	2.7	0.33	2.75	150	118	2	DIGITAL ELECTRONIC	1	66,59,57,53,48,46	16	53,48,44,38,34,30	18	

		A	IR DISTRIBUTI	ON SCHEDU	JLE		
		ROUND NECK:		RECTANGULA	R NECK:		
		DIFFUSER — FRAME SIZE - NECK DIA. —	8 - 24x24 CD-1 200 CFM 4W	Diffuser — Neck Dia. — Airflow —	12x12 CD- 200 CFM	1 4W	Sheet Numl MP001
	NOTE: COLOR SHAL FLAT BLACK F	AIRFLOW THROW L BE COORDINA PAINT TO INTERI	TED WITH OWNER PRIOR TO	THROW D ORDERING. FIELD APP HROUGH AIR DISTRIBUT	LY 10N.		MP100 MP200
TAG	MANUFACTURE	TYPE	FACE	FRAME	MODEL	REMARKS	
CD-1	TITUS	SUPPLY	SQUARE CONE	LAY-IN	тмѕ		

	Med
Sheet Number	
MP001	MECHANI
MP100	MECHANI
MP200	MECHANI

CONSTRUCTION	SET
FGS	#2019-15

1/27/2021 2:33:08 PM

Date

1701 E PRA	TER	WAY
SPARKS	NV 8	3 <mark>94</mark> 34

Description

PD DISPATCH REMODEL

chanical Sheet List

Sheet Name

CONTROLS

DIGITAL

ELECTRONIC

DIGITAL

ELECTRONIC

LWT (^F) ROWS

119

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ICAL SCHEDULES, SPECIFICATIONS AND SYMBOLS

ICAL DEMO ENLARGED PLAN ICAL ENLARGED PLAN AND DETAILS

CLG	CEILING
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DL	DOOR LOUVER
DN	DOWN
(E)	EXISTING
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
°F	DEGREES FARENHEIT
F.A.	FROM ABOVE
F.B.	FROM BELOW
FT.	FEET
LAT	LEAVING AIR TEMPERATURE
MAX	MAXIMUM
MBH	BRITISH THERMAL UNITS PER HOUR (THOUSANDS)
MIN	MINIMUM
(N)	NEW
RL / RS	REFRIGERANT LIQUID LINE / REFRIGERANT SUCTION LINE
S.E.E.R.	SEASONAL ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
STD	STANDARD
т	TEMPERATURE
T.A.	TO ABOVE
Т.В.	TO BELOW
TYP	TYPICAL
WB	WET BULB TEMPERATURE







(NOTE: ALL OF THE SYMBOLS INDICATED BELOW MAY NOT APPEAR ON THIS PROJECT)





> CONSTRUCTION SET FGS #2019-15

> > 1/27/2021 2:33:09 PM





1/27/2021 2:33:10 PM

Date

PD DISPATCH REMODEL

SPARKS NV 89434

1701 E PRATER WAY

Description

City of Sparks

AND DETAILS **MP200**

MECHANICAL

ENLARGED PLAN



O

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ELECTRICAL SYMBOLS

CONDUIT AND RA	CEWAY	MOUNTIN (UON)
	CONDUIT RUN IN OR ON CEILING OR WALL.	NA
	CONDUIT RUN IN FLOOR, UNDER FLOOR, OR UNDERGROUND.	NA
	MARKS INDICATE QTY OF CONDUCTORS IN CONDUIT EXCLUDING GROUND. NO MARKS INDICATE (2) CONDUCTORS. ADD GROUND PER NEC FOR EMT & NON-METALLIC CONDUIT.	NA
	LONG MARK INDICATES GROUND FOR ISOLATED GROUNDING SYSTEM. SIZE PER NEC.	NA
	BRANCH CIRCUIT (DIAGRAMMATIC)	NA
LA-1	HOMERUN INDICATING PANEL AND CIRCUIT NUMBER.	NA
LA-[1,3,5]	HOMERUN WITH CIRCUIT NUMBER IN BRACKETS INDICATING MULTI-PHASE LOAD.	NA
ON HA-1	"ON" INDICATES CIRCUITING SPLIT AT DIFFERENT LOCATIONS	NA
•	CONDUIT DOWN.	NA
<u> </u>	CONDUIT UP.	NA
E	CONDUIT STUB AND CAP.	NA

POWER DEVICES		MOUNTING (UON)
÷	DUPLEX CONVENIENCE OUTLET, +18" AFF (TYPICAL).	W, +18" AFF
-#	DUPLEX CONVENIENCE OUTLET, COUNTER HEIGHT +48" AFF (TYPICAL).	W, FVMH
-	CONVENIENCE OUTLET W/ GFCI PROTECTION.	W, +18" AFF
=⊕ WP	CONVENIENCE OUTLET W/ GFCI PROTECTION & WEATHER PROOF-IN-USE COVER.	W, +18" AFF
⇒ _{IG}	DUPLEX CONVENIENCE OUTLET W/ DEDICATED CIRCUIT & ISOLATED GROUND.	W, +18" AFF
=⊖ _{MON}	DUPLEX CONVENIENCE OUTLET FOR MONITOR. COORDINATE WITH ARCH/OWNER.	W, +60" AFF
=⊖ _{USB}	DUPLEX CONVENIENCE OUTLET WITH INTEGRAL USB CHARGING PORTS.	W, +18" AFF
=⊕ _{DF}	DUPLEX CONVENIENCE OUTLET FOR DRINKING FOUNTAIN. COORDINATE WITH MECH.	W, +30" AFF
= REF	DUPLEX CONVENIENCE OUTLET W/ DEDICATED CIRCUIT FOR REFRIGERATOR.	W, +42" AFF
= DISP	DUPLEX CONVENIENCE OUTLET W/ DEDICATED CIRCUIT FOR WASTE DISPOSAL.	W, +18" AFF
-#	DOUBLE DUPLEX CONVENIENCE OUTLET.	W, +18" AFF
÷	DUPLEX CONVENIENCE OUTLET, CEILING MOUNTED, FVMH.	C, FVMH
#	QUAD RECEPTACLE IN FLOOR BOX.	FL
-	DUPLEX RECEPTACLE IN FLOOR BOX.	FL
Ø	SPECIAL PURPOSE OUTLET, NEMA CONFIGURATION AND VOLTAGE AS NOTED.	W, FVMH
U _{USE}	JUNCTION BOX, SPECIFIC USE AS NOTED.	W, FVMH
LIGHTING (REFER	TO LIGHTING FIXTURE SCHEDULE FOR DETAILS)	MOUNTING (UON)
(L#)	LIGHTING FIXTURE TAG, INDICATING FIXTURE ID.	
EM	HALF SHADING AND/OR 'EM' TAG INDICATES FIXTURE W/ 90 MIN. EMEGENCY BACKUP.	w
	RECESSED VOLUMETRIC TROFFER, 1'X4', 2'X2', 2'X4'	с
	STRIP LIGHT FIXTURE.	с
	LINEAR LIGHTING FIXTURE.	C, W, FL
	RECESSED SQUARE DOWNLIGHT FIXTURE.	с
0	RECESSED AND/OR SEMI-RECESSED ROUND DOWNLIGHT FIXTURE.	с
	TRACK AND TRACK LIGHT FIXTURE.	C, W
WALL	VANITY FIXTURE.	w
<u></u>	EXIT SIGN, SINGLE FACE. ARROWS INDICATE PATH OF EGRESS. REFER TO PLANS FOR MOUNTING. ON UNSWITCHED LEG ON CIRCUIT.	FVM
<u> </u>	EXIT SIGN, DOUBLE FACE. ARROWS INDICATE PATH OF EGRESS. REFER TO PLANS FOR MOUNTING. ON UNSWITCHED LEG ON CIRCUIT.	FVM

IGHTING CONTR	OLS	MOUNTING (UON)
\$	LINE VOLTAGE LIGHT SWITCH, SINGLE POLE, +48" AFF.	W, +48" AFF
\$ ₃	THREE-WAY SWITCH, +48" AFF.	W, +48" AFF
\$_4	FOUR-WAY SWITCH, +48" AFF.	W, +48" AFF
\$ _D	LINE VOLTAGE DIMMER SWITCH, +48" AFF.	W, +48" AFF
\$ _K	KEYED SWITCH, +48" AFF.	W, +48" AFF
\$ _L	LIGHT SWITCH, SINGLE POLE, LIGHTED HANDLE, +48" AFF.	W, +48" AFF
\$ ₀	MOMENTARY OVERRIDE SWITCH, +48" AFF.	W, +48" AFF
\$ _{LV}	LOW VOLTAGE DIMMING SWITCH, +48" AFF.	W, +48" AFF
\$ _{OS}	LINE VOLTAGE DIMMING SWITCH, OCCUPANCY SENSOR +48" AFF.	W, +48" AFF
\$ _T	DIGITAL TIME SWITCH, +48" AFF.	W, +48" AFF
\$ ₀	MOMENTARY CONTACT SWITCH, +48" AFF.	W, +48" AFF
OS	OCCUPANCY SENSOR, DUAL TECHNOLOGY.	С
PC	PHOTOELECTRIC SENSOR.	С
H#	CONTROL ETHERNET GATEWAY HUB. REFER TO LIGHTING CONTROLS RISER DIAGRAM.	FVM
PP	CONTROL POWER PACK. REFER TO LIGHTING CONTROLS RISER DIAGRAM.	FVM
S#	CONTROL DEVICE. REFER TO LIGHTING CONTROLS RISER DIAGRAM.	W, +48" AFF
QUIPMENT		MOUNTING (UON)
\$ _M	MOTOR RATED SWITCH.	FVM
0	MOTOR RATED HAND-OFF-AUTO SWITCH.	FVM

EQUIPMENT		MOUNTING (UON)
\$ _M	MOTOR RATED SWITCH.	FVM
00	MOTOR RATED HAND-OFF-AUTO SWITCH.	FVM
各	EMERGENCY POWER OFF SWITCH, MUSHROOM TYPE.	W, FVMH
	DISCONNECT, HEAVY DUTY, NON-FUSIBLE.	w
R	DISCONNECT, HEAVY DUTY, FUSIBLE.	W, FVMH
\boxtimes	MAGNETIC MOTOR STARTER.	w
× ₽	COMBINATION MOTOR STARTER & DISCONNECT.	W, FVMH
	VARIABLE FREQUENCY DRIVE.	w
WALL	ELECTRICAL PANEL, SURFACE MOUNTED.	w
WALL	ELECTRICAL PANEL, FLUSH MOUNTED.	w
	TRANSFORMER.	FL
	DISTRIBUTION PANELBOARD.	W, FVMH
WALL	INVERTER.	W, FVMH
	EQUIPMENT CALLOUT.	
WALL	AUXILIARY SYSTEM CABINET.	W, FVMH

TELECOMMUNICA	TION DEVICES	MOUNTING (UON)
\bigtriangledown	DATA OUTLET	W
▼	TELEPHONE OUTLET	W
$\mathbf{\nabla}$	DATA/TELEPHONE OUTLET	W
\bigcirc	WIRELESS ACCESS POINT (WAP)	С

ELECTRICAL SYMBOLS

ABBREVIATIONS

1P	ONE POLE
1PH	SINGLE PHASE
2/C	TWO-CONDUCTOR
2P	TWO POLE
3/C	THREE-CONDUCTOR
3P	THREE POLE
3PH	THREE PHASE
3\//	
4PS1	FOUR POLE SINGLE THROW
4W	FOUR WIRE
A/C	AIR CONDITIONIG
AC	ALTERNATING CURRENT
ACS	ACCESS CONTROL SYSTEM
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJACENT
AFC	AVAILABLE FAULT CURRENT
AFE	ABOVE EINISHED ELOOR / GRADE
ΛI	
ALI	
AMP	AMPERE
APPROX.	APPROXIMATE / APPROXIMATELY
AR	AS REQUIRED
ARCH	ARCHITECTURAL / ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BB	BUCK BOOST
BFB	BACK FEED BREAKER
	BIII DING
BBKD	BREAKER
С	CEILING
CATV	COMMUNITY ANTENNA TELEVISION
СВ	CIRCUIT BREAKER
CFBA	CUSTOM COLOR / FINISH SELECTED BY ARCHITECT
CFCI	CONTRACTOR FURNISHED CONTRACTOR
CEOL	CONTRACTOR FURNISHED OWNER INSTALLED
DA	
dB	DAIVIPERACTUATOR
	DECIBLE, UNIT OF SOUND LEVEL
DEMO	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION
DEMO DEPT	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT
DEMO DEPT DF	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN
DEMO DEPT DF DIA	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER
DEMO DEPT DF DIA DIM	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION
DEMO DEPT DF DIA DIM DISC	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT
DEMO DEPT DF DIA DIM DISC	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT
DEMO DEPT DF DIA DIM DISC DN	DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN
DEMO DEPT DF DIA DIM DISC DN DPDT DWC	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW
DEMO DEPT DF DIA DIM DISC DN DPDT DWG	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EA EC	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EA EC EJ	DAMPER ACTORIOR DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC EJ ELEC	DAMPER ACTORIOR DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC EJ ELEC ELEC ELEV	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL ELECTRICAL
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC EJ ELEC ELEV FM	DAMPER ACTORION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL ELEVATOR EMERGENCY
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC ELEC ELEC ELEV EM EMB	DAMPER ACTION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL ELEVATOR EMERGENCY EXTERNAL MAINTENANCE BYDASS
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC ELEC ELEC ELEV EM EMB	DAMPER ACTION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL ELEVATOR EMERGENCY EXTERNAL MAINTENANCE BYPASS
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC ELEC ELEC ELEV EM EMB EMT	DAMPER ACTION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL ELEVATOR EMERGENCY EXTERNAL MAINTENANCE BYPASS ELECTRICAL METALLIC CONDUIT
DEMO DEPT DF DIA DIM DISC DN DPDT DWG E EA EC EJ ELEC ELEV EM EMB EMT ENT	DAMPER ACTION DECIBLE, UNIT OF SOUND LEVEL DEMOLITION DEPARTMENT DRINKING FOUNTAIN DIAMETER DIMENSION DISCONNECT DOWN DOUBLE POLE DOUBLE THROW DRAWINGS EAST EACH EMPTY CONDUIT WITH PULL WIRE EXPANSION JOINT ELECTRICAL ELEVATOR EMERGENCY EXTERNAL MAINTENANCE BYPASS ELECTRICAL METALLIC CONDUIT ELECTRICAL NONMETALLIC CONDUIT

ABBREVIA

EQUIP	EQUIPMENT
EXIST	EXISTING
-A	FIRE ALARM
ΞΔΔ	
-BO	FURNISHED BY OTHERS
-LA	FULL LOAD AMPERES
-MC	FLEXIBLE METAL CONDUIT
-PEN	FUSE PER EQUIPMENT NAMEPLATE
-30	
-VM	FIELD VERIFY MOUNTING
=VMH	FIELD VERIFY MOUNTING HEIGHT
-VNR	FULL VOLTAGE NON-REVERSING
-VR	FULL VOLTAGE REVERSING
3	GROUND
GEC	GROUNDING ELECTRODE CONDUCTOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
	GROUND
ער	
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
НР	HORSEPOWER
HPS	HIGH-PRESSURE SODIUM
17	
HVAC	HEATING, VENTILATION & AIR CONDITIONING
Hz	HERTZ, UNIT OF FREQUENCY
/0	INPUT / OUTPUT
G	ISOLATED GROUND
MC	
N/IS	
К	INFRARED
۲V	KILOVOLT
κνa	KILOVOLT AMPERE
(VAR	KILOVOLT AMPERE REACTIVE
<u>~</u>	
ννΗ	KILOWATTHOUK
ED	LIGHT EMITTING DIODE
FNC	LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
PS	LOW-PRESSURE SODIUM
RA	
_16	
_V	LOW VOLTAGE
MAX	MAXIMUM
MBJ	MAIN BONDING JUMPER
МС	METAL CLAD
NCB	
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MAN HOLE
VIIIN	
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVER-CURRENT PROTECTION
MON	MONITOR
	NORTH
N	
NA	NOTAPPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
	ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION

ELECTRICAL DRAWING SCHEDULE			
SHEET NUMBER	SHEET NAME		
e001	ELECTRICAL SYMBOL LEGEND & ABBREVIATIONS		
e002	ELECTRICAL SPECIFICATIONS		
e101	LEVEL 2 DISPATCH POWER PLAN - DEMOLITION		
e102	LEVEL 2 DISPATCH LIGHTING PLAN - DEMOLITION		
e201	LEVEL 2 DISPATCH POWER PLAN		
e202	LEVEL 2 DISPATCH LIGHTING PLAN		
e601	PANEL SCHEDULES		
e602	LIGHTING FIXTURE SCHEDULES & DETAILS		
NUMBER OF SHEETS IN	ISET 8		

LIONS

С	NOT IN CONTRACT
-	NIGHT LIGHT
)	NORMALLY OPEN
).	NUMBER
S	NOT TO SCALE
١E	OR APPROVED EQUAL
)	ON CENTER
CP	OVER-CURRENT PROTECTION
CI	OWNER FURNISHED CONTRACTOR INSTALLED
-01	OWNER FURNISHED OWNER INSTALLED
HD	OVERHEAD DOOR
_	OVERLOAD
	POWER FACTOR
1	PHASE
1L	PANEL
SOI	PROJECTOR
/C	POLYVINYL CHLORIDE
ΓY	QUANTITY
	RELOCATED DEVICE / EQUIPMENT
۱U	REMOTE ANNUNCIATOR UNIT

REFLECTED CEILING PLAN

RIGID NONMETALLIC CONDUIT **REVOLUTIONS PER MINUTE REMOVE & RELOCATE**

SHORT CIRCUIT AMPERES

SURGE PROTECTION DEVICE

SINGLE POLE DOUBLE THROW

SINGLE POLE SINGLE THROW

STANDARD FINISH / COLOR BY ARCHITECT

SQUARE FOOT / FEET

REFRIGERATOR

SWITCH NEUTRAL

START / STOP

SPECIFICATION

SINGLE THROW

SWITCHBOARD

SWITCHGEAR

TEMPORARY

TWISTLOCK

TYPICAL

TWISTED PAIR

TWISTED SHIELDED PAIR

TELEVISION (CABLE)

UNDERGROUND

VOLTS / VOLTAGE

VOLT AMPERE

WATER HEATER

TRANSFORMER

EXPLOSION PROOF

REMOVE / DEMOLISH

WEST

WITH

WYE

WITHOUT

UNSWITCHED

TELEPHONE TERMINAL BOARD

UNDERFLOOR / UNDERSLAB

UNLESS NOTED OTHERWISE

VARIABLE FREQUENCY DRIVE

WEATHER PROOF (NEMA 3R)

UNINTERRUPTIBLE POWER SOURCE

TRANSIENT VOLTAGE SURGE SUPPRESSOR

SQUARE

STRUCT STRUCTURAL

SOUTH

REVISIONS / REVISED

RIGID METAL CONDUIT

RCP

REF

REV

RMC

RNC RPM RR

S/N S/S

SCA

SFBA

SPD

SPDT

SPEC

SPST

SWBD

SWGR

TEMP

TP

TSP

TTB

TVSS

TYP

UGND

UNSW

UNO

UPS

VA

W

VFD

\///

W/O

WH

UF

TV

SQ

ST

SE



01/26/2021

ELECTRICAL SYMBOL LEGEND & ABBREVIATIONS



SPARKS PD DISPATCH REMODEL City of Sparks

> **1701 E PRATER WAY SPARKS NV 89434**

CONSTRUCTION SET 192079009

1/27/2021 2:58:15 PM

ABBREVIATIONS

PART ONE - GENERAL 1.1. THE WORK: ALL WORK SHALL BE NEW UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE THE WORK SHOWN ON THE DRAWINGS AND SPECIFIED FOR ITS INDIVIDUAL SECTIONS OF WORK. THE WORD "WORK" IS DEFINED AS ALL LABOR, TRANSPORTATION, MATERIAL, EQUIPMENT TOOLS, INSTALLATION, SUPERVISION AND ANY OTHER INCIDENTAL ITEMS OR SERVICES NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE COMPLETE SYSTEMS. WHICH SHALL BE PROVIDED BY THIS CONTRACTOR WHETHER OR NOT SPECIFICALLY INDICATED OR NOTED. 1.2. RESPONSIBILITY: THIS CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ACTIONS OF ITS PERSONNEL, SUPPLIERS, AND SUB-CONTRACTORS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL WORK AS MAY BE REQUIRED TO ACCOMMODATE OR SUPPORT THE ELECTRICAL WORK. EXAMPLES: PAINTING, STRUCTURAL SUPPORTS, CUTTING AND PATCHING, EXCAVATION AND BACKFILL, CONCRETE PADS, ROOF JACKS, ETC. REQUIRING THIS CONTRACTOR'S ENGAGEMENT OF APPROPRIATE TRADES TO PERFORM SUCH WORK FOR THE PROPER INSTALLATION AND OPERATION OF COMPLETE ELECTRICAL SYSTEMS. 1.3. MINIMUM REQUIREMENTS: THESE SPECIFICATIONS ESTABLISH THE MINIMUM REQUIREMENTS FOR THE WORK AND MATERIALS, EQUIPMENT AND METHODS TO BE PROVIDED. THE DRAWINGS MAY INDICATE REQUIREMENTS WHICH EXCEED THESE MINIMUMS. .4. GENERAL CONDITIONS: ALL GENERAL CONDITIONS, SPECIAL REQUIREMENTS OR GENERAL REQUIREMENTS OF THE CONSTRUCTION SPECIFICATIONS ARE MADE PART OF THIS SPECIFICATION AND HAVE THE SAME FORCE AND EFFECT AS IF COMPLETELY REPRODUCED. 1.5. <u>DEFINITIONS</u>: AHJ: AUTHORITY HAVING JURISDICTION ASSEMBLY: AN INSTALLATION OR SYSTEM OF MULTIPLE COMPONENTS REQUIRING MULTIPLE CONNECTIONS. (EXAMPLES: TRASH COMPACTOR, MOTORIZED DOOR, HVAC SPLIT SYSTEM, ETC.). EQUAL: ACCEPTED BY THE ENGINEER AS EQUAL FF&E: FURNISHINGS, FIXTURES AND EQUIPMENT - PROVIDED BY OTHERS AT JOBSITE. RECEIVE, PROTECT, STORE, ASSEMBLE, INSTALL AND CONNECT. PROVIDE MINIMUM 5x STRUCTURAL BACKING. (EXAMPLES: CHANDELIERS, PROJECTORS, ETC.). PROVIDE: FURNISH, INSTALL, ACTIVATE, AND COMMISSION. I.6. CODES: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC). THE 2015 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND ALL OTHER ADOPTED APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. 1.7. PERMITS: PAY ALL FEES AND OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED FOR THE WORK. 1.8. DRAWINGS: DRAWINGS ARE DIAGRAMMATIC AND SCHEMATIC IN NATURE, AND INDICATE THE TYPE, SIZE, ARRANGEMENT AND LOCATIONS OF MATERIALS AND EQUIPMENT. WORK INCLUDES CERTAIN COMPONENTS, APPURTENANCES, AND RELATED SPECIALTIES THAT MAY NOT BE SHOWN. PROVIDE ALL NECESSARY ITEMS TO COMPLETE THE WORK ACCORDING TO INDUSTRY STANDARDS. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO REQUIRE FINISHED WORK, TESTED AND READY FOR OPERATION. DO NOT SCALE DRAWINGS. ARRANGEMENT OF EQUIPMENT AND ROUTING OF FEEDERS AND BRANCH CIRCUITING SHALL BE PLUMB AND AT RIGHT ANGLES TO BUILDING CONSTRUCTION, AND MAY REQUIRE MODIFICATION DUE TO UNFORESEEN CONDITIONS REQUIRING ONSITE REVISIONS DURING CONSTRUCTION. (SEE ALSO "BIDDING"). .9. <u>COORDINATION</u>: THIS PROJECT REQUIRES A HIGH LEVEL OF COORDINATION AND COOPERATION WITH OWNER, ARCHITECT, OTHER TRADES, VENDORS, AND SPECIALTY CONTRACTORS. CAREFULLY EXAMINE ALL CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, SHOP DRAWINGS, ETC. FOR ALL GENERAL CONSTRUCTION, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND SPECIALTY CONTRACTOR WORK. PRIOR TO ROUGH-IN, COORDINATE THE WORK WITH ALL OTHER TRADES, TAKING RESPONSIBILITY FOR THE PROPER FITTING OF MATERIAL INTO THE BUILDING AS PLANNED WITHOUT INTERFERENCE WITH OTHER WORK. ESTABLISH AND VERIFY LOCATIONS, HEIGHTS, CONNECTION METHODS, ETC. WITH EQUIPMENT INSTALLER (AND OWNER, ARCHITECT, AND/OR INTERIOR DESIGNER FOR FF&E ITEMS), AND MAKE REASONABLE MODIFICATIONS IN THE LAYOUTS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES IN ORDER TO PROVIDE ACCESS FOR THE PROPER EXECUTION OF THE WORK. 1.10. IDENTICAL: ALL WORK REQUIRED FOR IDENTICAL ITEMS AND ASSEMBLIES OF THE PROJECT SHALL BE PROVIDED, ALTHOUGH EACH SPECIFIC IDENTICAL ITEM MAY NOT BE SHOWN IN DETAIL. 1.11. VERIFICATION: CHECK AND VERIFY ALL SIZES, DIMENSIONS, AND CONDITIONS BEFORE STARTING ANY WORK. ANY DEVIATION(S) OR PROBLEM(S) SHALL BE TRANSMITTED TO THE ENGINEER FOR 1.12. CONNECTIONS: CONNECT ALL EQUIPMENT, SYSTEMS, AND ASSEMBLIES PROVIDED BY OTHERS INCLUDING CONTROLS, SAFETY DEVICES AND INTERCONNECTIONS. EXCEPTION: DO NOT INTERCONNECT THE CONTROL SYSTEMS OF THOSE MECHANICAL AND PLUMBING SYSTEMS WHICH ARE SPECIFICALLY NOTED TO BE THE RESPONSIBILITY OF THOSE TRADES. PROVIDE FUSIBLE DISCONNECT SWITCHES AND MOTOR STARTERS FOR ALL EQUIPMENT EXCEPT THOSE ITEMS WHICH ARE SPECIFICALLY LISTED WITH INTEGRAL STARTERS/DISCONNECT SWITCHES. WHERE STARTERS AND/OR DISCONNECT SWITCHES ARE FURNISHED TOGETHER WITH EQUIPMENT, RECEIVE, INSTALL, AND CONNECT THOSE ITEMS. 1.13. SUBMITTAL: SUBMIT TO THE ENGINEER COMPLETE ELECTRONIC SETS OF SHOP DRAWINGS AND TECHNICAL DATA SHEETS FOR ALL EQUIPMENT AND MATERIALS SPECIFIED HEREIN. THE ENGINEER SHALL REVIEW SHOP DRAWINGS AND TECHNICAL DATA SHEETS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND ISSUE A WRITTEN ASSESSMENT TO THE OWNER PRIOR TO COMMENCEMENT OF WORK. THE ENGINEER'S FAILURE TO CORRECT ERRORS IN THE SUBMITTAL SHALL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATION TO PERFORM THE WORK AS SHOWN AND/OR SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ENGINEERING FEES NECESSARY TO CHANGE PROJECT DOCUMENTS BASED ON ALTERNATE SUBMITTAL PACKAGES/EQUIPMENT SUBSTITUTIONS. 1.14. <u>OR-EQUAL SUBSTITUTIONS</u>: ALL PROPOSED "OR EQUAL" SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER FOR CONSIDERATION PRIOR TO BIDDING AND AFTER ALL REQUIREMENTS ASSOCIATED WITH SUBSTITUTED EQUIPMENT AND/OR MATERIALS HAVE BEEN COORDINATED WITH OTHER BUILDING TRADES, INCLUDING ALL MECHANICAL, STRUCTURAL, AND/OR ARCHITECTURAL ELEMENTS. THE OWNER'S REPRESENTATIVE SHALL PRE-APPROVE ANY PROPOSED SUBSTITUTION IN WRITING. IDENTIFY AND ANNOTATE ALL REVISED REQUIREMENTS PER BUILDING TRADE ON THE SHOP DRAWINGS. ALSO IDENTIFY ALL COST DEBITS OR CREDITS IN WRITING FOR THE PROPOSED CHANGES PER BUILDING TRADE AND SUMMARIZE THESE AS A TOTAL NET-TO-OWNER CHARGE OR CREDIT FOR CONSIDERATION. 1.15. AS-BUILT: UPON COMPLETION OF CONSTRUCTION, SUPPLY THE ENGINEER WITH AS-BUILT DOCUMENTS ACCURATELY SHOWING THE MATERIALS AND EQUIPMENT AS INSTALLED. PROVIDE OPERATION AND MAINTENANCE MANUAL(S) CONTAINING APPROVED SHOP DRAWINGS. OPERATING AND MAINTENANCE INSTRUCTION FOR SWITCHGEAR, LIGHTING FIXTURES, CONTROLS, AND SPECIALTY EQUIPMENT. 1.16. GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER (LONGER IF REQUIRED BY GENERAL AND/OR SPECIAL CONDITIONS). IN ADDITION, THE INSTALLATION SHALL BE GUARANTEED TO PERFORM AS SPECIFIED AND FULFILL EACH AND EVERY REQUIREMENT OF THE DRAWINGS AND SPECIFICATIONS WHEN OPERATED IN ACCORDANCE WITH THE CONTRACTOR'S INSTRUCTIONS. SHOULD THE INSTALLATION IN ANY WAY FAIL TO DO SO, THE CONTRACTOR WILL, WITHOUT DELAY AND WITHOUT COST TO THE OWNER, PROVIDE WHATEVER ADDITIONAL EQUIPMENT, MATERIAL, AND LABOR REQUIRED TO CORRECT THE DEFICIENCY AND COMPLY WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. WHERE SPECIFIED EQUIPMENT HAS A LONGER GUARANTEE PERIOD, THE TERMS OF THAT GUARANTEE SHALL GOVERN (EXAMPLE: LED SYSTEM WITH 5 YEAR GUARANTEE). INCANDESCENT LAMPS ARE EXEMPT BUT SHALL BE NEW AND UNUSED AT THE TIME OF FINAL ACCEPTANCE. 1.18. IECC COMPLIANCE: COMPLY WITH ALL REQUIREMENTS SET FORTH IN THE IECC COMPLIANCE CERTIFICATE INCLUDED IN THESE DOCUMENTS. HIRE A COMMISSIONING AGENT TO COMPLY WITH AND PERFORM ALL ASPECTS OF SECTION C408 OF THE 2012 IECC. 1.19. <u>SITE VISIT</u>: CONTRACT DOCUMENTS INDICATE NEW WORK TO BE PERFORMED AND DO NOT PURPORT TO SHOW ALL EXISTING CONDITIONS. VISIT THE SITE PRIOR TO SUBMITTING A BID TO BECOME FAMILIAR WITH EXISTING CONDITIONS. COMPARE THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS AGAINST EXISTING CONDITIONS, AND IDENTIFY AND ANNOTATE ALL

- WORK OR CONDITIONS THAT ARE DIFFERENT FROM THE CONTRACT DOCUMENTS OR THEIR INTENT. UPON DISCOVERY, IMMEDIATELY NOTIFY AND REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER. NO EXTRAS OR CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO PERFORM THE PRE-BID SITE VISIT. 1.20. BASIS OF PROPOSAL: PROPOSAL SHALL BE BASED ON MANUFACTURERS AND MODELS AS LISTED UNLESS "OR EQUAL" IS INDICATED. PROVIDE SUBSTITUTION REQUESTS A MINIMUM OF FIVE (5) BUSINESS DAYS PRIOR TO BID DATE CLOSING TO ALLOW TIME FOR DUE CONSIDERATION OF
- PROPOSED ALTERNATE AND SUBSEQUENT NOTIFICATION TO ALL OTHER BIDDERS IN THE EVENT SUBSTITUTION IS DEEMED ACCEPTABLE. DETERMINATION OF SUBSTITUTION EQUALITY RESTS SOLELY WITH THE ENGINEER.

ELECTRICAL SPECIFICATIONS

- 1.21. VALUE ENGINEERING (V.E.) INITIATIVES: IN ADDITION TO THE "AS SPECIFIED/OR EQUAL" BASE BID, A COST REDUCTION INITIATIVE(S) MAY BE PROPOSED BASED ON SUBSTITUTIONS OF EQUIPMENT, MATERIALS, AND/OR METHODS. EACH SUCH PROPOSAL SHALL INCLUDE A DATA SHEET(S) ON THE SPECIFIED ITEM(S), THE PROPOSED SUBSTITUTE(S), AND THE NET CREDIT TO THE OWNER, INCLUDING ALL CREDITS AND CHARGES FROM ALL MEMBERS OF THE CONSTRUCTION TEAM. THE ENGINEER WILL REVIEW AND RENDER AN OPINION TO THE OWNER. IF THE V.E. INITIATIVE IS DECLINED, PROVIDE THE SPECIFIED EQUIPMENT/MATERIAL/METHOD. IF THE V.E. INITIATIVE IS ACCEPTED, AND IF SUCH ACCEPTANCE RESULTS IN A REQUIREMENT TO REVISE ANY DESIGN DOCUMENTS, THE CHARGES FOR THESE REVISIONS SHALL BE BILLED TO THE CONTRACTOR AND THE INVOICING SHALL BE SETTLED BEFORE THE PROJECT IS SIGNED OFF FOR FINAL ACCEPTANCE
- 1.22. BIDDING: THE CIVIL, ARCHITECTURAL, MECHANICAL, KITCHEN, AND/OR INTERIOR DRAWINGS CONTAIN DETAILED DESCRIPTIONS, CIRCUITING, AND CONNECTION REQUIREMENTS WHICH ARE PART OF THIS CONTRACTOR'S RESPONSIBILITIES. DO NOT SUBMIT BIDS ON THIS PROJECT PRIOR TO REVIEWING ALL PROJECT DRAWINGS, SPECIFICATIONS, AND ADDENDA.
- 1.23. SPECIFICATIONS BOOK: THE SPECIFICATIONS CONTAIN SIGNIFICANT INFORMATION, CONDITIONS, AND PROCEDURES WHICH MAY HAVE A SUBSTANTIAL IMPACT ON THIS CONTRACTOR'S COSTS. DO NOT SUBMIT A BID ON THIS PROJECT UNLESS THE SPECIFICATIONS HAVE BEEN THOROUGHLY REVIEWED. THE GENERAL NOTES CONTAINED HEREIN ARE COMPLIMENTARY TO THE SPECIFICATIONS BOOK, AND IN COMPARISON THE MORE STRINGENT REQUIREMENT(S) SHALL GOVERN.

PART TWO - PRODUCTS

- 2.1. EQUIPMENT STANDARDS: ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND OF THE HIGHEST QUALITY AVAILABLE ("SPECIFICATION GRADE"). EQUIPMENT SHALL BE CONSTRUCTED TO NEMA STANDARDS AND SHALL BE LABELED FOR THEIR INTENDED PURPOSE BY A RECOGNIZED TESTING AGENCY ACCEPTABLE TO THE AHJ (U.L., CSA, ETL, ETC.).
- 2.2. ACCEPTABLE MANUFACTURERS AND SUPPLIERS: WHERE EQUIPMENT AND MATERIALS ARE NOT SPECIFIED BY NAME THEY ARE DEEMED TO GENERIC, SUBJECT TO THE REQUIREMENTS LISTED HEREIN. THESE MANUFACTURERS ARE CONSIDERED CAPABLE OF OFFERING EQUIVALENT PRODUCTS. MINIMUM STANDARD IN ALL INSTANCES IS COMMERCIAL GRADE: SWITCHGEAR: EATON, GENERAL ELECTRIC, SIEMENS, SQUARE D
 - LIGHT FIXTURES: ACUITY, COOPER, HUBBELL, THOMAS WIRING DEVICES: HUBBELL, LEVITON, LEGRAND, WIREMOLD
- 2.3. <u>CIRCUITING</u>: ALL WIRING SHALL BE IN CONDUIT, CONCEALED WHERE POSSIBLE EXCEPT WHERE NOTED. EMT WITH STEEL INSULATED THROAT SET SCREW FITTINGS MAY BE USED IN DRY. PROTECTED INTERIOR LOCATIONS. PVC SCHEDULE 40 SHALL BE USED BELOW GRADE AT MINIMUM -24". WRAPPED RIGID ELBOWS AND RISERS SHALL BE USED FOR ALL THROUGH-GRADE TRANSITIONS AND STUB-UPS. RGS OR IMC CONDUIT WITH THREADED FITTINGS SHALL BE USED IN ALL LOCATIONS WHERE EXPOSED TO THE ELEMENTS OR SUBJECT TO PHYSICAL DAMAGE. IMC OR RIGID CONDUIT BELOW GRADE SHALL BE HALF-LAP WRAPPED WITH 20 MIL PVC TAPE. TYPE ENT RACEWAY IS NOT ALLOWED. CONNECT RECESSED AND SUSPENDED LIGHTING FIXTURES. MOTORIZED AND/OR VIBRATING EQUIPMENT WITH STEEL FLEX OR SEALTITE CONDUIT. ALL CONDUIT SHALL HAVE PULL CORD IF OTHERWISE EMPTY.
- 2.4. <u>MC CABLE</u>: MC CABLE MAY BE USED ONLY WITH SPECIFIC PERMISSION FROM THE ENGINEER. MC CABLE USE SHALL BE LIMITED TO CIRCUITING SOLUTIONS IN TIGHT CONDITIONS WHERE CONDUIT AND WIRE CIRCUITING CANNOT FIT. HOMERUNS AND FEEDERS SHALL BE CONDUIT AND WIRE. 2.6. WIRING: ALL WIRE SHALL BE COPPER UNLESS OTHERWISE NOTED. ALL WIRE SHALL BE STRANDED IN SIZES #8 AWG AND LARGER. SINGLE PHASE BRANCH CIRCUITS SHALL INCLUDE A SEPARATE NEUTRAL WIRE WITH EACH PHASE WIRE. NEUTRAL SHALL BE WHITE WITH COLOR STRIPE
- MATCHING COLOR OF PHASE WIRE. HOMERUNS TO PANELBOARDS SHALL BE MINIMUM #12 AWG CU IN 3/4" CONDUIT UNLESS OTHERWISE NOTED. 2.8. FUSES AND CIRCUIT BREAKERS: FUSES AND CIRCUIT BREAKERS SHALL BE SIZED PER ACTUAL RESPECTIVE APPLICATION (i.e., MOTOR CIRCUIT PROTECTOR, GROUND FAULT CIRCUIT INTERRUPTER, ARC FAULT CIRCUIT INTERRUPTER, ETC.). FUSES SHALL BE DUAL ELEMENT, CURRENT-LIMITING, AND SHALL BE INTERCHANGEABLE BETWEEN FRAME SIZES WITH STANDARD
- FACTORY FUSE REDUCERS. PROVIDE LOCKABLE SPARE FUSE CABINET WITH (3) SPARE FUSES OF EACH SIZE USED. 2.9. DISTRIBUTION SWITCHGEAR: SWITCHGEAR SHALL HAVE COPPER BUS AND HEAVY GAUGE HOUSINGS. SWITCHGEAR IN LOCATIONS OTHER THAN LOCKED ELECTRIC ROOMS SHALL HAVE
- LOCKABLE COVERS. SWITCHGEAR SHALL HAVE NO LESS THAN 20% SPARE BUSSED AND USABLE SPACE, MEASURED AS A PERCENTAGE OF THE SPACE OCCUPIED BY SPECIFIED CIRCUIT BREAKERS, SWITCHES, ETC. 2.10. SERVICE SWITCHGEAR: IN ADDITION TO THE ABOVE, SERVICE SWITCHGEAR SHALL MEET THE
- REQUIREMENTS OF THE SERVING UTILITY. 2.11. PANELBOARDS: PANELS SHALL HAVE COPPER BUS AND HARDWARE. BOLT-ON CIRCUIT BREAKERS, FLUSH MONO-FLAT TRIM, PIANO HINGED DOORS AND COVER (DOOR-IN-DOOR) WITH
- LOCKABLE MASTER-KEYED FLUSH LATCHES. FLUSH-MOUNTED PANELS SHALL HAVE EMPTY CONDUITS STUBBED TO ACCESSIBLE ATTIC SPACE: (1) 3/4" CONDUIT FOR EACH THREE (3) SPARE/SPACE CIRCUITS. 2.12. SAFETY SWITCHES: SWITCHES SHALL BE GENERAL DUTY UP TO 250 VOLTS, HEAVY DUTY ABOVE
- 250 VOLTS. FUSIBLE SWITCHES SHALL BE FUSED PER THE NAMEPLATE REQUIREMENTS OF THE EQUIPMENT BEING CONNECTED
- 2.13. MOTOR STARTERS: STARTERS SHALL BE MINIMUM NEMA SIZE 1 WITH INTEGRAL CONTROL TRANSFORMER, RED NEON "RUN" PILOT LIGHT AND "ON-OFF-AUTO" SELECTOR SWITCH ON COVER. OVERLOAD DEVICES SHALL BE SIZED PER THE NAMEPLATE AMPERAGE OF THE EQUIPMENT BEING CONTROLLED.
- 2.14. CONTACTORS: CONTACTORS SHALL BE ELECTRICALLY HELD WITH "ON-OFF-AUTO" SELECTOR SWITCH ON COVER. 2.15. RATINGS: ALL ELECTRICAL EQUIPMENT SHALL BE FULLY RATED FOR BRACING IN EXCESS OF THE
- MAXIMUM AVAILABLE FAULT CURRENT CALCULATED AND SHOWN AT THE EQUIPMENT CONNECTION POINT WITHIN THE DISTRIBUTION SYSTEM. MINIMUM RATING SHALL BE 10K AIC. 2.16. WIRING DEVICES: WIRING DEVICES (SWITCHES, RECEPTACLES, ETC.) SHALL BE SPECIFICATION GRADE "DECORA" STYLE, MINIMUM 20-AMP RATED. COVER PLATES SHALL BE NYLON. DEVICE AND PLATE COLOR(S) SHALL BE AS SPECIFIED BY ARCHITECT OR INTERIOR DESIGNER - VERIFY PRIOR TO COMMENCEMENT OF WORK. WIRING DEVICES EXPOSED TO THE ELEMENTS SHALL HAVE WEATHERPROOF-IN-USE LOCKABLE COVERS. RAISED STEEL BOX COVERS MAY BE USED IN UTILITY AREAS. REFER TO FOOD SERVICE NOTES (IF APPLICABLE TO THIS PROJECT) FOR
- ADDITIONAL REQUIREMENTS. 2.17. TRANSFORMERS: TRANSFORMERS SHALL BE TYPE TP-1 MINIMUM. WITH ALUMINUM WINDINGS. RATED FOR 150°C RISE (UNLESS OTHERWISE NOTED), MOUNTED ON RUBBER-IN-SHEAR VIBRATION ISOLATORS, CONNECTED WITH FLEXIBLE CONDUIT. PUBLISHED AND MEASURED NOISE RATING SHALL NOT EXCEED NEMA TP-20 MAXIMUM.
- 2.18. LIGHTING FIXTURES: LIGHT FIXTURES SHALL BE PROVIDED WITH ALL ASSOCIATED HARDWARE (HANGER BARS, PENDANTS, STEMS, RESTRAINTS, CHAINS, CORDS, LAMPS, ETC.). LENSES SHALL BE ACRYLIC, REFLECTORS SHALL BE ANODIZED. FLUORESCENT BALLASTS SHALL BE ELECTRONIC, PROGRAM RAPID START, THD LESS THAN 10%. FLUORESCENT LAMPS SHALL HAVE MINIMUM CRI OF 80%. INCANDESCENT LAMPS SHALL BE 130 VOLT, INSIDE FROST, MINIMUM 2000 HOUR LIFE. LOW VOLTAGE INCANDESCENT LAMPS SHALL BE HIR HALOGEN, MINIMUM 3000 HOUR LIFE. EXTERIOR LIGHTING FIXTURES SHALL BE INSTALLED TO PREVENT WATER, DUST AND INSECT INTRUSION, WITH GASKETING FOR DOOR/BACKPLATE AND SEALANT AT THE WIRING ENTRY POINT. REFER TO LIGHTING FIXTURE SCHEDULE WITHIN PLAN SET FOR ADDITIONAL REQUIREMENTS (LED CRITERIA, ETC.).
- 2.17. TAMPERPROOF: ALL EQUIPMENT AND CIRCUITING ACCESSIBLE BY THE PUBLIC SHALL BE DEMONSTRATED TO BE TAMPERPROOF AND VANDAL RESISTANT. OPENABLE DEVICES AND EQUIPMENT SHALL BE PAD LOCKABLE.
- PART THREE EXECUTION 3.1. GROUNDING: GROUND ALL EQUIPMENT AND SYSTEM NEUTRAL IN ACCORDANCE WITH THE REQUIREMENTS OF NEC ARTICLE 250. PROVIDE CODE-SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUIT RACEWAYS. WHERE ISOLATED GROUNDS ARE INDICATED, PROVIDE INSULATED CONDUCTOR (GREEN WITH YELLOW STRIPE). 3.2. UTILITY SERVICES: PROVIDE POWER AND COMMUNICATIONS SYSTEM SERVICES IN ACCORDANCE
- WITH THE REQUIREMENTS OF THE SERVING UTILITIES. CONTRACTOR TO PROVIDE ARC FLASH STUDY AND LABELLING ON ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC. PROVIDE EXCAVATION, RACEWAY, STRUCTURES, GROUNDING, ETC. AS DIRECTED. POWER SERVICES AND DISTRIBUTION SYSTEM AIC RATING SHALL EXCEED MAXIMUM AVAILABLE FAULT CURRENT THROUGH UTILITY SERVICE TRANSFORMER. CONTACT SERVING UTILITIES AND OBTAIN THEIR REQUIREMENTS PRIOR TO BID. (UTILITY SERVICE AND LINE EXTENSION CHARGES PAID BY OTHERS).

- RESPONSIBLE FOR TEMPORARY POWER CHARGES.
- DIRECTED BY ENGINEER AT NO ADDED COST.
- THROUGH FIRE RATED ASSEMBLIES.
- OF FIVE (5) TIMES THE ACTUAL LOAD. FLASHED AND COUNTER FLASHED.
- INSTALLED WITH EXPANSION FITTINGS.
- SOURCE AND CIRCUIT NUMBER.
- TRADES.
- TEAM AT NO ADDITIONAL COST TO THE OWNER.

FIRE/SMOKE DAMPER VAV LERMINAL (NO FAN **TEMPERATURE CONTROL PANEL**

- FIRE ALARM PANEL DOOR HOLDING/LATCHING DEVIC
- HOURS IN ADVANCE.
- PART FOUR SPECIAL SYSTEMS
- AUTHORITIES.

3.3. <u>TEMPORARY CONSTRUCTION POWER</u>: PROVIDE TEMPORARY ELECTRICAL POWER DISTRIBUTION AND LIGHTING AS REQUIRED FOR ALL TRADES THAT REQUIRE SERVICE DURING THE COURSE OF THIS PROJECT IN COMPLIANCE WITH ALL NEC AND OSHA REQUIREMENTS. OWNER SHALL NOT BE

3.4. LOCATIONS: INDICATED LOCATIONS OF ALL OUTLETS AND EQUIPMENT ARE SUBJECT TO CHANGE. SHIFT/RELOCATE/RECONFIGURE ANY OUTLET, EQUIPMENT OR CONNECTION POINT UP TO 10' AS 3.5. WORKMANSHIP: THE WORK SHALL BE INSTALLED PARALLEL AND AT RIGHT ANGLES TO THE

BUILDING LINES. LEVEL AND PLUMB. THE WORK SHALL BE WELL SUPPORTED AND SOLIDLY MOUNTED. DRESS AND TIE WIRING IN PANELBOARDS AND SWITCHGEAR. THE WORK SHALL BE LEFT CLEAN WITH NO DIRT, DENTS, ABRASIONS, PAINT SPLATTERS, OR OTHER IRREGULARITIES. 3.6. FIRE STOPPING: ALL PENETRATED FIRE RATED SURFACES SHALL BE FIRE SEALED WITH APPROVED U.L. LISTED SEALANTS AS LISTED WITHIN ARCHITECTURAL SPECIFICATIONS. DO NOT EXCEED MAXIMUM ALLOWABLE SURFACE PENETRATIONS DEPENDENT ON RATING OF SURFACES. REFER TO ARCHITECTURAL DRAWINGS FOR DETERMINATION OF PENETRATION LOCATIONS

3.7. SUPPORTS AND HANGERS: PROVIDE 3" HIGH HOUSEKEEPING CONCRETE PAD BENEATH FLOOR MOUNTED EQUIPMENT, EXTENDING 3" BEYOND EQUIPMENT FOOTPRINT. SUPPORT AND ALIGN ALL RACEWAYS, CABINETS, BOXES, BACK BOXES, FIXTURES, AND EQUIPMENT FROM STRUCTURE. SECURE ALL SUPPORTING METHODS BY MEANS OF TOGGLE BOLTS IN HOLLOW MASONRY. EXPANSION BOLTS IN SOLID MASONRY, CONCRETE PRESET INSERTS OR EXPANSION BOLTS IN CONCRETE, MACHINE SCREWS OR BOLTS IN METAL, AND WOOD SCREWS IN WOOD CONSTRUCTION. ALL SUPPORTING SYSTEMS AND COMPONENTS SHALL BE RATED FOR A MINIMUM

B. <u>SLEEVES AND PENETRATIONS</u>: PENETRATIONS OF ALL SURFACES SHALL BE PROVIDED WITH SLEEVES THAT SHALL BE SEALED WITH LIKE MATERIALS AND SHALL BE FINISHED WITH ESCUTCHEON PLATES. PENETRATIONS BELOW GRADE LEVEL SHALL BE WATERTIGHT. PENETRATIONS AT EXTERIOR WALLS SHALL BE WEATHERPROOF. ROOF PENETRATIONS SHALL BE

3.9. EXPANSION AND CONTRACTION: RACEWAYS PASSING THROUGH BUILDING EXPANSION JOINTS, ON ROOF, AND IN AREAS OF TEMPERATURE VARIATIONS GREATER THAN 30°F SHALL BE

3.10. IDENTIFICATION: IDENTIFY ALL EQUIPMENT, SWITCHBOARD CIRCUITS AND ELECTRICALLY-CONNECTED EQUIPMENT WITH ENGRAVED NAMEPLATES. BOXES SHALL BE MARKED WITH PANEL AND CIRCUIT NUMBERS (PERMANENT PEN ACCEPTABLE ABOVE CEILING). NAMEPLATES SHALL BE FASTENED WITH A MINIMUM OF TWO (2) SCREWS. PANEL DIRECTORIES SHALL BE TYPED. CONDUCTORS SHALL BE TAGGED WITH CIRCUIT NUMBERS AT SOURCE, JUNCTION BOXES, AND ALL OUTLET BOXES WITH PERMANENT ADHESIVE MARKER STRIP. PANEL DIRECTORIES SHALL BE TYPED. IDENTIFY WIRING DEVICES WITH SELF ADHESIVE CLEAR SATIN FINISH LABELS WITH

3.11. ELECTRIC ROOM CODE COMPLIANCE: DUE TO THE DIAGRAMMATIC NATURE OF THE DESIGN DOCUMENTS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE SPRINKLER, ETC.), COORDINATE WITH ALL OTHER SUBCONTRACTORS AT THE START OF THIS PROJECT TO INFORM AND VERIFY THAT NO FOREIGN SYSTEMS OR EQUIPMENT ARE MOUNTED ABOVE ELECTRICAL EQUIPMENT OR PASS THROUGH THE DESIGNATED ELECTRIC ROOMS, AND THAT A MINIMUM OF 7'-0" IS PROVIDED AS CLEAR HEADROOM ALONG ACCESS PATHS TO ELECTRIC ROOMS. ANY REROUTING OR RELOCATION OF SYSTEMS THAT A SUBCONTRACTOR FEELS WILL COMPROMISE THE DESIGN INTENT SHALL BE DESCRIBED IN WRITING AND FORWARDED TO THE DESIGN ENGINEER FOR FURTHER REVIEW. ALL PIPING TO HVAC UNITS THAT COOL ELECTRIC ROOMS SHALL BE LOCATED ABOVE ENTRY DOOR. THE SPRINKLER PIPING TO PROVIDE PROTECTION FOR THE ELECTRIC ROOM IS PREFERRED TO ENTER THE ROOM ABOVE THE ENTRY DOOR AND RUN DOWN THE AISLE SPACES OF THE ROOM. ALL INSTALLATIONS SHALL BE FULLY COORDINATED AMONGST ALL

3.12. ELECTRICALLY-OPERATED EQUIPMENT: VERIFICATION AND SUBSTITUTION: FEEDERS AND OVER-CURRENT DEVICES (INCLUDING STARTERS, DISCONNECTS, ETC.) HAVE BEEN DESIGNED BASED ON INFORMATION PROVIDED BY THE RESPONSIBLE CONSULTANT AND/OR DESIGNATED SUPPLIER. PRIOR TO ROUGH-IN, COORDINATE WITH THE APPROPRIATE TRADE AND/OR INSTALLER TO DETERMINE THAT THE ACTUAL NAMEPLATE ELECTRICAL REQUIREMENTS MATCH THIS DESIGN. ALL ADDITIONAL ELECTRICAL COSTS RELATED TO THE CONNECTION OF EQUIPMENT WHICH VARIES FROM THE ORIGINAL SPECIFICATIONS SHALL BE RESOLVED WITHIN THE CONSTRUCTION

3.13. ADDITIONAL SYSTEMS AND EQUIPMENT CONNECTIONS: IN ADDITION TO EQUIPMENT POWER FEEDERS AND CONNECTIONS INDICATED ON THE ELECTRICAL DRAWINGS, PROVIDE 120V CONTROL POWER CONNECTIONS TO SMOKE/FIRE DAMPERS, VAV BOXES, TEMPERATURE CONTROL. FIRE ALARM PANELS, DOOR HOLDING/LATCHING DEVICES, ETC, AS INDICATED IN THE PROJECT DRAWINGS AND SPECIFICATIONS AS WELL AS ALL DESIGN-BUILD SYSTEM DRAWING.

R PROVIDE SMOKE

<u>DETECTORS</u>

NO

		MAX NO. PE
	POWER SOURCE	20A CIRCUI
	EMERGENCY	10
	NORMAL (VERIFY)	10
L	EMERGENCY (VERIFY)	1
	EMERGENCY	1
CES	EMERGENCY	10

3.14. HOURS OF OPERATION: CONDUCT WORK TO MINIMIZE DISRUPTION OF OWNER'S ONGOING BUSINESS OPERATIONS. PROVIDE BARRICADES, NOISE ABATEMENT, AND DUST CONTAINMENT MEASURES TO ENSURE THE SAFETY AND COMFORT OF PATRONS. STAFF. AND WORKERS. INTERRUPTIONS OF EXISTING POWER, COMMUNICATIONS, AND/OR FIRE ALARM SYSTEMS SHALL BE PERFORMED ONLY AT SUCH TIMES AS DIRECTED BY OWNER OR RESIDENT ENGINEER. OUTAGES SHALL BE MOMENTARY IN NATURE, EACH SUCH OUTAGE (OR OPERATION WHICH MAY POSE RISK OF AN ACCIDENTAL OUTAGE) SHALL BE SCHEDULED A MINIMUM OF FORTY-EIGHT (48)

3.15. <u>COMMUNICATIONS SYSTEMS</u>: THE ELECTRICAL CONTRACTOR SHALL PROVIDE OUTLETS AND RACEWAYS FOR COMMUNICATION SYSTEMS AS INDICATED HEREIN, INCLUDING TELEPHONE, DATA, POINT-OF-SALE, SOUND, SECURITY, AUDIO/VISUAL, CCTV, MATV, ETC. CABLING AND DEVICES SHALL BE INSTALLED AND TERMINATED BY OTHERS.

4.1. DESIGN/BUILD FIRE ALARM SYSTEM: THESE DOCUMENTS DO NOT INDICATE DEVICES, OUTLETS, CONNECTIONS, AND CIRCUITRY NECESSARY FOR A COMPLETE FIRE ALARM SYSTEM. PROVIDE A COMPLETE, NEW FIRE ALARM DETECTION AND ALARM SYSTEM WITH CLASS 1 CIRCUITING INCLUDING, BUT NOT LIMITED TO. INITIATING DEVICES, DUCT DETECTORS, ADA HORN/STROBES, ETC. WHICH SHALL BE IN FULL COMPLIANCE WITH ALL LOCAL, STATE, AND ADA REQUIREMENTS. CONTROL PANEL SHALL INCLUDE INTEGRAL STANDBY BATTERIES, CHARGER, AND MUNICIPAL TIE MODULE OR AGENCY APPROVED AUTO-DIALER CONNECTED TO THE TELEPHONE SYSTEM (CONNECTION AND MONITORING CHARGES BY OWNER). SUBMIT PROPOSED DESIGN AND OBTAIN FIRE MARSHAL APPROVED SHOP DRAWINGS PRIOR TO COMMENCEMENT OF WORK. AFTER RECEIPT OF PLAN APPROVAL BY THE FIRE MARSHAL, PROVIDE ONE (1) SET OF STAMPED DRAWINGS (PRINT OR ELECTRONIC COPY) ALONG WITH AN APPROVED EQUIPMENT SUBMITTAL TO THE ELECTRICAL ENGINEER. ALL CONNECTIONS TO SYSTEM SHALL BE PERFORMED BY FACTORY-CERTIFIED TECHNICIAN AND SHALL BE ACCEPTED BY OWNER'S SYSTEM-MONITORING AGENCY. 4.2. THIRD PARTY TESTING: PROVIDE ALL ASSOCIATED COSTS FOR THIRD PARTY TESTING OF ALL EQUIPMENT, CONDUCTORS, GROUND FAULT, GROUND FAULT COORDINATION STUDY WITH REPORT PREPARATION, ETC. AS REQUIRED BY THE NEC, AHJ, AND ALL OTHER GOVERNING

4.3. <u>SIDA SYSTEM</u>: PROVIDE ALL CONDUIT AND CONDUCTORS FOR THE ASPER/PITKIN COUNTY AIR TERMINAL SIDA. ALL ADDITIONS AND ALTERNATIONS TO THE SIDA SYSTEM SHALL INTEGRATE WITH EXISTING SYSTEM FOR COMPLETEAND FUNCTIONAL OPERATION.



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ELECTRICAL **SPECIFICATIONS**



SPARKS PD DISPATCH REMODEL

1701 E PRATER WAY **SPARKS NV 89434**

No.	Description	Date

CONSTRUCTION SET

1/27/2021 2:58:16 PM



- D18 EXISTING PROJECTOR SCREEN TO BE REMOVED AND SALVAGED TO OWNER. ASSOCIATED CONDUIT, CONDUCTORS, AND CONTROLS TO BE DEMOLISHED BACK TO SOURCE. MAINTAIN THE EXISTING CIRCUIT AS REQUIRED. FIELD VERIFY.
- EXISTING PROJECTOR SCREEN CONTROL SWITCH TO BE DEMOLISHED. D19
- REFER TO PANEL SCHEDULES FOR DETAILS ON PANEL MODIFICATIONS. P11
- COMMUNICATIONS DEMOLITION WORK IN THIS AREA IS INCIDENTAL TO THE DEMOLITION OF THE EXISTING DISPATCH T03 CENTER STATIONS. EXISTING WALL MOUNTED COMMUNICATIONS DEVICES TO REMAIN, PROTECT IN PLACE.

No.	Description	Date

CONSTRUCTION SET

1/27/2021 2:58:19 PM



D02 EXISTING LIGHTING FIXTURE TO BE REMOVED.

EXISTING LIGHTING DEVICE TO BE REMOVED. D03

REMODEL City of Sparks

1701 E PRATER WAY SPARKS NV 89434

No.	Description	Date

CONSTRUCTION SET

1/27/2021 2:58:20 PM



- 1. COORDINATE ALL NEW OR PROPOSED WORK WITH EXISTING CONDITIONS. FIELD CONFLICTS AND/OR DISCREPANCIES IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- 2. EXISTING CONDITIONS ARE INDICATED ON THE DRAWINGS WITH HALF-TONE LINE WORK, DEMOLITION WORK IS INDICATED WITH FULL-TONE, DASHED LINE WORK, AND NEW OR PROPOSED WORK IS INDICATED WITH FULL-TONE, SOLID LINE WORK.
- 3. FOR PANELBOARD SCHEDULES, FINAL CONDITIONS AFTER NEW WORK IS COMPLETED ARE SHOWN. FOR RETROFITS ON EXISTING EQUIPMENT, EXISTING CONDITIONS ARE INDICATED WITH NORMAL TYPE FACE AND/OR THE NOTATION (E). MODIFICATIONS ARE INDICATED IN THE DRAWINGS IN BOLD TYPE FACE.
- 4. ALL WORK SHALL COMPLY WITH THE 2017 NFPA 70 NATIONAL ELECTRICAL CODE.
- P06 ELECTRICAL FLOOR BOX FOR POWER AND COMMUNICATIONS. PROVIDE HUBBELL CFB4G30 WITH ELECTRICAL WHIP FOR CONNECTION TO OWNER FURNISHED DISPATCH CONSOLE FURNITURE. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH FINAL FF&E SUBMITTALS. PROVIDE (1) UPS BACKUP CIRCUIT FOR A DEDICATED QUAD RECEPTACLE, (1) SPLIT UPS BACKUP CIRCUIT TO A SPLIT QUAD RECEPTACLE, AND (1) SPLIT NORMAL CIRCUIT TO THE SPLIT QUAD RECEPTACLE FOR NON CRITICAL LOADS. POKE-THRU SHALL BE MOUNTED TO RAISED FLOOR TILE. CONTRACTOR SHALL ROUTE CONDUITS TO THE POKE-THRU LOCATIONS SHOWN AND PROVIDE (10) FEET OF FMC TO PROVIDE FLEXIBILITY FOR LOCATING THE POKE-THRU IN THE DISPATCH CENTER. COORDINATE FINAL CONDUIT ROUTINGS WITH OWNER. RESERVE (2) SINGLE GANG SPACES IN FLOOR BOX FOR TELECOMMUNICATIONS CABLING AND TERMINATIONS, BY OTHERS.
- P07 ELECTRICAL FLOOR BOX: PROVIDE HUBBELL CFB2G30 WITH (1) DUPLEX OUTLET FOR
- P09 DISPATCH CONSOLE DESKS, BY OTHERS.
- P11 REFER TO PANEL SCHEDULES FOR DETAILS ON PANEL MODIFICATIONS.
- P12 FLAT SCREEN TV MONITORS, BY OTHERS.
- P13 PROVIDE NEW BRASS DUPLEX LIFT-LID COVER PLATE ON THE EXISTING FLOOR MOUNTED OUTLET. FIELD VERIFY REQUIREMENTS.
- P14 PROVIDE JUNCTION BOX BENEATH ACCESSIBLE RAISE FLOOR IN THIS LOCATION. ROUTE ALL BELOW FLOOR CRITICAL AND NORMAL POWER FEEDS SERVING THE DISPATCH CONSOLES THROUGH THIS JUNCTION BOX. COORDINATE EXACT LOCATION WITH FINAL RAISED FLOOR INSTALLER AND OWNER. FIELD VERIFY.
- T02 TELECOMMUNICATIONS DEVICE. PROVIDE SINGLE GANG JUNCTION BOX WITH MUD RING AT +18" AFF AND 1" C. EMT FROM BOX TO +6" ABOVE FINISHED CEILING. TELECOMMUNICATIONS EQUIPMENT CONNECTIONS BY OTHERS.
- T04 TELECOMMUNICATIONS DEVICE. PROVIDE 4-SQUARE JUNCTION BOX WITH MUD RING AT +18" AFF AND (2) 1" C. EMT FROM BOX TO +6" ABOVE FINISHED CEILING. TELECOMMUNICATIONS CABLING, DEVICES, AND CONNECTIONS BY OTHERS.
- T05 TELECOMMUNICATIONS DEVICE. PROVIDE SINGLE GANG JUNCTION BOX WITH MUD RING AT MOUNTING HEIGHT INDICATED AND 1" C. EMT FROM BOX TO +6" ABOVE

POWER AND (1) SINGLE GANG BOX RESERVED FOR COMMUNICATIONS, BY OTHERS.

FINISHED CEILING. TELECOMMUNICATIONS EQUIPMENT CONNECTIONS BY OTHERS.

ΟΤΛ	FOLIDMENT	
		LUAD (W)
1	WEST COMMUNICATIONS 911810-1	250
1	HARRIS R9063 REV C	4
1	HP Z2SFF G4 WORKSTATION DISPATCH	400
6	HP PRODISPLAY P221 MONITOR	132
1	HP ELITEDISPLAY E271I LED BACKLIT DISPLAY	40
1	SHS2900-01 HEADSET DOCK	5
1	HARRIS DDC100 DIGITAL DESKTOP CONTROLLER	4
1	INTRADO CONSOLE	250
1	CPU CABINET COOLING FAN	36
TOTAL		1121

QTY	EQUIPMENT	LOAD (W)
1	XYBIX T4 TABLE	600
1	MYCLIMATE PERSONAL CLIMATE CONTROL	492
1	TASK LIGHTING	18
TOTAL	-	1110

DISPATCH CONSOLE PROPOSED NORMAL LOADS AT EACH DISPATCH STATION

SPARKS PD DISPATCH REMODEL **City of Sparks**

1701 E PRATER WAY SPARKS NV 89434

No.	Description	Date

CONSTRUCTION SET

1/27/2021 2:58:22 PM



ARE SHOWN. FOR RETROFITS ON EXISTING EQUIPMENT, EXISTING CONDITIONS ARE INDICATED WITH NORMAL TYPE FACE AND/OR THE NOTATION (E). MODIFICATIONS ARE INDICATED IN THE DRAWINGS IN BOLD TYPE FACE.

4. ALL WORK SHALL COMPLY WITH THE 2017 NFPA 70 NATIONAL ELECTRICAL CODE.

♦ SHEET KEYNOTES

- P11 REFER TO PANEL SCHEDULES FOR DETAILS ON PANEL MODIFICATIONS.
- P12 FLAT SCREEN TV MONITORS, BY OTHERS.

SPARKS PD DISPATCH REMODEL City of Sparks

1701 E PRATER WAY SPARKS NV 89434

No.	Description	Date
1	PERMIT REVIEW COMMENTS	11/30/2020

CONSTRUCTION SET

1/27/2021 2:58:25 PM

			BRA	NCH I	PANEL	_: 2	LB					
	LOCATION: ELEC 253				VOL	_TS: 12	0/208	3 SINGLE			A.I.C	C. RATING: 1
	SUPPLY FROM: UPS DIST.				PHAS	SES: 1					MA	INS TYPE: M
	MOUNTING: SURFACE				WIF	RES: 3					MAIN	S RATING: 1
	ENCLOSURE: NEMA 1										MC	B RATING: 1
СКТ	CIRCUIT DESCRIPTION	TRIP	POLES		Ą		E	3	POLES	TRIP	CIRCUI	T DESCRIPTI
1	(E) LOAD (NOTE 1)	20 A	1	0 VA	0 VA				1	20 A	(E) LOAD (N	NOTE 1)
3	DISPATCH CONSOLE 1	20 A	1			750	VA	750 VA	1	20 A	DISPATCH	CONSOLE 1,
5	DISPATCH CONSOLE 2	20 A	1	750 VA	750 VA				1	20 A	DISPATCH	CONSOLE 3,
7	DISPATCH CONSOLE 3	20 A	1			750	VA	750 VA	1	20 A	DISPATCH	CONSOLE 4
9	DISPATCH CONSOLE 5	20 A	1	750 VA	750 VA				1	20 A	DISPATCH	CONSOLE 5,
11	DISPATCH CONSOLE 6	20 A	1			750	VA	180 VA	1	20 A	(E) CO RAD	, NO RM 245
13	DISPATCH CONSOLE 7	20 A	1	750 VA	0 VA				1	20 A	SPARE	
15	DISPATCH CONSOLE 7,8	20 A	1			750	VA	0 VA	1	20 A	(E) LOAD (N	NOTE 1)
17	DISPATCH CONSOLE 10	20 A	1	750 VA	0 VA				1	20 A	(E) LOAD (N	NOTE 1)
19	(F) DISPATCH CONSOLE 11,12	20 A	1			750	VA	720 VA	1	20 A	CO DISPAT	
21	DISPATCH CONSOLE 9,10	20 A	1	750 VA	0 VA				1	20 A	(E) TELECC	DM RM 239
23	(E) LOAD (NOTE 1)	20 A	1			0 V.	A	0 VA	1	20 A	(E) TELECC	DM RM 911 SE
25	(E) LOAD (NOTE 1)	20 A	1	0 VA	0 VA				1	20 A	(E) LOAD (N	NOTE 1)
27	(F) DISPATCH CONSOLE 11	20 A	1			750	VA	0 VA	1	20 A	(E) LOAD (N	NOTE 1)
29	(E) LOAD (NOTE 1)	20 A	1	0 VA	0 VA				1	20 A	(E) RADIO F	RM SERVER 2
31	(F) DISPATCH CONSOLE 12	20 A	1			750	VA	0 VA	1	20 A	(E) RADIO F	RM SERVER 2
33	(E) LOAD (NOTE 1)	20 A	1	0 VA	750 VA				1	20 A	DISPATCH	CONSOLE 8
35	(E) LOAD (NOTE 1)	20 A	1			0 V.	A	750 VA	1	20 A	DISPATCH	CONSOLE 9
37	(E) LOAD (NOTE 1)	20 A	1	0 VA	0 VA						(E) SPACE	
39	(E) SPACE					0 V.	A	0 VA			(E) SPACE	
41	(E) SPACE			0 VA	0 VA						(E) SPACE	
		тот	AL LOAD:	600	0 VA		8400) VA			1	
		TOT	AL AMPS:	58	3 A		78	A	1			
LOAD	CLASSIFICATION		CONNECT	ED LOAD	DEMAND FA	CTOR	ES	ST. DEMANI)		PANEL	TOTALS
EQUI	PMENT		720	VA	100.009	%		720 VA				
RECE	PTACLE		1368	AV C	86.55%	, D		11840 VA		TOTAL C	ONN. LOAD:	14400 VA
									Т	OTAL ES	T. DEMAND:	12560 VA
										тс	TAL CONN.:	69 A
									Т	OTAL ES	T. DEMAND:	60 A

EXISTING PANELBOARD MEASURED LOAD = 24A @ 120/208V, 1-PHASE. 1.) CONTRACTOR TO TRACE CIRCUIT AND IDENTIFY CONNECTED EQUIPMENT/DEVICES AND REPORT TO ENGINEER TO DETERMINE FINAL DISPOSITION.

						BRAN	ICH F	PANEL	_: 2⊢	IA					
6: 10K 6: MCB 6: 125 A 6: 100 A			Location: Radio 245 Supply From: DPHA Mounting: Surface Enclosure: NEMA 1					VOL PHAS WIR	-TS: 480/2 SES: 3 RES: 4	277 WYE				A.I.C. RATING: 10K MAINS TYPE: MLO MAINS RATING: 100 A MCB RATING: 0 A	
PTION	СКТ	СКТ	CIRCUIT DESCRIPTION	TRIP	POLE	6	A	E	3	()	POLES	TRIP	CIRCUIT DESCRIPTION	СКТ
= 4 0	2	1	108,225,226,229,230 ETC	20 A	1	0 VA	0 VA		0.1/0			1	20 A	220-224,227	2
= 1,2 = 3,4	4 6	5	202,203,208,210-215,217	20 A 20 A	1			456 VA	UVA	0 VA	0 VA	1	20 A 20 A	EXTERIOR	6
E 4 E 5 6	8	7	209	20 A	1	0 VA	0 VA	0.\/A	0.\/A			1	20 A	SKYLIGHT	8
5	12	9 11	(E) SPARE	20 A 20 A	1			UVA	UVA	0 VA	0 VA	1	20 A 20 A	(E) SPARE	12
	14	13	(E) SPACE			0 VA	0 VA	0.\/A	0.\/A					(E) SPACE	14
	18	13	(E) SPACE						UVA	0 VA	0 VA			(E) SPACE	18
ONITORS	20	19	(E) SPACE			0 VA	0 VA	0.1/4	0.\/A					(E) SPACE	20
, I SERVICE	22	23	(E) SPACE						UVA	0 VA	0 VA			(E) SPACE	24
	26	25	(E) SPACE			0 VA	0 VA	0.1/4	0.\/A					(E) SPACE	26
ER 245	30	29	(E) SPACE						0 1/1	0 VA	0 VA			(E) SPACE	30
ER 245 E 8	32 34			ΤΟΤΑ ΤΟΤΑΙ	L LOAD	: 0	VA A	456	S VA	0	/A A				
E 9	36	LOA	AD CLASSIFICATION	10174	C(DEMAND FA	CTOR	EST. DEM	AND			PANEL TOTALS	
	38	LIG	HTING			456 VA	A	125.00%	6	570 VA	\	τοτα		N LOAD [,] 456 VA	
	42											TOTAL	EST. D	DEMAND: 570 VA	
												ΤΟΤΑΙ	TOTAI EST. D	L CONN.: 1 A	
												101712	20112		
		NO													
			LOCATION: ELEC 253 SUPPLY FROM: TB MOUNTING: SURFACE			BRAN	ICH F	PANEL VOL PHAS WIR	_: 2L _TS: 120/2 SES: 3 RES: 4	D 208 WYE				A.I.C. RATING: 10K MAINS TYPE: MCB MAINS RATING: 400 A	
			ENCLOSURE: NEMA 1			_								MCB RATING: 400 A	
			CIRCUIT DESCRIPTION	TRIP 20 A	POLES	S 1110 VA	A 0 VA	E	3	(POLES	TRIP	CIRCUIT DESCRIPTION (E) SPACE	CKT 2
		3	DISPATCH CONSOLE 2	20 A	1			1110 VA	0 VA					(E) SPACE	4
		5	DISPATCH CONSOLE 3 DISPATCH CONSOLE 4	20 A 20 A	1	1110 VA	0 VA			1110 VA	0 VA			(E) SPACE (E) SPACE	6
		9	DISPATCH CONSOLE 5	20 A	1			1110 VA	0 VA					(E) SPACE	10
		11	DISPATCH CONSOLE 6	20 A	1	1110 VA	0.VA			1110 VA	0 VA			(E) SPACE	12
		15	DISPATCH CONSOLE 8	20 A	1			1110 VA	0 VA					(E) SPACE	16
		17	DISPATCH CONSOLE 9 DISPATCH CONSOLE 10	20 A	1	1110 VA	0.VA			1110 VA	0 VA			(E) SPACE	18
		21	(F) DISPATCH CONSOLE 11	20 A	1			1110 VA	0 VA					(E) SPACE	22
		23	(F) DISPATCH CONSOLE 12	20 A	1	1440 VA	0.\/A			1110 VA	0 VA			(E) SPACE	24
		27	EQ DISPATCH PRINTER	20 A	1			1440 VA	0 VA					(E) SPACE	28
		29	EQ DISPATCH PRINTER	20 A	1	1440 VA	0.VA			1440 VA	0 VA			(E) SPACE	30
		33	EQ DISPATCH PRINTER	20 A	1			1440 VA	0 VA					(E) SPACE	34
		35	EQ DISPATCH PRINTER	20 A	1	720 VA	0.\/A			1440 VA	0 VA			(E) SPACE	36
		39	CO DISPATCH OFFICE	20 A	1	120 44		540 VA	0 VA					(E) SPACE	40
		41	CO DISPATCH CLOSET	20 A	1	360 \/A	0.1/4			400 VA	0 VA			(E) SPACE	42
		43	CO MAIL RECEIVER	20 A 20 A	1	300 VA	UVA	375 VA	0 VA					(E) SPACE	44
		47	CO RADIO RM 245	20 A	1	540 \/A	0.1/4			180 VA	0 VA			(E) SPACE	48
		49 51	EQ BREAK MICROWAVE	20 A	1	UTU VA		1000 VA	0 VA					(E) SPACE	52
		53		20 A	1	1000 \/A	0.1/4			1200 VA	0 VA			(E) SPACE	54 56
		57	EQ BREAK REF	20 A	1			260 VA	0 VA					(E) SPACE	58
		59	CO DISPATCH CLOSET	20 A	1	375 VA	0.\/A			200 VA	0 VA			(E) SPACE	60
		63	SPARE	20 A 20 A	1	515 VA		0 VA	0 VA					(E) SPACE	64
		65	SPARE	20 A	1	0.\/A	0.1/4			0 VA	0 VA			(E) SPACE	66
		69	SPARE	20 A	1			0 VA	0 VA					(E) SPACE	70
		71 72	SPARE SPARE	20 A	1	0.1/4	0.\/A			0 VA	0 VA			(E) SPACE	72
		73	SPARE	20 A	1		JVA	0 VA	0 VA					(E) SPACE	76
		77	SPARE	20 A	1	0.1/4	0.1/4			0 VA	0 VA			(E) SPACE	78
		81	SPARE	20 A	1			0 VA	0 VA					(E) SPACE	82
		83	SPARE	20 A		. 1024	15 \/A	0404	5 \/A	0 VA	0 VA			(E) SPACE	84
				TOTA		: 86	6 A			78	A				
		LOA	AD CLASSIFICATION		CC			DEMAND FA	CTOR	EST. DEM				PANEL TOTALS	
		REC				5760 V	A	100.00%	6	5760 V	4	ΤΟΤΑ	L CON	N. LOAD: 29110 VA	
												TOTAL	EST. D TOTAI EST. D	DEMAND: 29110 VA L CONN.: 81 A DEMAND: 81 A	
		NO.	TES:												

GENERAL NOTES

- COORDINATE ALL NEW OR PROPOSED WORK WITH EXISTING CONDITIONS. FIELD CONFLICTS AND/OR DISCREPANCIES IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- EXISTING CONDITIONS ARE INDICATED ON THE DRAWINGS WITH HALF-TONE LINE WORK, DEMOLITION WORK IS INDICATED WITH FULL-TONE, DASHED LINE WORK, AND NEW OR PROPOSED WORK IS INDICATED WITH FULL-TONE, SOLID LINE WORK.
- FOR PANELBOARD SCHEDULES, FINAL CONDITIONS AFTER NEW WORK IS COMPLETED ARE SHOWN. FOR RETROFITS ON EXISTING EQUIPMENT, EXISTING CONDITIONS ARE INDICATED WITH NORMAL TYPE FACE AND/OR THE NOTATION (E). MODIFICATIONS ARE INDICATED IN THE DRAWINGS IN BOLD TYPE FACE.
- 4. ALL WORK SHALL COMPLY WITH THE 2017 NFPA 70 NATIONAL ELECTRICAL CODE.

ELECTRICAL LOAD SUMMARIES BY ELECTRICAL EQUIPMENT

2LB	EXISTING LOAD (MEASURED) PROPOSED LOAD	43A @ 120/208V 21A @ 120/208V
	FINAL LOAD	64A @ 120/208V
2LD	EXISTING LOAD (ACTUAL)	0A @ 120/208V
	PROPOSED LOAD	<u>84A @ 120/208V</u>
	FINAL LOAD	84A @ 120/208V
2HA	EXISTING LOAD (ESTIMATED)	60A @ 120/208V
	PROPOSED LOAD	1A @ 120/208V
	FINAL LOAD	61A @ 120/208V
DPLA	EXISTING LOAD (MEASURED)	210A @ 120/208
	PROPOSED LOAD	48A @ 120/208
	FINAL LOAD	258A @ 120/208





01/26/2021

PANEL SCHEDULES e601

SPARKS PD DISPATCH REMODEL City of Sparks

1701 E PRATER WAY SPARKS NV 89434

No.	Description	Date

CONSTRUCTION SET

1/27/2021 2:58:27 PM

					URE SCHEDULE		
FIXTURE ID	DESCRIPTION	SOURCE	VOLTAGE	LOAD	MOUNTING	WET LABEL	MANUFACTUR
L1	2X2 LED LIGHT FIXTURE, 80CRI, 5000K, 2000 LUMEN, 0-10V DIMMING	LED	277 V	19 VA	CEILING, RECESSED	No	LITHONIA EPANL-2X2-2000LM-80CRI-50K-MI
L1E	2X2 LED LIGHT FIXTURE, 80CRI, 5000K, 2000 LUMEN, 0-10V DIMMING, 90 MIN BATTERY BACKUP	LED	277 V	19 VA	CEILING, RECESSED	No	LITHONIA EPANL-2X2-2000LM-80CRI-50K-MI
X2	EXIT SIGN, DUAL FACE, CLEAR WITH GREEN LETTERING	LED	277 V	2 VA	FIXTURE MOUNTING PER PLAN	No	ISOLITE ELT-FT-EM-G-2M-BA OR APPROVED
			· ·				

Interi	neck Software Version 4. ior Lighting Compl	1.1.0 liance C	ertifi	cate	9
V					
Project Information					
Energy Code: Project Title: Project Type:	2018 IECC Sparks PD Dispatch Center Remode Alteration	I			
Construction Site: 1701 E Prater Way Sparks, NV 89434	Owner/Agent: Rob Bidart City of Sparks Sparks, NV 89434 rbidart@cityofsparks.us	Designer/C Joseph N Kimley-H 5370 Kie Suite 100 Reno, NV joe.nielse	ontractor: ielsen orn tzke Lane) / 89511 en@kimley-h	orn.com	
Allowed Interior Lighting	Power				
	A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	Allov (D wed Watts B X C)
1-Dispatch Center (Office)		1879	0.79		1484
		To	tal Allowed Wa	atts =	1484
Proposed Interior Lighting	g Power				
Fixture ID : Descr	A ription / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Dispatch Center (Office 1879	<u>sq.ft.)</u>		• •		
L1/L1E: LED Panel 19W:		1	24 Total Propose	19 ed Watts =	456 456
Interior Lighting PASSES					
Interior Lighting Complia	naa Statamant				
Interior Lighting Complian Compliance Statement: The p building plans, specifications, systems have been designed applicable mandatory required	nce Statement proposed interior lighting alteration project repro- and other calculations submitted with this perm to meet the 2018 IECC requirements in COM <i>che</i> ments listed in the Inspection Checklist.	esented in this docunit application. The eck Version 4.1.1.0	ument is cons proposed int and to compl	sistent wi erior light ly with an	th the ting ly
Interior Lighting Complian Compliance Statement: The p building plans, specifications, systems have been designed applicable mandatory required Dustin Colwell, Engineer of F	nce Statement proposed interior lighting alteration project repre- and other calculations submitted with this perm to meet the 2018 IECC requirements in COM <i>che</i> ments listed in the Inspection Checklist. Record	esented in this docu nit application. The eck Version 4.1.1.0	ument is cons proposed int and to comp 11/10	sistent wi erior light ly with an /2020	th the ting Y

Project Title: Sparks PD Dispatch Center Remodel Data filename: K:\REN_Mechanical\192079009 - Sparks PD Dispatch Remodel\Calculations\ComCheck\DISPATC Page 1 of 6 CENTER COMCHECK 2020-1110.cck

Report date: 11/10/20

LIGHTING CONTROLS LEGEND						
	LOW VOLTAGE CONTROLS CABLING (BY OTHERS)					
	LINE VOLTAGE CONDUIT AND CONDUCTORS					
PP	ROOM/ZONE CONTROL PACK (LITHONIA PP20 OR APPROVE EQUAL)					
S1	DIMMING SWITCH, 0-10V DIMMING, 4-BUTTON - ON/OFF/RAISE/LOWER (LITHONIA SPODM-D-SA-WH OR APPROVE EQUAL)					
S2	DIMMING SWITCH W/ INTEGRAL OCCUPANCY SENSOR (LITHONIA WSX-PDT-D- VA-WH OR APPROVED EQUAL). CONTRACTOR TO ENABLE ADH CAPABILITY.					
Ð	PHOTOCELL SENSOR (LITHONIA CM ADC OR APPROVE EQUAL)					
%	OCCUPANCY SENSOR, 360 DEGREE (LITHONIA CM-PDT-9-ADC OR APPROVE EQUAL)					

LIGHTING CONTROLS SEQUENCE OF OPERATIONS

- 1. GENERAL
- 1. ALL LIGHTING SHALL BE HIGH EFFICIENCY LED WITH DIMMING CONTROLS. OWNER SHALL HAVE THE ABILITY TO REDUCE TOTAL LUMEN OUTPUT AS DESIRED. 2. ALL EMERGENCY LIGHTING SHALL BE EMERGENCY BATTERY BACKUP EITHER REMOTELY MOUNTED OR INTEGRAL TO THE FIXTURE. FIXTURES WITH EMERGENCY BATTERY BACKUP ARE INDICATED ON THE PLANS. PROVIDE WITH INTEGRAL TEST
- SWITCH. 3. INTERIOR LIGHTING CONTROLS SHALL BE LOW VOLTAGE, 0-10V DIMMING COMPATIBLE.
- 4. DAYLIGHTING
- A. FIXTURES SPECIFIED WITH DAYLIGHTING CONTROLS SHALL BE INTEGRAL TO THE FIXTURE TO BE CONTROLLED BY AUTOMATIC PHOTOCELL DIMMING AS REQUIRED IN THE 2018 IECC. 5. OCCUPANCY
- A. ALL LIGHTING SHALL BE CONTROLLED BY AUTOMATIC OFF/MANUAL ON OCCUPANCY SENSOR CONTROLS, EXPECT WHERE PERMITTED UNDER 2018 IECC. CONTRACTOR SHALL COORDINATE WITH END USER TO SET DELAY TIMES FOR OCCUPANCY SENSORS TO A MAXIMUM OF 30 MINUTES.
- B. THE LIGHTING IN THE HALLWAYS, LOBBIES, AND OTHER EGRESS AREAS SHALL HAVE NO OCCUPANCY SENSOR CONTROLS AS PERMITTED BY THE 2018 IECC.





RECESSED TROFFER MOUNTING DETAIL1 SCALE: N.T.S.



HOMERUN TO



NOTES:

1. CONTROLS CABLING AS REQUIRED. COORDINATE CONTROLS CABLING REQUIREMENTS WITH CONTROLS MANUFACTURER.



FENESTRATION

FIXTURE (TYP)

---EMERGENCY LIGHTING FIXTURE W/ BATTERY

BACKUP (TYP)

-DAYLIGHTING ZONE PER IECC 2018

-NORMAL LIGHTING

SPARKS PD DISPATCH REMODEL City of Sparks

1701 E PRATER WAY SPARKS NV 89434

Date Description PERMIT REVIEW COMMENTS 11/30/2020

CONSTRUCTION SET 192079009

1/27/2021 2:58:28 PM



01/26/2021



SCHEDULES &





FENESTRATION