

126 S. SNYDER AVE, TEHACHAPI, CA 9356

BLEACHER REPLACEMENT AT TEHACHAPI EDUCATION CENTER FOR:

TEHACHAPI UNIFIED SCHOOL DISTRICT

126 S. SNYDER AVE, TEHACHAPI, CA 93561

| | | CESSIBII | LITY ST | ANDARD | S | PROJECT DIRECTORY | | | | | |
|--|---|--|---|---|---|---|---|--|---|---|--|
| COPERTY OF THE ERALL DESCRIPTION ION. SOME OF THIS TYPE AND/ 5, MAY NOT BE CALLY DETAILED DF THE MMENDATIONS. | DESIGN PROFESSI THE POT IDENTIFIE APPLICABLE CALIFO REQUIREMENTS FO OF THIS PROJECT, THE POT THAT WEF CORRECTIVE WORI THE SCOPE OF THIS INCORPORTRATED COMPONENTS OR F | IONAL IN GENERAL RES D IN THESE CONSTRUCT ORNIA BUILDING CODE A DR ALTERATIONS ADDITI THE POT WAS EXAMINE RE DETERMINED TO BE N K NECESSARY TO BRING S PROJECT'S WORK THE INTO THESE CONSTRUC PORTIONS OF THE POT | SPONSIBLE CHARGI TION DOCUMENTS IS ACCESSIBILITY PROV ONS AND STRUCTUF D AND ANY ELEMENT NONCOMPLIANT 1) H S THEM INTO COMPL ROUGH DETAILS, DR/ CION DOCUMENTS. A THAT WILL NOT BE C | E STATEMENT: COMPLIANT WITH THE CURI ISIONS FOR PATH OF TRAVE RAL REPAIRS. AS PART OF TH IS, COMPONENTS OR PORTH AVE BEEN IDENTIFIED AND 2 IANCE HAS BEEN INCLUDED AWINGS AND SPECIFICATION NY NON COMPLIANT ELEME ORRECTED BY THIS PROJEC | RENT EL HE DESIGN ONS OF D THE WITHIN IS NTS, CT BASED | OWNER Tehachapi Unified S 300 South Robinsor Tehachapi, Ca 9356 Phone: (661) 822-2' Fax: (661) 822-8221 KIRK GILBERT | SREP. School District | ARCHI Ordiz Melby Arch 5500 Ming Avenu Bakersfield, CA S Phone: (661) 832 Fax: (661) 832-4 JEANNIE BERTO | TECT nitects, Inc. ue, Suite 280 93309 2-5258 219 OLACCINI | FABRI Irwin Seating C 610 East Cumb Altamont, IL 62 Phone: (618) 44 | |
| ERMIT AW ORDINANCE OR WISE NOTED. | ON VALUATION THE IN THESE CONSTRU- DURING CONSTRUC COMPLIANT ARE FO TOLERANCES, THE PROJECT BY MEAN | RESHOLD LIMITATIONS C JCTION DOCUMENTS. CTION, IF POT ITEMS WIT DUND TO BE NONCONFO Y SHALL BE BROUGHT IN IS OF A CONSTRUCTION | OR A FIND OF UNREA THIN THE SCOPE OF ORMING BEYOND REA NTO COMPLIANCE W CHANGE DOCUMEN | SONABLE HARDSHIP ARE SC THE PROJECT REPRESENTE ASONABLE CONSTRUCION ITH THE CBC AS A PART OF 1 | D INDICATED | MECH./F Baskin Mechanical B 2131 19th ST, Bakersfield, CA 933 Phone: (559) 237-03 | PLUMB. Engineers, Inc 01 876 | CIVIL Afinar Civil Engir 214 Bernard Stre Bakersfield, CA Phone: (661) 716 | 1eer ∌et, 93305 6-7443 | ELEC JMPE Electrica Lighting Desigr 5500 Ming Ave Bakersfield, CA | |
| S NOTED. VERIFY UNLESS ECT, UNLESS VERIFY ALL OTED OTHERWISE | HAND ACTIVA 44 INCHES AB WHICH ARE IN TYPE HARDW/ DESIGNED TO OPENING HAR DIRECTION. MAXIMUM EFF POUNDS FOR ANGLES TO HI | TED DOOR OPENING HA OVE FLOOR. LATCHING I A PATH OF TRAVEL SH ARE, BY PANIC BARS, PI PROVIDE PASSAGE WI DWARE. LOCKED EXIT CORT TO OPERATE SHA INTERIOR DOORS. SUC INGED DOORS AND AT | ARDWARE SHALL BE S AND LOCKING DOO IALL BE OPERABLE ' USH-PULL ACTIVATI THOUT REQUIRING DOORS SHALL OPE LL NOT EXCEED 5 F CH PULL OR PUSH E THE CENTER PLANE | CENTERED BETWEEN 34 IN DRS THAT ARE HAND ACTIV, WITH A SINGLE EFFORT BY ON BARS, OR OTHER HARD THE ABILITY TO GRASP AND RATE AS ABOVE IN EGRESS POUNDS FOR EXTERIOR DO FFORT BEING APPLIED AT F | NCHES AND ATED AND LEVER WARE D TURN S ORS AND 5 RIGHT DOORS. | Mark Baskin STRUCT Anacapa Engineerin 9100 Ming Ave, Ste Bakersfield, CA 933 Phone: (661) 342-01 Ramon Sanchez | URAL g and Design 110, 11 21 | Bernard Salgado | | Phone: (661) 8 Fax: (661) 831- John Maloney | |
| B OR CAUSE | COMPENSATIN ABOVE STANE THE DOOR MA | NG DEVICES OR AUTON DARDS WHEN FIRE DOO AY BE INCREASED NOT | IATIC DOOR OPERA RS ARE REQUIRED. TO EXCEED 15 POUI | TORS MAY BE UTILIZED TO THE MAXIMUM EFFORT TC NDS. | MEET THE OPERATE | | | | | | |
| T BE APPROVED BY ARTMENT, AS WELL | 3. CONSTRUCTION HAVE A SMOON | ON: THE BOTTOM 10" OF TH UNINTERRUPTED SI | FALL DOORS EXCEP URFACE TO ALLOW | PT AUTOMATIC AND SLIDING THE DOOR TO BE OPENED | G SHALL BY A | | | | | ATION | |
| NTRACT CONFIRMING THAT TON. IF THERE ARE NS, THE GENERAL FROM THE UESTION. TE THE LAYOUT AND | 4. FOR HINGED I POSITIONED A PAIR OF DOOF 5. IN ADDITION T | MES ARE USED, A 10" H DOOR, WHICH WILL ALL ITHOUT CREATING A TR DOORS, THE OPENING N AT AN ANGLE OF 90 DEG RS SHALL MEET THIS OF | ACCESSIBILITY REQ | A HAZARDOUS CONDITION. L SHALL BE INSTALLED ON CONDITION. CONDITION. CASURED WITH THE DOOR OSED POSITION. AT LEAST UIREMENT. UIREMENTS SHALL COMPLY | Y WITH THE | | JILDING '1': T JILDING '2': T JPANC JILDING '1': E JILDING '2': A | | | GHT· | |
| ELECTRICAL AND CONSTRUCTION. | CALIFORNIA B DISABILITIES / | ACT). | 4, AS WELL AS FEDI | ERAL A.D.A., (AMERICANS W | /IIH | EXISTING BL EXISTING BL | VVADLE JILDING '1': 4 JILDING '2': 5 | 0'-0" 5'-0" | | GHT. | |
| JM POSSIBLE | BUILDING LEGEND | | | | | | | EIGHT | : | | |
| THE PROJECT AND CT. | BUILDING | TYPE | APP # | | | EXISTING BU | | 5'-0" | 0. | | |
| BUILDING CODE, | BUILDING '1' | MULTI-PURPOSE | 46228 52675 4092 | 46228 CLOSED WITH CERT. 52675 CLOSED WITH CERT. | #2 #1 | EXISTING BL EXISTING BL | ILDING '1': 1 | STORY STORY | 5: | | |
| TENTIAL SOURCES R OTHERWISE | BUILDING '2' | GYMNASIUM | 46228 52675 11066 | 46228 CLOSED WITH CERT | #2 #1 | ACTU | AL STO | ORIES: | | | |
| TESTING ON ALL DPES, AND | BUILDING '3' | CLASSROOMS | 46228 | 46228 CLOSED WITH CERT. | | EXISTING BU EXISTING BU | JILDING '1': 1 JILDING '2': 1 | STORY STORY | | | |
| PLETION. AN JRE THAT NEWLY ERGY CODE. | BUILDING '4' | ADMIN | 46228 52675 | 46228 CLOSED WITH CERT. | #2 #1 | | WABLE | 500 S.F. | | | |
| ERTIFIED LIGHTING | BUILDING '5' | CLASSROOMS | 4835 46228 52675 | 4633 PRE-TRACKER INFO. N 46228 CLOSED WITH CERT. 52675 CLOSED WITH CERT. | 01 AVAILABLE #2 #1 | PROJ | | REA: | | | |
| ERTIFIED 2021. | BUILDING '6' | CLASSROOMS | 46228 52675 | 4835 PRE-TRACKER INFO. N 46228 CLOSED WITH CERT. 3 52675 CLOSED WITH CERT. 3 | UT AVAILABLE #2 #1 | EXISTING BL | JILDING '1': | 、 | 7420 6 5 | | |
| RFORMED BY THE WNER'S AGENT. | BUILDING '7' | WORKSHOP | 11066 46228 52675 | 11066 PRE-TRACKER INFO. I 46228 CLOSED WITH CERT. 52675 CLOSED WITH CERT. | NOT AVAILABLE #2 #1 | OVI | ERHANG | | 49 S.F. | 500 S E - OK | |
| rograms-and-topics/ | BUILDING '8' | CLASSROOMS | 52675 | 52675 CLOSED WITH CERT. | #1 | EXISTING BL | ILDING AREA | - | 7420< 90 | 000 S.F. – OK | |
| ICIENCIES MUST BE ONSTRUCTION/ QUIRED | | | | | | EXI MEI WO OVI | STING BUILDING N'S RESTROOM MEN'S RESTRO ERHANG | G = REMODEL = OM REMODEL = = | 9304 S.F 252 S.F. 267 S.F. 42 S.F. | | |
| EREQUIRED | OF A KEY OR A LATCHING DE | ALL BE OPENABLE DURI ANY SPECIAL KNOWLED VICE EXCEPT PANIC HA | DGE. NO DEAD OR S RDWARE PERMITTE | LIDING BOLTS. NO LATCH O D. | R | BUI | | = | 9304 S.F | F. < 9500 S.F. = Ok | |
| ULATIONS (CCR) | 2. EXIT SIGNS M | UST BE INTERNALLY ILL | | | | FIRE | SPRINK | TED WALLS, SEE A-1 | 12 SITE PLAN | | |
| NOT BE STARTED LCULATIONS FOR NED BY THE | PROVIDE TWC PROVIDE TWC |) SEPARATE CIRCUITS F | OF POWER FOR EXI | T SIGNS. | | NO | | | | | |
| MADE BY AN BY THE DIVISION OF 4, CCR. | | | | | | | <u> </u> | | | | |
| WNER) AND WORK. THE DUTIES | | | | AB | DKEV | | 3 | | | | |
| K. ISTRICT (OWNER) PROJECT. RK OF THE ANCE WITH TITLE 24, | abandon abbreviation above finish floor above finished grac accessible addendum additional adjustable air condition | ABAN chamfer ABBRV circle AFF class de AFG cleanour ACC clear ADDM cold wat ADDL column ADJ commor A/C complet | t to grade CHFR CL CL CL CLR CLR CLR COL COL COM e COMF | each way easement east elementary elevation elevator enamel enclosure equal PL equipment | EW ESMT ELEM ELEV ENAM ENCL EQ EQUIP | hardwood header holddown hollow core hose bibb hot water insulation interior junction box | HDWD HDR HLDN HC HB HW INSUL INT J-BOX | radius redwood refrigerator register return air revision right rough opening schedule schematic | R RDW REF REG RA REV RT RO SCHED | surface one side switch symbol table contents tackboard telephone television tempered glass through transfor | |
| ION-COMPLYING ACT DOCUMENTS CONSTRUCTION CATIONS, DETAILING PROVED BY DSA | alternate aluminum anchor bolt angle approved approximate | ALI compon ALU concrete AB concrete L condens APPD condition APPROX conduit | ent COMF e CONC e masonry unit CMU sate CNDS n CONE CND | equivalent estimate exhaust exhaust fan exhaust hood existing | EQUIV EST EXH EXH FN EXH HD EXIST | ladder landscape lavatory linear feet (foot) louver lumber | LAD LNDSCP LAV LF LVR LUM | schematic section select sewer sheet metal sheet vinyl | SCHEM SECT SEL SWR SM SV | transter transformer transparent typical uniform uniform building co | |

ARCH construction CONSTR existing grade EXIST GR manufacturer MFR SHV uniform fire code architect shelving architect/enginee A/F consultant CONSUL exterior nechanica MECH showe SHR uniform plumbing c CONTR SW assembly ASSY contractor exterior finish FF metal MTL sidewalk urinal utility valve box audio visual AV contract documents exterior finish system EFS MIN siding similar SDG CD minimum CU YD CUR MOD SIM avenue AVE modify cubic yard extinguishe vanity MTD single average face brick SGL current mounted DAT beam FOS north SM varies datum face of stud smooth beam, standard S BM deep fascia board FAS BD on center soap dispenser veneer SD beam, wide flange WF BM definition DEF opposite OPP verify solid core bearing BRG degree DGR fence FΝ out to out 0/0 sound insulation SND INS vertical finish outside face of studs vestibule bearing plate BRG P delete DEL FIN OFS south finish floor below BLW demolition DEMO SPKR video over speaker D-B finish floor elevation SPEC wainscot below finish floo FF EL design build specification paint SPKLR DTL waste board detail fire alarm FA pair PR sprinkler DIAG both faces FIXT water diagonal fixture PNL square SQ panel FLR PAR both sides diameter DIA floor parapet square feet (foot) SQ FT water closet SQ IN bottom dimension DIM floor drain FD partition PTN welded squiare inch boulevard BLVD dishwasher DW floor finish F FIN paving PVG square yard SQ YD welded wire mesh DISP DIST BDRY FLUOR west boundary fluorescen SS dispenser penny (nail) stainless steel bronze build wide flange distance foot percent stairs DIV BLD FOOTING STD PIL window division footing pilaster standard DOC cabinet STL JST without CAB document foundation FDTN pipe rail PR steel joist PLAS DOM FURN wood cable television CTV domestic furnish olaster storage STOR PLAM PLBG cast iron domestic water supply DWS furring FURG plastic laminate storm drain SD wrought iron CLG DR galvanized GALV door plumbing street yard ceiling plywood polished ceiling grill CLG GRL double double glaze DBL garbage disposal G DISP PLYWD STR stringers vear CLG HT douglas fir DOUG FIR GB GEN POL STRUCT ceiling height structural gas bibb polyethylene (plastic) POLY portland cement PC CLG REG downspout SUB ceiling register substitue DS general CEM CTR GL GLZ glass SA cement drain supply air SPRT center drawer DWR glazing prefinish PREFIN support glue laminated wood GLU+AM gypsum board GYP BD center line drinking fountain DF PRELIM surface SUR CL preliminary C to C each ΕA gypsum board project PROJ surface four sides S4S center to center CER HDW PL ceramic each end EE hardware property line surface two sides S2S

| | SCOPE OF WORK | | SHEETS IN SET 53 |
|------------------------|--|----------------|--|
| CATOR | 1. REMOVAL OF EXISTING BLEACHER SEATING AND INSTALLATION OF NEW BLEACHER SEATING | GENERAL IN | NFORMATION |
| npany Iand Road, | IN EXISTING GYMNASIUM PER PC DRAWINGS A# 02-121254 | G-001 | GENERAL INFORMATION |
| 1 -6157 | 2. ALTERATIONS TO EXISTING MALE AND FEMALE RESTROOMS IN EXISTING GYMNASIUM TO MEET CURRENT ADA ACCESSIBILITY STANDARDS | G-002 | EGRESS PLAN |
| | 3. ALTERATIONS/ADDITION OF ACCESSIBLE PARKING STALLS TO EXISTING PARKING LOT TO MEET CURRENT ADA ACCESSIBILITY STANDARDS | CIVIL DRAW | lings |
| | 4. CONCRETE FLATWORK AS REQUIRED TO MEET CURRENT ADA MAXIMUM SLOPE | C-1 | GRADING AND DRAINAGE PLAN |
| RICAL | REQUIREMENTS IN PATH OF TRAVEL | ARCHITECT | URAL DRAWINGS |
| ingineering | | A-112 | SITE PLAN: ACCESSIBILITY |
| 3309 -7851 | | A-113 | SITE PLAN: ENLARGED AND SITE PLAN: DEMOLITION ENLARGED |
| 313 | | A-120 | FLOOR PLAN |
| | | A-122 | FLOOR PLAN: ENLARGED |
| | ARCHITECT'S STATEMENT | A-130 | INTERIOR ELEVATIONS |
| | STATEMENT OF GENERAL CONFORMANCE | A-501 | DETAILS |
| | FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP | A-502 A-601 | DOOR AND FINISH SCHEDULES |
| | DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS THE DRAWING PAGE OF SPECIFICATIONS, OR THE ATTACHED LIST OF DRAWINGS | MECHANICA | AL AND PLUMBING DRAWINGS |
| | HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OF CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME | MP-112 | NOTES, SCHEDULES, & DETAILS |
| | FOR: 1. DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24. | MP-120 | DEMO FLOOR PLAN |
| | CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND 2. COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION | MP-121 | FLOOR PLAN |
| | INTO THE CONSTRUCTION OF THIS PROJECT 3. THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY | ELECTRICA | L DRAWINGS |
| | RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-344" OF TITLE 24, PART 1. (TITLE 24, PART 1, SECTION 4-317 [b]) | E-100 | GENERAL NOTES, SYMBOLS, SCHEDULES & DETAILS |
| | THE DRAWINGS OR SHEETS LISTED ON THE SHEET INDEX SHEET | E-110 | FIRE ALARM RISER DIAGRAM |
| | REFER TO SHEET INDEX FOR A LIST OF "DRAWINGS PREPARED BY OTHERS" INCLUDING ALL DRAWINGS AND / OR CALCULATIONS PREPARED BY: | E-111 | |
| | IRWIN SEATING COMPANY-TELESCHOPIC DIVISION (PC A# 02-121254) | E-122 E-123 | RESTROOM LIGHTING PLAN |
| | | E-200 | FIRE ALARM SITE PLAN |
| | THE STATEMENT NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTION 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344 PART 1. (TITLE 24, PART 1, SECTION 4-317(b)) | E-201 E-202 | EXISTING FIRE ALARM PLAN FIRE ALARM FLOOR PLAN |
| | I CERTIFY THAT THIS DRAWING OR PAGE (CHECK BOTH BOXES): | E-300 | ELECTRICAL SPECIFICATIONS |
| | IS IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND | E-400 | FIRE ALARM SPECIFICATIONS |
| | X HAS BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS. | IRWIN SEAT | ING COMPANY PC#02-121254 |
| | ARCHITECTS SIGNATURE | | PROJECT COVER SHEET |
| | ARCHITECTS OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE | A02 | PLAN |
| | JEANNIE BERTOLACCNI | A03 | ELEVATION |
| | <u>C-35596</u> OCTOBER 31, 2025 | A04 | FRAMING PLAN |
| | LICENSE NUMBER EXPIRATION DATE | S1 | SPECIFICATIONS FOR IRWIN VERSATRACT BLEACHERS |
| | | | ADDITIONAL DETAILS |
| | | | DECK AND SEAT ASSEMBLIES |
| | | | IDS-2 POWER SYSTEM POST ASSEMBLIES |
| | | | POST ASSEMBLIES CONT. |
| | | | DECK SUPPORTS DECK SUPPORTS CONT. |
| | | S11 | BRACING |
| | | S12 S13 | BRACING CONT. WALL ATTACHMENT DETAILS |
| | | | FLOOR ATTACHMENT DETAILS |
| | | S15 | END RAILS CLOSURE CURTAINS |
| | | | AISLE STEPS |
| | | S17 | |
| | | | ACCESSIBLE SPACES CONT. |
| | | S20 | DIMENSIONS-10" RISE |
| S1S SW | | | |
| TOC TKBD | | | |
| TEL TV TEMP GLAS | | | |
| THRU XFER XEMB | | | |
| TRANS TYP | | | |
| e UBC UFC | | | |
| de UPC UR UTIL | | | |
| VB VAN VAR | | | |
| VNR VRFY VEBT | | | |
| VEST VID | | | |
| WC WST WTR | | | |
| WC WLD | | | |
| WF | | | |
| WDW W/O WD | | | |
| WI YD YR | | | |
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DT TIME: 1:36 PM DT DATE: 3/7/2025



GRADING PRIVATE ON SITE PAVING ONLY:

GRADING SHALL CONFORM TO STANDARDS, SPECIFICATIONS, AND REQUIREMENTS OF THE LATEST EDITION OF THE BUILDING CODE AS ADOPTED BY THE LOCAL GOVERNING AGENCY, CITY OF TAFT DEVELOPMENT STANDARDS, AND TO THE REQUIREMENTS OF THE PRELIMINARY SOILS REPORT PREPARED FOR THIS PROJECT BY: - ON FILE WITH THE SCHOOL DISTRICT-

NOTE: SHOULD A CONFLICT OCCUR BETWEEN THE FOLLOWING NOTES AND THE SOILS REPORT. THE MORE STRINGENT Requirements shall prevail.

THE CONTRACTOR SHALL REMOVE AND OR RELOCATE ALL OBSTRUCTIONS WITHIN THE IMPROVEMENT AREA AS DIRECTED IN THESE PLANS.

ALL EXISTING IMPROVEMENTS THAT ARE REMOVED, DAMAGED, OR UNDERCUT SHALL BE REPAIRED OR REPLACED AS DIRECTED BY AFFECTED AGENCY.

ALL CUT SLOPES SHALL BE NO STEEPER THAN (2) TWO HORIZONTAL TO (1) ONE VERTICAL.

ALL FILL SLOPES SHALL BE NO STEEPER THAN (2) TWO HORIZONTAL TO (1) ONE VERTICAL.

ALL VEGETABLE MATTER SHALL BE REMOVED FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED, AND THE SURFACE SHALL BE PLOWED SCARIFIED TO A DEPTH OF AT LEAST TWELVE INCHES (12"), AND UNTIL THE SURFACE IS FREE FROM RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH WOULD TEND TO PREVENT UNIFORM COMPACTION BY THE EQUIPMENT TO BE USED.

FILL MATERIALS: MATERIALS FOR FILL SHALL CONSIST OF MATERIAL SELECTED BY THE SOILS ENGINEER FROM SOURCES IDENTIFIED IN LABORATORY REPORTS. THE MATERIAL USED SHALL BE FREE FROM VEGETABLE MATTER AND OTHER ELETERIOUS SUBSTANCES AND SHALL NOT CONTAIN ROCKS OR LUMPS HAVING A DIAMETER OF OR MORE THAN SIX INCHES

AMOUNT OF COMPACTION: AFTER EACH LAYER (LIFT) HAS BEEN PLACED, MIXED AND SPREAD EVENLY, IT SHALL BE THOROUGHLY COMPACTED TO THE SPECIFIED DENSITY. THE SPECIFIED DENSITY WILL BE STATED AS A PERCENTAGE OF THE MAXIMUM DENSITY ATTAINABLE USING CURRENT ASTM DENSITY TEST NO. D 1557 THE SPECIFIED DENSITY TYPICALLY WILL BE NINETY PERCENT (90%) OF THE MAXIMUM FOR MOST COHESIVE, NON-EXPANSIVE SOILS, HOWEVER IT WILL BE ESTABLISHED AS APPROPRIATE FOR THE MATERIALS AND ENVIRONMENT DEFINED. FILL COMPACTION SHALL CONFORM TO U.B.C. STANDARDS AND LOCAL GRADING STANDARDS.

DEPTH AND MIXING OF FILL LAYERS: THE SELECTED FILL MATERIAL SHALL BE PLACED IN LEVEL, UNIFORM LAYERS WHICH, WHEN COMPACTED, SHALL HAVE A DENSITY CONFORMING TO THAT STIPULATED IN THESE PLANS OR THE SOILS REPORT. EACH LAYER SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO INSURE UNIFORMITY OF MATERIALS IN EACH LAYER. COMPACTED LAYER THICKNESS NORMALLY WILL BE SIX (6"), HOWEVER, IT MAY BE SPECIFIED OTHERWISE IF COMPACTION EQUIPMENT OF DEMONSTRATED CAPABILITY WILL BE USED.

COMPACTING AREA TO BE FILLED: AFTER THE FOUNDATION FOR THE FILL HAS BEEN CLEARED AND PLOWED OR SCARIFIED, IT SHALL BE DISKED OR BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS, BROUGHT TO THE PROPER MOISTURE CONTENT. AND COMPACTED (TYPICALLY) TO NOT LESS THAN NINETY (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH CURRENT ASTM DENSITY TEST NO. D 1557, OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE FOR THE MATERIALS AND CONDITIONS AND ACCEPTABLE TO THE ENGINEER AND OR INSPECTORS.

ROCK: WHEN FILL MATERIAL INCLUDES ROCK, THE MAXIMUM ROCK SIZE ACCEPTABLE SHALL BE SIX INCHES (6"). NO ARGE ROCKS SHALL BE ALLOWED TO NEST AND ALL VOIDS MUST BE CAREFULLY FILLED WITH SMALL STONES OR EARTH, PROPERLY COMPACTED. NO LARGE ROCKS WILL BE PERMITTED WITHIN TWELVE INCHES (12"), OF THE FINISHED GRADE.

MOISTURE CONTENT: THE FILL MATERIAL SHALL BE COMPACTED AT THE APPROPRIATE MOISTURE CONTENT SPECIFIED FOR THE SOILS BEING USED, AS IDENTIFIED IN LABORATORY AND SOILS REPORT. MOISTURE CONTENT TOLERANCES SHOULD E CLEARLY DEFINED FOR PLACEMENT OF EACH MATERIAL PROPOSED FOR USE IN A FILL. APPROPRIATE MOISTURE CONTENT S DEFINED TYPICALLY, AS OPTIMUM MOISTURE CONTENT, HOWEVER FOR EXPANSIVE SOILS IT MAY BE GREATER THAN OPTIMUM MOISTURE CONTENT, AND OTHER MOISTURE CONTENTS MAY BE NECESSARY TO PRODUCE THE DESIRED RESULTS WITH SPECIFIC SOILS.

DENSITY TESTS: FIELD DENSITY TEST SHALL BE MADE BY THE SOILS ENGINEER OF THE COMPACTION OF EACH LAYER F FILL. DENSITY TEST SHALL BE TAKEN IN THE COMPACTED MATERIAL BELOW THE DISTURBED SURFACE. WHEN THESE FESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY. THE PARTICULAR LAYER OF PORTION SHALL BE REWORKED UNTIL THE REQUIRED DENSITY HAS BEEN OBTAINED. SUFFICIENT DENSITY TESTS SHALL BE MADE TO SUPPORT THE SOILS ENGINEER'S CERTIFICATION OF EACH FILL LAYER.

REPRESENTATIVES OF THE SOILS ENGINEER WILL OBSERVE THE WORK IN PROGRESS, MAKE TESTS OF THE SOIL, AND REVIEW THE EXCAVATIONS AND TRENCHES. THE PROJECT CIVIL ENGINEER WILL OBSERVE GRADING OPERATIONS TO FACILITATE SUBSTANTIAL COMPLIANCE WITH THE PLANS. SPECIFICATIONS AND CODES WITHIN HIS PURVIEW. THE CONTRACTOR HALL SUPERVISE AND DIRECT THE WORK AND TECHNIQUES. SEQUENCES AND PROCEDURES. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. INTERMITTENT VISITS BY THE SOILS ENGINEER OR THE PROJECT CIVIL ENGINEER DO NOT INCLUDE REVIEW OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

GRADING WORK SHALL BE DONE IN A MANNER TO PREVENT STORM DAMAGE TO PUBLIC OR PRIVATE PROPERTY OF DTHERS BY FLOODING, EROSION, DEPOSITION, DEBRIS, OR ANY OTHER DAMAGE RESULTING FROM THE GRADING WORK.

5. SURFACE DRAINAGE SHALL HAVE A MINIMUM SLOPE OF TWO PERCENT AWAY FROM ALL STRUCTURES.

THE GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE PROJECT SHALL BE NOTIFIED BY THE CONTRACTOR OF THE OWNER A MINIMUM OF 48 HOURS PRIOR TO THE TIME THAT GRADING IS TO COMMENCE AND THE CONTRACTOR OR THE OWNER SHALL MAKE ALL NECESSARY ARRANGEMENTS FOR THEIR INSPECTIONS.

THE SOILS ENGINEER SHALL BE NOTIFIED SUFFICIENTLY IN ADVANCE TO PERMIT EXAMINATION OF SUBGRADE AND TESTING OF FILL AND FINAL GRADES. THE SOILS ENGINEER SHALL BE NOTIFIED OF ANY CONDITION THAT MAY EFFECT THE PROJECT.

COMPACTION IN PROPOSED PAVEMENT AREAS SHALL EXTEND TO A MINIMUM DISTANCE OF (2) FEET BEYOND THE OUTSIDE EDGE OF PAVEMENTS.

DURING GRADING, REASONABLE SEARCHING SHOULD BE PERFORMED FOR CANCELED SUBSURFACE OBSTRUCTIONS. ALL ABANDONED SUBSURFACE OBSTRUCTIONS SHOULD BE REMOVED. IF THE TERMINUS OF ANY ABANDONED PIPING IS OUTSIDE THE PROJECT LIMITS, THE PIPING SHOULD BE REMOVED WITHIN THE PROJECT AND PROPERLY CAPPED AT THE PROJECT BOUNDARY.

CONTRACTOR TO COORDINATE WITH INSPECTOR AND DEVELOPER, THE LOCATION OF THE BORROW OR SPOILS PRIOR TO CONSTRUCTION.

THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND PIPELINES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND PIPELINES BEFORE COMMENCING WORK, CONTRACTOR ASSUMES ALL LIABILITY FOR ANY AND ALL UNDERGROUND UTILITIES AND PIPELINES.THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE REMOVAL OR RELOCATION OF ANY AND ALL EXISTING UTILITIES WITH THE RESPECTIVE UTILITY COMPANY. COST OF THIS COORDINATION IS TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS IMPROVEMENTS TO COMPLETE THE PROJECT.

3. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AND THE LOCAL PUBLIC WORKS DEPARTMENT AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO MARK THE LOCATIONS OF EXISTING UTILITY LINES. 811

I. SITE GRADING. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL SLOPE AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5%) FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL, EXCEPTION: WHERE CLIMATIC OR SOIL CONDITIONS WARRANT, THE SLOPE OF THE GROUND AWAY FROM THE BUILDING FOUNDATION SHALL BE PERMITTED TO BE REDUCED TO NOT LESS THAN

CONCRETE NOTES:

TOP OF CURB TO BE TROWELED AND HAVE A LIGHT BRUSHED FINISH. GUTTER TO BE TROWELED AND HAVE A LIGHT BRUSHED FINISH.

. $\frac{1}{4}$ " to $\frac{1}{2}$ " felt expansion joint to be placed at curve returns and deep score joints placed at a MAXIMUM OF 10 FEET.

SAND SHALL BE CLEAN RIVER SAND FREE FROM ORGANICS, DIRT AND/OR DEBRIS.

AGGREGATE BASE CONFORM TO SECTION 26, CLASS II PER CALTRANS SEC 26 SPECIFICATIONS

FOR CONTINUOUS MACHINE CURB & GUTTER, THE #3 TIES @ 36" O.C. MAY BE DELETED IF THE CONCRETE MIX INCLUDES A MINIMUM OF 1 LB PER YARD OF CONCRETE NYLON PROCONM FIBER

- WEAKENED PLANE JOINTS SHALL BE IN SIDEWALK AND CURB & GUTTER @ 10' ON CENTER MAXIMUM.
- EXPANSION JOINTS SHALL BE INSTALLED IN SIDEWALK AT 40' O.C. MAXIMUM EXPANSION JOINTS SHALL BE INSTALLED IN SIDEWALK AND CURB & GUTTER CURB RETURNS
- CONCRETE SHALL TYPE II OR IV CLASS 3 BE 6 SACK CEMENT PER CUBIC YARDS
- 0. CONCRETE VALLEY GUTTER SHALL HAVE WEAKENED PLANE JOINT @ 15' O,C, TOOL EDGES OF JOINT.
- PROVIDE EXPANSION JOINT IN CONCRETE GUTTER @ 90' O,C, TOOL EDGES OF JOINT.
- 2. JOINTS IN ADJACENT SIDE WALKS AND CURB TO MATCH

3. REBAR SHALL CONFORM TO ASTM A615 AND BE GRADE 40 FOR REBAR #3 AND GRADE 60 FOR REBAR #\$ AND ARGER.

ASPHALT NOTES

ASPHALTIC CONCRETE AND EARTHWORK SHALL CONFORM TO SECTION 39 AND 19 OF THE STATE TANDARD SPECIFICATION LATEST EDITION. 1.1. CLASS II AGGREGATE BASE 1.2. TYPE B HMA HOT MIX ASPHALT

RECLAIMED AGGREGATE BASE - THICKNESS OF RECLAIMED AGGREGATE BASE STATE STANDARD SPECIFICATIONS.

Know what's below. **Call** before you dig.



ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES WHETHER SHOWN OR NOT SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL EXISTING FACILITIES FROM DAMAGE DURING CONSTRUCTION.

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER OF PROJECT CIVIL ENGINEER.

MONUMENTS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CITY. AN ENCROACHMENT PERMIT FROM THE CITY SHALL BE OBTAINED PRIOR TO THE BEGINNING OF ANY WORK OR CONSTRUCTION WITHIN THE STREET.

ALL EXCAVATIONS SHALL BE BACK FILLED AT THE END OF EACH WORKING DAY AND ROADS OPEN) VEHICULAR TRAFFIC UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTY OWNERS FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUN-OFF AND/OR DISPLACEMENT OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONJUNCTION WITH CONSTRUCTION OF THESE IMPROVEMENTS.

THE CONTRACTOR SHALL, AT NO COST TO THE CITY, PROVIDE ALL NECESSARY SAMPLES AND TESTS THAT THE CITY ENGINEER MAY REQUIRE TO ENSURE THAT QUALITY OF MATERIAL AND WORKMANSHIP ARE IN ACCORDANCE WITH THE CITY SPECIFICATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND SHALL MAINTAIN ALL FACILITIES (COMPLETE AND/OR INCOMPLETE) UNTIL ACCEPTED BY THE DISTRICT. 9. THE CONTRACTOR SHALL ADJUST ALL EXISTING VALVE COVERS, MAN HOLES AND AND UTILITY BOXES

AS NEEDED TO ACCOMMODATE NEW IMPROVEMENTS.

11. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.

25. IMPORTANT NOTICE - SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE ANY "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE AT 811, TWO WORKING DAYS BEFORE YOU DIG.

DUST CONTROL:

PORTABLE WATER WILL BE APPLIED TO DISTURBED SOIL AREAS OF THE PROJECT SITE TO CONTROL DUST AND MAINTAIN OPTIMUM MOISTURE LEVELS FOR COMPACTION. THE WATER WILL BE APPLIED USING WATER TRUCKS. AS SHOWN ON THE PROJECT SCHEDULE. PROJECT SOILS WILL BE DISTURBED AND EXPOSED FROM APPROXIMATELY MAY 1 THROUGH SEPTEMBER 15. WATER APPLICATIONS WILL BE CONCENTRATED DURING THE LATE SUMMER AND EARLY FALL MONTHS.

2. BMP WE-1, WIND EROSION CONTROL, AND BMP NS-1, WATER CONSERVATION PRACTICES, WILL BE IMPLEMENTED TO PROVIDE DUST CONTROL AND PREVENT DISCHARGES FROM DUST CONTROL ACTIVITIES AND WATER SUPPLY EQUIPMENT. WATER APPLICATION RATES WILL BE MINIMIZED AS NECESSARY TO PREVENT RUNOFF AND PONDING AND WATER EQUIPMENT LEAKS WILL BE REPAIRED IMMEDIATELY.

MOST DUST CONTROL MEASURES REQUIRE FREQUENT, OFTEN DAILY, OR MULTIPLE TIMES PER DAY ATTENTION.

3. DURING WINDY CONDITIONS (FORECAST OR ACTUAL WIND CONDITIONS APPROXIMATELY 25 MPH OR GREATER). DUST CONTROL WILL BE APPLIED TO DISTURBED AREAS, INCLUDING HAUL ROADS, TO ADEQUATELY CONTROL WIND EROSION.

4. BMP WM-3, STOCKPILE MANAGEMENT, USING SILT FECES AND PLASTIC COVERS WILL BE IMPLEMENTED TO PREVENT WIND DISPERSAL OF SEDIMENT FROM STOCKPILES.

NPDES NOTES:

CALIFORNIA WATER CODE - NPDES PERMIT ACTIVITY CALIFORNIA BUILDING STANDARDS CODE

WITH RESPECT TO THE STORMWATER AND NPDES REQUIREMENTS PER THE ABOVE REFERENCED CODES, REGULATIONS AND STANDARDS: CONSTRUCTION ACTIVITY WILL NOT RESULT IN THE DISTURBANCE OF ONE ACRE OR MORE OF TOTAL LAND AREA CONSTRUCTION ACTIVITY 'OIL & GAS' WILL NOT RESULT IN THE DISCHARGE TO A WATER OF THE STATE OF STORMWATER CONTAINING CONTAMINANTS AND/OR SEDIMENTS THAT WILL CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS. 3. CONSTRUCTION ACTIVITY WILL COMPLY WITH CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN) REQUIREMENTS.

PER 2022 CALGREEN BUILDING STANDARDS CODE 5.106.1, NON-RESIDENTIAL NEWLY CONSTRUCTED PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF LAND SHALL PREVENT THE LOSS OF SOIL OF POLLUTION OF STORM WATER RUNOFF FROM THE CONSTRUCTION ACTIVITIES THROUGH LOCAL ORDINANCE REQUIREMENTS AND/OR BEST MANAGEMENT PRACTICE (BMP). BMP'S THAT SHOULD BE CONSIDERED FOR IMPLEMENTATION AS APPROPRIATE FOR EACH PROJECT INCLUDE. BUT ARE NOT LIMITED TO FOLLOWING:

EROSION AND SEDIMENT CONTROL BMP'S -SCHEDULING CONSTRUCTION ACTIVITIES

-PRESERVATION OF NATURAL FEATURES, VEGETATION, AND SOIL -DRAINAGE SWALES OR LINED DITCHES T CONTROL STORM WATER FLOW -MULCHING OR HYDRO SEEDING TO STABILIZE SOIL EROSION CONTROL COVERS TO PROTECT SLOPES -protection of storm drain inlets (gravel bags or catch basin inserts) -PERIMETER SEDIMENT CONTROL (PERIMETER SILT FENCE, FIBER ROLLS) -SEDIMENT TRAP OR SEDIMENT BASIN TO RETAIN SEDIMENT ON SITE -STABILIZED CONSTRUCTION EXITS -WIND EROSION CONTROL

HOUSEKEEPING BMP'S -MATERIAL HANDLING AND WASTE MANAGEMENT

-BUILDING MATERIALS STOCKPILE MANAGEMENT MANAGEMENT OF WASHOUT AREAS (CONCRETE,PAINTS,STUCCO,ECT..

-CONTROL OF VEHICLE/EQUIPMENT FUELING TO CONTRACTOR'S STAGING ARFA -VEHICLE AND EQUIPMENT CLEANING PERFORMED OFF SITE -SPILL PREVENTION CONTROL

GENERAL CONSTRUCTION NOTES:

2. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL SURVEY MONUMENTS. ANY SURVEY

10. ALL MANHOLE AND MONUMENT ENCASEMENT COVERS SHALL BE SET 1/4" BELOW PAVEMENT GRADE.



| | GRADING AND DRAINAGE PLAN | |
|--------------|--|-----------------|
| | 126 S SNYDER AVE TEHACHAPI CA 93561 | JOB#: 2024-25 |
| | BLEACHER REPLACEMENT | SCALE: AS NOTED |
| | TEHACHAPI UNIFIED SCHOOL DISTRICT | |
| | | DRAWN BY: AFINA |
| BY: REVISION | | DATE: 5-29-24 |
| | SCALE: 1"=2' | |

| ¥ | | C | A |
|-----|---|---|---|
| /*↑ | P | 3 | A |

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FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

| Τn | | | | |
|-------------------------------|---|--|---|---|
| DS coi for | facilitate the Division of the State Architect's (DSA) fire and life safe A requires the design professional to provide the following informati isisting of construction of a new campus, construction of new buildir site alternate design means for fire department emergency vehicle a | ty plan review on at time of p ng(s), additions access, and fir | of project roject sub to existin e suppres | site conditions, mittal for project g buildings, and sion water supp |
| Info abo Aci an | prmation associated with compliance items 1 through 3 below is to b ove. Information associated with items 4 through 7 is to be complete mowledgement by the school district and signature from the Local F alternate design means is being requested. | e provided for d when an alte ire Authority (I | all projec ernate me _FA) is on | t types indicated ans is utilized. Ily required wher |
| The ima 2 a | Project Information and Fire & Life Safety Information sections are ged onto the fire access site plan. When an alternate design/means to be completed and imaged on the fire access site plan. | to be complet s is proposed, a | ed for all all section | projects and is on pages 1 an |
| For Bui | additional information refer to the instructions at the end of this form dings. | n and DSA Pol | icy <i>PL 0</i> 9 | -01: Fire Flow fo |
| PR | OJECT INFORMATION | | | |
| Sc | nool District/Owner: TEHACHAPI UNIFIED SCHOOL DISTRICT | | | |
| ~~ | | | | |
| - | BLEACHER REPLACEMENT AT TEHACHARI EDUC | ATION CENTER | | |
| Pro | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ | ATION CENTER | { | |
| Pro | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: 126 S. SNYDER AVE, TEHACHAPI, CA 93561 | ATION CENTER | 2 | |
| Pro | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 | ATION CENTER | 2 | |
| Pro Pro | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 E & LIFE SAFETY INFORMATION | ATION CENTER | 2 | |
| Pro Pro FIF | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 E & LIFE SAFETY INFORMATION Has a fire hydrant flow test been performed within the past 12 months? | ATION CENTER | 2 | No 🗆 |
| Pro Pro FIF | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 E & LIFE SAFETY INFORMATION Has a fire hydrant flow test been performed within the past 12 months? (<i>If yes, provide a copy of the test data.</i>) | ATION CENTER | 2 | No 🗆 |
| Pro Pro FIF 1. | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 E & LIFE SAFETY INFORMATION Has a fire hydrant flow test been performed within the past 12 months? <i>(If yes, provide a copy of the test data.)</i> Was the fire hydrant water flow test performed as part of this LFA review? | Yes Z Yes Z | 2 | No 🗆 |
| Pro Pro FIF 1. 2. | Ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ Ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 E & LIFE SAFETY INFORMATION Has a fire hydrant flow test been performed within the past 12 months? <i>(If yes, provide a copy of the test data.)</i> Was the fire hydrant water flow test performed as part of this LFA review? Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? <i>(If yes, indicate FHSZ classification below.)</i> | Yes Z Yes I Yes D | 2 | No 🗆 No 🗆 No 🖉 |
| Pro Pro FIF 1. 3. | ject Name/School: BLEACHER REPLACEMENT AT TEHACHAPI EDUC/ ject Address: ¹²⁶ S. SNYDER AVE, TEHACHAPI, CA 93561 E & LIFE SAFETY INFORMATION Has a fire hydrant flow test been performed within the past 12 months? <i>(If yes, provide a copy of the test data.)</i> Was the fire hydrant water flow test performed as part of this LFA review? Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? <i>(If yes, indicate FHSZ classification below.)</i> Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/ | Yes Z Yes Z Yes C Yes C | R High [] | No 🗆 No 🗆 No 🖉 Very High 🗆 |

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT Page 1 of 4 STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES

DSA 810 FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

| | ABITION MEANS AND METHODS RESOLUTION | ALTE | RNATE | ACCEPT | ED |
|-----|---|------|-------|--------|-----|
| 4. | Emergency vehicle access roadways do not meet CEC requirements | Yes | No | N/A | N/R |
| | e in the second s | | | 1 | |
| 4a. | Acceptable Alternate: Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property. | | | | |
| 5. | Fire Hydrants: Number and spacing does not meet CFC requirements. | | | 1 | |
| 5a. | Acceptable Alternate: Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property. | | | | |
| 6. | Fire Hydrants: Water flow and pressure are less than CFC minimum. | | 1 | | - |
| 3a. | Acceptable Alternate: The available flow and pressure is acceptable for providing fire suppression and protection of life and property. | 1 | | | |
| 7. | Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements. | | | 1 | |
| 'a. | Acceptable Alternate: The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property. | | | | |

, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property. Accepted by: _____

| Signature: | Date: |
|---|----------------------------|
| LOCAL FIRE AUTHORITY (LFA) INFORMATION | |
| LFA Agency Name: Kern County Fire Department | |
| LFA Review Official: Janet Huffaker | |
| Title: Fire Plans Examiner | Work Phone: (661) 330-0156 |
| Work Email: jhuffaker@kerncountyfire.org | |
| FA Reviewer's Signature: <u>Janet Huffaker</u> | Date:4/18/24 |
| GS DSA 810 (revised 12/29/20) IVISION OF THE STATE ARCHITECT DEPARTMENT OF C | Page 2 of |

Hydrant Flow Test Report Test Time 9:30am Test Date 4/15/2024 Tested by Location Cerro Coso Community College **RLH** Fire Protection 126 S Synder Ave. 4300 Stine Rd. Ste 800 Bakersfield, CA 93308 Tehachapi, CA 93561 661-322-9344 LIC# 777717 Steven Johnson <u>Notes</u> <u>Read Hydrant</u> Read - S Synder Ave between East E St & East F St 61 psi **static pressure** Flow - S Synder Ave between E Tehachapi Blvd & 30 psi residual pressure East F St 3970 ft hydrant elevation Flow Hydrant(s) Pitot Pressure Flow Size С #1 3970 1013 gpm 4 Flow Graph 1178.3 gpm at 20 psi

Created with the free hydrant flow test program from www.igneusinc.com

SAFE DISPERSAL CALCULATION

SAFE DISPERSAL AREA CALCULATION PER CBC 1028.5 OCCUPANT LOAD BASED ON EGRESS PLANS=1,194

AREA OF SAFE DISPERSAL REQUIRED 50'-0" AWAY FROM ANY BUILDING. 1194 (OCCUPANCY) X 5 (S E (OCCUPANCY) = 5 970 SOLIARE FEET REQUIRED

| (45' X | 33' = 1,480) + (100' X 3 | 0' = 3,000) + (40' X 38' = PROVIDED | = 1520) = 6,000 SQUARE F | EET |
|--|--|---|---|--|
| | SIT | E LEGE | ND | |
| TYPE | DESCR | IPTION | | |
| | 4" REINFORCED C | ONCRETE FLATWORK | SEE B4/A-501 | |
| | AC PAVING | | | |
| $\begin{array}{c} \downarrow \\ \downarrow $ | TURF | | | |
| | PLANTER | | | |
| | EXISTING BUILDIN | G. REFER TO BUILDIN | IG LEGEND ON G-001 FOF | R A#'s |
| | RESTROOMS TO B | E REMODELED / ADD | ED IN THIS APPLICATION | |
| | EXISTING RESTRO | OM (NO WORK IN THI | S AREA) | |
| | AREA OF SAFE DIS | PERSAL | | |
| ·····> | PATH OF TRAVEL (| (P.O.T) AS INDICATED | IS A COMMON BARRIER | FREE |
| | ACCESS ROUTE W AT 1:2 MAXIMUM S 1/4" VERTICAL. P.C FIRM, STABLE, ANI LEAST 60" X 60" SF P.O.T. WITH CONTI INTERVALS OF 400 CROSS-SLOPE ANI 401.1) SLOPES GR CONSIDERED AS A ALONG THE EDGE OF OVERHANGING THAN 4" FROM A W ARCHITECT SHALL TRAVEL. | ITHOUT ANY ABRUPT LOPE, EXCEPT THAT D.T. IS A MINIMUM OF 4 O SLIP RESISTANT. PA IALL BE LOCATED NO NUOUS GRADIENTS S MAXIMUM (11B-403.7 D 5% RUNNING SLOPI EATER THAN 5% TO A RAMP (11B-405). THE OF WALK OR LANDIN GOBSTRUCTIONS AN ALL, BETWEEN 27" TO VERIFY THAT NO BA | VERTICAL CHANGES EX LEVEL CHANGES DO NOT 48" WIDE. THE SURFACE ASSING SPACES (11B-405 T MORE THAN 200' APAR' SHALL HAVE 60" LEVEL AI 7) SLOPE SHALL NOT EXC E IN THE DIRECTION OF T MAXIMUM OF 8.33% SHA ERE SHALL BE NO DROP-(G. P.O.T. SHALL BE MAIN' D OBJECTS PROTRUDING 0 80" ABOVE FINISHED GI RRIERS EXIST IN THE PA | CEEDING F EXCEED SHALL BE .5.3) AT T. PARTS REAS AT XED 2% TRAVEL (1 XLL BE OFF OVER TAINED FF 3 GREATE RADE. TH OF |
| | DESIGN PROFESS THE POT IDENTIFIE WITH THE CURREN ACCESSIBILITY PR ALTERATIONS ADD DESIGN OF THIS P COMPONENTS OR NONCOMPLIANT 1 NECESSARY TO BE WITHIN THE SCOP DRAWINGS AND SI CONSTRUCION DC COMPONENTS OR BY THIS PROJECT FIND OF UNREASC CONSTRUCTION D | IONAL IN GENERAL R ED IN THESE CONSTR NT APPLICABLE CALIF OVISIONS FOR PATH DITIONS AND STRUCT ROJECT, THE POT WA PORTIONS OF THE P HAVE BEEN IDENTIF RING THEM INTO COM E OF THIS PROJECT'S PECIFICATIONS INCOI OCUMENTS. ANY NON PORTIONS OF THE P BASED ON VALUATIO NABLE HARDSHIP AF OCUMENTS. | ESPONSIBLE CHARGE S CUCTION DOCUMENTS IS ORNIA BUILDING CODE OF TRAVEL REQUIREMEN URAL REPAIRS. AS PART AS EXAMINED AND ANY E OT THAT WERE DETERMI IED AND 2) THE CORREC IPLIANCE HAS BEEN INCL WORK THROUGH DETAI RPORTRATED INTO THES COMPLIANT ELEMENTS, OT THAT WILL NOT BE CO IN THRESHOLD LIMITATIC RE SO INDICATED IN THES | TATEMEN COMPLIAI OF THE LEMENTS INED TO B TIVE WOR UDED LS, SE DRRECTEI DNS OR A SE |
| | DURING CONSTRU REPRESENTED AS BEYOND REASON/ BROUGHT INTO CO BY MEANS OF A CO | ICTION, IF POT ITEMS CODE COMPLIANT A ABLE CONSTRUCION DMPLIANCE WITH THE DNSTRUCTION CHANG | WITHIN THE SCOPE OF T RE FOUND TO BE NONCO TOLERANCES, THEY SHA E CBC AS A PART OF THIS GE DOCUMENT | THE PROJI)NFORMIN ALL BE } PROJEC |
| > > | EMERGENCY VEHI | CLE ACCESS | | |
| <u>P</u> | PROPERTY LINE | | | |
| × × × | EXISTING CHAINLI | NK FENCE | | |
| | EXISTING BUILDIN | G FIRE-RATED SEPAR | RATION | |
| | ASSUMED PROPER | RTY LINE | | |
| ADF | ACCESSIBLE DRIN | KING FOUNTAIN | | |
| В | STUDENT BOYS R | ESTROOM | | |
| G | STUDENT GIRLS R | ESTROOM | | |
| U | STUDENT RESTRO | OM - UNISEX | | |
| М | STAFF MENS REST | ROOM | | |
| W | STAFF WOMENS R | ESTROOM | | |
| F.H. O | FIRE HYDRANT | | | |
| 4 | ACCESSIBLE BUILD | ING ENTRY POINT | | |
| | EXISTING TREE | | | |
| | | CESSIE | | <u></u> |
| SECTION 1129B | | ACCESS. PARKING | VAN ACCESS. PARKING | TOTAL P |
| LOT A | 68 | κεų. / Υκυνίθεο 1 | 2 | 7 |
| LOT B | 11 | 1 | 1 | 1 |
| PARKING I | REQUIREMENTS | 6 | <u> </u> | |
| CBC SECTION 1-25 SPACES - 26-50 SPACES 51-75 SPACES | 11B-208.3 TABLE 11B-2 1 REQ'D - 2 REQ'D - 3 REQ'D | 08.2 : | | |
| PARKING LOT A 11 STANDARD 2 ACCESSIBLE (1 VAN ACC | A STALLS CESSIBLE, 1 REGULAR | RACCESSIBLE) | | |

TOTAL: 13 SPACES

<u>PARKING LOT B</u> 68 STANDARD STALLS 3 ACCESSIBLE STALLS (2 VAN ACCESSIBLE, 1 REGULAR ACCESSIBLE) TOTAL: 71 SPACES

DEMOLITION SITE LEGEND

| TYPE | DESCRIPTION |
|--|--|
| | EXISTING CONCRETE TO BE REMOVED IN ITS ENTIRETY |
| | EXISTING AC PAVING TO BE REMOVED IN ITS ENTIRETY |
| $\begin{array}{c} \rightarrow \\ \rightarrow $ | EXISTING TURF AND IRRIGATION TO BE REMOVED IN ITS ENTIRETY |
| | PORTION OF EXISTING PLANTER TO BE REMOVED IN ITS ENTIRETY |

| | SITE LEGEND |
|--|---|
| TYPE | DESCRIPTION |
| | 4" REINFORCED CONCRETE FLATWORK. SEE B4/A-501 |
| | AC PAVING |
| $\begin{array}{c} \downarrow \\ \downarrow $ | TURF |
| | PLANTER |
| | EXISTING BUILDING. REFER TO BUILDING LEGEND ON G-001 FOR A#'s |

| -4" WIDE DIAGONAL STRIPES (WHITE) | |
|--------------------------------------|---------------|
| 4" WIDE BLUE BORDER | |
| | • • • • • • • |
| | |
| | 5'-6" |
| E6 A-501 | <u>}</u> 0 |
| DENT LOADING SIGNAGE | |
| | |

| DE | MOL | ITION FLOOR PLAN LEGEND | | | |
|------|------------|---|--|--|--|
| ТҮРЕ | | DESCRIPTION | | | |
| | | SCOPE OF WORK | | | |
| DE | ΜΟΙ | LITION FLOOR PLAN KEYNOTE | | | |
| ID | | DESCRIPTION | | | |
| 01 | REM | IOVE EXISTING DOOR AND DOOR FRAME IN ITS ENTIRETY | | | |
| 02 | | | | | |
| 02 | REM | IOVE EXISTING DOOR LEAF IN ITS ENTIRETY | | | |
| 03 | REM | IOVE EXISTING DOOR FRAME IN ITS ENTIRETY | | | |
| 04 | REM (WH | REMOVE EXISTING WALL IN ITS ENTIRETY. REMOVE EXISTING DOOR AND DOOR (WHERE OCCURS) | | | |
| 05 | REM (WH | REMOVE PORTION OF EXISTING WALL. REMOVE EXISTING DOOR AND DOOR LEA (WHERE OCCURS) | | | |
| 06 | REN DEN | REMOVE EXISTING MECHANICAL REGISTER IN ITS ENTIRETY. REFER TO MECHAN DEMOLITION DRAWINGS | | | |
| 07 | REM | NOVE EXISTING LAV IN ITS ENTIRETY. REFER TO DEMOLITION PLUMBING DRA | | | |
| 08 | REM DR/ | NOVE EXISTING WATER CLOSET IN ITS ENTIRETY. REFER TO DEMOLITION PLI | | | |
| 09 | REN PLU | REMOVE EXISTING DRINKING FOUNTAIN IN ITS ENTIRETY. REFER TO DEMOLITIC PLUMBING DRAWINGS | | | |
| 10 | REN ENT | REMOVE EXISTING TOILET PARTITIONS AND ASSOCIATED TOILET ACCESSORIE | | | |
| 11 | SAV | VCUT AND REMOVE PORTION OF EXISTING CONCRETE SLAB | | | |
| 12 | REM | IOVE EXISTING TALL CABINETRY | | | |
| 13 | EXI | STING PIPE TO REMAIN | | | |
| 14 | REM | NOVE EXISTING BLEACHERS IN THEIR ENTIRETY | | | |
| 15 | REM | NOVE PORTION OF EXISTING CMU WALL | | | |
| 16 | REN COI | NOVE PORTION OF EXISTING CMU AND WOOD WALL UP TO EXISTING CONCRUNCE | | | |
| 17 | REN | /OVE EXISTING CABINET. REMOVE PORTION OF EXISTING PLUMBING AND CA | | | |

N

| | WALL LEGEND | | | | | | | | | |
|-----|--|---|--|--|--|--|--|--|--|--|
| ID | VIEW | WALL CORE | | | | | | | | |
| W01 | | INTERIOR FINISH, 2x6 WOOD STUDS AT 16" O.C. (FULL HEIGHT TO ROOF STRUCTURE ABOVE) WITH R-19 SOUND INSULATION EXISTING CMU WALL | | | | | | | | |
| W02 | | INTERIOR FINISH, 2x6 WOOD STUDS AT 16" O.C. (FULL HEIGHT TO CEILING STRUCTURE ABOVE) WITH R-19 SOUND INSULATION INTERIOR FINISH (FOR ATTATCHMENT SEE A3/A-502 & E3/A-50 | | | | | | | | |
| W03 | | CERAMIC TILE OVER MORTAR BED, EXISTING 2x FRAMING, E | | | | | | | | |
| W04 | | INTERIOR FINISH, 2x6 WOOD STUDS AT 16" O.C. (FULL HEIGH TO CEILING STRUCTURE ABOVE) WITH R-19 SOUND INSULATI EXISTING CMU WALL (FOR ATTATCHMENT SEE C1/A-502 & D3 | | | | | | | | |
| | FLOC | OR PLAN KEYNOTES | | | | | | | | |
| ID | DESCF | RIPTION | | | | | | | | |
| 02 | (E) 24" WIDE x 30 REINFORCED W/ @12" O.C. AT ENI |)" DEEP CONCRETE GRADE BEAM BELOW SLAB ON GRADE, (2) #8 TOP, (2) #9 BOT, (2) #5 MID, AND #3 TIES (3 TIES @ 8" O.C. DS/COLUMN LINES, ELSE TIES SPACED @ 15" O.C.) | | | | | | | | |
| 03 | (E) 22" WIDE x 30 BARS TOP & BOT COLUMN LINES, I | " DEEP CONCRETE GRADE BEAM BELOW SLAB ON GRADE, W/ (; , (2) #5 MID, AND #3 TIES (3 TIES @ 8" O.C. THEN 3 AT 12" O.C. A ELSE TIES SPACED @ 15" O.C.) | | | | | | | | |

| NOTES | 09 | FLOOR DRA | NN. REFER TO PL | UMBING DRAWI | NGS | | | E | XISTING | CONC | RETE | BEAM | SCHEDU |
|--|------------------------|--------------------------|--|---|--|-------------|------------------|--|--|-------------------------------|---------------------------------------|--|--|
| | 10 | ALIGN FACE CONCRETE | E OF STUD OF PR COLUMN FOR A | COPOSED 2x6 WC FLUSH INTERIO | OOD WALL WITH R FINISH | H THE FACE | OF EXISTING | BEAM ID B-11 B-12 | BEAM DIMENSIO 18" SQR. 18" SQR. | NS | BEAM REII (2) #8 T&B (2) #8 T&B | NFORCEMENT W/ #3 TIES @ 12" O W/ #3 TIES @ 12" O | .C. .C. |
| | 11 | | | | | | | B-13 | 18" SQR. W/ 8" x 3 | 2" CURB ABOVE | (2) #5 TOP | , (2) #6 BOT, (4) #4 E | .F. OF CURB W/ #4 TIES @ |
| ETAIL A5/A-502 | 12 | (E) CMU INF DIFFERENT | REINFORCEMEN | EMAIN, "WALL ID IT PATTERNS/W/ | " PER EXISTING ALL TYPES | G DRAWINGS | , TO DESIGNATE | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| FER TO DETAIL (A4/A-501) | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| C. EACH WAY (SEE A4/ | | | | | | | | | | | | | |
| WALL "TYPE B": | | D | (E) 18" SQ W/ (4) #9 CLOSED T | UARE CONCRET BARS VERTICAI IES SPACED @ 8 | "E COLUMN, LLY, AND #3 3" O.C., TYP. | | E) | PROVIDE CO STEEL LEDGE BLEACHERS | NTINUOUS HSS 6 ER @ TOP AND B SUPPORTS | x3x5/16" OTTOM | F | | SPANS TO MA |
| THICK PARTIALLY GROUTEI 1U INFILL WALL W/ #4 BARS ' O.C. EACH WAY @ CL | D @ | | (E) WALL "T 8" THICK P/ WALL W/ #4 | TYPE B": ARTIALLY GROU BARS @ 48" 0.0 | TED CMU INFILI C. EACH WAY @ | L DCL | 92'-1" | (E) WALL "TYF | PE B": TIALLY GROUTEI ARS @ 48" O.C. E | D CMU INFILL EACH WAY @ CI | | | (E) WALL "TYF 8" THICK PAR CMU INFILL W @ 48" O.C. EA |
| 15'-3" | | | | 15'-3" | | | 89'-10" | 1 | 5'-3" | | | | 15'-3" |
| 25'-0" | E4 A-501 | | 1 / 10 | N | | | 77'-4" 25'-6" | | | | | | |
| S.O.G.) — B-13, TYP. BE (+12 | TWEEN GL B-H 2'-2") | | (TYPIC | AL) | | E3 A-501 | | A5 A-501 | | | | <u>E4</u> -501 | |
| | | | | | | | | | | | | | |
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| 4'-0" | 3'-0" | * | 6'-0" | | 9'-0" | | 3'-0" | 7'-6" | * | 6'-0" | , | <u>'-0"</u> | 4'-0" |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| | | | | | | | | _ (E) 4" THICK SLAI #3 BARS @ 24" | B ON GRADE W/_ | | | | |
| | | | | | | | | #0 57110 @ 24 | | | | | |
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| | | | | | | | MULTIPUF | RPOSE | | | | | |
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| | DEMOLITION RCP KEYNOTES | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|
| ID DESCRIPTION | | | | | | | | | |
| 01 | REMOVE EXISTING CEILING FRAMING IN ITS ENTIRETY | | | | | | | | |
| 02 | REMOVE EXISTING LIGHT FIXTURES IN THEIR ENTIRETY | | | | | | | | |
| 03 | REMOVE EXISTING MECHANICAL REGISTERS IN THEIR ENTIRETY | | | | | | | | |
| 04 | EXISTING LIGHT FIXTURE TO REMAIN | | | | | | | | |
| | | | | | | | | | |

| | FRAMING KEY NOTES | | | | | | | |
|----------------|------------------------------|--|--|--|--|--|--|--|
| ID DESCRIPTION | | | | | | | | |
| 01 | 2x BLOCKING | | | | | | | |
| 02 | 2x CEILING JOISTS @ 24" O.C. | | | | | | | |

| | ACCESSORY SCHEDULE |
|------|---|
| ID | DESCRIPTION |
| GB1 | 36" GRAB BAR. REFER TO DETAIL C4/A-502 FOR GRAB BAR MOUNTING |
| GB2 | 42" GRAB BAR. REFER TO DETAIL C4/A-502 FOR GRAB BAR MOUNTING |
| MR1 | MIRROR WITH STAINLESS STEEL FRAME. REFER TO DETAIL D4/A-502 FOR ATTAC |
| PT1 | PAPER TOWEL DISPENSER |
| SD1 | SOAP DISPENSER |
| SN1 | SANITARY NAPKIN WASTE |
| TSC1 | TOILET SEAT COVER DISPENSER |
| INT | ERIOR ELEVATIONS KEYNOTES |
| ID | DESCRIPTION |
| 01 | LAVATORY-REFER TO PLUMBING DRAWINGS |
| 02 | URINAL-REFER TO PLUMBING DRAWINGS |
| 03 | WATER CLOSET-REFER TO PLUMBING DRAWINGS |
| 04 | DOOR-REFER TO DOOR SCHEDULE |
| 05 | EXISTING DOOR |
| 06 | CERAMIC WALL TILE |
| 07 | CERAMIC COVED TILE BASE |
| 08 | TOILET PARTITION. REFER TO DETAIL C5/A-502 |

OT TIME: 1:36 PM OT DATE: 3/7/2025

| | DOOR AND FRAME SCHEDULE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-------------------------|-------|-------|--------|----|--------|----|--------|----------|----------|----------|--------|--------|--------|---|-----|--|-----------|-----------|-----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|---------|
| | | | | DOOR | | | | | FRAME | | | DOOD | HARD | WARE | | | | | | | | | | | | | | | | | | | | | |
| DOOR | TYPE | | SIZE | | | EINIGH | | | DETAIL | | DETAIL | | | DETAIL | | SET | | SET DANIC | SET DANIC | SET DANIC | | SET | | | | REMARKS |
| | | W | HT | THK | | ГІЛІЭП | | ГІМІЭП | HEAD | JAMB | SILL | | NUMBER | FANIC | | | | | | | | | | | | | | | | | | | | | |
| 101 | А | 3'-0" | 7'-0" | 1 3/4" | НМ | P2 | НМ | P2 | D1/A-501 | D1/A-501 | D1/A-501 | 90 MIN | - | - | - | | | | | | | | | | | | | | | | | | | | |
| 102 | В | 6'-0" | 7'-0" | 1 3/4" | НМ | P2 | НМ | P2 | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | |
| 103 | А | 3'-0" | 7'-0" | 1 3/4" | НМ | P2 | НМ | P2 | D1/A-501 | D1/A-501 | D1/A-501 | 90 MIN | - | - | - | | | | | | | | | | | | | | | | | | | | |
| 104 | А | 3'-0" | 7'-0" | 1 3/4" | НМ | P2 | НМ | P2 | D2/A-501 | C2/A-501 | B1/A-501 | - | 1 | - | - | | | | | | | | | | | | | | | | | | | | |
| 105 | A | 3'-0" | 7'-0" | 1 3/4" | НМ | P2 | НМ | P2 | D1/A-501 | C1/A-501 | B1/A-501 | - | 2 | - | - | | | | | | | | | | | | | | | | | | | | |

| | INTERIOR FINISH SCHEDULE | | | | | | | | | | | | | | | | | |
|-----|--------------------------|----------|--------|----------|--------|--------|----------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|-----------|
| | | FLO | OR | BAS | SE | WAINS | WAINSCOT | | WALL A | | WALL B | | WALL C | | LD | CEILING | | |
| | | MATERIAL | FINISH | MATERIAL | FINISH | MATERI | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | KEIWIARNO |
| 101 | MULTIPURPOSE | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 102 | WOMEN'S RESTROOM | СТ | FF | CT-CB | FF | - | - | СТ | FF | СТ | FF | СТ | FF | СТ | FF | GYP | FF - | |
| 103 | MEN'S RESTROOM | СТ | FF | CT-CB | FF | - | - | СТ | FF | СТ | FF | СТ | FF | СТ | FF | GYP | P1 - | |
| 109 | RESTROOM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 110 | VESTIBULE | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 121 | RESTROOM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 130 | STOR. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 131 | VESTIBULE | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | | | | | | | | | | | | | | | | | | |

| FINISH & MATERIAL KEY |
|-----------------------|
|-----------------------|

| | FINISH KEY | | MATERIAL KEY |
|------|----------------|-------|---|
| MARK | FINISH | MARK | MATERIALS |
| FF | FACTORY FINISH | СТ | CERAMIC TILE |
| | | CT-CB | CERAMIC TILE COVED BASE 6" |
| | | GYP | 5/8" GYP BOARD, TAPE, SAND & MEDIUM TEX |

Equipment Anchorage Notes:

All Mechanical, Plumbing, and Electrical components shall be anchored and installed per the details on the DSA approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2022 CBC, Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26 and 30.

- . All permanent equipment and components. . Temporary, movable or mobile equipment that is permanently attached (E.G. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
- Temporary, moveable or mobile equipment which is heavier than 400 pounds or has a center mass located 4 feet or more above the adjacent floor or roof level that directly support the component are required to be restrained in a manner approved by DSA.

The following Mechanical and Electrical components shall be positively attached to the structure, but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and have a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component. B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all Mechanical, Electrical and Plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with above requirements.

Piping, Ductwork, and Electrical Distribution System Bracing Note:

Piping, ductwork, and Electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Section 13.6.5., 13.6.6, 13.6.7, 13.6.8, and 2022 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a pre-approved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP),

Electrical Distribution Systems (E): MP MD Option 1: Detailed on the approved drawings with project specific notes and details

PP 🗹 E 🗆 PP 🗆 E 🔲 #_____.

MP MD **Option 2:** Shall comply with the applicable OSHPD Pre-Approval (OPM#)

Codes:

- California Code of Regulations (C.C.R) Part 1 - 2022 California Standards Administrative Code, Title 24, C.C.R.
- Part 2 2022 California Building Code (C.B.C.), Title 24, C.C.R. Volumes 1-3.
- Part 3 2022 California Electrical Code, Title 24, C.C.R.
- Part 4 2022 California Mechanical Code (C.M.C.), Title 24, C.C.R. Part 5 - 2022 California Plumbing Code (C.P.C.), Title 24, C.C.R.
- Part 6 2022 California Energy Code, Title 24, C.C.R. Part 9 - 2022 California Fire Code, Title 24, C.C.R.

Standards and Guides:

| ADAAG - | American with Disabilities Act, Accessibility Guidelines. |
|------------|--|
| Fixtures - | Plumbing fixtures to comply with table 5.303.6 of the California |
| | Green Building Standards - 2022 Edition. |

| PLUMBING LEGEND | | | | | | | | | | | |
|--------------------------------|----------|-----------------------------|--------------|-----------|---------------------------------|--|--|--|--|--|--|
| SYMBOL | ABBR. | ITEM | SYMBOL | ABBR. | ITEM | | | | | | |
| | ACC. | ACCESSIBLE | | GRD. | GRADE | | | | | | |
| | A.D. | ACCESS DOOR/WALL BOX | ——G.W. — | G.W. | GREASE WASTE | | | | | | |
| | A.F.F. | ABOVE FINISHED FLOOR | + | H.B. | HOSE BIBB | | | | | | |
| | C.D. | CONDENSATE DRAIN | | H.∨.(A-C) | AIR CONDITIONING EQPT. | | | | | | |
| | C.I. | CAST IRON | | L. | LAVATORY | | | | | | |
| | CLG. | CEILING | | LOC. | LOCATION | | | | | | |
| | C.O. | CLEANOUT | | (N) | NEW | | | | | | |
| | COMB. | COMBUSTION | | N.I.C. | NOT IN CONTRACT | | | | | | |
| | CONN. | CONNECTION | | P.O.C. | POINT OF CONNECTION | | | | | | |
| | CONT. | CONTINUATION | | PROV. | PROVIDE | | | | | | |
| | COTG | CLEANOUT TO GRADE | | P.R.V. | PRESSURE REDUCING VALVE | | | | | | |
| | (D)C.W. | (DOMESTIC) COLD WATER | | R.D. | ROOF DRAIN | | | | | | |
| | D.H. | DEMO HATCH | | R.W.L. | RAINWATER LEADER | | | | | | |
| | (D)H.W. | (DOMESTIC) HOT WATER | | S. | SINK | | | | | | |
| | (D)HWR | (DOMESTIC) HOT WATER RETURN | | S.∉W. | SOIL AND WASTE | | | | | | |
| | DN. | DOWN | | SIM. | SIMILAR | | | | | | |
| | DR'N. | DRAIN | ISI OR ⊗OR ⋈ | S.O.V. | SHUT OFF VALVE | | | | | | |
| | (E). | EXISTING | | 55 | STAINLESS STEEL | | | | | | |
| · | (E)C.W. | EXISTING COLD WATER | | 5.5. | SERVICE SINK | | | | | | |
| · · | (E)H.W. | EXISTING HOT WATER | | SURF. | SURFACE | | | | | | |
| | (E)H.W.R | EXISTING HOT WATER RETURN | | Т.∉Р. | TEMPERATURE AND PRESSURE RELIEF | | | | | | |
| (E)C.D—— | (E)C.D | EXISTING CONDENSATE DRAIN | | T.P. | TRAP PRIMER | | | | | | |
| | E.D.F. | ELECTRIC DRINKING FOUNTAIN | | (TYP) | TYPICAL | | | | | | |
| | E.W.H. | ELECTRIC WATER HEATER | | UR. | URINAL | | | | | | |
| _ | F.C.O. | FLOOR CLEANOUT | <u> </u> | V.O. | VENT OFFSET | | | | | | |
| • | F.D. | FLOOR DRAIN | 0 | V.T.R. | VENT THRU ROOF | | | | | | |
| | FLR. | FLOOR | | (E) M. | EXISTING WASTE | | | | | | |
| | F.S. | FLOOR SINK | | М. | WASTE | | | | | | |
| G | G. | GAS | | W.C. | WATER CLOSET | | | | | | |
| (E) <i>G</i> . | (E) G. | EXISTING GAS | | W.H. | WATER HEATER | | | | | | |
| 0 | G.D. | GARBAGE DISPOSAL | | W.C.O. | WALL CLEANOUT | | | | | | |

| BRACING AND HANGING TABLE | | | | | | | | | | |
|---------------------------|-------------------|------------------------|-------------------------|--|--|--|--|--|--|--|
| PIPE SERVICE | SIZE | MAX HANGER SPACING 1 | MAX BRACE SPACING (2) | | | | | | | |
| WATER | < 1'' | 6 ft | N/A | | | | | | | |
| WATER | 1" - 1 <u>7</u> " | 6 ft | 12 ft | | | | | | | |
| WATER | > 2" | 10 ft | 20 ft | | | | | | | |
| VENT | ANY | 10 ft | 20 ft | | | | | | | |

1.) IN ADDITION TO SPACING NOTED, PROVIDE SUPPORT AT EACH FITTING OR JOINT. 2.) A MIN. OF (2) BRACES, (1) AT EACH END OF PIPE RUN EXCEEDING 10 ft IN LENGTH. (BOTH LONGITUDINAL AND TRANSVERSE)

Plumbing Fixture Schedule: WC-1

<u>EF-1</u>

Floor mounted F.V. elongated accessible water closet, "Kohler" # K-96057 Highcliff, "Olsonite" # 10CC open-front white seat, bolt caps, "Zurn" # ZER6000AV-HET-CCP battery powered 1.28 GPF sensor flush-valve, 1-1/4" C.W. (reduce to 1" @ flush-valve), 3" S. & W., 2" V.O., (see plan for trap primer accessory)

detail on plans) see manufacturers installation instructions for mounting heights, 3/4" C.W., 2" W., 2" W.C.O., 1-1/2" V.O.

WC-2 Floor mounted F.V. elongated water closet, "Kohler" # K-96053 Welcomme, "Olsonite" # 10CC open-front white seat, bolt caps, "Zurn" # ZER6000AV-HET-CCP battery powered 1.28 GPF sensor flush-valve, 1-1/4" C.W.(reduce to 1" @ flush-valve), 3" S. & W., 2" V.O., (see plan for trap primer accessory)

UR Wall mt'd. accessible urinal, "Kohler" # K-4991-ET-0 Bardon, "Zurn" # ZER6003AV-ULF-CP battery powered (pint) sensor flush-valve, wall hanger, (mount hanger per

Wall hung vitreous china accessible lavatory, "Kohler" # K-2007 (21" x 18") Kingston, offset grid drain, "Zurn" #Z6950-XL-S-F sensor faucet (0.5 GPM), (1) threaded angle wall stop with braided S.S. supply, 17 ga. C.P. trap/offset tailpiece, 1/2" C.W., 2" W., 2" W.C.O., 1-1/2" V., provide "J.R. Smith" # 720 stud mounted support arms

FD Cast iron floor drain/ shower drain, "J.R. Smith" #2005 with 5" dia. bronze grate or 2005-B with square grate (see plans), 2" trap with primer connection (plug trap primer connection for showers), 2" W., 1-1/2" V.O. (2" V.O. below slab if shown)

EDF Wall mounted electric dual hi-lo accessible drinking fountain / hydration bottle-fill station, "Elkay" # EZSTL8WSK, 1/5th H.P. @ 120v.-1ph., (2) threaded angled wall stops with braided stainless steel supplies, 17 ga. C.P. trap/tailpiece, 2" W., 2" W.C.O., 1-1/2" V.O., 1/2" C.W.

EXHAUST FAN & GRAVITY VENT SCHEDULE

Greenheck SP-A390-VG Ceiling Mounted Exhaust Fan. 300 CFM @ 0.20" E.S.P., 1154 RPM, 48 watts, 3.5 sones. Single speed fan with ECM motor, duct collar with integral backdraft damper, motor rated for continuous use, grille motion detector (filed installed), Energy Star rated, time delay relay and NEMA-1 toggle switch. Set up fan to operate as follows: Upon motion detection, fan to operate at set speed. Time delay for twenty minutes at set speed after motion is satisfied Electrical: 48 Watts @ 115v-1ph. Operating Weight: 24 Lbs.

| | LED FIXTURE SCHEDULE | | | | | | | | | | |
|---|---|------|------------|-------|------------------|----------------------------|----------------------|--|--|--|--|
| | LED MODULE | | | | | | | | | | |
| TYPE | MANUFACTURER AND CATALOG NUMBER | TYPE | COLOR TEMP | WATTS | DRIVER | OPTIC/LENS | REMARKS | | | | |
| $\begin{pmatrix} A \\ 42 \end{pmatrix}$ | KENALL MLH A8 48R MW PP 45L 40K DCC DV | | 4000K | 42 | 010V | PEARLESCENT | 4 FT HIGH ABUSE WRAP | | | | |
| EM 6 | ISOLITE BUG 6 WH | | 4000K | 6 | NICAD BATTERY | PRISMATIC | EM LIGHT | | | | |
| | (E) PANEL SCHEDULE "G" | | | | EXISTING EL | ECTRICAL SERVICES HAS BEEN | | | | | |

| | | | | | | (E | :)P | AN | ΕL | SCH | ЕD | UL | E "(| G" | | | | | | |
|----------------------|---------|------|---------|--------|--------|--------|--------|--------|--------|------|--------|------------|--------|--------|------------|--------|----------|---------|--------|-----------------|
| SERVICE: 120/208V 30 | 94W | | MAIN E | 3KR. | : ML | 0 | | | | | | | BUS | 3: 20 | 00A | | | | | LOC .: SEE PLAN |
| GE LOADCE | NTER | | | | | | | | | | | | | | | | | | | MTG .: FLUSH |
| REMARKS | | LOAD | | R E | L T | M I | P O | T R | С | | С | C T I R | P O | R E | t L E T | M I | | LOAD | | REMARKS |
| | ΦΑ | ФВ | ΦC | С | G | S C | L E | I P | R C | | R C | l P | L E | С | G | S C | ΦΑ | ФВ | ΦC | |
| PANEL "GL" | | | | | | | 2 | 100 | 1 | | 2 | 20 | 1 | | | | | | | OUTSIDE GFO |
| " | | | | | | | X | Х | 3 | 1. N | 4 | 20 | 1 | | | | | | | GYM LIGHT CON |
| RECEPTACLES | | | | | | | 1 | 20 | 5 | | 6 | 20 | 1 | | | | | | | SP |
| | | | | | | | 1 | 20 | 7 | | 8 | 20 | 1 | | | | | | | RECEPTACLE |
| SP | | | | | | | 1 | 20 | 9 | | 10 | 20 | 1 | | | | ÷. | | | " |
| HEATER | | | | | | | 1 | 20 | 11 | | 12 | 20 | 1 | | l i | | | | | LOBBY LIGHT |
| RECEPTACLES | | | | | | | 1 | 20 | 13 | | 14 | 20 | 1 | | | | | | | EXIT LIGHTS |
| " | | | | 1 | | | 1 | 20 | 15 | | 16 | 20 | 1 | | | | | | | LOBBY HEATE |
| OUTSIDE LTS | | | | | | | 1 | 20 | 17 | | 18 | 20 | 1 | | | | | | | SP |
| SPOT LTS | | | | | | | 1 | 20 | 19 | 4 | 20 | 20 | 1 | | | | | | | PLUG MOLD |
| " | | | | | | | 1 | 20 | 21 | | 22 | 20 | 1 | | | | | | | BDH |
| n | - 0- | | | | | | 1 | 20 | 23 | 0 | 24 | 20 | 1 | | 1 A | | | | | GYM WEST RE |
| | | | | | | | 1 | 20 | 25 | | 26 | 20 | 1 | | | | | | | BDH |
| " | | | | | | | 1 | 20 | 27 | | 28 | 20 | 1 | | | | | | | RECEPTACLE |
| " | | | | | | | 1 | 20 | 29 | | 30 | 20 | 1 | | | | | | | POPCORN |
| | | | | | | | 1 | 20 | 31 | n | 32 | 20 | 1 | | | | | | | GFCI |
| " | | | | | | | 1 | 20 | 33 | | 34 | 20 | 1 | | | | | | | GFCI |
| EVAP COOLER | | | | | | 1 | 2 | 25 | 35 | n (1 | 36 | 20 | 2 | | | 1 | | | | EF |
| " | 3 | | | | | | Х | Х | 37 | | 38 | Х | Х | | | | | | | " |
| EVAP COOLER | | | 1 | | | 1 | 2 | 25 | 39 | | 40 | 20 | 2 | | | 1 | | | | EF |
| " | | | | | | | X | Х | 41 | | 42 | Х | Х | | | | | | | " |
| TOTAL WATTS= | - 14 | | | ΦA= | = | | | | | | | ΦB= | | | | | | | ΦC= | |
| AMPS= | | | <i></i> | | | | | | | | | MIN | IMUN | MB | ٢R | | A.I.C. F | RATING= | 10,000 | AMPS SYM |

APPLICABLE CODE: 2022 CBC

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRIC ON THE DSA-APPROVED CONSTRUCTION DO BRACED TO MEET THE FORCE AND DISPLACE THROUGH 1617A.1.26 AND ASCE 7-16 CHAP

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE. 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT. B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS

PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURE ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING(PP), ELECTRICAL DISTRIBUTION SYSTEMS (E): MP MD PP E OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

GENERAL NOTES

| VISIT JOB SITE AND VERIFY EXISTING CONDITIONS PRIOR TO BID. | - |
|--|--------|
| THE ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2022 CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES. WHERE PLANS CALL FOR A HIGHER STANDARD THAN APPLICABLE CODES, THE PLANS SHALL GOVERN. | E C |

3. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS.

4. ALL ELECTRICAL EQUIPMENT, APPLIANCES AND LIGHTING FIXTURES SHALL BE LISTED BY A RECOGNIZED TEST LAB AND BEAR THAT LABEL OF APPROVAL.

5. CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIAL AND EQUIPMENT FOR THIS WORK UNLESS OTHERWISE NOTED.

6. FURNISH DISCONNECT SWITCHES AT REMOTE MOTORS.

7. ALL SPACES AS INDICATED ON PANELS OR SWITCHBOARDS SHALL BE COMPLETE WITH HARDWARE AND BUSSING FOR FUTURE BREAKER OR SWITCH.

8. CHECK ARCHITECTURAL PLANS FOR DOOR SWINGS BEFORE INSTALLING SWITCH OUTLETS.

9. GROUNDING AND BONDING SHALL BE PER CODE PLUS ANY ADDITIONAL PROVISIONS SPECIFIED OR SHOWN ON DRAWINGS.

10. ALL CONDUIT RUNS SHALL CONTAIN A CODE SIZED GREEN GROUND WIRE. 11. THESE PLANS ARE NOT COMPLETE UNTIL APPROVED BY THE AUTHORITY

12. ALL CONDUCTORS SHALL BE IN CONDUIT.

HAVING JURISDICTION.

13. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN/THWN INSULATION.

| ICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETA | ILS |
|--|------|
| DCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR | |
| EMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.2 | 1.18 |
| PTERS 13, 26, AND 30: | |

MP MD PP E OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM #) #____

SYMBOLS

| | CONDUIT EXISTING CONDUIT CONCEALED IN WALL OR CEILING |
|---------------------|--|
| | CONDUIT CONCEALED UNDER FLOOR OR BELOW GRADE |
| | CONDUIT STUBBED OUT AND CAPPED |
| | |
| - <u>\\\</u> | HATCH MARKS INDICATE NO. OF #12 WIRES IN CODE SIZED |
| _ ^ 2 | CONDUIT (3) MAX. IN 1/2" C., (5) MAX. IN 3/4" C., (8) MAX. IN 1"C., NO MARKS = 2#12 |
| FA-3 ■ | HOME RUN: LETTER INDICATES PANEL, NUMBER(S) INDICATES |
| | CIRCUIT(S). |
| | GROUND CONNECTION |
| | DISTRIBUTION SWITCHBOARD OR PANEL |
| | PANEL, BRANCH CIRCUIT TYPE, SURFACE AND FLUSH |
| | SIGNAL TERMINAL CABINET, SURFACE & FLUSH |
| \bigcirc | |
| | SWITCH CONTROL, NO. INDICATES WALL MOUNT, LETTER INDICATES SWITCH CONTROL, NO. INDICATES CIRCUIT. |
| \Box | RECESSED FIXTURE WITH JUNCTION BOX FOR THRU WIRING |
| $\otimes \otimes$ | EXIT LIGHT WITH ARROWS AS SHOWN ON PLANS, WALL AND |
| \bowtie | LOW LEVEL EXIT SIGN, +6" AFF, +4" FROM DOOR JAMB |
| $\langle A \rangle$ | LIGHT FIXTURE DESIGNATION, LETTER INDICATES TYPE, NO. INDICATES WATTAGE. SEE FIXTURE SCHEDULE. |
| <u>FC</u> | MECHANICAL EQUIPMENT DESIGNATION. |
| 1/ | SEE MECHANICAL DRAWINGS. |
| © M∼ | METER |
| \odot | FLUSH FLOOR RECEPTACLE |
| \Rightarrow | RECEPTACLE, DUPLEX, 15A, 125V, NEMA 5-15R +18" U.N.O. |
| \Rightarrow | DUPLEX RECEPTACLE MTD. ABOVE BACKSPLASH |
| | DUPLEX RECEPTACLE W/LOWER HALF SWITCHED |
| | |
| $\overline{\nabla}$ | CEILING RECEPTACI E |
| φ | RECEPTACLE, DUPLEX, 20A, 125V, NEMA 5-20R +18" U.N.O. |
| Ũ | JUNCTION BOX 4" SQUARE, 1-1/2" DEEP U.N.O. |
| \square | THERMOSTAT F.B.O. +48" |
| ∕@∕ ⊕ | MOTOR, NO. INDICATES HORSEPOWER CLOCK OUTLET +7'-6" U.N.O. |
| ы ГР | DISCONNECT SWITCH, NON-FUSED |
| L L L | DISCONNECT SWITCH FUSED HORSEPOWER RATED OR SIZED AS |
| | NOTED |
| | FUSES |
| | MAGNETIC MOTOR STARTER W/OVERLOADS IN EACH PHASE |
| | DIMINER W/INTEGRAL ON-OFF SW. |
| PC | PHOTOCELL |
| (SD) | SMOKE DETECTOR |
| D | COVERPLATE & GROMMETED OPENING +18" U.N.O. |
| \bigotimes | CABLE TV OUTLET +18" U.N.O. |
| M | MOTION SENSOR |
| \$ S | |
| s ² | |
| s ³ | THREE WAY SWITCH 20A, 120/277V A.C. +42" U.N.O. |
| s ^P | SWITCH W/PILOT LT. |
| s ^M | MANUAL MOTOR STARTER |
| FACP | FIRE ALARM CONTROL PANEL |
| GFI | GROUND FAULT CIRCUIT INTERRUPTING |
| LST MLO | MAIN LUGS ONLY |
| w/ | |
| C.O. | |
| w.р. F.B.O. | FURNISHED BY OTHERS, INSTALL & CONNECT |
| U.N.O. | UNLESS NOTED OTHERWISE |
| N.E.C. NIC | NOT IN CONTRACT |
| (E) | EXISTING |
| (N) | NEW REMOVE |
| (K) (RL) | RELOCATE |
| S/M | SURFACE MOUNT |
| U/G | |
| CWP | |
| AFF HACR | HEATING AND AIR CONDITIONING RATED CIRCUIT BREAKER |
| N.L. | NIGHT LIGHT |

NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THIS PROJECT.

| | LED FIXTURE SCHEDULE | | | | | | | | | | |
|---|----------------------------------|------|-------------------|-------|------------------|------------|--|--|--|--|--|
| | | | LED MODULE | | | | | | | | |
| TYPE | MANUFACTURER AND CATALOG NUMBER | TYPE | COLOR TEMP | WATTS | DRIVER | OPTIC/LENS | REMARKS | | | | |
| $\left\langle \begin{array}{c} E\\ 5 \end{array} \right\rangle$ | LITHONIA PRECISE LPR 1 GC ELN | | LED | 5 | NICAD BATTERY | GREEN | SINGLE FACE EXIT SIGN WITH 90 MIN. BATTERY BACK-UP - EDGE LIT | | | | |
| $\left< \frac{\text{EM}}{6} \right>$ | ISOLITE BUG 6 WH | | 4000K | 6 | NICAD BATTERY | PRISMATIC | EM LIGHT | | | | |
| $\left\langle \begin{array}{c} EL \\ 1 \end{array} \right\rangle$ | LITHONIA D-S-W-1-G-20-IF | | SELF- LUMINOUS | | NONE | GREEN | LOW LEVEL, SELF-LUMINOUS, WALL MOUNT, EXIT SIGN W/ TRITIUM FIELD GAS TUBES | | | | |
| | | | | | | | | | | | |

(2)-EL 1 5 EL 1

3)

4

5 1

EXIT LIGHT PLAN SCALE: 1/8" = 1'-0" CTRUE STREET SANTA BARBARA CA 93101 (627 OLIVE STREET SANTA BARBARA CA 93101 (625 569-9216 (625 669-92405) email : maloney@jmpe.net www.jmpe.net Z4135

| | (N)FACP HOCHIKI LATITU | IDE #LA203K1-10 | PHONE L | INE. |
|---|---------------------------|-----------------|---------------------------------------|-----------|
| (E)A-1420/1 | 11 | 10 | DVC DAC DAA | |
| RED LOCKABLE | | | | |
| | 975 R | ED | 998 975 BL TYPIC | .UE AL |
| | г— — — I | F 12-0 | AV 1 15CD,1/4W | |
| * * * * LIBRARY SHOP PORTABLES OLD | İ | SD 12-1 | AV N2-2 30CD,1/2W | |
| ZONE ZONE WORKER ZONE ROOM ZONE | | SD 12-2 | S N2-3 2W,WP | |
| | İ | HD 12-3 | AV N2-4 30CD,1/2W | |
| | (SD) 12-45 | SD 12-4 | S N2-5 2W, WP | |
| | SD 12-44 | SD 12-5 | AV 115CD,1W | |
| | SD 12-43 | X 12-6 | -AV- N2-7 15CD,1/4W | |
| | HD 12-42 | X 12-7 | -AV- N2-8 15CD,1/4W | |
| | SD 12-41 | SD 12-8 | AV N2-9 75CD,1W | |
| | (SD) 12-40 | X 12-9 | -V- N2-10 15CD | |
| | HD 12-39 | (SD) 12-10 | -V- N2-11 15CD | |
| | SD 12-38 | (SD) 12-11 | S N2-12 2W, WP | |
| | HD 12-37 | X 12-12 | -V- N2-13 15CD | |
| | | (SD) 12-13 | AV 75CD,1W | |
| | | SD 12-14 | AV N2-15 30CD,1/2W | |
| | SD 12-34 | SD 12-15 | AV N2-16 30CD,1/2W | |
| | SD 12-33 | SD 12-16 | AV 17 75CD,1W | |
| | | SD 12-17 | -V- N2-18 EOL 15CD SPEAKER | |
| | (SD) 12-31 | SD 12-18 | N2-19 SW,WP STROBE | : |
| | (SD) 12-30 | SD 12-19 | -V- N2-20 15CD AV N2-23 115CD,1 | w |
| | SD 12-29 | SD 12-20 | -V- N2-21 15CD AV 75CD,1V | V |
| | | X 12-21 | | |
| | SD 12-27 | HD 12-22 | | |
| | (SD) 12-26 | HD 12-23 | | |
| | | (SD) 12-24 | | |
| | | | <u></u> | ا ل |

FIRE ALARM RISER DIAGRAM

SCALE : NONE

| | I | | | | CREMILIET | | |
|-----|---------------------------------------|---------------------------------------|------------------------|--|--------------|--|--|
| | SYMBOL | DEVICE | MFR & CAT# | REMARKS | CSFM LISTI | | |
| NEW | | MAIN FIRE ALARM PANEL | HOCHIKI LA203K1-10 | SURFACE MOUNT W/ SOFTWARE UDPATE | 7165-0410:05 | | |
| NEW | DVC | DIGITAL VOICE COMMAND | HOCHIKI FNV-DP-100 | SURFACE MOUNT | 6911-0410:01 | | |
| NEW | DAC | DIGITAL COMMUNICATOR | HOCHIKI HSB-NSA-6 | PART OF NFS2-640 | 7300-0410:01 | | |
| NEW | SD | SMOKE DETECTOR | HOCHIKI ALN-V | PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX | 7272-0410:02 | | |
| NEW | | HEAT DETECTOR (IN ATTIC SPACE) | HOCHIKI ATJ-EA | PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX | 7270-0410:02 | | |
| NEW | F | ADDRESSABLE MANUAL PULL STATION | HOCHIKI DCP-AMS | PROVIDE 4"SQ. DEEP BOX | 7150-0410:01 | | |
| NEW | | SPEAKER STROBE | HOCHIKI HSSPK24CLPR | PROVIDE DEEP SQ J-BOX | 7320-0410:01 | | |
| NEW | S WP | EXTERIOR SPEAKER | GENTEX WSSPKR | PROVIDE MWBB BACKBOX | 7320-0569:01 | | |
| NEW | þ <u> </u> | FPLR CABLE | WESTPENN 975 | 18/2 BARE, CU, SHIELDED | 7161-0859:01 | | |
| NEW | · · · · · · · · · · · · · · · · · · · | FPLR CABLE | WESTPENN 998 | 12/2 SOLID, CU, UNSHIELDED | 7161-0859:01 | | |
| NEW | | FPLR CABLE | WESTPENN AQ294 | 18/2 STRANDED, CU, SHIELDED W/ AQUASEAL | 7161-0859:01 | | |
| NEW | | FPLR CABLE | WESTPENN AQC294 | 18/2 STRANDED, CU, SHIELDED W/ AQUASEAL | 7161-0859:01 | | |
| NEW | RM | DUAL RELAY MODULE | HOCHIKI R2ML | SURFACE MOUNT | 7300-0410:01 | | |

| NEW FACP BATTER | Y CALCULATION MFACP, HOC | HIKI LATITUDE | | | | | | |
|--------------------------------------|--------------------------|---------------|-------|----------|-----------|-----------|-----------|--|
| | | | | SUPE | RVISORY | | ALARM | |
| EQUIPM | ENT DESCRIPTION | QUANTITY | | C | URRENT | C | URRENT | |
| | | | | (AN | IPERES) | (AN | IPERES) | |
| | | EXISTING | NEW | EACH | SUB-TOTAL | EACH | SUB-TOTAL | |
| FIRE ALARM PANEL | | 0 | 1 | 0.25 | 0.25 | 0.25 | 0.25 | |
| KDM | | 0 | 1 | 0.1 | 0.1 | 0.1 | 0.1 | |
| DIGITAL ALARM COM | IMUNICATOR | 0 | 1 | 0.052 | 0.052 | 0.087 | 0.087 | |
| DVC | | 0 | 1 | 0.44 | 0.44 | 0.44 | 0.44 | |
| DAA 5025 | | 0 | 1 | 0.35 | 0.35 | 1.9 | 1.9 | |
| BEAM DETECTOR | | | | | | | | |
| PULL STATION | | 0 | 0 | 0.0003 | 0 | 0.0005 | 0 | |
| SMOKE DETECTOR | | 0 | 20 | 0.00039 | 0.0078 | 0.00039 | 0.0078 | |
| HEAT DETECTOR | | 0 | 20 | 0.00035 | 0.007 | 0.00035 | 0.007 | |
| | | | | 0.00039 | 0.00039 | | | |
| VISUALS | 15cd | 0 | 0 | | | 0.066 | 0 | |
| VISUALS | 30cd | 0 | 0 | | | 0.077 | 0 | |
| VISUALS | 75cd | 0 | 10 | | | 0.158 | 1.58 | |
| VISUALS | 115cd | | | | | | | |
| SUB TOTAL AMPERE | S | | | 1.20719 | AMPS | 4.3718 | AMPS | |
| | | | | x 24 HOU | RS | X 0.25 HO | URS | |
| SUB TOTAL AMPERE | E-HOURS | | | 28.97256 | A.H. | 1.09295 | A.H. | |
| | | | | | | | | |
| TOTAL REQUIRED A | 30.06551 | A.H. | | | | | | |
| BATTERY NON-LINE | | | x 1.2 | | | | | |
| TOTAL MINIMUM AMI | 36.07861 | A.H. | | | | | | |
| PROVIDED BATTERY CAPACITY 55.00 A.H. | | | | | | | | |

| FIRE ALARM SEQUENCE OF OPERATION | | | | | | | | | | | | | | | |
|--|--|---------------------|---|----------------|---|---|---|--|---|---|---|--|---|---|---|
| INPUT & SINU OUTPUT MATRIX MATRIX | | AREA SMOKE DETECTOR | AREA HEAT DETECTOR | | FIRE ALARM SYSTEM AC POWER FAILURE | FIRE ALARM SYSTEM LOW BATTERY | OPEN CIRCUIT | SROUND FAULT | VOTIFICATION APPLIANCE | | | | | | |
| ACTUATE COMMON ALARM | | | • | | | - | | | | | | | | | |
| ACTUATE AUDIBLE ALARM SIGNAL (PIEZO BUZZER) | | | • | | | | | | | | | | | | |
| ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (AMBER LED) | | | | | | | | | | | | | | | |
| ACTUATE AUDIBLE SUPERVISOR SIGNAL (PIEZO BUZZER) | ۲Y | | | | | | | | | | | | | | |
| ACTUATE COMMON TROUBLE SIGNAL INDICATOR (AMBER LE | D) | | | | • | • | • | • | • | | | | | | |
| ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (PIEZO BUZZ | ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (PIEZO BUZZER) | | | | • | • | • | • | • | | | | | | |
| ACTUATE EVACUATION SIGNAL THROUGHOUT THE BUILDING SPEAKERS & SPEAKER/STROBES TRANSMIT FIRE ALARM SIGNAL | | • | • | | | | | | | | | | | | |
| TO SUPERVISING STATION TRANSMIT SUPERVISORY SIGNA | L | • | • | | | | | | | | | | | | |
| TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION | | | | | • | • | • | • | • | | | | | | |
| | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | |
| | FIRE ALA INPUT & OUTPUT MATRIX SYSTEM OUTPUTS ACTUATE COMMON ALARM SIGNAL INDICATOR (RED LED) ACTUATE AUDIBLE ALARM SIGN (PIEZO BUZZER) ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (AMBER LE ACTUATE AUDIBLE SUPERVISOR SIGNAL (PIEZO BUZZER) ACTUATE COMMON TROUBLE SIGNAL (PIEZO BUZZER) ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (PIEZO BUZZ ACTUATE AUDIBLE SIGNAL THROUGHOUT THE BUILDING SPEAKERS & SPEAKER/STROBES TRANGMIT FIRE ALARM SIGNAL TO SUPERVISING STATION TRANGMIT TROUBLE SIGNAL TO SUPERVISING STATION TRANGMIT TROUBLE SIGNAL TO SUPERVISING STATION | FIRE ALARI | FIRE ALARM S INPUT & OUTPUT MATRIX SYSTEM OUTPUTS ACTUATE COMMON ALARM SIGNAL INDICATOR (RED LED) ACTUATE AUDIBLE ALARM SIGNAL (PIEZO BUZZER) ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (AMBER LED) ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (AMBER LED) ACTUATE AUDIBLE SUPERVISORY SIGNAL (PIEZO BUZZER) ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (PIEZO BUZZER) ACTUATE AUDIBLE SIGNAL (PIEZO BUZZER) ACTUATE AUDIBLE SIGNAL (PIEZO 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| FII | RE LIFE SAFETY NOTES |
|-----|---|
| I | CBC 3401.12 - BUILDING AND PARTS OF THEREOF SHALL BE MAINTAINED IN A SAFE AND SANITARY CONDITION. DEVICES OR SAFEGUARDS WHICH ARE REQUIRED BY THIS CODE SHALL BE MAINTAINED IN CONFORMANCE WITH THE CODE EDITION UNDER WHICH INSTALLED. THE OWNER OR THE OWNERS DESIGNATED AGENT SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BUILDING. |
| 2 | CFC 503.1; TITLE 19 DIVISION 1 § 3.05 MAINTAIN FIRE ACCESS ROUTE(S). PUBLIC STREET ACCESS - PROVIDE SIGN(S) 'NO PARKING FIRE LANE WITH CALIFORNIA VEHICLE CODE 22500.1' AND DETAIL. (OR INCLUDE NOTE - EXISTING NO PARKING FIRE LANE SIGN TO BE FIELD VERIFIED BY IOR) |
| 3 | CFC 503.1 - MAINTAIN / PROVIDE KEY BOXES FOR FIRE DEPARTMENT ACCESS, AS APPROPRIATE. |
| 4 | CFC 701.2 - WHERE ANY COMPONENTS IN THIS CHAPTER ARE NOT MAINTAINED AND DO NOT FUNCTION AS INTENDED OR DO NOT HAVE THE FIRE RESISTANCE REQUIRED BY THE CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED, REMODELED OR ALTERED, SUCH COMPONENT(S) OR PORTIONS THEREOF SHALL BE DEEMED AN UNSAFE CONDITION, IN ACCORDANCE WITH SECTION 110.1.1. COMPONENTS OR PORTIONS THEREOF DETERMINED TO BE UNSAFE SHALL BE REPAIRED OR REPLACED TO CONFORM TO THAT CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED, REMODELED, ALTERED OR THIS CHAPTER, AS DEEMED APPROPRIATE BY THE FIRE CODE OFFICIAL. |
| 5 | CFC 703. I AND TITLE 19 DIVISION 1 §1.14 - THE REQUIRED FIRE-RESISTANCE RATING OF FIRE- RESISTANCE CONSTRUCTION (INCLUDING WALLS, FIRESTOPS, SHAFT ENCLOSURES, PARTITIONS, SMOKE-BARRIERS, FLOORS, FIRE-RESISTIVE COATINGS AND SPRAYED FIRE-RESISTANT MATERIALS APPLIED TO STRUCTURAL MEMBERS AND FIRE-RESISTANT JOINTS SYSTEMS) SHALL BE MAINTAINED. SUCH ELEMENTS SHALL BE VISUALLY INSPECTED BY THE OWNER AND PROPERLY REPAIRED, RESTORED OR REPLACED WHEN DAMAGED, ALTERED, BREACHED OR PENETRATED. OPENINGS THROUGH FIRE- RESTANCE-RATED ASSEMBLIES SHALL BE PROTECTED BY SELF- OR AUTOMATIC-CLOSING DOORS OF APPROVED CONSTRUCTION MEETING THE FIRE PROTECTION REQUIRMENTS FOR THE ASSEMBLY. |
| 6 | CFC 703.2 - OPENING PROTECTIVE SHALL BE MAINTAINED IN AN OPERATIVE CONDITION IN ACCORDANCE WITH NFPA 80. FIRE DOORS AND SMOKE BARRIER DOORS SHALL NOT BE BLOCKED OR OBSTRUCTED OR OTHERWISE BE MADE INOPERABLE. FUSIBLE LINKS SHALL BE REPLACED PROMPTLY WHENEVER FUSED OR DAMAGED. FIRE ASSEMBLIES SHALL NOT BE MODIFIED. |
| 7 | CFC 901.4; 907.8.5 AND TITLE 19 DIVISION 1 1.14 - INSTALLATION FIRE PROTECTION SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH ORIGINAL INSTALLATION STANDARDS FOR THAT SYSTEM. REQUIRED SYSTEMS SHALL BE EXTENDED, ALTERED OR AUGMENTED AS NECESSARY TO MAINTAIN AND CONTINUE PROTECTION WHENEVER THE BUILDING IS ALTERED, REMODELED OR ADDED TO. ALTERATIONS TO FIRE PROTECTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH APPLICABLE STANDARDS. |
| 8 | TITLE 19 DIVISION 1 §1.14 - EVERY FIRE ALARM SYSTEM OR DEVICE, SPRINKLER SYSTEM, FIRE |

- M. FIRE EXTINGUISHER, FIRE HOSE, FIRE-RESISTIVE ASSEMBLY OR ANY OTHER FIRE SAFETY ASSEMBLY, DEVICE MATERIAL OR EQUIPMENT INSTALLED AND RETAINED IN SERVICE IN ANY BUILDING OR STRUCTURE SUBJECT TO CALIFORNIA CODE OF REGULATIONS, TITLE 19 DIVISION 1 REGULATIONS SHALL BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS TITLE 19 DIVISION 1 REGULATIONS AND WITH THEIR INTENDED USE.
- 9 TITLE 19 DIVISION 1 §3.24 UPON DISRUPTION OF DIMINISHMENT OF THE FIRE PROTECTIVE QUALITIES OF SUCH EQUIPMENT, MATERIAL OR SYSTEMS IMMEDIATE ACTION SHALL BE INSTITUTED TO EFFECT A REESTABLISHMENT OF SUCH EQUIPMENT MATERIAL OR SYSTEMS TO THEIR ORIGINAL NORMAL OPERATIONAL CONDITION.
- 10 CFC 901.5.1 IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE REQUIRED FIRE DETECTION, ALARM SYSTEM HAS BEEN TESTED AND APPROVED.
- I I CFC 901.5.1 IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE REQUIRED FIRE DETECTION, ALARM SYSTEM HAS BEEN TESTED AND APPROVED.
- 12 FIRE ALARM SCOPE REQUIRES DSA APPROVED DRAWINGS FOR REFERENCE OF AREAS IN SCOPE INCLUDE COMPLIANT FIRE ALARM COMPONENTS (SMOKE-HEAT-AUDIBLE-VISUAL-MANUAL). (STATEMENT OF COMPLIANCE PER CFC 901.2.1; 901.6.2.1 & TITLE 19 DIVISION 1 § 904.1(b) 904.2(c) RECORD AS-BUILT DRAWINGS AND TEST REPORTS.) ROOMS / AREAS IN SCOPE TO INCLUDE EXISTING FIRE ALARM COMPONENTS.
- 13 CFC 1030.1 THE MEANS OF EGRESS FOR BUILDING OR PORTIONS THEREOF SHALL BE MAINTAINED IN ACCORDANCE WITH THIS SECTION.
- 14 CFC 1030.4 EXIT SIGNS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTION 1011.
- 15 CFC CHAPTER 11. PROVISIONS APPLICABLE TO EXISTING BUILDING.

IG CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION APPLICABLE PROVISIONS TO BE REPLICATED VERBATIM - SAMPLE SECTIONS - 3304 PRECAUTIONS AGAINST FIRE: 3304.2 WASTE DISPOSAL; 3304.5 FIRE WATCH; 3304.6 CUTTING AND WELDING; 3305 FLAMMABLE AND COMBUSTIBLE LIQUIDS; 3308 OWNERS RESPONSIBILITY; 3310 ACCESS FOR FIREFIGHTING; 3311 MEANS OF EGRESS; 3315 FIRE EXTINGUISHERS.

- 1) APPLICABLE STANDARD 2022 NFPA 72
- APPROVED BY DSA

- SPECIFICATION WITHIN THE FIRE ALARM SECTION.

- PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
- WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.

- OVER TO THE OWNER.
- DOCUMETS.
- DETAILS.
- PER NFPA 72, REOUIREMENTS.
- SECTION 901.6.3.
- MONITORING CONTRACT OR PROVISIONS.
- BY DSA TO INSPECT THIS PROJECT.

FIRE ALARM DEVICES **TYPICAL MOUNTING DETAIL**

FIRE ALARM SYSTEM REQUIREMENTS

2) INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAS BEEN

3) UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.

4) A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. 5) ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR

RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.

6) DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING. 7) ALL PENETRATIONS THROUGH RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER LAB TESTING CRITERIA. APPROVED TYPE OF MATERIALS SHALL BE IDENTFIED WITHIN THE

8) WALL MOUNTED VISUAL NOTIFICATION DEVICES SHALL HAVE THEIR ENTIRE LENS TO BE BETWEEN 80" AND 90" FROM FINISHED FLOOR. 9) WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND

NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE. 10) AUDIBLE DEVICES TO BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 DBA AT 10 FEET OR MORE THAN 110 DBA AT THE MINIM HEARING DISTANCE . SOUND LEVEL SHALL BE MAINTAIND FOR DURATION OF AT LEAST 60 SECTIONS 5 DBA MUST BE MAINTAINED. 11) AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN. 12) THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE

13) VISUAL DEVICES SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISUAL DEVICES

14) UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATIONS. 15) ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR

FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE THHN OR THWN. 16) PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT

SPLICE THE WIRE. THERE MUST BE AT LEAST 6' OF LEAD WIRE FROM THE BOX TO THE DEVICE. ALL BOXES TO BE SIZED PER CEC. 17) SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE

SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED

18) ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN

19) FIRE ALARM PANEL, REMOTES, AND COMPONENETS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING

20) A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS. 21) THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION

22) CONTROL PANELS, REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" 23) THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC

24) SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST. 25) OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM

26) A DSA CLASS 3 INSPECTOR SHALL BE HIRED BY THE DISTRICT AND APPROVED

REQUIREMENTS FOR DISABLING THE FIRE ALARM SYSTEM;

IS RESTORED TO OPERATION.

FIRE ALARM SYSTEM

| | END OF LINE RESISTOR LOCATED AT LAST DEVIC OR INSIDE FATC |
|--------------|---|
| NAL VICES | |

-(A)

NORTH

SHALL REMAIN. 2. EXISTING RECEPTACLES SHALL REMAIN.

NOTES: 1. EXISTING FIRE ALARM DEVICES

EXISTING FIRE ALARM FLOOR PLAN SCALE : 1/8" = 1'-0"

MAIN OFFICE ENLARGED FIRE ALARM PLAN

MPE ELECTRICAL ENGINEERING LIGHTING DESIGN CA REGISTRATION NO E13083 627 OLIVE STREET SANTA BARBARA CA 93101 (805) 569–9216 FAX (805) 569–2405 email : maloney@jmpe.ne www.jmpe.net 24135 Α E202

SECTION 26 00 00 - ELECTRICAL

PART 1 _ GENERAL

1.1 IDENTIFICATION OF EQUIPMENT

- A. DISTRIBUTION PANELBOARDS: IDENTIFICATION SHALL BE WITH 1" X 4" LAMINATED, WHITE ON BLACK, MICARTA NAMEPLATES ON EACH MAJOR COMPONENT. EACH WITH NAME AND/OR NUMBER OF UNIT AND OTHER PERTINENT DATA AS REQUIRED. EMERGENCY POWER DISTRIBUTION PANELS SHALL BE IDENTIFIED WITH WHITE ON RED MICARTA NAMEPLATES. LETTERS SHALL BE NO LESS THAN 3/8" HIGH.
- B. CIRCUIT BREAKERS SHALL BE IDENTIFIED BY NUMBER AND NAME WITH 3/4" X 1-1/2" LAMINATED MICARTA NAMEPLATES WITH 3/16" HIGH LETTERS MOUNTED ADJACENT TO CIRCUIT BREAKER OR SWITCH.
- C. MISCELLANEOUS EQUIPMENT (ELECTRICAL), SUCH AS INDIVIDUALLY MOUNTED SAFETY SWITCHES, STARTERS, STEP-DOWN TRANSFORMERS, PULL BOXES, JUNCTION BOXES, ETC., SHALL BE IDENTIFIED AS REQUIRED BY THE USE OF SUCH EQUIPMENT WITH P-TOUCH LABELS AS REQUIRED.

1.2 ARC FLASH LABELING

- A. ALL PANELS, CIRCUIT BREAKER ENCLOSURES, SWITCHBOARDS AND MOTOR CONTROL CENTERS SHALL BE LABELED WITH ARC FLASH WARNING STICKERS.
- B THESE LABELS SHALL CONTAIN THE FOLLOWING:
- 1. ARC FLASH BOUNDARY
- 2. MINIMUM ARC RATING
- 3. PERSONAL PROTECTIVE EQUIPMENT LEVEL, PPE
- 4. SHOCK HAZARD LEVEL
- 5. FAULT CURRENT
- 1.3 MOUNTING
- A. PROVIDE MATERIALS AND ACCESSORIES NECESSARY TO PROPERLY MOUNT AND SECURE EQUIPMENT FURNISHED AND/OR INSTALLED UNDER THE ELECTRICAL WORK. THIS INCLUDES BUT IS NOT LIMITED TO SUCH ITEMS AS CONDUIT, OUTLETS, JUNCTION BOXES, SWITCHES, RELAYS, DISCONNECT SWITCHES, LIGHTING FIXTURES, CABINETS, AND TRANSFORMERS.

PART 2 PRODUCTS AND EXECUTION

2.1 CONDUIT

- A. RIGID STEEL CONDUIT:
- 1. RIGID STEEL CONDUIT SHALL HAVE ZINC COATED EXTERIOR, ZINC OR ENAMEL INTERIOR, STANDARD WEIGHT, ZINC COATED COUPLINGS, LOCKNUTS AND BUSHINGS AND SHALL BEAR THE U.L. LABEL. RIGID CONDUIT SHALL NOT BE INSTALLED UNDERGROUND.
- 2. USE RIGID CONDUIT ONLY FOR EXPOSED EXTERIOR CONDUIT RUNS, WHEREVER SUBJECT TO PHYSICAL DAMAGE, OR WHERE SPECIFICALLY CALLED FOR ON THE DRAWINGS OR REQUIRED BY A SERVING UTILITY.
- 3. INTERMEDIATE METALLIC CONDUIT (I.M.C.) MAY BE USED IN LIEU OF RIGID STEEL CONDUIT
- 4. USE LIQUID TIGHT FLEXIBLE CONDUIT IN LIEU OF FLEXIBLE CONDUIT FOR WET, DAMP, OR OUTDOOR AREAS OR WHERE WEATHERPROOF FLEXIBLE CONDUIT IS CALLED FOR ON THE DRAWINGS OR BY CODE.
- **B. PLASTIC CONDUIT:**
- 1. PLASTIC CONDUIT SHALL BE RIGID POLYVINYL CHLORIDE (PVC) UNDERWRITER'S APPROVAL, SCHEDULE 40. CONNECTIONS AND FITTINGS SHALL BE "OUTSIDE" TYPE ASSEMBLED IN ACCORDANCE WITH THE RECOMMENDED METHODS OF THE MANUFACTURER.
- 2. UNDERGROUND PVC CONDUIT SHALL BE BURIED A MINIMUM OF 24 INCHES BELOW GRADE. WHERE MORE THAN TWO CONDUITS ARE INSTALLED ADJACENTLY UNDERGROUND, USE FACTORY MADE CONDUIT SPACERS.
- 3. PVC CONDUIT SHALL BE USED FOR UNDERGROUND CONDUIT RUNS IN LIEU OF WRAPPED RIGID CONDUIT EXCEPT AS NOTED OTHERWISE ON THE DRAWINGS OR REQUIRED BY THE SERVING UTILITY.
- 4. PROVIDE A CODE SIZE GROUND CONDUCTOR IN EACH CONDUIT.
- 5. ONLY BRAIDED POLYETHYLENE OR SIMILAR PULL ROPE SHALL BE USED.

- C. INSTALLATION OF CONDUIT:
- 1. UNDERGROUND CONDUIT.
- a. KEEP INTERIOR OF CONDUIT CLEAN AND CLEAR. CLEAN UNDERGROUND CONDUITS BY PULLING A MANDREL THROUGH CONDUIT RUN FOLLOWED WITH A SWAB BEFORE PULLING WIRE.
- b. REROUTE CONDUIT FROM LOCATIONS SHOWN ON THE DRAWINGS WHERE IT IS NECESSARY TO CLEAR OBSTRUCTIONS.
- c. PROVIDE JUNCTION OR PULL BOXES WHERE REQUIRED FOR PULLING CONDUCTORS DUE TO EXCESSIVE NUMBER OF BENDS OR LENGTH OF CONDUIT RUNS.
- d. BURY UNDERGROUND CONDUIT, EXCEPT THOSE UNDER BUILDINGS, A MINIMUM OF 24 INCHES BELOW FINISHED GRADE. CONDUITS UNDER ROADWAYS SHALL BE A MINIMUM OF 36 INCHES BELOW FINISHED GRADE. CONDUIT RUNS 3/4 INCH AND SMALLER IN SLABS SHALL BE LOCATED ABOVE VAPOR BARRIERS. BURY CONDUIT RUNS LARGER THAN 3/4 INCH TO A MINIMUM DEPTH OF 12 INCHES BELOW FLOOR SLABS.
- e. STANDARD FACTORY ELLS SHALL NOT BE USED IN UNDERGROUND SERVICE CONDUITS OR OTHER LONG UNDERGROUND RUNS. FIELD BENDS SHALL NOT BE FLATTENED OR KINKED AND SHALL NOT MATERIALLY REDUCE THE INTERNAL DIAMETER OF THE CONDUIT. BENDS IN LONG UNDERGROUND RUNS SHALL BE MADE IN LONG SWEEPING BENDS. DO NOT BEND AT COUPLINGS. APPROVED CONDUIT BENDING METHODS SHALL BE USED.
- f. ALL CONDUIT RUNS SHALL HAVE A CODE SIZE INSULATED GROUNDING CONDUCTOR.
- q. PROPERLY SEPARATE TWO OR MORE CONDUITS INSTALLED UNDERGROUND IN A COMMON CONCRETE ENVELOPE WITH APPROVED FACTORY MADE CONDUIT SPACERS.
- h. LOCATE CONDUIT STUB_OUTS DIMENSIONALLY FROM BUILDING OR CURB LINES ON RECORD DRAWINGS.
- i. PULL WIRES SHALL BE INSTALLED IN EMPTY CONDUITS INCLUDING TELEPHONE CONDUITS AND STUB OUTS, NO. 12 AWG, TYPE "THWN" INSULATED COPPER WIRE OR 1/8-INCH POLYETHYLENE ROPE SHALL BE USED.
- 2. EXPOSED/CONCEALED CONDUIT:
- a. PROVIDE SECURE MOUNTING FACILITIES FOR CONDUITS. WIRE OR PLUMBERS TAPE SHALL NOT BE USED FOR HANGING CONDUIT. STRAP SHALL BE FACTORY MADE OF THE ONE HOLE MALLEABLE IRON OR TWO HOLE GALVANIZED CLAMP TYPE.
- b. PROVIDE EXPANSION COUPLINGS WHEREVER CONDUITS CROSS EXPANSION JOINTS.
- c. RUN CONDUIT AT RIGHT ANGLES OR PARALLEL TO STRUCTURAL MEMBERS, WALLS, FLOORS AND CEILINGS. WHERE SEVERAL CONDUITS ARE RUN TOGETHER OR SUSPENDED, THEY SHALL BE HUNG ON UNISTRUT TRAPEZES WITH MINIMUM 3/8-INCH ROD HANGERS.
- d. CUT ENDS OF CONDUIT SQUARE AND REAM TO REMOVE BURRS OR SHARP EDGES. TERMINATE CONDUITS PROPERLY WITH BUSHINGS, LOCKNUTS, ETC. TERMINATE ONE (1) INCH AND LARGER CONDUITS WITH INSULATED BUSHINGS.
- e. RENDER CONDUITS PROJECTING THROUGH THE ROOFING WATERTIGHT BY PROPER FLASHINGS. SECURELY FASTEN A SHEET METAL CAP AND TIGHTEN BANK OR STORM COLLAR TO THE CONDUITS. EXTEND FLASHING A MINIMUM OF SIX (6) INCHES IN ALL DIRECTIONS. COORDINATE AND INSTALL ROOF FLASHING FOR CONDUITS TO THE SATISFACTION OF THE PROJECT MANAGER.
- f. ALL CONDUIT RUNS SHALL HAVE A CODE SIZE INSULATED GROUNDING CONDUCTOR.
- g. PULL WIRES SHALL BE INSTALLED IN EMPTY CONDUITS INCLUDING TELEPHONE CONDUITS AND STUB OUTS, NO. 12 AWG, TYPE "THWN" INSULATED COPPER WIRE OR 1/8-INCH POLYETHYLENE ROPE SHALL BE USED.
- h. FLEXIBLE CONDUIT CONNECTIONS SHALL COMPLY WITH NEC SECTION 350-22.

2.2 WIRE AND CABLE

A. 600 VOLT CONDUCTORS:

- 1. CONDUCTORS SHALL BE COPPER AND DELIVERED TO THE SITE IN THEIR ORIGINAL, UNBROKEN PACKAGES PLAINLY MARKED OR TAGGED WITH U.L. LABEL, SIZE, KIND, INSULATION, NAME OF MANUFACTURER AND TRADE NAME OF THE WIRE.
- 2. TYPE "THWN", 600 VOLT INSULATION FOR DAMP OR WET LOCATIONS OR ON BOILERS AND FURNACES AND THEIR CONTROLS.
- 3. TYPE "THHN" 600 VOLT INSULATION SHALL BE USED IN OTHER LOCATIONS UNLESS NOTED.
- 4. MINIMUM SIZE CONDUCTOR SHALL BE #12.
- 5. CONDUCTORS SHALL BE STRANDED.
- 6. GROUND CONDUCTORS SHALL BE BARE COPPER OR HAVE GREEN INSULATION.

B. INSTALLATION:

- 1. CONDUCTORS SHALL BE CONTINUOUS BETWEEN OUTLETS OR JUNCTION BOXES AND NO SPLICES SHALL BE MADE EXCEPT IN OUTLET BOXES, PULL BOXES, PANELBOARD GUTTERS OR HANDHOLES.
- 2. JOINTS, SPLICES AND TAPS NO. L0 OR SMALLER (INCLUDING FIXTURE PIGTAILS) SHALL BE CONNECTED WITH "FLOATING SPRING" TYPE CONNECTORS. NO. 8 AND LARGER SHALL BE CONNECTED WITH SOLDERLESS CONNECTORS OF 100% ELECTROLYTIC COPPER. SPLIT_BOLT CONNECTORS ARE NOT ACCEPTABLE.
- 3. TIGHTEN PRESSURE TYPE LUGS ON PANELS AND EQUIPMENT, AND THEN RETIGHTEN 24 HOURS OR MORE LATER AFTER ENERGIZING. PROVIDE WRITTEN REPORT OF TORQUE VALUES ON LUGS.
- 4. OIL OR GREASE SHALL NOT BE USED WHEN PULLING CONDUCTORS. USE U.L. APPROVED CABLE LUBRICATION ONLY.
- 5. LACE OR TRAIN CONDUCTORS NEATLY IN PANELS, CABINETS AND EQUIPMENT. USE PLASTIC WIRE TIES TO ROUTE CONDUCTORS AT EDGE OF ENCLOSURE AWAY FROM OVERCURRENT DEVICES.
- 6. BRANCH CIRCUITS SHALL BE COLOR CODED IN COMPLIANCE WITH SECTION 210_5 OF THE CALIFORNIA ELECTRICAL CODE. COLORED TAPE IS NOT ACCEPTABLE.
- 7. ALL WIRING, BOTH LINE AND LOW VOLTAGE, SHALL BE INSTALLED IN CONDUIT UNLESS OTHERWISE NOTED.

END OF SECTION 26 00 00

| | I. IHEC |
|--|---|
| NCTIONAL OPERATION | OF EX |
| RM CONDITION IS DETECTED AND REPORTED BY ONE OF THE IG DEVICES, THE FOLLOWING FUNCTIONS SHALL IMMEDIATELY | 2. THE C TROU AMPS |
| ALARM LED ON THE SYSTEM DISPLAY SHALL FLASH. | 3. 11 SHA Z) PR(|
| O ELECTRIC SIGNAL IN THE CONTROL PANEL SHALL SOUND. D DISPLAY SHALL INDICATE ALL INFORMATION ASSOCIATED WITH THE CONDITION, INCLUDING THE TYPE OF ALARM POINT AND ITS LOCATION ROTECTED PREMISES | 4. THE N SYNC APPLI 5. THE S |
| OTECTED PREMISES. HISTORY STORAGE EQUIPMENT SHALL LOG THE INFORMATION EACH NEW FIRE ALARM CONTROL PANEL CONDITION, ALONG WITH TE OF OCCURRENCE. | AND A DISPL ALPH/ PROG |
| OUTPUT PROGRAMS ASSIGNED VIA CONTROL-BY-EVENT INTERLOCK IG TO BE ACTIVATED BY THE PARTICULAR POINT IN ALARM SHALL BE ND THE ASSOCIATED SYSTEM OUTPUTS (NOTIFICATION APPLIANCES YS) SHALL BE ACTIVATED. | 6. THE S THE F BASEI TO FA |
| | 7. THE S OUTP (SUCH |
| IATERIAL, GENERAL | DIODE |
| IAND COMPONENTS SHALL BE NEW, HOCHIKI CURRENT MODELS, THE IANCES, EQUIPMENT AND DEVICES SHALL BE TESTED AND LISTED BY ECOGNIZED APPROVALS AGENCY FOR USE AS PART OF A NALING SYSTEM, MEETING THE NATIONAL FIRE ALARM CODE. | THE AND " PROG SOFT |
| AND COMPONENTS SHALL BE INSTALLED IN STRICT COMPLIANCE RECOMMENDATIONS. CONSULT THE MANUFACTURER'S ANUALS FOR ALL WIRING DIAGRAMS, SCHEMATICS, PHYSICAL S, ETC., BEFORE BEGINNING SYSTEM INSTALLATION. | 8. THE F a. DF CC |
| SHALL BE ATTACHED TO WALLS AND CEILING/FLOOR ASSEMBLIES ELD FIRMLY IN PLACE (E.G., DETECTORS SHALL NOT BE SUPPORTED ENDED CEILINGS). FASTENERS AND SUPPORTS SHALL BE ADEQUATE E REQUIRED LOAD. | TF b. DE CF c. MA |
| E ALARM CONTROL PANEL BE A HOCHIKI LATITUDE AND SHALL CONTAIN A MICROPROCESSOR PROCESSING UNIT (CPU) AND POWER SUPPLY IN AN ECONOMICAL INGLE BOARD DESIGN. THE CPU SHALL COMMUNICATE WITH AND OLLOWING TYPES OF EQUIPMENT USED TO MAKE UP THE SYSTEM: ORESSABLE SMOKE AND THERMAL (HEAT) DETECTORS, ODULES, PRINTER, ANNUNCIATORS, AND OTHER SYSTEM VICES. | UF AC d. NII LE DE TH DE PE OF |
| | MA e. TH |
| | f. AL MA TII |
| LARMS AND/OR TROUBLES SHALL SILENCE THE LOCAL PANEL PIEZO SIGNAL AND CHANGE THE ALARM AND TROUBLE LEDS FROM MODE TO STEADY-ON MODE. IF MULTIPLE ALARM OR TROUBLE NS EXIST, DEPRESSION OF THIS SWITCH SHALL ADVANCE THE LCD O THE NEXT ALARM OR TROUBLE CONDITION. ON OF THE ACKNOWLEDGE SWITCH SHALL ALSO SILENCE ALL INNUNCIATOR PIEZO SOUNDERS. | g. PA h. RA NF CI i. PE |
| CE SWITCH: ACTIVATION OF THE ALARM SILENCE SWITCH SHALL ROGRAMMED ALARM NOTIFICATION APPLIANCES AND RELAYS TO HE NORMAL CONDITION AFTER AN ALARM CONDITION. THE F NOTIFICATION CIRCUITS AND RELAYS THAT ARE SILENCEABLE BY SHALL BE FULLY FIELD PROGRAMMABLE WITHIN THE CONFINES OF BLE STANDARDS. THE FACP SOFTWARE SHALL INCLUDE SILENCE UTO-SILENCE TIMERS. | j. SE EA PF k. CF AL Of I. W |
| ATE (DRILL) SWITCH: THE ALARM ACTIVATE SWITCH SHALL ACTIVATE TION APPLIANCE CIRCUITS. THE DRILL FUNCTION SHALL LATCH UNTIL SILENCED OR RESET. | m. CC n. DA o. DE |
| ET SWITCH: ACTIVATION OF THE SYSTEM RESET SWITCH SHALL ECTRONICALLY-LATCHED INITIATING DEVICES, APPLIANCES OR DNES, AS WELL AS ALL ASSOCIATED OUTPUT DEVICES AND CIRCUITS, O THEIR NORMAL CONDITION. | F. SIGNALIN 1. EACH SLC IN INTEI |
| HE LAMP TEST SWITCH SHALL ACTIVATE ALL LOCAL SYSTEM LEDS, EGMENT OF THE LIQUID CRYSTAL DISPLAY AND DISPLAY THE PANEL EVISION FOR SERVICE PERSONAL. | INTEL DEVIC DEVIC CAPA |
| | 2. CPU S TO BE |
| | TROU AUTO ADJUS |
| | RM CONDITION IS DETECTED AND REPORTED BY ONE OF THE G DEVICES, THE FOLLOWING FUNCTIONS SHALL IMMEDIATELY LARM LED ON THE SYSTEM DISPLAY SHALL FLASH. D ELECTRIC SIGNAL IN THE CONTROL PANEL SHALL SOUND. D DISPLAY SHALL INDICATE ALL INFORMATION ASSOCIATED WITH THE MODITION, INCUDING THE TYPE OF ALARM POINT AND ITS LOCATION COTECTED PREMISES. HISTORY STORAGE EQUIPMENT SHALL LOG THE INFORMATION ACCH NEW FIRE ALARM CONTROL PANEL CONDITION. ALONG WITH E OF OCCURRENCE. WITPUT PROGRAMS ASSIGNED VIA CONTROL-BY-EVENT INTERLOCK G TO BE ACTIVATED BY THE PARTICULAR POINT IN ALARM SHALL BE INTERLY STORAGE EQUIPMENT SHALL BE INSTRUCTION APPLIANCES (S) SHALL BE ACTIVATED. ATERIAL, GENERAL IND COMPONENTS SHALL BE NEW, HOCHIKI CURRENT MODELS, THE IND COMPONENTS SHALL BE INSTALLED IN STRUCT COMPLIANCE RECOMPONENTS SHALL BE INSTALLED IN STRUCT MERS NUALS FOR ALL WIRING DIAGRAMS, SCHEMATICS, PHYSICAL S, ETC., BEFORE BEGINNING SYSTEM INSTALLATION. HALL BE ATTACHED TO WALLS AND CELLING/FOR ASSEMBLIES D FINDLY IN PLACE (E.G., DETECTORS SHALL NOT BE SUPPORTED SNDED CELLINGS). FASTENERS AND SUPPORTS SHALL BE ADEQUATE REQUIRED LOAD. ALARM CONTROL PANEL BE A HOCHIKI LATITUDE AND SHALL CONTAIN A MICROPROCESSOR MICLE BOORD DESIGN. THE CPU SHALL COMMUNICATE WITH AND LOWING TYPES OF EQUIPMENT USED TO MAKE UP THE SYSTEM RECOMBINED OF SIME HEAL ARKN AND THOUBLE LEDS FROM MODE TO STRUCT PANEL ACKNOWLEDGE SWITCH IN RESPONSE ARMS ANDOLONG AND HEAR AND TROUBLE CONDITION. NO FTHE CONTROL PANEL ACKNOWLEDGE SWITCH IN RESPONSE SIGNAL AND CHANGE THE ALARM AND TROUBLE LEDS FROM MODE TO STRUCT. THE AL |

I CAPACITY AND GENERAL OPERATION

- E CONTROL PANEL OR EACH NETWORK NODE SHALL PROVIDE, OR BE CAPABLE EXPANSION TO 636 INTELLIGENT/ADDRESSABLE DEVICES.
- E CONTROL PANEL OR EACH NETWORK NODE SHALL INCLUDE FORM-C ALARM, OUBLE, SUPERVISORY, AND SECURITY RELAYS RATED AT A MINIMUM OF 2.0 PS @ 30 VDC.
- SHALL ALSO INCLUDE FOUR CLASS B (NFPA STYLE Y) OR CLASS A (NFPA STYLE PROGRAMMABLE NOTIFICATION APPLIANCE CIRCUITS. E NOTIFICATION APPLIANCE CIRCUITS SHALL BE PROGRAMMABLE TO NCRONIZE WITH SYSTEM SENSOR, GENTEX AND WHEELOCK NOTIFICATION
- PLIANCES. E SYSTEM SHALL INCLUDE A FULL FEATURED OPERATOR INTERFACE CONTROL D ANNUNCIATION PANEL THAT SHALL INCLUDE A BACKLIT LIQUID CRYSTAL SPLAY (LCD), INDIVIDUAL COLOR CODED SYSTEM STATUS LEDS, AND AN PHANUMERIC KEYPAD WITH EASY TOUCH RUBBER KEYS FOR THE FIELD
- OGRAMMING AND CONTROL OF THE FIRE ALARM SYSTEM. E SYSTEM SHALL BE PROGRAMMABLE, CONFIGURABLE, AND EXPANDABLE IN E FIELD WITHOUT THE NEED FOR SPECIAL TOOLS, PROM PROGRAMMERS OR PC SED PROGRAMMERS. IT SHALL NOT REQUIRE REPLACEMENT OF MEMORY ICS FACILITATE PROGRAMMING CHANGES.
- E SYSTEM SHALL ALLOW THE PROGRAMMING OF ANY INPUT TO ACTIVATE ANY TPUT OR GROUP OF OUTPUTS. SYSTEMS THAT HAVE LIMITED PROGRAMMING JCH AS GENERAL ALARM), HAVE COMPLICATED PROGRAMMING (SUCH AS A DDE MATRIX), OR REQUIRE A LAPTOP PERSONAL COMPUTER ARE NOT INSIDERED SUITABLE SUBSTITUTES.
- HE FACP SHALL SUPPORT UP TO 20 LOGIC EQUATIONS, INCLUDING "AND," "OR," ID "NOT," OR TIME DELAY EQUATIONS TO BE USED FOR ADVANCED OGRAMMING. LOGIC EQUATIONS SHALL REQUIRE THE USE OF A PC WITH A IFTWARE UTILITY DESIGNED FOR PROGRAMMING.
- E FACP OR EACH NETWORK NODE SHALL PROVIDE THE FOLLOWING FEATURES:
- DRIFT COMPENSATION TO EXTEND DETECTOR ACCURACY OVER LIFE. DRIFT COMPENSATION SHALL ALSO INCLUDE A SMOOTHING FEATURE, ALLOWING TRANSIENT NOISE SIGNALS TO BE FILTERED OUT.
- DETECTOR SENSITIVITY TEST, MEETING REQUIREMENTS OF NFPA 1-2018, CHAPTER 7.
- MAINTENANCE ALERT, WITH TWO LEVELS (MAINTENANCE ALERT/MAINTENANCE URGENT), TO WARN OF EXCESSIVE SMOKE DETECTOR DIRT OR DUST ACCUMULATION.
- NINE SENSITIVITY LEVELS FOR ALARM, SELECTED BY DETECTOR. THE ALARM LEVEL RANGE SHALL BE .5 TO 2.35 PERCENT PER FOOT FOR PHOTOELECTRIC DETECTORS AND 0.5 TO 2.5 PERCENT PER FOOT FOR IONIZATION DETECTORS. THE SYSTEM SHALL ALSO SUPPORT SENSITIVE ADVANCED DETECTION LASER DETECTORS WITH AN ALARM LEVEL RANGE OF .03 PERCENT PER FOOT TO 1.0 PERCENT PER FOOT. THE SYSTEM SHALL ALSO INCLUDE UP TO NINE LEVELS OF PREALARM, SELECTED BY DETECTOR, TO INDICATE IMPENDING ALARMS TO MAINTENANCE PERSONNEL.
- THE ABILITY TO DISPLAY OR PRINT SYSTEM REPORTS.
- ALARM VERIFICATION, WITH COUNTERS AND A TROUBLE INDICATION TO ALERT MAINTENANCE PERSONNEL WHEN A DETECTOR ENTERS VERIFICATION 20 TIMES.
- PAS PRESIGNAL, MEETING NFPA 1-2018 REQUIREMENTS.
- RAPID MANUAL STATION REPORTING (UNDER 3 SECONDS) AND SHALL MEET NFPA 72 CHAPTER 1 REQUIREMENTS FOR ACTIVATION OF NOTIFICATION CIRCUITS WITHIN 10 SECONDS OF INITIATING DEVICE ACTIVATION.
- PERIODIC DETECTOR TEST, CONDUCTED AUTOMATICALLY BY THE SOFTWARE. SELF OPTIMIZING PRE-ALARM FOR ADVANCED FIRE WARNING, WHICH ALLOWS EACH DETECTOR TO LEARN ITS PARTICULAR ENVIRONMENT AND SET ITS PREALARM LEVEL TO JUST ABOVE NORMAL PEAKS.
- CROSS ZONING WITH THE CAPABILITY OF COUNTING: TWO DETECTORS IN ALARM, TWO SOFTWARE ZONES IN ALARM, OR ONE SMOKE DETECTOR AND ONE THERMAL DETECTOR.
- WALK TEST, WITH A CHECK FOR TWO DETECTORS SET TO SAME ADDRESS. CONTROL-BY-TIME FOR NON-FIRE OPERATIONS, WITH HOLIDAY SCHEDULES. DAY/NIGHT AUTOMATIC ADJUSTMENT OF DETECTOR SENSITIVITY. DEVICE BLINK CONTROL FOR SLEEPING AREAS.

ING LINE CIRCUITS (SLC):

- CH FACP OR FACP NETWORK NODE SHALL SUPPORT UP TO TWO SLCS. EACH C INTERFACE SHALL PROVIDE POWER TO AND COMMUNICATE WITH UP TO 159 ELLIGENT DETECTORS (IONIZATION, PHOTOELECTRIC OR THERMAL) AND 159 ELLIGENT MODULES (MONITOR OR CONTROL) FOR A LOOP CAPACITY OF 318 /ICES. THE ADDITION OF THE OPTIONAL SECOND LOOP SHALL DOUBLE THE /ICE CAPACITY, SUPPORTING A TOTAL OF 636 DEVICES. EACH SLC SHALL BE PABLE OF NFPA 1-2018 STYLE 4, STYLE 6, OR STYLE 7 (CLASS A OR B) WIRING.
- U SHALL RECEIVE ANALOG INFORMATION FROM ALL INTELLIGENT DETECTORS BE PROCESSED TO DETERMINE WHETHER NORMAL, ALARM, PREALARM, OR OUBLE CONDITIONS EXIST FOR EACH DETECTOR. THE SOFTWARE SHALL TOMATICALLY MAINTAIN THE DETECTOR'S DESIRED SENSITIVITY LEVEL BY JUSTING FOR THE EFFECTS OF ENVIRONMENTAL FACTORS, INCLUDING THE CUMULATION OF DUST IN EACH DETECTOR. THE ANALOG INFORMATION SHALL SO BE USED FOR AUTOMATIC DETECTOR TESTING AND FOR THE AUTOMATIC TERMINATION OF DETECTOR MAINTENANCE REQUIREMENTS.

- I. POWER SUPPLY:
- 1. A HIGH TECH OFF-LINE SWITCHING POWER SUPPLY SHALL BE AVAILABLE FO FIRE ALARM CONTROL PANEL OR NETWORK NODE AND PROVIDE 6.0 AMPS O AVAILABLE POWER FOR THE CONTROL PANEL AND PERIPHERAL DEVICES.
- PROVISIONS WILL BE MADE TO ALLOW THE AUDIO-VISUAL POWER TO BE INCREASED AS REQUIRED BY ADDING MODULAR EXPANSION AUDIO-VISUAL POWER SUPPLIES.
- 3. POSITIVE-TEMPERATURE-COEFFICIENT (PTC) THERMISTORS, CIRCUIT BREAM OR OTHER OVER-CURRENT PROTECTION SHALL BE PROVIDED ON ALL POWE OUTPUTS. THE POWER SUPPLY SHALL PROVIDE AN INTEGRAL BATTERY CHA FOR USE WITH BATTERIES UP TO 55 AH OR MAY BE USED WITH AN EXTERNA BATTERY AND CHARGER SYSTEM. BATTERY ARRANGEMENT MAY BE CONFIG IN THE FIELD.
- 4. THE POWER SUPPLY SHALL CONTINUOUSLY MONITOR ALL FIELD WIRES FOR EARTH GROUND CONDITIONS, AND SHALL HAVE THE FOLLOWING LED INDICA

GROUND FAULT LED AC POWER FAIL LED NAC ON LED (4)

- 5. THE MAIN POWER SUPPLY SHALL OPERATE ON 120 VAC, 60 HZ, AND SHALL PROVIDE ALL NECESSARY POWER FOR THE FACP.
- 6. THE MAIN POWER SUPPLY SHALL PROVIDE A BATTERY CHARGER USING DUAL-RATE CHARGING TECHNIQUES FOR FAST BATTERY RECHARGE AND BE CAPABLE OF CHARGING BATTERIES UP TO 200 AH.
- 7. ALL CIRCUITS SHALL BE POWER-LIMITED, PER UL864 REQUIREMENTS.

2.3 SYSTEM COMPONENTS

- A. STROBE LIGHTS SHALL MEET THE REQUIREMENTS OF THE ADA, UL STANDARD BE FULLY SYNCHRONIZED, AND SHALL MEET THE FOLLOWING CRITERIA:
- 1. THE MAXIMUM PULSE DURATION SHALL BE 2/10 OF ONE SECOND
- 2. STROBE INTENSITY SHALL MEET THE REQUIREMENTS OF UL 1971.
- 3. THE FLASH RATE SHALL MEET THE REQUIREMENTS OF UL 1971.

2.4 SYSTEM COMPONENTS - ADDRESSABLE DEVICES

- A. ADDRESSABLE DEVICES GENERAL:
- ADDRESSABLE DEVICES SHALL USE SIMPLE TO INSTALL AND MAINTAIN DEC DECIMAL ADDRESS SWITCHES. DEVICES SHALL BE CAPABLE OF BEING SET ADDRESS IN A RANGE OF 001 TO 159.
- 2. ADDRESSABLE DEVICES, WHICH USE A BINARY-CODED ADDRESS SETTING METHOD, SUCH AS A DIP-SWITCH, ARE NOT AN ALLOWABLE SUBSTITUTE.
- DETECTORS SHALL BE INTELLIGENT (ANALOG) AND ADDRESSABLE, AND SHA CONNECT WITH TWO WIRES TO THE FIRE ALARM CONTROL PANEL SIGNALIN CIRCUITS.
- 4. ADDRESSABLE SMOKE AND THERMAL DETECTORS SHALL PROVIDE DUAL ALARM AND POWER/POLLING LEDS. BOTH LEDS SHALL FLASH GREEN UNDER NORMAL CONDITIONS, INDICATING THAT THE DETECTOR IS OPERATIONAL AND IN REGULAR COMMUNICATION WITH THE CONTROL PANEL, AND BOTH LEDS SHALL BE PLACED INTO STEADY RED ILLUMINATION BY THE CONTROL PANEL, INDICATING THAT AN ALARM CONDITION HAS BEEN DETECTED. IF REQUIRED, THE LED FLASH SHALL HAVE THE ABILITY TO BE REMOVED FROM THE SYSTEM PROGRAM. AN OUTPUT CONNECTION SHALL ALSO BE PROVIDED IN THE BASE TO CONNECT AN EXTERNAL REMOTE ALARM LED.
- 5. THE FIRE ALARM CONTROL PANEL SHALL PERMIT DETECTOR SENSITIVITY ADJUSTMENT THROUGH FIELD PROGRAMMING OF THE SYSTEM. THE PANEL ON A TIME-OF-DAY BASIS SHALL AUTOMATICALLY ADJUST SENSITIVITY.
- 6. USING SOFTWARE IN THE FACP, DETECTORS SHALL AUTOMATICALLY COMPENSATE FOR DUST ACCUMULATION AND OTHER SLOW ENVIRONMENTAL CHANGES THAT MAY AFFECT THEIR PERFORMANCE. THE DETECTORS SHALL BE LISTED BY UL AS MEETING THE CALIBRATED SENSITIVITY TEST REQUIREMENTS OF NFPA 1-2018, CHAPTER 7.
- 7. THE DETECTORS SHALL BE CEILING-MOUNT AND SHALL INCLUDE A SEPARATE TWIST-LOCK BASE WITH TAMPER PROOF FEATURE. BASES SHALL INCLUDE A SOUNDER BASE WITH A BUILT-IN (LOCAL) SOUNDER RATED AT 85 DBA MINIMUM, A RELAY BASE AND AN ISOLATOR BASE DESIGNED FOR STYLE 7 APPLICATIONS.
- 8. THE DETECTORS SHALL PROVIDE A TEST MEANS WHEREBY THEY WILL SIMULATE AN ALARM CONDITION AND REPORT THAT CONDITION TO THE CONTROL PANEL. SUCH A TEST MAY BE INITIATED AT THE DETECTOR ITSELF (BY ACTIVATING A MAGNETIC SWITCH) OR INITIATED REMOTELY ON COMMAND FROM THE CONTROL PANEL.
- 9. DETECTORS SHALL ALSO STORE AN INTERNAL IDENTIFYING TYPE CODE THAT THE CONTROL PANEL SHALL USE TO IDENTIFY THE TYPE OF DEVICE (ION, PHOTO, THERMAL).
- 10. DETECTORS WILL OPERATE IN AN ANALOG FASHION, WHERE THE DETECTOR SIMPLY MEASURES ITS DESIGNED ENVIRONMENT VARIABLE AND TRANSMITS AN ANALOG VALUE TO THE FACP BASED ON REAL-TIME MEASURED VALUES. THE FACP SOFTWARE, NOT THE DETECTOR, SHALL MAKE THE ALARM/NORMAL DECISION, THEREBY ALLOWING THE SENSITIVITY OF EACH DETECTOR TO BE SET IN THE FACP PROGRAM AND ALLOWING THE SYSTEM OPERATOR TO VIEW THE CURRENT ANALOG VALUE OF EACH DETECTOR.
- 11. ADDRESSABLE DEVICES SHALL STORE AN INTERNAL IDENTIFYING CODE THAT THE CONTROL PANEL SHALL USE TO IDENTIFY THE TYPE OF DEVICE.
- 12. A MAGNETIC TEST SWITCH SHALL BE PROVIDED TO TEST DETECTORS AND MODULES. DETECTORS SHALL REPORT AN INDICATION OF AN ANALOG VALUE REACHING 100% OF THE ALARM THRESHOLD.
- ADDRESSABLE MODULES SHALL MOUNT IN A 4-INCH SQUARE (101.6 MM SQUARE), 2-1/8 INCH (54 MM) DEEP ELECTRICAL BOX. AN OPTIONAL SURFACE MOUNT LEXAN ENCLOSURE SHALL BE AVAILABLE.

| | В. | ADDRESSABLE MANUAL FIRE ALARM BOX (MANUAL STATION): |
|----------------------------|-------|--|
| OR THE OF | | 1. ADDRESSABLE MANUAL FIRE ALARM BOXES SHALL, ON COMMAND FROM THE CONTROL PANEL, SEND DATA TO THE PANEL REPRESENTING THE STATE OF THE MANUAL SWITCH AND THE ADDRESSABLE COMMUNICATION MODULE STATUS. THEY SHALL USE A KEY OPERATED TEST-RESET LOCK, AND SHALL BE DESIGNED SO THAT AFTER ACTUAL EMERGENCY OPERATION, THEY CANNOT BE RESTORED TO NORMAL USE EXCEPT BY THE USE OF A KEY. |
| KERS, | | 2. ALL OPERATED STATIONS SHALL HAVE A POSITIVE, VISUAL INDICATION OF OPERATION AND UTILIZE A KEY TYPE RESET. |
| ER ARGER AL GURED | | 3. MANUAL FIRE ALARM BOXES SHALL BE CONSTRUCTED OF LEXAN WITH CLEARLY VISIBLE OPERATING INSTRUCTIONS PROVIDED ON THE COVER. THE WORD FIRE SHALL APPEAR ON THE FRONT OF THE STATIONS IN RAISED LETTERS, 1.75 INCHES (44 MM) OR LARGER. |
| R ATORS: | C. | INTELLIGENT PHOTOELECTRIC SMOKE DETECTOR: THE DETECTORS SHALL USE THE PHOTOELECTRIC (LIGHT-SCATTERING) PRINCIPAL TO MEASURE SMOKE DENSITY AND SHALL, ON COMMAND FROM THE CONTROL PANEL, SEND DATA TO THE PANEL REPRESENTING THE ANALOG LEVEL OF SMOKE DENSITY. |
| | D. | INTELLIGENT LASER PHOTO SMOKE DETECTOR: |
| E | | 1. THE INTELLIGENT LASER PHOTO SMOKE DETECTOR SHALL BE A SPOT TYPE DETECTOR THAT INCORPORATES AN EXTREMELY BRIGHT LASER DIODE AND AN INTEGRAL LENS THAT FOCUSES THE LIGHT BEAM TO A VERY SMALL VOLUME NEAR A RECEIVING PHOTO SENSOR. THE SCATTERING OF SMOKE PARTICLES SHALL ACTIVATE THE PHOTO SENSOR. |
| | | 2. THE LASER DETECTOR SHALL HAVE CONDUCTIVE PLASTIC SO THAT DUST ACCUMULATION IS REDUCED SIGNIFICANTLY. |
| | | 3. THE INTELLIGENT LASER PHOTO DETECTOR SHALL HAVE NINE SENSITIVITY LEVELS AND BE SENSITIVE TO A MINIMUM OBSCURATION OF 0.03 PERCENT PER FOOT. |
| 1971, | | 4. THE LASER DETECTOR SHALL NOT REQUIRE EXPENSIVE CONDUIT, SPECIAL FITTINGS OR PVC PIPE. |
| | | 5. THE INTELLIGENT LASER PHOTO DETECTOR SHALL SUPPORT STANDARD, RELAY, ISOLATOR AND SOUNDER DETECTOR BASES. |
| | | THE LASER PHOTO DETECTOR SHALL NOT REQUIRE OTHER CLEANING REQUIREMENTS THAN THOSE LISTED IN NFPA 72. REPLACEMENT, REFURBISHMENT OR SPECIALIZED CLEANING OF THE DETECTOR HEAD SHALL NOT BE REQUIRED. |
| | | 7. THE LASER PHOTO DETECTOR SHALL INCLUDE TWO BICOLOR LEDS THAT FLASH GREEN IN NORMAL OPERATION AND TURN ON STEADY RED IN ALARM. |
| ADE, TO AN | E. | INTELLIGENT IONIZATION SMOKE DETECTOR: THE DETECTORS SHALL USE THE DUAL-CHAMBER IONIZATION PRINCIPAL TO MEASURE PRODUCTS OF COMBUSTION AND SHALL, ON COMMAND FROM THE CONTROL PANEL, SEND DATA TO THE PANEL REPRESENTING THE ANALOG LEVEL OF PRODUCTS OF COMBUSTION. |
| ALL NG LINE LARM | F. | INTELLIGENT THERMAL DETECTORS: THERMAL DETECTORS SHALL BE INTELLIGENT ADDRESSABLE DEVICES RATED AT 135 DEGREES FAHRENHEIT (58 DEGREES CELSIUS) AND HAVE A RATE-OF-RISE ELEMENT RATED AT 15 DEGREES F (9.4 DEGREES C) PER MINUTE. IT SHALL CONNECT VIA TWO WIRES TO THE FIRE ALARM CONTROL PANEL SIGNALING LINE CIRCUIT. |
| AL GULAR | 2.5 E | BATTERIES |
| T AN ALL PUT | A. | THE BATTERY SHALL HAVE SUFFICIENT CAPACITY TO POWER THE FIRE ALARM SYSTEM FOR NOT LESS THAN TWENTY-FOUR HOURS PLUS 5 MINUTES OF ALARM UPON A NORMAL AC POWER FAILURE. |

- B. THE BATTERIES ARE TO BE COMPLETELY MAINTENANCE FREE. NO LIQUIDS ARE REQUIRED. FLUID LEVEL CHECKS FOR REFILLING, SPILLS, AND LEAKAGE SHALL NOT BE REQUIRED.
- C. IF NECESSARY TO MEET STANDBY REQUIREMENTS, EXTERNAL BATTERY AND CHARGER SYSTEMS MAY BE USED.

2.6 SPEAKERS

GENERAL: WHEELOCK ADVAN

WHEELOCK ADVANCE OUTDOOR SPEAKERS AND SPEAKER STROBES SHALL MOUNT TO A WEATHERPROOF BACK BOX. A UNIVERSAL MOUNTING PLATE SHALL BE USED FOR MOUNTING CEILING AND WALL PRODUCTS. THE NOTIFICATION APPLIANCE CIRCUIT AND AMPLIFIER WIRING SHALL TERMINATE AT THE UNIVERSAL MOUNTING PLATE. ALSO, SPECTRALERT ADVANCE SPEAKER STROBES, WHEN USED WITH THE SYNCCIRCUITTM MODULE ACCESSORY, SHALL BE POWERED FROM A NON-CODED NOTIFICATION APPLIANCE CIRCUIT OUTPUT AND SHALL OPERATE ON A NOMINAL 12 OR 24 VOLTS. WHEN USED WITH THE SYNCCIRCUITTM MODULE, 12-VOLT-RATED NOTIFICATION APPLIANCE CIRCUIT OUTPUTS SHALL OPERATE BETWEEN 8.5 AND 17.5 VOLTS; 24-VOLT-RATED NOTIFICATION APPLIANCE CIRCUIT OUTPUTS SHALL OPERATE BETWEEN 16.5 AND 33 VOLTS. OUTDOOR SPECTRALERT ADVANCE PRODUCTS SHALL OPERATE BETWEEN -40°F AND 151°F FROM A REGULATED DC, OR FULL-WAVE RECTIFIED, UNFILTERED POWER SUPPLY.

SPEAKER:

SPEAKER SHALL BE A WHEELOCK ET-1010 ______ DUAL-VOLTAGE TRANSFORMER SPEAKER CAPABLE OF OPERATING AT 25.0 OR 70.7 NOMINAL VRMS. SPEAKER SHALL BE LISTED TO UNDERWRITERS LABORATORIES STANDARD S4048 FOR OUTDOOR FIRE PROTECTIVE SIGNALING SYSTEMS. SPEAKER SHALL HAVE A FREQUENCY RANGE OF 400 TO 4,000 HZ AND SHALL HAVE AN OPERATING TEMPERATURE FROM -40°F AND 150.8°F. SPEAKER SHALL HAVE POWER TAPS AND WATTAGE SETTINGS THAT ARE SELECTED BY ROTARY SWITCHES. THE SPEAKER MUST BE INSTALLED WITH ITS WEATHERPROOF BACK BOX IN ORDER TO REMAIN OUTDOOR APPROVED PER UL LISTING S4048. THE SPEAKER SHALL BE SUITABLE FOR USE IN AIR HANDLING SPACES AND WET ENVIRONMENTS.

SPEAKER STROBE COMBINATION:

THE SPEAKER STROBE SHALL BE A HOCHIKI HSS ______ LISTED TO UL 1638 AND UL 1480 AND BE APPROVED FOR FIRE PROTECTIVE SIGNALING SYSTEMS. SPEAKER SHALL BE CAPABLE OF OPERATING AT 25.0 OR 70.0 NOMINAL VRMS AND SHALL HAVE A FREQUENCY RANGE OF 400 TO 4,000 HZ. SPEAKER SHALL HAVE POWER TAPS THAT ARE SELECTED BY ROTARY SWITCH. THE STROBE SHALL CONSIST OF A XENON FLASH TUBE WITH ASSOCIATED LENS/REFLECTOR SYSTEM AND OPERATE ON EITHER 12 OR 24 VOLTS. THE STROBE SHALL ALSO FEATURE SELECTABLE CANDELA OUTPUT, PROVIDING OPTIONS FOR 15 OR 15/75 CANDELA WHEN OPERATING ON 12 VOLTS AND 15, 15/75, 30, 75, 110, 115, 135, 150, 177 OR 185 CANDELA WHEN OPERATING ON 24 VOLTS. THE STROBE SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REQUIREMENT FOR VISIBLE SIGNALING APPLIANCES, FLASHING AT 1 HZ OVER THE STROBE'S ENTIRE OPERATING VOLTAGE RANGE. THE SPEAKER STROBE MUST BE INSTALLED WITH ITS WEATHERPROOF BACK BOX IN ORDER TO REMAIN OUTDOOR APPROVED PER UL. THE SPEAKER STROBE SHALL BE SUITABLE FOR USE IN WET ENVIRONMENTS.

END OF SECTION 28 31 11

| EM | | |
|--|---|--|
| | PROJECT VALUE | |
| | Technical Education Center | |
| OJECT LOCATION | Tehachapi, CA. | |
| WIN PROJECT NO. | G231623 | |
| | 2022 CBC | |
| IOKE PROTECTED? | NO | |
| ISMIC DESIGN CRITERIA | SEE SHEET S1 | |
| ICHORS TO BE INPECTED | | |
| SA-103) | <u> </u> | |
| UPPPER WALL ANCHORS | | |
| | | |
| J FLUUK ANUHUKS | | |
| Design per DSA IR 16-5.16 | nes. | |
| Site Class to be determined by SEC | OR or AOR | |
| | | |
| | | MAX. UPPER WALL LOAD |
| | | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. |
| | | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD |
| □ MAX. LOWER LO PARALLEL TO W | ALL | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL |
| ☐ MAX. LOWER LO PARALLEL TO W/ JOOR ATTACHED OPT | ALL ION | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL 250 LBS. |
| ☐ MAX. LOWER LO PARALLEL TO W/ .OOR ATTACHED OPT LBS./PO | ALL ION | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL 250 LBS. |
| ☐ MAX. LOWER LO PARALLEL TO W/ OOR ATTACHED OPT LBS./PO | ALL ION | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL 250 LBS. MAX. LOWER WALL LOAD |
| D MAX. LOWER LO PARALLEL TO W/ OOR ATTACHED OPT LBS./PO | ALL ION | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL 250 LBS. MAX. LOWER WALL LOAD WALL ATTACHED OPTION S20.4 |
| D MAX. LOWER LO PARALLEL TO WA OOR ATTACHED OPT LBS./PO | ALL ION | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL 250 LBS. MAX. LOWER WALL LOAD WALL ATTACHED OPTION 529.4 LBS./POST |
| MAX. LOWER LC PARALLEL TO W/ OOR ATTACHED OPT LBS./PC LBS./PC MAX. LOW FLOOR ATTAC | ALL ION OST ER LOAD CHED OPTION | MAX. UPPER WALL LOAD PERP. TO WALL 1020 LBS. MAX. UPPER WALL LOAD PARALLEL TO WALL 250 LBS. MAX. LOWER WALL LOAD WALL ATTACHED OPTION 529.4 LBS./POST Designer to choose either wall or floor attachment for lower |

| IND | EX OF SHE | ETS |
|-----|-----------|--|
| | SHEET | DESCRIPTON |
| ✓ | S0 | COVER SHEET |
| ✓ | A01 | BUILDING LAYOUT |
| ✓ | A02 | PLAN |
| ✓ | A03 | ELEVATION |
| ✓ | A04 | ELECTRICAL |
| ✓ | A05 | FRAMING PLAN |
| ✓ | S1 | SPECIFICATIONS FOR IRWIN VERSATRACT BLEA |
| ✓ | S2 | 10 RISE PLAN, ELEVATION & FRAMING |
| ✓ | S2A | ADDITIONAL DETAILS |
| ✓ | S4 | DECK & SEAT ASSEMBLIES |
| ✓ | S5 | IDS-2 POWER SYSTEM |
| ✓ | S7 | POST ASSEMBLIES |
| ✓ | S8 | POST ASSEMBLIES CONT. |
| ✓ | S9 | DECK SUPPORTS |
| ✓ | S10 | DECK SUPPORTS CONT. |
| < | S11 | BRACING |
| < | S12 | BRACING CONT. |
| ✓ | S13 | WALL ATTACHMENT DETAILS |
| ✓ | S14 | FLOOR ATTACHMENT DETAILS |
| ✓ | S15 | END RAILS |
| ✓ | S15A | CLOSURE CURTAINS |
| ✓ | S16 | AISLE STEPS |
| ✓ | S17 | AISLE HANDRAILS |
| ✓ | S18 | ACCESSIBLE SPACES |
| ✓ | S19 | ACCESSIBLE SPACES CONT. |
| ✓ | S20 | DIMENSIONS |
| | | |

9'-2" VERIFY

WALL TO BLEACHER

| DSA STAMP HERE | |
|---|---|
| VersaTract | 2023 |
| ISC JOB #: G2316 | 523 |
| TECHNICAL EDUCATIONAL CENTER TEHACHAPI, CA | A SEPERATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED |
| DSA FILE: XXX DSA APPL. #: XXX PC NUMBER: 02 118532 | |
| REV. DATE DESCRIPTION 0 8/28/23 MADE SHOPS CS | SIGN OFF MR 09/06/23 |
| | |
| □ (CHECK OPTION BOX IF A TO PROJECT SPECIFIC L | PPLIES JSE) |
| | 1. |
| 610 Cumberland Road ALTAMONT, IL 62411 Toll Free: (877) 597-1122 Phone: (618) 483-6157 www.irwinseating.com | |
| ELEVATION | 1 |
| SHEET # | |

7/10/24

| | DSA STAMP HERE |
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| OFESSIO | |
| BUCHAEL MENDOLUS | ISC JOB # G231623 |
| (III) S 2377 (IIII) S 2377 (IIII) S 2377 (III) S 2377 (I | |
| TUTA | TECHNICAL EDUCATIONAL CENTER TEHACHAPI, CA |
| | DSA FILE: XXX |
| | DSA APPL. #: XXX PC NUMBER: 02-118532 |
| | REV.DATEDESCRIPTIONSIGN OFF08/28/23MADE SHOPSCSKMR09/06/23 |
| | |
| POWER REQUIREMENTS: 208–230 VAC, 30 NOTES: Readily accessible disconnection box and wiring (as | |
| 20 amp feeder circuit protective devices to be provided by others per NEC 430.62(B) and UL508A 32.3.1(b) | |
| Amp: 20 Amp: 20 S Notes: 5 wire (L1, L2, L3, NEUTRAL, GROUND) NOTE: 4'-0" A.F.F. Max for 6 Rows and above 2'-0" A.F.F. Max for less than 6 Rows Motor Nameplate | |
| Inverse Inverse MODEL E7TUJWJS7 HP 1/2 1/2 1/2 | 610 Cumberland Road ALTAMONT, IL 62411 Toll Free: (877) 597-1122 Phone: (618) 483-6157 www.irwinseating.com |
| VOLIS 208-230 230 BLACK HZ 60 50 II GREEN/YELLOW AMPS 1.96-2.15 3.08 DUTY CYCLE: 5 MIN. ON - 30 MIN. OFF RATIO 111:1 TO REVERSE ROTATION INTERCHANGE ANY TWO PHASE LEADS BISON PN: 017-562-7111 MM/DD/YY """""""""""""""""""""""""""""""""""" | ELECTRICAL |
| Amp: 15 Freq: 60 Hz Notes: 120/24 Transformer by ITSC | SHEET # |
| M Motor P Pendant C Master T Transformer Contactor Contactor T Transformer Contactor Contactor T Transformer Distribution Tee K Key Switch Alarm | A04 |
| | 1 |

(59)

59

IDS POST ASSEMBLY MDU GUIDE DECK SUPPORT

MDU OUTRIGGER DECK SUPPORT

I REAR ROW BRACKET

SELF STORING END RAIL DECK SUPPORT

Standard Deck Support with Outrigger

Standard Deck Support with Skirt Attachment

POST ASSEMBLY

Brace Deck Support

Standard Deck Support

Length: 25'-6" Seating Rows: 7 Gross Projected Area: 25'-6" x 13'-8" = 349 sq. ft.

| | | - | | | 25 | 5' ——— | | | | 25'-6" | | | | | | | | | | 25' | | | | | | | | | - | | |
|---|---------|-----------------------|--------------------|--------------|--------|---------------|-----------------|---------------------|---------------------|----------------------------|---------------------|-----------------|---------------|--------------|-------------|---------|-------|------------------|----|---------------------------|-------------------------|---------------------|---------------|---------------------|--------------|--------|-------------|-----------------|---------------|---------------------|-------------|
| | | | | | —— 18: | 2" ——— | | | | | | | | | —— 1 | 32" — | | | | | | | - | | | — 182" | , | | | | |
| | • | | ≢ 1 54" | | 43" ≢ | ≡ 43 " | ≡ 54" | | 50" | | 53" | | 54" | | 43" | ≢ 4 | 43" ≢ | 54" | | ≢ 53" | | 50" | ≢ () | 54" : | ≢ 43" | | 43" | ∔ 54" | | 50" | - |
| | | 50" > | × 48" | - | 43" X | < 43" | 48" | 6" | 50" | XX 3 ¹ 3" | 53" | × 6' 1 | 48" | - | 43" | × 4 | 43" | 48" | | × 53" | ×× 3*3" | 50" | × 6' 1 | 48" [| 43" | × | 43" | 48" | | 50" | 3″ |
| | ED | 58 <mark>1</mark> " | 45 <u>1</u> " | - | 43" X | < 43" | 45 <u>1</u> " | | 58 <mark>1</mark> " | XX 33″ | 61 <mark>1</mark> " | | 45 <u>1</u> " | ф | 43 " | × 4 | 43" | 45 <u>1</u> " | d. | 61 <mark>1</mark> " | ×× 3 ⁷³ " | 58 <mark>1</mark> " | | 45 <u>1</u> " [| 43" | * | 43 " | □ 45 <u>1</u> " | | 58 <mark>1</mark> " | 3″ |
|) | , CLOSI | 61" 3" | 43" | | 43" X | < 43" | 43" | | 61" | XX 33" • | 64" | | 43" | – | 43" | × 4 | 43" | 43" | | 64" | 1 XX 3'3" | 61" | | 43" [| 43" | × | 43" | 43" | | 61" | ₩ ₩ ₽ |
| I | 3'-75 | 63 ¹ 3" | 40 ¹ 2″ | | 43" × | < 43" | □ 40 <u>1</u> " | | 63 <u>1</u> " | ×× 33 ⁵ 2 | 61 | 17 | 40 <u>1</u> " | ф | 43" | × 4 | 43" | 40 <u>1</u> " | | 61" | | 63 <mark>1</mark> " | | 40 ¹ " [| 43" | × | 43 " | □ 40 <u>1</u> " | | 63 <u>1</u> " | 3″ |
| | | 24" × 36 | 5" F 38" | | 43" × | < 43 " | □ 38" -∏ | 36" | × 24" | XX 6"3 ³ "8" | 22" 🗙 | 39" | 3 8" | — | 43" | × 4 | 43" 🔲 | ^{38"} = | | 39" × 22" | 8****, 3'3" | 24" 🗙 | 36" | 1 38" [| 43" | * | 43" | □ 38" _ | 3 6 | " X 24" | 1 3″ |
| | | 3 | 37 <u>1</u> " 33 | <u>1</u> , 0 | 86 | 5" | ⊖ 33 <u>1</u> " | 37 <mark>1</mark> " | | | 3 |) 37 <u>1</u> " | 332 | <u>}</u> " (| | 36" | ¢ | 33 <u>1</u> " | 37 | $\frac{7^{1^{n}}}{3^{n}}$ | | | 37 <u>1</u> " | 33 <u>1</u> " (| > | 86" | | ○ 33 <u>1</u> " | 37 <u>1</u> " | | |

Irwin Seating Company

Floor Design Loads & Notes:

- -Per ICC-300-2017
- Bleacher structure is designed for a uniform load of 100 pounds per square foot (psf) (ICC-300-2017, Table 303.2)
- Bleacher vertical design load is 120 pounds per linear foot(plf) (ICC-300-2017, Table 303.02)
- The 120 plf vertical design load will be used for Wheel Load calculations.

NOTE:

The design loads presented are calculated per the Design Requirements of ICC-300-2017. The Project Architect and/or Other Design Professional should review these loads for compliance with Governing Building Codes and compatibility with other Building Systems.

Controlling Section

Wheel Path Area

Closed Position 3'-8" x 2'-0" x 2 wheel paths = 14.7 sq. ft. Open Position $13'-8'' \times 2'-0'' \times 2$ wheel paths = 54.7 sq. ft.

25,254 lbs. Total Load

Dead Load 11.0 psfx 348.5 sq. ft. = 3,834 lbs. Live Load 120.0 plf x7 rows x 25'-6" length = 21,420 lbs

Distributed Loads Over Wheel Path Area *Closed Position* 3,834 lbs. ÷ 14.7 sq. ft. = 261 psf

Open Position 25,254 lbs. ÷ 54.7 sq. ft. = 462 psf

Wheel Loads

Number of Wheels 6 wheels per deck x 6 deck rows = 36 wheels Load per Wheel 25,254 lbs. + 36 wheels = 702 lbs. per wheel

Point Loads:(Live Load) Live Load per Wheel 702 lbs/wheel. Wheel Pressure (Live Load) 511 psi Concentrated Load

| DSA STAMP HERE IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-124361 INC: REVIEWED FOR SS ☑ FLS ☑ DATE: 03/27/2025 STAMP HERE | |
|--|---|
| VersaTract DRAFTER: CS DATE: 8-28-2 ISC JOB #: G2316 | 2023 23 |
| TECHNICAL EDUCATIONAL CENTER TEHACHAPI, CA | A SEPERATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED |
| DSA FILE: XXX DSA APPL. #: XXX PC NUMBER: 02-118532 REV. DATE DESCRIPTION S 0 8/28/23 MADE SHOPS CS KM | IGN OFF R 09/06/23 |
| CHECK OPTION BOX IF AP TO PROJECT SPECIFIC US | PLIES SE) |
| FRAMING PLAN SHEET # A05 | |

SPECIFICATION FOR TELESCOPIC EQUIPMENT

1. MATERIAL SPECIFICATION

- **1.1 STEEL COMPONENTS**
- 1.1.1 STRUCTURAL STEEL: ANGLES CHANNELS, FLATS: ASTM A36
- 1.1.2 SHEET STEEL: 16, 14, AND 10 GAUGE HOT ROLLED: ASTM A1011 (Fy = 50KSI)
 1.1.3 SUPPORT COLUMNS 14 GAUGE RECT. TUBING, COLD FORMED: ASTM A500B (Fy = 46KSI)
 1.1.4 NOSE AND REAR BEAMS: GALVANIZED COIL 14 GAUGE: ASTM A653 GRADE 50 (Fy = 50KSI)
- 1.1.5 NOSE AND REAR BEAMS: HOT ROLLED COIL 14 GAUGE: ASTM A1011 GRADE 50 (Fy = 50KSI)
- 1.1.6 LATERAL BRACING: 14 GAUGE RECT. TUBING, COLD FORMED ASTM A500B (Fy = 46KSI). 1.1.7 HORIZONTAL BRACING: 14 GAUGE RECT. TUBING, COLD FORMED ASTM A500B (Fy = 46KSI)
- 1.1.8 HORIZONTAL BRACING: FLAT BAR: ASTM A36
- 1.1.9 DECK SUPPORT ASSEMBLY: 14 GA COIL ASTM A1011 (Fy = 40KSI) 1.1.10 SKIRT: 14 GAUGE. COIL: ASTM A1011 (Fy = 40KSI)
- 1.1.11 GUARDRAIL TUBING: ASTM A500 GRADE B (Fy = 46KSI)
- 1.1.12 HANDRAIL TUBING: ASTM A513 GRADE B (Fy=46KSI)
- 1.1.13 FASTENERS STRUCTURAL (BOLTS): SAE GRADE 5 (ASTM EQUIVALENT: ASTM A449) U.N.O. 1.1.14 PLASTIC SEAT MODULE:
- 1.1.14.1 MATERIAL HDPE -CO-POLYMER CERTENE HI-752 OR EQUIVALENT
- 1.1.14.2 DENSITY .952G/CM3 +/-.10 1.1.14.3 CHEMICAL FAMILY POLYOLEFIN
- 1.1.14.4 RECYLCE CODE NO. 2
- 1.2 WOOD SEAT LUMBER
- 12.1 WOODEN SEAT BOARDS (SHEET S4 DETAIL 8) ARE MADE FROM GRADE C & BETTER SOUTHERN YELLOW PINE THAT IS UPGRADED TO MEET THE GRADING STANDARDS FOR GRADE B & BETTER. STANDARD GRADING RULES ARE ESTABLISHED BY THE SOUTHERN PINE INSPECTION BUREAU AND APPROVED BY THE BOARD OF REVIEW OF THE AMERICAN LUMBER STANDARDS COMMITTEE.
- 1.2.2 SOUTHERN PINE, NO. 1 DENSE, 8" WIDE, Fb = 1350PSI
- (NDS, 2018, TABLE, 4B)
- 1.3 BLEACHER DECKING MATERIALS 1.3.1 0.030 THICK HIGH DENSITY POLYETHYLENE OVERLAY ON APA RATED 5/8" OR 3/4" BCX SANDED PLYWOOD U.S. PRODUCT STD. CONFORMING TO VOLUNTARY PRODUCT STANDARD PS 1-07 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD PUBLISHED BY THE NATIONAL BUREAU OF STANDARDS, FEBRUARY 26, 2007 PLYWOOD IS EXTERIOR GRADE 5 PLY CONSTRUCTION
 - 5/8" PANEL BENDING STRENGTH (FbS) 625 LBF-IN/FT (PARALLEL TO STRENGTH AXIS; APA 2020, D510F TABLE 10) REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS 3/4" PANEL BENDING STRENGTH (FbS) 815 LBF-IN/FT (PARALLEL TO STRENGTH AXIS; APA 2020, D510F - TABLE 10) 2022 CBC CHAPTER 35 2022 CFC CHAPTER 80
- 1.4 WALL ATTACHMENT LUMBER
- 1.4.1 SOUTHERN PINE, PRESSURE TREATED NO. 1 DENSE; ALLOWABLE BENDING STRESS FOR FLAT USE 1650PSI (NDS, 2018, TABLE, 4B)
- 1.5 ARCHITECT OF RECORD TO VERIFY THAT THESE MATERIALS ARE SUITABLE TO BE INSTALLED IN THE BUILDING. 2. EXECUTION
- 2.1 ALL WELDING SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE (CBC) SECTIONS 2204A. 1 TITLE 24, OF CALIFORNIA CODE OF REGULATIONS (CCR)
- 2.2 ALL WELDING SHALL BE INSPECTED IN ACCORDANCE WITH 2022 CBC SECTION 1705A.2.1. AND SHALL BE PERFORMED DURING PRODUCT FABRICATION AT THE FACILITY OF MANUFACTURING.
- 2.3 ALL MEMBERS AND DETAILS SHALL BE AS ON THE LOAD TESTED STAND OR AS SUBSEQUENTLY APPROVED BY CALCULATIONS WHICHEVER APPLIES
- 2.4 FABRICATION SHALL CONFORM TO CBC CHAPTER 22A, TITLE 24 OF CCR AND IR 16-5.16
- 3. CERTIFICATION:
- THE FOLLOWING CERTIFICATIONS SHALL BE SUBMITTED TO THE DIVISION OF THE STATE ARCHITECT UPON COMPLETION OF THE PROJECT PER IR 16-5.16 (BY THE BLEACHER MANUFACTURER).
- 3.1 STEEL CERTIFICATION
- 3.1.1 STEEL CERTIFICATION PER IR 16-5.16 SECTION 4.2 3.2 WEI DER AND WEI DING CERTIFICATION
- 3.2.1 TO BE PERFORMED BY CERTIFIED PROFESSIONAL WELDING OPERATORS IN ACCORDANCE WITH AMERICAN WELDING SOCIETY, (AWS), D1.1 "STRUCTURAL WELDING CODE-STEEL".
- 3.2.2 WITH EACH BLEACHER THE MANUFACTURER WILL SEND DSA A VERIFIED REPORT MADE BY A QUALIFIED PROFESSIONAL ENGINEER, STATING THE FOLLOWING:
- 3.2.2.1 WELDS ON THIS BLEACHER HAVE BEEN MADE BY OPERATORS WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TESTS, AS PRESCRIBED IN THE QUALIFICATION SECTION OF THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY, TO PERFORM THE TYPE OF WORK REQUIRED.
- 3.2.2.2 I HAVE SELECTED AN A.W.S. C.W.I. TO ACT AS WELDING INSPECTOR. I CERTIFY HIM TO BE EXPERIENCED IN INSPECTION OF ARC WELDS ON WORK REQUIRING UNQUESTIONED RELIABILITY, AND THAT HE HAS THE ABILITY TO DISTINGUISH BETWEEN SOUND AND UNSOUND WELDING. 3.2.3 WITH EACH BLEACHER, THE WELDING INSPECTOR WILL SEND DSA A VERIFIED REPORT STATING:
- 3.2.3.1 I HAVE CHECKED THE EQUIPMENT AND FIND IT ADEQUATE AND HAVE CHECKED THE ABILITY OF THE WELDERS AND FOUND THEM SATISFACTORY.
- 3.2.3.2 I HAVE INSPECTED ALL THE WELDING AND FOUND IT PROPER AND IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS AND CHAPTER 22, TITLE 24, CCR. I HAVE USED ALL NECESSARY TESTS TO ASSURE MYSELF OF THE ADEQUACY OF THE WELDING.
- 4. DESIGN LOADS
- 4.1 AS SPECIFIED IN 2022 CBC TABLE 1607.A.1, ITEM 24 AND ICC 300-2017
- 4.1.1 DEAD LOAD
- 4.1.1.1 WEIGHT OF BLEACHER COMPONENTS THAT CONTRIBUTE TO THE GRAVITY LOAD(S) WITHIN A GIVEN LOAD PATH
- 4.1.2 LIVE LOAD
- 4.1.2.1 A UNIFORMLY DISTRIBUTED VERTICAL LIVE LOAD OF NOT LESS THAN 100 LBS. PER SQ. FT. (4788 PA) OF GROSS HORIZONTAL PROJECTION. (TABLE 1607A.1, ITEM 24 AND ICC 300-2017)
- 4.1.2.2 SEATBOARDS AND FOOTRESTS SHALL BE DESIGNED FOR A VERTICAL LIVE LOAD OF NOT LESS THAN
- 120LBS PER LINEAR FOOT (1.752 KN/M). (ICC 300-2017)
- 4 1 3 HORIZONTAL SWAY (ICC 300-2017)
- 4.1.3.1 24 LBS/FT (0.350 KN/M) PARALLEL TO SEAT LENGTH 4.1.3.2 10 LBS/FT (0.146 KN/M) PERPENDICULAR TO SEAT LENGTH
- 414 ALL COLUMNS
- 4.1.3.1 HAVE A SLENDERNESS RATIO OF LESS THAN 200
- 4.1.3.2 HAVE LATERAL BRACING THAT ACTS AS TENSION OR COMPRESSION BRACING
- 4.1.5 SEISMIC CRITERIA: SEE TABLE S1.0

- 5. REFERENCES: CBC 2022
- 5.1 REFERENCES PER CBC 2022 CHAPTER 35 AND AS NOTED BELOW 5.1.1 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS 2018) AMERICAN FOREST & PAPER ASSOC.
- 5.1.2 PANEL DESIGN SPECIFICATION (APA PDS-12) AMERICAN PLYWOOD ASSOCIATION
- ENGINEERED WOOD ASSOC. 5.1.3 2022 CALIFORNIA BUILDING CODE
- 5.1.4 DSA IR 16-5.16
- 5.1.5 NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL
- STRUCTURAL MEMBERS (NAS) REF.: S100-16 AMERICAN IRON AND STEEL INSTITUTE.
- 5.1.6 STEEL CONSTRUCTION MANUAL AISC 360-16 AMERICAN INSTITUTE OF STEEL CONSTRUCTION
- 5.1.7 AWS STRUCTURAL WELDING CODE STEEL (D1.1-15) 5.1.8 AWS STRUCTURAL WELDING CODE SHEET STEEL (D1.3-08)
- 5.1.9 ICC STANDARD ON BLEACHERS, FOLDING AND TELESCOPIC SEATING
- AND GRANDSTANDS (ICC 300-2017) INTERNATIONAL CODE COUNCIL, INC
- 5.1.10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES(ASCE 7-16)
- AMERICAN SOCIETY OF CIVIL ENGINEERS / STRUCTURAL ENGINEERING INSTITUTE
- 5.2 TITLE 24 CODES
- 2022 CALIFORNIA ADMINISTRATION CODE (CAC) (Part 1, Title 24, CCR) 2022 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 & 2 (Part 2, Title 24, CCR) 5.2.1 PART 1
- 5.2.2 PART 2
- 2022 CALIFORNIA ELECTRICAL CODE (CEC) (Part 3, Title 24, CCR) 5.2.4 PART 3 525 PART4
- 2022 CALIFORNIA MECHANICAL CODE (CMC) (Part 4, Title 24, CCR 2022 CALIFORNIA PLUMBING CODE (CPC) (Part 5, Title 24, CCR)
- 5.2.6 PART 5
- 2022 CALIFORNIA ENERGY CODE (Part 6, Title 24, CCR) 5.2.7 PART 6
- 5.2.9 PART 9 2022 CALIFORNIA FIRE CODE (CFC) (Part 9, Title 24, CCR
- 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC) (Part 10, Title 24, CCR) 5 2 10 PART 10
- 5.2.11 PART 11 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen) (Part 11, Title 24, CCR)
- 5.2.12 PART 12 2022 CALIFORNIA REFERENCED STANDARDS CODE (Part 12, Title 24, CCR)
- 5.2.13 TITLE 19 CCR. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

- FLS: NEW SITE MUST COMPLY WITH ICC 300-2017 SECTION 102.1, CHAPTER 1 THRU 4.
- EXISTING SITE MUST COMPLY WITH ICC 300-2012 SECTION 102.1, CHAPTER 1, 2, & 5 AND CFC SECTION 1030. ACS: BLEACHERS ARE REQUIRED TO COMPLY WITH ACCESS COMPLIANCE REGULATIONS IN TITLE 24,
- VOLUME 1 OF 2
- 5.3 WELDING PROCESS

Risk Category:

Seismic Design

Perpendicular to

seating:

arallel

p paralle

perpendicular

p perpendicula

Category:

- 5.3.1 STRUCTURAL STEEL WELDING TO COMPLY WITH AWS D1.1-15 AND CHAPTER 22A OF THE 2022 CBC
- 5.3.2 SHEET METAL WELDING TO COMPLY WITH AWS D1.3 AND CHAPTER 22A OF THE 2022 CBC 5.3.3 STEEL TESTING CERTIFICATION TO COMPLY WITH CHAPTER 22A SECTION 2203A.1 OF THE 2022 CBC
- 5.3.4 WELDING INSPECTOR AND WELDING INSPECTION TO COMPLY WITH CHAPTER 17A, SECTION 1705A
- OF 2022 CBC AND THE DIVISION OF STATE ARCHITECT INTERPRETATION OF REGULATION MANUAL. 5.3.5 QUALIFICATION OF WELDS AND INSPECTION OF WELDING MATERIAL TO COMPLY WITH DSA IR 16-5.16
- 5.3.6 WELDING ELECTRODE WILL CONFORM TO AWS A5.18, ASME SFA-S-18 ER70S-3 AND AWS A5.17 ASME
- SFA-5.17 EN14K 1E332-C AND 1E5591. CERTIFIED BY CSB TO CWA W48 (ER29S-3) (EEM13K) 5.3.7 CFC SECTIONS 2603: 2604: AND IF APPLICABLE 2605 AND 2606
- 6. NOTE

111

1.25

Parallel to seating: buildings, ASCE 7 Ch. 15,

Analysis Procedure: Equivalent Lateral Force

1.25

2.5

2.5

1.0

2

1

Lateral Force Resisting System²:

 $D(S_1 < 0.75)$

6.1 WHEN A BLEACHER EXERTS A FORCE ON A WALL OF A BUILDING, THE BUILDING'S STRUCTURAL ENGINEER MUST REVIEW AND APPROVE THE ADDITIONAL LOADS CAUSED BY THE BLEACHER. 6.2 WHEN A BLEACHER EXERTS A FORCE ON THE FLOOR OF A BUILDING. THE BUILDING'S STRUCTURAL

Nonbuilding Structures, Not Similar to

All Other Self-Supporting Structures

Nonstructural Components

ASCE 7 Ch. 13, Eqn 13.3-1

- ENGINEER MUST REVIEW AND APPROVE THE ADDITIONAL LOADS CAUSED BY THE BLEACHER.

TABLE S1.0

Seismic Design Parameters

Site-Specific

Parameters

1.37

1.62

1.08

0.44

1.11

0.74

2. In accordance with DSA IR 16-5.16 Section 3.2.2.1.

Per ASCE 7-16, Fa shall be in accordance with Section 11.4.8.

21.1 is required unless exempted by Section 20.3.1 for Site Class F.

Without Soils

Report

Assumed Site

3.0375

1.21

3.645

2.43

0.749

3.0375

1.2

3.645

2.43

0.749

Seismic

Parameters

Site Class⁵

SDS

S_{M1}

soils present.

| | SECTION SIZES - 10" RISE SECTION SIZES - 10" RISE | | | | | | | | | | | | 5 | SECTION SI | ZES - 10 | " RISE | _ | | SECTION S | IZES - 10" | RISE | | SECTION SIZES - 10" RISE | | | | | | | |
|------|---|-----------------------|--------------|-----------------------|----------------------|-----|---------|-----------------------|--------------|-----------------------|----------------------|------|-------------------|-----------------------|--------------|-----------------------|----------------------|-------------|-----------------------|--------------|-----------------------|----------------------|--------------------------|-------------------|-----------------------|--------------|-----------------------|----------------------|--|--|
| USE? | SECTION LENGTH | ROW 1 POST SPAN | MAX. ROWS | FLAT STRAP ROWS | AUX. POST ROWS | USE | SECTION | ROW 1 POST SPAN | MAX. ROWS | FLAT STRAP ROWS | AUX. POST ROWS | USE? | SECTION LENGTH | ROW 1 POST SPAN | MAX. ROWS | FLAT STRAP ROWS | AUX. POST ROWS | USE?SECTION | ROW 1 POST SPAN | MAX. ROWS | FLAT STRAP ROWS | AUX. POST ROWS | USE? | SECTION LENGTH | ROW 1 POST SPAN | MAX. ROWS | FLAT STRAP ROWS | AUX. POST ROWS | | |
| | 10'-2" | 45 in | 12 | - | - | | 14'-2" | 61 in | 18 | - | - | | 18'-2" | 79 in | 24 | - | - | 21'-8" | 121 in | 24 | 11-16 | - | \checkmark | 25'-0" | 157 in | 23 | 11-16 | - | | |
| | 10'-4" | 47 in | 12 | - | - | | 14'-4" | 63 in | 18 | - | - | | 18'-4" | 81 in | 24 | - | - | 21'-10" | 123 in | 24 | 11-16 | - | | 25'-2" | 159 in | 23 | 11-16 | 2 | | |
| | 10'-6" | 47 in | 12 | - | - | | 14'-6" | 63 in | 19 | - | - | | 18'-6" | 83 in | 24 | - | - | 22'-0" | 125 in | 24 | 11-16 | - | | 25'-4" | 155 in | 23 | 11-16 | 2 | | |
| | 10'-8" | 47 in | 13 | - | - | | 14'-8" | 63 in | 19 | - | - | | 18'-8" | 85 in | 24 | - | - | 22'-2" | 127 in | 24 | 11-16 | - | \bigvee | 25'-6" | 157 in | 23 | 11-16 | 2-3 | | |
| | 10'-10" | 49 in | 13 | - | - | | 14'-10" | 65 in | 19 | - | - | | 18'-10" | 87 in | 24 | - | - | 22'-4" | 129 in | 24 | 11-16 | - | | 25'-8" | 159 in | 23 | 11-16 | 2-3 | | |
| | 11'-0" | 49 in | 13 | - | - | | 15'-0" | 65 in | 20 | - | - | | 19'-0" | 89 in | 24 | - | - | 22'-6" | 131 in | 24 | 11-16 | - | | 25'-10" | 156 in | 23 | 11-16 | 2-4 | | |
| | 11'-2" | 49 in | 14 | - | - | | 15'-2" | 65 in | 20 | - | - | | 19'-2" | 91 in | 24 | - | - | 22'-8" | 133 in | 24 | 11-16 | - | | 26'-0" | 158 in | 23 | 11-16 | 2-4 | | |
| | 11'-4" | 51 in | 14 | - | - | | 15'-4" | 67 in | 20 | - | - | | 19'-4" | 93 in | 24 | - | - | 22'-10" | 135 in | 24 | 11-16 | - | | 26'-2" | 155 in | 23 | 11-16 | 2-5 | | |
| | 11'-6" | 51 in | 14 | - | - | | 15'-6" | 67 in | 20 | - | - | | 19'-6" | 95 in | 24 | - | - | 23'-0" | 137 in | 24 | 11-16 | - | | 26'-4" | 157 in | 23 | 11-16 | 2-5 | | |
| | 11'-8" | 51 in | 14 | - | - | | 15'-8" | 67 in | 21 | - | - | | 19'-8" | 97 in | 24 | - | - | 23'-2" | 139 in | 24 | 11-16 | - | | 26'-6" | 159 in | 23 | 11-16 | 2-5 | | |
| | 11'-10" | 53 in | 14 | - | - | | 15'-10" | 69 in | 21 | - | - | | 19'-10" | 99 in | 24 | - | - | 23'-4" | 141 in | 24 | 11-16 | - | | 26'-8" | 156 in | 23 | 11-16 | 2-6 | | |
| | 12'-0" | 53 in | 15 | - | - | | 16'-0" | 69 in | 21 | - | - | | 20'-0" | 101 in | 24 | - | - | 23'-6" | 143 in | 24 | 11-16 | - | | 26'-10" | 158 in | 23 | 11-16 | 2-6 | | |
| | 12'-2" | 53 in | 15 | - | - | | 16'-2" | 69 in | 22 | - | - | | 20'-2" | 103 in | 24 | - | - | 23'-8" | 145 in | 24 | 11-16 | - | | 27'-0" | 160 in | 23 | 11-16 | 2-6 | | |
| | 12'-4" | 55 in | 15 | - | - | | 16'-4" | 71 in | 22 | - | - | | 20'-4" | 105 in | 24 | - | - | 23'-10" | 147 in | 24 | 11-16 | - | | | | | | | | |
| | 12'-6" | 55 in | 16 | - | - | | 16'-6" | 71 in | 22 | - | - | | 20'-6" | 107 in | 24 | - | - | 24'-0" | 149 in | 24 | 11-16 | - | | | | | | | | |
| | 12'-8" | 55 in | 16 | - | - | | 16'-8" | 71 in | 22 | - | - | | 20'-8" | 109 in | 24 | - | - | 24'-2" | 151 in | 24 | 11-16 | - | - | | | | | | | |
| | 12'-10" | 57 in | 16 | - | - | | 16'-10" | 73 in | 22 | - | - | | 20'-10" | 111 in | 24 | - | - | 24'-4" | 153 in | 24 | 11-16 | - | - | | | | | | | |
| | 13'-0" | 57 in | 16 | - | - | | 17'-0" | 73 in | 23 | - | - | | 21'-0" | 113 in | 24 | - | - | 24'-6" | 155 in | 24 | 11-16 | - | - | | | | | | | |
| | 13'-2" | 57 in | 17 | - | - | | 17'-2" | 73 in | 23 | - | - | | 21'-2" | 115 in | 24 | - | - | 24'-8" | 157 in | 24 | 11-16 | - | | | | | | | | |
| | 13'-4" | 59 in | 17 | - | - | | 17'-4" | 75 in | 23 | - | - | | 21'-4" | 117 in | 24 | - | - | 24'-10" | 159 in | 24 | 11-16 | - |] | | | | | | | |
| | 13'-6" | 59 in | 17 | - | - | | 17'-6" | 75 in | 24 | - | - | | 21'-6" | 119 in | 24 | - | - | | | | | | | | | | | | | |
| | 13'-8" | 59 in | 18 | - | - | | 17'-8" | 75 in | 24 | - | - | | | | | | | | | | | | | | | | | | | |
| | 13'-10" | 61 in | 18 | - | - | | 17'-10" | 77 in | 24 | - | - | | | | | | | | | | | | | | | | | | | |
| | 14'-0" | 61 in | 18 | - | - | | 18'-0" | 77 in | 24 | - | - | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | 10 | ' RISE DIMEN | NSIONS | | | | | | | | | | |
|---------|--------------------------------|--------------------------------|---|----------------------|--|------------------------|--------------------------|---|---|-----------|----------|----------------------------------|----------------------------------|-----------|-------------|----------------------------------|----------------------------------|-----------------------|-------------------------------------|----------------------------------|--------|---------------|-------------------------|
| ROW | MAX. POST SPAN (IN.)* | POST TYPE (SEE SHEET S7) | COLUMN HEIGHT (IN.) (SEE SHEET S7) | COLUMN SIZE (IN.) | L/R OF COLUMN (SEE NOTE BELOW) | ROW HEIGHT (IN.) | KNEE BRACE 1 (IN.) | KNEE BRACE 1 W/ STRAP BRACE (IN.) | KNEE BRACE 2 W/ HORZ. BRACE (IN.) | - X (IN.) | Y (IN.) | BRACE HOLE CENTER (IN.) | BRACE TYPE (SEE SHEET S12) | - X (IN.) | Y (IN.) | BRACE HOLE CENTER (IN.) | BRACE TYPE (SEE SHEET S12) | - SPAN (IN.) | FLAT BAR LENGTH (IN.) | BRACE TYPE (SEE SHEET S12) | - | SPAN (IN.) | TUBE LENGTI (IN.) |
| | | | | | | | | | | MAX. L | OWER KNE | E BRACE DI | MENSIONS | MAX | . UPPER KNI | E BRACE DI | MENSIONS | MAX. FL/ 21'-8" AN | AT BAR BRA ID LONGER SEE NOTE | CE DIMENSION SECTIONS ONL | S Y | МАХ | . HORZ. (SHEE |
| 1 | 159 | DETAIL 2 | 11.3125 | 3 X 2 | 10.03 | 10 | N/A | N/A | N/A | 0 | 0 | 0 | 0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 2 | 164 | DETAIL 2 | 21.3125 | 3 X 2 | 18.89 | 20 | 2.00 | N/A | N/A | 38.00 | 11.0625 | 39.578 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 3 | 169 | DETAIL 2 | 31.3125 | 3 X 2 | 27.76 | 30 | 3.50 | N/A | N/A | 40.50 | 19.5625 | 44.977 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 4 | 174 | DETAIL 2 | 41.3125 | 3 X 2 | 36.62 | 40 | 5.00 | N/A | N/A | 43.00 | 28.0625 | 51.347 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 5 | 179 | DETAIL 2 | 51.3125 | 3 X 2 | 45.49 | 50 | 6.50 | N/A | N/A | 45.50 | 36.5625 | 58.370 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 6 | 184 | DETAIL 2 | 61.3125 | 3 X 2 | 54.35 | 60 | 8.00 | N/A | N/A | 48.00 | 45.0625 | 65.838 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 7 | 189 | DETAIL 2 | 71.3125 | 3 X 2 | 63.21 | 70 | 9.50 | N/A | N/A | 50.50 | 53.5625 | 73.615 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 8 | 194 | DETAIL 2 | 81.3125 | 3 X 2 | 72.08 | 80 | 11.00 | N/A | N/A | 53.00 | 62.0625 | 81.613 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 9 | 199 | DETAIL 2 | 91.3125 | 3 X 2 | 80.94 | 90 | 12.50 | N/A | N/A | 55.50 | 70.5625 | 89.774 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 10 | 204 | DETAIL 2 | 101.3125 | 3 X 2 | 89.81 | 100 | 14.00 | N/A | N/A | 58.00 | 79.0625 | 98.055 | DETAIL 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A | N/A |
| 11 | 209 | DETAIL 2 | 111.3125 | 3 X 2 | 98.67 | 110 | N/A | 15.50 | N/A | N/A | N/A | N/A | N/A | 60.50 | 87.5625 | 106.430 | DETAIL 3 or 6 | 209 | 210.25 | DETAIL 4 | | N/A | N/A |
| 12 | 214 | DETAIL 2 | 121.3125 | 3 X 2 | 107.54 | 120 | N/A | 17.00 | N/A | N/A | N/A | N/A | N/A | 63.00 | 96.0625 | 114.878 | DETAIL 3 or 6 | 214 | 215.25 | DETAIL 4 | | N/A | N/A |
| 13 | 219 | DETAIL 2 | 131.3125 | 3 X 2 | 116.40 | 130 | N/A | 18.50 | N/A | N/A | N/A | N/A | N/A | 65.50 | 104.5625 | 123.384 | DETAIL 3 or 6 | 219 | 220.25 | DETAIL 4 | | N/A | N/A |
| 14 | 224 | DETAIL 2 | 141.3125 | 3 X 2 | 125.27 | 140 | N/A | 20.00 | N/A | N/A | N/A | N/A | N/A | 68.00 | 113.0625 | 131.936 | DETAIL 3 or 6 | 224 | 225.25 | DETAIL 4 | | N/A | N/A |
| 15 | 229 | DETAIL 3 | 151.3125 | 4 X 2 | 103.92 | 150 | N/A | 21.50 | N/A | N/A | N/A | N/A | N/A | 70.50 | 121.5625 | 140.526 | DETAIL 3 or 6 | 229 | 230.25 | DETAIL 4 | | N/A | N/A |
| 16 | 234 | DETAIL 3 | 161.3125 | 4 X 2 | 110.78 | 160 | N/A | 23.00 | N/A | N/A | N/A | N/A | N/A | 73.00 | 130.0625 | 149.148 | DETAIL 3 or 6 | 234 | 235.25 | DETAIL 4 | | N/A | N/A |
| 17 | 239 | DETAIL 4 | 171.3125 | 4 X 2 | 117.65 | 170 | 2.00 | N/A | 55 | 50.00 | 53.0000 | 72.863 | DETAIL 1 | 75.50 | 108.0625 | 131.825 | DETAIL 3 | N/A | N/A | N/A | | 239 | 240 1/4 |
| 18 | 244 | DETAIL 4 | 181.3125 | 4 X 2 | 124.52 | 180 | 3.50 | N/A | 60 | 50.00 | 56.5000 | 75.447 | DETAIL 1 | 78.00 | 113.0625 | 137.358 | DETAIL 3 | N/A | N/A | N/A | | 244 | 245 1/4 |
| 19 | 249 | DETAIL 4 | 191.3125 | 4 X 2 | 131.39 | 190 | 5.00 | N/A | 65 | 50.00 | 60.0000 | 78.102 | DETAIL 1 | 80.50 | 118.0625 | 142.895 | DETAIL 3 | N/A | N/A | N/A | | 249 | 250 1/4 |
| 20 | 254 | DETAIL 4 | 201.3125 | 4 X 2 | 138.25 | 200 | 6.50 | N/A | 70 | 50.00 | 63.5000 | 80.822 | DETAIL 1 | 83.00 | 123.0625 | 148.436 | DETAIL 3 | N/A | N/A | N/A | | 254 | 255 1/4 |
| 21 | 259 | DETAIL 5 | 211.3125 | 4 X 2 | 145.12 | 210 | 8.00 | N/A | 75 | 50.00 | 67.0000 | 83.600 | DETAIL 1 | 85.50 | 128.0625 | 153.981 | DETAIL 8 | N/A | N/A | N/A | | 259 | 260 1/4 |
| 22 | 264 | DETAIL 5 | 221.3125 | 4 X 2 | 151.99 | 220 | 9.50 | N/A | 80 | 50.00 | 70.5000 | 86.431 | DETAIL 1 | 88.00 | 133.0625 | 159.529 | DETAIL 8 | N/A | N/A | N/A | | 264 | 265 1/4 |
| SECTION | LENGTHS | LESS THAN O | R EQUAL TO | 24'-10" | | | | | | | | | | | | | | | | | | | |
| 23 | 269 | DETAIL 5 | 231.3125 | 4 X 2 | 158.86 | 230 | 11.00 | N/A | 85 | 50.00 | 74.0000 | 89.308 | DETAIL 1 | 90.50 | 138.0625 | 165.080 | DETAIL 8 | N/A | N/A | N/A | | 269 | 270 1/4 |
| 24 | 274 | DETAIL 5 | 241.3125 | 4 X 2 | 165.73 | 240 | 12.50 | N/A | 90 | 50.00 | 77.5000 | 92.229 | DETAIL 1 | 93.00 | 143.0625 | 170.634 | DETAIL 8 | N/A | N/A | N/A | | 274 | 275 1/4 |
| 25 | - | - | - | - | - | 250 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | - | - |
| SECTION | LENGTHS | GREATER TH | AN 24'-10" | 1 | 1 | 1 | | 1 | 1 | | 1 | | | | 1 | | | | | 1 | | | |
| 23 | 269 | DETAIL 5 | 231.3125 | 4 X 2 | 158.86 | 230 | 11.00 | N/A | 85 | 50.00 | 74.0000 | 89.308 | DETAIL 1 | 90.50 | 138.0625 | 165.080 | DETAIL 8 | N/A | N/A | N/A | | 269 | 270 1/4 |
| 24 | - | - | - | - | | 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | | | - | |

NOTE: ONLY 260" (21-8") AND LONGER SECTIONS WILL HAVE THE STRAP BRACE SECTIONS WITHOUT THE STRAP WILL USE BRACE ON DETAIL 6 SHEET S12

L/R OF COLUMN: L = UNBRACED LENGTH OF COLUMN IN THE STRONG AXIS (IN.) R = RADIUS OF GYRATION OF THE COLUMN IN THE STRONG AXIS (IN.)

* MAX. POST SPAN WITHOUT AUX. POSTS

