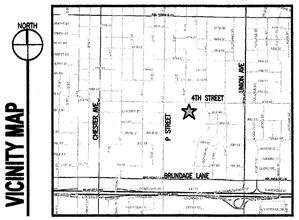
McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

601 FOURTH STREET - BAKERSFIELD, CA 93301

VICINITY MAP



SHEET INDEX

CONTACTS

OWNER		ARCHITECT – RESPONSIBLE DESIGN PROFESSIONAL		ELECTRICAL ENGINEER		CIVIL ENGINEER	
NAME:	BAKERSFIELD CITY SCHOOL DISTRICT	NAME:	CUNINGHAM GROUP ARCHITECTURE	NAME:	WATERS ENGINEERING	NAME:	PINNACLE CIVIL ENGINEERING
CONTACT:	RUBEN SOLIS ROBERT VAN TASSEL	CONTACT:	KEN SVENDSEN	CONTACT:	VINCENT WATERS	CONTACT:	MATT VoVILLA
ADDRESS:	1300 BAKER STREET BAKERSFIELD, CA 93301	ADDRESS:	2200 TRUXTUN AVENUE BAKERSFIELD, CA 93301	ADDRESS:	3200 SOUTH FAIRWAY SUITE B VISALIA, CA 93277	ADDRESS:	4620 CALIFORNIA AVENUE BAKERSFIELD, CA 93309
PHONE No.:	(661) 631-5883	PHONE No.:	(661) 327-7075	PHONE No.:	(559) 733-9733	PHONE No.:	(661) 869-0184
FAX No.:	(661) 326-1485	FAX No.:	(661) 327-1822	FAX No.:	(559) 733-9755	FAX No.:	(661) 377-0076

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED FOR EXACT DIMENSIONS.
2. ANY DISRUPTION OF EXISTING UTILITIES SHALL BE COORDINATED AND SCHEDULED WITH THE DISTRICT PRIOR TO STARTING WORK.
4. ALL WORK SHALL CONFORM TO 2007 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR) PARTS 1-6, 9 AND 12. PARTS 1-5 MUST BE KEPT ON SITE DURING CONSTRUCTION.
5. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CHANGE ORDERS APPROVED BY DSA PRIOR TO FABRICATION OR INSTALLATION, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
6. A 'DSA CERTIFIED' PROJECT INSPECTOR, MIN. CLASS 4 RBIP, EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY BOTH THE AOR AND DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR.)
7. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE SCHOOL BOARD SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
8. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
9. ADDENDA MUST BE STAMPED AND SIGNED BY AOR AND DELEGATED DESIGN PROFESSIONAL, WHEN APPLICABLE, AND APPROVED BY DSA.
10. SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS ARE CONSIDERED AS CHANGES TO APPROVED PLANS OR SPECIFICATIONS AND ARE TO BE TREATED AS ADDENDA OR CHANGE ORDERS. (SEC. 4-338(c),PART 1, AND IR A-6). REFER TO NOTE #5 ABOVE.
11. A FIELD CHANGE DIRECTIVE (FCD) MUST BE SIGNED BY THE AOR OR DELEGATED DESIGN PROFESSIONAL AND APPROVED BY DSA.
12. CHANGE ORDERS AND SUPPLEMENTARY DRAWINGS MUST BE STAMPED AND SIGNED BY THE AOR AND DELEGATED DESIGN PROFESSIONAL, WHEN APPLICABLE, SIGNED BY OWNER AND APPROVED BY DSA
13. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24 CCR'S, A CHANGE ORDER, OR SEPARATE SET OF DOCUMENTS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.

PROJECT DESCRIPTION

GOVERNING CODE: TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
TITLE 24 CCR, PART 1-2007 BUILDING STANDARDS ADMINISTRATIVE CODE
TITLE 24 CCR, PART 2-2007 CALIFORNIA BUILDING CODE
TITLE 24 CCR, PART 3-2007 CALIFORNIA ELECTRICAL CODE
TITLE 24 CCR, PART 4-2007 CALIFORNIA MECHANICAL CODE
TITLE 24 CCR, PART 5-2007 CALIFORNIA PLUMBING CODE
TITLE 24 CCR, PART 6-2008 CALIFORNIA ENERGY CODE
TITLE 24 CCR, PART 9-2007 CALIFORNIA FIRE CODE
TITLE 24 CCR, PART 12-2007 CALIFORNIA REFERENDED STANDARDS
2007 NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS
2007 NFPA 25, INSPECTION, TESTING, MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS
2007 NFPA 72, NATIONAL FIRE ALARM CODE
BUILDING TYPE: TYPE V-B
PRIMARY OCCUPANCY TYPE: GROUP E
NEW MODULAR UNITS (SQ/FT): 4,320 SF
PROGRAM DESCRIPTION: FOUR 24'x40' PERMANENT MODULAR CLASSROOMS AND ONE 12'x40' PERMANENT MODULAR TOILET ROOM BUILDING PLACED ON CONCRETE FOUNDATIONS.

ACS: Bill Dong
FLS: Kristin LaVella
SSS: Gary Reynolds

GRAPHIC SYMBOLS

DRAWING TITLE — NUMBER, DRAWING TITLE, A101, DRAWING, 1/8"=1'-0", DRAWING SCALE, SHEET NUMBER

BUILDING SECTION — NUMBER, 1, A401, SHEET ON WHICH SECTION OCCURS

DETAIL — NUMBER, A901, SHEET ON WHICH DETAIL OCCURS

STRUCTURAL GRIDLINE — 1, A

DOOR — REFERENCES DOOR SCHEDULE — 101

CEILING FINISH — REFERENCES COLOR AND FINISH SCHEDULE — 10'-0" HEIGHT, PT-1 FINISH, ACT-1 MATERIAL

EXTERIOR ELEVATION — NUMBER, A301, SHEET ON WHICH ELEVATION OCCURS

COMPASS ROSE — PROJECT NORTH, TRUE NORTH

BUILDING SYSTEM — REFERENCES BUILDING SYSTEM TYPE SCHEDULE — XX XXXXX — SYSTEM TYPE PER SCHEDULE, EXTENT OF SYSTEM

MATCHLINE — MATCHLINE, A100

FIRE EXTINGUISHER CABINET — AS, F, S — AS = 5 LB ABC EXTINGUISHER; A10 = 10 LB ABC EXTINGUISHER; EX = EXISTING EXTINGUISHER; EX = EXISTING CABINET OR HOOK; S = SURFACE MOUNTED CABINET; SH = SURFACE MOUNTED HOOK; SR = SEMI RECESSED CABINET; R = RECESSED CABINET

PLANTING / LANDSCAPE FEATURE — REFERENCES LANDSCAPING SCHEDULE — ABM, 10 — PLANTING TYPE PER SCHEDULE, QUANTITY

DATUMS – WORKPOINT AND CENTERPOINT — WP, CP

ROOM NAME — ROOM NAME, 100

INTERIOR PARTITION — REFERENCES PARTITION TYPE SCHEDULE — A3 — PARTITION TYPE PER SCHEDULE

WINDOW FRAME TYPE — REFERENCES WINDOW FRAME TYPE SCHEDULE(S) — 1 — FRAME TYPE PER SCHEDULE

LOUVER FRAME TYPE — REFERENCES LOUVER FRAME TYPE SCHEDULE(S) — L1 — FRAME TYPE PER SCHEDULE

FLOOR FINISH TRANSITION — REFERENCES COLOR AND FINISH SCHEDULE — FLR-1, FLR-2 — FLOORING TYPES PER SCHEDULE

INTERIOR ELEVATION — NUMBER, 4, A701, 2, 3, SHEET ON WHICH ELEVATION OCCURS

HEIGHT/ELEVATION BENCHMARKS — PRIMARY DATUM 100'-0", SECONDARY DATUM 101'-0", SPOT ELEVATION 100'-0"

KEYNOTE — REFERENCES SHEET KEYNOTE LEGEND — 1, 2

REVISION — 1

FIXTURE / EQUIPMENT (ELEVATION) — E — C = CLOCK; D = SMOKE DETECTOR; E = ELECTRICAL; S = SPEAKER; T = THERMOSTAT

FURNISHINGS / FIXTURES / EQUIPMENT — REFERENCES FFE SCHEDULE — CW, DM2436 — UNIT PER SCHEDULE, LOCATION OF UNIT

ABBREVIATIONS

ACT	ACOUSTIC CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATIVE / ALTERNATE
ALUM	ALUMINUM
AOR	ARCHITECT OF RECORD
ARCH	ARCHITECT
BLKG	BLOCKING
BO	BOTTOM OF
BRG	BEARING
CGA	CUNINGHAM GROUP ARCHITECTURE, P.A.
CJ	CONTROL JOINT
CL	CENTER LINE
CLR	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONT	CONTINUOUS OR CONTINUE
CPT	CARPET(ED)
CT	CERAMIC TILE
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIV	DIVISION
DN	DOWN
DWGS	DRAWINGS
(E) / EXIST	EXISTING
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC(AL)
EOR	ENGINEER OF RECORD
EQ	EQUAL
EWC	ELECTRIC WATER COOLER
EXP	EXPOSED
EXT	EXTERIOR
FD	FLOOR DRAIN
FE / FEC	FIRE EXTINGUISHER (CABINET)
FF / FFE	FINISH FLOOR (ELEVATION)
FOEW	FACE OF EXISTING WALL
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED POLYESTER
GA	GAUGE
GALV	GALVANIZED
GL	GLASS, GLAZING
GT	GLAZED TILE
GWB	GYPSUM WALLBOARD
HB	HOSE BIBB
HM	HOLLOW METAL
HSS	HOLLOW STEEL SECTION
ID	INSIDE DIAMETER
INSUL	INSULATION
IOR	INSPECTOR OF RECORD
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANIC(AL)
MIN	MINIMUM
MIR	MIRROR(ED)
MO	MASONRY OPENING
MTD	MOUNTED
NIC	NOT IN CONTRACT
OC	ON CENTER(S)
OD	OUTSIDE DIAMETER
OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
OF/OI	OWNER FURNISHED/OWNER INSTALLED
OFS	OVERFLOW SCUPPER
OFRD	OVERFLOW ROOF DRAN
OH	OVERHEAD
OPNG	OPENING
OZ	OUNCE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PRV	POWER ROOF VENTILATOR
PT	PAINT(ED)
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
RAD/(R)	RADIUS
RB	RUBBER BASE
RC	REMOTE COMPRESSOR
RD	ROOF DRAIN
REF	REFERENCE / REFER TO
RF	RESILIENT FLOORING
REQ'D	REQUIRED
RO	ROUGH OPENING
RTU	ROOF TOP UNIT
SC	SEALED CONCRETE
SF	SQUARE FOOT/FEET
SIM	SIMILAR
SS	STAINLESS STEEL
STL	STEEL
STRUCT	STRUCTURAL
SUSP	SUSPENDED
T	TREAD
TB	TACKBOARD
T&G	TONGUE AND GROOVE
TOC	TOP OF CONCRETE SLAB / CURB
TOD	TOP OF DECK
TOF	TOP OF FOOTING
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRTD	TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VB	VINYL BASE
VP	VENEER PLASTER
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
VWC	VINYL WALL COVERING
WB	WHITEBOARD
WD	WOOD
WDW	WINDOW
WP	WORK POINT
#	NUMBER OR POUND
&	AND
@	AT

MATERIALS

ALUMINUM
BRICK
CARPET
CERAMIC TILE/ RESILIENT TILE
CONCRETE – CAST-IN-PLACE
CONCRETE – PRECAST
CONCRETE BLOCK
EARTH
EXISTING CONDITION
FINISHED WOOD
GLASS
GRAVEL/STONE FILL
GYPSUM WALL BOARD
INSULATION – ACOUSTICAL
INSULATION – BATT
INSULATION – RIGID
PARTICLE BOARD
PLASTER / GROUT
PLYWOOD
ROUGH LUMBER/ WOOD FRAMING
WOOD BLOCKING
SAND/ GRANULAR FILL
STONE
STEEL/STEEL STUD FRAMING
TERRAZZO
WELDED WIRE FABRIC

Statement of General Conformance

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

(Application No. 02-111612 File No. 15-6)
4 Modular Classrooms plus Modular Toilet Building – McKinley Elementary School

These drawings and pages of calculations, the items listed below as 3), have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for:

1) Design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me the Architect of Record (AOR).
2) Coordination with my plans and specifications has been reviewed and is acceptable for incorporation into the construction of this project.
3) Reviewed items include:
   a) Structural Calculations for 12'x40' RESTROOM PC – 248 pages (8.5x11) stamped and signed by Ken Luttrell, SE (CA Lic. No. 1418), Shop drawings – 25 sheets (24x36) identified by the Index on sheet TS-1, stamped and signed by Randall Cavanagh, Architect (CA Lic. No. C12631) and Comparison PC drawing set (11x17) for American Modular Systems, Application No. PC 02-109808.
   b) Structural Calculations for 40' PITCHED ROOF MULTI-WID PC – 259 pages (8.5x11) stamped and signed by Ken Luttrell, SE (CA Lic. No. 1418), Shop drawings FOR 24'x40' RELOCATABLE BUILDINGS – 26 sheets (24x36) Identified by the Index on sheet TS-1, stamped and signed by Randall Cavanagh, Architect (CA Lic. No. C12631) and Comparison PC drawing set for 24'x40' THRU 120'X40' RELOCATABLE BUILDINGS (11x17) for American Modular Systems, Application No. PC 02-109695.

The Statement of General Conformance "shall 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" of Title 24, Part 1. *(Title 24, Part 1, Section 4-317 (b))*

I certify that these drawings or pages (check both boxes):

☑ are in general conformance and ☑ have been coordinated	☐ are in general conformance and ☐ have been coordinated
Signature 12-24-10 Date	Signature Date
Architect or ~~Engineer~~ designated to be in General responsible charge	Architect or Engineer delegated responsibility for this portion of the work
Kenneth L. Svendsen Print Name	Print Name
C18251 3-31-2011 License Number Exp Date	License Number Exp Date

LOCAL FIRE AUTHORITY REVIEW

LOCAL FIRE AUTHORITY TO INITIAL THE ITEMS AS APPLICABLE TO THIS PROJECT AND SIGN BELOW

YES NO N/A

ACCESS ROADS & FIRE HYDRANTS

☑ ☐ ☐ ACCESS ROADS & GATE ENTRANCES ARE IN ACCORDANCE WITH TITLE 19, CALIFORNIA CODE OF REGULATIONS DIV. 1, CHAP. 1, SUB. CHAP. 1, ARTICLE 3 NUMBER 3.05 (ACCESS ROADS) AND 3.16 & 2007 CFC 503.5.2 (GATE ENTRANCES) TO SCHOOL SITES.

☑ ☐ ☐ FIRE FLOW, FIRE HYDRANT LOCATION AND DISTRIBUTION ARE IN ACCORDANCE WITH 2007 CALIFORNIA FIRE CODE, 508.3 & APPENDIX B (FIRE FLOW) AND APPENDIX C (HYDRANT LOCATIONS) AND/OR NFPA 1142.

☑ ☐ ☐ FIRE HYDRANT TYPE MEETS LOCAL FIRE AUTHORITY OR WATER PURVEYOR MAKE AND MODEL REQUIREMENTS.

☐ ☐ ☑ WILDLAND URBAN INTERFACE AREA. (2007 CBC CHAPTER 7A)

AUTOMATIC FIRE SPRINKLER SYSTEMS

☐ ☐ ☑ THE LOCATION(S) OF THE PROPOSED POST INDICATOR VALVE (PIV) AND FIRE DEPARTMENT CONNECTION (FDC) MEETS THE REQUIREMENTS OF THIS JURISDICTION AT THIS TIME.

☐ ☐ ☑ THE LOCATION(S) OF THE DETECTOR CHECK VALVE ASSEMBLY (DCVA) MEETS THE REQUIREMENTS OF THIS JURISDICTION AT THIS TIME.

☐ ☐ ☑ THE FIRE PUMP ASSEMBLY / BACKFLOW PREVENTER MEETS THE REQUIREMENTS OF THIS JURISDICTION AT THIS TIME.

LOCAL FIRE AUTHORITY: BAKERSFIELD FIRE DEPARTMENT
ADDRESS: 2101 H STREET
CITY / STATE / ZIP: BAKERSFIELD CA. 93301
PHONE NUMBER: (661) 631-8421 **DATE:** 9-8-10
APPROVAL ISSUED BY: Danita Winston
RANK / TITLE: Fire Plans Examiner
COMMENTS:

A SIGNATURE ABOVE SIGNIFIES THAT THE LOCAL FIRE AUTHORITY HAS REVIEWED THE PROPOSED LOCATIONS AND WAS CONSULTED REGARDING THE PLACEMENT / DESIGN OF THE PIV(S), FDC(S), DCVA(S), FIRE PUMP(S), AND HYDRANTS. THE CURRENT CONFIGURATION SHOWN, AS OF THIS DATE, MEETS WITH THEIR CURRENT STANDARDS.

CUNINGHAM GROUP

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Bakersfield, CA
93301
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www.cuningham.com

Consultant

Revisions

No.	Date	Description

IDENTIFICATION STAMP
DIV OF THE STATE ARCHITECT
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Date: 12/15/10
Comm. No.: 10-0801
Drawn By: JF Checked By: -
PIC/ANC: - Document Phase: CD

Project Title

McKINLEY ELEMENTARY PERMANENT MOD. CLASSROOMS

LICENSED ARCHITECT KENNETH L. SVENDSEN C15251 RENEWAL 03-31-11 STATE OF CALIFORNIA

Sheet Title

COVER SHEET

Sheet Number

G001

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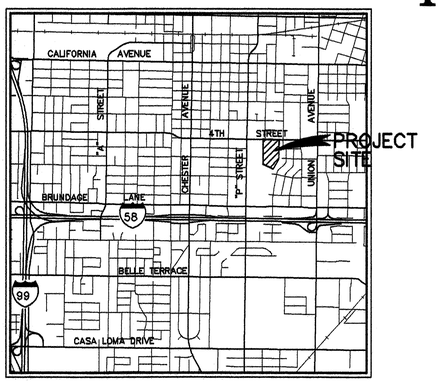
McKINLEY ELEMENTARY SCHOOL, BAKERSFIELD, CALIFORNIA
GRADING AND SITE IMPROVEMENT PLANS
FOR NEW PERMANENT MODULAR CLASSROOMS



VICINITY MAP
NO SCALE

BENCHMARK SET:

SET CONCRETE NAIL IN PAVEMENT AND SHOWN ON THIS PLAN WITH ELEVATIONS NOTED.

BENCHMARK USED:

FOUND CHISELED "O" AT THE NORTH END OF THE THE NORTHEAST CURB RETURN AT THE INTERSECTION OF 4TH STREET AND "T" STREET PER CITY OF BAKERSFIELD BENCH MARK BOOK.

ELEVATION = 387.48 (TRACT No. 1557 STREET IMPROVEMENT PLANS).

STATISTICS:

1. ASSESSOR'S PARCEL NUMBER: 010-110-01
2. APPROXIMATE ACREAGE: 22.37 ACRES (TOTAL DISTRICT PROPERTY)
3. BUILDING SIZE: APPROXIMATELY 4,115 S.F.
4. WATER: ON-SITE
5. SEWER DISPOSAL: ON-SITE
6. DRAINAGE: ON-SITE
7. EXISTING LAND USE: SCHOOL SITE
8. PROPOSED LAND USE: SCHOOL SITE
9. FIRE PROTECTION: C.O.B.
10. ADDRESS: 601 4th STREET BAKERSFIELD, CA 93307

SHEET No. INDEX

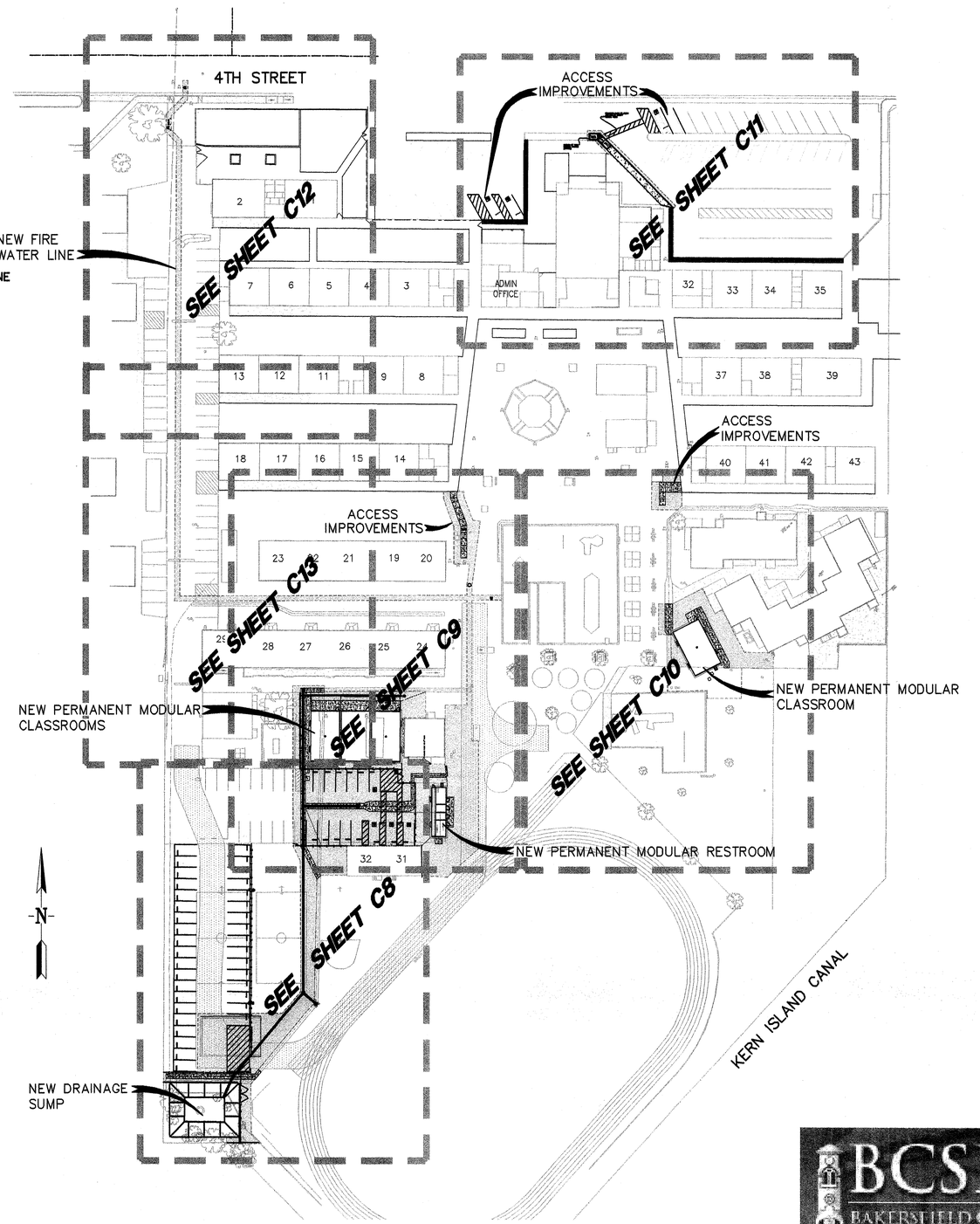
CONSTRUCTION LEGEND

- NEW AC PAVEMENT
- NEW CONCRETE
- PROPOSED DRAINAGE INLET
- DESIGN SLOPE
- SAWCUT LINE
- PROPOSED STORM DRAIN
- PROPOSED DOMESTIC PVC WATER LINE
- PROPOSED SEWER
- PROPOSED SEWER CLEANOUT PER C.O.B. STANDARD SW-5 (SEE SHEET 5)
- PROPOSED SEWER MANHOLE PER C.O.B. STANDARD SW-2 (SEE SHEET 5)
- PROPOSED GATE VALVE AND VALVE BOX
- PROPOSED 4-INCH AND BOX PER C.O.B. STANDARD W-4 (SEE SHEET 5)
- CONSTRUCTION NOTE – SEE SHEET 4
- EXISTING SEWER LINE
- EXISTING WATER LINE
- EXISTING ELEVATION
- PATH OF DRAINAGE
- CONCRETE BUMPER
- PROPOSED SIGN
- PROPOSED LUMINAIRE (SEE ELECTRICAL PLANS)
- ADA PAVEMENT MARKING
- PROPOSED 6' HIGH CHAIN LINK FENCE PER DISTRICT STANDARDS
- PROPOSED FIRE HYDRANT

TOG = TOP OF GRATE INLET
FL = FLOWLINE
GB = GRADE BREAK
TC = TOP OF CURB
TOC = TOP OF CONCRETE FLAT WORK
MIN = MINIMUM
AC = ASPHALT CONCRETE
BW = BACK OF WALK
EX = EXISTING
HP = HIGH POINT
INV = INVERT
FS = FINISHED SURFACE
LP = LIP OF V-GUTTER
CONC = PORTLAND CEMENT CONCRETE
S = SLOPE
FG = FINISHED GRADE
CO = CLEANOUT
BO = BLOWOFF

NOTE

SEE SHEETS 6 &7 (EXISTING CONDITIONS / DEMOLITION) FOR ADDITIONAL LEGEND OF EXISTING CONDITIONS.



KEY MAP
SCALE: 1"=50'

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Bakersfield, CA 93309
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Fax: (661) 377-0076

REGISTERED PROFESSIONAL ENGINEER MATTHEW K. YOVILO RCE 43130 Exp. 3-31-12 CIVIL STATE OF CALIFORNIA

12/15/2010

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Sheet Title
COVER SHEET

BCSD BAKERSFIELD CITY SCHOOL DISTRICT

Sheet Number
C1

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GENERAL NOTES:

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE START OF CONSTRUCTION. A PERMIT SHALL BE OBTAINED FROM CITY PUBLIC WORKS DEPARTMENT FOR WORK TO BE DONE IN THE CITY STREET RIGHT-OF-WAY.
2. ANY TRENCHING TO BE CONDUCTED WITHIN THIS PROJECT SHALL BE BACKFILLED AND COMPACTED PER THE SOILS REPORT.
3. THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL OBSTRUCTIONS AS DIRECTED BY CITY ENGINEER.
4. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS: THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER, AND THE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM NEGLIGENCE BY THE OWNER, ENGINEER, OR ARCHITECT.
5. IF A PROBLEM SHOULD ARISE DURING THE COURSE OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY PRIOR TO ANY FURTHER WORK.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF BAKERSFIELD STANDARDS AND STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION, EXCEPT AS OTHERWISE SHOWN ON THESE PLANS OR CONTRACT DOCUMENTS.
7. ~~PRIOR TO THE START OF ANY PHASE OF CONSTRUCTION, THE CITY CONSTRUCTION INSPECTION DEPARTMENT SHALL BE GIVEN 24 HOURS NOTICE (661) 326-3049.~~
8. ALL EXISTING IMPROVEMENTS (CURB, GUTTER, SIDEWALK, CROSS-GUTTER, FENCING, ETC.) THAT ARE REMOVED, DAMAGED, OR UNDERCUT SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER.
9. THE LOCATIONS OF EXISTING UTILITIES AND UNDERGROUND PIPELINES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND UNDERGROUND PIPELINES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE, PRESERVE AND PROTECT ANY AND ALL UNDERGROUND UTILITIES AND PIPELINES. THE CONTRACTOR SHALL CALL U.S.A. (UNDERGROUND SERVICE ALERT) 1-800-227-2600 TWO WORKING DAYS PRIOR TO ANY CONSTRUCTION OR EXCAVATION.
10. IF THE CONTRACTOR IS IN DOUBT AS TO THE MEANING OF ANY PART OF THE PLAN AND SPECIFICATIONS OR FINDS DISCREPANCIES IN OR OMISSIONS FROM THE DRAWINGS, HE SHALL SUBMIT A WRITTEN REQUEST FOR AN INTERPRETATION OR A CORRECTION THEREOF, PRIOR TO FILING HIS BID PRICE FOR THE PROJECT.
11. IN THE EVENT CONSTRUCTION STAKING BASED ON CONSULTANT'S PLANS, DRAWINGS OR OTHER DOCUMENTS IS ACCOMPLISHED BY OTHER THAN THE CONSULTANT, CLIENT AGREES TO HOLD CONSULTANT HARMLESS AND RELEASE CONSULTANT FROM ALL LIABILITY ARISING FROM THE USE OF SAID PLANS, DRAWINGS OR OTHER DOCUMENTS.
12. ALL EXISTING PAVING AND SURFACING REMOVED, DAMAGED OR UNDERCUT SHALL BE REPLACED IN ACCORDANCE WITH THE CITY OF BAKERSFIELD DRAWING S-6, OR AS OTHERWISE NOTED HEREIN.
13. COMPACTION TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE ENGINEER THE COST OF RETESTING DUE TO FAILED COMPACTION TESTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. PINNACLE CIVIL ENGINEERING, INC. SHALL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO, OR USES OF, THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED IN WRITING BY PINNACLE CIVIL ENGINEERING, INC.
15. ~~SEE WATER AND STREET IMPROVEMENT PLANS FOR OTHER IMPROVEMENTS THAT ARE PART OF THIS PROJECT.~~
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ALL TRENCHES. IF TRENCHES OR PIPING BECOME DAMAGED DUE TO WATER INFILTRATION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR THE TRENCH AND PIPING TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE.
17. FLOODING OR WATERJETTING SHALL NOT BE USED FOR BACKFILL COMPACTION.
18. DRAWINGS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY. CONTRACTOR SHALL OBTAIN A COPY OF "CITY OF BAKERSFIELD SUBDIVISION STANDARDS" AND DRAWINGS FOR HIS USE. THESE STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THESE PLANS.
19. NORMAL CONSTRUCTION STAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

GRADING NOTES:

1. ALL GRADING AND SITE PREPARATION SHALL CONFORM TO THIS PLAN AND SHALL CONFORM WITH APPENDIX CHAPTER 33 OF CALIFORNIA BUILDING CODE (CURRENT EDITION) AND STANDARDS PERTAINING THERETO.
2. SOILS REPORT PREPARED BY KRAZAN & ASSOCIATES DATED APRIL 22, 2009. IN THE EVENT OF A CONFLICT BETWEEN THESE PLANS AND THE SOILS REPORT, THE MORE RESTRICTIVE SPECIFICATION SHALL APPLY.
3. ALL DESIGN ELEVATIONS SHOWN ARE TO FINISH GRADE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING THE PAD AND PAVING AREAS TO WITHIN 0.1 FOOT OF SUBGRADE. IF SUCH AREAS SHOULD BE FOUND TO BE MORE THAN 0.1 FOOT FROM THE DESIGN SUBGRADE ELEVATION AFTER COMPLETION OF GRADING, THE CONTRACTOR SHALL RETURN AND CORRECT THE GRADING AT NO COST TO THE OWNER.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE START OF CONSTRUCTION. A PERMIT SHALL BE OBTAINED FROM THE CITY OF BAKERSFIELD FOR ANY WORK TO BE PERFORMED IN THE CITY RIGHT-OF-WAY.
6. UPON COMPLETION OF GRADING AND BEFORE THE START OF CONSTRUCTION, A FINAL SOILS REPORT COVERING THE SITE PREPARATION AND GRADING SHALL BE SUBMITTED TO THE ENGINEER AND BUILDING DEPARTMENT BY THE SOILS ENGINEER.
7. IF A PROBLEM OR CONFLICT SHOULD ARISE DURING THE COURSE OF THIS PROJECT, IT IS THE RESPONSIBILITY OF THE OWNER OR THE GRADING CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY PRIOR TO ANY FURTHER WORK.
8. ALL GRADING WORK SHALL BE SUPERVISED AS "ENGINEERED GRADING" IN ACCORDANCE WITH APPENDIX CHAPTER 33 OF CALIFORNIA BUILDING CODE. THE DESIGN ENGINEER SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO ENSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODE WITHIN HIS PURVIEW.
9. DUST CONTROL:
   IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT A DUST NUISANCE FROM ORIGINATING FROM THE SITE OF WORK AS A RESULT OF HIS OPERATIONS DURING THE EFFECTIVE PERIOD OF THIS CONTRACT. PREVENTATIVE MEASURES TO BE TAKEN BY THE CONTRACTOR SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   A. WATER SHALL BE APPLIED TO ALL UNPAVED AREAS AS REQUIRED TO PREVENT THE SURFACES FROM BECOMING DRY ENOUGH TO PERMIT DUST FORMATION.
   B. PAVED SURFACES OVER WHICH VEHICULAR TRAFFIC IS PERMITTED TO TRAVEL SHALL BE KEPT FREE OF DIRT.
10. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF ANY WORK. CALL U.S.A. UNDERGROUND ALERT (800) 227-2600 PRIOR TO ANY CONSTRUCTION OR EXCAVATION.
11. THE GEOTECHNICAL ENGINEER SHALL PROVIDE SUFFICIENT INSPECTIONS DURING THE PREPARATION OF THE NATURAL GROUND AND THE PLACEMENT AND COMPACTION OF THE FILL TO BE SATISFIED THAT THE WORK IS BEING PERFORMED IN ACCORDANCE WITH THE PLAN AND APPLICABLE CODE REQUIREMENTS.
12. EXISTING UNDERGROUND LINES HAVE BEEN SHOWN ON THIS PLAN ACCORDING TO AVAILABLE RECORDS. THE ENGINEER IS NOT RESPONSIBLE FOR POSSIBLE ERRORS OR OMISSIONS AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
13. DURING GRADING, REASONABLE SEARCHING SHOULD BE PERFORMED FOR CONCEALED 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.

GRADING NOTES (CONTINUED):

14. CONTRACTOR AGREES THAT HE 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 CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER 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 OWNER OR THE ENGINEER.
15. THE STAKING AND MARKING OF THE PROJECT SHALL BE PERFORMED BY THE CONTRACTOR. THE ENGINEER WILL PROVIDE SURVEY CONTROL POINTS.
16. ALL ONSITE OR OFFSITE OBSTRUCTIONS SHALL BE REMOVED BY CONTRACTOR AT CONTRACTOR'S EXPENSE.
17. ANY EXISTING IMPROVEMENT OR UTILITY REMOVED, DAMAGED OR UNDERCUT BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE COUNTY OF KERN AT THE CONTRACTOR'S EXPENSE.
18. ALL CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
19. SITE PREPARATION AND GRADING SHALL BE DONE UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER AND DESIGN ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO PLACING OF ANY FILL MATERIAL.
20. THE SITE SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION, INCLUDING ROOTS, LOOSE FILL, TRASH AND OTHER DELETERIOUS MATERIALS. ANY HOLE OR VOIDS LEFT AFTER THE REMOVAL OF TREES, ROOTS, SEPTIC TANKS, ABANDONED FOUNDATIONS, PIPELINES OR THE LIKE, SHALL BE FILLED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.
21. FILL MATERIAL SHALL BE SUBJECT TO THE SOILS ENGINEER'S APPROVAL.
22. ALL FILL SLOPES SHALL NOT TOE OUT WITHIN 12 FEET HORIZONTALLY FROM THE TOP OF EXISTING OR PLANNED CUT SLOPES.
23. ~~THE CUT AND FILL QUANTITIES ARE CALCULATED USING A COMPACTION FACTOR OF __. THE ENGINEER MAKES NO WARRANTEE EITHER DIRECT OR IMPLIED THAT THIS WILL BE THE ACTUAL COMPACTION FACTOR. IF A DEFICIENCY OR AN EXCESS OF SOIL ARISES, THE GRADING CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER, WHO SHALL DETERMINE IF ADJUSTMENTS CAN BE MADE TO IMPROVE THE BALANCE BETWEEN CUT AND FILL.~~
24. THE CUT AND FILL QUANTITIES SHOWN ON THIS PLAN ARE FOR PERMIT PURPOSES ONLY. ~~THE CONTRACTOR SHALL, AFTER EXAMINING THE PLAN, SOILS REPORT AND THE SITE TERRAIN, PREPARE HIS BID PRICE FOR THE PROJECT, BASED ON HIS OWN EARTHWORK CALCULATIONS.~~
25. EXPORT MATERIAL SHALL BE DISPOSED OF AT AN APPROVED SITE COORDINATED WITH THE INSPECTOR AT THE TIME OF GRADING.
26. SEE ARCHITECT'S DETAIL SHEET FOR DETAILS NOT SHOWN ON THESE PLANS. ALSO SEE ARCHITECT'S SITE PLAN FOR DIMENSIONS NOT SHOWN ON THIS PLAN.
27. IF THE CONTRACTOR IS IN DOUBT AS TO THE MEANING OF ANY PART OF THE PLAN AND SPECIFICATIONS OR FINDS DISCREPANCIES IN OR OMISSIONS FROM THE DRAWINGS, HE SHALL SUBMIT A WRITTEN REQUEST FOR AN INTERPRETATION OR A CORRECTION THEREOF, PRIOR TO FILING HIS BID PRICE FOR THE PROJECT.
28. THE CONTRACTOR SHALL COORDINATE WITH THE DISTRICT AND THE ENGINEER FOR LOCATION OF THE BORROW AREAS (IF REQUIRED) PRIOR TO BEGINNING CONSTRUCTION.
29. IN THE EVENT CONSTRUCTION STAKING BASED ON CONSULTANT'S PLANS, DRAWINGS OR OTHER DOCUMENTS IS ACCOMPLISHED BY OTHER THAN THE CONSULTANT, CLIENT AGREES TO HOLD CONSULTANT HARMLESS AND RELEASE CONSULTANT FROM ALL LIABILITY ARISING FROM THE USE OF SAID PLANS, DRAWINGS OR OTHER DOCUMENTS.
30. ANY TRENCHING TO BE DONE WITHIN THE PROJECT SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SOILS REPORT.
31. SURFACE DRAINAGE SHALL BE 1% MINIMUM, EXCEPT AS WAVED BY THE BUILDING OFFICIAL.
32. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO (A) FAMILIARIZE THEMSELVES WITH THE FOREGOING RECOMMENDATIONS, (B) NOTIFY THE ENGINEER WHEN SITE PREPARATION BEGINS AND BEFORE THE PLACEMENT OF FILLS, AND (C) INFORM THE ENGINEER IF ITEMS WHICH MIGHT EFFECT FOUNDATION STABILITY ARE ENCOUNTERED DURING EARTHWORK OPERATIONS SO THAT THEY MAY BE TREATED UNDER HIS DIRECTION (THESE MIGHT INCLUDE BURIED TRASH OR VEGETATION, PIPELINES, ABANDONED WELLS, OLD FILLS, ETC.)
33. FLOODING, JETTING, OR SIMILAR CONSOLIDATION METHODS OF COMPACTION SHALL NOT BE PERMITTED.
34. ANY ABANDONED WELLS ON THE PROPERTY DISCOVERED DURING GRADING SHALL BE ADEQUATELY CAPPED IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY AND STATE ORDINANCES.
35. A BERM OR DRAINAGE SWALE SHALL BE CONSTRUCTED ALONG THE TOP OF ALL CUT AND FILL SLOPES TO PREVENT RUNOFF FROM GOING OVER THE SLOPE. THE FACE OF ALL CUT AND FILL SLOPES SHALL BE PLANTED WITH A GROUND COVER INDIGENOUS TO THE AREA.
36. UNLESS OTHERWISE SPECIFIED IN THE GEOTECHNICAL ENGINEERING INVESTIGATION, GROUND SURFACES TO RECEIVE CONCRETE DRIVEWAYS AND BITUMINOUS PAVEMENTS SHOULD BE SCARIFIED AND COMPACTED TO A MINIMUM DEPTH OF TWELVE INCHES (12") BELOW THE EXISTING GROUND SURFACE IN AREAS TO BE FILLED. COMPACTION IN PROPOSED PAVEMENT AREAS SHOULD BE TO A MINIMUM OF NINETY-FIVE PERCENT (95%) OF THE MAXIMUM DENSITY AS OBTAINED BY ASTM TEST METHOD D1557-78, METHOD A, AND SHOULD EXTEND TO A MINIMUM DISTANCE OF TWO FEET (2') BEYOND THE OUTSIDE EDGES OF PAVEMENTS.
37. ALL AREAS ON THE SITE ON WHICH STRUCTURES ARE TO BE PLACED MUST BE COMPACTED TO NINETY PERCENT (90%) DENSITY FOR A MINIMUM DISTANCE OF FIVE FEET (5') BEYOND THE OUTSIDE EDGES OF THE FOUNDATIONS OF THE STRUCTURES. THE DEPTH OF OVEREXCAVATION AND COMPACTION IN PAD AREAS SHALL BE ONE FOOT BELOW EXISTING GROUND ELEVATION. RE-COMPACTION OF OVER-EXCAVATED MATERIAL SHALL BE TO AT LEAST NINETY PERCENT (90%) OF MAXIMUM DRY DENSITY.
38. ALL FILL AREAS TO BE CLEARED OF ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FOR A STRUCTURAL FILL AND THE AREA SCARIFIED TO A DEPTH OF 6".
39. FILL AREAS SLOPING STEEPER THAN 5:1 SHALL BE KEYED AND BENCHED TO SUPPORT FILL.
40. FILL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 6" IN COMPACTED THICKNESS AND COMPACTED AT OPTIMUM MOISTURE CONTENT BY APPROVED METHOD.
41. ALL FILL TO BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DENSITY AS DETERMINED BY C.B.C. APPENDIX CHAPTER 33 AND SO CERTIFIED BY TESTS AND REPORTS FROM SOILS ENGINEER.
42. UNAUTHORIZED CHANGES AND USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ANY AND ALL CHANGES TO THESE PLANS MUST BE APPROVED BY PINNACLE CIVIL ENGINEERING, INC.
43. PURSUANT TO SECTION 3317.8 OF THE CALIFORNIA BUILDING CODE, IF THE CIVIL ENGINEER, THE SOILS ENGINEER, OR THE ENGINEERING GEOLOGIST OF RECORD IS CHANGED DURING GRADING, THE WORK SHALL BE STOPPED UNTIL THE REPLACEMENT HAS AGREED IN WRITING TO ACCEPT THEIR RESPONSIBILITY WITHIN THEIR AREA OF TECHNICAL COMPETENCE FOR APPROVAL UPON COMPLETION OF THE WORK. IT SHALL BE THE DUTY OF THE PERMITTEE TO NOTIFY THE BUILDING OFFICIAL IN WRITING OF SUCH CHANGE PRIOR TO THE RECOMMENCEMENT OF SUCH GRADING.
44. IF THE PROJECT IS SUBJECT TO THE PROVISIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), A "NOTICE OF INTENT" (NOI) TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER NO. 92-08-DWQ) MUST BE FILED WITH STATE WATER RESOURCES CONTROL BOARD IN SACRAMENTO BEFORE THE BEGINNING OF ANY CONSTRUCTION ACTIVITY. COMPLIANCE WITH THE GENERAL PERMIT REQUIRES THAT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BE PREPARED, CONTINUOUSLY CARRIED OUT, AND ALWAYS BE AVAILABLE FOR PUBLIC INSPECTION DURING NORMAL CONSTRUCTION HOURS.
45. AN OPEN STREET PERMIT SHALL BE OBTAINED FROM THE CITY OF BAKERSFIELD PUBLIC WORKS DEPARTMENT FOR ANY WORK PERFORMED WITHIN EXISTING ACCEPTED STREET RIGHT-OF-WAY. UNLESS SECURED BY A SUBDIVISION AGREEMENT, SECURITY BASED ON AN APPROVED ENGINEER'S ESTIMATE FOR THE WORK PERFORMED WITHIN RIGHT OF WAY AND INSURANCE AS REQUIRED SHALL BE PROVIDED PRIOR TO ISSUANCE OF A PERMIT.

DEMOLITION NOTES:

1. CONTRACTOR SHALL PERFORM ALL NECESSARY DEMOLITION WITHIN THE LIMITS OF WORK.
2. SEE ALSO ARCHITECT'S PLANS FOR DEMOLITION SPECIFICATIONS FOR STRUCTURES HARDSCAPE.
3. ALL NECESSARY DEMOLITION WITHIN THE LIMITS OF WORK SHALL BE PERFORMED BY THE CONTRACTOR. EXISTING IRRIGATION SHALL BE CUT AND CAPPED AT APPROPRIATE LOCATIONS UNTIL THE NEW SYSTEM IS OPERATIONAL. ALL EXISTING IRRIGATION APPURTENANCES WITHIN THE LIMITS OF WORK SHALL BE REMOVED AND PROPERLY DISPOSED.
4. ALL TREES AND PLANTINGS WITHIN THE WORK LIMITS SHALL BE COMPLETELY REMOVED, INCLUDING ROOT BALLS.
5. EXCEPT AS OTHERWISE NOTED OR SHOWN ON THE PLANS, ALL MATERIAL GENERATED BY THE DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LAWS AND ORDINANCES.
6. THE AREA OF WORK AND CONSTRUCTION TRAFFIC LANES SHALL BE CORDONED OFF FOR THE DURATION OF THE CONTRACT. THE CONTRACTOR SHALL CONTINUALLY PROVIDE FOR SAFE PASSAGE OF PEDESTRIANS AROUND THE WORK ZONE.

PORTLAND CEMENT CONCRETE, CURBS & SIDEWALK:

1. GENERAL
   1.1: PORTLAND CEMENT CONCRETE FOR CURBS, GUTTERS, SIDEWALK, AND OTHER "FLATWORK" SHALL CONFORM TO THE PROVISIONS OF SECTION 40 AND 90 OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, EXCEPT AS OTHERWISE MODIFIED BY THESE PLANS, SPECIFICATIONS, OR CONTRACT DOCUMENTS.

   1.2: SEE ARCHITECT'S PLANS AND CONTRACT DOCUMENTS FOR STRUCTURAL CONCRETE, OR CONCRETE FOR FOUNDATIONS.

2. CONCRETE
   2.1 CLASS A
   CLASS A CONCRETE SHALL HAVE A MINIMUM PORTLAND CEMENT CONTENT OF 564 POUNDS PER CUBIC YARD AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS.

   2.2 CLASS B
   CLASS B CONCRETE SHALL A MINIMUM PORTLAND CEMENT CONTENT OF 500 POUNDS PER CUBIC YARD AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.

   2.3 CLASS C
   CLASS C CONCRETE SHALL HAVE A MINIMUM PORTLAND CEMENT CONTENT OF 376 POUNDS PER CUBIC YARD AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI IN 28 DAYS.

3. REINFORCING
   WHERE REINFORCED CONCRETE IS REQUIRED, REINFORCING STEEL CONFORMING TO THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS SHALL BE FURNISHED AND INSTALLED.

4. CONCRETE IMPROVEMENTS
   4.1: PORTLAND CEMENT CONCRETE SHALL BE CLASS B FOR CURB AND GUTTER, ADA RAMPS, AND SIDEWALKS AND CLASS A FOR CROSS GUTTERS, DRIVEWAY APPROACHES, AND ANY OTHER CONCRETE IMPROVEMENT WHICH WILL BE SUBJECT TO VEHICULAR TRAFFIC. CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 90, "PORTLAND CEMENT CONCRETE", OF THE STATE SPECIFICATIONS.

   4.2: CROSS GUTTERS AND DRIVEWAY APPROACHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH PROVISIONS OF SECTION 73, "CONCRETE CURBS AND SIDEWALKS", OF THE STATE SPECIFICATIONS. DRIVE APPROACHES SHALL NOT BE CONSTRUCTED WITHIN TEN FEET OF CURB RETURNS, AS MEASURED FROM RETURN TO EDGE OF APPROACH, UNLESS APPROVED BY THE CITY. EXPANSION JOINTS SHALL BE EITHER (A) ¼-INCH TO ½-INCH PREMOLDED EXPANSION JOINT FILLER PER SECTION 51-1.12 OF THE STATE SPECIFICATIONS, OR (B) 2-INCH DEEP SCORED JOINT (WEAKENED PLANE, EXTRUSION MACHINE ONLY).

   4.3: ALL CONCRETE IMPROVEMENTS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARD DETAILS. WHITE PIGMENTED CURING COMPOUNDS, CONFORMING TO ASTM C-309, SHALL BE APPLIED TO ALL EXPOSED SURFACES OF CONCRETE IMPROVEMENTS TO PROVIDE COMPLETE AND UNIFORM COVERAGE. CURING COMPOUND SHALL BE APPLIED WITHIN 1 HOUR OF CONCRETE FINISHING.

   4.4: EXCAVATION, GRADING AND BACKFILLING BEHIND THE CURB RETURNS, INCLUDING GRADING OF PARKWAY, SHALL BE DONE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS FOR EARTHWORK. ANY EXCAVATED MATERIAL NOT NEEDED FOR GRADING OR BACKFILL, IN THE OPINION OF THE CITY, SHALL BE REMOVED FROM THE SITE OF WORK AND DISPOSED OF AT THE EXPENSE OF THE OWNER.

   4.5: THE OWNER SHALL SUBMIT TO THE ENGINEER FOR APPROVAL THE DESIGN OF THE MIX PROPOSED FOR USE. SAID MIX DESIGN SHALL SET FORTH WEIGHTS OF CEMENT, SAND, COARSE AGGREGATE AND WATER TO BE USED TOGETHER WITH A GRADING ANALYSIS OF SAND AND COARSE AGGREGATE. THE SOURCE OF SUPPLY OF MATERIALS ENTERING INTO THE MIX SHALL ALSO BE GIVEN. THE MIX DESIGN SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING ANY CONCRETE.

   4.6: IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, INSTALL REBAR DOWELLS WHEN NEW PC CONCRETE IS SHOWN TO JOIN EXISTING PC CONCRETE.

SOIL STERILANT:

1. SOIL STERILANT SHALL BE APPLIED TO NATIVE SOILS OR BASE MATERIAL IN AREAS TO RECEIVE PORTLAND CEMENT CONCRETE OR ASPHALT CONCRETE.
2. SOIL STERILANT SHALL BE STANDARD, QUICK-ACTING, SHORT-LIVED, AND NON-SELECTIVE WEED AND GRASS KILLER. APPLICATION OF THE STERILANT SHALL POSE NO LONG TERM OR SHORT TERM HEALTH THREATS TO THE INSTALLER OR THE GENERAL PUBLIC. SOIL STERILANT SHALL BE OUSTXP, AS MANUFACTURED BY DUPONT, OR APPROVED EQUAL. SOIL STERILANT SHALL BE APPLIED AT A RATE AND MANNER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, EXCEPT AS OTHERWISE MODIFIED HEREIN.
3. SOIL STERILANT SHALL BE APPLIED TO THE GRADED AND COMPACTED BASE MATERIAL IMMEDIATELY BEFORE PAVING.
4. SOIL STERILANT SHALL BE APPLIED TO THE GRADED AND COMPACTED NATIVE SOIL OR BASE MATERIAL UNDER PORTLAND CEMENT CONCRETE, AFTER GRADE IS ACCEPTED, FORMWORK, OR STRINGLINE HAS BEEN INSTALLED, AND "POURING" IS PLANNED WITHIN 24-HOURS. GRADE SHALL NOT BE DISTURBED ONCE STERILANT HAS BEEN APPLIED.
5. SOIL STERILANT SHALL NOT BE APPLIED EARLIER THAN ONE DAY PRIOR TO PLACEMENT OF EITHER AGGREGATE BASE OR POURING PC CONCRETE. WATER SHALL NOT BE APPLIED TO AREA AFTER APPLICATION OF STERILANT.
6. SOIL STERILANT SHALL NOT BE APPLIED WHEN PRECIPITATION IS EMINENT. SOIL STERILANT SHALL BE APPLIED IN ACCORDANCE WITH ALL MANUFACTURER'S DRIFT MANAGEMENT RECOMMENDATIONS.

ASPHALT CONCRETE PAVING:

1. ASPHALT CONCRETE SHALL BE TYPE A (MODIFIED) FOR ALL ARTERIAL AND COLLECTOR STREETS AND TYPE B (MODIFIED) FOR LOCAL STREETS, AND SITEWORK, AND SHALL CONFORM TO THE PROVISIONS IN SECTION 39, "ASPHALT CONCRETE," OF THE STANDARD SPECIFICATIONS AND THESE PROVISIONS.
2. PRIOR TO THE ADDITION OF ASPHALT BINDER, THE COMBINED MINERAL AGGREGATE FOR TYPE A (MODIFIED) OR TYPE B (MODIFIED) ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 39-2.02, "AGGREGATE," OF THE STANDARD SPECIFICATIONS FOR 1/2" MAXIMUM, MEDIUM GRADING.
3. ASPHALT BINDER FOR TYPE A (MODIFIED) ASPHALT CONCRETE SHALL BE PG70-10 VISCOSITY GRADED ASPHALT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ASPHALT BINDER FOR TYPE B (MODIFIED) ASPHALT CONCRETE SHALL BE PG70-10 VISCOSITY GRADED ASPHALT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE ASPHALT BINDER SHALL CONFORM TO THE REQUIREMENTS IN THE TABLE FOR "STEAM-REFINED PAVING ASPHALTS," IN SECTION 92-1.02, "GRADES," OF THE STANDARD SPECIFICATIONS.
4. THE AMOUNT OF ASPHALT BINDER TO BE MIXED WITH THE MINERAL AGGREGATE SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH CALIFORNIA TEST METHOD 367 USING SAMPLES OF MATERIALS PROPOSED FOR USE IN THE WORK. THE AMOUNT OF ASPHALT BINDER SHALL BE APPROVED BY THE ENGINEER.
5. AT LEAST 14 DAYS PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING FOR THE ENGINEER'S REVIEW AND APPROVAL:
   A. A LIST OF AGGREGATE AND ASPHALT SOURCES.
   B. DOCUMENTATION VERIFYING THAT THE AGGREGATES TO BE INCORPORATED IN THE WORK CONFORM TO THE REQUIREMENTS IN SECTION 39-2.02, "AGGREGATE," OF THE STANDARD SPECIFICATIONS AND THESE SPECIAL PROVISIONS. MATERIAL SIEVE ANALYSIS AND SAND EQUIVALENT TEST RESULTS SHOULD NOT BE OLDER THAT SIX (6) MONTHS. ALL OTHER TEST RESULTS SHOULD NOT BE OLDER THAN ONE (1) YEAR.
   C. AN ASPHALT CONCRETE MIX DESIGN DETERMINED IN ACCORDANCE WITH CALIFORNIA TEST 367. LABORATORY TEST RESULTS ON WHICH THE DESIGN IS BASED SHALL BE SUBMITTED WITH THE MIX DESIGN ALONG WITH THE THEORETICAL MAXIMUM DENSITY OF THE DESIGN MIXTURE AS DETERMINED BY ASTM D-2041. THE ASPHALT CONCRETE MIX SHALL MEET THE REQUIREMENTS OF SECTION 39-2.02, "AGGREGATE," OF THE STANDARD SPECIFICATIONS AND THESE SPECIAL PROVISIONS. IF THE DATA SUBMITTED SHOWS THAT THE MATERIALS ARE SUBSTANTIALLY THE SAME AS WHEN THE DESIGN WAS PREPARED, THE DESIGN MAY BE UP TO THREE (3) YEARS OLD. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH THE ASPHALT CONCRETE MIX DESIGN.
6. WHERE NEW ASPHALT CONCRETE PAVEMENT IS TO CONFORM TO EXISTING PAVED SURFACES, THE EXISTING PAVEMENT SHALL BE SAW CUT.
7. A PRIME COAT WILL NOT BE REQUIRED ON NON-PAVED AREAS TO BE SURFACED PRIOR TO THE PLACEMENT OF ASPHALT CONCRETE; HOWEVER, ALL OTHER REQUIREMENTS OF SECTION 39-4.01, "SUB-GRADE," OF THE STANDARD SPECIFICATIONS SHALL BE MET.
8. THE AREA TO WHICH PAINT BINDER HAS BEEN APPLIED SHALL BE CLOSED TO PUBLIC TRAFFIC. CARE SHALL BE TAKEN TO AVOID TRACKING BINDER MATERIAL ONTO EXISTING PAVEMENT SURFACE BEYOND THE LIMITS OF CONSTRUCTION.
9. PAVING JOINTS SHALL MATCH STRIPE L

PLUMBING SPECIFICATIONS FOR BAKERSFIELD CITY SCHOOL DISTRICT:

WATER PIPING AND FITTINGS BELOW GRADE

1. ALL GATE VALVES 2 INCH AND LARGER SHALL BE FLANGED / MECHANICAL JOINT RESILIENT SEAT GATE VALVES.
2. ALL GATE VALVES 1 ½ INCHES AND SMALLER SHALL BE 150 NIBCO / STOCKHAM / CRANE OR EQUAL.
3. NO BALL VALVES PERMITTED BELOW GRADE.
4. ALL WATER LINES 2 INCH AND LARGER SHALL BE SCHEDULE 80 PVC, 4 INCH AND LARGER MAY BE PVC C900.
5. ALL WATER LINES 1 ½ INCHES AND SMALLER MAY BE SCHEDULE 40 PVC.
6. ALL SOLVENT WELDED JOINTS TO BE MADE WITH GRAY, HEAVY-BODIED, MEDIUM-SETTING INDUSTRIAL GRADE PVC SOLVENT CEMENT.
7. ALL PIPING THAT RISES UP FROM BELOW GRADE SHALL BE TYPE L COPPER WITH BRAZED JOINTS AND WRAPPED WITH 40 MILS OF PIPE WRAP TAPE. THE USE OF FEMALE PVC ADAPTERS IS PROHIBITED.
8. ALL VALVE BOXES SHALL BE CHRISTY G5 OR EQUAL.
9. ALL VALVES ARE TO BE SLEEVED WITH 6 INCH PIPE FROM VALVE TO 6 INCHES FROM THE TOP OF THE YARD BOX.

WATER PIPING AND FITTINGS ABOVE GRADE

1. GATE VALVES TO BE NIBCO / STOCKHAM / CRANE OR EQUAL
2. BALL VALVES ARE TO HAVE LEVER HANDLES, TFE SEAT AND O-RING SEALS.
3. ALL WATER LINE SHALL BE TYPE L COPPER PIPE WITH SOLDERED JOINTS / PRO PRESS OR EQUAL.
4. ALL STUB OUT NIPPLES SHALL BE RED BRASS OR TYPE K COPPER.

SANITARY SEWER AND STORM DRAIN LINES BELOW GRADE

1. ALL SEWER AND STORM DRAIN PIPING SHALL BE CAST IRON, SCHEDULE 40 PVC DWV, SCHEDULE 40 ABS DWV OR SDR 35 PIPE AND FITTINGS.
2. ALL CLEAN OUTS SHALL BE INSTALLED WITH A WYE 1/8 BEND COMBINATION. ALL END OF RUN CLEAN OUTS AND CLEAN OUTS INSTALLED AT CHANGE OF DIRECTION SHALL BE INSTALLED WITH (2) 1/8 BENDS OR LONG SWEEP ¼ BEND.
3. ALL CLEAN OUT BOXES SHALL BE CHRISTY G5 OR EQUAL.

MISCELLANEOUS VALVES AND MATERIALS

1. GAS VALVES SHALL BE RESUN LUBRICATED PLUG STYLE VALVE, DEZURIK SERIES 400 OR EQUAL.
2. AT LOCATIONS WHERE CONSTRUCTION CHANNEL IS USED WITH COPPER PIPE, THE PIPING SHALL BE SECURED WITH CUSH-A CLAMP BRAND STRAP WITH INSERT OR EQUAL.
3. CONDENSATE LINES SHALL BE TYPE M COPPER PIPE WITH SOLDERED OR PRO PRESS FITTINGS AND SHALL BE INSTALLED WITH PLUGGED CLEAN OUT TEES AT EVERY CHANGE OF DIRECTION. PROVIDE TRAPS AT ALL AIR CONDITIONING EQUIPMENT.
4. ALL PIPING SHALL RUN PARALLEL WITH BUILDING SURFACES UNLESS APPROVED BY DISTRICT.

CITY OF BAKERSFIELD SEWER SPECIFICATIONS:

1. GENERAL CONTRACTOR WILL FURNISH ALL MATERIAL, TOOLS, LABOR, EQUIPMENT AND SUPERVISION NECESSARY TO COMPLETE INSTALLATION.

2. VCP INSTALLATION: (NOT ALLOWED FOR 8" PIPE SET AT 0.25%)

A. MATERIALS: THE PIPE AND FITTINGS SHALL BE EXTRA STRENGTH VITRIFIED CLAY CONFORMING TO CURRENT ASTM DESIGNATION C-700, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE PROVISIONS OF SECTION 71 OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, CURRENT EDITION AND THE CURRENT ASTM DESIGNATION C-12.

B. JOINTS:

1. THE PIPE AND FITTINGS SHALL HAVE A SOCKET END AND A SPIGOT END WITH COMPRESSION JOINTS CONFORMING WITH THE CURRENT ATSM DESIGNATION C-425.
2. THE PIPE FITTINGS FOR 6", 8", 10" AND 12" SANITARY SEWER MAINS MAY BE PLAIN-WITH COMPRESSION COUPLINGS CONFORMING WITH THE CURRENT ATSM DESIGNATION C-425. EXCEPTING THAT A STAINLESS STEEL SHEAR RING AS MANUFACTURED BY MISSION CLAY PRODUCTS CORPORATION FOR THEIR "MAINLINE" BAND SEAL COMPRESSION COUPLING, OR APPROVED EQUAL, SHALL BE REQUIRED.
3. THE PIPE AND FITTINGS FOR PRIVATE SANITARY SEWER HOUSE OR BUILDING LATERALS MAY BE PLAIN-END WITH COMPRESSION COUPLINGS CONFORMING WITH THE CURRENT ASTM DESIGNATION C-425. (STAINLESS STEEL SHEAR RINGS ARE NOT REQUIRED).

3. ABS PIPE INSTALLATION:

A. MATERIALS: PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATIONS D 2680 AND D 2751. PIPE AND FITTINGS SHALL BE HOMOGENEOUS THROUGHOUT AND FREE FROM CRACKS, HOLES, FOREIGN INCLUSIONS OR OTHER INJURIOUS DEFECTS. FITTINGS SHALL BE INJECTION MOLDED AND SHALL BE INSTALLED IN LINE ON NEW PIPELINES; CUT-IN FITTINGS ARE NOT PERMITTED.

B. JOINTS: ONLY USE SOLVENT WELDED JOINTS. THE ASSEMBLY OF JOINTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE ABS PIPE CONNECTS TO VCP, USE COUPLINGS APPROVED BY THE CITY OF BAKERSFIELD.

C. INSTALLATION: PIPE AND FITTINGS SHOULD BE INSTALLED IN ACCORDANCE WITH ASTM D 2321. ONLY CLASS I, II OR III EMBEDMENT MATERIALS WILL BE CONSIDERED SUITABLE.

4. PVC PIPE INSTALLATION:

A. MATERIALS: PIPES AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATIONS D 3034 AND SDR 35. PIPE AND FITTINGS SHALL BE HOMOGENEOUS THROUGHOUT AND FREE FROM CRACKS, HOLES, FOREIGN INCLUSIONS OR OTHER INJURIOUS DEFECTS. FITTINGS SHALL BE INJECTION MOLDED AND SHALL BE INSTALLED IN LINE ON NEW PIPELINES; CUT-IN FITTINGS ARE NOT PERMITTED.

B. JOINTS: USE ONLY ELASTOMERIC GASKET JOINTS. THE ASSEMBLY OF JOINTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. WHERE PVC PIPE CONNECTS TO VCP, USE COUPLINGS APPROVED BY THE CITY OF BAKERSFIELD.

C. INSTALLATION: PIPE AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D 2321. ONLY CLASS I OR II EMBEDMENT MATERIALS WILL BE CONSIDERED SUITABLE.

5. SYSTEM TESTING:

A. INSTALLED PIPE SHALL BE TESTED IN ACCORDANCE WITH CHAPTER 1.3 OF THE SUBDIVISION DESIGN MANUAL AND WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND ACCEPTABLE BY THE CITY OF BAKERSFIELD. 24 HOURS NOTICE WILL BE REQUIRED FOR TEST AND INSPECTION.

6. WYE-FITTINGS SHALL BE INJECTION MOLDED IN-LINE AND SHALL BE USED FOR ALL LATERAL CONNECTIONS AND SHALL BE ROTATED A MINIMUM OF 23° AND A MAXIMUM OF 45° ABOVE THE HORIZONTAL PLANE RUNNING THROUGH THE CENTERLINE OF THE MAIN. WYE-FITTINGS ONLY SHALL BE USED FOR VCP. ALL SEWER STUBS SHALL BE CLOSED WITH A STANDARD PLASTIC PLUG (SOLVENT WELDED).

7. THE MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BAKERSFIELD DRAWING S-7 AND S-8 AND SECTION 70-1.02H AND 71-1.07 OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, LATEST EDITION. THE CLEANOUTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BAKERSFIELD STANDARD DRAWINGS S-20.

8. ALL SEWER LATERALS TO BE 4" IN DIAMETER EXCEPT AS NOTED ON PLANS AND EXTEND 4 FEET BEYOND PROPERTY LINE.

9. SURFACE MARKERS FOR SEWER LATERALS SHALL BE INSTALLED PER CITY OF BAKERSFIELD DRAWING SW-1.

10. 24 HOUR NOTICE IS REQUIRED FOR TESTING AND INSPECTION.

11. FOR CURVED PIPE: IDENTIFICATION TAPE DESIGNED FOR USE ON SEWERS SHALL BE PLACED ON TOP OF SEWER MAIN ALONG ITS ENTIRE LENGTH. IDENTIFICATION TAPE SHALL ALSO BE PLACED ON SEWER LATERALS EXTENDING 1 FOOT ABOVE SEWER MAIN TO RIGHT-OF-WAY LINE.

CITY OF BAKERSFIELD SEWER SPECIFICATIONS (CONT'D):

12. SEWER FORCE MAIN PIPE:
    A. POLYVINYL CHLORIDE PIPE (PVC) FOR SEWER FORCE MAIN SHALL BE CLASS 150 (DR18) OR CLASS 200 (DR14) AND SHALL COMPLY WITH AWWA SPECIFICATIONS FOR 12" AND LESS.
    B. PVC JOINTS FOR SEWER FORCE MAIN SHALL HAVE ELASTORMERIC GASKET JOINTS, EITHER GASKET BELL AND SPIGOT TYPE OR PLAIN END WITH GASKET COUPLING TYPE.
    C. FITTINGS: SPECIALS AND FITTING SHALL BE DUCTILE-IRON CONFORMING TO AWWA SPECIFICATION C100, CLASS D, EXCEPT THAT FITTING SHALL HAVE ALL BELL CONNECTIONS OF STANDARD AWWA DIMENSIONS OR SPECIAL DIMENSIONS AS REQUIRED, OR FITTINGS SHALL BE EQUIPPED WITH ADAPTERS OF THE PROPER CLASS FOR THE SIZE OF PIPE, AS RECOMMENDED BY THE PIPE MANUFACTURER, OR EQUAL. PROTECTIVE COATING SHALL BE IN ACCORDANCE WITH SECTION 5.15 OF THESE SPECIFICATIONS.

13. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING SEWER LINES THAT THE NEW SYSTEM TIES INTO. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER SO THAT ANY NECESSARY ADJUSTMENTS CAN BE MADE TO THE PLANS.

14. PRIOR TO FINAL ACCEPTANCE, ALL SEWER LINES SHALL BE INSPECTED WITH VIDEO EQUIPTMENT DESIGNED FOR THIS PURPOSE. THE TELEVISION CAMERA SHALL HAVE THE CAPABILITY TO ROTATE 360°, IN ORDER TO VIEW AND RECORD THE TOP AND SIDES OF THE PIPE, AS REQUIRED. THE VIDEO INSPECTION SHALL BE WITNESSED BY THE CONSTRUCTION INPECTOR, WHO WILL ALSO INITIAL AND DATE THE "CHAIN OF CUSTODY" FORM. THE SUBDIVIDER SHALL IMMEDIATELY NOTIFY THE CITY OF ANY PIPE LOCATIONS REVEALED TO BE NOT IN COMPLIANCE WITH THE SPECIFICATIONS. A RECORDED VIDEO CASSETTE, THE COMPLETED "CHAIN OF CUSTODY" FORM AND A WRITTEN LOG (WHICH INCLUDES THE STATIONING, BASED ON THE STATIONING OF THE APPROVED PLANS, OF ALL CONNECTED LATERALS) OF THE INSPECTION SHALL BE PROVIDED FOR VIEWING, AND SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ACCEPTANCE. AFTER ACCEPTANCE, THE VIDEO CASSETTE SHALL BECOME THE PROPERTY OF THE CITY.

15. AN OPEN STREET PERMIT SHALL BE OBTAINED FROM THE CITY OF BAKERSFIELD PUBLIC WORKS DEPARTMENT FOR ANY WORK PERFORMED WITHIN EXISTING ACCEPTED STREET RIGHT-OF-WAY. UNLESS SECURED BY A SUBDIVISION AGREEMENT, SECURITY BASED ON AN APPROVED ENGINEER'S ESTIMATE FOR THE WORK PERFORMED WITHIN THE RIGHT-OF-WAY AND INSURANCE AS REQUIRED SHALL BE PROVIDED PRIOR TO ISSUANCE OF A BUILDING PERMIT.

16. CLASS I BEDDING AND EMBANKMENT IS REQUIRED FOR ALL PLASTIC SEWER PIPE WITHIN THE PIPE ZONE.

17. CONTRACTOR TO VERIFY POSITIVE SLOPE FROM MANHOLE PRIOR TO CONNECTING STUB. IF THE POSITIVE SLOPE DOES NOT EXIST, REPLACE STUB TO MANHOLE.

CITY OF BAKERSFIELD WATER SPECIFICATIONS:

CHAPTER V – MATERIALS

5.1 PURPOSES: THIS CHAPTER ESTABLISHES MINIMUM ACCEPTABLE STANDARDS AND CRITERIA FOR MATERIALS TO BE USED IN CONSTRUCTION. SEE ALSO PLUMBING STANDARDS FOR BAKERSFIELD CITY SCHOOL DISTRICT. IN THE EVENT OF A CONFLICT BETWEEN THESE SPECIFICATIONS, THE PLANS, AND THE STANDARDS OF THE BAKERSFIELD CITY SCHOOL DISTRICT (DISTRICT), HEREIN, DISTRICT'S STANDARDS SHALL PREVAIL.

5.2 QUALITY OF MATERIALS: ALL MATERIAL INCORPORATED INTO THE WORK SHALL BE NEW AND SHALL CONFORM TO THESE STANDARDS AND SPECIFICATIONS. NO MATERIAL SHALL BE INCORPORATED INTO THE WORK UNTIL IT HAS BEEN APPROVED BY THE INSPECTOR. ANY REJECTED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE.

5.2.1 CERTIFICATE OF COMPLIANCE: A CERTIFICATE OF COMPLIANCE SHALL BE FURNISHED PRIOR TO THE USE OF ANY MATERIALS OR EQUIPMENT. THE CERTIFICATE SHALL BE SIGNED BY THE MANUFACTURER OF THE MATERIALS OR EQUIPMENT. A CERTIFICATE OF COMPLIANCE SHALL BE FURNISHED WITH EACH LOT OF MATERIAL DELIVERED TO THE WORK AND THE LOT SO CERTIFIED SHALL BE CLEARLY IDENTIFIED IN THE CERTIFICATE.

5.3 POLYVINYL CHLORIDE PIPE (PVC): PVC PIPE SHALL BE MANUFACTURED FOR USE IN WATER SYSTEMS AND SHALL BE DESIGNATED AS CLASS 150 (DR18) OR CLASS 200 (DR14), AND SHALL COMPLY WITH AWWA C900-75 SPECIFICATIONS FOR 12" AND LESS, AND AWWA C905-88 FOR PIPE 14" TO 36" IN DIAMETER. OUTSIDE DIAMETER OF PVC PIPE SHALL BE EQUIVALENT TO CAST-IRON PIPE.

5.3.1 PVC JOINTS: PVC PIPE SHALL HAVE ELASTOMERIC GASKET JOINTS, EITHER GASKET BELL AND SPIGOT TYPE OR PLAIN END WITH GASKET COUPLING TYPE.

5.3.2 FITTINGS: SPECIALS AND FITTINGS SHALL BE CAST-IRON CONFORMING TO AWWA SPECIFICATION C100, CLASS D, EXCEPT THAT FITTING SHALL HAVE ALL BELL CONNECTIONS OF STANDARD AWWA DIMENSIONS OR SPECIAL DIMENSIONS AS REQUIRED, OR FITTINGS SHALL BE EQUIPPED WITH ADAPTERS OF THE PROPER CLASS FOR THE SIZE OF PIPE, AS RECOMMENDED BY THE PIPE MANUFACTURER, OR EQUAL. PROTECTIVE COATING SHALL BE IN ACCORDANCE WITH SECTION 5.15 OF THESE SPECIFICATIONS.

5.4 COUPLINGS: RUBBER RING COUPLINGS SHALL BE "FLUID-TITE" AS MANUFACTURED BY KEASBEY & MATTISON COMPANY OR "RING-TITE" AS MANUFACTURED BY JOHNS-MANVILLE COMPANY, OR EQUAL.

5.4.1 FITTINGS: SPECIALS AND FITTINGS SHALL BE CAST IRON AS SPECIFIED IN SECTION 5.3.2 OF THESE SPECIFICATIONS.

5.5 SMALL SIZE PIPE FOR BLOW-OFFS OR SIMILAR USES SHALL BE GALVANIZED STEEL CONFORMING TO ASTM DESIGNATION A-120.

5.5.1 WELDED FITTINGS: STEEL WELDED FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A-234.

5.5.2 FLANGES: STEEL PIPE FLANGES SHALL CONFORM TO THE REQUIREMENTS OF AWWA SPECIFICATION C-207.

5.5.3 BOLTS: MATERIAL FOR BOLTS SHALL CONFORM TO THE REQUIREMENTS FOR OPEN HEARTH, FREE CUTTING GRADE BAR STEEL, ASTM DESIGNATION A-107. BOLTS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 60,000 PSI. BOLT HEADS SHALL BE EITHER SQUARE OR HEXAGON AND NUTS SHALL BE COLD PRESSURED SEMI-FINISHED HEXAGON.

5.5.4 GASKETS: FLANGED JOINTS SHALL BE PROVIDED WITH 1/16TH-INCH THICK GASKETS, CRANITE, OR EQUAL.

5.5.5 SLEEVE-TYPE COUPLINGS: SLEEVE-TYPE COUPLINGS SHALL BE STYLE 38 DRESSER OR SMITH-BLAIR ADAPTER COUPLINGS OR APPROVED EQUAL, AND SHALL BE OF STEEL WITH STEEL BOLTS, WITHOUT CENTERING RING. THE MIDDLE RING SHALL BE NOT LESS THAN 1/4 INCH IN THICKNESS.

5.6 VALVES: ALL VALVES SHALL BE CAST-IRON BODY, BRONZE MOUNTED, SOLID BRONZE INTERNAL WORKING PARTS WITH NON-RISING STEMS, AND SHALL BE OPENED BY TURNING COUNTER-CLOCKWISE. BRONZE SHALL BE GRADE 1 AND SHALL CONFORM TO ASTM-B-62 (85-5-5-5) BRONZE (85% COPPER, 5% ZINC, 5% LEAD, AND 5% TIN). VALVES SHALL BE DESIGNED
FOR A MINIMUM WORKING PRESSURE OF 150 PSI. VALVES 2 INCHES AND LARGER SHALL CONFORM TO THE REQUIREMENTS OF AWWA C500, EXCEPT AS OTHERWISE PROVIDED IN THESE SPECIFICATIONS. VALVES SMALLER THAN 2 INCHES SHALL CONFORM TO THE REQUIREMENTS OF FEDERAL SPECIFICATION WW-V-54, EXCEPT AS OTHERWISE PROVIDED.

5.6.1 TESTS: EACH VALVE SHALL HAVE THE MANUFACTURER'S INITIALS, PRESSURE RATING, AND YEAR OF MANUFACTURE CAST IN THE BODY. VALVES SHALL BE TESTED IN THE FACTORY AT A HYDRAULIC PRESSURE EQUAL TO TWICE THE SPECIFIED WATER WORKING PRESSURE. FACTORY TEST RESULTS SHALL BE SUPPLIED TO THE DISTRICT UPON REQUEST.

CITY OF BAKERSFIELD WATER SPECIFICATIONS (CONT'D):

5.6.2 COATING: ALL VALVE BODIES AND CAST-IRON PORTIONS OF THE HOUSINGS AND EXTENSIONS SHALL BE COATED IN ACCORDANCE WITH SECTION 5.15 OF THESE SPECIFICATIONS.

5.6.3 GATE VALVES: GATE VALVES SHALL BE DOUBLE-DISC, PARALLEL FACED AND SHALL HAVE A CLEAR WATERWAY EQUAL TO THE FULL NOMINAL DIAMETER OF THE PIPE. RESILIENT SEALED GATE VALVES IN ACCORDANCE WITH AWWA C509-87, ARE APPROVED FOR USE BY THE DEPARTMENT.

5.7 VALVE BOXES: VALVE BOXES IN SIDEWALKS, PARKWAYS, AND OTHER AREAS SHALL CONSIST OF A CAST IRON VALVE BOX AND RISER AND A CAST IRON LOCKING COVER IN ACCORDANCE WITH THE STANDARD DETAILS. THE CAST-IRON COVERS SHALL BE HOT-DIPPED ASPHALT-COATED AND SHALL HAVE THE WORD "WATER" CAST IN THE TOP.

IN ANY AREAS SUBJECT TO TRAFFIC, A CLASS "B" CONCRETE PAD SHALL BE POURED AROUND THE RISER IN ACCORDANCE WITH THE STANDARD DETAILS.

5.8 WATER SERVICE PIPE AND TUBING: RESIDENTIAL WATER SERVICE PIPE SHALL BE COPPER WATER TUBING, COPPER WATER PIPE, OR POLYETHYLENE PLASTIC TUBING IN ACCORDANCE WITH THE STANDARD DETAILS AND THE DISTRICT SPECIFICATIONS.

5.9 CORPORATION STOPS: ALL CORPORATION STOPS SHALL BE BRONZE OR BRASS, ROUND, WITH INLET FOR EITHER CORPORATION STOP (C.S.) THREAD FOR ASBESTOS-CEMENT, PVC OR CAST-IRON PIPE, OR IRON PIPE STANDARD (I.P.S.) THREAD FOR STEEL PIPE, AND OUTLET FOR THE TYPE OF SERVICE PIPE USED.

5.10 METER STOPS: ALL METER STOPS SHALL BE BRONZE OR BRASS, WITH INLET FOR THE TYPE OF SERVICE PIPE USED, AND OUTLET FOR THE TYPE OF SERVICE PIPE OR METER COUPLING USED.

5.11 FIRE HYDRANTS: FIRE HYDRANTS SHALL BE PURCHASED DIRECTLY FROM THE CITY OF BAKERSFIELD FIRE DEPARTMENT. FIRE HYDRANTS SHALL BE MUELLER COMPANY NO. A-24009 COMPLETE WITH PROPER BURY LENGTH, EXCEPT FIRE HYDRANTS SHALL BE JONES COMPANY J-344 WHERE ANGLE FIRE PLUGS HAVE BEEN INDICATED. HOSE THREADS SHALL BE NATIONAL STANDARD HOSE THREADS.

5.12 PORTLAND CEMENT CONCRETE: PORTLAND CEMENT CONCRETE SHALL BE CLASS "B" AND SHALL CONTAIN A MINIMUM OF 5 SACKS (470 POUNDS) OF CEMENT PER CUBIC YARD. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

5.12.1 MATERIALS FOR CONCRETE SHALL BE PORTLAND CEMENT CONFORMING TO ASTM SPECIFICATIONS FOR TYPE I OR TYPE II, WELL GRADED, SOUND, NON-REACTIVE AGGREGATE, AND CLEAN WATER.

5.13 PROTECTIVE COATINGS: ALL VALVES, FLANGES, BOLTS, FITTINGS AND PIPING FOR INSTALLATION SHALL BE SHOP COATED AND FIELD REPAIRED AS NECESSARY PRIOR TO BACKFILLING IN CONFORMANCE WITH THE FOLLOWING SCHEDULE:

1.	EXTERIOR SURFACES OF BURIED STEEL PIPE TO A POINT 4 INCHES ABOVE FINISH GRADE.	COAL TAR EPOXY OR CEMENT MORTAR	AWWA C 205
2.	INTERIOR SURFACES OF STEEL PIPE.	COAL TAR EPOXY OR FUSION EPOXY	AWWA C 205
3.	ALL EXPOSED FERROUS METAL SURFACES.	RED PRIMER	2 COATS
4.	BURIED VALVES, COUPLINGS AND OTHER SURFACES NOT OTHERWISE DESIGNATED TO BE CEMENT MORTAR COATED.	COAL TAR ENAMEL	2 COATS 16 MILS

ALL SURFACES TO BE PAINTED OR COATED SHALL BE PROPERLY CLEANED WITH APPROVED EQUIPMENT BEFORE APPLICATION OF COATING MATERIALS. THE REMOVAL OF OIL OR GREASE SHALL BE ACCOMPLISHED WITH SUITABLE SOLVENTS BEFORE MECHANICAL CLEANING IS STARTED. ANY GRIT OR DUST REMAINING ON THE SURFACE FROM THE CLEANING OPERATIONS SHALL BE REMOVED BEFORE COATING MATERIALS ARE APPLIED.

5.14 MISCELLANEOUS: MATERIALS OR EQUIPMENT NOT INCLUDED IN THESE SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE STANDARD DETAILS.

5.14.1 SPECIAL EQUIPMENT OR MATERIALS NOT INCLUDED IN THE SPECIFICATIONS OR STANDARD DETAIL SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL.

CHAPTER VI – INSTALLATION OF WATER SYSTEM

6.1 PURPOSE: THIS SECTION ESTABLISHES THE MINIMUM ACCEPTABLE STANDARDS FOR INSTALLATION AND CONSTRUCTION OF CITY OF BAKERSFIELD WATER IMPROVEMENTS, INCLUDING TRENCHING, CONSTRUCTION AND INSTALLATION.

6.2 TRENCHING: THE MINIMUM WIDTH OF TRENCH SHALL BE OUTSIDE DIAMETER OF THE PIPE PLUS 12 INCHES. A MINIMUM OF 6 INCHES OF CLEARANCE SHALL BE PROVIDED FROM THE OUTSIDE FACE OF THE PIPE TO THE TRENCH WALL. EXCESSIVE TRENCH WIDTHS GREATER THAN 16 INCHES MORE THAN THE PIPE OUTSIDE DIAMETER SHALL BE AVOIDED WHENEVER POSSIBLE.

6.2.1 PIPE DEPTH: FOR WATER MAINS AND SERVICES 12 INCHES AND LESS IN INSIDE DIAMETER, A MINIMUM OF 30 INCHES OF COVER FROM TOP OF PIPE TO FINISHED GRADE, OR FOR PIPE LOCATED WITHIN STREETS, A MINIMUM OF 30 INCHES OF COVER FROM TOP OF PIPE TO GUTTER FLOWLINE, SHALL BE MAINTAINED. FOR WATER MAINS LARGER THAN 12 INCHES IN DIAMETER, 36 INCHES OF COVER SHALL BE MAINTAINED, MEASURED FOR THE VARIOUS PIPE LOCATIONS AS DEFINED IN THIS SECTION.

6.2.2 WHEN WATER MAINS CROSS ROADWAYS THAT HAVE NOT BEEN CONSTRUCTED TO FULL ULTIMATE WIDTH, ADEQUATE TRENCH DEPTH SHALL BE PROVIDED SUCH THAT MINIMUM COVER REQUIREMENTS AS STATED ARE SATISFIED WHEN THE ROADWAY IS CONSTRUCTED TO ITS ULTIMATE WIDTH.

6.2.3 TRENCH BOTTOM: THE BOTTOM OF TRENCH SHALL BE EXCAVATED TO THE ESTABLISHED GRADE LINE OF THE PIPE AND SHALL BE SMOOTH, EVEN AND FLAT FOR THE ENTIRE WIDTH OF TRENCH. AT EACH JOINT OF PIPE THE BOTTOM OF THE TRENCH SHALL BE RECESSED IN SUCH A MANNER AS TO BELIEVE THE PIPE BALL OR COUPLING OF ALL LOAD AND TO ENSURE CONTINUOUS BEARING ALONG THE PIPE BARREL.

WHERE EXCAVATION ENCOUNTERS BOULDERS, ROCK, HARDPAN, OR OTHER HARD OR UNYIELDING MATERIAL, THE TRENCH SHALL BE EXCAVATED A MINIMUM OF 6 INCHES BELOW THE ESTABLISHED GRADE, AND BACKFILLED TO PROPER GRADE WITH MATERIAL ACCEPTABLE TO THE DISTRICT. BACKFILL MATERIAL SHALL BE COMPACTED TO 90% OF RELATIVE COMPACTION.

WHERE EXCAVATION ENCOUNTERS SOFT, UNSTABLE, OR EXCESSIVELY WET MATERIAL, SUCH MATERIAL SHALL BE REMOVED TO A DEPTH AS DIRECTED BY THE ENGINEER, AND REPLACED WITH MATERIAL ACCEPTABLE TO THE DISTRICT.

6.2.4 NUISANCE WATER: PIPE TRENCH AND ANY OTHER EXCAVATION SHALL BE KEPT ENTIRELY FREE OF WATER UNTIL ALL PIPE HAS BEEN PLACED AND APPROVED. WATER SHALL BE DISPOSED IN SUCH A MANNER AS TO NOT CAUSE INJURY TO PUBLIC OR PRIVATE PROPERTY, NOR CREATE A PUBIC NUISANCE.

6.2.5 BACKFILL: BACKFILL SHALL BE INITIALLY PLACED AND COMPACTED FROM THE PIPE BED OR FOUNDATION TO THE "SPRINGLINE" OF THE PIPE. BACKFILL SHALL BE SUFFICIENTLY RODDED OR HAND-TAMPED TO ENSURE REQUIRED COMPACTION IS OBTAINED ON ALL SIDES OF THE PIPE. SUBSEQUENT BACKFILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 6 INCHES IN COMPACTED THICKNESS, AND SHALL BE COMPACTED BY APPROVED METHOD SO AS TO NOT CAUSE INJURY OR DISTURBANCE OF THE PIPE. FLOODING OF TRENCHES MAY BE PERMITTED BY THE DEPARTMENT PROVIDED FOUNDATION AND BACKFILL MATERIAL IS SUFFICIENTLY GRANULAR AND OPEN GRADED IN NATURE SUCH THAT REQUIRED COMPACTION MAY BE OBTAINED.

CITY OF BAKERSFIELD WATER SPECIFICATIONS (CONT'D):

BACKFILL MATERIAL SHALL BE FREE OF ALL TRASH, DEBRIS, ROCKS LARGER THAN 3/4" IN ANY DIMENSION, ORGANIC OR OTHER DELETERIOUS MATERIAL. COMPACTION SHALL BE OBTAINED IN ACCORDANCE WITH THE STANDARD DETAILS. MAXIMUM DENSITY AND OPTIMUM MOISTURE SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1557.

COSTS OF COMPACTION TESTING SHALL BE BORNE BY THE DEVELOPER AND SHALL BE PERFORMED BY A COMPANY OR INDIVIDUAL PROPERLY LICENSED TO PERFORM SUCH WORK.

6.2.6 TRENCH SAFETY: EXCAVATIONS SHALL BE SUPPORTED IN CONFORMANCE WITH THE RULES, ORDERS, AND REGULATIONS OF THE INDUSTRIAL ACCIDENT COMMISSION AND THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA.

6.3 PIPE PLACEMENT & MATERIAL HANDLING: ALL PIPE AND PIPE MATERIAL SHALL BE HANDLED, STORED, LAID, BLOCKED AND JOINED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS EXCEPT AS OTHERWISE PROVIDED IN THE STANDARD DETAILS AND THESE SPECIFICATIONS.

6.3.1 EVERY PRECAUTION SHALL BE TAKEN TO PREVENT FOREIGN MATERIAL FROM ENTERING THE PIPE DURING INSTALLATION. ALL OPEN ENDS OF PIPE SHALL BE PROPERLY COVERED AT THE END OF THE DAY TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR CHILDREN. NO TOOLS, RAGS, OR OTHER EQUIPMENT SHALL BE PLACED IN THE PIPE DURING INSTALLATION.

6.3.2 HANDLING: HOISTING OF PIPE BY MECHANICAL MEANS SHALL REQUIRE USE OF A CLOTH BELT OR CONTINUOUS FIBER ROPE THAT DOES NOT SCRATCH THE PIPE SURFACE.

PIPE SHALL BE CAREFULLY LOWERED INTO TRENCH SUCH THAT PIPE BEDDING OR FOUNDATION WILL NOT BE DISTURBED AND PIPE WILL NOT BE INJURED. ANY PIPE THAT IS MARRED, CRACKED, OR SCRATCHED FORMING A CLEAR DEPRESSION SHALL BE REJECTED.

6.3.3 CAST IRON FITTINGS: CAST IRON FITTINGS SHALL BE LOWERED INTO TRENCH BY MECHANICAL MEANS. CAST IRON FITTINGS SHALL BE RUNG WITH A LIGHT HAMMER WHILE SUSPENDED TO DETECT CRACKS, AND SHALL BE INSPECTED FOR SCRATCHES OF THE SURFACE COATING AND OTHER DEFECTS.

ANY MATERIAL REJECTED SHALL BE PROMPTLY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH SUITABLE MATERIAL.

WHEN THE SEAL BETWEEN THE PIPE AND THE BELL END OF THE FITTING IS MADE WITH A RIGID JOINTING MATERIAL, THE LENGTH OF THE PIPE SHALL NOT EXCEED 3 FEET, 3 INCHES FOR PIPE 6 INCHES AND LESS IN INSIDE DIAMETER. WHEN PIPE IS 9 INCHES AND MORE IN DIAMETER, THE LENGTH OF THE PIPE SHALL NOT EXCEED 6 FEET, 6 INCHES. WHEN A RUBBER RING-TYPE CAST-IRON FITTING IS USED TO MAKE THE JOINT, LENGTHS OF PIPE UP TO 13 FEET MAY BE USED FOR ENTERING BELLS OF FITTINGS.

6.3.4 STORAGE: PVC PIPE SHALL NOT BE STACKED HIGHER THAN 4 FEET NOR STACKED WITH WEIGHT ON THE BELLS. IF PVC PIPE IS STORED FOR PROLONGED PERIODS IT SHALL BE PROTECTED FROM ULTRAVIOLET LIGHT BY COVERING.

6.3.5 P.V.C. PIPE INSTALLATION: THE MANUFACTURER'S RECOMMENDATIONS SHALL BE STRICTLY ADHERED TO EXCEPT AS OTHERWISE PROVIDED HEREIN.

THE BELL AND SPIGOT SHALL BE THOROUGHLY WIPED CLEAN JUST PRIOR TO COUPLING. THE RUBBER GASKET SHALL BE INSERTED, AND THE SPIGOT END SHALL BE LUBRICATED JUST PRIOR TO JOINING PIPES. THE RUBBER RING GASKET SHALL BE CHECKED FOR PROPER PLACEMENT WITH A FEELER GAGE AFTER JOINING PIPE.

SPECIFICATIONS FOR LENGTHS OF P.V.C. PIPE ENTERING AND EXITING STRUCTURES, DEFLECTING PIPE, AND CUTTING PIPE SHALL CONFORM TO THE REQUIREMENTS OF A.C. PIPE IN SECTION 6.2.5 OF THESE SPECIFICATIONS.

6.3.6 SETTING VALVES AND VALVE BOXES: VALVES SHALL BE SET TRULY PLUMB WITH VALVE BOXES DIRECTLY OVER THE WRENCH NUT OF THE VALVE. THE VALVE BOX SHALL NOT TRANSMIT SHOCK OR STRESS TO THE VALVE. AFTER BEING CORRECTLY POSITIONED FOR LINE AND GRADE, EARTH FILL SHALL BE CAREFULLY TAMPED AROUND THE VALVE BOX.

6.3.7 SETTING AIR AND VACUUM RELIEF VALVE INSTALLATIONS: THE GATE VALVE IMMEDIATELY BELOW THE RELIEF VALVE SHALL BE SET TO THE GRADE INDIC

CITY OF BAKERSFIELD WATER SPECIFICATIONS (CONT'D):

(CONTINUED FROM SHEET 3)

7.3 DISINFECTION OF WATER LINES: AFTER HYDROSTATIC TESTING HAS BEEN COMPLETED, THE ENTIRE NEWLY CONSTRUCTED WATER SYSTEM INCLUDING PIPE, VALVES, FITTINGS, HYDRANTS, AND OTHER ACCESSORIES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C-601 AND AS SPECIFIED HEREIN.

7.3.1 CHLORINE APPLICATION: THE DISINFECTING AGENT SHALL BE CHLORINE IN LIQUID OR "TABLET" FORM APPLIED IN A QUANTITY SUFFICIENT TO PRODUCE A SOLUTION OF AT LEAST 50 PARTS PER MILLION BY WEIGHT IN SAMPLES TAKEN AT THE MOST DISTANT POINTS OF THE SYSTEM.

AFTER THE REQUIRED SOLUTION OF CHLORINE IS OBTAINED THE PIPES SHALL REMAIN CLOSED FOR 24 HOURS. AFTER A 24 HOUR DURATION, SAMPLES SHALL BE TAKEN AT THE SAME LOCATION AS THE INITIAL SAMPLE AND SHALL SHOW NO LESS THAN 10 PARTS PER MILLION BY WEIGHT, FAILING SHALL REQUIRE ADDITIONAL DISINFECTION AS DIRECTED BY THE DEPARTMENT.

7.3.2 DURING THE DISINFECTION PROCESS, ALL VALVES AND OTHER APPURTENANCES SHALL BE OPERATED WHILE THE SYSTEM IS FILLED WITH HEAVILY CHLORINATED WATER.

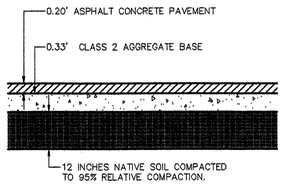
7.3.3 FLUSHING: AFTER THE 24 HOUR STERILIZATION PERIOD THE LINE SHALL BE THOROUGHLY FLUSHED TO REMOVE ALL STRONGLY CHLORINATED WATER UNTIL SAMPLES TAKEN AT VARIOUS POINTS AS DIRECTED TEST NOT IN EXCESS OF 1 PART PER MILLION. FOR THE PROTECTION OF PROPERTY DURING FLUSHING, THE ENGINEER MAY REQUIRE THE CONTRACTOR TO USE HOSES OR PIPE TO CONVEY THE WASTE WATER TO LOCATIONS WHERE NO DAMAGE WILL RESULT.

CARE SHALL BE TAKEN TO PREVENT STRONG CHLORINE SOLUTION IN THE LINE BEING TREATED FROM FLOWING BACK INTO THE EXISTING SYSTEM.

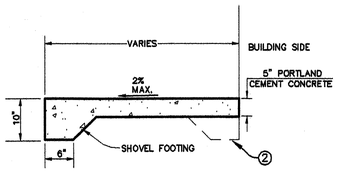
7.4 BACTERIOLOGICAL TESTS: THE DEPARTMENT SHALL REQUIRE A BACTERIOLOGICAL TEST. BACTERIOLOGICAL TESTS SHALL BE PERFORMED BY A QUALIFIED LABORATORY AND THE REQUIREMENTS OF SUCH TESTS SHALL BE IN ACCORDANCE WITH STANDARDS ESTABLISHED BY THE STATE DEPARTMENT OF HEALTH SERVICES.

7.5 FIRE FLOW TESTS: THE CITY OF BAKERSFIELD FIRE DEPARTMENT WILL TEST NEWLY CONSTRUCTED WATER SYSTEMS TO DETERMINE IF MINIMUM STANDARDS FOR THE FIRE FLOW HAVE BEEN MET.

7.6 COSTS FOR TESTING: THE DEVELOPER OR DEVELOPER'S CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE VARIOUS ACCEPTANCE TESTS AND ANY NECESSARY REPAIRS, EXCEPT AS OTHERWISE STATED IN THESE SPECIFICATIONS.

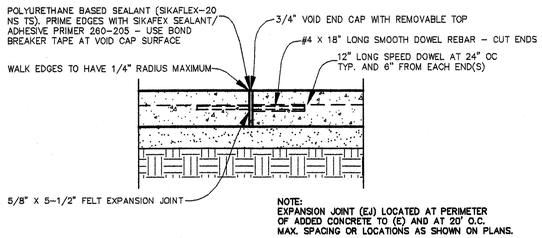


A/4 TYPICAL PAVING SECTION
N.T.S.

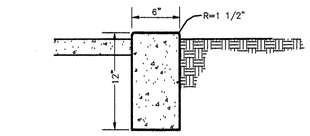


NOTES: ① OBTAIN 95% RELATIVE COMPACTION FOR A DEPTH OF 12" BENEATH ALL CONCRETE, PER ASTM D-1557
② CONSTRUCT SHOVEL FOOTINGS ON BOTH SIDES OF WALK WHEN NOT ABUTTING A STRUCTURE
③ FLATWORK, OTHER THAN SIDEWALK, WILL EXCLUDE SHOVEL FOOTING.

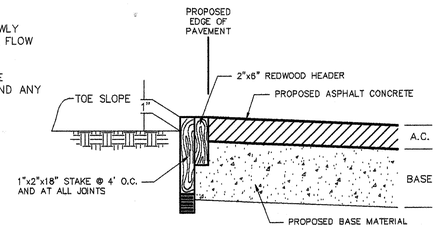
B/4 PCC SIDEWALK SECTION
N.T.S.



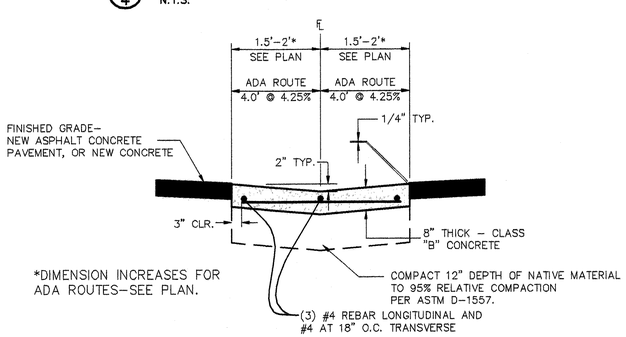
C/4 EXPANSION JOINT @ CONCRETE 'JOINS'
N.T.S.



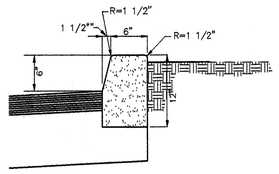
NON-REINFORCED
D/4 6" CONCRETE MOW CURB
N.T.S.



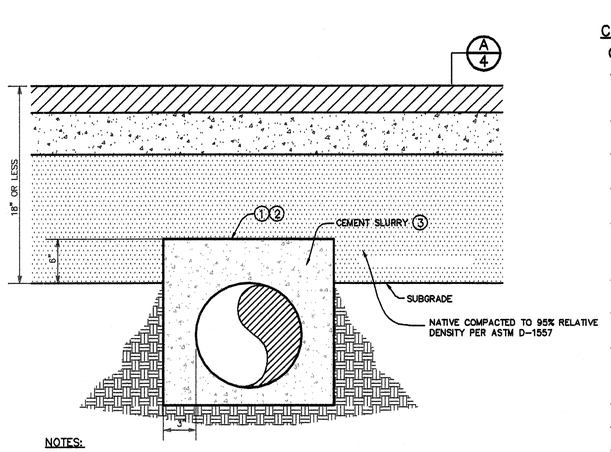
E/4 REDWOOD PAVING BOARD
N.T.S.



F/4 CONCRETE "V" GUTTER
N.T.S.

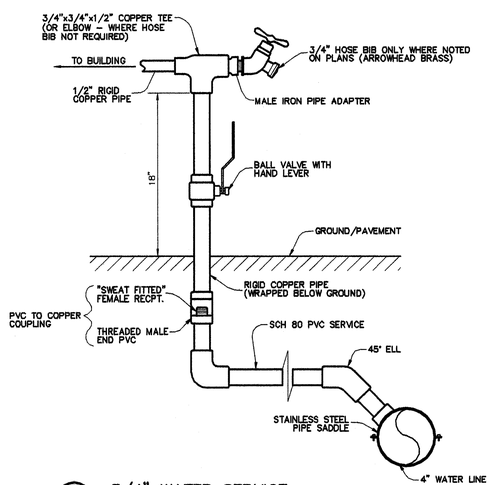


NON-REINFORCED
G/4 6" CONCRETE CURB
N.T.S.

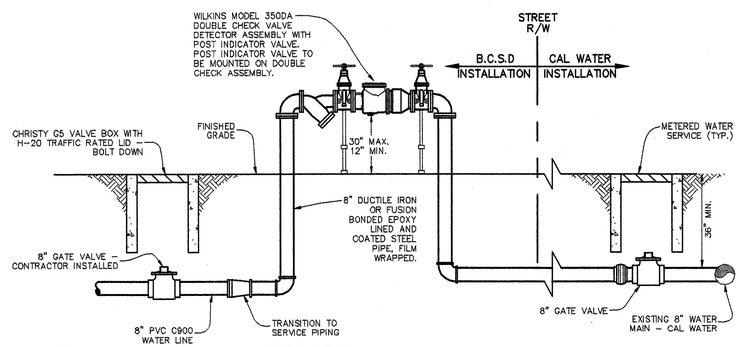


NOTES:
① SLURRY BACKFILL TO BE USED IN PAVED AREAS WHERE COVER IS 18" OR LESS.
② SLURRY TO ENCROACH INTO SUB-GRADE TO ACHIEVE 6" OF SLURRY COVER OVER PIPE.
③ SLURRY SHALL BE 1-SACK CONCRETE MIX.

H/4 TRENCH SLURRY BACKFILL
N.T.S. (WHEN LESS THAN 18" OF COVER)



I/4 3/4" WATER SERVICE
N.T.S.



J/4 DETAIL - BACKFLOW PREVENTION
N.T.S.

CONSTRUCTION NOTES-GRADING, UTILITY & SITE IMPROVEMENTS

GRADING, PAVING AND FLATWORK:

1. CONTRACTOR SHALL PERFORM ALL NECESSARY DEMOLITION WITHIN THE LIMITS OF WORK. PROTECT EXISTING UTILITIES THAT ARE TO REMAIN. SEE DEMOLITION NOTES, SHEET 2 HEREIN, AND ARCHITECT'S SPECIFICATIONS.
2. SAWCUT AND REMOVE EXISTING ASPHALT CONCRETE PAVEMENT FOR PLACEMENT OF NEW UTILITIES. PATCH PAVEMENT IN ACCORDANCE WITH DETAIL A/C4 HEREIN.
3. CONTRACTOR SHALL CORDONE OFF WORK AREAS WITH CAUTION TAPE, DELINEATORS AND BARRICADES, AND SHALL PROVIDE FOR SAFE PASSAGE OF STUDENTS AND DISTRICT EMPLOYEES.
4. PRIOR TO FINISH GRADING, THE BUILDING PAD AREA SHALL BE OVEREXCAVATED AND RECOMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT.
5. CONTRACTOR SHALL RESEARCH ALL EXISTING UTILITIES AND POINTS OF CONNECTION. AS A FIRST ORDER OF WORK, CONTRACTOR SHALL "POTHOLE" EXISTING UTILITIES TO VERIFY LOCATION AND DEPTH. DESCREPANCIES WITH THE PLANS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER SUCH THAT ADJUSTMENTS MAY BE MADE PRIOR TO INSTALLATION.
6. PLACE AND COMPACT ASPHALT CONCRETE PAVEMENT OVER CLASS 2 AGGREGATE BASE OVER COMPACTED SUBGRADE IN ACCORDANCE WITH DETAIL A/C4 PLANS, THE SPECIFICATIONS AND CONTRACT DOCUMENTS.
7. CONSTRUCT REDWOOD HEADER BOARD PER DETAIL AT ANY EDGE OF ASPHALT CONCRETE PAVEMENT NOT ABUTTING PORTLAND CEMENT CONCRETE.
8. CONSTRUCT PORTLAND CEMENT CONCRETE PAVEMENT OR WALKS IN ACCORDANCE WITH DETAIL B/C4 HEREIN. SAWCUT EXISTING ASPHALT CONCRETE PAVEMENT. NEW WALK SHALL MEET ALL STATE AND FEDERAL ADA SPECIFICATIONS. CONCRETE FORMWORK SHALL BE CHECKED FOR ADA COMPLIANCE BY THE INSPECTOR PRIOR TO POUR.
9. APPLY SOIL STERILANT UNDER NEW PC CONCRETE OR ASPHALT CONCRETE PAVEMENT.
10. REMOVE EXISTING CONCRETE WALK AND RECONSTRUCT IN ACCORDANCE WITH DETAIL B/C4 HEREIN.
11. FURNISH AND INSTALL ADA APPROVED DETECTABLE/TACTILE WARNING SURFACE TILE (TRUNCATED DOME MAT) ON EXISTING PC CONCRETE SURFACE. SURFACE SHALL BE MANUFACTURED BY ARMOR-TILE OR APPROVED EQUAL. MAT COLOR SHALL BE YELLOW IN ACCORDANE WITH DSA REQUIREMENTS. CONTRACTOR SHALL SUBMIT CONCRETE ACHORAGE DETAIL FOR APPROVAL.
12. PAINT NEW PARKING STALLS, ADA PARKING STALLS, PAVEMENT MARKINGS, AND ROUTES IN ACCORDANCE WITH THE PLANS. EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AND FOG-SEALED PRIOR TO PAINTING NEW MARKINGS. FOG SEAL SHALL SET SUFFICIENTLY BEFORE APPLYING NEW PAINT. SEE DETAILS ON AS101.
13. CONSTRUCT CONCRETE VEE GUTTER PER DETAIL F/C4 HEREIN. SEE PLAN FOR WIDTH.
14. INSTALL ROCK WELL IN CENTER OF CRAWL SPACE UNDER EACH PORTABLE. SEE ARCHITECT'S PLANS FOR DETAIL OF ROCK WELL.
15. ADJUST ALL EXISTING UTILITY BOXES TO FINISHED GRADE. CONCRETE COLLARS SHALL BE POURED AROUND NEW CLEAN-OUTS, BLOWOFFS, AND UTILITY BOXES. SAWCUT AND POUR COLLARS AFTER COMPLETION OF NEW PAVEMENT.
16. VENT STRUCTURE SHALL BE CONSTRUCTED WITH FOUNDATION. SEE ARCHITECT'S PLANS FOR DETAIL.

DOMESTIC WATER NOTES:

17. SEE GENERAL NOTES AND SPECIFICATIONS ON SHEET 3 OF THESE PLANS.
18. CUT-IN/JOIN EXISTING WATER LINE. COORDINATE WITH DISTRICT FOR ACCEPTABLE TIMES TO SHUT OFF WATER SERVICE.
19. ALL UTILITIES WITH LESS THAN 18-INCHES OF COVER SHALL BE ENCASED IN A CONCRETE SLURRY PER DETAIL A/C4.
20. INSTALL 2-INCH DOMESTIC WATER LINE. SEE DISTRICT'S PLUMBING STANDARDS.
21. INSTALL 8-INCH PVC C900 FIRE WATER LINE, IN ACCORDANCE WITH CITY OF BAKERSFIELD STANDARD W-1.
22. INSTALL 8-INCH GATE VALVE AND VALVE BOX PER CITY OF BAKERSFIELD STANDARDS.
23. INSTALL 2-INCH GATE VALVE AND VALVE BOX PER DISTICT STANDARDS.
24. INSTALL THRUST BLOCKS AT ALL WATERLINE ANGLE POINTS PER CITY OF BAKERSFIELD STANDARD W-2.
25. FURNISH AND INSTALL DOUBLE DETECTOR CHECK VALVE, PER COUNTY AND CITY FIRE DEPARTMENT STANDARDS. SEE DETAIL J/C4 HEREIN.
26. INSTALL FIRE HYDRANT PER CITY OF BAKERSFIELD STANDARD W-3. SEE DETAIL B/C5
27. INSTALL WATERLINE BLOW-OFF PER CITY OF BAKERSFIELD STANDARD W-4.
28. INSTALL 3/4-INCH DOMESTIC SERVICE PER DETAIL I/C4 HEREIN. CONNECT TO PORTABLE PER MANUFACTURERS RECOMMENDATIONS. EXCLUDE 3/4" HOSE BIB EXCEPT WHERE NOTED ON THE PLANS.

SEWER AND STORM DRAIN NOTES:

29. FURNISH AND INSTALL 8-INCH PVC STORM DRAIN, SDR 35.
30. FURNISH AND INSTALL 6-INCH PVC SEWER, SDR 35.
31. INSTALL PLUG IN SEWER WHERE NOTED.
32. FURNISH AND INSTALL 4-INCH PVC SEWER, SDR 35, WITH SEWER WYES FOR CONNECTION TO BUILDING SEWER.
33. INSTALL SEWER WYES IN STORM DRAIN LINE FOR CONNECTION TO ROOF DRAINS. INSTALL ADAPTOR FOR RECTANGULAR ROOF DRAIN TO CIRCULAR STORM DRAIN.
34. INSTALL SEWER CLEAN-OUT WHERE INDICATED FOR BOTH SEWER AND STORM DRAIN.
35. FURNISH AND INSTALL 24-INCH SQUARE DRAINAGE INLET - CHRISTY U23 WITH H20, ADA COMPLIANT AND HEEL PROOF GRATE. SEE SHEET 5 FOR DETAIL.
36. FURNISH AND INSTALL SEWER MANHOLE PER CITY OF BAKERSFIELD STANDARD SW-2.
37. CONSTRUCT STORM DRAIN OUTLET STRUCTURE PER CITY OF BAKERSFIELD STANDARD S-9.
38. INSTALL 6-FOOT CHAIN LINK FENCING PER DISTRICT STANDARD. FENCING SHALL BE INSTALLED AFTER COMPLETION OF NEW PAVEMENT. NEW PAVEMENT SHALL BE CORED TO RECEIVE FENCE POSTS.
39. INSTALL 4-FOOT MAN GATE WHERE INDICATED ON PLAN.
40. INSTALL 14-FOOT SWING DOUBLE GATE WHERE INDICATED ON PLAN.

40A. INSTALL 20 FOOT SLIDING GATE WHERE INDICATED ON PLAN.

MISCELLANEOUS

41. REMOVE AND SALVAGE EXISTING BASKETBALL GOASL AND TEHTERBALL POLES. DELIVER TO AN "ON-SITE" LOCATION AS DIRECTED BY THE DISTRICT.
42. REFERENCE ARCHITECTS PLANS FOR ADA PARKING LOT SIGNS.
43. PROPOSED PARKING LOT LUMINAIRE - SEE ELECTRICAL PLANS.
44. CONSTRUCT CONCRETE CURB PER DETAIL B/C5 HEREIN.
45. EXCAVATE DRAINAGE SUMP TO THE LINES AND GRADES SHOWN ON PLAN.
46. FURNISH AND INSTALL 3' PRE-CAST CONCRETE PARKIGN BUMPERS.
47. SAWCUT AND JOIN EXISTING PC CONCRETE. INSTALL REBAR DOWELS PER DETAIL A/C4
48. ~~IN AREAS OF NEW PAVEMENT, INSTALL NEW FENCING AFTER COMPLETION OF PAVEMENT INSTALLATION. PAVEMENT SHALL BE CORED.~~
49. RECONSTRUCT 6" PCC CURB PER DETAIL B/C5
50. REMOVE EXISTING TREES WHERE SHOWN ON PLAN.

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12/15/2010

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Project Title
McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

LICENSED ARCHITECT JOHN L. SEVIER C15251 RENEWAL 03-31-13 STATE OF CALIFORNIA

Sheet Title
NOTES, DETAILS AND TYPICAL SECTIONS

Sheet Number
C4

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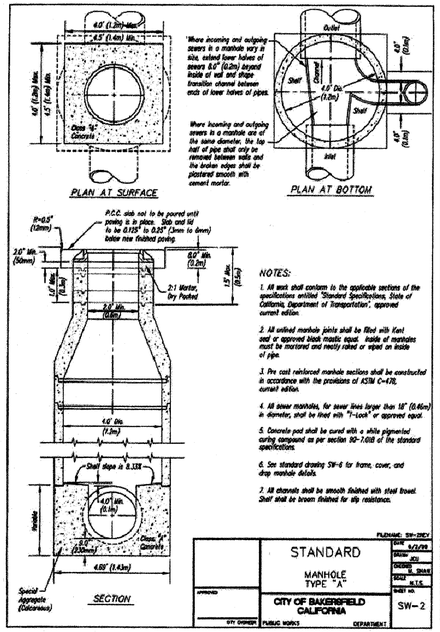

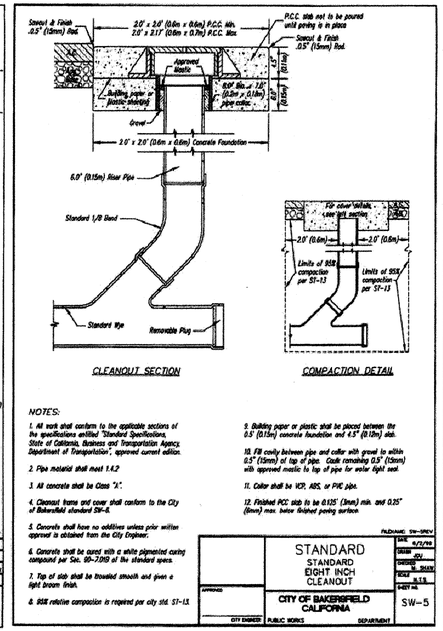

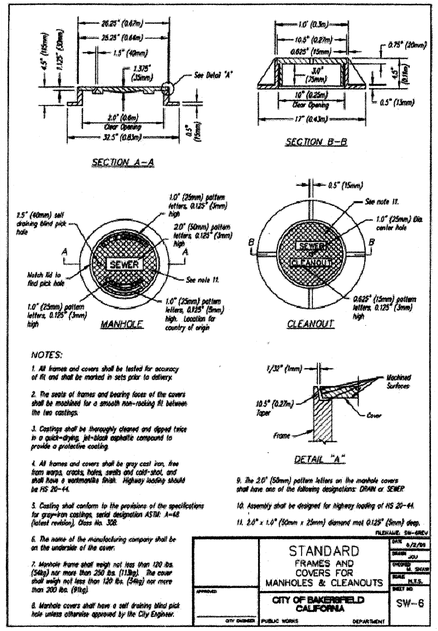

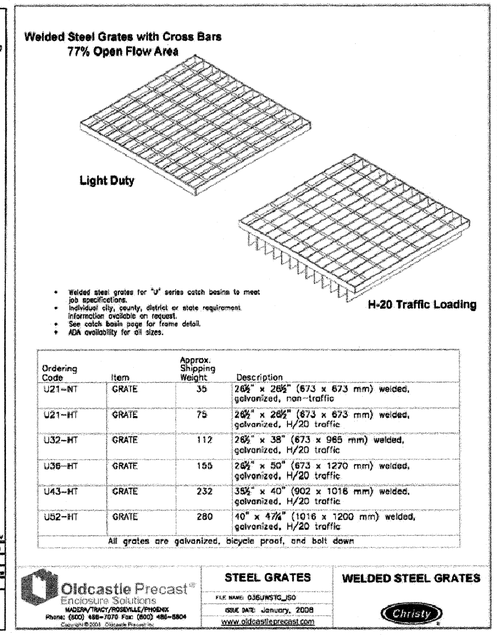

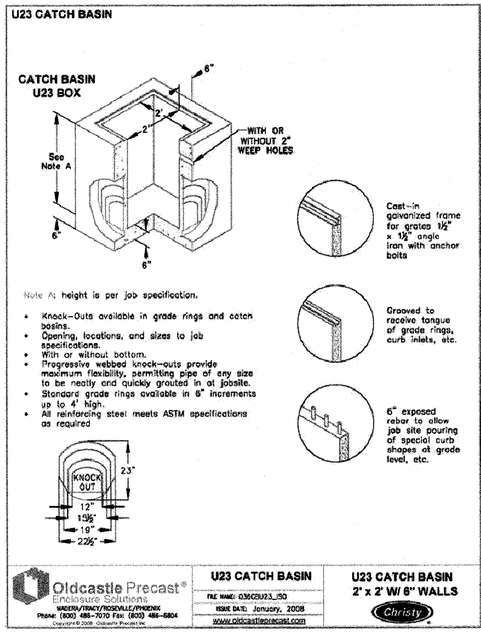

THRUST BLOCK SCHEDULE

BEARING AREA IN SQUARE FEET					
PIPE SIZE	TEE OR PLUG	90°ELL	45°ELL OR 11 1/2° ELL	CROSS	VALVE
6"	3	4	2	2	1.5 EA.	3.0
8"	5	7	4	2	3.0 EA.	5.5
10"	8	11	6	3	4.5 EA.	9.0
12"	11	16	8	4	6.5 EA.	13.0
16"	16	23	13	7	8.0 EA.	16.0

NOTES:
1) ALL VALVES, FITTINGS, AND DIRECTIONAL CHANGES ARE TO BE HELD IN PLACE BY CONCRETE THRUSTS BLOCKS.
2) BEARING AREAS INDICATED ARE BASED ON ALLOWABLE SOIL PRESSURE OF 1500 PSF.
3) CONCRETE IS NOT TO BEAR AGAINST PIPE. THRUST BLOCK TO ONLY BE IN CONTACT WITH FITTING.
4) THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
5) JOINTS SHALL BE KEPT CLEAR OF CONCRETE.

WATER RESOURCES DEPARTMENT
CITY OF BAKERSFIELD, CALIFORNIA
THRUST BLOCK DETAIL
APPROVED: MANAGER - WATER RESOURCES DEPARTMENT DATE 12-9-2009
PLATE No. W-2 REV. 1-9-09

WATER RESOURCES DEPARTMENT
CITY OF BAKERSFIELD, CALIFORNIA
BLOWOFF ASSEMBLY - PAVED AREA
APPROVED: MANAGER - WATER RESOURCES DEPARTMENT DATE 12-9-2009
PLATE No. W-4 REV. 1-9-09

WATER RESOURCES DEPARTMENT
CITY OF BAKERSFIELD, CALIFORNIA
FIRE HYDRANT ASSEMBLY
APPROVED: MANAGER - WATER RESOURCES DEPARTMENT DATE 12-9-2009
PLATE No. W-3 REV. 1-9-09

B/5 FIRE HYDRANT
NTS

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12/15/2010

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McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

LICENSED ARCHITECT BRENT L. SWAIN C15251 RENEWAL 03-31-11 STATE OF CALIFORNIA

Sheet Title
NOTES, DETAILS AND TYPICAL SECTIONS

Sheet Number
C5

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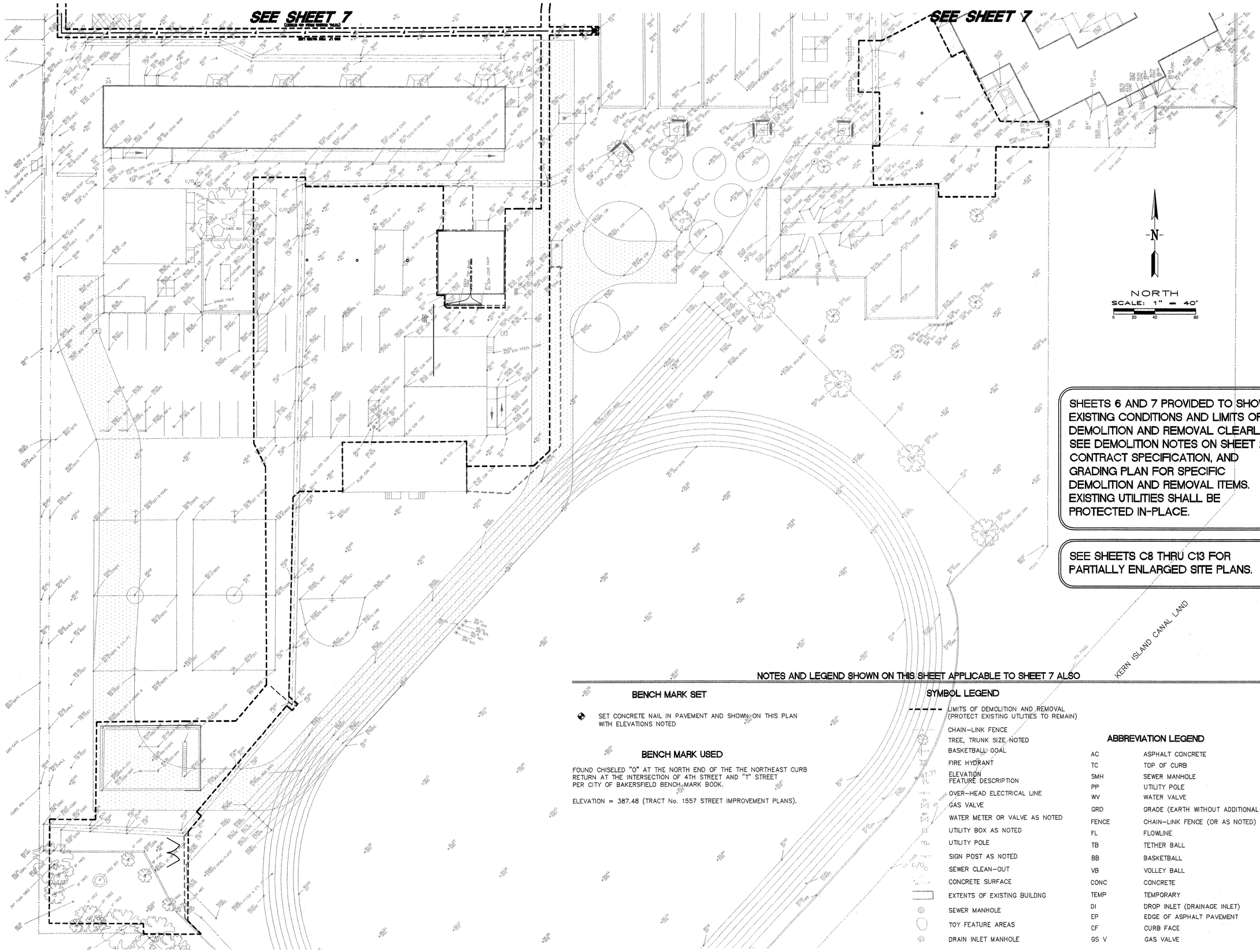

SHEETS 6 AND 7 PROVIDED TO SHOW EXISTING CONDITIONS AND LIMITS OF DEMOLITION AND REMOVAL CLEARLY. SEE DEMOLITION NOTES ON SHEET 2, CONTRACT SPECIFICATION, AND GRADING PLAN FOR SPECIFIC DEMOLITION AND REMOVAL ITEMS. EXISTING UTILITIES SHALL BE PROTECTED IN-PLACE.

SEE SHEETS C8 THRU C13 FOR PARTIALLY ENLARGED SITE PLANS.

NOTES AND LEGEND SHOWN ON THIS SHEET APPLICABLE TO SHEET 7 ALSO

BENCH MARK SET

SET CONCRETE NAIL IN PAVEMENT AND SHOWN ON THIS PLAN WITH ELEVATIONS NOTED

BENCH MARK USED

FOUND CHISELED "O" AT THE NORTH END OF THE THE NORTHEAST CURB RETURN AT THE INTERSECTION OF 4TH STREET AND "I" STREET PER CITY OF BAKERSFIELD BENCH MARK BOOK.

ELEVATION = 387.48 (TRACT No. 1557 STREET IMPROVEMENT PLANS).

SYMBOL LEGEND

- LIMITS OF DEMOLITION AND REMOVAL (PROTECT EXISTING UTILITIES TO REMAIN)
- CHAIN-LINK FENCE
- TREE, TRUNK SIZE NOTED
- BASKETBALL GOAL
- FIRE HYDRANT
- ELEVATION FEATURE DESCRIPTION
- OVER-HEAD ELECTRICAL LINE
- GAS VALVE
- WATER METER OR VALVE AS NOTED
- UTILITY BOX AS NOTED
- UTILITY POLE
- SIGN POST AS NOTED
- SEWER CLEAN-OUT
- CONCRETE SURFACE
- EXTENTS OF EXISTING BUILDNG
- SEWER MANHOLE
- TOY FEATURE AREAS
- DRAIN INLET MANHOLE

ABBREVIATION LEGEND

AC	ASPHALT CONCRETE
TC	TOP OF CURB
SMH	SEWER MANHOLE
PP	UTILITY POLE
WV	WATER VALVE
GRD	GRADE (EARTH WITHOUT ADDITIONAL DESC.)
FENCE	CHAIN-LINK FENCE (OR AS NOTED)
FL	FLOWLINE
TB	TETHER BALL
BB	BASKETBALL
VB	VOLLEY BALL
CONC	CONCRETE
TEMP	TEMPORARY
DI	DROP INLET (DRAINAGE INLET)
EP	EDGE OF ASPHALT PAVEMENT
CF	CURB FACE
GS V	GAS VALVE

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McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

LICENSED ARCHITECT KENNETH L. SPENCER C15251 RENEWAL 03-31-11 STATE OF CALIFORNIA

Sheet Title
EXISTING CONDITIONS & DEMO

Sheet Number
C6

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NOTE:
SEE SHEET 6 FOR NOTES AND LEGEND APPLICABLE TO THIS SHEET

4th STREET

4th STREET

NORTH
SCALE: 1" = 40'
0 20 40 80

SHEETS 6 AND 7 PROVIDED TO SHOW EXISTING CONDITIONS AND LIMITS OF DEMOLITION AND REMOVAL CLEARLY. SEE DEMOLITION NOTES ON SHEET 2, CONTRACT SPECIFICATION, AND GRADING PLAN FOR SPECIFIC DEMOLITION AND REMOVAL ITEMS. EXISTING UTILITIES SHALL BE PROTECTED IN-PLACE.

SEE SHEETS C8 THRU C13 FOR PARTIALLY ENLARGED SITE PLANS.

SEE SHEET 6

SEE SHEET 6

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12/15/2010

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Project Title
McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

LICENSED ARCHITECT
ROBERT L. SIMPSON
C15251
RENEWAL 03-31-11
STATE OF CALIFORNIA

Sheet Title
EXISTING CONDITIONS & DEMO

Sheet Number
C7

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JOIN EXISTING FENCE

FLOOR ELEV = 79.3

2:1 MAX. SLOPE

CONSTRUCT 18 LF 12" SDR 35 DRAIN PIPE @ 4.00%

LIMIT OF SAWCUT AND REMOVAL (1)(2)(3)

CONSTRUCT 67 LF 12" SDR 35 DRAIN PIPE @ 0.50%

CONSTRUCT 149 LF 12" SDR 35 DRAIN PIPE @ 0.50%

CONSTRUCT 144 LF 12" SDR 35 DRAIN PIPE @ 0.50%

CONSTRUCT 150 LF 4" PVC SCHED 40 @ 0.50%

4' WIDE

8' WIDE

3' WIDE

NOTE:
REFER TO SHEET 4 FOR CONSTRUCTION NOTES

NORTH
SCALE: 1" = 10'
0 5 10 20

SEE SHEET C9

SEE SHEET C9

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McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

LICENSED ARCHITECT
KENNETH L. SCHNEIDER
C15251
RENEWAL 03-31-11
STATE OF CALIFORNIA

Sheet Title

GRADING AND SITE IMPROVEMENTS

Sheet Number

C8

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SEE SHEET C8

** 38 ** THIS SHEET ONLY COORDINATE WITH DISTRICT AS TO EXACT FENCE HEIGHT.

LIMIT OF SAWCUT AND REMOVAL 1 2 3

CONSTRUCT 92 LF 12" SDR 35 DRAIN PIPE @ 0.50%

CONSTRUCT 44 LF 12" SDR 35 DRAIN PIPE @ 0.50%

CONSTRUCT 130 LF 4" PVC SEWER @ 2.00%

CONSTRUCT 59 LF 6" PVC SEWER @ 0.35%

CONSTRUCT 154.0 LF 6" PVC SEWER @ 0.35%

CONSTRUCT 49.5 LF 6" PVC SEWER @ 0.35%

FF = 87.00

FF = 87.00

88.04 CONC TOP RAMP TAPER CURB TO 0" HIGH

87.11 AC BGN CONC RAMP

8" WIDE

3" WIDE

W/HOSE BIB

GRADE BREAK

BLDG CDR TEMP

EXISTING SIDEWALK

665 LF FIRE WATER LINE (TOTAL COMING FROM 4th STREET)

TOP WATER LINE 84.81

INV. 6" SDR35 84.11

NEW BUILDING

PROPOSED SIDEWALK

PROPOSED A/C SUFACE

EXISTING A/C SUFACE

EXISTING SIDEWALK

EXISTING CONCRETE V-GUTTER

PROPOSED 4" STORM DRAIN PIPE

VARIES 3.5% TO 6.5%

2.00%

A/9 TYPICAL SECTION N.T.S.

PAVEMENT JOIN

VARIES 2% OR LESS

B/9 TYPICAL SECTION N.T.S.

NOTE:
REFER TO SHEET 4 FOR CONSTRUCTION NOTES

NORTH
SCALE: 1" = 10'

SEE SHEET C10

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LICENSED ARCHITECT KENNETH L. SENSER C15251 RENEWAL 02-31-11 STATE OF CALIFORNIA

Sheet Title
GRADING AND SITE IMPROVEMENTS

Sheet Number
C9

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SEE SHEET C9

SEE SHEET C11

NOTE:
REFER TO SHEET 4 FOR CONSTRUCTION NOTES

FF = 88.59

NORTH
SCALE: 1" = 10'
0 5 10 20

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LICENSED ARCHITECT
KENNETH L. SPENCER
C15251
RENEWAL 03-31-11
STATE OF CALIFORNIA

Sheet Title
GRADING AND SITE IMPROVEMENTS

Sheet Number
C10

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NORTH
SCALE: 1" = 10'
0 5 10 20

TRANSITION SHALL BE FLUSH AND FREE OF ABRUPT CHANGE. (TYP.)

EXISTING SIDEWALK

PROVIDE 12" WIDE GROOVED BOARDER (TYPICAL)

LIMIT OF SAWCUT AND REMOVAL

NOTE:
REFER TO SHEET 4 FOR CONSTRUCTION NOTES

SEE SHEET C10

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McKINLEY ELEMENTARY PERMANENT MODULAR CLASSROOMS

LICENSED ARCHITECT
BRENT L. SENSER
C15251
RENEWAL 03-31-11
STATE OF CALIFORNIA

Sheet Title

GRADING AND SITE IMPROVEMENTS

Sheet Number

C11

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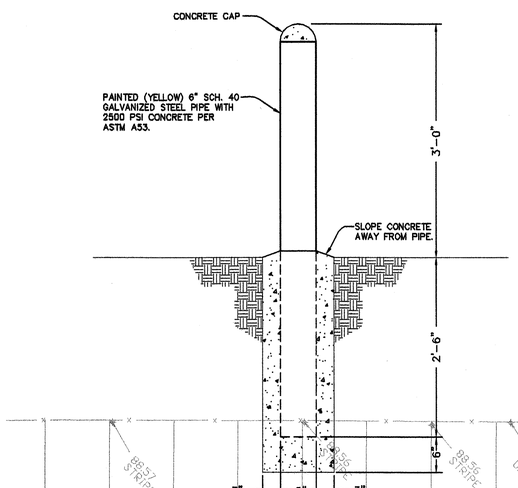

A/12 PIPE BOLLARD DETAIL
N.T.S.

NOTE:
REFER TO SHEET 4 FOR CONSTRUCTION NOTES

CONSTRUCT 3 PIPE BOLLARDS 1.50 FEET EAST OF VALVE ASSEMBLY PER DETAIL A/12

"CUT IN" TO BE PERFORMED BY: CALIFORNIA WATER SERVICE COMPANY.

4th STREET

"R" STREET

SEE SHEET C13

NORTH
SCALE: 1" = 10'
0 5 10 20

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LICENSED ARCHITECT ROBERT L. SKINNER C15251 RENEWAL 08-31-13 STATE OF CALIFORNIA

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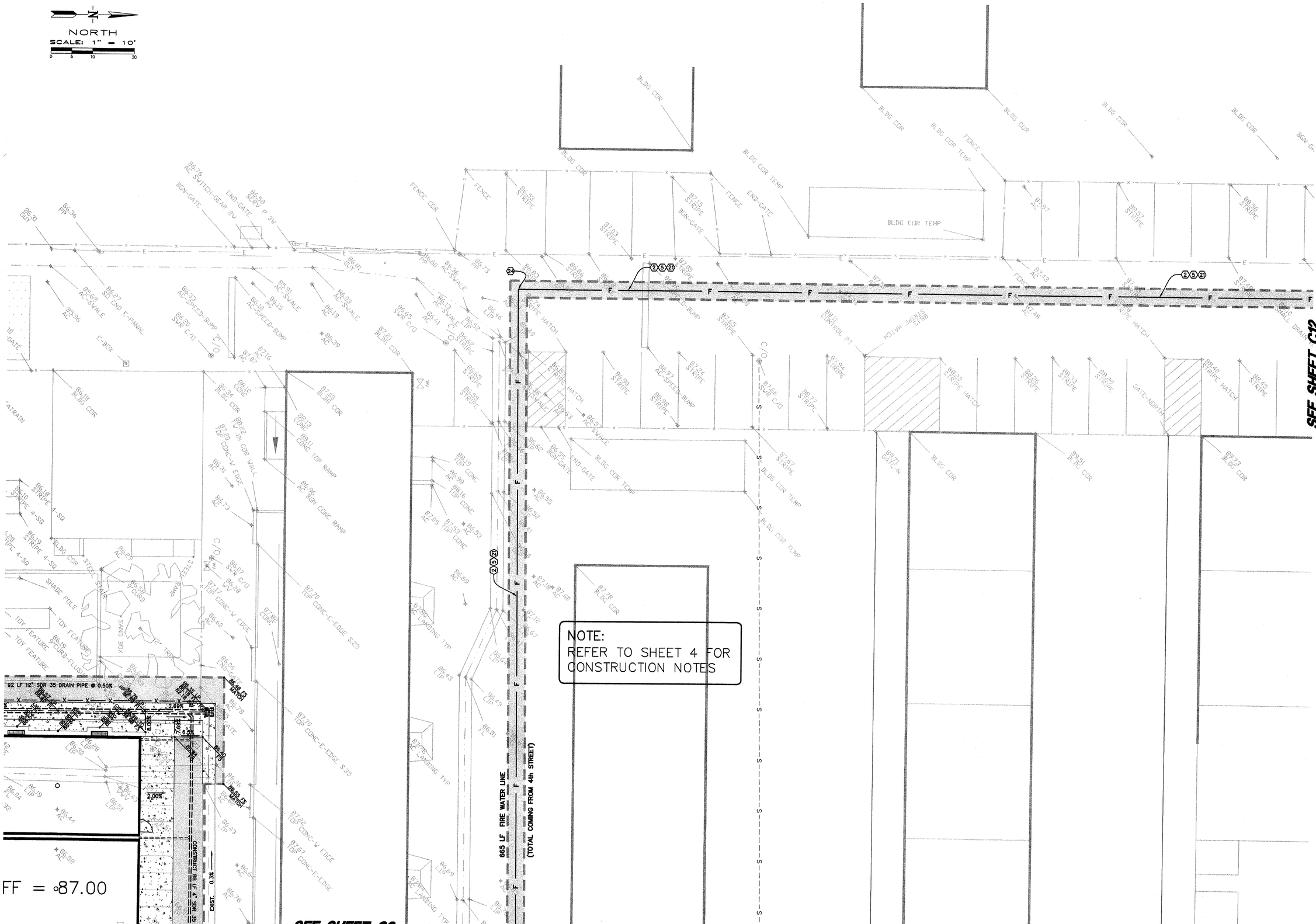

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LICENSED ARCHITECT
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GRADING AND SITE IMPROVEMENTS

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C13

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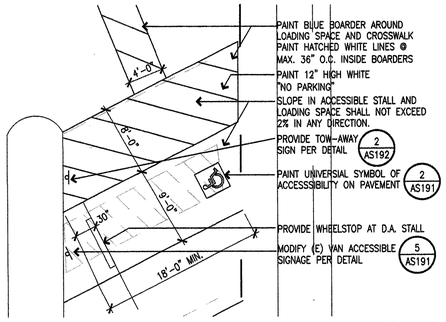
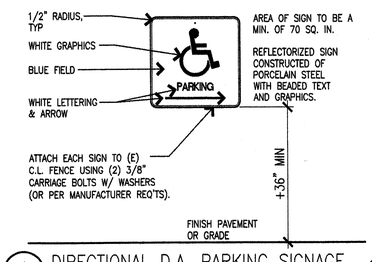


3 AS101 PARTIAL SITE PLAN
SCALE: 1" = 8'-0"



4 AS101 DIRECTIONAL D.A. PARKING SIGNAGE
SCALE: N.T.S.

CODE ANALYSIS METHODOLOGY:

IMAGINARY PROPERTY LINES WERE CREATED PER SECTION 704.3 TO AVOID ANY RATED CONSTRUCTION OR PROTECTED OPENINGS. THE NEW MODULAR CLASSROOMS PC1-PC3 AND THE PERMANENT MODULAR TOILET ROOM BUILDING, PTRB, ARE GROUPED WITH THE EXISTING CLASSROOMS 30-32. THE AGGREGATE AREA OF THESE SEVEN BUILDINGS WAS USED TO DETERMINE CODE COMPLIANCE UNDER SECTION 503.1.2 BUILDINGS ON THE SAME LOT. THE NEW MODULAR CLASSROOM PC4 IS LOCATED ON THE EAST SIDE OF THE SITE WITH AN IMAGINARY PROPERTY LINE SEPARATING IT FROM THE EXISTING CLASSROOMS.

PATH OF TRAVEL (POT):

A PATH OF TRAVEL IS A COMMON BARRIER FREE ACCESSIBLE ROUTE AT LEAST 48" WIDE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUN SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL.
THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM AND SMOOTH.
PASSING SPACES AT LEAST 60"x60" ARE LOCATED NOT MORE THAN 200' APART.
CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS NOT MORE THAN 400' APART.
SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED AS A RAMP. CROSS-SLOPE DOES NOT EXCEED 2%.
MAINTAIN POT FREE OF OVERHANGING OBSTRUCTIONS TO 80" MIN., PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL OR EDGE AND 27" ABOVE FINISH GRADE.

DENOTES PATH OF TRAVEL

ALLOWABLE AREA CALCULATION:

THE SOUTH-WEST GROUPING OF BUILDINGS (PC1-PC3 & MTRB)

(3) PERMANENT MODULAR CLASSROOMS	2880 SF
(1) PERMANENT MODULAR TOILET ROOM BUILDING (PTRB)	480 SF
EXISTING CLASSROOM BUILDING #30	960 SF
EXISTING CLASSROOMS #31 & 32	1440 SF
TOTAL SQUARE FOOTAGE	5760 SF

5760 SF IS LESS THAN THE ALLOWABLE AREA OF 9500 SF

THE SOUTH-EAST PORTABLE CLASSROOM PC4

(1) PERMANENT MODULAR CLASSROOM	960 SF

960 SF IS LESS THAN THE ALLOWABLE AREA OF 9500 SF

OCCUPANCY & TYPE OF CONSTRUCTION:

E OCCUPANCY
TYPE V-B CONSTRUCTION

PARKING ANALYSIS:

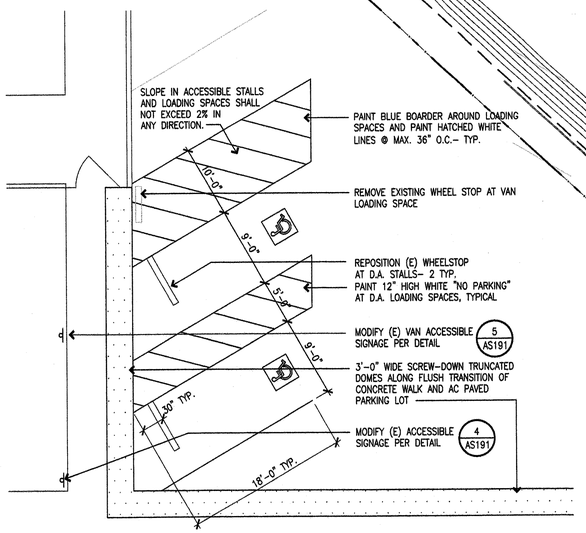
PARKING LOT	TOTAL # OF SPACES	REQUIRED # OF ACCESSIBLE STALLS	# OF ACCESSIBLE STALLS PROVIDED
AREA 'A' STAFF	14	1	2
AREA 'B' PUBLIC	13	1	1
AREA 'C' STAFF	95	4	4

UNDER FLOOR VENTILATION (PER CBC SECTION 1203.3.2 EXP. #2)

MODULAR BUILDING	VENTILATION REQUIRED	VENTILATION PROVIDED
PC1-PC3	2880 SF / 1500 = 1.92 SF	(6) 4'-0" VENTS @ 2.25 SF EA + 1.60 SF ACCESS[1] = 15.1 SF
PC4	960 SF / 1500 = 0.64 SF	(4) 4'-0" VENTS @ 2.25 SF EA + 1.60 SF ACCESS[1] = 10.6 SF
PTRB	480 SF / 1500 = 0.32 SF	(2) 4'-0" VENTS @ 2.25 SF EA + 1.60 SF ACCESS[1] = 6.1 SF

1. 24" W x 16" H CRAWL SPACE ACCESS OPEN'G W/ 60% MIN OPEN GRATING = 1.60 SF OF VENTILATION
2. PROVIDE 10 MIL POLY SHEETING IN CRAWL SPACE (REQUIRED TO USE VENTILATION RATIO OF 1/1500)
3. EACH 48"x12" POLYVENT UNIT PROVIDES 2.25 SF MIN. OF FREE VENTILATION AREA. PROVIDE MODEL PNDG1301.

FIRE APPARATUS ACCESS SPACE. PAINT 4" WIDE DIAGONAL STRIPPING @ 36" O.C. PAINT 12" HIGH WHITE LETTERS "NO PARKING FIRE LANE"
NEW CHAIN LINK FENCE AROUND PARKING LOT
REMOVE EXISTING BASKETBALL COURT AND HOOPS. PREP AREA AS REQ'D FOR NEW PARKING LOT
REMOVE EXISTING SAND PLAY BOX. PREP AREA AS REQ'D FOR NEW PAVING PER CIVIL
REMOVE EXISTING FENCE, ROLLING GATE AND PARKING STALLS AS SHOWN
20'-0" WIDE FIRE APPARATUS ACCESS LANE
PARKING AREA - C - STAFF
PARKING LOT LIGHTING. REFER TO ELECTRICAL FOR ADD'L INFO
20'-0" WIDE ROLLING CHAIN LINK GATE FOR FIRE APPARATUS ACCESS TO SITE
PRE-K DSA A#54457
PLAY BOX
PC1
PC2
PC3
PTRB
30 DSA A#46446
SAFE DISPERSAL AREA
96,228 SF / 3 = 32,076 OCCUPANTS
50'-0" TYP
(2) EXISTING PORTABLE CLASSROOMS #31 & #32 SCHEDULED FOR FUTURE DEMO
ACCESSIBLE HI/LO DRINKING FOUNTAIN 7 AS192
FIRE DEPARTMENT APPARATUS TURNAROUND AREA, ACCEPTABLE ALTERNATIVE TO 120' HAMMERHEAD LAYOUT SHOWN PER CFC FIGURE D103.1
PLAY BOX
PC4
DSA A#55266
PATH OF TRAVEL
5'-0" MIN WIDE ACCESSIBLE CONCRETE WALK, FEATHER IN SURROUNDING AC PAVING, REFER TO CIVIL PLANS FOR ADDITIONAL INFORMATION
MULTI-PURPOSE DSA APPLICATION #11354, #59100
DSA A#9873
ADMIN OFFICE A-#11354, #59100
FACULTY
CLASSROOMS - A #11354, #59100
PROVIDE UNAUTHORIZED PARKING SIGNAGE PER DETAIL 2 AS192
(E) FH
DOUBLE CHECK DECTECTOR VALVE (DCDV) W/ POST INDICATOR & FIRE ALARM SUPERVISORY SWITCHES. REFER TO CIVIL PLANS FOR (3) PROTECTIVE BOLLARDS
PROVIDE FENCE MOUNTED TOW-AWAY SIGN PER DETAIL 2 AS192
EXISTING 10'x18' VAN LOADING SPACE, 9'x18' VAN ACCESSIBLE STALL, 5'x18' LOADING SPACE AND 9'x18' ACCESSIBLE STALL
PARKING AREA - A ADMIN. / PUBLIC
3'-0" WIDE SCREW-DOWN TRUNCATED DOMES ALONG FLUSH TRANSITION OF CONCRETE WALK AND AC PAVED PARKING LOT
NEW CURB RAMPS & WARNING DOMES, REFER TO CIVIL SHT C11
4'-0" WIDE DRIVE CROSSING PATH W/ 4" WIDE DIAGONAL BLUE PAINTED STRIPING @ 36" O.C.
EXISTING NON-COMPLIANT STALL. REMOVE SIGN, STRIPPING AND PAVEMENT SYMBOL.
PROVIDE 12" H. PAINTED WHITE LETTERS "NO PARKING - BUS LOADING"
EXISTING BUS LOOP
REMOVE EXSITING PARKING STALLS AT BUS LOOP. REMOVE ALL WHEEL STOPS, STRIPPING AND SIGNAGE.
PARKING AREA - D - PUBLIC
3'-0" WIDE SCREW-DOWN PAD OF TRUNCATED DOMES ALONG EXISTING FLUSH TRANSITION OF CONCRETE WALK AND AC PAVED PARKING LOT
NEW ACCESSIBLE CONCRETE WALK PER CIVIL SHT C11 TO REPLACE EXISTING NON-COMPLIANT WALK
NORTH



ABBREVIATIONS

FH	FIRE HYDRANT
DF	DRINKING FOUNTAIN
MTR	MEN'S TOILET ROOM
WTR	WOMEN'S TOILET ROOM
BTR	BOY'S TOILET ROOM
GTR	GIRL'S TOILET ROOM

2 AS101 PARTIAL SITE PLAN
SCALE: 1" = 8'-0"

1 AS101 SITE PLAN
SCALE: 1" = 40'-0"

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LICENSED ARCHITECT KENNETH L. SIDENSTICKER C15251 RENEWAL 03-31-13 STATE OF CALIFORNIA

Sheet Title
SITE PLAN

Sheet Number
AS101

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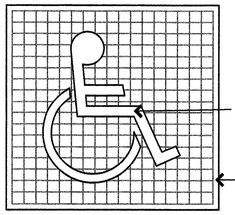
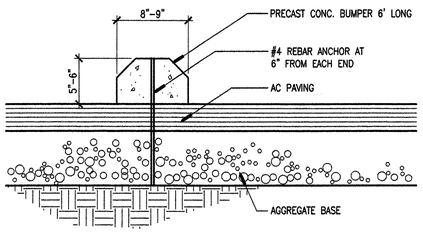
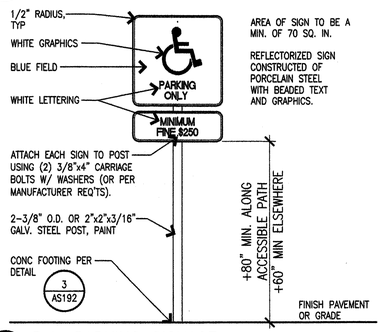


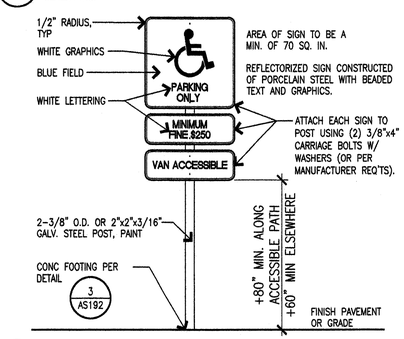
2 / AS191 D.A. PARKING SYMBOL
SCALE: N.T.S.



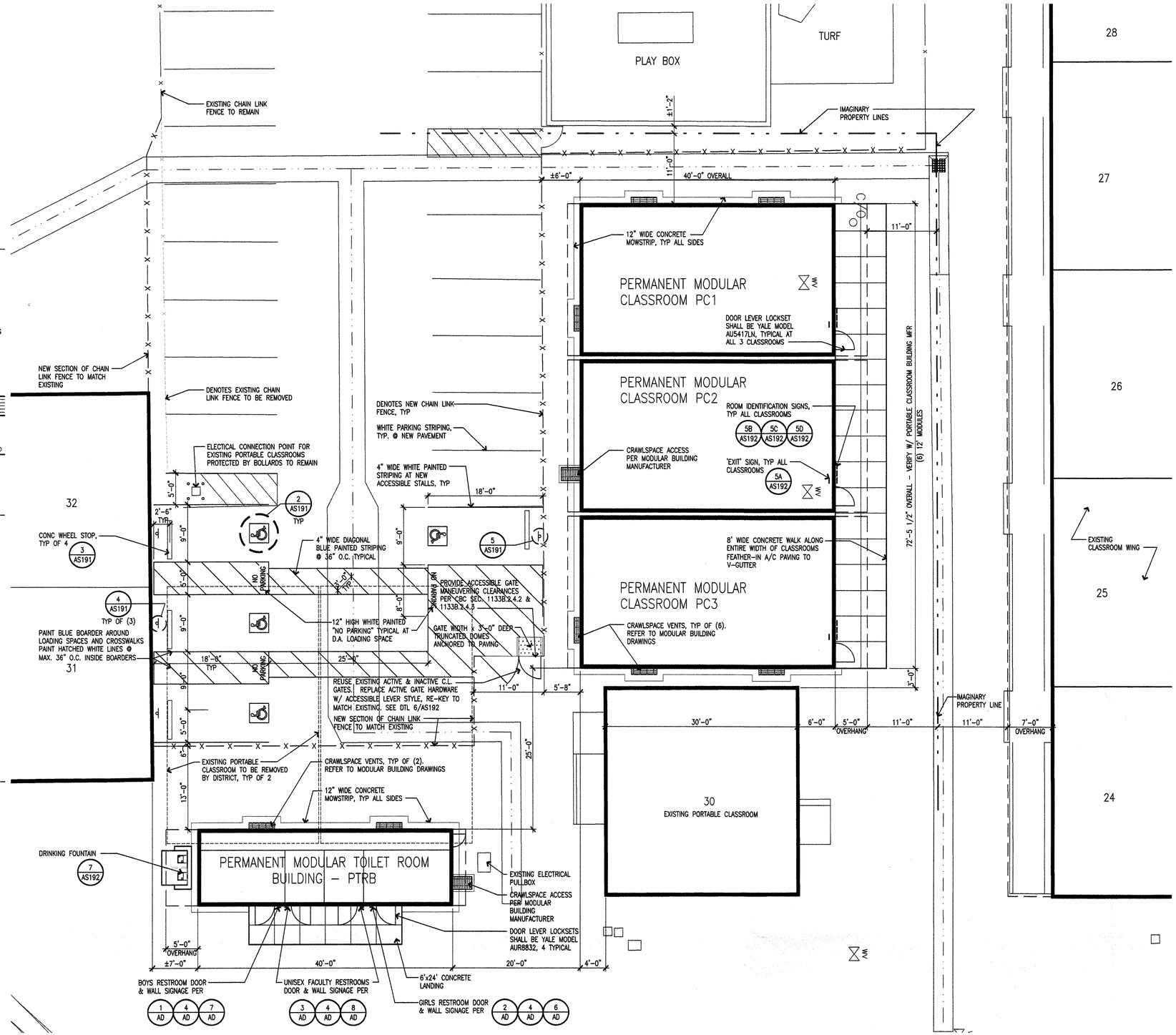
3 / AS191 WHEEL STOP
SCALE: 1 1/2" = 1'-0"



4 / AS191 D.A. PARKING SIGNAGE
SCALE: N.T.S.



5 / AS191 D.A. VAN PARKING SIGNAGE
SCALE: N.T.S.



1 / AS191 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"

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LICENSED ARCHITECT KENNETH L. SIEGFRIED C15251 RENEWAL 03-31-11 STATE OF CALIFORNIA

Sheet Title
ENLARGED SITE PLAN

Sheet Number
AS191

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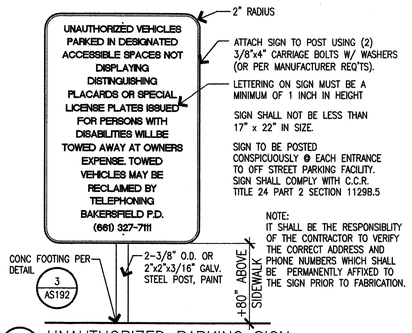
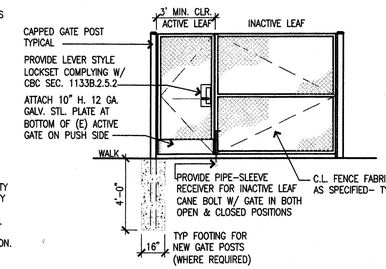
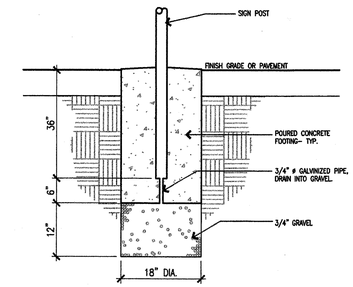


2 AS192 UNAUTHORIZED PARKING SIGN
SCALE: N.T.S.



6 AS192 SITE C.L. FENCE GATE
SCALE: N.T.S.



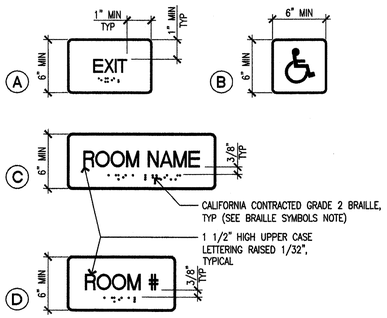
3 AS192 SIGN POST FOOTING
SCALE: 3/4" = 1'-0"

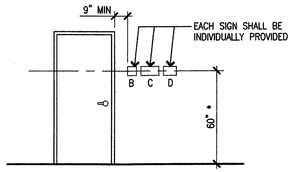
NOTES:

SIGN ANCHORAGE:
SIGN SHALL BE MECHANICALLY FASTENED W/ (4) FLATHEAD, STAINLESS STEEL, TAMPER PROOF SCREWS (COUNTERSUNK) AND ADHESIVE

LETTERS AND NUMBERS: REF. CBC 1117B.5.3
1) WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1.
2) STROKE WIDTH TO HEIGHT BETWEEN 1:5 AND 1:10.
3) CONTRAST CHARACTERS AND SYMBOLS WITH BACKGROUND SHALL BE DISTINCTLY DIFFERENT FROM DOOR.
4) SANS SERIF UPPERCASE CHARACTERS, EXCEPT WHERE NOTED.
5) RAISED CHARACTERS SHALL BE AT LEAST 5/8" HIGH, BUT NO HIGHER THAN 2".
6) RAISED 1/32"

BRAILLE SYMBOLS: REF. CBC 1117B.5.6
CALIFORNIA CONTRACTED GRADE 2 BRAILLE
1) USE CONTRASTED GRADE 2 BRAILLE
2) DOT DIAMETER: .059 INCHES
3) INTER- DOT SPACING .100 INCHES
4) HORIZONTAL SEPARATION BETWEEN CELLS: .200 INCHES
5) VERTICAL SEPARATION BETWEEN CELLS: .395 INCHES
6) MIN. DOT HEIGHT ABOVE BACKGROUND .025 INCHES



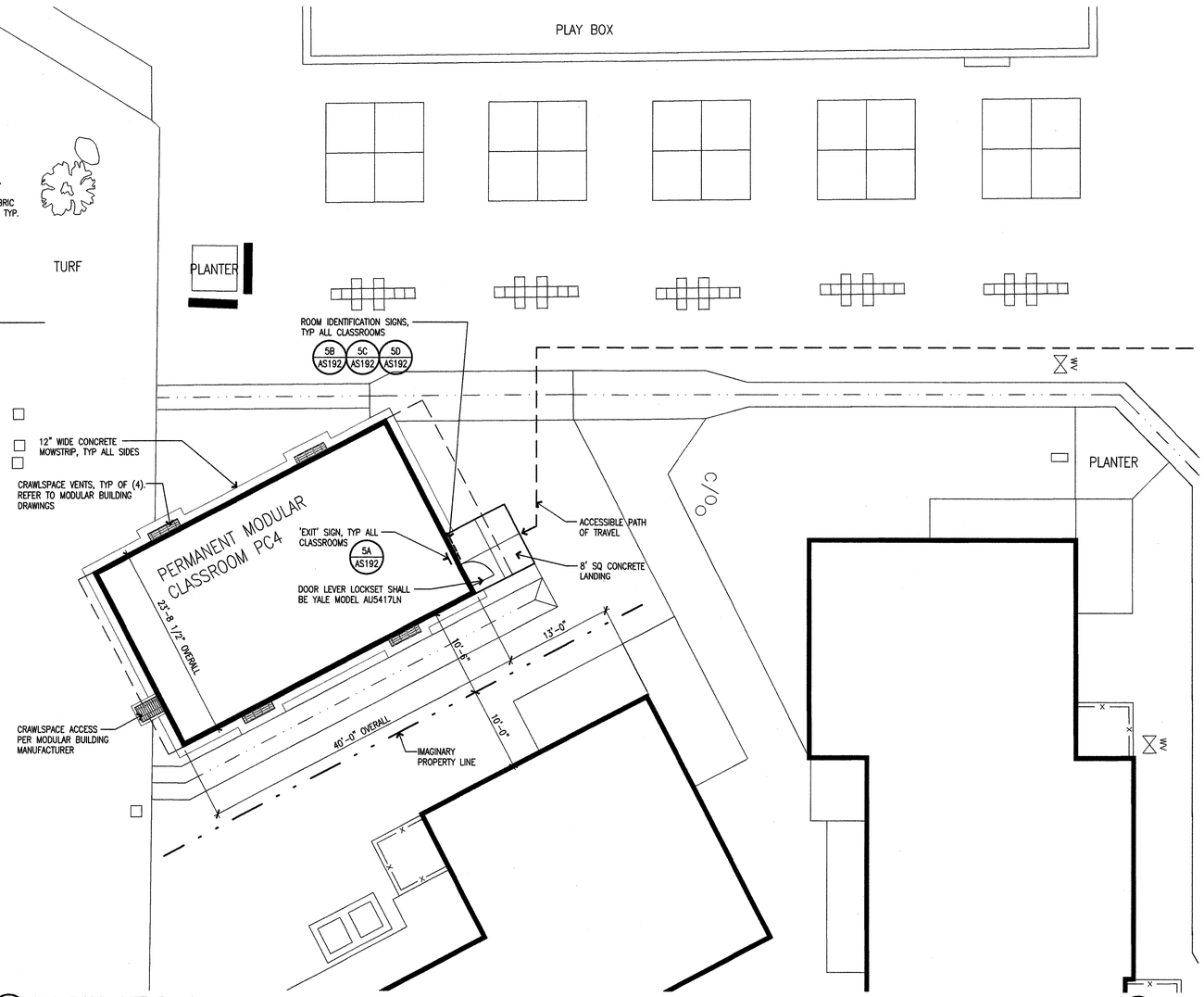


SIGN MOUNTING LOCATION

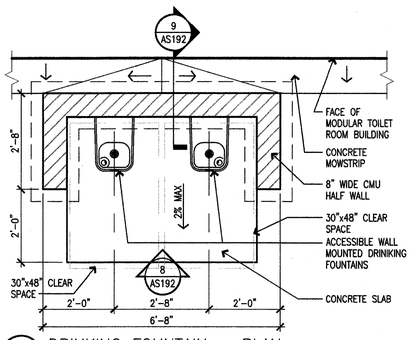
* MEASURED FROM F.F. TO BOTTOM OF TACTILE LETTERS

LOCATE SIGN AT PAIRED DOORS ON RIGHT SIDE OF OPENING IF DISTANCE TO SIDE WALL OR NEAREST OBSTRUCTION IS 30" OR MORE, OTHERWISE MOUNT TO SIDE WALL – TYPICAL. WHERE SIGN OCCURS AT HINGE JAMB, LIMIT CLOSER TO 90

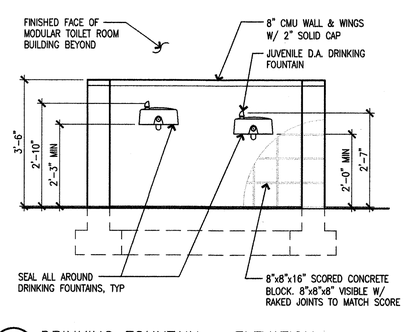
5 AS192 IDENTIFYING DEVICES FOR PERMANENT ROOMS AND SPACES
SCALE: N.T.S.



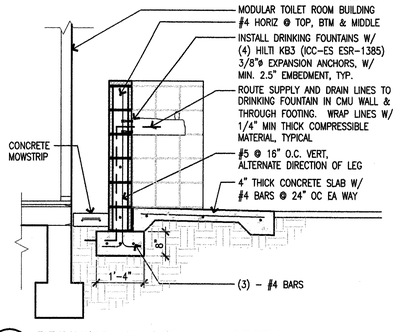
1 AS192 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"



7 AS192 DRINKING FOUNTAIN – PLAN
SCALE: 1/2" = 1'-0"



8 AS192 DRINKING FOUNTAIN – ELEVATION
SCALE: 1/2" = 1'-0"



9 AS192 DRINKING FOUNTAIN – SECTION
SCALE: 1/2" = 1'-0"

CUNINGHAM GROUP

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Consultant

Revisions

No.	Date	Description

IDENTIFICATION STAMP
DIV OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
FILE NO. 15-6
APPL. # 02-111612
AC. 80 FD 88 GR
DATE 1/12/11

Date:	12/15/10
Comm. No.:	10-0801
Drawn By: JF	Checked By: -
PIC/AIC: -	Document Phase: CD

Project Title
McKINLEY ELEMENTARY PERMANENT MOD. CLASSROOMS

LICENSED ARCHITECT KENNETH L. SENESY C15251 RENEWAL 03-31-11 STATE OF CALIFORNIA

Sheet Title
ENLARGED SITE PLAN

Sheet Number
AS192

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American Modular Systems Inc.

24' x 40' RELOCATABLE BUILDINGS
BAKERSFIELD CITY SCHOOL DISTRICT
(McKINLEY ELEMENTARY SCHOOL)

EXPOSED STEEL–2:12 PITCHED ROOF

MODULAR STEEL MOMENT FRAME TEST & INSPECTION GUIDELINE

A SEPARATE TEST AND INSPECTION LIST IS TO BE SUBMITTED AS PART OF THE APPROVAL PROCESS.
THIS GUIDE DOES NOT REPLACE THE TEST AND INSPECTION LIST

TYPE OF MODULAR STEEL MOMENT FRAME BUILDING PROJECT
(X - INDICATES TEST OR INSPECTION TO BE DONE)

TESTS and INSPECTIONS			STOCKPILE		CONSTRUCTION OF (diaphragm material-foundation material)			RELOCATION OF CERTIFIED BUILDING	
MATERIAL TYPE		DESCRIPTION	Wood Floor Only	Concrete Floors	Plywood Floor Only - Wood Foundation	Plywood Floor - Concrete Foundation	Concrete Floor - Concrete Foundation	Wood Foundation	Concrete Foundation
COMPACTED FILL (Two Story Relocatable)	By Geotech	Fill Materials				X	X		X
		Proper fill materials, lift thickness, placement and compaction during placement, Continuous				X	X		X
		Compaction test only as ordered				X	X		X
CONCRETE	LT WT FILL OVER DECK (Two-story)	Mix Design		X			X		
		Waiver of Batch Plant Inspection See Note 1 for conditions and requirements		X			X		
		Inspect Placing over Steel Deck - by RBIP		X			X		
		Slump Test; determine Temperature of Concrete See Note 2 for additional test		X			X		
		Compression Tests		X			X		
	FOUNDATION	Mix Design				X	X		X
		Waiver of Batch Plant Inspection See Note 1 for conditions and requirements				X	X		X
		Inspect Placing - by Project Inspector				X	X		X
		Slump Test; determine Temperature of Concrete See Note 2 for additional test				X	X		X
		Compression Tests				X	X		X
REINFORCING STEEL		Sample and Test Bar Steel - #6 & Larger				X	X		X
		Inspect Placing at Project Site - by Project Inspector				X	X		X
STRUCTURAL STEEL		Mfr. Certified Mill Test Reports	X	X	X	X	X		
		Shop Fabrication	X	X	X	X	X		
		Inspection of Welds - Shop	X	X	X	X	X		
		Inspection of Welds - Field See Note 3			X	X	X	X	X
		Sample and Test all Unidentified Structural Steel and Steel Deck	X	X	X	X	X		
		Examine seam welds of structural tubes and pipes	X	X	X	X	X		
GROUNDING		Electrical grounding			X	X	X	X	X
SHOT PINS		Ceiling wire hangers	X	X	X	X	X		
EXPANSION ANCHORS		See Note 4				X	X		X
EPOXY ANCHORS		See Note 4				X	X		X
INSPECTOR CLASS (minimum requirements)			RBIP or Class 1		In Plant: RBIP or Class 1 Site: Class 4 for Single Story Site: Class 2 for Two-Story			Class 4 for Single Story Class 2 for Two-Story	
SELECTION OF THE PROJECT INSPECTOR AND TESTING AGENCY			By the Owner and approved by DSA, A/E of Record and Structural Engineer		By the School District and approved by DSA, A/E of Record and Structural Engineer				
COST OF THE PROJECT INSPECTOR (CA Admin Code 4-333(b) AND TESTING AGENCY (CA Admin Code 4-336)			By the Owner		By the School District				
COPIES OF THE REPORT TO:			DSA (Original) I.O.R./P.I Manufacturer Arch/SE noted on DSA-1			Architect School District I.O.R./ P.I	Structural Engineer DSA (Original) Manufacturer		

ITEMS IN RED FONT COLOR ARE USER NOTES AND INDICATE ITEMS THAT NEED TO BE VERIFIED FOR EACH SPECIFIC PC.
THE NOTES IN RED ABOVE AND BELOW ARE TO BE REMOVED PRIOR TO PLACING THE GUIDELINE ON THE DRAWINGS

Note 1:
Verify that Either Condition a or b are met:
- a) Concrete Plant complies fully with ASTM C94, Section 8 and 9, and has a current certification indicating the plant has automatic batching and recording capabilities from the National Ready Mixed Concrete Association
- b) Compressive strength: 3500 psi Specified - 2500 psi Design

Requirements c thru f are met:
- c) Inspector to check first batching at start of work and furnish mix proportions to licensed weighmaster
- d) Licensed Weighmaster to positively identify materials as to quantity and certify each load by a ticket
- e) Tickets transmitted to Inspector of Record
- f) Submit Weighmaster Affidavit

Note 2: Air Content Test as required based on site location (for cold weather conditions)
Note 3: Required where the details of the PC specify a Welding
Note 4: Required where the details of the PC specify the use of this type of anchor

BUILDING DATA			
OCCUPANCY	E OR B, OR A CATEGORY I & II WITH OCCUPANT LOAD LESS THAN 300.		
TYPE OF CONSTRUCTION	VB		
WIND LOAD	V= 85 MPH EXPOSURE = C I = 1.00	K_{zt} = 1.00 λ = 1.21	
FLOOR LIVE LOAD	50 LBS.SQ. FT.		
ROOF LIVE LOAD	20 LBS/SQ FT (REDUCIBLE)		
FIRE SPRINKLER SYSTEM WEIGHT (PSF)	1.5		
ALLOWABLE SOIL PRESSURE (PSF)	1,500 FOR CONCRETE		
FLOOD HAZARD AREA	NO		
BUILDING AREA	960 MIN SQ FT		
CLIMATE ZONES	1–16		
MODULES	MOMENT–RESISTANT		
SYSTEM	12' x 40' MODULES		
FOUNDATION TYPE	CONCRETE		
SEISMIC	S_S = 1.5 S_1 = <.75 F_a =1.0 F_v =1.5 S_{DS} = 1.000	S_{D1} = 0.749 I = 1.00 R = 3.50 Ω_0 = 3.00 C_d = 3.000	C_s = 0.2857 T = 0.190 Site Class = D Seismic design category = D

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2008
2007 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2007 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
(2006 INTERNATIONAL BUILDING CODE VOLUMES 1–3 AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2005 NATIONAL ELECTRICAL CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.
(2006 UNIFORM MECHANICAL CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
(2006 UNIFORM PLUMBING CODE AND 2007 CALIFORNIA AMENDMENTS)
2008 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2004 SAFETY CODE FOR ELEVATORS AND ESCALATORS (ASME A17.1–2004)
2007 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2006 INTERNATIONAL FIRE CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 C.C.R.
(2006 INTERNATIONAL EXISTING BUILDING CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA "GREEN" BUILDING REQUIREMENTS, PART 11, TITLE 24 C.C.R. (PENDING ADOPTION)
2007 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	Automatic Sprinkler Systems	2002 Edition
NFPA 14	Standpipe Systems	2003 Edition
NFPA 17	Dry Chemical Extinguishing Systems	2002 Edition
NFPA 17a	Wet Chemical Systems	2002 Edition
NFPA 20	Stationary Pumps	2003 Edition
NFPA 24	Private Fire Mains	2002 Edition
NFPA 72	National Fire Alarm Code (California Amended) (Note See UL Standard 1971 for "Visual Devices")	2002 Edition
NFPA 253	Critical Radiant Flux of Floor Covering Systems	2006 Edition
NFPA 2001	Clean Agent Fire Extinguishing Systems	2004 Edition
ASME 17.1	Elevator Standard	2004 Edition

Reference code sections for applicable Standards – 2007 CBC Chapter 35 and 2007 CFC Chapter 45.

GENERAL NOTES

1. PC BUILDING CLASSIFED AS OCCUPANCY "A" WITH OCCUPANT LOAD 100 OR MORE CAN NOT BE REVIEWED OVER THE COUNTER (OTC).
2. PC BUILDING APPROVED ONLY FOR OCCUPANCY E OR B, OR A CATEGORY I & II WITH OCCUPANT LOAD LESS THAN 300.
3. PC BUILDING EXITING IS BASED ON THE USE OR OCCUPANCY AND WILL BE REVIEWED AS SITE SPECIFIC.
4. PC BUILDING LOCATED IN FIRE HAZARD SEVERITY ZONES PER WILDLAND URBAN INTERFACE FIRE AREAS (WUI) SHALL CONFORM TO CBC CHAPTER 7A. (NOT APPLICABLE–THIS PROJECT)
5. SITE USE SPECIFIC REQUIREMENT FOR AUTOMATIC SPRINKLER SYSTEM MIGHT BE REQUIRED BUT NOT INCLUDED IN THIS PC APPROVAL. (NOT REQUIRED–THIS PROJECT)

DRAWING INDEX

BASED ON PC 02-109695

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/05/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOL DISTRICT
McKINLEY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
COVER SHEET

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — No. C12831 Ren. 2-29-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. DSA SS GR
DATE 11/2/11

PROJECT No.

T-S

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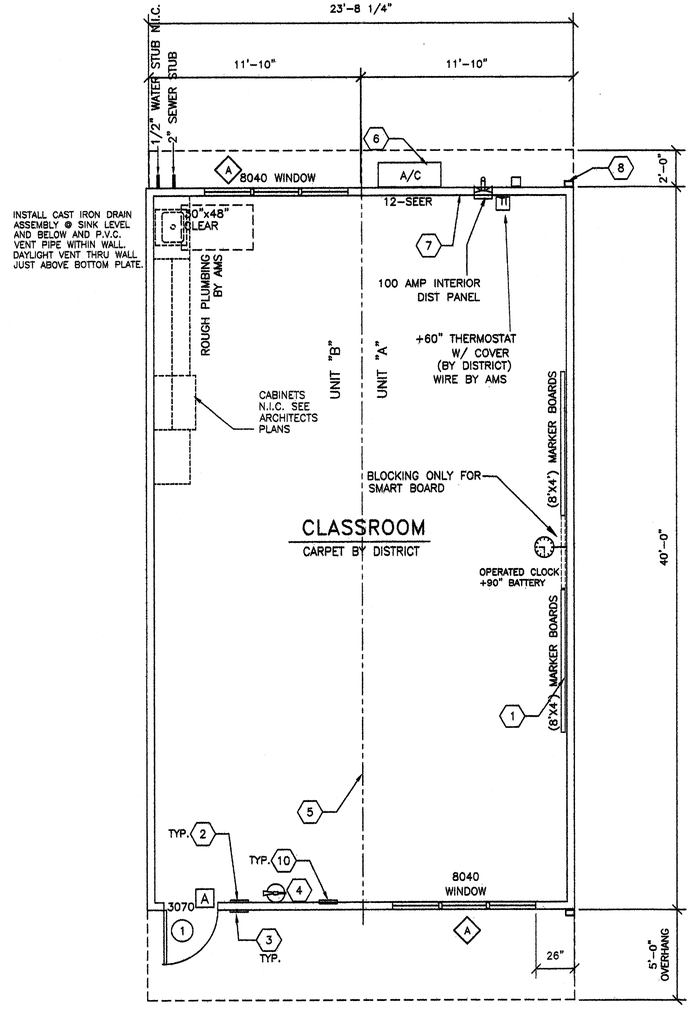

2 / A1 TYPICAL FLOOR PLAN
1/4"=1'-0"

- SHEET NOTES -

1. (1) 8'x4' MARKER BOARDS
2. EXIT TACTILE SIGN PER DETAIL 10/AD (BY OWNER)
3. CLASSROOM ID & ISA PER DETAIL PER DETAIL 5 & 9/AD
4. FIRE EXTINGUISHER TOP OF BRACKET @ +48" A.F.F.
5. TYP MOD LINE
6. HVAC UNIT (LOCATION MAY VARY)
7. ELECTRICAL PANEL (LOCATION MAY VARY)
8. DOWNSPOUT (QUANITY & LOCATION MAY VARY)
9. CARPET
10. FLOOR LIVE LOAD SIGN PER 1603A.3 2007 CBC

- GENERAL NOTES -

1. NOT USED
2. INTERIOR WALLS MAY OCCUR THROUGHOUT BUILDING REFER TO SHEET S5A FOR ATTACHMENTS.
3. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER CBC 1008.1.9
4. IF OCCUPANCY LOAD EXCEEDS 50 PROVIDE A SECOND EXIT DOOR PER CBC TABLE 1015.1
5. PROVIDE OCCUPANT LOAD SIGN (BY OWNER) CAPACITY POSTING PER 2007 CBC SECTION 1603A3 TITLE 19 C.C.R. SECTION 3.3.0. THIS ROOM SHALL BE POST WITH A DURABLE SIGN NEAR THE MAIN EXIT FROM THE ROOM.

- BUILDING SIZE SCHEDULE -

BUILDING	40'-0" MODULES	OVERALL SIZE
24' x 40'	2	23'-8 1/4"
~~36' x 40'~~	~~3~~	~~35'-6 1/2"~~
~~48' x 40'~~	~~4~~	~~47'-4 3/4"~~
~~60' x 40'~~	~~5~~	~~59'-3"~~
~~72' x 40'~~	~~6~~	~~71'-1 1/4"~~
~~84' x 40'~~	~~7~~	~~82'-11 1/2"~~
~~96' x 40'~~	~~8~~	~~94'-9 3/4"~~
~~108' x 40'~~	~~9~~	~~106'-8"~~
~~120' x 40'~~	~~10~~	~~118'-6 1/4"~~

SYMBOL SCHEDULE

(#)	DOOR (REFER TO SHEET A3 FOR TYPES)
[X]	DOOR HARDWARE TYPE REFER TO DOOR HARDWARE SCHEDULE
◇A	WINDOW (REFER TO SHEET A3 FOR TYPES)

DOOR HARDWARE SCHEDULE

A	EXTERIOR DOOR LOCKSET W/ LEVER RHODES SCHLAGE D70PD (LOCKSET BY DISTRICT)
B	EXTERIOR DOOR PANIC BAR W/ PULL ON EXTERIOR VON DUPRIN 22LX230NL (WHEN REQUIRED)

Exterior Door
A) Hinges: Hager 4-1/2X4-1/2 butts, BB1279 US26D,1-1/2 pair each door with set screw in barrel and ball bearing design
C) Closer: Norton 8500DA or 8500BF series, LCN 1460 Del series or equal. (5 lbs. max. pressure) (15 lbs. max at fire doors.)
D) Weatherstripping: All exterior doors shall be weatherstripped with Pemko 299D, Ultra WS007, at door jambs and head or equal.
E) Threshold: Threshold shall be Pemko 271 AV 5" aluminum with Pemko 216 AV Ultra TH042 door bottom.

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD UNIFIED SCHOOL DISTRICT
McKINLEY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
TYPICAL FLOOR PLAN

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PROJECT No.

A1

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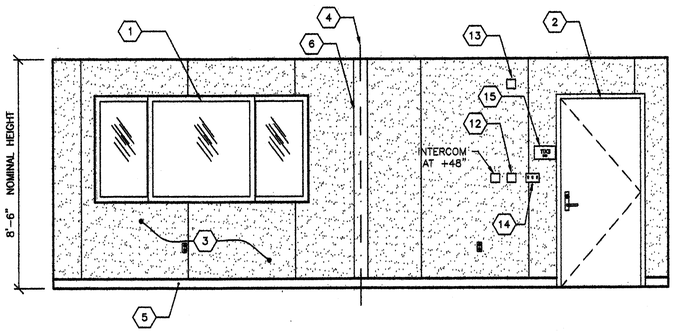
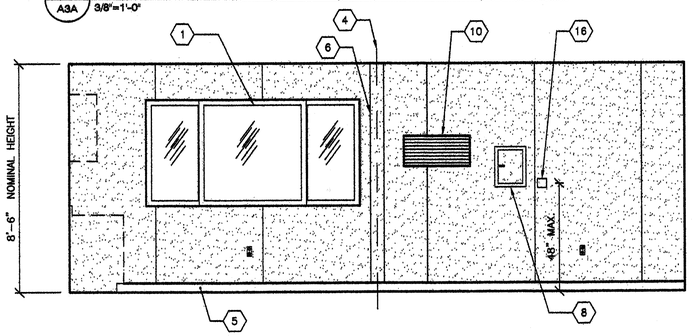
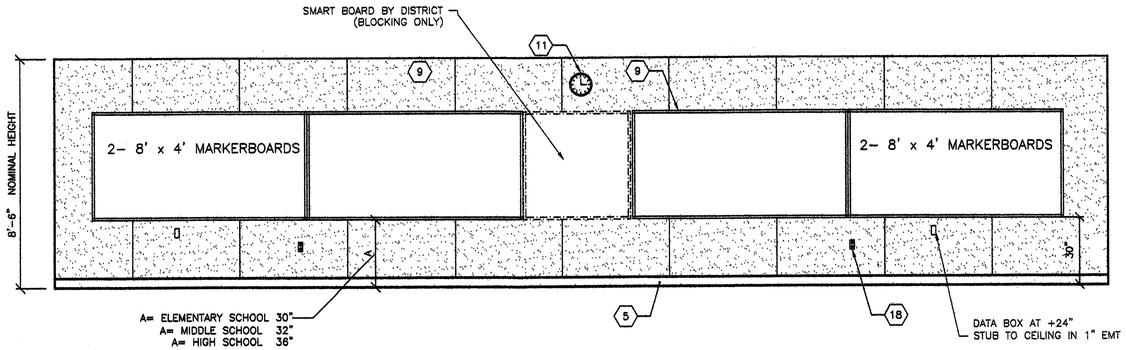


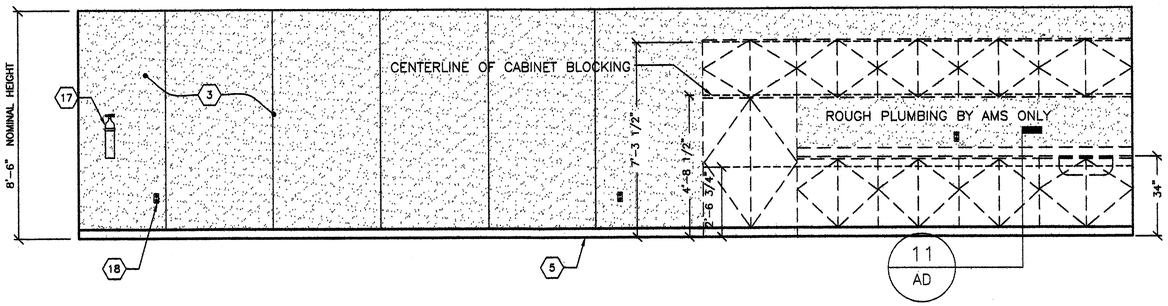
1 A3A TYPICAL CLASSROOM FRONT END WALL ELEVATION
3/8"=1'-0"



3 A3A TYPICAL CLASSROOM REAR END WALL ELEVATION
3/8"=1'-0"



2 A3A TYPICAL CLASSROOM SIDE WALL ELEVATION
3/8"=1'-0"



4 A3A TYPICAL CLASSROOM SIDE WALL ELEVATION
3/8"=1'-0"

ROOM FINISHES SCHEDULE

ROOM NUMBER	ROOM NAME	FINISHES: FLOOR	BASE	WALLS: FRONT	REAR	RIGHT	LEFT	CEILING	CEILING HEIGHT	REMARKS
#	CLASSROOM	A	D	F	F	F	F	J	8'-6"	

A – CARPET PER STATE OF CALIF SPEC COMPLYING WITH GROUP 1, TYPE A OR TYPE B, CLASS 2, DENSITY 4600, DIRECT GLUE DOWN.
B – VINYL SHEET FLOORING
C – VCT. ARMSTRONG STANDARD OR EXCELON
D – TOP SET BASE. 4" BURKE
E – TOP SET BASE. 6" BRINGANTINE OR SANDOVAL
F – WALL FINISH. 1/2" VINYL TACKBOARD CLASS 1 OVER 1/2" GYP BOARD BACKING
G – 1/2" W.R. GYP BOARD. TAPE, TEXTURE, PAINTED FINISH
H – 1/2" GYP BOARD. TAPE, TEXTURE, PAINTED FINISH
I – 3/32" F.R.P. OVER 1/2" W.R. GYP BOARD
J – ACOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATIONS)
K – 1/2" VINYL TACKBOARD CLASS 1 OVER 5/8" TYPE "X" GYP BOARD BACKING
L – 5/8" TYPE 'X' GYP BOARD. TAPE, TEXTURE, PAINTED FINISH

DOOR SCHEDULE

DOORS: DOOR NO.	FRAME OPENING SIZE	MATERIAL	DOOR FIRE TYPE	HARDWARE SET NO.	QUANTITY	FRAMES: MATERIAL	HEAD DETAIL	JAMB DETAIL	REMARKS
1	3'-0 x 7'-0"	HM	F1	A	1	STL	9/A5A	4/A5A	F1

HM – HOLLOW METAL
AL – ALUMINUM
SST – STAINLESS STEEL
STL – STEEL FRAME. 16 ga. FULLY WELDED
WWF – WINDOW WALL FRAME
SC – SOLID CORE WOOD
HC – HOLLOW CORE WOOD

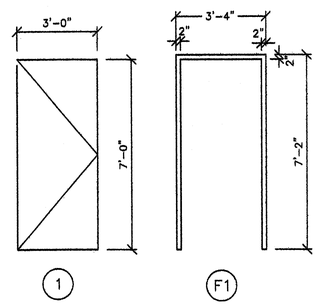
*CLASSROOMS > 1000 S.F WILL RE'Q PANIC HARDWARE PER CBC 1008.1.9

NOTE: REFER TO SHEETS A5A, A6A & A7A FOR HEAD & JAMB DOOR DETAILS W/ OPTIONAL EXTERIOR FINISHES

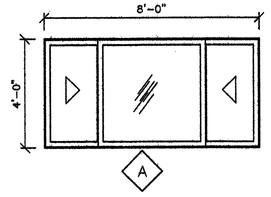
WINDOW SCHEDULE

WINDOW NO.	AMT.	TYPE	WIDTH	HEIGHT	FINISH	GLASS TYPE	U-FACTOR	SHGC
1	2	SLIDER	8'-0"	4'-0"	BRONZE	SOLAR GRAY	0.780	0.430

EXTERIOR LITE – 3/16" MINIMUM TEMPERED GLASS OR LAMINATED AS – 1 GLASS OF SOLAR GRAY GLARE REDUCING TYPE WITH A LIGHT TRANSMISSION FACTOR OF 45% MAXIMUM.



5 A3 DOOR AND DOOR FRAME TYPES
3/8"=1'-0"



6 A3 WINDOW TYPES
3/8"=1'-0"

- KEY NOTES -

1. WINDOW TYP.
2. TYP EXTERIOR DOOR
3. VINYL WRAPPED TACKABLE WALLS
4. TYP MOD LINE
5. TOP SET BASE
6. TRIM PIECE (FIELD INSTALL)
7. NOT USED
8. ELECTRICAL PANEL
9. (2) 4'x4' MARKER BOARDS
10. HVAC GRILL
11. CLOCK
12. PULL STATION J-BOX 48" A.F.F SEE ELECTRICAL SHEETS
13. HORN/STROBE J-BOX SEE ELECTRICAL SHEETS
14. LIGHT SWITCH SEE ELECTRICAL SHEETS
15. EXIT TACTILE SIGN PER DETAIL 10/AD (BY OWNER)
16. THERMOSTAT 48" A.F.F SEE MECHANICAL SHEETS
17. FIRE EXTINGUISHER TOP OF BRACKET @ +48" AFF PROTRUSION MAX 4" FROM WALL. IF FIRE EXTINGUISHER IS ABOVE 27" A.F.F
18. TYP DUPLEX OUTLET (SEE ELECTRICAL SHEETS) SPACED @ 12' o.c MIN. PER C.E.C

BASED ON PC# 02-109695

REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOLS
McKINLEY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
TYPICAL INTERIOR ELEVATIONS

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER RAMON PATRICK CRAWFORD No. C12831 Ren. 3-31-11 STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02-111612
AC. ND. FLS OTSS GR.
DATE 1/12/11

PROJECT No.

A3

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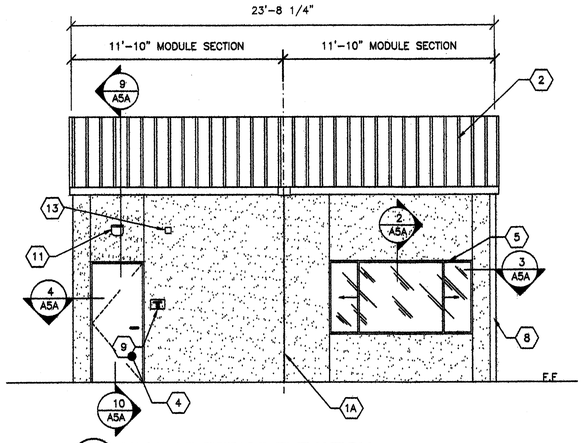
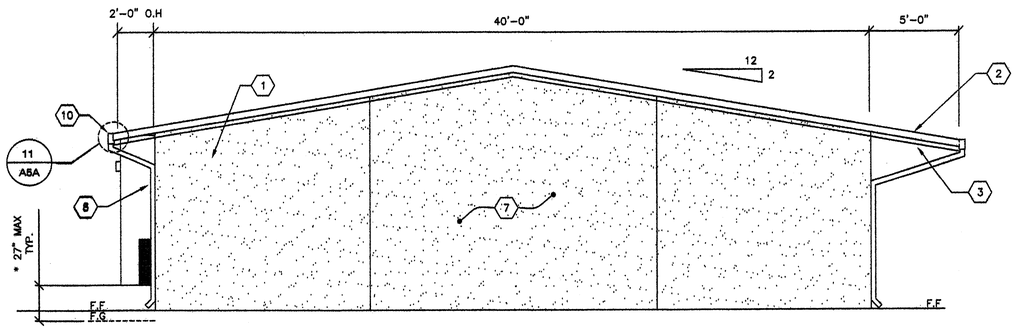
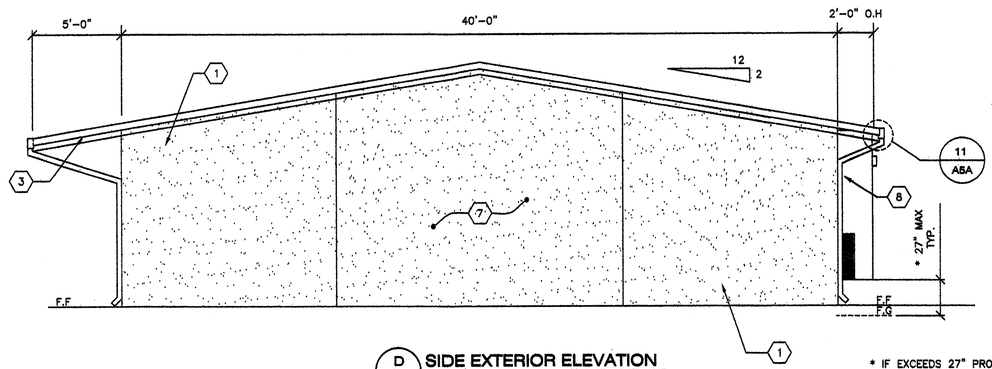


A / A5 FRONT EXTERIOR ELEVATION
1/4"=1'-0"

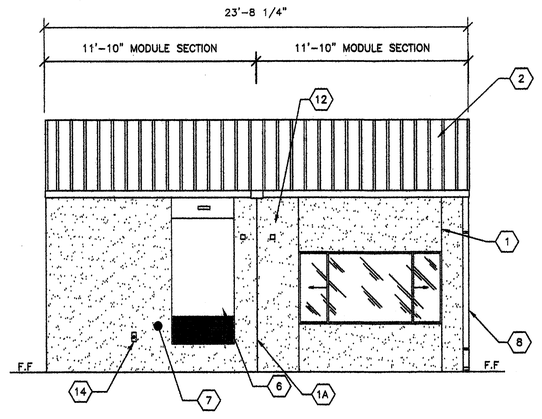


C / A5 SIDE EXTERIOR ELEVATION
1/4"=1'-0"



D / A5 SIDE EXTERIOR ELEVATION
1/4"=1'-0"

* IF EXCEEDS 27" PROTECTIVE GUARDS SHALL BE INSTALLED (BY OWNER)



B / A5 REAR EXTERIOR ELEVATION
1/4"=1'-0"

- SHEET NOTES -

1. CONTROL JOINT (LOCATIONS MAY VARY)
1A. 16 GA. FLASHING TRIM @ MODLINES TYP.
2. STANDING SEAM METAL ROOFING
3. OVERHANG
4. TYPICAL EXTERIOR DOOR
5. WINDOW SEE SPEC'S
6. HVAC UNIT TYP.
7. ACRYLIC TEXTURED FINISH OVER HARDI-BOARD
8. DOWNSPOUT (QUANTITY & LOCATION MAY VARY)
9. ROOM ID AND ISA SIGNAGE (BY OWNER) TYP REFER TO DETAILS 5/AD AND 9/AD
10. GUTTER
11. EXTERIOR LIGHT FIXTURE TYP
12. MODULAR IDENTIFICATION TAG, +90" ABOVE F.F.
13. FIRE ALARM HORN (REFER TO E1)
14. WP/G.F.C.I TYP. @ HVAC UNITS SEE ELECTRICAL SHEETS.

~~R FOR RAMP DETAILS REFER TO SHEET S6R~~

BASED PC 02-109695

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT
McKINLEY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
TYPICAL EXTERIOR ELEVATIONS (SYNTHETIC STUCCO)

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — No. C12631 Ren. 12/31/11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. VD FLS SS GR
DATE 11/2/11

PROJECT No.

A5

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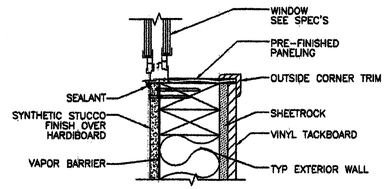
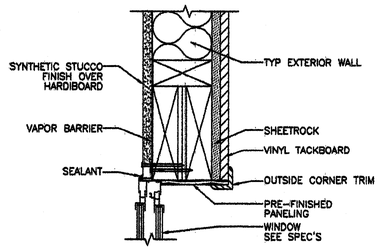
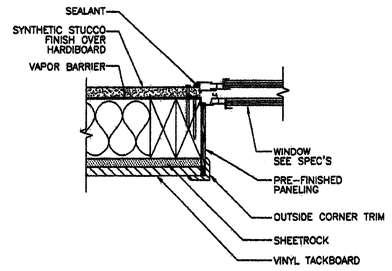


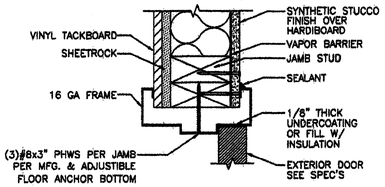
1 A5A **TYP WINDOW SILL DETAIL** 3"=1'-0"



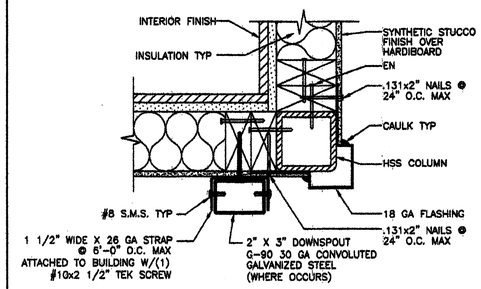
2 A5A **TYP WINDOW HEADER DETAIL** 3"=1'-0"



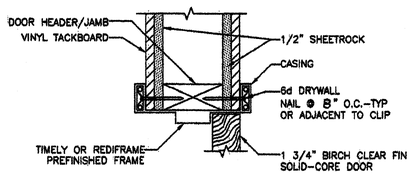
3 A5A **TYP WINDOW JAMB DETAIL** 3"=1'-0"



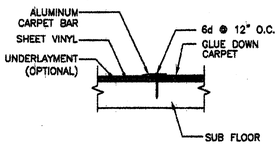
4 A5A **TYP DOOR JAMB DETAIL** 3"=1'-0"



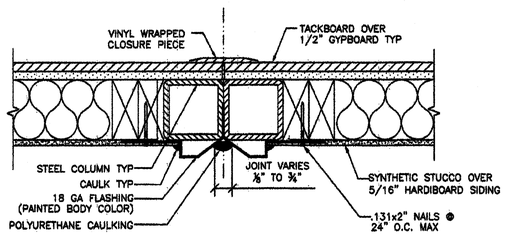
5 A5A **DOWSPOUT ATTACHMENT DETAIL** 3"=1'-0"



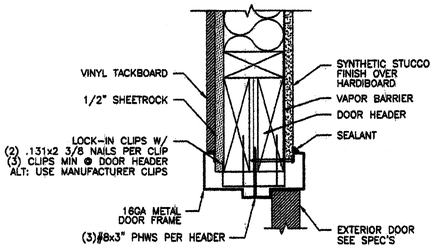
6 A5A **TYP INTERIOR DOOR HEADER DETAIL** 3"=1'-0"



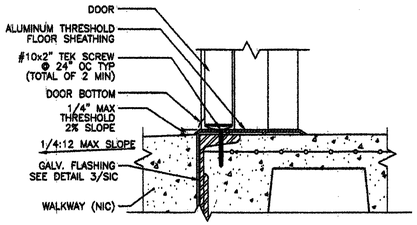
7 A5A **FLOORING DETAIL** 3"=1'-0"



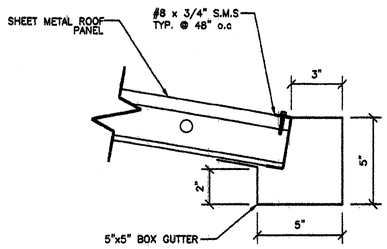
8 A5A **TYP MODLINE CLOSURE DETAIL** 3"=1'-0"



9 A5A **TYP DOOR HEADER DETAIL** 3"=1'-0"



10 A5A **THRESHOLD DETAIL** 1 1/2"=1'-0"



11 A5A **TYP GUTTER ATTACHMENT DETAIL** 3"=1'-0"

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 2/6/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE CLASSROOMS
ARCHITECTURAL DETAILS (SYNTHETIC STUCCO OPTION)

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

No. C12631 Ren. 2-31-11 STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02 111612
AC, DD, FLS, SS
DATE 1/6/11

PROJECT No.

A5A

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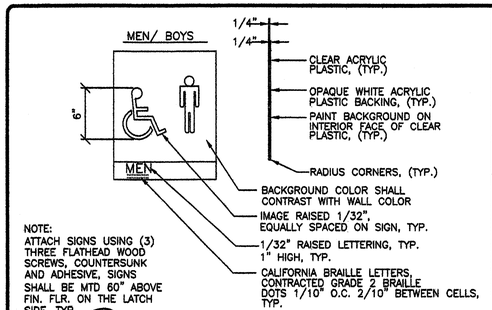
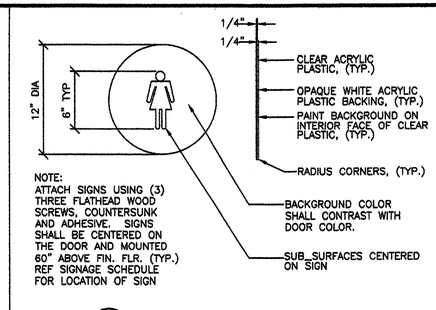


1 AD — WALL MTD RESTROOM SYMBOL
N.T.S.



2 AD — WOMEN'S RESTROOM SIGNAGE
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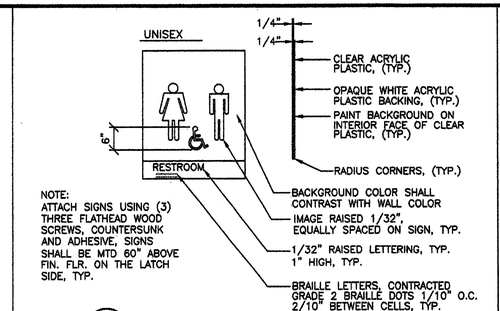
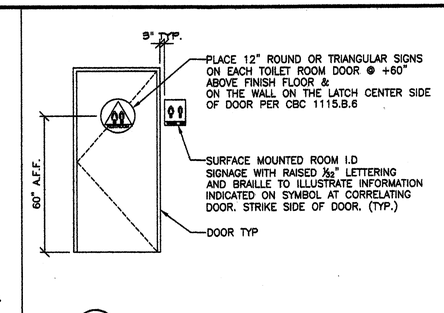


3 AD — WALL MTD RESTROOM SYMBOL
N.T.S.



4 AD — ROOM IDENTIFICATION SIGNAGE
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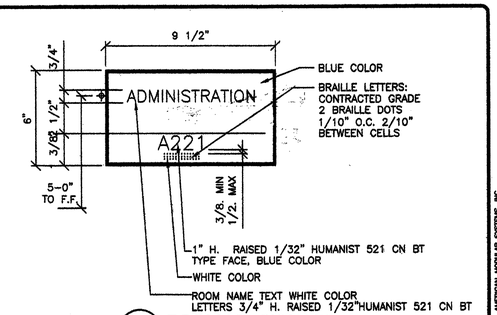
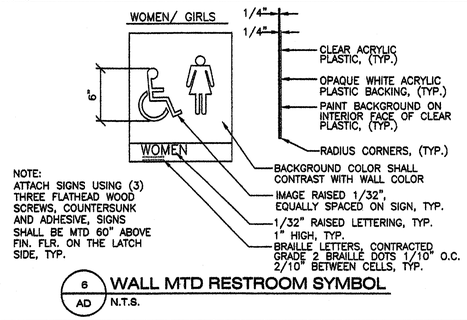
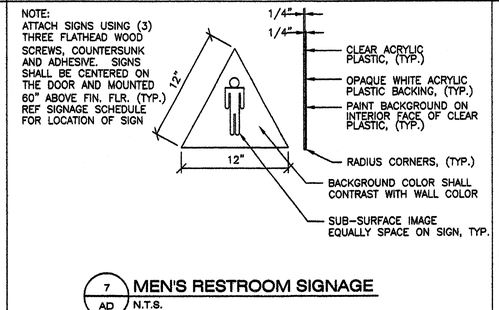


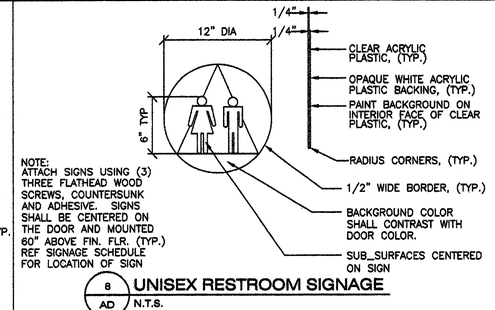
5 AD — ROOM I.D. SIGNAGE
N.T.S.



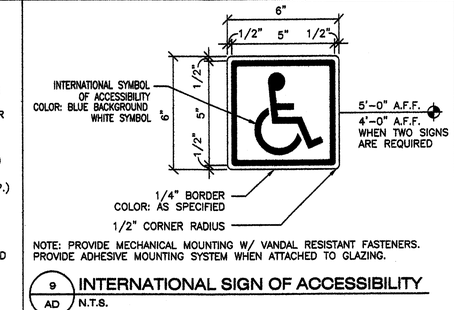
6 AD — WALL MTD RESTROOM SYMBOL
N.T.S.



7 AD — MEN'S RESTROOM SIGNAGE
N.T.S.

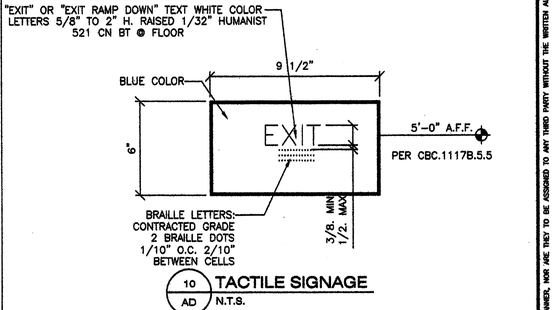


8 AD — UNISEX RESTROOM SIGNAGE
N.T.S.



NOTE: PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTENERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING.

9 AD — INTERNATIONAL SIGN OF ACCESSIBILITY
N.T.S.



10 AD — TACTILE SIGNAGE
N.T.S.

DIMENSIONS FOR ACCESSIBILITY IN TOILET FACILITIES

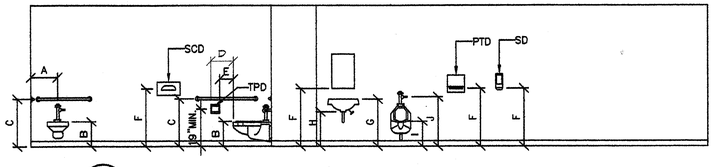
	FIXTURE TYPE	ADULT (AGE 12 AND OVER) DIMENSION	ELEMENTARY DIMENSION	KINDERGARTEN & PRE-SCHOOL DIMENSION	REMARKS
A	TOILET CENTERLINE FROM WALL	18"	15"	12"	FLUSH VALVE TO WIDE SIDE OF STALL TYP
B	TOILET SEAT HEIGHT (TO TOP OF SEAT)	17"–19"	15"	10"–12"	
C	GRAB BAR HEIGHT	33"	27"	20–22" ABOVE SEAT *	36" GRAB BAR @ REAR OF TOILET (250 LB CAPACITY TYP) (ALLOWED @ 38" A.F.F @ TANK TYPE TOILET) 42" GRAB BAR @ SIDE OF TOILET
D	TOILET PAPER DEPENSER IN FRONT OF TOILET (TPD)	12" MAX.	6" MAX.	6" MAX. **	12" IN FRONT OF TOILET ROLL PAPER HOLDER WITHOUT STOPS
E	NAPKIN DISPOSAL IN FRONT OF TOILET (SND)	12" MAX.	12" MAX	N/A	24" IN FRONT OF TOILET (BY OWNER)
F	DISPENSER OR MIRROR HEIGHT	40" MAX.	36" MAX.	32" MAX.	
G	LAVATORY/SINK TOP HEIGHT	34" MAX.	29" MAX.	24" MAX.	WRAP DRAIN WATER IF HOT WATER OCCURS
H	LAVATORY/SINK KNEE CLEARANCE	27" MIN.	24" MIN.	19" MIN.	
I	URINAL LIP HEIGHT	17" MAX.	15" MAX.	13" MAX.	
J	URINAL FLUSH HANDLE HEIGHT	44" MAX.	37" MAX.	32" MAX.	
K	DRINKING FOUNTAIN BUBBLER HEIGHT	36" MAX.	32" MAX.	30" MAX.	
L	DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	24" MIN.	22" MIN.	
M	RAMP/STAIR HANDRAIL HEIGHT	34"–38"	27"	22"	

*= ABOVE SEAT
**= DEVIATES FROM CODE REQUIREMENTS AND REQUIRES A WRITTEN FINDING OF UNREASONABLE HARDSHIP

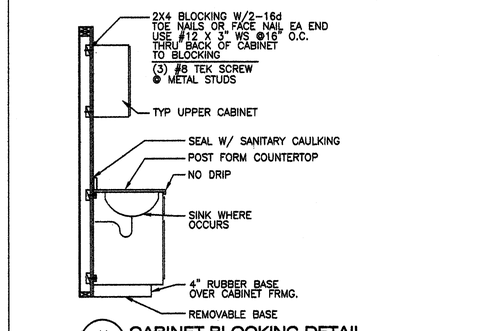
NOTE: 1. ALL ITEMS ON THIS SCHEDULE DO NOT NECESSARILY OCCUR IN THE PROJECT
2. HEIGHTS NOTED ON INTERIOR ELEVATIONS SHALL GOVERN OVER THOSE SHOWN HERE.

SCD = SEAT COVER DISPENSER
PTD = PAPER TOWEL DISPENSER
SD = SOAP DISPENSER
TPD = TOILET PAPER DISPENSER
SND = SANITARY NAPKIN DISPOSAL (WHERE APPLICABLE)
(ALL TOILET ACCESSORIES ARE N.I.C)

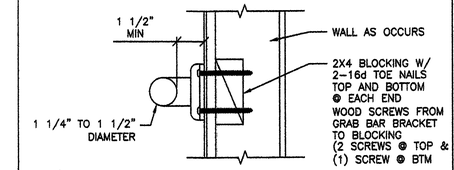
THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING AND CONSTRUCTION



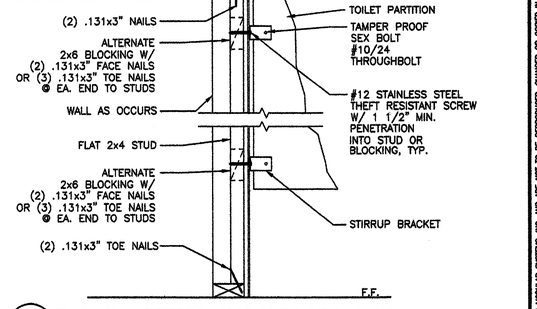
15 AD — ACCESSIBLE HEIGHTS @ TOILETS
N.T.S.



11 AD — CABINET BLOCKING DETAIL
1/2"=1'-0"

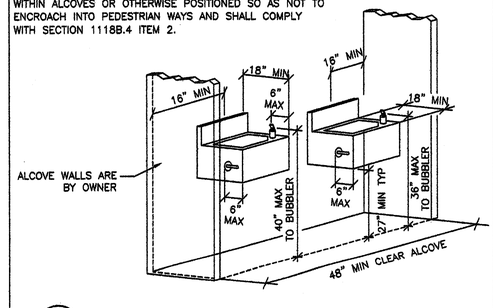


12 AD — GRAB BAR BLOCKING DETAIL
3"=1'-0"



16 AD — TOILET PARTITION ANCHORAGE BLOCKING
1" = 1'-0"

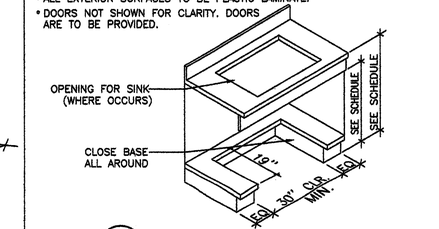
NOTE:
ALL DRINKING FOUNTAINS SHALL BE LOCATED COMPLETELY WITHIN ALCOVES OR OTHERWISE POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS AND SHALL COMPLY WITH SECTION 1118B.4 ITEM 2.



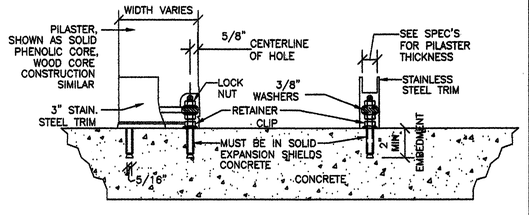
13 AD — DRINKING FOUNTAIN REQUIRED CLEARANCES
N.T.S.

14 AD — OCCUPANT LOAD SIGN
NTS

NOTES:
- MODIFY BASE AS SHOWN FOR WHEELCHAIR ACCESS.
- ALL EXTERIOR SURFACES TO BE PLASTIC LAMINATE.
- DOORS NOT SHOWN FOR CLARITY. DOORS ARE TO BE PROVIDED.



15 AD — ACCESSIBLE CABINET ELEVATION
N.T.S.



DRILL HOLES FOR FLOOR ATTACHMENT 5/8" FROM EDGE OF PILASTER. TYPICAL FOR ALL LOCATIONS.
NOTE: PLACE STAINLESS STEEL TRIM ON PILASTER, SLIDE UP BEFORE SECURING PILASTER TO FLOOR ATTACHMENT.

17 AD — TOILET PARTITION FLOOR ATTACHMENT
1/2" = 1'-0"

REVISIONS

NO	DATE	DESCRIPTION
1		
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4		

DATE: 12/02/04
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
ACCESSIBLE DETAILS

American Modular Systems Inc.
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(209)825-1921 Fax (209)825-7018
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APPROVALS:

REGISTERED ARCHITECT RAMON MARTINEZ CHAVARRIA No. C12831 Ren. 3-31-11 STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. AS FLS SS GR
DATE 1/13/11

PROJECT No.
PC

AD

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GENERAL NOTES AND SPECIFICATIONS

SECTION 1A GENERAL REQUIREMENTS

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL REQUIREMENT APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH TRADE SECTION.

B. NAME BRANDS ARE INDICATED TO ESTABLISH A STANDARD OF QUALITY. ITEMS OF EQUAL OR BETTER QUALITY MAY BE SUBSTITUTED FOR THE LISTED BRAND NAMED PRODUCTS WITH THE WRITTEN APPROVAL OF D.S.A. AND THE ARCHITECT.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLES 19 AND 24 CALIFORNIA CODE OF REGULATIONS 2007 C.B.C. NO CHANGES SHALL BE MADE FROM D.S.A. APPROVED DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL OF D.S.A. AND THE ARCHITECT.

2. SCOPE OF WORK

A. THE WORK CONSISTS OF MANUFACTURING OFF-SITE IN A PLANT AND INSTALLING ON-SITE,MODULAR RELOCATABLE BUILDINGS AS DEFINED HEREIN AND SHOWN AND DETAILED ON DRAWINGS.

B. ALL REQUIREMENTS OF TITLES 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS RELATING TO INSPECTIONS AND VERIFIED REPORTS SHALL BE COMPLIED WITH AND SHALL INCLUDE:

1. GENERAL RESPONSIBLE CHARGE OF FIELD ADMINISTRATION BY THE ARCHITECT OF RECORD.
2. INSPECTION IN-PLANT DURING THE COURSE OF CONSTRUCTION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT. THE INSPECTOR SHALL BE RESPONSIBLE FOR AND APPROVED TO INSPECT THE GENERAL CONSTRUCTION WELDING,MECHANICAL, AND ELECTRICAL WORK. COST OF THESE INSPECTIONS SHALL BE BORNE BY THE SCHOOL DISTRICTS.
3. ON-SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY INSTALLATION OR CONNECTIONS BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT.
4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIVISION OF THE STATE ARCHITECT.
5. ADDENDUMS SHALL BE SIGNED BY THE ARCHITECT & APPROVED BY D.S.A.
6. CHANGE ORDERS SHALL BE SIGNED BY THE OWNER & ARCHITECT & APPROVED BY D.S.A.
7. THE TESTING LAB SHALL BE IN THE EMPLOY OF THE OWNER.
8. ALL CONTRACTORS SHALL VERIFY ALL WORK CONDITIONS, DIMENSIONS AND DETAILS AND REPORT ANY OR ALL OMISSIONS AND DISCREPANCIES TO THE DESIGNER/OWNER IMMEDIATELY BEFORE COMMENCING WORK.
9. EACH CONTRACTOR TO BE RESPONSIBLE TO SEE THAT THEIR WORK CONFORMS TO ALL GOVERNMENTAL CODES WHETHER OR NOT SO STATED ON THE DRAWINGS.
10. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE LATEST REQUIREMENTS OF THE GOVERNING BUILDING CODES IN EFFECT AT TIME OF DSA APPLICATION.
11. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED AND ERECTED PER MANUFACTURER'S DIRECTIONS AND INSTRUCTIONS.
12. SHOP DRAWINGS MAY BE REQUIRED. IF SO, THEY WILL BE ACCURATELY DRAWN TO A LARGE ENOUGH SCALE TO SHOW ALL PERTINENT FEATURES OF THE ITEM AND ITS CONNECTION TO RELATED WORK.
13. THE MANUFACTURER OF BUILDING IS TO PLACE TWO PERMANENT METAL IDENTIFICATION LABEL ON EACH MODULE, MECHANICALLY FASTENED TO THE FRAME SEE "GENERAL DESIGN REQUIREMENTS", THIS PAGE.

    FOR PROJECTS MANUFACTURED OFF-SITE, THE PLANT INSPECTOR IS TO INDICATE THE MANUFACTURER'S NAME AND SERIAL NUMBER OF EACH MODULE ON THE VERIFIED REPORT AND D.S.A. APP. NUMBER.
14. ALL TESTS AND INSPECTIONS REQUIRED BY DSA SHALL BE COMPLIED WITH. ALL TESTS REQ. BY FIRE AND LIFE SAFETY REGULATIONS SHALL BE BY A NATIONALY RECOGNIZED TESTING LABORATORY.

SECTION 2 FOUNDATION

1. ASSUMED ALLOWABLE SOIL BEARING: 1000 PSF FOR WOOD FOUNDATIONS, 1500 P.S.F. FOR CONCRETE FOUNDATIONS EMBEDDED 12" MIN BELOW GRADE.
2. FOOTINGS SHALL BE LOCATED ON UNDISTURBED FIRM NATURAL SOIL, APPROVED COMPACTED FILL OR ON AN APPROVED PAVED SURFACE.

NOTE: THE FOUNDATION SYSTEM PRESENTED HEREIN COMPLIES WITH INTERPRETATION OF REGULATIONS, IR 16-1, ISSUED BY DIVISION OF THE STATE ARCHITECT FOR TEMPORARY BUILDINGS. THIS FOUNDATION SYSTEM IS NON-CONVENTIONAL AND THE STRUCTURAL ENGINEER TAKES NO RESPONSIBILITY FOR ITS CONSTRUCTION OR LONGEVITY.

WORK NOT INCLUDED:

A. ALL ON-SITE OR OFF-SITE UTILITIES AND THE CONNECTION OF THEM TO THE BUILDING UNLESS INDICATED ON THE DRAWINGS.
B. ALL LEVELING, GRADING OR OTHER SITE PREPARATION EXCEPT CONCRETE OR WOOD LEVELING STRIPS WHERE REQUIRED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
C. FIRE ALARM SYSTEM, PROGRAM BELL, PUBLIC ADDRESS SYSTEM,INTERCOM SYSTEM,TV,TELEPHONE SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS, OR MODIFIED BY CHANGE ORDER.
4. WHEELS AND HITCH SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
5. ACCESSIBILITY OF SITE
   THE SCHOOL DISTRICT SHALL PROVIDE ACCESS TO THE SITE FOR THE INSTALLATION OF BUILDINGS. REMOVAL OF TREES SHRUBS,FENCING, SPRINKLERS ETC. NECESSARY FOR THE MOVE-IN OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

SECTION 5 STEEL

A. GENERAL - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC STANDARD SPECIFICATIONS,TITLE 24 OF CALIFORNIA CODE OF REGULATIONS AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OF STEEL STRUCTURAL MEMBERS. A COPY OF TITLE 24 SHALL BE KEPT AT THE JOBSITE AT ALL TIMES.

B. WELDING - ALL WELDING DONE BY SHIELDED ELECTRIC-ARC OR FLUX CORED-ARC PROCESS COMPLYING WITH REQUIREMENTS OF THE "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY. WELDING DONE BY OPERATORS QUALIFIED BY TESTS ACCEPTABLE TO THE DIVISION OF THE STATE ARCHITECT. WELDING INSPECTION PER TITLE 24,PART 2,CCR, SECTION 1704A.3.1 WELDING ELECTRODE SHALL BE E70XX. ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20FT-LBS AT ZERO DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURES CERTIFICATIONS.
   1. STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A-36
   2. PIPE COLUMNS SHALL COMFORM TO A.S.T.M. A-53 WITH SULFUR CONTENT NOT EXCEEDING 0.05%.
   3. STEEL TUBING SHALL CONFORM TO A.S.T.M. A-500 GRADE B OR A.S.T.M. A579 GRADE 50 FOR GAUGE TUBING-TYP. U.N.O.
   4. STRUCTURAL WELDS ARE DESIGNED FOR FULL ALLOWABLE STRESS UNLESS OTHERWISE NOTED.

C. ERECTION - STRUCTURAL STEEL ERECTED TRUE,STRAIGHT, PLUMB AND TO ITS DESIGNATED LOCATIONS. FIELD CONNECTIONS BOLTED OR WELDED AS INDICATED ON THE DRAWINGS.

D. NAILS,BOLTS, SCREWS AND NUTS ETC.- FOR EXTERIOR WORK SHALL BE CADMIUM PLATED OR GALVANIZED.
   1. BOLTS FOR STRUCTURAL STEEL JOINTS SHALL CONFORM TO A.S.T.M. A-307 UNLESS OTHERWISE NOTED. ALL HOLES FOR MACHINE AND CARRIAGE BOLTS THROUGH STEEL TO BE DRILLED, OR TORCH PILOT HOLE AND REAM MIN. 1/16" TO BOLT SIZE. NELSON STUDS (WELDED TO STEEL) MAY BE SUBSTITUTED FOR BOLTS SAME LENGTH AND DIAMETER.

E. HANDRAILS - FABRICATED, AS DETAILED, WELDS GROUND SMOOTH.

F. SHOP PAINT
   1. EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
   2. NON-EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
   3. ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.

G. TESTS
   1. PROVIDE MILL CERTIFICATES OR TEST ALL STEEL MEMBERS PER T-24 PART 2,CCR SECTION 2212A.1

SECTION 6A CARPENTRY

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL CARPENTRY
2. MATERIALS
   LUMBER GRADE MARKED IN ACCORDANCE WITH "STANDARD GRADING AND DRESSING RULE NO. 17" OF WEST COAST LUMBER INSPECTION BUREAU, OR "GRADING RULES FOR LUMBER,3RD EDITION OF WESTERN WOOD PRODUCTS ASSOCIATION OR W.C.L.I.B.. PLYWOOD GRADE MARKED IN ACCORDANCE WITH PRODUCT STANDARD PS 1-95 FOR SOFTWOOD PLYWOOD, OF AMERICAN PLYWOOD ASSOCIATION.
   EACH SHEET SHALL BEAR THE STAMP OF APA, PITTSBURGH TESTING, OR TECO.

A. JOISTS, PLATES, STUDS-DOUGLAS FIR OR HEM FIR #2 OR BETTER U.N.O. NOTE: MSR 1650 E1.5 MAY BE SUBSTITUTED FOR #2 GRADE IF IT MEETS THE STRUCTURAL REQUIREMENTS FOR FLOOR AND ROOF MEMBERS.

B. H.F. HEADERS, POSTS AND TIMBERS-DOUGLAS FIR S4S #1

C. BLOCKING - DOUG FIR #3,OR HEM FIR #3,OR STD. & BET.

D. SILLS AND LUMBER & SHIM PLATES IN CONTACT WITH CONCRETE,MASONRY OR EARTH, DOUG FIR OR HEM FIR #2 OR BETTER PRESSURE TREATED IN ACCORDANCE WITH CBC 2304.11.2 EACH PIECE SHALL BEAR AWPB STAMP. AWPA STANDARD U1 & T1 GROUND CONTACT, D.F.OR H.F.#2 ABOVE GROUND.

E. MOISTURE BARRIER - KRAFT WATERPROOF BUILDING PAPER, OR 15 LB. FELT. PER 2007 CBC 17-1 FOR KRAFT, 32-1 FOR FELT.

F. STUDS - S4S DOUG FIR #2. OR #2 HEM FIR. MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF INSTALLATION.

G. FASTENERS -NAILS SHALL BE CORROSION RESISTANT PER C.B.C. 2304.9.1.1 COMMON NAILS FOR EXT. SIDING & FNDN. ONLY.

H. BUILDING TRIM - 2X RESAWN SELECT D.F.,H.F.,OR CEDAR

J. DOOR/WINDOW TRIM - 1X4 RESAWN D.F.,H.F.,OR CEDAR.

K. FRAMING CONNECTORS SHALL BE FROM SIMPSON CATALOG LATEST ED.

M. FIRE BLOCKS SHALL CONFORM TO CBC SECTION 717

N. ALL NAILS SHALL BE COMMON NAILS UNLESS OTHERWISE NOTED.

O. FOUNDATION LUMBER: ALL CUT ENDS AND HOLES IN PRESSURE TREATED LUMBER SHALL BE TREATED WITH "CUPRINOL".

3. WORKMANSHIP

A. FRAMING - SECURELY NAILED,BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT, FITTED AND ASSEMBELED LEVEL PLUMB AND TRUE TO LINE. TRIM IN AS LONG LENGTHS AS POSSIBLE WITH ALL STANDING TRIM IN ONE PIECE. TRIM SEALED AT ALL EDGES.

B. NAILING - IN ACCORDANCE WITH TITLE 24, CALIFORNIA BUILDING CODE, TABLE 2304.9.1

C. EXTERIOR WALLS - FACTORY FABRICATED. CAULKING PROVIDED BETWEEN PERIMETER OF WALL AND STRUCTURAL MEMBERS PROVIDING WEATHER-PROOF AND WATER-TIGHT SEAL. NECESSARY CLOSERS,SEALS, AND FLASHINGS PLACED AT TOP AND BASE SUPPORT OF PANELS AND AROUND OPENINGS.

D. NAILS INTO P.T. LUMBER TO BE HOT DIPPED GALVANIZED.

E. MACHINE APPLIED NAILING:
   USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE.
   MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

F. MOISTURE BARRIER - APPLIED TO STUDS WEATHER-BOARD FASHION, HORIZONTAL
   JOINTS LAPPED MIN 6" INCLUDING BUILDING CORNERS.
   SHEATHING APPLIED OVER MOISTURE BARRIER.

G. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING UNLESS TRANSPARENT TYPE.

SECTION 7B SHEET METAL

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL INDICATED SHEET METAL.
2. MATERIALS
   A. SHEET METAL - STEEL SHEETS HOT DIP GALVANIZED WITH 1.25 OZ. PER SQUARE FOOT ZINC COATING CONFORMING TO ASTM A526. MINIMUM 26 GA. UNLESS OTHERWISE NOTED ON THE DRAWINGS.
   B. SOLDER - OF STAND,GRADE "A" OF EQUAL PARTSARD BRAND LEAD AND TIN ASTM B32.
   C. FLUX - ZINC SATURATED MURIATIC ACID.
   D. GUTTERS: 26 GA. G-90 GALV. STEEL.
      DOWNSPOUTS: 2"X3" CONVOLUTED 30 GA. G-90 GALV. STEEL.
      GUTTER ENDCAPS: 26 GA. G-90 GALV. STEEL.
      GUTTER CLIPS: 18 GA. G-90 GALV. STEEL
3. WORKMANSHIP
   SHEET METAL ACCURATELY FORMED TO DIMENSIONS AND SHAPES DETAILED WITH TRUE STRAIGHT LINES, CORNERS AND ANGLES. FLASHING INSTALLED IN LONGEST LENGTHS POSSIBLE. EXTERIOR WORK FORMED, FABRICATED AND INSTALLED SO THAT IT ADEQUATELY PROVIDES FOR EXPANSION AND CONTRACTION IN THE COMPLETED WORK AND FINISHES WATER AND WEATHER TIGHT. ALUMINUM SHALL BE SEPARATED FROM FERROUS METAL BY POLYETHYLENE TAPE OR FLOOD COAT OF ASPHALTIC PAINT.

SECTION 7C METAL ROOFING

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL METAL ROOFING. TEST RESULTS SHOWING THE ROOFING SYSTEM WILL WITHSTAND THE UPLIFT OF A 85 MPH WIND SHALL BE SUBMITTED WITH THE PLANS AND SPECIFICATIONS.
2. MATERIALS
   A. ROOFING - 1 1/4" INCH STANDING SEAM MIN 26-GAUGE G-90 GALV. INTERLOCKING (UNPENETRATED) SHEET STL PANELS (G90).
   B. ALTERNATE: ROOFING - 3 INCH STANDING SEAM MIN 20-GAUGE G-90 GALV. INTERLOCKING (UNPENETRATED) SHEET STL PANELS (G90).
   C. ROOFING: CLASS B FIRE RATING

SECTION 7J SEALANT

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIAL AND SERVICES TO SEAL BUILDINGS.
2. MATERIALS
   VULKEM SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL FOR ROOFS. "GEOCEL" SILICONIZED CAULK, GE, DUPONT, EAGLESEAL OR DAP FOR ALL OTHER APPLICATIONS, OR EQUAL.
3. WORKMANSHIP
   SEALANT APPLIED TO DRY CLEAN SURFACES, WHEREVER INDICATED ON DETAILS AND AS NEEDED TO MAKE BUILDING WATERTIGHT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SECTION 8 CONCRETE

1. CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318-05
2. THE MINIMUM 28 DAY STRENGTH AND TYPE OF CONCRETE SHALL BE A FOLLOW:
   SLABS ON GRADE & FOUNDATIONS 2500 PSI (150 PCF)
   CONCRETE OVER METAL DECK 3000 PSI (110 PCF) OR (150 PCF)
3. REINFORCING SHALL CONFORM TO ASTM A615--GRADE 40 UON.
4. CONCRETE COVERAGE SHALL BE AS FOLLOWS, UON ON DRAWINGS:
   CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLABS) .....3"
   CONCRETE EXPOSED TO GROUND BUT PLACED IN FORMS.....2"
   SLABS (ON GROUND).....POSITION IN CENTER OF SLAB
5. ALL BARS SHALL HAVE A CLASS B MINUMUM SPLICE LAP UON.
6. NOTIFY THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.

SECTION 8A EXTERIOR PLASTER

LATHING AND PLASTERING MATERIALS AND ACCESSORIES SHALL BE MARKED BY THE MANUFACTURER'S DESIGNATION TO INDICATE COMPLIANCE WITH THE APPROPRIATE STANDARDS REFERENCED IN THIS SECTION AND STORED IN SUCH A MANNER TO PROTECT THEM FROM THE WEATHER. PER 2507.1

LATHING AND PLASTERING MATERIALS SHALL CONFORM TO THE STANDARDS LISTED IN TABLE 2507.2 AND CHAPTER 35 AND, WHERE REQUIRED FOR FIRE PROTECTION, SHALL ALSO CONFORM TO THE PROVISIONS OF CHAPTER 7. PER 2507.2

GYPSUM BOARD AND GYPSUM PLASTER CONSTRUCTION SHALL BE OF THE MATERIALS LISTED IN TABLES 2506.2 AND 2507.2. THESE MATERIALS SHALL BE ASSEMBLED AND INSTALLED IN COMPLIANCE WITH THE APPROPRIATE STANDARDS LISTED IN TABLES 2508.1 AND 2511.1, AND CHAPTER 35 PER 2508.1 PROVIDE 2 LAYERS OF GRADE D PAPER PER CBC SECTION 2510.6

2510.6 WATER-RESISTIVE BARRIERS. WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION 1404.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER.

EXCEPTION: WHERE THE WATER -RESISTIVE BARRIER THAT IS APPLIED OVER WOOD-BASED SHEATING HAS A WATER RESISTANCE EQUAL TO OR GREATER THAN THAT 60-MINUTE GRADE D PAPER AND IS SEPARATED FROM THE STUCCO BY AN INTERVENING, SUBSTANTIALLY NONWATER-ABSORBING LAYER OR DRAINAGE SPACE.

1. GENERAL NOTES
   PLASTERING WITH CEMENT PLASTER SHALL NOT BE LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE FABRIC LATH AND SHALL NOT BE LESS THAN TWO COATS WHEN APPLIED OVER MASONRY CONCRETE OR GYPSUM BACKING AS SPECIFIED IN SECTION 2510.5

A. THE FIRST COAT SHALL BE APPLIED WITH SUFFICIENT MATERIAL AND PRESSURE TO FILL SOLIDLY ALL OPENINGS IN THE LATH. THE SURFACE SHALL BE SCORED HORIZONTALLY SUFFICIENTLY ROUGH TO PROVIDE ADEQUATE BOND TO RECEIVE THE SECOND COAT.

B. THE SECOND COAT SHALL BE BROUGHT OUT TO PROPER THICKNESS, RODDED AND FLOATED SUFFICIENTLY ROUGH TO PROVIDE ADEQUATE BOND FOR THE FINISH COAT. THE SECOND COAT SHALL HAVE NO VARIATION GREATER TO THAN 1/4 INCH (6.4 mm) IN ANY DIRECTION UNDER 5-FOOT STRAIGHT EDGE.

C. THE FINISH COATS SHALL BE APPLIED OVER BASE COATS THAT HAVE BEEN IN PLACE FOR THE TIME PERIODS SET FORTH IN ASTM C 926 THE THIRD OR FINISH COAT SHALL BE APPLIED WITH SUFFICIENT MATERIAL AND PRESSURE TO BOND TO AND TO COVER THE BROWN COAT AND SHALL BE OF SUFFICIENT THICKNESS TO CONCEAL THE BROWN COAT.

SECTION 8B HOLLOW METAL DOORS AND FRAMES

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL HOLLOW METAL DOORS AND FRAMES.
2. MATERIALS
   A. DOORS - INSULATED TYPE L FULL FLUSH, MANUFACTURED BY AMWELD MANUFACTURING COMPANY,18 GA. 1 3/4" THICK PER CS242 MIN,REINFORCE FOR HARDWARE-BOTH FACES FOR CLOSER, SOUND DEADEN INTERIOR.
   B. FRAMES - 16 GA COLD ROLLED,2" FACES, CS242 MIN.3 ANCHORS PER JAMB + ADJUSTABLE FLOOR ANCHOR EACH JAMB REINFORCE FOR HARDWARE. PROVIDE STRIKE BOX,PROVIDE SOUND DEADENING: 1/8" UNDERCOATING OR INSULATING FILL.
3. WORKMANSHIP
   ALL WORK FABRICATED IN SHOP TO REQUIRED PROFILES BY FORMING AND WELDING, WITH ARISES AND EDGES STRAIGHT, SHARP FIT FABRICATED ACCURATELY WITH SQUARE CORNERS, HAIRLINE JOINTS AND SURFACES FREE FROM WARP,WAVE,BUCKLE OR OTHER DEFECTS AFTER FABRICATION,DOORS AND FRAMES CLEANED THOUROUGHLY,ALL WELDS GROUND SMOOTH AND GIVEN PRIME COAT.

SECTION 9E PAINTING

1. SCOPE OF WORK
CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PAINT BUILDING. ALL EXPOSED SURFACES OF BUILDING AND RAMPS SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES, THRESHOLDS, AND ROOFING.
2. MATERIALS

A. FOR EXTERIOR WOOD:

REF.BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	42-9M	1240	Y24W20	289-N
FINISH	QD-60-XX	1240-XXX	B54WZ102	GE2-NXX

B. FOR INTERIOR TRIM

REF.BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
FINISH	W450-XX	1650-XXX	A26W11	40XX

C. FOR METAL

REF.BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	43-4	1710	B50NZ6	15N
FINISH	10-XX	1700-XXX	B54WZ102	GE2-NXX

3. WORKMANSHIP
   ALL EXPOSED SURFACES SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES AND THRESHOLDS. MATERIAL SHALL BE OF THE GRADE SPECIFIED OR EQUAL.

A. EXTERIOR - WOOD SIDING, TRIM AND SKIRTING FLAT OR SEMI-GLOSS LATEX - APPLY ONE COAT OF PRIME AND AT LEAST ONE FINISH COAT. PRIME COAT SHALL BE BRUSHED ON OR SPRAYED AND BACK BRUSHED INTO ALL GROOVES IN THE SIDING. IF NECESSARY, IN THE OPINION OF THE INSPECTOR, AN EXTRA COAT SHALL BE APPLIED TO ALL GROOVES SO THAT THE FINISH COAT WILL HAVE A UNIFORM APPEARANCE. ALLOW PRIME COAT TO DRY ACCORDING TO MANUFACTURER'S RECOMMENDATION. PRIME AND FINISH COATS SHALL BE COMPATIBLE AND MANUFACTURED BY THE SAME COMPANY.

B. INTERIOR TRIM - TRIM NOT PRECOATED SHALL BE PAINTED WITH TWO COATS OF SEMI-GLOSS LATEX OVER PRIMER.

C. INTERIOR HARDWOOD CABINETS - TWO COATS LOW LUSTER POLYURETHANE FINISH. APPLY FIRST COAT THINNED WITH ONE QUART MINERAL SPIRITS PER GALLON. APPLY SECOND COAT AS RECOMMENDED BY MANUFACTURER.

D. METAL - ALL METAL SURFACES SHALL BE PAINTED WITH TWO COATS OF ALKYD FINISH COAT OVER ZINC CHROMATE OR EQUAL RUST INHIBITING PRIMER.

E. RAMP - ONE COAT OF FERROX NON-SLIP (0.8 MIN. C.O.F.) SURFACING AS MANUFACTURED BY AMERICAN ABRASIVE METALS OR COMPARABLE. ALL PAINTS OF THE TYPE INDICATED SHALL BE LISTED ON THE STATE OF CALIFORNIA QUALIFIED PRODUCTS LIST FOR MAINTENANCE PAINTS 8010-91G-98A DATED JULY 1989. OR EQUAL.

F. SUBMIT ONE SET COLOR SAMPLES TO ARCHITECT FOR EACH PRODUCT TO ASSIST IN SELECTION.

SECTION 13F SITE ASSEMBLY

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR MATERIALS AND SERVICES TO PREPARE THE BUILDING ELEMENTS, TRANSPORT THEM FROM THE PLANT TO THE SITE AND TO COMPLETE THE ASSEMBLY AT THE SITE. THE CONDITION OF THE SITE, SUCH AS DRAINAGE AND SOIL BEARING CAPACITY, SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT . UNLESS SPECIFICALLY CALLED FOR IN THE CONTRACT, STEPS, RAMPS, OR HANDRAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. ASSEMBLY OF ELEMENTS

A. IN A LOCATION ON THE SITE AS DETERMINED BY THE SCHOOL DISTRICT,(APPROVED BY DSA) THE CONTRACTOR SHALL PLACE WOOD LEVELING STRIPS OR OTHER SUITABLE SUPPORTS AS DETAILED ON THE DRAWINGS.

B. THE ELEMENTS SHALL BE BROUGHT TO THE SITE ON WHEEL ASSEMBLY AND TRANSFERRED TO THE PREPARED SITE. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ELEMENTS BY RACKING OR BUMPING EACH OTHER.

C. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTION ON THE DRAWINGS. FLASHINGS, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER DETAILS ON THE DRAWINGS.

SECTION 15A AIR CONDITIONING

1. SCOPE OF WORK (SEE SHEET M3 FOR HVAC SPEC. AND NOTES)
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL THE AIR CONDITIONING SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS, INCLUDING A/C UNITS AND ACCESSORIES, REMOTE THERMOSTAT, GRILLS AND POWER WIRING COMPLETE TO LOAD CENTER. CONTRACTOR SHALL INSTRUCT OWNER'S OPERATORS ON OPERATION AND MAINTENANCE OF A/C SYSTEM.
2. EQUIPMENT
   SEE NOTE ON FLOOR PLAN FOR SIZE AND TYPE.
3. WORKMANSHIP
   UNITS SHALL BE INSTALLED COMPLETE AND OPERATING WITH ALL ACCESSORIES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

SECTION 16A ELECTRICAL

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES FOR ELECTRICAL INSTALLATION COMPLETE WITH ASSOCIATED EQUIPMENT AND FIXTURES, IN OPERATING CONDITION READY FOR USE. THE WORK INCLUDES: LIGHT AND POWER SYSTEMS,LIGHTING FIXTURES COMPLETE WITH LAMPS, CONNECTIONS AND DISCONNECTS TO A/C EQUIPMENT.

A. PROVIDE CONDUIT WITH PULL STRINGS AND JUNCTION BOXES FOR AUTOMATIC DETECTION FIRE ALARM SYTEM AND NOTIFICATION PER NFPA 72

2. MATERIALS
   ALL NEW COMPLYING WITH REQUIREMENTS OF CALIFORNIA ELECTRIC CODE AND NATIONAL FIRE PROTECTION ASSOCIATION

A. ELECTRIC METALLIC TUBING - COUPLING AND FLEX CONDUIT GALVANIZED OR SHERARDIZED. EXTERIOR FLEX- GALV. STEEL W/ FACTORY APPLIED P.V.C. JACKET.

B. PANELBOARDS - FLUSH MOUNTED.

C. CONDUCTORS - COPPER,INSULATED FOR 600 VOLTS, TYPE THHN FOR SIZES #12 TO #6, TYPE THW FOR LARGER SIZES.MINIMUM SIZE-#14.

D. RECEPTACLES - AS NOTED. +18" A.F.F. MIN.

E. CLOCK RECEPTACLE - AS NOTED.

F. SWITCHES - AS NOTED. +48" A.F.F. MAX.

G. LIGHTING FIXTURES - AS NOTED ON THE DRAWINGS.

3. WORKMANSHIP
   MATERIALS AND EQUIPMENT INSTALLED IN A SECURE,NEAT WORKMANLIKE MANNER IN ACCORDANCE WITH CODE REQUIREMENTS. PANELBOARD CARDS FILLED OUT. CONDUIT AND CABLE INSTALLED IN WALL AND CEILING SPACES. WORK PIERCING WATERPROOFED AREAS FLASHED AND SEALED TO A WATERTIGHT CONDITION.
   BUILDING CONDUIT/WIRING FROM FACE OF BLDG TO SITE TERMINATION BY SITE CONTRACTOR(N.I.C.).(FLEXIBLE CONDUIT S-BEND SEALTITE)

INSPECTION

INSPECTION OF PREFABRICATED BUILDINGS IS DIVIDED INTO TWO SEPARATE FUNCTIONS.

1. IN-PLANT INSPECTION.
2. ON-SITE INSPECTION.

THE CONTRACTOR SHALL ALLOW UP TO SEVEN (7) DAYS FROM THE DATE OF PLAN APPROVAL TO OBTAIN AN IN PLANT INSPECTOR APPROVED BY D.S.A.

IN-PLANT INSPECTION AND MATERIAL TESTING SHALL BE ACCOMPLISHED UNDER THE SUPERVISION OF THE DISTRICT ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ARCHITECT, DSA, AND THE DESIGNATED INSPECTOR/INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. THE MANUFACTURER SHALL PROVIDE THE INSPECTOR WITH FULL ACCESS TO ALL PLANT OPERATIONS INVOLVING WORK UNDER THIS CONTRACT AND SHALL ADVISE THE INSPECTOR IN ADVANCE OF THE TIME AND PLACE WHEN OPERATIONS THAT THE INSPECTOR WANTS TO OBSERVE TAKE PLACE. BEFORE THE BUILDING(S) ARE REMOVED FROM THE PLANT FOR DELIVERY TO THE STORAGE FACILITY OR FROM THE STORAGE FACILITY TO THE SITE THE INSPECTOR SHALL DETERMINE THAT THEY ARE ACCEPTABLE AND ISSUE A WRITTEN RELEASE WHICH SHALL BE IN THE FORM OF A VERIFIED REPORT (FORM SSS-8). A COPY OF THE INSPECTOR'S VERIFIED REPORT SHALL ACCOMPANY EACH BUILDING TO STORAGE OR TO THE SITE. THE INSPECTOR SHALL PUT ONE COPY IN EACH BUILDING.

COORDINATION OF WORK

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL NECESSARY ARRANGEMENTS WITH THE SCHOOL DISTRICT AUTHORIZED REPRESENTATIVE FOR ACCESS TO GROUNDS AND REMOVAL OF EQUIPMENT,IF NECESSARY.
THIS CONTACT SHALL BE MADE AT LEAST 48 HOURS PRIOR TO DELIVERY OF AY MODULE.
ON-SITE INSPECTION SHALL BE DONE BY THE SITE INSPECTOR. ALL WORK WHICH THE MANUFACTURER OR HIS SUBCONTRACTORS PERFORM AT THE SITE SHALL BE SUBJECT TO THE INSPECTION OF THE SITE INSPECTOR. THE MANUFACTURER WILL FURNISH THE SITE INSPECTOR WITH SUCH INFORMATION AS MAY BE NECESSARY TO KEEP HIM FULLY INFORMED AS TO PROGRESS OF WORK AND DATES WHEN SITE WORK WILL OCCUR. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENC

MATERIALS AND WORKMANSHIP

ALL CONTRACTORS SHALL CERTIFY THAT NO ASBESTOS-CONTAINING BUILDING MATERIALS WHICH EXCEED STATE AND FEDERAL MANDATED SAFE ASBESTOS LEVELS HAVE BEEN USED IN THE CONSTRUCTION OF RELOCATABLE FACILITIES.

ALL WORKMEN SHALL BE SKILLED AND QUALIFIED FOR THE WORK WHICH THEY PERFORM. ALL MATERIALS USED,UNLESS OTHERWISE SPECIFIED,SHALL BE NEW AND OF THE TYPES AND GRADES SPECIFIED. THE CONTRACTOR SHALL, IF REQUESTED, FURNISH EVIDENCE SATISFACTORY TO THE ARCHITECT THAT SUCH IS THE CASE.

CONTRACTOR'S CREWS ASSIGNED TO ANY WORK PERFORMED UNDER THIS CONTRACT SHALL INCLUDE ONE COMPETENT AND FULLY EXPERIENCED PERSON DESIGNATED AS THE RESPONSIBLE PERSON IN CHARGE. SUCH PERSON MUST BE IDENTIFIED BY NAME TO THE DISTRICT IN ADVANCE OF ANY WORK. UPON REQUEST, THE CONTRACTOR SHALL PROMPTLY FURNISH TO THE DISTRICT INFORMATION RELATING TO THIS EMPLOYEE'S EXPERIENCE.

WORKMANSHIP SHALL BE EQUAL OR BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT. A QUALITY CONTROL SUPERVISOR, DESIGNATED BY THE MANUFACTURER, SHALL REVIEW ALL WORK IN PROGRESS AND SHALL REVIEW THE FINISHED BUILDING PRIOR TO FINAL INSPECTION TO ASSURE IT IS COMPLETE AND CORRECT. THE QUALITY CONTROL SUPERVISOR SHALL HAVE THE AUTHORITY TO HAVE MATERIALS REPLACED AND WORK REDONE IN ORDER TO CORRECT FAULTY MATERIALS OR WORKMANSHIP.

GENERAL DESIGN REQUIREMENTS:

UP TO (10) APPROXIMATELY 12' x 40' MODULES DESIGNED SO THAT TWO MODULES MAY BE JOINED TOGETHER TO FORM A COMPLETE STRUCTURE TO MAINTAIN A POSITIVE ALIGNMENT OF FLOORS, WALLS, AND ROOF AND TO PERMIT SIMPLE NON-DESTRUCTIVE DETACHMENT FOR FUTURE RELOCATION.

EACH MODULE SHALL BE PERMANENTLY IDENTIFIED WITH AN IMPRINTED (STAMPED NOT ENGRAVED) METAL IDENTIFICATION TAG 3"X1 -1/2" MINIMUM SIZE WITH THE FOLLOWING INFORMATION:

1. MANUFACTURER'S NAME AND BUILDING SERIAL NUMBER.
2. DESIGN WIND LOAD / EXPOSURE
3. DESIGN ROOF LIVE LOAD
4. DESIGN FLOOR LIVE LOAD
5. D.S.A. APPLICATION NUMBER.

2-TAGS PER MODULE ONE ON EXTERIOR AND ONE ON MODULE BEAM AT FRONT OF BUILDING ABOVE CEILING.

EACH MODULE SHALL BE CAPABLE OF RESISTING ALL VERTICAL AND LATERAL LOADS DURING TRANSPORTATION AND RELOCATION. (NORMAL INDUSTRY PRACTICE FOR BRACING MODULES DURING TRANSPORTATION AND RELOCATIONS IS ACCEPTABLE.) WHEN MODULES ARE ASSEMBLED JOINTS SHALL BE SEALED WITH REMOVABLE CLOSING STRIPS OR OTHER METHOD TO PRESENT A FINISHED APPEARANCE AND BE PERMANENTLY WATERPROOF.

EACH MODULE SHALL BE SUFFICIENTLY RIGID TO BE JACKED UP AT THE FRONT AND BACK CORNERS FOR RELOCATION WITHOUT DAMAGE OR THE MODULE SHALL HAVE LIFT LUGS AT FRONT AND BACK LOCATED AS REQUIRED SO THAT THE MODULE MAY BE JACKED UP FOR RELOCATION IN ONE PIECE WITHOUT ADDITIONAL SUPPORTS OF ANY TYPE. EVIDENCE OF EXCESSIVE BOWING DURING THE INSTALLATION OF THE MODULES WHICH, IN THE OPINION OF THE AGENCY ARCHITECT OR STRUCTURAL ENGINEER, CAUSES EXCESSIVE WORKING AT ANY JOINT OR COMPROMISES THE STRUCTURAL INTEGRITY OF THE MODULE SHALL BE SUFFICIENT REASON FOR REJECTION OF THE MODULE.

FINISH AND BASE MATERIALS AT EACH MODULE SHALL TERMINATE AT INTERIOR MODULE JOINTS IN A MANNER TO JOIN FLUSH AND TIGHT WITH SAME MATERIAL IN ADJACENT MODULE SO THE MODULE MAY BE RELOCATED WITH MINIMUM CUTTING AND PATCHING.

MARKERBOARD SPECIFICATIONS

MARKERBOARDS SHALL BE 24 ga. PORCELAIN STEEL FACING SHEET SUITABLE TO ACCEPT DRY ERASE FLET MARKERS. THE FACING SHEET SHALL BE LAMINATED TO PARTICLE BOARD SUBSTRATE WITH A MINIMUM DENSITY OF 45#/c. ft.
THE PANEL SHALL HAVE A FOIL BACKING. THE PANELS SHALL HAVE EXTRUDED ALUMINUM MOLDING AND CHALKRAIL WITH A MINIMUM OF 2-$\frac{16}{16}$" PROJECTION FROM THE FACE OF PANEL. THREE MAP HOOKS WITH CLIPS PER PANEL SHALL BE PROVIDED. ONE FLAG HOLDER, $\frac{1}{2}$" SIZE, SHALL BE PROVIDED FOR EACH CLASSROOM. EACH CLASSROOM SHALL HAVE 2 EACH 4 X 8 PANELS INSTALLED SIDE BY SIDE TO MAKE A 4 X 16 PANEL, CENTERED ON THE LONG WALLS.
REFERENCE BRANDS: CHATFIELD-CLARKE Co, Inc. SERIES 500 OR NELSON ADAMS Co. NACO SERIES 60.

NOTE:

WALL FINISH MATERIAL
- FLAME SPREAD MAX = 200
- SMOKE DENSITY MAX = 450

BUILDING INSULATION
- FLAME SPREAD MAX = 25
- SMOKE DENSITY MAX = 450

PIPE INSULATION
- FLAME SPREAD MAX = 25
- SMOKE DENSITY MAX = 450

DUCT INSULATION
- FLAME SPREAD MAX = 25
- SMOKE DENSITY MAX = 50

INTERIOR

1. FLOOR: CARPETS - CLASSROOM SHALL BE CARPETED AS INDICATED ON FLOOR PLAN WITH DIRECT GLUE DOWN TYPE PER STATE OF CALIFORNIA SPECIFICATION 7220-XXX-01, GROUP 1, TYPE A, CLASS 26. COLOR WILL BE SELECTED BY ARCHITECT AFTER AWARD OF BID. THE CARPET DENSITY SHALL BE 4600 MINIMUM. PILE YARN SHALL BE BRANDED NYLON. NO CROSS SEAMS SHALL BE ALLOWED. PILE HEIGHT 1/2" MAX
2. BASE: RESILIENT COVE BASE - BEST QUALITY, MOULDED RUBBER, 1/8" THICK, 4" HIGH, MOULDED TOP SET COVE: PROVIDE PREFORMED BASE FOR SQUARE EXTERNAL CORNERS AND PREFORMED END STOPS WHERE BASE DOES NOT ABUT. SOLID COLOR AS MANUFACTURED BY "JOHNSONITE CO.", FLEXCO, OR EQUAL. APPLY COVE TO COMPLETE PERIMETER OF CLASSROOM.
3. INTERIOR WALLS SHALL BE VINYL COVERED TACKBOARD(U.O.N.) APPLIED IN ONE CONTINUOUS LENGTH FROM FLOOR TO CEILING. THE TACKBOARD SHALL BE INDUSTRIAL INSULATION BOARD MANUFACTURED SPECIFICALLY AS A SUBSTITUTE FOR VINYL COVERED WALL PANELS. THE BOARD SHALL BE ASPHALT FREE, SHALL HAVE AN IRONED-ON COATING AND SHALL HAVE A MINIMUM DENSITY OF 18 LBS. PER FT. THE VINYL COATING SHALL BE MADE OF VIRGIN VINYL CALENDERED BASE COLOR, WEIGHING A MINIMUM OF 8 OZ. PER SQUARE YARD. THE COATING BACKING SHALL BE SHEETING OR NON-WOVEN FABRIC. THE VINYL COATING SHALL BE MECHANICALLY LAMINATED, WITH THE LONG EDGES WRAPPED, TO THE TACKBOARD. TACKBOARD SHALL BE APPLIED OVER 1/2" SHEETROCK OR PLYWOOD SHEATHING. THE VINYL WALL COVERED PANEL SHALL HAVE A CLASS III FLAME SPREAD RATING. THE PANEL SHALL BE APPROVED FOR CLASSROOM USE BY THE CALIFORNIA STATE FIRE MARSHAL. REFERENCE BRAND: VINYL COVERED TACKBOARD AS MANUFACTURED BY CHATFIELD-CLARKE OR COMPARABLE. CARE SHALL BE TAKEN IN MOUNTING THE TACKBOARD SO THAT THE TEXTURE OF ALL PANELS WILL HAVE THE SAME ORIENTATION AND COLOR MATCH.
4. CEILING: SUSPEND T-BAR SYSTEM, SEE SHEET M2 FOR DETAILS ETC. MATERIALS AND INSTALLATION PER IR 25-5 INCLUSIVE AS APPLICABLE TO CLASSROOMS.

DOORS & WINDOWS

EXTERIOR DOORS: METAL DOORS - 3'-0"x7'-0" HOLLOW METAL DOOR CONSTRUCTION OF 1 SHEET OF 18 GA. GRADE II STEEL ASSEMBLED PER CS242 MIN AND REINFORCED WITH 20 GA. MIN. FILL DOOR SPACES WITH MINERAL WOOL OR OTHER INSULATION. (REINFORCE BOTH FACES FOR CLOSURE) PROVIDE FLUSH TOP ON DOORS. HARDWARE REINFORCEMENT SHALL BE 10 GA. MIN FOR HINGES, DOOR FRAME SHALL BE 16 GA. PRESSED STEEL FRAME ASTM A366 & C5242. HARDWARE REINFORCEMENT SHALL BE 10 GA. PLATE. FRAMES SHALL BE DESIGNED WITH INTEGRAL STOP AND TRIM. PROVIDE (3) ANCHORS PER JAMB PLUS ADJUSTABLE FLOOR ANCHOR.

EXTERIOR WINDOWS: PROVIDE ANODIZED ALUMINUM FRAME 5/8" MINIMUM DUAL PANE WINDOW UNITS, AS SHOWN ON FLOOR PLANS. THE 5/8" DIMENSION IS THE MINIMUM THICKNESS FOR THE DUAL GLAZED WINDOW PANEL CONSISTING OF TWO LIGHTS OF GLASS AND THE AIR SPACE. GLAZING MATERIAL SHALL BE:

EXTERIOR LITE - 3/16" MINIMUM TEMPERED GLASS OR LAMINATED AS - 1 GLASS OF SOLAR GRAY GLARE REDUCING TYPE WITH A LIGHT TRANSMISSION FACTOR OF 45% MAXIMUM.

INTERIOR LITE - 1/8" MINIMUM CLEAR TEMPERED.

MINIMUM AIR SPACE SHALLE BE 1/4".

SPACE - BENT OR SEALED CORNER ALUMINUM WITH DESICCANT FILL

SEALER - BUTYL PRIMARY SEAL AND POLYSULFIDE OF SILICONE SECONDARY SEAL.

CERTIFICATION - ALL GLAZING TO BE CERTIFIED IN ACCORDANCE WITH ASTM E-773, E-774.

HEADER HEIGHT SHALL BE THE SAME AS THE DOOR. ALL OPERABLE SASH SHALL HAVE ALUMINUM SCREENS. WINDOWS SHALL NOT BE MOUNTED TO THE EXTERIOR PLYWOOD SURFACE. ALL WINDOWS SHALL MEET THE AAMA GS101-88 VOLUNTARY. SPEC. FOR ALUMINUM PRIME WINDOWS AND SLIDING GLASS (ANS1), COMMERCIAL GRADE.

HARDWARE

1. EXTERIOR DOOR
   - A) HINGES: HAGER 4-1/2X4-1/2 BUTTS, BB1279 US26D,1-1/2 PAIR EACH DOOR WITH SET SCREW IN BARREL AND BALL BEARING DESIGN, OR APPROVED EQUAL.
   - B) EXTERIOR LOCKSET: SCHLAGE ND70PD CORBIN OR YALE OR EQUIVALENT. ALUM. FINISH. OR PANIC BARS/PULL HANDLE PANIC BAR TYPE VON DUPRIN 22L (PULL ON EXT.) OR CORBIN OR YALE OR EQUIVALENT. ALUM. FINISH. PANIC BARS ARE ONLY REQUIRED WHERE THE OCCUPANT LOAD IS 50 OR MORE.
   - C) CLOSER: NORTON 8500DA OR 8500BF SERIES, LCN 1460 DEL SERIES OR EQUAL. MAXIMUM 5 LBS FOR EXTERIOR AND INTERIOR DOORS. THE MAXIMUM EFFORT FOR FIRE DOORS MAY BE INCREASED TO THE MAXIMUM ALLOWED BY THE APPROPIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS. THE SWEEP PERIOD FROM AN OPEN POSITION OF 70 DEGREES SHALL BE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
   - D) WEATHERSTRIPPING: ALL EXTERIOR DOORS SHALL BE WEATHERSTRIPPED WITH PEMKO 299D, ULTRA WS007, AT DOOR JAMBS AND HEAD OR EQUAL.
   - E) THRESHOLD: THRESHOLD SHALL BE PEMKO 271 AV 5" ALUMINUM WITH PEMKO 216 AV ULTRA TH042 DOOR BOTTOM.
   - F) DOORSTOP: QUALITY #44, OR EQUAL.
   - D) INTERIOR LOCKSET: SCHLAGE LEVER HANDLE LOCKSET, AS FOLLOWS:

STUDENT TOILETS	S10A PASSAGE LATCH OR EQUAL
OFFICES	S70D CLASSROOM LOCKSET OR EQUAL
CUSTODIAL	SB0A LOCKSET OR EQUAL
PUBLIC TOILETS	S40A PRIVACY LATCHSET OR EQUAL

FIRE EXTINGUISHER

1. EACH PORTABLE CLASSROOM SHALL BE EQUIPPED WITH PRESSURE TYPE FIRE EXTINGUISHERS WITH 2A10BC UL RATING. TO BE MOUNTED ON THE INTERIOR WALL OF THE BUILDING NEAR THE DOORWAY(S) AT A MAXIMUM HEIGHT OF 4 FEET TO THE MOUNTING BRACKET AND THE BOTTOM OF FE MOUNTED 27" AFF. FIRE EXTINGUISHERS SHALL BE TOTALLY CHARGED AND HAVE A DIAL INDICATING THE STATE OF CHARGE.

ACCESSIBILITY STANDARDS

2007 CALIFORNIA BUILDING CODE (PART 2, TITLE 24, CCR)
SEC. 1103B.1 BUILDING ACCESSIBILITY, GENERAL.
THE 2007 CBC REQUIRES THAT BUILDINGS EXCEEDING 10,000 SQUARE FEET ON ANY FLOOR MUST HAVE AN ACCESSIBLE MEANS OF VERTICAL ACCESS VIA RAMP, ELEVATOR, OR LIFT WITHIN 200 FEET OF TRAVEL OF EACH STAIR AND EACH STAIR AND EACH ESCALATOR.
TABLE 1115B-1 SUGGESTED DIMENSIONS FOR CHILDREN'S USE.
THE 2007 CBC REQUIRES A 27" MINIMUM DIMENSION FOR LAVATORY/SINK KNEE CLEARANCE, WHICH IS THE DISTANCE FROM THE FINISH FLOOR TO THE UNDERSIDE OF THE LAVATORY/SINK.
SECTION 1115B.3.1 ACCESSIBLE WATER CLOSET COMPARTMENT.
THE 2007 CBC REQUIRES AN ACCESSIBLE TOILET STALL TO HAVE A MINIMUM WIDTH OF 60" AND SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC-CLOSING DEVICE, AND SHALL HAVE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WHEN LOCATED AT THE END AND 34 INCHES WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
THE INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR SHALL BE EQIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH SHALL BE FLIP-OVER STYLE, SLIDING OR OTHER HARDWARE NOT REQUIRING THE USER TO GRASP OR TWIST. EXCEPT FOR DOOR-OPENING WIDTHS AND DOOR SWINGS, A CLEAR, UNOBSTRUCTED ACCESS OF NOT LESS THAN 44 INCHES SHALL BE PROVIDED TO THE WATER CLOSET COMPARTMENTS DESIGNED FOR USE BY PERSONS WITH DISABILITIES.
SECTION 1115B.4.4.4, WATER CONTROLS
THE 2007 CBC REQUIRES THAT THE FORCE TO OPERATE A WATER CONTROL (VALVE) FOR AN ACCESSIBLE SHOWER SHALL NOT EXCEED 5LBS. MAXIMUM FORCE (PULL).
SECTION 1117B.5 SIGNS AND IDENTIFICATION (ALSO REFER TO SECTIONS 1115B.6, 1116B, 1007.6.5 1007.7, 1008.1.8.6, 1011.3, 1020.1.5 & 1020.1.6.1-5
THE 2007 CBC MAKES SEVERAL GENERAL DESIGN CHANGES AND CLARIFICATIONS TO SIGNAGE,
- *ALL GROUND FLOOR EXIT DOOR SHALL HAVE TACTILE EXIT SIGNAGE.
- *AT STAIRS, EACH FLOOR SHALL RECEIVE TACTILE "STAIR LEVEL" SIGNAGE IN ADDITION TO SPECIAL TACTILE AT THE EXIT DISCHARGE LEVEL.
- *EACH EXIT DOOR THAT LEADS TO A GRADE LEVEL EXIT BY MEANS OF A STAIRWAY SHALL HAVE TACTILE EXIT SIGNAGE.
- *EACH EXIT ACCESS DOOR TO A CORRIDOR OR HALLWAY THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN SHALL BE IDENTIFIED BY TACTILE EXIT SIGNAGE.

SECTION 1129B ACCESSIBLE PARKING REQUIRED.
THE 2007 CBC REQUIRES THE WORDS "NO PARKING", IN 12" HEIGHT WHITE LETTERS, TO BE PAINTED ON THE PAVEMENT WITHIN ALL PARKING SPACE ACCESS AISLES. VAN PARKING ACCESS AISLES SHALL BE PLACED ON THE PASSENGER SIDE OF THE VEHICLE. RAMPS MAY NOT ENCROACH INTO ANY REQUIRED ACCESS AISLE. PARKING SPACE ACCESS AISLES SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.*
*EXISTING SITES:
AT EXISTING SITES, ANY RAMP WHICH EXCEEDS A 2% SLOPE
ACCESS AISLES FOR ACCESSIBLE PARKING SPACES PER CBCS SECTION 1129B, MAY REQUIRED REMOVAL AND REDESIGN PER THE PATH OF TRAVEL (POT) PROVISIONS OF CBCS SECTION 1134B, IN ORDER TO APPROVE THE BUILDING PLACEMENT.
SECTION 1133B.2.5 CLOSER EFFORT TO OPERATE DOORS.
THE 2007 CBC REQUIRES THAT THE EFFORT TO OPEN AN EXTERIOR DOOR SHALL NOT EXCEED 5 POUNDS (PULL).
THE 2007 CBC REQUIRES THAT THE SWEEP PERIOD OF ACCESSIBLE DOORS SHALL BE 3 SECONDS MAXIMUM, BASED ON AN OPEN DOOR POSITION OF 70 DEGREES (FROM CLOSED), TO A DOOR POSITION OF 3" FROM THE LATCH.
SECTIONS 1133B.2.4.5 & 1133B.2.5.3 RECESSED DOORS.
THE 2007 CBC REQUIRES THAT DOORS RECESSED 8" OR MORE SHALL HAVE STRIKE EDGE CLEARANCES IN ACCORDANCE WITH FIGURE 11B-33 (A).
SECTION 1133B.4.2.4 HANDRAIL ORIENTATION.
THE 2007 CBC SPECIFIES THAT AT LEAST ONE HANDRAIL SHALL BE PARALLEL TO THE DIRECTION OF THE STAIR RUN, AND PERPENDICULAR TO THE EDGE OF THE STAIR NOSING.
SECTION 1133B.5.2 RAMP WIDTH:
MINIMUM 48" CLEAR AT OCCUPANT LOAD 300 OR LESS, 60" CLEAR AT OCCUPANT LOAD MORE THAN 300.
RADIUS MINIMUM OF 0.125"
THE 2007 CBC REQUIRES THAT SIGN EDGES LESS THAN 80" ABOVE THE FINISHED FLOOR MUST CONTAIN ROUNDED OR EASED RADIUS MINIMUM OF 0.125"
THE PROJECT PLANS OR SPECIFICATIONS SHALL INDICATE THE REQUIREMENT THAT THE MANUFACTURER SHALL PROVIDE A WRITTEN FIVE-YEAR PRODUCT WARRANTY, IN ACCORDANCE WITH THE BULLETIN.

LIGHT GAUGE METAL STUDS

1. ALL GALVANIZED STUDS AND JOISTS SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF THE 2001 AISI/COS/ANSI.
2. ALL GALVANIZED STUDS, JOISTS, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A 1011
3. GALVANIZED FRAMING PRODUCTS SHALL BE COATED IN ACCORDANCE WITH REQUIREMENTS OF ASTM A 1011 PRODUCTS WILL BE FURNISHED WITH A G-60 OR EQUIVALENT COATING IF SPECIFIED AND ORDERED TO BE IN CONFORMANCE WITH ASTM C-955 OTHERWISE, G-40 OR EQUIVALENT COATING WILL BE PROVIDED.

METAL FLOOR DECK

1. SECTION PROPERTIES SHALL BE DERIVED IN ACCORDANCE WITH AISI " SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION."
2. METAL DECKING IS TO BE ATTACHED TO THE STRUCTURAL FRAME IN CONFORMANCE WITH AWS D1.1 AND D1.3 "SPECIFICATION FOR WELDING SHEET STEEL IN STRUCTURES."
3. ASTM REFERENCE NUMBERS:
   A) ASTM A653, STEEL SHEET, ZINC-COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY THE HOT-DIP PROCESS
   STRUCTURAL (PHYSICAL) QUALITY.
4. STEEL DECK INSTITUTE (SDI)-METAL FLOOR DECK PROFILES SHALL BE IN CONFORMANCE WITH SDI STANDARDS.
5. METAL FLOOR DECK TO BE ASC STEEL DECK
   1. B-36, 18 GAUGE
      1 1/2" DEEP X 36" WIDE
   2. N-24, 18 GAUGE
      3" DEEP X 24" WIDE
6. DECK UNITS ARE TO BE FABRICATED FROM SHEET STEEL CONFORMING TO ASTM A653, Fy=38 KSI WITH A GALVANIZED COATING, G-60 OR G-90.

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 01/20/09
SCALE: NOTED
DRAWN BY: RL
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
GENERAL NOTES

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

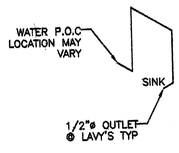
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — No. C12831 Ren. 3-31-11 — STATE OF CALIFORNIA

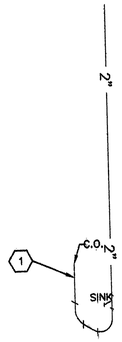
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC W FLR SS GR
DATE 1/12/11

PROJECT No.

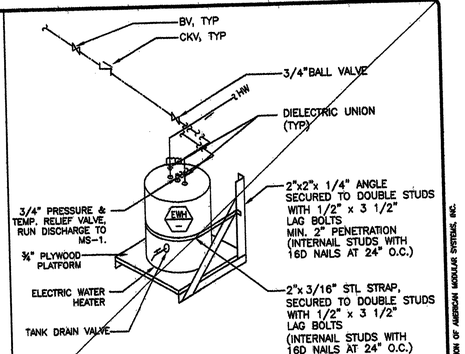
N2



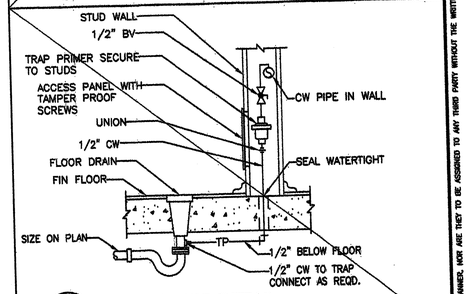
A P1 **WATER SUPPLY ISOMETRIC**
NO SCALE



B P1 **WASTE ISOMETRIC**
NO SCALE

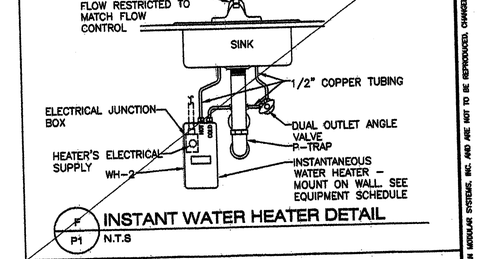


D P1 **WATER HEATER SUPPORT DETAIL**
N.T.S



E P1 **TRAP PRIMER DETAIL**
N.T.S

NOTE:
INSULATE HOT WATER SUPPLY AND DRAIN PIPING AT ACCESSIBLE LAVATORIES WITH HAND-LAV GUARD KITS AS MANUFACTURED BY "TRUEBRO" INC.



F P1 **INSTANT WATER HEATER DETAIL**
N.T.S

SHEET NOTES

1. DWV PIPING SHALL BE ABS PLASTIC
2. COLD WATER SUPPLY SHALL BE TYPE L COPPER
3. DWV PIPING:
   MIN SLOPE 1/4" PER FOOT
   MAY SLOPE 4" CI @ 1/8" PER FOOT
   VENTS SHALL TERMINATE NOT LESS THAN 10 FEET FROM OR AT LEAST 3 FT. ABOVE ANY WINDOW, DOOR, AIR INTAKE OR VENT SHAFT, NOR LESS THAN 3FT. IN EVERY DIRECTION FROM ANY LOT LINE; ALLEY AND STREET EXCEPTED; EXTEND 6" ABOVE THE ROOF

BASED ON PC# 02-109635

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REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOLS
McKINLEY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
ISOMETRIC PLANS & DETAILS

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

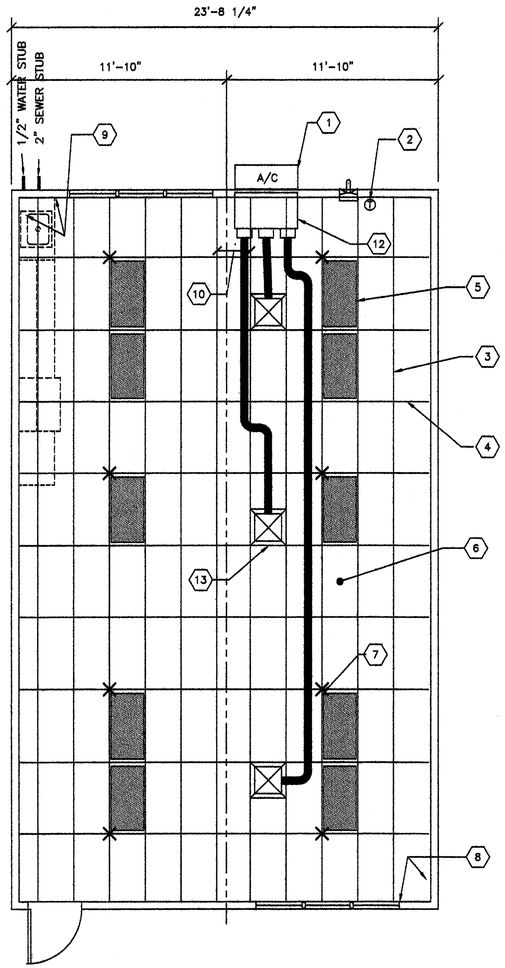
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER
MARCUS SHARICK DARNAUER
No. C12831
Ren. 3-31-11
STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. FLS SS. CP
DATE 11/12/10

PROJECT No.

P1



2 / M1 TYPICAL REFLECTED CEILING PLAN
1/4"=1'-0"

- SHEET NOTES -

1. WALL HUNG HVAC UNIT
2. THERMOSTAT @ +60" SEALED
3. MAIN RUNNER TYP
4. CROSS RUNNER TYP
5. INTERIOR LIGHT FIXTURE REFER TO SHEET SHEET E1 FOR SPEC'S
6. CEILING HEIGHT @ 8'-6" NOM
7. SPLAY WIRE SEE 4/M2 FOR DETAILS
8. FIXED CEILING END
9. FREE CEILING END
10. CENTER SECTION THAT CROSSES MODULE LINE TO BE FIELD INSTALLED
11. NOT USED
12. CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING
13. TYPICAL 4-WAY SUPPLY AIR REGISTER LOCATION AND SIZE MAY VARY PER CEILING LAYOUT AND BUILDING SIZE

NOTE:
WHERE TWO OR MORE HVAC UNITS SERVE A COMMON SPACE, UNITS SHALL BE EQUIPED WITH DUCT SMOKE DETECTOR FOR AUTO SHUTDOWN. INTERCONNECT WITH FIRE ALARM SYSTEM

AUTOMATIC SHUT-OFF IS NOT REQUIRED WHEN ALL OCCUPIED ROOMS SERVED BY THE AIR HANDLING EQUIPMENT HAVE DIRECT ACCESS TO THE EXTERIOR AND THE TRAVEL DISTANCE DO NOT EXCEEDS 100 FT. PER CMC 609 EXEPTION #2

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BASED ON PC 02-109695

REVISIONS

NO	DATE	DESCRIPTION
1		
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3		
4		

DATE: 06/15/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOLS
McKINLEY SCHOOL

24' x 40' RELOCATABLE BUILDINGS
TYPICAL REFLECTED CEILING PLAN

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

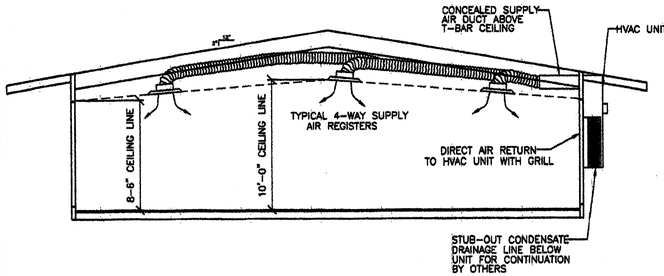
APPROVALS:

REGISTERED ARCHITECT RANDALL PATRICK DUNAGAN No. C12831 Ren. 2-31-11 STATE OF CALIFORNIA

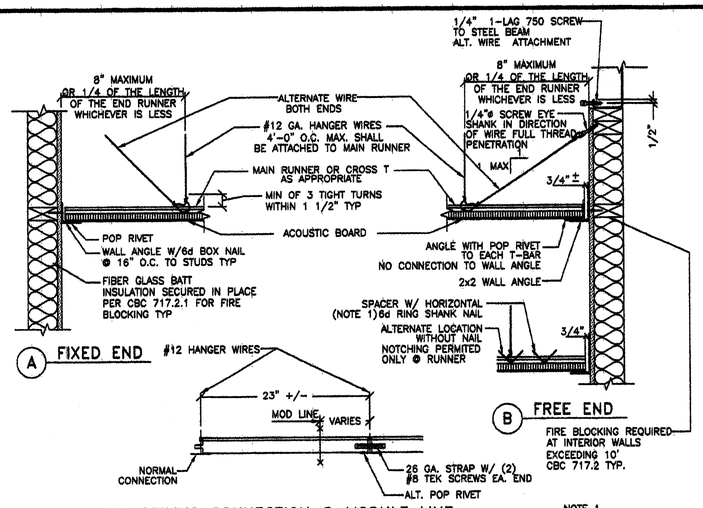
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC FIELD ASSESSOR
DATE 11/2/11

PROJECT No.
PC

M1

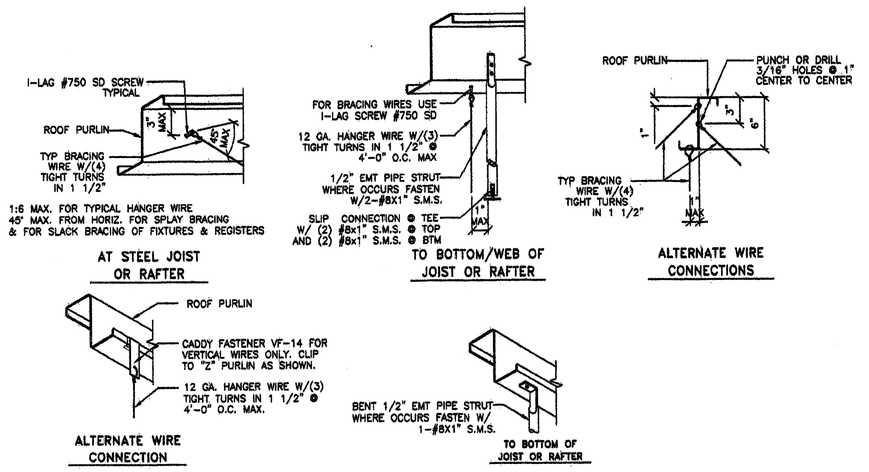


1 / M2 **TYPICAL MECHANICAL DETAIL SECTION**
3/16"=1'-0"

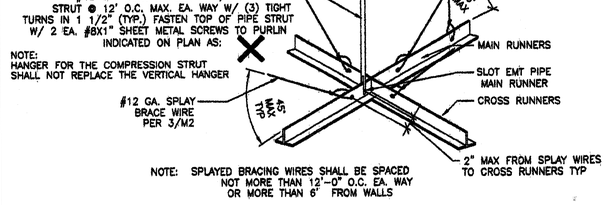


2 / M2 **CEILING ATTACHMENTS DETAILS**
1 1/2"=1'-0"

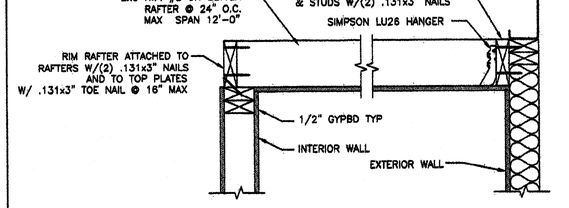
NOTE 1
NAILS AT THE END OF HORIZONTAL STRUTS ARE TO BE PLACED WITH NAIL HEAD TOWARD ℄ OF SPACE OF STRUT



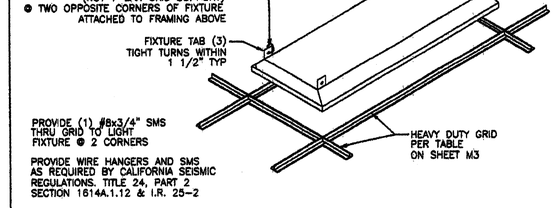
3 / M2 **CONNECTION TO PURLINS DETAILS**
1 1/2"=1'-0"



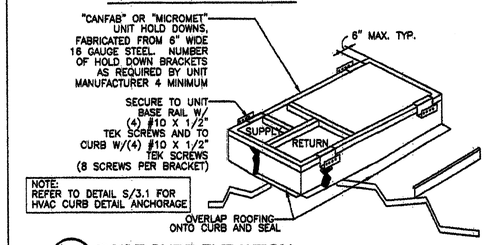
4 / M2 **SPLAY WIRE DETAIL**
1 1/2"=1'-0"



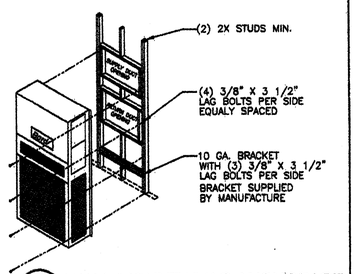
5 / M2 **GYPBOARD CEILING DETAIL**
1 1/2"=1'-0"
OPTIONAL



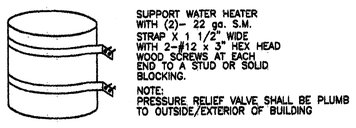
6 / M2 **LIGHT FIXTURE ATTACHMENT DETAIL**
3/4"=1'-0"



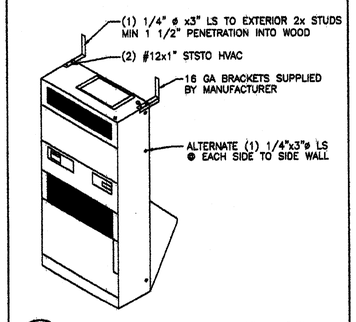
7 / M2 **ROOF CURB ELEVATION**
N.T.S.
OPTIONAL



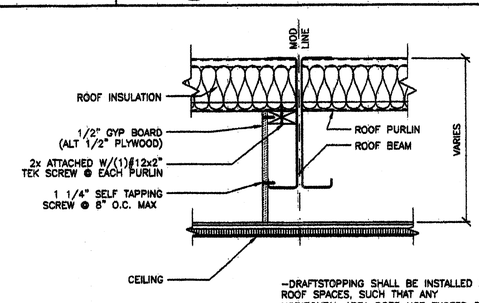
8 / M2 **WALL MOUNT HVAC ANCHORAGE**
N.T.S.



9 / M2 **WATER HEATER SUPPORT DETAIL**
NTS

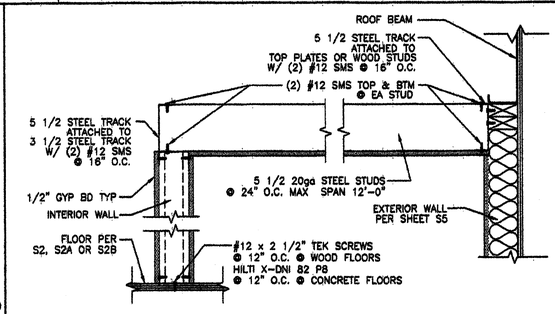


10 / M2 **INTERIOR HVAC ANCHORAGE**
N.T.S.



-DRAFTSTOPPING SHALL BE INSTALLED IN ATTICS AND CONCEALED ROOF SPACES, SUCH THAT ANY HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET (279 M) PER 717.4.3
EXCEPTIONS
1. IN OTHER THAN HIGH-RISE BUILDINGS, GROUP A,E,H,I AND L OCCUPANCIES AND OTHER APPLICATIONS LISTED IN SECTION 111 REGULATED BY THE OFFICE OF THE STATE FIRE MARSHAL, DRAFTSTOPPING IS NOT REQUIRED IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1

11 / M2 **DRAFT STOP DETAIL**
1 1/2"=1'-0"



12 / M2 **GYPBOARD CEILING DETAIL W/ STEEL STUDS**
1 1/2"=1'-0"
OPTIONAL

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE:01/25/08
SCALE:NOTED
DRAWN BY:RL
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE CLASSROOMS
MECHANICAL BUILDING SECTION & CEILING DETAILS

American Modular Systems Inc.
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APPROVALS:

No. C12831 Ren. 2-31-09 — STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02_111612
AC. FLR. SYS.
DATE 1/24/08

PROJECT No.
PC

M2

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METAL SUSPENSION SYSTEMS FOR LAY IN PANEL CEILING

1. 12 GA. (MIN) HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING 4'-0" x 4'-0 GRID SPACING, ALONG MAIN RUNNER. SPLICES WILL NOT BE PERMITTED IN ANY HANGER WIRES UNLESS SPECIFICALLY APPROVED BY DSA.
2. PROVIDE 12 GA HANGER WIRES WITHIN 8" OF THE ENDS OF ALL MAIN AND CROSS RUNNERS OR AT 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS AT THE PERIMETER OF THE CEILING AREA.
3. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAINTAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREA. HANGER WIRES THAT ARE MORE THAN 1 IN 6 OUT OF PLUMB ARE TO HAVE COUNTERBRACED WIRES.
4. CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2 INCH FREE OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD BE FREE AND A MINIMUM OF 1/2 INCH CLEAR OF WALL.
5. AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16 GA WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNERS MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNERS IS 12" OR LESS, THIS INTERLOCK IS NOT REQUIRED.
6. PROVIDE SETS OF 4-#12 GA. SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT THE FOLLOWING SPACING:
   (A) FOR SCHOOL BUILDINGS, PLACE SETS OF SPLAY WIRES AT A SPACING NOT MORE THAN 12 FEET BY 12 FEET ON CENTER.
   (B) PROVIDE SPLAY WIRES AT LOCATIONS NOT MORE THAN 1/2 THE ABOVE SPACING FROM EACH PERIMETER WALL OR AT THE EDGE OF VERTICAL CEILING OFFSETS

   THE SLOPE OF THESE WIRES SHOULD NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND SHOULD BE TAUT WITHOUT CAUSING THE CEILING TO LIFT. SPLICES IN BRACING WIRES ARE NOT PERMITTED WITHOUT SPECIAL DSA APPROVAL.
7. FASTEN HANGER WIRES WITH NOT LESS THAN 3 TIGHT TURNS. FASTEN SPLAY WIRES WITH 4 TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2 INCHES. HANGER OR BRACING WIRE ANCHORS TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.
8. SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT ETC.,
9. ATTACH ALL LIGHT FIXTURES AND AIR TERMINALS TO THE CEILING GRID RUNNERS WITH SCREWS OR APPROVED FASTENERS AS REQUIRED TO RESIST A HORIZONTAL FORCE EQUAL TO THE FIXTURES.
10. FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF 2-#12 GA. SLACK SAFETY WIRES ATTACHED AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
11. CLASSIFICATION OF CEILING GRID:
    CLASSIFICATION OF CEILING GRID IS "HEAVY DUTY" CHICAGO METALLIC, OR DONN(USG) PER ASTM C635
    MANUFACTURER'S CATALOG NUMBER - MAIN RUNNER HEAVY DUTY MAIN TEE OR EQUAL #200-01 OR DX26.
    MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER CHICAGO METALLIC 1214-01 OR DONN DX 416 CROSS TEES.
    MANUFACTURER'S CATALOG NUMBER OF DETAIL FOR RUNNER SPLICE N/A.
    ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL-FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE ASTM FLAME SPREAD CLASS 1, 24" X 48" MODULAR SIZE, LIGHT REFLECTION 75% MINIMUM, NOISE REDUCTION COEFFICIENT OF 0.65 MINIMUM. MAXIMUM SMOKE DENSITY NOT TO EXCEED 450.

TABLE A HEAVY DUTY GRID COMPONENTS

MANUFACTURER	MAIN TEE	H.D. 4' CROSS TEE	H.D. 2' CROSS TEE
DONN/USG	DX-26	DX-424	DX-216
ARMSTRONG	7301	7341	7323
CHICAGO MET.	200-01	1204-01	1228-01

NOTE: ALL GRID COMPONENTS SHALL BE BY SAME MANUFACTURER

HVAC CFM CHART

MODEL NUMBER	DESCRIPTION	MAX. CFM	UNIT WEIGHT LBS.
WH421-A	3 1/2 TON HEAT PUMP	1400	530
WH482-A	4 TON HEAT PUMP	1550	560
WH602-A	5 TON HEAT PUMP	1700	560

GENERAL NOTES

HEATING VENTILATING AND AIR CONDITIONING (HVAC)

1. HEAT PUMP: SINGLE PACKAGE WALL MOUNTED AIR TO AIR ELECTRIC HEAT PUMP UNIT SHALL BE RATED IN ACCORDANCE WITH ARI STANDARD 240-77.
   REFERENCE BRANDS: BARD WH421-AXXXXXXX, BARD WH482-AXXXXXXX, BARD WH602-AXXXXXXX
   MAXIMUM AC SIZE FOR THIS BUILDING WILL BE A 5-TON UNIT
   ALL UNITS SHALL BE 230/208 VOLT, 1 PHASE SYSTEM, UL TESTED & APPROVED OR COMPARABLE AND MEET CURRENT ENERGY STANDARDS.
   A.) THE SYSTEM SHALL MAINTAIN AN AUTOMATICALLY CONTROLLED INDOOR CLASSROOM TEMPERATURE OF 78 DEGREES F. WHEN THE OUTDOOR DRY BULB TEMPERATURE VARIES BETWEEN 100 DEGREES F. IN THE SUMMER
   B.) THE SYSTEM MUST MAINTAIN THE ABOVE TEMPERATURE WHEN THE DAMPER IS ADJUSTED TO USE APPROXIMATELY ONE THIRD FRESH AIR.
2. DUCTWORK.
   A.) CONSTRUCT ALL DUCTWORK OF GALVANIZED SHEET METAL IN ACCORDANCE WITH C.M.C., ASHRAE GUIDE EQUIPMENT VOLUME AND SMACNA LOW VELOCITY DUCT CONSTRUCTION MANUAL LATEST EDITIONS. ALL DUCTWORK SHALL BE INSULATED WITH 1" THICK FIBERGLASS DUCT WRAP WITH VAPOR BARRIER. PROVIDE 1" DUCT ATTENUATION AT ALL DUCTWORK WITHIN 2'-0" OF HVAC UNIT.
   B.) NON-METALLIC DUCTWORK OPTION: IN ACCESSIBLE CONCEALED PORTIONS OF DUCT SYSTEM RIGID 1" FIBERGLASS OR INSULATED FLEX-DUCT WITH VAPOR BARRIER MAY BE SUBSTITUTED FOR SHEET METAL DUCTWORK. ALL DUCTWORK WITHIN 2'-0" OF THE HVAC UNIT AND ALL INTERFACE CONNECTIONS SHALL BE METAL. DUCTWORK AND REINFORCEMENT SHALL BE DESIGNED FOR 2" STATIC PRESSURE.
   REFERENCE BRANDS: OWENS-CORNING FIBERGLASS DUCTTBOARD, 1" THICK, AND MICRO-AIRE, TYPE 475.
   NON-METALLIC DUCTWORK SHALL CONFORM TO NFPA 90-A AND SMACNA CLASS 1 RATING.
3. AIR DUCT INSULATION AND LININGS SHALL COMPLY WITH FLAME SPREAD LESS THAN OR EQUAL TO 25, SMOKE GENERATION LESS THAN OR EQUAL TO 50.
4. SUPPLY AIR DIFFUSERS SHALL BE 675 CFM MAX. 12" ROUND. 1" FIBERGLASS OR FLEXDUCT DUCTWORK SPECIFICALLY DESIGNED TO PROVIDE AIR THERMAL COOLING SYSTEMS. 24"X8"X1" MICRO-AIRE TYPE #475 OWENS-CORNING, KNAUF, CERTAINTEED, OR EQUAL AND 90- B: UL #131 TEST, CLASS 1 RATING WITH "SMACNA".
5. REGISTERS AND DIFFUSERS: PROVIDE THREE (MIN) 4-WAY THROW AIR DIFFUSERS AS MANUFACTURED CARNES, TITUS, HART AND COOLEY, METALAIRE, SHOEMAKER, BARBER-COLEMAN OR KRUEGER COMMERCIAL GRADE GRILLS AND REGISTERS
6. AIR CONDITIONING CONTROLS.
   THERMOSTAT: PROVIDE ELECTRONIC PROGRAMMABLE THERMOSTAT. THERMOSTAT SHALL HAVE THE FOLLOWING FUNCTIONS.
   A.) 5 AND 2 WEEKDAY/WEEKEND PROGRAMMING WITH 4 SEPARATE TIME/TEMPERATURE SETTING FOR 24-HOUR PERIOD.
   B.) KEY BOARD LOCKOUT SWITCH.
   C.) PROGRAMMABLE DISPLAY.
   D.) 2-HOUR OVERRIDE MINIMUM.
   E.) STATUS INDICATED LED'S.
   F.) BATTERY BACK-UP.
   PROVIDE LOCKING CLEAR THERMOSTAT COVER WITH THERMOSTAT COVER WITH ACCESS HOLE FOR PROGRAM OVERRIDE. WHITE RODERS IF92-371. MOUNT @ +60" w/COVER (SEALED-SETTING ADJUSTMENTS CAN BE DONE BY SERVICE PERSONNEL ONLY.)
   +48" UNSEALED.
7. THERMAL INSULATION
   A.) ROOF INSULATION: R-19 UNFACED.
   B.) WALLS INSULATION: R-13 KRAFT FACED.
   C.) FLOORS INSULATION: CONCRETE FLOOR
   FLAME SPREAD AND SMOKE DEVELOPMENT SHALL CONFORM TO CALIFORNIA BUILDING CODE SEC. 719.
8. FACTORY-MADE AIR DUCTS. FACTORY-MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL CONFORM TO THE REQUIREMENTS OF U.M.C. STANDARD NO. 6-1. EACH PORTION OF A FACTORY-MADE AIR DUCT SYSTEM SHALL BE IDENTIFIED BY THE MANUFACTURER WITH A LABEL OR OTHER SUITABLE IDENTIFICATION INDICATING COMPLIANCEWITH U.M.C. STANDARD NO. 6-1 AND ITS CLASS DESIGNATION. THESE DUCTS SHALL BE LISTED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTING AND THE REQUIREMENTS OF UMC STD. 6-1.

   DUCT SUPPORT
   FLEX DUCT TO BE SUPPORTED WITH 1-1/2" WIDE X 26 GA. GALV. STRAP @ MAX 6'-0" O.C. ATTACH TO RAFTER W/2 #8 SMS @ EACH END.
   SUPPLY AIR PLENUM TO BE SUPPORTED WITH 1-1/2" WIDE X 26 GA. GALV. STRAPS MIN. 2 PER PLENUM.
   SUPPLY AIR BOX AND DIFFUSERS TO BE SUPPORTED WITH (2) 12 GA. HANGER WIRES TO BOX @ OPPOSITE CORNERS.
   SUPPLY AIR BOX AND DIFFUSERS TO BE BRACED WITH (2) 12 GA. SLACK WIRES TO BOX @ OPPOSITE CORNERS. ATTACH SUPPLY AIR DIFFUSERS TO CEILING GRID TO RESIST A LATERAL LOAD EQUAL TO THE WEIGHT OF THE DIFFUSER AND SUPPLY AIR BOX W/2 #8 SMS.
9. FIREBLOCKING:
   SHALL BE PROVIDED IN THE FOLLOWING LOCATION
10. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT (3048mm) INTERVALS BOTH VERTICAL AND HORIZONTAL. SEE CBC SECTION 717.2

INSULATION SCHEDULE

ZONE	WALL	ROOFS	FLOORS
1-14 & 16	R -13	R -19	R -13
15	R -13	R -30	R -13

HVAC SCHEDULE

BUILDING SIZE	# OF HVAC		
	3 ½ TON HVAC	4 TON HVAC	5 TON HVAC
24' x 40'	1		
36' x 40'		1	
48' x 40'	2		
60' x 40'		2	
72' x 40'			2
84' x 40'			2
96' x 40'		3	
108' x 40'			3
120' x 40'			3

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
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DATE: 12/02/04
SCALE: NOTED
DRAWN BY: RL
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE CLASSROOMS
CEILING & MECHANICAL NOTES

American Modular Systems Inc.
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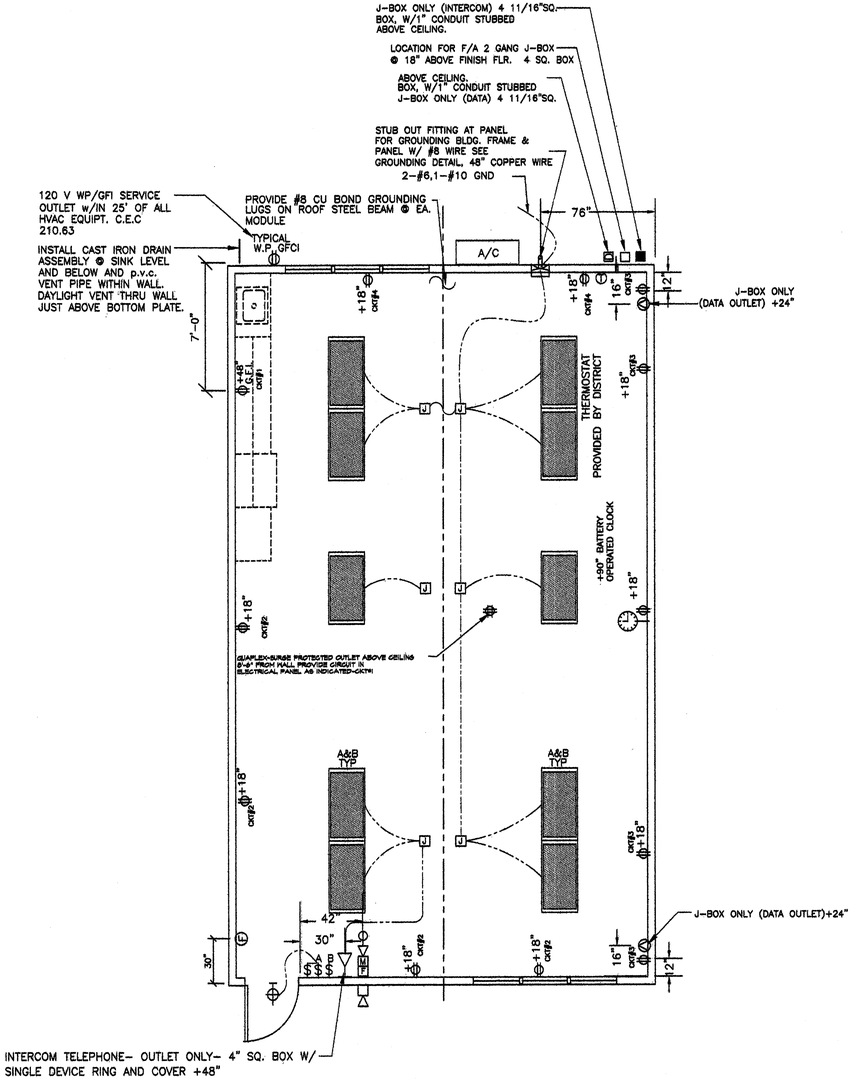
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — RICHARD LEE LOPEZ — No. C12631 Ren. 6-30-13 — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02 111612
AC PD FLR SS GR
DATE 11-2-11

PROJECT No.
PC

M3



2 / E1 TYPICAL ELECTRICAL PLAN
1/4"=1'-0"

STANDARD ELECTRICAL SYMBOLS

- EXIT LIGHT WHEN THE OCCUPANT LOAD IS 50 OR MORE
- INCANDESCENT WALL MOUNTED INTERIOR LIGHT FIXTURE
- DUPLEX WALL CONVENIENCE OUTLETS @ +18" TO CENTER LINE ABOVE F.F. AND 12'-0" MAX TYP U.O.N.
- FOURPLEX WALL OUTLET @ +18" TO CENTER LINE U.O.N..
- W.P.GFCI — WEATHER PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET
- GFCI — GROUND FAULT CIRCUIT INTERRUPT OUTLET
- $ — SINGLE POLE LIGHT SWITHCES @ +48", HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.
- J — ELECTRICAL CROSSOVER J-BOXES ABOVE T-BAR CEILING #1-4"X1", #22 4"X2"
- CLOCK/SPEAKER COMBO @ +90"
- $a — SWITCH SUBSCRIPTS - a=DEVICE CONTROLLED.
- J — JUNCTION BOX - SIZE AND TYPE AS REQUIRED.
- S — SPEAKER- OUTLET ONLY - 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +84"
- △ — DATA/COMMUNICATION OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +18" U.O.N. AND A 3/4" CONDUIT STUB CEILING SPACE.
- ▲ — INTERCOM TELEPHONE- OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48" U.O.N.
- M — MOTION SENSOR OUTLET STUB-UP -PROVIDE (1)4" SQ. BOX W/ SINGLE DEVICE RING AND COVER AND ONE 3/4" CONDUIT STUB TO ABOVE CEILING (DEVICES BY OTHERS)
- S — SECURITY/INTRUSSION KEY PAD - OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER @ +48" AND ONE 3/4" CONDUIT STUB ABOVE CEILING
- DC — DOOR CONTACT - PROVIDE (1) EMPTY 1/2"ø EMT THROUGH DOOR HEADER STUB ABOVE CEILING
- CATV △ — CATV OUTLET STUB-UP -PROVIDE (1)4" SQ. BOX W/ SINGLE DEVICE RING AND COVER AND(1) 3/4"ø CONDUIT TO ABOVE CEILING (DEVICES BY OTHERS)
- F — FIRE ALARM PULL STATION - OUTLET ONLY, 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48". (DEVICE N.I.C.)
- FIRE ALARM HORN - OUTLET ONLY - 4" SQ. SINGLE GANG J-BOX WITH BLANK WEATHERPROOF COVER @ +90" MIN (DEVICE N.I.C.)
- FIRE ALARM VISUAL ALARM- OUTLET ONLY - 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +80". A.F.F. BUT NO GREATER THAN +96". IF CEILING MOUNTED PER NFPA72 TABLE 6-4.4.1(b).
- M — MINI HORN BOX W/ SINGLE DEVICE RING AND COVER @ +80"A.F.F. BUT NO GREATER THAN +96". STUB TO ATTIC
- T — THERMOSTAT @ +60" SEALED, +48" A.F.F UNSEALED
- ULTRASONIC OCCUPANCY SENSOR
- ELECTRICAL PANEL
- EMERG. LIGHTING w/BATTERY BACKUP WHEN THE OCCUPANT LOAD IS 50 OR MORE

NOTE:
AT ANY SPACE REQUIRING 2 OR MORE EXITS PROVIDE EXIT SIGNS (CBC 1011) AND EMERENCY EXIT ILLUMINATION (CBC 1006)

NOTE:
THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT, SMOKE DETECTORS AND PULL STATIONS WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3

SYMBOL	DESCRIPTION	WATTS	MANUFACTURER
	2'X4' FLOURESCENT DROP IN FIXTURE, ACRYLIC PRISMATIC LENS. T-8 ELECTRONIC BALLASTS (3)32 WATT TUBES, WT. 27 LBS.	SP41 32 W	CRESCENT 24GP40HFSA1158YF2 OR LITHONIA 2GT440A12120ESPWS1846LPESCW
	FLOURESCENT SURFACE MOUNTED EXTERIOR LIGHT WITH IMPACT RESISTANT ENCLOSURE. .125 THICK CLEAR PRISMATIC ONE PIECE LENS W/ NEOPRENE GASKET & POSIGRIP STAINLESS STEEL SCREWS. (PROVIDE EMERGENCY BATTERY BACK-UP WHEN THE OCCUPANT LOAD IS 50 OR MORE)	(2) 7W TT 2700 K	ENERTRON 7026B-L OR EQUAL

- GENERAL NOTES -

1. - F.A. : STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT
2. - IF OPTIONAL DOOR OCCURS A PULL STATION J-BOX AND EXIT SIGN ARE REQUIRED. PULL STATIONS ARE REQUIRED @ EVERY EXIT
3. - STUB OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES SHOWN ARE DIAGRAMITICAL ONLY EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.
4. - SEE TYPICAL CLASSROOM LAYOUT FOR LOCATIONS OF ALL DEVICES. FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.
5. - THE LIGHTS FOR EACH ROOM OVER 250' SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR. WATT STOPPER W-500A, W-1000A,OR W-2000A (OR EQUAL) BASED ON THE ROOM SIZE IN CONJUCTION WITH BI-LEVEL SWITCHING.

BASED ON PC 02-109695

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RB/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOLS
McKINLEY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
TYPICAL ELECTRICAL PLAN

American Modular Systems Inc.
787 Spreckels Ave, Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

No. C12831 Exp. 9-30-11 — REGISTERED PROFESSIONAL ENGINEER — ROBERT BRUCE — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. 100 FLS SS CR.
DATE 1/14/11

PROJECT No.

E1

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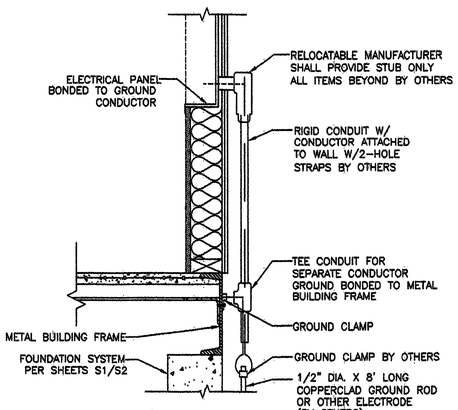
VOLTS: 120/240 SINGLE PHASE			PANEL: A								FEED: EXTERIOR LB		
MAIN: 100 AMP MAIN BKR.			LOCATION: INTERIOR								MOUNTING: FLUSH		
LOAD	WATTS A	WATTS B	BRK. AMP	P	CKT R	A	B	CKT R	P	BRK. AMP	WATTS A	WATTS B	LOAD
LIGHTS, FLUORESCENT	960		15	1	1			2	2	60	4476		A/C HVAC UNIT
LIGHTS, FLUORESCENT		960	15	1	3			4	2	60		4476	
EXTERIOR LIGHT & CLOCK	100		15	1	5			6					SPACE
DUPLEX RECEPT.		720	15	1	7			8					
DUPLEX RECEPT.	720		15	1	9			10					
SPACE					11			12					
					13			14					
					15			16					
PHASE WATTAGE	1880	1680			17			18			4476	4476	PHASE WATTAGE
TOTAL WATTS "A"LEG: 6556			TOTAL WATTS A+B=2743								TOTAL WATTS "B" LEG 6156		
TOTAL WATTS: 15455		65 AMPS	120/240V			SINGLE PHASE							100AMP BUS.
FEEDERS: TO BE RUN BY THE DISTRICT EITHER UNDERGROUND OR OVERHEAD, SEE SITE ELEC. PLAN.													

NOTE:
FIRE ALARM DEDICATED CIRCUIT SHALL BE INDENTIFIED WITH A RED MARKED DISCONNECT WITH LOCK-ON CAPABILITY NFPA 72 4.4.1.4.2.1



SIZE OF CONDUCTORS SHALL COMPLY W/CEC.
BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL & METAL BUILDING FRAME (CEC).
IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (CEC).
ELECTRICAL BOND MODULES TOGETHER W/#8 CU @ MODLINE. BY MANUFACTURER. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS (CEC) AS REQUIRED. GROUNDING DETAIL PER DSA IR E-1.
INSPECTOR TO WITNESS GROUNDING TEST.

1 / E2 GROUNDING DETAIL
1 1/2"=1'-0"

BASED ON PC# 02-109695

- GENERAL NOTES -

FIRE ALARM SYSTEM

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE,& CA. FIRE CODE.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTINGS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY DSA.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.
4. JUCTION BOXES- GALVINIZED SHEET METAL, SQUARE OR RECTANGULAR WITH BLANK COVERS. LOCATE ONE BOX AT REAR OF BUILDING NEAR MAIN ELECTRICAL PANEL AT +18" ABOVE FINISH FLOOR FOR FUTURE CONNECTION.
5. COVERS- INSTALL GASKETED, METAL, WATERPROOF, FINISH COVERS AT EXTERIOR LOCATIONS. INSTALL FINISH COVERS AT INTERIOR LOCATIONS.
6. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALL, TESTED, AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL REGULATIONS (CBC 907.2.3) AND THE 2002 EDITION OF NFPA 72.
7. THE LOCATION OF AUTOMATIC DETECTORS, MANUAL STATIONS AND OTHER FIRE ALARM EQUIPMENT AND DEVICES, AS SHOWN ON PLAN, ARE FOR REFERENCE ONLY AND DO NOT CONTITUTE SHOP DRAWINGS WICH ARE REQUIRED FOR REVIEW AND APPROVAL
8. ALARM-INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 dBA ABOVE THE AVERAGE AMBIENT NOISE LEVELS OR 5dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS WHICH-EVER IS GREATER, MEASURED 5' ABOVE THE FLOOR. AMBIENT NOISE LEVELS MEANS THE LEVEL WICH CAN NORMALLY BE EXPECTED WHEN THE FACILITY, BUILDING, ROOM, OR AREA IS FUCTIONING UNDER NORMAL OPERATING OR WORKING CONDITIONS (NFPA 72, SEC. 7.4.2)
9. THE ALARM SYSTEM SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNINGS SHALL HAVE A FLASH RATE NOT EXCEEDING TWO FLASHES PER SECOND (2 HZ) NOR BE LESS THAN ONE FLASH EVERY SECOND (1 HZ). STROBE SIGNALING DEVICES FOR THE HEARING IMPAIRED SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED (NFPA 72, SEC. 7.5)
10. AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY STATE FIRE MARSHAL. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BY ARRAGED BY OWNER.

IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 10db OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALING DEVICES MAY BE REQUIRED BY TYHE ENFORCING AGENCY PER [CBC].

GENERAL NOTES

1. GROUNDING ELECTRODE CONDUCTOR SIZED PER CEC.
2. PROVIDE BONDS TO BLDG. STEEL & PANEL (#8 CU)
3. PANEL TO LISTED FOR USE AS SERVICE EQUIPMENT.

FIXTURE NOTES:

1. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE ENERGY SAVING LAMPS AND BALLASTS.
2. LUMINATES/BALLASTS SHALL BE CERTIFIED PER CALIFORNIA BUILDING CODE, TITLE 24.
3. FLUORESCENT LIGHT FIXTURE TYPE "A" SHALL BE CONTROLLED TO PROVIDE TWO LEVELS OF LIGHTING. SWITCH (SA) SHALL CONTROL THE TWO OUTER LAMPS AND SWITCH (SB) SHALL CONTROL THE TWO INNER LAMPS.

ELECTRICAL

1. ELECTRICAL SERVICE DROP AND CONNECTIONS SUPPLIED BY OTHERS.
2. MANUFACTURER TO PROVIDE STUB-OUT FROM BACK OF ELECTRICAL PANEL THROUGH THE EXTERIOR WALL OR TO BELOW FLOOR FOR RECEIVING EITHER UNDERGROUND OR OVERHEAD SERVICE & FITTING FOR GROUNDING CABLE.
3. ELECTRICAL PANEL BOARD SHALL BE RECESS MOUNTED INSIDE THE BUILDING. SIZED TO ACCOMMODATE ALL CONNECTED LOADS INCLUDING SPACES AS SHOWN. OVERCURRENT PROTECTIVE DEVICES IN THE PANEL BOARDS HAVE ADEQUATE SHORT CIRCUIT INTERRUPTING CAPACITY. ALL BUSES INCLUDING BUS SHALL BE COPPER OR ALUMINUM.
4. 2X4 FLOURESCENT FIXTURES SHALL BE STEEL FRAME, LENS SHALL BE HINGED AND LOCKED IN PLACE BY TWO LOCKING DEVICES. THE LENS DIFFUSERS SHALL BE KHS, INC. #KSH-12, CAROLITE, INC. #C-12 OR PLASKOLITE, INC. #PL21A. MINIMUM LENS THICKNESS SHALL BE .125 INCH.
5. FLOURESCENT BALLAST SHALL BE ENERGY SAVER WHILE MAINTAINING FULL LIGHT OUTPUT, CLASS "P" EQUIPPED WITH THERMAL PROTECTORS, GUARANTEED AGAINST FAILURE FOR (2) YEARS AND BE REPLACED FROM INSIDE THE FIXTURE.
6. CLOCK - 12" DIAL CLOCK ON CLOCK OUTLET.
   A) CLOCK SHALL BE GENERAL ELECTRIC MODEL 2912 129V 60 CYCLE
   B) CLOCK OUTLET SHALL BE BRYANT #2828 OR EQUAL WITH SEPERABLE HANGING CLIP & APP'D RECEPT.

THE H.V.A.C. UNIT FEEDER CIRCUIT - PANEL CIRCUIT BREAKER, FEEDER WIRE, UNIT DISCONNECT AND FUSES (WHERE USED) - IS TO BE COORDINATED WITH THE NAME PLATE DATA AT THE TIME OF MANUFACTURE. H.V.A.C. UNITS HAVING KVA RATINGS LARGER THAN THAT INDICATED ON THIS PANEL SCHEDULE WILL NOT BE ALLOWED TO BE INSTALLED ON THIS BUILDING. IF 60 DEGREES C. WIRE IS TO BE USED IN THIS INSTALLATION, CALCULATIONS DEMONSTRATING AMPACITY BE PROVIDED ON THE DRAWING.

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 06/15/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOLS

24' x 40' RELOCATABLE BUILDINGS
ELECTRICAL NOTES & DETAILS

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

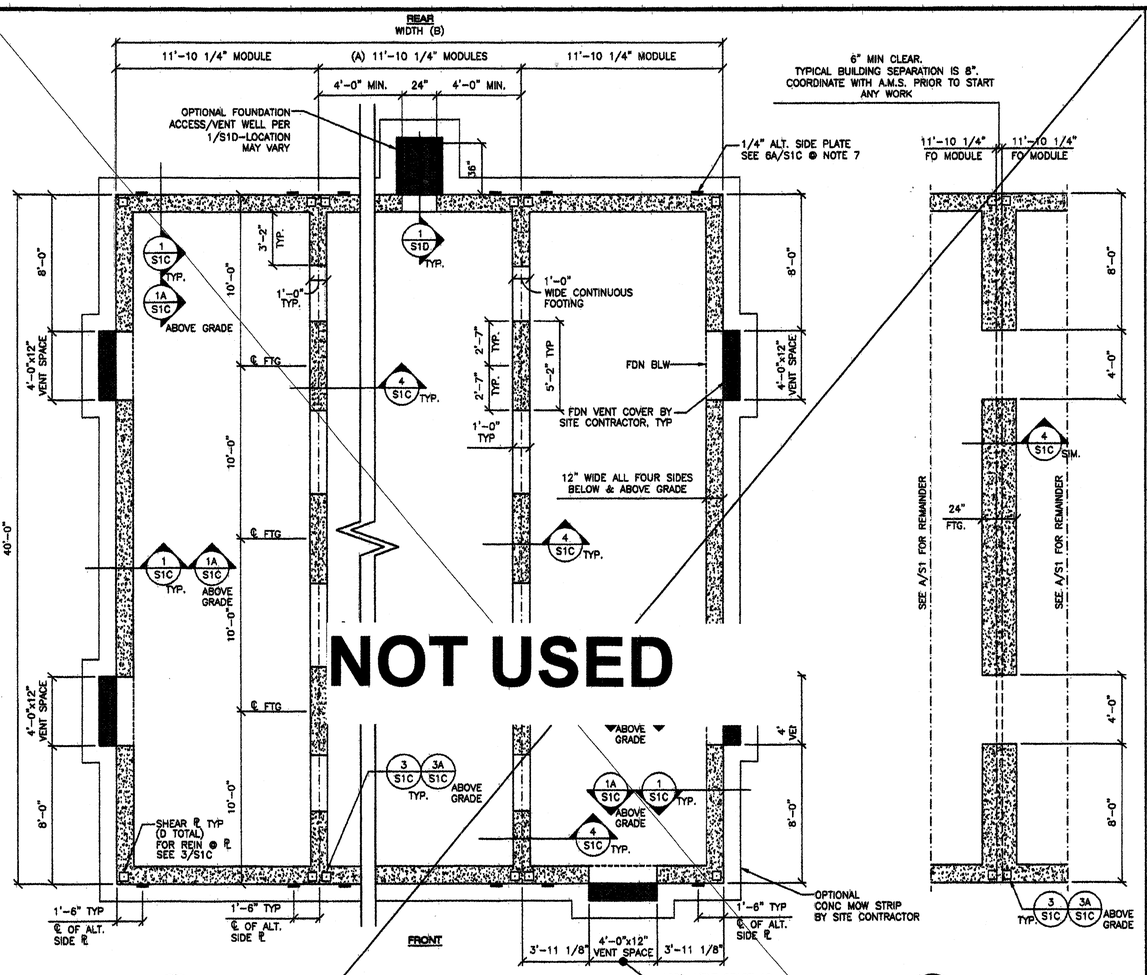
APPROVALS:

REGISTERED MECHANICAL ENGINEER No. C12831 Ren. 3-31-11 STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. W FLS SS GC
DATE 11-12-11

PROJECT No.
PC

E2



NOT USED

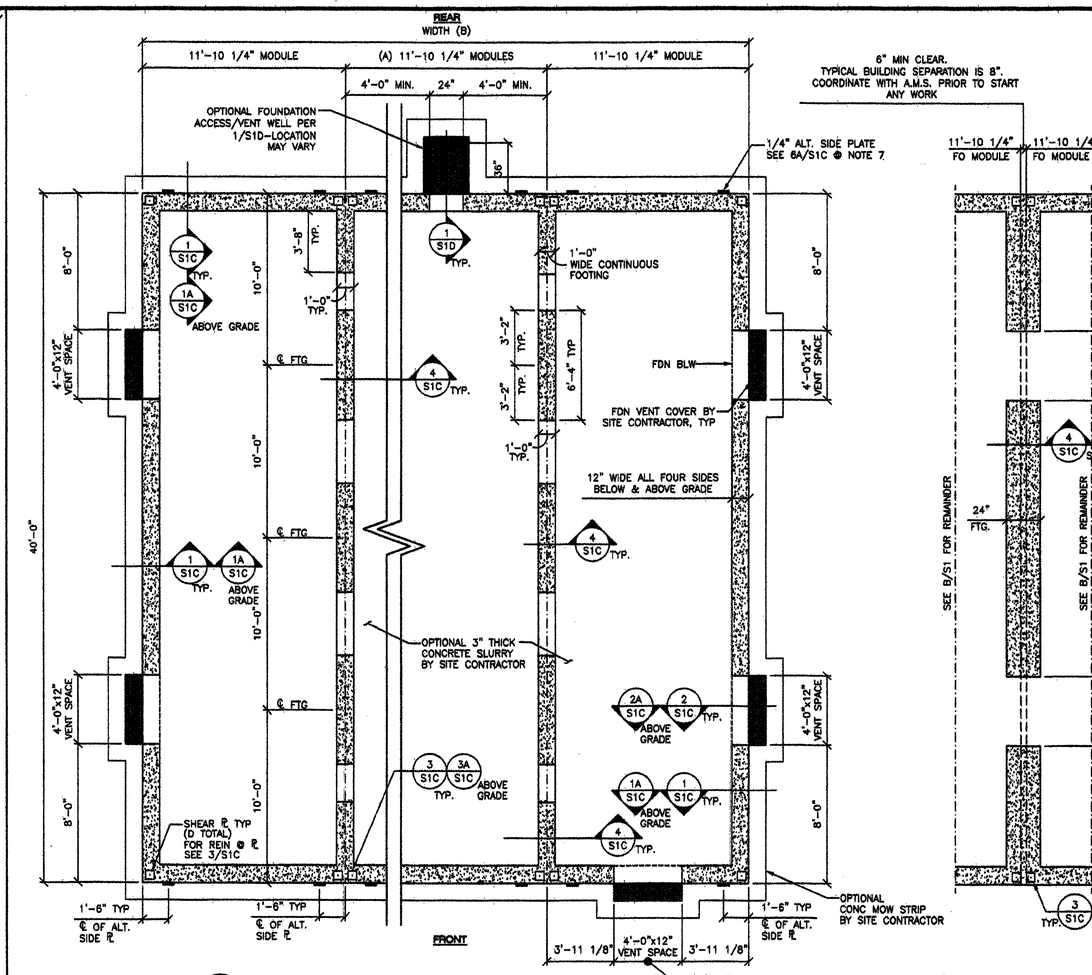
A S1 FOUNDATION PLAN (PLYWOOD OR VIROC FLOOR) (50 PSF LIVE LOAD)
1/4"=1'-0"

A1 S1 FOUNDATION PLAN COMBINED
1/4"=1'-0"

MODULE SCHEDULE

BLDG SIZE (FT)	TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	"B" TOTAL BLDG WIDTH	TOTAL FLOOR AREA (FT^2)	"C" MIN. TOTAL # 4'x12" VENTS REQ'D	VENT AREA REQ'D (FT^2)	VENT AREA PROVIDED (FT^2)	"D" TOTAL # OF TYPICAL SHEAR ℄'s
24x40	2	0	23'-8 ½"	960	4	6.4	16.0	8
36x40	3	1	35'-6 ¾"	1440	4	9.6	16.0	12
48x40	4	2	47'-5"	1920	4	12.8	16.0	16
60x40	5	3	59'-3 1/4"	2400	4	16.0	16.0	20
72x40	6	4	71'-1 ½"	2880	5	19.2	20.0	24
84x40	7	5	82'-11 3/4"	3360	6	22.4	24.0	28
96x40	8	6	94'-10"	3840	7	25.6	28.0	32
108x40	9	7	106'-8 1/4"	4320	8	28.8	32.0	36
120x40	10	8	118'-6 ½"	4800	8	32.0	32.0	40
132x40	11	9	130'-4 3/4"	5280	9	35.2	36.0	44
144x40	12	10	142'-3"	5760	10	38.4	40.0	48

NOTES:
1. DO NOT INSTALL BUILDING IN AREAS OF WATER FLOW LINES.
2. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500 PSI MIN. PROPORTIONED PER TITLE 24, PART 2, SECTION 1905A.3 OR 1905A.4
3. THE REINFORCING BARS MUST BE TESTED PER TITLE 24, PART 2, SECTION 1916A.2 IF CONCRETE WITH A COMPRESSIVE STRENGTH OF 3500 PSI IS SPECIFIED THEN THE TESTING OF THE REINFORCING BARS MAY BE WAIVED PER SECTION 1916A.4. THE CEMENT SHALL BE CERTIFIED PER SECTION 1916A.1
4. REINFORCING STEEL 40,000 PSI MINIMUM, PER ASTM A615
5. MINIMUM SOIL BEARING CAPACITY 1500 PSF.
6. DESIGN SOIL BEARING CAPACITY 1500 PSF.
7. ALTERNATE SIDE PLATES MUST COMPLETELY REPLACE TYPICAL SHEAR PLATES ALONG ANY ONE MODULE LINE (4 ALTERNATE SIDE PLATES @ INTERIOR MODULE LINE AND 2 ALTERNATE SIDE PLATES @ EXTERIOR MODULE LINE.) COMBINATION OF TYPICAL SHEAR PLATES AND ALTERNATE SIDE PLATES ALONG ANY ONE MODULE LINE IS NOT PERMITTED.



B S1 FOUNDATION PLAN (PLYWOOD OR VIROC FLOOR) (50 PSF LIVE LOAD w/15 PSF PARTITION LOAD)
1/4"=1'-0"

B1 S1 FOUNDATION PLAN COMBINED
1/4"=1'-0"

MODULE SCHEDULE

BLDG SIZE (FT)	TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	"B" TOTAL BLDG WIDTH	TOTAL FLOOR AREA (FT^2)	"C" MIN. TOTAL # 4'x12" VENTS REQ'D	VENT* AREA REQ'D (FT^2)	VENT AREA PROVIDED (FT^2)	"D" TOTAL # OF TYPICAL SHEAR ℄'s
24x40	2	0	23'-8 ½"	960	4	6.4	16.0	8
36x40	3	1	35'-6 ¾"	1440	4	9.6	16.0	12
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84x40	7	5	82'-11 3/4"	3360	6	22.4	24.0	28
96x40	8	6	94'-10"	3840	7	25.6	28.0	32
108x40	9	7	106'-8 1/4"	4320	8	28.8	32.0	36
120x40	10	8	118'-6 ½"	4800	8	32.0	32.0	40
132x40	11	9	130'-4 3/4"	5280	9	35.2	36.0	44
144x40	12	10	142'-3"	5760	10	38.4	40.0	48

*REFER TO UNDER FLOOR VENTILATION TABLE 6 ON 101 SHEET

NOTES:
1. DO NOT INSTALL BUILDING IN AREAS OF WATER FLOW LINES.
2. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500 PSI MIN. PROPORTIONED PER TITLE 24, PART 2, SECTION 1905A.3 OR 1905A.4
3. THE REINFORCING BARS MUST BE TESTED PER TITLE 24, PART 2, SECTION 1916A.2 IF CONCRETE WITH A COMPRESSIVE STRENGTH OF 3500 PSI IS SPECIFIED THEN THE TESTING OF THE REINFORCING BARS MAY BE WAIVED PER SECTION 1916A.4. THE CEMENT SHALL BE CERTIFIED PER SECTION 1916A.1
4. REINFORCING STEEL 40,000 PSI MINIMUM, PER ASTM A615
5. MINIMUM SOIL BEARING CAPACITY 1500 PSF.
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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE:02/13/09
SCALE: NOTED
DRAWN BY:RL
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
CONCRETE FOUNDATION PLAN 50 P.S.F LIVE LOAD & 50 P.S.F LIVE LOAD+15 P.S.F PART. LOAD FLOOR

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1021 Fax (209)825-7018
americanmodular.com

APPROVALS:
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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1418 EXP. 3-31-98 II Structural Engineer — STATE OF CALIFORNIA

REGISTERED ARCHITECT — No. C12631 Ren. 2-31-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02_111612
AC. — FLS. — SS GR
DATE 11/12/11

PROJECT No.

S1

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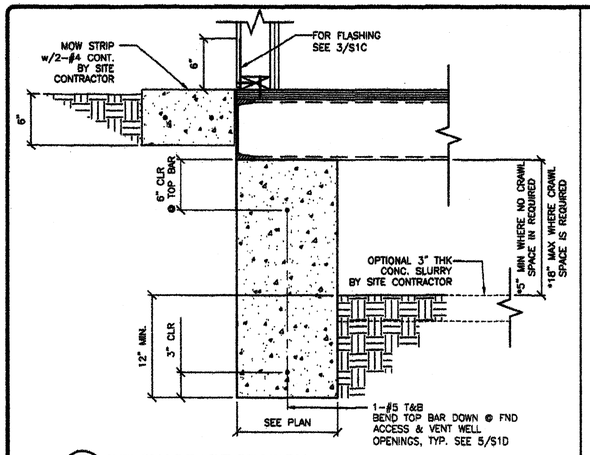
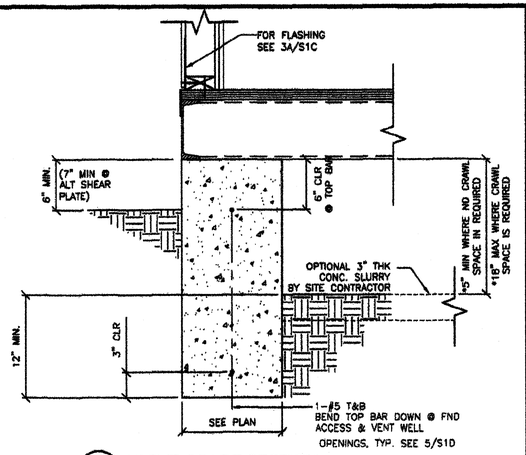


1 S1C **BELOW GRADE SECTION**
1 1/2"=1'-0"

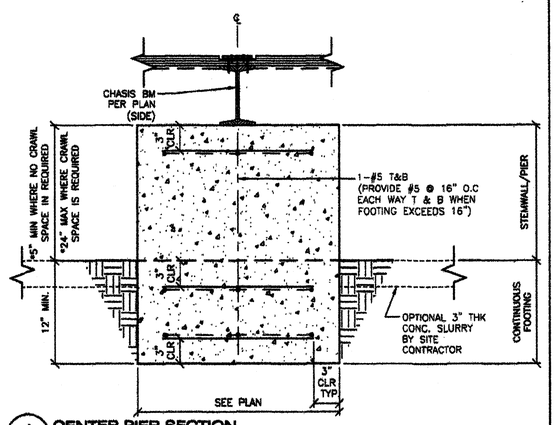
* COORDINATE WITH AMS PRIOR TO EXCAVATE



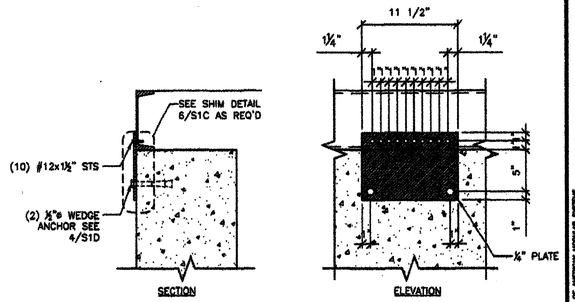
1A S1C **ABOVE GRADE SECTION**
1 1/2"=1'-0"

* COORDINATE WITH AMS PRIOR TO EXCAVATE

* COORDINATE WITH AMS PRIOR TO EXCAVATE



4 S1C **CENTER PIER SECTION**
1 1/2"=1'-0"



6A S1C **ALTERNATE SHEAR PLATE DETAIL**
1 1/2"=1'-0"

SEE 1/S1C FOR BALANCE OF DETAIL

2 S1C **BELOW GRADE SECTION/VENT DETAIL**
1 1/2"=1'-0"

2A S1C **ABOVE GRADE SECTION/VENT DETAIL**
1 1/2"=1'-0"

6 S1C **FILLER ACCESS HOLE DETAIL**
1 1/2"=1'-0"

7 S1C **TYP. WALL & FTG. REINF. SPLICES**
NOT TO SCALE

3 S1C **BELOW GRADE SECTION/PLATE ATTACHMENT**
1 1/2"=1'-0"

3A S1C **ABOVE GRADE SECTION/PLATE ATTACHMENT**
1 1/2"=1'-0"

6 S1C **ALTERNATE SHEAR PLATE SHIM DETAIL**
1 1/2"=1'-0"

8 S1C **TYPICAL REINFORCING BENDS**
NOT TO SCALE

REVISIONS		
NO	DATE	DESCRIPTION
1	02/17/09	REVISION TO DETAIL 4/S1C
2		
3		
4		

DATE: 01/23/09
SCALE: NOTED
DRAWN BY: RL
SERIAL NO.:

CUSTOMER:

24' x 40' THRU 144' x 40' (E8) RELOCATABLE BUILDINGS
CONCRETE FOOTING DETAILS

American Modular Systems Inc.
797 Sprocket Ave. Manteca, CA 95336
(209)825-1221 Fax (209)825-7018
americansmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell — No. 14418 — EXP. 3-31-09 (1) — Structural Engineer — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. C42831 Ren. 2-31-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP — DIV. OF THE STATE ARCHITECT — OFFICE OF REGULATION SERVICES — 02_111612 — AC. — FLS — SS — DATE 1/12/11

PROJECT No.

S1C

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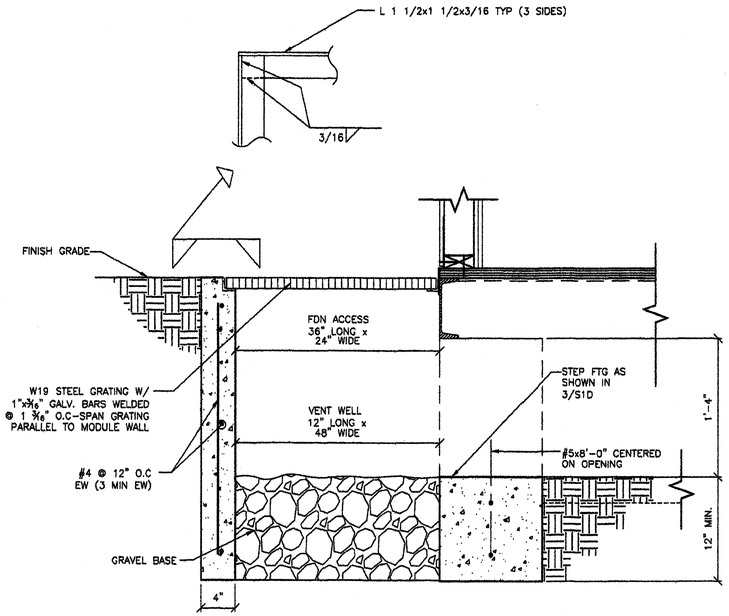
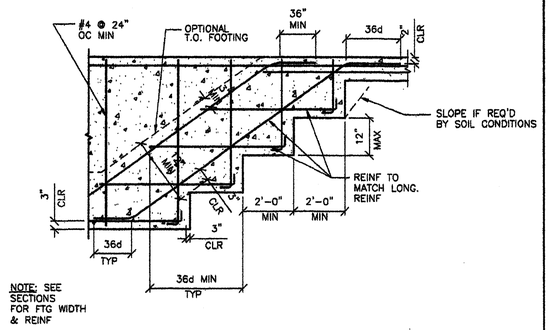


1 S1D **OPTIONAL FOUNDATION ACCESS/VENT WELL**
1 1/2"=1'-0"



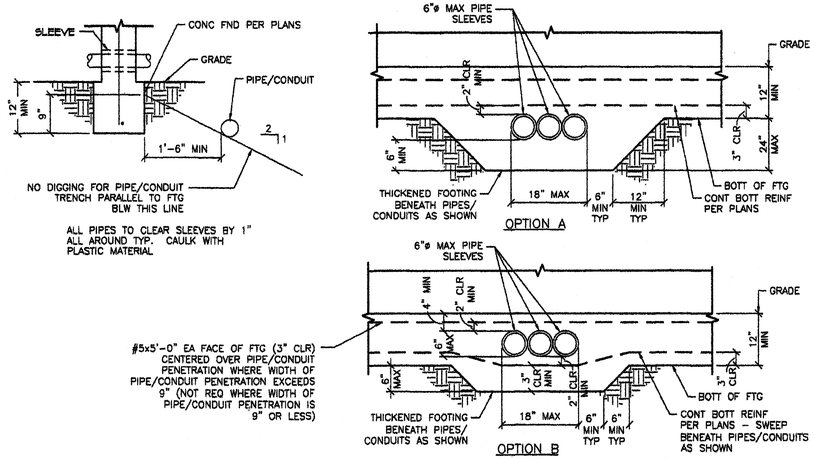
3 S1D **TYPICAL STEPPED FOOTING**
N.T.S.

ANCHOR TYPE	HILTI KWIK KB-TZ ICC ESR-1917			SIMPSON WEDGEALL ICC ESR-1771		
ANCHOR SIZE (IN)	½"ø	⅝"ø	3/4"ø	½"ø	⅝"ø	3/4"ø
MIN EMBED (IN)	4"	4 3/4"	5 3/4"	3 7/8"	5 1/8"	5 3/4"
TENSION TEST LBS (SINGLE BOLT)	5121#	7395#	7456#	3826#	6378#	5150#
TENSION TEST LBS (DOUBLE BOLT)	5121#	6174#	5889#	3826#	5102#	4122#
INSTALLATION TORQUE (FT-LB)	40	60	110	50	85	180

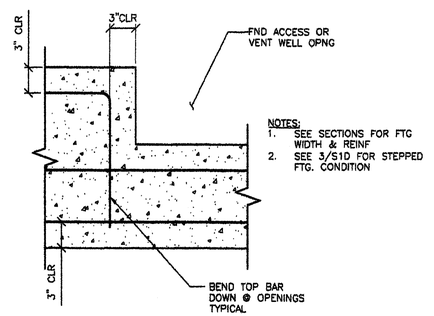
1. TENSION TEST– 2 x ALLOWABLE TENSION LOAD PER DSA IR 19-1.
2. NORMAL WEIGHT CONCRETE WITH f'c= 2500 PSI TO COMPLY WITH 1916A.4 FOR MATERIAL TEST WAIVER.

4 S1D **ANCHOR BOLT SCHEDULE**
N.T.S.

NOTES:
1. AS AN OPTION TO INDIVIDUAL PIPE SLEEVES THE FOOTING MAY BE BLOCKED OUT FOR MULTIPLE PIPES (8" HIGH x 18" WIDE MAX @ OPTION "A", 6" HIGH x 18" WIDE MAX OPTION "B") OR INDIVIDUAL PROVIDE 1" MIN CLEARANCE ALL AROUND BTWN PIPES/CONDUITS & BLOCKOUT/SLEEVES & FILL W/ CAULK.
2. CONCRETE SHALL BE WELL CONSOLIDATED AROUND & UNDER PIPES, CONDUITS, SLEEVES, BLOCKOUTS TO PREVENT CONCRETE VOIDS.
3. PROVIDE 2" CLEAR MIN BETWEEN BLOCKOUT SLEEVES AND REINFORCEMENT.
4. WHERE TOP OF PIPES/CONDUITS ARE 12" OR MORE BELOW THE BOTTOM OF THE FOOTING, THICKENED FOOTING AROUND PIPES/CONDUITS IS NOT REQUIRED. BACKFILL & COMPACT TO 95 % OVER PIPES/CONDUITS PRIOR TO PLACING FOOTING.



2 S1D **PIPE SLEEVE DETAIL**
1 1/2"=1'-0"



5 S1D **VENT/ACCESS VENT OPENING DETAIL**
1 1/2"=1'-0"

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 11/19/2007
SCALE: NOTED
DRAWN BY: RL
SERIAL NO.:

CUSTOMER:

24' x 40' THRU 144' x 40' RELOCATABLE BUILDINGS
CONCRETE FOOTING DETAILS

American Modular Systems Inc.
787 Sprackels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1416
EXP. 3-31-09 11
Structural Engineer
STATE OF CALIFORNIA

REGISTERED ARCHITECT
No. C12831
Exp. 2-31-11
STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02_111612
AC. — FLS. — SS GR
DATE 11/21/11

PROJECT No.

S1D

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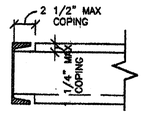
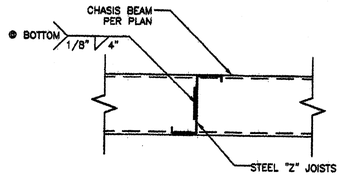
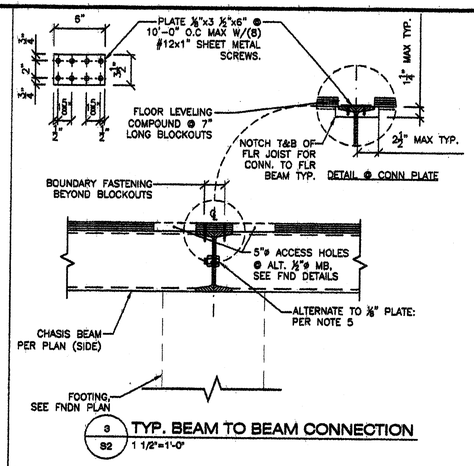


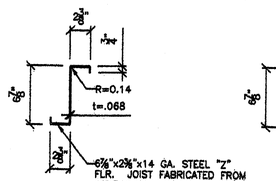
TYP FLOOR JOIST COPING



1 / S2 TYP JOIST ATTACHMENT TO BEAM
1 1/2"=1'-0"

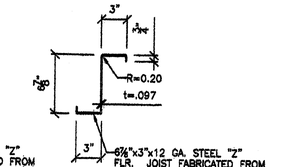


3 / S2 TYP. BEAM TO BEAM CONNECTION
1 1/2"=1'-0"



14 GA. JOIST

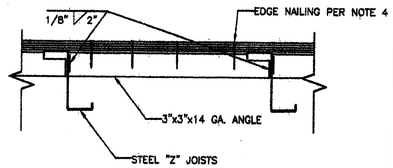
Z SECTION PROPERTIES
A=0.89 IN.^{2}
Sx=1.85 IN.^{3}
Ix=6.37 IN.^{4}



12 GA. JOIST

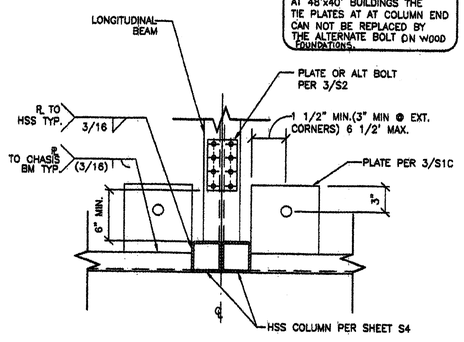
Z SECTION PROPERTIES
A=1.38 IN.^{2}
Sx=2.97 IN.^{3}
Ix=10.20 IN.^{4}

1A / S2 TYP JOISTS
1 1/2"=1'-0"

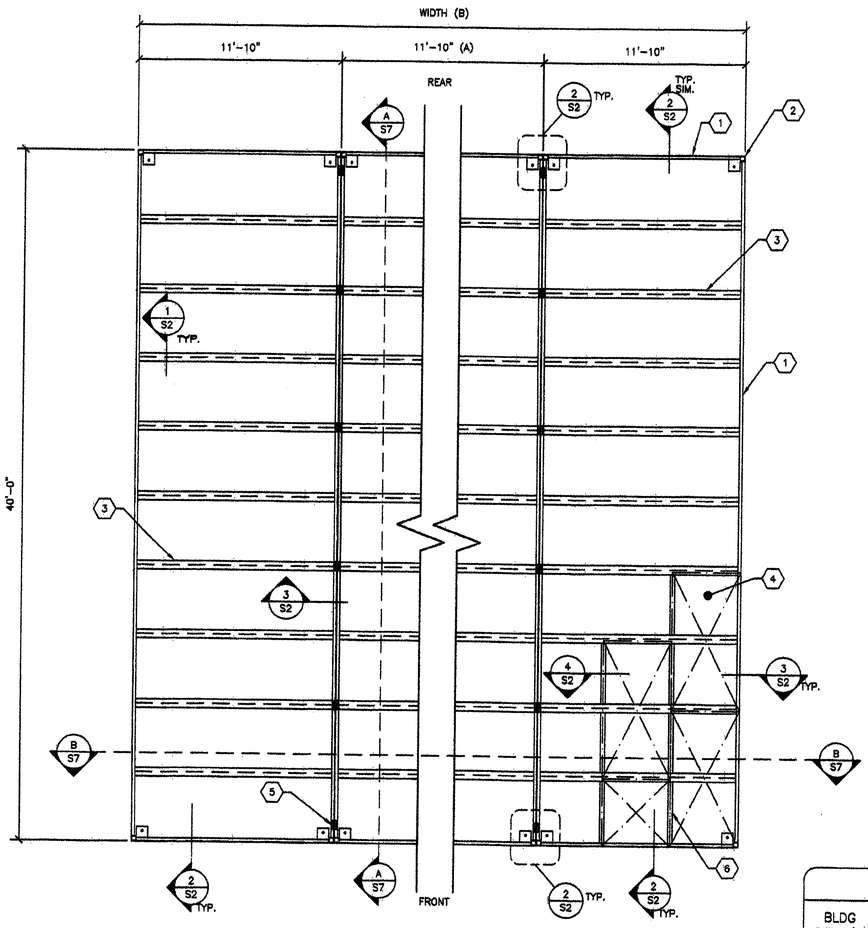


4 / S2 TYP. ANGLE TO Z-PURLIN ATTACHMENT
1 1/2"=1'-0"

NOTE:
AT 48'x40' BUILDINGS THE TIE PLATES AT AT COLUMN END CAN NOT BE REPLACED BY THE ALTERNATE BOLT ON WOOD FOUNDATIONS.



2 / S2 TYP. FL. BEAM CONNECTION
1 1/2"=1'-0"



A / S2 TYPICAL FLOOR FRAMING LAYOUT
1/4"=1'-0"
PLYWOOD FLOOR

- KEY NOTES -

1. C 7x9.8 FLOOR BEAM
   ALTERNATE C10x15.3
2. HSS COLUMN PER SHEET S4
3. FLOOR JOIST (SEE 1A/S2)

FLOOR JOIST SCHEDULE		
	SPACING	
LIVE LOAD PSF	14 GA. JOIST	12 GA. JOIST
50 PSF	48" O.C	48" O.C
50+15 PSF	24" O.C	48" O.C
100 PSF	24" O.C	24" O.C
150 PSF	———	24" O.C

4. 1 1/8" T&G PLYWOOD FLOOR SHT'G
   STURDI-I-FLOOR 48" O.C SPAN RATING EXP. 1
   COMFORMING TO PS 1-95
   OPTION: UNI-FLOOR BY PITTSBURGH
   TESTING LAB CONFORMING TO PS 1-95.
   STAGGER SHEETS 48" O.C AS SHOWN W/
   FACE GRAIN NORMAL TO FLOOR JOISTS.
   FASTENING: BOUNDARY OF EA. MODULE:
   #12x2 1/4" WOOD TEK @ CHANNEL @ 6" O.C
   PANEL EDGES: ET&F 0.144"x2" MIN.
   POWER DRIVEN PINS @ 6"O.C
   FIELD: ET&F 0.1446x2" MIN. POWER
   DRIVEN PINS @ 10" O.C.

   NOTE: SEE ICC ER-5144 FOR ET&F BRAND PNEUMATIC PINS.
5. PLATE 1/8"x 3 1/2"x6"
   W/(8)#12x1" SHEET METAL SCREWS
   @ 10'-0" O.C MAX

   ALTERNATE:
   3/4"ø x1 3/4" MB @ 10'-0" O.C TYP
   (8'-0" O.C. MAX @ 48'x40' 150 PSF FLOOR
   LIVE LOAD BUILDING ON WOOD FOUNDATIONS)
   MAX AND 6" MAX FROM EACH END OF MOUDLE.
   BOLT ø + 1/16" MAX HOLE THRU CHANNELS
6. 3"x3"x14 GA. ANGLE @ UNSUPPORTED PLYWOOD EDGES @ THE TWO END MODULES OF 48'x40' 150 P.S.F BUILDING ON WOOD FOUNDATION ONLY. PER DETAIL 4/S2

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAUGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.

- MODULE SCHEDULE -

BLDG SIZE (FT)	TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	"B" TOTAL BLDG WIDTH
24' x 40'	2	0	23'-8 1/4"
36' x 40'	3	1	35'-8 1/2"
48' x 40'	4	2	47'-4 3/4"
60' x 40'	5	3	59'-3"
72' x 40'	6	4	71'-1 1/4"
84' x 40'	7	5	82'-11 1/2"
96' x 40'	8	6	94'-9 3/4"
108' x 40'	9	7	106'-8"
120' x 40'	10	8	118'-6 1/4"

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: 02/11/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
FLOOR FRAMING PLANS (PLYWOOD)

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

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REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 5418
EXP. 3-31-09 11
Structural Engineer
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LICENSED INFORMATION RONALD PATRICK ARMANINO
No. C12831
Ren. 8-31-09
STATE OF CALIFORNIA

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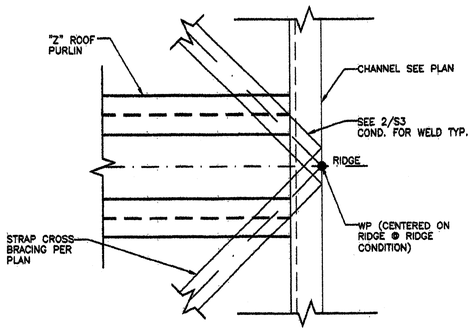
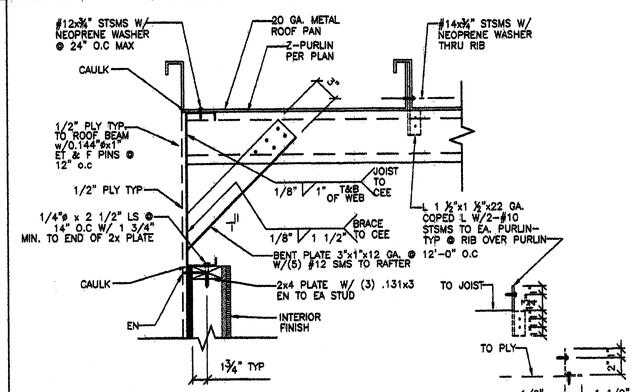
DATE 11/12/08

PROJECT No.
PC

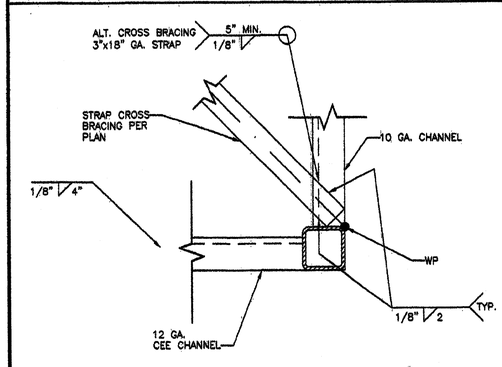
S2



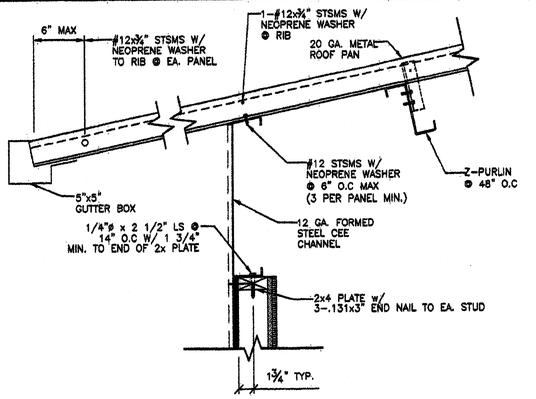
1 / S3 — TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ ROOF CHANNEL



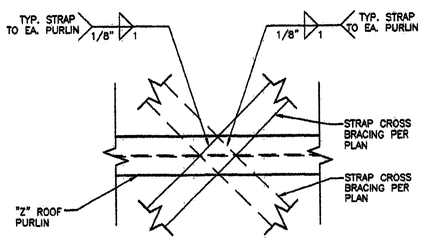
4 / S3 — SIDE WALL TO ROOF BEAM DETAIL
1 1/2"=1'-0"



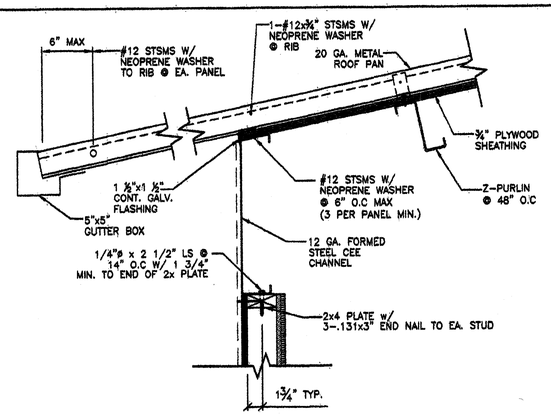
2 / S3 — TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ END CHANNEL



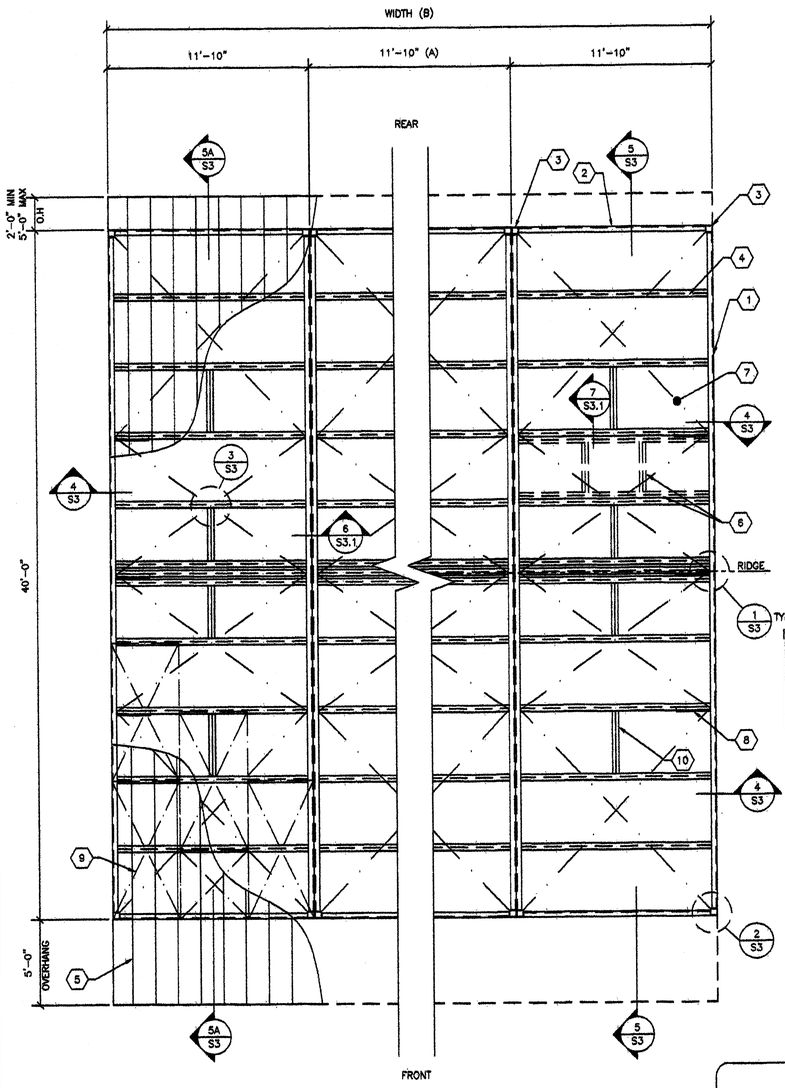
5 / S3 — 2'-0" OR 5'-0" OVERHANG DETAIL
1 1/2"=1'-0"



3 / S3 — TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ ROOF PURLIN



5A / S3 — 2'-0" OR 5'-0" OVERHANG DETAIL
1 1/2"=1'-0" OVERHANG W/PLYWOOD SHEATHING



A / S3 — TYPICAL ROOF FRAMING LAYOUT
1/4"=1'-0" OPEN SOFFIT

- KEY NOTES -

1. LONGITUDINAL ROOF BEAM TYP. (SEE 10/S3.1)
2. 12 GA TRANVERSE ROOF BEAM TYP. (SEE 11/S3.1)
3. HSS COLUMN PER SHEET S4
4. 'Z' FORMED ROOF PURLINS @ 48" O.C. MAX (SEE 9/S3.1)
5. 20 GA. ROOF PAN 3 SPAN CONTINOUS MIN. (SEE 8/S3.1)
6. PROVIDE DOUBLE 6" PURLINS W/6" PURLIN BLKG PER 7/S3.1 @ OPTIONAL ROOF MOUNT HVAC. (MAX WEIGHT 600#)
7. 2"x18 GA. STRAP CROSS BRACING GRADE 50 ALT. CROSS BRACING 3"x18 GA. GRADE 50
8. 3x1x12 GA. BENT PLATE BRACE PER 4/S3 @ EA. STRAP TO 10 GA. BM CONNECTION & @ 12'-0" OC MAX @ EXTERIOR WALL ONLY. PROVIDE 2 @ RIDGE & PROVIDE PURLIN BLKG PER NOTE 10 BELOW.
9. ALTERNATE TO CROSS BRACING: 3/4" APA RATED L-P OSB SHEATHING OR 3/4" PLYWOOD (ALL SHEATHING SHALL BE EITHER T&G OR EDGE CLIP) COMPLY WITH DSA PA-062, CD EXPOSURE-1 48/24 SPAN INDEX, FACE GRAIN NORMAL TO ROOF PURLINS ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 1" MIN. FROM EDGE OF PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO SCHEDULE BELOW FOR FASTENING.
10. PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 7/S3.1. BLOCKING IS ONLY REQUIRED AT THE OUTSIDE MODULES @ PURLINS WITH DIAGONAL BRACING PER NOTE 8 ABOVE.

FASTENING SCHEDULE

NAILING	.144 PINS SPACING		# 10 SMS SPACING	
	TYPICAL	WITHIN 4' OF BUILDING CORNERS	TYPICAL	WITHIN 4' OF BUILDING CORNERS
BOUNDARY	6" O.C.	6" O.C.	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.	6" O.C.	6" O.C.
FIELD	12" O.C	6" O.C	12" O.C	12" O.C

ET & F 0.144 PINS PER ICC ESR #4144

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAUGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.
2. SEE SHEET S5 FOR TYP. SIDE WALL FRAMING.
3. SEE SHEET S5 FOR TYP. END WALL FRAMING.
4. ALL FASTENERS THRU METAL ROOF PANEL SHALL BE INSTALLED w/NEOPRENE WASHERS.

- MODULE SCHEDULE -

BLDG SIZE (FT)	TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	"B" TOTAL BLDG WIDTH
24' x 40'	2	0	23'-8 1/4"
36' x 40'	3	1	35'-8 1/2"
48' x 40'	4	2	47'-4 3/4"
60' x 40'	5	3	59'-1"
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120' x 40'	10	8	118'-6 1/4"

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/06/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24'x40' THRU 120'x40' RELOCATABLE BUILDINGS
ROOF FRAMING PLANS (OPEN SOFFIT)

AMS
American Modular Systems Inc.
757 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell — No. 1418 — EXP. 9-31-09 — Structural Engineer — STATE OF CALIFORNIA

LICENSED MANUFACTURED HOUSING INSTALLATION MANAGER — No. C12631 — Ren. 9-21-2011 — STATE OF CALIFORNIA

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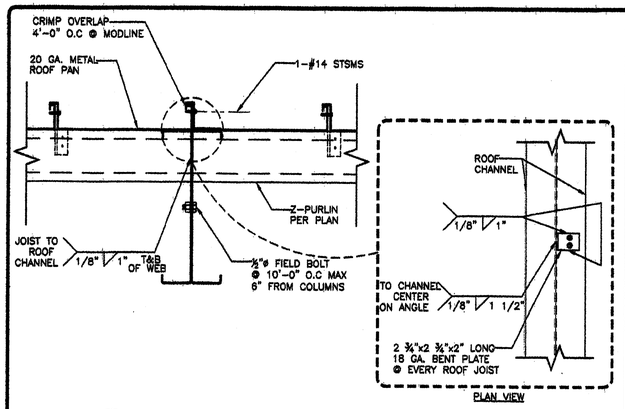
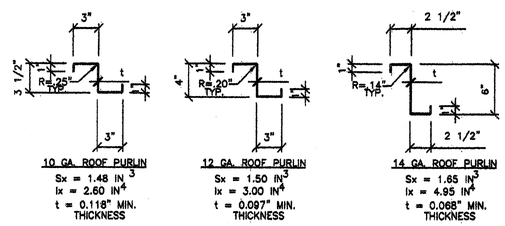
OFFICE OF REGULATION SERVICES
02_111612
AC. — FLS. — SS GF
DATE 1/12/11

PROJECT No.
PC

S3



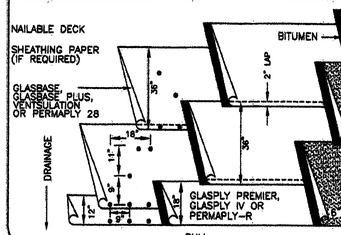
6 / S3.1 ROOF BEAM CONNECTION DETAIL
1 1/2"=1-0"



JOIST FABRICATED FROM ASTM A570 GRADE 36. HOT ROLLED SHEETS, JOISTS TO BE GIVEN A RUST INHIBITIVE COATING.

9 / S3.1 Z PURLINS DETAILS AND PROPERTIES
1 1/2"=1-0"

THREE PLY MINERAL SURFACED FIBER GLASS BUILT-UP ROOF



MATERIALS PER 100 SQ. FT. OF ROOF AREA

SHEATHING PAPER:
WOOD BOARD DECKS ONLY.....1 LAYER

FELTS:

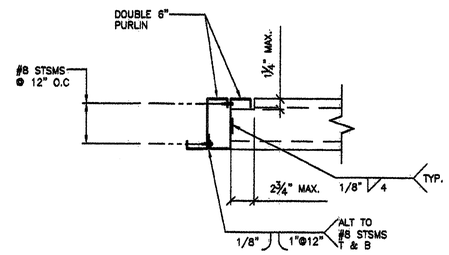
GLASBASE, GLASBASE PLUS, PERMAPLY 28 OR VENTSULATION FELT.....1 PLY
GLASPLY PREMIER, PERMAPLY-R OR GLASPLY IV.....1 PLY
GLASKAP, MINERAL SURFACED CAP SHEET.....1 PLY

BITUMEN (INTERPLY):

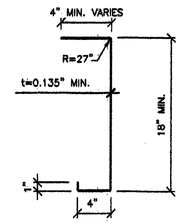
INCLINE PER FOOT	ASPHALT	NOMINAL WEIGHT
UP TO 1"	170°F, TYPE II, FLAT	46 LBS.
1" TO 3"	190°F, TYPE III, STEEP	46 LBS.
3" TO 6"	220°F, TYPE IV, SPECIAL STEEP	46 LBS.
0 TO 6"	PERMAMOP	46 LBS.

APPROXIMATE INSTALLED WEIGHT: 141-215 LBS.
ROOFING CLASS: A

12 / S3.1 THREE PLY MINERAL BUILT-UP ROOF
1 1/2"=1-0"



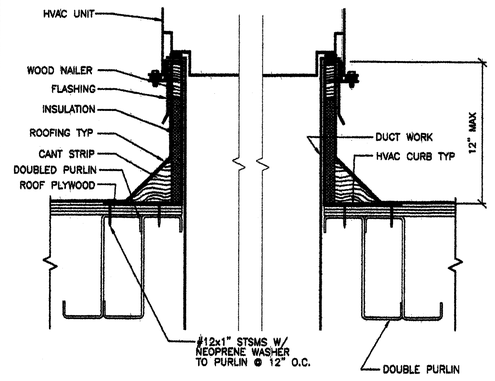
7 / S3.1 BLOCKING DETAIL
1 1/2"=1-0"



A	3.71 IN2
Sx MIN.	17.32 IN3
Ix MIN.	159.80 IN4

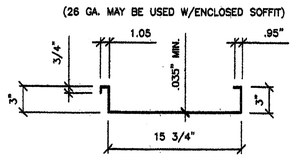
BEAM FABRICATED FROM ASTM A1011 GR50 W/RUST INHIBITIVE COATING.

10 / S3.1 LONGITUDINAL ROOF BEAM
1 1/2"=1-0"



12 / S3.1 HVAC CURB DETAIL ANCHORAGE
3"=1-0"

(26 GA. MAY BE USED W/ENCLOSED SOFFIT)

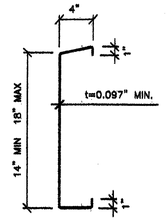


$S\bar{x}(t) = 0.326\ IN^3$ $S\bar{x}(b) = 1.365\ IN^3$ $i\bar{x}^2 = 0.789\ IN^4$

$S\bar{y}(t) = 0.323\ IN^3$ $S\bar{y}(b) = 0.283\ IN^3$ $i\bar{y}^2 = 0.452\ IN^4$

PAN FABRICATED FROM ASTM A1011 GRADE 50, HOT ROLLED SHEETS. PAN TO BE GIVEN A RUST INHIBITIVE COATING.

8 / S3.1 20 GA. ROOF PAN
1 1/2"=1-0"



	14"	18"
A	2.36 IN2	2.76 IN2
Sx MIN.	9.58 IN3	13.60 IN3
Ix MIN.	67.016 IN4	122.44 IN4

BEAM FABRICATED FROM ASTM A1011 GR50 W/RUST INHIBITIVE COATING.

11 / S3.1 12 GA. ROOF CHANNEL
1 1/2"=1-0"

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/12/06
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
ROOF FRAMING PLANS (OPEN SOFFIT)

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

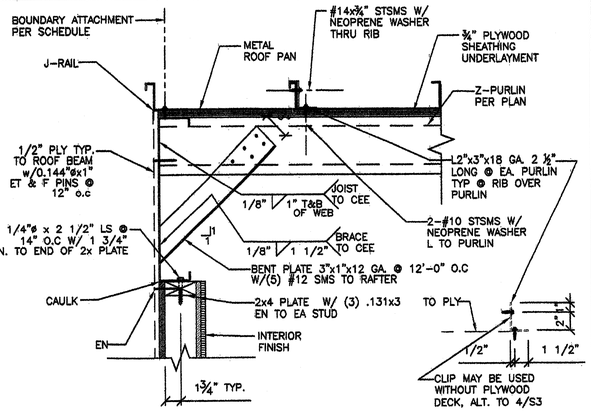
REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1419 Exp. 3-31-13 Structural Engineer — STATE OF CALIFORNIA

LICENSED ARCHITECT — No. C12931 Ren. 3-31-13 — STATE OF CALIFORNIA

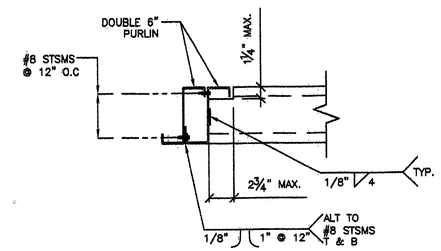
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02 111612
AC. FLS SS GR
DATE 1/12/11

PROJECT No.
PC

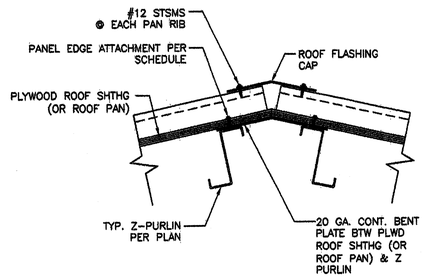
S3.1



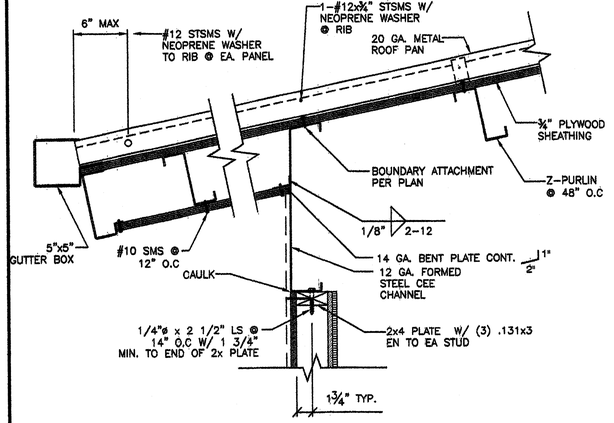
1 S3A — TYP. PLYWOOD SHEATHING
1 1/2"=1'-0"



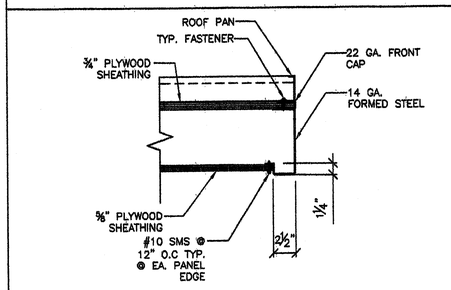
4 S3A — BLOCKING DETAIL
1 1/2"=1'-0"



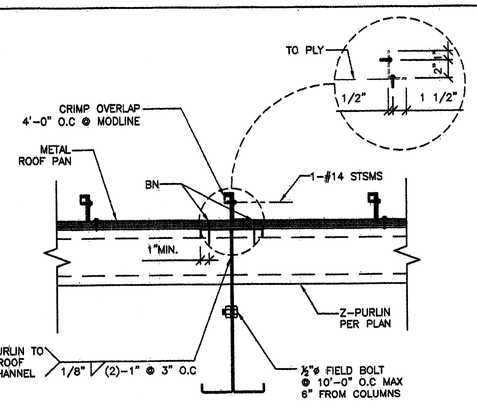
5 S3A — HIGH PITCH RIDGE DETAIL
1 1/2"=1'-0"



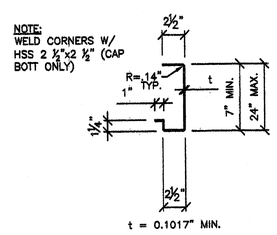
2 S3A — OVERHANG DETAIL
1 1/2"=1'-0"



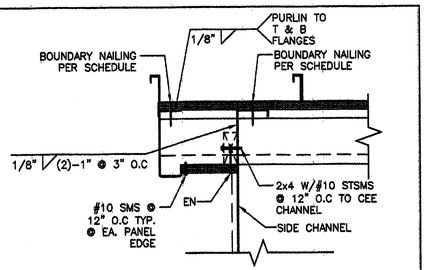
6 S3A — ENCLOSED SOFFIT DETAIL
1 1/2"=1'-0"



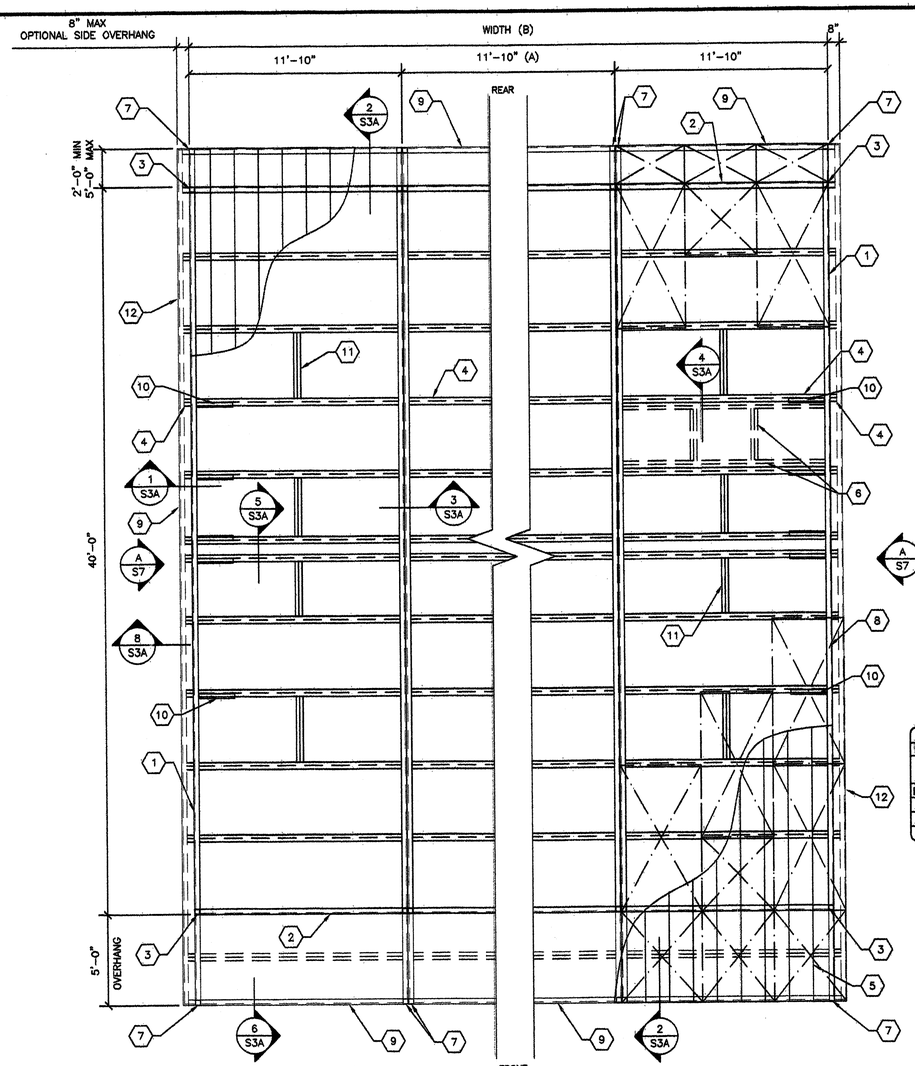
3 S3A — ROOF BEAM CONNECTION DETAIL
1 1/2"=1'-0"



7 S3A — 14 GA. FORMED STEEL CEE
1 1/2"=1'-0"



8 S3A — SIDE WALL OVERHANG DETAIL
1 1/2"=1'-0" (OPTIONAL)



A S3A — TYPICAL ROOF FRAMING LAYOUT
1/4"=1'-0"

- KEY NOTES -

1. LONGITUDINAL ROOF BEAM TYP. (SEE 10/S3.1)
2. 12 GA TRANVERSE ROOF BEAM TYP. (SEE 11/S3.1)
3. HSS COLUMN PER SHEET S4
4. 'Z' FORMED ROOF PURLINS @ 48" O.C. MAX (SEE 9/S3.1)
5. 20 GA. ROOF PAN 3 SPAN CONTINOUS MIN. (SEE 8/S3.1)
6. PROVIDE DOUBLE 6" PURLINS W/6" PURLIN BLKG PER 4/S3A @ OPTIONAL ROOF MOUNT HVAC. (MAX WEIGHT 600#)
7. 14 GA. 2 ½"x 2 ½" HSS PER 7/S3A
8. ALTERNATE TO CROSS BRACING: 3/4" APA RATED L-P OSB SHEATHING OR 3/4" ROOF SHTHG CD EXPOSURE 1 BLW ROOF PAN, SPAN INDEX: 48/24, GRAIN NORMAL TO RAFTERS. NAILING: ET & F POWER DRIVEN PINS, UNO. (REFER TO FASTENING SCHEDULE BELOW FOR TYPICAL NAILING SPACING). ROOF SHTHG MAY REPLACE STRAP CROSS BRACING ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 1" MIN. FROM EDGE OF PLYWOOD & ¾" MIN. FROM EDGE OF STEEL SUPPORTING MEMEBER
9. 14 GA. FORMED STEEL CEE
10. 3x1x12 GA. BENT PLATE BRACE PER 1/S3A @ EA. STRAP TO 10 GA. BM CONNECTION & @ 12'-0" OC MAX @ EXTERIOR WALL ONLY. PROVIDE 2 @ RIDGE @ EACH BRACE PER NOTE 11 BELOW.
11. PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 4/S3.A. BLOCKING IS ONLY REQUIRED AT THE OUTSIDE MODULES @ PURLINS WITH DIAGONAL BRACING PER NOTE 10 ABOVE.
12. OPTIONAL SIDE OVERHANGS

FASTENING SCHEDULE				
NAILING	0.144 PINS SPACING		# 10 SMS SPACING	
	TYPICAL	WITHIN 4' OF BUILDING CORNERS	TYPICAL	WITHIN 4' OF BUILDING CORNERS
BOUNDARY	6" O.C.	6" O.C.	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.	6" O.C.	6" O.C.
FIELD	12" O.C	6" O.C	12" O.C	12" O.C

ET & F 0.144 PINS PER ICC ESR #4144

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.
2. SEE SHEET S5 FOR TYP. SIDE WALL FRAMING.
3. SEE SHEET S5 FOR TYP. END WALL FRAMING.
4. ALL FASTENERS THRU METAL ROOF PANEL SHALL BE INSTALLED w/NEOPRENE WASHERS.

- MODULE SCHEDULE -

BLDG SIZE (FT)	TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	"B" TOTAL BLDG WIDTH
24' x 40'	2	0	23'-8 1/4"
~~36' x 40'~~	~~3~~	~~1~~	~~35'-8 1/2"~~
~~48' x 40'~~	~~4~~	~~2~~	~~47'-4 3/4"~~
~~60' x 40'~~	~~5~~	~~3~~	~~59'-3"~~
~~72' x 40'~~	~~6~~	~~4~~	~~71'-1 1/4"~~
~~84' x 40'~~	~~7~~	~~5~~	~~82'-11 1/2"~~
~~96' x 40'~~	~~8~~	~~6~~	~~94'-9 3/4"~~
~~108' x 40'~~	~~9~~	~~7~~	~~106'-8"~~
~~120' x 40'~~	~~10~~	~~8~~	~~118'-6 1/4"~~

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 12/16/10
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOL DISTRICT
McKINLEY

2:12 PITCHED ROOF 24'x 40' RELOCATABLE BUILDINGS
ROOF FRAMING PLANS (PLYWOOD SHEATHING)

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Lotrich No. 1416 Exp. 3-31-2011 Structural Engineer — STATE OF CALIFORNIA

REGISTERED ARCHITECTURAL TECHNOLOGIST — No. CJ2831 Ren. 2-31-11 — STATE OF CALIFORNIA

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OFFICE OF REGULATION SERVICES
02-111612
AC. — FLS. — SS. GC
DATE 1/12/11

PROJECT No.
PC

S3A

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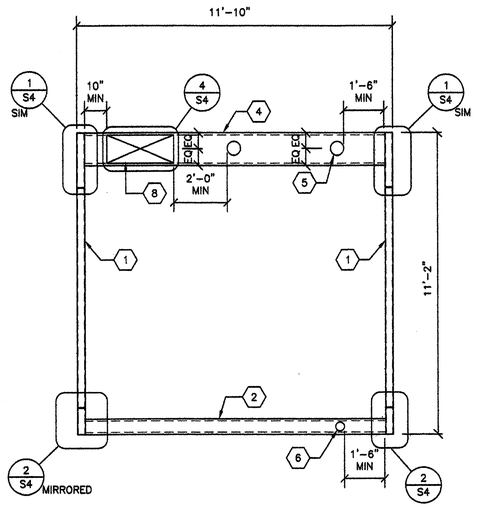
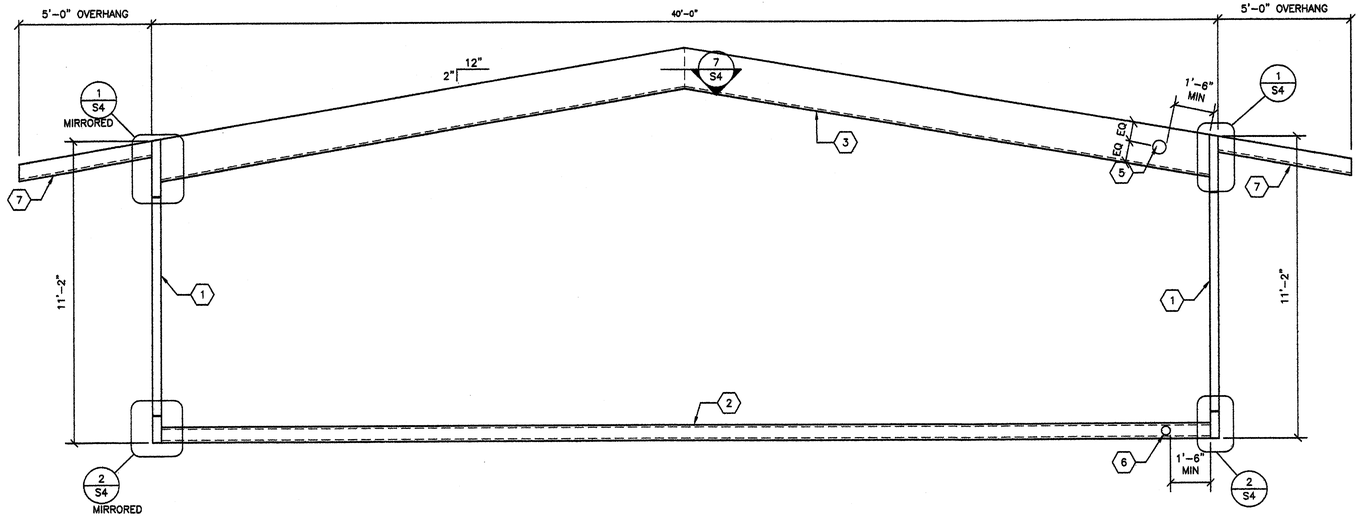


B / S4 TYPICAL TRANSVERSE FRAME
3/8"=1'-0"



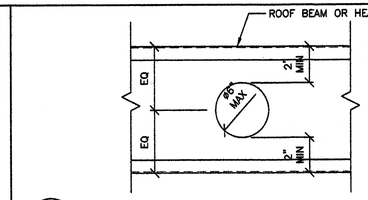
A / S4 TYPICAL LONGITUDINAL FRAME
3/8"=1'-0"

- KEY NOTES -

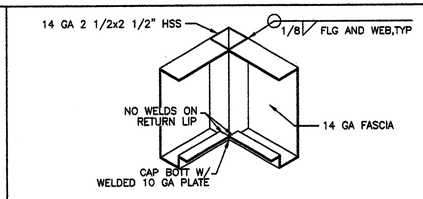
1. HSS 4x4x5/16" COLUMN
2. FLOOR BEAM PER SCHEDULE BELOW
3. LONGITUDINAL ROOF CHANNEL PER 10/S3.1
4. 12 GA. TRANSVERSE ROOF CHANNEL 14" MIN 18" MAX PER 11/S3.1
5. 6" ø MAX OPENING IN WEB OF ROOF BEAM WITHOUT WEB REINFORCEMENT MINIMUN SPACING OF HOLES @ 48" O.C. HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF ROOF BEAM EXCEPT AS NOTED OTHERWISE ON FRAMING ELEVATION NOTE: IF HOLE IS 3" OR LESS THEY MAY BE SPACED AT 24" O.C. MINIMUM
6. 4" ø MAX OPENING IN WEB OF FLOOR BEAM WITHOUT WEB REINFORCEMENT MINIMUM SPACING OF HOLES @ 48" O.C. HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF FLOOR BEAM WITH DIRECT FOUNDATION SUPPORT BELOW. OPENINGS ARE NOT ALLOWED WHERE BEAMS ARE SPANNING BETWEEN FOUNDATIONS OR ACROSS VENT OPENINGS. NOTE: IF HOLE IS 2" OR LESS THEY MAY BE SPACED AT 24" MINIMUM
7. 12 GA OUTRIGGER CHANNEL AT ENCLOSED OVERHANG REFER TO DETAIL 1/S4
8. OPENING FOR HVAC UNIT

- FLOOR BEAM SCHEDULE -

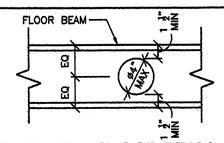
SUBFLOOR TYPE	FLOOR BEAM SIZE	ALTERNATES
VIROC OR PLYWOOD	C7x9.8	C9x13.4, C10x15.3
CONCRETE	C9x13.4	C10x15.3



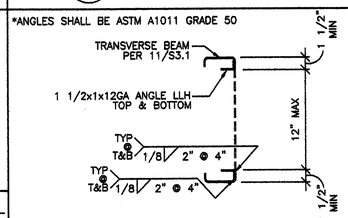
5 / S4 OPENING @ ROOF BEAMS
1 1/2"=1'-0"



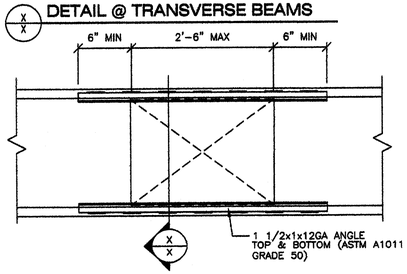
3 / S4 OVERHANG CORNER DETAIL
NTS



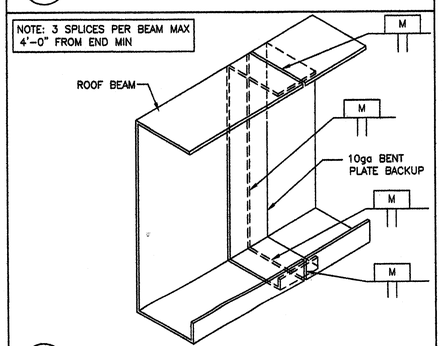
6 / S4 OPENING @ FLOOR BEAM
1 1/2"=1'-0"



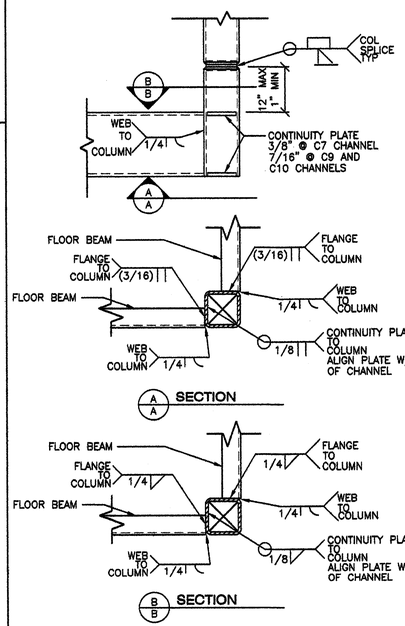
X / X DETAIL @ TRANSVERSE BEAMS



4 / S4 OPENING @ TRANSVERSE ROOF BEAMS
1 1/2"=1'-0"

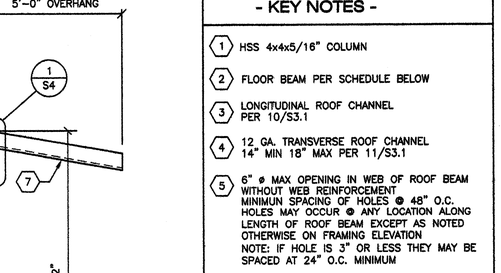


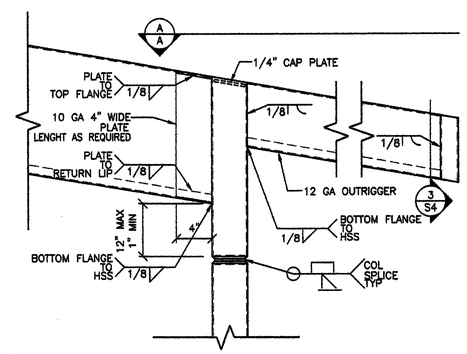
7 / S4 TYPICAL BEAM SPLICE
N.T.S.



2 / S4 TYPICAL CORNER TO BEAM DETAIL
1 1/2"=1'-0"

THE WELDING PROCEDURE QUALIFICATION TEST RECORD AND WELDING PRODECURE SPECIFICATION FOR THIS WELD SHALL BE PREPARED IN ACCORDANCE WITH AWS D.1-06 AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND SUBMITTAL TO THE D.S.A. TYPICAL DETAILS 1/S4A, 2/S4A AND 7/S4A. ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT.-LBS AT ZERO DEGREES F, AS DETERMINED BY AWS CLASSIFICATION.





1 / S4 TYPICAL ROOF CHANNEL TO HSS DETAIL
1 1/2"=1'-0"

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/04/08
SCALE: NOTED
DRAWN BY: RL
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
TYPICAL FRAME ELEVATIONS

American Modular Systems Inc.
757 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell, No. 1419, EXP. 3-31-08, Structural Engineer — STATE OF CALIFORNIA

REGISTERED ARCHITECT — No. C12631, Ren. 3-31-11 — STATE OF CALIFORNIA

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DATE 1/12/11

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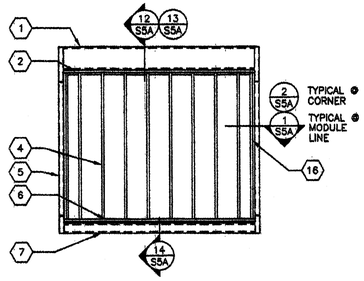
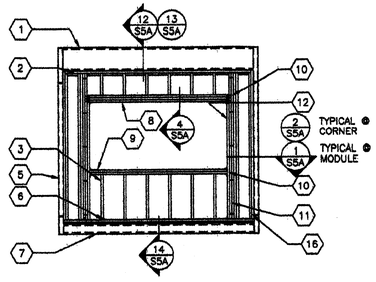
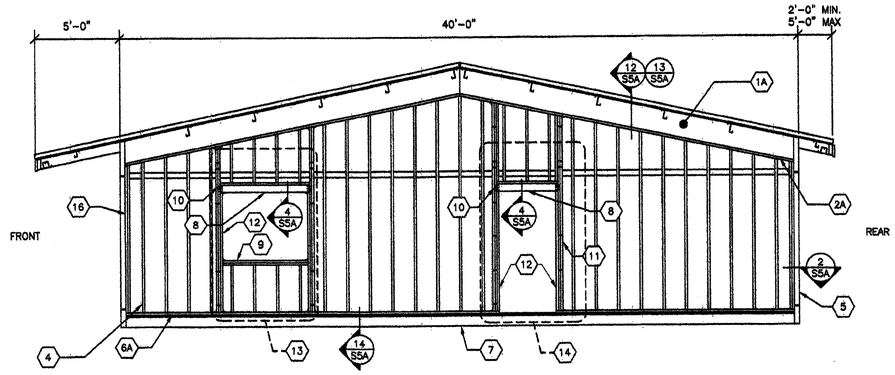
S4



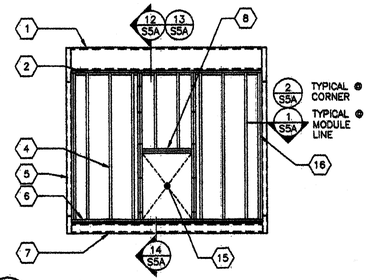
1 / S5 TYP END WALL FRAMING W/NO OPENINGS
1/4"=1-0"



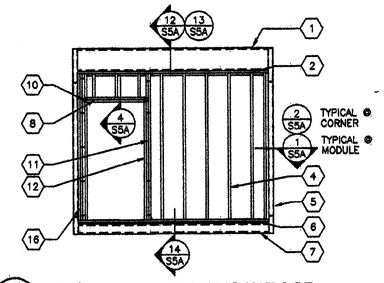
2 / S5 TYP END WALL FRAMING W/WINDOW
1/4"=1-0"



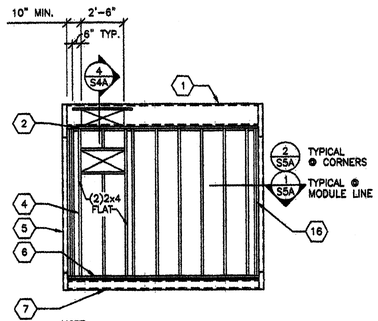
6 / S5 TYP SIDE WALL FRAMING
1/4"=1-0"



3 / S5 TYP END WALL FRAMING W/INDOOR HVAC UNIT OPTIONAL
1/4"=1-0"



4 / S5 TYP END WALL FRAMING W/DOOR
1/4"=1-0"



NOTE:
HVAC DUCT OPENING LOCATIONS MAY VARY ANYWHERE ALONG 12 GA. CEE MEMBER. (EXCEPT AS SHOWN ABOVE)
SEE SHEET 1 FOR OPENING LOCATION

3 / S5 TYP END WALL FRAMING W/WALL HUNG HVAC UNIT OPTIONAL
1/4"=1-0"

EXTERIOR WALL FINISH/WALL STUD SCHEDULE

FINISH TYPE	FOUNDATION TYPE	WALL FINISH COMMENTS	STUD TYPE	STUD SPACING TYPICAL	STUD SPACING @ CORNERS
5/8" PLYWOOD SHEATHING 303 CONFORMING TO PS1-95. VERTICAL GROOVES @ 8" OC	WOOD OR CONCRETE	JOINT DETAIL SEE 10/S5A NAILING PER BLDG SECTIONS	HEM FIR #2	@ 16" OC	@ 16" OC
			DOUG FIR #2	@ 16" OC	@ 16" OC
9/16" HARDIBOARD WITH SYNTHETIC STUCCO 9/16" HARDI-LAP SIDING	WOOD OR CONCRETE	JOINT DETAIL AND NAILING PER DETAIL 10/S5A	HEM FIR #2	@ 16" OC	@ 16" OC
			DOUG FIR #2	@ 16" OC	@ 16" OC
½" PLYWOOD SHEATHING CONFORMING TO PS1-95, APA RATED, 5 PLY 32/16, EXPOSURE 1 WITH ⅞" STUCCO	CONCRETE ONLY	NAILING PER BLDG SECTIONS	HEM FIR #2	@ 16" OC	@ 12" OC
			DOUG FIR #2	@ 16" OC	@ 16" OC

1. ALL NAILS IN EXTERIOR APPLICATIONS TO BE GALVANIZED.
2. WALL CORNERS ARE DEFINED AS A DISTANCE OF 8' FEET IN BOTH DIRECTIONS FROM EACH CORNER OF BUILDINGS WITH 2160 SQ. FT. OR GREATER AND A DISTANCE OF 4 FEET IN BOTH DIRECTIONS FROM EACH CORNER OF BUILDINGS WITH LESS THAN 2160 SQ. FT.
3. TYPICAL PLYWOOD NAILING WHERE OCCURS .131x2 1/4" GALV @ 6" O.C E.N. & 12" O.C. F.N.

- KEY NOTES -

1. ROOF HEADER
1A. ROOF BEAM
2. 2x4 HEM FIR #2 PLATE NO SPLICE
2A. 2x HEM FIR #2 PLATE
3. 2x STUDS SPACED PER SCHEDULE TYP. W/ (3) .131x3" NAILS @ EA END
4. 2x4 STUDS SPACED PER SCHEDULE W/(3).131x3" NAILS @ EA. END @ TRANSVERSE WALLS. (2) 2x4'S OR (1)2x6 STUDS SPACED PER SCHEDULE W/(3).131x3" NAILS @ EACH END @ LONGITUDINAL WALLS.
5. HSS COLUMN PER SHEET S4
6. 2x HEM FIR #2 BOTTOM PLATE NO SPLICES 2x P.T. HEM FIR #2 AT CONCRETE FLOORS
6A. 2x HEM FIR #2 BOTTOM PLATE 2x P.T. HEM FIR #2 AT CONCRETE FLOORS
7. PERIMETER FLOOR BEAM
8. (2) 2x6 HEM FIR W/ 2x4 FLAT HEADER ALT. (3) FLAT 2x HEM FIR. PER DETAIL 4/S5A
9. (2) 2x HEM FIR #2 WINDOW SILL PLATE TYP. (3) 2x HEM FIR #2 OR (2) 2x DOUG FIR #2 @ STUCCO WALLS
10. (7).131x3" END NAILS THROUGH KING STUD TYP (ONLY 5 NAILS REQUIRED AT WINDOW SILLS) INTERNAIL KINGS STUDS W/.131 NAILS @ 12" O.C MAX
11. (2) 2x HEM FIR #2 KING STUDS W/ (2) A34 T&B TO PLATE @ OPENINGS LESS THAN 4'-0" (INTERNAIL W/0.131 NAILS @ 12" OC TYP MAX.)
    (4) 2x HEM FIR #2 KING STUDS W/(2) A34 T & B TO PLATE @ TRANSVERSE WALLS @ OPENINGS GREATER THAN 4'-0" (INTERNAIL W/0.131 NAILS @ 12" OC TYP MAX.)
    (6) 2x HEM FIR #2 KING STUDS W/(2) A34 T & B TO PLATE @ LONGITUDINAL WALLS @ OPENINGS GREATER THAN 4'-0" (INTERNAIL W/0.131 NAILS @ 12" OC TYP MAX.)
12. 2x HEM FIR #2 TRIMMER
13. OPTIONAL WINDOW OPENING MAX 8'-0" WIDE (REFER TO 2/S5 FOR DETAILS AND FLOOR PLANS FOR LOCATIONS)
14. OPTIONAL DOOR OPENING (REFER TO 4/S5 FOR DETAILS AND FLOORPLANS FOR LOCATIONS)
15. HVAC OPENINGS @ INDOOR UNIT
16. 2x NAILER

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/07/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THUR 120' x 40' RELOCATABLE BUILDINGS
WALL FRAMING ELEVATIONS

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

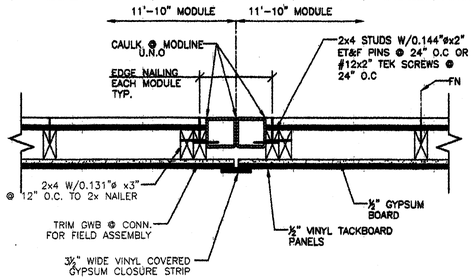
REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1418 EXP. 3-31-09 II. Structural Engineer — STATE OF CALIFORNIA

LICENSED ARCHITECT — RANDOLPH PATRICK GRAHAM — No. C12831 Ren. 3-31-09 — STATE OF CALIFORNIA

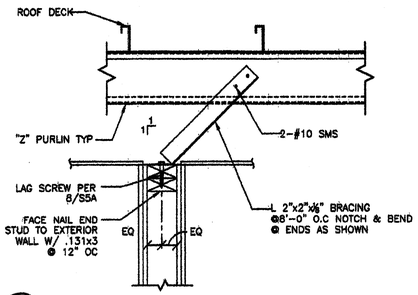
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02 111612
AC. FLS SSGR
DATE 1/12/11

PROJECT No.

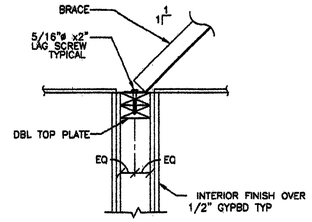
S5



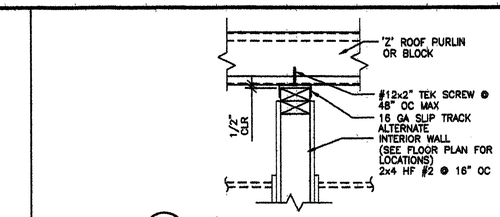
1 S5A — WALL TO COLUMN TYP DETAIL @ MODLINES
1 1/2"=1'-0"



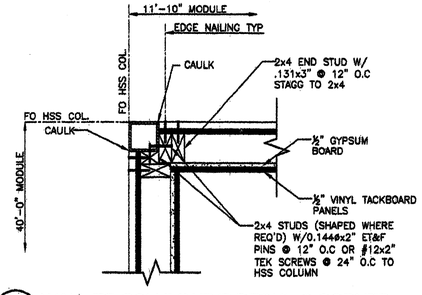
5 S5A — TYP. INTERIOR WALL BRACING
1 1/2"=1'-0" (BRACE PARALLEL TO PURLINS)



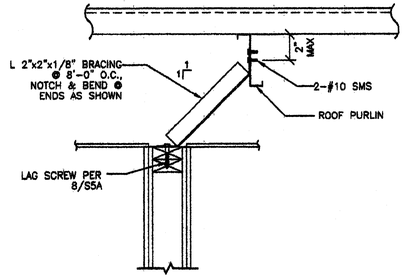
8 S5A — TYP. INTERIOR WALL BRACING
1 1/2"=1'-0" (INTERIOR PARTITION BRACING)



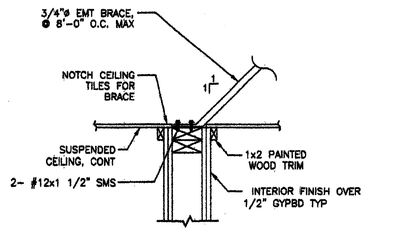
11 S5A — ALT.INTERIOR WALL ATTACHMENT
1 1/2"=1'-0"



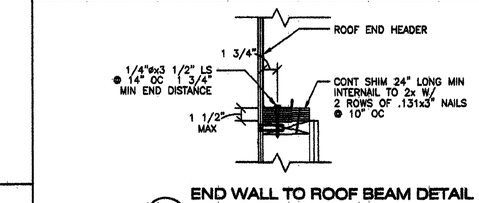
2 S5A — WALL TO COLUMN TYP DETAIL @ CORNER
1 1/2"=1'-0"



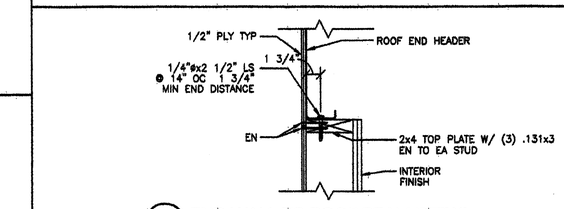
6 S5A — TYP. INTERIOR WALL BRACING
1 1/2"=1'-0" (BRACE PERPENDICULAR TO PURLINS)



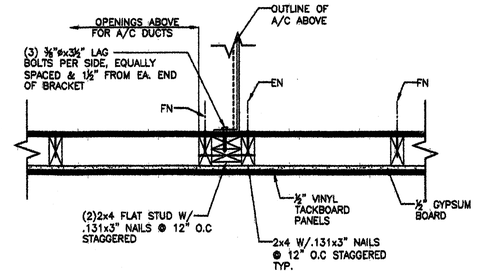
9 S5A — ALT. INTERIOR WALL BRACING
1 1/2"=1'-0" (INTERIOR PARTITION BRACING w/EMT BRACING)



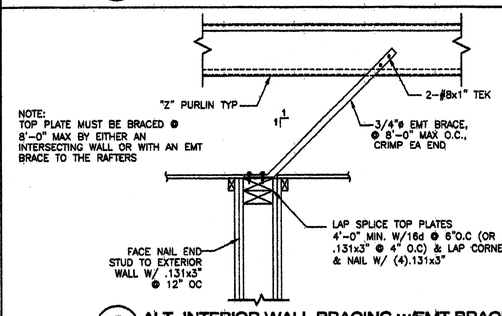
13 S5A — END WALL TO ROOF BEAM DETAIL WITH SHIM CONDITION
1 1/2"=1'-0"



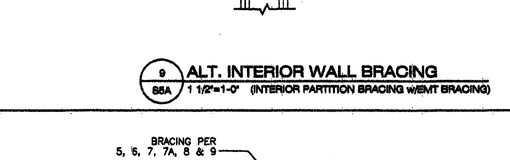
12 S5A — END WALL TO ROOF BEAM DETAIL
1 1/2"=1'-0"



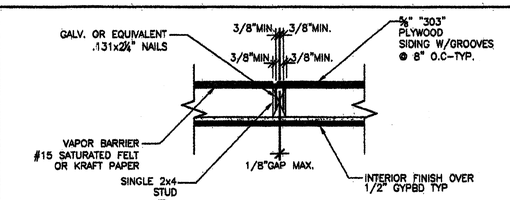
3 S5A — WALL HUNG HVAC DETAIL ATTACHMENT
1 1/2"=1'-0"



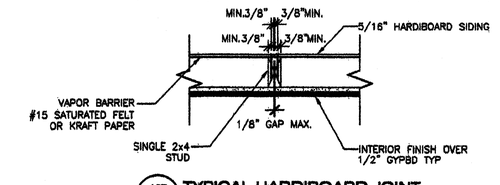
7 S5A — ALT. INTERIOR WALL BRACING w/EMT BRACE
1 1/2"=1'-0" (BRACE PARALLEL TO PURLINS)



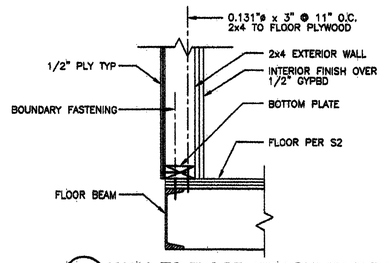
10 S5A — ALT BLOCKING @ INT WALL BRACING
1 1/2"=1'-0"



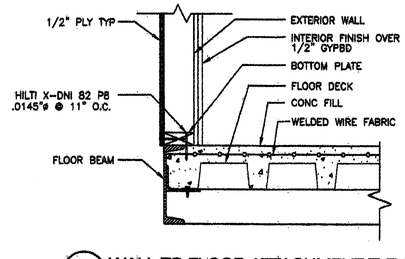
10A S5A — TYPICAL SIDING JOINT
1 1/2"=1'-0"



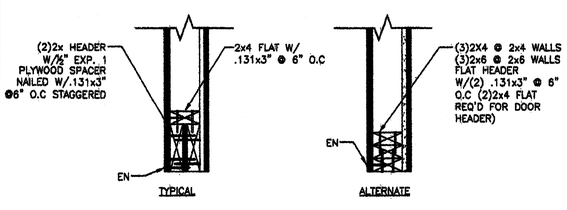
10B S5A — TYPICAL HARDIBOARD JOINT
1 1/2"=1'-0"



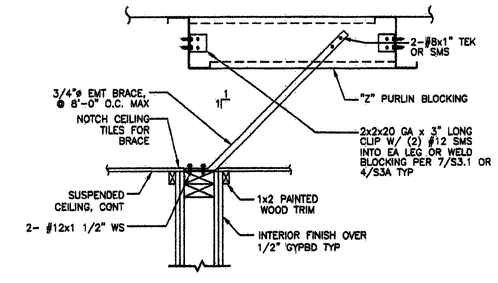
14 S5A — WALL TO FLOOR ATTACHMENT TYP DETAIL
1 1/2"=1'-0" (CONCRETE FLOOR SYSTEM)



15 S5A — WALL TO FLOOR ATTACHMENT TYP DETAIL
1 1/2"=1'-0" (CONCRETE FLOOR SYSTEM)



4 S5A — WALL HEADER DETAILS AND ALTERNATE
1 1/2"=1'-0"



7A S5A — ALT. INTERIOR WALL BRACING w/EMT BRACE
1 1/2"=1'-0" (BRACE PERPENDICULAR TO PURLINS)

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/06/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

2:12 PITCHED ROOF 24' x 40' THRU 120' x 40' RELOCATABLE BUILDINGS
WALL FRAMING DETAILS

AMS
American Modular Systems Inc.
797 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1418 EXP. 3-31-09 II Structural Engineer — STATE OF CALIFORNIA

REGISTERED LANDSCAPE ARCHITECT — No. C12831 Ren. 3-31-09 — STATE OF CALIFORNIA

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DIV. OF THE STATE ARCHITECT
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02 111612
AC. — FLS. — SS
DATE: 11/5/11

PROJECT No.

S5A

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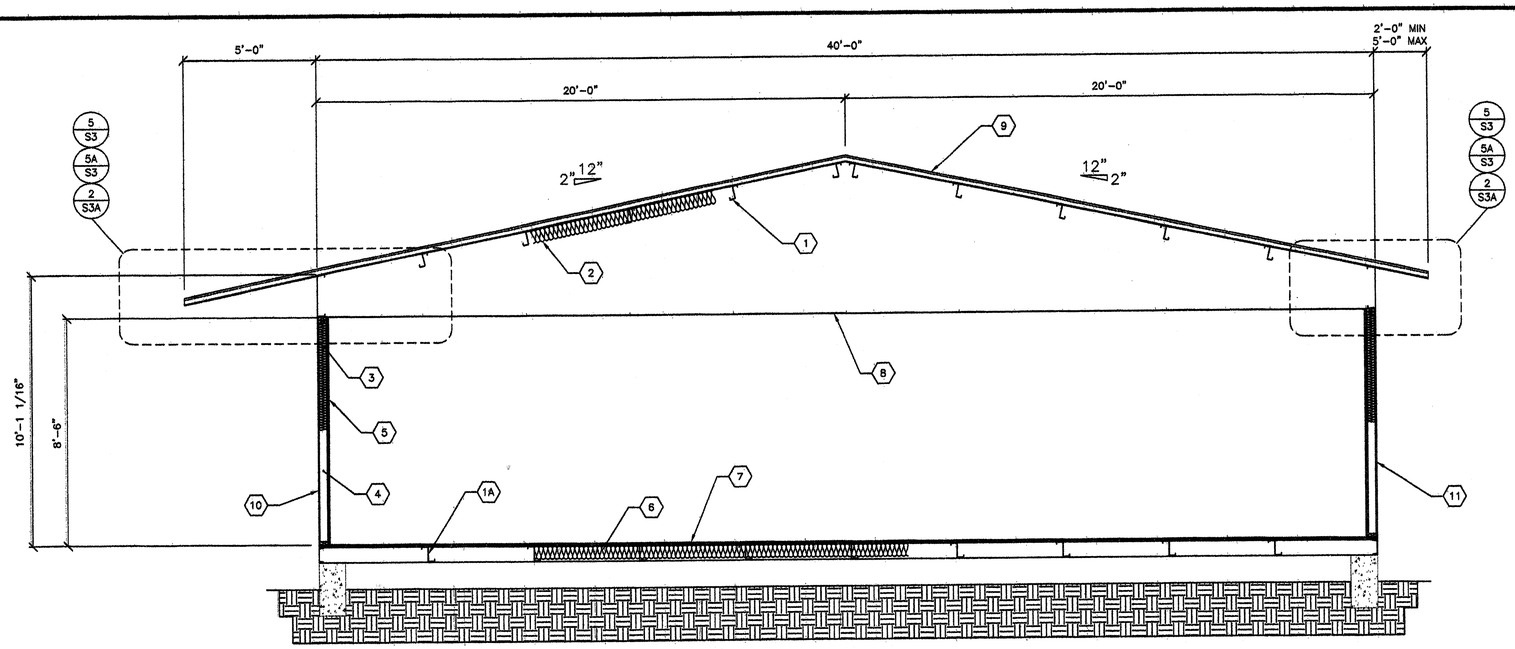
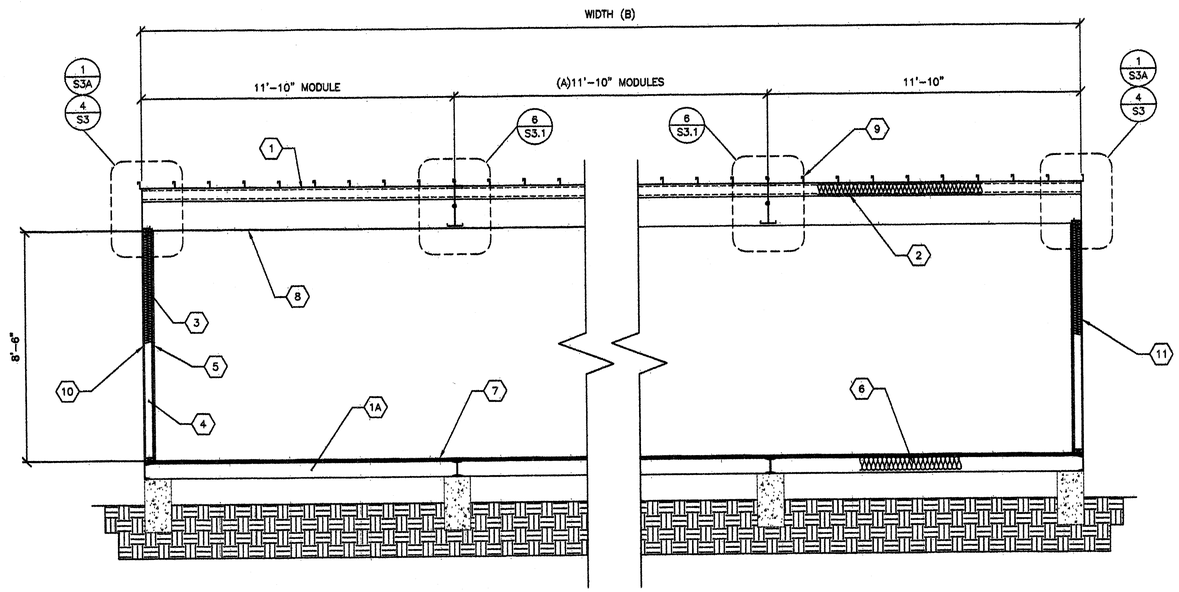


A S7 TYP. LONGITUDINAL SECTION
3/8"=1'-0"

- KEY NOTES -

1. "Z" PURLINS @ 48" O.C
1A. STEEL "Z" FLOOR JOISTS @ 48" O.C.
2. R-19 INSULATION w/22 GA WIRE @ 16" O.C
3. INSULATION w/KRAFT PAPER
4. 2x STUDS PER ELEV, S5
5. VINYL FABRIC ON RIGID TACKABLE BACKING, 8'-6" PANELS
6. INSULATION w/KRAFT PAPER AND CHICKEN WIRE
7. 1 1/8" PLYWOOD FLOOR SHEATHING FOR ALT SEE SHEET S2,
8. SUSPENDED T-BAR CEILING
9. METAL ROOF PANELS SEE ROOF FRAMING PLAN
10. TYPICAL PLYWOOD NAILING .131x2½" GALV @ 6" O.C PANEL EDGES (ALL EDGES BLOCKED).131x2½" GALV @ 12" O.C FIELD
11. EXTERIOR WALL FINISH PER EXTERIOR ELEVATIONS



B S7 TYP. TRANSVERSE SECTION
3/8"=1'-0"

- MODULE SCHEDULE -

BLDG SIZE (FT)	TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	"B" TOTAL BLDG WIDTH
24' x 40'	2	0	23'-8 1/4"
36' x 40'	3	1	35'-6 1/2"
48' x 40'	4	2	47'-4 3/4"
60' x 40'	5	3	59'-3"
72' x 40'	6	4	71'-1 1/4"
84' x 40'	7	5	82'-11 1/2"
96' x 40'	8	6	94'-9 3/4"
108' x 40'	9	7	106'-8"
120' x 40'	10	8	118'-6 1/4"

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 12/16/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD CITY SCHOOL DISTRICT
McKINLEY ELEMENTARY SCHOOL

2:12 PITCHED ROOF 24' x 40' RELOCATABLE BUILDINGS
BUILDING SECTIONS

American Modular Systems Inc.
787 Sprocket Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7015
americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER
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EXP. 3-31-13
Structural Engineer
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C12831
Ren. 3-31-13
STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. — FLS. — SS GR
DATE 1/12/11

PROJECT No.

S7

American Modular Systems Inc.

12'x40' RELOCATABLE BUILDING
BAKERSFIELD SCHOOL DISTRICT
(McKINLEY ELEMENTARY SCHOOL)

EXPOSED – STEEL

MODULAR STEEL MOMENT FRAME TEST & INSPECTION GUIDELINE

A SEPARATE TEST AND INSPECTION LIST IS TO BE SUBMITTED AS PART OF THE APPROVAL PROCESS.
THIS GUIDE DOES NOT REPLACE THE TEST AND INSPECTION LIST

TYPE OF MODULAR STEEL MOMENT FRAME BUILDING PROJECT
(X - INDICATES TEST OR INSPECTION TO BE DONE)

TESTS and INSPECTIONS			STOCKPILE		CONSTRUCTION OF (diaphragm material-foundation material)			RELOCATION OF CERTIFIED BUILDING	
MATERIAL TYPE		DESCRIPTION	Wood Floor Only	Concrete Floors	Plywood Floor Only - Wood Foundation	Plywood Floor - Concrete Foundation	Concrete Floor - Concrete Foundation	Wood Foundation	Concrete Foundation
COMPACTED FILL (Two Story Relocatable)	By Geotech	Fill Materials				X	X		X
		Proper fill materials, lift thickness, placement and compaction during placement. Continuous				X	X		X
		Compaction test only as ordered				X	X		X
CONCRETE	LT WT FILL OVER DECK (Two-story)	Mix Design							
		Waiver of Batch Plant Inspection See Note 1 for conditions and requirements							
		Inspect Placing over Steel Deck - by RBIP							
		Slump Test: determine Temperature of Concrete See Note 2 for additional test							
		Compression Tests							
	FOUNDATION	Mix Design				X			X
		Waiver of Batch Plant Inspection See Note 1 for conditions and requirements				X	X		X
		Inspect Placing - by Project Inspector				X	X		X
		Slump Test; determine Temperature of Concrete See Note 2 for additional test				X	X		X
		Compression Tests				X	X		X
REINFORCING STEEL		Sample and Test Bar Steel - #5 & Larger				X	X		X
		Inspect Placing at Project Site - by Project Inspector				X	X		X
STRUCTURAL STEEL		Mfr. Certified Mill Test Reports	X	X	X	X	X		
		Shop Fabrication	X	X	X	X	X		
		Inspection of Welds - Shop	X	X	X	X	X		
		Inspection of Welds - Field See Note 3			X	X	X	X	X
		Sample and Test all Unidentified Structural Steel and Steel Deck	X	X	X	X	X		
		Examine seam welds of structural tubes and pipes	X	X	X	X	X		
GROUNDING		Electrical grounding			X	X	X	X	X
SHOT PINS		Ceiling wire hangers	X	X	X	X	X		
EXPANSION ANCHORS		See Note 4				X	X		X
EPOXY ANCHORS		See Note 4				X	X		X
INSPECTOR CLASS (minimum requirements)			RBIP or Class 1		In Plant: RBIP or Class 1 Site: Class 4			Class 4	
SELECTION OF THE PROJECT INSPECTOR AND TESTING AGENCY			By the Owner and approved by DSA, A/E of Record and Structural Engineer		By the School District and approved by DSA, A/E of Record and Structural Engineer				
COST OF THE PROJECT INSPECTOR (CA Admin Code 4-333(b) AND TESTING AGENCY (CA Admin Code 4-335)			By the Owner		By the School District				
COPIES OF THE REPORT TO:			DSA (Original) I.O.R./ P.I. Manufacturer Arch/SE noted on DSA-1			Architect School District I.O.R./ P.I.	Structural Engineer DSA (Original) Manufacturer		

ITEMS IN RED FONT COLOR ARE USER NOTES AND INDICATE ITEMS THAT NEED TO BE VERIFIED FOR EACH SPECIFIC PC.
THE NOTES IN RED ABOVE AND BELOW ARE TO BE REMOVED PRIOR TO PLACING THE GUIDELINE ON THE DRAWINGS

Note 1:
Verify that Either Condition a or b are met:
a) Concrete Plant complies fully with ASTM C94, Section 8 and 9, and has a current certification indicating the plant has automatic batching and recording capabilities from the National Ready Mixed Concrete Association
b) Compressive strength: 3500 psi Specified - 2500 psi Design
Requirements c thru f are met:
c) Inspector to check first batching at start of work and furnish mix proportions to licensed weighmaster
d) Licensed Weighmaster to positively identify materials as to quantity and certify each load by a ticket
e) Tickets transmitted to Inspector of Record
f) Submit Weighmaster Affidavit

Note 2: Air Content Test as required based on site location (for cold weather conditions)
Note 3: Required where the details of the PC specify a Welding
Note 4: Required where the details of the PC specify the use of this type of anchor

BUILDING DATA	
OCCUPANCY	E OR B, OR A CATEGORY I & II WITH OCCUPANT LOAD LESS THAN 300.
TYPE OF CONSTRUCTION	VB
WIND LOAD	V= 85 MPH K_{zt} = 1.00 EXPOSURE = C K_h = 1.21 I = 1.00
FLOOR LIVE LOAD	50 PSF LIVE LOAD+15 P.S.F
ROOF LIVE LOAD	20 LBS/SQ FT
FIRE SPRINKLER SYSTEM WEIGHT (PSF)	1.5
ALLOWABLE SOIL PRESSURE (PSF)	1,500 FOR CONCRETE
FLOOD HAZARD AREA	NO
BUILDING AREA	480 SQ FT
CLIMATE ZONES	1–16
MODULES	MOMENT–RESISTANT
SYSTEM	12' x 40' MODULES
FOUNDATION TYPE	CONCRETE / WOOD
SEISMIC	S_S = 1.5 S_{D1} = 0.749 T = 0.190 S_1 = 0.000 I = 1.00 Site Class = D F_a = 1.0 R = 3.50 Seismic design F_v =1.5 Ω_0 = 3.00 category = D S_{DS} = 1.000 C_d = 3.000

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2008
2007 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2007 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
(2006 INTERNATIONAL BUILDING CODE VOLUMES 1–3 AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2005 NATIONAL ELECTRICAL CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.
(2006 UNIFORM MECHANICAL CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
(2006 UNIFORM PLUMBING CODE AND 2007 CALIFORNIA AMENDMENTS)
2008 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2004 SAFETY CODE FOR ELEVATORS AND ESCALATORS (ASME A17.1–2004)
2007 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2006 INTERNATIONAL FIRE CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 C.C.R.
(2006 INTERNATIONAL EXISTING BUILDING CODE AND 2007 CALIFORNIA AMENDMENTS)
2007 CALIFORNIA "GREEN" BUILDING REQUIREMENTS, PART 11, TITLE 24 C.C.R. (PENDING ADOPTION)
2007 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	Automatic Sprinkler Systems	2002 Edition
NFPA 14	Standpipe Systems	2003 Edition
NFPA 17	Dry Chemical Extinguishing Systems	2002 Edition
NFPA 17a	Wet Chemical Systems	2002 Edition
NFPA 20	Stationary Pumps	2003 Edition
NFPA 24	Private Fire Mains	2002 Edition
NFPA 72	National Fire Alarm Code (California Amended) (Note See UL, Standard 1971 for "Visual Devices")	2002 Edition
NFPA 253	Critical Radiant Flux of Floor Covering Systems	2006 Edition
NFPA 2001	Clean Agent Fire Extinguishing Systems	2004 Edition
ASME 17.1	Elevator Standard	2004 Edition

Reference code sections for applicable Standards – 2007 CBC Chapter 35 and 2007 CFC Chapter 45.

GENERAL NOTES

1. PC BUILDING EXITING IS BASED ON THE USE OR OCCUPANCY AND WILL BE REVIEWED AS SITE SPECIFIC. SEE ARCHITECTS PLANS
2* PC BUILDING LOCATED IN FIRE HAZARD SEVERITY ZONES PER WILDLAND URBAN INTERFACE FIRE AREAS (WUI) SHALL CONFORM TO CBC CHAPTER 7A. SEE ARCHITECTS PLANS
3* SITE USE SPECIFIC REQUIREMENT FOR AUTOMATIC SPRINKLER SYSTEM MIGHT BE REQUIRED BUT NOT INCLUDED IN THIS PC APPROVAL.

* NOT APPLICABLE OR REQUIRED FOR THIS PROJECT.

DRAWING INDEX

BASED ON PC# 02–109808

REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT
McKINLEY SCHOOL

12'X40' RELOCATABLE BUILDING
COVER SHEET

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

LICENSED ARCHITECT No. C12831 Ren. 2-31-11 STATE OF CALIFORNIA

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OFFICE OF REGULATION SERVICES
02–111612
AC. PO FEE $55 GR
DATE 1/12/11

PROJECT No.

T-S

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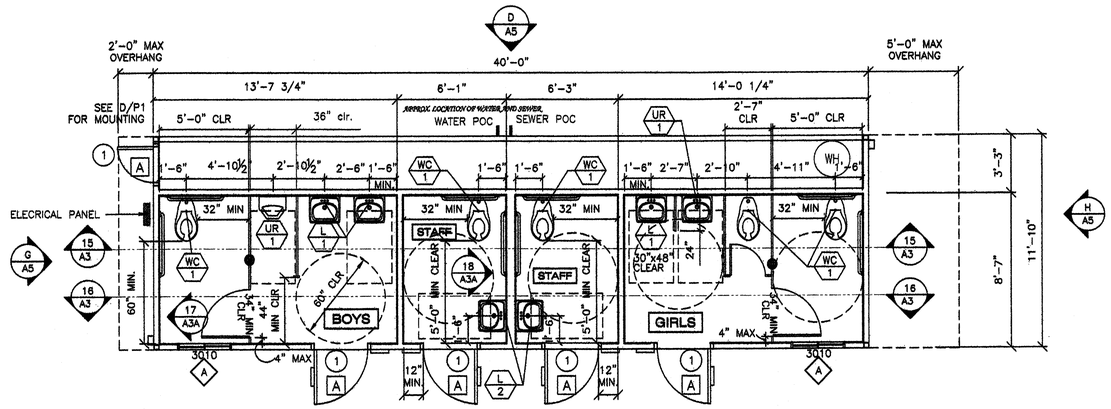

3 A1 **RESTROOM FLOOR PLAN** A A5
1/4"=1'-0" OPTION #3

- BUILDING FIXTURE SCHEDULE -

MARK	FIXTURE	TYPE @ KINDERGARTEN	TYPE @ ELEMENTARY	TYPE @ ADULT	REMARKS
WC 1	WATER CLOSET	WALL MOUNT TYPE AMERICAN STANDARD MODEL AFWALL 2257.103 OR EQUAL	WALL MOUNT TYPE AMERICAN STANDARD MODEL AFWALL 2257.103 OR EQUAL	WALL MOUNT TYPE AMERICAN STANDARD MODEL AFWALL 2257.103 OR EQUAL	MOUNT AS SPECIFIED IN FLOOR PLANS
WC 2	WATER CLOSET	FLOOR MOUNT TANK TYPE AMERICAN STANDARD MODEL BABY DEVORO 2315.016 OR EQUAL	FLOOR MOUNT TANK TYPE AMERICAN STANDARD MODEL COLONY 2399.010 OR EQUAL	FLOOR MOUNT TANK TYPE AMERICAN STANDARD MODEL CADET 2998.012 OR EQUAL	MOUNT AS SPECIFIED IN FLOOR PLANS
WC 3	WATER CLOSET	FLOOR MOUNT FLUSH VALVE TYPE AMERICAN STANDARD MODEL BABY DEVORO 2282.010 OR EQUAL	FLOOR MOUNT FLUSH VALVE TYPE AMERICAN STANDARD MODEL MADERA 2234.015 OR EQUAL	FLOOR MOUNT FLUSH VALVE TYPE AMERICAN STANDARD MODEL MADERA 3043.102 OR EQUAL	FLUSH VALVE ZURN MODEL Z6000 OR EQUAL. MOUNT AS SPECIFIED IN FLOOR PLANS
L 1	LAVATORY	AMERICAN STANDARD MODEL LUCERNE 0356.421 OR EQUAL	——	——	AMERICAN STANDARD SINGLE CONTROL LAVATORY FAUCET MODEL 2175.205 MOUNT AS SPECIFIED IN FLOOR PLANS
L 2	LAVATORY	AMERICAN STANDARD MODEL LUCERNE 0355.012 OR EQUAL	——	——	AS SPECIFIED IN FLOOR PLANS
UR 1	URINAL	WALL MOUNT TYPE AMERICAN STANDARD MODEL ALLBROOK 6541.132 OR EQUAL	——	——	FLUSH VALVE ZURN MODEL Z6003 OR EQUAL. MOUNT AS SPECIFIED IN FLOOR PLANS
M 1	MIRROR	WALL MOUNT TYPE BRADLEY MODEL 781-1830 OR EQUAL	——	——	MOUNT AS SPECIFIED IN FLOOR PLANS
GB 1	36" GRAB BARS	WALL MOUNT TYPE CREATIVE SPECIALTIES INTERNATIONAL MODEL R7436 (1 1/4" EXPOSED SCREW 36" & 42") OR EQUAL	——	——	18 GA. 304 STAINLESS STEEL SATIN FINISH MOUNT AS SPECIFIED IN FLOOR PLANS (STRUCTURAL STRENGTH OF GRAB BARS 250# MIN.)
GB 2	42" GRAB BARS				
WH 1	WATER HEATER	RHEEMGLAS ENERGY MISER ELECTRIC WATER HEATER RHEEM POINT OF USE MODEL 81VP2S THRU 82VP30-1 OR EQUAL	——	——	AVAILABLE IN 2 1/2, 6, 10, 15, 20 AND 30 GALLON MODELS MOUNT AS SPECIFIED IN FLOOR PLANS
FLS 1	FLOOR SINK	FLORESTONE FLOOR SINK MOLDED MOP RECEPTORS MODEL MSR-2424	——	——	AMERICAN STANDARD EXPOSED YOKE WALL MOUNT UTILITY FAUCET MODEL 8344.112
ULS 1	UTILITY SINK	WALL MOUNT TYPE ELJER RADFORD SINK MODEL 241-0354	——	——	AMERICAN STANDARD EXPOSED YOKE WALL MOUNT UTILITY FAUCET MODEL 8344.112
FV 1	FLUSH VALVE	ZURN FLUSH VALVE MODEL EXPOSED Z6000	——	——	FLOW OPTIONS: 1.6 GAL. LOW CONSUMPTION FLUSH WATER CLOSET VALVE MOUNT AS SPECIFIED IN FLOOR PLANS. HANDLE AT WIDE SIDE
FV 2	FLUSH VALVE	ZURN FLUSH VALVE MODEL EXPOSED Z6003	——	——	FLOW OPTIONS: 1.0 GAL. LOW CONSUMPTION FLUSH 3/4" URINAL VALVE MOUNT AS SPECIFIED IN FLOOR PLANS. HANDLE AT WIDE SIDE
CS 1	CLASSROOM SINK	TEKA SINGLE BOWL SINK MODEL #256-413 OR EQUAL	——	——	AS SPECIFIED IN FLOOR PLANS
CS 1	KITCHEN SINK	TEKA DOUBLE BOWL SINK MODEL #336-413 OR EQUAL	——	——	AS SPECIFIED IN FLOOR PLANS

A A1 **FIXTURE CALL OUTS**

NOTES:

1. CLOSER END CAPS ON FRONT AND REAR OF ROOF DECK. NO EXPOSED RIBS.
2. SOLID PLYWOOD DECK WITH FELT UNDERLAYMENT AT ALL STANDING SEAM METAL ROOFS.
3. CLOSED EAVES. NO EXPOSED ROOF-FRAMING.

- SHEET NOTES -

1. 3'-0" x 1'-0" WINDOW
2. ROOM I.D SIGNAGE PER DETAIL 2 & 7/AD (BY OWNER)
3. RESTROOM I.D SIGNAGE PER DETAIL 1 & 6/AD (BY OWNER)
4. FIRE EXTINGUISHER TOP OF BRACKET @ +48" A.F.F.
5. EXIT TACTILE SIGN PER DETAIL 10/AD (BY OWNER)
6. HVAC UNIT (LOCATION MAY VARY)
7. ELECTRICAL PANEL (LOCATION MAY VARY)
8. DOWNSPOUT (QUANITY & LOCATION MAY VARY)
9. FLOOR DRAIN (LOCATION MAY VARY) TYP.
10. FLOOR LIVE LOAD SIGN PER 1603A.3 2007 CBC
11. OPTIONAL TYPICAL RAMP REFER TO SHEET S6R FOR DETAILS
12. CLASSROOM ID & ISA PER DETAIL 5 & 9/AD

- GENERAL NOTES -

1. REFER TO SHEETS A2 & A2.1 FOR ADDITIONAL FLOOR PLAN CONFIGURATIONS
2. INTERIOR WALLS MAY OCCUR THROUGHOUT BUILDING REFER TO SHEET S5A FOR ATTACHMENTS.
3. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER CBC 1008.1.9
4. IF OCCUPANCY LOAD EXCEEDS 50 PROVIDE A SECOND EXIT DOOR PER CBC TABLE 1015.1
5. PROVIDE OCCUPANT LOAD SIGN (BY OWNER) CAPACITY POSTING PER CBC SECTION 1004.3 TITLE 19 C.C.R. SECTION 3.3.0. THIS ROOM SHALL BE POST WITH A DURABLE SIGN NEAR THE MAIN EXIT FROM THE ROOM.

SYMBOL SCHEDULE

- (#) DOOR (REFER TO SHEET A3 FOR TYPES)
- [X] DOOR HARDWARE TYPE REFER TO DOOR HARDWARE SCHEDULE
- (A) WINDOW (REFER TO SHEET A3 FOR TYPES)

DOOR HARDWARE SCHEDULE

A	EXTERIOR DOOR LOCKSET W/ LEVER HARDWARE PROVIDED BY DISTRICT
B	EXTERIOR DOOR PANIC BAR ~~W/ PULL ON EXTERIOR~~ VON DUPRIN 22LX230NL (WHEN REQUIRED)

Exterior Door
A) Hinges: Hager 4-1/2X4-1/2 butts, BB1279 US26D,1-1/2 pair each door with set screw in barrel and ball bearing design
C) Closer: Norton 7500DA or 8500BF series, LCN 1460 Del series or equal. (5 lbs. max. pressure) (15 lbs. max at fire doors.)
D) Weatherstripping: All exterior doors shall be weatherstripped with Pemko 299D, Ultra WS007, at door jambs and head or equal.
E) Threshold: Threshold shall be Pemko 271 AV 5" X 1/4" THICK aluminum with Pemko 216 AV Ultra TH042 door bottom.

BASED ON PC# 02-109808

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/04/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT

12' x 40' RELOCATABLE BUILDING
TYPICAL FLOOR PLANS

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

LICENSED ARCHITECT RAMON SANTIAGO No. C12831 Ren. 2-31-11 STATE OF CALIFORNIA

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PROJECT No.

A1

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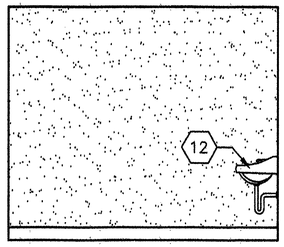
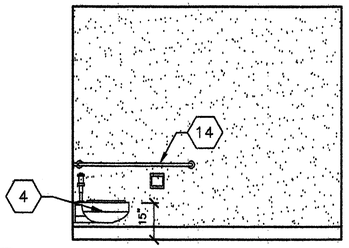
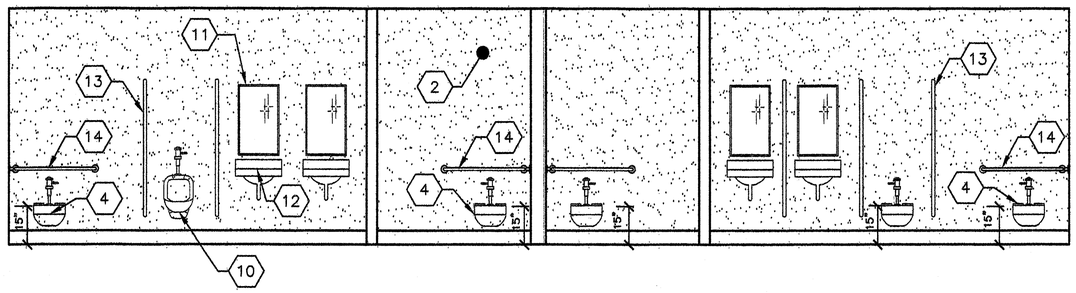


13 / A3 **RESTROOM ELEVATION** 1/4"=1'-0" (BOYS)

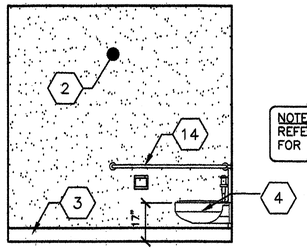


14 / A3 **RESTROOM ELEVATION** 1/4"=1'-0" (BOYS)

16 / A3 **RESTROOM ELEVATION** 1/4"=1'-0" OPTION #3

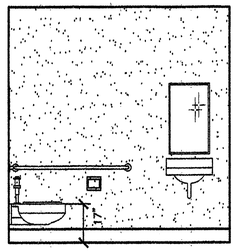


15 / A3 **RESTROOM ELEVATION** 1/4"=1'-0" OPTION #3



NOTE:
REFER TO SHEET AD
FOR REQUIRED HEIGHTS

17 / A3 **INTERIOR ELEVATION** 1/4"=1'-0" OPTION #3



18 / A3 **INTERIOR ELEVATION** 1/4"=1'-0" OPTION #3

- KEY NOTES -

1. TYP EXTERIOR DOOR
2. F.R.P. FIBER REINFORCED PLASTIC
2A. VINYL WRAPPED TACKABLE WALLS
3. 6" BASE
3A. 4" BASE
4. TYP. TOILET
5. HORN/STROBE J-BOX SEE ELECTRICAL SHEETS
6. LIGHT SWITCH SEE ELECTRICAL SHEETS
7. NOT USED
8. TYP GFIC OUTLET SEE ELECTRICAL SHEETS
9. 3010 OBSCURED GLASS WINDOW
10. TYP. URINAL
11. TYP. MIRROR
12. TYP. LAVATORY
13. TOILET PARTITION
14. GRAB BAR

NOTE: ALL INTERIOR SURFACE REQUIREMENTS PER CBC CHAPTER II

ROOM FINISHES SCHEDULE

ROOM NUMBER	ROOM NAME	FINISHES: FLOOR	BASE	WALLS: FRONT	REAR	RIGHT	LEFT	CEILING	CEILING HEIGHT	REMARKS
1	GIRLS RESTROOM	B	E	I	I	I	I	G	8'-6"	
2	STAFF RESTROOM	B	E	I	I	I	I	G	8'-6"	
3	STAFF RESTROOM	B	E	I	I	I	I	G	8'-6"	
4	BOYS RESTROOM	B	E	I	I	I	I	G	8'-6"	

A – CARPET PER STATE OF CALIF SPEC COMPLYING WITH GROUP 1, TYPE A OR TYPE B, CLASS 2, DENSITY 4600, DIRECT GLUE DOWN.
B – VINYL SHEET FLOORING
C – VCT. ARMSTRONG STANDARD OR EXCELON
D – TOP SET BASE. 4" BURKE
E – TOP SET BASE. 6" BRINGANTINE OR SANDOVAL
F – WALL FINISH. 1/2" VINYL TACKBOARD CLASS 1 OVER 1/2" GYP BOARD BACKING
G – 1/2" W.R. GYP BOARD. TAPE, TEXTURE, PAINTED FINISH
H – 1/2" GYP BOARD. TAPE, TEXTURE, PAINTED FINISH
I – 3/32" F.R.P. OVER 1/2" W.R. GYP BOARD
J – ACOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATIONS)
K – 1/2" VINYL TACKBOARD CLASS 1 OVER 5/8" TYPE "X" GYP BOARD BACKING
L – 5/8" TYPE 'X' GYP BOARD. TAPE, TEXTURE, PAINTED FINISH

DOOR SCHEDULE

DOOR NO.	FRAME OPENING SIZE	DOORS: MATERIAL	FIRE RATING	HARDWARE SET NO.	QUANTITY	FRAMES: MATERIAL	HEAD DETAIL	JAMB DETAIL	REMARKS
1	3'-0 x 7'-0"	HM		A	1	STL	9/A5A	4/A5A	
2	2'-0 x 7'-0"	HM		A	1	STL	9/A5A	4/A5A	

HM – HOLLOW METAL
AL – ALUMINUM
SST – STAINLESS STEEL
STL – STEEL FRAME. 16 ga. FULLY WELDED
WWF – WINDOW WALL FRAME
SC – SOLID CORE WOOD
HC – HOLLOW CORE WOOD

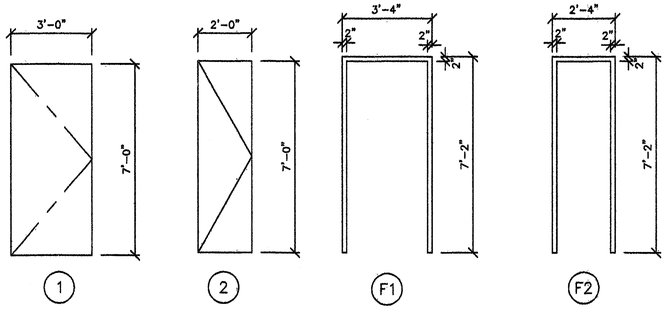
*CLASSROOMS > 1000 S.F WILL REQ PANIC HARDWARE PER CBC 1008.1.9

NOTE: REFER TO SHEETS A5A, A6A & A7A FOR HEAD & JAMB DOOR DETAILS W/ OPTIONAL EXTERIOR FINISHES

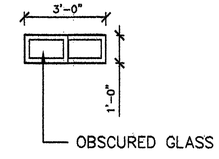
WINDOW SCHEDULE

WINDOW NO.	AMT.	TYPE	WIDTH	HEIGHT	FINISH	GLASS TYPE	U-FACTOR	SHGC
4	2	SLIDER	3'-0"	1'-0"	BRONZE	OBSCURED	0.780	0.430

EXTERIOR LITE – 3/16" MINIMUM TEMPERED GLASS OR LAMINATED AS – 1 GLASS OF SOLAR GRAY GLARE REDUCING TYPE WITH A LIGHT TRANSMISSION FACTOR OF 45% MAXIMUM.



5 / A3 **DOOR AND DOOR FRAME TYPES** 3/8"=1'-0"



6 / A3 **WINDOW TYPES** 3/8"=1'-0"

BASED ON PC# 02-109808

REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/03/10
SCALE: NOTED
DRAWN BY: MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTIRCT
COLLEGE HEIGHTS ELEMENTARY SCHOOL

12'X40' RELOCATABLE BUILDING
TYPICAL INTERIOR ELEVATIONS

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

REGISTERED ARCHITECT DANIEL PATRICK DOLAN No. C12631 Ren. 8-31-11 STATE OF CALIFORNIA

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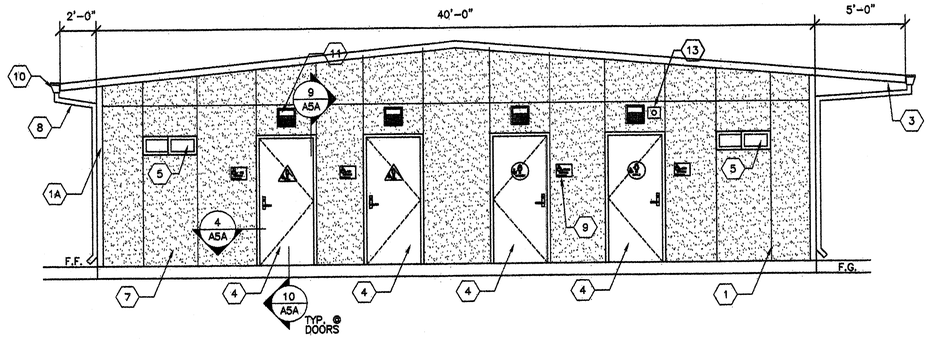
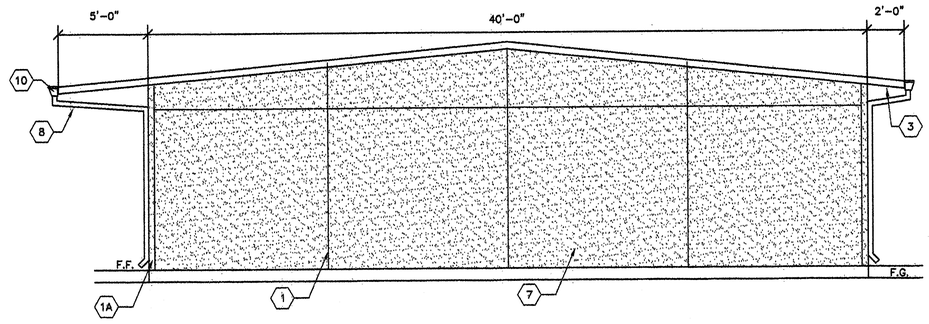
- SHEET NOTES -

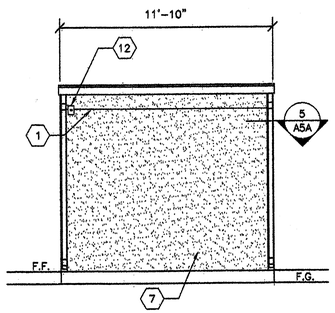
1. CONTROL JOINT (LOCATIONS MAY VARY)
1A. 16 GA. FLASHING TRIM @ MODLINES TYP.
2. STANDING SEAM METAL ROOFING
3. OVERHANG
4. TYPICAL EXTERIOR DOOR
5. WINDOW SEE SPEC'S
6. HVAC UNIT TYP.
7. ACRYLIC TEXTURED FINISH OVER HARDI-BOARD
8. DOWNSPOUT (QUANTITY & LOCATION MAY VARY)
9. ROOM ID SIGNAGE (NIC) TYP REFER TO DETAIL 5/AD
10. GUTTER
11. EXTERIOR LIGHT FIXTURE TYP
12. MODULAR IDENTIFICATION TAG, +90" ABOVE F.F.
13. FIRE ALARM HORN (REFER TO E1)
14. WP/G.F.C.I TYP. @ HVAC UNITS SEE ELECTRICAL SHEETS.



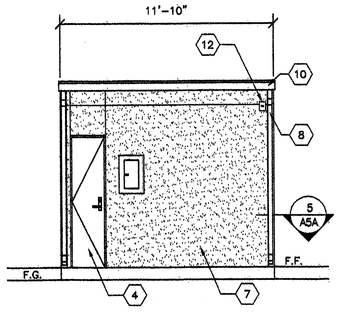
A / A5 FRONT EXTERIOR ELEVATION
1/4"=1'-0"



D / A5 REAR EXTERIOR ELEVATION
1/4"=1'-0"



G / A5 SIDE EXTERIOR ELEVATION
1/4"=1'-0"



H / A5 SIDE EXTERIOR ELEVATION
1/4"=1'-0"

BASED ON PC# 02-109808

REVISIONS		
NO	DATE	DESCRIPTION
1		
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4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT
McKINLEY SCHOOL

12'X40' RELOCATABLE BUILDING
TYPICAL EXTERIOR ELEVATIONS (SYNT. STUCCO OPTION)

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — No. C12631 Ren. 3-31-11 — STATE OF CALIFORNIA

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DATE 11/2/11

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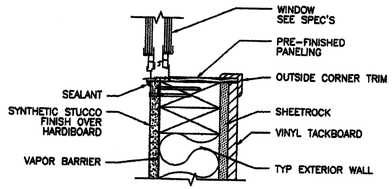
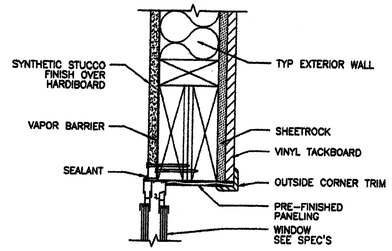
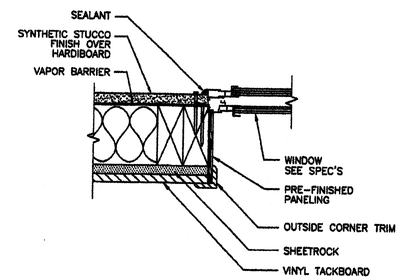


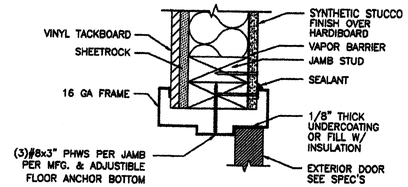
1 A5A TYP WINDOW SILL DETAIL 3"=1'-0"



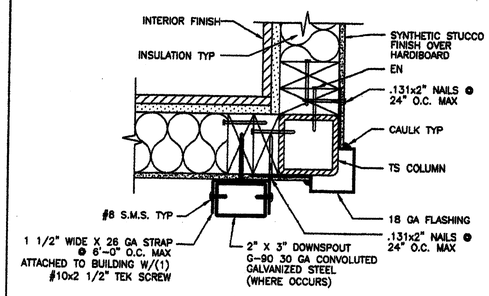
2 A5A TYP WINDOW HEADER DETAIL 3"=1'-0"



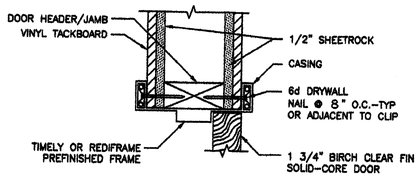
3 A5A TYP WINDOW JAMB DETAIL 3"=1'-0"



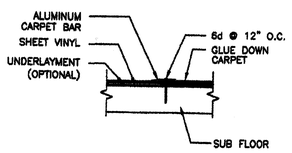
4 A5A TYP DOOR JAMB DETAIL 3"=1'-0"



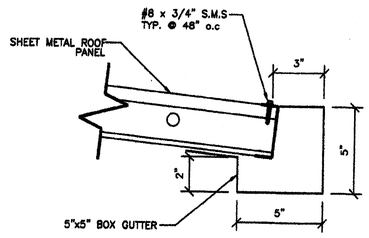
5 A5A DOWSPOUT ATTACHMENT DETAIL 3"=1'-0"



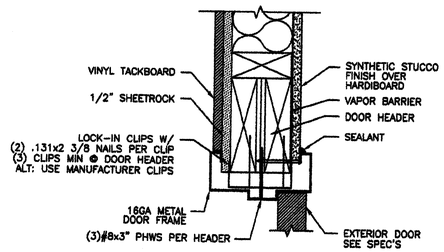
6 A5A TYP INTERIOR DOOR HEADER DETAIL 3"=1'-0"



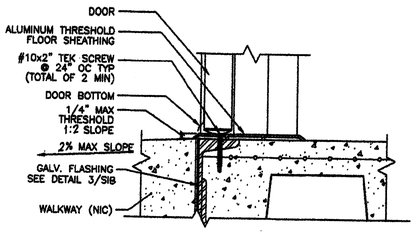
7 A5A FLOORING DETAIL 3"=1'-0"



8 A5A TYP GUTTER ATTACHMENT DETAIL 3"=1'-0"



9 A5A TYP DOOR HEADER DETAIL 3"=1'-0"



10 A5A THRESHOLD DETAIL 1 1/2"=1'-0"

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 2/24/09
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12'X40' RELOCATABLE BUILDING
ARCHITECTURAL DETAILS (SYNT. STUCCO OPTION)

AMS
American Modular Systems Inc.
707 Sprocket Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

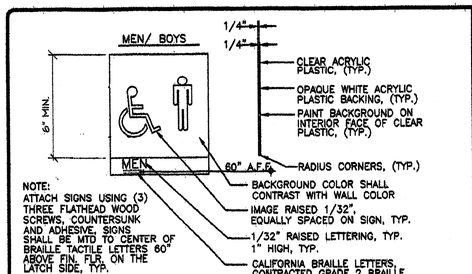
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER No. C12631 Exp. 3-31-11 STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02_111612
AC. PA FIELD GP
DATE 7/12/11

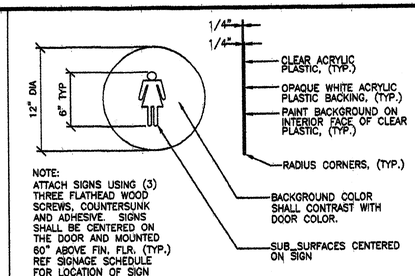
PROJECT No.

A5A



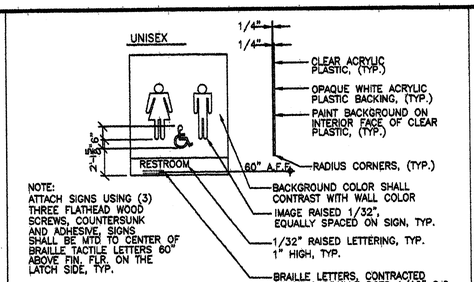
NOTE:
ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE MTD TO CENTER OF BRAILLE TACTILE LETTERS 60" ABOVE FIN. FLR. ON THE LATCH SIDE, TYP.

1 AD — WALL MTD RESTROOM SYMBOL
N.T.S.



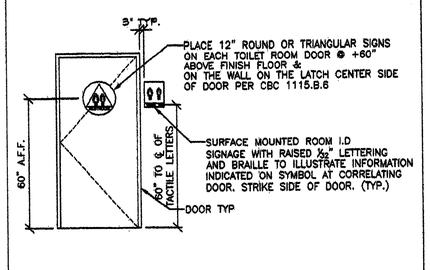
NOTE:
ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE CENTERED ON THE DOOR AND MOUNTED 60" ABOVE FIN. FLR. (TYP.) REF SIGNAGE SCHEDULE FOR LOCATION OF SIGN

2 AD — WOMEN'S RESTROOM SIGNAGE
N.T.S.

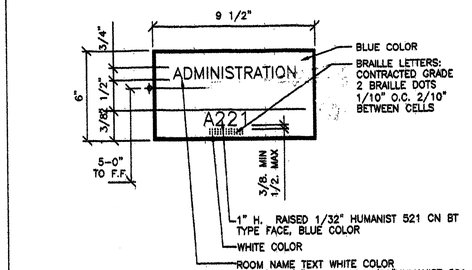


NOTE:
ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE MTD TO CENTER OF BRAILLE TACTILE LETTERS 60" ABOVE FIN. FLR. ON THE LATCH SIDE, TYP.

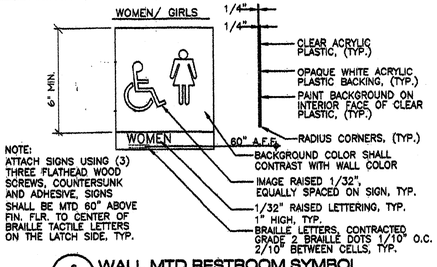
3 AD — WALL MTD RESTROOM SYMBOL
N.T.S.



4 AD — ROOM IDENTIFICATION SIGNAGE
N.T.S.

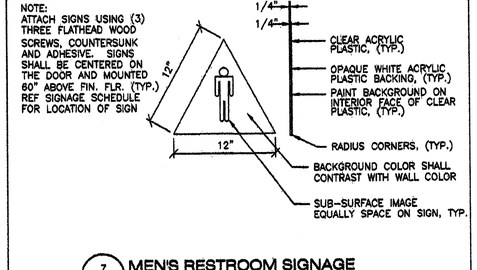


5 AD — ROOM I.D. SIGNAGE
N.T.S.



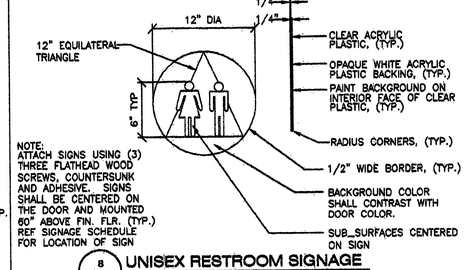
NOTE:
ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE MTD 60" ABOVE FIN. FLR. TO CENTER OF BRAILLE TACTILE LETTERS ON THE LATCH SIDE, TYP.

6 AD — WALL MTD RESTROOM SYMBOL
N.T.S.



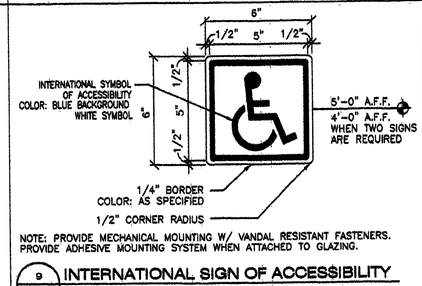
NOTE:
ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE CENTERED ON THE DOOR AND MOUNTED 60" ABOVE FIN. FLR. (TYP.) REF SIGNAGE SCHEDULE FOR LOCATION OF SIGN

7 AD — MEN'S RESTROOM SIGNAGE
N.T.S.



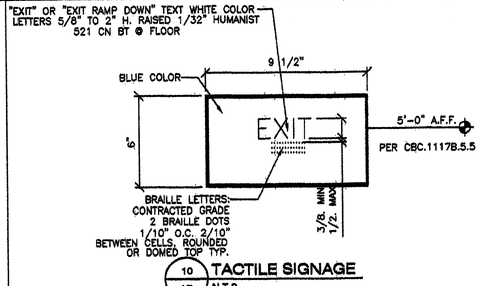
NOTE:
ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE CENTERED ON THE DOOR AND MOUNTED 60" ABOVE FIN. FLR. (TYP.) REF SIGNAGE SCHEDULE FOR LOCATION OF SIGN

8 AD — UNISEX RESTROOM SIGNAGE
N.T.S.



NOTE: PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTENERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING.

9 AD — INTERNATIONAL SIGN OF ACCESSIBILITY
N.T.S.



10 AD — TACTILE SIGNAGE
N.T.S.

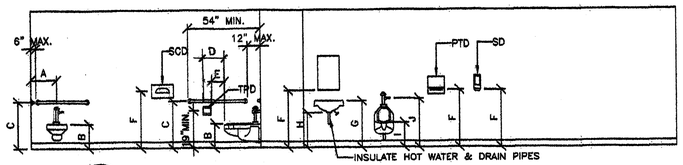
DIMENSIONS FOR ACCESSIBILITY IN TOILET FACILITIES

	FIXTURE TYPE	ADULT (AGE 12 AND OVER) DIMENSION	ELEMENTARY DIMENSION	KINDERGARTEN & PRE-SCHOOL DIMENSION	REMARKS
A	TOILET CENTERLINE FROM WALL	18"	15"	12"	FLUSH VALVE TO WIDE SIDE OF STALL TYP
B	TOILET SEAT HEIGHT (TO TOP OF SEAT)	17"-19"	15"	10"-12"	
C	GRAB BAR HEIGHT	33"	27"	20-22" ABOVE SEAT *	36" GRAB BAR @ REAR OF TOILET (250 LB CAPACITY TYP) (ALLOWED @ 38" A.F.F. @ TANK TYPE TOILET) 42" GRAB BAR @ SIDE OF TOILET
D	TOILET PAPER DEPENSER IN FRONT OF TOILET (TPD)	12" MAX.	6" MAX.	6" MAX. **	12" IN FRONT OF TOILET ROLL PAPER HOLDER WITHOUT STOPS
E	NAPKIN DISPOSAL IN FRONT OF TOILET (SND)	12" MAX.	12" MAX	N/A	24" IN FRONT OF TOILET (BY OWNER)
F	DISPENSER OR MIRROR HEIGHT	40" MAX.	36" MAX.	32" MAX.	
G	LAVATORY/SINK TOP HEIGHT	34" MAX.	29" MAX.	24" MAX.	WRAP DRAIN WATER IF HOT WATER OCCURS
H	LAVATORY/SINK KNEE CLEARANCE	27" MIN.	24" MIN.	19" MIN.	
I	URINAL LIP HEIGHT	17" MAX.	15" MAX.	13" MAX.	
J	URINAL FLUSH HANDLE HEIGHT	44" MAX.	37" MAX.	32" MAX.	
K	DRINKING FOUNTAIN BUBBLER HEIGHT	38" MAX.	32" MAX.	30" MAX.	
L	DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	24" MIN.	22" MIN.	
M	RAMP/STAIR HANDRAIL HEIGHT	34"-38"	27"	22"	

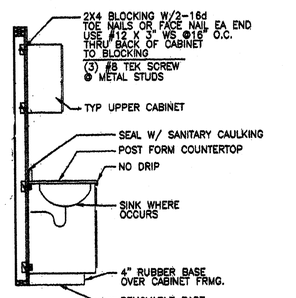
*= ABOVE SEAT
**= DEVIATES FROM CODE REQUIREMENTS AND REQUIRES A WRITTEN FINDING OF UNREASONABLE HARDSHIP
NOTE: 1. ALL ITEMS ON THIS SCHEDULE DO NOT NECESSARILY OCCUR IN THE PROJECT
2. HEIGHTS NOTED ON INTERIOR ELEVATIONS SHALL GOVERN OVER THOSE SHOWN HERE.

SCD = SEAT COVER DISPENSER	TPD = TOILET PAPER DISPENSER
PTD = PAPER TOWEL DISPENSER	SND = SANITARY NAPKIN DISPOSAL (WHERE APPLICABLE)
SD = SOAP DISPENSER	(ALL TOILET ACCESSORIES ARE N.I.C)

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING AND CONSTRUCTION

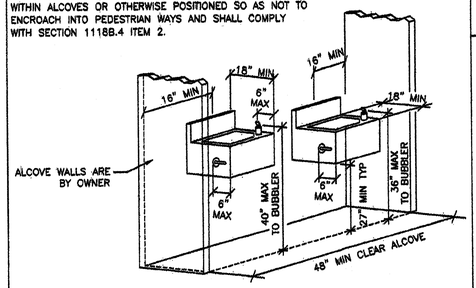


15 AD — ACCESSIBLE HEIGHTS @ TOILETS
N.T.S.

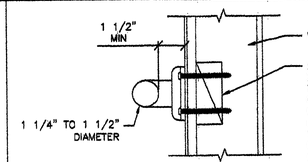


X1 AD — CABINET BLOCKING DETAIL
1/2"=1'-0"

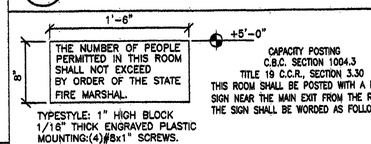
NOTE:
ALL DRINKING FOUNTAINS SHALL BE LOCATED COMPLETELY WITHIN ALCOVES OR OTHERWISE POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS AND SHALL COMPLY WITH SECTION 1118B.4 ITEM 2.



13 AD — DRINKING FOUNTAIN REQUIRED CLEARANCES
N.T.S.



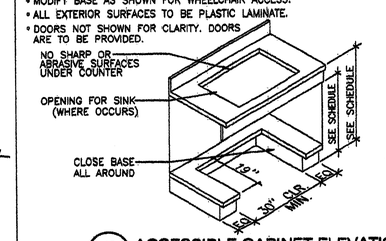
12 AD — GRAB BAR BLOCKING DETAIL
3"=1'-0"



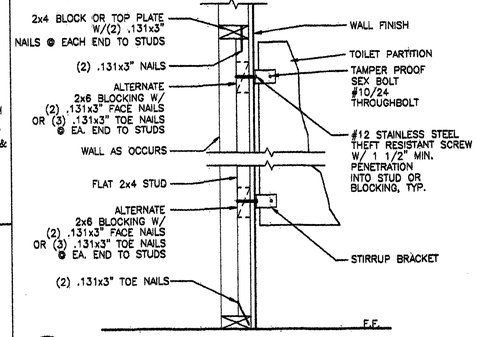
TYPESTYLE: 1" HIGH BLOCK
1/16" THICK ENGRAVED PLASTIC
MOUNTING:(4)#8x1" SCREWS.

14 AD — OCCUPANT LOAD SIGN
NTS

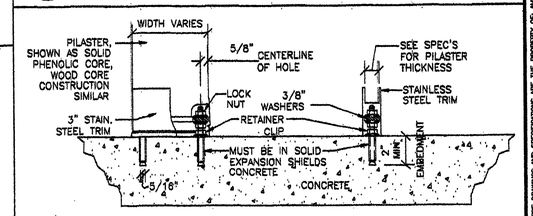
NOTES:
- MODIFY BASE AS SHOWN FOR WHEELCHAIR ACCESS.
- ALL EXTERIOR SURFACES TO BE PLASTIC LAMINATE.
- DOORS NOT SHOWN FOR CLARITY. DOORS ARE TO BE PROVIDED.



16 AD — ACCESSIBLE CABINET ELEVATION
N.T.S.



16 AD — TOILET PARTITION ANCHORAGE BLOCKING
1" = 1'-0"



DRILL HOLES FOR FLOOR ATTACHMENT 5/8" FROM EDGE OF PILASTER. TYPICAL FOR ALL LOCATIONS.
NOTE: PLACE STAINLESS STEEL TRIM ON PILASTER, SLIDE UP BEFORE SECURING PILASTER TO FLOOR ATTACHMENT.

17 AD — TOILET PARTITION FLOOR ATTACHMENT
1/2" = 1'-0"

REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 2/24/09
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12'X40' RELOCATABLE BUILDING
ACCESSIBLE DETAILS

American Modular Systems Inc.
757 Spreckels Ave. Manteca, CA 95336
(209)825-1221 Fax (209)825-7015
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — No. C12631 — STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02_111612
AC DSA SS GR
DATE 7/12/11

PROJECT No.

AD

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GENERAL NOTES AND SPECIFICATIONS

SECTION 1A GENERAL REQUIREMENTS

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL REQUIREMENT APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH TRADE SECTION.

B. NAME BRANDS ARE INDICATED TO ESTABLISH A STANDARD OF QUALITY. ITEMS OF EQUAL OR BETTER QUALITY MAY BE SUBSTITUTED FOR THE LISTED BRAND NAMED PRODUCTS WITH THE WRITTEN APPROVAL OF D.S.A. AND THE ARCHITECT.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLES 19 AND 24 CALIFORNIA CODE OF REGULATIONS 2007 C.B.C. NO CHANGES SHALL BE MADE FROM D.S.A. APPROVED DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL OF D.S.A. AND THE ARCHITECT.

2. SCOPE OF WORK

A. THE WORK CONSISTS OF MANUFACTURING OFF-SITE IN A PLANT AND INSTALLING ON-SITE,MODULAR RELOCATABLE BUILDINGS AS DEFINED HEREIN AND SHOWN AND DETAILED ON DRAWINGS.

B. ALL REQUIREMENTS OF TITLES 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS RELATING TO INSPECTIONS AND VERIFIED REPORTS SHALL BE COMPLIED WITH AND SHALL INCLUDE:

1. GENERAL RESPONSIBLE CHARGE OF FIELD ADMINISTRATION BY THE ARCHITECT OF RECORD.
2. INSPECTION IN-PLANT DURING THE COURSE OF CONSTRUCTION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT. THE INSPECTOR SHALL BE RESPONSIBLE FOR AND APPROVED TO INSPECT THE GENERAL CONSTRUCTION WELDING,MECHANICAL, AND ELECTRICAL WORK. COST OF THESE INSPECTIONS SHALL BE BORNE BY THE SCHOOL DISTRICTS.
3. ON-SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY INSTALLATION OR CONNECTIONS BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT.
4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIVISION OF THE STATE ARCHITECT.
5. ADDENDUMS SHALL BE SIGNED BY THE ARCHITECT & APPROVED BY D.S.A.
6. CHANGE ORDERS SHALL BE SIGNED BY THE OWNER & ARCHITECT & APPROVED BY D.S.A.
7. THE TESTING LAB SHALL BE IN THE EMPLOY OF THE OWNER.
8. ALL CONTRACTORS SHALL VERIFY ALL WORK CONDITIONS, DIMENSIONS AND DETAILS AND REPORT ANY OR ALL OMISSIONS AND DISCREPANCIES TO THE DESIGNER/OWNER IMMEDIATELY BEFORE COMMENCING WORK.
9. EACH CONTRACTOR TO BE RESPONSIBLE TO SEE THAT THEIR WORK CONFORMS TO ALL GOVERNMENTAL CODES WHETHER OR NOT SO STATED ON THE DRAWINGS.
10. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE LATEST REQUIREMENTS OF THE GOVERNING BUILDING CODES IN EFFECT AT TIME OF DSA APPLICATION.
11. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED AND ERECTED PER MANUFACTURER'S DIRECTIONS AND INSTRUCTIONS.
12. SHOP DRAWINGS MAY BE REQUIRED. IF SO, THEY WILL BE ACCURATELY DRAWN TO A LARGE ENOUGH SCALE TO SHOW ALL PERTINENT FEATURES OF THE ITEM AND ITS CONNECTION TO RELATED WORK.
13. THE MANUFACTURER OF BUILDING IS TO PLACE TWO PERMANENT METAL IDENTIFICATION LABEL ON EACH MODULE, MECHANICALLY FASTENED TO THE FRAME SEE "GENERAL DESIGN REQUIREMENTS", THIS PAGE.
    FOR PROJECTS MANUFACTURED OFF-SITE, THE PLANT INSPECTOR IS TO INDICATE THE MANUFACTURER'S NAME AND SERIAL NUMBER OF EACH MODULE ON THE VERIFIED REPORT AND D.S.A. APP. NUMBER.
14. ALL TESTS AND INSPECTIONS REQUIRED BY DSA SHALL BE COMPLIED WITH. ALL TESTS REQ. BY FIRE AND LIFE SAFETY REGULATIONS SHALL BE BY A NATIONALY RECOGNIZED TESTING LABORATORY.

SECTION 2 FOUNDATION

1. ASSUMED ALLOWABLE SOIL BEARING: 1000 PSF FOR WOOD FOUNDATIONS, 1500 P.S.F. FOR CON CRETE FOUNDATIONS EMBEDDED 12" MIN BELOW GRADE.
2. FOOTINGS SHALL BE LOCATED ON UNDISTURBED FIRM NATURAL SOIL, APPROVED COMPACTED FILL OR ON AN APPROVED PAVED SURFACE.

NOTE: THE FOUNDATION SYSTEM PRESENTED HEREIN COMPLIES WITH INTERPRETATION OF REGULATIONS, IR 16-1, ISSUED BY DIVISION OF THE STATE ARCHITECT FOR TEMPORARY BUILDINGS, THIS FOUNDATION SYSTEM IS NON-CONVENTIONAL AND THE STRUCTURAL ENGINEER TAKES NO RESPONSIBILITY FOR ITS CONSTRUCTION OR LONGEVITY.

WORK NOT INCLUDED:

A. ALL ON-SITE OR OFF-SITE UTILITIES AND THE CONNECTION OF THEM TO THE BUILDING UNLESS INDICATED ON THE DRAWINGS.
B. ALL LEVELING, GRADING OR OTHER SITE PREPARATION EXCEPT CONCRETE OR WOOD LEVELING STRIPS WHERE REQUIRED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
C. FIRE ALARM SYSTEM, PROGRAM BELL, PUBLIC ADDRESS SYSTEM,INTERCOM SYSTEM,TV,TELEPHONE SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS, OR MODIFIED BY CHANGE ORDER.
4. WHEELS AND HITCH SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
5. ACCESSIBILITY OF SITE
   THE SCHOOL DISTRICT SHALL PROVIDE ACCESS TO THE SITE FOR THE INSTALLATION OF BUILDINGS, REMOVAL OF TREES SHRUBS,FENCING, SPRINKLERS ETC. NECESSARY FOR THE MOVE-IN OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

SECTION 5 STEEL

A. GENERAL - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC STANDARD SPECIFICATIONS,TITLE 24 OF CALIFORNIA CODE OF REGULATIONS AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OF STEEL STRUCTURAL MEMBERS. A COPY OF TITLE 24 SHALL BE KEPT AT THE JOBSITE AT ALL TIMES.

B. WELDING - ALL WELDING DONE BY SHIELDED ELECTRIC-ARC OR FLUX CORED-ARC PROCESS COMPLYING WITH REQUIREMENTS OF THE "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY. WELDING DONE BY OPERATORS QUALIFIED BY TESTS ACCEPTABLE TO THE DIVISION OF THE STATE ARCHITECT.
   WELDING INSPECTION PER TITLE 24,PART 2,CCR, SECTION 1704A.3.1
   WELDING ELECTRODE SHALL BE E70XX.
   ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20FT-LBS AT ZERO DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURES CERTIFICATIONS PER SECTION 2211A2.3 CBC 2007.
   1. STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A-36
   2. PIPE COLUMNS SHALL COMFORM TO A.S.T.M. A-53 WITH SULFUR CONTENT NOT EXCEEDING 0.05%.
   3. STEEL TUBING SHALL CONFORM TO A.S.T.M. A-500 GRADE B OR A.S.T.M. A579 GRADE 50 FOR GAUGE TUBING-TYP. U.N.O.
   4. STRUCTURAL WELDS ARE DESIGNED FOR FULL ALLOWABLE STRESS UNLESS OTHERWISE NOTED.

C. ERECTION - STRUCTURAL STEEL ERECTED TRUE,STRAIGHT, PLUMB AND TO ITS DESIGNATED LOCATIONS. FIELD CONNECTIONS BOLTED OR WELDED AS INDICATED ON THE DRAWINGS.

D. NAILS,BOLTS, SCREWS AND NUTS ETC.- FOR EXTERIOR WORK SHALL BE CADMIUM PLATED OR GALVANIZED.
   1. BOLTS FOR STRUCTURAL STEEL JOINTS SHALL CONFORM TO A.S.T.M. A-307 UNLESS OTHERWISE NOTED. ALL HOLES FOR MACHINE AND CARRIAGE BOLTS THROUGH STEEL TO BE DRILLED, OR TORCH PILOT HOLE AND REAM MIN. 1/16" TO BOLT SIZE. NELSON STUDS (WELDED TO STEEL) MAY BE SUBSTITUTED FOR BOLTS SAME LENGTH AND DIAMETER.

E. HANDRAILS - FABRICATED, AS DETAILED, WELDS GROUND SMOOTH.

F. SHOP PAINT
   1. EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
   2. NON-EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
   3. ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.

G. TESTS
   1. PROVIDE MILL CERTIFICATES OR TEST ALL STEEL MEMBERS PER T-24 PART 2,CCR SECTION 2212A.1

SECTION 6A CARPENTRY

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL CARPENTRY
2. MATERIALS
   LUMBER GRADE MARKED IN ACCORDANCE WITH "STANDARD GRADING AND DRESSING RULE NO. 17" OF WEST COAST LUMBER INSPECTION BUREAU, OR "GRADING RULES FOR LUMBER,3RD EDITION OF WESTERN WOOD PRODUCTS ASSOCIATION OR W.C.L.I.B.. PLYWOOD GRADE MARKED IN ACCORDANCE WITH PRODUCT STANDARD PS 1-95 FOR SOFTWOOD PLYWOOD, OF AMERICAN PLYWOOD ASSOCIATION.
   EACH SHEET SHALL BEAR THE STAMP OF APA, PITTSBURGH TESTING, OR TECO.

A. JOISTS, PLATES, STUDS-DOUGLAS FIR S4S #2 U.N.O.
   NOTE: MSR 1650 E1.5 MAY BE SUBSTITUTED FOR #2 GRADE IF IT MEETS THE STRUCTURAL REQUIREMENTS FOR FLOOR AND ROOF MEMBERS.
B. H.F. HEADERS, POSTS AND TIMBERS-DOUGLAS FIR S4S #1
C. BLOCKING - DOUG FIR #3,OR HEM FIR #3,OR STD. & BET.
D. SILLS AND LUMBER & SHIM PLATES IN CONTACT WITH CONCRETE,MASONRY OR EARTH, DOUG FIR #2 PRESSURE TREATED IN ACCORDANCE WITH CBC 2304.11.2 EACH PIECE SHALL BEAR AWPB STAMP. AWPA STANDARD U1 & T1 GROUND CONTACT,D.F.#2 ABOVE GROUND.
E. MOISTURE BARRIER - KRAFT WATERPROOF BUILDING PAPER, OR 15 LB. FELT, CBC 2007 17-1 FOR KRAFT, 32-1 FOR FELT.
F. STUDS - S4S DOUG FIR #2. OR #2 HEM FIR. MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF INSTALLATION.
G. FASTENERS -NAILS SHALL BE CORROSION RESISTANT PER C.B.C. 2304.9.1.1 COMMON NAILS FOR EXT. SIDING & FNDN. ONLY.
H. BUILDING TRIM - 2X RESAWN SELECT D.F.,H.F.,OR CEDAR
J. DOOR/WINDOW TRIM - 1X4 RESAWN D.F.,H.F.,OR CEDAR.
K. FRAMING CONNECTORS SHALL BE FROM SIMPSON CATALOG LATEST ED.
M. FIRE BLOCKS SHALL CONFORM TO CBC SECTION 717
N. ALL NAILS SHALL BE COMMON NAILS UNLESS OTHERWISE NOTED.
O. FOUNDATION LUMBER: ALL CUT ENDS AND HOLES IN PRESSURE TREATED LUMBER SHALL BE TREATED WITH "CUPRINOL".

3. WORKMANSHIP

A. FRAMING - SECURELY NAILED,BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT, FITTED AND ASSEMBELED LEVEL PLUMB AND TRUE TO LINE. TRIM IN AS LONG LENGTHS AS POSSIBLE WITH ALL STANDING TRIM IN ONE PIECE. TRIM SEALED AT ALL EDGES.
B. NAILING - IN ACCORDANCE WITH TITLE 24, CALIFORNIA BUILDING CODE, TABLE 2304.9.1
C. EXTERIOR WALLS - FACTORY FABRICATED. CAULKING PROVIDED BETWEEN PERIMETER OF WALL AND STRUCTURAL MEMBERS PROVIDING WEATHER-PROOF AND WATER-TIGHT SEAL. NECESSARY CLOSERS,SEALS, AND FLASHINGS PLACED AT TOP AND BASE SUPPORT OF PANELS AND AROUND OPENINGS.
D. NAILS INTO P.T. LUMBER TO BE HOT DIPPED GALVANIZED.
E. MACHINE APPLIED NAILING:
   USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE.
   MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD.
   IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
F. MOISTURE BARRIER - APPLIED TO STUDS WEATHER-BOARD FASHION, HORIZONTAL
   JOINTS LAPPED MIN 6" INCLUDING BUILDING CORNERS.
   SHEATHING APPLIED OVER MOISTURE BARRIER.
G. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING UNLESS TRANSPARENT TYPE.

SECTION 7B SHEET METAL

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL INDICATED SHEET METAL.
2. MATERIALS
   A. SHEET METAL - STEEL SHEETS HOT DIP GALVANIZED WITH 1.25 OZ. PER SQUARE FOOT ZINC COATING CONFORMING TO ASTM A526. MINIMUM 26 GA. UNLESS OTHERWISE NOTED ON THE DRAWINGS.
   B. SOLDER - OF STAND,GRADE "A" OF EQUAL PARTSARD BRAND LEAD AND TIN ASTM B32.
   C. FLUX - ZINC SATURATED MURIATIC ACID.
   D. GUTTERS: 26 GA. G-90 GALV. STEEL.
      DOWNSPOUTS: 2"X3" CONVOLUTED 30 GA. G-90 GALV. STEEL.
      GUTTER ENDCAPS: 26 GA. G-90 GALV. STEEL.
      GUTTER CLIPS: 18 GA. G-90 GALV. STEEL
3. WORKMANSHIP
   SHEET METAL ACCURATELY FORMED TO DIMENSIONS AND SHAPES DETAILED WITH TRUE STRAIGHT LINES, CORNERS AND ANGLES. FLASHING INSTALLED IN LONGEST LENGTHS POSSIBLE. EXTERIOR WORK FORMED, FABRICATED AND INSTALLED SO THAT IT ADEQUATELY PROVIDES FOR EXPANSION AND CONTRACTION IN THE COMPLETED WORK AND FINISHES WATER AND WEATHER TIGHT. ALUMINUM SHALL BE SEPARATED FROM FERROUS METAL BY POLYETHYLENE TAPE OR FLOOD COAT OF ASPHALTIC PAINT.

SECTION 7C METAL ROOFING

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL METAL ROOFING. TEST RESULTS SHOWING THE ROOFING SYSTEM WILL WITHSTAND THE UPLIFT OF A 85 MPH WIND SHALL BE SUBMITTED WITH THE PLANS AND SPECIFICATIONS.
2. MATERIALS
   A. ROOFING - 1 1/4" INCH STANDING SEAM MIN 26-GAUGE G-90 GALV. INTERLOCKING (UNPENETRATED) SHEET STL PANELS (G90).
   B. ALTERNATE: ROOFING - 3 INCH STANDING SEAM MIN 20-GAUGE G-90 GALV. INTERLOCKING (UNPENETRATED) SHEET STL PANELS (G90).
   C. ROOFING: CLASS B FIRE RATING

SECTION 7J SEALANT

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIAL AND SERVICES TO SEAL BUILDINGS.
2. MATERIALS
   VULKEM SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL FOR ROOFS. "GEOCEL" SILICONIZED CAULK, GE, DUPONT, EAGLESEAL OR DAP FOR ALL OTHER APPLICATIONS, OR EQUAL.
3. WORKMANSHIP
   SEALANT APPLIED TO DRY CLEAN SURFACES, WHEREVER INDICATED ON DETAILS AND AS NEEDED TO MAKE BUILDING WATERTIGHT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SECTION 8 CONCRETE

1. CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318-05
2. THE MINIMUM 28 DAY STRENGTH AND TYPE OF CONCRETE SHALL BE A FOLLOW:
   SLABS ON GRADE & FOUNDATIONS 2500 PSI (150 PCF)
   CONCRETE OVER METAL DECK 2500 PSI (110 PCF) OR (150 PCF)
3. REINFORCING SHALL CONFORM TO ASTM A615--GRADE 40 UON.
4. CONCRETE COVERAGE SHALL BE AS FOLLOWS, UON ON DRAWINGS:
   CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLABS) .....3"
   CONCRETE EXPOSED TO GROUND BUT PLACED IN FORMS.....2"
   SLABS (ON GROUND).....POSITION IN CENTER OF SLAB
5. ALL BARS SHALL HAVE A CLASS B MINUMUM SPLICE LAP UON.
6. NOTIFY THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.

SECTION 8A EXTERIOR PLASTER

LATHING AND PLASTERING MATERIALS AND ACCESSORIES SHALL BE MARKED BY THE MANUFACTURER'S DESIGNATION TO INDICATE COMPLIANCE WITH THE APPROPRIATE STANDARDS REFERENCED IN THIS SECTION AND STORED IN SUCH A MANNER TO PROTECT THEM FROM THE WEATHER. PER 2507.1

LATHING AND PLASTERING MATERIALS SHALL CONFORM TO THE STANDARDS LISTED IN TABLE 2507.2 AND CHAPTER 35 AND, WHERE REQUIRED FOR FIRE PROTECTION, SHALL ALSO CONFORM TO THE PROVISIONS OF CHAPTER 7. PER 2507.2

GYPSUM BOARD AND GYPSUM PLASTER CONSTRUCTION SHALL BE OF THE MATERIALS LISTED IN TABLES 2506.2 AND 2507.2. THESE MATERIALS SHALL BE ASSEMBLED AND INSTALLED IN COMPLIANCE WITH THE APPROPRIATE STANDARDS LISTED IN TABLES 2508.1 AND 2511.1, AND CHAPTER 35 PER 2508.1

1. GENERAL NOTES
   PLASTERING WITH CEMENT PLASTER SHALL NOT BE LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE FABRIC LATH AND SHALL NOT BE LESS THAN TWO COATS WHEN APPLIED OVER MASONRY CONCRETE OR GYPSUM BACKING AS SPECIFIED IN SECTION 2510.5

A. THE FIRST COAT SHALL BE APPLIED WITH SUFFICIENT MATERIAL AND PRESSURE TO FILL SOLIDLY ALL OPENINGS IN THE LATH. THE SURFACE SHALL BE SCORED HORIZONTALLY SUFFICIENTLY ROUGH TO PROVIDE ADEQUATE BOND TO RECEIVE THE SECOND COAT.
B. THE SECOND COAT SHALL BE BROUGHT OUT TO PROPER THICKNESS, RODDED AND FLOATED SUFFICIENTLY ROUGH TO PROVIDE ADEQUATE BOND FOR THE FINISH COAT. THE SECOND COAT SHALL HAVE NO VARIATION GREATER TO THAN 1/4 INCH (6.4 mm) IN ANY DIRECTION UNDER 5-FOOT STRAIGHT EDGE.
C. THE FINISH COATS SHALL BE APPLIED OVER BASE COATS THAT HAVE BEEN IN PLACE FOR THE TIME PERIODS SET FORTH IN ASTM C 926 THE THIRD OR FINISH COAT SHALL BE APPLIED WITH SUFFICIENT MATERIAL AND PRESSURE TO BOND TO AND TO COVER THE BROWN COAT AND SHALL BE OF SUFFICIENT THICKNESS TO CONCEAL THE BROWN COAT.

SECTION 8B HOLLOW METAL DOORS AND FRAMES

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL HOLLOW METAL DOORS AND FRAMES.
2. MATERIALS
   A. DOORS - INSULATED TYPE L FULL FLUSH, MANUFACTURED BY AMWELD MANUFACTURING COMPANY,18 GA. 1 3/4" THICK PER CS242 MIN,REINFORCE FOR HARDWARE-BOTH FACES FOR CLOSER, SOUND DEADEN INTERIOR.
   B. FRAMES - 16 GA COLD ROLLED,2" FACES, CS242 MIN.3 ANCHORS PER JAMB + ADJUSTABLE FLOOR ANCHOR EACH JAMB REINFORCE FOR HARDWARE. PROVIDE STRIKE BOX,PROVIDE SOUND DEADENING: 1/8" UNDERCOATING OR INSULATING FILL.
3. WORKMANSHIP
   ALL WORK FABRICATED IN SHOP TO REQUIRED PROFILES BY FORMING AND WELDING, WITH ARISES AND EDGES STRAIGHT, SHARP FIT FABRICATED ACCURATELY WITH SQUARE CORNERS, HAIRLINE JOINTS AND SURFACES FREE FROM WARP,WAVE,BUCKLE OR OTHER DEFECTS AFTER FABRICATION,DOORS AND FRAMES CLEANED THOUROUGHLY,ALL WELDS GROUND SMOOTH AND GIVEN PRIME COAT.

SECTION 9E PAINTING

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PAINT BUILDING. ALL EXPOSED SURFACES OF BUILDING AND RAMPS SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES, THRESHOLDS, AND ROOFING.
2. MATERIALS

A. FOR EXTERIOR WOOD:

REF.BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	42-9M	1240	Y24W20	289-N
FINISH	QD-60-XX	1240-XXX	B54W2102	GE2-NXX

B. FOR INTERIOR TRIM

REF. BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
FINISH	W450-XX	1650-XXX	A26W11	40XX

C. FOR METAL

REF. BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	43-4	1710	B50NZ6	15N
FINISH	10-XX	1700-XXX	B54WZ102	GE2-NXX

3. WORKMANSHIP
   ALL EXPOSED SURFACES SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES AND THRESHOLDS. MATERIAL SHALL BE OF THE GRADE SPECIFIED OR EQUAL.

A. EXTERIOR - WOOD SIDING, TRIM AND SKIRTING FLAT OR SEMI-GLOSS LATEX - APPLY ONE COAT OF PRIME AND AT LEAST ONE FINISH COAT. PRIME COAT SHALL BE BRUSHED ON OR SPRAYED AND BACK BRUSHED INTO ALL GROOVES IN THE SIDING. IF NECESSARY, IN THE OPINION OF THE INSPECTOR, AN EXTRA COAT SHALL BE APPLIED TO ALL GROOVES SO THAT THE FINISH COAT WILL HAVE A UNIFORM APPEARANCE. ALLOW PRIME COAT TO DRY ACCORDING TO MANUFACTURER'S RECOMMENDATION. PRIME AND FINISH COATS SHALL BE COMPATIBLE AND MANUFACTURED BY THE SAME COMPANY.
B. INTERIOR TRIM - TRIM NOT PRECOATED SHALL BE PAINTED WITH TWO COATS OF SEMI-GLOSS LATEX OVER PRIMER.
C. INTERIOR HARDWOOD CABINETS - TWO COATS LOW LUSTER POLYURETHANE FINISH. APPLY FIRST COAT THINNED WITH ONE QUART MINERAL SPIRITS PER GALLON. APPLY SECOND COAT AS RECOMMENDED BY MANUFACTURER.
D. METAL - ALL METAL SURFACES SHALL BE PAINTED WITH TWO COATS OF ALKYD FINISH COAT OVER ZINC CHROMATE OR EQUAL RUST INHIBITING PRIMER.
E. RAMP - ONE COAT OF FERROX NON-SLIP (0.6 MIN. C.O.F.) SURFACING AS MANUFACTURED BY AMERICAN ABRASIVE METALS OR COMPARABLE. ALL PAINTS OF THE TYPE INDICATED SHALL BE LISTED ON THE STATE OF CALIFORNIA QUALIFIED PRODUCTS LIST FOR MAINTENANCE PAINTS 8010-91G-98A DATED JULY 1989. OR EQUAL.
F. SUBMIT ONE SET COLOR SAMPLES TO ARCHITECT FOR EACH PRODUCT TO ASSIST IN SELECTION.

SECTION 13F SITE ASSEMBLY

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR MATERIALS AND SERVICES TO PREPARE THE BUILDING ELEMENTS, TRANSPORT THEM FROM THE PLANT TO THE SITE AND TO COMPLETE THE ASSEMBLY AT THE SITE. THE CONDITION OF THE SITE, SUCH AS DRAINAGE AND SOIL BEARING CAPACITY, SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT . UNLESS SPECIFICALLY CALLED FOR IN THE CONTRACT, STEPS, RAMPS, OR HANDRAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. ASSEMBLY OF ELEMENTS

A. IN A LOCATION ON THE SITE AS DETERMINED BY THE SCHOOL DISTRICT,(APPROVED BY DSA) THE CONTRACTOR SHALL PLACE WOOD LEVELING STRIPS OR OTHER SUITABLE SUPPORTS AS DETAILED ON THE DRAWINGS.
B. THE ELEMENTS SHALL BE BROUGHT TO THE SITE ON WHEEL ASSEMBLY AND TRANSFERRED TO THE PREPARED SITE. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ELEMENTS BY RACKING OR BUMPING EACH OTHER.
C. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTION ON THE DRAWINGS. FLASHINGS, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER DETAILS ON THE DRAWINGS.

SECTION 15A AIR CONDITIONING

1. SCOPE OF WORK (SEE SHEET M3 FOR HVAC SPEC. AND NOTES)
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL THE AIR CONDITIONING SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS, INCLUDING A/C UNITS AND ACCESSORIES, REMOTE THERMOSTAT, GRILLS AND POWER WIRING COMPLETE TO LOAD CENTER. CONTRACTOR SHALL INSTRUCT OWNER'S OPERATORS ON OPERATION AND MAINTENANCE OF A/C SYSTEM.
2. EQUIPMENT
   SEE NOTE ON FLOOR PLAN FOR SIZE AND TYPE.
3. WORKMANSHIP
   UNITS SHALL BE INSTALLED COMPLETE AND OPERATING WITH ALL ACCESSORIES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

SECTION 16A ELECTRICAL

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES FOR ELECTRICAL INSTALLATION COMPLETE WITH ASSOCIATED EQUIPMENT AND FIXTURES, IN OPERATING CONDITION READY FOR USE. THE WORK INCLUDES: LIGHT AND POWER SYSTEMS,LIGHTING FIXTURES COMPLETE WITH LAMPS, CONNECTIONS AND DISCONNECTS TO A/C EQUIPMENT.

A. PROVIDE CONDUIT WITH PULL STRINGS AND JUNCTION BOXES FOR AUTOMATIC DETECTION FIRE ALARM SYTEM AND NOTIFICATION PER NFPA 72

2. MATERIALS
   ALL NEW COMPLYING WITH REQUIREMENTS OF CALIFORNIA ELECTRIC CODE AND NATIONAL FIRE PROTECTION ASSOCIATION

A. ELECTRIC METALLIC TUBING - COUPLING AND FLEX CONDUIT GALVANIZED OR SHERARDIZED. EXTERIOR FLEX- GALV. STEEL W/ FACTORY APPLIED P.V.C. JACKET.
B. PANELBOARDS - FLUSH MOUNTED.
C. CONDUCTORS - COPPER,INSULATED FOR 600 VOLTS, TYPE THHN FOR SIZES #12 TO #6, TYPE THW FOR LARGER SIZES.MINIMUM SIZE-#14.
D. RECEPTACLES - AS NOTED. +18" A.F.F. MIN.
E. CLOCK RECEPTACLE - AS NOTED.
F. SWITCHES - AS NOTED. +48" A.F.F. MAX.
G. LIGHTING FIXTURES - AS NOTED ON THE DRAWINGS.

3. WORKMANSHIP
   MATERIALS AND EQUIPMENT INSTALLED IN A SECURE,NEAT WORKMANLIKE MANNER IN ACCORDANCE WITH CODE REQUIREMENTS. PANELBOARD CARDS FILLED OUT. CONDUIT AND CABLE INSTALLED IN WALL AND CEILING SPACES. WORK PIERCING WATERPROOFED AREAS FLASHED AND SEALED TO A WATERTIGHT CONDITION.
   BUILDING CONDUIT/WIRING FROM FACE OF BLDG TO SITE TERMINATION BY SITE CONTRACTOR(N.I.C.).(FLEXIBLE CONDUIT S-BEND SEALTITE)

INSPECTION

INSPECTION OF PREFABRICATED BUILDINGS IS DIVIDED INTO TWO SEPARATE FUNCTIONS.

1. IN-PLANT INSPECTION.
2. ON-SITE INSPECTION.

THE CONTRACTOR SHALL ALLOW UP TO SEVEN (7) DAYS FROM THE DATE OF PLAN APPROVAL TO OBTAIN AN IN PLANT INSPECTOR APPROVED BY D.S.A.

IN-PLANT INSPECTION AND MATERIAL TESTING SHALL BE ACCOMPLISHED UNDER THE SUPERVISION OF THE DISTRICT ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ARCHITECT, DSA, AND THE DESIGNATED INSPECTOR/INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. THE MANUFACTURER SHALL PROVIDE THE INSPECTOR WITH FULL ACCESS TO ALL PLANT OPERATIONS INVOLVING WORK UNDER THIS CONTRACT AND SHALL ADVISE THE INSPECTOR IN ADVANCE OF THE TIME AND PLACE WHEN OPERATIONS THAT THE INSPECTOR WANTS TO OBSERVE TAKE PLACE. BEFORE THE BUILDING(S) ARE REMOVED FROM THE PLANT FOR DELIVERY TO THE STORAGE FACILITY OR FROM THE STORAGE FACILITY TO THE SITE THE INSPECTOR SHALL DETERMINE THAT THEY ARE ACCEPTABLE AND ISSUE A WRITTEN RELEASE WHICH SHALL BE IN THE FORM OF A VERIFIED REPORT (FORM SSS-6). A COPY OF THE INSPECTOR'S VERIFIED REPORT SHALL ACCOMPANY EACH BUILDING TO STORAGE OR TO THE SITE. THE INSPECTOR SHALL PUT ONE COPY IN EACH BUILDING.

COORDINATION OF WORK

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL NECESSARY ARRANGEMENTS WITH THE SCHOOL DISTRICT AUTHORIZED REPRESENTATIVE FOR ACCESS TO GROUNDS AND REMOVAL OF EQUIPMENT,IF NECESSARY.
THIS CONTACT SHALL BE MADE AT LEAST 48 HOURS PRIOR TO DELIVERY OF AY MODULE.
ON-SITE INSPECTION SHALL BE DONE BY THE SITE INSPECTOR. ALL WORK WHICH THE MANUFACTURER OR HIS SUBCONTRACTORS PERFORM AT THE SITE SHALL BE SUBJECT TO THE INSPECTION OF THE SITE INSPECTOR. THE MANUFACTURER WILL FURNISH THE SITE INSPECTOR WITH SUCH INFORMATION AS MAY BE NECESSARY TO KEEP HIM FULLY INFORMED AS TO PROGRESS OF WORK AND DATES WHEN SITE WORK WILL OCCUR. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL VERIFY THAT THE DISTRICT'S SITE IS READY TO RECEIVE THE CLASSROOM(S) PRIOR TO THE DELIVERY OF ANY CLASSROOM(S) BY VISITING EACH SITE (THIS MAY BE DONE BY THE INSPECTOR).

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		

MATERIALS AND WORKMANSHIP

ALL CONTRACTORS SHALL CERTIFY THAT NO ASBESTOS-CONTAINING BUILDING MATERIALS WHICH EXCEED STATE AND FEDERAL MANDATED SAFE ASBESTOS LEVELS HAVE BEEN USED IN THE CONSTRUCTION OF RELOCATABLE FACILITIES.

ALL WORKMEN SHALL BE SKILLED AND QUALIFIED FOR THE WORK WHICH THEY PERFORM. ALL MATERIALS USED,UNLESS OTHERWISE SPECIFIED,SHALL BE NEW AND OF THE TYPES AND GRADES SPECIFIED. THE CONTRACTOR SHALL, IF REQUESTED, FURNISH EVIDENCE SATISFACTORY TO THE ARCHITECT THAT SUCH IS THE CASE.

CONTRACTOR'S CREWS ASSIGNED TO ANY WORK PERFORMED UNDER THIS CONTRACT SHALL INCLUDE ONE COMPETENT AND FULLY EXPERIENCED PERSON DESIGNATED AS THE RESPONSIBLE PERSON IN CHARGE. SUCH PERSON MUST BE IDENTIFIED BY NAME TO THE DISTRICT IN ADVANCE OF ANY WORK. UPON REQUEST, THE CONTRACTOR SHALL PROMPTLY FURNISH TO THE DISTRICT INFORMATION RELATING TO THIS EMPLOYEE'S EXPERIENCE.

WORKMANSHIP SHALL BE EQUAL OR BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT. A QUALITY CONTROL SUPERVISOR, DESIGNATED BY THE MANUFACTURER, SHALL REVIEW ALL WORK IN PROGRESS AND SHALL REVIEW THE FINISHED BUILDING PRIOR TO FINAL INSPECTION TO ASSURE IT IS COMPLETE AND CORRECT. THE QUALITY CONTROL SUPERVISOR SHALL HAVE THE AUTHORITY TO HAVE MATERIALS REPLACED AND WORK REDONE IN ORDER TO CORRECT FAULTY MATERIALS OR WORKMANSHIP.

GENERAL DESIGN REQUIREMENTS:

UP TO (12) APPROXIMATELY 12' x 40' MODULES DESIGNED SO THAT TWO MODULES MAY BE JOINED TOGETHER TO FORM A COMPLETE STRUCTURE TO MAINTAIN A POSITIVE ALIGNMENT OF FLOORS, WALLS, AND ROOF AND TO PERMIT SIMPLE NON-DESTRUCTIVE DETACHMENT FOR FUTURE RELOCATION.

EACH MODULE SHALL BE PERMANENTLY IDENTIFIED WITH AN IMPRINTED (STAMPED NOT ENGRAVED) METAL IDENTIFICATION TAG 3"X1 -1/2" MINIMUM SIZE WITH THE FOLLOWING INFORMATION:

1. MANUFACTURER'S NAME AND BUILDING SERIAL NUMBER.
2. DESIGN WIND LOAD / EXPOSURE
3. DESIGN ROOF LIVE LOAD
4. DESIGN FLOOR LIVE LOAD
5. D.S.A. APPLICATION NUMBER.

2-TAGS PER MODULE ONE ON EXTERIOR AND ONE ON MODULE BEAM AT FRONT OF BUILDING ABOVE CEILING.

EACH MODULE SHALL BE CAPABLE OF RESISTING ALL VERTICAL AND LATERAL LOADS DURING TRANSPORTATION AND RELOCATION. (NORMAL INDUSTRY PRACTICE FOR BRACING MODULES DURING TRANSPORTATION AND RELOCATIONS IS ACCEPTABLE.) WHEN MODULES ARE ASSEMBLED JOINTS SHALL BE SEALED WITH REMOVABLE CLOSING STRIPS OR OTHER METHOD TO PRESENT A FINISHED APPEARANCE AND BE PERMANENTLY WATERPROOF.

EACH MODULE SHALL BE SUFFICIENTLY RIGID TO BE JACKED UP AT THE FRONT AND BACK CORNERS FOR RELOCATION WITHOUT DAMAGE OR THE MODULE SHALL HAVE LIFT LUGS AT FRONT AND BACK LOCATED AS REQUIRED SO THAT THE MODULE MAY BE JACKED UP FOR RELOCATION IN ONE PIECE WITHOUT ADDITIONAL SUPPORTS OF ANY TYPE. EVIDENCE OF EXCESSIVE BOWING DURING THE INSTALLATION OF THE MODULES WHICH, IN THE OPINION OF THE AGENCY ARCHITECT OR STRUCTURAL ENGINEER, CAUSES EXCESSIVE WORKING AT ANY JOINT OR COMPROMISES THE STRUCTURAL INTEGRITY OF THE MODULE SHALL BE SUFFICIENT REASON FOR REJECTION OF THE MODULE.

FINISH AND BASE MATERIALS AT EACH MODULE SHALL TERMINATE AT INTERIOR MODULE JOINTS IN A MANNER TO JOIN FLUSH AND TIGHT WITH SAME MATERIAL IN ADJACENT MODULE SO THE MODULE MAY BE RELOCATED WITH MINIMUM CUTTING AND PATCHING.

MARKERBOARD SPECIFICATIONS

MARKERBOARDS SHALL BE 24 ga. PORCELAIN STEEL FACING SHEET SUITABLE TO ACCEPT DRY ERASE FLET MARKERS. THE FACING SHEET SHALL BE LAMINATED TO PARTICLE BOARD SUBSTRATE WITH A MINIMUM DENSITY OF 45#/c. ft.
THE PANEL SHALL HAVE A FOIL BACKING. THE PANELS SHALL HAVE EXTRUDED ALUMINUM MOLDING AND CHALKRAIL WITH A MINIMUM OF 2-$\frac{13}{16}$" PROJECTION FROM THE FACE OF PANEL. THREE MAP HOOKS WITH CLIPS PER PANEL SHALL BE PROVIDED. ONE FLAG HOLDER, $\frac{1}{2}$ " SIZE, SHALL BE PROVIDED FOR EACH CLASSROOM. EACH CLASSROOM SHALL HAVE 2 EACH 4 X 8 PANELS INSTALLED SIDE BY SIDE TO MAKE A 4 X 16 PANEL, CENTERED ON THE LONG WALLS.
REFERENCE BRANDS: CHATFIELD-CLARKE Co, Inc. SERIES 500 OR NELSON ADAMS Co. NACO SERIES 60.

NOTE:

WALL FINISH MATERIAL
- FLAME SPREAD MAX = 200
- SMOKE DENSITY MAX = 450

BUILDING INSULATION
- FLAME SPREAD MAX = 25
- SMOKE DENSITY MAX = 450

PIPE INSULATION
- FLAME SPREAD MAX = 25
- SMOKE DENSITY MAX = 450

DUCT INSULATION
- FLAME SPREAD MAX = 25
- SMOKE DENSITY MAX = 50

INTERIOR

1. FLOOR: CARPETS - CLASSROOM SHALL BE CARPETED AS INDICATED ON FLOOR PLAN WITH DIRECT GLUE DOWN TYPE PER STATE OF CALIFORNIA SPECIFICATION 7220-XXX-01, GROUP 1, TYPE A, CLASS 26. COLOR WILL BE SELECTED BY ARCHITECT AFTER AWARD OF BID. THE CARPET DENSITY SHALL BE 4600 MINIMUM. PILE YARN SHALL BE BRANDED NYLON. NO CROSS SEAMS SHALL BE ALLOWED. PILE HEIGHT 1/2" MAX
2. BASE: RESILIENT COVE BASE - BEST QUALITY, MOULDED RUBBER, 1/8" THICK, 4" HIGH, MOULDED TOP SET COVE: PROVIDE PREFORMED BASE FOR SQUARE EXTERNAL CORNERS AND PREFORMED END STOPS WHERE BASE DOES NOT ABUT. SOLID COLOR AS MANUFACTURED BY "JOHNSONITE CO.", FLEXCO, OR EQUAL. APPLY COVE TO COMPLETE PERIMETER OF CLASSROOM.
3. INTERIOR WALLS SHALL BE VINYL COVERED TACKBOARD(U.O.N.) APPLIED IN ONE CONTINUOUS LENGTH FROM FLOOR TO CEILING. THE TACKBOARD SHALL BE INDUSTRIAL INSULATION BOARD MANUFACTURED SPECIFICALLY AS A SUBSTITUTE FOR VINYL COVERED WALL PANELS. THE BOARD SHALL BE ASPHALT FREE, SHALL HAVE AN IRONED-ON COATING AND SHALL HAVE A MINIMUM DENSITY OF 18 LBS. PER FT. THE VINYL COATING SHALL BE MADE OF VIRGIN VINYL CALENDERED BASE COLOR, WEIGHING A MINIMUM OF 8 OZ. PER SQUARE YARD. THE COATING BACKING SHALL BE SHEETING OR NON-WOVEN FABRIC. THE VINYL COATING SHALL BE MECHANICALLY LAMINATED, WITH THE LONG EDGES WRAPPED, TO THE TACKBOARD. TACKBOARD SHALL BE APPLIED OVER 1/2" SHEETROCK OR PLYWOOD SHEATHING. THE VINYL WALL COVERED PANEL SHALL HAVE A CLASS III FLAME SPREAD RATING. THE PANEL SHALL BE APPROVED FOR CLASSROOM USE BY THE CALIFORNIA STATE FIRE MARSHAL. REFERENCE BRAND: VINYL COVERED TACKBOARD AS MANUFACTURED BY CHATFIELD-CLARKE OR COMPARABLE. CARE SHALL BE TAKEN IN MOUNTING THE TACKBOARD SO THAT THE TEXTURE OF ALL PANELS WILL HAVE THE SAME ORIENTATION AND COLOR MATCH.
4. CEILING: SUSPEND T-BAR SYSTEM, SEE SHEET 3 FOR DETAILS ETC. MATERIALS AND INSTALLATION PER CCR 2501.A.5 AND IR #M-3 INCLUSIVE AS APPLICABLE TO CLASSROOMS.

DOORS & WINDOWS

EXTERIOR DOORS: METAL DOORS - 3'-0"x7'-0" HOLLOW METAL DOOR CONSTRUCTION OF 1 SHEET OF 18 GA. GRADE II STEEL ASSEMBLED PER CS242 MIN AND REINFORCED WITH 20 GA. MIN. FILL DOOR SPACES WITH MINERAL WOOL OR OTHER INSULATION. (REINFORCE BOTH FACES FOR CLOSURE) PROVIDE FLUSH TOP ON DOORS. HARDWARE REINFORCEMENT SHALL BE 10 GA. MIN FOR HINGES, DOOR FRAME SHALL BE 16 GA. PRESSED STEEL FRAME ASTM A366 & C5242. HARDWARE REINFORCEMENT SHALL BE 10 GA. PLATE. FRAMES SHALL BE DESIGNED WITH INTEGRAL STOP AND TRIM. PROVIDE (3) ANCHORS PER JAMB PLUS ADJUSTABLE FLOOR ANCHOR.

EXTERIOR WINDOWS: PROVIDE ANODIZED ALUMINUM FRAME 5/8" MINIMUM DUAL PANE WINDOW UNITS, AS SHOWN ON FLOOR PLANS. THE 5/8" DIMENSION IS THE MINIMUM THICKNESS FOR THE DUAL GLAZED WINDOW PANEL CONSISTING OF TWO LIGHTS OF GLASS AND THE AIR SPACE. GLAZING MATERIAL SHALL BE:

EXTERIOR LITE - 3/16" MINIMUM TEMPERED GLASS OR LAMINATED AS - 1 GLASS OF SOLAR GRAY GLARE REDUCING TYPE WITH A LIGHT TRANSMISSION FACTOR OF 45% MAXIMUM.
INTERIOR LITE - 1/8" MINIMUM CLEAR TEMPERED.
MINIMUM AIR SPACE SHALLE BE 1/4".
SPACE - BENT OR SEALED CORNER ALUMINUM WITH DESICCANT FILL
SEALER - BUTYL PRIMARY SEAL AND POLYSULFIDE OF SILICONE SECONDARY SEAL.
CERTIFICATION - ALL GLAZING TO BE CERTIFIED IN ACCORDANCE WITH ASTM E-773, E-774.
HEADER HEIGHT SHALL BE THE SAME AS THE DOOR. ALL OPERABLE SASH SHALL HAVE ALUMINUM SCREENS. WINDOWS SHALL NOT BE MOUNTED TO THE EXTERIOR PLYWOOD SURFACE. ALL WINDOWS SHALL MEET THE AAMA GS101-88 VOLUNTARY. SPEC. FOR ALUMINUM PRIME WINDOWS AND SLIDING GLASS (ANS1), COMMERCIAL GRADE.

HARDWARE

1. EXTERIOR DOOR
   - A) HINGES: HAGER 4-1/2X4-1/2 BUTTS, BB1279 US26D,1-1/2 PAIR EACH DOOR WITH SET SCREW IN BARREL AND BALL BEARING DESIGN, OR APPROVED EQUAL.
   - B) EXTERIOR LOCKSET: SCHLAGE ND70PD CORBIN OR YALE OR EQUIVALENT. ALUM. FINISH. OR PANIC BARS/PULL HANDLE PANIC BAR TYPE VON DUPRIN 22L (PULL ON EXT.) OR CORBIN OR YALE OR EQUIVALENT. ALUM. FINISH. PANIC BARS ARE ONLY REQUIRED WHERE THE OCCUPANT LOAD IS 50 OR MORE.
   - C) CLOSER: NORTON 8500DA OR 8500BF SERIES, LCN 1460 DEL SERIES OR EQUAL. MAXIMUM 5 LBS FOR EXTERIOR AND INTERIOR DOORS. THE MAXIMUM EFFORT FOR FIRE DOORS MAY BE INCREASED TO THE MAXIMUM ALLOWED BY THE APPROPIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS. THE SWEEP PERIOD FROM AN OPEN POSITION OF 70 DEGREES SHALL BE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
   - D) WEATHERSTRIPPING: ALL EXTERIOR DOORS SHALL BE WEATHERSTRIPPED WITH PEMKO 299D, ULTRA WS007, AT DOOR JAMBS AND HEAD OR EQUAL.
   - E) THRESHOLD: THRESHOLD SHALL BE PEMKO 271 AV 5" ALUMINUM WITH PEMKO 216 AV ULTRA TH042 DOOR BOTTOM.
   - F) DOORSTOP: QUALITY #44, OR EQUAL.
   - D) INTERIOR LOCKSET: SCHLAGE LEVER HANDLE LOCKSET, AS FOLLOWS:

STUDENT TOILETS	S10A PASSAGE LATCH OR EQUAL
OFFICES	S70D CLASSROOM LOCKSET OR EQUAL
CUSTODIAL	S80A LOCKSET OR EQUAL
PUBLIC TOILETS	S40A PRIVACY LATCHSET OR EQUAL

FIRE EXTINGUISHER

1. EACH PORTABLE CLASSROOM SHALL BE EQUIPPED WITH PRESSURE TYPE FIRE EXTINGUISHERS WITH 2A10BC UL RATING. TO BE MOUNTED ON THE INTERIOR WALL OF THE BUILDING NEAR THE DOORWAY(S) AT A MAXIMUM HEIGHT OF 4 FEET TO THE MOUNTING BRACKET AND THE BOTTOM OF FE MOUNTED 27" AFF.
   FIRE EXTINGUISHERS SHALL BE TOTALLY CHARGED AND HAVE A DIAL INDICATING THE STATE OF CHARGE.

ACCESSIBILITY STANDARDS

2007 CALIFORNIA BUILDING CODE (PART 2, TITLE 24, CCR)
SEC. 11038.1 BUILDING ACCESSIBILITY, GENERAL.
THE 2007 CBC REQUIRES THAT BUILDINGS EXCEEDING 10,000 SQUARE FEET ON ANY FLOOR MUST HAVE AN ACCESSIBLE MEANS OF VERTICAL ACCESS VIA RAMP, ELEVATOR, OR LIFT WITHIN 200 FEET OF TRAVEL OF EACH STAIR AND EACH STAIR AND EACH ESCALATOR.
TABLE 1115B-1 SUGGESTED DIMENSIONS FOR CHILDREN'S USE.
THE 2007 CBC REQUIRES A 27" MINIMUM DIMENSION FOR LAVATORY/SINK KNEE CLEARANCE, WHICH IS THE DISTANCE FROM THE FINISH FLOOR TO THE UNDERSIDE OF THE LAVATORY/SINK.
SECTION 1115B.3.1 ACCESSIBLE WATER CLOSET COMPARTMENT.
THE 2007 CBC REQUIRES AN ACCESSIBLE TOILET STALL TO HAVE A MINIMUM WIDTH OF 60" AND SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC-CLOSING DEVICE, AND SHALL HAVE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WHEN LOCATED AT THE END AND 34 INCHES WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
THE INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR SHALL BE EQIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH SHALL BE FLIP-OVER STYLE, SLIDING OR OTHER HARDWARE NOT REQUIRING THE USER TO GRASP OR TWIST. EXCEPT FOR DOOR-OPENING WIDTHS AND DOOR SWINGS,
A CLEAR, UNOBSTRUCTED ACCESS OF NOT LESS THAN 44 INCHES SHALL BE PROVIDED TO THE WATER CLOSET COMPARTMENTS DESIGNED FOR USE BY PERSONS WITH DISABILITIES.
SECTION 1115B.4.4.4. WATER CONTROLS
THE 2007 CBC REQUIRES THAT THE FORCE TO OPERATE A WATER CONTROL (VALVE) FOR AN ACCESSIBLE SHOWER SHALL NOT EXCEED 5LBS. MAXIMUM FORCE (PULL).
SECTION 1117B.5 SIGNS AND IDENTIFICATION (ALSO REFER TO SECTIONS 1115B.6, 1116B, 1007.6.5 1007.7, 1008.1.8.6, 1011.3, 1020.1.5 & 1020.1.6.1-5
THE 2007 CBC MAKES SEVERAL GENERAL DESIGN CHANGES AND CLARIFICATIONS TO SIGNAGE,
*ALL GROUND FLOOR EXIT DOOR SHALL HAVE TACTILE EXIT SIGNAGE.
*AT STAIRS, EACH FLOOR SHALL RECEIVE TACTILE "STAIR LEVEL" SIGNAGE IN ADDITION TO SPECIAL TACTILE AT THE EXIT DISCHARGE LEVEL.
*EACH EXIT DOOR THAT LEADS TO A GRADE LEVEL EXIT BY MEANS OF A STAIRWAY SHALL HAVE TACTILE EXIT SIGNAGE.
*EACH EXIT ACCESS DOOR TO A CORRIDOR OR HALLWAY THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN SHALL BE IDENTIFIED BY TACTILE EXIT SIGNAGE.
SECTION 1129B ACCESSIBLE PARKING REQUIRED.
THE 2007 CBC REQUIRES THE WORDS "NO PARKING", IN 12" HEIGHT WHITE LETTERS, TO BE PAINTED ON THE PAVEMENT WITHIN ALL PARKING SPACE ACCESS AISLES. VAN PARKING ACCESS AISLES SHALL BE PLACED ON THE PASSENGER SIDE OF THE VEHICLE. RAMPS MAY NOT ENCROACH INTO ANY REQUIRED ACCESS AISLE. PARKING SPACE ACCESS AISLES SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.*
*EXISTING SITES:
AT EXISTING SITES, ANY RAMP WHICH EXCEEDS A 2% SLOPE ACCESS AISLES FOR ACCESSIBLE PARKING SPACES PER CBCS SECTION 1129B, MAY REQUIRED REMOVAL AND REDESIGN PER THE PATH OF TRAVEL (POT) PROVISIONS OF CBCS SECTION 1134B, IN ORDER TO APPROVE THE BUILDING PLACEMENT.
SECTION 1133B.2.5 CLOSER EFFORT TO OPERATE DOORS.
THE 2007 CBC REQUIRES THAT THE EFFORT TO OPEN AN EXTERIOR DOOR SHALL NOT EXCEED 5 POUNDS (PULL).
THE 2007 CBC REQUIRES THAT THE SWEEP PERIOD OF ACCESSIBLE DOORS SHALL BE 3 SECONDS MAXIMUM, BASED ON AN OPEN DOOR POSITION OF 70 DEGREES (FROM CLOSED), TO A DOOR POSITION OF 3" FROM THE LATCH.
SECTIONS 1133B.2.4.5 & 1133B.2.5.3 RECESSED DOORS.
THE 2007 CBC REQUIRES THAT DOORS RECESSED 8" OR MORE SHALL HAVE STRIKE EDGE CLEARANCES IN ACCORDANCE WITH FIGURE 11B-33 (A).
SECTION 1133B.4.2.4 HANDRAIL ORIENTATION.
THE 2007 CBC SPECIFIES THAT AT LEAST ONE HANDRAIL SHALL BE PARALLEL TO THE DIRECTION OF THE STAIR RUN, AND PERPENDICULAR TO THE EDGE OF THE STAIR NOSING.
SECTION 1133B.5.2 RAMP WIDTH:
MINIMUM 48" CLEAR AT OCCUPANT LOAD 300 OR LESS, 60" CLEAR AT OCCUPANT LOAD MORE THAN 300.
RADIUS MINIMUM OF 0.125"
THE 2007 CBC REQUIRES THAT SIGN EDGES LESS THAN 80" ABOVE THE FINISHED FLOOR MUST CONTAIN ROUNDED OR EASED RADIUS MINIMUM OF 0.125"
THE PROJECT PLANS OR SPECIFICATIONS SHALL INDICATE THE REQUIREMENT THAT THE MANUFACTURER SHALL PROVIDE A WRITTEN FIVE-YEAR PRODUCT WARRANTY, IN ACCORDANCE WITH THE BULLETIN.

1. ALL GALVANIZED STUDS AND JOISTS SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF THE 2001 AISI/COS/ANSI.
2. ALL GALVANIZED STUDS, JOISTS, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A 653
3. GALVANIZED FRAMING PRODUCTS SHALL BE COATED IN ACCORDANCE WITH REQUIREMENTS OF ASTM A 653.
   PRODUCTS WILL BE FURNISHED WITH A G-60 OR EQUIVALENT COATING IF SPECIFIED AND ORDERED TO BE IN CONFORMANCE WITH ASTM C-955 OTHERWISE, G-40 OR EQUIVALENT COATING WILL BE PROVIDED.

1. SECTION PROPERTIES SHALL BE DERIVED IN ACCORDANCE WITH AISI " SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION."
2. METAL DECKING IS TO BE ATTACHED TO THE STRUCTURAL FRAME IN CONFORMANCE WITH AWS D1.1 AND D1.3 "SPECIFICATION FOR WELDING SHEET STEEL IN STRUCTURES."
3. ASTM REFERENCE NUMBERS:
   A) ASTM A653, STEEL SHEET, ZINC-COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY THE HOT-DIP PROCESS
   STRUCTURAL (PHYSICAL) QUALITY.
4. STEEL DECK INSTITUTE (SDI)-METAL FLOOR DECK PROFILES SHALL BE IN CONFORMANCE WITH SDI STANDARDS.
5. METAL FLOOR DECK TO BE ASC STEEL DECK
   1. B-36, 18 GAUGE
      1 1/2" DEEP X 36" WIDE
   2. N-24, 18 GAUGE
      3" DEEP X 24" WIDE
6. DECK UNITS ARE TO BE FABRICATED FROM SHEET STEEL CONFORMING TO ASTM A653, Fy=38 KSI WITH A GALVANIZED COATING, G-60 OR G-90.

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 2/24/09
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12'X40' RELOCATABLE BUILDINGS
GENERAL NOTES

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

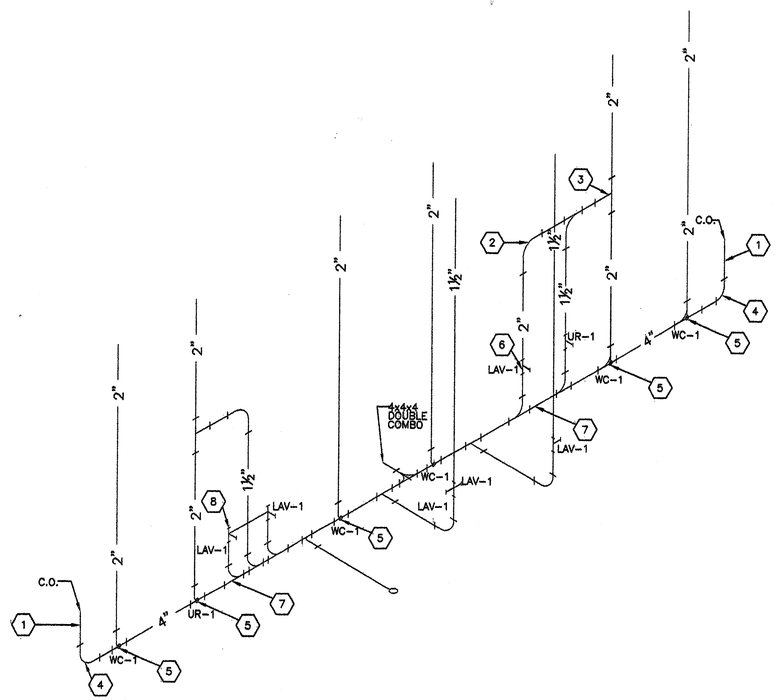
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER No. C12631 Ren. 2-31-11 STATE OF CALIFORNIA

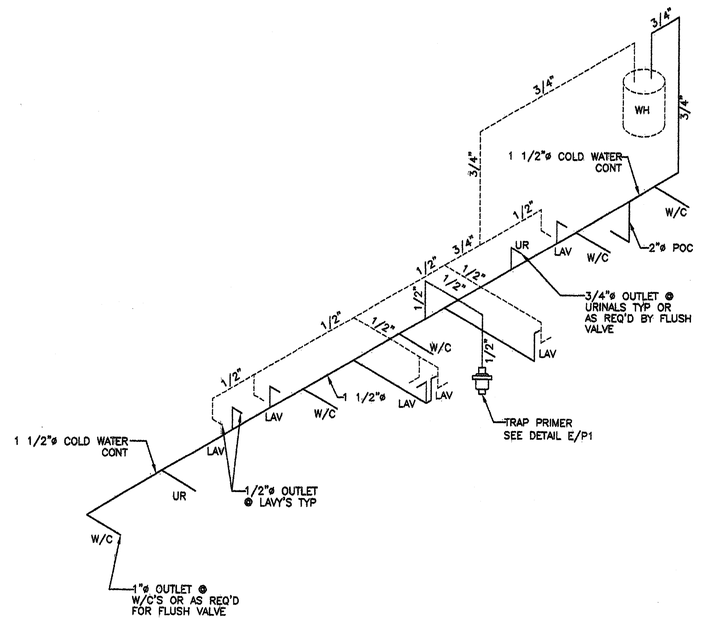
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC. WD FLS SS GR
DATE 7/12/11

PROJECT No.

N2

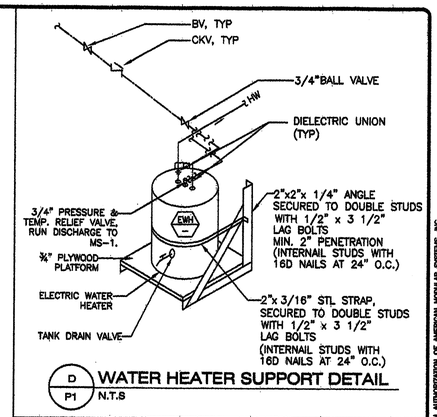


3C P1 **WASTE ISOMETRIC**
NO SCALE

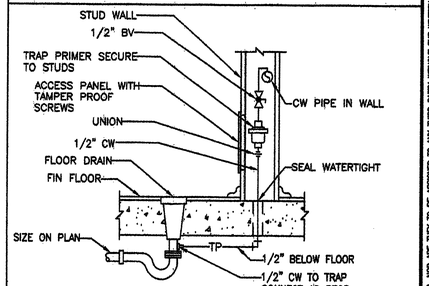


3B P1 **WATER SUPPLY ISOMETRIC**
NO SCALE

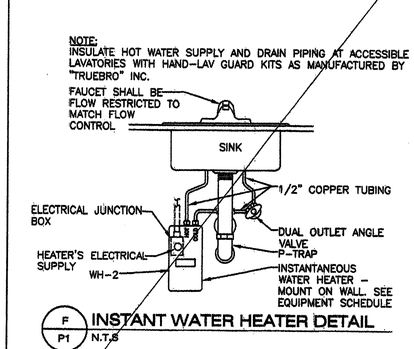
3A P1 **RESTROOM OPTION #3**
NO SCALE



D P1 **WATER HEATER SUPPORT DETAIL**
N.T.S



E P1 **TRAP PRIMER DETAIL**
N.T.S



F P1 **INSTANT WATER HEATER DETAIL**
N.T.S

SHEET NOTES

1. DWV PIPING SHALL BE ABS PLASTIC
2. COLD WATER SUPPLY SHALL BE TYPE L COPPER
3. DWV PIPING:
   MIN SLOPE 1/4" PER FOOT
   MAY SLOPE 4" CI @ 1/8" PER FOOT
   VENTS SHALL TERMINATE NOT LESS THAN 10 FEET FROM OR AT LEAST 3 FT. ABOVE ANY WINDOW, DOOR, AIR INTAKE OR VENT SHAFT, NOR LESS THAN 3FT. IN EVERY DIRECTION FROM ANY LOT LINE, ALLEY AND STREET EXCEPTED; EXTEND 6" ABOVE THE ROOF

——— COLD WATER
- - - - - - - - HOT WATER

BASED ON PC# 02-109808

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: MP
SERIAL NO.:

CUSTOMER:
McKINLEY SCHOOL
BAKERSFIELD SCHOOL DISTRICT

12 x 40 RELOCATABLE BUILDING
ISOMETRIC PLANS & DETAILS

American Modular Systems Inc.
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americanmodular.com

APPROVALS:

REGISTERED MECHANICAL ENGINEER — No. C12631 Ren. 2-31-11 — STATE OF CALIFORNIA

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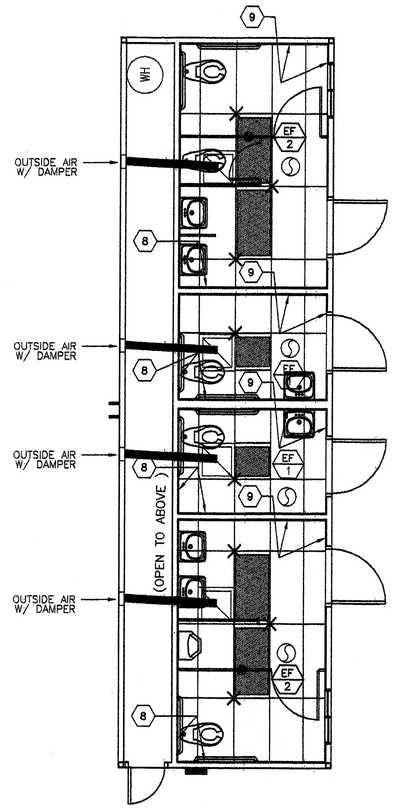
EXHAUST FAN						
MARK	DESCRIPTION	CFM	WATTS	S.P.	VOLT/PH	
EF 1	EXHAUST FAN	110	1050	.10"	115-1ø	NUTONE 672 CEILING MOUNTED 180W INPUT
EF 2	EXHAUST FAN	200	1050	.10"	115-1ø	CEILING MOUNTED 180W INPUT

BUILDING PLUMBING STANDARDS:

1. TOILETS SHALL BE KOHLER-KINGSTON #K-4330. FLUSH VALVES FOR TOILETS SHALL BE SLOAN-REGAL FLUSHOMETER #111. MOUNTING BRACKET BY J.R SMITH. SEATS SHALL BE BEMIS #1955C.

2. TOILETS MAY BE ALSO BE AMERICAN STANDARD AFWALL #2257.103. MOUNTING BRACKET BY J.R. SMITH #0600. FLUSH VALVES FOR TOILETS SHALL BE SLOAN-REGAL FLUSHOMETER #111. SEATS SHALL BE BEMIS #1955C.

3. LAVATORIES SHALL BE CAST IRON PORCELAIN FINISHED KOHLER-HUDSON #K-2861. STAFF LAVATORIES SHALL BE CHICAGO 3300-CP FAUCETS. STUDENT LAVATORIES SHALL BE CHICAGO 3400-CP FAUCETS. P-TRAP MAY BE DEARBORN BRASS COMPANY #704 ASSEMBLY OR EQUAL 17 GA . P-TRAP. COMPRESSION STOPS MAY BE BRASSCRAFT #OCR 19 CS OR EQUAL. PROVIDE STAINLESS STEEL BRAIDED CONNECTORS AT LEAST 16" LONG. MOUNTING BRACKETS SHALL BE J.R. SMITH #0800.



3 / M1 TYPICAL REFLECTED CEILING PLAN
1/4"=1'-0" OPTION #3

- SHEET NOTES -

1. WALL HUNG HVAC UNIT
2. THERMOSTAT @ +60" SEALED
3. MAIN RUNNER TYP
4. CROSS RUNNER TYP
5. INTERIOR LIGHT FIXTURE REFER TO SHEET SHEET E1 FOR SPEC'S
6. CEILING HEIGHT @ 8'-6" NOM
7. SPLAY WIRE SEE 4/M2 FOR DETAILS
8. FIXED CEILING END
9. FREE CEILING END
10. CENTER SECTION THAT CROSSES MODULE LINE TO BE FIELD INSTALLED
11. NOT USED
12. CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING
13. TYPICAL 4-WAY SUPPLY AIR REGISTER LOCATION AND SIZE MAY VARY PER CEILING LAYOUT AND BUILDING SIZE

NOTE:
WHERE TWO OR MORE HVAC UNITS SERVE A COMMON SPACE, UNITS SHALL BE EQUIPED WITH DUCT SMOKE DETECTOR FOR AUTO SHUTDOWN. INTERCONNECT WITH FIRE ALARM SYSTEM

AUTOMATIC SHUT-OFF IS NOT REQUIRED WHEN ALL OCCUPIED ROOMS SERVED BY THE AIR HANDLING EQUIPMENT HAVE DIRECT ACCESS TO THE EXTERIOR AND THE TRAVEL DISTANCE DO NOT EXCEEDS 100 FT. PER CMC 609 EXEPTION #2

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BASED ON PC# 02-109808

REVISIONS

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DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT
McKINLEY SCHOOL

12'X40' RELOCATABLE BUILDING
TYPICAL CEILING PLAN & NOTES

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
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americanmodular.com

APPROVALS:

REGISTERED ARCHITECT No. C12631 Ren. 8-31-11 STATE OF CALIFORNIA

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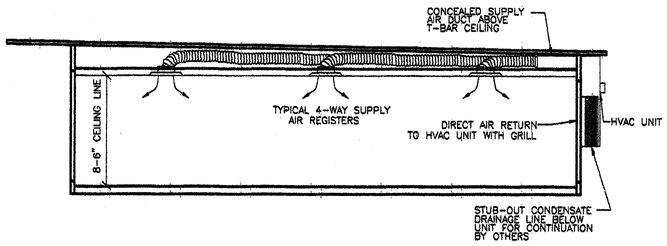
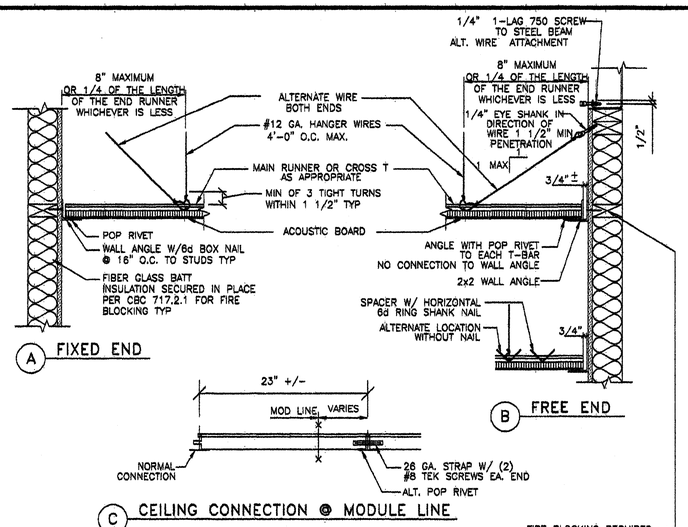
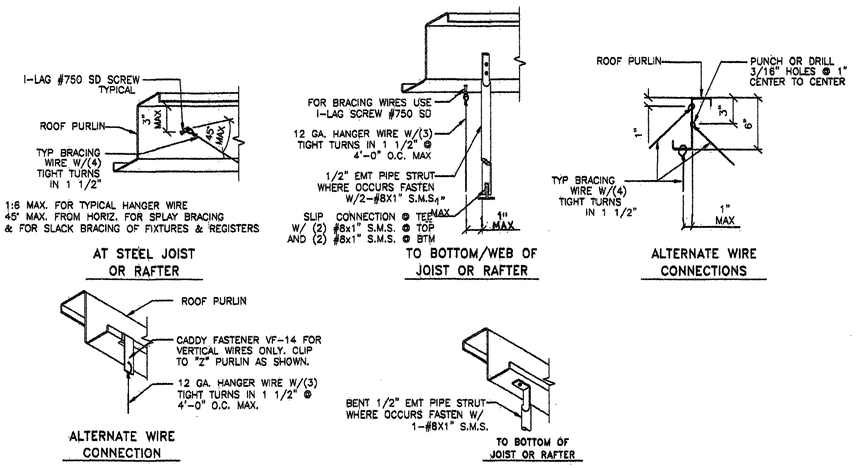
M1



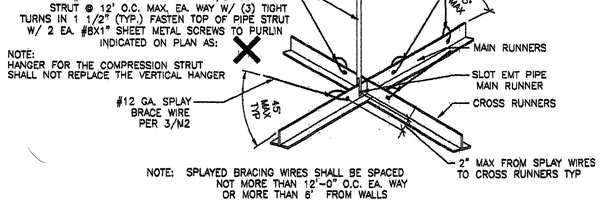
1 M2 **TYPICAL MECHANICAL DETAIL SECTION**
3/16"=1'-0"



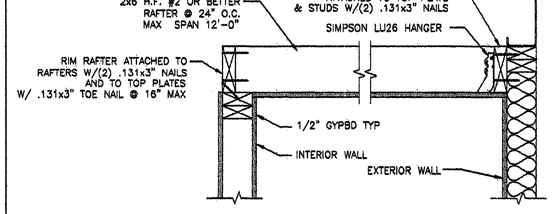
2 M2 **CEILING ATTACHMENTS DETAILS**
1 1/2"=1'-0"



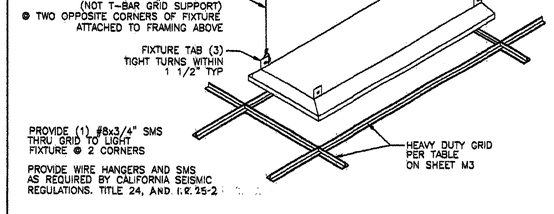
3 M2 **CONNECTION TO PURLINS DETAILS**
1 1/2"=1'-0"



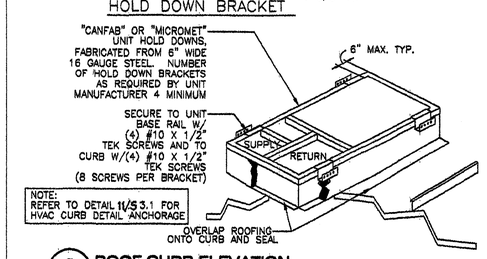
4 M2 **SPLAY WIRE DETAIL**
1 1/2"=1'-0"



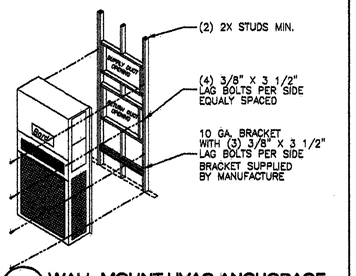
5 M2 **GYPBOARD CEILING DETAIL**
1 1/2"=1'-0"
OPTIONAL



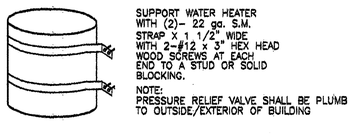
6 M2 **LIGHT FIXTURE ATTACHMENT DETAIL**
3/4"=1'-0"



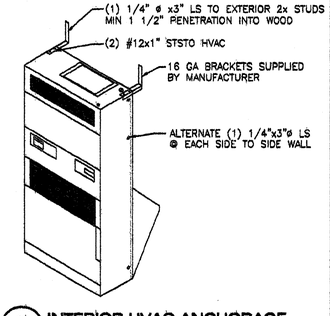
7 M2 **ROOF CURB ELEVATION**
N.T.S.
OPTIONAL



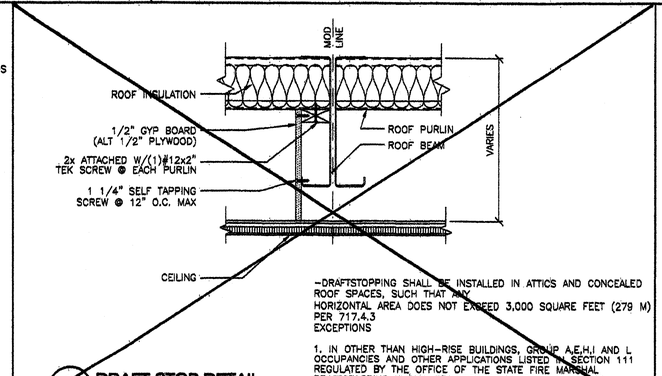
8 M2 **WALL MOUNT HVAC ANCHORAGE**
N.T.S.



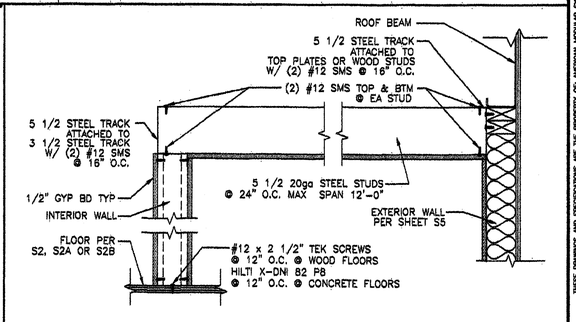
9 M2 **WATER HEATER SUPPORT DETAIL**
NTS
(FLOOR MOUNTED)



10 M2 **INTERIOR HVAC ANCHORAGE**
N.T.S.



11 M2 **DRAFT STOP DETAIL**
1 1/2"=1'-0"



12 M2 **GYPBOARD CEILING DETAIL W/ STEEL STUDS**
1 1/2"=1'-0"
OPTIONAL

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 2/24/09
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12'X40' RELOCATABLE BUILDING
MECHANICAL BUILDING SECTION & CEILING DETAILS

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1821 Fax (209)825-7018
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER MECHANICAL ENGINEERING No. C12831 Exp. 3-31-09 STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02_111612
AC Rev SS GA
DATE 1/21/11

PROJECT No.

M2

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METAL SUSPENSION SYSTEMS FOR LAY IN PANEL CEILING

1. 12 GA. (MIN) HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING 4'-0" x 4'-0 GRID SPACING, ALONG MAIN RUNNER. SPLICES WILL NOT BE PERMITTED IN ANY HANGER WIRES UNLESS SPECIFICALLY APPROVED BY DSA.
2. PROVIDE 12 GA HANGER WIRES WITHIN 8" OF THE ENDS OF ALL MAIN AND CROSS RUNNERS OR AT 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS AT THE PERIMETER OF THE CEILING AREA.
3. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAINTAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREA. HANGER WIRES THAT ARE MORE THAN 1 IN 6 OUT OF PLUMB ARE TO HAVE COUNTERBRACED WIRES.
4. CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2 INCH FREE OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD BE FREE AND A MINIMUM OF 1/2 INCH CLEAR OF WALL.
5. AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16 GA WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNERS MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNERS IS 12" OR LESS, THIS INTERLOCK IS NOT REQUIRED.
6. PROVIDE SETS OF 4-#12 GA. SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT THE FOLLOWING SPACING:
   (A) FOR SCHOOL BUILDINGS, PLACE SETS OF SPLAY WIRES AT A SPACING NOT MORE THAN 12 FEET BY 12 FEET ON CENTER.
   (B) PROVIDE SPLAY WIRES AT LOCATIONS NOT MORE THAN 1/2 THE ABOVE SPACING FROM EACH PERIMETER WALL OR AT THE EDGE OF VERTICAL CEILING OFFSETS

   THE SLOPE OF THESE WIRES SHOULD NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND SHOULD BE TAUT WITHOUT CAUSING THE CEILING TO LIFT. SPLICES IN BRACING WIRES ARE NOT PERMITTED WITHOUT SPECIAL DSA APPROVAL.
7. FASTEN HANGER WIRES WITH NOT LESS THAN 3 TIGHT TURNS. FASTEN SPLAY WIRES WITH 4 TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2 INCHES. HANGER OR BRACING WIRE ANCHORS TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.
8. SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT ETC.,
9. ATTACH ALL LIGHT FIXTURES AND AIR TERMINALS TO THE CEILING GRID RUNNERS WITH SCREWS OR APPROVED FASTENERS AS REQUIRED TO RESIST A HORIZONTAL FORCE EQUAL TO THE FIXTURES.
10. FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF 2-#12 GA. SLACK SAFETY WIRES ATTACHED AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
11. CLASSIFICATION OF CEILING GRID:
    CLASSIFICATION OF CEILING GRID IS "HEAVY DUTY" CHICAGO METALLIC, OR DONN(USG) PER ASTM C635
    MANUFACTURER'S CATALOG NUMBER - MAIN RUNNER HEAVY DUTY MAIN TEE OR EQUAL #200-01 OR DX26.
    MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER CHICAGO METALLIC 1214-01 OR DONN DX 416 CROSS TEES.
    MANUFACTURER'S CATALOG NUMBER OF DETAIL FOR RUNNER SPLICE N/A.
    ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL-FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE ASTM FLAME SPREAD CLASS T, 24" X 48" MODULAR SIZE, LIGHT REFLECTION 75% MINIMUM, NOISE REDUCTION COEFFICIENT OF 0.65 MINIMUM. MAXIMUM SMOKE DENSITY NOT TO EXCEED 450.

TABLE A HEAVY DUTY GRID COMPONENTS

MANUFACTURER	MAIN TEE	H.D. 4' CROSS TEE	H.D. 2' CROSS TEE
DONN/USG	DX-26	DX-424	DX-216
ARMSTRONG	7301	7341	7323
CHICAGO MET.	200-01	1204-01	1226-01

NOTE: ALL GRID COMPONENTS SHALL BE BY SAME MANUFACTURER

HVAC CFM CHART

MODEL NUMBER	DESCRIPTION	MAX. CFM	UNIT WEIGHT LBS.
WH421-A	3 1/2 TON HEAT PUMP	1400	530
WH482-A	4 TON HEAT PUMP	1550	560
WH602-A	5 TON HEAT PUMP	1700	560

GENERAL NOTES

HEATING VENTILATING AND AIR CONDITIONING (HVAC)

1. HEAT PUMP: SINGLE PACKAGE WALL MOUNTED AIR TO AIR ELECTRIC HEAT PUMP UNIT SHALL BE RATED IN ACCORDANCE WITH ARI STANDARD 240-77.
   REFERENCE BRANDS: BARD WH421-AXXXXXXX
   BARD WH482-AXXXXXXX
   BARD WH602-AXXXXXXX
   MAXIMUM AC SIZE FOR THIS BUILDING WILL BE A 5-TON UNIT
   ALL UNITS SHALL BE 230/208 VOLT, 1 PHASE SYSTEM, UL TESTED & APPROVED OR COMPARABLE AND MEET CURRENT ENERGY STANDARDS.
   A.) THE SYSTEM SHALL MAINTAIN AN AUTOMATICALLY CONTROLLED INDOOR CLASSROOM TEMPERATURE OF 78 DEGREES F. WHEN THE OUTDOOR DRY BULB TEMPERATURE VARIES BETWEEN 100 DEGREES F. IN THE SUMMER
   B.) THE SYSTEM MUST MAINTAIN THE ABOVE TEMPERATURE WHEN THE DAMPER IS ADJUSTED TO USE APPROXIMATELY ONE THIRD FRESH AIR.
2. DUCTWORK.
   A.) CONSTRUCT ALL DUCTWORK OF GALVANIZED SHEET METAL IN ACCORDANCE WITH C.M.C., ASHRAE GUIDE EQUIPMENT VOLUME AND SMACNA LOW VELOCITY DUCT CONSTRUCTION MANUAL LATEST EDITIONS. ALL DUCTWORK SHALL BE INSULATED WITH 1" THICK FIBERGLASS DUCT WRAP WITH VAPOR BARRIER. PROVIDE 1" DUCT ATTENUATION AT ALL DUCTWORK WITHIN 2'-0" OF HVAC UNIT.
   B.) NON-METALLIC DUCTWORK OPTION: IN ACCESSIBLE CONCEALED PORTIONS OF DUCT SYSTEM RIGID 1" FIBERGLASS OR INSULATED FLEX-DUCT WITH VAPOR BARRIER MAY BE SUBSTITUTED FOR SHEET METAL DUCTWORK. ALL DUCTWORK WITHIN 2'-0" OF THE HVAC UNIT AND ALL INTERFACE CONNECTIONS SHALL BE METAL. DUCTWORK AND REINFORCEMENT SHALL BE DESIGNED FOR 2" STATIC PRESSURE.
   REFERENCE BRANDS: OWENS-CORNING FIBERGLASS DUCTTBOARD, 1" THICK, AND MICRO-AIRE, TYPE 475.
   NON-METALLIC DUCTWORK SHALL CONFORM TO NFPA 90-A AND SMACNA CLASS 1 RATING.
3. AIR DUCT INSULATION AND LININGS SHALL COMPLY WITH FLAME SPREAD LESS THAN OR EQUAL TO 25, SMOKE GENERATION LESS THAN OR EQUAL TO 50.
4. SUPPLY AIR DIFFUSERS SHALL BE 675 CFM MAX. 12" ROUND. 1" FIBERGLASS OR FLEXDUCT
   DUCTWORK SPECIFICALLY DESIGNED TO PROVIDE AIR THERMAL COOLING SYSTEMS. 24"X8"X1" MICRO-AIRE TYPE #475 OWENS-CORNING, KNAUF, CERTAINTEED, OR EQUAL AND 90- B: UL #131 TEST, CLASS 1 RATING WITH "SMACNA".
5. REGISTERS AND DIFFUSERS: PROVIDE THREE (MIN) 4-WAY THROW AIR DIFFUSERS AS MANUFACTURED CARNES, TITUS, HART AND COOLEY, METALAIRE, SHOEMAKER, BARBER-COLEMAN OR KRUEGER COMMERCIAL GRADE GRILLS AND REGISTERS
6. AIR CONDITIONING CONTROLS.
   THERMOSTAT: PROVIDE ELECTRONIC PROGRAMMABLE THERMOSTAT. THERMOSTAT SHALL HAVE THE FOLLOWING FUNCTIONS.
   A.) 5 AND 2 WEEKDAY/WEEKEND PROGRAMMING WITH 4 SEPARATE TIME/TEMPERATURE SETTING FOR 24-HOUR PERIOD.
   B.) KEY BOARD LOCKOUT SWITCH.
   C.) PROGRAMMABLE DISPLAY.
   D.) 2-HOUR OVERRIDE MINIMUM.
   E.) STATUS INDICATED LED'S.
   F.) BATTERY BACK-UP.
   PROVIDE LOCKING CLEAR THERMOSTAT COVER WITH THERMOSTAT COVER WITH ACCESS HOLE FOR PROGRAM OVERRIDE. WHITE RODERS IF92-371. MOUNT @ +60" w/COVER (SEALED-SETTING ADJUSTMENTS CAN BE DONE BY SERVICE PERSONNEL ONLY.)
   +48" UNSEALED.
7. THERMAL INSULATION
   A.) ROOF INSULATION: R-19 UNFACED.
   B.) WALLS INSULATION: R-13 KRAFT FACED.
   C.) FLOORS INSULATION: CONCRETE FLOOR
   FLAME SPREAD AND SMOKE DEVELOPMENT SHALL CONFORM TO CALIFORNIA BUILDING CODE SEC. 719.
8. FACTORY-MADE AIR DUCTS. FACTORY-MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL CONFORM TO THE REQUIREMENTS OF U.M.C. STANDARD NO. 6-1. EACH PORTION OF A FACTORY-MADE AIR DUCT SYSTEM SHALL BE IDENTIFIED BY THE MANUFACTURER WITH A LABEL OR OTHER SUITABLE IDENTIFICATION INDICATING COMPLIANCEWITH U.M.C. STANDARD NO. 6-1 AND ITS CLASS DESIGNATION. THESE DUCTS SHALL BE LISTED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTING AND THE REQUIREMENTS OF UMC STD. 6-1.

   DUCT SUPPORT
   FLEX DUCT TO BE SUPPORTED WITH 1-1/2" WIDE X 26 GA. GALV. STRAP @ MAX 6'-0" O.C. ATTACH TO RAFTER W/2 #8 SMS @ EACH END.
   SUPPLY AIR PLENUM TO BE SUPPORTED WITH 1-1/2" WIDE X 26 GA. GALV. STRAPS MIN. 2 PER PLENUM.
   SUPPLY AIR BOX AND DIFFUSERS TO BE SUPPORTED WITH (2) 12 GA. HANGER WIRES TO BOX @ OPPOSITE CORNERS.
   SUPPLY AIR BOX AND DIFFUSERS TO BE BRACED WITH (2) 12 GA. SLACK WIRES TO BOX @ OPPOSITE CORNERS. ATTACH SUPPLY AIR DIFFUSERS TO CEILING GRID TO RESIST A LATERAL LOAD EQUAL TO THE WEIGHT OF THE DIFFUSER AND SUPPLY AIR BOX W/2 #8 SMS.
9. FIREBLOCKING:
   SHALL BE PROVIDED IN THE FOLLOWING LOCATION
10. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT (3048mm) INTERVALS BOTH VERTICAL AND HORIZONTAL. SEE CBC SECTION 717.2

INSULATION SCHEDULE

ZONE	WALL	ROOFS	FLOORS
1-14 & 16	R -13	R -19	R -13
15	R -13	R -30	R -13

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REVISIONS

NO	DATE	DESCRIPTION
1		
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3		
4		

DATE: 2/24/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12'X40' RELOCATABLE BUILDING
CEILING & MECHANICAL NOTES

American Modular Systems Inc.
707 Sprocketa Ave. Manteca, CA 95336
(209)825-1901 Fax (209)825-7016
americanmodular.com

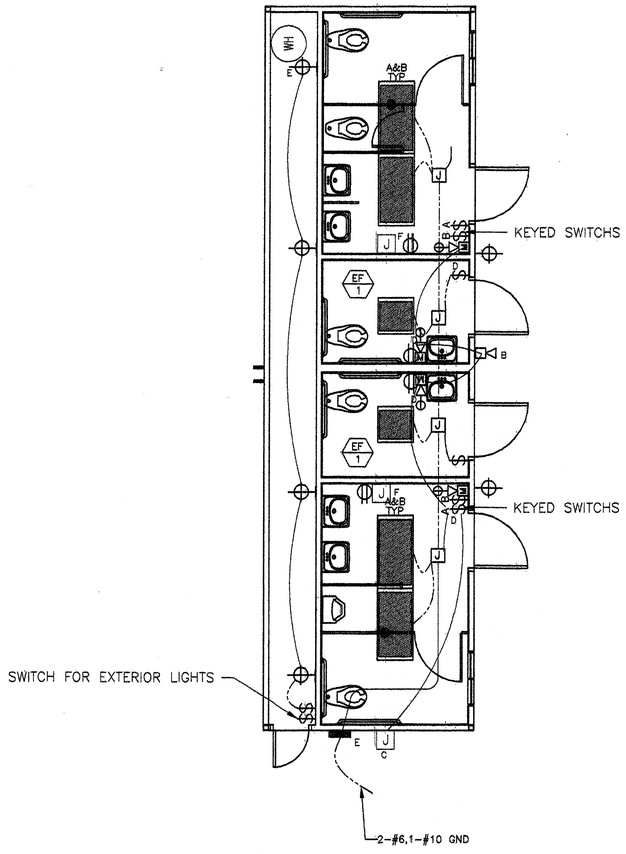
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER No. C12831 Ram, S.D.Lam STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02 111612
AC FI SS CR
DATE 1/12/11

PROJECT No.
PC

M3



3 / E1 TYPICAL ELECTRICAL PLAN
1/4"=1'-0"

B. EXTERIOR 4 SQ. J-BOX (FIRE ALARM HORN) INSTALL AT +90" FROM FINISFED FLOOR.
C. J-BOX ONLY (FIRE ALARM TIE-IN) INSTALL 4" SQ. BOX, 2 GANG RING WITH 1" CONDUIT TO ABOVE CEILING. TIE TO 3/4" CONDUIT AS SHOWN ON PLAN FOR FIRE ALARM DEVICES.
D. 4" SQ. J-BOX (FIRE ALARM HORN/STROBE).
E. ELECTRICAL SERVICE TIE-IN LOCATION.
F. 4" J-BOX MOUNTED AT +36" TO CENTER WITH 230 V. POWER FOR DISTRICT SUPPLIED HAND DRYERS.
G. EXTERIOR ENERGY SAVING LIGHT FIXTURE. STANDARD LIGHT SWITCH LOCATED IN PLUMBING CHASE. IDENTIFIY SWITCH AS SUCH.
H. 6 GALLON 120V ELECTRIC WATER HEATER. MOUNT ON WALL AS HIGH AS POSSIBLE WITH dsa APPROVED PLATFORM AND SAFTEY STRAP.

STANDARD ELECTRICAL SYMBOLS

- EXIT LIGHT WHERE TWO OR MORE EXITS ARE REQUIRED
- INCANDESCENT WALL MOUNTED INTERIOR LIGHT FIXTURE
- DUPLEX WALL CONVENIENCE OUTLETS @ +18" TO CENTER LINE ABOVE F.F. AND 12'-0" MAX TYP U.O.N.
- FOURPLEX WALL OUTLET @ +18" TO CENTER LINE U.O.N..
- W.P.GFCI — WEATHER PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET
- GFCI — GROUND FAULT CIRCUIT INTERRUPT OUTLET
- $ — SINGLE POLE LIGHT SWITHCES @ +48", HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.
- J — ELECTRICAL CROSSOVER J-BOXES ABOVE T-BAR CEILING #1-4"X1", #22 4"X2"
- CLOCK/SPEAKER COMBO @ +90"
- :a — SWITCH SUBSCRIPTS - a=DEVICE CONTROLLED.
- J — JUNCTION BOX - SIZE AND TYPE AS REQUIRED.
- S — SPEAKER- OUTLET ONLY - 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +84"
- △ — DATA/COMMUNICATION OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +18" U.O.N. AND A 3/4" CONDUIT STUB CEILING SPACE.
- ▲ — INTERCOM TELEPHONE- OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48" U.O.N.
- M-H — MOTION SENSOR OUTLET STUB-UP -PROVIDE (1)4" SQ. BOX W/ SINGLE DEVICE RING AND COVER AND ONE 3/4" CONDUIT STUB TO ABOVE CEILING (DEVICES BY OTHERS)
- S — SECURITY/INTRUSSION KEY PAD - OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER @ +48" AND ONE 3/4" CONDUIT STUB ABOVE CEILING
- DC — DOOR CONTACT - PROVIDE (1) EMPTY 1/2"ø EMT THROUGH DOOR HEADER STUB ABOVE CEILING
- CATV △ — CATV OUTLET STUB-UP -PROVIDE (1)4" SQ. BOX W/ SINGLE DEVICE RING AND COVER AND(1) 3/4"ø CONDUIT TO ABOVE CEILING (DEVICES BY OTHERS)
- F — FIRE ALARM PULL STATION - OUTLET ONLY, 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48". (DEVICE N.I.C.)
- FIRE ALARM HORN - OUTLET ONLY - 4" SQ. SINGLE GANG J-BOX WITH BLANK WEATHERPROOF COVER @ +90" MIN (DEVICE N.I.C.)
- FIRE ALARM VISUAL ALARM- OUTLET ONLY - 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +80". A.F.F. BUT NO GREATER THAN +96". IF CEILING MOUNTED PER NFPA72 TABLE 6-4.4.1(b).
- M — MINI HORN BOX W/ SINGLE DEVICE RING AND COVER @ +80"A.F.F. BUT NO GREATER THAN +96". STUB TO ATTIC
- T — THERMOSTAT @ +60" SEALED, +48" A.F.F UNSEALED
- ULTRASONIC OCCUPANCY SENSOR
- ELECTRICAL PANEL

- GENERAL NOTES -

1.- F.A. : STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT
2.- IF OPTIONAL DOOR OCCURS A PULL STATION J-BOX AND EXIT SIGN ARE REQUIRED. PULL STATIONS ARE REQUIRED @ EVERY EXIT
3.- STUB OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES SHOWN ARE DIAGRAMITICAL ONLY EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.
4.- SEE TYPICAL CLASSROOM LAYOUT FOR LOCATIONS OF ALL DEVICES. FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.
5.- THE LIGHTS FOR EACH ROOM OVER 250' SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR. WATT STOPPER W-500A, W-1000A,OR W-2000A (OR EQUAL) BASED ON THE ROOM SIZE IN CONJUCTION WITH BI-LEVEL SWITCHING.

NOTE:
AT ANY SPACE REQUIRING 2 OR MORE EXITS PROVIDE EXIT SIGNS (CBC 1011) AND EMERENCY EXIT ILLUMINATION (CBC 1006)

NOTE:
THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT, SMOKE DETECTORS AND PULL STATIONS WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3

SYMBOL	DESCRIPTION	WATTS	MANUFACTURER
	2'X4' FLOURESCENT DROP IN FIXTURE, ACRYLIC PRISMATIC LENS. T-8 ELECTRONIC BALLASTS (3)32 WATT TUBES, WT. 27 LBS.	SP41 32 W	CRESCENT 24GP40HFSA115BYF2 OR LITHONIA 2GT440A12120ESPWS1846LPESCW
	FLOURESCENT SURFACE MOUNTED EXTERIOR LIGHT WITH IMPACT RESISTANT ENCLOSURE .125 THICK CLEAR PRISMATIC ONE PIECE LENS W/ NEOPRENE GASKET & POSIGRIP STAINLESS STEEL SCREWS. (PROVIDE EMERGENCY BATTERY BACK-UP WHERE TWO OR MORE EXITS OCCUR.)	(2) 7W TT 2700 K	ENERTRON 7026B-L OR EQUAL

BASED ON PC# 02-109606

REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 06/16/10
SCALE: NOTED
DRAWN BY: RS/MP
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT
McKINLEY SCHOOL

12'X40' RELOCATABLE BUILDING
TYPICAL ELECTRICAL PLAN & NOTES

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

REGISTERED PROFESSIONAL ENGINEER — No. C12831 Ren. 2-31-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC(V) FLS SS CR
DATE 1/12/11

PROJECT No.

E1

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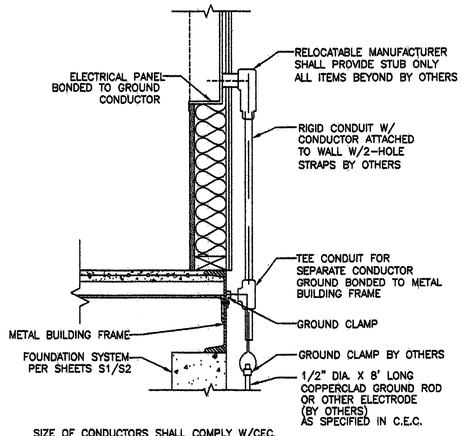
VOLTS: 120/240 SINGLE PHASE			PANEL "A"						FEED: EXTERIOR LB		
MAIN: 60 AMP MAIN BKR.			LOCATION: INTERIOR						MOUNTING: FLUSH		
LOAD	WATTS A	WATTS B	BRK. AMP	P	CKT	A	B	CKT	BRK. AMP	WATTS A	WATTS B	LOAD
RECEPTS	1440		20	1	1			2	30	3216		WATER HEATER
EXIT LIGHT / EXTERIOR LIGHTS		300	20	1	3			4	30		3216	WATER HEATER
INTERIOR LIGHTS	1440		20	1	5			6				
F.A.C.P		*			7			8				
					9			10				
					11			12				
					13			14				
					15			16				
PHASE WATTAGE	2880	300			17			18		3216	3216	PHASE WATTAGE
TOTAL WATTS "A" LEG = 6096			TOTAL WATTS A+B= 9612						TOTAL WATTS "B" LEG = 3516			
TOTAL WATTS = 9612		40 AMPS	120/240V			SINGLE PHASE			60 AMP BUS.			
FEEDERS: 3-#2 & 1-#8 CU. TO BE RUN BY THE DISTRICT EITHER UNDERGROUND OR OVERHEAD, SEE SITE ELEC. PLAN.												

NOTE:
FIRE ALARM DEDICATED CIRCUIT SHALL BE INDENTIFIED WITH A RED MARKED DISCONNECT WITH LOCK-ON CAPABILITY NFPA 72 4.4.1.4.2.1



SIZE OF CONDUCTORS SHALL COMPLY W/CEC.
BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL & METAL BUILDING FRAME (CEC).
IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (CEC).
ELECTRICAL BOND MODULES TOGETHER W/#8 CU @ MODLINE. BY MANUFACTURER. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS (CEC) AS REQUIRED. GROUNDING DETAIL PER DSA IR E-1.
INSPECTOR TO WITNESS GROUNDING TEST.

1/E2 GROUNDING DETAIL
1 1/2"=1'-0"

BASED ON PC# 02-109808

- GENERAL NOTES -

FIRE ALARM SYSTEM

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE,& CA. FIRE CODE.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTINGS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY DSA.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.
4. JUCTION BOXES- GALVINIZED SHEET METAL, SQUARE OR RECTANGULAR WITH BLANK COVERS. LOCATE ONE BOX AT REAR OF BUILDING NEAR MAIN ELECTRICAL PANEL AT +18" ABOVE FINISH FLOOR FOR FUTURE CONNECTION.
5. COVERS- INSTALL GASKETED, METAL, WATERPROOF, FINISH COVERS AT EXTERIOR LOCATIONS. INSTALL FINISH COVERS AT INTERIOR LOCATIONS.
6. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALL, TESTED, AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL REGULATIONS (CBC 907.2.3) AND THE 2002 EDITION OF NFPA 72.
7. THE LOCATION OF AUTOMATIC DETECTORS, MANUAL STATIONS AND OTHER FIRE ALARM EQUIPMENT AND DEVICES, AS SHOWN ON PLAN, ARE FOR REFERENCE ONLY AND DO NOT CONTITUTE SHOP DRAWINGS WICH ARE REQUIRED FOR REVIEW AND APPROVAL
8. ALARM-INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 dBA ABOVE THE AVERAGE AMBIENT NOISE LEVELS OR 5dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS WHICH-EVER IS GREATER, MEASURED 5' ABOVE THE FLOOR. AMBIENT NOISE LEVELS MEANS THE LEVEL WICH CAN NORMALLY BE EXPECTED WHEN THE FACILITY, BUILDING, ROOM, OR AREA IS FUCTIONING UNDER NORMAL OPERATING OR WORKING CONDITIONS (NFPA 72, SEC. 7.4.2)
9. THE ALARM SYSTEM SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNINGS SHALL HAVE A FLASH RATE NOT EXCEEDING TWO FLASHES PER SECOND (2 HZ) NOR BE LESS THAN ONE FLASH EVERY SECOND (1 HZ). STROBE SIGNALING DEVICES FOR THE HEARING IMPAIRED SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED (NFPA 72, SEC. 7.5)
10. AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY STATE FIRE MARSHAL. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BY ARRAGED BY OWNER.

IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 10db OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALING DEVICES MAY BE REQUIRED BY TYHE ENFORCING AGENCY PER [CBC].

GENERAL NOTES

1. GROUNDING ELECTRODE CONDUCTOR SIZED PER CEC.
2. PROVIDE BONDS TO BLDG. STEEL & PANEL (#8 CU)
3. PANEL TO LISTED FOR USE AS SERVICE EQUIPMENT.

FIXTURE NOTES:

1. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE ENERGY SAVING LAMPS AND BALLASTS.
2. LUMINATES/BALLASTS SHALL BE CERTIFIED PER CALIFORNIA BUILDING CODE, TITLE 24.
3. FLUORESCENT LIGHT FIXTURE TYPE "A" SHALL BE CONTROLLED TO PROVIDE TWO LEVELS OF LIGHTING. SWITCH (SA) SHALL CONTROL THE TWO OUTER LAMPS AND SWITCH (SB) SHALL CONTROL THE TWO INNER LAMPS.

ELECTRICAL

1. ELECTRICAL SERVICE DROP AND CONNECTIONS SUPPLIED BY OTHERS.
2. MANUFACTURER TO PROVIDE STUB-OUT FROM BACK OF ELECTRICAL PANEL THROUGH THE EXTERIOR WALL OR TO BELOW FLOOR FOR RECEIVING EITHER UNDERGROUND OR OVERHEAD SERVICE & FITTING FOR GROUNDING CABLE.
3. ELECTRICAL PANEL BOARD SHALL BE RECESS MOUNTED INSIDE THE BUILDING. SIZED TO ACCOMMODATE ALL CONNECTED LOADS INCLUDING SPACES AS SHOWN. OVERCURRENT PROTECTIVE DEVICES IN THE PANEL BOARDS HAVE ADEQUATE SHORT CIRCUIT INTERRUPTING CAPACITY. ALL BUSES INCLUDING BUS SHALL BE COPPER OR ALUMINUM.
4. 2X4 FLOURESCENT FIXTURES SHALL BE STEEL FRAME, LENS SHALL BE HINGED AND LOCKED IN PLACE BY TWO LOCKING DEVICES. THE LENS DIFFUSERS SHALL BE KHS, INC. #KSH-12, CAROLITE, INC. #C-12 OR PLASKOLITE, INC. #PL21A. MINIMUM LENS THICKNESS SHALL BE .125 INCH.
5. FLOURESCENT BALLAST SHALL BE ENERGY SAVER WHILE MAINTAINING FULL LIGHT OUTPUT, CLASS "P" EQUIPPED WITH THERMAL PROTECTORS, GUARANTEED AGAINST FAILURE FOR (2) YEARS AND BE REPLACED FROM INSIDE THE FIXTURE.
6. CLOCK - 12" DIAL CLOCK ON CLOCK OUTLET.
   A) CLOCK SHALL BE GENERAL ELECTRIC MODEL 2912 129V 60 CYCLE
   B) CLOCK OUTLET SHALL BE BRYANT #2828 OR EQUAL WITH SEPERABLE HANGING CLIP & APP'D RECEPT.

THE H.V.A.C. UNIT FEEDER CIRCUIT - PANEL CIRCUIT BREAKER, FEEDER WIRE, UNIT DISCONNECT AND FUSES (WHERE USED) - IS TO BE COORDINATED WITH THE NAME PLATE DATA AT THE TIME OF MANUFACTURE. H.V.A.C. UNITS HAVING KVA RATINGS LARGER THAN THAT INDICATED ON THIS PANEL SCHEDULE WILL NOT BE ALLOWED TO BE INSTALLED ON THIS BUILDING. IF 60 DEGREES C. WIRE IS TO BE USED IN THIS INSTALLATION, CALCULATIONS DEMONSTRATING AMPACITY BE PROVIDED ON THE DRAWING.

REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 08/06/10
SCALE: NOTED
DRAWN BY: RS
SERIAL NO.:

CUSTOMER:
BAKERSFIELD SCHOOL DISTRICT
McKINLEY SCHOOL

12'X40' RELOCATABLE BUILDINGS
ELECTRICAL NOTES & DETAILS

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

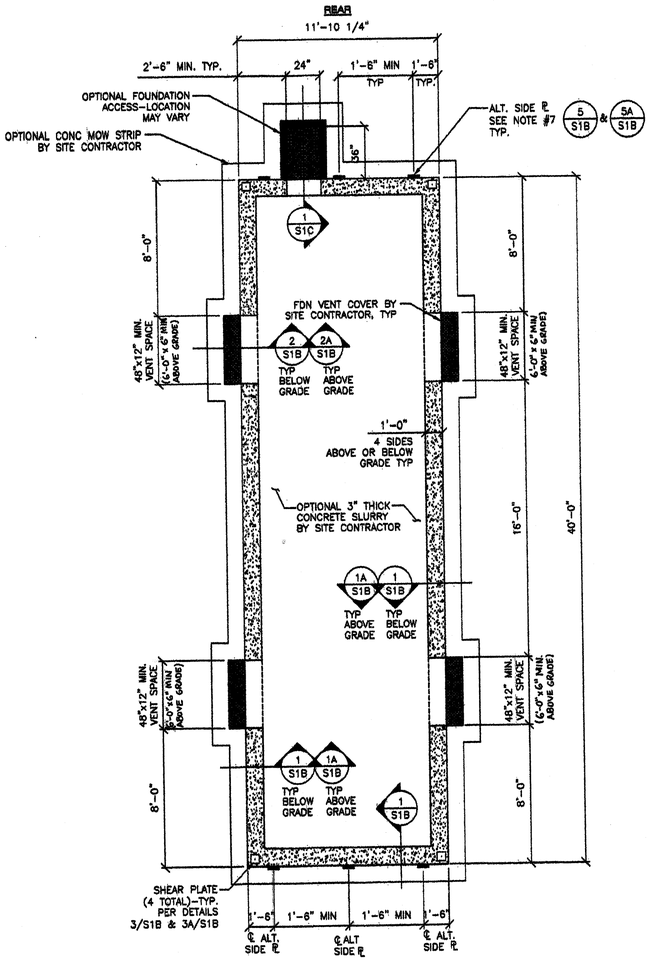
APPROVALS:

REGISTERED PROFESSIONAL ENGINEER ELECTRICAL No. C12831 Ren. 2-31-11 STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02-111612
AC, PD, FLS, SS, GR
DATE 1/7/11

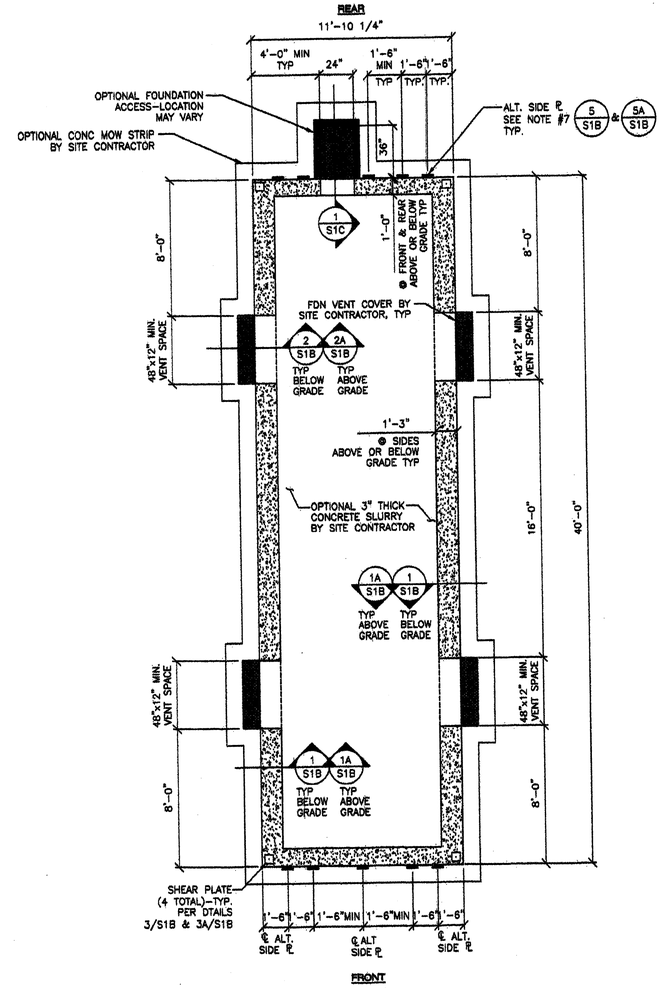
PROJECT No.
PC

E2



A S1A FOUNDATION PLAN (ABOVE/BELOW GRADE)
1/4"=1'-0" (50 PSF FLOOR LIVE LOAD PLUS 15 PSF PARTITION LOAD)

NOTES:
1. DO NOT INSTALL BUILDING IN AREAS OF WATER FLOW LINES.
2. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500 PSI MIN. PROPORTIONED PER TITLE 24, PART 2, SECTION 1905A.3 OR 1905A.4
3. THE REINFORCING BARS MUST BE TESTED PER TITLE 24, PART 2, SECTION 1916A.2 IF CONCRETE WITH A COMPRESSIVE STRENGTH OF 3500 PSI IS SPECIFIED THEN THE TESTING OF THE REINFORCING BARS MAY BE WAIVED PER SECTION 1916A.4. THE CEMENT SHALL BE CERTIFIED PER SECTION 1916A.1
4. REINFORCING STEEL 40,000 PSI MINIMUM, PER ASTM A615
5. MINIMUM SOIL BEARING CAPACITY 1500 PSF.
6. DESIGN SOIL BEARING CAPACITY 1500 PSF.
7. ALTERNATE SIDE PLATES MUST COMPLETELY REPLACE TYPICAL SHEAR PLATES ALONG ANY ONE 40'WALL. COMBINATION OF TYPICAL SHEAR PLATES AND SIDE PLATES ALONG ANY ONE 40' WALL LINE IS NOT PERMITTED.
8. MINIMUM BUILDING SEPARATION IS 6".



B S1A FOUNDATION PLAN (ABOVE/BELOW GRADE)
1/4"=1'-0" (CONCRETE 125 PSF FLOOR LIVE LOAD)

NOTES:
1. DO NOT INSTALL BUILDING IN AREAS OF WATER FLOW LINES.
2. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500 PSI MIN. PROPORTIONED PER TITLE 24, PART 2, SECTION 1905A.3 OR 1905A.4
3. THE REINFORCING BARS MUST BE TESTED PER TITLE 24, PART 2, SECTION 1916A.2 IF CONCRETE WITH A COMPRESSIVE STRENGTH OF 3500 PSI IS SPECIFIED THEN THE TESTING OF THE REINFORCING BARS MAY BE WAIVED PER SECTION 1916A.4. THE CEMENT SHALL BE CERTIFIED PER SECTION 1916A.1
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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/21/08
SCALE: NOTED
DRAWN BY: RL
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
CONCRETE FOUNDATION PLAN
50 PSF LIVE LOAD+15 P.S.F & 125 PSF

American Modular Systems Inc.
787 Sprocketa Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

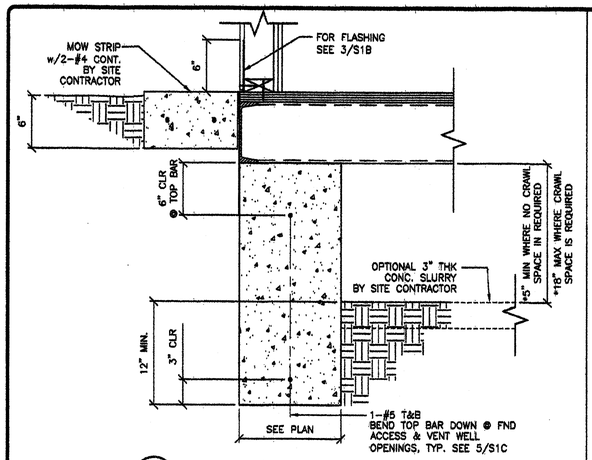
REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1418 EXP. 3-31-11 Structural Engineer — STATE OF CALIFORNIA

REGISTERED ENGINEER — No. G12831 Ren. 6-30-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02 111612
AC. FLS. SS GR
DATE 1/12/11

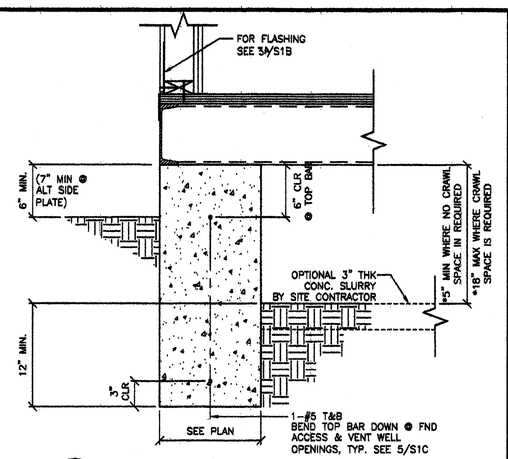
PROJECT No.

S1A



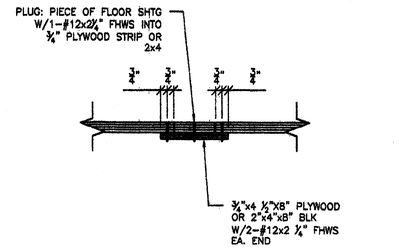
1 / S1B **BELOW GRADE SECTION**
1 1/2"=1'-0"

* COORDINATE WITH AMS PRIOR TO EXCAVATE

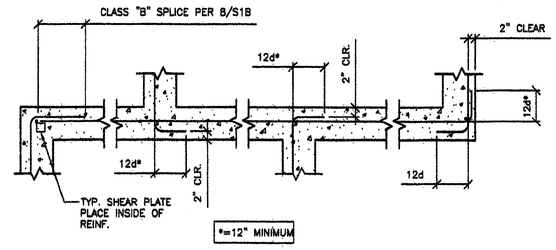


1A / S1B **ABOVE GRADE SECTION**
1 1/2"=1'-0"

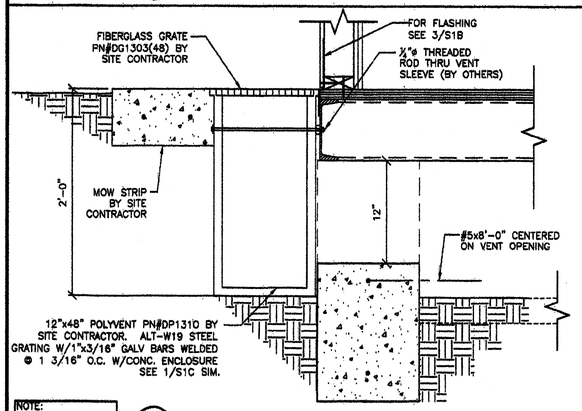
* COORDINATE WITH AMS PRIOR TO EXCAVATE



4 / S1B **FILLER ACCESS HOLE DETAIL**
1 1/2"=1'-0"

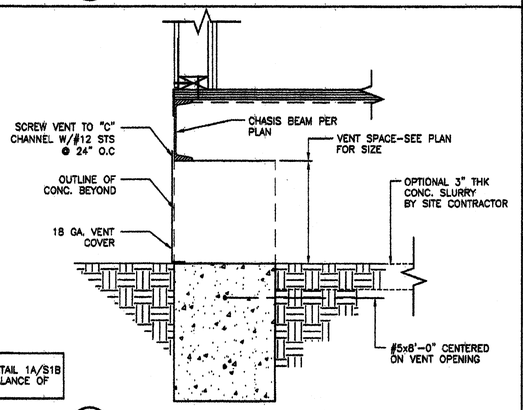


6 / S1B **TYP. WALL & FTG. REINF. SPLICES**
NOT TO SCALE



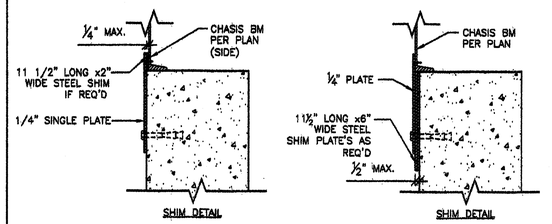
NOTE: SEE DETAIL 1/S1B FOR BALANCE OF DETAIL

2 / S1B **BELOW GRADE SECTION/VENT DETAIL**
1 1/2"=1'-0"

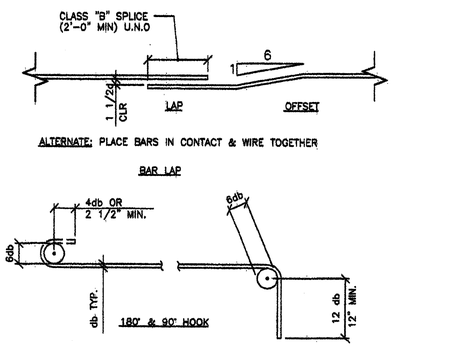


NOTE: SEE DETAIL 1A/S1B FOR BALANCE OF DETAIL

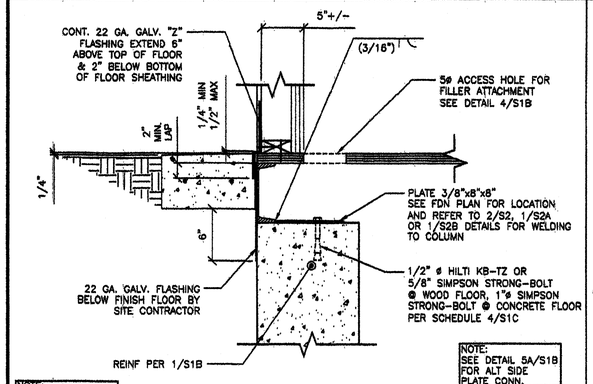
2A / S1B **ABOVE GRADE SECTION/VENT DETAIL**
1 1/2"=1'-0"



5 / S1B **ALTERNATE SIDE PLATE SHIM DETAIL**
1 1/2"=1'-0"

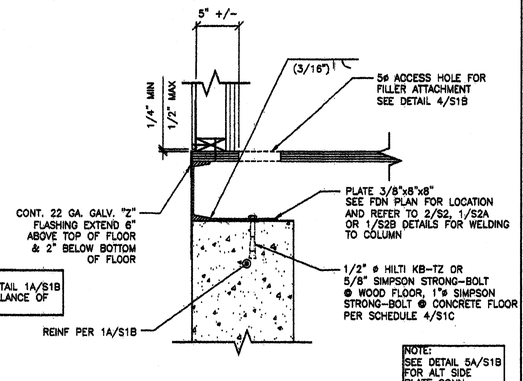


7 / S1B **TYPICAL REINFORCING BENDS**
NOT TO SCALE

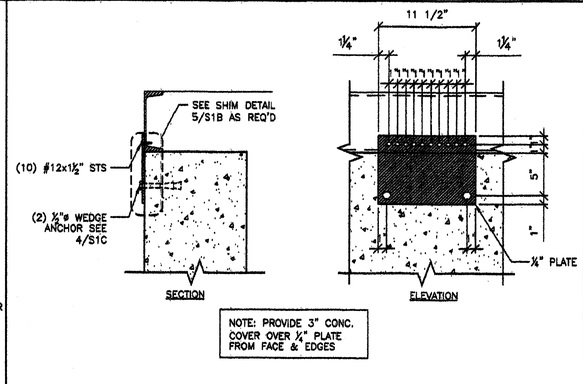


NOTE: SEE DETAIL 1/S1B FOR BALANCE OF DETAIL

3 / S1B **BELOW GRADE SECTION/PLATE ATTACHMENT**
1 1/2"=1'-0"



3A / S1B **ABOVE GRADE SECTION/PLATE ATTACHMENT**
1 1/2"=1'-0"



5A / S1B **ALTERNATE SIDE PLATE DETAIL**
1 1/2"=1'-0"

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/21/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
CONCRETE FOUNDATION DETAILS

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Lutrell No. 5416 EXP. 3-31-11 Structural Engineer — STATE OF CALIFORNIA

LICENSED ARCHITECT — No. C12831 Ren. 2-31-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02_111612
AC. — FLS. — SS. GR
DATE 1/12/11

PROJECT No.

S1B

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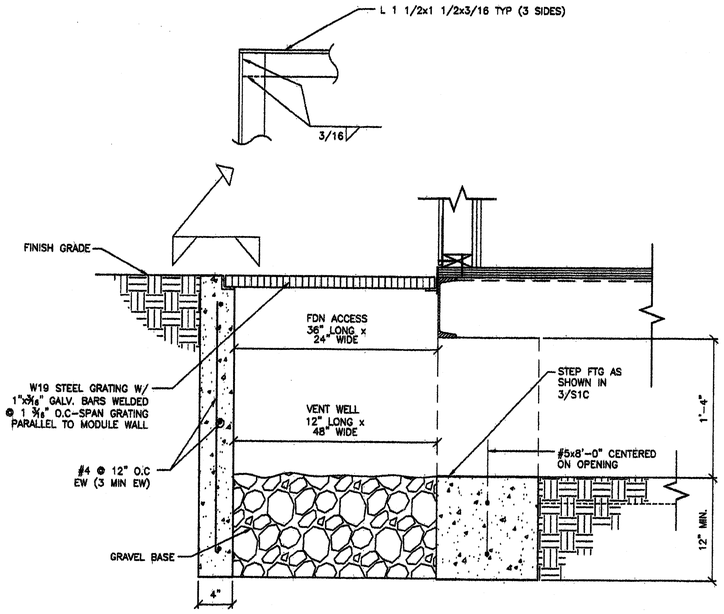
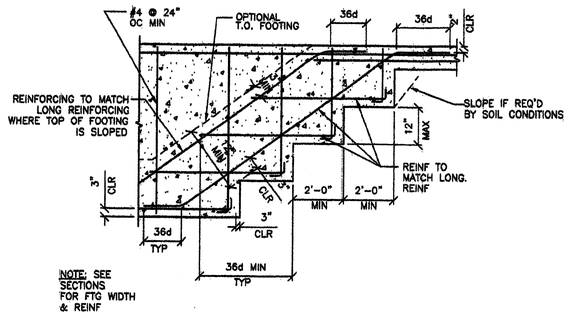


1 / S1C OPTIONAL FOUNDATION ACCESS/VENT WELL
1 1/2"=1'-0"



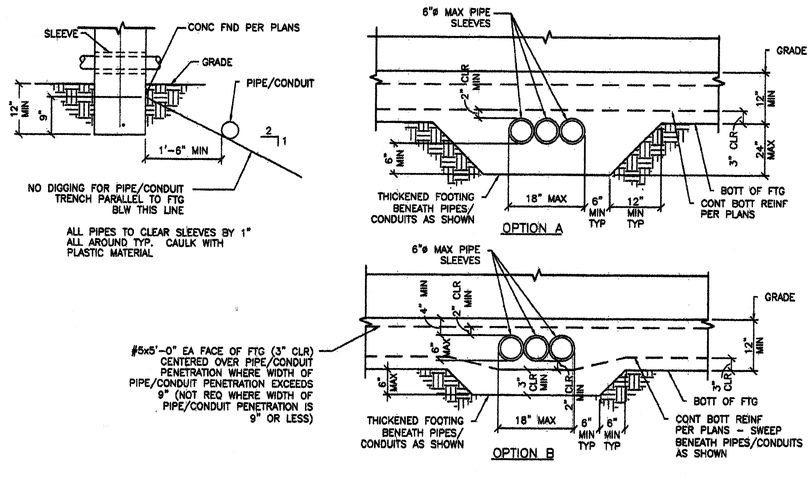
3 / S1C TYPICAL STEPPED FOOTING
N.T.S.

ANCHOR TYPE	HILTI KWIK KB-TZ ICC ESR-1917			SIMPSON STRONG-BOLT ICC ESR-1771			
ANCHOR SIZE (IN)	1/2"ø	5/8"ø	3/4"ø	1/2"ø	5/8"ø	3/4"ø	1"ø
MIN EMBED (IN)	4"	4 3/4"	5 3/4"	3 7/8"	5 1/8"	5 3/4"	5 1/4"
TENSION TEST LBS (SINGLE BOLT)	5121#	8040#	7917#	3826#	6732#	5454#	3550#
TENSION TEST LBS (DOUBLE BOLT)	5121#	6174#	5889#	3826#	5102#	4122#	N/A
INSTALLATION TORQUE (FT-LB)	40	60	110	50	85	180	230

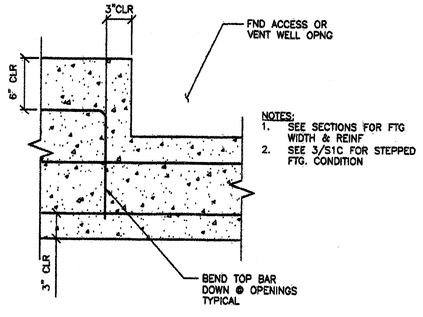
1. TENSION TEST- 2 x ALLOWABLE TENSION LOAD PER DSA IR 19-1.
2. NORMAL WEIGHT CONCRETE WITH f'c= 2500 PSI TO COMPLY WITH 1916A.4 FOR MATERIAL TEST WAIVER.
3. MINIMUM EDGE DISTANCE REQUIRED 6".

4 / S1C ANCHOR BOLT SCHEDULE
N.T.S.

NOTES:
1. AS AN OPTION TO INDIVIDUAL PIPE SLEEVES THE FOOTING MAY BE BLOCKED OUT FOR MULTIPLE PIPES (8" HIGH x 18" WIDE MAX @ OPTION "A", 6" HIGH x 18" WIDE MAX OPTION "B") PROVIDE 1" MIN CLEARANCE ALL AROUND BTWN PIPES/CONDUITS & BLOCKOUT/SLEEVES & FILL W/ CAULK.
2. CONCRETE SHALL BE WELL CONSOLIDATED AROUND & UNDER PIPES, CONDUITS, SLEEVES, BLOCKOUTS TO PREVENT CONCRETE VOIDS.
3. PROVIDE 2" CLEAR MIN BETWEEN BLOCKOUT/SLEEVES AND REINFORCEMENT.
4. WHERE TOP OF PIPES/CONDUITS ARE 12" OR MORE BELOW THE BOTTOM OF THE FOOTING, THICKENED FOOTING AROUND PIPES/CONDUITS IS NOT REQUIRED. BACKFILL & COMPACT TO 95% OVER PIPES/CONDUITS PRIOR TO PLACING FOOTING.



2 / S1C PIPE SLEEVE DETAIL
1 1/2"=1'-0"



5 / S1C VENT/ACCESS VENT OPENING DETAIL
1 1/2"=1'-0"

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REVISIONS

NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/21/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
CONCRETE FOUNDATION DETAILS

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REGISTERED PROFESSIONAL ENGINEER
Kenneth A Luttrell
No. 1418
EXP. 3-31-11
Structural Engineer
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
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Ren. 2-31-11
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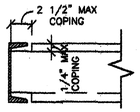
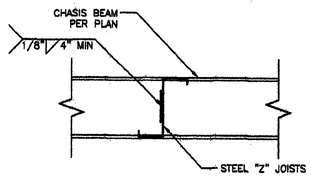
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02_111612
AC. — FLS. — SS GR
DATE 11/2/11

PROJECT No.

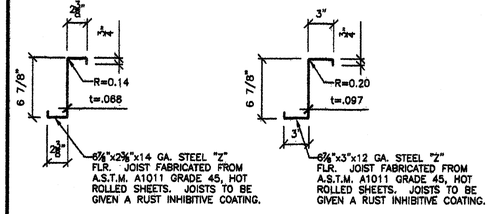
S1C



TYP FLOOR JOIST COPING



1 / S2 — TYP. Z-JOIST ATTACHMENT TO BEAM
1 1/2"=1'-0"



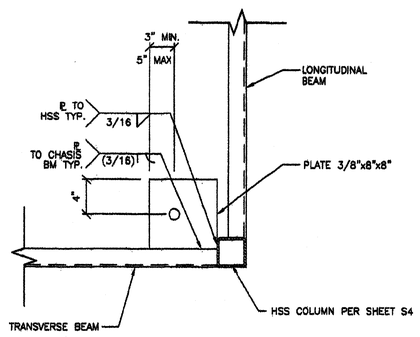
14 GA. JOIST

Z SECTION PROPERTIES
A=0.89 IN.^{2}
Sx=1.85 IN.^{3}
Ix=6.37 IN.^{4}

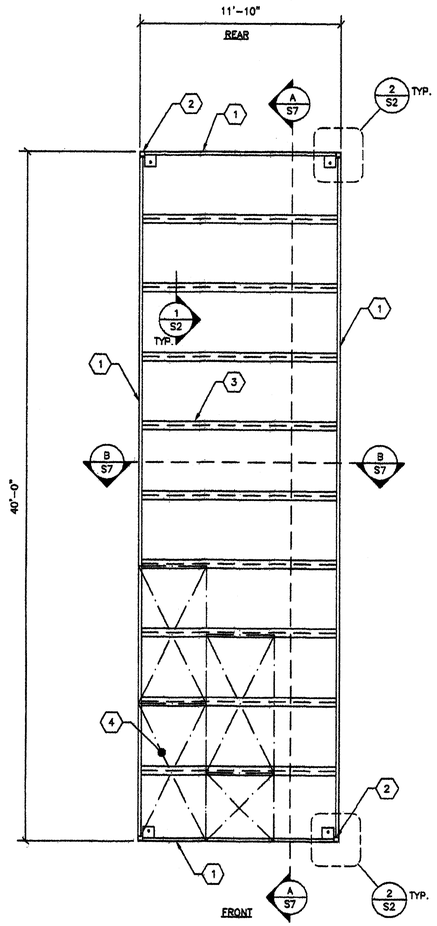
12 GA. JOIST

Z SECTION PROPERTIES
A=1.38 IN.^{2}
Sx=2.97 IN.^{3}
Ix=10.20 IN.^{4}

1A / S2 — TYP. Z-JOISTS
1 1/2"=1'-0"



2 / S2 — TYP. FL. BEAM CONNECTION
1 1/2"=1'-0"



A / S2 — TYPICAL FLOOR FRAMING PLAN
1/4"=1'-0"
PLYWOOD FLOOR

- KEY NOTES -

1. C 7x9.8 FLOOR BEAM FOR 50 PSF+15 PSF
   ALTERNATE C10x15.3
   C 9x13.4 FOR 125 PSF
2. HSS COLUMN PER SHHET S4
3. FLOOR JOIST PER SCHEDULE (SEE 1A/S2)

FLOOR JOIST SCHEDULE		
LIVE LOAD PSF	SPACING	
	14 GA. JOIST	12 GA. JOIST
50 + 15	24" O.C.	48" O.C.
125	——	24" O.C.

4. 1 1/8" T&G PLYWOOD FLOOR SHT'G
   STURDI-I-FLOOR 48" O.C SPAN RATING EXP. 1
   COMFORMING TO PS 1-95
   OPTION: UNI-FLOOR BY PITTSBURGH
   TESTING LAB CONFORMING TO PS 1-95.
   STAGGER SHEETS 48" O.C AS SHOWN W/
   FACE GRAIN NORMAL TO FLOOR JOISTS.
   FASTENING: BOUNDARY OF EA. MODULE:
   #12x2 1/4" WOOD TEK @ CHANNEL @ 6" O.C
   PANEL EDGES: ET&F 0.144"6x2" MIN.
   POWER DRIVEN PINS @ 6"O.C
   FIELD: ET&F 0.144"x2" MIN. POWER
   DRIVEN PINS @ 10" O.C.

   NOTE: SEE ICC ER-4144 FOR ET&F
   BRAND PNEUMATIC PINS.

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/21/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
FLOOR FRAMING PLAN & DETAILS (PLYWOOD OPTION)

American Modular Systems Inc.
787 Sprekels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1416 EXP. 9-31-11 Structural Engineer — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. C12631 Rev. 2-31-11 — STATE OF CALIFORNIA

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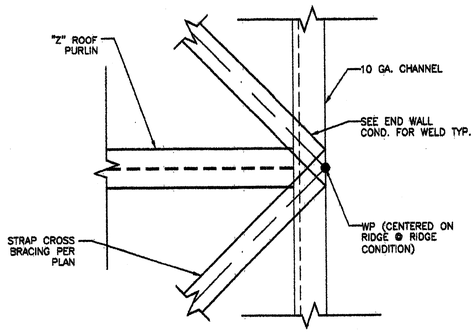
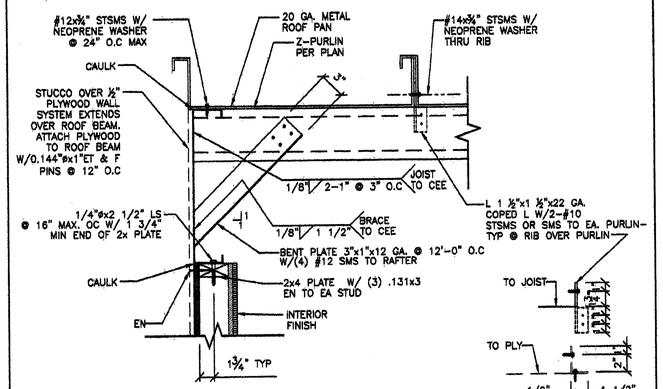
PROJECT No.

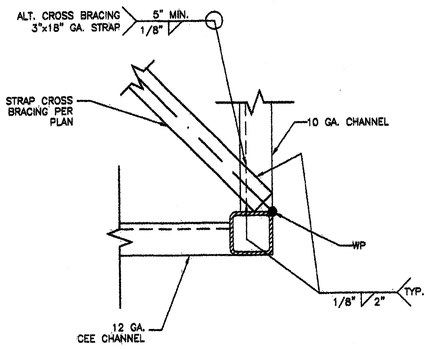
S2



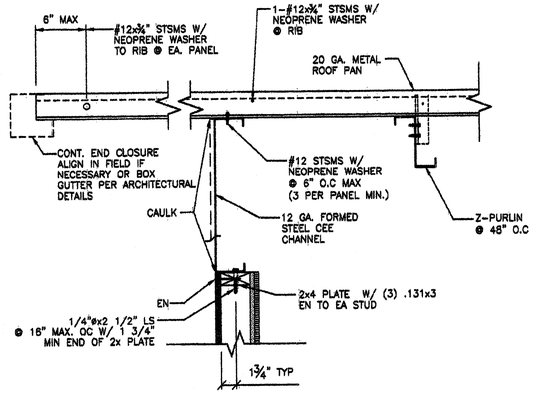
1 / S3 TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ ROOF CHANNEL



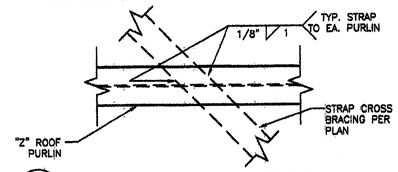
4 / S3 SIDE WALL TO ROOF BEAM DETAIL
1 1/2"=1'-0"



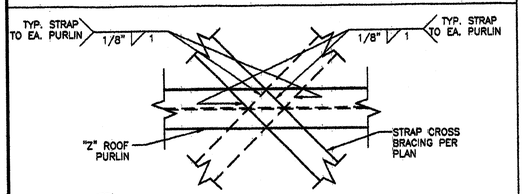
2 / S3 TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ END CHANNEL



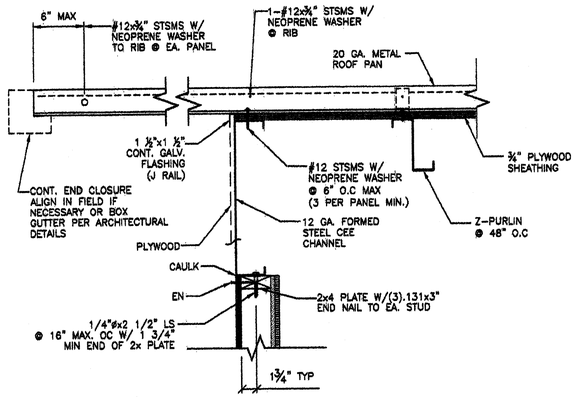
5 / S3 5'-0" OVERHANG DETAIL
1 1/2"=1'-0"



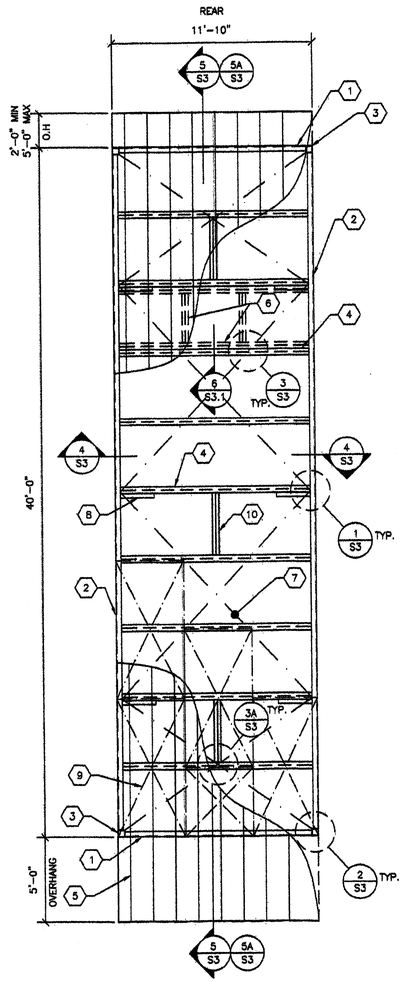
3 / S3 TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ ROOF PURLIN



3A / S3 TYP. CROSS BRACING DETAILS
1 1/2"=1'-0" @ ROOF PURLIN



5A / S3 OVERHANG DETAIL
1 1/2"=1'-0"



A / S3 TYPICAL ROOF FRAMING LAYOUT
1/4"=1'-0" (MONO/DUAL PITCH-OPEN SOFFIT)

- KEY NOTES -

1. 12 GA. TRANSVERSE BEAM PER 10/S3.1
2. LONGITUDINAL ROOF CHANNEL TYP. PER 9/S3.1
3. HSS COLUMN PER SHEET S4
4. 'Z' FORMED ROOF PURLINS PER 8/S3.1 @ 48" O.C. MAX
5. 20 GA. ROOF PAN
   ALTERNATE 26 GA. ROOF PAN W/ROOF PLYWOOD & ENCLOSED SOFFIT OVERHANG OPTIONS ONLY. SEE SHEET S3A FOR DETAILS
6. PROVIDE DOUBLE 6" PURLINS W/8" PURLIN BLKG PER 6/S3.1 @ OPTIONAL 600# HVAC. (10'-0" MAX FROM END OF BLDG TO CENTER OF UNIT)
7. 2"x16 GA. STRAP CROSS BRACING GRADE 50
   ALT. CROSS BRACING 3"x18 GA. GRADE 50
8. 3x1x12 GA. BENT PLATE BRACE @ EA. STRAP TO BM CONN. & @ 12'-0" OC MAX
   SEE 4/S3 FOR DETAILS
   PROVIDE PURLIN BLKG @ EACH BRACE PER (10) BELOW
9. ALTERNATE TO CROSS BRACING:
   3/4" APA RATED L-P OSB SHEATHING OR 3/4" PLYWOOD (ALL SHEATHING SHALL BE EITHER T&G OR EDGE CLIP) COMPLY WITH DSA PA-062, CD EXPOSURE-1 48/24 SPAN INDEX, FACE GRAIN NORMAL TO ROOF PURLINS ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 1" MIN. FROM EDGE OF PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO SCHEDULE BELOW FOR FASTENING.
10. PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 6/S3.1
    BLOCKING IS ONLY REQUIRED AT PURLINS WITH DIAGONAL BRACING PER (8) ABOVE

FASTENING SCHEDULE

NAILING	0.144 PINS SPACING		# 10 SMS SPACING	
	TYPICAL	WITHIN 3' OF BUILDING CORNERS	TYPICAL	WITHIN 3' OF BUILDING CORNERS
BOUNDARY	6" O.C.	6" O.C.	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.	6" O.C.	6" O.C.
FIELD	12" O.C	6" O.C	12" O.C	12" O.C

ET & F 0.144 PINS PER ICC ESR #4144

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.
2. SEE SHEET S5 FOR TYP. SIDE WALL FRAMING.
3. SEE SHEET S5 FOR TYP. END WALL FRAMING.
4. ALL FASTENERS THRU METAL ROOF PANEL SHALL BE INSTALLED w/NEOPRENE WASHERS.

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REVISIONS

NO	DATE	DESCRIPTION
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DATE: 02/25/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
ROOF FRAMING PLAN & DETAILS (OPEN SOFFIT OPTION)

American Modular Systems Inc.
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americas@modular.com

APPROVALS:

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REGISTERED ARCHITECTURAL PRODUCTS ENGINEER — No. C42831 Exp. 2-31-11 — STATE OF CALIFORNIA

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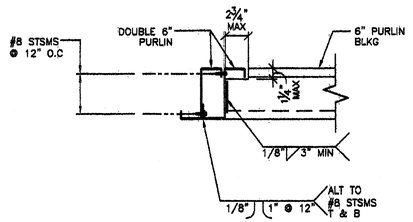
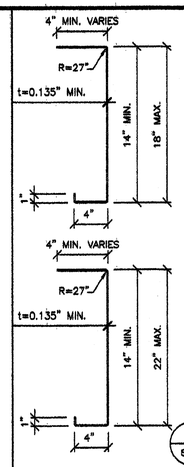
AC FLS SS GF
DATE 1/31/11

PROJECT No.

S3



6 / S3.1 BLOCKING DETAIL
1 1/2"=1-0"



	14"	18"
A	3.14 IN^2	3.71 IN^2
Sx MIN.	12.07 IN^3	17.32 IN^3
Ix MIN.	86.94 IN^4	159.80 IN^4

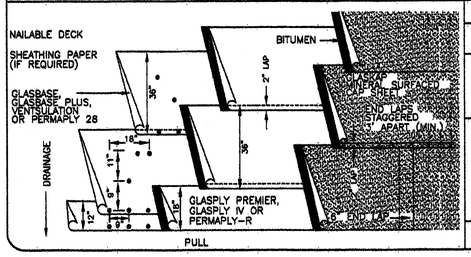
BEAM FABRICATED FROM ASTM A1011 GR50 W/RUST INHIBITIVE COATING.

	14"	22"
A	3.14 IN^2	4.28 IN^2
Sx MIN.	12.07 IN^3	23.33 IN^3
Ix MIN.	86.94 IN^4	262.35 IN^4

BEAM FABRICATED FROM ASTM A1011 GR50 W/RUST INHIBITIVE COATING.

9 / S3.1 LONGITUDINAL ROOF BEAM
1 1/2"=1-0"

THREE PLY MINERAL SURFACED FIBER GLASS BUILT-UP ROOF



MATERIALS PER 100 SQ. FT. OF ROOF AREA

SHEATHING PAPER:
WOOD BOARD DECKS ONLY.....1 LAYER

FELTS:

GLASBASE, GLASBASE PLUS, PERMAPLY 28 OR VENTSULATION FELT.....1 PLY
GLASPLY PREMIER, PERMAPLY-R OR GLASPLY IV.....1 PLY
GLASKAP, MINERAL SURFACED CAP SHEET.....1 PLY

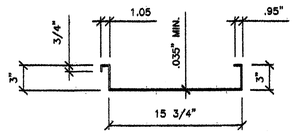
BITUMEN (INTERPLY):

INCLINE PER FOOT	ASPHALT	NOMINAL WEIGHT
UP TO 1"	170°F, TYPE II, FLAT	46 LBS.
1" TO 3"	190°F, TYPE III, STEEP	46 LBS.
3" TO 6"	220°F, TYPE IV, SPECIAL STEEP	46 LBS.
0 TO 6"	PERMAMOP	46 LBS.

APPROXIMATE INSTALLED WEIGHT: 141-215 LBS.
ROOFING CLASS: A

12 / S3.1 THREE PLY MINERAL BUILT-UP ROOF
1 1/2"=1-0"

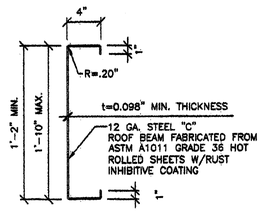
(26 GA. MAY BE USED W/ENCLOSED SOFFIT)



$S_x^+(t)$ = 0.418 IN^3
$S_x^-(b)$ = 1.412 IN^3
I_x^+ = 0.968 IN^4

PAN FABRICATED FROM ASTM A1011 GRADE 36, HOT ROLLED SHEETS. PAN TO BE GIVEN A RUST INHIBITIVE COATING.

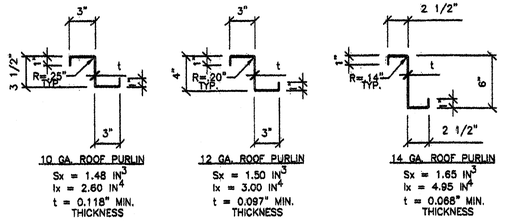
7 / S3.1 20 GA. ROOF PAN
1 1/2"=1-0"



TYPICAL SECTION

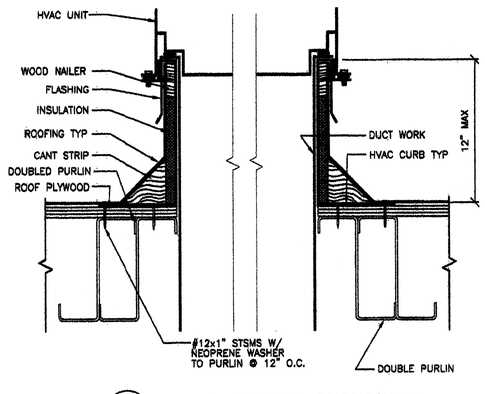
C SECTION PROPERTIES
D=1'-2"
A=2.36 IN^2
Sx=9.57 IN^3
Ix=67.02 IN^4

10 / S3.1 12 GA. ROOF CHANNEL
1 1/2"=1-0"



JOIST FABRICATED FROM ASTM A1011 GRADE 36. HOT ROLLED SHEETS, JOISTS TO BE GIVEN A RUST INHIBITIVE COATING.

8 / S3.1 Z PURLINS DETAILS AND PROPERTIES
1 1/2"=1-0"



11 / S3.1 HVAC CURB DETAIL ANCHORAGE
3"=1-0"

- GENERAL NOTES -

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REVISIONS

NO	DATE	DESCRIPTION
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DATE: 02/25/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
ROOF FRAMING DETAILS

American Modular Systems Inc.
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americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell — Exp. 1-618 — EXP. 5-31-11 — Structural Engineer — STATE OF CALIFORNIA

No. C12631 — Ren. 2-31-11 — STATE OF CALIFORNIA

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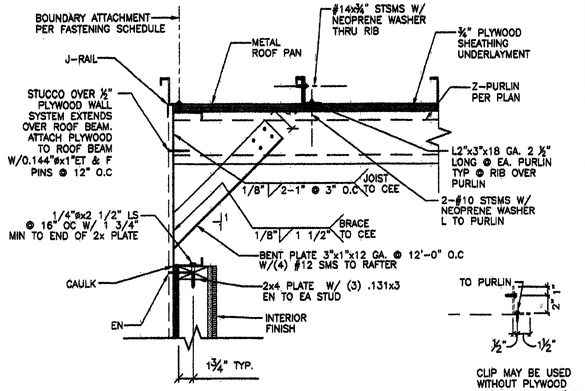
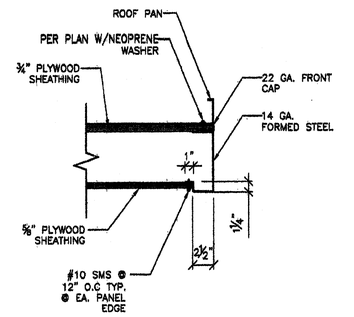
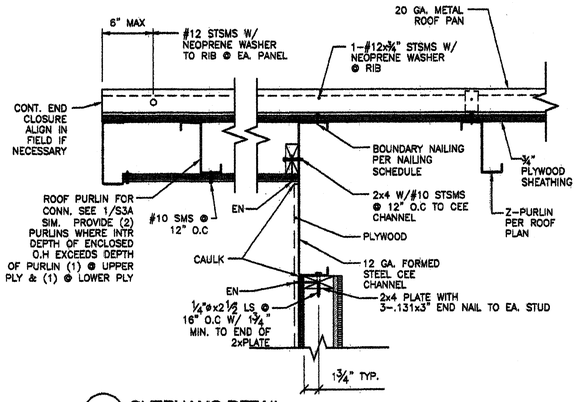


1 / S3A **DETAIL**
1 1/2"=1'-0"



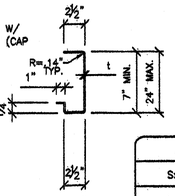
4 / S3A **ENCLOSED SOFFIT DETAIL**
1 1/2"=1'-0"



2 / S3A **OVERHANG DETAIL**
1 1/2"=1'-0"

NOTE:
14 GA. STL FABRICATED FROM ASTM A1011 GRADE 36 ROLLED SHEETS W/RUST INHIBITIVE PRIMER

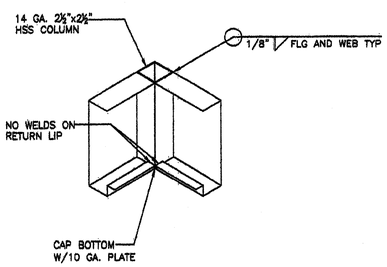
NOTE:
WELD CORNERS W/ HSS 2 ½"x2 ½" (CAP BOTT ONLY)



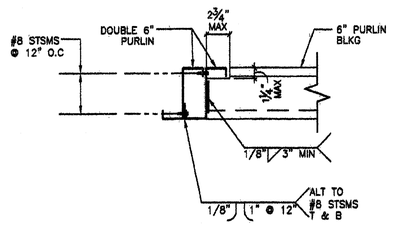
A	0.974 IN^2
Sx MIN.	1.776 IN^3
Ix MIN.	6.87 IN^4

BEAM FABRICATED FROM ASTM A1011 GR50 W/RUST INHIBITIVE COATING.

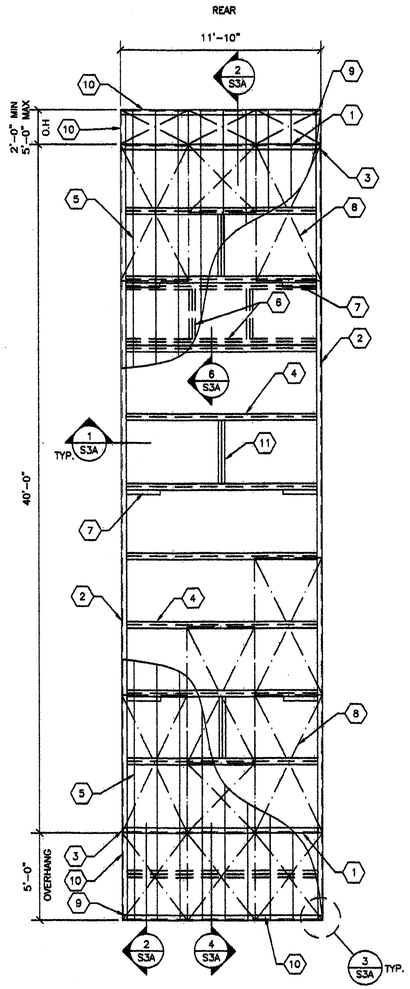
5 / S3A **14 GA. FORMED STEEL CEE**
1 1/2"=1'-0"



3 / S3A **OVERHANG CORNER DETAIL**
NOT TO SCALE



6 / S3A **BLOCKING DETAIL**
1 1/2"=1'-0"



A / S3A **TYPICAL ROOF FRAMING LAYOUT**
1/4"=1'-0"

- KEY NOTES -

1. 12 GA. TRANSVERSE BEAM PER 10/S3.1
2. LONGITUDINAL ROOF CHANNEL TYP. PER 9/S3.1
3. HSS PER SHEET S4
4. 'Z' FORMED ROOF PURLINS PER 8/S3.1 @ 48" O.C. MAX
5. 20 GA. ROOF PAN (ALT. 26 GA. ROOF PAN OVER PLYWOOD)
6. PROVIDE DOUBLE 6" PURLINS W/6" PURLIN BLKG PER 6/S3A @ OPTIONAL 600# HVAC. (10'-0" MAX FROM END OF BLDG TO CENTER OF UNIT)
7. 3"x1"x12 GA. BENT PLATE TO 10 GA. BEAM @ 12'-0" OC MAX PER 1/S3A PROVIDE PURLIN BLOCKING @ EACH BRACE PER (11) BELOW (IF CROSS BRACING IS USED THEN REFER TO PLAN 1/S3 FOR BENT PLATE LOCATIONS, AND PROVIDE CROSS BRACING AT OVERHANGS)
8. 3/4" APA RATED L-P OSB SHEATHING OR 3/4" PLYWOOD (ALL SHEATHING SHALL BE EITHER T&G OR EDGE CLIP) COMPLY WITH DSA PA-062, CD EXPOSURE-1 48/24 SPAN INDEX, FACE GRAIN NORMAL TO ROOF PURLINS ROOF SHTHG MAY BE REPLACED BY STRAP CROSS BRACING (REFER TO SHEET S3 FOR DETAILS, AND PROVIDE CROSS BRACING AT OVERHANGS) ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 1" MIN. FROM EDGE OF PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO SCHEDULE BELOW FOR FASTENING.
9. HSS COLUMN 14 GA. 2 ½"x2 ½" TYP. SEE 3/S3A
10. 14 GA. FORMED STEEL CEE SEE 5/S3A
11. PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 6/S3A BLOCKING IS ONLY REQUIRED AT PURLINS WITH DIAGONAL BRACING PER (7) ABOVE

FASTENING SCHEDULE

NAILING	0.144 PINS SPACING		# 10 SMS SPACING	
	TYPICAL	WITHIN 3' OF BUILDING CORNERS	TYPICAL	WITHIN 3' OF BUILDING CORNERS
BOUNDARY	6" O.C.	6" O.C.	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.	6" O.C.	6" O.C.
FIELD	12" O.C	6" O.C	12" O.C	12" O.C

ET & F 0.144 PINS PER ICC ESR #4144

- GENERAL NOTES -

1. THE MATERIAL THICKNESS OF STRUCTURAL MEMBER, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED IN THE TABLE OR IN THE PLAN. THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.
2. SEE SHEET S5 FOR TYP. SIDE WALL FRAMING.
3. SEE SHEET S5 FOR TYP. END WALL FRAMING.
4. ALL FASTENERS THRU METAL ROOF PANEL SHALL BE INSTALLED w/NEOPRENE WASHERS.

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DATE: 02/25/06
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
ROOF FRAMING PLAN & DETAILS (ENCLOSED SOFFIT OPTION)

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1418 EXP. 3-31-11 Structural Engineer — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. C12831 Ren. 2-31-11 — STATE OF CALIFORNIA

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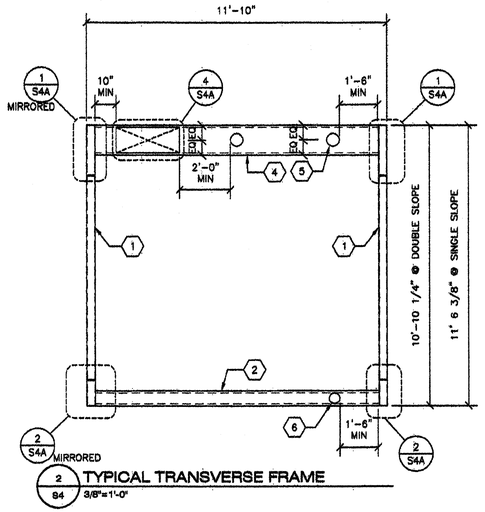
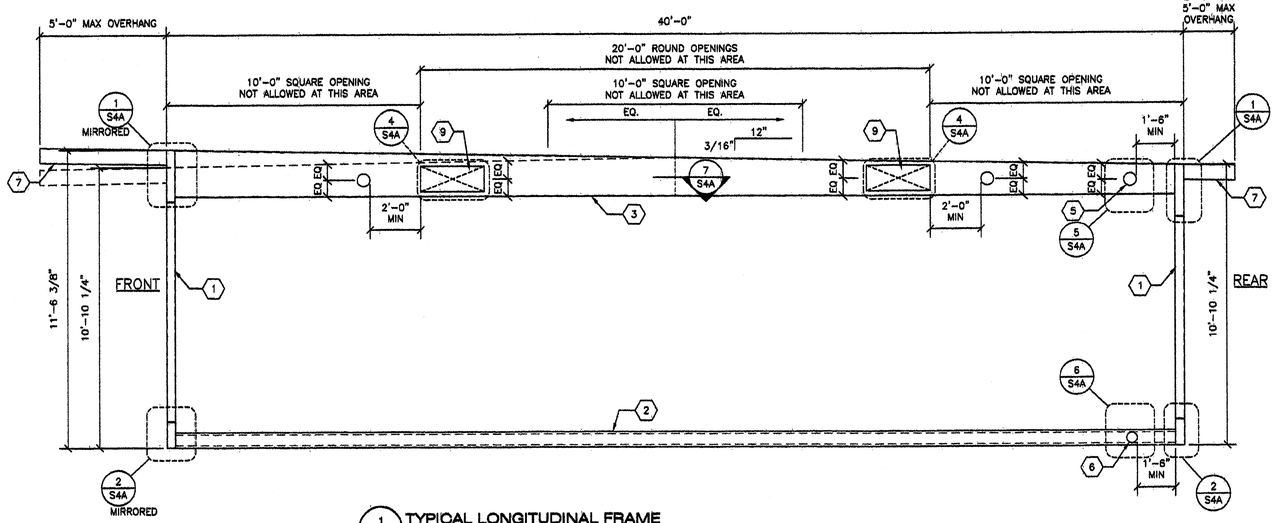
PROJECT No.

S3A



2/S4 TYPICAL TRANSVERSE FRAME
3/8"=1'-0"



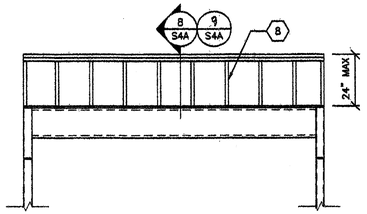
1/S4 TYPICAL LONGITUDINAL FRAME
3/8"=1'-0"

- KEY NOTES -

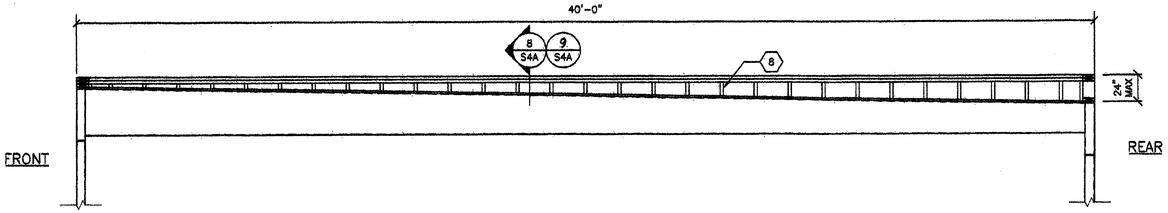
1. 4x4x5/16 HSS COLUMN
2. FLOOR BEAM PER SCHEDULE
3. 10 GA. LONGITUDINAL ROOF CHANNEL
   14"-18"-14" @ DOUBLE SLOPE
   14"-22" @ SINGLE SLOPE
4. 12 GA. TRANSVERSE ROOF CHANNEL
   14" MIN 22" MAX
5. 6" ø MAX OPENING IN WEB OF ROOF BEAM WITHOUT WEB REINFORCEMENT
   MINIMUM SPACING OF HOLES @ 48" O.C.
   HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF ROOF BEAM EXCEPT AS NOTED OTHERWISE ON FRAMING ELEVATION
   NOTE: IF HOLE IS 3" OR LESS THEY MAY BE SPACED AT 24"O.C. MINIMUM
6. 4" ø MAX OPENING IN WEB OF FLOOR BEAM WITHOUT WEB REINFORCEMENT
   MINIMUM SPACING OF HOLES @ 48" O.C.
   HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF FLOOR BEAM WITH DIRECT FOUNDATION SUPPORT BELLOW. OPENINGS ARE NOT ALLOWED WHERE BEAMS ARE SPANNING BETWEEN FOUNDATIONS OR ACROSS VENT OPENINGS.
   NOTE: IF HOLE IS 2" OR LESS THEY MAY BE SPACED AT 24" MINIMUM
7. 14 GA OUTRIGGER CHANNEL AT OPTIONAL ENCLOSED OVERHANG
   REFER TO DETAIL 1/S4A
8. 2x6 H.F. #2 OR BETTER STUDS @ 16" O.C.
9. 12"x 30" MAX OPENING ALLOWED ONLY AT EXTERIOR BEAMS WITH A WALL DIRECTLY BELOW. IF WALL BELOW IT IS REMOVED THEN A COLUMN MUST BE ADDED AT MID SPAN. REFER TO DETAIL 4/S4A FOR OPENING REINFORCEMENT

- FLOOR BEAM SCHEDULE -

SUBFLOOR TYPE	FLOOR BEAM SIZE	ALTERNATES
VIROC OR PLYWOOD	C7x9.8	C9x13.4, C10x15.3
CONCRETE	C9x13.4	C10x15.3



4/S4 PARAPET WALL OPTION @ TRANSVERSE FRAME
3/8"=1'-0"



3/S4 PARAPET WALL OPTION @ LONGITUDINAL FRAME
3/8"=1'-0"

REVISIONS

NO	DATE	DESCRIPTION
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DATE: 02/25/08
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SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
TYPICAL FRAME ELEVATIONS

American Modular Systems Inc.
767 Sprocket Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americansmodular.com

APPROVALS:

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DISABLED ACCESS INSPECTOR/SPECIALIST
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Ren. 2-31-11
STATE OF CALIFORNIA

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PROJECT No.

S4

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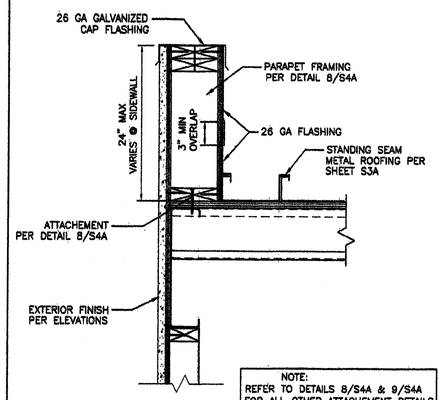
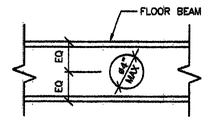
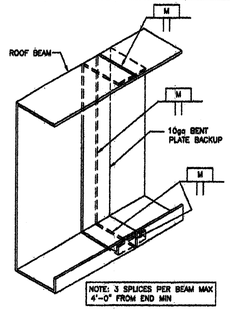


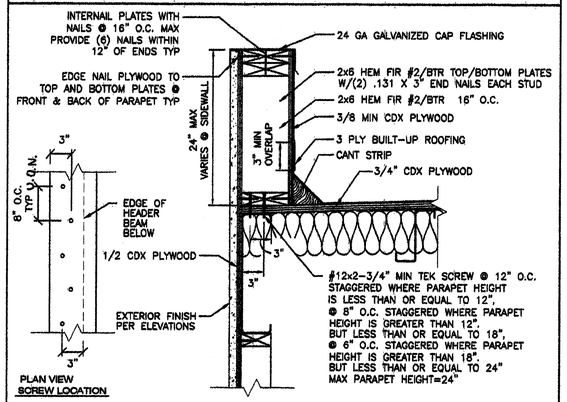
10 / S4A PARAPET DETAIL @ REAR/SIDES
1 1/2"=1'-0" (WITH METAL ROOFING OPTION)



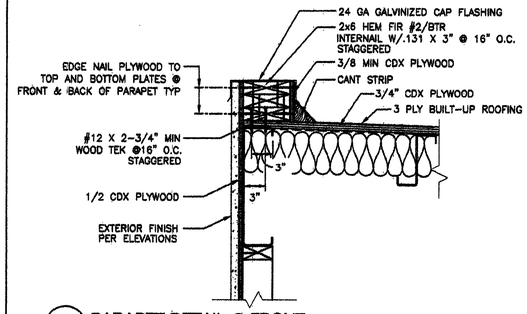
6 / S4A OPENING @ FLOOR BEAM
1 1/2"=1'-0"



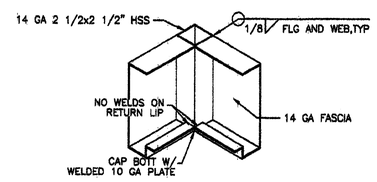
7 / S4A TYPICAL BEAM SPLICE
N.T.S.



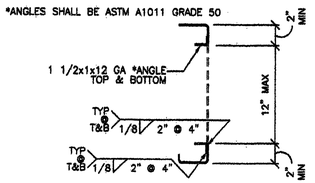
8 / S4A PARAPET DETAIL @ REAR/SIDES
1 1/2"=1'-0"



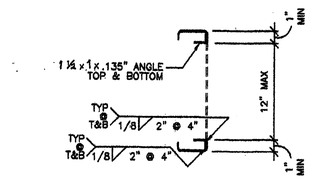
9 / S4A PARAPET DETAIL @ FRONT
1 1/2"=1'-0"



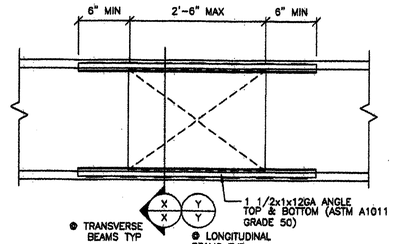
3 / S4A OVERHANG CORNER DETAIL
NTS



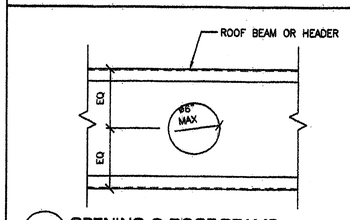
Y / Y DETAIL @ LONGITUDINAL BEAMS



X / X DETAIL @ TRANSVERSE BEAMS

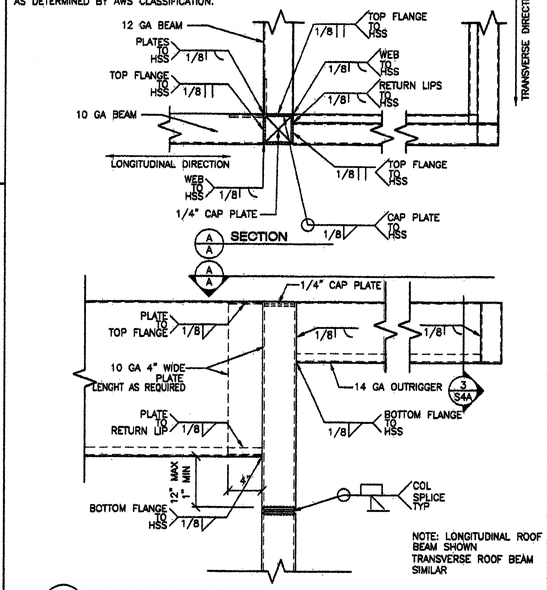


4 / S4A OPENING @ ROOF BEAMS
1 1/2"=1'-0"

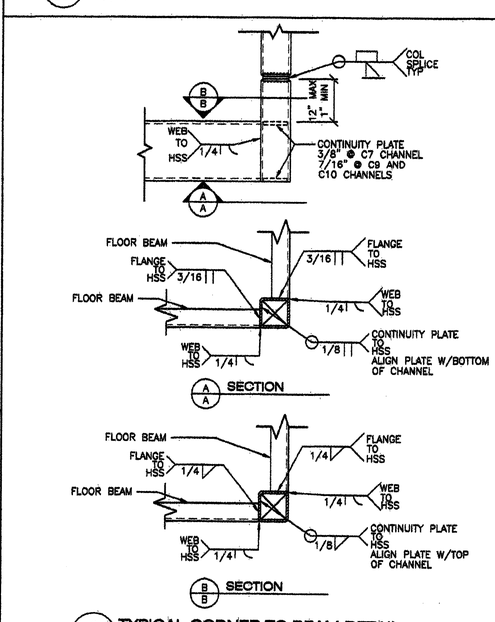


5 / S4A OPENING @ ROOF BEAMS
1 1/2"=1'-0"

THE WELDING PROCEDURE QUALIFICATION TEST RECORD AND WELDING PRODECURE SPECIFICATION FOR THIS WELD SHALL BE PREPARED IN ACCORDANCE WITH AWS D.1-06 AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND SUBMITTAL TO THE D.S.A. TYPICAL DETAILS 1/S4A, 2/S4A AND 7/S4A.
ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT.-LBS AT ZERO DEGREES F, AS DETERMINED BY AWS CLASSIFICATION.



1 / S4A TYPICAL ROOF CHANNEL TO HSS DETAIL
1 1/2"=1'-0"



2 / S4A TYPICAL CORNER TO BEAM DETAIL
1 1/2"=1'-0"

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NO	DATE	DESCRIPTION
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DATE: 02/25/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
FRAME CONNECTION DETAILS

American Modular Systems Inc.
787 Sycamore Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7016
americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Luttrell No. 1418 EXP. 6-21-11 Structural Engineer — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. CI 2631 Ren. 2-31-11 — STATE OF CALIFORNIA

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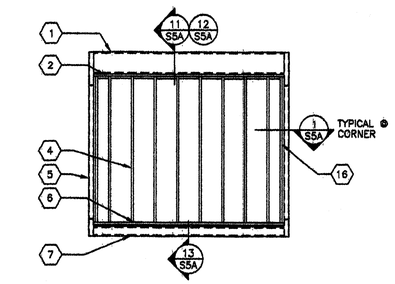
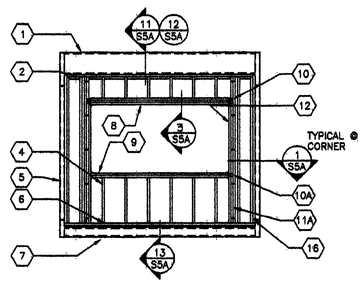
PROJECT No.

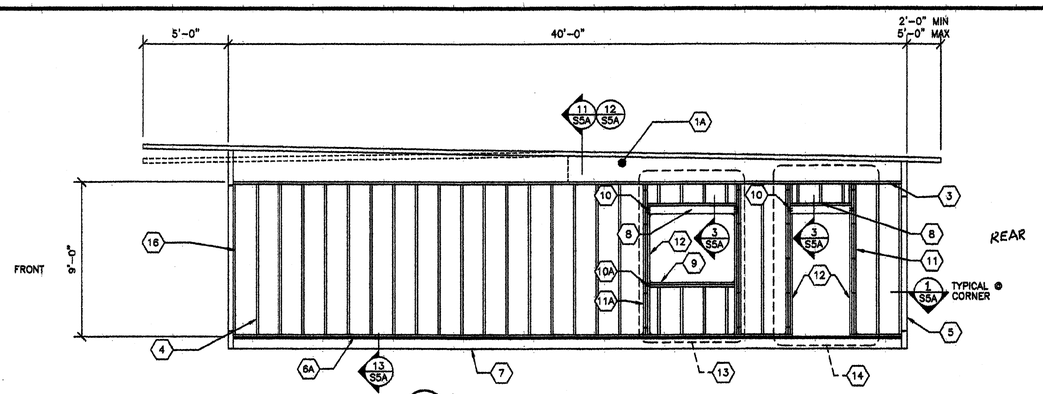
S4A



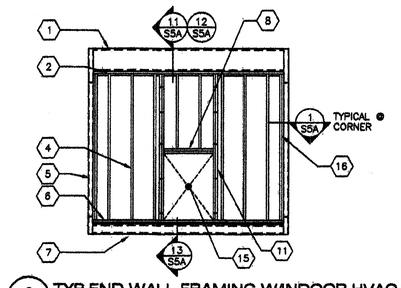
1 / S5 — TYP END WALL FRAMING W/NO OPENINGS
1/4"=1'-0"



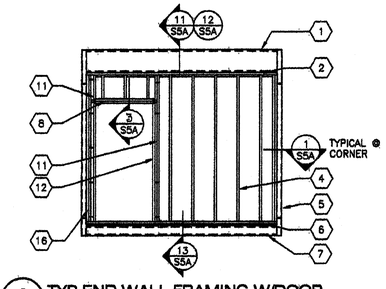
4 / S5 — TYP END WALL FRAMING W/WINDOW
1/4"=1'-0"



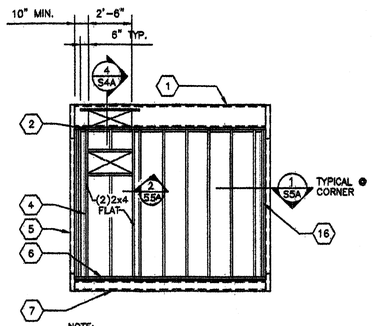
6 / S5 — TYP SIDE WALL FRAMING (MONO/DUAL PITCH)
1/4"=1'-0"



2 / S5 — TYP END WALL FRAMING W/INDOOR HVAC UNIT OPTIONAL
1/4"=1'-0"



5 / S5 — TYP END WALL FRAMING W/DOOR
1/4"=1'-0"



NOTE:
HVAC DUCT OPENING LOCATIONS MAY VARY ANYWHERE ALONG 12 GA. CEE MEMEBER. (EXCEPT AS SHOWN ABOVE)
SEE SHEET 1 FOR OPENING LOCATION

3 / S5 — TYP END WALL FRAMING W/WALL HUNG HVAC UNIT OPTIONAL
1/4"=1'-0"

EXTERIOR WALL FINISH/WALL STUD SCHEDULE

FINISH TYPE	FOUNDATION TYPE	WALL FINISH COMMENTS	STUD TYPE	STUD SPACING TYPICAL	STUD SPACING @ CORNERS
5/8" PLYWOOD SHEATHING 303 CONFORMING TO PS1-95. VERTICAL GROOVES @ 8" OC	WOOD OR CONCRETE	JOINT DETAIL SEE 9/S5A NAILING PER BLDG SECTIONS	HEM FIR #2	@ 16" OC	@ 16" OC
			DOUG FIR #2	@ 16" OC	@ 16" OC
5/16" HARDIBOARD WITH SYNTHETIC STUCCO 5/16" HARDI-LAP SIDING	WOOD OR CONCRETE	PER SHEETS A5, A5A, A6 & A6A	HEM FIR #2	@ 16" OC	@ 16" OC
			DOUG FIR #2	@ 16" OC	@ 16" OC
1/2" PLYWOOD SHEATHING CONFORMING TO PS1-95, APA RATED, 5 PLY 32/16, EXPOSURE 1 WITH 7/8" STUCCO	CONCRETE ONLY	NAILING PER BLDG SECTIONS	HEM FIR #2	@ 16" OC	@ 12" OC
			DOUG FIR #2	@ 16" OC	@ 16" OC

1. ALL NAILS IN EXTERIOR APPLICATIONS TO BE GALVANIZED.
2. WALL CORNERS ARE DEFINED AS A DISTANCE OF 8 FEET IN BOTH DIRECTIONS FROM EACH CORNER OF BUILDINGS WITH 2160 SQ. FT. OR GREATER AND A DISTANCE OF 3 FEET IN BOTH DIRECTIONS FROM EACH CORNER OF BUILDINGS WITH LESS THAN 2160 SQ. FT.
3. TYPICAL PLYWOOD NAILING WHERE OCCURS .131x2 1/4" GALV @ 6" O.C E.N. & 12" O.C. F.N.

- KEY NOTES -

1. ROOF HEADER
1A. ROOF BEAM
2. 2x4 PLATE NO SPLICE
3. 2x4 PLATE
4. 2x4 STUDS SPACED PER SCHEDULE TYP. W/ (3) .131x3" NAILS @ EA END
5. HSS COLUMN
6. 2x4 BOTTOM PLATE NO SPLICES
6A. 2x4 BOTTOM PLATE
7. PERIMETER FLOOR BEAM
8. (2) 2x6 W/ 2x4 FLAT HEADER ALT. (3) FLAT 2x4 HEM FIR. PER DETAIL 3/S5A
9. (2) 2x4 HEM FIR #2 WINDOW SILL PLATE (3) 2x4 HEM FIR #2 OR (2) 2x4 DOUG FIR #2 @ 8" WIDE WINDOW SILL PLATE WITH STUCCO FINISH ONLY
10. (5).131x3" END NAILS THROUGH KING STUD TYP
10A. (3) .131"X3" END NAILS THROUGH KING STUD, TYP.
11. (2) 2x4 KING STUDS W/ (2) A34 T&B TO PLATE (INTERNAL W/0.131 NAILS @ 14" OC TYP MAX.)
11A. (3) 2x4 KING STUDS W/ (2) A34 T&B TO PLATE (INTERNAL W/0.131 NAILS @ 14" OC TYP MAX.)
12. 2x4 TRIMMER
13. OPTIONAL WINDOW OPENING MAX 8'-0" WIDE (REFER TO 4/S5 FOR DETAILS AND FLOOR PLANS FOR LOCATIONS)
14. OPTIONAL DOOR OPENING (REFER TO 5/S5 FOR DETAILS AND FLOOR PLANS FOR LOCATIONS)
15. HVAC OPENINGS @ INDOOR UNIT
16. 2x NAILER

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CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
WALL FRAMING ELEVATIONS

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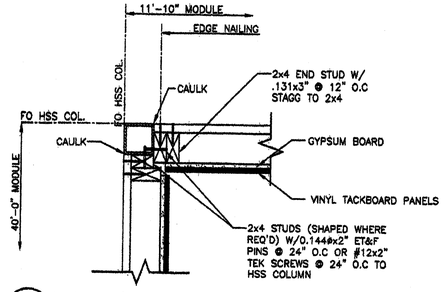
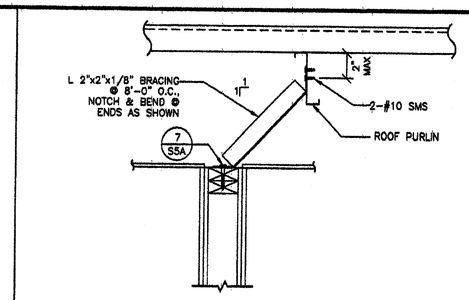
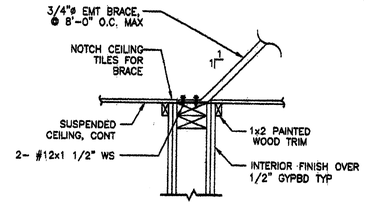
S5



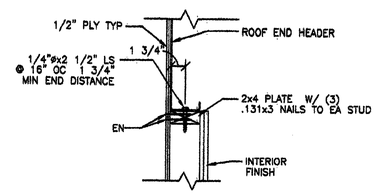
1 S5A — WALL TO COLUMN TYP DETAIL @ CORNER
1 1/2"=1'-0"
FOR COLUMN LOCATION REFER TO ARCHITECTURAL DETAILS



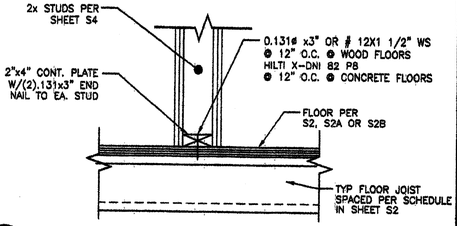
6 S5A — TYP. INTERIOR WALL BRACING
1 1/2"=1'-0" (BRACE PERPENDICULAR TO PURLINS)



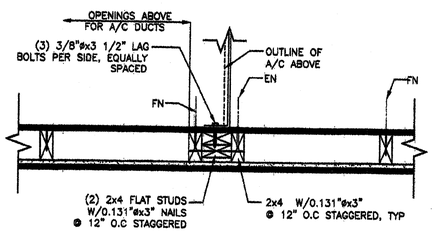
8 S5A — ALT. INTERIOR WALL BRACING
1 1/2"=1'-0" (INTERIOR PARTITION BRACING w/EMT BRACING)



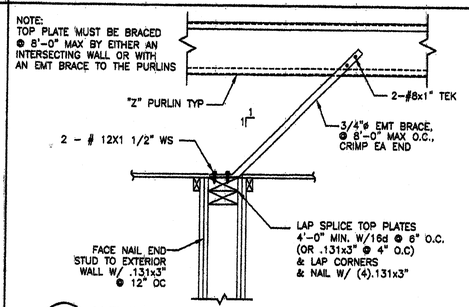
11 S5A — END WALL TO ROOF BEAM DETAIL
1 1/2"=1'-0"



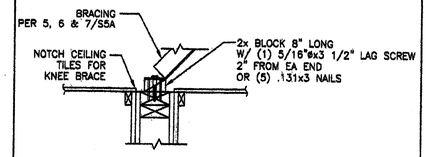
15 S5A — TYP. INT. NON-BEARING WALL BASE ATTACHMENT
1 1/2"=1'-0" (WALL PERPENDICULAR TO FLOOR JOISTS)



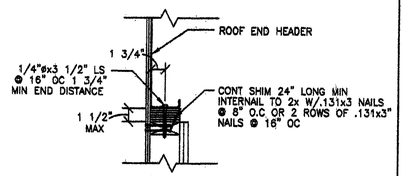
2 S5A — WALL HUNG HVAC DETAIL ATTACHMENT
1 1/2"=1'-0"



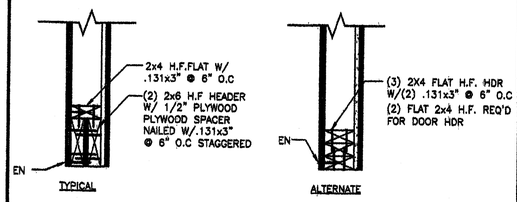
6 S5A — ALT. INTERIOR WALL BRACING w/EMT BRACE
1 1/2"=1'-0" (BRACE PARALLEL TO PURLINS)



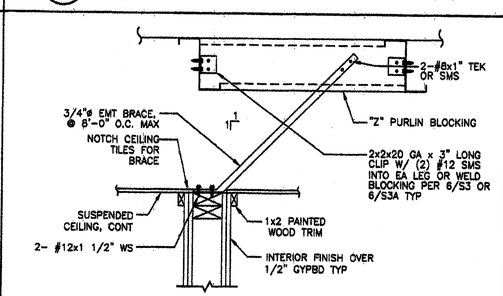
8A S5A — ALT BLOCKING @ INT WALL BRACING
1 1/2"=1'-0"



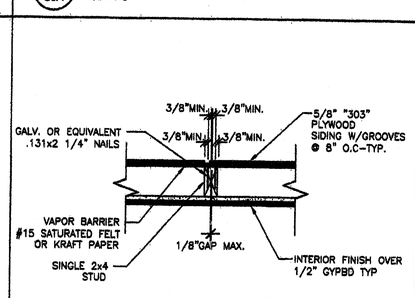
12 S5A — END WALL TO ROOF BEAM DETAIL WITH SHIM CONDITION
1 1/2"=1'-0"



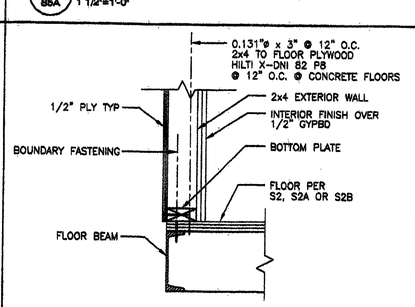
3 S5A — WALL HEADER DETAILS AND ALTERNATE
1 1/2"=1'-0"



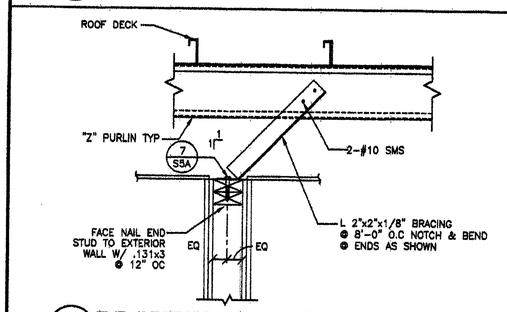
6A S5A — ALT. INTERIOR WALL BRACING w/EMT BRACE
1 1/2"=1'-0" (BRACE PERPENDICULAR TO PURLINS)



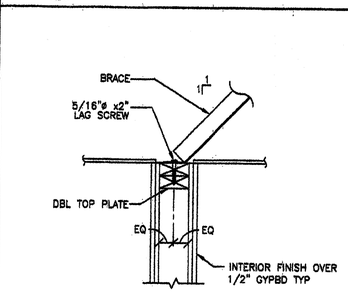
9 S5A — TYPICAL SIDING JOINT
1 1/2"=1'-0"



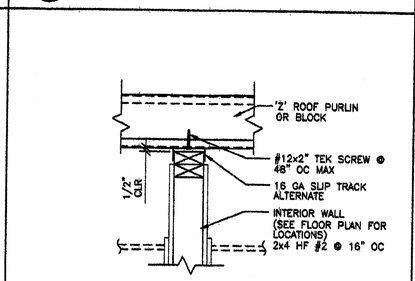
13 S5A — EXTERIOR WALL TO FLOOR TYP DETAIL
1 1/2"=1'-0"



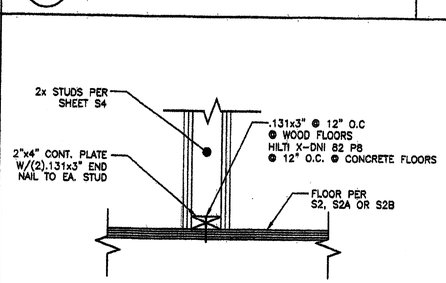
4 S5A — TYP. INTERIOR WALL BRACING
1 1/2"=1'-0" (BRACE PARALLEL TO PURLINS)



7 S5A — TYP. INTERIOR WALL BRACING
1 1/2"=1'-0" (INTERIOR PARTITION BRACING)



10 S5A — ALT.INTERIOR WALL ATTACHMENT
1 1/2"=1'-0"



14 S5A — TYP. INT. NON-BEARING WALL BASE ATTACHMENT
1 1/2"=1'-0" (WALL PARALLEL TO FLOOR JOISTS)

REVISIONS		
NO	DATE	DESCRIPTION
1		
2		
3		
4		

DATE: 02/25/08
SCALE: NOTED
DRAWN BY: DM
SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
WALL FRAMING DETAILS

American Modular Systems Inc.
787 Sprockels Ave. Manteca, CA 95336
(209)825-1921 Fax (209)825-7018
americanmodular.com

APPROVALS:

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REGISTERED PROFESSIONAL ENGINEER — Kenneth A. Lutzel No. 1418 EXP. 3-31-11 Structural Engineer — STATE OF CALIFORNIA

REGISTERED INSPECTOR OF STRUCTURAL WORK — No. CI 2831 Exp. 7-31-11 — STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02_111612
AC FLS SS GS
DATE 11/2/11

PROJECT No.

S5A

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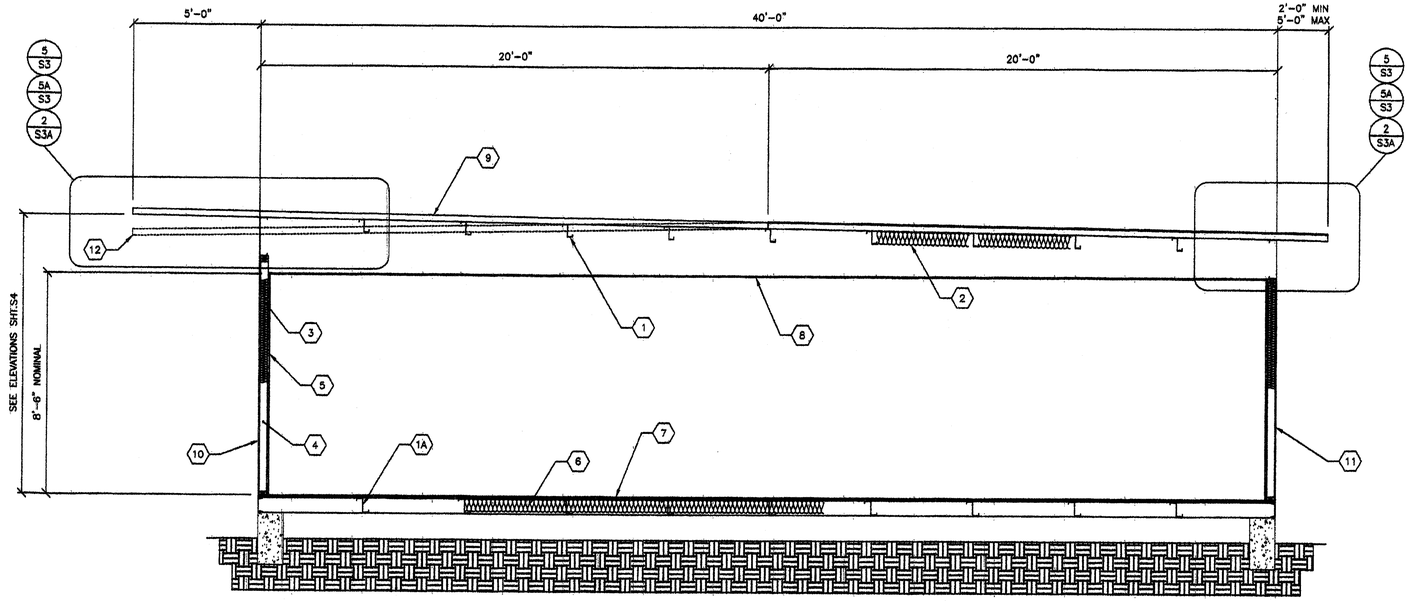
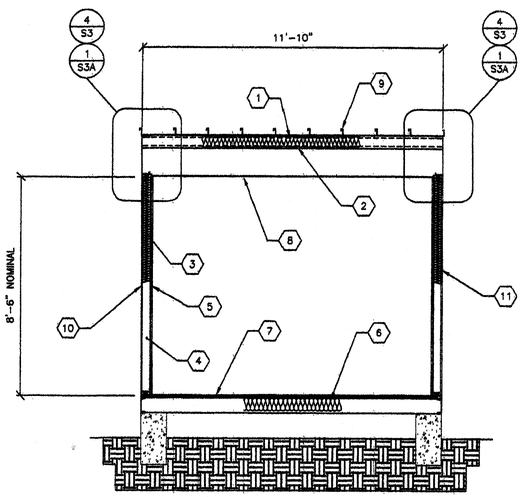


A / S7 TYP. LONGITUDINAL SECTION (MONO/DUAL PITCH)
3/8"=1'-0"



B / S7 TYP. TRANSVERSE SECTION (MONO/DUAL PITCH)
3/8"=1'-0"

- KEY NOTES -

1. "Z" PURLINS @ 48" O.C
1A. STEEL "Z" FLOOR JOISTS
2. INSULATION w/22 GA WIRE
3. INSULATION w/KRAFT PAPER
4. 2x STUDS PER ELEV, S5
5. VINYL FABRIC OVER TACKABLE BACKING PANELS
6. INSULATION w/KRAFT PAPER AND CHICKEN WIRE
7. 1 ⅛" PLYWOOD FLOOR SHEATHING FOR ALT SEE SHEET S2, S2A OR S2B
8. SUSPENDED T-BAR CEILING
9. METAL ROOF PANELS SEE ROOF FRAMING PLAN
10. TYPICAL PLYWOOD NAILING .131x2¾" GALV @ 6" O.C PANEL EDGES (ALL EDGES BLOCKED).131x2¾" GALV @ 12" O.C FIELD
11. EXTERIOR WALL FINISH PER EXTERIOR ELEVATIONS
12. ALTERNATE DUAL PITCH

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REVISIONS

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1		
2		
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DATE: 02/25/08
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SERIAL NO.:

CUSTOMER:

12' x 40' RELOCATABLE BUILDINGS
BUILDING SECTIONS

American Modular Systems Inc.
787 Spreckels Ave. Manteca, CA 95336
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americanmodular.com

APPROVALS:

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REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 5-31-11
Structural Engineer
STATE OF CALIFORNIA

REGISTERED INSPECTOR
No. GI12631
Ren. 2-31-11
STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02_111612
AC. ___ FLS. ___ SS GR
DATE 1/12/11

PROJECT No.

S7

GENERAL NOTES
(TYPICAL FOR ALL RELOCATABLE CLASSROOM BUILDINGS)

(A) ALL EXISTING ELECTRICAL INFORMATION SHOWN HEREIN HAS BEEN COMPILED FROM PREVIOUS STATE APPROVED CONSTRUCTION DOCUMENTS AND INFORMATION PROVIDED BY THE OWNER'S FACILITIES PERSONNEL. IT HAS NOT NECESSARILY BEEN PHYSICALLY FIELD VERIFIED BY THIS OFFICE. USE AND APPLICATION OF THIS INFORMATION SHALL BE CONFINED TO THE PROJECT FOR WHICH IT IS INTENDED.

(B) ALL EQUIPMENT SHALL HAVE AN INDEPENDENT TESTING LABORATORY LABEL (U.L., C.S.A., ETC.) AS REQUIRED BY C.E.C. ARTICLE 110. PROVIDE EVIDENCE OF COMPLIANCE WITH THIS REQUIREMENT WITH EQUIPMENT SUBMITTALS. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO ISSUING PURCHASE ORDERS IF EQUIPMENT PROPOSED IS NOT COMPLIANT WITH THIS REQUIREMENT. WHERE FIELD CERTIFIED PRODUCTS MAY BE REQUIRED FOR FIELD ASSEMBLED COMPONENTS, PROVIDE CERTIFIED REPORT BY AN APPROVED TESTING AGENCY ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. ALL TESTING FEES SHALL BE INCLUDED IN CONTRACTOR'S BID.

(C) WORKING CLEARANCES ABOUT ELECTRICAL EQUIPMENT SHALL COMPLY WITH THE REQUIREMENTS OF C.E.C. ARTICLE 110. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORKING CLEARANCES FOR EQUIPMENT INSTALLED AS PART OF THIS CONTRACT.

(D) PROVIDE 1/2" NYLON PULL ROPE IN ALL NEW CONDUIT AND RACEWAY TO ALLOW FUTURE ADDITION OF CONDUCTORS AS REQUIRED, WHETHER OR NOT CONDUCTORS ARE INSTALLED AT THIS TIME.

(E) WHERE EXISTING CONDUIT IS BEING REUSED ON THE SITE, NEW CONDUCTORS SHALL BE PULLED CONTINUOUS AND UNSPLICED THROUGH THE EXISTING RACEWAY, RE-PULLING EXISTING CONDUCTORS AS REQUIRED AND PROVIDING A PULL ROPE IN THE EXISTING CONDUIT PER ABOVE.

(F) FOR ALL UNDERGROUND CONDUIT BETWEEN SWITCHGEAR, SIGNAL TERMINAL CABINETS, OR PERMANENT BUILDINGS AND RELOCATABLE CLASSROOM BUILDINGS, RUN CONDUIT UNDERGROUND TO RELOCATABLE CLASSROOM BUILDING PER PLANS. AT THE RELOCATABLE CLASSROOM BUILDING, CONVERT PVC TO PVC WRAPPED RIGID CONDUIT AT 18" BELOW FINISH GRADE, THEN RISE CONDUIT FROM UNDERGROUND ON THE EXTERIOR WALL OF THE RELOCATABLE BUILDING AND CONVERT FROM PVC WRAPPED RIGID CONDUIT TO W.P. EMT AT +6" A.F.G. CONTINUE TO RELOCATABLE BUILDING PANEL, SIGNAL TERMINAL CABINET, OR EXTERIOR MOUNTED DISTRIBUTION GUTTER ATTACHING CONDUIT TO BUILDING STRUCTURE PER C.E.C. ARTICLE 358 REQUIREMENTS AND PROVIDE ALL FITTINGS, CONDULETS, ETC. AS REQUIRED TO CONNECT CONDUIT TO PANEL, SIGNAL TERMINAL CABINET OR EXTERIOR MOUNTED DISTRIBUTION GUTTER WHETHER LOCATED INSIDE BUILDING OR MOUNTED TO EXTERIOR WALL AS REQUIRED. CONTRACTOR SHALL FIELD VERIFY ALL.

(G) FOR ALL ELECTRICAL EQUIPMENT BEING REMOVED, PROVIDE THE OWNER WITH THE FIRST RIGHT OF REFUSAL. IF OWNER EXERCISES THE FIRST RIGHT, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL SUCH REFUSED EQUIPMENT COMPLETE AND IN A PROPER MANNER.

(H) RELOCATABLE CLASSROOM MANUFACTURER SHALL PROVIDE AND INSTALL ALL ELECTRICAL CONDUIT, OUTLET, LIGHTING, PANELS AND TERMINAL CABINETS AS SHOWN ON THE RELOCATABLE CLASSROOM BUILDING MANUFACTURER'S BUILDING DRAWINGS.

(J) RELOCATABLE BUILDING MANUFACTURER SHALL PROVIDE AND INSTALL 45 JUNCTION BOXES WITH SINGLE GANG PLASTER RINGS FOR COMMUNICATION AND FIRE ALARM SYSTEM OUTLETS.

(L) CONTRACTOR SHALL SUPPLY ALL BACK BOXES FOR CLOCK AND SPEAKER OUTLETS, INSTALL ALL SIGNAL SYSTEMS DEVICES AND WIRING AND CONNECT SAME PER ELECTRICAL DRAWINGS AND SPECIFICATIONS.

(M) CONTRACTOR SHALL USE JUNCTION AND PULL BOXES PROVIDED BY THE RELOCATABLE BUILDING MANUFACTURER TO THE FULLEST EXTENT POSSIBLE. WHEN NOT POSSIBLE, NEW JUNCTION AND/OR PULL BOXES SHALL BE PROVIDED AT LOCATIONS ON THE BUILDING ELECTRICAL FLOOR PLAN DRAWINGS.

(N) PROVIDE FLEXIBLE CONDUIT CONNECTION BETWEEN BUILDING MODULES, TYPICAL WHERE BUILDING MODULE LINES OCCUR. CONTRACTOR SHALL VERIFY EXACT LOCATIONS WITH RELOCATABLE BUILDING MANUFACTURER.

(P) WHERE SURFACE MOUNTED RACEWAY IS REQUIRED WITHIN THE RELOCATABLE CLASSROOM BUILDING, USE SURFACE METAL RACEWAY, WIREMOLD #100 SERIES OR APPROVED EQUAL. VERIFY ANY SURFACE RACEWAY ROUTING AND FINISH WITH THE ARCHITECT PRIOR TO ORDERING MATERIALS AND COMMENCING ROUGH IN WORK.

(Q) CONTRACTOR SHALL COORDINATE ALL ELECTRICAL ROUGH-IN, POWER CONNECTION AND SITE DISTRIBUTION REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION AND RELOCATABLE BUILDING MANUFACTURER AND/OR RELOCATABLE BUILDING MANUFACTURER'S BUILDING DRAWINGS.

(R) THE SEISMIC ANCHORAGE MECHANICAL AND ELECTRICAL EQUIPMENT SHALL CONFORM TO CALIFORNIA CODE OF REGULATIONS TITLE 24, 2007 CALIFORNIA CODE SECTION 1613A AND TABLE 16OTA1. ANCHORAGE DETAILS FOR ROOF/FLOOR MOUNTED EQUIPMENT SHALL BE SHOWN ON PLANS.

(S) CONTRACTOR SHALL WARRANTY ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF WORK BY OWNER.

CODES, RULES & REGULATIONS

ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST REGULATIONS OF THE STATE FIRE MARSHAL, TITLE 24, 2007 CALIFORNIA CODE OF REGULATIONS, 2007 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24, SERVING UTILITY COMPANIES AND OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THESE CODES. WHERE WORK OF A HIGHER DEGREE IS INDICATED IN THE PLANS OR SPECIFICATIONS THIS REQUIREMENT SHALL GOVERN.

ELECTRICAL SYMBOL SCHEDULE

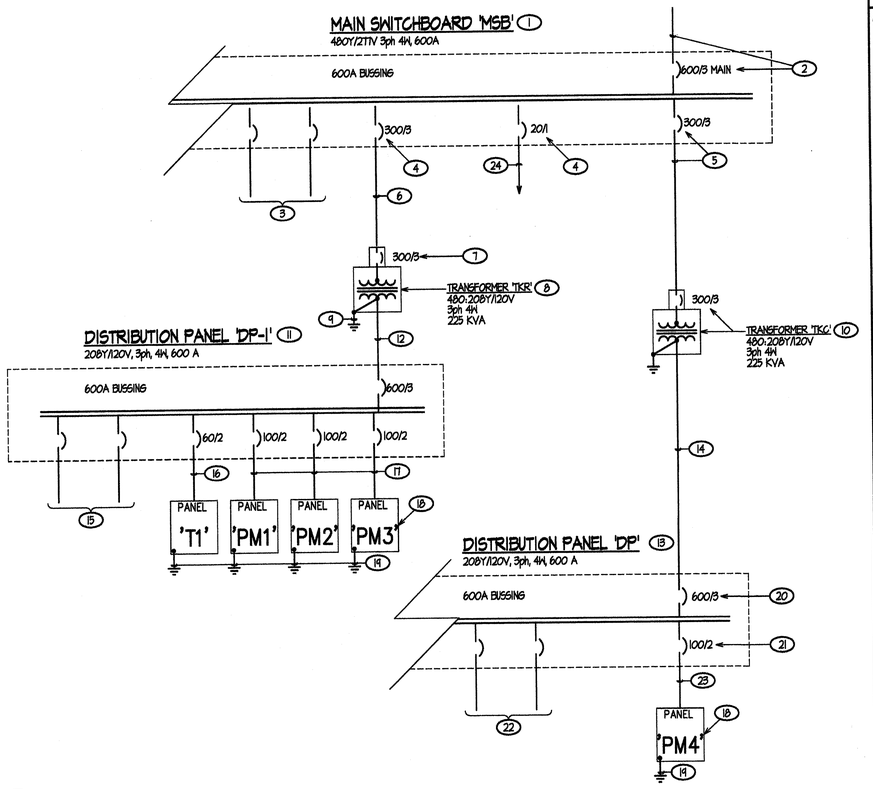
DIMENSIONS INDICATED ARE MEASURED TO CENTERLINE OF ENCLOSURE, UNLESS OTHERWISE NOTED
NOTE: SOME SYMBOLS SHOWN MAY NOT APPLY TO THIS PROJECT

SYMBOL	DESCRIPTION	NOTES
(2-A-100)	DENOTES LIGHTING FIXTURE CIRCUIT, FIXTURE TYPE AND FIXTURE WATTAGE	
U.G.	DENOTES UNDERGROUND INSTALLATION	
W.P.	WEATHERPROOF.	
A.F.F.	DENOTES ABOVE FINISHED FLOOR	
U.O.N.	UNLESS OTHERWISE NOTED	
(1)	ELECTRICAL KEYNOTE #1, REFER TO NOTES ON SAME SHEET.	
⊕	HOME RUN 3/4" C. MINIMUM. (DENOTES PANEL A, CIRCUIT #1).	
——	CONDUIT RUN IN WALL OR ATTIC (1/2" C - 2 #12 AWG THWN + 1 #12 GND)	
– – –	CONDUIT RUN IN FLOOR OR U.G. (1/2" C - 2 #12 AWG THWN + 1 #12 GND)	(1)
—//—	CONDUIT RUN: DENOTES 1/2"C - 3 #12 AWG CU THWN + 1 #12 CU GND	(1)
	ELECTRICAL PANELBOARD PER PLANS, FLUSH MOUNTED IN WALL	
	ELECTRICAL PANELBOARD PER PLANS, SURFACE MOUNTED ON WALL	
J	JUNCTION BOX PROVIDED BY BUILDING MANUFACTURER, U.O.N.	
J	JUNCTION BOX PER PLANS.	
	UNDERGROUND SYSTEMS PULL BOX PER PLANS.	
S	OCCUPANCY SENSOR SYSTEM SWITCHPACK PER PLANS.	
M	OCCUPANCY SENSOR MOTION DETECTOR PER PLANS.	
	WALL MOUNTED LIGHTING FIXTURE PER PLANS.	
	WALL MOUNTED NIGHT LIGHTING FIXTURE	
IC	INTERCOM HANDSET PER PLANS.	
TV	TELEVISION OUTLET +18" A.F.F., U.O.N.	
S	SURFACE MOUNTED INTERCOM SPEAKER PER PLANS.	
	FIRE ALARM MASTER CONTROL PANEL PER PLANS.	
F	FIRE ALARM MANUAL PULL STATION, +48" A.F.F., U.O.N.	
SD	FIRE ALARM SMOKE DETECTOR ON CEILING, U.O.N.	
HD	FIRE ALARM HEAT DETECTOR IN ACCESSIBLE ATTIC, U.O.N.	
DD	FIRE ALARM DUCT SMOKE DETECTOR IN AIR CONDITIONING DUCT.	
V	FIRE ALARM VISUAL ALARM UNIT @ +80" MINIMUM, U.O.N.	
AV	FIRE ALARM HORN/STROBE ALARM UNIT @ +80" MINIMUM, U.O.N.	
H	FIRE ALARM HORN, MOUNTED ON CEILING, U.O.N.	
H	FIRE ALARM MINI-HORN, MOUNTED ON CEILING, U.O.N.	
E.O.L.	FIRE ALARM SIGNALLING CIRCUIT END OF LINE RESISTOR LOCATED AT THE FIRE ALARM MASTER PANEL, U.O.N.	

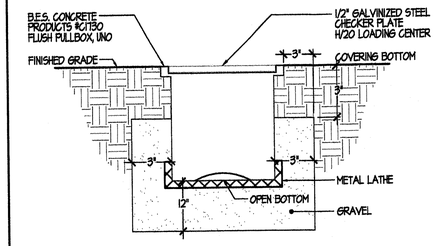
NOTES

(1) ALL UNDERGROUND SITE CONDUIT SHALL BE MINIMUM 3/4"C. UNLESS NOTED OTHERWISE.

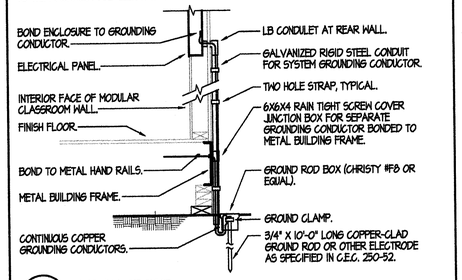
(2) REFER TO E6 FOR FIRE ALARM DEVICE SCHEDULE



1 SINGLE LINE DIAGRAM — NTS

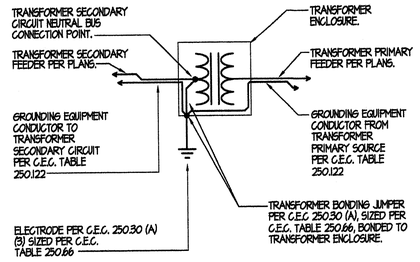


2 UNDERGROUND PULLBOX — NTS

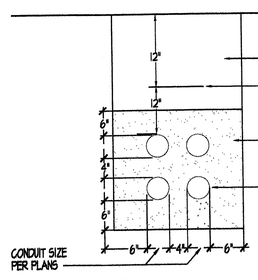


THE GROUNDING ELECTRODE SYSTEM SHALL BE TESTED BY THE FALL OF POTENTIAL METHOD AS SPECIFIED IN IEEE STANDARD 81-1983 AND SHOWN TO BE 25 OHMS OR LESS. A COPY OF THE TEST REPORT, SIGNED BY THE PROJECT INSPECTOR WHO WITNESSED THE TEST, SHALL BE SUBMITTED TO THE ARCHITECT AND ELECTRICAL ENGINEER.

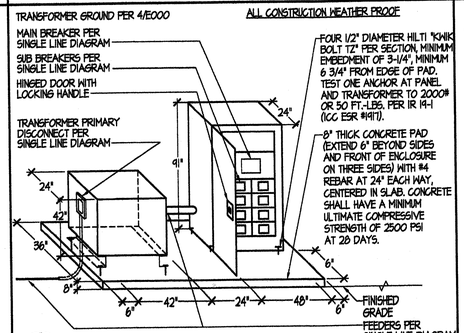
3 SYSTEM GROUND — NTS
BOND CLASSROOM BUILDINGS TOGETHER WITH 1 #6 CU CONDUCTOR WHERE PERMANENT MODULAR BUILDINGS OCCUR SIDE BY SIDE.



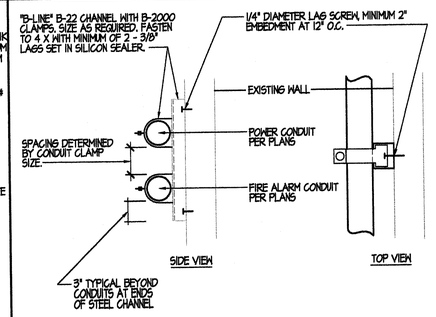
4 TRANSFORMER GROUND — NTS



5 DUCT BANK DETAIL 600V OR LESS — NTS



6 TRANSFORMER AND DISTRIBUTION PANEL DETAIL — NTS
TRANSFORMER MAXIMUM WEIGHT = 1,471 LBS.



7 CONDUIT SUPPORT — NTS

LOAD CALCULATIONS - MAINSWITCHBOARD 'MSB'

EXISTING DEMAND SUB-TOTAL		76.470	KVA
NEW LOAD BEING ADDED		71.432	KVA
FINAL RESULT LOAD		147.902	KVA
@ 480v, 3ph, 4w	=	177.9	AMPS

THE EXISTING DEMAND WAS CALCULATED USING THE PREVIOUS 12 MONTH HIGH BILLING DEMAND AND 0.85 ASSUMED POWER FACTOR. RESULTANT LOAD WAS THEN TAKEN AT 125% PER N.E.C. ARTICLE 220.35 REQUIREMENTS. THE FINAL RESULTANT LOAD DOES NOT EXCEED RATED FEEDER AMPACITY OR SERVICE CAPACITY, THEREFORE, THE EXISTING 600A SERVICE IS ADEQUATE AND HAS CAPACITY FOR THE REVISED/ADDITIONAL LOAD.

SINGLE LINE DIAGRAM NOTES

(1) EXISTING MAIN SWITCHBOARD TO REMAIN. SWITCHBOARD IS 480Y/277V, 3PH 4W, 600A WITH SUFFICIENT CAPACITY FOR THE REVISED/ADDITIONAL LOAD REQUIRED BY THE SCOPE OF THIS WORK. REFER TO LOAD CALCULATIONS, THIS SHEET AND SITE POWER PLAN, SHEET E3 FOR WORK REQUIRED AND COORDINATION/REFERENCE.

(2) EXISTING UTILITY COMPANY SERVICE LATERAL AND SWITCHBOARD MAIN CIRCUIT BREAKER TO REMAIN, NO WORK REQUIRED.

(3) REPRESENTATIVE SUB-FEED CIRCUIT BREAKER SPACE SHOWN FOR CLARITY ONLY, ARE EXISTING TO REMAIN, NO WORK REQUIRED. DISTRIBUTION SECTION HAS CAPACITY AND SPACE FOR ADDITIONAL CIRCUIT BREAKER REQUIRED BY THIS SCOPE OF WORK.

(4) PROVIDE NEW CIRCUIT BREAKER PER SPECIFICATIONS (MATCH EXISTING EQUIPMENT MANUFACTURER AND I.C. RATINGS CONTRACTOR SHALL VERIFY ALL) AND INSTALL IN SPACE AVAILABLE IN EXISTING DISTRIBUTION SECTION.

(5) EXISTING SUB-FEED CIRCUIT BREAKER, FEEDER CONDUIT AND WIRING TO REMAIN, NO WORK REQUIRED.

(6) 4"C. 3 #500 KCMIL CU THWN + 1 # 2 CU GROUND. EXISTING 4"C. EXTENDING FROM MAIN SWITCHBOARD TO REMAIN. PULL IN NEW 3 #500 KCMIL CU THWN + 1 # 2 CU GROUND VIA TWO EXISTING UNDERGROUND PULL BOXES AS REQUIRED. EXTEND NEW 4"C. 3 #500 KCMIL CU THWN + 1 # 2 CU GROUND FROM SECOND EXISTING UNDERGROUND PULL BOX TO NEW PAD MOUNTED TRANSFORMER AND CONNECT AS SHOWN. REFER TO SITE POWER PLAN, SHEET E101 FOR COORDINATION/REFERENCE.

(7) PRIMARY NON-AUTOMATIC CIRCUIT BREAKER IN NEMA 3R ENCLOSURE MOUNTED ON TRANSFORMER PER 6/E000.

(8) PROVIDE NEW PAD MOUNTED TRANSFORMER PER SPECIFICATIONS, INSTALL PER 6/E000 AND CONNECT AS SHOWN.

(9) SYSTEM GROUND PER 4/E000.

(10) EXISTING PAD MOUNTED TRANSFORMER, DISCONNECT(S) AND GROUNDING SYSTEM TO REMAIN, NO WORK REQUIRED. TRANSFORMER IS RATED 480V:208Y/120V, 3PH 4W, 225 KVA WITH SUFFICIENT CAPACITY FOR THE ADDITIONAL LOAD REQUIRED BY THE SCOPE OF THIS WORK.

(11) PROVIDE NEW DISTRIBUTION PANEL BOARD AND ASSOCIATED CIRCUIT BREAKERS PER SPECIFICATIONS, INSTALL PER 6/E000 AND CONNECT AS SHOWN.

(12) TWO 4"C. 3 #350 KCMIL CU THWN + 1 # 1 CU GROUND EACH.

(13) EXISTING DISTRIBUTION PANELBOARD TO REMAIN. PANELBOARD IS 208Y/120V, 3PH 4W, 600A WITH SUFFICIENT CAPACITY FOR THE ADDITIONAL LOAD REQUIRED BY THE SCOPE OF THIS WORK. REFER TO SITE POWER PLAN, SHEET E101 FOR WORK REQUIRED AND COORDINATION/REFERENCE.

(14) EXISTING DISTRIBUTION PANELBOARD FEEDER TO REMAIN, NO WORK REQUIRED.

(15) PROVIDE SPACE, HARDWARE, BRACING, AND BUSSING EXTENSION (INCLUDING GROUND BUSSING) AS REQUIRED FOR FIVE 100/2 FUTURE CIRCUIT BREAKERS, MINIMUM. NO MODIFICATION OF ENCLOSURE, BUSSING, ETC. SHALL BE REQUIRED FOR FUTURE INSTALLATION OF THESE BREAKERS.

(16) 1-1/4"C. 3 #4 CU THWN + 1 #10 CU GROUND.

(17) 1-1/2"C. 3 #2 CU THWN + 1 #8 CU GROUND.

(18) CONNECT PERMANENT MODULAR BUILDING PANEL PER MANUFACTURER'S WRITTEN INSTRUCTIONS, TYPICAL.

(19) SYSTEM GROUND PER 3/E000.

(20) EXISTING MAIN CIRCUIT BREAKER TO REMAIN, NO WORK REQUIRED.

(21) EXISTING SUB-FEED CIRCUIT BREAKER TO REMAIN. REUSE EXISTING CIRCUIT BREAKER IN EXISTING DISTRIBUTION PANEL FOR NEW FEED AS SHOWN. CONNECT EXISTING CIRCUIT BREAKER TO NEW FEEDER CONDUCTORS AS REQUIRED.

(22) REPRESENTATIVE SUB-FEED CIRCUIT BREAKERS AND FEEDERS SERVING EXISTING LOADS SHOWN FOR CLARITY ONLY, ARE EXISTING TO REMAIN, NO WORK REQUIRED. NOT EVERY SUB-FEED INSTALLED TO EXISTING DISTRIBUTION SECTION IS SHOWN, HOWEVER, DISTRIBUTION SECTION HAS CAPACITY AND SPACE FOR ADDITIONAL CIRCUIT BREAKERS REQUIRED BY THIS SCOPE OF WORK.

(23) EXISTING OVERHEAD 1-1/2"C. TO REMAIN AND BE REUSED. REROUTE CONDUIT BY ROTATING EXISTING LB CONDULET 180 DEGREES AND REATTACH TO EXISTING DISTRIBUTION PANEL ENCLOSURE. CONVERT EMT CONDUIT TO PVC WRAPPED RIGID CONDUIT AT +6" ABOVE EXISTING EQUIPMENT CONCRETE PAD, THEN CONVERT PVC WRAPPED RIGID CONDUIT TO PVC AT 18" BELOW FINISH GRADE AND EXTEND PER SITE POWER PLAN. SAW CUT EXISTING CONCRETE EQUIPMENT PAD, AC PAVING/ASPHALT/CONCRETE SURFACES AS REQUIRED, BACK FILL TRENCH AND INFILL AREA WITH LIKE MATERIAL SUCH THAT NEW FINISH SURFACE MATERIAL IS FLUSH WITH EXISTING ADJACENT FINISH SURFACE MATERIAL (INCLUDING EQUIPMENT PAD) UPON COMPLETE CURING/DRYING OF MATERIAL. CONTRACTOR SHALL EXERCISE CAUTION IN NEW TRENCHING SO AS TO NOT DISTURB OR DISRUPT EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL FIELD VERIFY ALL.

(24) PULL 2 #10 CU THWN + 1 #10 CU GROUND IN EXISTING 4"C. FROM MAIN SWITCHBOARD TO EXISTING UNDERGROUND PULL BOX, THEN EXIT UNDERGROUND PULL BOX AS REQUIRED WITH NEW 3/4"C. AND RUN NEW PARKING LOT SECURITY POLE LIGHTING CIRCUIT PER PARTIAL SITE POWER PLAN, SHEET E101.

ELECTRICAL DRAWING INDEX

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Sheet Title

SINGLE LINE DIAGRAM, DETAILS AND CALCULATIONS

Sheet Number

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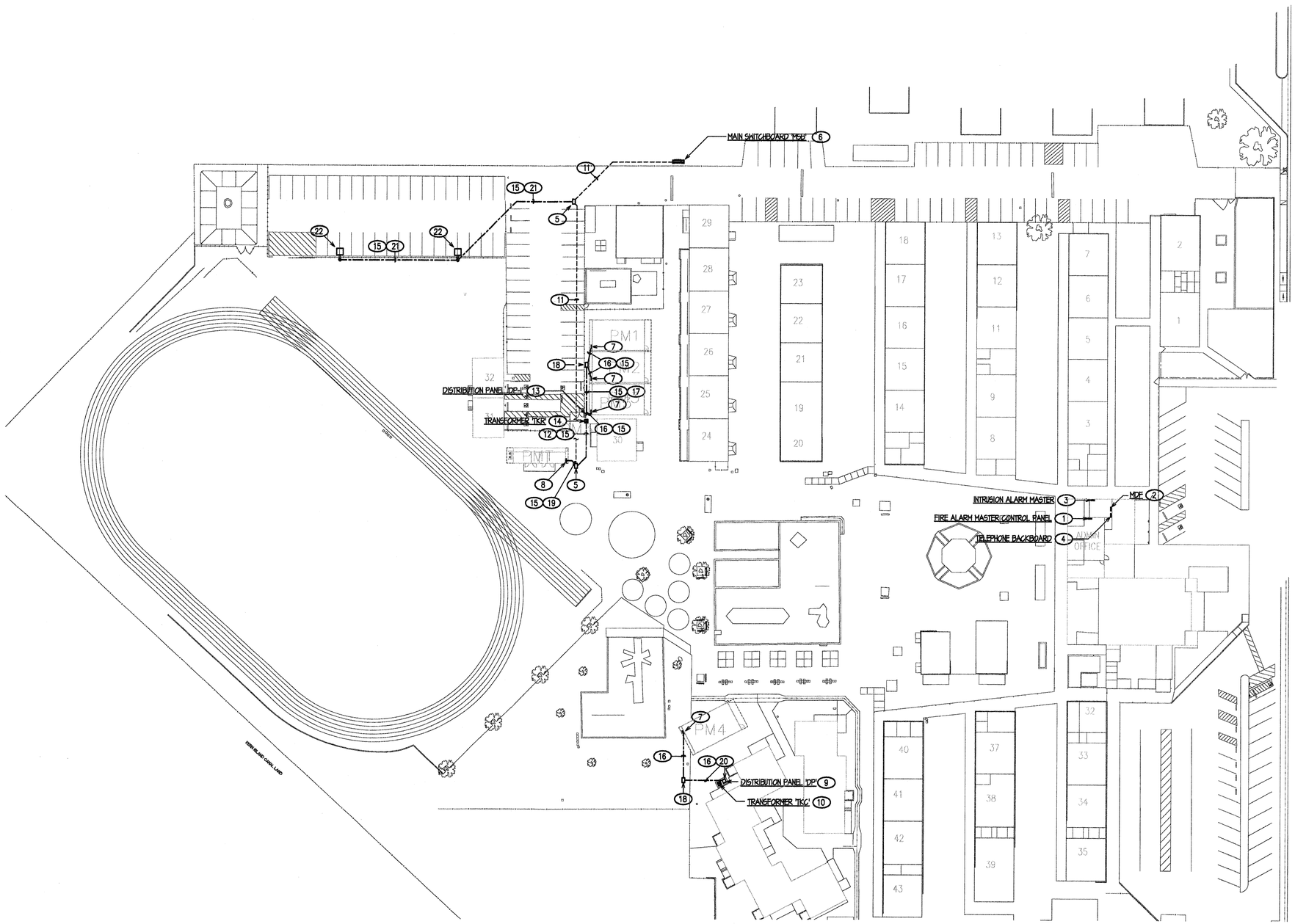

PARTIAL SITE POWER PLAN

SCALE: 1"= 40'-0"

NORTH

PARTIAL SITE POWER PLAN NOTES

1. EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. PANEL IS AN NFS-640 AS MANUFACTURED BY NOTIFIER, G.S.F.M. # 1165-0028:214, INSTALLED UNDER D.S.A. APPLICATION #03-106681 WITH PROTECTION MONITORING PER NFPA '72 1-5.6 REQUIREMENTS. PANEL HAS BATTERY CAPACITY FOR ADDITIONAL DEVICES REQUIRED UNDER THIS SCOPE OF WORK. PROVIDE ADDITIONAL SIGNALING/INITIATION MODULES/CARDS/PROGRAMMING AS REQUIRED TO ACCOMMODATE ADDITIONAL DEVICES, CONTRACTOR SHALL FIELD VERIFY. REFER TO FIRE ALARM SINGLE LINE DIAGRAM, SHEET E302 FOR COORDINATION/REFERENCE.
2. EXISTING MDF TO REMAIN.
3. EXISTING SONITROL INTRUSION ALARM MASTER PANEL TO REMAIN.
4. EXISTING TELEPHONE BACKBOARD TO REMAIN.
5. EXISTING UNDERGROUND PULL BOX TO REMAIN, CONTRACTOR SHALL FIELD VERIFY ALL.
6. EXISTING MAIN SWITCHBOARD TO REMAIN. SWITCHBOARD IS 480Y/277V , 3PH 4W, 600A WITH SUFFICIENT CAPACITY FOR THE ADDITIONAL LOAD REQUIRED BY THE SCOPE OF THIS WORK. REFER SINGLE LINE DIAGRAM, 1/E000 FOR WORK REQUIRED AND COORDINATION/REFERENCE.
7. 100A, 240V SINGLE PHASE POWER PANEL TO BE PRE-INSTALLED ON PERMANENT MODULAR CLASSROOM BUILDING (INSTALLATION BY OTHERS). CONNECT PER SINGLE LINE DIAGRAM, 1/E000.
8. 60A, 240V SINGLE PHASE POWER PANEL TO BE PRE-INSTALLED ON PERMANENT MODULAR TOILET BUILDING (INSTALLATION BY OTHERS). CONNECT PER SINGLE LINE DIAGRAM, 1/E000.
9. EXISTING DISTRIBUTION PANEL TO REMAIN. PANEL IS 208Y/120V , 3PH 4W, 600A WITH SUFFICIENT CAPACITY FOR THE ADDITIONAL LOAD REQUIRED BY THE SCOPE OF THIS WORK. REFER SINGLE LINE DIAGRAM, 1/E000 FOR WORK REQUIRED AND COORDINATION/REFERENCE.
10. EXISTING TRANSFORMER TO REMAIN. REFER TO SINGLE LINE DIAGRAM, 1/E000 FOR COORDINATION/REFERENCE.
11. EXISTING SPARE 4" CONDUIT TO REMAIN. REFER TO SINGLE LINE DIAGRAM, 1/E000 FOR WORK REQUIRED.
12. SITE POWER FEEDER PER SINGLE LINE DIAGRAM, 1/E000.
13. PROVIDE NEW DISTRIBUTION PANEL PER SPECIFICATIONS, INSTALL PER 6/E000 AND CONNECT PER SINGLE LINE DIAGRAM, 1/E000.
14. PROVIDE NEW TRANSFORMER PER SPECIFICATIONS, INSTALL PER 6/E000 AND CONNECT PER SINGLE LINE DIAGRAM, 1/E000.
15. SAW CUT EXISTING AC PAVING/ASPHALT/CONCRETE SURFACES AS REQUIRED, BACK FILL TRENCH AND INFILL AREA WITH LIKE MATERIAL SUCH THAT NEW FINISH SURFACE MATERIAL IS FLUSH WITH EXISTING ADJACENT FINISH SURFACE MATERIAL UPON COMPLETE CURING/DRYING OF MATERIAL. CONTRACTOR SHALL EXERCISE CAUTION IN NEW TRENCHING SO AS TO NOT DISTURB OR DISRUPT EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL FIELD VERIFY ALL.
16. 1-1/2"C. 3#2 CU THWN + #6 CU GROUND. RUN POWER FEEDER TO PERMANENT MODULAR CLASSROOM BUILDING PANEL PROVIDED BY BUILDING MANUFACTURER AND CONNECT POWER PER MANUFACTURER'S WRITTEN INSTRUCTIONS. CONVERT PVC TO PVC WRAPPED RIGID CONDUIT AT 18" BELOW FINISH GRADE, THEN RISE CONDUIT FROM UNDERGROUND ON EXTERIOR WALL OF PERMANENT MODULAR BUILDING AND CONVERT FROM PVC WRAPPED RIGID CONDUIT TO W.P. EMT AT +6' A.F.G., THEN CONTINUE TO PANEL, ATTACHING CONDUIT TO BUILDING STRUCTURE PER C.E.C. ARTICLE 358 REQUIREMENTS. PROVIDE ALL FITTINGS, CONDULETS, ETC. AS REQUIRED TO CONNECT TO PANEL WHETHER PANEL IS LOCATED INSIDE BUILDING OR MOUNTED TO EXTERIOR WALL AS REQUIRED. CONTRACTOR SHALL FIELD VERIFY ALL.
17. TWO 1-1/2"C. 3#2 CU THWN + #6 CU GROUND EACH.
18. PROVIDE NEW UNDERGROUND PULL BOX PER SPECIFICATIONS AND INSTALL PER 2/E000.
19. 1-1/4"C. 3#4 CU THWN + #10 CU GROUND. RUN POWER FEEDER TO PERMANENT MODULAR TOILET BUILDING PANEL PROVIDED BY BUILDING MANUFACTURER AND CONNECT POWER PER MANUFACTURER'S WRITTEN INSTRUCTIONS. CONVERT PVC TO PVC WRAPPED RIGID CONDUIT AT 18" BELOW FINISH GRADE, THEN RISE CONDUIT FROM UNDERGROUND ON EXTERIOR WALL OF PERMANENT MODULAR BUILDING AND CONVERT FROM PVC WRAPPED RIGID CONDUIT TO W.P. EMT AT +6' A.F.G., THEN CONTINUE TO PANEL, ATTACHING CONDUIT TO BUILDING STRUCTURE PER C.E.C. ARTICLE 358 REQUIREMENTS. PROVIDE ALL FITTINGS, CONDULETS, ETC. AS REQUIRED TO CONNECT TO PANEL WHETHER PANEL IS LOCATED INSIDE BUILDING OR MOUNTED TO EXTERIOR WALL AS REQUIRED. CONTRACTOR SHALL FIELD VERIFY ALL.
20. REROUTE EXISTING CONDUIT ATTACHMENT FROM DISTRIBUTION PANEL 'DP-1'. MODIFY EXISTING CONDUIT ATTACHMENT TO FACILITATE UNDERGROUND RUN. AS REQUIRED, CONTRACTOR SHALL PROVIDE NEW 1-1/2"C. FROM CONVERTED CONDUIT ATTACHMENT TO NEW UNDERGROUND PULL BOX.
21. 3/4"C. 2 #10 CU THWN + 1 #10 CU GROUND.
22. NEW PARKING LOT SECURITY LIGHTING POLE. PROVIDE DAY-BRITE #SBX250M2TMG3-MCLTA10S LIGHT FIXTURE WITH SGS42060TL24 POLE. INSTALL PER 3/E201.

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Sheet Title

PARTIAL SITE POWER PLAN

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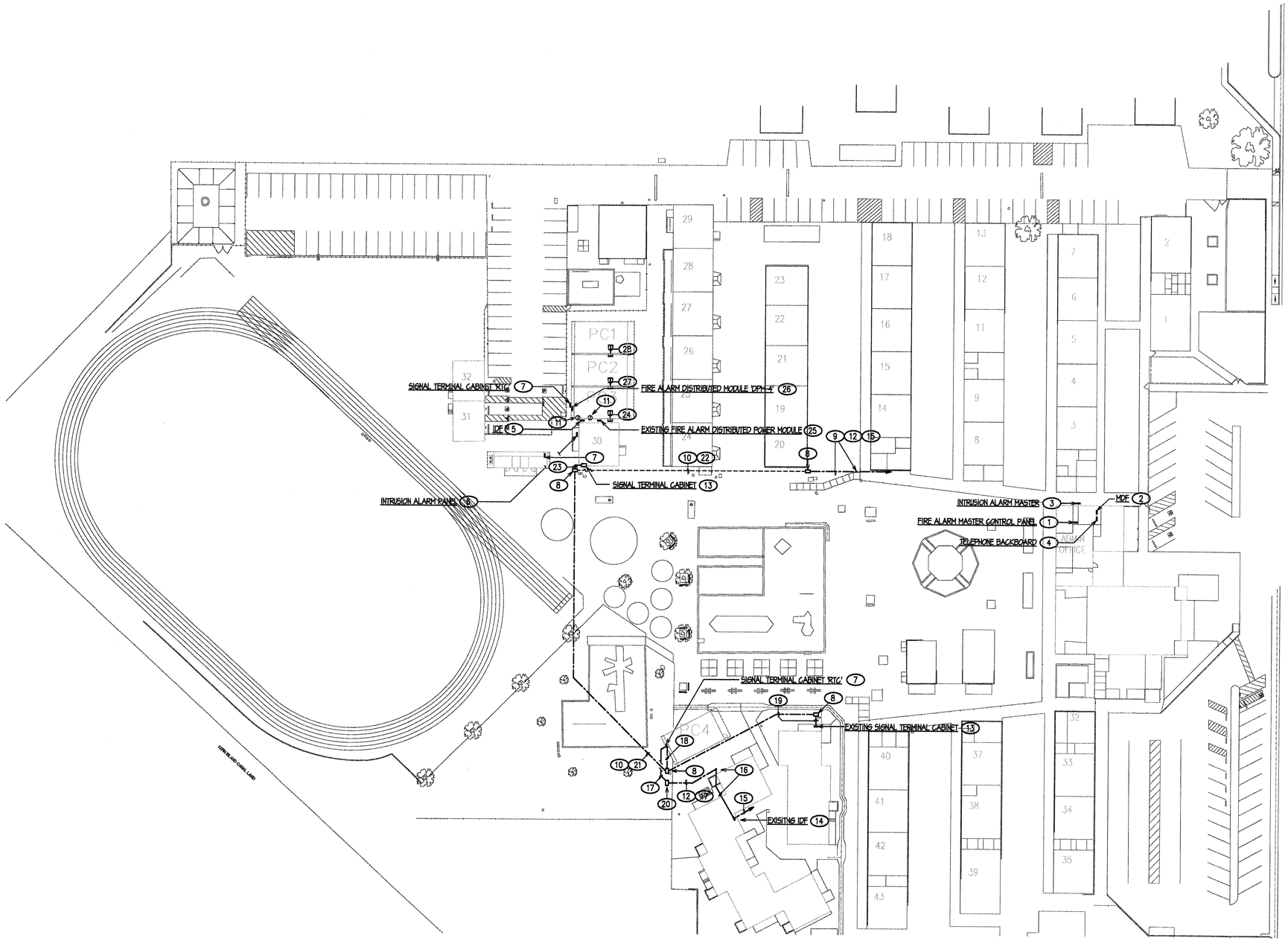

PARTIAL SITE SIGNAL PLAN

SCALE: 1"= 40'-0"

NORTH

PARTIAL SITE SIGNAL PLAN NOTES

1. EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. PANEL IS AN NFS-640 AS MANUFACTURED BY NOTIFIER, C.S.F.M. # 7165-0028:214, INSTALLED UNDER D.S.A. APPLICATION #03-106681 WITH PROTECTION MONITORING PER NFPA 72 1-5.6 REQUIREMENTS. PANEL HAS BATTERY CAPACITY FOR ADDITIONAL DEVICES REQUIRED UNDER THIS SCOPE OF WORK. PROVIDE ADDITIONAL SIGNALING/INITIATION MODULES/CARDS/PROGRAMMING AS REQUIRED TO ACCOMMODATE ADDITIONAL DEVICES, CONTRACTOR SHALL FIELD VERIFY. REFER TO FIRE ALARM SINGLE LINE DIAGRAM, SHEET E302 FOR COORDINATION/REFERENCE.
2. EXISTING MAIN DISTRIBUTION FRAME RACK TO REMAIN. COORDINATE TERMINATION OF NEW FIBER OPTIC CABLE WITH DISTRICT NETWORK SYSTEMS ENGINEER, GARY TAYLOR (661) 631-4145.
3. EXISTING SONITROL INTRUSION ALARM MASTER PANEL TO REMAIN, NO WORK REQUIRED.
4. EXISTING TELEPHONE BACKBOARD TO REMAIN. COORDINATE TERMINATION OF NEW 25 PAIR 'AI' CABLING WITH DISTRICT NETWORK SYSTEMS ENGINEER, GARY TAYLOR (661) 631-4145.
5. PROVIDE NEW WALL MOUNTED IDF PER SPECIFICATIONS AND INSTALL PER 2/E201. IDF CABINET IS TO BE MOUNTED JUST BELOW THE T-BAR CEILING WITH SUFFICIENT SPACE BETWEEN CABINET AND CEILING TO ALLOW FREE, UNIMPEDED DOOR SWING. CONTRACTOR SHALL CUT CEILING TILE ABOVE IDF CABINET AT WALL AND INSTALL A 6" LENGTH OF V3000 WIREMOLD TO ROUTE CABLES FROM ATTIC SPACE INTO IDF CABINET.
6. EXISTING INTRUSION ALARM PANEL TO REMAIN, NO WORK REQUIRED.
7. PROVIDE NEW SIGNAL TERMINAL PER SPECIFICATIONS. INSTALL PER 1/E201. REFER TO BUILDING REAR ELEVATION, 4/E201 FOR COORDINATION/REFERENCE.
8. EXISTING SIGNAL PULL BOX TO REMAIN.
9. EXTEND NEW 1-1/2"C., UNDERGROUND, FROM EXISTING PULL BOX TO EXISTING BUILDING OVERHANG. CONVERT PVC TO PVC WRAPPED RIGID CONDUIT AT 18" BELOW FINISH GRADE, THEN RISE CONDUIT FROM UNDERGROUND ON SUPPORT BEAM OF BUILDING OVERHANG AND CONVERT FROM PVC WRAPPED RIGID CONDUIT TO W.P. EMT AT +6" A.F.G., THEN CONTINUE TO ROOF OF EXISTING OVERHANG, ATTACHING CONDUIT TO BUILDING STRUCTURE PER C.E.C. ARTICLE 358 REQUIREMENTS. CONTINUE TO SYSTEMS MASTER PANELS. PROVIDE ALL FITTINGS, CONDULETS, ETC. AS REQUIRED TO CONNECT TO SYSTEMS MASTER PANELS. SEAL ALL BUILDING PENETRATIONS WATER TIGHT. CONTRACTOR SHALL FIELD VERIFY ALL.
10. EXISTING CONDUIT TO REMAIN.
11. EXISTING WALL MOUNTED PULL BOXES TO REMAIN. REFER TO ITEM (29), BELOW FOR COORDINATION/REFERENCE.
12. SAW CUT EXISTING AC PAVING/ASPHALT/CONCRETE SURFACES AS REQUIRED, BACK FILL TRENCH AND INFILL AREA WITH LIKE MATERIAL SUCH THAT NEW FINISH SURFACE MATERIAL IS FLUSH WITH EXISTING ADJACENT FINISH SURFACE MATERIAL UPON COMPLETE CURING/DRYING OF MATERIAL. CONTRACTOR SHALL EXERCISE CAUTION IN NEW TRENCHING SO AS TO NOT DISTURB OR DISRUPT EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL FIELD VERIFY ALL.
13. EXISTING SIGNAL TERMINAL CABINET TO REMAIN. PROVIDE TELEVISION SYSTEM SPLITTER IN TERMINAL CABINET, PICK UP EXISTING TELEVISION CABLING AT THIS LOCATION AND EXTEND NEW 'T' CABLING TO NEW PERMANENT MODULAR BUILDINGS PER PLANS. CONTRACTOR SHALL FIELD VERIFY ALL.
14. EXISTING IDF TO REMAIN. CONTRACTOR SHALL ADD NEW FIBER OPTIC PATCH PANEL PER SPECIFICATIONS AND INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
15. 1-1/2"C. ONE 'FO' CABLE (DATA) FROM CAMPUS MDF VIA EXISTING CONDUIT. TERMINATE NEW CABLE IN FIBER OPTIC PATCH PANEL BEING INSTALLED IN EXISTING IDF. CONTRACTOR SHALL FIELD VERIFY CONDUIT ROUTING TO MDF LOCATION. WHERE CONDUIT DOES NOT EXIST, CONTRACTOR SHALL PROVIDE NEW CONDUIT, SURFACE MOUNTED OR UNDERGROUND PER ITEM 12 ABOVE, AS REQUIRED.
16. 2"C. EIGHT 'D' CABLES (DATA). CONTRACTOR SHALL PICK UP AND SPLICE EXISTING TWO WEST PENN 364 CABLES IN ACCESSIBLE ATTIC SPACE AND THEN RUN TO EXISTING JUNCTION BOX INSTALLED ON SIDE OF EXISTING BUILDING. EXIT BUILDING, PROVIDING NEW 3/4"C. FOR SPEAKER CABLE AND NEW 2"C. FOR DATA CABLES AS REQUIRED, ATTACHING CONDUIT TO BUILDING STRUCTURE PER C.E.C. ARTICLE 358 REQUIREMENTS USING EXISTING 'C' CHANNEL MOUNTED TO BUILDING EXTERIOR WALL, CONTINUE DOWN SIDE OF EXISTING BUILDING. CONVERT FROM W.P. EMT TO PVC WRAPPED RIGID CONDUIT AT +6" A.F.G. CONVERT FROM PVC WRAPPED RIGID CONDUIT TO PVC AT 18" BELOW FINISH GRADE. CONTINUE WITH NEW CONDUIT TO NEW UNDERGROUND PULL BOX AS SHOWN.
17. 2"C. EIGHT 'D' CABLES (DATA), 3/4"C. ONE 'A' CABLE (SPEAKER).
18. 3/4"C. ONE 'FN' CABLE (NOTIFICATION) + ONE 'FI' CABLE (INITIATION). 2"C. EIGHT 'D' CABLES (DATA) AND 3/4"C. ONE 'A' CABLE (SPEAKER).
19. EXISTING 1"C. AND 1-1/2" C. TO REMAIN, NO WORK REQUIRED.
20. PROVIDE NEW UNDERGROUND PULL BOX PER SPECIFICATIONS AND INSTALL PER 2/E000.
21. IN EXISTING 1"C. PULL-IN ONE 'FN' CABLE (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION).
22. IN EXISTING 1-1/2"C, PULL-IN ONE 'FO' CABLE (DATA)
23. 1-1/2"C. ONE 'FO' CABLE (DATA) AND CONNECT TO BUILDING IDF. PICK UP EXISTING 25 PAIR COMMUNICATIONS CABLE, SPLICE AND PULL ONE 'AI' CABLE THROUGH ACCESSIBLE ATTIC SPACE TO EXISTING WALL MOUNTED PULL BOXES ON WEST SIDE OF BUILDING. REFER TO ITEM 11, ABOVE FOR COORDINATION/REFERENCE.
24. 2"C. TWENTY-FOUR 'D' CABLES (DATA) FROM NEW IDF; 1-1/2"C. ONE 'AI' CABLE (TELEPHONE) FROM EXISTING BUILDING MOUNTED SIGNAL T.C.; 1-1/2"C. ONE 'FN' CABLE (NOTIFICATION) FROM EXISTING DISTRIBUTED POWER MODULE + ONE 'FI' CABLE (INITIATION) FROM EXISTING BUILDING MOUNTED SIGNAL T.C. ROUTE EIGHT DATA CABLES PER 4/E201 IN PERMANENT MODULAR BUILDING 'PMB' AND EXTEND REMAINING SIXTEEN DATA CABLES TO DATA CONDUIT SLEEVE BETWEEN PERMANENT MODULAR BUILDINGS 'PMB' AND 'PM2'. ROUTE 'AI' CABLE TO NEW BUILDING MOUNTED SIGNAL T.C. 'RTC', ITEM 7 ABOVE AND TERMINATE. ROUTE FIRE ALARM CABLING TO NEW BUILDING MOUNTED FIRE ALARM 'RFATC' AND TERMINATE. REFER TO BUILDING EXTERIOR ELEVATION 4/E201 FOR COORDINATION/REFERENCE.
25. EXISTING FIRE ALARM POWER MODULE TO REMAIN. DPM IS AN ACPS-2406 AS MANUFACTURED BY NOTIFIER, C.S.F.M. # 7165-0028:218, INSTALLED UNDER D.S.A. APPLICATION #03-106681 WITH PROTECTION MONITORING PER NFPA 72 1-5.6 REQUIREMENTS. MODULE HAS BATTERY CAPACITY FOR ADDITIONAL DEVICES REQUIRED UNDER THIS SCOPE OF WORK. REFER TO FIRE ALARM SINGLE LINE DIAGRAM, SHEET E302 FOR COORDINATION/REFERENCE.
26. PROVIDE NEW FIRE ALARM DISTRIBUTED POWER MODULE PER SPECIFICATIONS, INSTALL PER 4/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302.
27. PROVIDE TWO 2"C. SLEEVES (DATA); ONE 2"C. SLEEVE (COMMUNICATIONS); ONE 1-1/2"C. SLEEVE (FIRE ALARM) BETWEEN PERMANENT MODULAR BUILDINGS. PULL SIXTEEN 'D' CABLES IN ONE 2"C. SLEEVE (DATA), LEAVE ONE 2"C SLEEVE (DATA) FOR FUTURE. PULL TWO 'A' CABLES (SPEAKER) IN 2"C. (COMMUNICATIONS). PULL TWO 'FN' CABLES (NOTIFICATION) + ONE 'FI' CABLE (FIRE ALARM INITIATION) IN 1-1/2"C. (FIRE ALARM). REFER TO PERMANENT MODULAR BUILDING ELECTRICAL PLANS, 4/E200 AND PERMANENT MODULAR BUILDING FIRE ALARM PLANS, 2/E301 FOR SIGNAL DISTRIBUTION REQUIREMENTS INSIDE BUILDING.
28. PROVIDE TWO 2"C. SLEEVES (DATA); ONE 2"C. SLEEVE (COMMUNICATIONS); ONE 1-1/2"C. SLEEVE (FIRE ALARM) BETWEEN PERMANENT MODULAR BUILDINGS. PULL EIGHT 'D' CABLES IN ONE 2"C. SLEEVE (DATA), LEAVE ONE 2"C SLEEVE (DATA) FOR FUTURE. PULL ONE 'A' CABLE (SPEAKER) IN 2"C. (COMMUNICATIONS). PULL TWO 'FN' CABLES (NOTIFICATION) + ONE 'FI' CABLE (FIRE ALARM INITIATION) IN 1-1/2"C. (FIRE ALARM). REFER TO PERMANENT MODULAR BUILDING ELECTRICAL PLANS, 4/E201 AND PERMANENT BUILDING FIRE ALARM PLANS, 2/E301 FOR SIGNAL DISTRIBUTION REQUIREMENTS INSIDE BUILDING.

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McKINLEY ELEMENTARY PERMANENT MOD CLASSROOMS

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PARTIAL SITE SIGNAL PLAN

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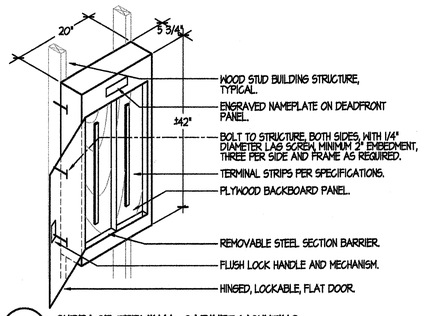
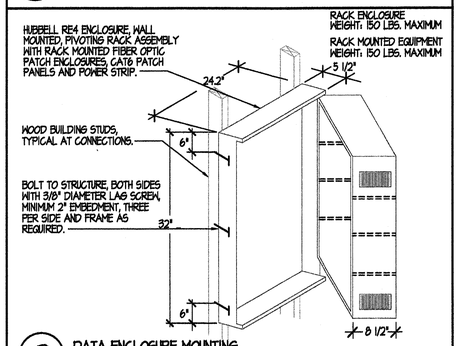


1 **SURFACE TERMINAL CABINET MOUNTING**

NTS



2 **DATA ENCLOSURE MOUNTING**

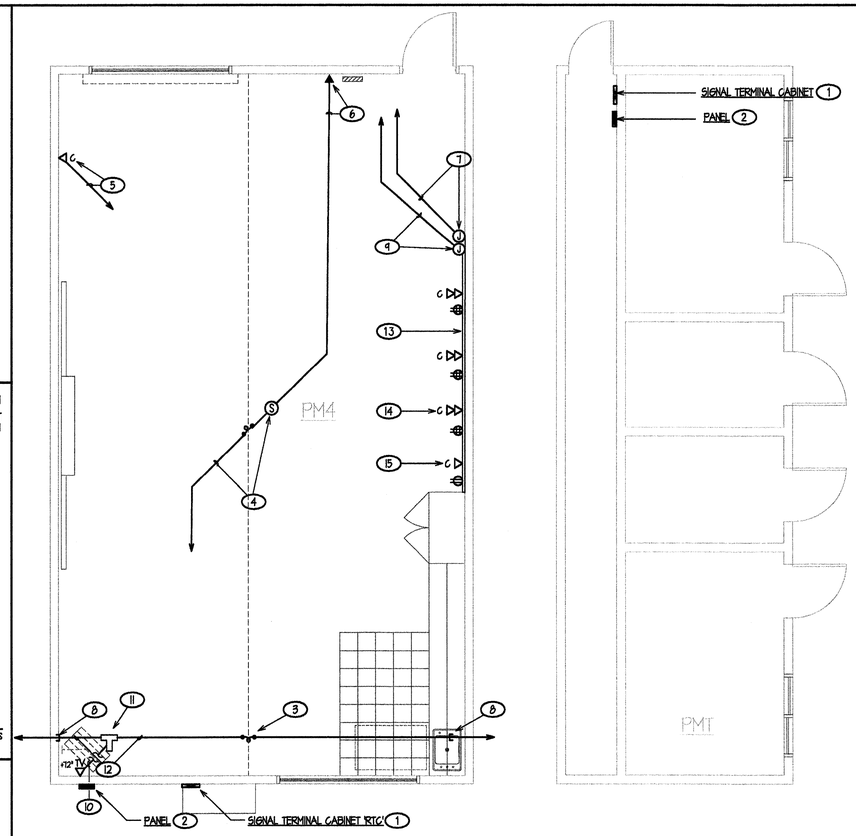
WALL MOUNTED IDF ENCLOSURE

NTS

3 **POLE FIXTURE MOUNTING**

NOT A PART OF DSA REVIEW

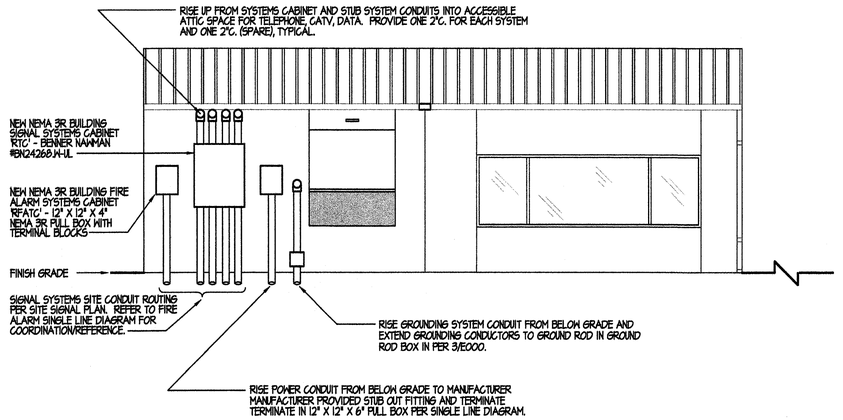
NTS



4 **PERMANENT MODULAR BUILDING ELECTRICAL PLANS**

BUILDING ORIENTATION VARIES, REFER TO SITE ELECTRICAL PLANS FOR EXACT BUILDING POSITIONING

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



5 **ELEVATION AT REAR OF PERMANENT MODULAR BUILDINGS**

REFER TO SITE SIGNAL PLAN FOR EXACT LOCATIONS FOR 'RTC' AND 'RFATC' ON REAR OF BUILDING, WHERE OCCURS.

NTS

PERMANENT MODULAR BUILDING ELECTRICAL PLANS NOTES

1. PROVIDE NEW SIGNAL TERMINAL CABINET PER SPECIFICATIONS AND INSTALL PER 1/E201. EXTEND CONDUCTORS AS REQUIRED TO BUILDING ELECTRICAL SYSTEMS.
2. POWER PANEL IS TO BE PRE-INSTALLED ON PERMANENT MODULAR BUILDING (INSTALLATION BY OTHERS). REFER TO SINGLE LINE DIAGRAM, 1/E000 FOR COORDINATION/REFERENCE.
3. PROVIDE FLEXIBLE CONDUIT CONNECTION AT MODULE LINE BETWEEN BUILDING MODULES, TYPICAL.
4. PROVIDE CEILING MOUNTED SPEAKER ASSEMBLY PER SPECIFICATIONS (SPEAKER ASSEMBLY SHALL NOT EXCEED 20 LBS. TOTAL WEIGHT). PROVIDE SPEAKER CABLE PER SPECIFICATIONS. AT SPEAKER LOCATION, TERMINATE AT SPEAKER LEAVING SUFFICIENT EXCESS CABLE, THREE SERVICE LOOPS MINIMUM AND RUN CABLE IN ACCESSIBLE ATTIC SPACE VIA J-HOOKS AT 8' O.C. FROM SPEAKER TO BUILDING SIGNAL TERMINAL CABINET VIA BUILDING COMMUNICATIONS CONDUIT SLEEVE WHERE OCCURS AND TERMINATE ON TERMINATION BLOCK.
5. PROVIDE SINGLE RJ45 JACK AND COVER PLATE PER SPECIFICATIONS AND INSTALL TO EXISTING BACK BOX AT THIS LOCATION. USE EXISTING CONDUIT TO ACCESSIBLE ATTIC SPACE AND RUN ONE 'D' CABLE TO IDF CABINET VIA BUILDING DATA CONDUIT SLEEVE WHERE OCCURS AND TERMINATE AT SPARE POSITION IN COPPER PATCH PANEL. PROVIDE INSULATED BUSHING AT CONDUIT IN ATTIC SPACE FOR CABLE PROTECTION. CONTRACTOR SHALL FIELD VERIFY ALL.
6. PROVIDE SINGLE LINE TELEPHONE PER SPECIFICATIONS, SURFACE MOUNTED TO EXISTING BACK BOX AT THIS LOCATION. EXTEND ONE 'A' CABLE FROM CEILING MOUNTED SPEAKER VIA J-HOOKS AT 8' O.C. IN FREE AIR TO EXTERIOR WALL, THEN USE EXISTING CONCEALED CONDUIT TO EXISTING BACK BOX AND TERMINATE ONE PAIR AT TELEPHONE. FROM TELEPHONE, RUN ONE 'D' CABLE VIA BUILDING DATA CONDUIT SLEEVE WHERE OCCURS TO IDF RACK AND TERMINATE AS SPARE FOR FUTURE. PROVIDE INSULATED BUSHING AT CONDUIT IN ATTIC SPACE FOR CABLE PROTECTION. CONTRACTOR SHALL FIELD VERIFY ALL.
7. PROVIDE 1"C. SEVEN 'D' CABLES PER SPECIFICATIONS, CONCEALED IN WALL TO ACCESSIBLE ATTIC SPACE, THEN CONTINUE VIA BUILDING DATA CONDUIT SLEEVE WHERE OCCURS TO NEAREST IDF RACK AND TERMINATE AT SPARE POSITION IN COPPER PATCH PANEL. PROVIDE INSULATED BUSHING AT CONDUIT IN ATTIC SPACE FOR CABLE PROTECTION. CONTRACTOR SHALL FIELD VERIFY ALL.
8. SIGNAL SYSTEMS CONDUIT SLEEVE PER PLANS. REFER TO PARTIAL SITE SIGNAL PLAN, SHEET E102 FOR COORDINATION/REFERENCE.
9. 3/4"C. 2#12 CU THWN + 1#12 CU GROUND CONCEALED IN ATTIC/WALLS TO MANUFACTURER PROVIDED POWER PANEL. CONNECT TO SPARE 20/1 CIRCUIT BREAKER AT PANEL AND LABEL AS @COMPUTER WORKSTATION RACEWAY#.
10. 3/4"C. ONE 'T' CABLE PER SPECIFICATIONS TO TELEVISION OUTLET IN CORNER OF PERMANENT MODULAR BUILDING AND TERMINATE AT WALL MOUNTED 'F' CONNECTOR AS REQUIRED.
11. PROVIDE BLONDER-TONGUE T-TAPS WITH QUAD SHIELD COMPRESSION TERMINATIONS AND MOUNT TO STRUCTURE IN ATTIC SPACE FOR TELEVISION CABLING DISTRIBUTION. RUN ONE 'T' CABLE VIA J-HOOKS AT 8' O.C. IN FREE AIR TO WALL, THEN CONCEALED IN WALL TO TELEVISION OUTLET.
12. ONE 'T' CABLE PER SPECIFICATIONS VIA J-HOOKS TO EXTERIOR BUILDING WALL, THEN VIA 2"C. COMMUNICATIONS SLEEVE TO ADJACENT PERMANENT MODULAR BUILDING WHERE OCCURS. PROVIDE PROTECTIVE INSULATING BUSHING ON INTERIOR SIDE OF WALL IN EACH BUILDING AND SEAL ALL PENETRATIONS WATER TIGHT. CONTRACTOR SHALL FIELD VERIFY ALL.
13. PROVIDE SURFACE METAL RACEWAY PER SPECIFICATIONS MOUNTED AT +18" A.F.F. COORDINATE EXACT LOCATION OF RACEWAY WITH ROBERT VAN TASSEL, SUPERVISOR, PLANNING AND CONSTRUCTION, BAKERSFIELD CITY SCHOOL DISTRICT, 661-631-5884.
14. PROVIDE DUPLEX RJ45 DATA JACKS PER SPECIFICATIONS, INSTALL TO SURFACE METAL RACEWAY AND TERMINATE ONE 'D' CABLE TO EACH.
15. PROVIDE SINGLE DATA JACK AND COVER PLATE PER SPECIFICATIONS, INSTALL TO SURFACE METAL RACEWAY AND TERMINATE ONE 'D' CABLE.

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REGISTERED PROFESSIONAL ENGINEER
MARK V. WATERS
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Revisions

No.	Date	Description

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Project Title

McKINLEY ELEMENTARY PERMANENT MOD CLASSROOMS

LICENSED ARCHITECT
KENNETH L. SIDDLE
C15251
RENEWAL 03-31-11
STATE OF CALIFORNIA

Sheet Title

BUILDING ELECTRICAL PLANS

Sheet Number

E201

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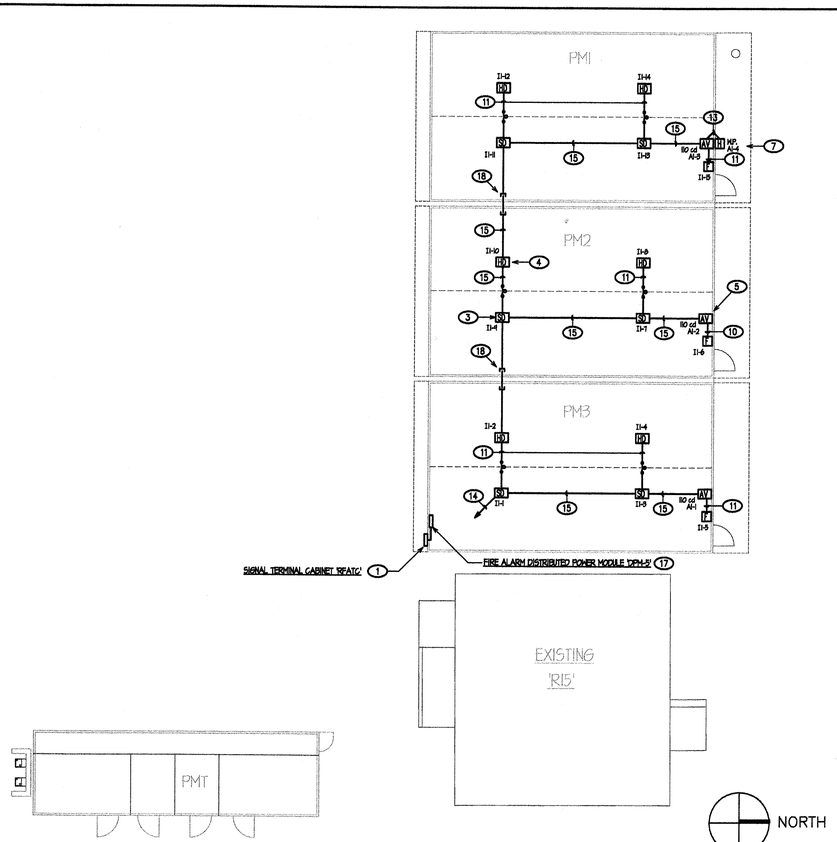
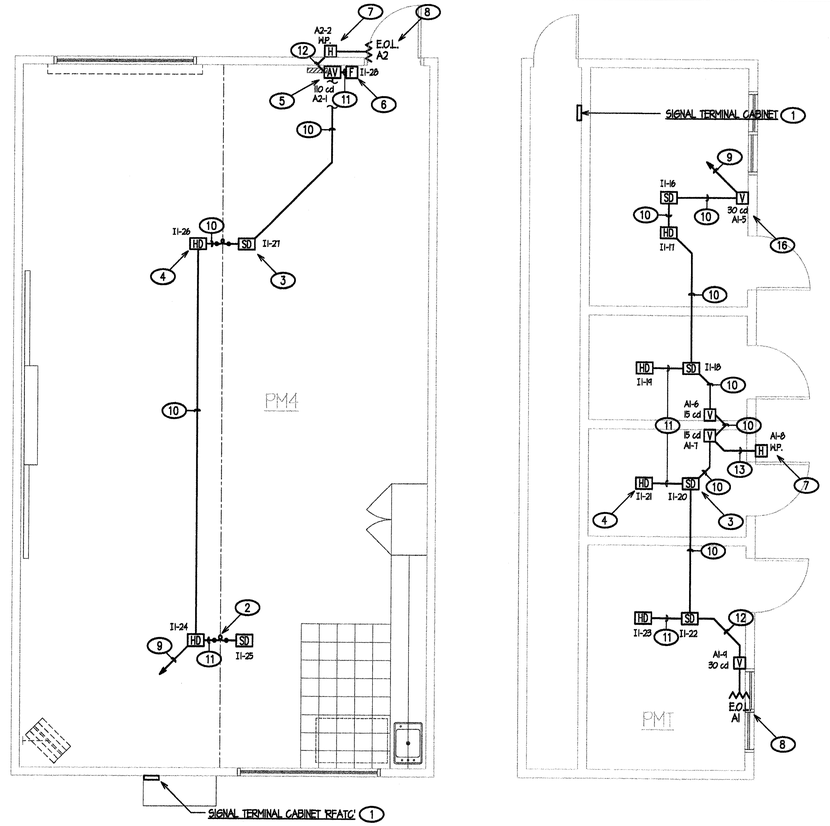


1 BUILDING FIRE ALARM PLANS

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



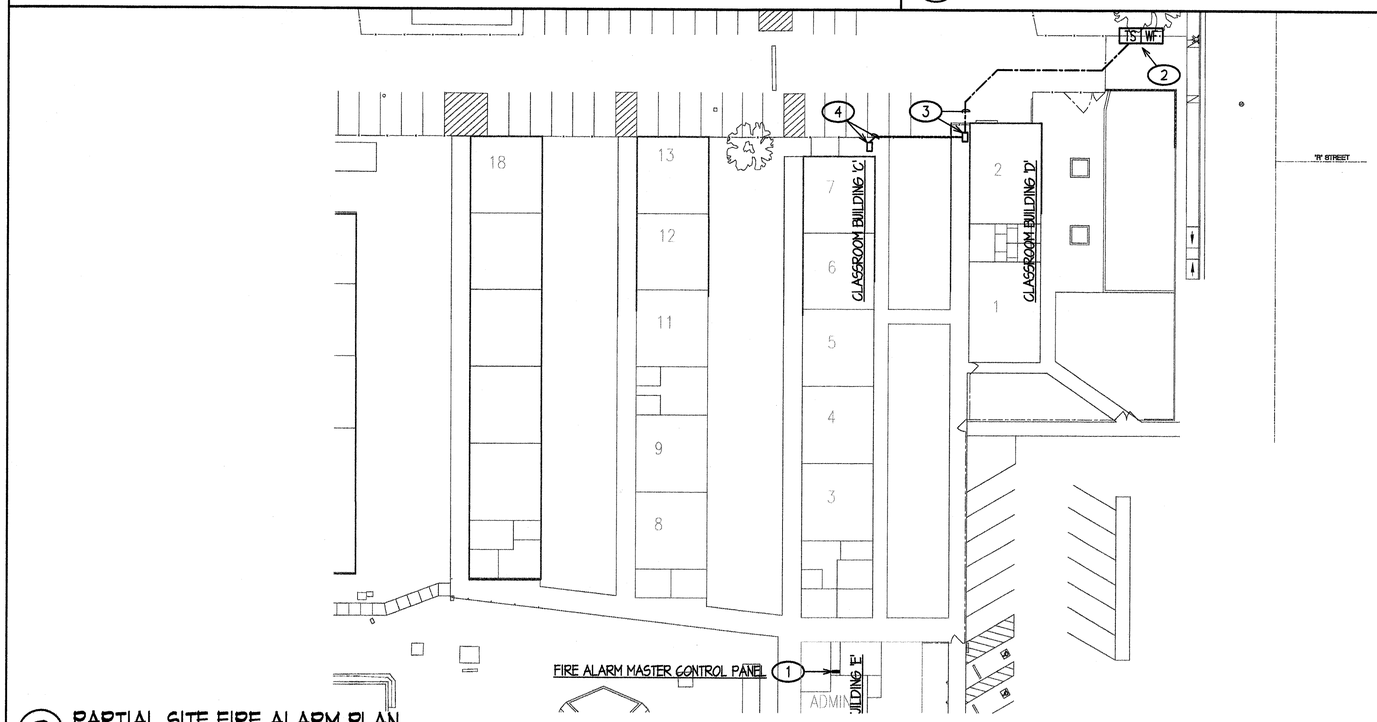
2 BUILDING FIRE ALARM PLANS

BUILDING ORIENTATION VARIES, REFER TO SITE ELECTRICAL PLANS FOR EXACT BUILDING POSITIONING

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

BUILDING FIRE ALARM PLANS NOTES

1. PROVIDE NEW SIGNAL TERMINAL CABINET PER SPECIFICATIONS AND INSTALL PER 1/E201. EXTEND CONDUCTORS AS REQUIRED TO BUILDING ELECTRICAL SYSTEMS.
2. PROVIDE FLEXIBLE CONDUIT CONNECTION AT MODULE LINE BETWEEN BUILDING MODULES, TYPICAL.
3. PROVIDE FIRE ALARM SMOKE DETECTORS PER SPECIFICATIONS, INSTALL PER 3/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302, TYPICAL WHERE OCCURS.
4. PROVIDE FIRE ALARM HEAT DETECTORS PER SPECIFICATIONS, INSTALL PER 3/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302, TYPICAL WHERE OCCURS.
5. PROVIDE FIRE ALARM AUDIBLE/VISUAL NOTIFICATION APPLIANCES PER SPECIFICATIONS, INSTALL PER 3/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302, TYPICAL WHERE OCCURS.
6. PROVIDE FIRE ALARM MANUAL PULL STATION PER SPECIFICATIONS, INSTALL PER 3/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302, TYPICAL WHERE OCCURS.
7. PROVIDE FIRE ALARM M.P. AUDIBLE DEVICES PER SPECIFICATIONS, INSTALL PER 3/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302, TYPICAL WHERE OCCURS.
8. PROVIDE NEW FIRE ALARM END OF LINE RESISTOR FOR INDICATED NOTIFICATION CIRCUIT PER SPECIFICATIONS. INSTALL AT THIS LAST NOTIFICATION DEVICE IN THE NOTIFICATION CIRCUIT AND CONNECT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
9. 3/4"C. ONE 'FN' CABLE (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION) TO BUILDING SIGNAL TERMINAL CABINET.
10. 3/4"C. ONE 'FN' CABLE (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION).
11. ½"C. ONE 'FI' CABLE (INITIATION).
12. ½"C. ONE 'FN' CABLE (NOTIFICATION).
13. 3/4"C. TWO 'FN' CABLES (NOTIFICATION).
14. 3/4"C. TWO 'FN' CABLES (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION) TO BUILDING SIGNAL TERMINAL CABINET.
15. 3/4"C. TWO 'FN' CABLES (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION).
16. PROVIDE FIRE ALARM VISUAL NOTIFICATION APPLIANCES PER SPECIFICATIONS, INSTALL PER 3/E302 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E302, TYPICAL WHERE OCCURS.
17. PROVIDE NEW FIRE ALARM DISTRIBUTED POWER MODULE PER SPECIFICATIONS AND INSTALL PER 4/E302.
18. AT EACH EXTERIOR WALL OF ADJACENT PERMANENT MODULAR CLASSROOM BUILDINGS, PENETRATE BUILDING AND RUN NOTIFICATION AND INITIATION CIRCUITS INTO BUILDING ACCESSIBLE ATTIC SPACE AS REQUIRED. PROVIDE M.P. 1-1/2" FLEXIBLE CONDUIT SLEEVE BETWEEN BUILDINGS, CONVERTING AND ADAPTING TO EMT IN ATTIC SPACES. SEAL ALL PENETRATIONS WATERTIGHT.



3 PARTIAL SITE FIRE ALARM PLAN

SCALE: 1" = 30'- 0"

PARTIAL SITE FIRE ALARM PLAN NOTES

1. EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. PANEL IS AN NFS-640 AS MANUFACTURED BY NOTIFIER, C.S.F.M. # 7165-0028:214, INSTALLED UNDER D.S.A. APPLICATION #03-106681 WITH PROTECTION MONITORING PER NFPA 72 1-5.6 REQUIREMENTS. PANEL HAS BATTERY CAPACITY FOR ADDITIONAL DEVICES REQUIRED UNDER THIS SCOPE OF WORK. PROVIDE ADDITIONAL SIGNALING/INITIATION MODULE/CARDS/PROGRAMMING AS REQUIRED TO ACCOMMODATE ADDITIONAL DEVICES, CONTRACTOR SHALL FIELD VERIFY. REFER TO FIRE ALARM SINGLE LINE DIAGRAM, SHEET E302 FOR COORDINATION/REFERENCE.
2. MONITOR SWITCHES FOR DOUBLE CHECK DETECTOR VALVE, PROVIDED AND INSTALLED BY DIVISION 15 CONTRACTOR. PROVIDE FIRE ALARM SYSTEM INTERFACE MODULE MOUNTED IN FIRE ALARM CONTROL PANEL AND CONNECT TO EXISTING INITIATION CIRCUIT 'I1'. REFER TO ITEM (1) ABOVE FOR COORDINATION/REFERENCE.
3. EXISTING UNDERGROUND PULL BOX TO REMAIN. RUN 3/4"C. 4 #14 CU THWN FOR EACH SWITCH FROM DCDV ASSEMBLY SWITCH CONTACTS TO EXISTING UNDERGROUND PULL BOX SOUTH OF CLASSROOM 1 IN CLASSROOM BUILDING 'D'. ENTER EXISTING PULL BOX WITH NEW CONDUIT AS REQUIRED PROTECTING ALL EXISTING CONDUIT AND WIRING CURRENTLY IN PULL BOX. SAW CUT EXISTING AC PAVING/ASPHALT/CONCRETE SURFACES AS REQUIRED, BACK FILL TRENCH AND INFILL AREA WITH LIKE MATERIAL SUCH THAT NEW FINISH SURFACE MATERIAL IS FLUSH WITH EXISTING ADJACENT FINISH SURFACE MATERIAL UPON COMPLETE CURING/DRYING OF MATERIAL. CONTRACTOR SHALL EXERCISE CAUTION IN NEW TRENCHING SO AS TO NOT DISTURB OR DISRUPT EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL FIELD VERIFY ALL.
4. PULL NEW CONDUCTORS IN EXISTING CONDUIT VIA EXISTING UNDERGROUND PULL BOX SOUTH OF CLASSROOM 'D', THEN CONTINUE IN EXISTING FIRE ALARM CONDUIT IN BUILDING 'C' TO FIRE ALARM CONTROL PANEL LOCATED IN ADMINISTRATION, BUILDING 'E'. CONNECT TAMPER SWITCHES TO INTERFACE MODULES PER MANUFACTURER'S WRITTEN INSTRUCTIONS. REFER TO ITEM (1) ABOVE AND ARCHITECTURAL DRAWINGS, SHEET A5101 FOR EXACT LOCATION OF DETECTOR VALVE ASSEMBLY AND COORDINATION/REFERENCE.

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McKINLEY ELEMENTARY PERMANENT MOD CLASSROOMS

LICENSED ARCHITECT — KENNETH L. SIGGERS — C15251 — RENEWAL 03-31-11 — STATE OF CALIFORNIA

Sheet Title

BUILDING FIRE ALARM PLANS

Sheet Number

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FIRE ALARM VOLTAGE DROP CALCULATIONS

DEVICE NUMBER	AWG SIZE	CIRC. MILS	OHMS RES. PER/FT.	WIRE LENGTH	DEVICE AMPERES	TOTAL AMPERES	DEVICE % VD	TOTAL % VD
1	#12	6530	0.00164	48'	0.133	0.76	0.54	0.54
2	#12	6530	0.00164	23'	0.133	0.63	0.23	0.82
3	#12	6530	0.00164	75'	0.133	0.44	0.60	1.42
4	#12	6530	0.00164	8'	0.050	0.36	0.05	1.47
5	#12	6530	0.00164	211'	0.081	0.31	1.06	2.53
6	#12	6530	0.00164	35'	0.050	0.23	0.13	2.66
7	#12	6530	0.00164	8'	0.050	0.18	0.02	2.68
8	#12	6530	0.00164	13'	0.050	0.13	0.03	2.71
9	#12	6530	0.00164	51'	0.081	0.08	0.07	2.78

ANNUNCIATION CIRCUIT 'A1'	TOTAL PERCENTAGE DROP IN CIRCUIT:	2.78%
BASED UPON A 24 VDC CIRCUIT OPERATING AT 75 DEGREES FARENHEIT		

FIRE ALARM VOLTAGE DROP CALCULATIONS

DEVICE NUMBER	AWG SIZE	CIRC. MILS	OHMS RES. PER/FT.	WIRE LENGTH	DEVICE AMPERES	TOTAL AMPERES	DEVICE % VD	TOTAL % VD
1	#12	6530	0.00164	600'	0.133	0.18	1.71	1.71
2	#12	6530	0.00164	8'	0.050	0.05	0.01	1.78

ANNUNCIATION CIRCUIT 'A2'	TOTAL PERCENTAGE DROP IN CIRCUIT:	1.78%
BASED UPON A 24 VDC CIRCUIT OPERATING AT 75 DEGREES FARENHEIT		

FIRE ALARM BATTERY CALCULATIONS - 'DPM-3'

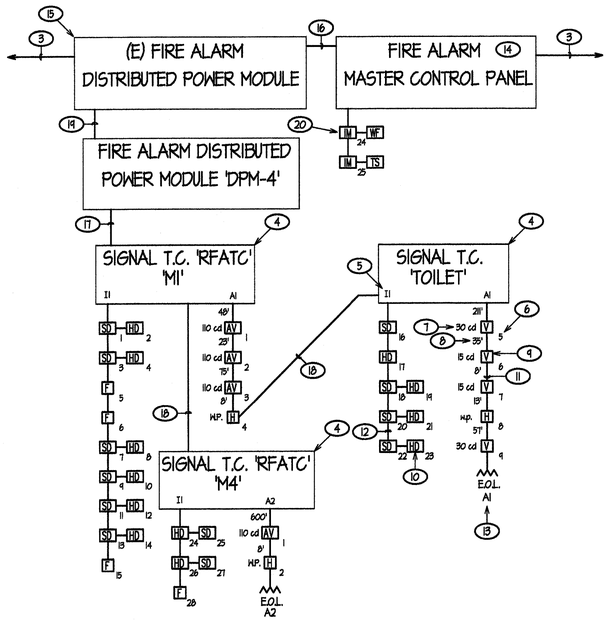
EQUIPMENT DESCRIPTION		QUANTITY		SUPERVISORY CURRENT (AMPERES)		ALARM CURRENT (AMPERES)	
		EXISTING	NEW	EACH	SUB-TOTAL	EACH	SUB-TOTAL
DISTRIBUTED POWER MODULE		1	1	0.090	0.180	0.090	0.180
HORNS		10	0	0.000	0.000	0.023	0.230
AUDIBLE/VISUALS	30 cd	1	0	0.000	0.000	0.092	0.092
AUDIBLE/VISUALS	75 cd	20	0	0.000	0.000	0.146	2.960
AUDIBLE/VISUALS	110 cd	4	0	0.000	0.000	0.165	0.660
VISUALS	15/75 cd	3	0	0.000	0.000	0.066	0.198

SUB-TOTAL AMPERES	0.180 AMPS	4.32	AMPS
	x 24 HOURS	x 0.084	HOURS
SUB-TOTAL AMPERE-HOURS	4.32 A.H.	0.363	A.H.
TOTAL REQUIRED AMPERE-HOURS FOR:		4.683	A.H.
BATTERY NON-LINEAR DISCHARGE CHARCTERISTIC FACTOR		x 1.2	
TOTAL MINIMUM AMPERE HOURS REQUIRED		5.620	A.H.
EXISTING BATTERY CAPACITY		7.0	A.H.

FIRE ALARM BATTERY CALCULATIONS - 'DPM-4'

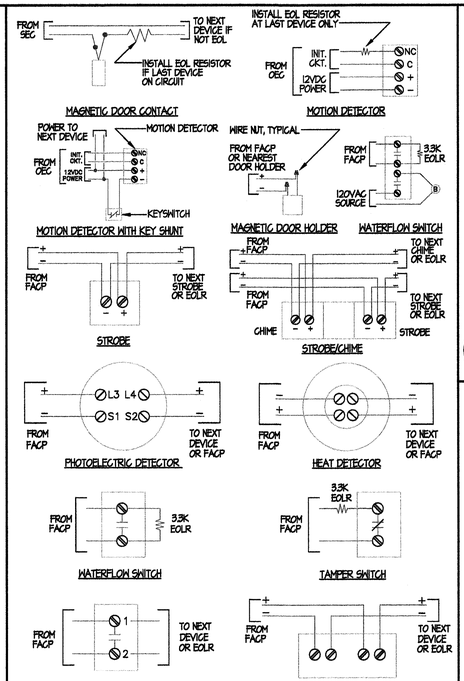
EQUIPMENT DESCRIPTION		QUANTITY		SUPERVISORY CURRENT (AMPERES)		ALARM CURRENT (AMPERES)	
		EXISTING	NEW	EACH	SUB-TOTAL	EACH	SUB-TOTAL
HORNS		0	3	0.000	0.000	0.050	0.150
AUDIBLE/VISUALS	110 cd	0	4	0.000	0.000	0.133	0.532
VISUALS	15 cd	0	2	0.000	0.000	0.050	0.100
VISUALS	30 cd	0	2	0.000	0.000	0.081	0.162

SUB-TOTAL AMPERES	0.000 AMPS	0.944	AMPS
	x 24 HOURS	x 0.084	HOURS
SUB-TOTAL AMPERE-HOURS	0.000 A.H.	0.0793	A.H.
TOTAL REQUIRED AMPERE-HOURS FOR:		0.0793	A.H.
BATTERY NON-LINEAR DISCHARGE CHARCTERISTIC FACTOR		x 1.2	
TOTAL MINIMUM AMPERE HOURS REQUIRED		0.0952	A.H.
PROVIDE BATTERY CAPACITY		7.0	A.H.



1 FIRE ALARM SINGLE LINE DIAGRAM

NO SCALE



2 TYPICAL DEVICE WIRING DETAIL

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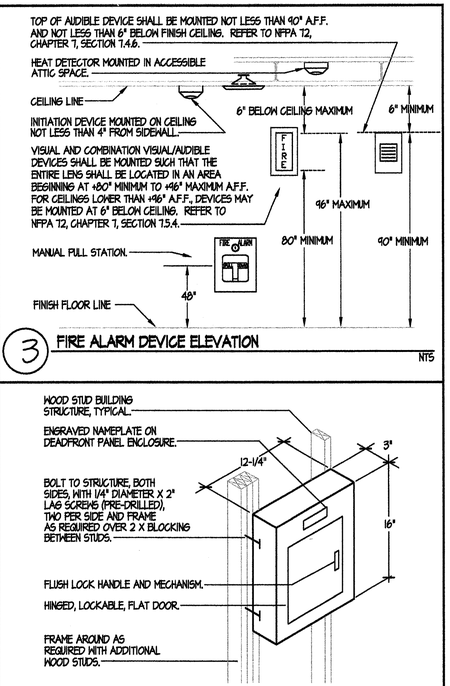

3 FIRE ALARM DEVICE ELEVATION

NTS

4 SURFACE MOUNTED DISTRIBUTED POWER MODULE

NTS

FIRE ALARM SINGLE LINE DIAGRAM NOTES

1. SINGLE LINE DIAGRAM IS A SCHEMATIC REPRESENTATION OF FIRE ALARM DISTRIBUTION AND BRANCH CIRCUITING. REFER TO PARTIAL SITE SIGNAL PLAN, SHEET E102 FOR SPECIFIC SITE DISTRIBUTION ROUTING AND COORDINATION/REFERENCE.
2. PROVIDE NEW FIRE ALARM DISTRIBUTED POWER MODULE PER SPECIFICATIONS. RUN 1/2"C. 2 #12 CU THWN + 1 #12 CU GROUND TO BUILDING PANEL AND CONNECT TO SPARE, DEDICATED 20/1 CIRCUIT BREAKER LOCATED AT BUSS POSITION NUMBER [XX] IN PANEL ['X'] PER MANUFACTURER'S WRITTEN INSTRUCTIONS. PROVIDE RED COLOR CIRCUIT BREAKER HANDLE AND DISCONNECT LOCATION LABELING PER N.F.P.A. 72, CHAPTER 4, SECTIONS 4.4.1.4.2. ADDITIONALLY, CONTRACTOR SHALL PROVIDE AND INSTALL A LISTED LOCK OUT DEVICE COMPATIBLE WITH THE CIRCUIT BREAKER FOR ADDED PROTECTION.
3. EXISTING DEDICATED 120VAC, 20A CIRCUIT BREAKER FOR EXISTING FIRE ALARM CONTROL EQUIPMENT TO REMAIN, NO WORK REQUIRED.
4. BUILDING SIGNAL TERMINAL CABINET PER PLANS. PROVIDE FLAT MOUNT TERMINAL BLOCKS PER SPECIFICATIONS, QUANTITY AS REQUIRED, TO TERMINATE ALL FIRE ALARM CONDUCTORS WITHIN THE FIRE ALARM SECTION OF THE SIGNAL TERMINAL CABINET.
5. CIRCUIT DESIGNATION, TYPICAL.
6. DENOTES NOTIFICATION APPLIANCE NUMBER USED IN VOLTAGE DROP CALCULATIONS, TYPICAL. REFER TO FIRE ALARM VOLTAGE DROP CALCULATIONS, AND BATTERY CALCULATIONS, THIS SHEET FOR COORDINATION/REFERENCE.
7. DENOTES FIRE ALARM VISIBLE NOTIFICATION APPLIANCE NOMINAL CANDELA RATING REQUIRED, TYPICAL.
8. DENOTES DISTANCE BETWEEN NOTIFICATION APPLIANCES, TYPICAL.
9. PROVIDE NOTIFICATION APPLIANCE PER SPECIFICATIONS, TYPICAL. REFER TO INDIVIDUAL BUILDING FIRE ALARM PLANS FOR EXACT DEVICE LOCATIONS, QUANTITIES AND CONDUIT ROUTING REQUIREMENTS. REFER TO FIRE ALARM SYMBOL SCHEDULE, THIS SHEET FOR COORDINATION/REFERENCE.
10. PROVIDE INITIATING DEVICE PER SPECIFICATIONS, TYPICAL. REFER TO INDIVIDUAL BUILDING FIRE ALARM PLANS FOR EXACT DEVICE LOCATIONS, QUANTITIES AND CONDUIT ROUTING REQUIREMENTS. REFER TO FIRE ALARM SYMBOL SCHEDULE, THIS SHEET FOR COORDINATION/REFERENCE.
11. RUN ONE 'FN' CABLE BETWEEN NOTIFICATION APPLIANCES, TYPICAL, SHOWN HERE FOR CLARITY ONLY. SEE INDIVIDUAL FIRE ALARM PLANS FOR EACH RESPECTIVE BUILDING TO DETERMINE EXACT ROUTING REQUIREMENTS OF FIRE ALARM CIRCUITING AND CONDUIT.
12. RUN ONE 'FI' CABLE BETWEEN INITIATING DEVICES, TYPICAL, SHOWN HERE FOR CLARITY ONLY. SEE INDIVIDUAL FIRE ALARM PLANS FOR EACH RESPECTIVE BUILDING TO DETERMINE EXACT ROUTING REQUIREMENTS OF FIRE ALARM CIRCUITING AND CONDUIT.
13. END OF LINE RESISTOR FOR INDICATED NOTIFICATION CIRCUIT, TYPICAL. PROVIDE AND INSTALL AT LAST NOTIFICATION APPLIANCE IN CIRCUIT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
14. EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. REFER TO PARTIAL SITE SIGNAL PLAN, SHEET E102 FOR COORDINATION/REFERENCE.
15. EXISTING FIRE ALARM DISTRIBUTED POWER MODULE TO REMAIN. EXTEND SPARE NOTIFICATION CIRCUIT(S) AS INDICATED. REFER TO PARTIAL SITE SIGNAL PLAN, SHEET E102 FOR COORDINATION/REFERENCE.
16. EXISTING FIRE ALARM FEEDER BETWEEN EXISTING FIRE ALARM CONTROL PANEL AND EXISTING FIRE ALARM DISTRIBUTED POWER MODULE TO REMAIN, NO WORK REQUIRED.
17. 1"C. THREE 'FN' CABLES (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION) TO BUILDING SIGNAL TERMINAL CABINET.
18. 3/4"C. ONE 'FN' CABLE (NOTIFICATION) AND ONE 'FI' CABLE (INITIATION).
19. 1/2"C. ONE 'FN' CABLE (NOTIFICATION).
20. PROVIDE NEW ADDRESSABLE INTERFACE MODULE INSTALLED TO EXISTING FIRE ALARM CONTROL PANEL FOR WATER FLOW AND TAMPER SWITCH MONITORING. RUN 4 #14 CU THWN TO EACH SWITCH PER PARTIAL SITE FIRE ALARM PLAN, SHEET E301 AND CONNECT.

APPLICABLE CODES AND STANDARDS

APPLICABLE CODES AS OF JANUARY 1, 2008:

2007 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.

2007 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 C.C.R.
(2006 INTERNATIONAL BUILDING CODE VOLUMES 1-2 OF THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS, WITH CALIFORNIA AMENDMENTS

2007 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 C.C.R.
2005 NATIONAL ELECTRICAL CODE (NEC)

2007 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 C.C.R.
2006 UNIFORM MECHANICAL CODE (UMC)

2007 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 C.C.R.
2006 UNIFORM PLUMBING CODE (UPC)

2008 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.

2001 CALIFORNIA ELEVATOR SAFETY CODE OF REGULATIONS, TITLE 8

2007 CALIFORNIA HISTORICAL BUILDING CODE, PART 8, TITLE 24 C.C.R.

2007 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
2006 INTERNATIONAL FIRE CODE (IFC)

2007 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 C.C.R.
2006 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

2003 TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2007 CALIFORNIA REFERENCE STANDARDS CODE, PART 12, TITLE 24 C.C.R.

PARTIAL LIST OF APPLICABLE STANDARDS:

2002 NFPA 13, AUTOMATIC SPRINKLER SYSTEMS

2007 NFPA 14, STANDPIPE SYSTEMS

2002 NFPA 17, DRY CHEMICAL EXTINGUISHING SYSTEMS

2002 NFPA 17A, WET CHEMICAL SYSTEMS

2007 NFPA 20, STATIONARY PUMPS

2007 NFPA 24, PRIVATE FIRE MAINS

2007 NFPA 72, NATIONAL FIRE ALARM CODE (CALIFORNIA AMMENDED)
(NOTE: SEE UL STANDARDS 1971 FOR "VISUAL DEVICES")

2006 NFPA 253, CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS

2004 NFPA 2001, CLEAN AGENT FIRE EXTINGUISHING SYSTEMS
REFERENCE CODE SECTION FOR NFPA STANDARDS - CBS (SFM) 3504.1

FIRE ALARM SYSTEM LEVEL OF VISIBILITY

THE ALARM SYSTEM SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNINGS SHALL HAVE A FLASH RATE NOT EXCEEDING TWO FLASHES PER SECOND (2 HZ) NOR BE LESS THAN ONE FLASH EVERY SECOND (1 HZ). STROBE SIGNALING DEVICES FOR THE HEARING IMPAIRED SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED (NFPA 72, SEC. 7.5.2)

FIRE ALARM SYSTEM TESTING REQUIREMENTS

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALLING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY PER CHAPTER 7, NFPA 72, AND A CERTIFICATE OF COMPLETION SHALL BE PROVIDED TO THE OWNER PER CHAPTER 1, NFPA 72, AND THE CALIFORNIA FIRE CODE, SECTION 1006.2.4

FIRE ALARM SYMBOL SCHEDULE

	FIRE ALARM MASTER PANEL - NOTIFIER #NFS-640 (C.S.F.M. # 7165-0028: 214)
	EXISTING FIRE ALARM DISTRIBUTED POWER MODULE NOTIFIER #AGPS-2408 (C.S.F.M. # 7315-0028:213)
	FIRE ALARM DISTRIBUTED POWER MODULE NOTIFIER #AGPS-610E (C.S.F.M. # 7315-0028: 248)
SD	AUTOMATIC SMOKE DETECTOR (PHOTOELECTRIC) - NOTIFIER #FSP-851 (C.S.F.M. #7212-0028: 206)
HD	AUTOMATIC HEAT DETECTOR (ATTIC MOUNTED) - NOTIFIER #FST-851H (C.S.F.M. #7210-0028: 196)
IM	ADDRESSABLE INTERFACE MODULE - NOTIFIER #FMM-1 (C.S.F.M. #7300-0028: 219)
F	MANUAL PULL STATION NOTIFIER #NBG-12LX (C.S.F.M. #7150-0028: 199)
H AP.	WALL MOUNTED AUDIBLE DEVICE - 101dba SETTING NOTIFIER SPECTRALERT ADVANCE #HRK WITH SURFACE MOUNT WEATHERPROOF BACKBOX #WBB (C.S.F.M. #7125-1653: 184)
AV	WALL MOUNTED AUDIBLE/VISUAL DEVICE - 96dba SETTING, CANDELA RATING PER PLANS NOTIFIER SPECTRALERT ADVANCE #P2RH WITH SURFACE MOUNT BACKBOX SKIRT #BBS (C.S.F.M. #7300-1653: 186)
V	WALL MOUNTED VISUAL DEVICE - CANDELA RATING PER PLANS NOTIFIER SPECTRALERT ADVANCE #SR WITH SURFACE MOUNT BACKBOX SKIRT #BBS (C.S.F.M. #7125-1653: 186)
E.O.L.	CIRCUIT END OF LINE RESISTOR.

FIRE ALARM SYSTEM OPERATIONAL MATRIX

SYMBOL	DEVICE DESCRIPTION	ACTIVATE EVACUATION HORNS/ STROBES	ANNUNCIATE AT BUILDING F.A.C.P.	ACTIVATE FIRE/ SMOKE DAMPERS
F	MANUAL PULL STATION	X	X	
SD	SMOKE DETECTOR	X	X	X
HD	HEAT DETECTOR	X	X	
WF	WATERFLOW SWITCH	X	X	
TS	TAMPER SWITCH		SUPERVISORY	

FIRE ALARM SYSTEM LEVEL OF AUDIBILITY

ALARM-INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 dBA ABOVE THE AVERAGE AMBIENT NOISE LEVELS OR 5 dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS WHICH-EVER IS GREATER. MEASURED 5' ABOVE THE FLOOR. AMBIENT NOISE LEVELS MEANS THE LEVEL WHICH CAN NORMALLY BE EXPECTED WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATING OR WORKING CONDITIONS (NFPA 72, SEC. 4-3.2.1 AND 4-3.2.2) (FA-10)

FIRE ALARM SYSTEM INSTALLATION NOTES

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA ELECTRICAL CODE AND ARTICLE 9. INSTALLATION OF THE SYSTEM SHALL NOT BEGIN UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING SFM LISTING NUMBERS FOR EACH COMPONENT, HAVE BEEN APPROVED BY DSA UPON COMPLETION OF THE INSTALLATION, A TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE INSPECTOR OF RECORD.

FIRE ALARM SYSTEM REQUIREMENTS

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE, SECTION 305.9; CALIFORNIA ELECTRICAL CODE, ARTICLE 760 AND CALIFORNIA FIRE CODE, ARTICLE 10.

INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT COMMENCE UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTINGS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY THE DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICES.

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALLING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY, PER CHAPTER 7 NFPA 72. IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 15db OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALLING DEVICES MAY BE REQUIRED BY THE ENFORCING AGENCY PER CALIFORNIA FIRE CODE. THE FINAL FIRE ALARM TEST SHALL BE WITNESSED BY THE LOCAL FIRE AUTHORITY WITH THE D.S.A. INSPECTOR OF RECORD.

A CERTIFICATE OF COMPLETION SHALL BE PROVIDED TO THE OWNER PER NFPA 72, CHAPTER 1, PARAGRAPH 1-6.2.1 AND THE CALIFORNIA FIRE CODE.

COMPLETE AUTOMATIC FIRE ALARM SYSTEM SUBMITTAL

THE FIRE ALARM SYSTEM DESIGN IS A COMPLETE PLAN SUBMITTAL PER DSA POLICY. THE CONTRACTOR SHALL INSTALL THE AUTOMATIC, ADDRESSABLE FIRE PROTECTION SYSTEM AS SHOWN AND AS HEREIN SPECIFIED. IF ANY SUBSTITUTION OF FIRE ALARM EQUIPMENT IS TO BE REQUESTED, SUCH REQUEST SHALL BE MADE A MINIMUM OF TEN BUSINESS DAYS PRIOR TO PROJECT BID DATE. THE CONTRACTOR SUBMITTAL SHALL INCLUDE ALL MANUFACTURER'S CATALOG EQUIPMENT SPECIFICATION SHEETS, THE CSFM LISTING SHEETS FOR INDIVIDUAL COMPONENTS COMPRISING THE SUBSTITUTED FIRE ALARM SYSTEM, BATTERY LOAD CALCULATIONS AND VOLTAGE DROP CALCULATIONS FOR EACH SIGNALLING CIRCUIT. SHOULD THE SUBSTITUTED SYSTEM BE APPROVED AND INSTALLED, THE CONTRACTOR SHALL PROVIDE ONE SET OF REPRODUCIBLE, CAD GENERATED, DSA-ORS APPROVED AND STAMPED 'AS-CONSTRUCTED' DRAWINGS TO THE ENGINEER UPON COMPLETION OF THE SYSTEM INSTALLATION.

FIRE ALARM SYSTEM OPERATION NOTES

THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (CBC SECTION 1006.2.4.2.2.1.1) THE AUTOMATIC ALARM SYSTEM SHALL COVER ALL ROOMS AND AREAS AND UPON ACTIVATION OF AN INITIATING DEVICE ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION. (EXCEPTION: SMOKE DETECTORS ARE NOT REQUIRED IN NON-ACCESSIBLE AREAS AS DEFINED IN CBC SECTION 210 (CBC SECTION 1006.2.4.2.2.1.1 AND 1006.2.4.2.2.1.5)

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Revisions

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OFFICE OF REGULATION SERVICES
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McKINLEY ELEMENTARY PERMANENT MOD CLASSROOMS

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Sheet Title

FIRE ALARM SINGLE LINE DIAGRAM

Sheet Number

E302

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MVW MVW E302 DPM-4 DPM-3 FIRE ALARM SINGLE LINE DIAGRAM.DWG 12/15/2010 4:11:11 PM

GENERAL ELECTRICAL CONDITIONS

SECTION 260500

DIVISION 0 AND 1 ARE HEREIN INCORPORATED AS A PART OF THIS SECTION BY REFERENCE.

I - GENERAL

ORDINANCES, REGULATIONS AND CODES

ALL WORK MUST CONFORM TO THE REQUIREMENTS WHICH FALL WITHIN THE SCOPE OF THE REGULATIONS IN THE CODES OR UNDER THE JURISDICTION OF ANY OF THE GOVERNING BODIES LISTED.

THE CALIFORNIA CODE OF REGULATIONS, TITLES 19 THRU 25.

THE NATIONAL ELECTRIC CODE AS APPLICABLE UNDER CURRENT STATE AND LOCAL REGULATIONS, IF ANY, (LATEST EDITION AND SUPPLEMENTS.)

STATE BOARD OF HEALTH.

CAL-OSHA REGULATIONS.

NOTHING IN THESE SPECIFICATIONS OR SHOWN ON THE PLANS, SHALL RELIEVE THE CONTRACTOR FROM FULL COMPLIANCE WITH APPLICABLE PORTIONS OF ANY OF THE ABOVE REGULATIONS PERTAINING TO WORK WHICH HE IS INSTALLING UNDER THIS CONTRACT.

PERMITS AND FEES:

PAY FOR AND OBTAIN ALL PERMITS, INSPECTION FEES, ETC., AS REQUIRED FOR THE COMPLETION OF ALL WORK INCLUDED IN THIS CONTRACT. ANY INSPECTION CERTIFICATES REQUIRED SHALL BE OBTAINED AND DELIVERED TO THE OWNER.

EXAMINATION OF DRAWINGS AND SITE:

BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL CAREFULLY EXAMINE THE STRUCTURAL, MECHANICAL, PLUMBING AND ARCHITECTURAL DRAWINGS FOR THIS WORK, ALONG WITH THE SPECIFICATIONS FOR SAME IN ADDITION TO THE DRAWINGS AND SPECIFICATIONS GOVERNING THE WORK OF THIS TRADE. HE SHALL ALSO VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND FAMILIARIZE HIMSELF WITH ALL THE SITE CONDITIONS. NO SUBSEQUENT ALLOWANCES WILL BE MADE TO THE CONTRACTOR BECAUSE OF HIS NEGLIGENCE IN COMPLYING WITH THE ABOVE OR HIS ALLEGED INABILITY TO UNDERSTAND THE REQUIREMENTS.

CONDUCT OF THE WORK:

THE CONTRACTOR SHALL MAINTAIN ON THE JOB A COMPETENT FOREMAN OR A SUPERINTENDENT AT ALL TIMES TO SUPERINTEND THE WORK.

CONTRACTOR'S RESPONSIBILITY:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS AND EQUIPMENT UNTIL FINAL ACCEPTANCE BY THE OWNER. HE SHALL ERECT AND MAINTAIN SUITABLE BARRIERS, PROTECTIVE DEVICES, LIGHTS AND WARNING SIGNS WHERE REQUIRED FOR THE PROTECTION OF THE PUBLIC AND EMPLOYEES ABOUT THE BUILDINGS. HE SHALL BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM HIS NEGLECT OR THE CARELESSNESS AND NEGLECT OF HIS EMPLOYEES.

II - PRODUCTS

GENERAL

WITHIN THIRTY ONE (21) DAYS OF CONTRACT AWARD BY THE OWNER, THE CONTRACTOR SHALL SUBMIT A COMPLETE LISTING OF PRODUCTS HE INTENDS TO FURNISH, COMPLETE WITH MANUFACTURER AND CATALOG DESIGNATIONS, ALONG WITH CURRENTLY QUOTED LEAD TIMES FOR DELIVERY OF SAME. SHOULD THE CONTRACTOR ANTICIPATE THAT THE DELIVERY SCHEDULE OF ANY SPECIFIED PRODUCT MAY ADVERSELY IMPACT THE PROJECT CONSTRUCTION SCHEDULE, HE SHALL BRING IT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER AT THIS TIME.

WITHIN THIRTY FIVE (35) DAYS AFTER AWARD OF CONTRACT BY THE OWNER, THE CONTRACTOR SHALL MAKE SUBMITTALS FOR ALL MATERIAL TO BE USED ON THE PROJECT, WHETHER AS SPECIFIED OR SUBSTITUTIONS.

SUBMITTALS FOR ALL PROPOSED MATERIAL SHALL BE MADE AT ONE TIME IN A NEAT AND ORDERLY FASHION IN A SUITABLE BINDER WITH A TITLE SHEET, TABLE OF CONTENTS AND INDEXED TABS SEPARATING EACH GROUP OF MATERIALS ACCORDING TO THE SECTION AS OUTLINED IN THIS SPECIFICATION. ALL EQUIPMENT SHALL BE IDENTIFIED BY THE MARK NUMBER AS INDICATED ON THE DRAWINGS. ANY SUBMITTAL MADE SUBSEQUENT TO THE INITIAL EQUIPMENT SUBMITTAL MAY BE REJECTED WITHOUT REVIEW, OR THE ENGINEER MAY INVOICE THE CONTRACTOR, AT SENIOR ELECTRICAL ENGINEER HOURLY RATES, MINIMUM TWO HOURS PER PRODUCT, FOR REVIEW OF ANY PRODUCT NOT LISTED IN THIS SPECIFICATION OR SHOWN IN THE DRAWINGS. PAYMENT OF THE REVIEW INVOICE SHALL NOT BE CONTINGENT UPON APPROVAL OF THE SUBSTITUTION SUBMITTAL AND SHALL BE INCLUDED WITH THE SUBMITTAL. SUBMITTAL OF A BID FOR THIS PROJECT SHALL INCLUDE A WRITTEN ACKNOWLEDGMENT OF THESE TERMS FROM THE CONTRACTOR (PAYMENT FOR SUCH REVIEW SHALL BE MADE IN ADVANCE).

EQUIPMENT OR MATERIAL FURNISHED OR INCORPORATED IN CONSTRUCTION WITHOUT PRIOR APPROVAL OF THE ARCHITECT MAY BE REJECTED AND IF REJECTED SHALL BE REMOVED FROM THE STRUCTURE AND REPLACED WITH APPROVED EQUIPMENT OR MATERIAL AT THE CONTRACTOR'S EXPENSE.

ALL EQUIPMENT CHARACTERISTICS AND ACCESSORIES REQUIRED ON THE DRAWINGS OR IN THE SPECIFICATIONS SHALL BE HIGHLIGHTED, CIRCLED OR UNDERLINED. FOR ALL ITEMS NOT SCHEDULED THEREIN, CALCULATIONS AND OTHER INFORMATION RELATING TO SELECTION OF AN ITEM SHALL BE INCLUDED.

SUBMITTALS NOT CONFORMING TO THE ABOVE REQUIREMENTS WILL BE REJECTED AND RETURNED WITHOUT REVIEW.

SUBSTITUTIONS:

THE SPECIFICATIONS OR DRAWINGS ARE IN NO WAY TO BE CONSTRUED AS BEING PROPRIETARY TOWARD ONE PRODUCT OR MANUFACTURER UNLESS NOTED AS NO SUBSTITUTE. ALL OTHER PRODUCTS, OR TYPES OF PRODUCTS, LISTED THEREIN ARE INTENDED TO SET THE STANDARD FOR PERFORMANCE, QUALITY, DESIGN, AND INSTALLATION PROCEDURE. HOWEVER, NO RIGHT IS IMPLIED UPON THE PART OF THE CONTRACTOR TO SUBSTITUTE OTHER MATERIALS, PRODUCTS OR SYSTEMS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND/OR ENGINEER.

ALL REQUESTS FOR SUBSTITUTION, IN ADDITION TO THE REQUIREMENTS SET FORTH IN DIVISIONS 0 AND 1, SHALL BE COMPLETE, PROVIDED IN TRIPLICATE, IN WRITING, AND SHALL INDICATE ALL INFORMATION REQUIRED THEREIN, INCLUDING SPECIFIC DIFFERENCES FROM THE SPECIFIED ITEM. THE REQUEST FOR SUBSTITUTION SHALL BE ACCOMPANIED BY PRODUCT LITERATURE, PERFORMANCE DATA, SPECIFICATIONS, DRAWINGS, SAMPLES OR OTHER MEANS AS MAY BE REQUIRED FOR PROPER EVALUATION BY THE ARCHITECT AND/OR ENGINEER.

REQUEST FOR SUBSTITUTION OF A PRODUCT SHALL CONSTITUTE REPRESENTATION BY THE CONTRACTOR THAT HE HAS INVESTIGATED THE PROPOSED PRODUCT AND HAS DETERMINED THAT IT IS EQUAL OR SUPERIOR, IN ALL RESPECTS, TO THE SPECIFIED PRODUCT.

SUBMIT A SEPARATE REQUEST FOR EACH PRODUCT SUBSTITUTION. DOCUMENT EACH REQUEST WITH COMPLETE DATA SUBSTANTIATING COMPLIANCE OF PROPOSED SUBSTITUTION WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS. EACH SUBMITTAL SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING INFORMATION:

AN ITEMIZED COMPARISON OF THE PROPOSED SUBSTITUTION WITH THE SPECIFIED PRODUCT, LISTING VARIATIONS, ADVANTAGES, DISADVANTAGES, ETC. IN DETAIL.

A QUALITY OF FABRICATION PROCESS COMPARISON BETWEEN THE PROPOSED SUBSTITUTION AND THE SPECIFIED PRODUCT.

A PERFORMANCE COMPARISON BETWEEN THE PROPOSED SUBSTITUTION AND THE SPECIFIED PRODUCT.

A COST COMPARISON BETWEEN THE PROPOSED SUBSTITUTION AND THE SPECIFIED PRODUCT, DETAILING ANY ADDITIONAL CHARGES, CREDITS TO THE OWNER, ETC. RESULTING FROM THE SUBSTITUTION OF SPECIFIED EQUIPMENT.

INDICATE THE IMPACT THE SUBSTITUTION WILL HAVE UPON THE CONSTRUCTION SCHEDULE, AND THE WORK OF ANY OTHER TRADES, IF ANY.

PROVIDE AN EXECUTED CONTRACTOR'S WAIVER OF RIGHTS TO ADDITIONAL PAYMENT AND/OR TIME THAT MAY BECOME NECESSARY SHOULD THE SUBSTITUTED PRODUCT FAIL TO PERFORM ADEQUATELY.

ALL PROPOSED SUBSTITUTIONS SHALL BE A STANDARD PRODUCT OF THE MANUFACTURING FIRM, UNDER CURRENT MANUFACTURE AND BE A STANDARD CATALOG ITEM AT TIME OF BID COMPLETE WITH MANUFACTURER'S STANDARD WARRANTY.

ACCEPTANCE OF SUBSTITUTIONS WILL BE MADE SOLELY BY THE ARCHITECT AND/OR THE ENGINEER BASED UPON THE INFORMATION PROVIDED.

ACCEPTANCE OF SUBSTITUTIONS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR COMPLYING WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES IN OTHER PARTS OF THE WORK MADE NECESSARY BY HIS SUBSTITUTIONS, AND SHALL BEAR ALL EXPENSE INCURRED THEREIN WHETHER OR NOT SUCH REQUIREMENTS ARE IDENTIFIED AT THE TIME THE SUBSTITUTION SUBMITTAL IS MADE.

SUBSTITUTION SUBMITTALS SHALL BE MADE NO LATER THAN (10) TEN BUSINESS DAYS PRIOR TO THE BID CLOSING DATE. FAILURE TO SUBMIT WITHIN THIS DEADLINE CONSTITUTES A GUARANTEE ON THE PART OF THE CONTRACTOR THAT THE SPECIFIED PRODUCTS WILL BE SUPPLIED. ANY SUBSTITUTION SUBMITTAL MADE SUBSEQUENT TO OR DURING THIS PREREQUISITE TEN DAY TIME PERIOD MAY BE REJECTED WITHOUT REVIEW, OR THE ENGINEER MAY INVOICE THE CONTRACTOR, AT SENIOR ELECTRICAL ENGINEER HOURLY RATES, MINIMUM TWO HOURS PER PRODUCT, FOR REVIEW OF ANY PRODUCT NOT LISTED IN THIS SPECIFICATION OR SHOWN IN THE DRAWINGS. PAYMENT OF THE REVIEW INVOICE SHALL NOT BE CONTINGENT UPON APPROVAL OF THE SUBSTITUTION SUBMITTAL AND SHALL BE INCLUDED WITH THE SUBMITTAL. SUBMITTAL OF A BID FOR THIS PROJECT SHALL INCLUDE A WRITTEN ACKNOWLEDGMENT OF THESE TERMS FROM THE CONTRACTOR (PAYMENT FOR SUCH REVIEW SHALL BE MADE IN ADVANCE).

SYSTEM DRAWINGS DEPICTING THE PLACEMENT OF THE SUBSTITUTED EQUIPMENT WITHIN THE DESIGN OF THE OVERALL SYSTEMS SHALL BE PROVIDED. THESE DRAWINGS SHALL SHOW DIMENSIONS, HEIGHTS, MOUNTING METHODS, ANY AFFECTED SYSTEM CALCULATIONS, ETC. FOR EACH OF THE SUBSTITUTED PRODUCTS AND INCLUDE ANY CHANGES REQUIRED TO THE BUILDING TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.

CATALOG DATA AND OPERATING INSTRUCTIONS

UPON COMPLETION OF THE WORK IN THIS CONTRACT, THE ARCHITECT SHALL BE FURNISHED WITH A COMPLETE SET OF CATALOG DATA WHICH DESCRIBES EACH PIECE OF EQUIPMENT INSTALLED UNDER THIS CONTRACT. THE CATALOG SHALL BE BOUND IN A SET AND SHALL BE CLEARLY LABELED AS TO EACH ITEM OF EQUIPMENT USED.

OPERATION AND MAINTENANCE MANUALS SHALL BE PROVIDED FOR ALL ELECTRICAL EQUIPMENT SUBMITTED AND INSTALLED UNDER THIS CONTRACT PER REQUIREMENTS AS SET FORTH IN DIVISION 1 OF THESE SPECIFICATIONS. IN ADDITION TO THOSE REQUIREMENTS, THE FOLLOWING INFORMATION SHALL BE INCLUDED:

INTERCONNECTION WIRING DIAGRAMS BETWEEN DISCRETE PORTIONS OF THE COMPLETE SYSTEMS WHERE DEVIATION OCCURRED FROM THE DESIGNED INTERCONNECTION REQUIREMENTS OF THE CONTRACT DOCUMENTS.

WHERE EQUIPMENT SUBSTITUTION WAS MADE DURING THE COURSE OF THE PROJECT, VARYING SIGNIFICANTLY FROM A DESIGNED SYSTEMS REQUIREMENTS AS SHOWN IN THE CONTRACT DOCUMENTS, COMPLETE SYSTEM DRAWINGS, EQUIPMENT SPECIFICATION SHEETS AND ALL OTHER PERTINENT DOCUMENTATION SHALL BE PROVIDED IN THE BOUND SET OF OPERATION AND MAINTENANCE MANUALS.

WHERE APPLICABLE, PREVENTATIVE MAINTENANCE PROCEDURES AND MANUFACTURER'S SUGGESTED SCHEDULE FOR SUCH PREVENTATIVE MAINTENANCE FOR ALL ELECTRICAL EQUIPMENT SUPPLIED.

EMERGENCY SAFETY SHUT DOWN PROCEDURES DURING EQUIPMENT MALFUNCTION.

MANUFACTURER'S LITERATURE PROVIDED WITH EQUIPMENT SHALL BE BOUND IN THE SET OF OPERATION AND MAINTENANCE MANUALS ALONG WITH ALL OTHER PERTINENT INFORMATION.

III - EXECUTION

RECORD DRAWINGS:

THE CONTRACTOR SHALL MAINTAIN "AS-CONSTRUCTED" RECORD DRAWINGS AT ALL TIMES, SHOWING THE EXACT INSTALLATION OF THE ELECTRICAL WORK GOVERNED UNDER THIS CONTRACT, INCLUDING EQUIPMENT LOCATIONS.

ELECTRONIC FILES IN AUTOCAD R14 OR LATER DRAWING FILE FORMAT (DWG) ON CD-ROM OR FLOPPY DISKETTES AND A REPRODUCIBLE SET OF RECORD DRAWINGS SHALL BE PROVIDED TO THE OWNER'S FACILITIES MAINTENANCE AND OPERATIONS DEPARTMENT AT PROJECT CLOSE OUT.

REFER TO DIVISION 1 FOR ADDITIONAL REQUIREMENTS.

LOCATIONS:

THE WORK AS LAID OUT IS TO SOME EXTENT DIAGRAMMATIC, AND THE LOCATION THEREON INDICATED MAY BE APPROXIMATE ONLY. THE CONTRACTOR, THEREFORE, SHALL INSTALL ALL THE EQUIPMENT, APPARATUS, CONDUIT RUNS AND THE LIKE AS FOLLOWS:

ADHERE TO THE LOCATION INDICATED AS FAR AS POSSIBLE.

MAINTAIN AMPLE HEAD ROOM IN ALL ROOMS AND PASSAGEWAYS, CLEARANCE AROUND ALL APPARATUS AND EQUIPMENT AND UNDER PIPE LINES FOR UNOBSTRUCTED PASSAGE AND FOR EASY SERVICING OF ALL APPARATUS, EQUIPMENT, DEVICES AND THE LIKE.

VERIFY THE EXACT LOCATIONS OF ALL FIXTURES AND OTHER APPARATUS OR DEVICES AS INDICATED ON THE DRAWINGS. IN THE EVENT THESE DRAWINGS DO NOT SUFFICIENTLY INDICATE THE LOCATIONS FOR ALL SUCH FIXTURES, APPARATUS OR DEVICES, THE CONTRACTOR SHALL OBTAIN THE EXACT LOCATIONS FROM THE ARCHITECT.

VERIFICATION OF DIMENSIONS:

THE CONTRACTOR SHALL, AS WORK PROGRESSES, VERIFY THE DIMENSIONS OF THE SPACES AVAILABLE FOR THE INSTALLATION OF THE WORK AND HE SHALL ASSUME FULL RESPONSIBILITY FOR THE PROPER LOCATIONS AND GRADING OF EACH PORTION THEREOF.

WHERE THE WORK REQUIRES CONNECTIONS TO BE MADE TO EQUIPMENT THAT IS FURNISHED AND SET IN PLACE BY OTHERS, THE CONTRACTOR SHALL OBTAIN EXACT ROUGH-IN DIMENSIONS FROM THE MANUFACTURER OF SUCH EQUIPMENT AND HE SHALL INSTALL THE CONNECTIONS IN A NEAT AND WORKMANLIKE MANNER.

PRELIMINARY OPERATION:

SHOULD THE OWNER REQUIRE THROUGH THE ARCHITECT THAT ANY PORTION OF THE SYSTEMS OR EQUIPMENT HEREIN SPECIFIED BE OPERATED PRIOR TO THE FINAL COMPLETION AND ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CONSENT. SUCH OPERATION SHALL BE UNDER THE SUPERVISION AND DIRECTION OF THE CONTRACTOR, BUT ALL EXPENSES THEREFORE SHALL BE PAID BY THE OWNER, SEPARATE AND DISTINCT FROM ANY MONEY PAID ON ACCOUNT THEREFORE OF THE CONTRACT.

SUCH PRELIMINARY OPERATION, OR PAYMENT THEREFOR, SHALL NOT BE CONSTRUED AS AN ACCEPTANCE OF ANY OF THE WORK UNDER THE CONTRACT. THE ARCHITECT SHALL APPROVE ANY EXPENSE INCURRED BY THE CONTRACTOR BEFORE PAYMENT BY THE OWNER.

CUTTING AND PATCHING:

THE CONTRACTOR SHALL DO ALL CUTTING AND PATCHING OF THE WORK FOR THE INSTALLATION OF THE EQUIPMENT AND MATERIALS AS APPROVED BY THE ARCHITECT AND/OR ENGINEER. ALL PATCHING SHALL ACCURATELY MATCH THE ADJOINING WORK.

FOUNDATIONS AND SUPPORTS:

THE CONTRACTOR SHALL PROVIDE ALL FOUNDATIONS, SUPPORTS AND HANGERS, ETC., AS REQUIRED TO INSTALL THE EQUIPMENT AS SPECIFIED OR SHOWN ON THE DRAWINGS. ALL EQUIPMENT SHALL BE SUPPORTED, BRACED AND CROSS-BRACED IN SUCH MANNER AS TO PREVENT SWAY AND/OR LATERAL MOVEMENT.

EXCAVATION AND BACKFILLING:

EXCAVATING REQUIRED FOR THE INSTALLATION OF THE WORK SHALL BE DONE BY THIS CONTRACTOR. UNDERGROUND LINES OUTSIDE THE BUILDINGS SHALL BE INSTALLED WITH A MINIMUM COVER OF 24", EXCEPT DEPTH OF UTILITY SERVICES SHALL COMPLY WITH RESPECTIVE UTILITY COMPANY REQUIREMENTS.

THE CONDUIT SHALL BE LAID ON FIRM SOIL CUT TRUE AND EVEN TO AFFORD BEARING FOR THE FULL LENGTH OF THE BARREL OF THE PIPE. ANY PART OF THE TRENCH EXCAVATED BELOW GRADE SHALL BE CORRECTED WITH THOROUGHLY COMPACTED MATERIAL APPROVED BY THE ARCHITECT.

WHEN THE BOTTOM UNCOVERED AT SUBGRADE IS SOFT AND, IN THE OPINION OF THE ARCHITECT, CANNOT SUPPORT THE CONDUIT, A FURTHER DEPTH SHALL BE EXCAVATED AND REFILLED TO CONDUIT FOUNDATION GRADE AS REQUIRED BY THE ARCHITECT.

BACKFILL:

6" BELOW, AROUND, AND TO 6" ABOVE CONDUIT: MATERIAL SHALL BE SAND. PLACE CAREFULLY AROUND AND ON TOP OF PIPE, TAKING CARE NOT TO DISTURB CONDUIT CONSOLIDATE WITH VIBRATOR.

6" ABOVE CONDUIT TO GRADE: MATERIAL SHALL BE SANDY OR SILTY LOAM, FREE OF LUMPS, LAID IN 6" LAYERS, UNIFORMLY MIXED TO PROPER MOISTURE AND COMPACTED TO REQUIRED DENSITY. IF BACKFILL IS DETERMINED TO BE SUITABLE AND REQUIRED COMPACTION IS DEMONSTRATED BY LABORATORY TEST, WATER COMPACTION IN 6" LAYERS MAY BE USED, SUBJECT TO REVIEW BY ENGINEER.

COMPACTION:

COMPACT TO DENSITY OF 95% WITHIN BUILDING AND UNDER WALKWAYS, DRIVEWAYS, TRAFFIC AREAS, PAVED AREAS, ETC. AND TO 90% ELSEWHERE. DEMONSTRATE PROPER COMPACTION BY TESTING AT TOP, BOTTOM AND ONE-HALF OF THE TRENCH DEPTH. PERFORM THESE TESTS AT THREE LOCATIONS PER 100' OF TRENCH.

NO EXCAVATION BELOW THE LEVEL OF, OR ADJACENT TO, FOUNDATIONS OR FOOTINGS SHALL BE MADE EXCEPT IN A MANNER APPROVED BY THE ARCHITECT.

A DETECTABLE TRACER TAPE (RED OR YELLOW FOR POWER CONDUITS, ORANGE FOR TELECOMMUNICATIONS AND CATV CONDUITS) STATING "CAUTION ELECTRIC LINE BURIED BELOW" SHALL BE INSTALLED 12" ABOVE CONDUIT, FULL LENGTH OF DITCH.

ELECTRICAL CONDUIT SHALL NOT BE RUN IN EXCAVATIONS PROVIDED FOR PLUMBING OR HEATING PIPES, UNLESS SEPARATED BY A MINIMUM OF 12 INCHES.

VERIFY LOCATION OF ALL UNDERGROUND LINES WITH OWNER AND UTILITY COMPANIES BEFORE STARTING EXCAVATION.

TEN (10) DAYS BEFORE DOING ANY EXCAVATION OR TRENCHING CONTACT "UNDERGROUND ALERT SERVICE," 1-800-642-2444, ADVISE THEM OF WORK SCHEDULE AND COMPLY WITH THEIR RECOMMENDATIONS.

CLEANING UP:

THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM ACCUMULATIONS OF HIS WASTE MATERIAL OR RUBBISH. AT THE COMPLETION OF THE WORK, HE SHALL REMOVE ALL HIS RUBBISH, TOOLS, SCAFFOLDING AND SURPLUS MATERIALS FROM AND ABOUT THE BUILDINGS, LEAVING THE PREMISES IN A CLEAN CONDITION.

ALL EXTERIOR SURFACES OF EXPOSED EQUIPMENT AND MATERIAL SHALL BE THOROUGHLY CLEANED OF ALL DIRT, CEMENT, PLASTER AND OTHER DEBRIS, INCLUDING THE EXTERIOR SURFACES OF ALL CONDUIT, CONDUIT FITTINGS, CONDUIT HANGER, INSULATION AND THE LIKE.

ALL SURFACES TO BE PAINTED SHALL BE CAREFULLY WIPED OR OTHERWISE CLEANED, CRACKS AND CORNERS SCRAPED OUT CLEAN, GREASE AND OIL SPOTS REMOVED SO THAT SURFACES MAY RECEIVE PAINT WITHOUT FURTHER PREPARATION.

ALL FIXTURES AND PLATED MATERIALS SHALL BE THOROUGHLY CLEANED AND POLISHED.

DAMAGE BY LEAKS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO ANY PART OF THE PREMISES CAUSED BY BREAKS IN CONDUIT OR FIXTURES FURNISHED AND/OR INSTALLED BY HIM UNDER THIS SPECIFICATION FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE PROJECT BY THE OWNER.

SITE CONDITIONS:

WHERE EXISTING UTILITIES ARE SHOWN ON THE PLANS, EXTREME CARE SHALL BE EXERCISED IN EXCAVATING NEAR THESE UTILITIES TO AVOID ANY DAMAGE THERETO, AND THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY SUCH DAMAGE CAUSED BY THIS OPERATION.

THE GENERAL LOCATION AND ARRANGEMENT OF CONDUIT, EQUIPMENT APPARATUS, ETC., AS SHOWN IN THE DRAWINGS OR HEREIN SPECIFIED AND ALL INSTALLATIONS SHALL BE MADE IN ACCORDANCE THEREWITH. INFORMATION ON THE DRAWINGS RELATIVE TO EXISTING SERVICES IS APPROXIMATE ONLY. MINOR DEVIATIONS REQUIRED TO CONFORM TO ACTUAL LOCATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO OWNER.

SHOULD UTILITIES NOT SHOWN ON THE PLANS BE FOUND DURING EXCAVATIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT FOR INSTRUCTIONS AS TO FURTHER ACTION. FAILURE TO DO SO WILL MAKE THE CONTRACTOR LIABLE FOR ANY DAMAGE THERE ARISING FROM HIS OPERATIONS AFTER DISCOVERY OF SUCH UTILITIES NOT SHOWN ON THE PLANS. THESE UTILITIES SHALL BE REMOVED OR RELOCATED AS DIRECTED BY THE ARCHITECT. AN EQUITABLE ADJUSTMENT IN THE CONTRACT WILL BE MADE FOR THE ADDITIONAL WORK INVOLVED.

THE CONTRACTOR SHALL USE SPECIAL PRECAUTIONS WHERE EXCAVATIONS ARE MADE IN THE AREAS NEAR ELECTRICAL DUCTS SINCE THEY MAY BE HIGH VOLTAGE DUCTS. ALL SUCH DUCTS SHALL BE EXPOSED BY CAREFUL HAND EXCAVATION SO AS NOT TO DAMAGE THE DUCTS OR CAUSE INJURY TO PERSONNEL AND SHALL BE SUITABLY MARKED WITH WARNING SIGNS, BARRICADES, ETC. AS REQUIRED.

STANDARD PRACTICE:

ALL WORK NOT SHOWN IN COMPLETE DETAILS SHALL BE INSTALLED IN CONFORMANCE WITH THE BEST NECA STANDARD PRACTICE FOR THE TRADE.

INTENT:

IT IS THE INTENTION TO PROVIDE SYSTEMS THAT ARE COMPLETE IN EVERY RESPECT WITHOUT FURTHER COST TO THE OWNER. ANYTHING NOT SHOWN IN DRAWINGS, OR INDICATED IN THE SPECIFICATIONS, BUT REQUIRED FOR COMPLETE OPERATING SYSTEMS SHALL BE INCLUDED AS PART OF THIS CONTRACT. THIS SHALL INCLUDE ALL CONNECTIONS TO EXISTING SERVICES.

SPECIAL NOTE:

ATTENTION OF THE CONTRACTOR IS HEREBY CALLED TO ALL WORK COVERED BY NOTES ON THE DRAWINGS. KEYNOTED CONDITIONS SPECIFY PARTICULAR DETAILS REQUIRED FOR THE WORK SO NOTED.

WORK COVERED BY NOTES MUST BE FURNISHED AND INSTALLED WHETHER IT IS SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR NOT.

GUARANTEE:

EXCEPT AS OTHERWISE SPECIFIED, ALL MATERIALS, APPARATUS EQUIPMENT FURNISHED AND INSTALLED UNDER THIS SPECIFICATION SHALL BE NEW AND FREE FROM ALL DEFECTS. SHOULD ANY TROUBLE DEVELOP WITHIN A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE WORK, DUE TO INFERIOR OR FAULTY MATERIAL AND/OR WORKMANSHIP, THE TROUBLE SHALL BE CORRECTED AND MATERIAL AND EQUIPMENT REPLACED BY THE CONTRACTOR WITHOUT EXPENSE TO THE OWNER.

SERVICES:

THE LOCATION OF ANY EXISTING UTILITY SERVICES SHOWN ON THE DRAWINGS IS APPROXIMATE AND SHALL BE CHECKED BY THIS CONTRACTOR FOR EXACT LOCATION.

LIST OF MATERIALS:

WITHIN THIRTY (30) CALENDAR DAYS AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT A COMPLETE LIST OF MATERIALS TO BE INSTALLED UNDER THIS CONTRACT, GIVING, IN THE CASE OF EACH ITEM OF MATERIAL TO BE USED, THE NAME OF THE ARTICLE.

ALL SUBSTITUTIONS OF SPECIFIED MATERIALS MUST BE APPROVED BY THE ARCHITECT AS STIPULATED IN THE GENERAL CONDITIONS.

ACCESS OPENINGS:

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SUFFICIENT AND CONVENIENT ACCESS OPENINGS, PANELS, ETC., IN THE BUILDING CONSTRUCTION WHERE REQUIRED FOR THE MAINTENANCE OF, INSTALLATION AND/OR REMOVAL OF ALL ELECTRICAL EQUIPMENT, OR OTHER ITEMS OF THE VARIOUS SYSTEMS AND EQUIPMENT.

PURCHASE ORDERS AND ACCEPTANCE:

THE CONTRACTOR SHALL FILE WITH THE ARCHITECT TWO (2) CERTIFIED COPIES OF ALL PURCHASE ORDERS, FOR MATERIALS, EQUIPMENT, APPLIANCES AND RENTALS THEREOF WITHIN TWO (2) WEEKS FROM DATE OF NOTICE TO PROCEED WITH THE CONTRACT IF REQUESTED BY THE ARCHITECT.

THE CONTRACTOR SHALL FILE WITH THE ARCHITECT TWO (2) CERTIFIED COPIES OF ACCEPTANCE OF PURCHASE ORDERS FOR MATERIALS, EQUIPMENT, AND APPLIANCES BY THE MANUFACTURER, DISTRIBUTOR OR WHOLESALE HOUSE WITHIN SIX (6) WEEKS FROM THE DATE OF NOTICE TO PROCEED WITH THE CONTRACT IF REQUESTED BY THE ARCHITECT.

FAILURE TO PROVIDE SAME WITHIN THE STIPULATED TIME SHALL BE DEEMED SUFFICIENT CAUSE FOR THE ARCHITECT TO WITHHOLD CERTIFICATES OF PAYMENT FOR WORK COMPLETED OR MATERIALS AND EQUIPMENT PROVIDED BY THE CONTRACTOR OR HIS SUBCONTRACTORS TOWARD THE COMPLETION OF THEIR CONTRACTS.

END OF SECTION 260500

BASIC ELECTRICAL MATERIALS AND METHODS

SECTION 262000

DIVISIONS 0 AND 1 ARE HEREIN INCORPORATED AS A PART OF THIS SECTION BY REFERENCE.

I - GENERAL

SCOPE OF WORK:

THIS PORTION OF THE WORK INCLUDES THE FURNISHING OF ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETE WIRING SYSTEM TO OUTLETS AND ALL EQUIPMENT SHOWN ON THE DRAWINGS OR COVERED BY THIS SECTION OF THE SPECIFICATIONS. IN GENERAL, THE WORK, INCLUDES THE FOLLOWING:

ALL CONDUIT, CABLING, DEVICES, TERMINATIONS NECESSARY FOR A COMPLETE EXTENSION OF THE EXISTING CAMPUS TELEPHONE SYSTEM.

THIS SHALL INCLUDE BUT NOT BE LIMITED TO INSTALLING CABLE IN EXISTING AND NEW CONDUIT PER PLANS BETWEEN THE TELEPHONE BACKBOARD IN ADMINISTRATION BUILDING AND COMMUNICATIONS TERMINAL CABINET ON FIRST PORTABLE BUILDING. EXTERIOR CABLE BETWEEN BUILDINGS SHALL BE 25 PAIR, ESSEX 101-047-40, AIRCORE/SEALPIC. TERMINATE IN COMMUNICATIONS TERMINAL CABINET ON SIEMEN #5661M-50 PUNCH BLOCKS MOUNTED ON 5B4B STAND OFF BRACKETS. DEDICATED CAT5 GENERAL CABLE 5500 SHALL BE INSTALLED FROM NEAREST IDF TO EACH RJ11 TELEPHONE JACK IN CLASSROOMS (FUTURE SPARES). EXTEND 3&4 CABLE FROM SPEAKER TO TELEPHONE JACK. PROVIDE CORTELCO, EASYTOUCH PART NUMBER 240085-VOE-2IF, COLOR SANDSTONE HANDSET IN EACH CLASSROOM.

ALL CONDUIT, CABLING, DEVICES, TERMINATIONS NECESSARY FOR COMPLETE EXTENSION OF EXISTING CAMPUS COMMUNICATION SYSTEM.

THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, INSTALLING CABLE IN EXISTING AND NEW CONDUIT PER PLANS TO COMMUNICATIONS TERMINAL CABINET ON FIRST PORTABLE BUILDING. EXTERIOR CABLE BETWEEN BUILDINGS SHALL BE 25 PAIR, ESSEX 101-047-40, AIRCORE/SEALPIC. TERMINATE IN COMMUNICATIONS TERMINAL CABINET ON SIEMEN #5661M-50 PUNCH BLOCKS MOUNTED ON 5B4B STAND OFF BRACKETS. DEDICATED WEST PENN #384 CABLE SHALL BE INSTALLED FROM COMMUNICATION TERMINAL CABINET TO EACH SPEAKER IN CLASSROOMS. TERMINATE SHIELDED PAIR AT SPEAKER. PROVIDE ATLAS SD72-H 25VOLT SPEAKER IN EACH CLASSROOM. PROVIDE 3 SERVICE LOOPS OF CABLE AT SPEAKER WITHIN EACH CLASSROOM ATTIC.

ALL CONDUIT, CABLING, DEVICES, TERMINATIONS NECESSARY FOR COMPLETE EXTENSION OF EXISTING CAMPUS T.V. CABLE SYSTEM.

THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, INSTALLING CABLE IN EXISTING AND NEW CONDUIT PER PLANS TO COMMUNICATIONS TERMINAL CABINET ON FIRST PORTABLE BUILDING. EXTERIOR CABLE FROM ADMINISTRATION BUILDING TO COMMUNICATIONS TERMINAL CABINET ON FIRST PORTABLE BUILDING SHALL BE RG6 QUAD SHIELD. PROVIDE SPLITTER IN COMMUNICATIONS TERMINAL CABINET AND IN EACH CLASSROOM. INTERIOR CABLE FROM COMMUNICATIONS TERMINAL CABINET TO CLASSROOMS SHALL BE RG6 QUAD SHIELD CABLE. INSTALL RG6 QUA

FEEDER PROTECTIVE DEVICES AS SHOWN SHALL BE MOLDED CASE CIRCUIT BREAKERS PROVIDING COMPLETE CIRCUIT OVERCURRENT PROTECTION BY HAVING INVERSE TIME AND INSTANTANEOUS TRIPPING CHARACTERISTICS, AND WHERE APPLICABLE, BE CURRENT LIMITING.

CIRCUIT BREAKERS SHALL BE OPERATED BY A TOGGLE-TYPE HANDLE AND SHALL HAVE A QUICK-MADE, QUICK-BREAK OVER-CENTER SWITCHING MECHANISM THAT IS MECHANICALLY TRIP FREE. AUTOMATIC TRIPPING OF THE BREAKER SHALL BE CLEARLY INDICATED BY HANDLE POSITION. CONTACTS SHALL BE NON-WELDING SILVER ALLOY AND ARC EXTINCTION SHALL BE ACCOMPLISHED BY MEANS OF DE-ION ARC CHUTES.

STANDARD TWO AND THREE POLE CIRCUIT BREAKERS SHALL BE UL LISTED AS HACR TYPE BREAKERS FOR USE WITH HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT.

ALL CIRCUIT BREAKERS LOCATED IN SEPARATE ENCLOSURES, WHETHER NEMA 1 OR NEMA 3R RATED, SHALL INCLUDE A HANDLE PADLOCK ATTACHMENT.

CIRCUIT BREAKER INTERRUPTING CAPACITIES SHALL BE AS INDICATED ON THE DRAWINGS OR AS SPECIFIED HEREINAFTER. WHERE APPLICABLE, CIRCUIT BREAKERS SHALL BE LISTED FOR SERIES APPLICATION.

ALL CIRCUIT BREAKERS IN MAIN SWITCHBOARD SHALL HAVE SHORT CIRCUIT CURRENT INTERRUPTING CAPACITY EXCEEDING THE MAXIMUM AVAILABLE AT SERVICE TRANSFORMER. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FAULT CURRENT INFORMATION FROM SERVING POWER COMPANY PRIOR TO INSTALLATION. SUBMIT LETTER OF VERIFICATION OF AVAILABLE FAULT CURRENT WITH MAIN SWITCHBOARD EQUIPMENT SUBMITTALS.

ALL CIRCUIT BREAKERS, 100 AMPS OR MORE, SHALL BE TESTED BY AN INDEPENDENT TESTING FIRM IN ACCORDANCE WITH NETA SPECIFICATIONS AND A REPORT SUBMITTED TO THE ARCHITECT. THE CONTRACTOR SHALL PAY FOR THE COST OF THIS REQUIREMENT. ANY CIRCUIT BREAKER THAT DOES NOT PASS THE TEST SHALL BE REPLACED.

TERMINAL CABINETS:

TERMINAL CABINETS SHALL BE FLUSH OR SURFACE MOUNTED AS INDICATED WITH HINGED DOORS AND LOCK. MATCH PANEL BOARD LOCK. EXTERIOR FINISH TO BE SAME AS FOR PANEL BOARDS. PROVIDE 3/4" PLYWOOD BACKING INSIDE OF CABINET. PROVIDE PROPER NUMBER OF TERMINALS IN CABINETS AS REQUIRED.

PROVIDE FLAT MOUNT TERMINAL BLOCKS MOUNTED ON PLYWOOD BACKING INSIDE TERMINAL CABINETS FOR CONDUCTOR TERMINATION. PROVIDE QUANTITY OF TERMINAL BLOCKS FOR EACH SYSTEM AS REQUIRED. TERMINAL BLOCKS SHALL BE KULKA STANDARD 600-600A SERIES AS MANUFACTURED BY MARATHON SPECIAL PRODUCTS.

PROVIDE A BAKELITE NAMEPLATE FASTENED WITH SCREWS TO THE FACE OF EACH TERMINAL CABINET WHICH WILL IDENTIFY IT.

MATCH PANEL KEY.

PROVIDE CIRCUIT DIRECTORY AND HOLDER ON INSIDE OF DOOR WITH ONE LINE FOR EACH CONDUCTOR ENTERING AND EACH CONDUCTOR LEAVING CABINET.

RECEPTACLES AND PLATES:

FURNISH AND INSTALL 20A, 125 VOLT, 3 WIRE GROUNDING TYPE DUPLEX RECEPTACLES AT ALL RECEPTACLE OUTLETS AS INDICATED ON DRAWINGS, SPECIFICATION GRADE LEVITON, BRYANT, PASS AND SEYMOUR, OR APPROVED EQUAL.

ALL RECEPTACLE PLATES SHALL BE STAINLESS STEEL. PROVIDE OUTLET BOXES FOR RECEPTACLES AS SPECIFIED HEREIN.

DEVICE COLOR TO BE IVORY IN LIGHT COLORED WALLS AND BROWN IN DARK COLORED WALLS.

TELEVISION OUTLETS:

WALL OUTLETS SHALL PROVIDE 5 MHZ-900 MHZ BANDWIDTH, SHIELDED, RFI SEALED, WITH STEEL BACKPLATE AND IVORY PLASTIC FRONT FILLER PLATE. WALL OUTLETS SHALL BE MALL TAPS WITH A RANGE OF COUPLING VALUES FROM 4-30 DB, AND 75 OHM IMPEDANCE. OUTLETS SHALL BE BLONDER-TONGUE #ITF-6F-FT, TAP VALUE AS DETERMINED IN THE FIELD.

TAP OFFS SHALL BE PROVIDED IN EACH CLASSROOM. PROVIDE A 1 WAY TAP OFF, WITH TAP VALUE AS REQUIRED TO ACCOMMODATE SYSTEM SIGNAL LEVELS AT EACH TELEVISION OUTLET. TAP OFFS SHALL HAVE A FREQUENCY RANGE OF 5 TO 1000 MHZ, WITH AN OUTPUT TO TAP ISOLATION OF 18 TO 40 DB, A THRU-LINE LOSS OF BETWEEN 0.5 AND 3.5 DB, A TAP DOWN LOSS OF 3 TO 30 DB AND INPUT RETURN LOSS OF 12 TO 20 DB, DEPENDING ON TAP VALUE SELECTED. TAP OFFS SHALL BE BLONDER-TONGUE #CRT-(DB) OR APPROVED EQUAL (WHERE DB INDICATES TAP VALUE TO BE SELECTED TO ACCOMMODATE SYSTEM SIGNAL LEVELS).

SPLITTERS SHALL BE PROVIDED WHERE REQUIRED. SPLITTERS SHALL HAVE A FREQUENCY RESPONSE OF 5 TO 750 MHZ, WITH EIGHT OUTPUTS MINIMUM. SPLITTER LOSS SHALL BE 13.5 DB, MAXIMUM, INPUT RETURN LOSS 14 DB, MINIMUM, ISOLATION BETWEEN INPUTS 21 DB, MINIMUM. SPLITTER SHALL BE PROVIDED WITH -60 DB RFI SHIELDING. SPLITTERS SHALL BE BLONDER-TONGUE #CRS-8 OR APPROVED EQUAL. COORDINATE EXACT QUANTITY AND LOCATION OF SPLITTERS WITH DISTRICT ELECTRONICS DEPARTMENT PERSONNEL.

PROVIDE TERMINATORS FOR COAXIAL CABLE AND LINE TERMINATION, AS REQUIRED. TERMINATORS SHALL BE MALE TYPE, WEATHERPROOF WHERE REQUIRED, 75 OHM, UHF/VHF, 1/4 WATT, F' TYPE. TERMINATORS SHALL HAVE 25 DB RETURN LOSS TO 400 MHZ, 22 DB RETURN LOSS TO 650 MHZ, AND 18 DB RETURN LOSS TO 840 MHZ. PROVIDE TERMINATORS FOR ALL UNUSED COMBINER INPUTS). TERMINATORS SHALL BE BLONDER-TONGUE #STT-1F OR APPROVED EQUAL.

COMMUNICATIONS/PROGRAM:

RJ45 JACKS: LEVITON QUICKPORT 5E108-RE.

IDF CABINET: HUBBELL RE4 WITH HUBBELL SM6ION FIBER TERMINATION BOX AND SFP5G INSERT MODULES.

PATCH PANEL: HUBBELL P548UE WITH PCBLMST CABLE MANAGEMENT BAR.

RJ11 JACKS: LEVITON #C0256-SS.

CEILING MOUNTED SPEAKER ASSEMBLY: ATLAS #SDT2N, 70.7/25V DUAL VOLTAGE TRANSFORMER AND WHITE SPEAKER BAFFLE.

SINGLE LINE TELEPHONE: CORTELCO #240085VOE2I, SANDSTONE COLOR.

TELECOMMUNICATIONS TERMINATION BLOCKS: 66 STYLE BLOCK, SIEMON NETWORKING CABLING SOLUTIONS, M SERIES #S66M1-50 PUNCH DOWN BLOCKS MOUNTED ON S8#B STAND OFF BRACKETS.

CONDUCTORS:

ALL WIRE INSTALLED IN THIS CONTRACT SHALL BE OF A STANDARD MANUFACTURER AS APPROVED BY THE NATIONAL BOARD OF FIRE UNDERWRITERS AND BE OF THE SIZE AS INDICATED ON THE DRAWINGS. ALL WIRE SHALL BEAR THE UNDERWRITER'S LABEL AND SHALL BE BROUGHT TO THE JOB IN UNBROKEN PACKAGES AND APPROVED BY THE JOB INSPECTOR BEFORE SAME IS INSTALLED.

ALL CONDUCTORS SHALL BE TYPE COPPER WITH THHN INSULATION UNLESS OTHERWISE NOTED.

NUMBER 12 AWG GAUGE WIRE SHALL BE THE SMALLEST GAUGE WIRE USED, EXCEPT FOR CONTROL CIRCUITS WHICH SHALL BE AS SHOWN ON PLANS OR AS SPECIFIED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS.

ALL WIRE #8 AWG GAUGE OR LARGER SHALL BE STRANDED.

THE NEUTRAL CONDUCTOR OF ALL FEEDERS SHALL BE OF THE SAME SIZE AS THE PHASE CONDUCTORS.

SPLICES ON ALL WIRE LESS THAN 8 GAUGE SHALL BE WITH INSULATED IDEAL "WING NUTS", "SCOTCHLOCK", OR EQUAL, SPRING CONNECTORS.

SPLICES IN WIRES 8 GAUGE AND LARGER SHALL BE MADE WITH CRIMP ON SOLDERLESS CONNECTOR, SCOTCH, BURNDY OR EQUAL. CONNECTORS TO SWITCHES OR BUS BAR SHALL BE MADE WITH ONE PIECE LUGS FOR ALL WIRES, SIZED FOR CONDUCTORS AS SHOWN ON PLANS.

EACH BRANCH CIRCUIT SHALL BE MARKED WITH THE CIRCUIT NUMBER AT THE PANEL AND AT THE FIRST OUTLET NEAREST THE PANEL. E-Z CODE MARKERS (WESTERN LITHOGRAPH CO.) OR EQUAL SHALL BE USED TO MARK THE CIRCUITS.

CABLES:

'A' CABLE SHALL BE SHIELDED, TWISTED PAIR, TWO SHIELDED, TWISTED PAIRS, ONE UNSHIELDED, TWISTED PAIR, 22 AWG, LOW CAPACITANCE, WEST PENN #384 OR APPROVED EQUAL. (Inside speaker)

'AI' CABLE SHALL BE UNSHIELDED, TWISTED PAIR, 24 AWG, LOW CAPACITANCE, ESSEX #01-0RT-40, AIRCORE/SEALPIC 25 PAIR OR APPROVED EQUAL.

'D' CABLE SHALL BE CATEGORY 5e, UNSHIELDED TWISTED PAIR, FOUR PAIR, 24 AWG, SOLID BARE COPPER, GENERAL CABLE #5500 OR APPROVED EQUAL. (Data, inside telephone)

'FN' CABLE SHALL BE WEST PENN #A2221, 12/2 STRANDED FIRE ALARM CABLE, AND 'FI' CABLE SHALL BE WEST PENN #A2218, 18/2 STRANDED FIRE ALARM CABLE.

'FO' CABLES SHALL BE 6 STRAND, 62.5/125 MICRON, MULTIMODE FIBER OPTIC CABLES, OPTICAL CABLE CORPORATION'S DX SERIES CABLE.

'T' CABLE SHALL BE SUPERIOR ESSEX #18-148-41, RG6 QUAD SHIELD COAXIAL CABLE.

MOTOR DISCONNECTS:

SHALL BE FUSED SWITCH WITH DUAL ELEMENT FUSES. HEAVY DUTY RATED AND QUICK-MAKE QUICK-BREAK TYPE. FUSE RATING SHALL COMPLY WITH MOTOR MANUFACTURER'S RECOMMENDATIONS. SWITCH SHALL BE UL LISTED. DISCONNECTS SHALL HAVE AN EXTERNAL OPERATING HANDLE, LOCKABLE IN THE OPEN OR CLOSED POSITION.

PROVIDE DISCONNECTS FOR ALL MOTORS IF NOT PROVIDED BY OTHERS.

DISCONNECT SWITCHES SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PART OF THE HVAC UNIT'S NAMEPLATE DATA.

DISCONNECTS SHALL BE HEAVY DUTY RATED. OPERATING HANDLE SHALL BE LOCKABLE IN OPEN OR CLOSED POSITION.

TRANSFORMER, DRY TYPE:

TRANSFORMER SHALL BE CLASS H INSULATION WITH TEMPERATURE RISE NOT EXCEEDING 150° C., IN A MAXIMUM AMBIENT OF 40° C., WITH RATED NAMEPLATE LOAD CONNECTED TO THE SECONDARY SIDE, AT RATED VOLTAGE.

TRANSFORMER SHALL BE BUILT IN ACCORDANCE WITH THE LATEST REVISED IEEE, ANSI AND NEMA STANDARDS.

CASE TEMPERATURE SHALL NOT EXCEED 35° C., ABOVE AMBIENT.

DESIGNS SHALL INCORPORATE BUILT-IN VIBRATION DAMPENING SYSTEMS.

TERMINAL COMPARTMENT SHALL BE LOCATED TO INSURE TERMINATION OF CABLE LEADS IN TEMPERATURE LEVELS NOT TO EXCEED 60° C., AND TO PROVIDE FOR SIDE OR BOTTOM ENTRANCE OF CONDUIT. ENCLOSURES SHALL BE WEATHERPROOF AND RODENT PROOF. VENTILATION OPENINGS SHALL BE LOUVERED TYPE. SCREENING WILL NOT BE ACCEPTABLE.

TRANSFORMER SHALL BE FURNISHED WITH 2 TAPS ABOVE AND BELOW RATED VOLTAGE, EACH 2 1/2%.

ACCEPTABLE MANUFACTURERS SHALL BE SQUARE "D" APPROVED OR EQUAL.

III - EXECUTION

CONDUIT SYSTEMS:

A CONCEALED CONDUIT SYSTEM SHALL BE INSTALLED FOR ALL INTERIOR WIRING INCLUDING CONTROLS. CONDUIT SHALL BE RUN CONTINUOUS BETWEEN OUTLETS, ETC., AND WITH THE MINIMUM NUMBER OF BENDS.

CONDUIT RUNS FOR CIRCUITS OPERATING OVER 600V SHALL HAVE A GROUNDING BUSHING INSTALLED AT EACH TERMINATION.

ALL CONDUIT RUNS ON ROOF AND UP TO TEN FEET ABOVE FINISH GRADE SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH THREADED COUPLINGS AND CONNECTORS.

PVC 40 OR RIGID STEEL FACTORY WRAPPED WITH PVC TAPE SHALL BE USED FOR UNDERGROUND RUNS.

WHERE UNDERGROUND CONDUIT CANNOT BE RUN BELOW BUILDING FOOTINGS THE CONTRACTOR SHALL PROVIDE PVC-80 SLEEVES THROUGH THE FOOTINGS (CONTRACTOR SHALL OBTAIN APPROVAL FOR ALL SLEEVE SIZES AND LOCATIONS WITH THE STRUCTURAL ENGINEER BEFORE INSTALLATION).

ALL CONDUIT RISERS THROUGH SLAB SHALL BE RIGID STEEL OR IMC (FACTORY WRAPPED WITH PVC TAPE OR WITH FACTORY APPLIED PVC COATING) AND SHALL EXTEND A MINIMUM OF FOUR INCHES (4") ABOVE FINISHED FLOOR.

ALL CONDUIT SHALL BE DELIVERED TO THE SITE OF CONSTRUCTION IN THEIR ORIGINAL BUNDLES. EACH LENGTH OF CONDUIT SHALL BEAR THE LABEL OF THE NATIONAL BOARD OF FIRE UNDERWRITERS. ALL CONDUIT SUBJECTED TO ROUGH USAGE WHILE ON THE JOB BEFORE INSTALLATION AND NOT ACCEPTABLE TO THE ARCHITECT SHALL BE REMOVED FROM THE PREMISES UPON NOTICE.

CONDUIT INSTALLED IN MASONRY WALLS SHALL BE RIGID STEEL GALVANIZED CONDUIT OR PVC, NOT IN SAME MASONRY CELL AS THE BUILDING STRUCTURAL REINFORCING STEEL.

THE JOINTS IN ALL CONDUITS INSTALLED UNDER CONCRETE SLABS ON THE GROUND, OR UNDERGROUND, OR EXPOSED TO THE WEATHER, SHALL BE MADE LIQUID AND GAS-TIGHT. ALL UNDERGROUND CONDUIT OUTSIDE OF THE BUILDINGS SHALL BE BURIED TO A DEPTH OF NOT LESS THAN 24" BELOW FINISH GRADE. UTILITY SERVICES SHALL COMPLY WITH UTILITY COMPANY REQUIREMENTS. TWO OR MORE POWER OR TELECOMMUNICATIONS CONDUIT RUNS INSTALLED IN A COMMON TRENCH SHALL BE SEPARATED HORIZONTALLY BY AT LEAST FOUR INCHES (4"). TWO OR MORE POWER AND TELECOMMUNICATIONS CONDUIT RUNS INSTALLED IN A COMMON TRENCH SHALL BE SEPARATED HORIZONTALLY BY AT LEAST TWELVE (12"). ELECTRICAL CONDUIT RUNS INSTALLED IN A COMMON TRENCH WITH OTHER UTILITY LINES SHALL BE SEPARATED HORIZONTALLY FROM SUCH LINES BY AT LEAST TWELVE INCHES (12").

CHANGES IN DIRECTION SHALL BE MADE WITH CONDUIT SWEEP ELBOWS OR LONG RADIUS BENDS MADE ON THE JOB. WHERE TWO OR MORE CONDUITS ARE GROUPED IN EXPOSED LOCATION.

5 OR CONDUIT PENNIES HELD IN PLACE WITH CONDUIT BUSHINGS. SHOULD DIRT OR MOISTURE COLLECT IN ANY CONDUIT, THE CONTRACTOR SHALL SWAB THEM OUT TO THE SATISFACTION OF THE ARCHITECT.

CONDUITS ENDING AT THE MOTORS SHALL BE CARRIED AS CLOSE AS POSSIBLE TO THE TERMINAL BLOCKS MAKING ALLOWANCE FOR THE MOVEMENT OF THE MOTORS WHEN THEY ARE EQUIPPED WITH SLIDE RAILS. THE CONNECTION BETWEEN THE CONDUIT TERMINALS ON THE MOTOR AND THE CONDUIT SHALL BE MADE WITH LIQUID-TIGHT FLEXIBLE CONDUIT USING THE PROPER FITTINGS.

ALL CONDUITS WHERE THEY ENTER PANEL BOXES, PULL BOXES, OR OUTLET BOXES SHALL BE SECURED IN PLACE BY GALVANIZED LOCKNUTS - ONE (1) LOCKNUT INSIDE OF BOX. AN INSULATED THROAT SHALL BE USED WHERE CONDUCTORS ARE #4 OR LARGER.

WHERE CONDUITS ARE RUN EXPOSED, THE SAME SHALL BE INSTALLED STRAIGHT AND TRUE WITH REFERENCE TO THE ADJACENT CONSTRUCTION.

CONDUIT 1" AND ABOVE SHALL HAVE INSULATED THROAT BUSHINGS.

ANY CONDUIT INSTALLED UNDER BUILDING SHALL BE UNDER THE SLAB.

ALL BOXES FOR BRACKET OUTLETS SHALL BE EQUIPPED WITH 3/8" "NO-BOLT" FIXTURE STUD. THESE BOXES SHALL BE SO SET THAT WHEN IN PLACE THE FIXTURE SHALL BE AT RIGHT ANGLES TO THE CEILING OR WALLS.

ALL EMPTY CONDUIT SHALL BE EQUIPPED WITH A #12 GALVANIZED IRON PULL WIRE OR NYLON PULL ROPE CONTINUOUS FROM OUTLET TO OUTLET.

FLEXIBLE CONDUIT WILL BE PERMITTED FOR CONNECTING LIGHTING FIXTURES TO JUNCTION BOXES.

FLEXIBLE CONNECTIONS IN OUTDOOR AND DAMP LOCATIONS SHALL BE FLEXIBLE LIQUID-TIGHT METAL CONDUIT OR NON-CORROSIVE SEAMLESS METALLIC TUBING WITH WATER-TIGHT CONNECTIONS.

INSTALL ROOF JACKS FOR THIS CONSTRUCTION IN ACCORDANCE WITH OTHER SECTIONS OF THIS SPECIFICATION.

THE MAXIMUM ALLOWED LENGTH OF FLEX CONDUIT AT EQUIPMENT CONNECTIONS IS 18".

EXPANSION JOINTS FOR CONDUIT SHALL BE PROVIDED WHERE REQUIRED TO COMPENSATE FOR THERMAL EXPANSION AND CONTRACTION.

NO CONDUIT SMALLER THAN 1/2 INCH ELECTRICAL TRADE SIZE SHALL BE USED.

SUPPORT CONDUITS ON ROOF ON 2" X 4" REDWOOD BLOCKS SPACED 5 FT. APART AND SET IN MASTIC.

UNDERGROUND HANDHOLES AND BOXES

INSTALL HANDHOLES AND BOXES LEVEL AND PLUMB AND WITH ORIENTATION AND DEPTH COORDINATED WITH CONNECTING CONDUITS TO MINIMIZE BENDS AND DEFLECTIONS REQUIRED FOR PROPER ENTRANCES.

UNLESS OTHERWISE INDICATED, SUPPORT UNITS ON A LEVEL BED OF CRUSHED STONE OR GRAVEL, GRADED FROM 1/2-INCH SIEVE TO NO.4 SIEVE AND COMPACTED TO SAME DENSITY AS ADJACENT UNDISTURBED EARTH.

ELEVATION: IN PAVED AREAS, SET SO COVER SURFACE WILL BE FLUSH WITH FINISHED GRADE. SET COVERS OF OTHER ENCLOSURES 1 INCH ABOVE FINISHED GRADE.

INSTALL HANDHOLES WITH BOTTOM BELOW FROST LINE, BELOW GRADE.

INSTALL REMOVABLE HARDWARE, INCLUDING PULLING EYES, CABLE STANCHIONS, CABLE ARMS, AND INSULATORS, AS REQUIRED FOR INSTALLATION AND SUPPORT OF CABLES AND CONDUCTORS AND AS INDICATED. SELECT ARM LENGTHS TO BE LONG ENOUGH TO PROVIDE SPARE SPACE FOR FUTURE CABLES BUT SHORT ENOUGH TO PRESERVE ADEQUATE WORKING CLEARANCES IN ENCLOSURE.

FIELD-CUT OPENINGS FOR CONDUITS ACCORDING TO ENCLOSURE MANUFACTURER'S WRITTEN INSTRUCTIONS. CUT WALL OF ENCLOSURE WITH A TOOL DESIGNED FOR MATERIAL TO BE CUT. SIZE HOLES FOR TERMINATING FITTINGS TO BE USED, AND SEAL AROUND PENETRATIONS AFTER FITTINGS ARE INSTALLED.

OUTLETS:

IN GENERAL, THE LOCATIONS OF ELECTRICAL OUTLETS SHALL BE AS SHOWN ON THE DRAWINGS; HOWEVER, THE CONTRACTOR SHALL MAKE ANY CHANGES NECESSARY TO SUIT CONDITIONS ON THE JOB OR REARRANGEMENT OF BUILT-IN FIXTURES AND EQUIPMENT AS DIRECTED BY THE ENGINEER OR HIS REPRESENTATIVE.

THE CONTRACTOR SHALL STUDY THE GENERAL BUILDING PLANS WITH RELATION TO SPACES SURROUNDING EACH OUTLET IN ORDER THAT HIS WORK MAY FIT THE WORK OF OTHERS AND THAT WHEN FIXTURES OR OTHER EQUIPMENT ARE INSTALLED THEY WILL BE SYMMETRICALLY LOCATED ACCORDING TO ROOM LAYOUT. REFER ALL CONFLICTS AND DISCREPANCIES PROMPTLY TO THE ARCHITECT.

OUTLET BOXES:

OUTLETS FOR CONCEALED WIRING SHALL BE FLUSH WITH THE FINISHED WALL OR CEILING SURFACES. PULL BOXES, JUNCTION BOXES AND ALL OTHERS TO WHICH NO FIXTURE OR DEVICE IS TO BE ATTACHED, SHALL BE FITTED WITH BLANK COVER PLATES AND PAINTED TO MATCH SURROUNDINGS. IN ORDER TO REDUCE NOISE TRANSMISSION BETWEEN ROOMS, OUTLET BOXES SHALL NOT BE INSTALLED BACK TO BACK. WHERE OUTLETS ARE SIDE BY SIDE AND FACED INTO OPPOSITE ROOMS, THE BOXES SHALL BE AT LEAST 6" APART, EXCEPT IN FIRE RATED WALLS, SPACE BOXES 24" APART. IF THE BOXES ARE CONNECTED TOGETHER, THE CONNECTION SHALL BE FLEXIBLE AND SHALL HAVE OPENINGS PACKED WITH FIBERGLASS.

THE CONTRACTOR SHALL INFORM HIMSELF OF WALL THICKNESS THROUGHOUT THE BUILDING AND SHALL PROVIDE OUTLET BOXES OF SUITABLE DEPTH THAT CAN BE FLUSH MOUNTED AND YET WILL BE DEEP ENOUGH TO CONTAIN THE PARTICULAR APPARATUS INVOLVED. LOCATION OF EXPOSED PULL OR JUNCTION BOXES WILL BE SUBJECT TO THE ARCHITECT'S APPROVAL.

WHERE MORE THAN ONE SWITCH OCCURS AT THE SAME LOCATION, USE MULTIPLE GANG OUTLET BOXES COVERED BY A SINGLE PLATE; PROVIDE BOX PARTITIONS AS REQUIRED BY THE C.E.C.

OUTLET BOX EXTENSIONS SHALL BE U.L. LISTED AND SHALL BE ATTACHED TO BOX WITH THREADED METAL SCREWS. METALLIC "FLASH GUARDS" ARE NOT PERMITTED TO BE USED AS BOX EXTENSIONS.

LOCATIONS OF OUTLETS:

THE ARCHITECT RESERVES THE RIGHT TO MAKE REASONABLE CHANGES IN THE INDICATED LOCATIONS BEFORE WORK IS ROUGHED IN WITHOUT ADDITIONAL CHARGE TO THE OWNER.

WHERE WAINSCOT OCCURS AT THE 4'-6" LEVEL, CONFLICTING WITH A DEVICE MOUNTING HEIGHT, THE DEVICE SHALL BE MOUNTED LOWER IN THE WAINSCOT AS NEAR THE 4'-0" LEVEL AS POSSIBLE, BUT IN NO CASE, SHALL THE DEVICE BE PARTIALLY IN THE WAINSCOT AND PARTIALLY IN THE WALL.
CONDUCTOR IDENTIFICATION & INSTALLATION:

THE DRAWINGS INDICATE THE ARRANGEMENT OF OUTLETS ON EACH BRANCH CIRCUIT AND THE CIRCUIT TAGS SHOW THE NUMBER OF THE CIRCUIT, AND THE BOARD TO WHICH IT WILL BE CONNECTED. CIRCUITS INDICATED WITH THE SAME NUMBERS SHALL BE CONNECTED TO THE SAME BREAKER ON THE PANEL BOARD.

ALL FEEDERS AND BRANCH CIRCUITS SHALL BE TAGGED IN ALL PULL BOXES AND IN THE GUTTERS OF ALL PANELS TO WHICH THEY CONNECT.

ALL WIRING SHALL BE INSTALLED WITH IDENTIFIED NEUTRAL CONDUCTORS.

NO WIRE SHALL BE INSTALLED UNTIL ALL WORK OF OTHER CONTRACTORS THAT MIGHT CAUSE INJURY TO THE SAID WIRE HAS BEEN COMPLETED. CARE SHALL BE USED TO PULL WIRES TO INSURE THAT NO DAMAGE OCCURS TO THE INSULATION. POWDERED SOAPSTONES OR WIRE EASE SHALL BE USED FOR PULLING IN WIRES.

IN MAKING THE CONNECTION OF ALL BRANCH CIRCUITS TO THE TERMINALS OF SWITCHES, BASE PLUGS, ETC., THE WIRES SHALL BE LOOPED AROUND THE BINDING SCREWS OR BE FITTED WITH CONNECTING LUGS. AT THE CEILING OUTLETS, THE CONTRACTOR SHALL LEAVE NOT LESS THAN 6" OF FREE ENDS ON EACH WIRE FOR CONNECTIONS TO THE FIXTURES.

NO SPLICES SHALL BE PERMITTED EXCEPT IN OUTLET BOXES, AND IN PANEL BOARD GUTTERS.

SWITCHES AND RECEPTACLES SHALL BE SECURELY FASTENED TO THE OUTLET BOX. WHERE THE OUTLET BOX COVERS ARE BACK OF THE FINISHED WALLS THE SWITCH OR RECEPTACLE SHALL BE BUILT OUT FROM THE SAME WITH WASHERS SO THAT IT IS RIGIDLY HELD IN PLACE TO THE BOX. THE FLOATING OF ANY SWITCH OR RECEPTACLE WILL NOT BE PERMITTED.

ALL SIGNAL AND COMMUNICATIONS CONDUCTORS SHALL BE IDENTIFIED IN TERMINAL CABINETS AS TO TYPE OF SYSTEM, EG: CLOCK, BELL, FIRE ALARM, ETC. AS WELL AS THE LOCATION OF THE OTHER END OF THE CONDUCTOR BY ROOM NUMBER OR NAME, AS DIRECTED BY THE OWNER. IDENTIFICATION SHALL BE BY NUMBERS AT TERMINAL STRIPS AND A NUMBERED DIRECTORY IN A CARD HOLDER INSIDE THE TERMINAL CABINET.

FIRE ALARM SYSTEM WIRING SHALL BE COLOR-CODED AS FOLLOWS:

INITIATING DEVICES - TWO YELLOW WIRES, TWO ORANGE WIRES.
SIGNALING DEVICES - TWO BLACK WIRES, TWO RED WIRES.

TELECOMMUNICATION SYSTEM WIRING SHALL BE COLOR-CODED GREEN AND YELLOW.

SECURITY SYSTEM WIRING SHALL BE COLOR-CODED BLUE AND YELLOW.

ALL POWER WIRING #6 GAUGE AND SMALLER SHALL BE FACTORY COLOR CODED. FOR LARGER THAN #6, MARK CONDUCTORS ON EACH END AND AT ALL JUNCTION AND/OR PULL BOXES WITH A 1" BAND OF COLORED PRESSURE-SENSITIVE PLASTIC TAPE. FOR ISOLATED GROUND WIRES, MARK WITH A 1" BAND OF GREEN TAPE, FOLLOWED BY A 1" BAND OF YELLOW TAPE, FOLLOWED BY A 1" BAND OF GREEN TAPE. COLORS FOR EACH PHASE AND THE NEUTRAL SHALL BE CONSISTENT THROUGHOUT THE SYSTEM. COLOR CODE SHALL BE AS FOLLOWS:

WIRE	208Y/120V	480Y/277V
PHASE A	BLACK	BROWN
PHASE B	RED	ORANGE
PHASE C	BLUE	YELLOW
NEUTRAL	WHITE	GRAY
EQUIPMENT GROUND	GREEN	GREEN

THE WHITE OR GRAY CONDUCTOR SHALL BE THE NEUTRAL AT EACH OUTLET. CONDUCTORS HAVING WHITE, GRAY OR GREEN COVERING SHALL NOT BE USED TO INDICATE OTHER THAN NEUTRAL OR GROUNDING. THIS LIMITATION APPLIES TO ALL POWER, LIGHTING, AND CONTROL CIRCUITS.

INSTALLATION OF CONDUCTORS SHALL BE MADE IN A NEAT AND WORKMANLIKE MANNER TO MEET CODE REQUIREMENTS AND SHALL BE RUN CONTINUOUS WITHOUT HELD, SPLICE OR JOINT BETWEEN BOXES. DO NOT INSTALL WIRES IN CONDUIT UNLESS THE ENTIRE SYSTEM OF CONDUIT AND OUTLET BOXES ARE PERMANENTLY IN PLACE. ALL CONDUCTORS SHALL BE PULLED USING A U.L. APPROVED WIRE LUBRICANT.

MAKE ALL TERMINATIONS AT MOTORS USING 3M SERIES 5300 MOTOR LEAD/CABLE SPLICING KITS. MAKE CONNECTIONS PER 3M WRITTEN INSTALLATION PROCEDURES.

ON ALL BOLTED ELECTRICAL CONNECTIONS, THE CONTRACTOR SHALL USE BELVILLE WASHERS.

ALL WIRING TO BE NEATLY BUNDLED AND TIED WITH NYLON CORD OR PLASTIC STRAPS.

SPLICES IN UNDERGROUND BOXES SHALL BE MADE WITH CRIMP ON COMPRESSION CONNECTORS AND INSULATED WITH HEAT SHRINK SLEEVES OR WITH SPLICE KITS LISTED BY THE MANUFACTURER FOR WET LOCATIONS. WIRE NUTS ARE NOT PERMITTED.

GROUNDING:

THE CONDUIT SYSTEM, SUPPORTS, CABINETS, SWITCHBOARDS, ETC., AND NEUTRAL CONDUCTORS MUST BE PERMANENTLY AND EFFECTIVELY GROUNDED BY MEANS OF APPROVED GROUND CLAMPS, IN ACCORDANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE. THE NEUTRAL SHALL ONLY BE GROUNDED AT THE MAIN SERVICE LOCATION UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS OR REQUIRED BY THE CALIFORNIA ELECTRICAL CODE.

THE CONTRACTOR SHALL EXERCISE EVERY PRECAUTION TO OBTAIN GOOD CONTACTS AT ALL PANEL BOXES, PULL BOXES, ETC.; WHERE IT IS NOT POSSIBLE TO OBTAIN GOOD CONTACTS, THE CONDUITS SHALL BE BONDED AROUND THE BOXES WITH A #6 AWG GAUGE, THHN WIRE WITH GROUND CLAMPS.

ALL EQUIPMENT CASES, MOTOR FRAMES, ETC. SHALL BE COMPLETELY GROUNDED TO SATISFY APPLICABLE CODE REQUIREMENTS.

AT EACH BUILDING THE INTERIOR HOT AND COLD WATER PIPING SHALL BE BONDED TO THE BUILDING SERVICE EQUIPMENT PER C.E.C. #250.104.

DO NOT USE UNDERGROUND GAS PIPING AS A GROUNDING ELECTRODE.

PULL A GREEN GROUND WIRE IN ALL CONDUITS, BOTH METALLIC AND NON METALLIC.

EACH DISCONNECT SWITCH SHALL HAVE A GROUND CONNECTOR (LAY IN WIRE TYPE) WHICH SHALL BE USED FOR GROUNDING THE DISCONNECT ENCLOSURE. THE GROUND WIRE SHALL CONTINUE AND BE CONNECTED TO THE ENCLOSURE OF THE EQUIPMENT SERVED.

WHERE THERE IS MORE THAN ONE BUILDING SUPPLIED FROM A COMMON SERVICE, PROVIDE A GROUNDING ELECTRODE AT EACH BUILDING PER C.E.C. #250.32.

GROUNDING CONDUCTORS:

FOR INSULATED CONDUCTORS, COMPLY WITH DIVISION 16 SECTION "CONDUCTORS." ALL GROUNDING CONDUCTORS SHALL BE COPPER.

EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED WITH GREEN-COLORED INSULATION. GROUNDING ELECTRODE CONDUCTORS SHALL BE STRANDED CABLE. UNDERGROUND CONDUCTORS SHALL BE BARE, TINNED, STRANDED, UNLESS OTHERWISE INDICATED.

BARE COPPER CONDUCTORS SHALL COMPLY WITH THE FOLLOWING: SOLID CONDUCTORS: ASTM B 3; ASSEMBLY OF STRANDED CONDUCTORS: ASTM B 8; TINNED CONDUCTORS: ASTM B 33.

COPPER BONDING CONDUCTORS SHALL BE PROVIDED AS FOLLOWS: BONDING CABLE: 28 KCMIL, 14 STRANDS OF NO. 17 AWG COPPER CONDUCTOR, 1/4 INCH IN DIAMETER; BONDING CONDUCTOR: NO. 4 OR NO. 6 AWG, STRANDED COPPER CONDUCTOR; BONDING JUMPER: BARE COPPER TAPE, BRAIDED BARE COPPER CONDUCTORS, TERMINATED WITH COPPER FERRULES; 1-5/8 INCHES WIDE AND 1/16-INCH THICK; TINNED BONDING JUMPER: TINNED-COPPER TAPE, BRAIDED COPPER CONDUCTORS, TERMINATED WITH COPPER FERRULES; 1-5/8-INCHES WIDE AND 1/16-INCH THICK.

CONNECTOR PRODUCTS:

COMPLY WITH IEEE 837 AND UL 467; LISTED FOR USE FOR SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND CONNECTED ITEMS.

BOL