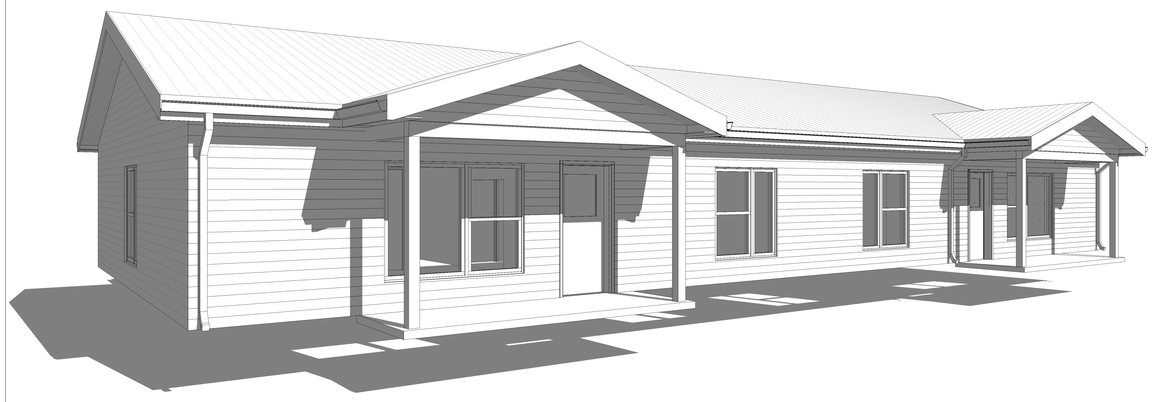
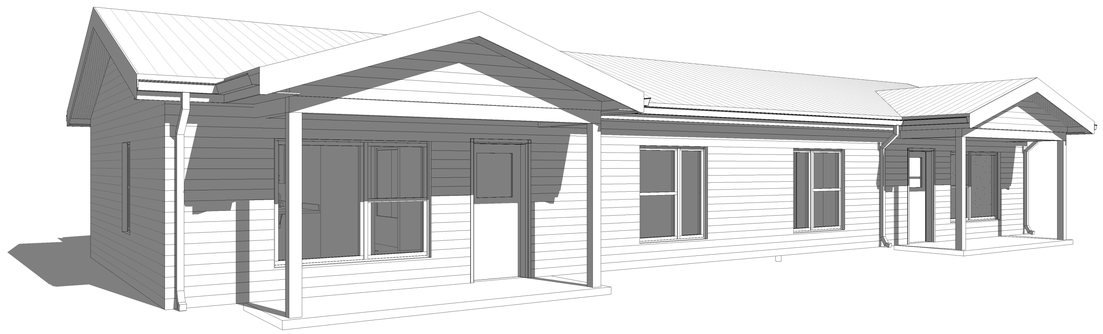
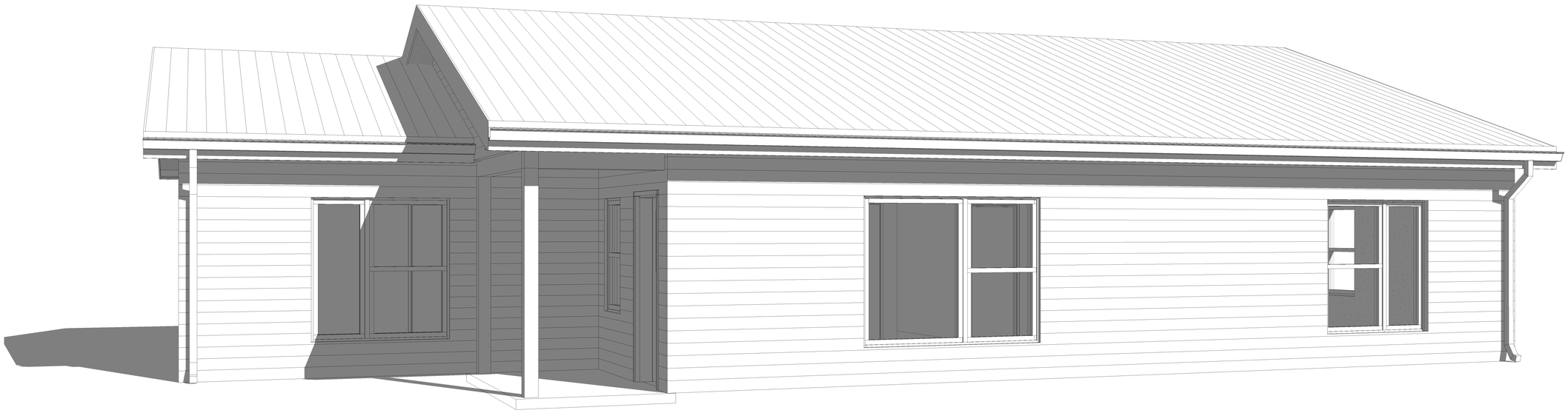


2 BEDROOM / 1 BATHROOM - DUPLEX



1 BEDROOM / 1 BATHROOM - DUPLEX



3 BEDROOM / 2 BATHROOM - SINGLE-FAMILY

NOTE: IMAGES ARE CONCEPTUAL IN NATURE AND MAY NOT REFLECT THE REQUIREMENTS OF THE DRAWINGS CONTAINED HEREIN.

BID PACKAGE #4 - TEACHERAGES

PROJECT TEAM

OWNER
LUKACHUKAI COMMUNITY SCHOOL
NAVAJO ROUTE 13 PO BOX 230
LUKACHUKAI, ARIZONA 85340

ARCHITECT
DEKKER/PERICH/SABATINI
2375 E. CAMELBACK ROAD, SUITE 760
PHOENIX, AZ 85016
TEL: 602.842.5600

LANDSCAPE ARCHITECT
DEKKER/PERICH/SABATINI
7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109
TEL: 505.761.9700
FAX: 505.761.4222

STRUCTURAL ENGINEER
DEKKER/PERICH/SABATINI
7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109
TEL: 505.761.9700
FAX: 505.761.4222

CIVIL ENGINEER
BOHANNAN HUSTON INC.
7500 JEFFERSON ST. NE.
ALBUQUERQUE,NM 87109
TEL: 505.823.1000

MECHANICAL ENGINEER
BRIDGERS & PAXTON
4600 C MONTGOMERY BLVD. NE
ALBUQUERQUE,NM 87109
505.883.4111

ELECTRICAL ENGINEER
BRIDGERS & PAXTON
4600 C MONTGOMERY BLVDNE
ALBUQUERQUE, NM 87109
505.883.4111

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

ARCHITECT

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S.
KAPU
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

DATE 12/10/2020
PROJECT NO: 20-7002.005

ISSUE PURPOSE
100% SUBMITTAL

PARTITION TYPE LEGEND

STUD SIZE:
A = 2x4 (1 1/2"x3 1/2")
B = 2x6 (1 1/2"x5 1/2")
C-Z = OTHER SIZES ASSIGNED

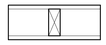
51A

PARTITION NUMBER:
50's = NON-RATED (FULL/PARTIAL HEIGHT)
60's = RATED
70's = ACOUSTIC

NOTE: SEE PARTITION TYPES THIS SHEET FOR MORE DETAILED ASSEMBLY INFORMATION

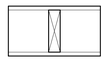
51A • FULL HEIGHT

- 2x4 WOOD STUDS
- (1) LAYER 5/8" GYPSUM BOARD BOTH SIDES
- TOTAL WIDTH: 4 1/2"
- COMMENTS: EXTEND TO UNDERSIDE OF STRUCTURE ABOVE



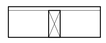
51B • FULL HEIGHT

- 2x6 WOOD STUDS
- (1) LAYER 1/2" GYPSUM BOARD BOTH SIDES
- TOTAL WIDTH: 6 1/2"
- COMMENTS: EXTEND TO UNDERSIDE OF STRUCTURE ABOVE



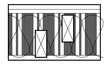
52A • FULL HEIGHT • NON-RATED

- 2x4 WOOD STUDS
- (1) LAYER 1/2" GYPSUM BOARD ONE SIDE
- TOTAL WIDTH: 4"
- COMMENTS: EXTEND TO UNDERSIDE OF STRUCTURE ABOVE



D1 • FULL HEIGHT • 1-HOUR FIRE RATED-ACOUSTIC — STC 45 / UL U340

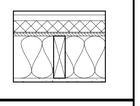
- 2x4 WOOD STUDS (STAGGERED) ON 2x6 PLATE
- (1) LAYER 5/8" GYPSUM BOARD BOTH SIDES
- 1/2" RESILIENT CHANNEL ONE SIDE
- ACOUSTIC INSULATION
- TOTAL WIDTH: 7 1/4"
- COMMENTS: EXTEND TO UNDERSIDE OF STRUCTURE ABOVE



EXTERIOR WALL TYPE LEGEND

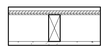
W1 • FULL HEIGHT

- 5/16" FIBER CEMENT HORIZONTAL LAP SIDING (w/ 6" EXPOSURE) ON 1x FURRING STRIPS @ 16" O.C.
- 1 1/2" RIGID INSULATION (R-7.5)
- 7/16" PLYWOOD w/ WEATHER BARRIER
- 2x6 WOOD STUDS @ 16" O.C. w/BATT INSULATION (R-19)
- (1) LAYER 1/2" GYPSUM BOARD ONE SIDE
- TOTAL WIDTH: 9 1/4"
- COMMENTS: EXTEND TO ROOF BEARING



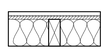
W2 • FULL HEIGHT

- 7/8" THICK 3-COAT STUCCO SYSTEM
- (1) LAYER 1/2" GYPSUM BOARD ONE SIDE
- 2X4 WOOD STUDS
- (1) LAYER OF 7/16" PLYWOOD SHEATHING w/ WEATHER BARRIER
- TOTAL WIDTH: 5"



W2A • FULL HEIGHT

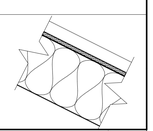
- 5/16" FIBER CEMENT HORIZONTAL LAP SIDING (w/ 6" EXPOSURE)
- 1 1/2" RIGID INSULATION (R-7.5)
- 7/16" PLYWOOD w/ WEATHER BARRIER
- 2x6 WOOD STUDS @ 16" O.C
- TOTAL WIDTH: 4 1/2"



ROOF TYPE LEGEND

R1 - MEDIUM SLOPE

- PRO-PANEL (CORRUGATED) ROOFING PANEL
- WATER RESISTIVE UNDERLAYMENT
- 15/32" OSB PLYWOOD SHEATHING
- WOOD FRAMED TRUSS; REF. STRUCTURAL
- R-38 BATT INSULATION @ TRUSS TOP CHORD



DRAWING INDEX

GENERAL SYMBOLS LEGEND

NORTH ARROW — NORTH

STRUCTURAL GRIDLINE — 0

BUILDING SECTION / WALL SECTION — XX / XX-XXX

EXTERIOR ELEVATIONS — XX / XX-XXX

INTERIOR ELEVATIONS — X / X XX-XXX X / X

ENLARGED DETAIL DRAWING — XX / XX-XXX

ROOM NAME AND NUMBER — Room name 101

WINDOW TYPE — 1\

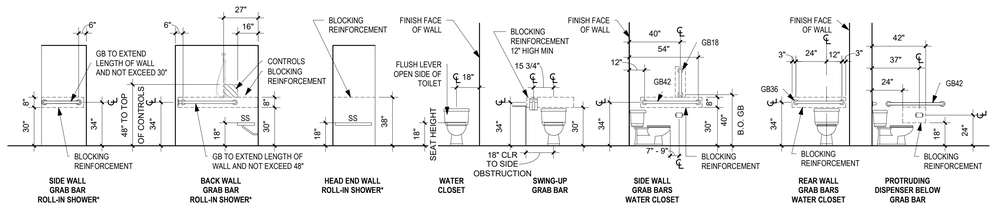
PARTITION ASSEMBLY TYPE — 1t

ELEVATION MARK — X' - X"

DOOR NUMBER — X000

B1 TYPICAL MOUNTING HEIGHTS - ACCESSORIES
1/4" = 1'-0"

NOTE: DIMENSIONS SHOWN ARE TO TOP OF FLOOR OR FACE OF FINISHED WALL SURFACE



*NOTE: COORDINATE WITH PLUMBING FIXTURE SCHEDULE. REQUIRED BLOCKING COORDINATED WITH PLUMBING FIXTURES AND MUST MEET INSTALLATION REQUIREMENTS.

A1 TYPICAL MOUNTING HEIGHTS - ACCESSORIES
1/4" = 1'-0"

NOTE: DIMENSIONS SHOWN ARE TO TOP OF FLOOR OR FACE OF FINISHED WALL SURFACE

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
DATE SIGNED
12/10/2021
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

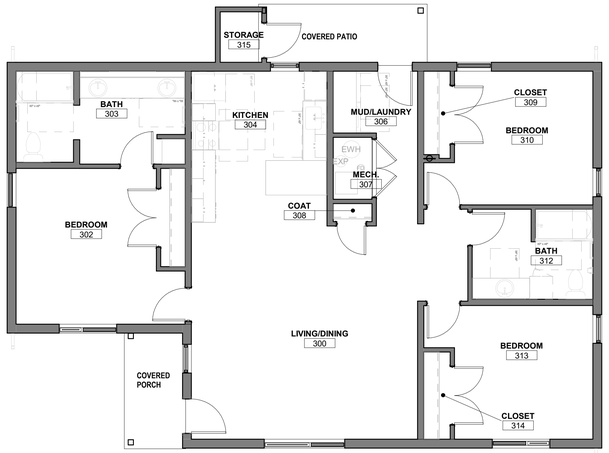
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

DRAWING INDEX, LEGENDS, AND GENERAL NOTES & DETAILS

SHEET NO

GI000



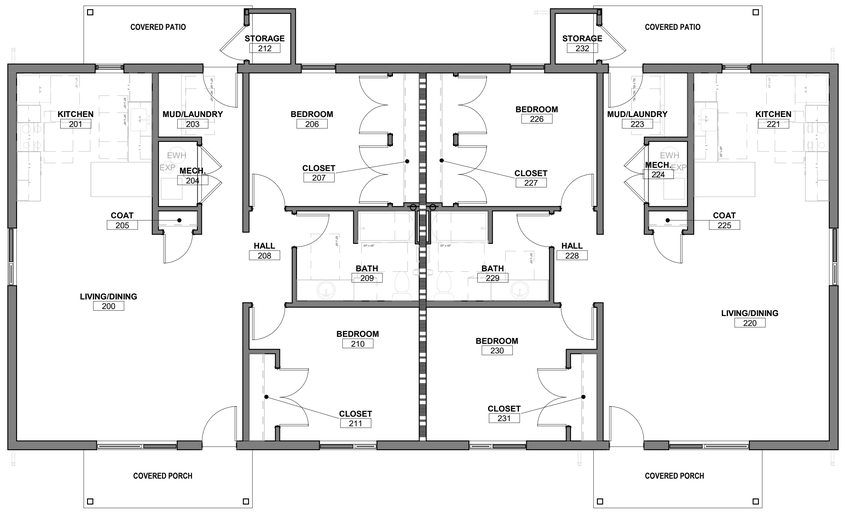
AREA CALCULATIONS
HEATED AREA: 1,536 SF

COVERED PORCH: 70 SF
COVERED PATIO: 70 SF

TOTAL UN-HEATED: 140 SF

TOTAL BUILDING AREA: 1,676 SF

C5 3BD/2BA SINGLE-FAMILY - LIFE SAFETY PLAN
3/16" = 1'-0"



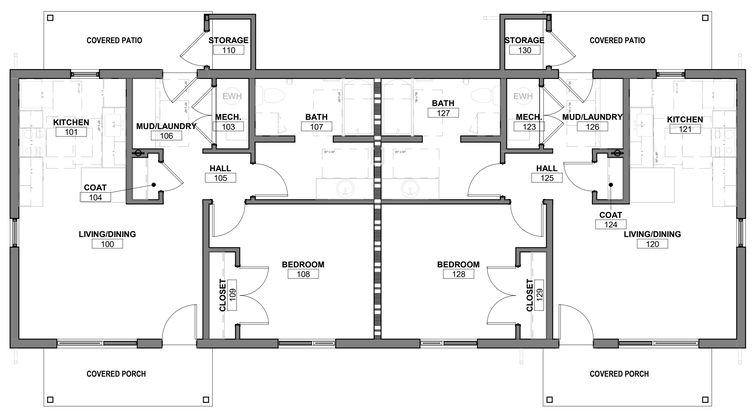
AREA CALCULATIONS
HEATED AREA: 2,400 SF

COVERED PORCH: 140 SF
COVERED PATIO: 140 SF

TOTAL UN-HEATED: 280 SF

TOTAL BUILDING AREA: 2,680 SF

B1 2BD/1BA DUPLEX - LIFE SAFETY PLAN
3/16" = 1'-0"



AREA CALCULATIONS
HEATED AREA: 1,530 SF

COVERED PORCH: 140 SF
COVERED PATIO: 140 SF

TOTAL UN-HEATED: 280 SF

TOTAL BUILDING AREA: 1,810 SF

A5 1BD/1BA DUPLEX - LIFE SAFETY PLAN
3/16" = 1'-0"

GENERAL SHEET NOTES

A. SMOKE DETECTORS TO BE INSTALLED PER NFPA 70 AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
B. SMOKE DETECTORS ARE TO BE HARD-WIRED WITH BATTERY BACKUPS AND INTERCONNECTED.
C. CARBON MONOXIDE ALARMS TO BE INSTALLED PER NFPA 70 AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

APPLICABLE CODES

2018 NFPA 101 Life Safety Code
2018 NFPA 5000 Building Construction and Safety Code
2007 ASHRAE 90.2 Energy Efficient Design of Low-Rise Residential Buildings
2017 NFPA 70 National Electric Code (NEC)
2018 NFPA 54 National Fuel Gas Code
2018 Uniform Plumbing Code
2018 Uniform Mechanical Code
1101/2005 Educational Space Criteria Handbook
2015 IRC, R301, Ch. 4 and 8 (structural design)

OCCUPANCY CLASSIFICATION

OCCUPANCY GROUP NFPA 6.1.8.1.1 **ONE- AND TWO-FAMILY DWELLING**

TYPE OF CONSTRUCTION

CONSTRUCTION CLASSIFICATION (NFPA 220): **V(000)**

FIRE PROTECTION SYSTEMS

- HAZARD CLASSIFICATION: **ORDINARY** (NFPA 24.1.5)
  - BUILDINGS ARE EQUIPPED WITH AUTOMATIC SPRINKLER SYSTEM AS REQUIRED FOR ONE- AND TWO-FAMILY DWELLINGS (NFPA 22.3.5.1)
  - BUILDINGS ARE EQUIPPED WITH SMOKE DETECTORS AS REQUIRED FOR ONE- AND TWO-FAMILY DWELLINGS (NFPA 22.3.4.1.1)
  - BUILDINGS ARE EQUIPPED WITH CARBON MONOXIDE ALARMS (HARD-WIRED WITH BATTERY BACK-UP) AS REQUIRED FOR ONE- AND TWO-FAMILY DWELLINGS (NFPA 22.3.4.2.1)

ENERGY CONSERVATION

APACHE COUNTY, AZ
CLIMATE ZONE: 3A,B

INSULATION AND FENESTRATION

REQUIREMENTS BY COMPONENT	REQUIRED	PROVIDED
ROOF	R-22 CAVITY	R-38
WALLS	R-15+7.5 ci	R19+7.5 ci
DOORS	U-0.39	U-0.35
WINDOWS	U-0.47; SHGC 0.40	U-0.35; SHGC 0.40
SKYLIGHTS	U-0.90; SHGC 0.40	U-0.60; SHGC 0.40

PROVIDED ENVELOPE VALUES ARE HIGHER THAN THE REQUIRED VALUES DUE TO LEED REQUIREMENTS

SHEET LEGEND

Name
101
150 SF/ 50 SF
3 OCC
ROOM NAME
ROOM NUMBER
AREA OF ROOM/SF PER OCCUPANT
OCCUPANT LOAD OF ROOM

FEB FIRE EXTINGUISHER BRACKET

1 HOUR RATED PARTITION, REFER TO PARTITION TYPES

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

DRAWN BY	AW/BJ
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

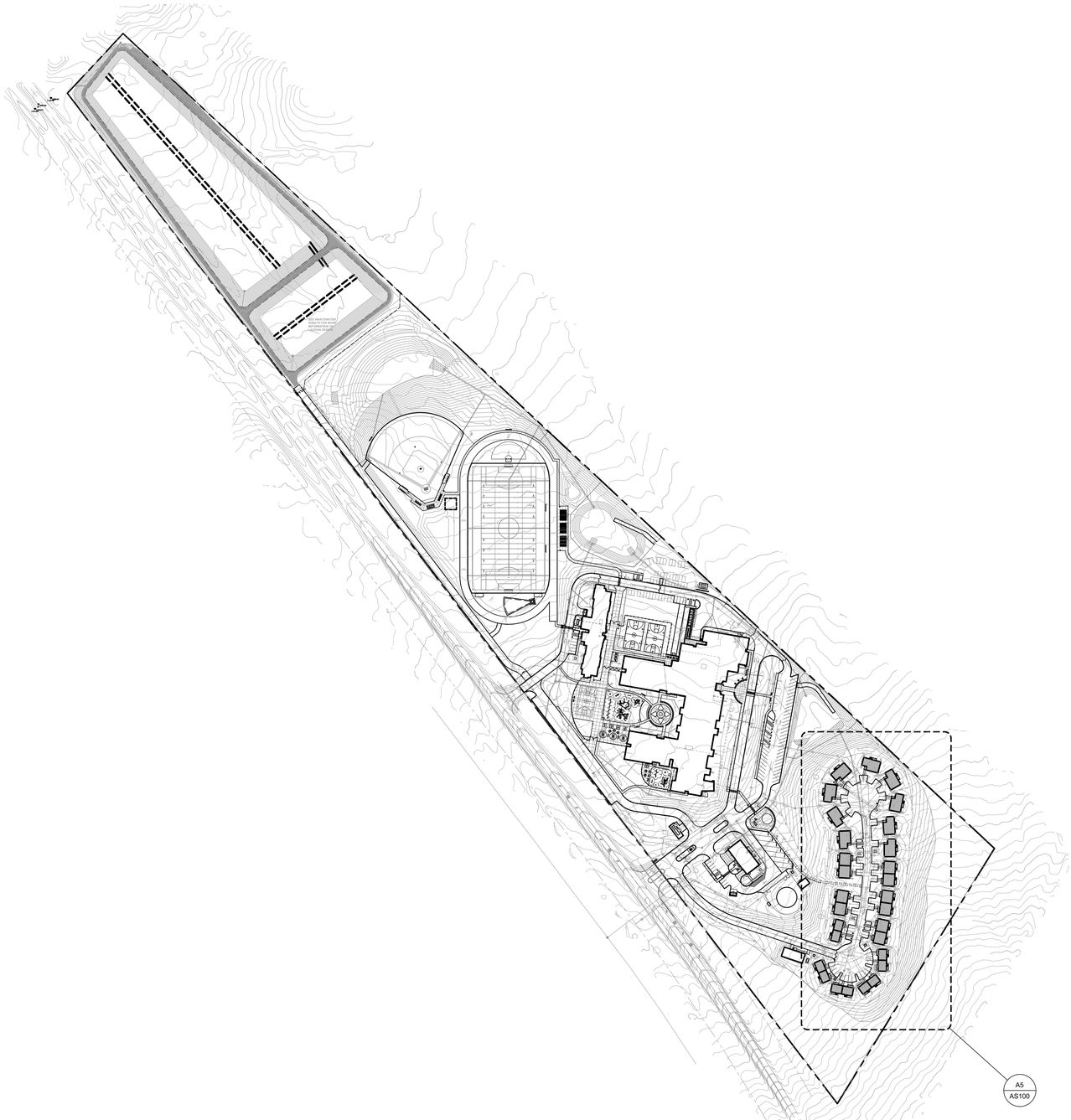
DRAWING NAME

CODE ANALYSIS AND LIFE SAFETY PLANS

SHEET NO

GI101

INCLUDED FOR REFERENCE ONLY.
SEE DETAILED SITE DRAWINGS IN
THE K-8 ACADEMICS DRAWING SET.



NORTH A1 OVERALL SITE PLAN
1" = 150'-0"
0 150' 300'

NORTH A5 TEACHERAGE HOUSING ENLARGEMENT
1" = 40'-0"
0 40' 80'

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

ARCHITECT

ENGINEER

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS
1
2
3
4
5
6

DRAWN BY	BG
REVIEWED BY	CM
DATE	12/10/2020
PROJECT NO.	20-7002

DRAWING NAME
OVERALL
SITE PLAN

SHEET NO.
AS100
OF

GENERAL CRITERIA:

1. COORDINATION WITH OTHER DRAWINGS:
   - A. SEE DRAWINGS OTHER THAN STRUCTURAL FOR KINDS OF FLOOR FINISH AND THEIR LOCATION, DEPRESSIONS IN FLOOR SLABS, OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL FEATURES, WALKS, RAMPS, STAIRS, CURBS, ETC.
   - B. HOLES AND OPENINGS THROUGH WALLS, ROOFS AND FLOORS FOR DUCTS, PIPING AND VENTILATION SHALL BE CHECKED BY THE CONTRACTOR, WHO SHALL VERIFY SIZES AND LOCATIONS OF SUCH HOLES OR OPENINGS WITH THE PLUMBING, HVAC, ELECTRICAL DRAWINGS AND THE SUB-CONTRACTORS.
   - C. SEE ARCHITECTURAL DRAWINGS FOR WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.
   - D. DISCREPANCIES: COORDINATE STRUCTURAL DRAWINGS WITH OTHER DRAWINGS FOR INDIVIDUAL ITEMS. DISCREPANCIES UNCOVERED, IF ANY, SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
   - E. TYPICAL EDGE OF STRUCTURE / SLAB IS SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR TO COORDINATE LOCATIONS, DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL EXTERIOR WALL SECTIONS.
   - F. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF DETERMINING DIMENSIONS.
2. INTENT: IF CERTAIN CONDITIONS ARE NOT SPECIFICALLY CUT OR DETAILED IN THE CONTRACT DOCUMENTS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS CUT AND DETAILED ELSEWHERE IN THE CONTRACT DOCUMENTS.
3. TYPICAL DETAILS, SECTIONS, AND SCHEDULES ARE SHOWN ON SHEETS SE301 THROUGH SE502 AND APPLY TO ALL CONSTRUCTION EXCEPT WHERE SHOWN DIFFERENTLY ON THE PLANS AND DETAILS.
4. FOR DETAILS, LOCATIONS AND NUMBER OF INSERTS, EMBEDDED ITEMS, EQUIPMENT SUPPORT PADS, EQUIPMENT ANCHOR RODS AND SIMILAR ITEMS, REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS.
5. NO OPENINGS, MODIFICATIONS OR REVISIONS SHALL BE MADE TO ANY MEMBERS OF THE STRUCTURAL SYSTEM WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER OR RECORD.
6. EXISTING CONDITIONS:
   - A. NEW CONSTRUCTION MUST BE COORDINATED WITH EXISTING SITE CONDITIONS.
   - B. LOCATE AND PROTECT ALL EXISTING UNDERGROUND FACILITIES.
   - C. REMOVE ALL MATERIAL THAT WILL INTERFERE WITH NEW BUILDING FOUNDATIONS AS PER GEOTECHNICAL CONSULTANT'S RECOMMENDATIONS.
7. STRUCTURAL STABILITY:
   - A. THE STRUCTURE SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER FINAL, FULLY CONSTRUCTED CONDITIONS.
   - B. PROVIDE SAFE AND ADEQUATE SHORING FOR ALL PARTS OF THE STRUCTURE DURING CONSTRUCTION.
   - C. WHERE BACKFILL IS PLACED AGAINST WALLS, THE WALLS SHALL BE BRACED OR OTHERWISE ADEQUATELY SHORED UNTIL PERMANENT BRACING ELEMENTS OR SLABS HAVE BEEN ERECTED AND HAVE ATTAINED DESIGN STRENGTH.

SCHEDULE FOR STRUCTURAL SPECIAL INSPECTION
1. SOILS: VERIFY COMPACTION & RE-COMPACTION OF ALL MATERIALS BELOW SLAB & SITE CONCRETE. PRIOR TO CONCRETE PLACEMENT. VERIFY THAT FOUNDATIONS INTO ROCK MEET THE MINIMUM EMBEDMENT REQUIREMENTS.
2. CONCRETE: VERIFY USE OF REQUIRED MIX DESIGNS, REBAR SIZE, SPACING, AND CLEAR DISTANCE, FORMWORK, CURING, AND POST-INSTALLED ANCHORS IN CONCRETE. FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE CONCRETE TEMPERATURE.
3. WOOD-FRAMED ROOF DIAPHRAGMS AND SHEAR PANELS; UPLIFT ANCHORAGE AT ROOF TRUSSES; SHEAR PANEL HOLDOWNS AND HOLDOWN ANCHORS: INSPECT CAST-IN ANCHORS PRIOR TO CONCRETE PLACEMENT TO MAKE SURE THAT ANCHORS ARE LOCATED CORRECTLY AND TIED INTO PLACE; PERIODICALLY INSPECT ROOF AND WALL SHEATHING FOR SIZE AND SPACING OF NAILING; PERIODICALLY INSPECT TRUSS UPLIFT ANCHORS FOR CORRECT SIZE AND NUMBER OF FASTENERS.

NOTE:
SPECIAL INSPECTIONS SHALL BE CONDUCTED TO SATISFY ALL APPLICABLE REQUIREMENTS OF 2018 NFPA, ACI 318-14, AND NDS REQUIREMENTS

POST-INSTALLED ANCHOR AND REINFORCING BAR SCHEDULE					
	ANCHOR	CONCRETE	GROUTED CMU	HOLLOW CMU[2]	EVALUATION REPORT
EXPANSION ANCHORS	SIMPSON STRONG-BOLT 2	●	●	○	ICC-ES ESR-3037, IAPMO-UES 240
	HILTI KWIK BOLT TZ	●	●	○	ICC-ES ESR-1917, ICC-ES ESR-3785
	DEWALT POWER-STUD+ SD1	●	●	○	ICC-ES ESR-2818, ICC-ES ESR-2966
SCREW ANCHORS	SIMPSON TITEN HD	●	●	○	ICC-ES ESR-2713, ICC-ES ESR-1056
	HILTI KH-EZ	●	●	○	ICC-ES ESR-3027, ICC-ES ESR-3056
	DEWALT SCREW-BOLT+	●	●	○	ICC-ES ESR-3889, ICC-ES ESR-4042
ADHESIVE ANCHORS OR BARS	SIMPSON SET-3G	●	○	○	ICC-ES ESR-4057
	SIMPSON SET-XP	○	●	●	IAPMO-UES 265
	HILTI HIT-RE 500 V3	●	○	○	ICC-ES ESR-3814
	HILTI HIT-HY 270	○	●	●	ICC-ES ESR-4144
	DEWALT PURE 110+	●	○	○	ICC-ES ESR-3298
	DEWALT AC 100+ GOLD	○	●	●	ICC-ES ESR-3200

● - ANCHOR/SUBSTRATE APPROVED FOR USE.
○ - ANCHOR/SUBSTRATE NOT APPROVED FOR USE.

NOTES:
1. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED ABOVE SHALL BE SUBMITTED TO THE ARCHITECT, WITH CALCULATIONS THAT ARE PREPARED AND SEALED BY A REGISTERED ENGINEER LICENSED IN THE PROJECT JURISDICTION, SHOWING THAT THE PROPOSED PRODUCT WILL ACHIEVE AN EQUIVALENT OR GREATER CAPACITY USING THE APPROPRIATE DESIGN PROCEDURE REQUIRED BY THE PROJECT BUILDING CODE, AND SHALL BE ACCOMPANIED BY A CURRENT ICC-ES/IAPMO-UES TEST REPORT SUBSTANTIATING SUITABILITY.
2. FOR ANCHORS AND REINFORCING BARS INSTALLED IN HOLLOW CMU, CONTRACTOR SHALL PROVIDE ANCHOR SCREENS APPROVED FOR USE IN THE MANUFACTURER'S ANCHOR ICC-ES/IAPMO-UES TEST REPORT.

B1 POST-INSTALLED ANCHORS AND REINFORCING BARS
12" = 1'-0"

CONCRETE MIX DESIGN CRITERIA					
INTENDED USE	f'c (28 DAY)	MAXIMUM W/C RATIO	MAXIMUM AGGREGATE SIZE	SLUMP (+/- 1")	MINIMUM ENTRAINED AIR (+/-1.5%)
FOOTINGS AND TURNED-DOWN EDGES	3,500 PSI	0.55	1 1/2"	4"	5.5%
SLAB-ON-GRADE	3,000 PSI	0.45 [2]	3/4"	5"	NONE
EXTERIOR SITEWORK	4,000 PSI	0.50	3/4"	5"	6.0%

NOTES:
1. SEE SPECIFICATIONS FOR FINE AGGREGATE INFORMATION.
2. STRICT ADHERENCE TO THE SPECIFIED WATER/CEMENT RATIO IS REQUIRED. WATER SHALL NOT BE ADDED TO THE MIX AT TIME OF PLACEMENT. WATER-REDUCING ADMIXTURES ARE PERMITTED TO ENHANCE WORKABILITY (SEE SPECIFICATIONS).

A1 CONCRETE MIX DESIGN CRITERIA
12" = 1'-0"

DESIGN CRITERIA:

THE FOLLOWING CRITERIA COVERS THE STRUCTURAL DESIGN OF THIS BUILDING STRUCTURE.

1. DESIGN CODE:
   - A. 2018 NFPA 5000 - BUILDING CONSTRUCTION AND SAFETY CODE.
2. RISK CATEGORY: II
3. DESIGN LOADS:

   VERTICAL:

   - A. DEAD LOADS - BUILDING IS DESIGNED FOR THE ACTUAL IN-PLACE WEIGHTS OF ALL MATERIALS SHOWN ON THE CONSTRUCTION DOCUMENTS.
   - B. DESIGN LOADINGS: LIVE / DEAD
     - FLOOR ..... 100 PSF
     - ROOF (NON-REDUCIBLE) ..... 20 PSF / 20 PSF
   - C. ROOF SNOW LOAD:
     - GROUND SNOW LOAD, P_g ..... 15 PSF
     - PITCHED ROOF SNOW LOAD, P_s ..... 11 PSF
     - SNOW EXPOSURE FACTOR, C_e 1.0
     - SNOW IMPORTANCE FACTOR, I_s 1.0
     - THERMAL FACTOR, C_t 1.0

   HORIZONTAL:

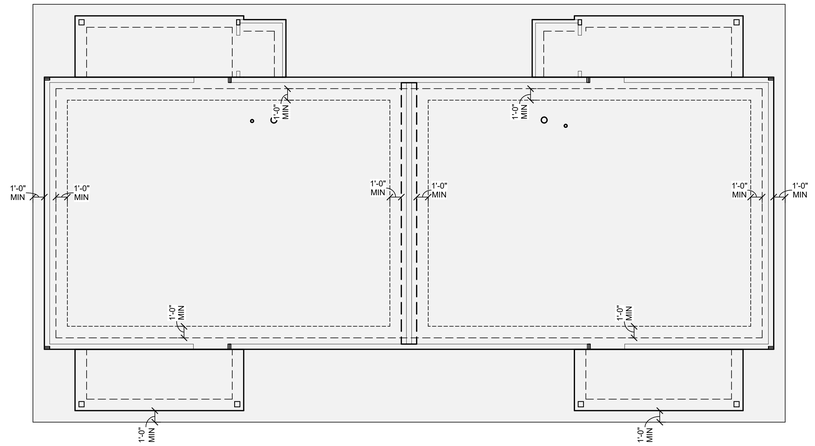
   - A. WIND DESIGN DATA:
     - ANALYSIS PROCEDURE: DIRECTIONAL PROCEDURE
     - ULTIMATE DESIGN WIND SPEED (3 SEC. GUST): V_{ult} = 115 MPH
     - NOMINAL DESIGN WIND SPEED: V_{asd} = 90 MPH
     - WIND EXPOSURE CATEGORY: C
     - INTERNAL PRESSURE COEFFICIENT: +/-0.18
     - DESIGN ULTIMATE WIND PRESSURE FOR COMPONENTS AND CLADDING AT WALL ELEMENTS WITH 10 SQUARE FEET TRIBUTARY AREA:
       - 0-15 FEET = 25 PSF
   - B. EARTHQUAKE DESIGN DATA:
     - ANALYSIS PROCEDURE:
       - EQUIVALENT LATERAL FORCE PROCEDURE
     - SOIL SITE CLASS: B
     - SPECTRAL RESPONSE ACCELERATIONS ... S_s = 0.134
       - S_1 = 0.045
     - SITE COEFFICIENTS ..... F_a = 1.0
       - F_v = 1.0
     - EARTHQUAKE SPECTRAL RESPONSE ACCELERATION PARAMETERS ..... S_{MS} = 0.134
       - S_{M1} = 0.045
       - S_{DS} = 0.089
       - S_{D1} = 0.03
     - SEISMIC IMPORTANCE FACTOR: I_E = 1.0
     - SEISMIC DESIGN CATEGORY: A
     - SEISMIC FORCE-RESISTING SYSTEM:
       - LIGHT-FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
     - RESPONSE MODIFICATION COEFFICIENT: R = 6.5
     - SEISMIC RESPONSE COEFFICIENT: C_s = 0.022
     - SIMPLIFIED DESIGN BASE SHEAR: (ASCE 7)
       - $V = F\ S_{DS}\ W\ /\ R$
   - C. LOWEST ANTICIPATED SERVICE TEMPERATURE (LAST)
     - ENCLOSED STRUCTURES ..... = 50°F
     - UNENCLOSED STRUCTURES ..... = (20°F)

MATERIAL CRITERIA:

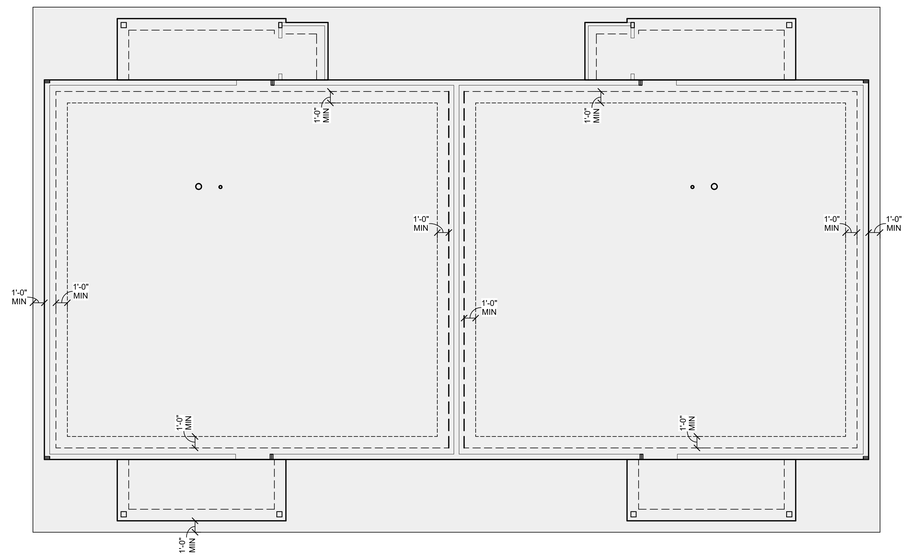
1. CAST-IN-PLACE CONCRETE:
   - A. ALL CONCRETE WORK SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE," ACI 301.
   - B. SEE SCHEDULE ON A1/S001 FOR CONCRETE MIX DESIGN AND 28 DAY STRENGTH REQUIREMENTS.
   - C. ALL CONCRETE SHALL BE REINFORCED UNLESS SPECIFICALLY NOTED "NOT REINFORCED."
   - D. STEM WALLS, GRADE BEAMS, AND RETAINING WALLS SHALL NOT BE CAST AGAINST EXCAVATED VERTICAL SIDE SURFACES.
   - E. CONTROL JOINTS IN SLABS ON GRADE SHALL BE PROVIDED WHERE NOTED ON PLANS, BUT SHALL NOT EXCEED 12 FOOT SPACING.
   - F. LIMIT SITE AND RETAINING WALL POURS TO A MAXIMUM OF 40 FEET BETWEEN CONSTRUCTION JOINTS. CONTROL JOINT SPACING IN WALLS SHALL NOT EXCEED HALF OF THE SPACING BETWEEN CONSTRUCTION JOINTS OR 20 FEET. ONE HALF-INCH EXPANSION JOINTS IN RETAINING WALL SHALL BE PLACED AT SPACING NOT EXCEEDING 40 FEET. COORDINATE LOCATIONS OF JOINTS WITH ARCHITECTURAL PLANS.
   - G. ALL CAST-IN ANCHORS FOR COLUMNS AND WALL ELEMENTS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE SECURELY SUPPORTED IN POSITION PRIOR TO PLACEMENT OF CONCRETE. INSERTING THESE BOLTS INTO WET CONCRETE IS NOT ALLOWED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OR APPROVED IN WRITING.
   - H. PIPE AND CONDUIT WILL NOT BE PERMITTED TO BE INSTALLED HORIZONTALLY IN SLABS WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
   - I. AT INTERIOR SLABS-ON-GROUND OVER VAPOR RETARDER COMPLY WITH THE FOLLOWING:
     - a. MOIST CURING OF SLABS ON GROUND IS REQUIRED. SEE SPECIFICATIONS FOR MORE INFORMATION.
     - b. CARE SHALL BE TAKEN TO PREVENT WATER INTRUSION INTO THE SUBGRADE BOTH PRIOR TO AND AFTER SLAB POURS.
     - c. TIMING OF SLAB SAWCUT JOINTS IS CRITICAL TO SLAB CURING PERFORMANCE. SAWCUT JOINTS FOR CONTROL JOINTS SHALL BE MADE AT THE EARLIEST POSSIBLE TIME THAT THE CONCRETE WILL SUPPORT THE WEIGHT OF EQUIPMENT AND OPERATORS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. REINFORCING STEEL:
   - A. ALL REINFORCING STEEL SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318) AND THE STANDARD MANUAL (ACI 315).
   - B. USE ASTM A615 GRADE 60 FOR ALL REINFORCING STEEL. USE ASTM A1064 FOR ALL WELDED WIRE FABRIC. PROVIDE IN FLAT SHEETS ONLY.
   - C. LAP WIRE FABRIC TWO FULL MESH PANELS AND TIE SECURELY.
   - D. ALL REINFORCEMENT SHALL BE CONTINUOUS. STAGGER SPLICES WHERE POSSIBLE. LAPS FOR SPLICES SHALL BE AS INDICATED ON SHEET SE501, UNLESS OTHERWISE SHOWN OR NOTED.
   - E. BAR SUPPORTS AND SPACERS FOR REINFORCING SHALL BE PROVIDED IN ACCORDANCE WITH ACI 315. CHAIRS WITH 22 GA SAND PLATES OR PRECAST BLOCKS SHALL BE PROVIDED FOR ALL REINFORCING OF CONCRETE IN CONTACT WITH GRADE. DECK CHAIRS SHALL BE PROVIDED FOR ALL WELDED WIRE FABRIC IN SLABS OVER METAL DECK. REINFORCING SHALL BE SECURELY TIED TO SUPPORTS.
   - F. REINFORCING SHALL NOT BE TACK WELDED OR WELDED IN ANY MANNER UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL PLANS.
   - G. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT (CLEAR DISTANCE):
     - a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
     - b. CONCRETE EXPOSED TO EARTH OR WEATHER: 2"
   - H. TYPICAL REINFORCEMENT UNLESS OTHERWISE SHOWN:
     - a. UP TO 8" CONCRETE WALLS: #4 @ 8" OC EACH WAY AT CENTER OF WALL.
     - b. OVER 8" TO 12" CONCRETE WALLS: #4 @ 12" OC EACH WAY, EACH FACE.
     - c. OVER 12" THICK: #5 @ 12" OC EACH WAY, EACH FACE.
   - I. ALL HORIZONTAL REINFORCING IN FOOTINGS, WALLS AND BEAMS SHALL BE CONTINUOUS AROUND CORNERS OR HAVE CORNER BARS OF THE SAME SIZE AND SPACING AS THE HORIZONTAL BARS AND LAP SPLICES PER SCHEDULE.
   - J. ALL POST-INSTALLED REINFORCING BARS SHALL BE INSTALLED WITH PRODUCTS LISTED IN TABLE B1/S001, IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND ES-REPORT. THESE SHALL BE INSPECTED PER SPECIAL INSPECTION REQUIREMENTS.
3. VAPOR RETARDER:
   - A. PLACE VAPOR RETARDER DIRECTLY BENEATH INTERIOR SLABS-ON-GRADE, BETWEEN SLAB AND BASE.
   - B. LAP AND SEAL ALL EDGES, PUNCTURES, AND PENETRATIONS.
   - C. MEET THE REQUIREMENTS OF ASTM E1745 WITH A WATER VAPOR PERMEANCE LESS THAN 0.010 PERMS.
   - D. BASIS OF DESIGN: STEGO WRAP, 15 MIL MINIMUM.
   - E. SEE DETAIL A3/SE501 FOR TYPICAL VAPOR RETARDER SYSTEM.
   - F. SEE SPECIFICATIONS AND MANUFACTURER'S INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS, INCLUDING REQUIREMENTS RELATED TO RADON MITIGATION SYSTEM.
4. POST INSTALLED ANCHORS AND REINFORCING BARS:
   - A. CONTRACTOR SHALL SUBMIT TECHNICAL LITERATURE FOR PROPOSED ANCHORING SYSTEM TO ARCHITECT FOR REVIEW PRIOR TO INSTALLATION. REFER TO SPECIFICATION DIVISION 01 FOR REQUIREMENTS.
   - B. ANCHORS AND REINFORCING BARS SHALL BE INSTALLED PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) AND ICC-ES/IAPMO-UES TEST REPORTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
     - HOLE DRILLING AND CLEANING
     - CARTRIDGE PREPARATION AND DISPENSING (ADHESIVE ANCHORS)
     - ANCHOR INSERTION
     - ANCHOR CURING TIME (ADHESIVE ANCHORS)
     - ANCHOR TORQUE (MECHANICAL ANCHORS)
   - C. ADDITIONAL REQUIREMENTS FOR ADHESIVE ANCHORS AND REINFORCING BARS INSTALLED INTO CONCRETE:
     - ANCHORS SHALL NOT BE INSTALLED INTO CONCRETE UNTIL IT REACHES THE FOLLOWING CRITERIA:
       - * MINIMUM 21 DAYS OF CURING
       - * MEETS MINIMUM DESIGN STRENGTH
     - AT TIMES OF INSTALLATION, CONCRETE TEMPERATURE RANGE SHALL BE BETWEEN 40 AND 100 DEGREES FAHRENHEIT. REFER TO MPII FOR CONDITIONING REQUIREMENTS OF ADHESIVES AT LOW TEMPERATURES.
     - CONCRETE SUBSTRATE SHALL BE DRY AT TIME OF ANCHOR INSTALLATION AND THROUGHOUT THE ADHESIVE CURING PROCESS (SEE MPII FOR CURE TIMES).
     - HOLES FOR ANCHORING SHALL BE ACHIEVED WITH ROTARY HAMMER AND CARBIDE-TIPPED DRILL BIT. CORED HOLES ARE NOT ALLOWED.
     - INSTALLATION OF ANCHORS INTO HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS SUBJECTED TO SUSTAINED TENSION LOADS ARE SUBJECT TO THE FOLLOWING:
       - * ANCHORS REQUIRE CONTINUOUS SPECIAL INSPECTION.
       - * INSTALLATION OF ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM IN ACCORDANCE WITH ACI 318.
   - D. ANCHORS AND REINFORCING BARS SHALL BE INSTALLED AT NOT LESS THAN MINIMUM EDGE DISTANCES, EMBEDMENTS AND/OR SPACING AS LISTED IN THE MPII AND ICC-ES/IAPMO-UES TEST REPORTS, OR AS INDICATED, WHICHEVER IS GREATER.
   - E. ANCHORS AND REINFORCING BARS SHALL BE INSTALLED IN APPROPRIATE AND PROPERLY CURED SUBSTRATES AS REQUIRED BY MPII AND ICC-ES/IAPMO-UES TEST REPORTS.
   - F. ANCHOR AND REINFORCING BAR LENGTHS SHOWN IN THESE PLANS ARE THE REQUIRED MINIMUM EMBEDMENT DEPTHS. CONTRACTOR SHALL PROVIDE ANCHORS WITH SUFFICIENT PROJECTION LENGTH FOR PROPER INSTALLATION OF SUPPORTED EQUIPMENT AND/OR STRUCTURE.
   - G. POST-INSTALLED ANCHORS AND REINFORCING BARS SHALL ONLY BE USED WHERE SPECIFIED ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ARCHITECT PRIOR TO USING POST-INSTALLED ANCHORS AND REINFORCING BARS IN LIEU OF CAST-IN-PLACE ANCHORS.
   - H. CARE SHALL BE GIVEN TO AVOID CONFLICTS WITH EXISTING REBAR.
   - I. PRE-APPROVED POST-INSTALLED ANCHORS AND REINFORCING BARS AND SUBSTRATES ARE LISTED IN SCHEDULE B1/S001.
5. WOOD FRAMING:
   - A. STUDS SHALL BE SPRUCE-PINE-FIR, STUD GRADE OR BETTER UNLESS NOTED OTHERWISE, WITH THE FOLLOWING ALLOWABLE STRESSES:
     - MAXIMUM FIBER STRESS IN BENDING: F_b = 600 PSI
     - TENSION PARALLEL TO GRAIN: F_t = 275 PSI
     - COMPRESSION PARALLEL TO GRAIN: F_c = 625 PSI
     - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 335 PSI
     - HORIZONTAL SHEAR: F_v = 125 PSI
     - MODULUS OF ELASTICITY: E = 1,000,000 PSI
     - STUDS SHALL BE SPACED AT 16" OC UNLESS NOTED OTHERWISE.
   - B. SAWN LUMBER FRAMING SHALL BE DOUGLAS FIR SOUTH, NO 2 OR BETTER UNLESS NOTED OTHERWISE, WITH THE FOLLOWING ALLOWABLE STRESSES:
     - MAXIMUM FIBER STRESS IN BENDING: F_b = 900 PSI
     - TENSION PARALLEL TO GRAIN: F_t = 525 PSI
     - COMPRESSION PARALLEL TO GRAIN: F_c = 1350 PSI
     - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 525 PSI
     - HORIZONTAL SHEAR: F_v = 180 PSI
     - MODULUS OF ELASTICITY: E = 1,200,000 PSI
   - C. EXPOSED FRAMING SHALL BE WESTERN CEDAR, NO 1 OR BETTER UNLESS NOTED OTHERWISE, WITH THE FOLLOWING ALLOWABLE STRESSES:
     - MAXIMUM FIBER STRESS IN BENDING: F_b = 975 PSI
     - TENSION PARALLEL TO GRAIN: F_t = 475 PSI
     - COMPRESSION PARALLEL TO GRAIN: F_c =725 PSI
     - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 425 PSI
     - HORIZONTAL SHEAR: F_v = 140 PSI
     - MODULUS OF ELASTICITY: E = 1,000,000 PSI
   - D. PREFABRICATED WOOD TRUSSES:
     - a. TRUSSES SHALL BE DESIGNED AND FABRICATED WITH WOOD CHORDS AND WOOD WEBS IN ACCORDANCE WITH DESIGN PREPARED BY A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF ARIZONA.
     - b. DESIGN STANDARDS SHALL CONFORM WITH THE APPLICABLE PROVISION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, PUBLISHED BY THE AMERICAN FOREST & PAPER ASSOCIATION, AND THE DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, PUBLISHED BY THE TRUSS PLATE INSTITUTE. SEE THE QUALITY CONTROL MANUAL FOR TOLERANCES AND OTHER SPECIAL REQUIREMENTS.
     - c. ALL TRUSSES SHALL BE SECURELY BRACED BOTH DURING ERECTION AND AFTER PERMANENT INSTALLATION IN ACCORDANCE WITH BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS AS PUBLISHED BY THE TRUSS PLATE INSTITUTE.
   - E. MICRO=LAM LVL:
     - a. ALL BEAMS SHALL HAVE THE FOLLOWING ALLOWABLE STRESSES:
       - FLEXURAL STRESS: F_b = 2600 PSI
       - COMPRESSION PARALLEL TO GRAIN: F_t = 2510 PSI
       - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 750 PSI
       - HORIZONTAL SHEAR: F_v = 285 PSI
       - MODULUS OF ELASTICITY: E = 2,000,000 PSI
   - F. PARALLAM PSL:
     - a. BEAMS SHALL HAVE THE FOLLOWING ALLOWABLE STRESSES:
       - FLEXURAL STRESS: F_b = 2900 PSI
       - COMPRESSION PARALLEL TO GRAIN: F_c = 2900 PSI
       - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 750 PSI
       - HORIZONTAL SHEAR: F_v = 290 PSI
       - MODULUS OF ELASTICITY: E = 2,000,000 PSI
     - b. COLUMNS SHALL HAVE THE FOLLOWING ALLOWABLE STRESSES:
       - FLEXURAL STRESS: F_b = 2400 PSI
       - COMPRESSION PARALLEL TO GRAIN: F_c = 2500 PSI
       - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 425 PSI
       - HORIZONTAL SHEAR: F_v = 190 PSI
       - MODULUS OF ELASTICITY: E = 1,800,000 PSI
   - G. TIMBERSTRAND LSL:
     - a. BEAMS AND COLUMNS SHALL HAVE THE FOLLOWING ALLOWABLE STRESSES:
       - FLEXURAL STRESS: F_b = 1700 PSI
       - COMPRESSION PARALLEL TO GRAIN: F_c = 1835 PSI
       - COMPRESSION PERPENDICULAR TO GRAIN: F_c = 710 PSI
       - HORIZONTAL SHEAR: F_v = 425 PSI
       - MODULUS OF ELASTICITY: E = 1,300,000 PSI
   - H. APA SPAN RATED SHEATHING:
     - a. SEE PLANS FOR GRADE, THICKNESS, AND LOCATIONS OF SHEATHING.
     - b. ROOF SHEATHING SHALL BE CONTINUOUS OVER 2 SPANS MINIMUM.
     - c. PROVIDE 2x BLOCKING AT ALL LOCATIONS WHERE ROOF SHEATHING CHANGES SLOPE AND AT ALL UNSUPPORTED WALL PANEL EDGES.
   - I. CONNECTIONS:
     - a. NAILING SHALL BE IN ACCORDANCE WITH THE NAILING SCHEDULE UNLESS OTHERWISE NOTED. COMMON OR RING-SHANK NAILS SHALL BE USED EXCEPT WHERE OTHERWISE STATED.
     - b. LUMBER CONNECTORS SHALL BE BY SIMPSON CO. OR EQUAL WITH CONNECTIONS INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
     - c. BOLTS SHALL BE ASTM A307.
     - d. STEEL SIDE PLATES SHALL BE ASTM A36.
     - e. MINIMUM EDGE DISTANCE AND MINIMUM FASTENER SPACING REQUIRED BY THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION SHALL BE MAINTAINED AT ALL CONNECTIONS.
   - J. FRAMING:
     - a. WOOD FRAMING SHALL CONFORM TO APPLICABLE NFPA AND NDS REQUIREMENTS.
     - b. GRADE STAMPS SHALL BE LEGIBLE WITH A MARK INDICATING STRESS RATING AND/OR GRADE, METHOD OF GRADING, SPECIES, MOISTURE CONTENT, AND MILL IDENTIFICATION.
     - c. SUPPORT WALL STUDS ON A CONTINUOUS TREATED 2x (MINIMUM) WIDTH PLATE, WIDTH TO MATCH WIDTH OF STUDS. SEE PLANS, SECTIONS AND DETAILS FOR ANCHORAGE OF SILL PLATE TO FOUNDATION. CAST-IN ANCHOR RODS SHALL BE SECURELY SUPPORTED IN POSITION PRIOR TO PLACEMENT OF CONCRETE. INSERTING THESE RODS INTO WET CONCRETE IS NOT PERMITTED.
     - d. PROVIDE HEADERS AT OPENINGS PER HEADER SCHEDULE.
     - e. ATTIC SPACES SHALL BE PROVIDED WITH CROSS VENTILATION IN ACCORDANCE WITH APPLICABLE CODES OR AS APPROVED BY THE BUILDING OFFICIAL.
     - f. CUTTING, NOTCHING OR DRILLING OF BEAMS, TRUSSES OR JOISTS SHALL BE PERMITTED ONLY AS DETAILED OR APPROVED BY THE ENGINEER.
     - g. UNLESS OTHERWISE SHOWN ON PLAN, ATTACH SHEATHING TO WALL STUDS USING 8d COMMON @ 6" OC AT PANEL EDGES AND @ 12" OC ELSEWHERE.

FOUNDATION NOTES

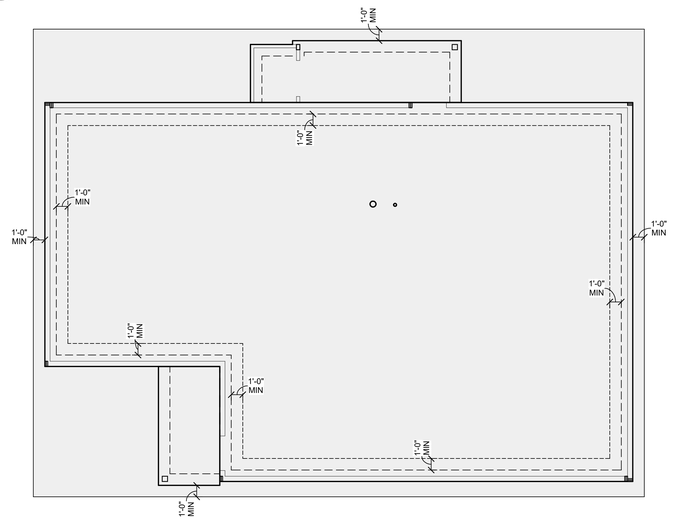
1. DESIGN CRITERIA:
   - A. A SUBSURFACE GEOTECHNICAL INVESTIGATION HAS BEEN PERFORMED BY GEOMAT INCORPORATED. A REPORT OF THIS INVESTIGATION DATED 4/11/2017 AND NUMBERED 172-2683 IS AVAILABLE.
   - B. IMPORTANT ADDITIONAL INFORMATION CONCERNING SPECIFIC SOIL CONDITIONS IS CONTAINED IN THIS REPORT AND SHALL BE REVIEWED PRIOR TO START OF CONSTRUCTION.
   - C. THE GEOTECHNICAL INVESTIGATION REPORT CONTAINS SPECIFIC REQUIREMENTS CONCERNING CLEARING AND GRUBBING, SITE, SUBFLOOR AND BEARING SURFACE PREPARATION, STRUCTURAL FILL REQUIREMENTS, AND COMPACTION REQUIREMENTS NOT NECESSARILY SHOWN ON THESE DRAWINGS. REFER ANY CONFLICTS BETWEEN THESE DRAWINGS AND THE REPORT TO THE ARCHITECT FOR DIRECTION PRIOR TO BEGINNING ANY WORK.
2. BASIS FOR DESIGN:
   - A. ALLOWABLE SOIL BEARING PRESSURE = 2500 PSF
3. FIELD OBSERVATION AND TESTING REQUIREMENTS:
   - A. EMPLOY THE SERVICES OF A REGISTERED, LICENSED GEOTECHNICAL ENGINEER TO OBSERVE ALL CONTROLLED EARTHWORK. THE GEOTECHNICAL ENGINEER SHALL PROVIDE CONTINUOUS ON-SITE OBSERVATION BY EXPERIENCED PERSONNEL DURING CONSTRUCTION OF CONTROLLED EARTHWORK. NOTIFY THE GEOTECHNICAL ENGINEER AT LEAST TWO WORKING DAYS IN ADVANCE OF ANY FIELD OPERATIONS OF THE CONTROLLED EARTHWORK. A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER SHALL BE PRESENT TO CONFIRM THE COMPLETE EXCAVATION OF ANY UNCONTROLLED FILL.
   - B. TESTS OF MATERIALS SHALL BE MADE AT THE FOLLOWING RATES:
     - a. ONE FIELD DENSITY TEST PER EACH 2500 SQUARE FEET OF COMPACTED SUBGRADE PRIOR TO PLACING STRUCTURAL FILL OR FLOOR SLAB CONSTRUCTION WITH A MINIMUM OF 2 TESTS PER HOUSING PAD.
     - b. TWO FIELD DENSITY TESTS PER EACH LIFT OF STRUCTURAL FILL AT EACH HOUSING PAD.
     - c. ONE MOISTURE-DENSITY CURVE FOR EACH TYPE OF MATERIAL USED, AS INDICATED BY SIEVE ANALYSIS AND PLASTICITY INDEX.
     - d. FOLLOWING FINISH GRADING THE FINAL SURFACE SHALL BE TESTED.
     - e. FOLLOWING FOUNDATION EXCAVATION THE FOOTING EXCAVATIONS SHALL BE TESTED.
     - f. THE GEOTECHNICAL ENGINEER SHALL SUBMIT THE RESULTS OF ALL REQUIRED TESTS TO THE ARCHITECT WITHIN 2 WORKING DAYS AFTER THE TEST.
4. SPECIFIC SOIL PREPARATION REQUIREMENTS:
   - A. CLEARING AND GRUBBING:
     - a. REMOVE ALL BRUSH, RUBBISH, GRASS AND OTHER PLANTS, AND GRASS AND OTHER PLANT ROOTS FROM THE CONSTRUCTION AREA.
     - b. REMOVE STUMPS, MATTED ROOTS AND ROOTS LARGER THAN 2 INCHES IN DIAMETER WITHIN 6 INCHES OF THE SURFACE OF AREAS ON WHICH FILL AND/OR FOOTINGS ARE TO BE CONSTRUCTED.
     - c. REMOVE ALL TOPSOIL FROM THE CONSTRUCTION AREA. THIS MATERIAL SHALL NOT BE USED AS FILL MATERIAL, BUT MAY BE STOCKPILED AND LATER USED IN THE TOP 6 INCHES OF FILL OUTSIDE THE BUILDING PAD.
   - B. SITE AND SUBSURFACE PREPARATION:
     - a. OVEREXCAVATE ALL SOILS UNDERLYING FOOTINGS AND FLOOR SLAB AND ALL UNCONTROLLED FILL AS SHOWN ON SHEET S012 OF THE ROUGH-GRADING PACKAGE.
     - b. SCARIFY ALL EXPOSED SUBGRADE SOILS TO A DEPTH OF 9 INCHES, MOISTEN TO NEAR OPTIMUM MOISTURE CONTENT AND COMPACT TO



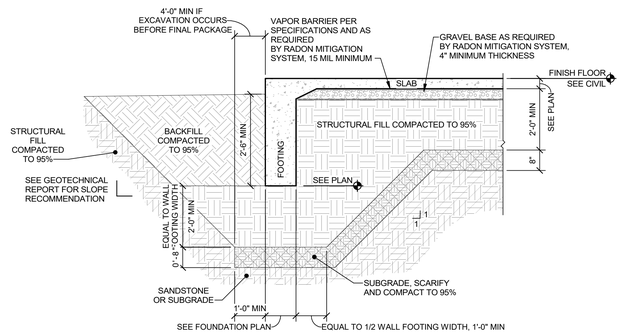
E1 OVEREXCAVATION PLAN - 1BD/1BA DUPLEX
NOT TO SCALE



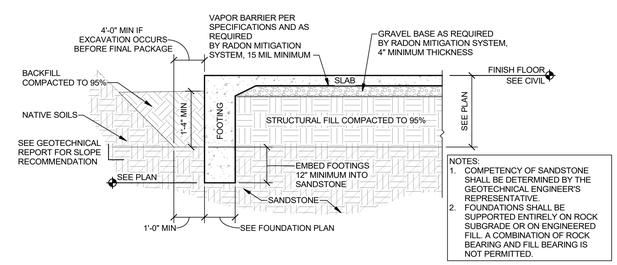
C1 OVEREXCAVATION PLAN - 2BD/1BA DUPLEX
NOT TO SCALE



A1 OVEREXCAVATION PLAN - 3BD/2BA SINGLE FAMILY
NOT TO SCALE



B4 TYP OVER-EXCAVATION DETAIL AT TURN-DOWN FOOTING
NOT TO SCALE



A4 ALTERNATE OVER-EXCAVATION IF SANDSTONE IS WITHIN 3 FEET OF FINISH GRADE ELEVATIONS
NOT TO SCALE

GENERAL SHEET NOTES

A. REFERENCE FINISHED FLOOR ELEVATION = 100'-0" UNO, SEE CIVIL FOR MSLE.
B. SEE PLAN DIMENSIONS FOR EXTENT OF OVER-EXCAVATION.
C. SEE S001 FOR ADDITIONAL FOUNDATION INFORMATION.
D. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF THE COMPACTED SUBGRADE.
E. TYPICAL BOTTOM OF FOOTING ELEVATION IS 97'-0". SEE FOUNDATION PACKAGE FOR FINAL ELEVATIONS.

OVER-EXCAVATION LEGEND

INDICATES EXTENTS OF OVER-EXCAVATION.

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

EXP. 12/31/2021

PROJECT

K-8 Academics
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RW, gdb
REVIEWED BY	CH, EL
DATE	09/15/2020
PROJECT NO	20-7002.005

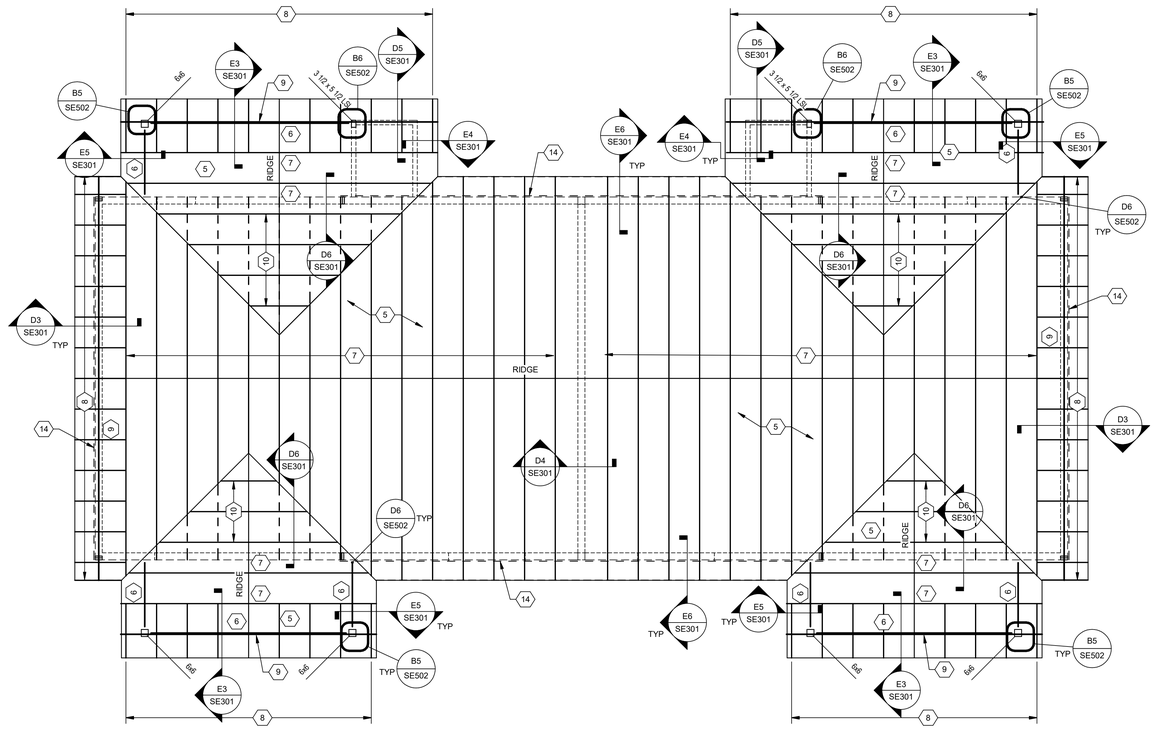
DRAWING NAME

OVEREXCAVATION PLANS AND DETAILS - TEACHERAGES

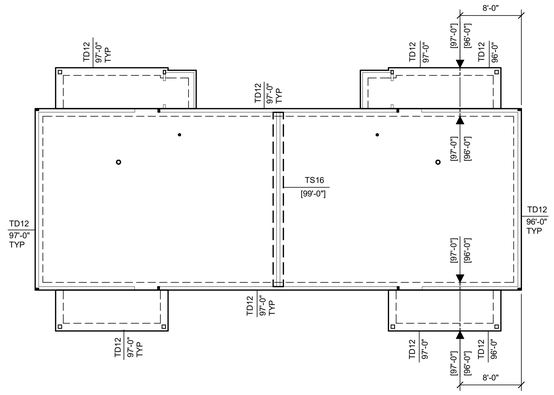
SHEET NO

S013

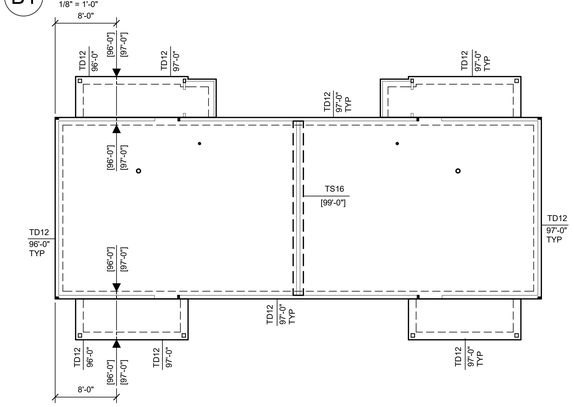
9/15/2020 1:25:54 PM



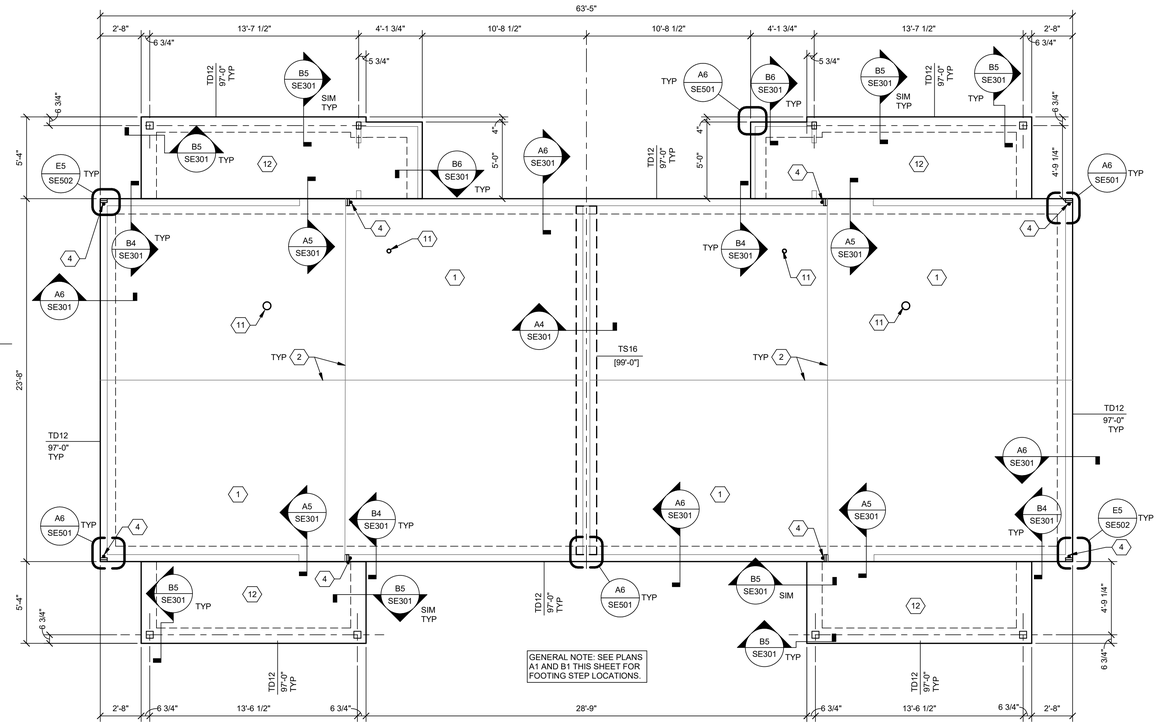
C3 ROOF FRAMING PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"



B1 FOOTING STEP PLAN - UNITS 1, 2, 26, 27, 28 & 29
1/8" = 1'-0"



A1 FOOTING STEP PLAN - UNITS 22, 23, 24 & 25
1/8" = 1'-0"



A3 FOUNDATION PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"

GENERAL SHEET NOTES

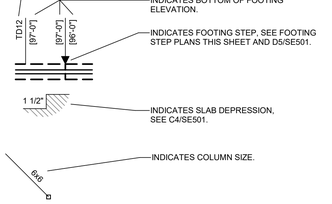
A. REFERENCE FINISHED FLOOR ELEVATION = 100'-0" UNO, SEE CIVIL FOR MSLE.
B. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
C. SEE SHEETS SE301 THROUGH SE502 FOR FOUNDATION AND FRAMING SECTIONS, DETAILS AND SCHEDULES.
D. DIMENSIONS ARE TO FACE OF CONCRETE TURNED-DOWN EDGE UNLESS SHOWN OTHERWISE.
E. TOP OF SLAB SHALL BE 6" MINIMUM ABOVE EXTERIOR FINISH GRADE. SEE CIVIL DRAWINGS FOR ACTUAL FINISH GRADE ELEVATIONS.
F. FOR LAP SPLICE AND EMBEDMENT SCHEDULE, SEE E6/SE501.
G. SEE ARCHITECTURAL FOR EXACT DIMENSIONS AND LOCATIONS OF STEPS AND DEPRESSIONS IN INTERIOR SLAB.
H. REFER TO ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF STUD WALL OPENINGS. SEE A5 AND A6/SE502 FOR LINTEL FRAMING AND SCHEDULE.
I. TRUSSES ARE SPACED @ 24" OC UNLESS OTHERWISE NOTED ON PLANS.
J. SEE E6/SE502 FOR FRAMING REQUIRED AT OPENINGS IN ROOF DECK.

SHEET KEYNOTES

NOTE: NOT ALL KEYED NOTES APPEAR ON THIS SHEET.

1. 4" CONCRETE SLAB-ON-GRADE WITH #4 @ 16" OC EACH WAY, SEE D6/SE501.
2. SLAB CONTROL JOINT, SEE D6/SE501.
3. (2) #4 x 5'-0" AT RE-ENTRANT CORNERS, SEE D4/SE501.
4. DOUBLE 2x6 WITH SIMPSON DTT2Z HOLDOWN AND 1/2" DIAMETER x 4" MINIMUM EMBEDMENT SCREW ANCHOR.
5. 15/32" APA-RATED SHEATHING, 32/16, EXPOSURE ONE. ATTACH TO SUPPORTING FRAMING USING 8d FACENAIL @ 6" OC AT PANEL EDGES AND "EN" LOCATIONS; @ 12" OC ("FN") AT INTERMEDIATE SUPPORT FRAMING. PROVIDE 2x BLOCKING AT PANEL EDGES WHERE SLOPE OF SHEATHING CHANGES DIRECTION.
6. 6x10 BEAM.
7. PREFABRICATED LUMBER ROOF TRUSSES AT 24" OC.
8. 2x6 OUTRIGGERS @ 24" OC.
9. PREFABRICATED GABLE END TRUSS. PROVIDE BRACING @ 48" OC AS SHOWN.
10. PREFABRICATED LUMBER VALLEY SETS @ 24" OC.
11. SLAB PENETRATION. SEE ARCHITECTURAL AND MEP DRAWINGS. SEE DETAIL C5/AE501 FOR RADON PIT DETAIL.
12. 4" THICK CONCRETE SLAB WITH WWF6x6-W2.1xW2.1.
13. PREFABRICATED LUMBER TRUSS DESIGNED TO CLEAR-SPAN, WITH VERTICAL FRAMING MEMBERS @ 16" OC. PROVIDE DOUBLE TOP CHORD AND/OR DROPPED TOP CHORD AS REQUIRED.
14. SIMPSON CS20 COILED STRAP WITH ALL NAIL HOLES FILLED - TYPICAL ABOVE AND BELOW OPENINGS FOR FULL LENGTH OF WALL. PROVIDE 2x BLOCKING BEHIND STRAPS FOR THEIR FULL LENGTH.

LEGEND



KEYPLAN

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL
32665
CHARLES R. HANSON
12/10/2020
Signed
REGISTERED ARCHITECT
ARIZONA, U.S.A.
EXP. 12/31/2021

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

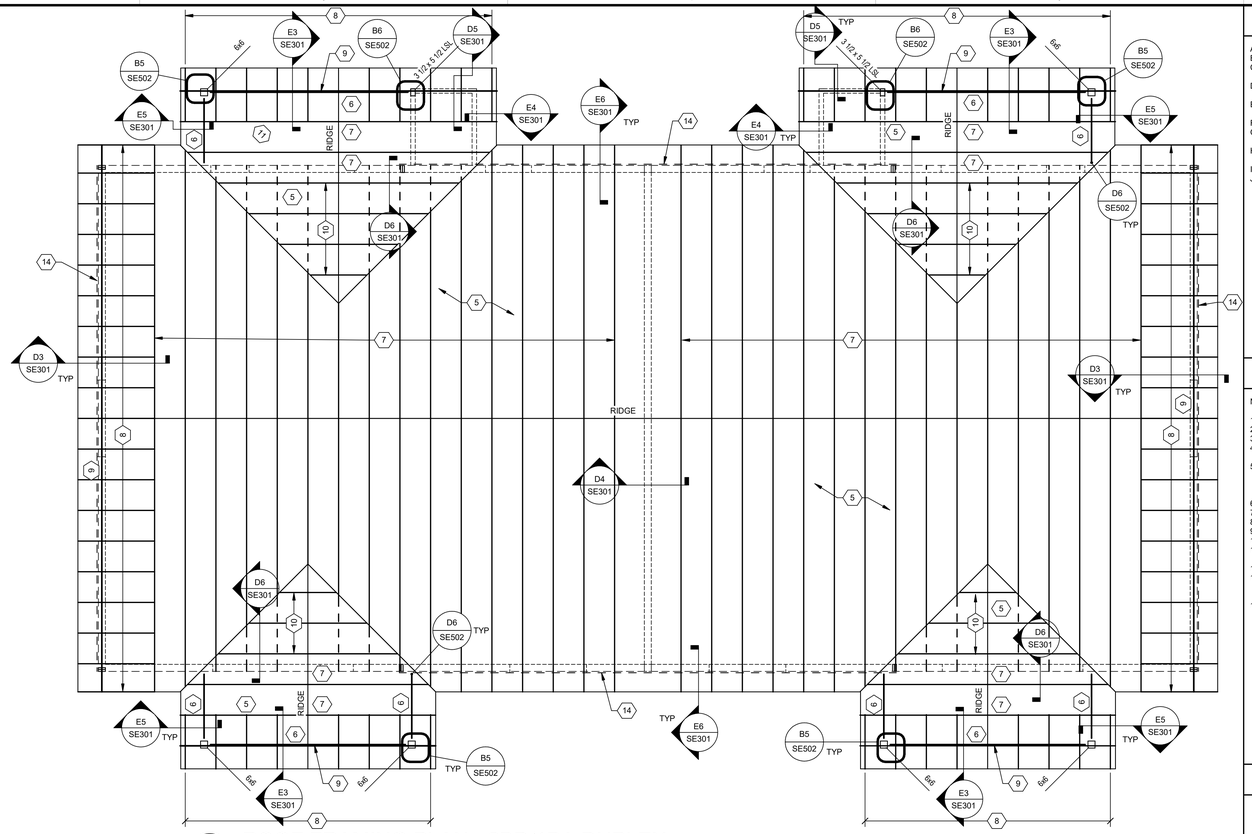
REVISIONS

DRAWN BY	RW, gdb
REVIEWED BY	CH, EL
DATE	12/08/2020
PROJECT NO	20-7002.005

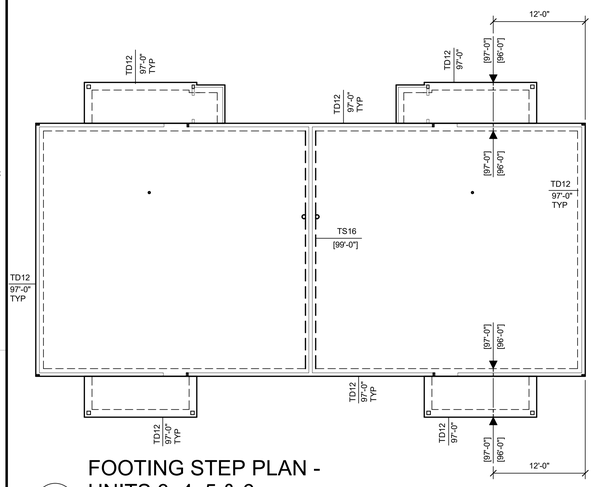
DRAWING NAME
1BD/1BA DUPLEX - FOUNDATION AND ROOF FRAMING PLANS

SHEET NO
SE101

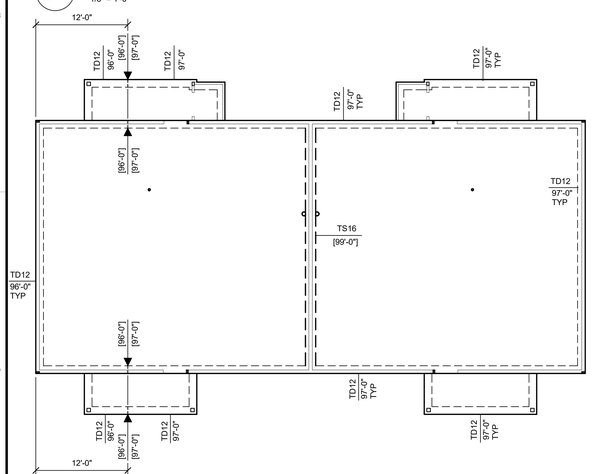
12/8/2020 11:20:00 AM



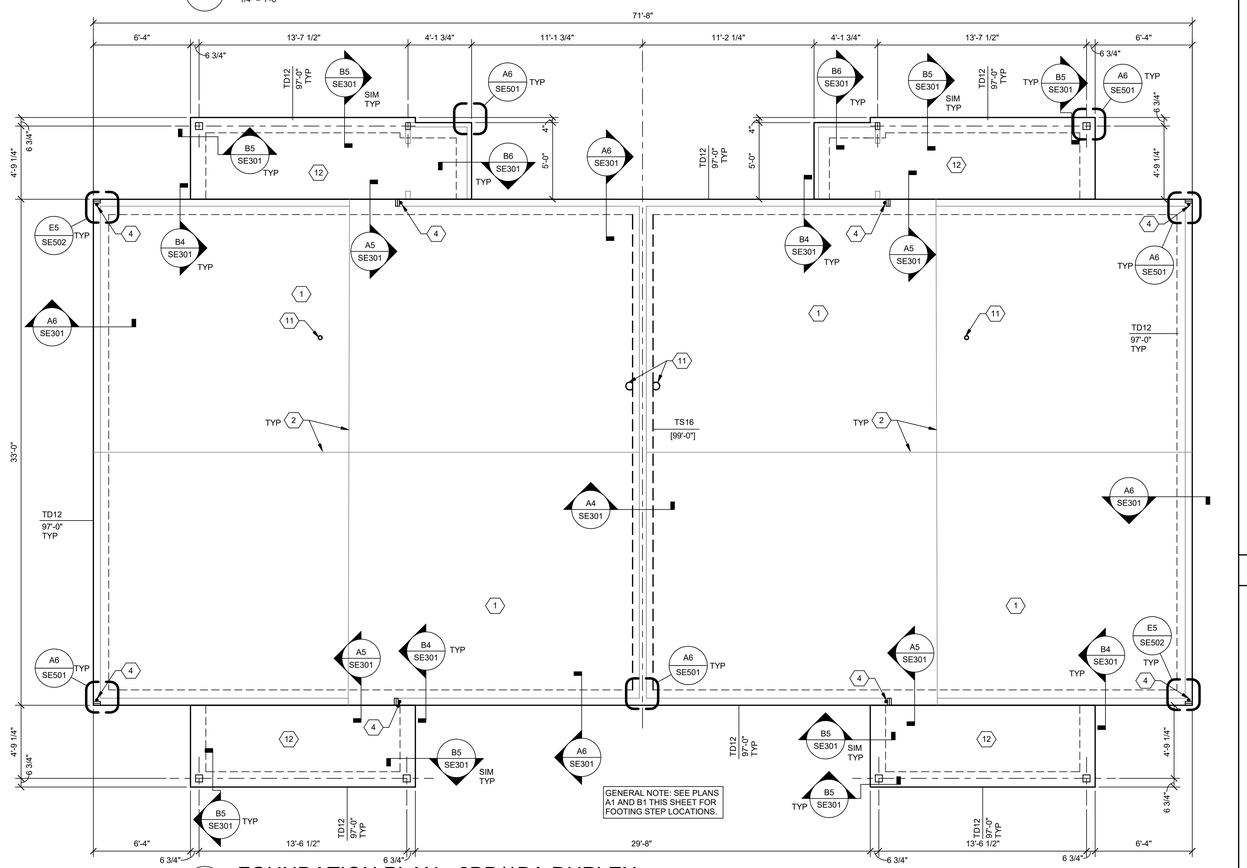
C3 ROOF FRAMING PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"



B1 FOOTING STEP PLAN - UNITS 3, 4, 5 & 6
1/8" = 1'-0"



A1 FOOTING STEP PLAN - UNITS 16, 17, 18, 19, 20 & 21
1/8" = 1'-0"



A3 FOUNDATION PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"

GENERAL SHEET NOTES

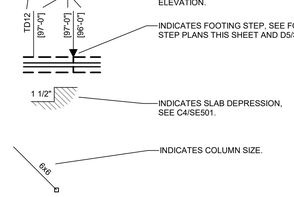
A. REFERENCE FINISHED FLOOR ELEVATION = 100'-0" UNO, SEE CIVIL FOR MSLE.
B. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
C. SEE SHEETS SE301 THROUGH SE502 FOR FOUNDATION AND FRAMING SECTIONS, DETAILS AND SCHEDULES.
D. DIMENSIONS ARE TO FACE OF CONCRETE TURNED-DOWN EDGE UNLESS SHOWN OTHERWISE.
E. TOP OF SLAB SHALL BE 6" MINIMUM ABOVE EXTERIOR FINISH GRADE. SEE CIVIL DRAWINGS FOR ACTUAL FINISH GRADE ELEVATIONS.
F. FOR LAP SPLICE AND EMBEDMENT SCHEDULE, SEE E6/SE501.
G. SEE ARCHITECTURAL FOR EXACT DIMENSIONS AND LOCATIONS OF STEPS AND DEPRESSIONS IN INTERIOR SLAB.
H. REFER TO ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF STUD WALL OPENINGS. SEE A5 AND A6/SE502 FOR LINTEL FRAMING AND SCHEDULE.
I. TRUSSES ARE SPACED @ 24" OC UNLESS OTHERWISE NOTED ON PLANS.
J. SEE E6/SE502 FOR FRAMING REQUIRED AT OPENINGS IN ROOF DECK.

SHEET KEYNOTES

NOTE: NOT ALL KEYED NOTES APPEAR ON THIS SHEET.

1. 4" CONCRETE SLAB-ON-GRADE WITH #4 @ 16" OC EACH WAY, SEE D6/SE501.
2. SLAB CONTROL JOINT, SEE D6/SE501.
3. (2) #4 x 5'-0" AT RE-ENTRANT CORNERS, SEE D4/SE501.
4. DOUBLE 2x6 WITH SIMPSON DTT2Z HOLDOWN AND 1/2" DIAMETER x 4" MINIMUM EMBEDMENT SCREW ANCHOR.
5. 15/32" APA-RATED SHEATHING, 32/16, EXPOSURE ONE. ATTACH TO SUPPORTING FRAMING USING 8d FACENAIL @ 6" OC AT PANEL EDGES AND "EN" LOCATIONS; @ 12" OC ("FN") AT INTERMEDIATE SUPPORT FRAMING. PROVIDE 2x BLOCKING AT PANEL EDGES WHERE SLOPE OF SHEATHING CHANGES DIRECTION.
6. 6x10 BEAM.
7. PREFABRICATED LUMBER ROOF TRUSSES AT 24" OC.
8. 2x6 OUTRIGGERS @ 24" OC.
9. PREFABRICATED GABLE END TRUSS. PROVIDE BRACING @ 48" OC AS SHOWN.
10. PREFABRICATED LUMBER VALLEY SETS @ 24" OC.
11. SLAB PENETRATION. SEE ARCHITECTURAL AND MEP DRAWINGS. SEE DETAIL C5/AE501 FOR RADON PIT DETAIL.
12. 4" THICK CONCRETE SLAB WITH WWF6x6-W2.1xW2.1.
13. PREFABRICATED LUMBER TRUSS DESIGNED TO CLEAR-SPAN, WITH VERTICAL FRAMING MEMBERS @ 16" OC. PROVIDE DOUBLE TOP CHORD AND/OR DROPPED TOP CHORD AS REQUIRED.
14. SIMPSON CS20 COILED STRAP WITH ALL NAIL HOLES FILLED - TYPICAL ABOVE AND BELOW OPENINGS FOR FULL LENGTH OF WALL. PROVIDE 2x BLOCKING BEHIND STRAPS FOR THEIR FULL LENGTH.

LEGEND



KEYPLAN

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL
REGISTERED ARCHITECT
32665
CHARLES R. HANSON
12/10/2020
ARIZONA U.S.A.
EXP. 12/31/2021

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RW
REVIEWED BY	CH, EL
DATE	12/08/2020
PROJECT NO	20-7002.005

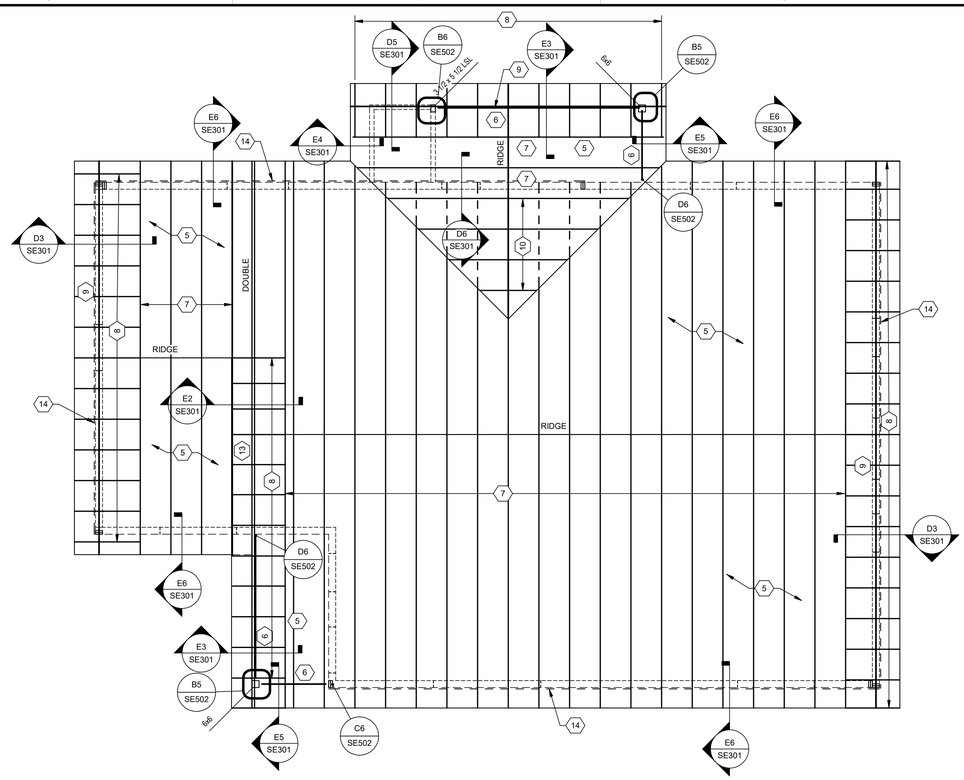
DRAWING NAME

2BD/1BA DUPLEX - FOUNDATION AND ROOF FRAMING PLANS

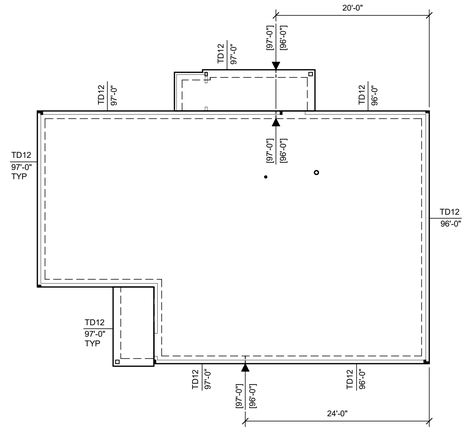
SHEET NO

SE102

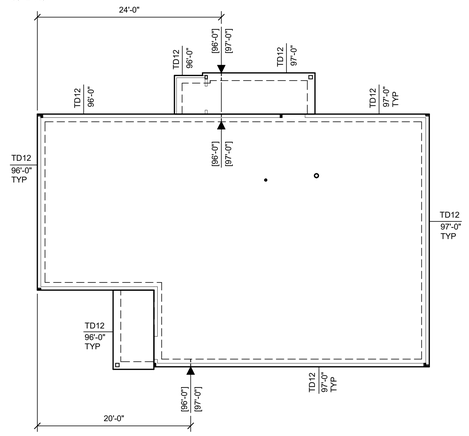
12/8/2020 11:20:03 AM



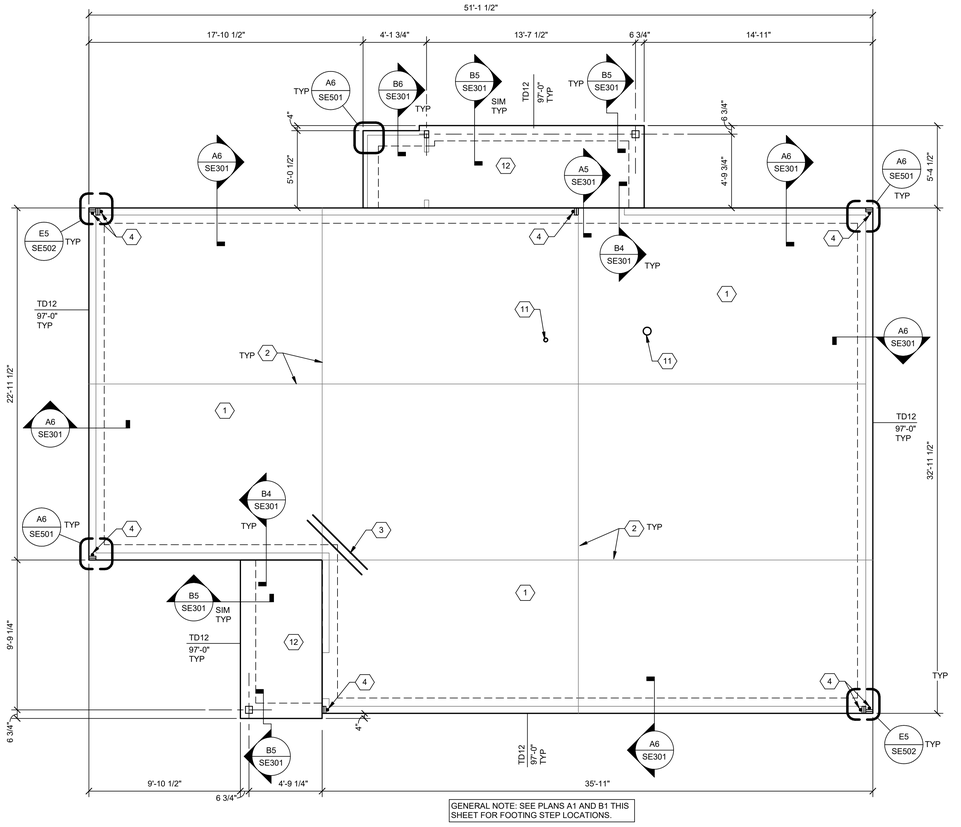
C3 ROOF FRAMING PLAN - 3BD/2BA SINGLE FAMILY
1/4" = 1'-0"



B1 FOOTING STEP PLAN - UNITS 7, 8 & 9
1/8" = 1'-0"



A1 FOOTING STEP PLAN - UNITS 12, 13, 14 & 15
1/8" = 1'-0"



A3 FOUNDATION PLAN - 3BD/2BA SINGLE FAMILY
1/4" = 1'-0"

GENERAL SHEET NOTES

A. REFERENCE FINISHED FLOOR ELEVATION = 100'-0" UNO, SEE CIVIL FOR MSLE.
B. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
C. SEE SHEETS SE301 THROUGH SE502 FOR FOUNDATION AND FRAMING SECTIONS, DETAILS AND SCHEDULES.
D. DIMENSIONS ARE TO FACE OF CONCRETE TURNED-DOWN EDGE UNLESS SHOWN OTHERWISE.
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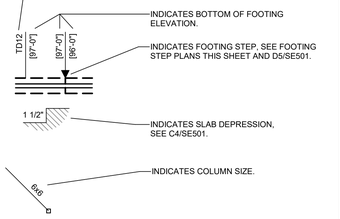
G. SEE ARCHITECTURAL FOR EXACT DIMENSIONS AND LOCATIONS OF STEPS AND DEPRESSIONS IN INTERIOR SLAB.
H. REFER TO ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF STUD WALL OPENINGS. SEE A5 AND A6/SE502 FOR LINTEL FRAMING AND SCHEDULE.
I. TRUSSES ARE SPACED @ 24" OC UNLESS OTHERWISE NOTED ON PLANS.
J. SEE E6/SE502 FOR FRAMING REQUIRED AT OPENINGS IN ROOF DECK.

SHEET KEYNOTES

NOTE: NOT ALL KEYED NOTES APPEAR ON THIS SHEET.

1. 4" CONCRETE SLAB-ON-GRADE WITH #4 @ 16" OC EACH WAY, SEE D6/SE501.
2. SLAB CONTROL JOINT, SEE D6/SE501.
3. (2) #4 x 5'-0" AT RE-ENTRANT CORNERS, SEE D4/SE501.
4. DOUBLE 2x6 WITH SIMPSON DTT2Z HOLDOWN AND 1/2" DIAMETER x 4" MINIMUM EMBEDMENT SCREW ANCHOR.
5. 15/32" APA-RATED SHEATHING, 32/16, EXPOSURE ONE. ATTACH TO SUPPORTING FRAMING USING 8d FACENAIL @ 6" OC AT PANEL EDGES AND "EN" LOCATIONS; @ 12" OC ("FN") AT INTERMEDIATE SUPPORT FRAMING. PROVIDE 2x BLOCKING AT PANEL EDGES WHERE SLOPE OF SHEATHING CHANGES DIRECTION.
6. 6x10 BEAM.
7. PREFABRICATED LUMBER ROOF TRUSSES AT 24" OC.
8. 2x6 OUTRIGGERS @ 24" OC.
9. PREFABRICATED GABLE END TRUSS. PROVIDE BRACING @ 48" OC AS SHOWN.
10. PREFABRICATED LUMBER VALLEY SETS @ 24" OC.
11. SLAB PENETRATION. SEE ARCHITECTURAL AND MEP DRAWINGS. SEE DETAIL C5/AE501 FOR RADON PIT DETAIL.
12. 4" THICK CONCRETE SLAB WITH WWF6x6-W2.1xW2.1.
13. PREFABRICATED LUMBER TRUSS DESIGNED TO CLEAR-SPAN, WITH VERTICAL FRAMING MEMBERS @ 16" OC. PROVIDE DOUBLE TOP CHORD AND/OR DROPPED TOP CHORD AS REQUIRED.
14. SIMPSON CS20 COILED STRAP WITH ALL NAIL HOLES FILLED - TYPICAL ABOVE AND BELOW OPENINGS FOR FULL LENGTH OF WALL. PROVIDE 2x BLOCKING BEHIND STRAPS FOR THEIR FULL LENGTH.

LEGEND



KEYPLAN

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL
32665
CHARLES R. HANSON
12/10/2020
Registered
ARIZONA U.S.A.
EXP. 12/31/2021

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RW
REVIEWED BY	CH, EL
DATE	12/08/2020
PROJECT NO	20-7002.005

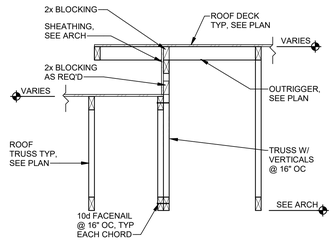
DRAWING NAME

3BD/2BA SINGLE FAMILY - FOUNDATION AND ROOF FRAMING PLANS

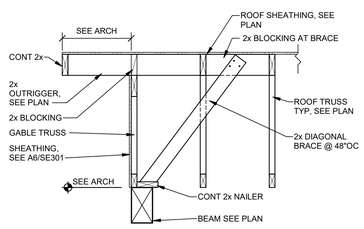
SHEET NO

SE103

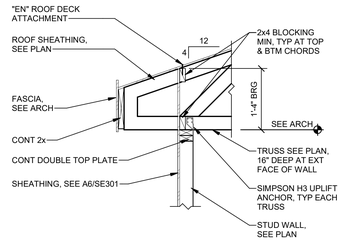
12/8/2020 11:29:05 AM



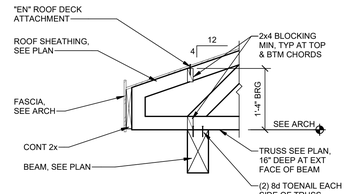
E2 FRAMING SECTION
3/4" = 1'-0"



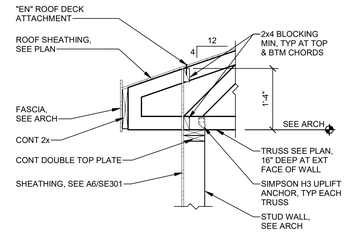
E3 FRAMING SECTION
3/4" = 1'-0"



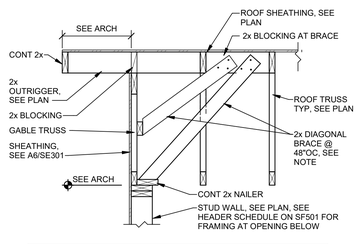
E4 FRAMING SECTION
3/4" = 1'-0"



E5 FRAMING SECTION
3/4" = 1'-0"

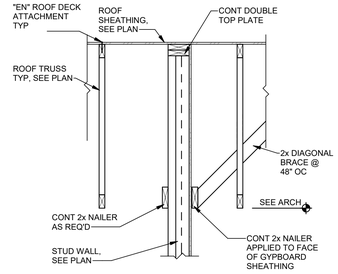


E6 FRAMING SECTION
3/4" = 1'-0"

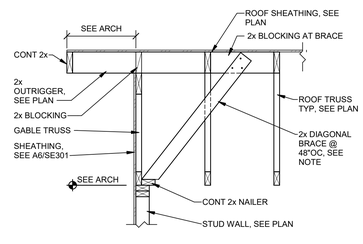


NOTE: AT GABLE TRUSS HEIGHTS GREATER THAN 4'-0" PROVIDE A SECOND LINE OF BRACING AT MID HEIGHT OF GABLE TRUSS AS SHOWN.

D3 FRAMING SECTION
3/4" = 1'-0"

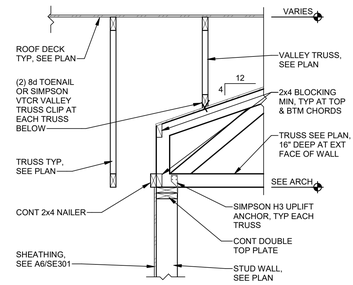


D4 FRAMING SECTION
3/4" = 1'-0"

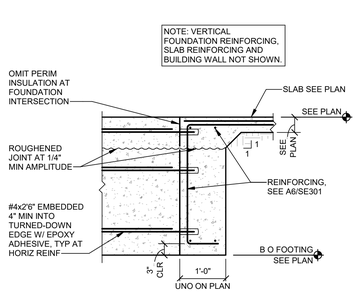


NOTE: AT GABLE TRUSS HEIGHTS GREATER THAN 4'-0" PROVIDE A SECOND LINE OF BRACING AT MID HEIGHT OF GABLE TRUSS PER D3/SE301.

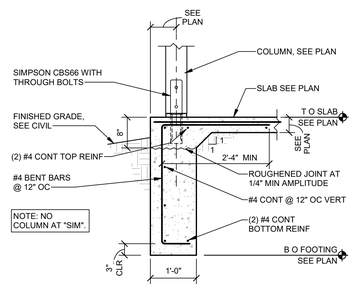
D5 FRAMING SECTION
3/4" = 1'-0"



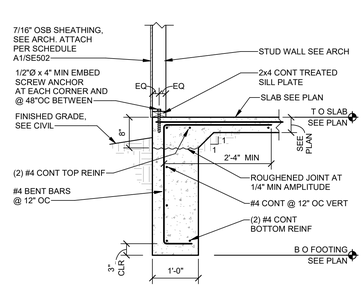
D6 FRAMING SECTION
3/4" = 1'-0"



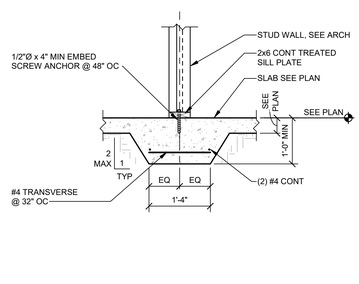
B4 SECTION
3/4" = 1'-0"



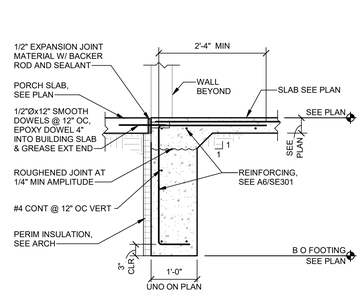
B5 SECTION
3/4" = 1'-0"



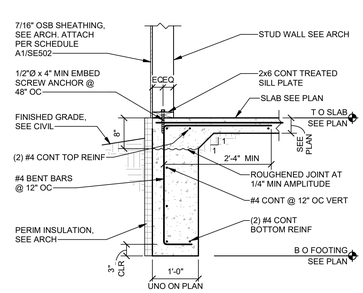
B6 SECTION
3/4" = 1'-0"



A4 SECTION
3/4" = 1'-0"



A5 SECTION
3/4" = 1'-0"



A6 SECTION
3/4" = 1'-0"

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

EXP. 12/31/2021

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community School
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RW
REVIEWED BY	CH, EL
DATE	12/08/2020
PROJECT NO	20-7002.005

DRAWING NAME

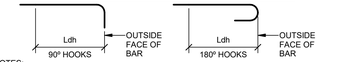
STRUCTURAL SECTIONS

SHEET NO

SE301

12/8/2020 11:29:07 AM

DEVELOPMENT LENGTHS OF STANDARD HOOKS IN TENSION GRADE 60 REINFORCEMENT NORMAL WEIGHT CONCRETE				
BAR SIZE	F'c=3000		F'c=4000	
	Lhb	0.7Lhb	Lhb	0.7Lhb
#3	8	6	7	6
#4	11	8	9	7
#5	14	10	12	8
#6	16	12	14	10
#7	19	13	17	12
#8	22	15	19	13
#9	25	17	21	15
#10	28	19	24	17
#11	31	22	27	19
#14	37	N/A	32	N/A
#18	49	N/A	43	N/A



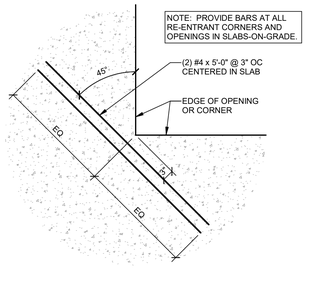
NOTES:
1. Ldh = DEVELOPMENT LENGTH OF STANDARD HOOK (INCHES).
2. Ldh = Lhb UNLESS CONDITIONS OF NOTE 3 ARE SATISFIED.
3. Ldh = 0.7 Lhb FOR #11 BARS AND SMALLER WHEN SIDE COVER (NORMAL TO PLANE OF HOOK) IS NOT LESS THAN 2 1/2 INCHES AND FOR 90° HOOKS, COVER ON BAR EXTENSION BEYOND HOOK IS NOT LESS THAN 2 INCHES.
4. HOOKS ARE NOT CONSIDERED EFFECTIVE FOR DEVELOPING BARS IN COMPRESSION.
5. Ldh SHALL BE MULTIPLIED BY 1.2 FOR EPOXY-COATED HOOKED BARS.

E5 STD HOOK SCHEDULE
3/4" = 1'-0"

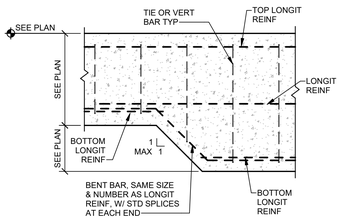
CONCRETE LAP SPLICE SCHEDULE	
BAR SIZE	SPLICE LENGTH
#3	1'-5"
#4	1'-10"
#5	2'-4"
#6	2'-9"
#7	4'-0"
#8	4'-7"
#9	5'-2"
#10	5'-10"
#11	6'-6"

NOTE:
1. SPLICE LENGTHS ARE TYPICAL UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
2. SPLICES SHALL BE STAGGERED AT LEAST 24" AND BARS SHALL BE LAPPED ONLY WHERE INDICATED ON DRAWINGS OR AS SPECIFICALLY PERMITTED BY THE STRUCTURAL ENGINEER.
3. WELDED WIRE FABRIC SHALL LAP A MINIMUM OF 8" AT SPLICES.
4. FOR HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW THE SPLICE: LENGTHS SHALL BE 130% OF THAT SHOWN.
5. WHEN BARS OF DIFFERENT SIZE ARE LAP SPLICED, THE SPLICE LENGTH SHALL BE THE LARGER SPECIFIED SPLICE LENGTH OF THE BARS.

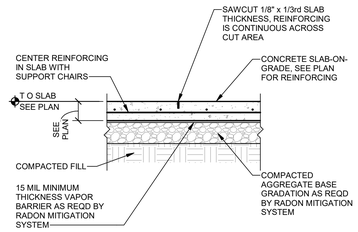
E6 CONCRETE LAP SPLICE SCHEDULE
3/4" = 1'-0"



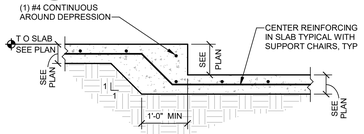
D4 SLAB REINFORCING AT RE-ENTRANT CORNERS
3/4" = 1'-0"



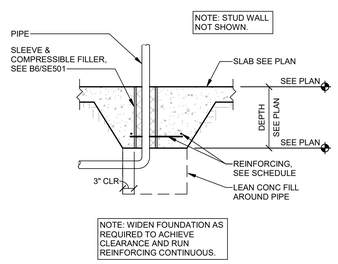
D5 STEP IN TURNED-DOWN EDGE
3/4" = 1'-0"



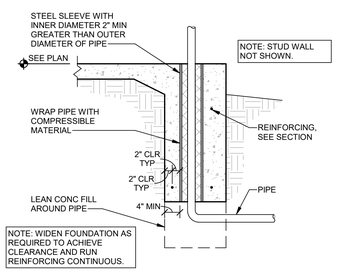
D6 TYPICAL SLAB-ON-GRADE
3/4" = 1'-0"



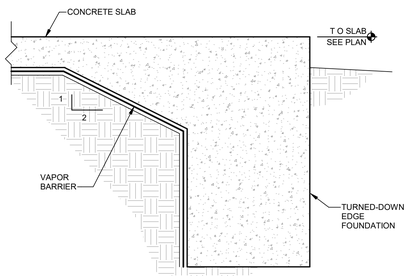
C4 SLAB RECESS
3/4" = 1'-0"



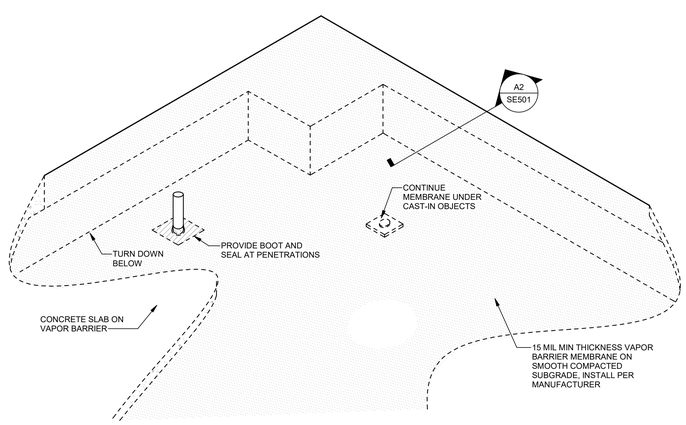
B5 VERTICAL PIPE THROUGH FOUNDATION
3/4" = 1'-0"



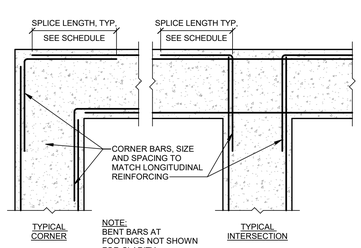
B6 VERTICAL PIPE THROUGH FOUNDATION
3/4" = 1'-0"



A2 VAPOR BARRIER AT TURNED-DOWN EDGE FOUNDATION
1 1/2" = 1'-0"



A3 VAPOR BARRIER ISOMETRIC
1/4" = 1'-0"



A6 TYP CONT FOOTING INTERSECTION REINFORCING
3/4" = 1'-0"

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

EXP. 12/31/2021

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community School
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RW
REVIEWED BY	CH, EL
DATE	12/08/2020
PROJECT NO	20-7002.005

DRAWING NAME

FOUNDATION DETAILS AND SCHEDULES

SHEET NO

SE501

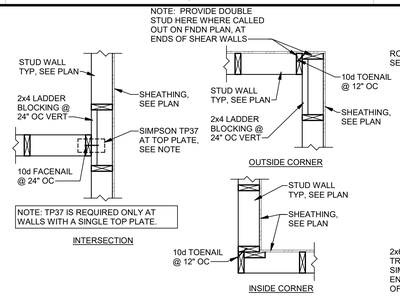
12/8/2020 11:29:09 AM

NAILING SCHEDULE		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
ROOF		
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON; OR 3-10d BOX	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON	EACH END, TOENAIL
	2-16d COMMON	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON @ 6"OC	FACE NAIL
2. CEILING JOISTS TO TOP PLATE	3-8d COMMON; OR 3-10d BOX	EACH JOIST, TOENAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	3-16d COMMON; OR 4-10d BOX	FACE NAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	PER IBC TABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	3-10d COMMON; OR 4-10d BOX	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE	3-10d COMMON; OR 3-16d BOX; OR 4-10d BOX	TOENAIL [c]
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-16d COMMON; OR 3-10d BOX	END NAIL
	3-10d COMMON; OR 3-16d BOX; OR 4-10d BOX	TOENAIL
WALL		
8. STUD TO STUD (NOT AT BRACED WALL OR SHEAR PANELS)	16d COMMON; OR	24" OC FACE NAIL
	10d BOX	16" OC FACE NAIL
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL OR SHEAR PANELS) U.N.O.	16d COMMON; OR	16" OC FACE NAIL
	16d BOX	12" OC FACE NAIL
10. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON; OR	16" OC EACH EDGE, FACE NAIL
	16d BOX	12" OC EACH EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	4-8d COMMON; OR 4-10d BOX	TOENAIL
12. TOP PLATE TO TOP PLATE	16d COMMON; OR	16" OC FACE NAIL
	10d BOX	12" OC FACE NAIL
13. TOP PLATE TO TOP PLATE, AT END JOINTS	8-16d COMMON; OR 12-10d BOX	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL OR SHEAR PANELS)	16d COMMON; OR	16" OC, FACE NAIL
	16d BOX	12" OC, FACE NAIL
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL OR SHEAR PANELS U.N.O.	2-16d COMMON; OR 3-16d BOX	16" OC FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8d COMMON; OR 4-10d BOX, OR	TOENAIL
	2-16d COMMON; OR 3-10d BOX	END NAIL
17. TOP OR BOTTOM PLATE TO STUD	2-16d COMMON; OR 3-10d BOX	END NAIL
18. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON; OR 3-10d BOX	FACE NAIL
19. 1" BRACE TO EACH STUD AND PLATE	2-8d COMMON; OR 2-10d BOX	FACE NAIL
20. 1" x 6" SHEATHING TO EACH BEARING	2-8d COMMON; OR 2-10d BOX	FACE NAIL
21. 1" x 8" AND WIDER SHEATHING TO EACH BEARING	3-8d COMMON; OR 3-10d BOX	FACE NAIL
FLOOR		
22. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8d COMMON; OR 3-10d BOX	TOENAIL
23. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON; OR 10d BOX	6" OC, TOENAIL
24. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON; OR 2-10d BOX	FACE NAIL
25. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON	FACE NAIL
26. 2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d COMMON	EACH BEARING, FACE NAIL
27. BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS U.N.O.	20d COMMON; OR	32" OC, FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	10d BOX	24" OC, FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	AND: 2-20d COMMON; OR 3-10d BOX	ENDS AND AT EACH SPLICE, FACE NAIL
28. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16d COMMON; OR 4-10d BOX	EACH JOIST OR RAFTER, FACE NAIL
29. JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON; OR 4-10d BOX	END NAIL
30. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8d COMMON; OR 2-10d BOX	EACH END, TOENAIL

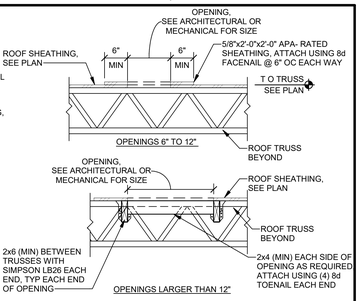
WOOD STRUCTURAL PANELS (WSP) INCLUDING SUBFLOOR, ROOF AND SHEATHING TO FRAMING [a,b]			
		EDGES (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
31. 3/8" - 1/2"	8d COMMON OR DEFORMED (WALL)	6	12
	8d COMMON (SUBFLOOR AND ROOF)	6	12
32. 19/32" - 3/4"	8d COMMON	6	12
33. 7/8" - 1 1/4"	10d COMMON	6	12

a. NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON OR RING-SHANK ONLY.
b. USE THESE ATTACHMENTS UNLESS NOTED OTHERWISE IN THE SHEAR PANEL SCHEDULE, GENERAL STRUCTURAL NOTES, OR ELSEWHERE ON THE DRAWINGS.
c. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.

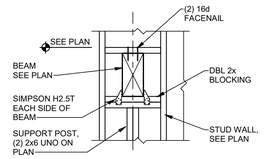
A1 NAILING SCHEDULE
NOT TO SCALE



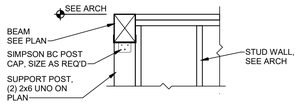
E5 WALL DETAILS - ADVANCED FRAMING
3/4" = 1'-0"



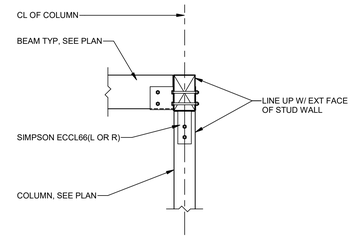
E6 TYPICAL OPENING DETAIL
3/4" = 1'-0"



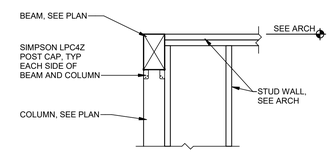
D6 BEAM PERPENDICULAR TO WALL
3/4" = 1'-0"



C6 BEAM AT WALL CORNER
3/4" = 1'-0"



B5 BEAM BEARING ON COLUMN
3/4" = 1'-0"



B6 BEAM BEARING ON COLUMN
3/4" = 1'-0"

NON-LOAD BEARING HEADER SCHEDULE			
ROUGH OPENING	HEADER MATERIAL	END BEARING	
		JACK STUD	FULL HEIGHT
UP TO 4'-0"	2x LAID FLAT	1	---
UP TO 6'-0"	(2)-2x6	1	1
UP TO 8'-0"	(2)-2x8	1	1
---	---	---	---

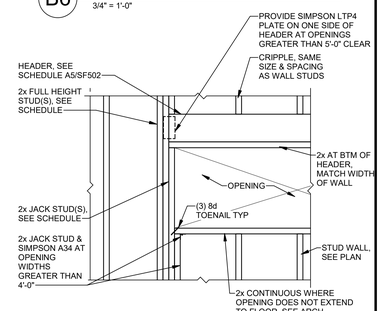
1. NAIL PLIES TOGETHER PER NAILING SCHEDULE A1/SE502

A4 HEADER SCHEDULE - NON-LOAD BEARING WALLS
3/4" = 1'-0"

LOAD BEARING HEADER SCHEDULE			
ROUGH OPENING	HEADER MATERIAL	END BEARING	
		JACK STUD	FULL HEIGHT
UP TO 4'-0"	(2) 2x6	1	1
UP TO 6'-0"	(2) 2x8	1	2
UP TO 8'-0"	(3) 2x12	2	2
---	---	---	---

NOTES:
1. NAIL PLIES TOGETHER PER NAILING SCHEDULE A1/SE502.
2. SEE A6/SE502 FOR BEARING DETAIL.

A5 HEADER SCHEDULE - LOAD BEARING WALLS
3/4" = 1'-0"



A6 HEADER BEARING DETAIL
3/4" = 1'-0"

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RW
REVIEWED BY	CH, EL
DATE	12/08/2020
PROJECT NO	20-7002.005

DRAWING NAME

FRAMING DETAILS AND SCHEDULES

SHEET NO

SE502

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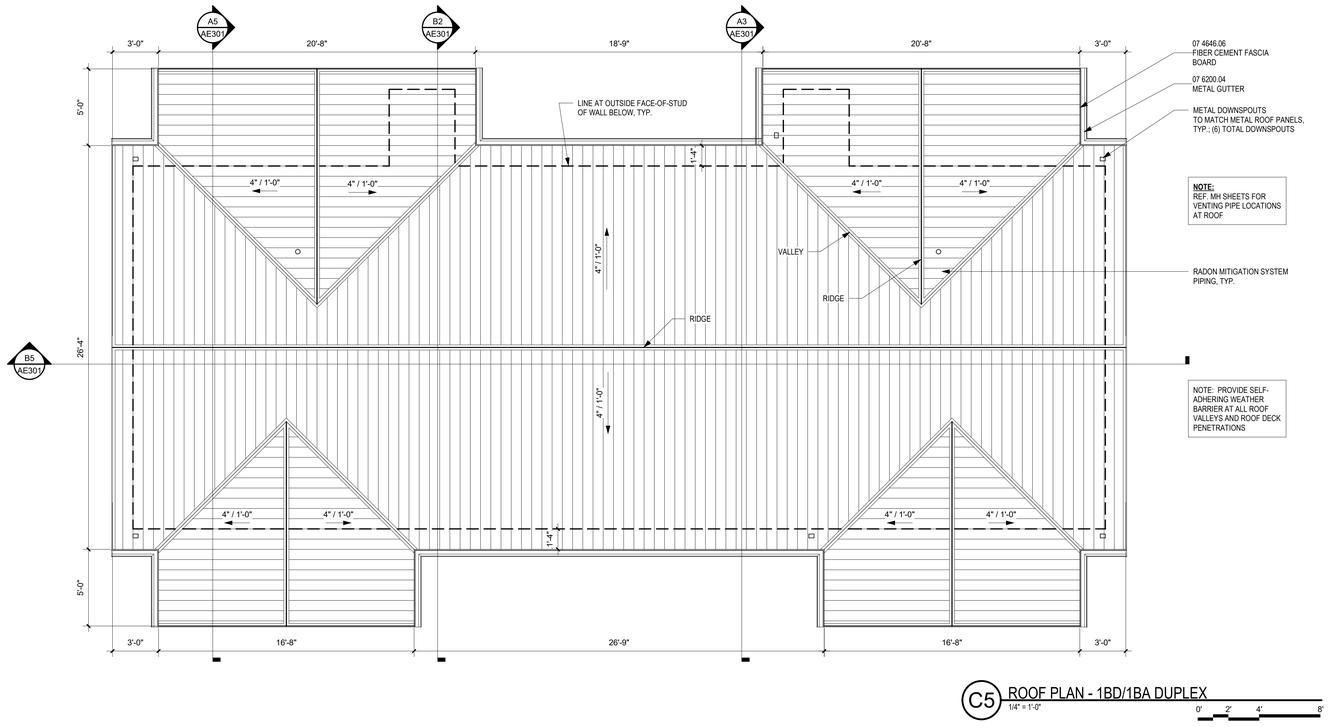
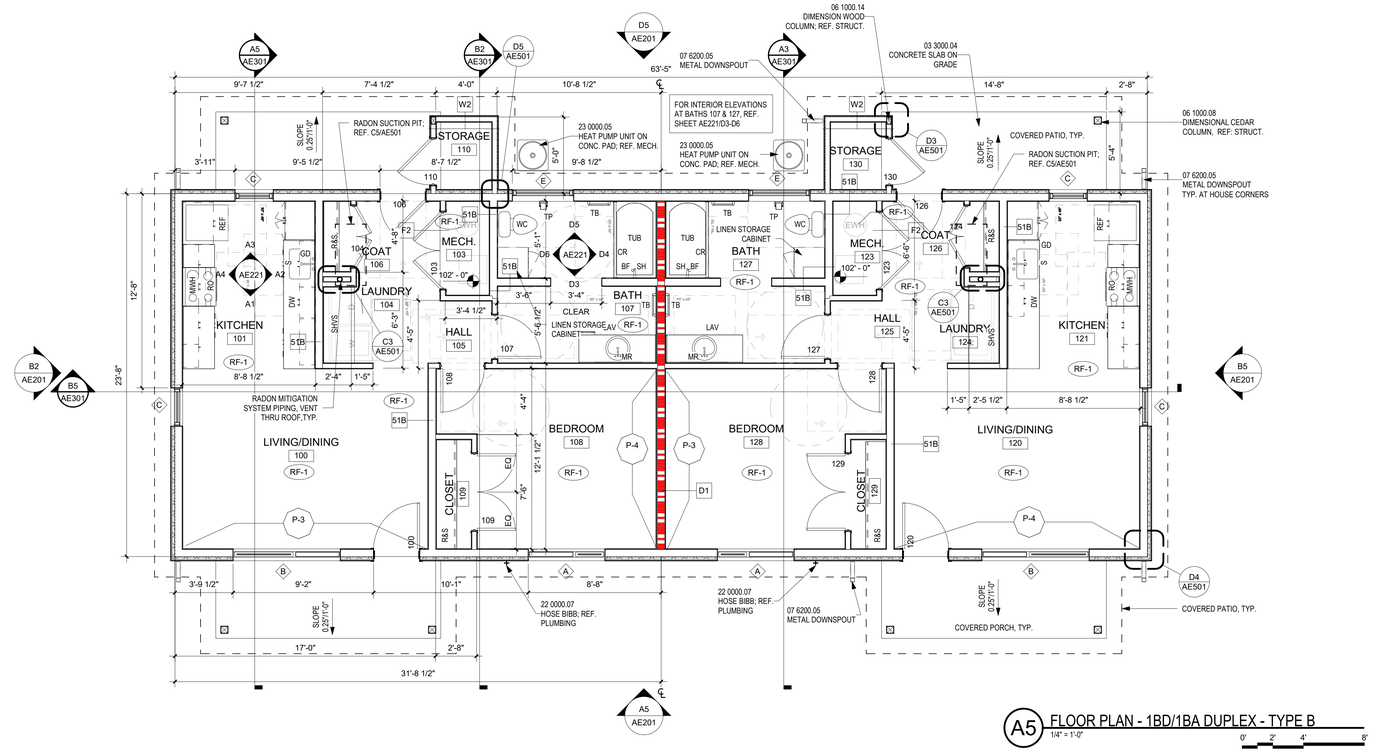


C5 ROOF PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 FLOOR PLAN - 1BD/1BA DUPLEX - TYPE B
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. REFEENCE SITE PLAN FOR LOCATIONS OF ADA-ACCESSIBLE HOUSING UNITS FOR EACH UNIT TYPE.
B. REFERENCE SITE PLAN FOR LOCATIONS OF HOUSING UNITS WITH PROVISIONS FOR THE HEARING IMPAIRED.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. PROVIDE BLOCKING AT ALL TOILET AND SHOWER LOCATIONS FOR SECURING GRAB BARS.
E. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
F. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
G. AT EXTERIOR STORAGE ROOMS WHERE WALL TYPE **51B** IS CALLED OUT, PROVIDE BATT INSULATION TO MATCH ADJACENT/ADJOINING EXTERIOR WALLS, TYP.
H. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. DISHWASHER SHOWN FOR LOCATION AND REFERENCE ONLY; NOT IN CONTRACT.
M. CONTRACTOR TO SUPPLY AND INSTALL RANGE AND REFRIGERATOR ONLY. ALL OTHER APPLIANCES BY OWNER AND INSTALLED BY CONTRACTOR.
N. PROVIDE GAS LINE STUB OUT FOR RANGE AT ALL UNITS, TYP. REFER TO MECHANICAL.
O. ALL INTERIOR FINISHES FLAME SPREAD REQUIREMENTS SHALL BE IN COMPLIANCE WITH NFPA 5000 (2018), CHAPTER 10.2.
P. PAINT ALL GYP. BOARD CEILINGS IN UNITS P-2, UNLESS NOTED OTHERWISE.
Q. PAINT ALL GYP BOARD WALLS IN UNITS P-1, UNLESS NOTED OTHERWISE.
R. ALL FINISH TRANSITIONS THAT OCCUR AT DOORWAYS TRANSITION MATERIAL AT CENTERLINE OF DOOR WHEN CLOSED
S. ALL FLOORING TO RUN CONTINOUSLY UNDER APPLIANCES AND AT OPEN CABINET CONDITIONS
T. ALL GYP BOARD WALLS TO RECEIVE WB-1, UNLESS NOTED OTHERWISE.
U. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
V. RADON MITIGATION SYSTEM UNDERSLAB ASSEMBLY WITH GRAVEL PITS AND 6"DIA. VERTICAL VENT PIPING BY CONTRACTOR, OVER 4" GRAVEL BASE. REF. STRUCTURAL FOR SLAB-ON-GRADE DETAILS.
W. COORDINATE RADON PIPING LOCATIONS PRIOR TO PLACING SLAB. PROVIDE GFCI IN ATTIC FOR FUTURE ACTIVE SYSTEM.
X. AT MECHANICAL ROOM, PROVIDE ELEVATED BASE @ T/BASE = 2'-0" A.F.F. FOR WATER HEATER AND FURNACE CONSISTING OF 2x6 FRAMING (AT 16" O.C.) & PLYWOOD DECKING.
Y. FOR MAINTENANCE, PROVIDE ACCESS PANEL TO FLOOR DRAIN/SINK AT MECH. ROOM.

REFERENCE KEYNOTES

03 3000.04	CONCRETE SLAB ON GRADE
06 1000.08	DIMENSIONAL CEDAR COLUMN, REF: STRUCT.
06 1000.14	DIMENSION WOOD COLUMN; REF. STRUCT.
07 4646.06	FIBER CEMENT FASCIA BOARD
07 6200.04	METAL GUTTER
07 6200.05	METAL DOWNSPOUT
22 0000.07	HOSE BIBB; REF. PLUMBING
23 0000.05	HEAT PUMP UNIT ON CONC. PAD; REF. MECH.

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

GENERAL LEGEND

CR	SHOWER CURTAIN ROD
GBXX	GRAB BAR PER ANSI A117.1 XX INDICATES WIDTH
MR	MIRROR, FULL WIDTH OF VANITY COUNTERTOP
R&S	ROD & SHELF - WIRE CLOSET SHELVING
RH	ROBE HOOK
SHVS	SHELF - WIRE CLOSET SHELVING
TB	TOWEL BAR
TP	TOILET PAPER DISPENSER
WS	WORK SURFACE, 30" WIDE MINIMUM CLEARANCE

APPLIANCE LEGEND

ADA DW	ADA DISHWASHER
DW	DISHWASHER
ADA REF	ADA REFRIGERATOR
REF	REFRIGERATOR
ADA RO	ADA ELECTRIC RANGE/ OVEN
RO	RANGE/ OVEN
W	WASHER
D	DRYER
MIC	MICROWAVE (ADA) ON COUNTERTOP
RH	ADA EXHAUST HOOD, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
WH	WATER HEATER
F	FURNACE

FIXTURE LEGEND

NOTE: REFER TO PLUMBING FIXTURE SCHEDULE FOR MANUFACTURER AND MODEL NUMBERS

BF	BATH FAUCET	TUB	TUB & SHOWER, VERIFY DIMENSION
GD	GARBAGE DISPOSAL, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS	S	PER UNIT
		ADA S	SINK
FD	FLOOR DRAIN	WC	ADA SINK, COORDINATE PLUMBING WITH APRON CASEWORK
LAV	LAVATORY	SH	WATER CLOSET
ADA LAV	ADA LAVATORY, COORDINATE PLUMBING WITH APRON CASEWORK	SHWR	SHOWER HEAD
RS	ROLL-IN SHOWER WITH TILE SURROUND	SS	SHOWER
			SHOWER SEAT

LEGEND

XX-X — FLOOR MATERIAL; REFER TO FINISH LEGEND
FLOORING MATERIAL TRANSITION, TRANSITION STRIP REQUIRED, REF. AF621
FLOORING PATTERN TRANSITION, NO TRANSITION STRIP REQUIRED
XX-X — SPECIALTY WALL FINISH, REFER TO FINISH LEGEND
FLOORING DIRECTION
5'-0" DIAMETER TURNING RADIUS
ACCESSIBILITY CLEAR SPACE AS INDICATED

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT — CERTIFICATE NO. 63277 — SANJAY S. KADU — 12/31/2022 — ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

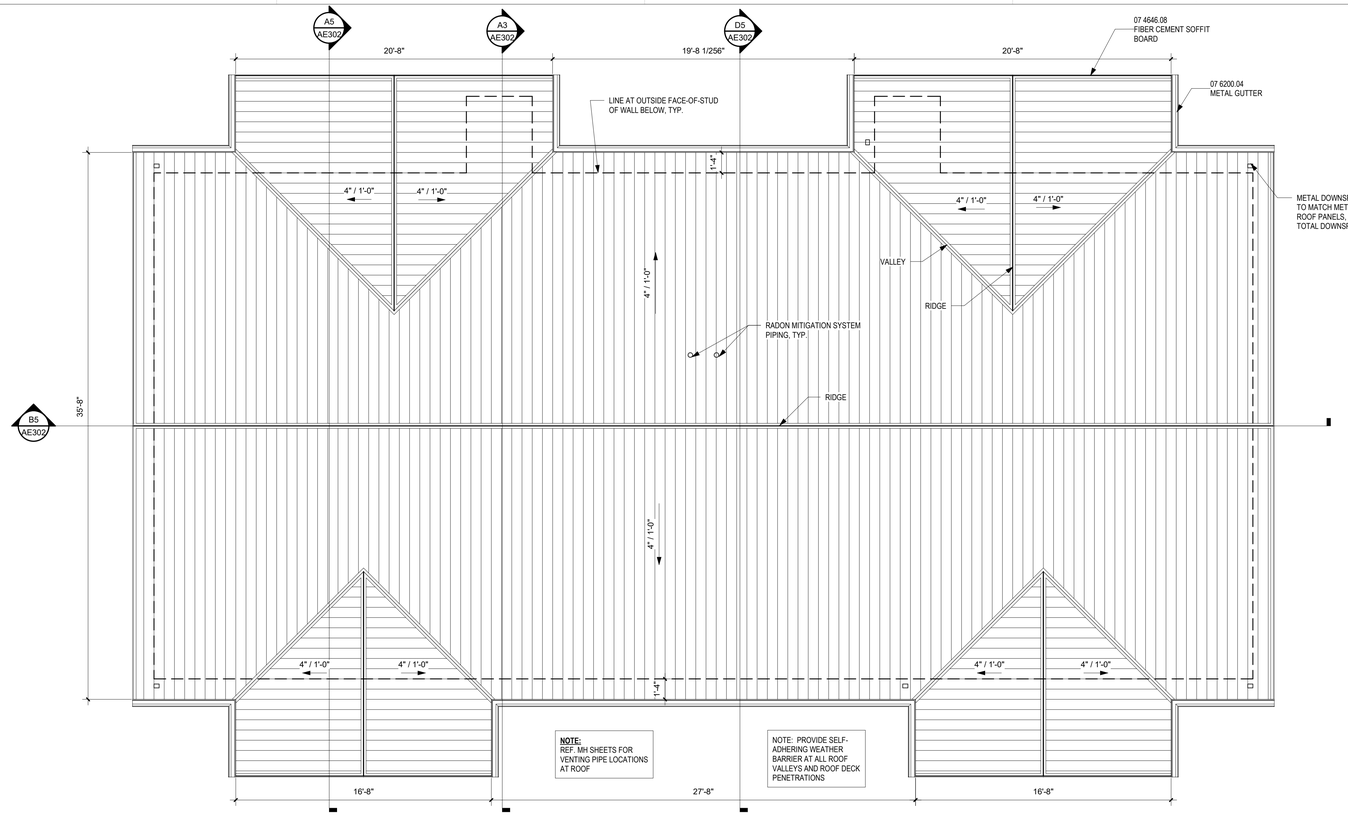
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

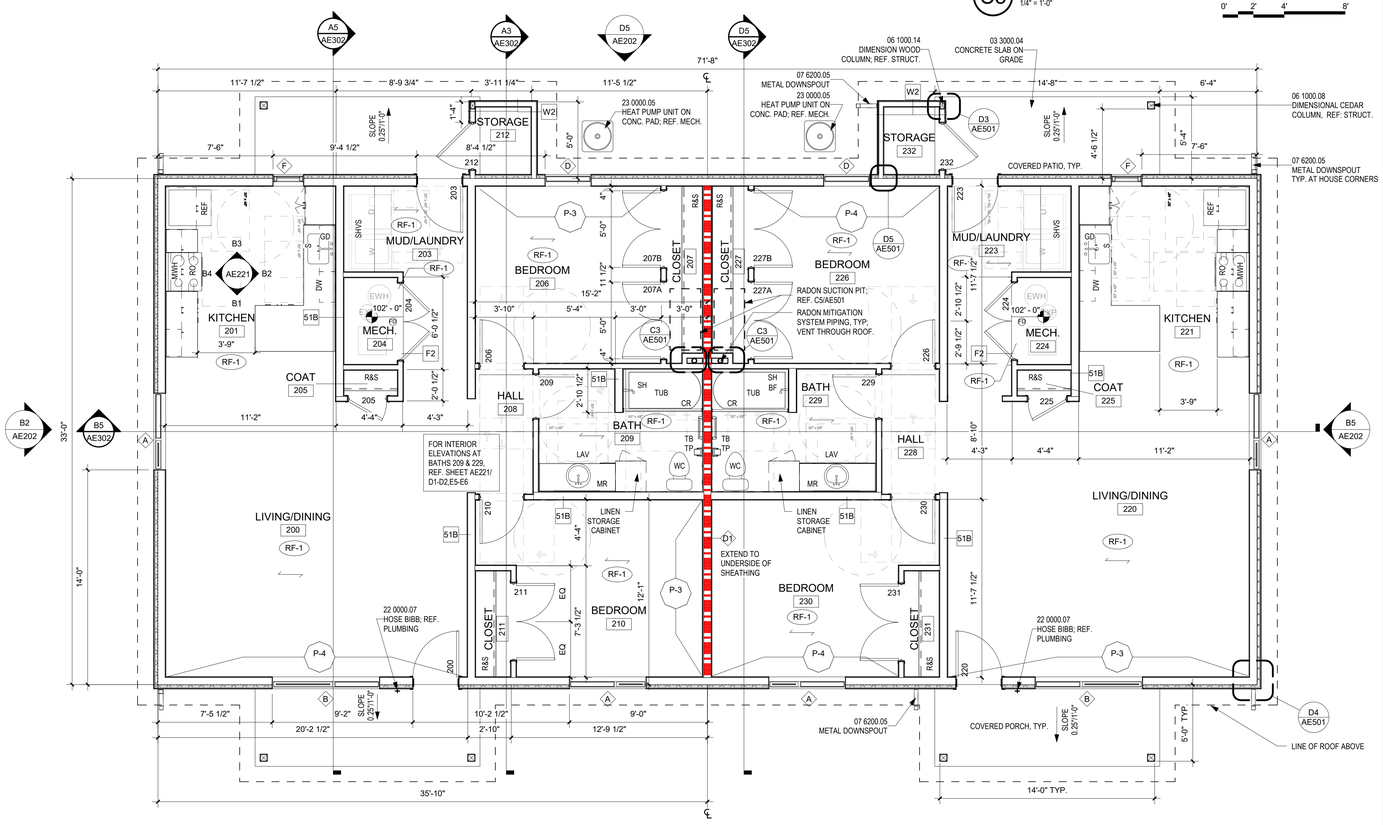
1BD/1BA DUPLEX - PLANS

SHEET NO

AE101



C5 ROOF PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 FLOOR PLAN - 2BD/1BA DUPLEX - TYPE B
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. REFEENCE SITE PLAN FOR LOCATIONS OF ADA-ACCESSIBLE HOUSING UNITS FOR EACH UNIT TYPE.
B. REFERENCE SITE PLAN FOR LOCATIONS OF HOUSING UNITS WITH PROVISIONS FOR THE HEARING IMPAIRED.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. PROVIDE BLOCKING AT ALL TOILET AND SHOWER LOCATIONS FOR SECURING GRAB BARS.
E. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
F. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
G. AT EXTERIOR STORAGE ROOMS WHERE WALL TYPE **51B** IS CALLED OUT, PROVIDE BATT INSULATION TO MATCH ADJACENT/ADJOINING EXTERIOR WALLS, TYP.
H. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. DISHWASHER SHOWN FOR LOCATION AND REFERENCE ONLY; NOT IN CONTRACT.
M. CONTRACTOR TO SUPPLY AND INSTALL RANGE AND REFRIGERATOR ONLY. ALL OTHER APPLIANCES BY OWNER AND INSTALLED BY CONTRACTOR.
N. PROVIDE GAS LINE STUB OUT FOR RANGE AT ALL UNITS, TYP. REFER TO MECHANICAL.
O. ALL INTERIOR FINISHES FLAME SPREAD REQUIREMENTS SHALL BE IN COMPLIANCE WITH NFPA 5000 (2018), CHAPTER 10.2.
P. PAINT ALL GYP. BOARD CEILINGS IN UNITS P-2, UNLESS NOTED OTHERWISE.
Q. PAINT ALL GYP BOARD WALLS IN UNITS P-1, UNLESS NOTED OTHERWISE.
R. ALL FINISH TRANSITIONS THAT OCCUR AT DOORWAYS TRANSITION MATERIAL AT CENTERLINE OF DOOR WHEN CLOSED
S. ALL FLOORING TO RUN CONTINOUSLY UNDER APPLIANCES AND AT OPEN CABINET CONDITIONS
T. ALL GYP BOARD WALLS TO RECEIVE WB-1, UNLESS NOTED OTHERWISE.
U. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
V. RADON MITIGATION SYSTEM UNDERSLAB ASSEMBLY WITH GRAVEL PITS AND 6"DIA. VERTICAL VENT PIPING BY CONTRACTOR, OVER 4" GRAVEL BASE. REF. STRUCTURAL FOR SLAB-ON-GRADE DETAILS.
W. COORDINATE RADON PIPING LOCATIONS PRIOR TO PLACING SLAB. PROVIDE GFCI IN ATTIC FOR FUTURE ACTIVE SYSTEM.
X. AT MECHANICAL ROOM, PROVIDE ELEVATED BASE @ T/BASE = 2'-0" A.F.F. FOR WATER HEATER AND FURNACE CONSISTING OF 2x6 FRAMING (AT 16" O.C.) & PLYWOOD DECKING.
Y. FOR MAINTENANCE, PROVIDE ACCESS PANEL TO FLOOR DRAIN/SINK AT MECH. ROOM.

REFERENCE KEYNOTES

03 3000.04	CONCRETE SLAB ON GRADE
06 1000.08	DIMENSIONAL CEDAR COLUMN, REF: STRUCT.
06 1000.14	DIMENSION WOOD COLUMN; REF. STRUCT.
07 4646.08	FIBER CEMENT SOFFIT BOARD
07 6200.04	METAL GUTTER
07 6200.05	METAL DOWNSPOUT
22 0000.07	HOSE BIBB; REF. PLUMBING
23 0000.05	HEAT PUMP UNIT ON CONC. PAD; REF. MECH.

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.), STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

GENERAL LEGEND

CR	SHOWER CURTAIN ROD
GBXX	GRAB BAR PER ANSI A117.1 XX INDICATES WIDTH
MR	MIRROR, FULL WIDTH OF VANITY COUNTERTOP
R&S	ROD & SHELF - WIRE CLOSET SHELVING
RH	ROBE HOOK
SHVS	SHELF - WIRE CLOSET SHELVING
TB	TOWEL BAR
TP	TOILET PAPER DISPENSER
WS	WORK SURFACE, 30" WIDE MINIMUM CLEARANCE

APPLIANCE LEGEND

ADA DW	ADA DISHWASHER
DW	DISHWASHER
ADA REF	ADA REFRIGERATOR
REF	REFRIGERATOR
ADA RO	ADA ELECTRIC RANGE/ OVEN
RO	RANGE/ OVEN
W	WASHER
D	DRYER
MIC	MICROWAVE (ADA) ON COUNTERTOP
RH	ADA EXHAUST HOOD, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
WH	WATER HEATER
F	FURNACE

FIXTURE LEGEND

NOTE: REFER TO PLUMBING FIXTURE SCHEDULE FOR MANUFACTURER AND MODEL NUMBERS

BF	BATH FAUCET	TUB	TUB & SHOWER, VERIFY DIMENSION PER UNIT
GD	GARBAGE DISPOSAL, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS	S	SINK
FD	FLOOR DRAIN	ADA S	ADA SINK, COORDINATE PLUMBING WITH APRON CASEWORK
LAV	LAVATORY	WC	WATER CLOSET
ADA LAV	ADA LAVATORY, COORDINATE PLUMBING WITH APRON CASEWORK	SH	SHOWER HEAD
RS	ROLL-IN SHOWER WITH TILE SURROUND	SHWR	SHOWER
		SS	SHOWER SEAT

LEGEND

XX-X — FLOOR MATERIAL; REFER TO FINISH LEGEND
FLOORING MATERIAL TRANSITION, TRANSITION STRIP REQUIRED, REF. AF621
FLOORING PATTERN TRANSITION. NO TRANSITION STRIP REQUIRED
XX-X — SPECIALTY WALL FINISH, REFER TO FINISH LEGEND
FLOORING DIRECTION
5'-0" DIAMETER TURNING RADIUS
ACCESSIBILITY CLEAR SPACE AS INDICATED

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT CERTIFICATE NO. 63277 SANJAY S. KADU 12/10/2020 REGISTERED ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

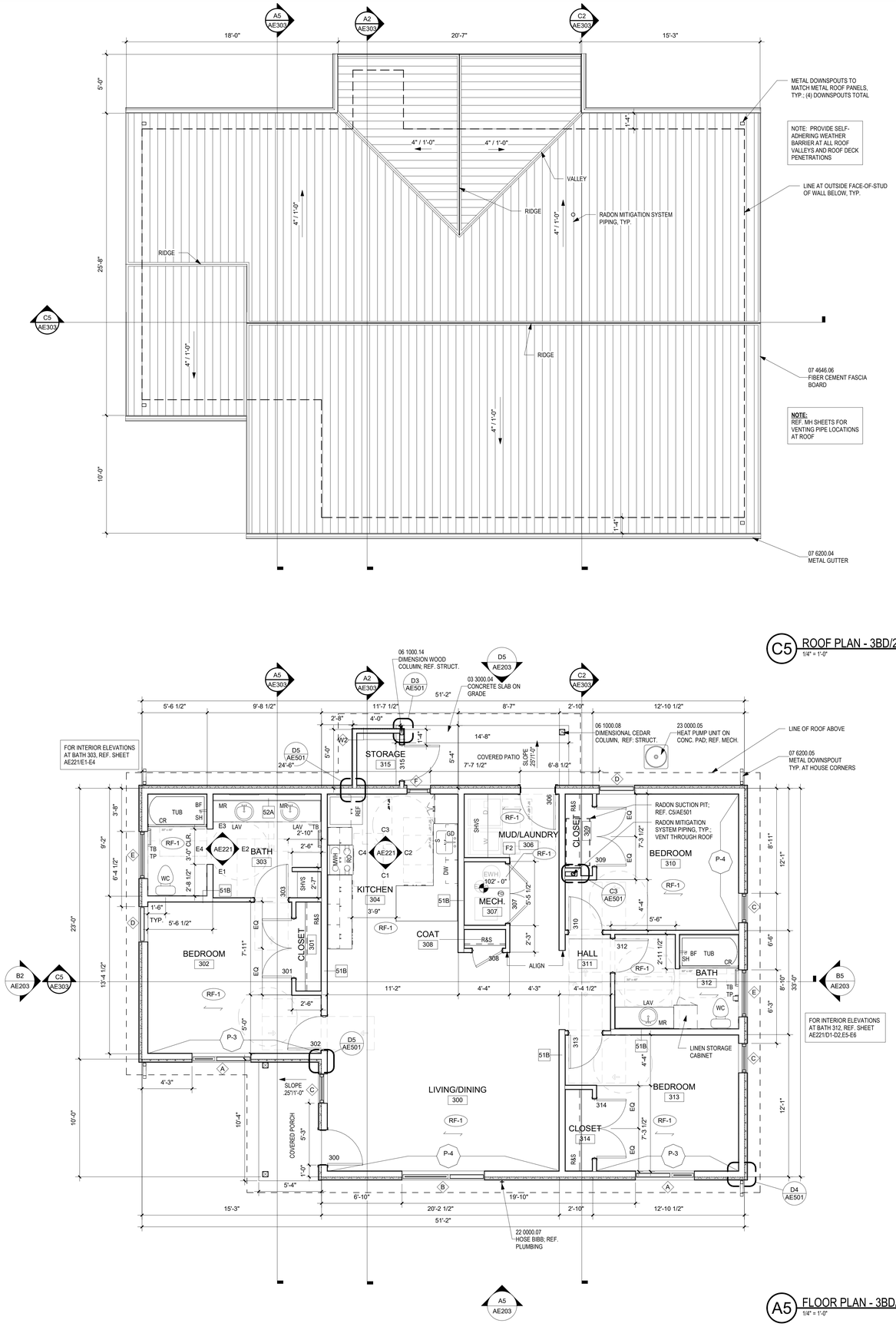
DRAWING NAME

2BD/1BA DUPLEX - PLANS

SHEET NO

AE102

C5 ROOF PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"



A5 FLOOR PLAN - 3BD/2BA SINGLE-FAMILY - TYPE B
1/4" = 1'-0"

GENERAL SHEET NOTES

A. REFEENCE SITE PLAN FOR LOCATIONS OF ADA-ACCESSIBLE HOUSING UNITS FOR EACH UNIT TYPE.
B. REFERENCE SITE PLAN FOR LOCATIONS OF HOUSING UNITS WITH PROVISIONS FOR THE HEARING IMPAIRED.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. PROVIDE BLOCKING AT ALL TOILET AND SHOWER LOCATIONS FOR SECURING GRAB BARS.
E. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
F. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
G. AT EXTERIOR STORAGE ROOMS WHERE WALL TYPE **51B** IS CALLED OUT, PROVIDE BATT INSULATION TO MATCH ADJACENT/ADJOINING EXTERIOR WALLS, TYP.
H. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. DISHWASHER SHOWN FOR LOCATION AND REFERENCE ONLY; NOT IN CONTRACT.
M. CONTRACTOR TO SUPPLY AND INSTALL RANGE AND REFRIGERATOR ONLY. ALL OTHER APPLIANCES BY OWNER AND INSTALLED BY CONTRACTOR.
N. PROVIDE GAS LINE STUB OUT FOR RANGE AT ALL UNITS, TYP. REFER TO MECHANICAL.
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P. PAINT ALL GYP. BOARD CEILINGS IN UNITS P-2, UNLESS NOTED OTHERWISE.
Q. PAINT ALL GYP BOARD WALLS IN UNITS P-1, UNLESS NOTED OTHERWISE.
R. ALL FINISH TRANSITIONS THAT OCCUR AT DOORWAYS TRANSITION MATERIAL AT CENTERLINE OF DOOR WHEN CLOSED
S. ALL FLOORING TO RUN CONTINOUSLY UNDER APPLIANCES AND AT OPEN CABINET CONDITIONS
T. ALL GYP BOARD WALLS TO RECEIVE WB-1, UNLESS NOTED OTHERWISE.
U. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
V. RADON MITIGATION SYSTEM UNDERSLAB ASSEMBLY WITH GRAVEL PITS AND 6"DIA. VERTICAL VENT PIPING BY CONTRACTOR, OVER 4" GRAVEL BASE. REF. STRUCTURAL FOR SLAB-ON-GRADE DETAILS.
W. COORDINATE RADON PIPING LOCATIONS PRIOR TO PLACING SLAB. PROVIDE GFCI IN ATTIC FOR FUTURE ACTIVE SYSTEM.
X. AT MECHANICAL ROOM, PROVIDE ELEVATED BASE @ T/BASE = 2'-0" A.F.F. FOR WATER HEATER AND FURNACE CONSISTING OF 2x6 FRAMING (AT 16" O.C.) & PLYWOOD DECKING.
Y. FOR MAINTENANCE, PROVIDE ACCESS PANEL TO FLOOR DRAIN/SINK AT MECH. ROOM.

REFERENCE KEYNOTES

03 3000.04	CONCRETE SLAB ON GRADE
06 1000.08	DIMENSIONAL CEDAR COLUMN. REF: STRUCT.
06 1000.14	DIMENSION WOOD COLUMN. REF. STRUCT.
07 4646.06	FIBER CEMENT FASCIA BOARD
07 6200.04	METAL GUTTER
07 6200.05	METAL DOWNSPOUT
22 0000.07	HOSE BIBB; REF. PLUMBING
23 0000.05	HEAT PUMP UNIT ON CONC. PAD; REF. MECH.

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.), STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-(LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-(LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

GENERAL LEGEND

CR	SHOWER CURTAIN ROD
GBXX	GRAB BAR PER ANSI A117.1 XX INDICATES WIDTH
MR	MIRROR, FULL WIDTH OF VANITY COUNTERTOP
R&S	ROD & SHELF - WIRE CLOSET SHELVING
RH	ROBE HOOK
SHVS	SHELF - WIRE CLOSET SHELVING
TB	TOWEL BAR
TP	TOILET PAPER DISPENSER
WS	WORK SURFACE, 30" WIDE MINIMUM CLEARANCE

APPLIANCE LEGEND

ADA DW	ADA DISHWASHER
DW	DISHWASHER
ADA REF	ADA REFRIGERATOR
REF	REFRIGERATOR
ADA RO	ADA ELECTRIC RANGE/ OVEN
RO	RANGE/ OVEN
W	WASHER
D	DRYER
MIC	MICROWAVE (ADA) ON COUNTERTOP
RH	ADA EXHAUST HOOD, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
WH	WATER HEATER
F	FURNACE

FIXTURE LEGEND

NOTE: REFER TO PLUMBING FIXTURE SCHEDULE FOR MANUFACTURER AND MODEL NUMBERS

BF	BATH FAUCET	TUB	TUB & SHOWER, VERIFY DIMENSION
GD	GARBAGE DISPOSAL, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS	S	SINK
		ADA S	ADA SINK, COORDINATE PLUMBING WITH APRON CASEWORK
FD	FLOOR DRAIN	WC	WATER CLOSET
LAV	LAVATORY	SH	SHOWER HEAD
ADA LAV	ADA LAVATORY, COORDINATE PLUMBING WITH APRON CASEWORK	SHWR	SHOWER
RS	ROLL-IN SHOWER WITH TILE SURROUND	SS	SHOWER SEAT

LEGEND

XX-X — FLOOR MATERIAL; REFER TO FINISH LEGEND
FLOORING MATERIAL TRANSITION, TRANSITION STRIP REQUIRED, REF. AF621
FLOORING PATTERN TRANSITION. NO TRANSITION STRIP REQUIRED
XX-X — SPECIALTY WALL FINISH, REFER TO FINISH LEGEND
FLOORING DIRECTION
5'-0" DIAMETER TURNING RADIUS
ACCESSIBILITY CLEAR SPACE AS INDICATED

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT CERTIFICATE NO. 63277 SANJAY S. KADU 12/31/2022 REGISTERED ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

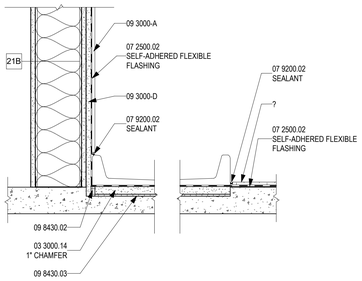
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

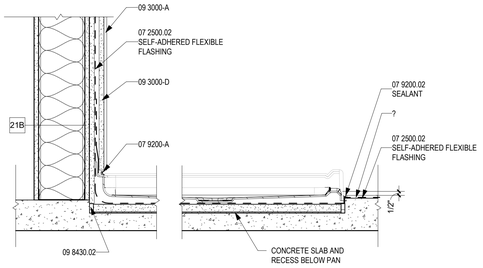
3BD/2BA SINGLE-FAMILY - PLANS

SHEET NO

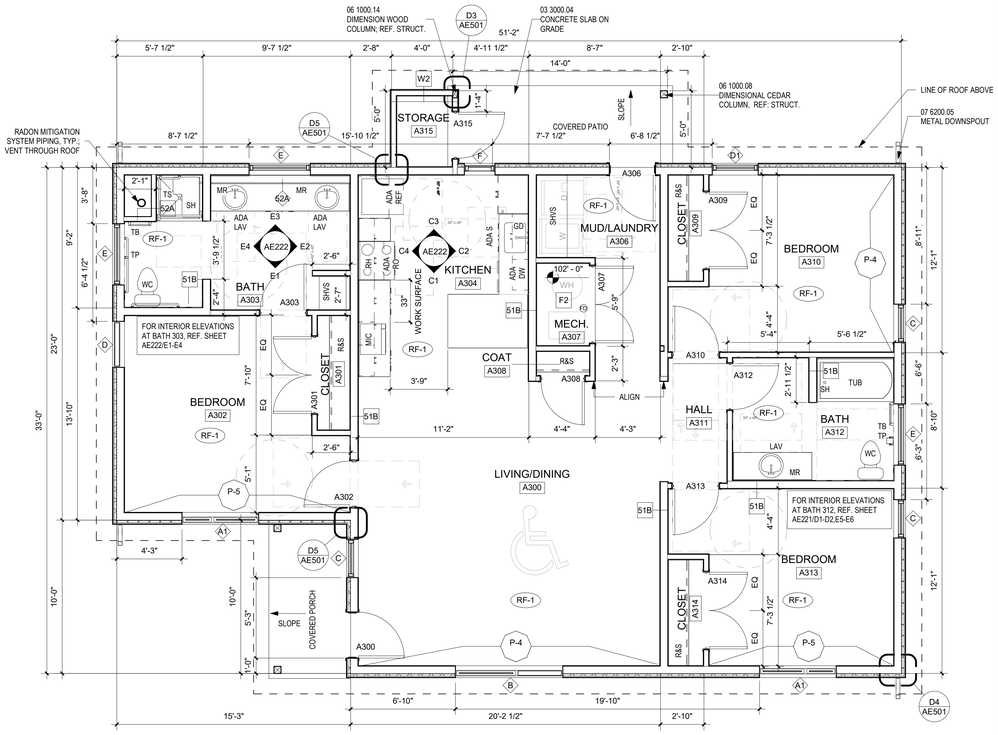
AE103



D1 DETAIL - SHOWER BASE, TYP.
1 1/2" = 1'-0"

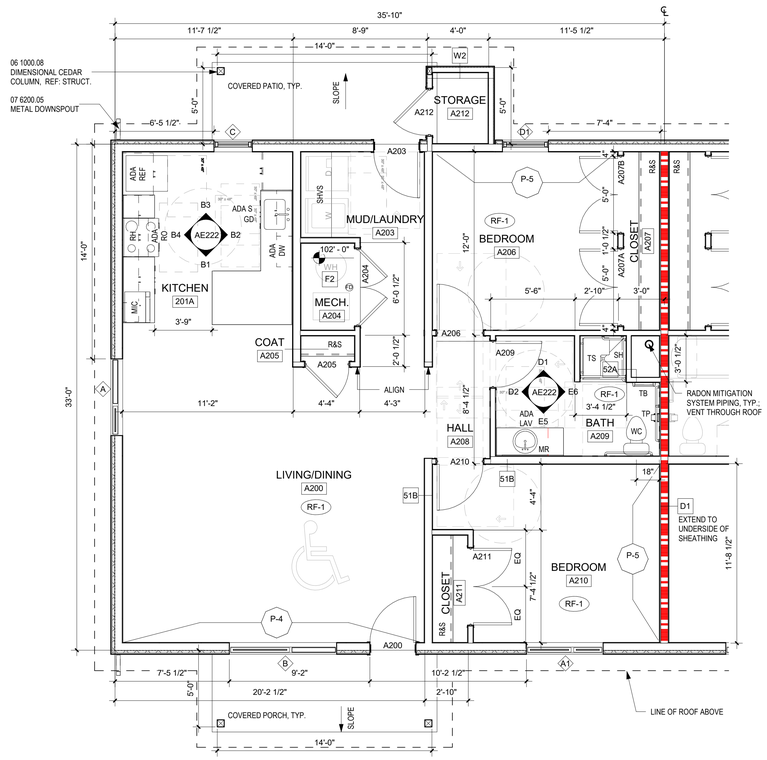


C1 DETAIL - ROLL IN SHOWER BASE, TYP.
1 1/2" = 1'-0"



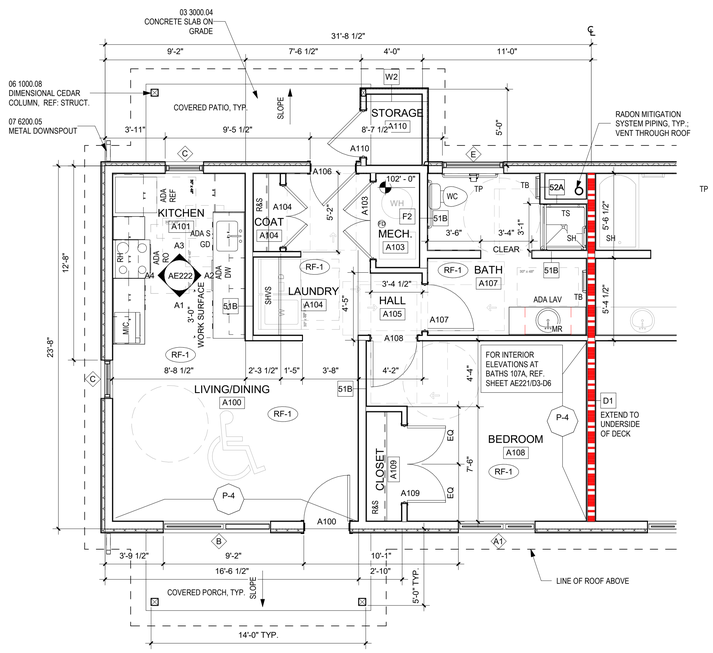
C5 FLOOR PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"

0' 2' 4' 8'



A1 FLOOR PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"

0' 2' 4' 8'



A5 FLOOR PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"

0' 2' 4' 8'

GENERAL SHEET NOTES

A. REFEENCE SITE PLAN FOR LOCATIONS OF ADA-ACCESSIBLE HOUSING UNITS FOR EACH UNIT TYPE.
B. REFERENCE SITE PLAN FOR LOCATIONS OF HOUSING UNITS WITH PROVISIONS FOR THE HEARING IMPAIRED.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. PROVIDE BLOCKING AT ALL TOILET AND SHOWER LOCATIONS FOR SECURING GRAB BARS.
E. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
F. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
G. AT EXTERIOR STORAGE ROOMS WHERE WALL TYPE **51B** IS CALLED OUT, PROVIDE BATT INSULATION TO MATCH ADJACENT/ADJOINING EXTERIOR WALLS, TYP.
H. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. DISHWASHER SHOWN FOR LOCATION AND REFERENCE ONLY; NOT IN CONTRACT.
M. CONTRACTOR TO SUPPLY AND INSTALL RANGE AND REFRIGERATOR ONLY. ALL OTHER APPLIANCES BY OWNER AND INSTALLED BY CONTRACTOR.
N. PROVIDE GAS LINE STUB OUT FOR RANGE AT ALL UNITS, TYP. REFER TO MECHANICAL.
O. ALL INTERIOR FINISHES FLAME SPREAD REQUIREMENTS SHALL BE IN COMPLIANCE WITH NFPA 5000 (2018), CHAPTER 10.2.
P. PAINT ALL GYP. BOARD CEILINGS IN UNITS P-2, UNLESS NOTED OTHERWISE.
Q. PAINT ALL GYP BOARD WALLS IN UNITS P-1, UNLESS NOTED OTHERWISE.
R. ALL FINISH TRANSITIONS THAT OCCUR AT DOORWAYS TRANSITION MATERIAL AT CENTERLINE OF DOOR WHEN CLOSED
S. ALL FLOORING TO RUN CONTINOUSLY UNDER APPLIANCES AND AT OPEN CABINET CONDITIONS
T. ALL GYP BOARD WALLS TO RECEIVE WB-1, UNLESS NOTED OTHERWISE.
U. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
V. RADON MITIGATION SYSTEM UNDERSLAB ASSEMBLY WITH GRAVEL PITS AND 6"DIA. VERTICAL VENT PIPING BY CONTRACTOR, OVER 4" GRAVEL BASE. REF. STRUCTURAL FOR SLAB-ON-GRADE DETAILS.
W. COORDINATE RADON PIPING LOCATIONS PRIOR TO PLACING SLAB. PROVIDE GFCI IN ATTIC FOR FUTURE ACTIVE SYSTEM.
X. AT MECHANICAL ROOM, PROVIDE ELEVATED BASE @ T/BASE = 2'-0" A.F.F. FOR WATER HEATER AND FURNACE CONSISTING OF 2x6 FRAMING (AT 16" O.C.) & PLYWOOD DECKING.
Y. FOR MAINTENANCE, PROVIDE ACCESS PANEL TO FLOOR DRAIN/SINK AT MECH. ROOM.

REFERENCE KEYNOTES

03 3000.04	CONCRETE SLAB ON GRADE
03 3000.14	1" CHAMFER
06 1000.08	DIMENSIONAL CEDAR COLUMN; REF: STRUCT.
06 1000.14	DIMENSION WOOD COLUMN; REF. STRUCT.
07 2500.02	SELF-ADHERED FLEXIBLE FLASHING
07 6200.05	METAL DOWNSPOUT
07 9200-A	
07 9200.02	SEALANT
09 3000-A	
09 3000-D	
09 8430.02	
09 8430.03	

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

GENERAL LEGEND

CR	SHOWER CURTAIN ROD
GBXX	GRAB BAR PER ANSI A117.1 XX INDICATES WIDTH
MR	MIRROR, FULL WIDTH OF VANITY COUNTERTOP
R&S	ROD & SHELF - WIRE CLOSET SHELVING
RH	ROBE HOOK
SHVS	SHELF - WIRE CLOSET SHELVING
TB	TOWEL BAR
TP	TOILET PAPER DISPENSER
WS	WORK SURFACE, 30" WIDE MINIMUM CLEARANCE

APPLIANCE LEGEND

ADA DW	ADA DISHWASHER
DW	DISHWASHER
ADA REF	ADA REFRIGERATOR
REF	REFRIGERATOR
ADA RO	ADA ELECTRIC RANGE/ OVEN
RO	RANGE/ OVEN
W	WASHER
D	DRYER
MIC	MICROWAVE (ADA) ON COUNTERTOP
RH	ADA EXHAUST HOOD, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
WH	WATER HEATER
F	FURNACE

FIXTURE LEGEND

NOTE: REFER TO PLUMBING FIXTURE SCHEDULE FOR MANUFACTURER AND MODEL NUMBERS

BF	BATH FAUCET	TUB	TUB & SHOWER, VERIFY DIMENSION
GD	GARBAGE DISPOSAL, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS	S	PER UNIT SINK
		ADA S	ADA SINK, COORDINATE PLUMBING WITH APRON CASEWORK
FD	FLOOR DRAIN		
LAV	LAVATORY	WC	WATER CLOSET
ADA LAV	ADA LAVATORY, COORDINATE PLUMBING WITH APRON CASEWORK	SH	SHOWER HEAD
		SHWR	SHOWER
RS	ROLL-IN SHOWER WITH TILE SURROUND	SS	SHOWER SEAT

LEGEND

XX-X — FLOOR MATERIAL; REFER TO FINISH LEGEND

FLOORING MATERIAL TRANSITION, TRANSITION STRIP REQUIRED, REF. AF621

FLOORING PATTERN TRANSITION, NO TRANSITION STRIP REQUIRED

XX-X — SPECIALTY WALL FINISH, REFER TO FINISH LEGEND

FLOORING DIRECTION

5'-0" DIAMETER TURNING RADIUS

ACCESSIBILITY CLEAR SPACE AS INDICATED

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S.
KAPU
DATE SIGNED
12/10/2020
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

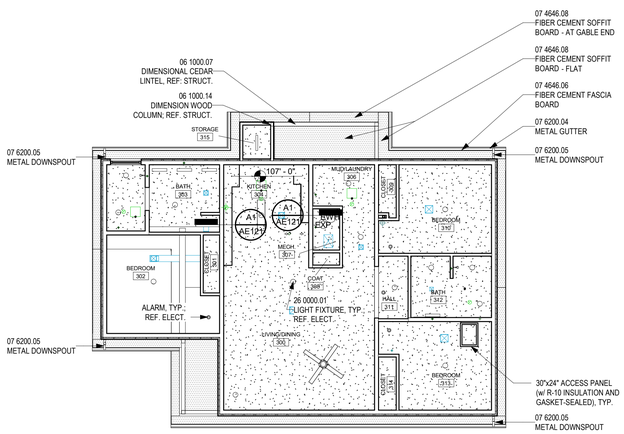
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

TYPE 'A' UNITS - FLOOR PLANS

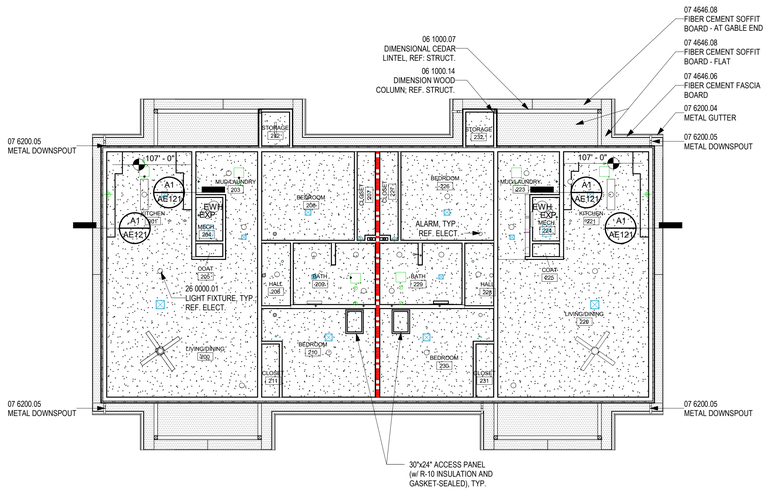
SHEET NO

AE104



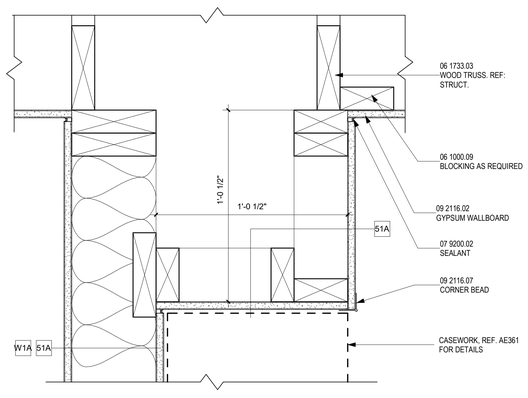
D5 3BD/2BA SINGLE-FAMILY - REFLECTED CEILING PLAN

1/8" = 1'-0"



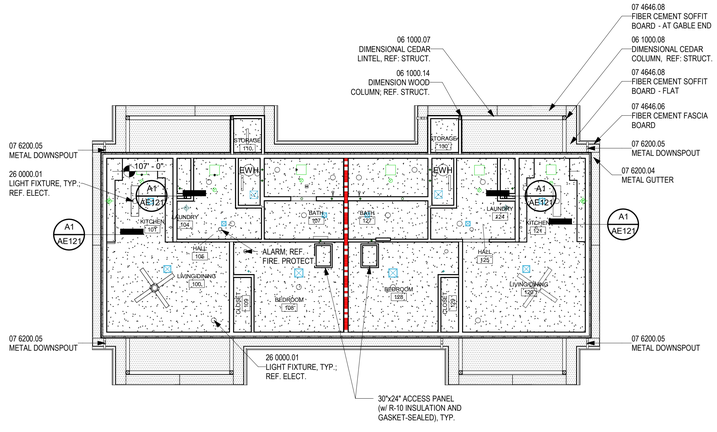
B5 2BD/1BA DUPLEX - REFLECTED CEILING PLAN

1/8" = 1'-0"



A1 TYPICAL INTERIOR SOFFIT

3" = 1'-0"



A5 1BD/1BA DUPLEX - REFLECTED CEILING PLAN

1/8" = 1'-0"

GENERAL SHEET NOTES

A. GYPSUM CEILINGS TO BE 8'-0" A.F.F., UNLESS NOTED OTHERWISE.
B. REFER TO AF621 FOR ADDITIONAL FINISH INFORMATION AND DETAILS.
C. GYPSUM BOARD CEILINGS TO BE PAINTED P-2, UNLESS NOTED OTHERWISE.
D. PAINT VERTICAL FACE(S) OF SOFFITS TO MATCH UNDERSIDE, UNLESS NOTED OTHERWISE.
E. ALL SOFFITS TO ALIGN WITH FACE OF ADJACENT WALL, UNLESS NOTED OTHERWISE.
F. DIMENSIONS AT REFLECTED CEILING PLAN ARE TO FINISHED FACE, UNLESS NOTED OTHERWISE.
G. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
H. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
I. ATTIC ACCESS PANELS EQUIPPED WITH DURABLE ≥ R-10 COVER THAT IS GASKETED (I.E., NOT CAULKED).

REFERENCE KEYNOTES

06 1000.07	DIMENSIONAL CEDAR LINTEL, REF: STRUCT.
06 1000.08	DIMENSIONAL CEDAR COLUMN, REF: STRUCT.
06 1000.09	BLOCKING AS REQUIRED
06 1000.14	DIMENSION WOOD COLUMN; REF. STRUCT.
06 1733.03	WOOD TRUSS. REF: STRUCT.
07 4646.06	FIBER CEMENT FASCIA BOARD
07 4646.08	FIBER CEMENT SOFFIT BOARD
07 6200.04	METAL GUTTER
07 6200.05	METAL DOWNSPOUT
07 9200.02	SEALANT
09 2116.02	GYPSUM WALLBOARD
09 2116.07	CORNER BEAD
26 0000.01	LIGHT FIXTURE, TYP.; REF. ELECT.

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 CLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

LEGEND

- GYP. BD. CEILING SYSTEM
- FIBER CEMENT SOFFIT BOARD
- LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS
- LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS
- 2X2 RETURN AIR DIFFUSER, REFER TO MECHANICAL DRAWINGS
- 2X2 SUPPLY AIR DIFFUSER, REFER TO MECHANICAL DRAWINGS

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KAPU
DATE SIGNED
12/10/2020
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

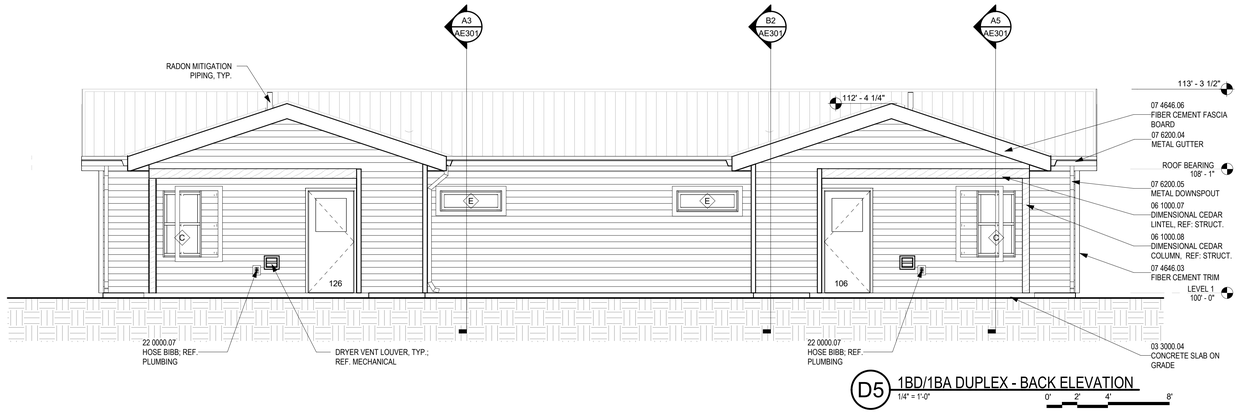
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

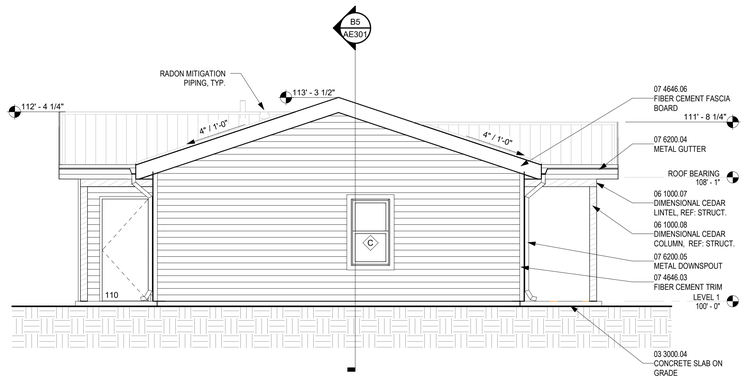
REFLECTED CEILING PLANS / CEILING DETAILS

SHEET NO

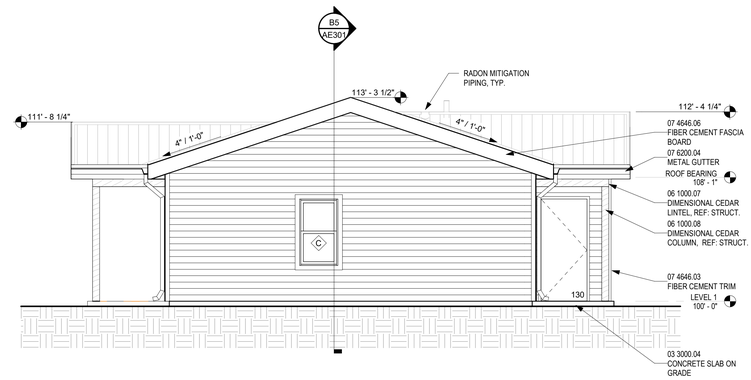
AE121



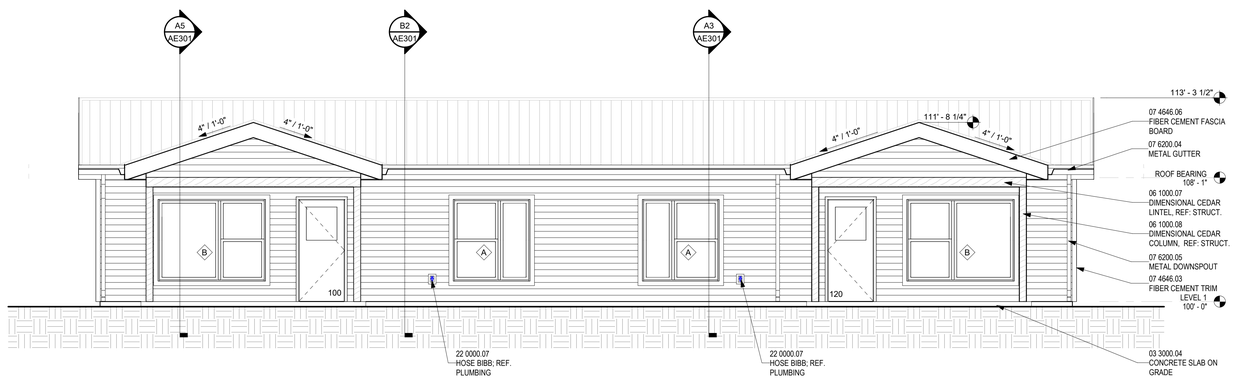
D5 1BD/1BA DUPLEX - BACK ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'



B2 1BD/1BA DUPLEX - LEFT ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'



B5 1BD/1BA DUPLEX - RIGHT ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'



A5 1BD/1BA DUPLEX - FRONT ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
E. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

03 3000.04	CONCRETE SLAB ON GRADE
06 1000.07	DIMENSIONAL CEDAR LINTEL, REF: STRUCT.
06 1000.08	DIMENSIONAL CEDAR COLUMN, REF: STRUCT.
07 4646.03	FIBER CEMENT TRIM
07 4646.06	FIBER CEMENT FASCIA BOARD
07 6200.04	METAL GUTTER
07 6200.05	METAL DOWNSPOUT
22 0000.07	HOSE BIBB; REF. PLUMBING

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

LEGEND

- CEMENT FIBER HORIZONTAL LAP SIDING (6" EXPOSURE)
- WOOD_CEDAR
- ROOFING_METAL PANEL

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
DATE SIGNED
12/10/2020
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

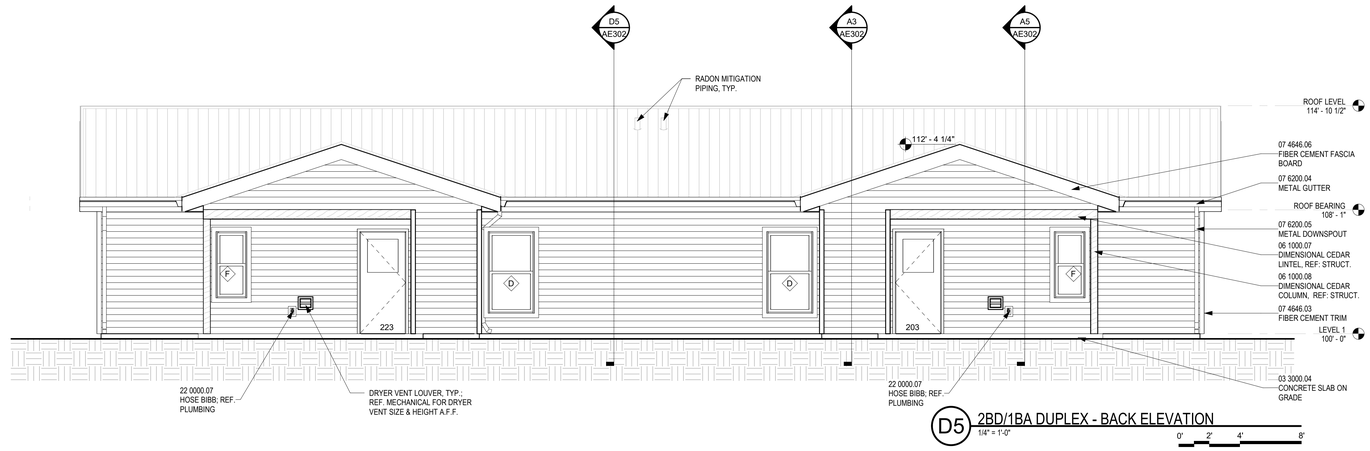
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

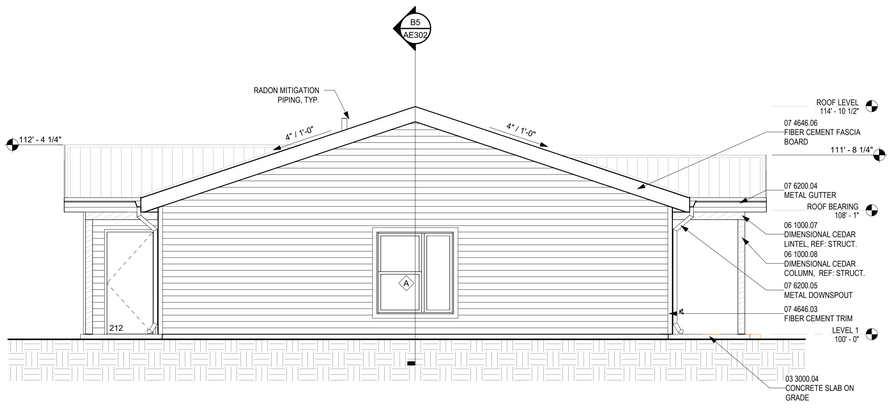
1BD/1BA DUPLEX - EXTERIOR ELEVATIONS

SHEET NO

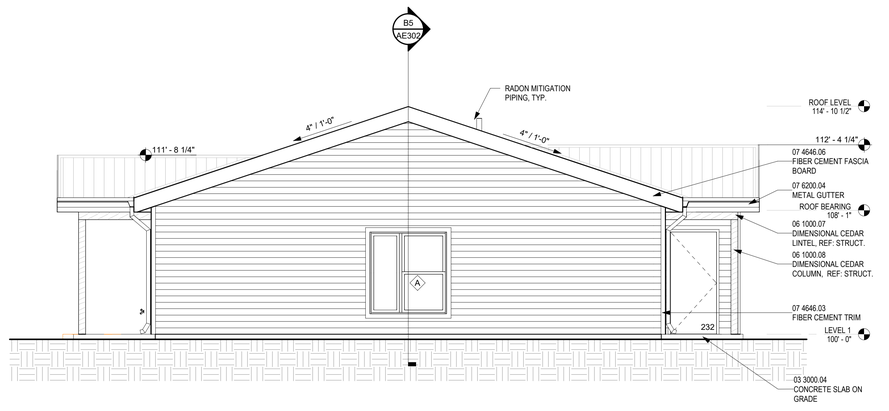
AE201



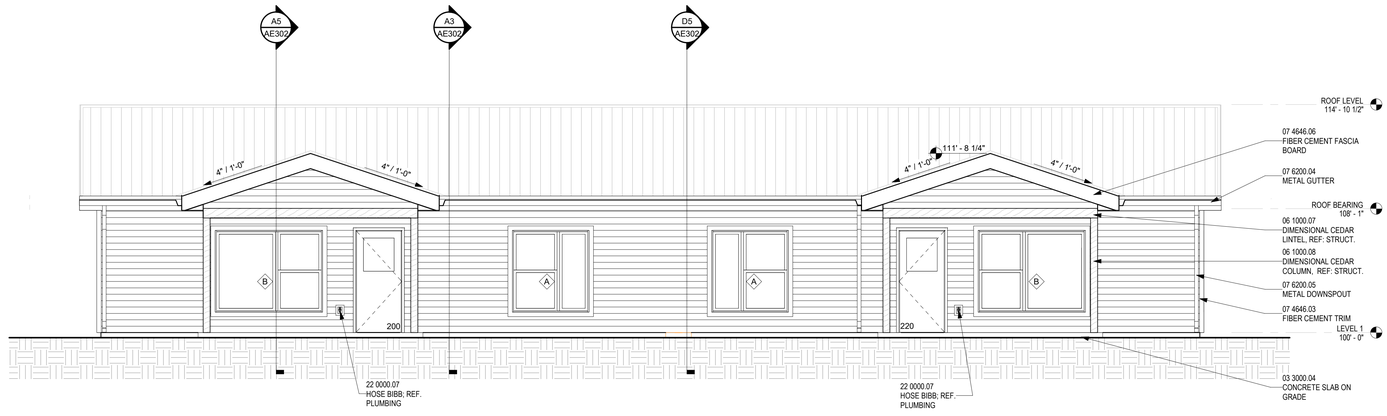
D5 2BD/1BA DUPLEX - BACK ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'



B2 2BD/1BA DUPLEX - LEFT ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'



B5 2BD/1BA DUPLEX - RIGHT ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'



A5 2BD/1BA DUPLEX - FRONT ELEVATION
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
E. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

03 3000.04	CONCRETE SLAB ON GRADE
06 1000.07	DIMENSIONAL CEDAR LINTEL, REF: STRUCT.
06 1000.08	DIMENSIONAL CEDAR COLUMN, REF: STRUCT.
07 4646.03	FIBER CEMENT TRIM
07 4646.06	FIBER CEMENT FASCIA BOARD
07 6200.04	METAL GUTTER
07 6200.05	METAL DOWNSPOUT
22 0000.07	HOSE BIBB; REF. PLUMBING

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

LEGEND

- CEMENT FIBER HORIZONTAL LAP SIDING (6" EXPOSURE)
- WOOD_CEDAR
- ROOFING_METAL PANEL

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S.
KAPU
DATE SIGNED
12/10/2020
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

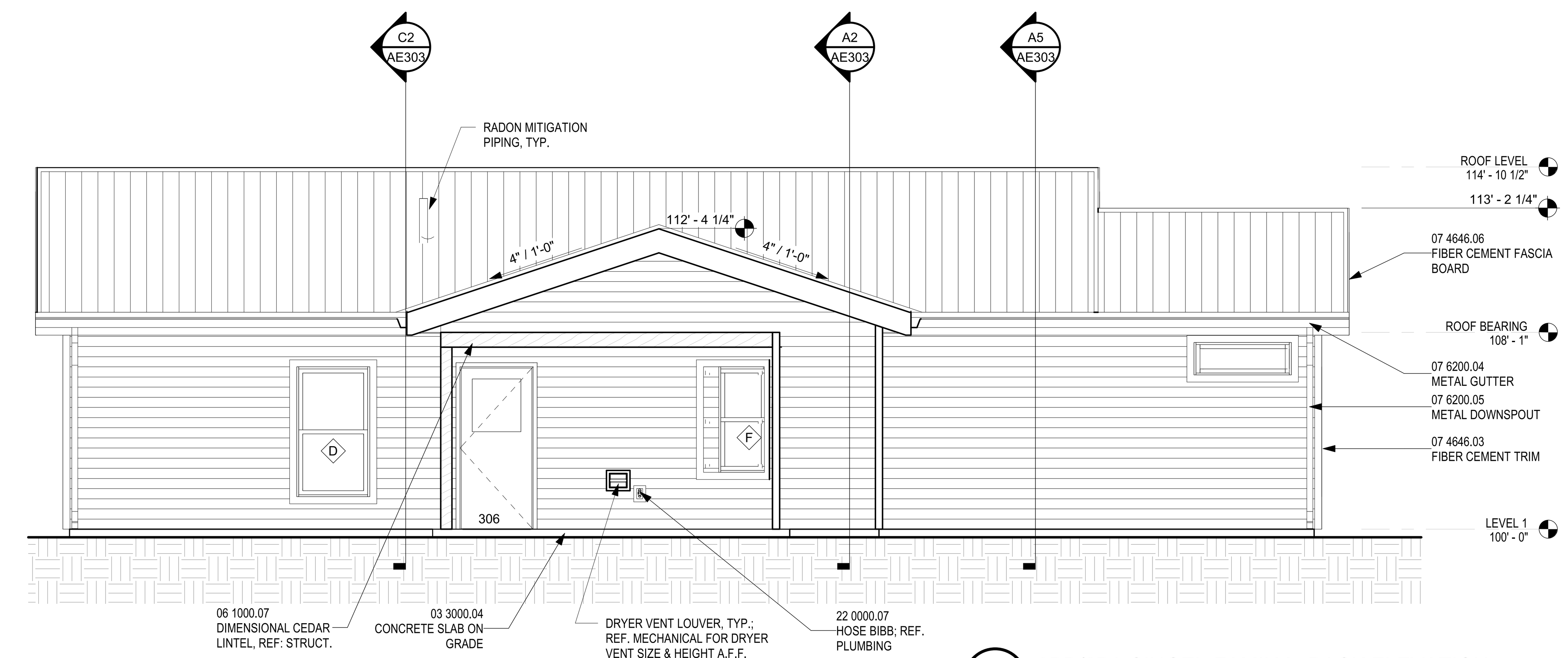
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

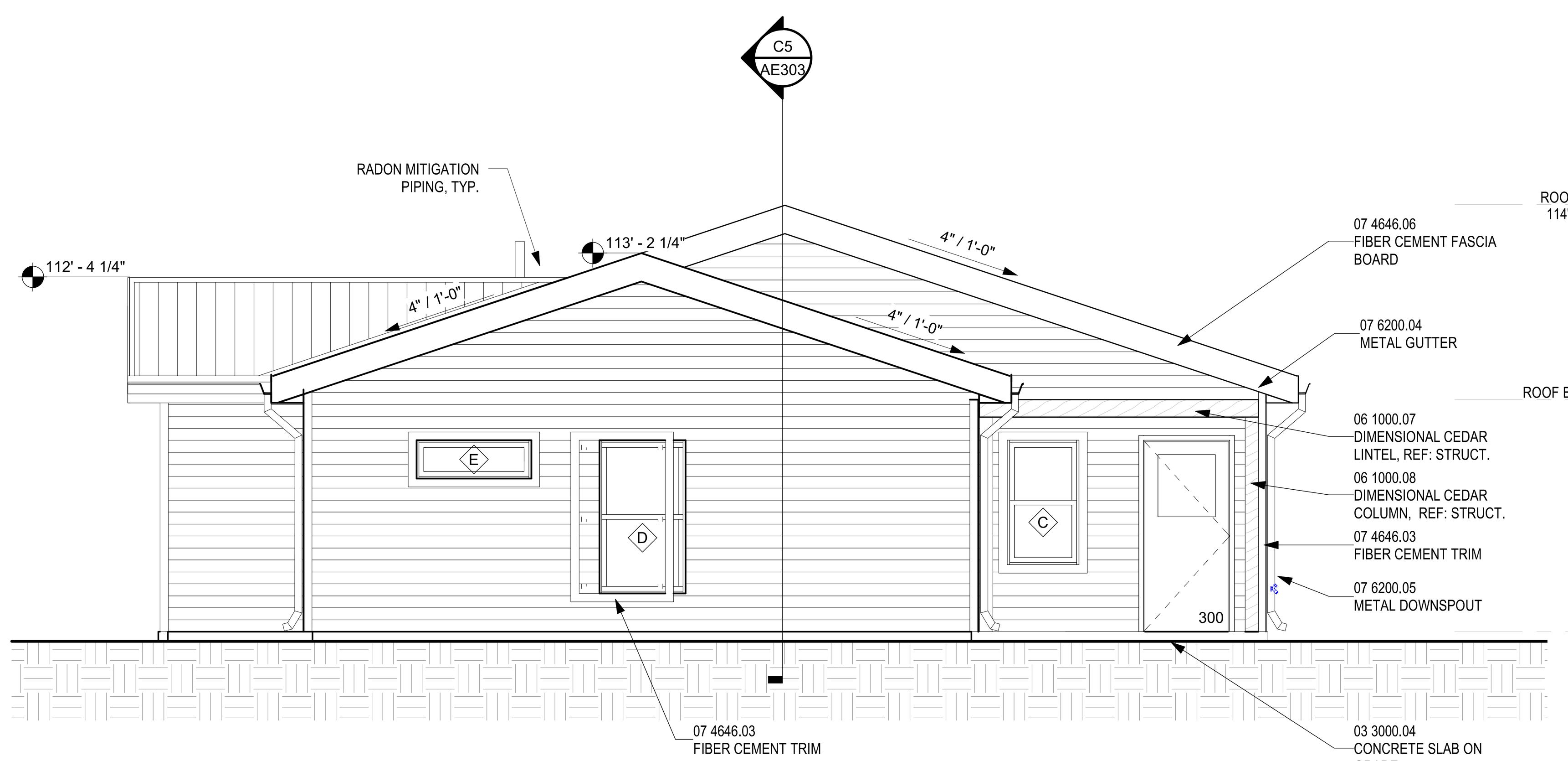
2BD/1BA DUPLEX - EXTERIOR ELEVATIONS

SHEET NO

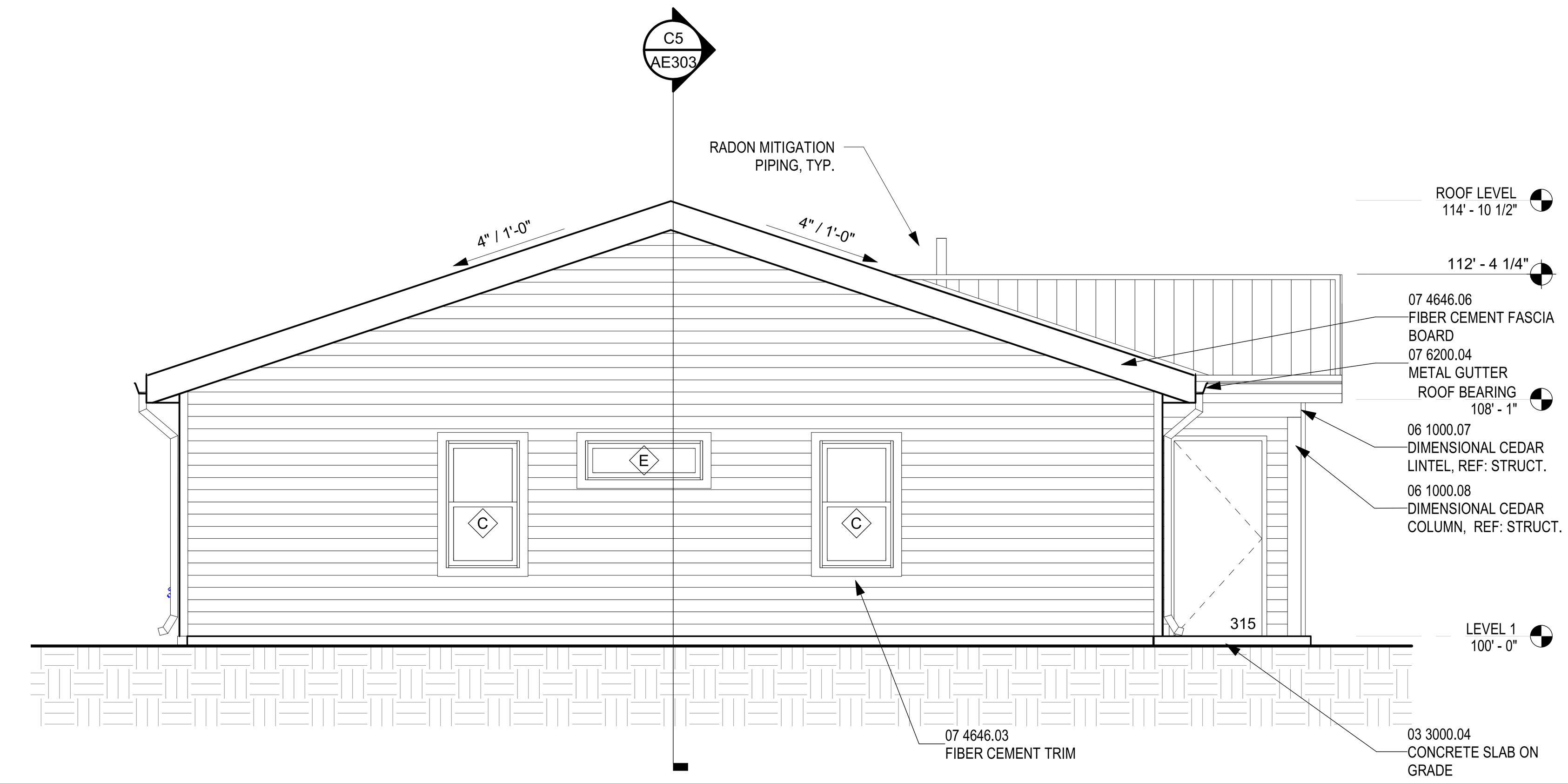
AE202



D5 3BD/2BA SINGEL-FAMILY - BACK ELEVATION
1/4" = 1'-0"



B2 3BD/2BA SINGEL-FAMILY - LEFT ELEVATION
1/4" = 1'-0"



B5 3BD/2BA SINGEL-FAMILY - RIGHT ELEVATION
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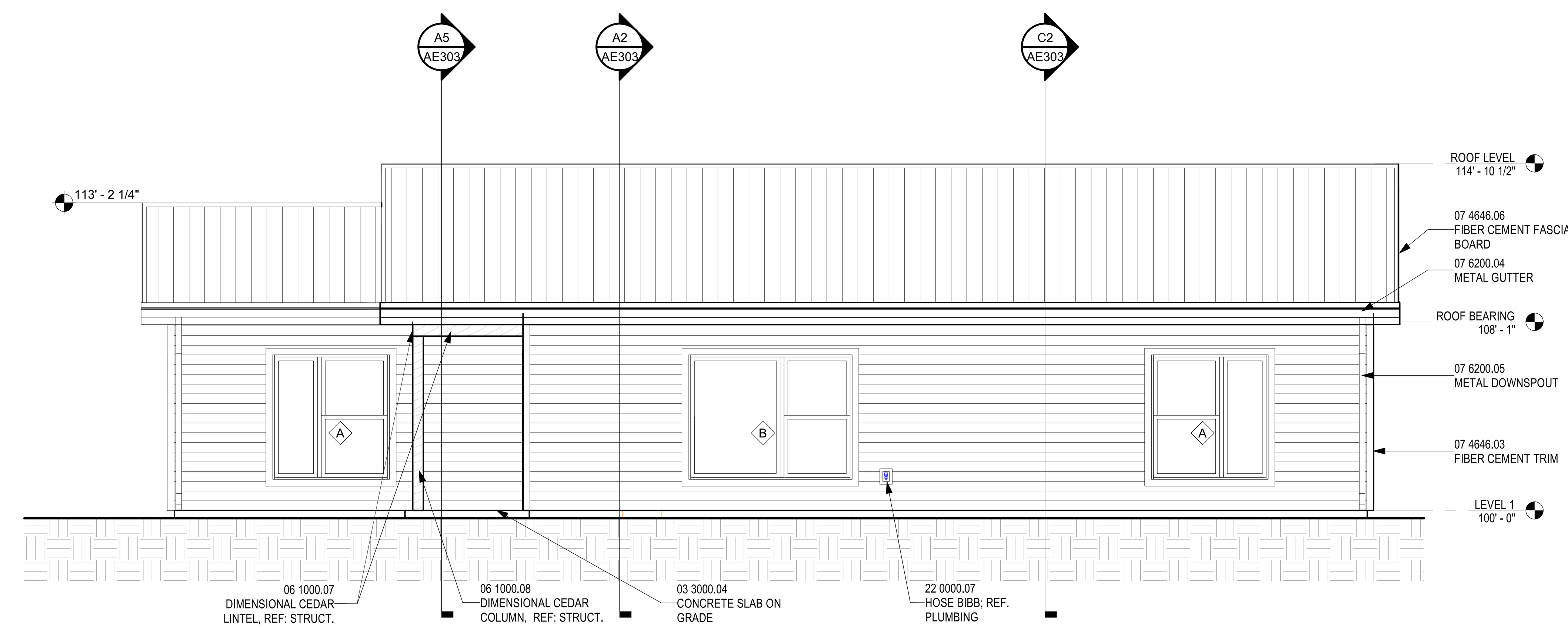

A5 3BD/2BA SINGEL-FAMILY - FRONT ELEVATION
1/4" = 1'-0"

GENERAL SHEET NOTES

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G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
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LEGEND

CEMENT FIBER HORIZONTAL LAP SIDING (6" EXPOSURE)
WOOD_CEDAR
ROOFING_METAL PANEL

DEKKER
PERICH
SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

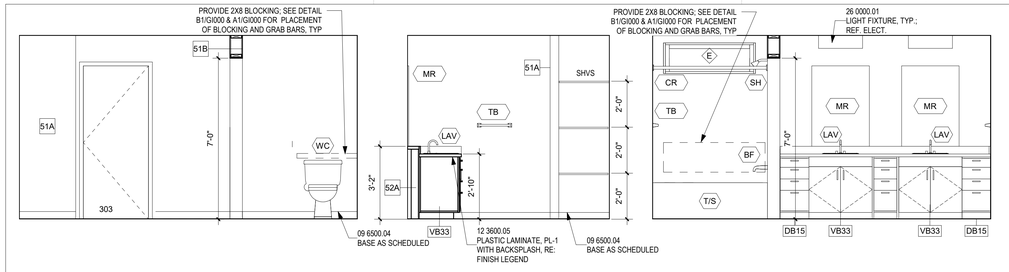
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

3BD/2BA SINGLE-FAMILY - EXTERIOR ELEVATIONS

SHEET NO

AE203



E1 3BD/2BA SINGLE-FAMILY - BATH (FRONT) 3/8" = 1'-0"

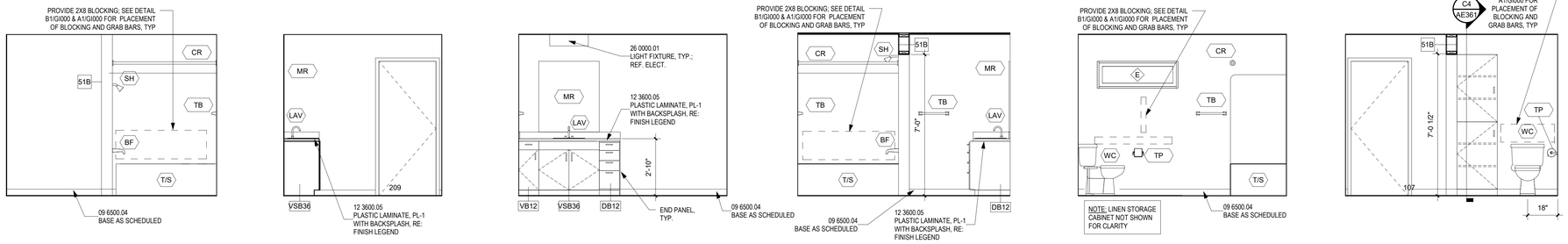
E2 3BD/2BA S-F - BATH (RIGHT) 3/8" = 1'-0"

E3 3BD/2BA SINGLE-FAMILY - BATH (BACK) 3/8" = 1'-0"

E4 3BD/2BA S-F - BATH (LEFT) 3/8" = 1'-0"

E5 2BD/1BA DUPLEX - BATH (FRONT) 3/8" = 1'-0"

E6 2BD/1BA DUPLEX - BATH (RIGHT) 3/8" = 1'-0"



D1 2BD/1BA DUPLEX - BATH (BACK) 3/8" = 1'-0"

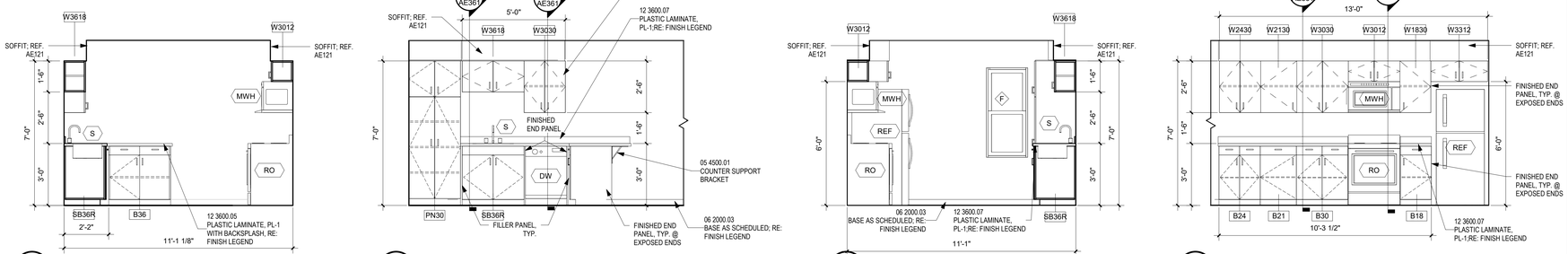
D2 2BD/1BA DUPLEX - BATH (LEFT) 3/8" = 1'-0"

D3 1BD/1BA DUPLEX - BATH (FRONT) 3/8" = 1'-0"

D4 1BD/1BA DUPLEX - BATH (RIGHT) 3/8" = 1'-0"

D5 1BD/1BA DUPLEX - BATH (BACK) 3/8" = 1'-0"

D6 1BD/1BA DUPLEX - BATH (LEFT) 3/8" = 1'-0"

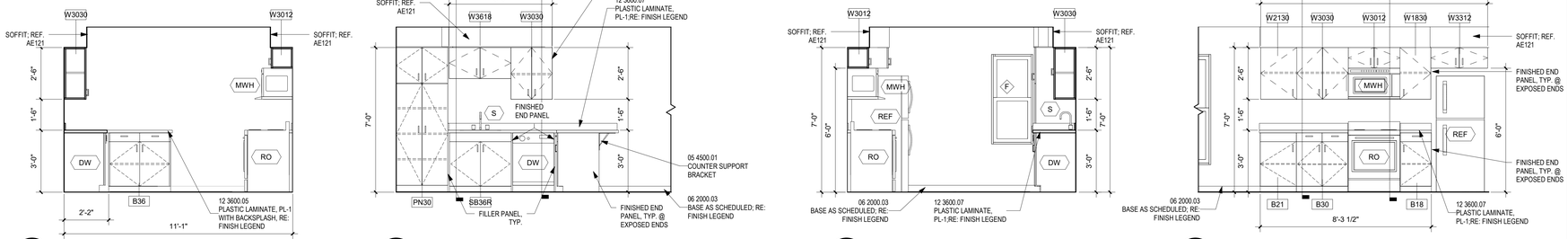


C1 3BD/2BA SINGLE-FAMILY - KITCHEN (FRONT) 3/8" = 1'-0"

C2 3BD/2BA SINGLE-FAMILY - KITCHEN (RIGHT) 3/8" = 1'-0"

C3 3BD/2BA SINGLE-FAMILY - KITCHEN (BACK) 3/8" = 1'-0"

C4 3BD/2BA SINGLE-FAMILY - KITCHEN (LEFT) 3/8" = 1'-0"

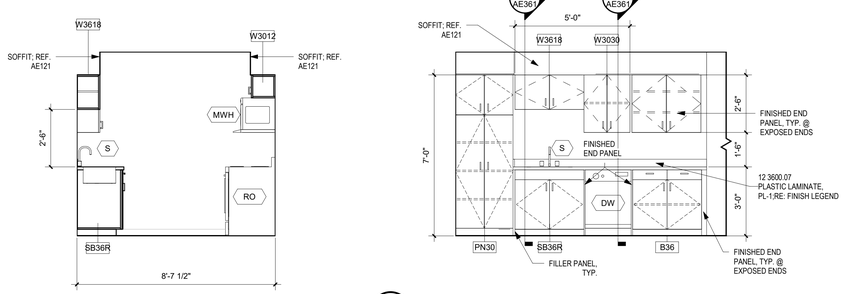


B1 2BD/1BA DUPLEX - KITCHEN (FRONT) 3/8" = 1'-0"

B2 2BD/1BA DUPLEX - KITCHEN (RIGHT) 3/8" = 1'-0"

B3 2BD/1BA DUPLEX - KITCHEN (BACK) 3/8" = 1'-0"

B4 2BD/1BA DUPLEX - KITCHEN (LEFT) 3/8" = 1'-0"



A1 1BD/1BA DUPLEX - KITCHEN (FRONT) 3/8" = 1'-0"

A2 1BD/1BA DUPLEX - KITCHEN (RIGHT) 3/8" = 1'-0"

A3 1BD/1BA DUPLEX - KITCHEN (BACK) 3/8" = 1'-0"

A4 1BD/1BA DUPLEX - KITCHEN (LEFT) 3/8" = 1'-0"

GENERAL SHEET NOTES

A. DIMENSIONS ARE TO FINISHED FACE, UNLESS NOTED OTHERWISE.
B. REFER TO GI000 FOR TYPICAL TOILET ACCESSORY MOUNTING HEIGHTS.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. PROVIDE BLOCKING AT ALL TOILET AND SHOWER LOCATIONS FOR SECURING GRAB BARS.
E. COORDINATE WALL DEVICE LOCATIONS WITH WALL MOUNTED FURNISHINGS.
F. COORDINATE WALL ACCESS PANEL LOCATIONS AS TO NOT OVERLAP CHANGES IN FINISHES.
G. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
H. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING (MEP) LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
I. DISHWASHER SHOWN FOR LOCATION AND REFERENCE ONLY; NOT IN CONTRACT.
J. CONTRACTOR TO SUPPLY AND INSTALL RANGE AND REFRIGERATOR ONLY. ALL OTHER APPLIANCES BY OWNER AND INSTALLED BY CONTRACTOR.
K. ALL INTERIOR FINISHES FLAME SPREAD REQUIREMENTS SHALL BE IN COMPLIANCE WITH NFPA 5000 (2018), CHAPTER 10.2.
L. PAINT ALL GYP. BOARD CEILINGS IN UNITS P-3, UNO
M. PAINT ALL GYP BOARD WALLS IN UNITS P-1, UNO
N. ALL FINISH TRANSITIONS THAT OCCUR AT DOORWAYS TRANSITION MATERIAL AT CENTERLINE OF DOOR WHEN CLOSED
O. ALL FLOORING TO RUN CONTINOUSLY UNDER APPLIANCES AND AT OPEN CABINET CONDITIONS
P. ALL GYP BOARD WALLS TO RECEIVE WB-1, UNO
Q. ALL GYP BOARDS IN RESTROOMS TO RECEIVE RB-1, UNO
R. WHERE SHOWER ABUTS OR IS ADJACENT TO EXTERIOR WALL, PROVIDE WEATHER BARRIER BEHIND SHOWER.
S. PROVIDE MOISTURE-RESISTANT GYPSUM WALLBOARD OR CEMENT BOARD (WITH CAULKED JOINTS) BEHIND TUB AND/OR SHOWER ENCLOSURES.
T. DRYWALL SEALED TO TOP PLATE AT ALL UNCONDITIONED ATTIC / WALL INTERFACES USING CAULK, FOAM, DRYWALL ADHESIVE (BUT NOT OTHER CONSTRUCTION ADHESIVES), OR EQUIVALENT MATERIAL.
U. KITCHEN AND BATHROOMS TO HAVE REMOVABLE BASE CABINETS FLOORING TO EXTEND UNDER SINK BASE FOR ADAPTABLE/ADDITIONAL FIRM ADA TYPE SINK

REFERENCE KEYNOTES

05 4500.01	COUNTER SUPPORT BRACKET
05 2000.03	BASE AS SCHEDULED; RE: FINISH LEGEND
06 4100.09	LINEN STORAGE CABINET
09 6500.04	BASE AS SCHEDULED
12 3600.05	PLASTIC LAMINATE, PL-1 WITH BACKSPLASH, RE: FINISH LEGEND
12 3600.07	PLASTIC LAMINATE, PL-1;RE: FINISH LEGEND
26 0000.01	LIGHT FIXTURE, TYP.; REF. ELECT.

GENERAL LEGEND

CR	SHOWER CURTAIN ROD
GBXX	GRAB BAR PER ANSI A117.1 XX INDICATES WIDTH
MR	MIRROR, FULL WIDTH OF VANITY COUNTERTOP
R&S	ROD & SHELF - WIRE CLOSET SHELVING
RH	ROBE HOOK
SHVS	SHELF - WIRE CLOSET SHELVING
TB	TOWEL BAR
TP	TOILET PAPER DISPENSER
WS	WORK SURFACE, 30" WIDE MINIMUM CLEARANCE

APPLIANCE LEGEND

ADA DW	ADA DISHWASHER (OWNER PROVIDED, NIC)
DW	DISHWASHER (OWNER PROVIDED, NIC)
ADA REF	ADA REFRIGERATOR
REF	REFRIGERATOR
ADA RO	ADA ELECTRIC RANGE/ OVEN
RO	RANGE/ OVEN
W	WASHER (OWNER PROVIDED, NIC)
D	DRYER (OWNER PROVIDED, NIC)
MIC	MICROWAVE (ADA) ON COUNTERTOP (OWNER PROVIDED, NIC)
RH	ADA EXHAUST HOOD, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
WH	WATER HEATER
F	FURNACE
MWH	MICROWAVE with HOOD (OWNER PROVIDED, NIC)

FIXTURE LEGEND

NOTE:	REFER TO PLUMBING FIXTURE SCHEDULE FOR MANUFACTURER AND MODEL NUMBERS
BF	BATH FAUCET
GD	GARBAGE DISPOSAL, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
FD	FLOOR DRAIN
LAV	LAVATORY
RS	ROLL-IN SHOWER WITH TILE SURROUND
TUB	TUB & SHOWER, VERIFY DIMENSION PER UNIT
S	SINK
WC	WATER CLOSET
SH	SHOWER HEAD
SHWR	SHOWER
SS	SHOWER SEAT

CASEWORK LEGEND

BXX	CASEWORK - BASE CABINET, WIDTH INDICATED AS "XX"
BXXR	CASEWORK - BASE CABINET (REMOVABLE), WIDTH INDICATED AS "XX"
DB	CASEWORK - DRAWER BASE, WIDTH INDICATED AS "XX"
OBXX	CASEWORK - OPEN BASE CABINET, WIDTH INDICATED AS "XX"
SBXX	CASEWORK - SINK BASE, WIDTH INDICATED AS "XX"
SBXXR	CASEWORK - SINK BASE CABINET (REMOVABLE), WIDTH INDICATED AS "XX"
SBXXA	CASEWORK - SINK BASE CABINET (ACCESSIBLE), WIDTH INDICATED AS "XX"
VBXX	CASEWORK - VANITY DRAWER BASE, WIDTH INDICATED AS "XX"
VSBXX	CASEWORK - VANITY SINK BASE, WIDTH INDICATED AS "XX"
VSBXXR	CASEWORK - VANITY SINK BASE (REMOVABLE), WIDTH INDICATED AS "XX"
WXXYY	CASEWORK - 12" DEEP WALL MOUNTED CABINET, WIDTH INDICATED AS "XX", HEIGHT "YY"
FEP	FINISHED END PANEL
F	FIXED PANEL
GPNL	12" DEEP X 30" WIDE FRAME AND GYP PANEL TO CONTAIN HOOD VENT, REF: E5/AE361
LIN	LINEN CABINET
PN	PANTRY CABINET

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
DATE SIGNED
12/10/2020
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

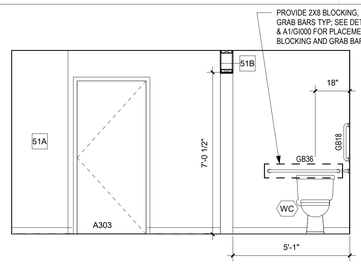
DRAWN BY	AW/CM
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

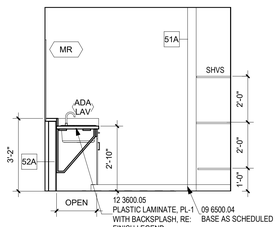
INTERIOR ELEVATIONS

SHEET NO

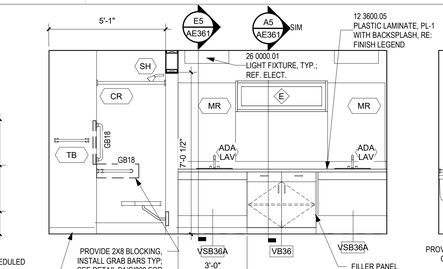
AE221



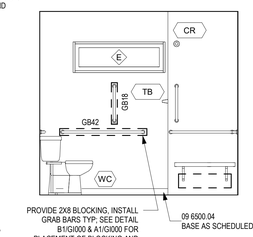
E1 3/2 SINGLE-FAMILY - BATH (FRONT) TYPE 'A'
3/8" = 1'-0"



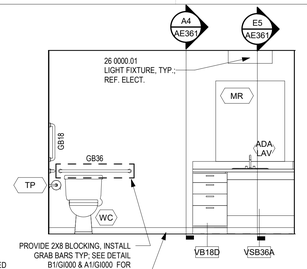
E2 3/2 S-F - BATH (R) TYPE 'A'
3/8" = 1'-0"



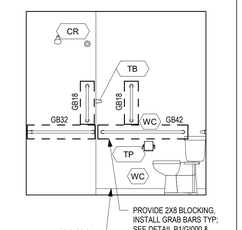
E3 3/2 SINGLE-FAMILY - BATH (BACK) TYPE 'A'
3/8" = 1'-0"



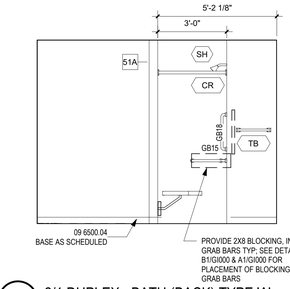
E4 3/2 S-F - BATH (L) TYPE 'A'
3/8" = 1'-0"



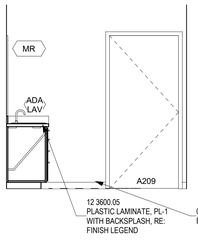
E5 2/1 DUPLEX - BATH (FRONT) TYPE 'A'
3/8" = 1'-0"



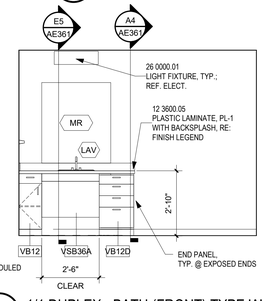
E6 2/1 DUPLEX - BATH (R) TYPE 'A'
3/8" = 1'-0"



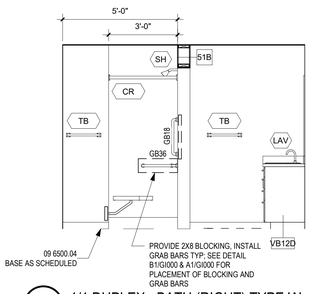
D1 2/1 DUPLEX - BATH (BACK) TYPE 'A'
3/8" = 1'-0"



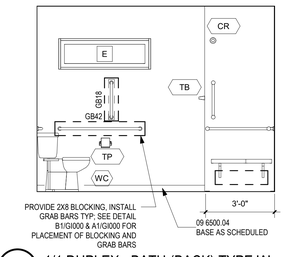
D2 2/1 DUPLEX - BATH (L) TYPE 'A'
3/8" = 1'-0"



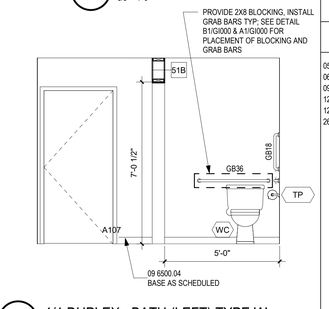
D3 1/1 DUPLEX - BATH (FRONT) TYPE 'A'
3/8" = 1'-0"



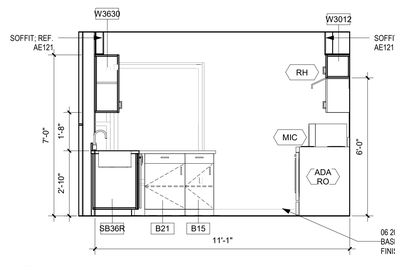
D4 1/1 DUPLEX - BATH (RIGHT) TYPE 'A'
3/8" = 1'-0"



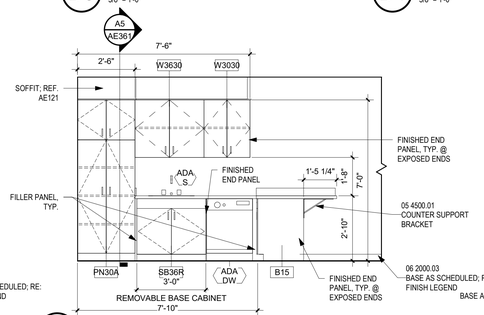
D5 1/1 DUPLEX - BATH (BACK) TYPE 'A'
3/8" = 1'-0"



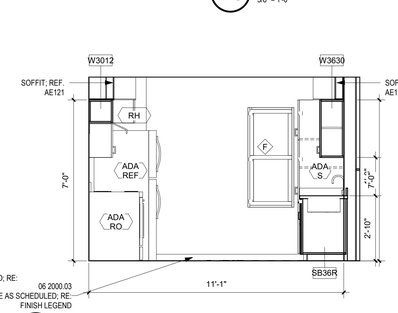
D6 1/1 DUPLEX - BATH (LEFT) TYPE 'A'
3/8" = 1'-0"



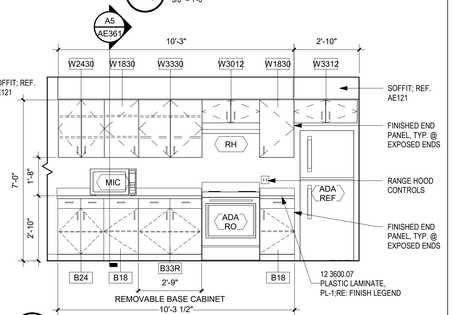
C1 3BD/2BA SINGLE-FAMILY - KITCHEN (FRONT) TYPE 'A'
3/8" = 1'-0"



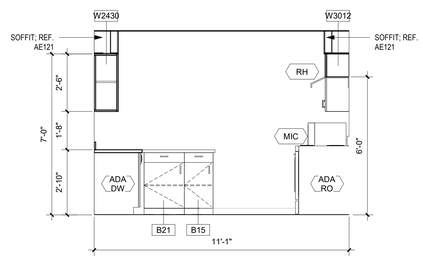
C2 3BD/2BA SINGLE-FAMILY - KITCHEN (RIGHT) TYPE 'A'
3/8" = 1'-0"



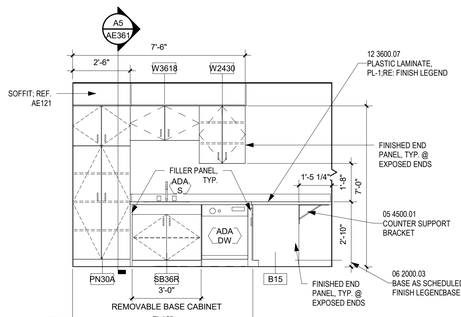
C3 3BD/2BA SINGLE-FAMILY - KITCHEN (BACK) TYPE 'A'
3/8" = 1'-0"



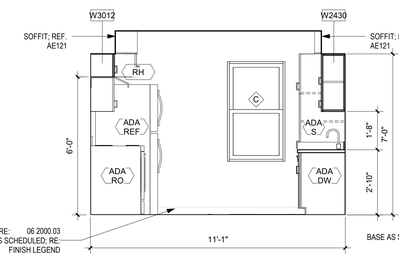
C4 3BD/2BA SINGLE-FAMILY - KITCHEN (LEFT) TYPE 'A'
3/8" = 1'-0"



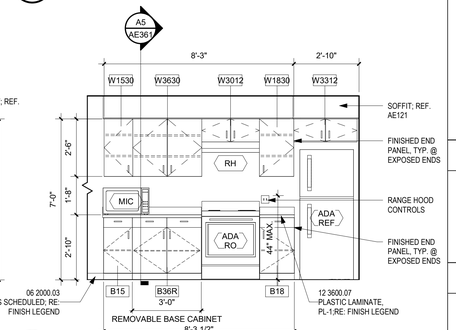
B1 2BD/1BA DUPLEX - KITCHEN (FRONT) TYPE 'A'
3/8" = 1'-0"



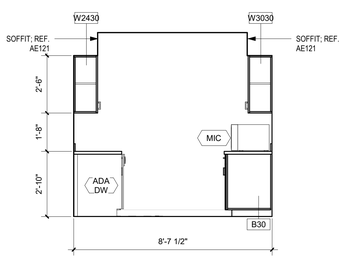
B2 2BD/1BA DUPLEX - KITCHEN (RIGHT) TYPE 'A'
3/8" = 1'-0"



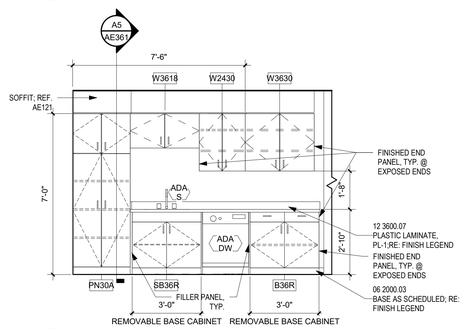
B3 2BD/1BA DUPLEX - KITCHEN (BACK) TYPE 'A'
3/8" = 1'-0"



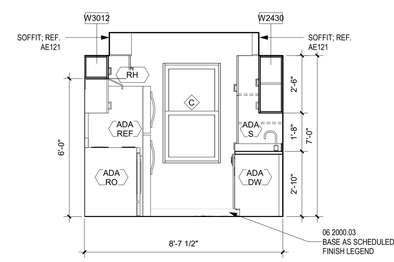
B4 2BD/1BA DUPLEX - KITCHEN (LEFT) TYPE 'A'
3/8" = 1'-0"



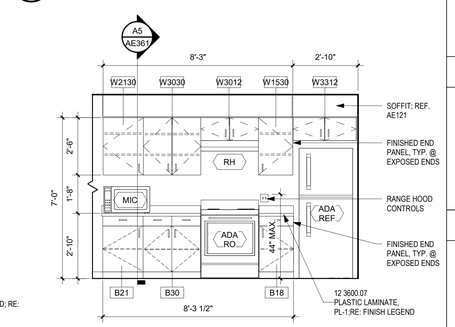
A1 1BD/1BA DUPLEX - KITCHEN (FRONT) TYPE 'A'
3/8" = 1'-0"



A2 1BD/1BA DUPLEX - KITCHEN (RIGHT) TYPE 'A'
3/8" = 1'-0"



A3 1BD/1BA DUPLEX - KITCHEN (BACK) TYPE 'A'
3/8" = 1'-0"



A4 1BD/1BA DUPLEX - KITCHEN (LEFT) TYPE 'A'
3/8" = 1'-0"

GENERAL SHEET NOTES

A. DIMENSIONS ARE TO FINISHED FACE, UNLESS NOTED OTHERWISE.
B. REFER TO GI000 FOR TYPICAL TOILET ACCESSORY MOUNTING HEIGHTS.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. PROVIDE BLOCKING AT ALL TOILET AND SHOWER LOCATIONS FOR SECURING GRAB BARS.
E. COORDINATE WALL DEVICE LOCATIONS WITH WALL MOUNTED FURNISHINGS.
F. COORDINATE WALL ACCESS PANEL LOCATIONS AS TO NOT OVERLAP CHANGES IN FINISHES.
G. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
H. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING (MEP) LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
I. DISHWASHER SHOWN FOR LOCATION AND REFERENCE ONLY; NOT IN CONTRACT.
J. CONTRACTOR TO SUPPLY AND INSTALL RANGE AND REFRIGERATOR ONLY. ALL OTHER APPLIANCES BY OWNER AND INSTALLED BY CONTRACTOR.
K. ALL INTERIOR FINISHES FLAME SPREAD REQUIREMENTS SHALL BE IN COMPLIANCE WITH NFPA 5000 (2018), CHAPTER 10.2.
L. PAINT ALL GYP. BOARD CEILINGS IN UNITS P-3, UNO
M. PAINT ALL GYP BOARD WALLS IN UNITS P-1, UNO
N. ALL FINISH TRANSITIONS THAT OCCUR AT DOORWAYS TRANSITION MATERIAL AT CENTERLINE OF DOOR WHEN CLOSED
O. ALL FLOORING TO RUN CONTINOUSLY UNDER APPLIANCES AND AT OPEN CABINET CONDITIONS
P. ALL GYP BOARD WALLS TO RECEIVE WB-1, UNO
Q. ALL GYP BOARDS IN RESTROOMS TO RECEIVE RB-1, UNO
R. WHERE SHOWER ABUTS OR IS ADJACENT TO EXTERIOR WALL, PROVIDE WEATHER BARRIER BEHIND SHOWER.
S. PROVIDE MOISTURE-RESISTANT GYPSUM WALLBOARD OR CEMENT BOARD (WITH CAULKED JOINTS) BEHIND TUB AND/OR SHOWER ENCLOSURES.
T. DRYWALL SEALED TO TOP PLATE AT ALL UNCONDITIONED ATTIC / WALL INTERFACES USING CAULK, FOAM, DRYWALL ADHESIVE (BUT NOT OTHER CONSTRUCTION ADHESIVES), OR EQUIVALENT MATERIAL
U. KITCHEN AND BATHROOM SINK TO HAVE REMOVABLE BASE CABINETS. FLOORING TO EXTEND UNDER SINK BASE FOR ADAPTABLE CONDITION. CONFIRM ADA TYPE SINK

REFERENCE KEYNOTES

05 4500.01	COUNTER SUPPORT BRACKET
06 2000.03	BASE AS SCHEDULED; RE: FINISH LEGEND
09 6500.04	BASE AS SCHEDULED
12 3600.05	PLASTIC LAMINATE, PL-1 WITH BACKSPLASH, RE: FINISH LEGEND
12 3600.07	PLASTIC LAMINATE, PL-1;RE: FINISH LEGEND
26 0000.01	LIGHT FIXTURE, TYP.; REF. ELECT.

GENERAL LEGEND

CR	SHOWER CURTAIN ROD
GBXX	GRAB BAR PER ANSI A117.1 XX INDICATES WIDTH
MR	MIRROR, FULL WIDTH OF VANITY COUNTERTOP
R&S	ROD & SHELF - WIRE CLOSET SHELVING
RH	ROBE HOOK
SHVS	SHELF - WIRE CLOSET SHELVING
TB	TOWEL BAR
TP	TOILET PAPER DISPENSER
WS	WORK SURFACE, 30" WIDE MINIMUM CLEARANCE

APPLIANCE LEGEND

ADA DW	ADA DISHWASHER (OWNER PROVIDED, NIC)
DW	DISHWASHER (OWNER PROVIDED, NIC)
ADA REF	ADA REFRIGERATOR
REF	REFRIGERATOR
ADA RO	ADA ELECTRIC RANGE/ OVEN
RO	RANGE/ OVEN
W	WASHER (OWNER PROVIDED, NIC)
D	DRYER (OWNER PROVIDED, NIC)
MIC	MICROWAVE (ADA) ON COUNTERTOP (OWNER PROVIDED, NIC)
RH	ADA EXHAUST HOOD, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
WH	WATER HEATER
F	FURNACE
MWH	MICROWAVE with HOOD (OWNER PROVIDED, NIC)

FIXTURE LEGEND

NOTE:	REFER TO PLUMBING FIXTURE SCHEDULE FOR MANUFACTURER AND MODEL NUMBERS
BF	BATH FAUCET
GD	GARBAGE DISPOSAL, SWITCH CONTROLS ARE WITHIN REACH RANGE IN "TYPE A" UNITS
FD	FLOOR DRAIN
LAV	LAVATORY
RS	ROLL-IN SHOWER WITH TILE SURROUND
TUB	TUB & SHOWER, VERIFY DIMENSION PER UNIT
S	SINK
WC	WATER CLOSET
SH	SHOWER HEAD
SHWR	SHOWER
SS	SHOWER SEAT

CASEWORK LEGEND

BXX	CASEWORK - BASE CABINET, WIDTH INDICATED AS "XX"
BXXR	CASEWORK - BASE CABINET (REMOVABLE), WIDTH INDICATED AS "XX"
DB	CASEWORK - DRAWER BASE, WIDTH INDICATED AS "XX"
OBXX	CASEWORK - OPEN BASE CABINET, WIDTH INDICATED AS "XX"
SBXX	CASEWORK - SINK BASE, WIDTH INDICATED AS "XX"
SBXXR	CASEWORK - SINK BASE CABINET (REMOVABLE), WIDTH INDICATED AS "XX"
SBXXA	CASEWORK - SINK BASE CABINET (ACCESSIBLE), WIDTH INDICATED AS "XX"
VBXX	CASEWORK - VANITY DRAWER BASE, WIDTH INDICATED AS "XX"
VSBXX	CASEWORK - VANITY SINK BASE, WIDTH INDICATED AS "XX"
VSBXXR	CASEWORK - VANITY SINK BASE (REMOVABLE), WIDTH INDICATED AS "XX"
WXXYY	CASEWORK - 12" DEEP WALL MOUNTED CABINET, WIDTH INDICATED AS "XX", HEIGHT "YY"
FEP	FINISHED END PANEL
F	FIXED PANEL
GPNL	12" DEEP X 30" WIDE FRAME AND GYP PANEL TO CONTAIN HOOD VENT, REF: ES/AE361
LIN	LINEN CABINET
PN	PANTRY CABINET

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KAPU
10/10/2021
REGISTERED
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

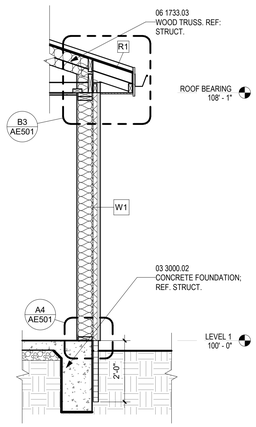
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

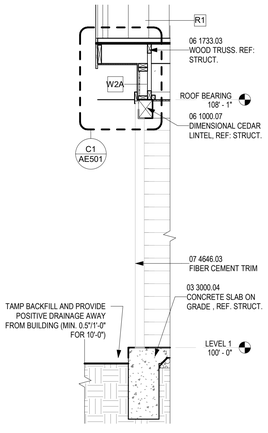
INTERIOR ELEVATIONS - TYPE 'A' UNITS

SHEET NO

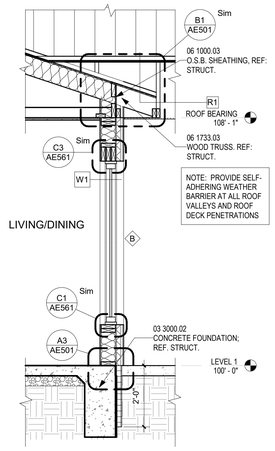
AE222



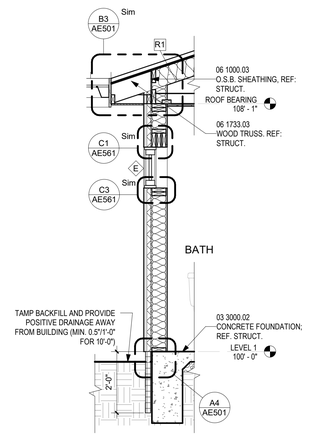
D1 TYPICAL WALL SECTION
1/2" = 1'-0"



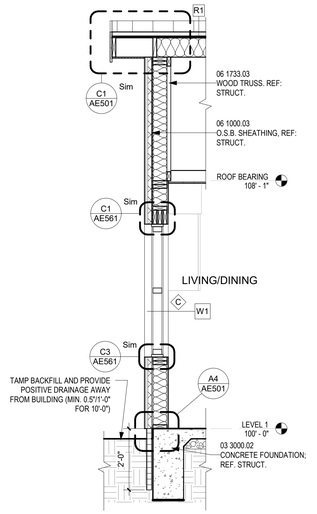
D2 TYPICAL WALL SECTION AT PORCH/PATIO
1/2" = 1'-0"



D3 WALL SECTION AT ROOF INTERSECTION
1/2" = 1'-0"



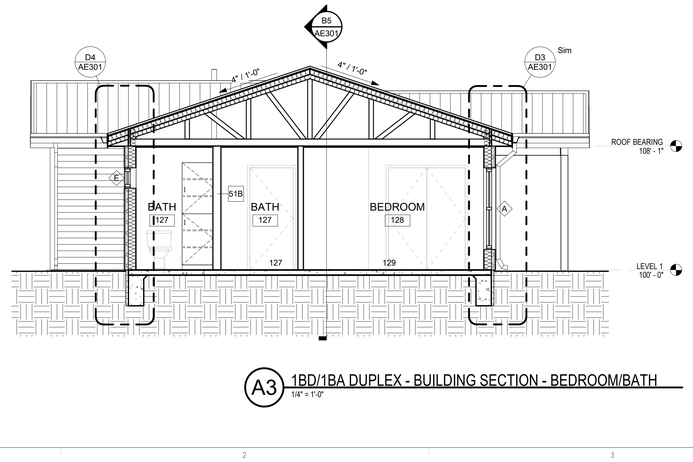
D4 TYPICAL WALL SECTION AT HIGH WINDOW
1/2" = 1'-0"



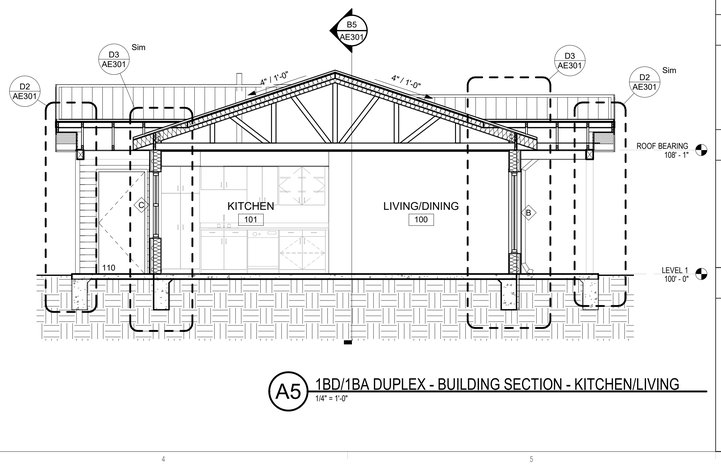
D5 TYPICAL WALL SECTION AT GABLE WALL
1/2" = 1'-0"

B2 1BD/1BA DUPLEX - BUILDING SECTION - LAUNDRY/HALL/BEDROOM
1/4" = 1'-0"

B5 1BD/1BA DUPLEX - BUILDING SECTION - LIVING/BEDROOM
1/4" = 1'-0"



A3 1BD/1BA DUPLEX - BUILDING SECTION - BEDROOM/BATH
1/4" = 1'-0"



A5 1BD/1BA DUPLEX - BUILDING SECTION - KITCHEN/LIVING
1/4" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
E. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

03 3000.02	CONCRETE FOUNDATION; REF. STRUCT.
03 3000.04	CONCRETE SLAB ON GRADE
06 1000.03	O.S.B. SHEATHING, REF: STRUCT.
06 1000.07	DIMENSIONAL CEDAR LINTEL, REF: STRUCT.
06 1733.03	WOOD TRUSS. REF: STRUCT.
07 4646.03	FIBER CEMENT TRIM

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER. WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-ILOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-ILOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF: STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

LEGEND

CEMENT FIBER HORIZONTAL LAP SIDING (6" EXPOSURE)

WOOD_CEDAR

ROOFING_METAL PANEL

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KAPU
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

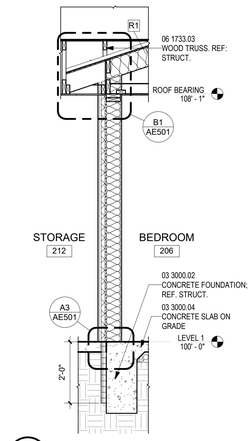
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

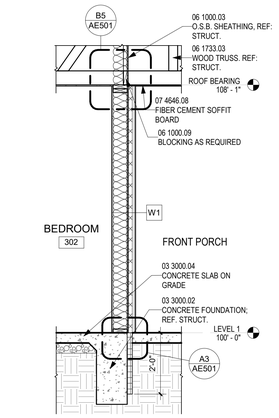
1BD/1BA DUPLEX - BUILDING / WALL SECTIONS

SHEET NO

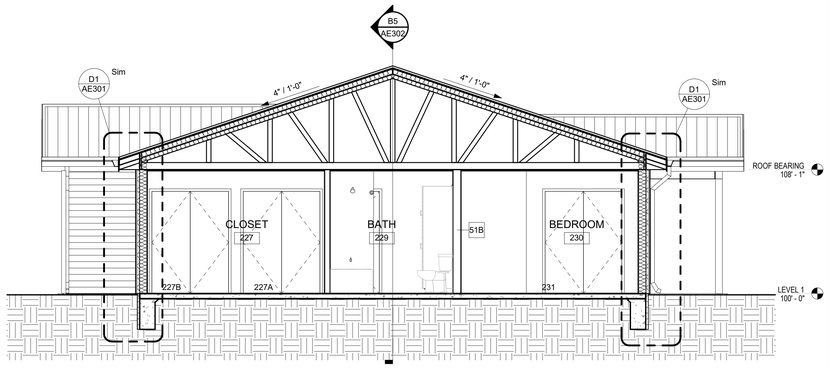
AE301



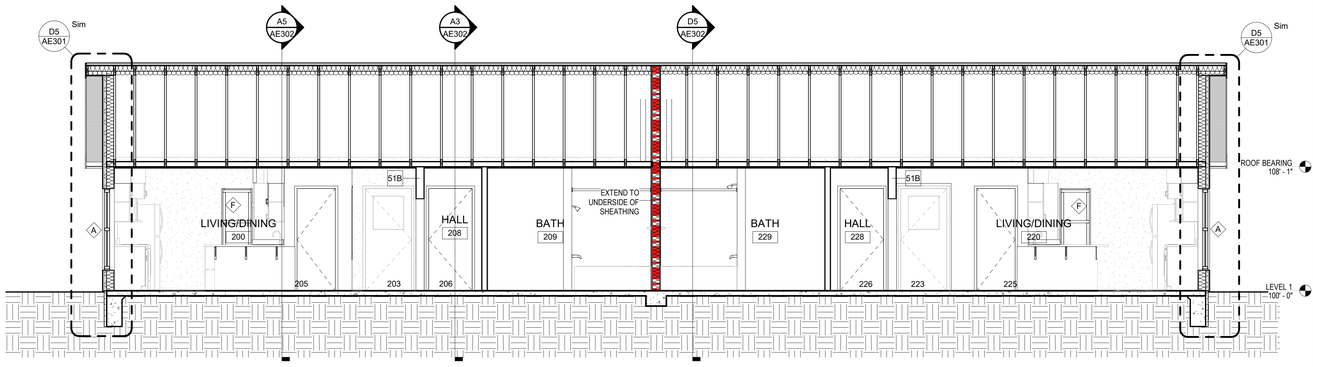
D1 WALL SECTION AT EXTR. STORAGE
1/2" = 1'-0"



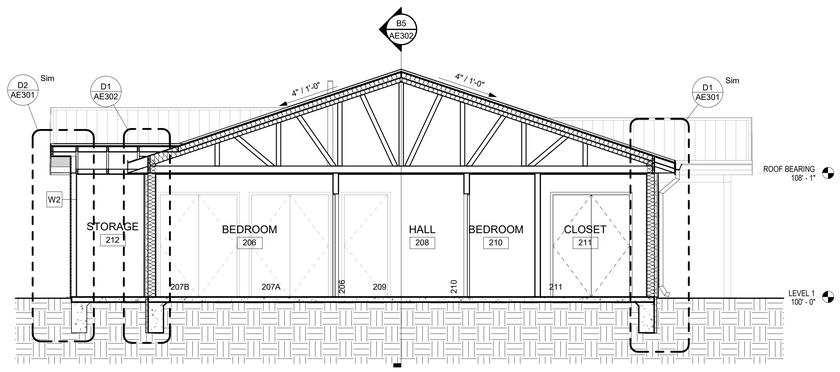
D2 WALL SECTION AT 3BD/2BA PORCH
1/2" = 1'-0"



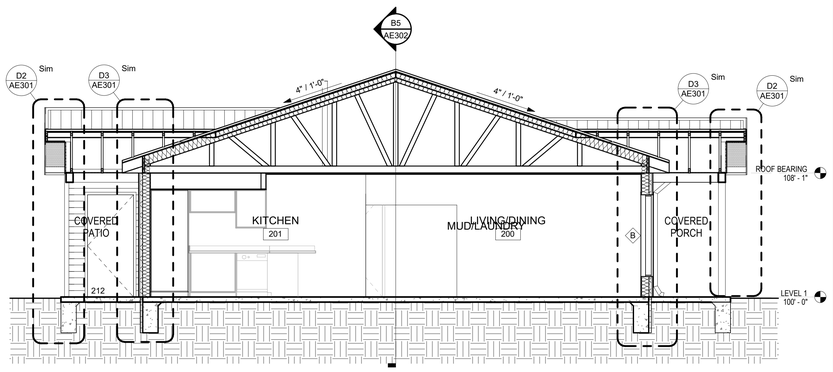
D5 2BD/1BA DUPLEX - BUILDING SECTION - BEDROOM/BATH/BEDROOM
1/4" = 1'-0"



B5 2BD/1BA DUPLEX - BUILDING SECTION - LIVING/BEDROOM
1/4" = 1'-0"



A3 2BD/1BA DUPLEX - BUILDING SECTION - BEDROOM/HALL/BEDROOM
1/4" = 1'-0"



A5 2BD/1BA DUPLEX - BUILDING SECTION - KITCHEN/LIVING
1/4" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
E. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

03 3000.02	CONCRETE FOUNDATION; REF. STRUCT.
03 3000.04	CONCRETE SLAB ON GRADE
06 1000.03	O.S.B. SHEATHING, REF: STRUCT.
06 1000.09	BLOCKING AS REQUIRED
06 1733.03	WOOD TRUSS. REF: STRUCT.
07 4646.08	FIBER CEMENT SOFFIT BOARD

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

LEGEND

CEMENT FIBER HORIZONTAL LAP SIDING (6" EXPOSURE)
WOOD_CEDAR
ROOFING_METAL PANEL

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KAPU
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

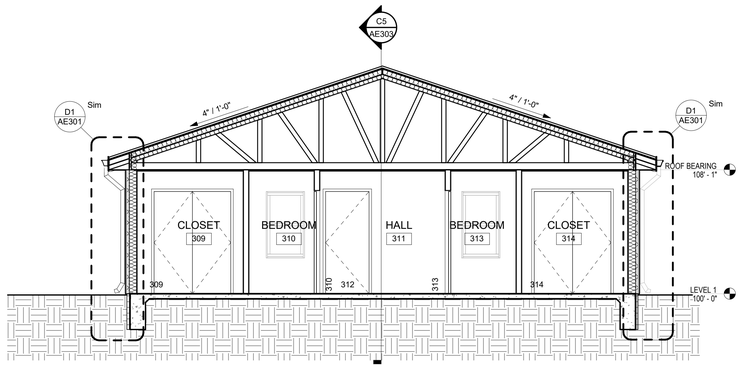
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

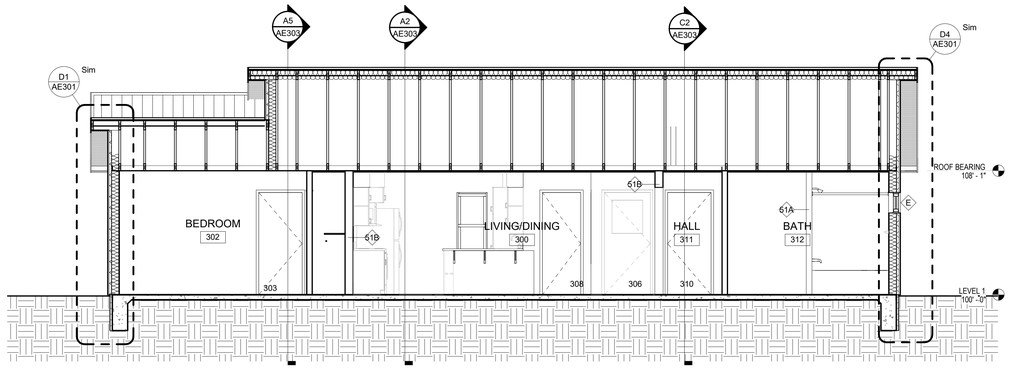
2BD/1BA DUPLEX - BUILDING/WALL SECTIONS

SHEET NO

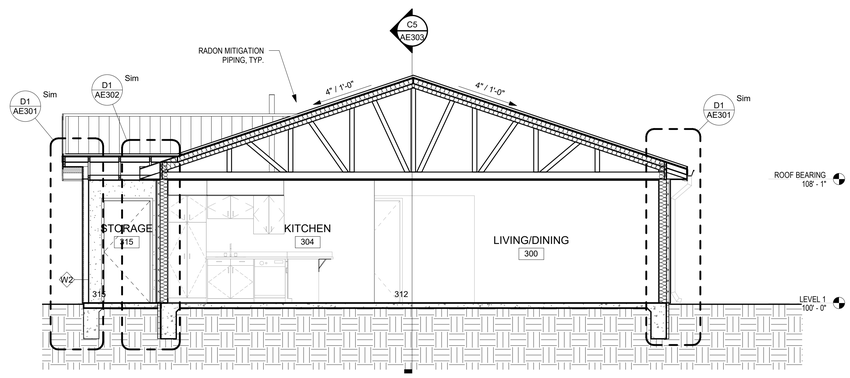
AE302



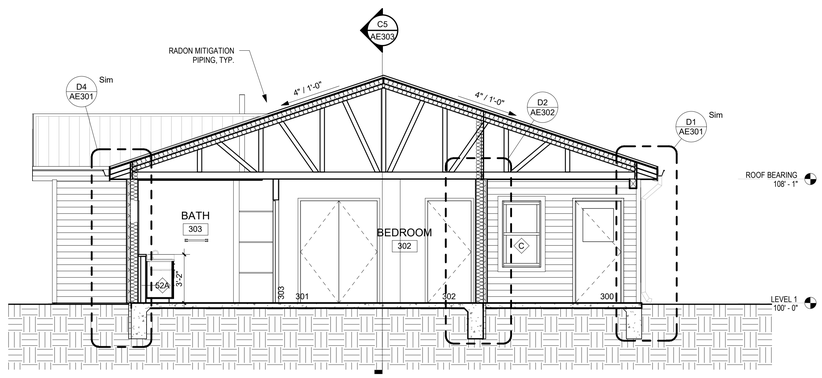
C2 3BD/2BA SINGLE-FAMILY - BUILDING SECTION - BEDROOM/HALL/BEDROOM
1/4" = 1'-0"



C5 3BD/2BA SINGLE-FAMILY - BUILDING SECTION - LIVING/BEDROOM/BATH
1/4" = 1'-0"



A2 3BD/2BA SINGLE-FAMILY - BUILDING SECTION - LIVING/KITCHEN
1/4" = 1'-0"



A5 3BD/2BA SINGLE-FAMILY - BUILDING SECTION - BATH/BEDROOM
1/4" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
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F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
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K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
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M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

LEGEND

CEMENT FIBER HORIZONTAL LAP SIDING (6" EXPOSURE)

WOOD_CEDAR

ROOFING_METAL PANEL

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

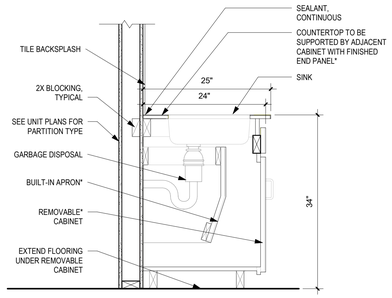
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

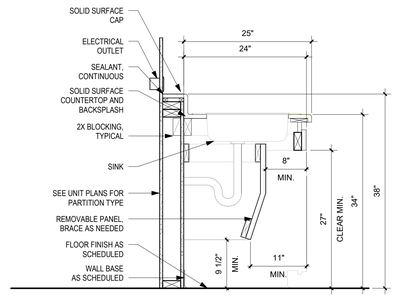
3BD/2BA SINGLE-FAMILY - BUILDING SECTIONS

SHEET NO

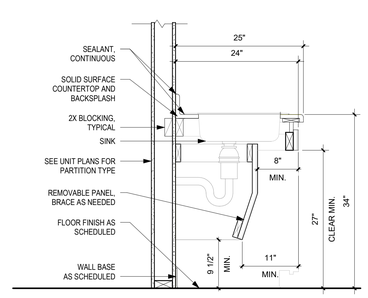
AE303



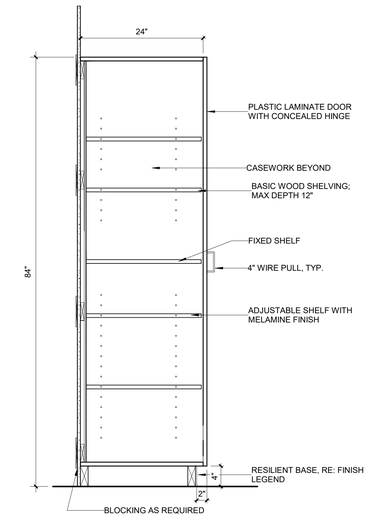
E3 ACCESSIBLE KITCHEN SINK BASE CABINET
1" = 1'-0"



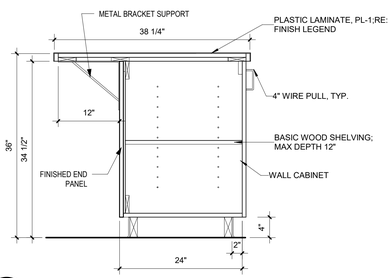
E4 ACCESSIBLE VANITY SINK @ FURRED WALL
1" = 1'-0"



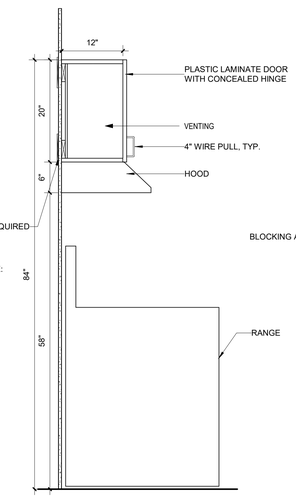
E5 ACCESSIBLE VANITY SINK, TYP.
1" = 1'-0"



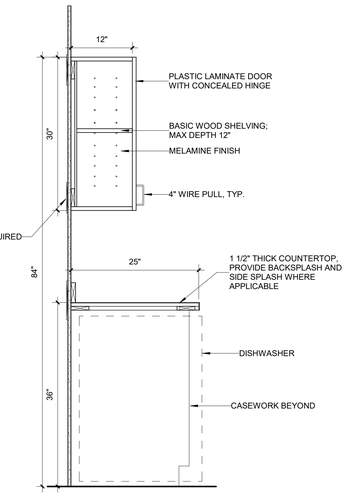
C4 CASEWORK - TALL CABINET
1" = 1'-0"



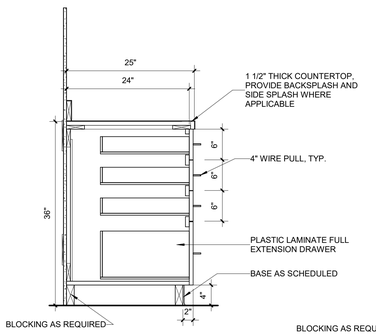
A1 PENINSULA w/ BASE CABINET
1" = 1'-0"



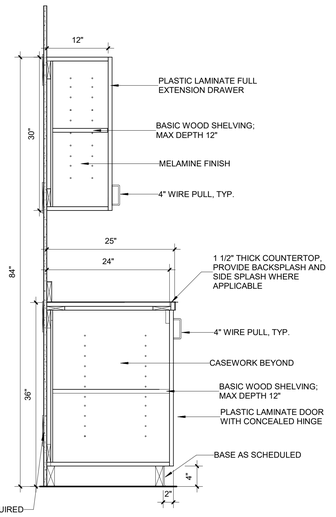
A2 CASEWORK - RANGE w/ WALL CABINET
1" = 1'-0"



A3 DISHWASHER w/ WALL CABINET
1" = 1'-0"



A4 BASE (w/ DRAWERS) & WALL CABINETS
1" = 1'-0"



A5 BASE & WALL CABINETS
1" = 1'-0"

GENERAL SHEET NOTES

A. DIMENSIONS ARE TO FINISHED FACE, UNLESS NOTED OTHERWISE.
B. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
C. COORDINATE CASEWORK WITH SOFFIT LOCATIONS, NOT ALL SOFFITS SHOWN IN SECTION, CASEWORK UNDER 7'-2" AFF SOFFIT TO RECEIVE SCRIBE/FILLER WITH CONTINUOUS LAMINATE.
D. REFERENCE INTERIOR ELEVATIONS FOR CASEWORK FINISH INFORMATION.
E. ALL SHELVING CABINETS OVER 36"W REQUIRE A MIDDLE VERTICAL SUPPORT.
F. PROVIDE COUNTER SUPPORTS EVERY 36" MINIMUM.
G. PROVIDE CONTINUOUS SOLID BACKING UNDER COUNTERTOP FOR FULL LENGTH OF SUPPORT

REFERENCE KEYNOTES

06 4100.02	WALL CABINET
06 4100.07	ADJUSTABLE SHELF WITH MELAMINE FINISH
06 4100.08	BASIC WOOD SHELVING; MAX DEPTH 12"
06 4100.10	4" WIRE PULL, TYP.
06 4100.11	PLASTIC LAMINATE FULL EXTENSION DRAWER
06 4100.12	PLASTIC LAMINATE DOOR WITH CONCEALED HINGE
06 4100.13	BLOCKING AS REQUIRED
06 4100.14	MELAMINE FINISH
06 4100.15	CASEWORK BEYOND
06 4100.16	FIXED SHELF
09 6500.01	RESILIENT BASE, RE: FINISH LEGEND
09 6500.04	BASE AS SCHEDULED
11 3013.02	RANGE
11 3013.08	DISHWASHER
11 3013.11	HOOD
12 3600.07	PLASTIC LAMINATE, PL-1;RE: FINISH LEGEND
12 3600.08	1 1/2" THICK COUNTERTOP, PROVIDE BACKSPLASH AND SIDE SPLASH WHERE APPLICABLE

CASEWORK LEGEND

BXX	CASEWORK - BASE CABINET, WIDTH INDICATED AS "XX"
DB	CASEWORK - DRAWER BASE, WIDTH INDICATED AS "XX"
OBXX	CASEWORK - OPEN BASE CABINET, WIDTH INDICATED AS "XX"
SBXX	CASEWORK - SINK BASE, WIDTH INDICATED AS "XX"
VBXX	CASEWORK - VANITY DRAWER BASE, WIDTH INDICATED AS "XX"
VSBXX	CASEWORK - VANITY SINK BASE, WIDTH INDICATED AS "XX"
WXXYY	CASEWORK - 12" DEEP WALL MOUNTED CABINET, WIDTH INDICATED AS "XX", HEIGHT AS "YY"
FEP	FINISHED END PANEL
F	FIXED PANEL
GPNL	12" DEEP X 30" WIDE FRAME AND GYP PANEL TO CONTAIN HOOD VENT, REF: E5/AE361
LIN	LINEN CABINET
PAN	PANTRY CABINET

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
DATE SIGNED 12/10/2020
REGISTERED ARCHITECT
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

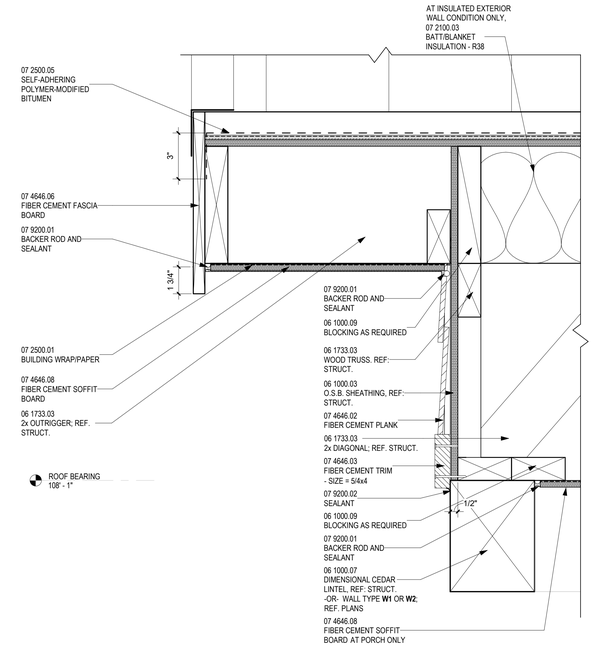
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

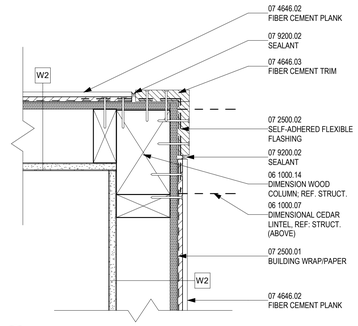
CASEWORK SECTIONS

SHEET NO

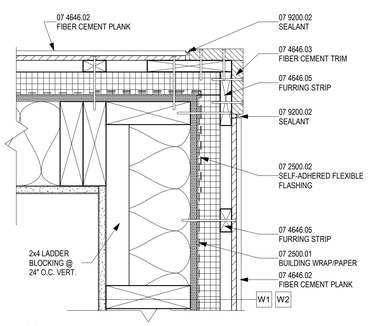
AE361



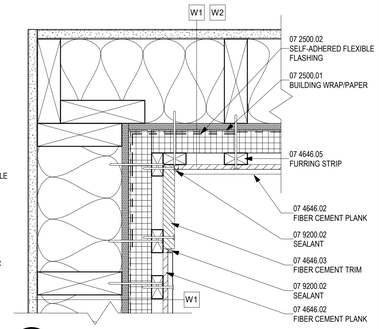
C1 DETAIL - TYPICAL GABLE END WALL (PORCH CONDITION SHOWN)
3" = 1'-0"



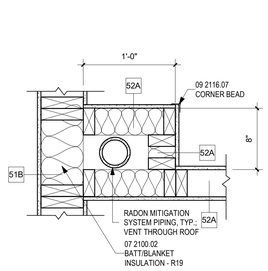
D3 OUTSIDE CORNER AT STORAGE ROOM/COLUMN
3" = 1'-0"



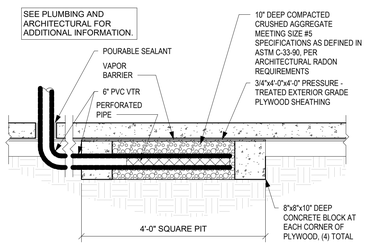
D4 PLAN DETAIL - TYP OUTSIDE CORNER
3" = 1'-0"



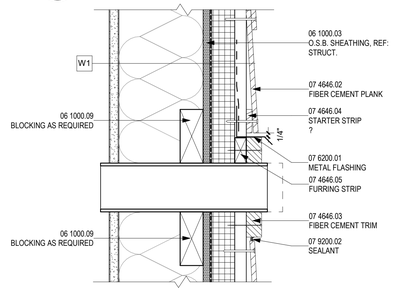
D5 PLAN DETAIL - TYP INSIDE CORNER
3" = 1'-0"



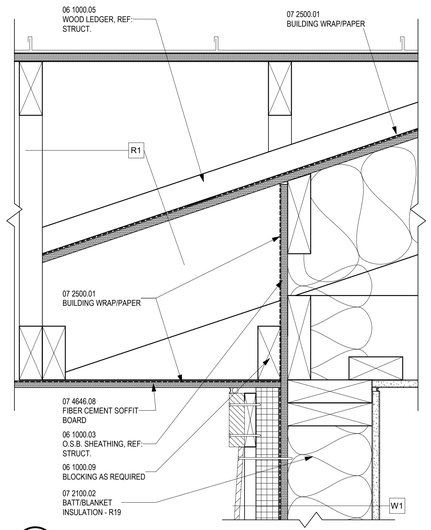
C3 PLAN DETAIL - RADON PIPE CHASE
1 1/2" = 1'-0"



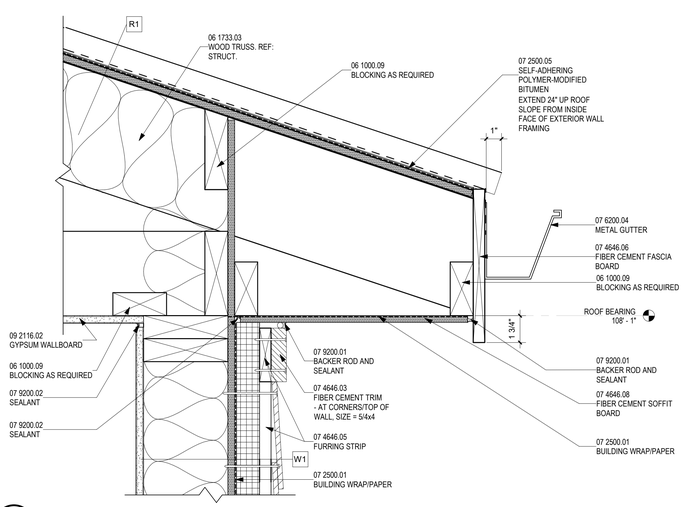
C4 DETAIL - RADON SUCTION PIT
3/4" = 1'-0"



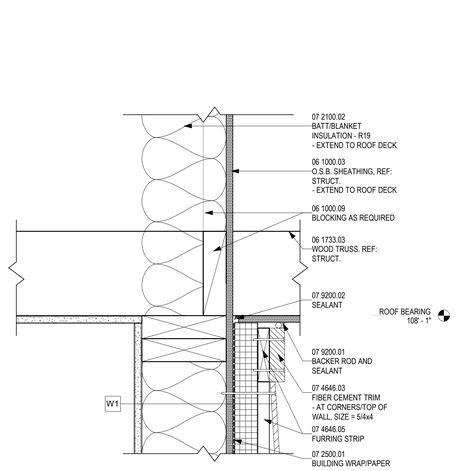
C5 SECTION DETAIL - FIXTURE PENETRATION AT EXTR
3" = 1'-0"



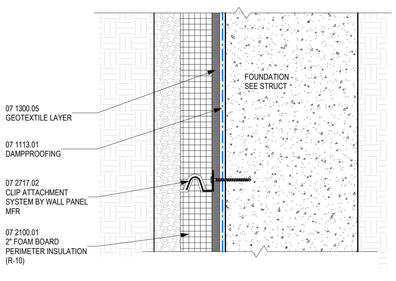
B1 DETAIL AT OVERFRAME ROOF
3" = 1'-0"



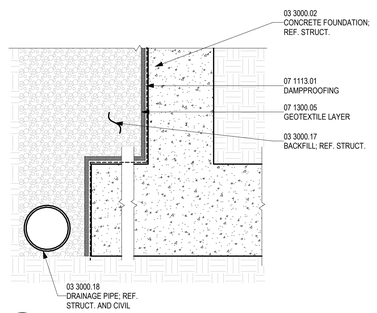
B3 DETAIL - TYPICAL ROOF EAVE
3" = 1'-0"



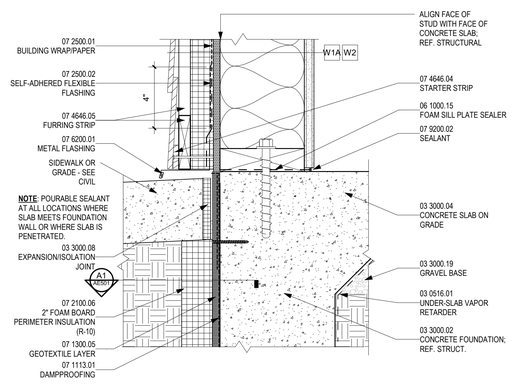
B5 DETAIL - 3BD/2BA PORCH OVERHANG
3" = 1'-0"



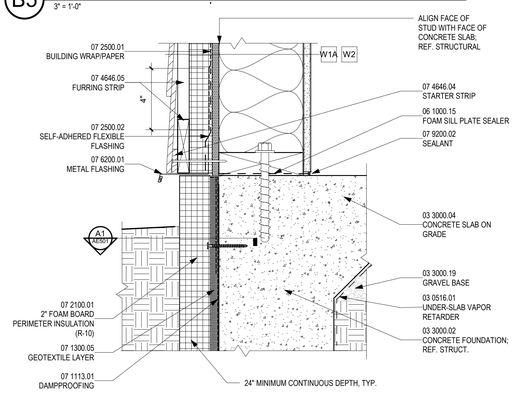
A1 PLAN DETAIL - WATER CONTROL BELOW GRADE
3" = 1'-0"



A2 DETAIL - WATER CONTROL BELOW GRADE
1 1/2" = 1'-0"



A3 DETAIL - TYPICAL WALL BASE
3" = 1'-0"



A4 DETAIL - TYPICAL WALL BASE
3" = 1'-0"

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
E. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

03 0516.01	UNDER-SLAB VAPOR RETARDER
03 3000.02	CONCRETE FOUNDATION; REF. STRUCT.
03 3000.04	CONCRETE SLAB ON GRADE
03 3000.08	EXPANSION/ISOLATION JOINT
03 3000.17	BACKFILL; REF. STRUCT.
03 3000.18	DRAINAGE PIPE; REF. STRUCT. AND CIVIL
03 3000.19	GRAVEL BASE
06 1000.03	O.S.B. SHEATHING, REF: STRUCT.
06 1000.05	WOOD LEDGER, REF: STRUCT.
06 1000.07	DIMENSIONAL CEDAR LINTEL, REF: STRUCT.
06 1000.09	BLOCKING AS REQUIRED
06 1000.14	DIMENSION WOOD COLUMN; REF. STRUCT.
06 1000.15	FOAM SILL PLATE SEALER
06 1733.03	WOOD TRUSS. REF: STRUCT.
07 1113.01	DAMPPROOFING
07 1300.05	GEOTEXTILE LAYER
07 2100.01	2" FOAM BOARD PERIMETER INSULATION (R-10)
07 2100.02	BATT/BLANKET INSULATION - R19
07 2100.03	BATT/BLANKET INSULATION - R38
07 2100.06	2" FOAM BOARD PERIMETER INSULATION (R-10)
07 2500.01	BUILDING WRAP/PAPER
07 2500.02	SELF-ADHERED FLEXIBLE FLASHING
07 2500.05	SELF-ADHERING POLYMER-MODIFIED BITUMEN
07 2717.02	CLIP ATTACHMENT SYSTEM BY WALL PANEL MFR
07 4646.02	FIBER CEMENT PLANK
07 4646.03	FIBER CEMENT TRIM
07 4646.04	STARTER STRIP
07 4646.05	FURRING STRIP
07 4646.06	FIBER CEMENT FASCIA BOARD
07 4646.08	FIBER CEMENT SOFFIT BOARD
07 6200.01	METAL FLASHING
07 6200.04	METAL GUTTER
07 9200.01	BACKER ROD AND SEALANT
07 9200.02	SEALANT
09 2116.02	GYPSUM WALLBOARD
09 2116.07	CORNER BEAD

EXTERIOR WALL TYPES

REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER, WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES

REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-/LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-/LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF: STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL
REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
STATE OF ARIZONA U.S.A.
EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS
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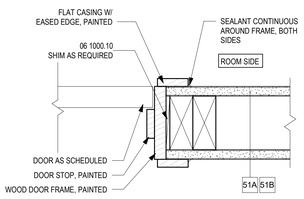
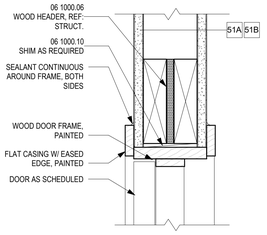
DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME
ENLARGED DETAILS

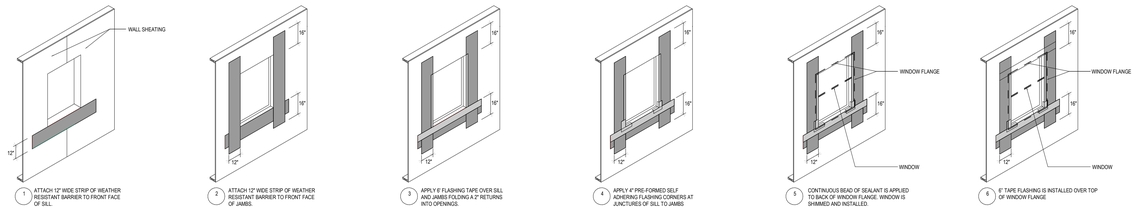
SHEET NO
AE501



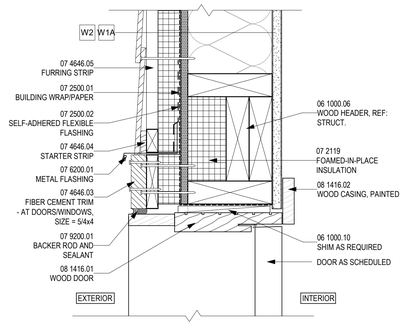
E1 DOOR JAMB @ INTERIOR WALL
3" = 1'-0"



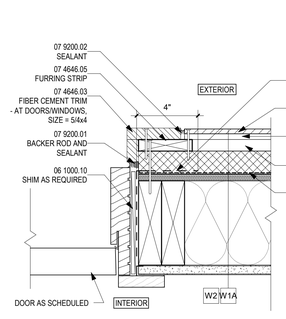
E2 DOOR HEAD @ INTERIOR WALL
3" = 1'-0"



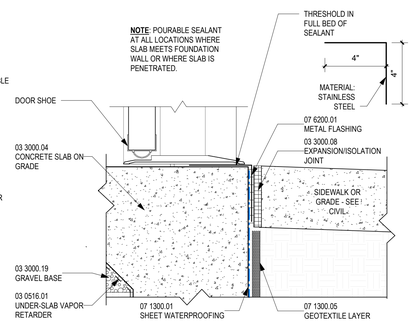
E5 WINDOW FLASHING DETAIL
1/16" = 1'-0"



D1 DOOR HEAD @ EXTERIOR WALL
3" = 1'-0"



D2 DOOR JAMB @ EXTERIOR WALL
3" = 1'-0"

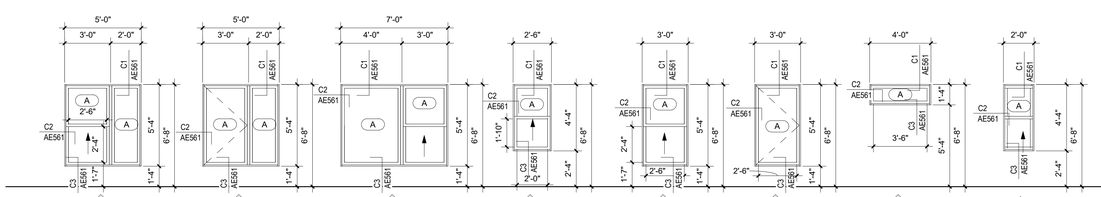


D3 UNIT ENTRY DOOR THRESHOLD
3" = 1'-0"

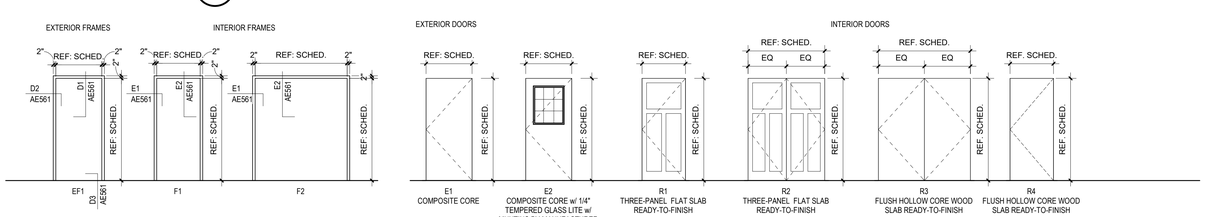
C1 WINDOW HEAD @ EXTERIOR WALL - VINYL
3" = 1'-0"

C2 WINDOW JAMB @ EXTERIOR WALL
3" = 1'-0"

C3 WINDOW SILL @ PLANK
3" = 1'-0"



B3 WINDOW TYPES
(PROVIDE HORIZONTAL SLAT LOUVER BLINDS)
1/4" = 1'-0"



A1 DOOR FRAME TYPES
1/4" = 1'-0"

A3 DOOR TYPES
1/4" = 1'-0"

DOOR AND FRAME SCHEDULE -- REFERENCE DETAILS THIS SHEET

	DOOR					FRAME		
	SIZE							
NUMBER	WIDTH	HEIGHT	THK	TYPE	MAT	TYPE	MAT	REMARKS
100	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
103	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
104	4' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
106	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
107	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
108	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
109	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
110	3' - 0"	6' - 8"	1 3/4"	E1	HM	EF1	WD	
120	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
123	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
124	4' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
126	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
127	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
128	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
129	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
130	3' - 0"	6' - 8"	1 3/4"	E1	COM	EF1	WD	
200	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
203	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
204	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
205	2' - 6"	6' - 8"	1 3/4"	R4	WD	F1	WD	
206	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
207A	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
207B	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
209	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
210	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
211	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
212	3' - 0"	6' - 8"	1 3/4"	E1	COM	EF1	WD	
220	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
223	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
224	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
225	2' - 6"	6' - 8"	1 3/4"	R4	WD	F1	WD	
226	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
227A	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
227B	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
229	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
230	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
231	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
232	3' - 0"	6' - 8"	1 3/4"	E1	COM	EF1	WD	
300	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
301	5' - 0"	4' - 8"	1 3/4"	R2	WD	F2	WD	
302	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
303	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
306	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
307	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
308	2' - 6"	6' - 8"	1 3/4"	R1	WD	F1	WD	
309	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
310	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
312	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
313	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
314	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
315	3' - 0"	6' - 8"	1 3/4"	E1	COM	EF1	WD	
A100	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
A103	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
A104	4' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A106	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
A107	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A108	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A109	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A110	3' - 0"	6' - 8"	1 3/4"	E1	HM	EF1	WD	
A200	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
A203	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
A204	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
A205	2' - 10"	6' - 8"	1 3/4"	R4	WD	F1	WD	
A206	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A207A	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A207B	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A209	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A210	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A211	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A212	3' - 0"	6' - 8"	1 3/4"	E1	COM	EF1	WD	
A300	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
A301	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A302	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A303	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A306	3' - 0"	6' - 8"	1 3/4"	E2	COM	EF1	WD	
A307	5' - 0"	4' - 8"	1 3/4"	R3	WD	F2	WD	
A308	2' - 10"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A309	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A310	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A312	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A313	3' - 0"	6' - 8"	1 3/4"	R1	WD	F1	WD	
A314	5' - 0"	6' - 8"	1 3/4"	R2	WD	F2	WD	
A315	3' - 0"	6' - 8"	1 3/4"	E1	COM	EF1	WD	

GENERAL SHEET NOTES

A. REFER TO SHEET AE001 FOR EXPLANATION OF ENCLOSURE ASSEMBLIES.
B. REFER TO SHEET AE002 FOR ENCLOSURE CONTINUITY FOR CONTROL LAYER CONTINUITY INTENT.
C. PROVIDE BACKING FOR SECURING WALL MOUNTED ITEMS.
D. EXTERIOR WALLS TO BE TYPE **W1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR EXTERIOR WALL TYPE DESCRIPTIONS.
E. INTERIOR WALLS TO BE TYPE **51A**, UNLESS NOTED OTHERWISE. REF. GI000 FOR INTERIOR WALL TYPE DESCRIPTIONS.
F. ROOFS TO BE TYPE **R1**, UNLESS NOTED OTHERWISE. REF. GI000 FOR ROOF TYPE DESCRIPTIONS.
G. AT BUILDING SECTIONS, ROOF TRUSS LOCATIONS SHOWN FOR REFERENCE ONLY. REFERENCE STRUCTURAL DRAWINGS FOR ACTUAL ROOF TRUSS LOCATIONS.
H. AT BUILDING SECTIONS, ROOF TRUSS DIAGONALS SHOWN FOR REFERENCE ONLY. ACTUAL ROOF TRUSS DIAGONALS TO BE DETERMINED BY MANUFACTURER.
I. DIVERT WATER AWAY FROM BUILDING WALLS AND FOUNDATIONS BY SLOPING THE EXTERIOR GRADE AWAY FROM THE BUILDING AND PROVIDING A COBBLE RUN-DOWN AT EACH ROOF DRAIN DOWNSPOUT.
J. REFER TO MECHANICAL SHEETS FOR DUCT AND ROOF PENETRATION LOCATIONS.
K. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING LEGENDS FOR DESCRIPTION OF MEP-RELATED SYMBOLS.
L. SIZE/LOCATION OF RADON SYSTEM IS FOR REFERENCE ONLY; TO BE DESIGNED AND INSTALLED BY OWNER'S VENDOR PER REQ'S OF AUTHORITIES HAVING JURISDICTION.
M. FOR WINDOW TYPES A, A1 & B, VERIFY FIXED WINDOW SIDE PER ELEVATIONS AND PLANS.
N. PROVIDE R-5 BLANKET INSULATION OVER FIRE SPRINKLER SYSTEM AND DUCTWORK.
O. ALL EXTERIOR DOORS AND OPERABLE WINDOWS TO RECEIVE WEATHERSTRIPPING AND SEALED.
P. INSTALL INSULATION TO BE INSTALLED TO RESNET GRADE 1 STANDARDS.
Q. DUCTS, FLUES, SHAFTS, PLUMBING, PIPING, WIRING, EXHAUST FANS, & OTHER PENETRATIONS TO UNCONDITIONED SPACE SEALED, WITH BLOCKING / FLASHING AS NECESSARY.

REFERENCE KEYNOTES

03 0516.01	UNDER-SLAB VAPOR RETARDER
03 3000.04	CONCRETE SLAB ON GRADE
03 3000.08	EXPANSION/ISOLATION JOINT
03 3000.19	GRAVEL BASE
06 1000.06	WOOD HEADER, REF: STRUCT.
06 1000.10	SHIM AS REQUIRED
07 1300.01	SHEET WATERPROOFING
07 1300.05	GEOTEXTILE LAYER
07 2119	FOAMED-IN-PLACE INSULATION
07 2500.01	BUILDING WRAP/PAPER
07 2500.02	SELF-ADHERED FLEXIBLE FLASHING
07 2500.03	SADDLE FLASHING
07 4646.02	FIBER CEMENT PLANK
07 4646.03	FIBER CEMENT TRIM
07 4646.04	STARTER STRIP
07 4646.05	FURRING STRIP
07 6200.01	METAL FLASHING
07 9200.01	BACKER ROD AND SEALANT
07 9200.02	SEALANT
08 1416.01	WOOD DOOR
08 1416.02	WOOD CASING, PAINTED
08 5313.01	VINYL WINDOW AS SCHEDULED
09 2116.07	CORNER BEAD

EXTERIOR WALL TYPES
REFERENCE SHEET GI000

W1 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING w/ 1x SUB-FRAMING/FURRING STRIP AT 16" ON CENTER, ON 1 1/2" RIGID INSULATION (R-7.5) ON BUILDING WRAP/ PAPER (SEAL ALL SEAMS) ON 7/16" OSB SHEATHING ON 2x6 STUDS AT 16" ON CENTER. WITH R-19 GLASS FIBER BATT INSULATION AND 1/2" GYPSUM BOARD ON INTERIOR.

W2 — EXTERIOR WALL (LOAD-BEARING)
FIBER CEMENT HORIZONTAL LAP SIDING, ON BUILDING WRAP/PAPER (SEALL ALL SEAMS) ON OSB SHEATHING ON 2x4 STUDS AT 16" O.C., WITH 1/2" GYPSUM BOARD ON INTR.
TYPE **W2A** - SAME AS W2 EXCEPT NO GYPSUM BOARD

INTERIOR WALL TYPES
REFERENCE SHEET GI000

D1 — INTERIOR SEPARATION WALL - 1 HOUR FIRE RATING (LOAD-BEARING) - UL U340
ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON 1/2" CLARK DIETRICH RC DELUXE RESILIENT CHANNEL (@ 24" O.C.) ONE SIDE ON 2x4 STUDS (@ 24" O.C.) STAGGERED ON 2x6 PLATES (STAGGERED @ 12" O.C.). UNFACED SOUND BATT INSULATION FULL DEPTH OF CAVITY WITH 5/8" TYPE "X" GYPSUM BOARD AT OPPOSITE SIDE.

51A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
(1) LAYER(S) 1/2" GYPSUM BOARD (EACH SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **51B:** SAME AS 51A EXCEPT 2x6 STUDS
TYPE **52A:** SAME AS 51A EXCEPT GYPSUM BOARD ONE SIDE ONLY.
TYPE **52C:** SAME AS 52A EXCEPT 2x2 STUDS

52A — INTERIOR PARTITION WALL (NON-LOAD BEARING)
ONE LAYER(S) 1/2" GYPSUM BOARD (ONE SIDE) ON 2x4 STUDS AT 16" ON CENTER.
TYPE **52B:** SAME AS 52A EXCEPT 2x6 STUDS

ROOF TYPES

R1 — ROOF ASSEMBLY - NON RATED
PRO-PANEL ROOFING PANEL ON OSB SHEATHING WITH WATER RESISTIVE UNDERLAYMENT ON 2x FRAMED ROOF TRUSS (REF. STRUCTURAL FOR TRUSS SIZE AND DETAILS) WITH R-38 GLASS FIBER BATT INSULATION (OR EQUIVALENT) AT TRUSS TOP CHORD AND 1/2" GYPSUM BOARD ON INTERIOR.

FLOOR TYPES

F1 — FLOOR ASSEMBLY
4" CONCRETE SLAB (PER STRUCTURAL) ON 15 MIL VAPOR BARRIER ON 4" COMPACTED GRAVEL BASE.
NOTE: AT SLAB EDGE, PROVIDE 2'-0" MINIMUM (VERTICAL) 2" RIGID INSULATION.

F2 — FLOOR ASSEMBLY
3/4" PLYWOOD DECKING ON 2x6 FRAMING WITH 2X6 LEDGER BOARDS.

GLAZING LEGEND

MARK	DESCRIPTION
A	3/4" INSULATED TEMPERED GLASS

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT CERTIFICATE NO. 63277 SANJAY S. KAPU 12/31/2022 REGISTERED ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community School
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

DRAWN BY	AW
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

DOOR / WINDOW / FRAME TYPES, DETAILS AND SCHEDULES

SHEET NO

AE561

06-2000 WOOD BASE (WB-X)

WB-1	PRODUCT	MDF
	FINISH	PAINT GRADE; PAINT P-5
	SIZE	1/2" X 4"H EASED TOP EDGE
	NOTES	GENERAL WALL BASE IN UNITS EXCEPT RESTROOMS

06-4100 PLASTIC LAMINATE (PL-X)

PL-1	MFG	FORMICA
	PROFILE	POLOMA POLAR
	NUMBER	6698-58
	FINISH	MATTE
	NOTES	COUNTERTOPS

09-6500 RESILIENT TILE FLOORING (RF-X)

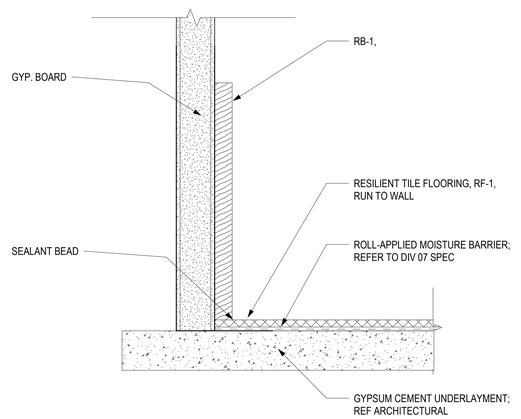
RF-1	MFG	PATCRAFT
	PATTERN	TIMBER GROVE II
	COLOR	BOXWOOD
	SIZE	6 x 48
	THICKNESS	12 MIL
	NOTES	INSTALL WITH MANUFACTURER RECOMMEND ACOUSTICAL PAD

09-6500 RESILIENT BASE (RB-X)

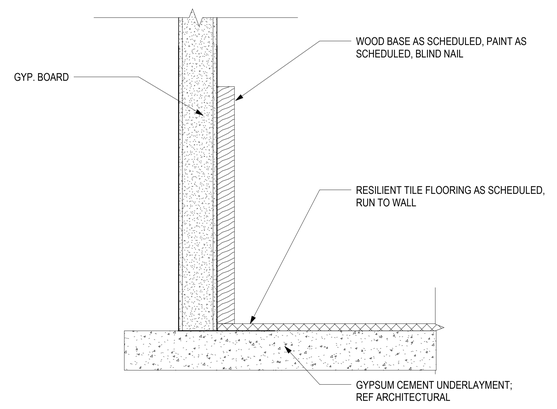
RB-1	MFG	JOHNSONITE
	PROFILE	COVE
	SIZE	4"
	COLOR	PEBBLE
	NOTES	RESTROOM WALL BASE

09-9123 PAINTING (P-X)

P-1	MFG	SHERWIN WILLIAMS
	COLOR	GREEK VILLA
	NUMBER	SW7551
	NOTES	GENERAL PAINT
P-2	MFG	SHERWIN WILLIAMS
	COLOR	AESTHETIC WHITE
	NUMBER	SW7035
	NOTES	CEILINGS
P-3	MFG	DUNN EDWARDS
	COLOR	NOMADIC TAUPE
	NUMBER	DE6192
	NOTES	ACCENT WALL
P-4	MFG	SHERWIN WILLIAMS
	COLOR	EVENING SHADOW
	NUMBER	SW7662
	NOTES	ACCENT WALL
P-5	MFG	SHERWIN WILLIAMS
	COLOR	AMAZING GRAY
	NUMBER	SW7044
	NOTES	WB-1 COLOR



A4 WALL BASE DETAIL AT RESTROOMS
12" = 1'-0"



A5 WALL BASE DETAIL
12" = 1'-0"

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
63277
SANJAY S. KADU
DATE SIGNED
12/10/2020
ARIZONA U.S.A.

EXPIRES 12/31/2022

PROJECT

BID PACKAGE #4 - TEACHERAGES

Lukachukai Community School
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% SUBMITTAL

REVISIONS

DRAWN BY	CM
REVIEWED BY	RW/JM
DATE	12.10.2020
PROJECT NO	20-7002.005

DRAWING NAME

FINISH LEGEND

SHEET NO

AF621

ABBREVIATIONS

ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ACOUSTIC LINING
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CA	COMPRESSED AIR
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CONT.	CONTINUATION
D	DRAIN
DX	DIRECT EXPANSION
ENT	ENTERING
EXH	EXHAUST
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
°F	DEGREES FAHRENHEIT
FB	FLAT BOTTOM
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
F.G.	FILTER GAUGE
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FS	FLOOR SINK
FT	FLAT TOP
FT.	FEET
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HD	HAND DAMPER (VOLUME DAMPER)
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
IN	INCHES
KW	KILOWATT
KWH	KILOWATT HOUR
MA	MAIN AIR (CONTROLS)
MCC	MOTOR CONTROL CENTER
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO.	NUMBER (QUANTITY)
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAGE
QTY	QUANTITY
QUAD	QUADRANT
R.A.	RETURN AIR
Rh	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SCD	SMOKE CONTROL DAMPER
SP	STATIC PRESSURE (INCHES OF WATER)
SDVV	SINGLE DUCT VARIABLE VOLUME
ST	SOUND TRAP
TOPT	TOP OF PIPE TRAPEZE
TP	TOTAL PRESSURE (INCHES OF WATER)
TYP.	TYPICAL
V	VOLTS
VAC	VOLTS, ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VTR	VENT THRU ROOF

MECHANICAL SYMBOL LEGEND

DUCTWORK SYMBOLS


FLEXIBLE CONNECTION


RISE IN DUCT


VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EXCEPT TRANSFER AIR SOUND ELBOW)


SHORT RADIUS ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EXCEPT TRANSFER AIR SOUND ELBOW)


STANDARD LONG RADIUS ELBOW


SUPPLY DUCT


EXHAUST DUCT


CEILING EXHAUST REGISTER


DUCT TRANSITION

24x12 — INDICATES A 24"x12" RECTANGULAR DUCT (WIDTH x DEPTH)

12Ø — INDICATES A 12" ROUND DUCT

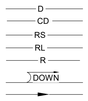
ACCESS DOOR

ROOM THERMOSTAT/TEMP. TRANSMITTER LOCATION ONLY
SEE CONTROL DRAWINGS FOR TYPE

CARBON MONOXIDE MONITOR LOCATION ONLY
TO BE HARDWIRED AND HAVE BATTERY BACKUP

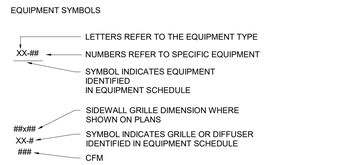
PIPING SYMBOLS

MECHANICAL PIPING



SECTION SYMBOL

EQUIPMENT SYMBOLS



NOTE: NOT ALL ABBREVIATIONS OR SYMBOLS APPLY TO THIS PROJECT

GENERAL NOTES

A. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILINGS, UNLESS OTHERWISE NOTED.

B. PROVIDE ACCESS PANELS OR DOORS IN INACCESSIBLE CEILINGS AND/OR CHASES FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, COILS, FANS, CONTROLS, ETC. THEY SHALL BE FURNISHED UNDER DIVISION 23 AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATION. ACCESS DOOR RATING SHALL MATCH CLASSIFICATION OF WALL AND CEILING FIRE RATING.

C. COORDINATE THE LOCATION OF ALL DIFFUSERS, GRILLES, REGISTERS, ACCESS DOORS, ETC., WITH THE ARCHITECTURAL REFLECTED CEILING PLAN(S).

D. ALL ROUND RUNOUTS AND DROPS TO DIFFUSERS SHALL BE THE SAME NOMINAL SIZE AS THE SCHEDULED DIFFUSER NECK SIZE.

E. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. ALL DUCT SIZES SHOWN ON DRAWINGS ARE NET INSIDE DIMENSIONS. PROVIDE ONE INCH ACOUSTICAL LINING (TYPE D3 INSULATION) IN LOW VELOCITY RECTANGULAR DUCTWORK FOR THE FIRST 10 DIAMETERS OF DUCTWORK CONNECTED TO DEVICE, OR AS INDICATED ON DRAWINGS, WHICHEVER IS GREATER. FOR THE REMAINDER OF THIS DUCTWORK PROVIDE AS INDICATED IN THE INSULATION SPECIFICATIONS.

F. PROVIDE TURNING VANES IN ALL SQUARE ELBOWS, EXCEPT TRANSFER AIR SOUND ELBOWS.

G. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND/OR SMOKE RATED WALLS AND ASSEMBLIES. PROVIDE APPROVED FIRE DAMPERS IN ALL REQUIRED PENETRATIONS FOR DUCTWORK, GRILLES, REGISTERS AND DIFFUSERS. ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE, SMOKE AND FULL HEIGHT WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. APPROVED FIRE PROOF CAULKING MATERIAL.

H. CONTRACTOR SHALL COORDINATE ALL DUCTWORK, PIPING, PLUMBING AND FIRE PROTECTION PIPING WITH STRUCTURAL AND ELECTRICAL SYSTEMS AND SHALL PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

I. CONTRACTOR SHALL FURNISH ALL NECESSARY STRUCTURES, INSERTS, SLEEVES, AND HANGING DEVICES FOR INSTALLATION OF MECHANICAL AND PLUMBING EQUIPMENT, DUCTWORK AND PIPING, ETC. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR AND ALL BUILDING TRADES TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

J. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MISCELLANEOUS ANGLES, CHANNELS, UNISTRUT, ETC., AS MAY BE REQUIRED TO ADEQUATELY SUPPORT THE MECHANICAL PIPING, DUCTWORK, AND EQUIPMENT IN A MANNER APPROVED BY THE ARCHITECT, WHICH WILL NOT OVERLOAD THE BUILDING STRUCTURAL SYSTEM.

K. SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, DUCT WALL PENETRATIONS AND FITTING CONNECTIONS ON ALL DUCT SYSTEMS.

L. MECHANICAL ITEMS SUCH AS ROOF DRAINS, FLOOR DRAINS, PLUMBING FIXTURES, ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS BUT NOT SHOWN ON THE MECHANICAL DRAWINGS SHALL BE INCLUDED IN THE PROJECT. THESE ITEMS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR INCLUSION IN ADDENDUM.

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

BRIDGERS & PAXTON
4600 C Montgomery Blvd. NE
Albuquerque, NM 87109
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SEAL

Digitally signed by Abbas Shirian
Date: 2020.12.08 15:32:57 -07'00'

REGISTERED PROFESSIONAL ENGINEER (PE) CERTIFICATE NO. 49452 ABBAS SHIRIAN DATE SIGNED ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RKS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

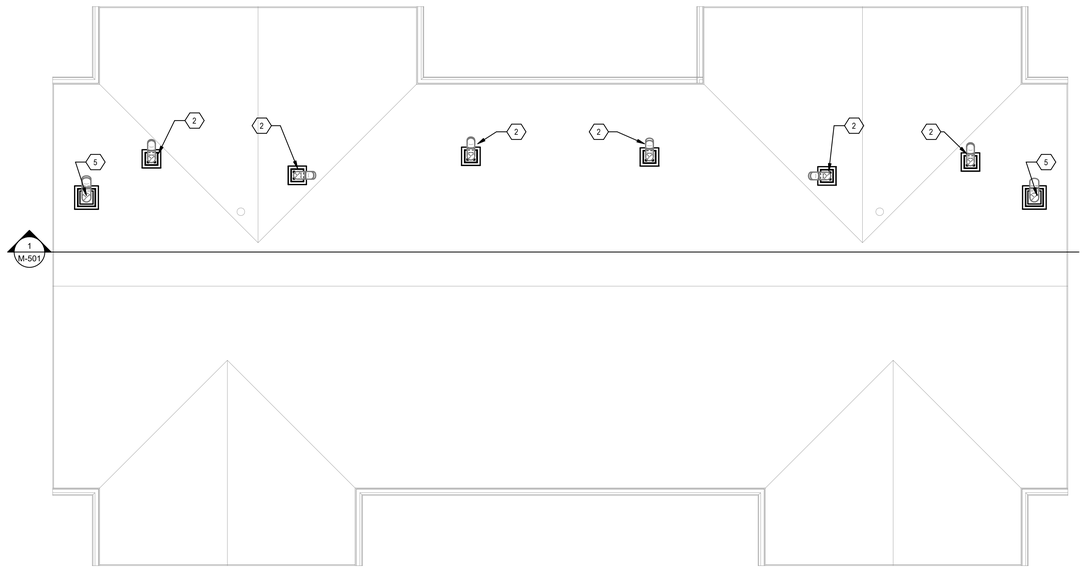
DRAWING NAME

MECHANICAL LEGEND

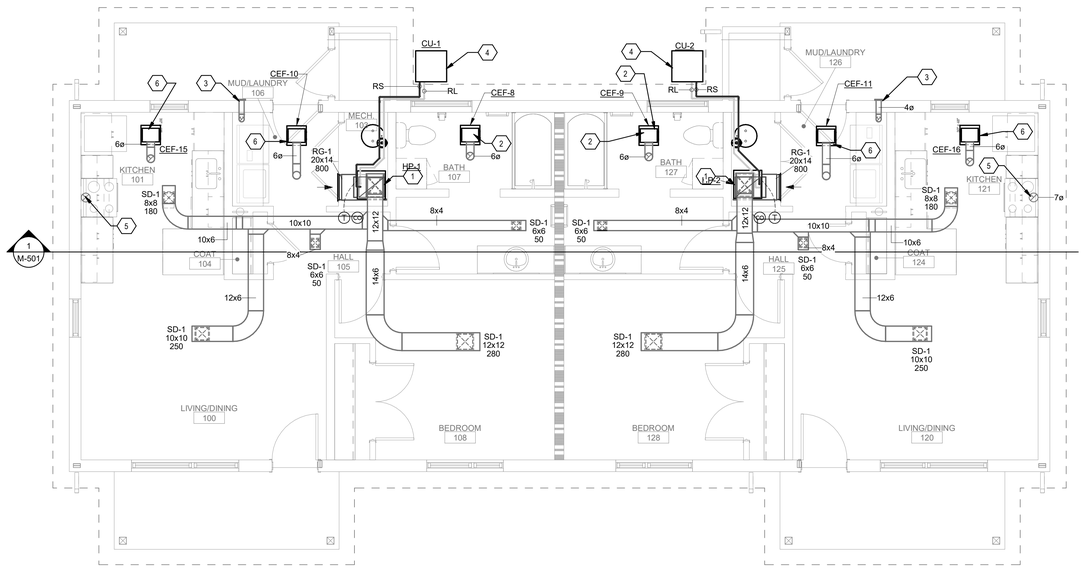
SHEET NO

M-001

Bridgers & Paxton Project No: 8183 12/7/2020 3:09:10 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_RKSchamp.rvt



C5 MECHANICAL ROOF PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 HVAC PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. FOR INFORMATION ON LOW PRESSURE DUCT FITTINGS, SEE DETAIL C5/M-501.

B. ALL OVERHEAD EQUIPMENT, PIPING AND DUCTWORK, IS TO BE SUSPENDED FROM STRUCTURAL MEMBERS.

C. PROVIDE REMOTE ACCESS PROGRAMABLE THERMOSTATS FOR EACH HEAT PUMP.

D. SEE SITE PLAN FOR PLAN ORIENTATION.

E. PROVIDE CO MONITORS FOR EACH UNIT, HARD-WIRED WITH BATTERY BACKUP.

F. SEAL ALL EXTERNAL CRACKS, JOINTS, PENETRATIONS, EDGES, AND ENTRY POINTS WITH APPROPRIATE CAULKING AND INSTALL RODENT-PROOF SCREENS ON ALL OPENINGS GREATER THAN 1/4"

G. PROVIDE DRAIN PAN AND ASSOCIATED PIPING TO FLOOR SINK FOR LEED/ENERGY STAR V3 PURPOSES.

SHEET KEYNOTES

1. INDOOR VERTICAL SPLIT SYSTEM MOUNTED 24" HIGH ANGLE IRON STAND WITH A HEAVY GAUGE SHEET METAL INTAKE PLENUM. SEE PIPE DIAGRAM E2/M-501. DUCT DISCHARGE FROM TOP OF UNIT BETWEEN TRUSSES.
2. 6" DIAMETER EXHAUST UP BETWEEN TRUSS THROUGH 8" ROOF CURB TO GOOSENECK. SEE DETAIL E2/M-501. COORDINATE LOCATION WITH TRUSS SPACING. COORDINATE LOCATION OF FAN BETWEEN TRUSSES. WALL MOUNTED FAN SWITCH WITH VENILATION CONTROL & DELAY TIMER TO BE PROVIDE BY DIVISTION 23 AND INSTALLED UNDER DIVISION 26. SEE CONTROL DIAGRAM AND VENTILATION CALCULATION ON SHEET M901.
3. 4" DRYER VENT THROUGH WALL TO LOUVERED HOOD LOCATED AT 24" AFF.
4. OUTDOOR HEAT PUMP MOUNTED ON CONCRETE PAD. SEE PIPE DIAGRAM E2/M-501.
5. 7" DIAMETER EXHAUST FROM RANGE HOOD UP THROUGH ROOF CURB TO GOOSENECK. SEE DETAIL E4/M-501. COORDINATE LOCATION WITH TRUSS SPACING.
6. 6" DIAMETER EXHAUST UP BETWEEN TRUSS THROUGH 8" HIGH ROOF CURB TO GOOSENECK. SEE DETAIL E4/M-501. COORDINATE LOCATION WITH TRUSS SPACING. COORDINATE LOCATION OF FAN BETWEEN TRUSSES. SEE CONTROL DIAGRAMS.

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

BRIDGERS & PAXTON
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Albuquerque, NM 87109
505.883.4111 www.bpce.com

SEAL
Digitally signed by Abbas Shirian
Date: 2020.12.08 15:09:04 07'00'
REGISTERED PROFESSIONAL ENGINEER (ARCHITECT)
CERTIFICATE NO.
49452
ABBAS
SHIRIAN
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100%
CONSTRUCTION
DOCUMENTS

REVISIONS

DRAWN BY	RKS/ZH
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

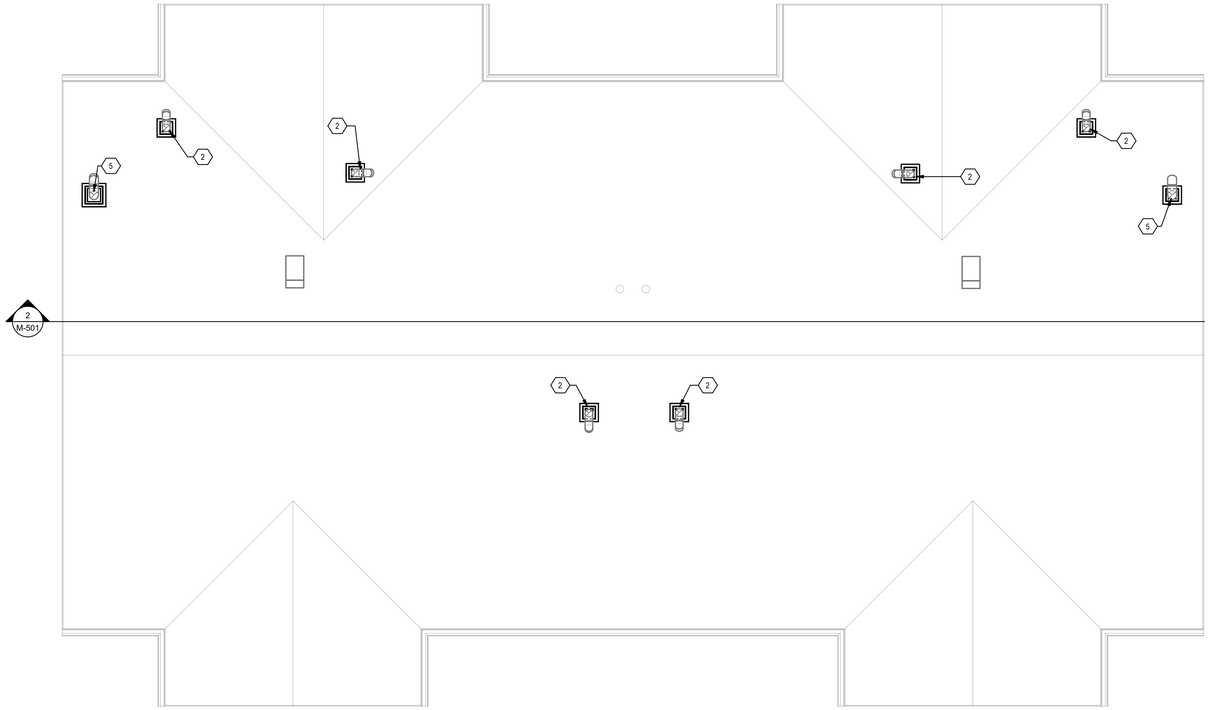
DRAWING NAME

HVAC PLAN -
1BD/1BA DUPLEX

SHEET NO

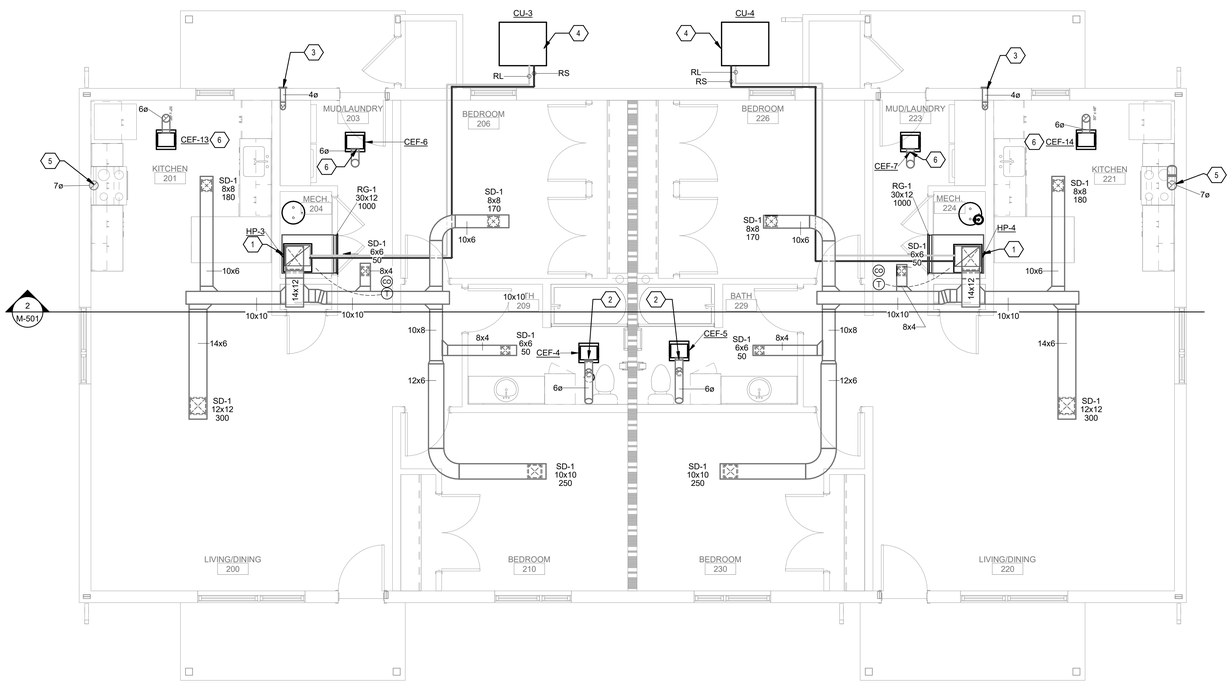
MH101

Bridgers & Paxton Project No: 8183 12/7/2020 3:09:17 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_RKSchamp.rvt



C5 MECHANICAL ROOF PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"

0' 2' 4' 8'



A5 HVAC PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"

0' 2' 4' 8'

GENERAL SHEET NOTES

A. FOR INFORMATION ON LOW PRESSURE DUCT FITTINGS, SEE DETAIL C5/M-501.

B. ALL OVERHEAD EQUIPMENT, PIPING AND DUCTWORK, IS TO BE SUSPENDED FROM STRUCTURAL MEMBERS.

C. PROVIDE REMOTE ACCESS PROGRAMABLE THERMOSTATS FOR EACH HEAT PUMP.

D. SEE SITE PLAN FOR PLAN ORIENTATION.

E. PROVIDE CO MONITORS FOR EACH UNIT, HARD-WIRED WITH BATTERY BACKUP.

F. SEAL ALL EXTERNAL CRACKS, JOINTS, PENETRATIONS, EDGES, AND ENTRY POINTS WITH APPROPRIATE CAULKING AND INSTALL RODENT-PROOF SCREENS ON ALL OPENINGS GREATER THAN 1/4".

G. PROVIDE DRAIN PAN AND ASSOCIATED PIPING TO FLOOR SINK FOR LEED/ENERGY STAR V3 PURPOSES

SHEET KEYNOTES

1. INDOOR VERTICAL SPLIT SYSTEM MOUNTED 24" HIGH ANGLE IRON STAND WITH A HEAVY GAUGE SHEET METAL INTAKE PLENUM. SEE PIPE DIAGRAM E2/M-501. DUCT DISCHARGE FROM TOP OF UNIT BETWEEN TRUSSES.
2. 6" DIAMETER EXHAUST UP BETWEEN TRUSS THROUGH 8" ROOF CURB TO GOOSENECK. SEE DETAIL E2/M-501. COORDINATE LOCATION WITH TRUSS SPACING. COORDINATE LOCATION OF FAN BETWEEN TRUSSES. WALL MOUNTED FAN SWITCH WITH VENILATION CONTROL & DELAY TIMER TO BE PROVIDE BY DIVISTION 23 AND INSTALLED UNDER DIVISION 26. SEE CONTROL DIAGRAM AND VENTILATION CALCULATION ON SHEET M901.
3. 4" DRYER VENT THROUGH WALL TO LOUVERED HOOD LOCATED AT 24" AFF.
4. OUTDOOR HEAT PUMP MOUNTED ON CONCRETE PAD. SEE PIPE DIAGRAM E2/M-501.
5. 7" DIAMETER EXHAUST FROM RANGE HOOD UP THROUGH ROOF CURB TO GOOSENECK. SEE DETAIL E4/M-501. COORDINATE LOCATION WITH TRUSS SPACING.
6. 6" DIAMETER EXHAUST UP BETWEEN TRUSS THROUGH 8" HIGH ROOF CURB TO GOOSENECK. SEE DETAIL E4/M-501. COORDINATE LOCATION WITH TRUSS SPACING. COORDINATE LOCATION OF FAN BETWEEN TRUSSES. SEE CONTROL DIAGRAMS.

DEKKER
PERICH
SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

BRIDGERS & PAXTON
4600 C Montgomery Blvd. NE
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Date: 2020.12.08 15:53:59 07'00'

REGISTERED PROFESSIONAL ENGINEER (MECHANICAL)
CERTIFICATE NO.
49452
ABBAS
SHIRIAN
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100%
CONSTRUCTION
DOCUMENTS

REVISIONS

DRAWN BY	RKS/ZH
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

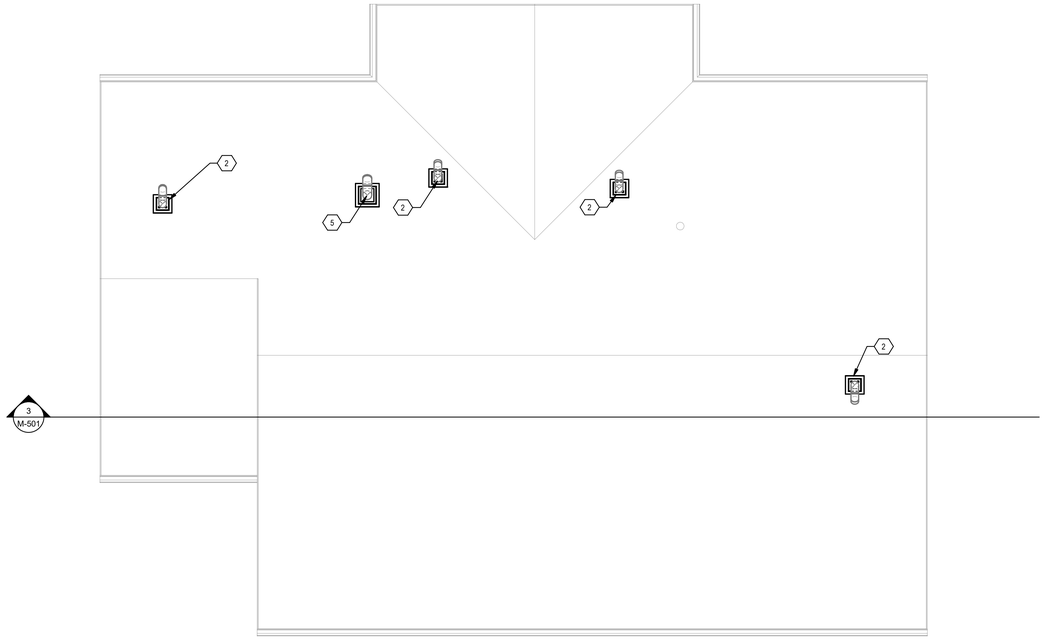
DRAWING NAME

HVAC PLAN -
2BD/1BA DUPLEX

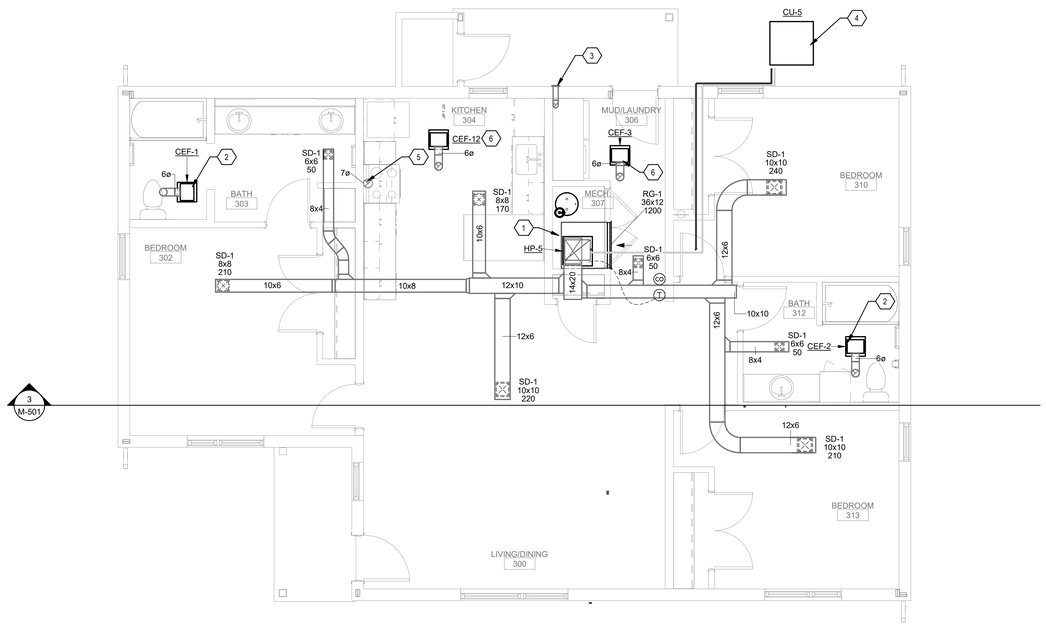
SHEET NO

MH102

Bridgers & Paxton Project No: 8183 12/7/2020 3:09:20 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_RKSchamp.rvt



C5 MECHANICAL ROOF PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'



A5 HVAC PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. FOR INFORMATION ON LOW PRESSURE DUCT FITTINGS, SEE DETAIL C5/M-501.

B. ALL OVERHEAD EQUIPMENT, PIPING AND DUCTWORK, IS TO BE SUSPENDED FROM STRUCTURAL MEMBERS.

C. PROVIDE REMOTE ACCESS PROGRAMABLE THERMOSTATS FOR EACH HEAT PUMP.

D. SEE SITE PLAN FOR PLAN ORIENTATION.

E. PROVIDE CO MONITORS FOR EACH UNIT, HARD-WIRED WITH BATTERY BACKUP.

F. SEAL ALL EXTERNAL CRACKS, JOINTS, PENETRATIONS, EDGES, AND ENTRY POINTS WITH APPROPRIATE CAULKING AND INSTALL RODENT-PROOF SCREENS ON ALL OPENINGS GREATER THAN 1/4".

G. PROVIDE DRAIN PAN AND ASSOCIATED PIPING TO FLOOR SINK FOR LEED/ENERGY STAR V3 PURPOSES

SHEET KEYNOTES

1. INDOOR VERTICAL SPLIT SYSTEM MOUNTED 24" HIGH ANGLE IRON STAND WITH A HEAVY GAUGE SHEET METAL INTAKE PLENUM. SEE PIPE DIAGRAM E2/M-501. DUCT DISCHARGE FROM TOP OF UNIT BETWEEN TRUSSES.
2. 6" DIAMETER EXHAUST UP BETWEEN TRUSS THROUGH 6" ROOF CURB TO GOOSENECK. SEE DETAIL E2/M-501. COORDINATE LOCATION WITH TRUSS SPACING. COORDINATE LOCATION OF FAN BETWEEN TRUSSES. WALL MOUNTED FAN SWITCH WITH VENILATION CONTROL & DELAY TIMER TO BE PROVIDE BY DIVISTION 23 AND INSTALLED UNDER DIVISION 26. SEE CONTROL DIAGRAM AND VENTILATION CALCULATION ON SHEET M601.
3. 4" DRYER VENT THROUGH WALL TO LOUVERED HOOD LOCATED AT 24" AFF.
4. OUTDOOR HEAT PUMP MOUNTED ON CONCRETE PAD. SEE PIPE DIAGRAM E2/M-501.
5. 7" DIAMETER EXHAUST FROM RANGE HOOD UP THROUGH ROOF CURB TO GOOSENECK. SEE DETAIL E4/M-501. COORDINATE LOCATION WITH TRUSS SPACING.
6. 6" DIAMETER EXHAUST UP BETWEEN TRUSS THROUGH 8" HIGH ROOF CURB TO GOOSENECK. SEE DETAIL E4/M-501. COORDINATE LOCATION WITH TRUSS SPACING. COORDINATE LOCATION OF FAN BETWEEN TRUSSES. SEE CONTROL DIAGRAMS.

DEKKER PERICH SABATINI
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Date: 2020.12.08 13:34:17-07'00'
REGISTERED PROFESSIONAL ENGINEER (ARCHITECT)
CERTIFICATE NO.
49452
ABBAS
SHIRIAN
DATE SIGNED
ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RKS/ZH
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

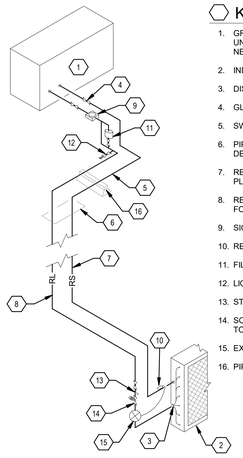
DRAWING NAME

HVAC PLAN - 3BD/2BA SINGLE-FAMILY

SHEET NO

MH103

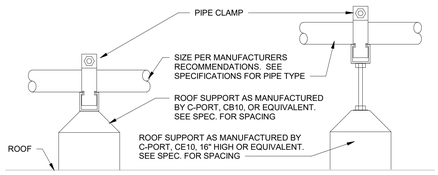
Bridgers & Paxton Project No: 8183 12/7/2020 3:09:22 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_RKSchamp.rvt



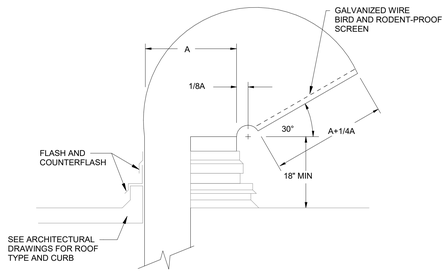
KEYNOTES

1. GROUND MOUNTED OUTDOOR HEAT PUMP UNIT MOUNTED ON 4" CONCRETE PAD WITH NEOPRENE VIBRATION ISOLATION PADS.
2. INDOOR UNIT, DIRECT EXPANSION (DX) COIL
3. DISTRIBUTION NOZZLE
4. GLOBE VALVES AT OUTDOOR UNIT
5. SWING JOINT
6. PIPE PENETRATION THROUGH ROOF, SEE DETAIL
7. REFRIGERANT SUCTION LINE, SEE FLOOR PLAN FOR SIZE
8. REFRIGERANT LIQUID LINE, SEE FLOOR PLAN FOR SIZE
9. SIGHT GLASS
10. REMOTE BULB
11. FILTER
12. LIQUID CHARGING VALVE
13. STRAINER
14. SOLENOID VALVE TO BE LOCATED AS CLOSE TO EXPANSION VALVE AS POSSIBLE
15. EXPANSION VALVE
16. PIPE SUPPORT SEE DETAIL E2/M-501

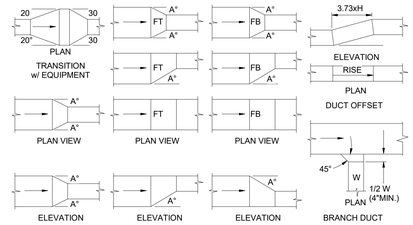
D1 SPLIT SYSTEM HEAT PUMP REFRIGERANT PIPING DETAIL
SCALE = NONE



E2 REFRIGERANT PIPE SUPPORT DETAIL
SCALE = NONE

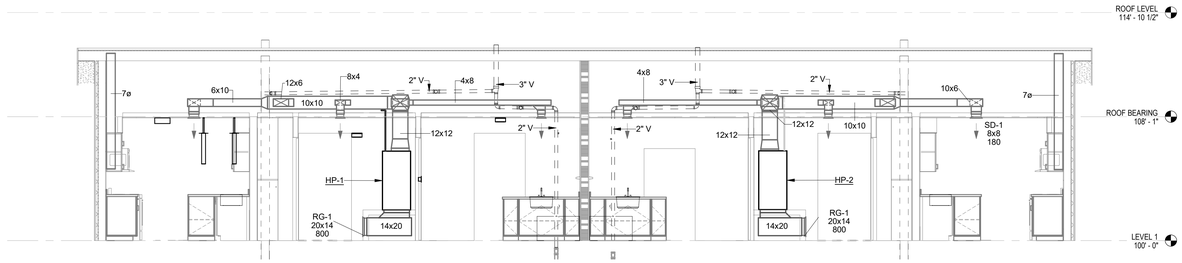


E4 GOOSENECK DETAIL
SCALE = NONE

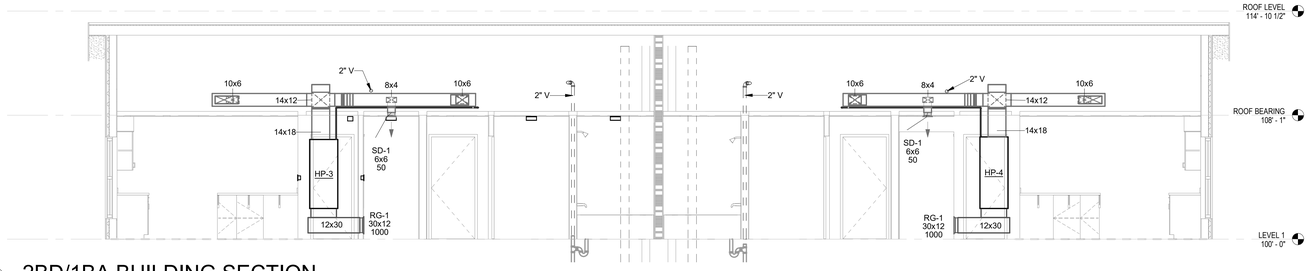


NOTES
1. ANGLE A=30 MAXIMUM WHEN AIR FLOWS IN DIRECTION OF ARROS. (SUPPLY AIR)
2. ANGLE A=15 WHEN AIR FLOWS IN OPPOSITE DIRECTION OF ARROS (R.A. OR EXHAUST)

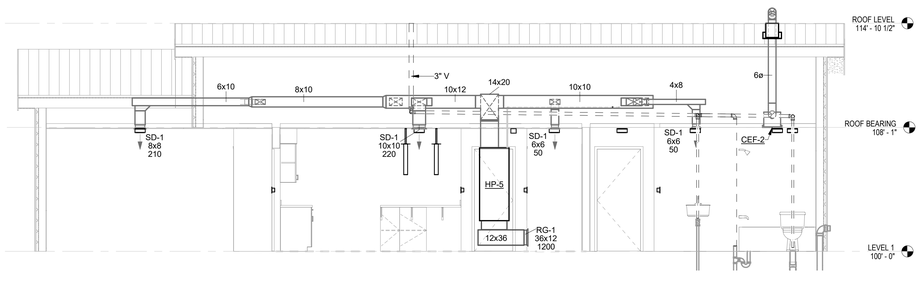
E5 LOW PRESSURE DUCT FITTING DETAIL
SCALE = NONE



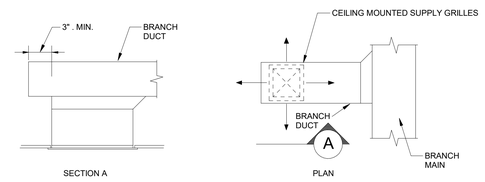
1 1BD/1BA BUILDING SECTION
SCALE: 1/4" = 1'-0"



2 2BD/1BA BUILDING SECTION
SCALE: 1/4" = 1'-0"



3 3BD/2BA BUILDING SECTION
SCALE: 1/4" = 1'-0"



E5 CEILING SUPPLY DIFFUSER CONNECTION DETAIL
SCALE = NONE

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Digitally signed by Abbas Shirian
Date: 2020.12.08 13:34:49 -07'00'
49452 ABBAS SHIRIAN REGISTERED PROFESSIONAL ENGINEER CERTIFICATE NO. DATE SIGNED ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RKS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME
MECHANICAL DETAILS

SHEET NO
M-501

Bridgers & Paxton Project No.: 8183 12/7/2020 3:09:13 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_RKSshamp.rvt

ALL SELECTIONS ARE BASED ON 6550 FT. ABOVE SEA LEVEL.

EXHAUST FANS

SYMBOL	GREENHECK MODEL NO.	LOCATION	AREA SERVED	TYPE	CFM	S.P. (IN. WC)	FAN RPM	MOTOR DATA					SONES	OPERATING WEIGHT (LBS.)	NOTES
								INPUT WATTS	VOLT	PHASE	HZ	FLA			
CEF-1	SP-A90	3BD/2BA DUPLEX	BATHROOM	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-2	SP-A90	3BD/2BA DUPLEX	BATHROOM	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-3	SP-A90	3BD/2BA DUPLEX	LAUNDRY	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-4	SP-A90	2BD/1BA DUPLEX	BATHROOM	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-5	SP-A90	2BD/1BA DUPLEX	BATHROOM	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-6	SP-A90	2BD/1BA DUPLEX	LAUNDRY	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-7	SP-A90	2BD/1BA DUPLEX	LAUNDRY	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-8	SP-A90	1BD/1BA DUPLEX	BATHROOM	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-9	SP-A90	1BD/1BA DUPLEX	BATHROOM	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-10	SP-A90	1BD/1BA DUPLEX	LAUNDRY	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-11	SP-A90	1BD/1BA DUPLEX	LAUNDRY	CEILING EXHAUST FAN	72	0.25	900	12	115	1	60	0.17	0.7	15	ENERGY STAR CERTIFIED
CEF-12	SP-A90	3BD/2BA DUPLEX	KITCHEN	CEILING EXHAUST FAN	105	0.229	890	16	115	1	60	0.18	0.7	15	ENERGY STAR CERTIFIED
CEF-13	SP-A90	2BD/1BA DUPLEX	KITCHEN	CEILING EXHAUST FAN	105	0.229	890	16	115	1	60	0.18	0.7	15	ENERGY STAR CERTIFIED
CEF-14	SP-A90	2BD/1BA DUPLEX	KITCHEN	CEILING EXHAUST FAN	105	0.229	890	16	115	1	60	0.18	0.7	15	ENERGY STAR CERTIFIED
CEF-15	SP-A90	1BD/1BA DUPLEX	KITCHEN	CEILING EXHAUST FAN	105	0.229	890	16	115	1	60	0.18	0.7	15	ENERGY STAR CERTIFIED
CEF-16	SP-A90	1BD/1BA DUPLEX	KITCHEN	CEILING EXHAUST FAN	105	0.229	890	16	115	1	60	0.18	0.7	15	ENERGY STAR CERTIFIED

ELEC HEAT PUMP - INDOOR UNIT

SYMBOL	TRANE MODEL NO.	LOCATION	SUPPLY AIRFLOW (CFM)	ESP	FAN MOTOR		INDOOR UNIT MOTOR DATA				SEER	ELECTRIC HEAT (kW)	COOLING DX				HEAT PUMP HEATING (ELEC)					AUXILARY HEAT (ELEC)				WEIGHT (LBS.)	NOTE
					HP	FLA	VOLT	PHASE	HZ	MCA			CAPACITY (BTUH)	EAT DB (DEG F)	EAT WB (DEG F)	AMBIENT DB (DEG F)	CAPACITY (BTUH)	EAT DB (DEG F)	AMBIENT DB (DEG F)	HEATING LDB (DEG. F)	HSPF (BTUH/WATT)	HEATING EDB (DEG. F)	kW	HEATING LDB (DEG. F)	HEATING TEMP. RISE (DEG. F)		
HP-1	TAM9A0B30V31	1BD/1BA DUPLEX	800	0.7	0.5	3.0-3.5	230	1	60	44.0	16.75	7.68	24,831	80	67	90	22,600	70	0	81.01	9.6	70	7.68	100.19	30.19	150	
HP-2	TAM9A0B30V31	1BD/1BA DUPLEX	800	0.7	0.5	3.0-3.5	230	1	60	44.0	16.75	7.68	24,831	80	67	90	22,600	70	0	81.01	9.6	70	7.68	100.19	30.19	150	
HP-3	TAM9A0B30V31	2BD/1BA DUPLEX	1000	0.7	0.5	3.0-3.5	230	1	60	54.0	17.0	9.6	29,437	80	67	90	28,800	70	0	81.63	9.6	70	9.60	100.19	30.19	150	
HP-4	TAM9A0B30V31	2BD/1BA DUPLEX	1000	0.7	0.5	3.0-3.5	230	1	60	54.0	17.0	9.6	29,437	80	67	90	28,800	70	0	81.63	9.6	70	9.60	100.19	37.74	150	
HP-5	TAM9A0B36V31	3BD/2BA DUPLEX	1200	0.7	0.5	3.0-3.5	240	1	60	54.0	16.25	14.4	36,146	80	67	90	33,800	70	0	81.27	9.6	70	14.40	107.74	37.74	150	

NOTES:

UNITS TO BE PROVIDED WITH WI-FI PROGRAMMABLE THERMOSTAT.
AIR FILTER HOUSINGS ARE TO BE AIRTIGHT TOP PREVEN BYPASS OR LEAKAGE.
PROVIDE 1" MERV 13 FILTER.

ELEC HEAT PUMP - OUTDOOR UNIT

SYMBOL	TRANE MODEL NO.	LOCATION	COOLING RATED CAPACITY (BTUH)	HEATING RATED CAPACITY (BTUH)	ELECTRICAL DATA						COMPRESSORS			WEIGHT (LBS.)	NOTE
					VOLT	PHASE	HZ	MCA	FLA	MOTOR HP	REFR. TYPE	LIQUID LINE	GAS LINE		
CU-1	4TWR6024H1	1BD/1BA DUPLEX	24,831	22,600	230	1	60	14.0	0.64	0.125	R-410A	3/8"	3/4"	200	
CU-2	4TWR6024H1	1BD/1BA DUPLEX	24,831	22,600	230	1	60	14.0	0.64	0.125	R-410A	3/8"	3/4"	200	
CU-3	4TWR6030H1	2BD/1BA DUPLEX	29,437	28,800	230	1	60	17.0	0.64	0.125	R-410A	3/8"	3/4"	200	
CU-4	4TWR6030H1	2BD/1BA DUPLEX	29,437	28,800	230	1	60	17.0	0.64	0.125	R-410A	3/8"	3/4"	200	
CU-5	4TWR6036H1	3BD/2BA DUPLEX	36,146	33,800	230	1	60	18.0	0.64	0.125	R-410A	3/8"	3/4"	200	PROVIDE SINGLE POINT ENTRY KIT

GRILLES AND DIFFUSERS

ITEM NO.	MANUFACTURER & MODEL NO.	TYPE	FRAME STYLE	FACE DIMENSIONS (INCH)	NECK DIMENSIONS (INCH)	CFM RANGE	T.P. (IN. W.G.)	MAXIMUM NC	NOTES
SD-1	PRICE 540S*, TYPE A	SUPPLY GRILLE	FIXED CEILING	8X8	6X6	0-90	0.02-0.09	15	W/MUTI SPLIT LOUVER DAMPER
	PRICE 540S*, TYPE A	SUPPLY GRILLE	FIXED CEILING	10X10	8X8	91-195	0.02-0.09	15	W/MUTI SPLIT LOUVER DAMPER
	PRICE 540S*, TYPE A	SUPPLY GRILLE	FIXED CEILING	12X12	10X10	196-250	0.02-0.08	15	W/MUTI SPLIT LOUVER DAMPER
	PRICE 540S*, TYPE A	SUPPLY GRILLE	FIXED CEILING	14X14	12X12	251-360	0.02-0.08	15	W/MUTI SPLIT LOUVER DAMPER
RG-1	PRICE 530*	SIDEWALL RETURN	FLAT MARGIN	SEE PLAN	SEE PLANS	SEE PLANS	0.03-0.06	26	

NOTE:

* USE ALUMINUM PRICE 640S OR EQUAL FOR BATHROOM SUPPLY REGISTERS.

DEKKER PERICH SABATINI
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DESIGN
INSPIRATION

BRIDGERS & PAXTON
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Albuquerque, NM 87109
505.883.4111 www.bpcie.com

SEAL

Digitally signed by Abbas Shirian
Date: 2020.12.08 15:35:05 07'00'

REGISTERED PROFESSIONAL ENGINEER (MECHANICAL)
CERTIFICATE NO.
49452
ABBAS
SHIRIAN
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RKS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

MECHANICAL SCHEDULES

SHEET NO

M-701

Bridgers & Paxton Project No: 8183 12/8/2020 2:37:23 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_RKSchamp.rvt

INSTRUMENTATION SOCIETY OF AMERICA TABLE

	FIRST LETTER		SUCCEEDING LETTERS		
	MEASURING OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER FLAME		USER CHOICE	USER CHOICE	USER CHOICE
C	CONDUCTIVITY			CONTROL (13)	
D	DENSITY	DIFFERENTIAL			
E	VOLTAGE		SENSOR PRIMARY ELEMENT		
F	FLOW RATE	RATIO FRACTION			
G	GAUGE		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOTION	MOMENTARY			MIDDLE INTERMEDIATE
N	HUMIDITY		USER DEFINED	USER DEFINED	USER DEFINED
O	USER CHOICE		ORIFICE RESTRICTION		
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTI-VARIABLE, MECHANICAL VIBRATION		MULTI-FUNCTION	MULTI-FUNCTION	MULTI-FUNCTION
V	ANALYSIS			VALVE, DAMPER LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED	X-AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE	Y-AXIS		RELAY, COMPUTE CONVERT	
Z	POSITION DIMENSION	Z-AXIS		DRIVER, ACTUATOR UNCLASSIFIED FINAL CONTROL ELEMENT	

INSTRUMENTATION TYPE ABBREVIATION LIST

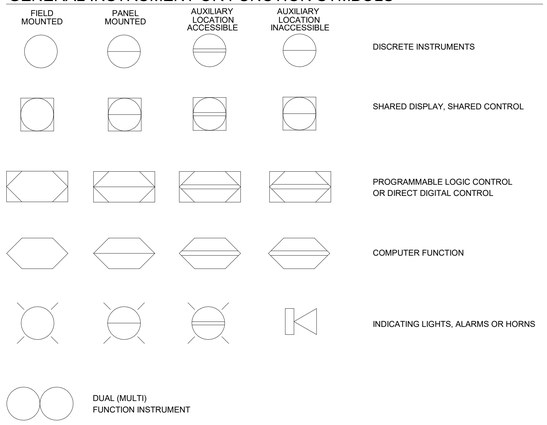
CODE DESCRIPTION	CODE DESCRIPTION	CODE DESCRIPTION
AA ANALYTICAL ALARM	LA LEVEL ALARM	VA VIBRATION ALARM
AE ANALYTICAL ELEMENT	LC LEVEL CONTROLLER (STAND ALONE)	VS VIBRATION SWITCH
AET ANALYTICAL ELEMENT TRANSMITTER	LCV LEVEL CONTROL VALVE	
AI ANALYTICAL INDICATOR	LE LEVEL ELEMENT	XV SOLENOID VALVE
AC ANALYTICAL CONTROLLER	LIC LEVEL INDICATING CONTROLLER	
AIC ANALYTICAL INDICATING CONTROLLER	LIT LEVEL INDICATING TRANSMITTER	YA EQUIPMENT ALARM
AT ANALYTICAL TRANSMITTER	LS LEVEL SWITCH	YI EQUIPMENT STATUS
AIT ANALYTICAL INDICATING CONTROLLER	LT LEVEL TRANSMITTER	YCD SMOKE DAMPER
ACV ANALYTICAL CONTROL VALVE	LY LEVEL SIGNAL CONVERTER	YS SMOKE DETECTOR
AY ANALYTICAL SIGNAL CONVERTER		
	MV MANUAL HAND VALVE	ZC POSITION CONTROL
EI VOLTAGE INDICATOR		ZI POSITION INDICATOR
EA VOLTAGE ALARM	NT HUMIDITY TRANSMITTER	ZS POSITION SWITCH
ES VOLTAGE SWITCH (CONTROL RELAY)		
ESL VOLTAGE SWITCH LOW (24 VAC OR LESS)	PA PRESSURE ALARM	
ET VOLTAGE TRANSMITTER	PCV PRESSURE CONTROL VALVE	VA VIBRATION ALARM
EY VOLTAGE SIGNAL CONVERTER	PDI PRESSURE DIFFERENTIAL INDICATOR	VS VIBRATION SWITCH
	PDS PRESSURE DIFFERENTIAL SWITCH	
FA FLOW ALARM	PDT PRESSURE DIFFERENTIAL TRANSMITTER	
FCV FLOW CONTROL VALVE	PI PRESSURE INDICATOR	
FE FLOW ELEMENT	PIS PRESSURE INDICATING SWITCH	
FET FLOW ELEMENT\TRANSMITTER	PIT PRESSURE INDICATING TRANSMITTER	
FI FLOW INDICATOR	PS PRESSURE SWITCH	
FIT FLOW INDICATING TRANSMITTER	PT PRESSURE TRANSMITTER	
FS FLOW SWITCH	PY PRESSURE SIGNAL CONVERTER	
FT FLOW TRANSMITTER		
FY FLOW SIGNAL CONVERTER	SC SPEED CONTROL	
	SCM SPEED CONTROL MANUAL	
HK MANUAL VARIABLE CONTROL		
HS HAND SWITCH	TA TEMPERATURE ALARM	
HSI HAND SWITCH INDICATOR	TC TEMPERATURE CONTROLLER	
	TCV TEMPERATURE CONTROL VALVE	
II CURRENT INDICATOR	TE TEMPERATURE ELEMENT	
IA CURRENT ALARM	TET TEMPERATURE ELEMENT TRANSMITTER	
IS CURRENT SWITCH	TI TEMPERATURE INDICATOR	
IT CURRENT TRANSMITTER	TIT TEMPERATURE INDICATING TRANSMITTER	
IY CURRENT SIGNAL CONVERTER	TIC TEMPERATURE INDICATING CONTROLLER	
	TS TEMPERATURE SWITCH	
JIT POWER INDICATING TRANSMITTER	TSL FREEZE STAT	
JY POWER SIGNAL CONVERTER	TT TEMPERATURE TRANSMITTER	
KC TIME CLOCK		

FMS SYSTEM OPERATING CONSTRAINTS

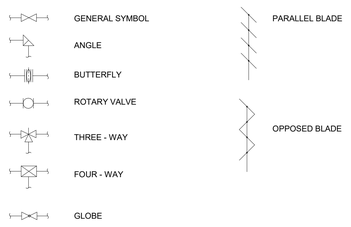
THE FMS CONTROL SYSTEM SHALL OPERATE WITHIN THE FOLLOWING SYSTEM CONSTRAINTS FOR CONTROL:

SUPPLY AIR DRYBULB TEMPERATURE	+/- 0.5°F OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
MIXED AIR DRYBULB TEMPERATURE	+/- 0.5°F OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
WATER TEMPERATURE	+/- 0.5°F OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
DUCT STATIC PRESSURE	+/- 0.1" W.C. OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
SUPPLY/ RETURN AIR VOLUME	+/- 2.5% OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
OUTSIDE AIR/ RELIEF AIR VOLUME	+/- 2.5% OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
BUILDING PRESSURE	+/- 0.01" W.C. OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
ROOM TEMPERATURE	+/- 1.0°F OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
ROOM AIR VOLUME	+/- 2.5% OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
HUMIDITY LEVEL	+/- 2.5% R.H. OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
WATER TEMPERATURE	+/- 1.0°F OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL
WATER DIFFERENTIAL PRESSURE	+/- 1.0 PSI OF SETPOINT WITH HUNTING OF < 5% OF THE CONTROL SIGNAL

GENERAL INSTRUMENT OR FUNCTION SYMBOLS



CONTROL VALVE BODY/ DAMPER SYMBOLS



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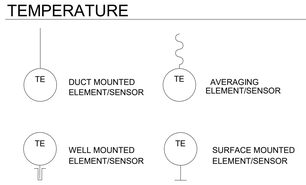
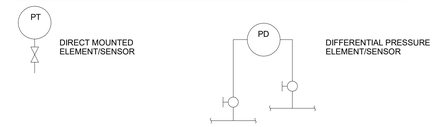
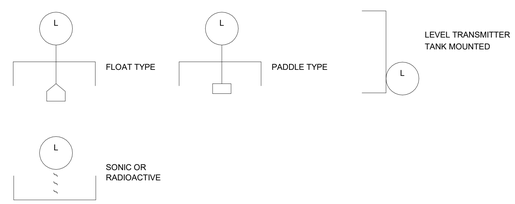


CURRENT

PRESSURE



LEVEL



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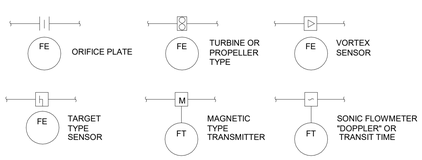

LADDER DIAGRAM SYMBOLS

- HOA — HAND-OFF-AUTO SWITCH
- OL — NORMALLY CLOSED OVERLOAD CONTACTS
- SWITCH
- FUSE
- CONTACT NORMALLY CLOSED
- CONTACT NORMALLY OPEN
- C — COIL IN MOTOR STARTER
- R — PILOT LIGHT (COLOR INDICATION)
- CR — COIL IN MOTOR STARTER
- TRANSFORMER

ABBREVIATIONS

IA	INSTRUMENTATION AIR
DDC	DIRECT DIGITAL CONTROL
C	COMMON VALVE PORT
F.O	FAIL OPEN
F.C	FAIL CLOSED
SR	SPRING RANGE
TR	THROTTLING RANGE
PH	PREHEAT
HR	HEAT RECOVERY
CPA	CONTROL POINT ADJUSTMENT
SPDT	SINGLE POLE DOUBLE THROW
DPDT	DOUBLE THROW DOUBLE POLE
DA	DIRECT ACTING
RA	REVERSE ACTING

PROCESS CODES

TW	COOLING TOWER OR CONDENSER WATER
CHW	CHILLED WATER
SCHW	SECONDARY CHILLED WATER
HW	HOT WATER
SHW	SECONDARY HOT WATER
STM	STEAM

LINE LEGEND

- ELECTRICAL SIGNAL
- PNEUMATIC SIGNAL
- INTERNAL SYSTEM LINK

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REGISTERED PROFESSIONAL ENGINEER (ARCHITECT)
CERTIFICATE NO.
49452
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SHIRIAN
12/31/2020
REGISTERED
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

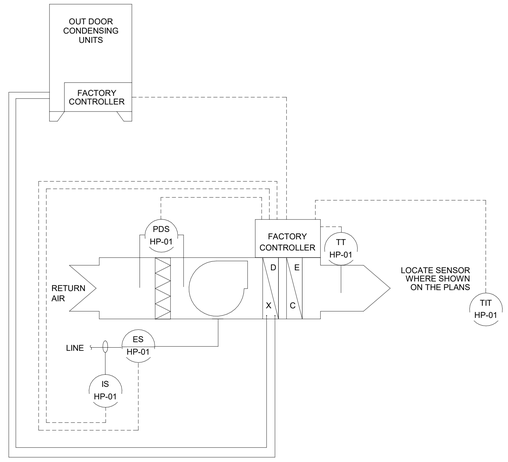
DRAWN BY	RKS
REVIEWED BY	SDB
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

MECHANICAL CONTROLS LEGEND

SHEET NO

MI001



TYPICAL HEAT PUMP CONTROL DIAGRAM

SEQUENCE OF OPERATION

HEAT PUMPS

EACH HEAT PUMP UNIT SHALL BE INSTALLED PACKAGED CONTROLS AND A PROGRAMABLE WALL THERMOSTAT TO PROVIDE HEATING OR COOLING AS REQUIRED TO MAINTAIN ROOM SPACE TEMPERATURE. THE ROOM SPACE TEMPERATURE AND SETPOINT SHALL BE SENSED AND ADJUSTED AT THE ROOM THERMOSTAT. THE HEAT PUMP UNIT AND CONTROLLER SHALL AUTOMATICALLY PROVIDE HEATING OR COOLING BY CONTROLLING THE 4-WAY REVERSING VALVE FACTORY INSTALLED IN THE REFRIGERANT CIRCUIT OF EACH UNIT. EACH HEATPUMP SHALL OPERATE BASED ON AN OCCUPANCY SCHEDULE PROGRAMMED INTO THE THERMOSTAT. THE FAN SHALL OPERATE CONTINUOUSLY DURING OCCUPIED PERIODS AND SHALL CYCLE ON/OFF DURING UNOCCUPIED PERIODS. DURING UNOCCUPIED PERIODS, THE TEMPERATURE SETPOINTS SHALL BE SET TO 55°F FOR HEATING AND 85°F FOR COOLING. IF THE TEMPERATURE IS OUTSIDE THESE SETPOINTS, THE UNIT SHALL START AND OPERATE UNTIL THE UNOCCUPIED SETPOINT IS REACHED. IF DURING UNOCCUPIED PERIODS, THE OCCUPANCY OVERRIDE SWITCH IS ACTIVATED, THE FMS SHALL OPERATE THE UNIT IN AN OCCUPIED MODE FOR A PERIOD OF TWO HOURS BEFORE SWITCHING BACK TO THE UNOCCUPIED MODE. A SMOKE DETECTOR LOCATED IN THE SUPPLY AIR STREAM OF UNITS 2000 CFM AND LARGER SHALL STOP THE FAN IF SMOKE IS DETECTED IN THE DUCT.

KITCHEN EXHAUST FANS

EACH EXHAUST FAN SHALL OPERATE FROM A LOCAL AUTO SHUT OFF 30-15-10-5 MINUTE PRESET COUNTDOWN WALL SWITCH TIMER. THE FAN SHALL OPERATE ANYTIME THE WALL SWITCH IS ON.

BATHROOM EXHAUST FANS

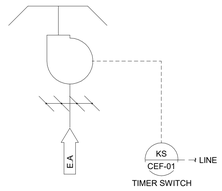
EACH FAN SHALL BE CONTROLLED BY A SPECIAL SWITCH WILL ACTIVATE THE FAN WITH PLACED IN THE ON POSITION. ONCE THE FAN IS OPERATING, THE SWITCH SHALL OPERATE THE FAN FOR A MINIMUM OF 10 MINUTES (ADJUSTABLE) OR UNTIL THE SWITCH IS OFF; WHICHEVER IS LONGER. THE SWITCH SHALL ALSO OPERATE THE FAN FOR A MINIMUM TIME PERIOD EACH HOUR EVEN IF THE SWITCH IS NOT TURNED ON. THE TIME PERIODS SHALL MEET THE ASHRAE 62.2 WHOLE-HOME VENTILATION WITH INTERMITTENT VENTILATION REQUIREMENTS. USE SMART EXHAUST BATH FAN SWITCH WITH VENTILALTION CONTROL AND DELAY TIMER, SE1-W OR EAUAL.

LAUNDRY EXHAUST FANS

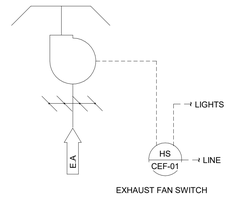
EXHAUST FAN CONTROL
EACH FAN SHALL OPERATE A LOCAL 4 HOUR TWIST TIMER. THE FAN SHALL OPERATE ANYTIME THE TWIST TIMER IS ACTIVATED.

CONTROL SCOPE

- IT IS THE INTENT OF THIS SECTION TO PROVIDE A FULLY FUNCTIONAL SYSTEM TO PROVIDE FULLY AUTOMATIC TEMPERATURE CONTROL FOR ALL SYSTEMS PROVIDED UNDER THIS CONTRACT.
- IT IS THE RESPONSIBILITY OF THE BIDDER TO READ AND CONFORM TO ALL SECTIONS OF THE SPECIFICATIONS, REVIEW ALL CONTRACT DRAWINGS AND TO COORDINATE ALL EQUIPMENT SUPPLIED UNDER OTHER SECTIONS OF THE SPECIFICATIONS WITH THIS WORK.
- THE CONTROL SYSTEM SHALL INCLUDE ALL OPERATOR INPUT/OUTPUT DEVICES, FIELD CONTROL UNITS, FIELD CONTROLS, SENSORS AND CONTROLS CONDUIT, WIRING, AND PIPING, ETC.
- THE ENGINEERING, INSTALLATION SUPERVISION AND LABOR, CALIBRATION, AND CHECKOUT NECESSARY FOR A COMPLETE AND FULLY OPERATIONAL CONTROL SYSTEM AS SPECIFIED HEREAFTER SHALL BE PROVIDED UNDER THIS SECTION.
- THE CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF FACTORY FURNISHED AND FIELD INSTALLED CONTROLS AS WELL AS ALL OTHER SYSTEM CONTROLS INDICATED ON THE CONTRACT DRAWINGS OR REQUIRED BY THIS SPECIFICATION.



TYPICAL LAUNDRY AND KITCHEN EXHAUST FAN CONTROL DIAGRAM
(TYPICAL FOR CEF-3, CEF-6, CEF-7, CEF-10 THRU CEF-16)



TYPICAL BATHROOM EXHAUST FAN CONTROL DIAGRAM
(TYPICAL FOR CEF-1, CEF-2, CEF-4, CEF-5, CEF-8 AND CEF-9)

VENTILATION CALCULATION

UNIT	AREA	BEDROOM COUNT	CFM	UNIT TOTAL EXHAUST	MINIMUM OPERATING MINUTES PER HOUR
1BD/1BA	700	1	22	216	6.1
2BD/1BA	1120	2	34	216	9.4
3BD/2BA	1452	3	45	291	9.2

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ARCHITECTURE
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REGISTERED PROFESSIONAL ENGINEER (ARCHITECT)
CERTIFICATE NO.
49452
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SHIRIAN
DATE SIGNED
ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	RKS
REVIEWED BY	SDB
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

MECHANICAL CONTROLS DIAGRAMS

SHEET NO

MI601

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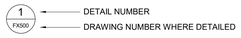
FIRE PROTECTION SYMBOL LEGEND

SECTION SYMBOL

DETAIL SYMBOL



SECTION, ELEVATION, AND DETAIL TITLES

SITE UTILITY SYMBOLS

DESCRIPTION	NEW	EXISTING
FIRE PROTECTION	F	EX. F
POST INDICATOR VALVE	PIV	PIV
REDUCED PRESSURE BACKFLOW PREVENTER		
FIRE HYDRANT	F.H.	F.H.(E)
FIRE DEPARTMENT INLET CONNECTION	F.D.C.	F.D.C.
VALVE WITH VALVE BOX		
CONSTRUCTION		
FENCING		

FIRE FLOW DATA

TEST DATE:	XX/XX/XXXX
TEST LOCATION:	XX INCH MAIN ON SITE
WATER PRESSURE ZONE:	XX - XXXX
TEST ELEVATION:	XXXX' MSL
REQUESTED LOADING:	XXXX GPM
(IF MODELED BY THE MUNICIPALITY)	
PEAK STATIC PRESSURE:	XXX.X PSI
RESIDUAL PRESSURE:	XXX.X PSI
FLOWING GPM:	XXXX GPM
(IF NOT MODELED BY THE MUNICIPALITY)	

SCHEMATIC SYMBOLS

SYMBOL	ABBREVIATION	DESCRIPTION
XX		KEYED NOTE
		POINT OF CONNECTION TO EXISTING
XXXXX		EXISTING PIPE TO BE REMOVED
		NEW PIPING
		EXISTING PIPING TO REMAIN
		NEW PIPE CONNECTION TO EXISTING PIPING
		DIRECTION OF FLOW
		DROP IN PIPE
		RISE IN PIPE
		TOP CONNECTION, 45° OR 90° BOTTOM CONNECTION, 45° OR 90°
		CAPPED OUTLET
		SIDE CONNECTION
		UNION
		FLANGED UNION
		ORIFICE UNION
		REDUCER OR INCREASER
		ECCENTRIC REDUCER
		PIPE GUIDE
		FLEXIBLE CONNECTION
		UNIVERSAL TEMPERATURE-PRESSURE FITTING (PETE'S PLUG)
		STRAINER WITH BLOWDOWN VALVE & HOSE BIBB
		PRESSURE GAUGE AND GAUGE COCK
		TEST PLUG (PRESS/TEMP)
		PENETRATION
	MAV	MANUAL AIR VENT (MAV)
A	AAV	AUTOMATIC AIR VENT (AAV)
	FS/FD/AD	FLOOR SINK , FLOOR DRAIN , AREA DRAIN
		SLOPE OF PIPE
	AG	AIR GAP FITTING
	(WH) (HB)	WALL HYDRANT, HOSE BIBB
	TP	TRAP PRIMER WITH ACCESS PANEL
		WATER MOTOR GONG
		ALARM BELL
		FIRE HOSE CABINET
		FIRE HOSE VALVE CABINET
		CLEAN AGENT FIRE SUPPRESSION
		DISCHARGE NOZZLE
		AUDIO/VISUAL ALARM
C.P.		CONTROL PANEL

PIPING SYMBOLS

SYMBOL	ABBREVIATION	DESCRIPTION
CA	CA	COMPRESSED AIR
FP	FP	FIRE PROTECTION; WET PIPE
DFP	DFP	FIRE PROTECTION; DRY PIPE
SP	SP	STANDPIPE; WET
DSP	DSP	STANDPIPE; DRY
DP	DP	DRY PIPE/PRE-ACTION FIRE PROTECTION

FIRE PROTECTION-INTERIOR

SYMBOL	DESCRIPTION
●	PENDANT STYLE HEAD/DRY TYPE AS NOTED
○	UPRIGHT STYLE HEAD/DRY TYPE AS NOTED
◁	SIDEWALL STYLE HEAD/DRY TYPE AS NOTED

NOTE: NOT ALL ABBREVIATIONS OR SYMBOLS APPLY TO THIS PROJECT

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANT	ACID NEUTRALIZING TANK
BOP	BOTTOM OF PIPE
DN	DOWN
EL	ELEVATION
FFE	FINISHED FLOOR ELEVATION
FT	FEET
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HD	HEAD
HP	HORSEPOWER
IN	INCHES
INV	INVERT
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
No. #	NUMBER
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
OS&Y	OUTSIDE SCREW AND YOKE
PH	PHASE
PSIG	POUNDS PER SQUARE INCH GAUGE
SP	STATIC PRESSURE
TD	TRENCH DRAIN
TYP	TYPICAL
YB	YARD BOX
YH	YARD HYDRANT

VALVE SYMBOLS

SYMBOL	ABBREVIATION	DESCRIPTION
FP		ROOF MANIFOLD
FDC	FDC	FIRE DEPARTMENT INLET CONNECTION
FDC (E)	(E)FDC	EXISTING FIRE DEPARTMENT INLET CONNECTION
FP	FP	WET PIPE FIRE RISER
FP DFP	DFP	DRY PIPE FIRE RISER
FP DP		DELUGE/PREACTION FIRE RISER
FP D		INSPECTOR'S TEST CONNECTION (HORIZONTAL)
FP D		INSPECTOR'S TEST CONNECTION (VERTICAL)
		STANDPIPE VALVE
		FLOW CONTROL VALVE
		FLOW SWITCH
		GATE VALVE
		GLOBE VALVE
		OS&Y VALVE
		BUTTERFLY VALVE
OR OR		BALL VALVE
OR		CHECK VALVE
		WATER PRESSURE REDUCING VALVE
		AUTO BALL DRIP VALVE
		PRESSURE RELIEF VALVE
		TEMPERATURE AND PRESSURE RELIEF VALVE
		DRAIN VALVE
		VALVE IN VERTICAL
		FLOW SWITCH
		DIAPHRAGM (PROCESS SYSTEMS)
		REDUCED PRESSURE BACKFLOW PREVENTER (RPBP)
		ATMOSPHERIC VACUUM BREAKER
		PRESSURE STYLE VACUUM BREAKER

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DRAWING NAME

FIRE PROTECTION LEGEND

SHEET NO

FX001

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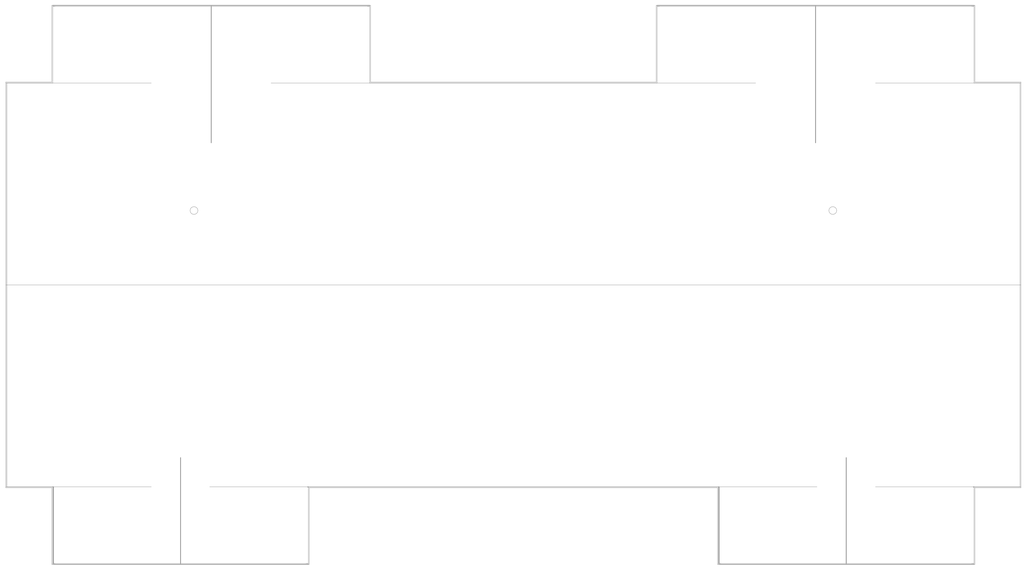
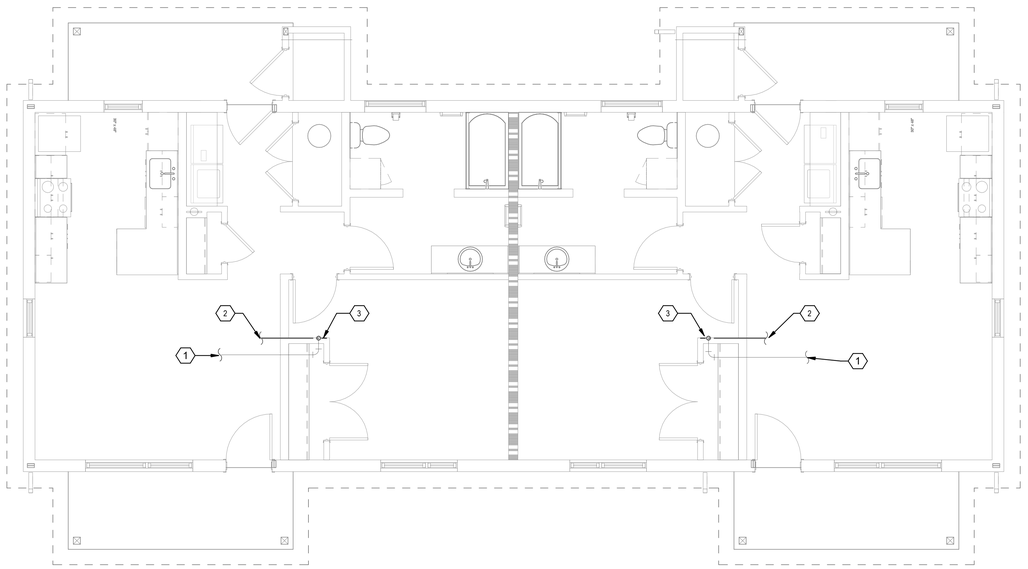


C5 FIRE PROTECTION ROOF PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 FIRE PROTECTION PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. FIRE SPRINKLER SYSTEM SHALL BE THE RESPONSIBLITY OF THE FIRE SPRINKLER CONTRACTOR FOR FLOW TEST AND DESIGN OF FIRE SPRINKLERS HEADS AND PIPING.
B. FIRE SPRINKLER WATER SUPPLY SHALL BE PART OF THE DOMESTIC COLD WATER SUPPLY.
C.

SHEET KEYNOTES

1. 1-1/2" FIRE LINE FROM DOMESTIC WATER SUPPLY SEE PLUMBING DRAWINGS FOR CONTINUATION.
2. FIRE SPRINKLER PIPING, HEAD LAY OUT AND SIZING SHALL BE SHOWN BY THE FIRE SPRINKLER CONTRACTOR DRAWINGS.
3. FIRE RISER WITH FLOW SWITCH CONTROL VALVE LOCATION.

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FIRE PROTECTION PLAN - 1BD/1BA DUPLEX

SHEET NO

FX101

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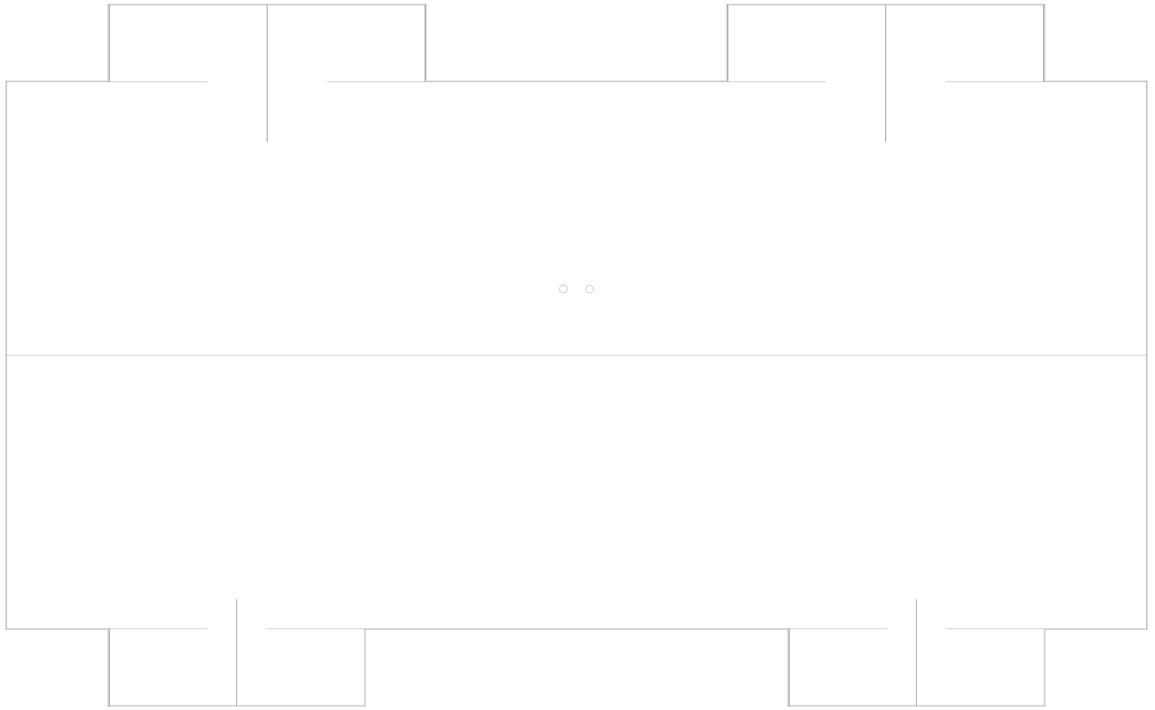
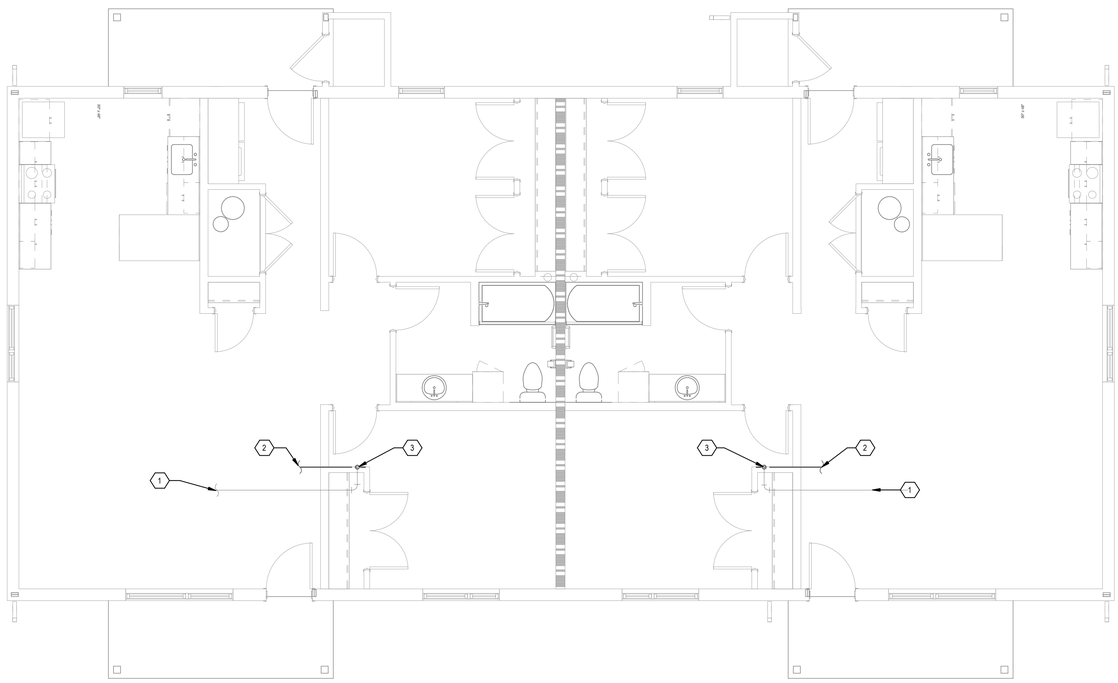


C5 FIRE PROTECTION ROOF PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 FIRE PROTECTION PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. FIRE SPRINKLER SYSTEM SHALL BE THE RESPONSIBLITY OF THE FIRE SPRINKLER CONTRACTOR FOR FLOW TEST AND DESIGN OF FIRE SPRINKLERS HEADS AND PIPING.
B. FIRE SPRINKLER WATER SUPPLY SHALL BE PART OF THE DOMESTIC COLD WATER SUPPLY.
C.

SHEET KEYNOTES

1. 1-1/2" FIRE LINE FROM DOMESTIC WATER SUPPLY SEE PLUMBING DRAWINGS FOR CONTINUATION.
2. FIRE SPRINKLER PIPING, HEAD LAY OUT AND SIZING SHALL BE SHOWN BY THE FIRE SPRINKLER CONTRACTOR DRAWINGS.
3. FIRE RISER WITH FLOW SWITCH CONTROL VALVE LOCATION.

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

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CERTIFICATE NO
49452
ABBAS
SHIRIAN
REGISTERED PROFESSIONAL ENGINEER (ARCHITECTURAL)
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	Author
REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

FIRE PROTECTION PLAN - 2BD/1BA DUPLEX

SHEET NO

FX102

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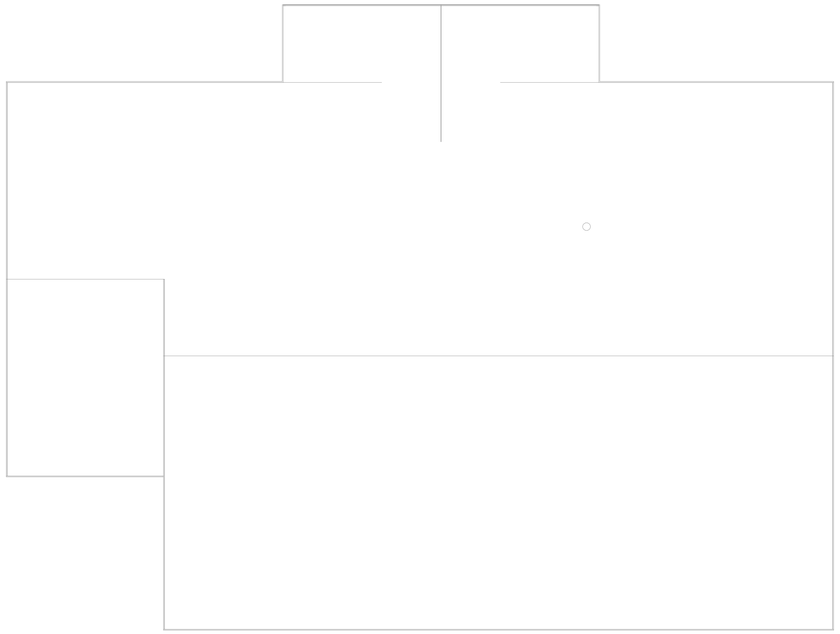

C5 FIRE PROTECTION ROOF PLAN - 3BD/2BA SINGLE-FAMILY
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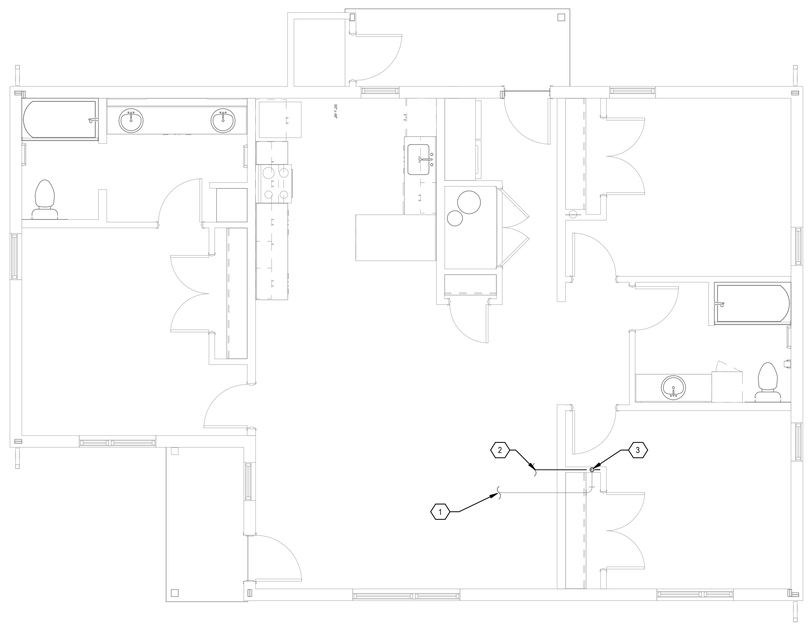

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REGISTERED PROFESSIONAL ENGINEER (ARCHITECT)
EXPIRES 03/31/2021

PROJECT

Teacherages

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Lukachukai, AZ 86507

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REVIEWED BY	Approver
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PROJECT NO	20-7002.005

DRAWING NAME

FIRE PROTECTION PLAN - 3BD/2BA SINGLE-FAMILY

SHEET NO

FX103

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PLUMBING SYMBOL LEGEND

PLUMBING FIXTURE & EQUIPMENT SYMBOL

P## — LETTER REFERS TO PLUMBING FIXTURE; NUMBER AND/OR LOWERCASE LETTER REFERS TO SPECIFIC CATEGORY; SYMBOL INDICATES FIXTURE IDENTIFIED IN FIXTURE SCHEDULE
ex. P1a WATER CLOSET (BARRIER FREE)

TMV-1 — LETTER REFERS TO PLUMBING EQUIPMENT; NUMBER REFERS TO SPECIFIC EQUIPMENT COUNT; SYMBOL INDICATES EQUIPMENT IDENTIFIED IN EQUIPMENT SCHEDULE

P1	WATER CLOSETS
P2	URINALS
P3	LAVATORIES
P4	SINKS
P5	SERVICE SINKS
P6	WATER COOLERS/DRINKING FOUNTAINS
P7	SHOWERS/BATHTUBS
P8	WATER HAMMERS/SHOCK ABSORBERS
P9	HOSE BIBBS
P10	HYDRANTS
P11	SUPPLY BOXES
P12	WASHER BOXES
P13	EYEWASH/EYEWASH SHOWERS
P14	CLINIC SINKS
P15	TRAP PRIMER
FD1	FLOOR DRAINS
FS1	FLOOR SINKS
RD1	ROOF DRAINS
ORD1	OVERFLOW DRAINS
DSN1	DOWNSPOUT NOZZLES
AD1	AREA DRAINS
DD1	DECK DRAINS

TMV-1	THERMOSTATIC MIXING VALVE
DWH-1	DOMESTIC WATER HEATER
EWH-1	ELECTRIC WATER HEATER
IWH-1	INSTANTANEOUS WATER HEATER
RCP-1	RECIRCULATION PUMP
EXP-1	EXPANSION TANK
RPZ-1	REDUCED PRESSURE ZONE BACKFLOW
BFP-1	DOUBLE CHECK BACKFLOW
GI-1	GREASE INTERCEPTOR
OI-1	OIL INTERCEPTOR
OS-1	OIL/SAND INTERCEPTOR
AN-1	ACID NEUTRALIZER
LI-1	LINT INTERCEPTOR
GM-1	GAS METER
REG-1	REGULATOR
PRV-1	PRESSURE REDUCING VALVE

NOTE: NOT ALL FIXTURE & EQUIPMENT SYMBOLS APPLY TO THIS PROJECT

SECTION SYMBOL

A / P-100 — SECTION LETTER; DRAWING NUMBER WHERE DETAILED

DETAIL SYMBOL

1 / P-500 — DETAIL NUMBER; DRAWING NUMBER WHERE DETAILED

SECTION, ELEVATION, AND DETAIL TITLES

SECTION LETTER / DRAWING NUMBER WHERE DETAILED — A / P-300 — SECTION / SCALE

DETAIL NUMBER / DRAWING NUMBER WHERE DETAILED — 1 / P-500 — DETAIL / SCALE

ELEVATION LETTER / DRAWING NUMBER WHERE DETAILED — A / P-200 — ELEVATION / SCALE

PIPING SYMBOLS

SYMBOL	ABBREVIATION	DESCRIPTION
AV	AV	ACID VENT
AW	AW	ACID WASTE
CA	CA	COMPRESSED AIR
CD	CD	CONDENSATE DRAIN
DCW	DCW	DOMESTIC COLD WATER
DHW	DHW	DOMESTIC HOT WATER
DHWR	DHWR	DOMESTIC HOT WATER RETURN
DHW 140°F	DHW 140°F	140° DOMESTIC HOT WATER
DHWR 140°F	DHWR 140°F	140° DOMESTIC HOT WATER RETURN
ROS	ROS	REVERSE OSMOSIS SUPPLY
ROR	ROR	REVERSE OSMOSIS RETURN
MU	MU	MAKE-UP WATER
NPW	NPW	NON-POTABLE WATER
V	V	VENT
DIS	DIS	DEIONIZED WATER SUPPLY
DIR	DIR	DEIONIZED WATER RETURN
SAN	SAN	SANITARY SEWER
GW	GW	GREASE WASTE
GV	GV	GREASE VENT
RD	RD	STORM/ROOF DRAIN
ORD	ORD	OVERFLOW ROOF DRAIN
LPG	LPG	LIQUEFIED PETROLEUM GAS
G	G	NATURAL GAS-LOW PRESSURE
NGM	NGM	NATURAL GAS-MEDIUM PRESSURE
NGH	NGH	NATURAL GAS-HIGH PRESSURE
IRR	IRR	IRRIGATION
SCW	SCW	SOFT COLD WATER
SHW	SHW	SOFT HOT WATER
TWR (_ _ _)	TWR	TEMPERED WATER RETURN (TEMP °F)
TW (_ _ _)	TW	TEMPERED WATER (TEMP °F)
PD	PD	PUMPED DISCHARGE LINE
ICW	ICW	INDUSTRIAL COLD WATER
IHW	IHW	INDUSTRIAL HOT WATER
IHWR	IHWR	INDUSTRIAL HOT WATER RETURN
INW	INW	INDUSTRIAL WASTE
IA	IA	INSTRUMENT COMPRESSED AIR
IW	IW	INDIRECT WASTE
LA	LA	LAB COMPRESSED AIR

SITE UTILITY SYMBOLS

DESCRIPTION	NEW	EXISTING
SANITARY SEWER	S	EX. S
COLD WATER SUPPLY	W	EX. W
FIRE PROTECTION	F	EX. F
NATURAL GAS	G	EX. G
STORM DRAIN	SD	EX. SD
IRRIGATION	IRR	EX. IRR
VALVE WITH VALVE BOX		
FIRE HYDRANT	F.H.	F.H.(E)
FIRE DEPARTMENT INLET CONNECTION	F.D.C.	F.D.C.
CONSTRUCTION		
THRUST BLOCK		
CLEANOUT	SAS — C.O.	SAS — C.O.(E)
POWER POLE	PP	PP
FENCING		
LIGHT POLE	LP	LP
WATER METER	WM	WM
NATURAL GAS METER	GM	GM
GATE VALVE		
VALVE IN RISER		
POST INDICATOR VALVE	PIV	PIV
REDUCED PRESSURE BACKFLOW PREVENTER		
SANITARY MANHOLE	SAS — M.H.	SAS — M.H.(E)
SLOPE AND LINEAL FOOTAGE	255' OF 6" @ 0.15%SLOPE	

VALVE SYMBOLS

SYMBOL	DESCRIPTION
	GATE VALVE
	GLOBE VALVE
S	SOLENOID VALVE
	OS&Y VALVE
	BUTTERFLY VALVE
OR OR	BALL VALVE
OR	CHECK VALVE
OR	PLUG VALVE
	BALANCING VALVE/CIRCUIT SETTER DEVICE
	PRESSURE REDUCING VALVE
	REGULATING/SUSTAINING VALVE
	2-WAY CONTROL VALVE
	3-WAY MODULATING CONTROL VALVE
	FUEL GAS PRESSURE REGULATOR
	PRESSURE RELIEF VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	DRAIN VALVE
	VALVE IN VERTICAL
	FLOW SWITCH
	DIAPHRAGM (PROCESS SYSTEMS)
	REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)
	ATMOSPHERIC VACUUM BREAKER
	PRESSURE STYLE VACUUM BREAKER

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANT	ACID NEUTRALIZING TANK
AVTR	ACID RESISTANT VENT THROUGH ROOF
B.C.	BALANCING COCK
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CWB	CLOTHES WASHER BOX
CFH	CUBIC FEET PER HOUR
CO	CLEANOUT
COTG	CLEANOUT TO GRADE
CP	CIRCULATION PUMP
CWV	COMBINATION WASTE AND VENT
DCO	DOUBLE CLEANOUT
DCOTG	DOUBLE CLEANOUT TO GRADE
DF	DRINKING FOUNTAIN
DN	DOWN
DS	DOWNSPOUT
DSN	DOWNSPOUT NOZZLE
EL	ELEVATION
EWH	ELECTRIC WATER HEATER
EWC	ELECTRIC WATER COOLER
EEW	EMERGENCY EYEWASH
ES	EMERGENCY SHOWER
ESEW	EMERGENCY SHOWER EYE WASH
°F	DEGREES FAHRENHEIT
FCO	FLOOR CLEANOUT
FFE	FINISHED FLOOR ELEVATION
FT	FEET
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
FV	FLUSH VALVE
GD	GUTTER DRAIN
GI	GREASE INTERCEPTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GWH	GAS WATER HEATER
HB	HOSE BIBB
HD	HEAD
HP	HORSEPOWER
IN	INCHES
INV	INVERT
kW	KILOWATT
MBh	1,000 BTUH
MV	MIXING VALVE
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
No. #	NUMBER
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
OS&Y	OUTSIDE SCREW AND YOKE
PH	PHASE
Ph	POWERS OF HARDNESS
PSIG	POUNDS PER SQUARE INCH GAUGE
SP	STATIC PRESSURE
TD	TRENCH DRAIN
TYP	TYPICAL
YB	YARD BOX
YH	YARD HYDRANT
WCO	WALL CLEANOUT
WC	WATER CLOSET

NOTE: NOT ALL ABBREVIATIONS OR SYMBOLS APPLY TO THIS PROJECT

SCHEMATIC SYMBOLS

SYMBOL	ABBREVIATION	DESCRIPTION
XX		KEYED NOTE
		POINT OF CONNECTION TO EXISTING
XXXXX		EXISTING PIPE TO BE REMOVED
		NEW PIPING
		EXISTING PIPING TO REMAIN
		NEW PIPE CONNECTION TO EXISTING PIPING
		SLOPE OF PIPE
		DIRECTION OF FLOW
		DROP IN PIPE
		RISE IN PIPE
		TOP CONNECTION, 45° OR 90°
		BOTTOM CONNECTION, 45° OR 90°
		CAPPED OUTLET
		SIDE CONNECTION
		UNION
		FLANGED UNION
		ORIFICE UNION
		REDUCER OR INCREASER
		ECCENTRIC REDUCER
		PIPE GUIDE
		FLEXIBLE CONNECTION
		UNIVERSAL TEMPERATURE-PRESSURE FITTING (PETE'S PLUG)
		STRAINER WITH BLOWDOWN VALVE & HOSE BIBB
		THERMOMETER
		PRESSURE GAUGE AND GAUGE COCK
		AQUASTAT
OR		WATER HAMMER ARRESTOR
		TEST PLUG (PRESS/TEMP)
		PENETRATION
	MAV	MANUAL AIR VENT (MAV)
A	AAV	AUTOMATIC AIR VENT (AAV)
	FS/FD/AD	FLOOR SINK , FLOOR DRAIN , AREA DRAIN
	FCO/COTG	FLOOR CLEANOUT/CLEANOUT TO GRADE
	DCOTG	TWO WAY OR DOUBLE CLEANOUT TO GRADE
	RD/OD/DD	ROOF DRAIN/OVERFLOW DRAIN/DECK DRAIN
	TP	TRAP PRIMER WITH ACCESS PANEL
	VTR	VENT THROUGH ROOF
	AG	AIR GAP FITTING
	(WH) (HB)	WALL HYDRANT, HOSE BIBB
	WCO	WALL CLEANOUT

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REGISTERED PROFESSIONAL ENGINEER (MECHANICAL) CERTIFICATE NO. 49452 ABBAS SHIRIAN 12/8/2020 SIGNED ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages

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Intersection IR 12 and IR 13
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100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	JRS/AGS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

PLUMBING LEGEND

SHEET NO

P-001

Bridgers & Paxton Project No: 8183
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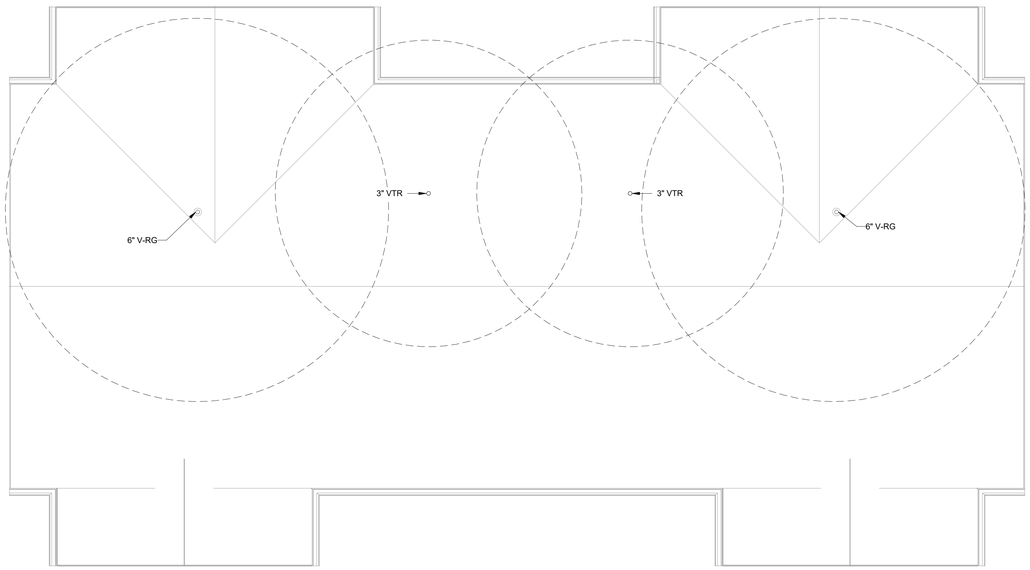

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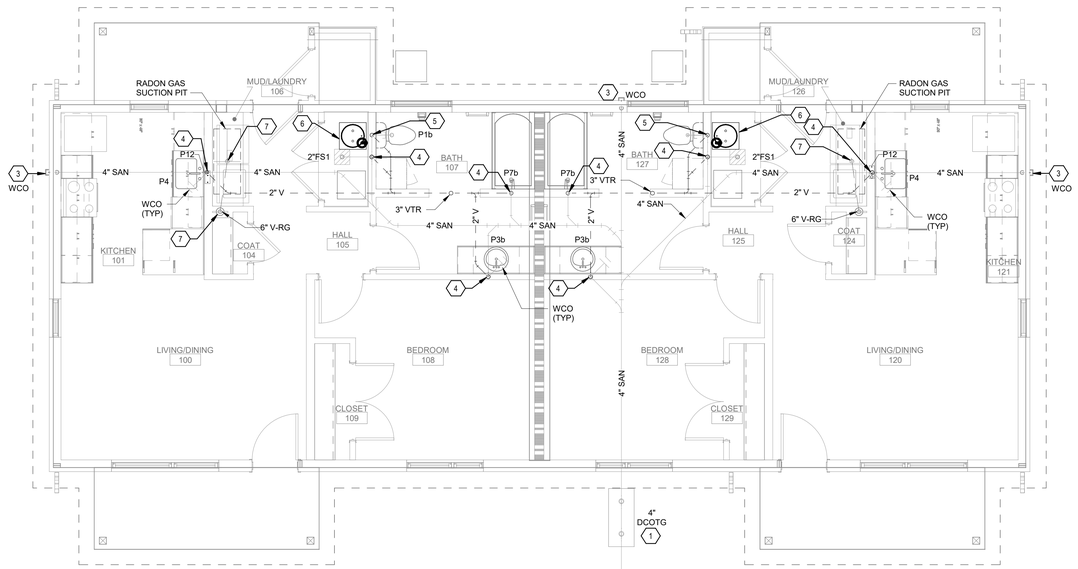

A5 WASTE & VENT PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. AREFER TO ARCHITECTURAL FLOOR PLANS FOR EXACT LOCATION AND HEIGHTS OF ALL PLUMBING FIXTURES BEFORE ROUGH-IN OR INSTALLATION OF PIPE. PLUMBING FIXTURES SHALL BE MOUNTED AT HEIGHTS SHOWN ON ARCHITECTURAL ELEVATION DRAWINGS.
B. ALL PIPING IN FINISHED ROOMS SHALL BE CONCEALED IN FURRED CHASES UNLESS OTHERWISE NOTED ON THIS DRAWING.
C. PROVIDE HINGED ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTERS, ISOLATION BALL VALVES LOCATED IN NONACCESSIBLE CEILINGS AND CHASES. DOORS FURNISHED PER ARCHITECTURAL SPECIFICATIONS AND PURCHASED AND INSTALLED PER DIVISION 22. ACCESS DOOR RATING SHALL MATCH THE CLASSIFICATION OF WALLS AND CEILING FIRE RATING. COORDINATE COLOR AND TYPE OF ACCESS DOOR WITH ARCHITECTURAL PRIOR TO PERFORMING WORK.
D. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND OR SMOKE RATED WALLS AND ASSEMBLIES. PIPING PENETRATIONS OF FIRE AND SMOKE RATED WALLS AND LISTED ASSEMBLIES SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. LISTED FIRE PROOF CAULKING MATERIAL.
E. COORDINATE ALL PLUMBING PIPING WITH ALL OTHER TRADES AND PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN REQUIRED EQUIPMENT ACCESS AND SERVICEABILITY.
F. PIPING LOCATIONS HAVE BEEN SHOWN FOR CLARITY AND DO NOT NECESSARILY REFLECT THE EXACT LOCATION OF PIPE. COORDINATE ROUTING WITH ALL OTHER TRADES BEFORE INSTALLATION OR MAKEUP OF PIPE. PROVIDE COORDINATION DRAWINGS PER SPECIFICATIONS.
G. REFER TO DRAWING P-701 FOR PLUMBING ROUGH IN REQUIREMENTS.
H. SEAL ALL EXTERNAL CRACKS, JOINTS, PENETRATIONS, EDGES, AND ENTRY POINTS WITH APPROPRIATE CAULKING AND INSTALL RODENT-PROOF SCREENS ON ALL OPENINGS GREATER THAN 1/4".
I. PROVIDE DRAIN PAN AND ASSOCIATED PIPING TO FLOOR SINK FOR LEED/ENERGY STAR V3 PURPOSES
J. FOR RADON GAS SUCTION PUT DETAILS, SEE ARCHITECURAL PLANS.

SHEET KEYNOTES

1. INSTALL DOUBLE CLEANOUT TO GRADE IN ACCORDANCE WITH DETAIL A5/P-501.
2. INSTALL 2" FLOOR SINK IN ACCORDANCE WITH DETAIL C3/P-501.
3. INSTALL WALL CLEANOUT IN ACCORDANCE WITH DETAIL A2/P-501.
4. 2" SAN PIPING DOWN TO FLOOR BELOW. 2" VENT PIPING UP TO CEILING ABOVE.
5. 4" SAN PIPING DOWN TO FLOOR BELOW. 2" VENT PIPING UP TO CEILING ABOVE.
6. DRAIN PAN TO DRAIN OVER TO FLOOR SINK BELOW MECHANICAL PLATFORM.
7. 6" V-RG PIPING TO RISE UP FROM RADON PIT AND EXTEND BELOW SLAB.

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REVIEWED BY	AS
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PROJECT NO	20-7002.005

DRAWING NAME

WASTE & VENT PLAN - 1BD/1BA DUPLEX

SHEET NO

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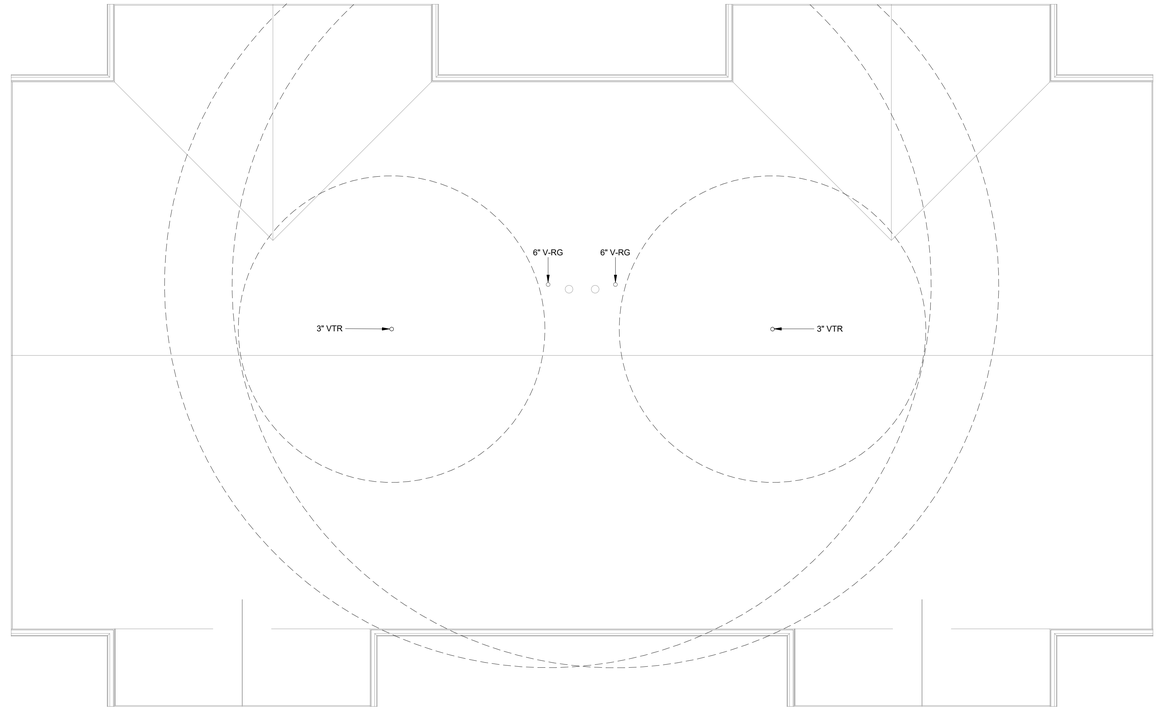

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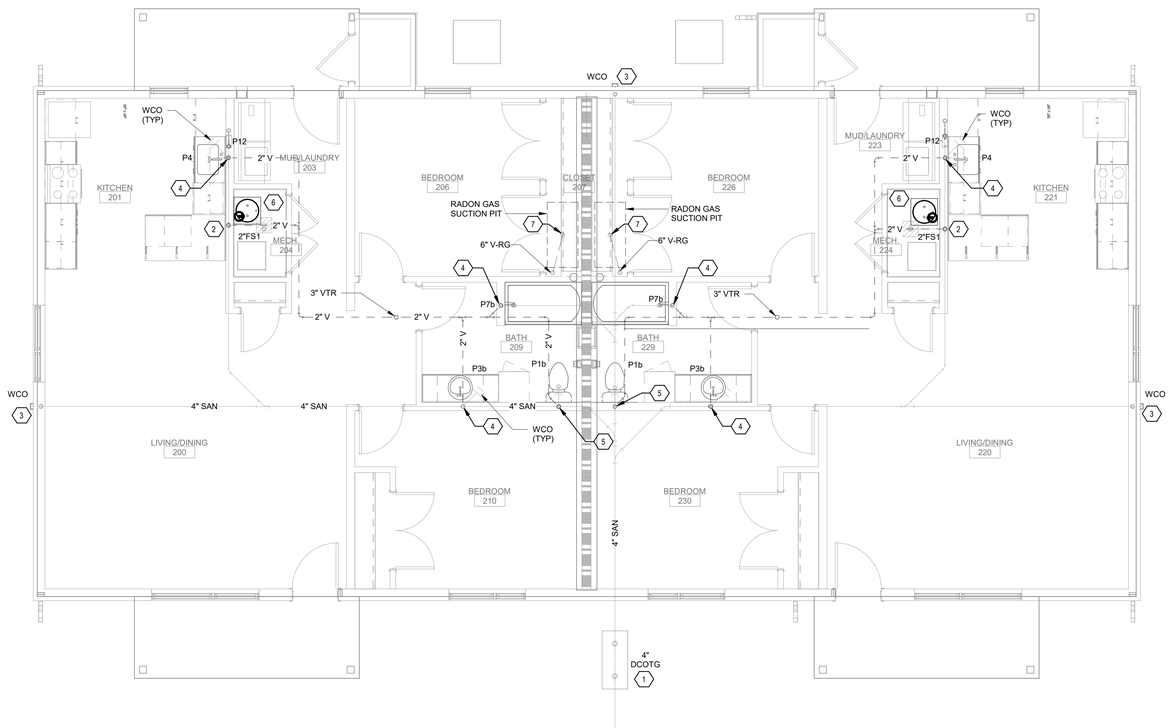

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B. ALL PIPING IN FINISHED ROOMS SHALL BE CONCEALED IN FURRED CHASES UNLESS OTHERWISE NOTED ON THIS DRAWING.
C. PROVIDE HINGED ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTERS, ISOLATION BALL VALVES LOCATED IN NONACCESSIBLE CEILINGS AND CHASES. DOORS FURNISHED PER ARCHITECTURAL SPECIFICATIONS AND PURCHASED AND INSTALLED PER DIVISION 22. ACCESS DOOR RATING SHALL MATCH THE CLASSIFICATION OF WALLS AND CEILING FIRE RATING. COORDINATE COLOR AND TYPE OF ACCESS DOOR WITH ARCHITECTURAL PRIOR TO PERFORMING WORK.
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J. FOR RADON GAS SUCTION PUT DETAILS, SEE ARCHITECURAL PLANS.

SHEET KEYNOTES

1. INSTALL DOUBLE CLEANOUT TO GRADE IN ACCORDANCE WITH DETAIL A5/P-501.
2. INSTALL 2" FLOOR SINK IN ACCORDANCE WITH DETAIL C3/P-501.
3. INSTALL WALL CLEANOUT IN ACCORDANCE WITH DETAIL A2/P-501.
4. 2" SAN PIPING DOWN TO FLOOR BELOW. 2" VENT PIPING UP TO CEILING ABOVE.
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DESIGN
INSPIRATION

BRIDGERS & PAXTON
4600 C Montgomery Blvd. NE
Albuquerque, NM 87109
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SEAL
Digitally signed by Abbas Shirian
Date: 2020.12.08 09:44:36-07'00'
CERTIFICATE NO. 49452 ABBAS SHIRIAN REGISTERED PROFESSIONAL ENGINEER (ARCHITECTURAL) ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	JRS/AGS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

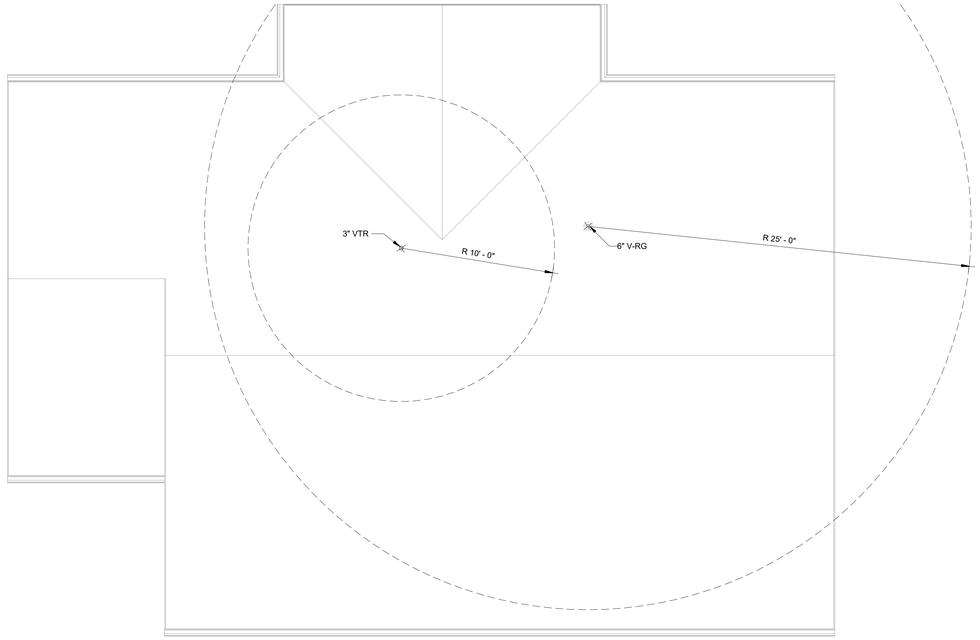
DRAWING NAME

WASTE & VENT PLAN - 2BD/1BA DUPLEX

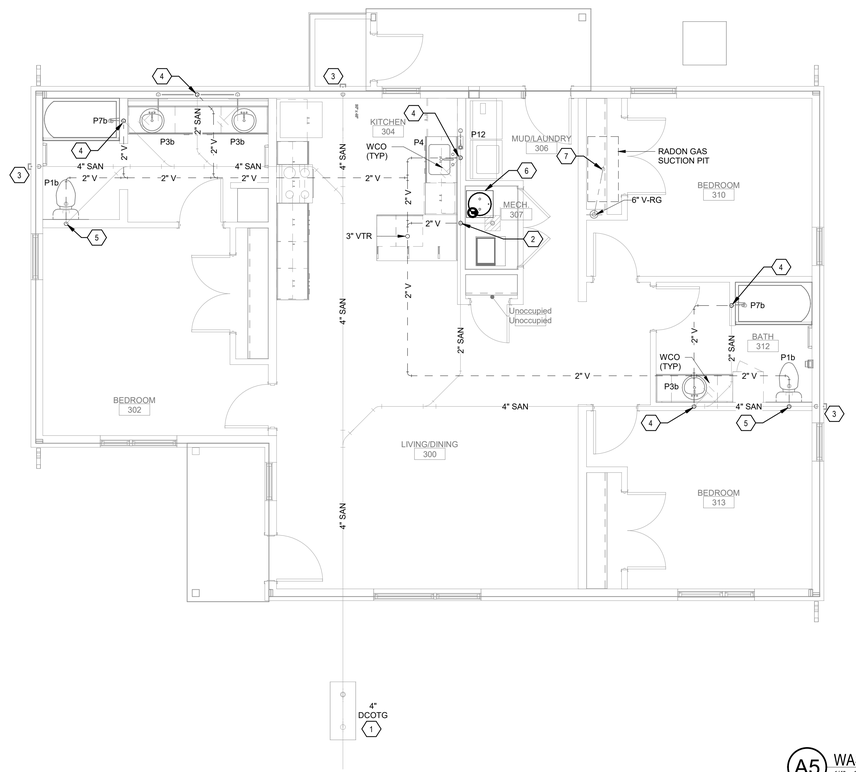
SHEET NO

PL102

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:14 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobers.rvt



C5 PLUMBING ROOF PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'



A5 WASTE & VENT PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. AREFER TO ARCHITECTURAL FLOOR PLANS FOR EXACT LOCATION AND HEIGHTS OF ALL PLUMBING FIXTURES BEFORE ROUGH-IN OR INSTALLATION OF PIPE. PLUMBING FIXTURES SHALL BE MOUNTED AT HEIGHTS SHOWN ON ARCHITECTURAL ELEVATION DRAWINGS.
B. ALL PIPING IN FINISHED ROOMS SHALL BE CONCEALED IN FURRED CHASES UNLESS OTHERWISE NOTED ON THIS DRAWING.
C. PROVIDE HINGED ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTERS, ISOLATION BALL VALVES LOCATED IN NONACCESSIBLE CEILINGS AND CHASES. DOORS FURNISHED PER ARCHITECTURAL SPECIFICATIONS AND PURCHASED AND INSTALLED PER DIVISION 22. ACCESS DOOR RATING SHALL MATCH THE CLASSIFICATION OF WALLS AND CEILING FIRE RATING. COORDINATE COLOR AND TYPE OF ACCESS DOOR WITH ARCHITECTURAL PRIOR TO PERFORMING WORK.
D. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND OR SMOKE RATED WALLS AND ASSEMBLIES. PIPING PENETRATIONS OF FIRE AND SMOKE RATED WALLS AND LISTED ASSEMBLIES SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. LISTED FIRE PROOF CAULKING MATERIAL.
E. COORDINATE ALL PLUMBING PIPING WITH ALL OTHER TRADES AND PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN REQUIRED EQUIPMENT ACCESS AND SERVICEABILITY.
F. PIPING LOCATIONS HAVE BEEN SHOWN FOR CLARITY AND DO NOT NECESSARILY REFLECT THE EXACT LOCATION OF PIPE. COORDINATE ROUTING WITH ALL OTHER TRADES BEFORE INSTALLATION OR MAKEUP OF PIPE. PROVIDE COORDINATION DRAWINGS PER SPECIFICATIONS.
G. REFER TO DRAWING P-701 FOR PLUMBING ROUGH IN REQUIREMENTS.
H. SEAL ALL EXTERNAL CRACKS, JOINTS, PENETRATIONS, EDGES, AND ENTRY POINTS WITH APPROPRIATE CAULKING AND INSTALL RODENT-PROOF SCREENS ON ALL OPENINGS GREATER THAN 1/4".
I. PROVIDE DRAIN PAN AND ASSOCIATED PIPING TO FLOOR SINK FOR LEED/ENERGY STAR V3 PURPOSES.
J. FOR RADON GAS SUCTION PUT DETAILS, SEE ARCHITECURAL PLANS.

SHEET KEYNOTES

1. INSTALL DOUBLE CLEANOUT TO GRADE IN ACCORDANCE WITH DETAIL A5/P-501.
2. INSTALL 2" FLOOR SINK IN ACCORDANCE WITH DETAIL C3/P-501.
3. INSTALL WALL CLEANOUT IN ACCORDANCE WITH DETAIL A2/P-501.
4. 2" SAN PIPING DOWN TO FLOOR BELOW. 2" VENT PIPING UP TO CEILING ABOVE.
5. 4" SAN PIPING DOWN TO FLOOR BELOW. 2" VENT PIPING UP TO CEILING ABOVE.
6. DRAIN PAN TO DRAIN OVER TO FLOOR SINK BELOW MECHANICAL PLATFORM.
7. 6" V-RG PIPING TO RISE UP FROM RADON PIT AND EXTEND BELOW SLAB.

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ARIZONA U.S.A.
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PROJECT

Teacherages

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100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	JRS/AGS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

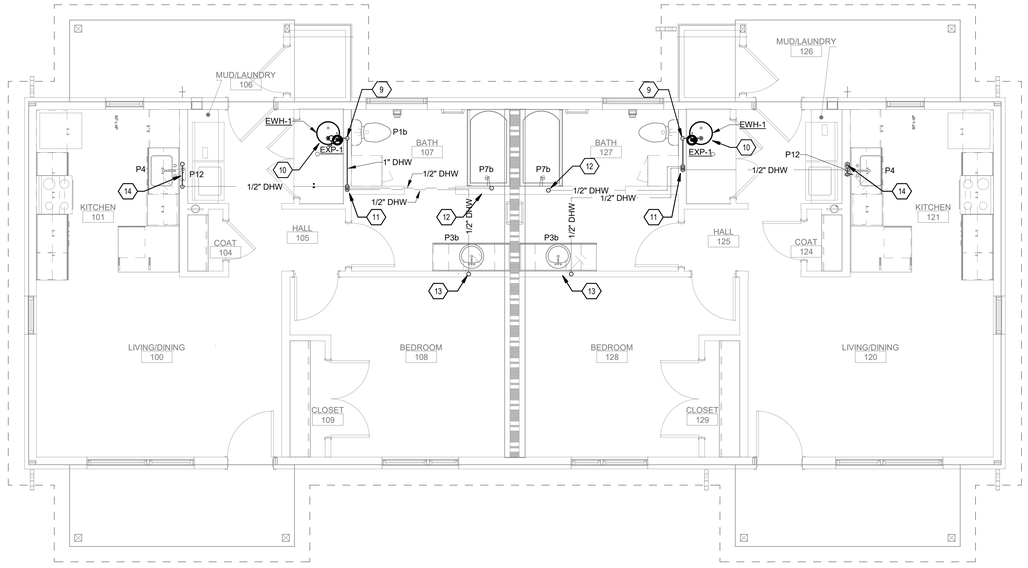
DRAWING NAME

WASTE & VENT PLAN - 3BD/2BA SINGLE-FAMILY

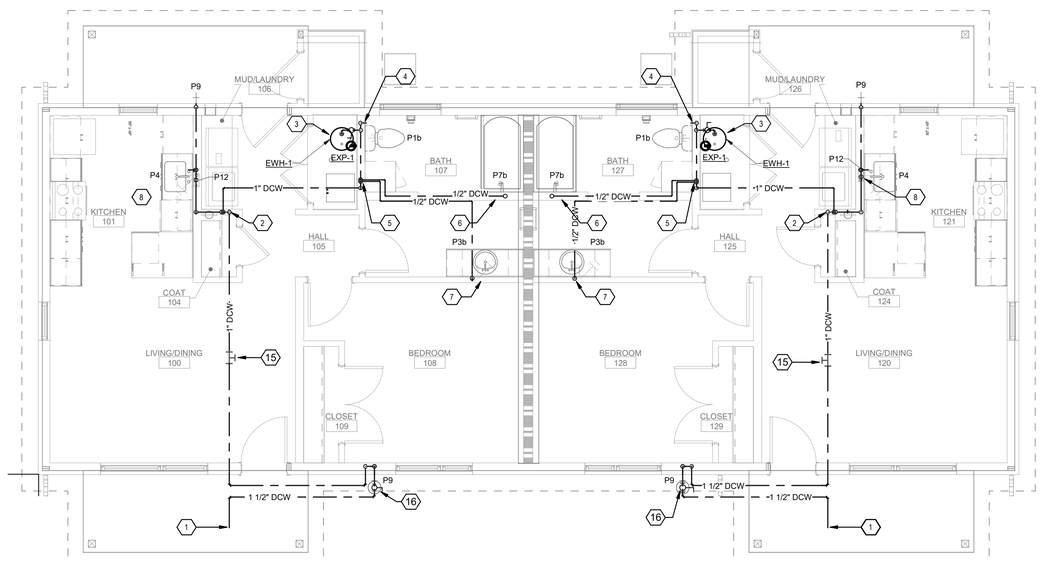
SHEET NO

PL103

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:14 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobers.rvt



C5 PRESSURE PIPING PLAN - DHW - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 PRESSURE PIPING PLAN - DCW - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. ALL OVERHEAD EQUIPMENT AND PIPING IS TO BE SUSPENDED FROM STRUCTURAL MEMBERS.

SHEET KEYNOTES

1. 1-1/2" DCW IN SEE CIVIL SITE PLAN FOR CONTINUATION.
2. 1" DCW RISE UP IN WALL TO MULTI-MANIFOLD FITTING.
3. 1" DCW DOWN AND CONNECT TO DWH-1, PROVIDE SHUT OFF BALL VALVE.
4. 1/2" DCW TO P1a .
5. PROVIDE (2) 1/2" DCW LINES DOWN FROM MULTI-MANIFOLD FITTING.
6. 1/2" DCW UP IN WALL TO P7b.
7. 1/2" DCW UP TO P3b.
8. 3/4" DCW UP TO P12, WITH 1/2" DCW TO P4.
9. 1" DHW DOWN IN WALL TO 1" HEADER.
10. 1" DHW DOWN AND CONNECT TO DWH-1, PROVIDE SHUT OFF BALL VALVE.
11. PROVIDE (3) 1/2" DHW LINES DOWN FROM MULTI-MANIFOLD FITTING.
12. 1/2" DHW UP IN WALL TO P7b.
13. 1/2" DHW UP TO P3b.
14. 3/4" DHW UP TO P12, WITH 1/2" DHW TO P4.
15. PROVIDE 1-1/2" WATER STUB OUT FOR FIRE PROTECTION FIRE RISER, SEE FIRE PROTECTION PLANS FOR CONTINUATION.
16. DOMESTIC WATER SHUT OFF VALVE IN CONCRETE PIT WITH CAST IRON LID.

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Teacherages

Lukachukai Community Schools
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PROJECT NO	20-7002.005

DRAWING NAME

PRESSURE PIPING PLAN - 1BD/1BA DUPLEX

SHEET NO

PP101

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:17 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobers.rvt

GENERAL SHEET NOTES

A. ALL OVERHEAD EQUIPMENT AND PIPING IS TO BE SUSPENDED FROM STRUCTURAL MEMBERS.

SHEET KEYNOTES

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2. 1" DCW RISE UP IN WALL TO MULTI-MANIFOLD FITTING.
3. 1" DCW DOWN AND CONNECT TO DWH-1, PROVIDE SHUT OFF BALL VALVE.
4. 1/2" DCW TO P1a.
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6. 1/2" DCW UP IN WALL TO P7b.
7. 1/2" DCW UP TO P3b.
8. 3/4" DCW UP TO P12, WITH 1/2" DCW TO P4.
9. 1" DHW DOWN IN WALL TO 1" HEADER.
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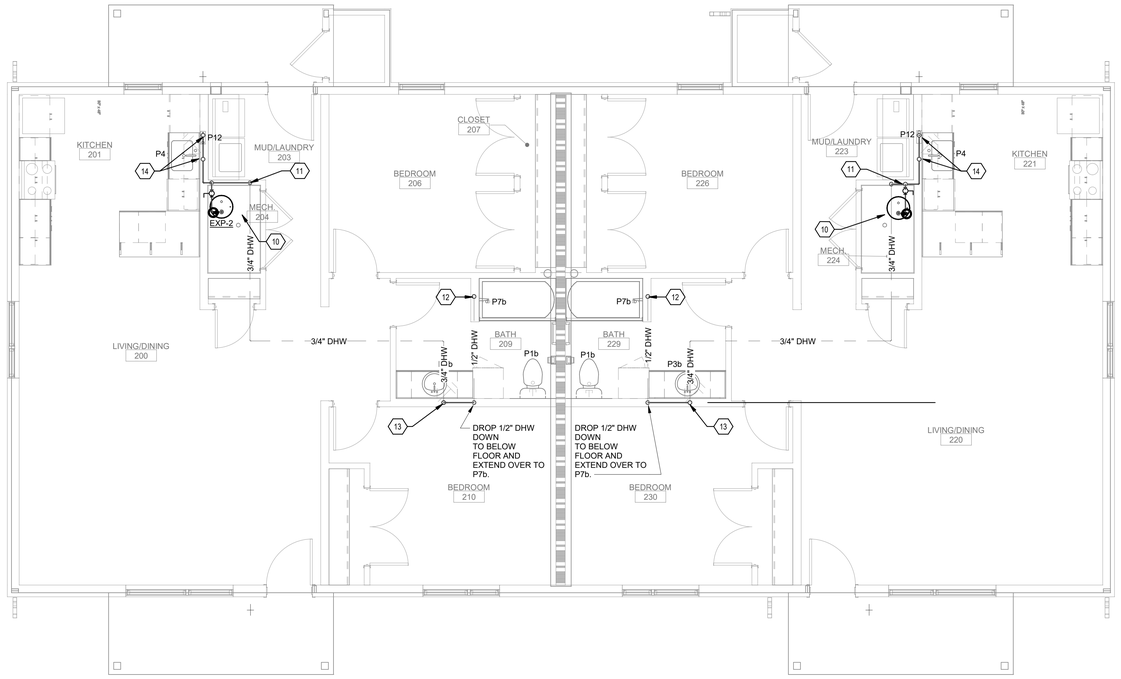
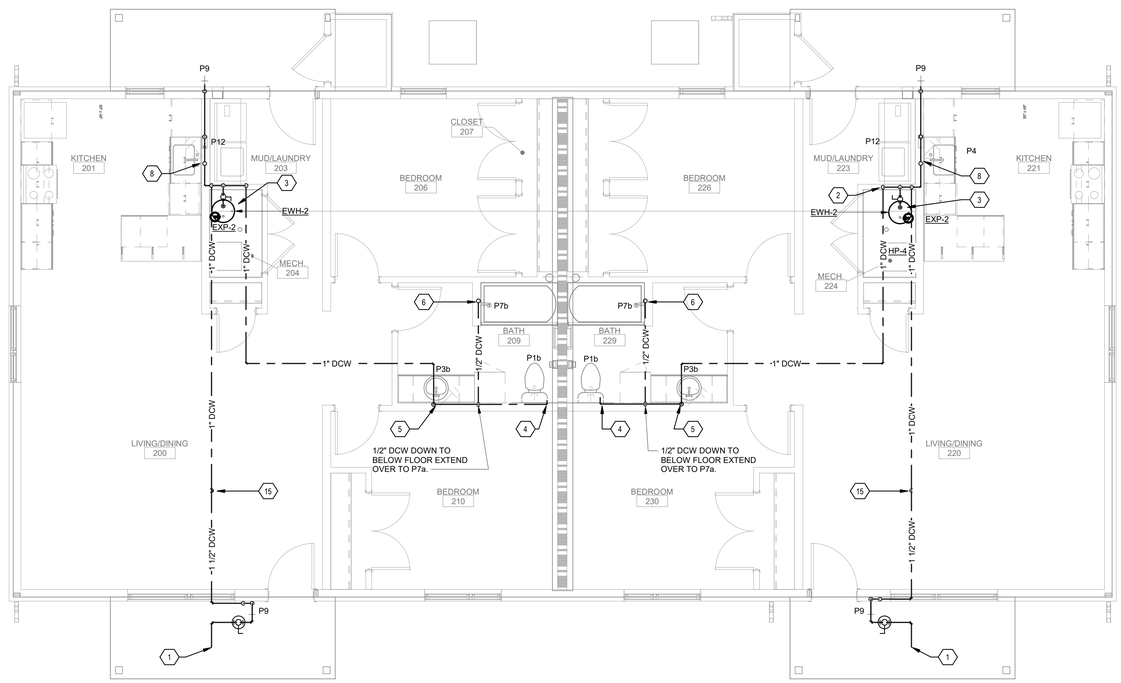
12. 1/2" DHW UP IN WALL TO P7b.
13. 1/2" DHW UP TO P3b.
14. 3/4" DHW UP TO P12, WITH 1/2" DHW TO P4.
15. PROVIDE 1-1/2" WATER STUB OUT FOR FIRE PROTECTION FIRE RISER, SEE FIRE PROTECTION PLANS FOR CONTINUATION.
16. DOMESTIC WATER SHUT OFF VALVE IN CONCRETE PIT WITH CAST IRON LID.



C5 PRESSURE PIPING PLAN - HW - 2BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'



A5 PRESSURE PIPING PLAN - DCW - 2BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

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PROJECT

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Lukachukai Community Schools
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Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

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REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

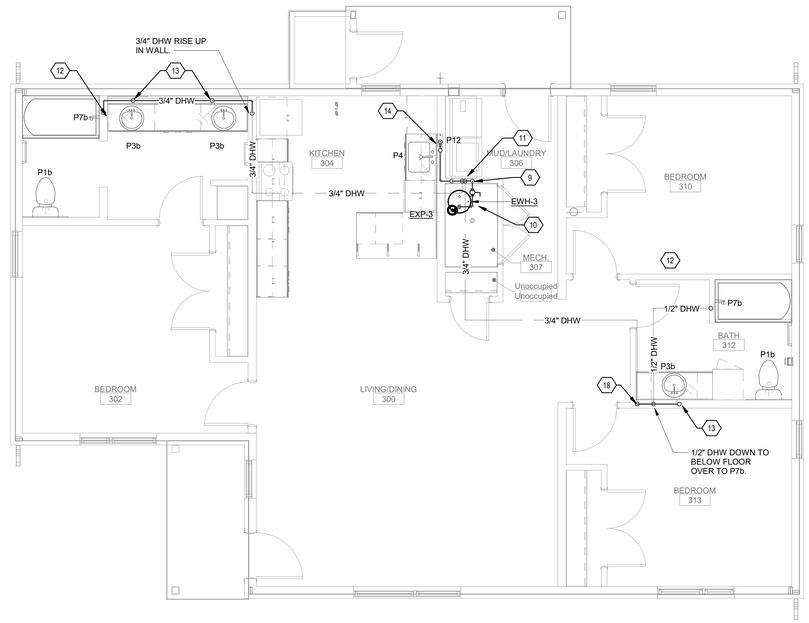
DRAWING NAME

PRESSURE PIPING PLAN - 2BD/1BA DUPLEX

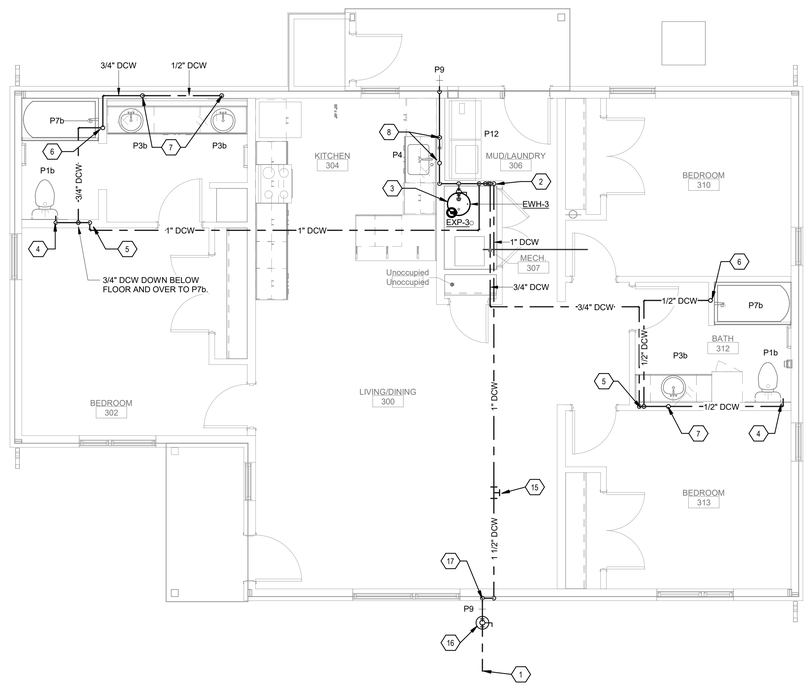
SHEET NO

PP102

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:19 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobers.rvt



C5 PRESSURE PIPING PLAN - DHW - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"



A5 PRESSURE PIPING PLAN - DCW - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"

GENERAL SHEET NOTES

A. ALL OVERHEAD EQUIPMENT AND PIPING IS TO BE SUSPENDED FROM STRUCTURAL MEMBERS.

SHEET KEYNOTES

1. 1-1/2" DCW IN SEE CIVIL SITE PLAN FOR CONTINUATION.
2. 1" DCW RISE UP IN WALL TO MULTI-MANIFOLD FITTING.
3. 1" DCW DOWN AND CONNECT TO DWH-1, PROVIDE SHUT OFF BALL VALVE.
4. 1/2" DCW TO P1a .
5. PROVIDE (2) 1/2" DCW LINES DOWN FROM MULTI-MANIFOLD FITTING.
6. 1/2" DCW UP IN WALL TO P7b.
7. 1/2" DCW UP TO P3b.
8. 3/4" DCW UP TO P12, WITH 1/2" DCW TO P4.
9. 1" DHW DOWN IN WALL TO 1" HEADER.
10. 1" DHW DOWN AND CONNECT TO EWH-1, PROVIDE SHUT OFF BALL VALVE.
11. PROVIDE (3) 1/2" DHW LINES DOWN FROM MULTI-MANIFOLD FITTING.
12. 1/2" DHW UP IN WALL TO P7b.
13. 1/2" DHW UP TO P3b.
14. 3/4" DHW UP TO P12, WITH 1/2" DHW TO P4.
15. PROVIDE 1-1/2" WATER STUB OUT FOR FIRE PROTECTION FIRE RISER, SEE FIRE PROTECTION PLANS FOR CONTINUATION.
16. DOMESTIC WATER SHUT OFF VALVE IN CONCRETE PIT WITH CAST IRON LID.
17. 1-1/2" DOMESTIC COLD WATER TO RISE UP PROVIDE 3/4" NON FREEZE HOSE BIBB (P9) DROP 1-1/2" DOMESTIC COLD WATER DOWN TO BELOW FLOOR AND OVER TO SERVE THE HOUSE.
18. 3/4" DHW UP IN WALL AND OVER.

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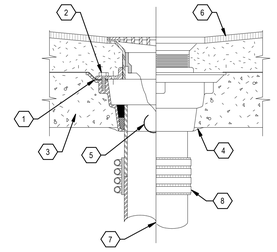
PRESSURE PIPING PLAN - 3BD/2BA SINGLE-FAMILY

SHEET NO

PP103

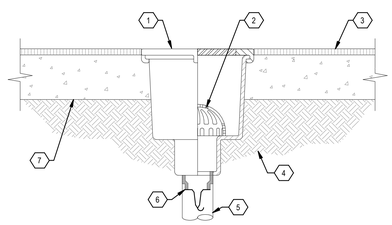
Bridgers & Paxton Project No: 8183 12/8/2020 2:58:22 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSotters.rvt



1. FLOOR DRAIN WITH ADJUSTABLE STRAINER, DOUBLE DRAINAGE FLANGE AND WEEP HOLES. SEE FLOOR DRAIN SPECIFICATIONS
2. CLAMP TO 24"x24" 4# LEAD SHEET AND WATERPROOFING MEMBRANE (NOT REQUIRED FOR SINGLE POUR CONSTRUCTION)
3. CONCRETE FLOOR OF TWO POUR CONSTRUCTION
4. CAULK AS REQUIRED ON INSTALLATION ABOVE GRADE
5. TRAP GUARD WATER SAVING DEVICE SIZED PER DRAIN (IF SPECIFIED)
6. FINISHED FLOOR SLOPED IN ACCORDANCE WITH ARCH. DRAWINGS. COORDINATE WITH STRUCTURAL
7. SEE PLUMBING FLOOR PLANS FOR SIZING AND P-TRAP REQUIREMENTS
8. FOUR BAND HEAVY DUTY CLAMP, SEE SPECIFICATIONS

D5 FLOOR DRAIN DETAIL

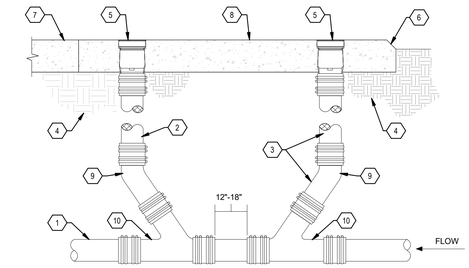
SCALE: NOT TO SCALE



1. FLOOR SINK GRATING, SEE FLOOR SINK SPECIFICATIONS
2. DOME STRAINER
3. FINISHED FLOOR
4. COMPACTED EARTH
5. SEE PLUMBING FLOOR PLANS FOR SIZING AND P-TRAP REQUIREMENTS
6. TRAP GUARD WATER SAVING DEVICE (SPECIFIED)
7. STRUCTURAL SLAB

B3 FLOOR SINK DETAIL

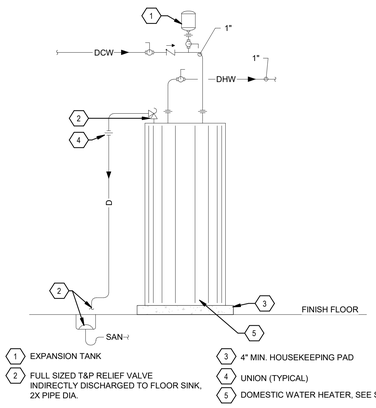
SCALE: NOT TO SCALE



1. SERVICE LINE, SEE SPECIFICATIONS FOR PIPE MATERIALS.
2. SAME SIZE AS SERVICE LINE, THRU 4" PIPE, MAXIMUM 4" SIZE REQUIRED.
3. CAST IRON SOIL PIPE RISER AND FITTINGS.
4. COMPACTED EARTH, SEE SPECIFICATIONS.
5. CLEANOUT WITH HEAVY DUTY SCORIATED SECURED TOP
6. 2" CHAMFER ON ALL COLLARS IN EARTH.
7. FINISH HARDSCAPE. SEE SITE PLAN DRAWINGS FOR ELEVATION.
8. 4" THICK CONCRETE PAD.
9. 1/8TH BEND.
10. WYE FITTING.

B5 DOUBLE CLEANOUT TO GRADE - DETAIL

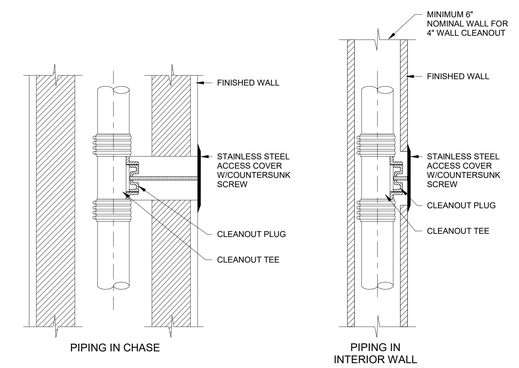
SCALE: NOT TO SCALE



1. EXPANSION TANK
2. FULL SIZED T&P RELIEF VALVE INDIRECTLY DISCHARGED TO FLOOR SINK, 2X PIPE DIA.
3. 4" MIN. HOUSEKEEPING PAD
4. UNION (TYPICAL)
5. DOMESTIC WATER HEATER, SEE SPEC'S

A3 ELECTRIC WATER HEATER DETAIL

SCALE: NOT TO SCALE



A5 WALL CLEANOUT DETAIL

SCALE: NOT TO SCALE

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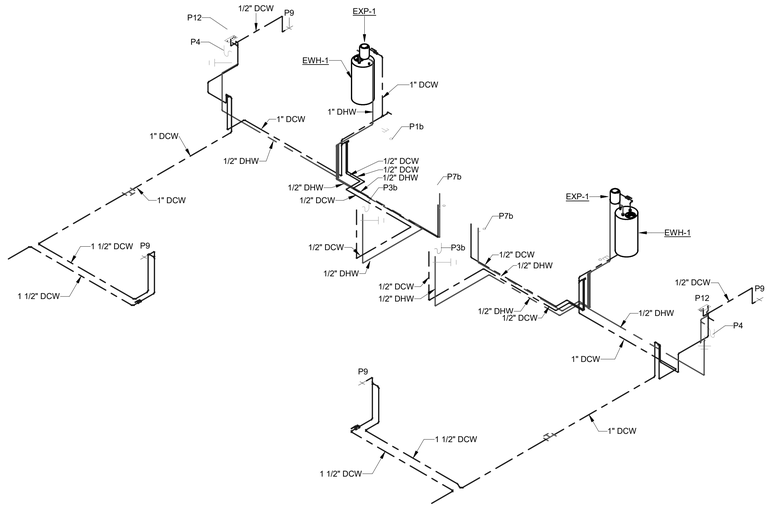
DRAWING NAME

PLUMBING DETAILS

SHEET NO

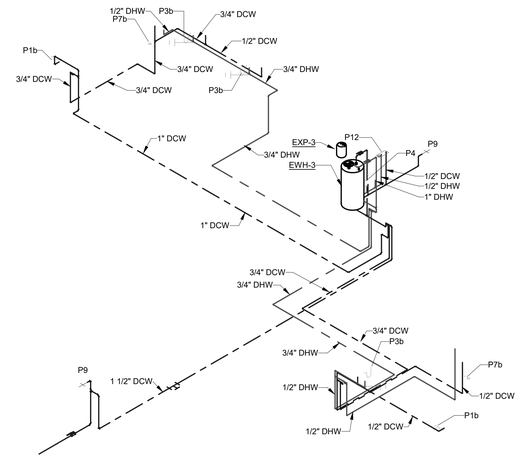
P-501

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:10 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teatcherages_AGSobers.rvt



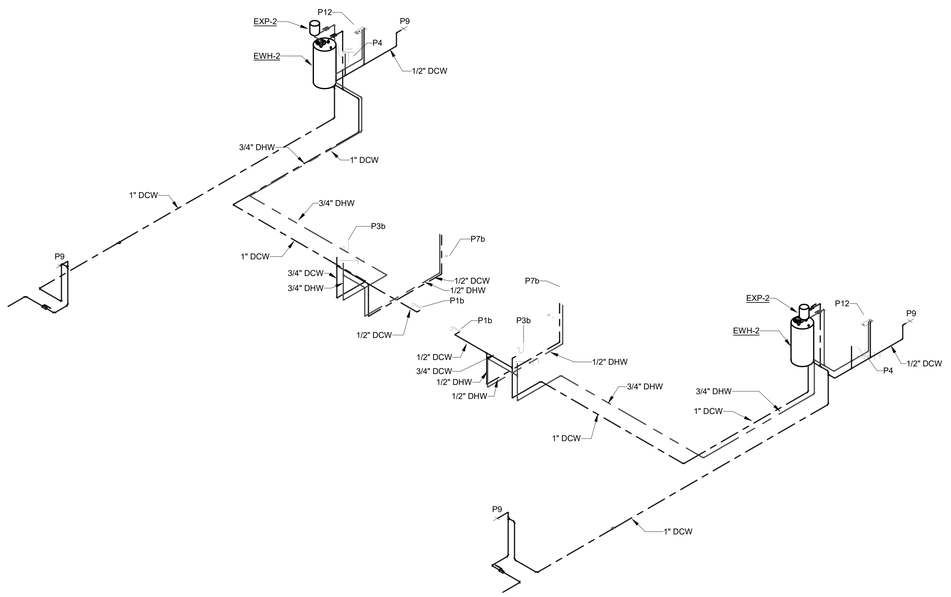
C2 PLUMBING SUPPLY PIPING 1BD/1BT DUPLEX

SCALE: NOT TO SCALE



D5 PLMB SUPPLY PIPING 3BD/2BT DIAGRAM

SCALE: NOT TO SCALE



A4 PLMB SUPPLY PIPING 2BR/1BT DIAGRAM

SCALE: NOT TO SCALE

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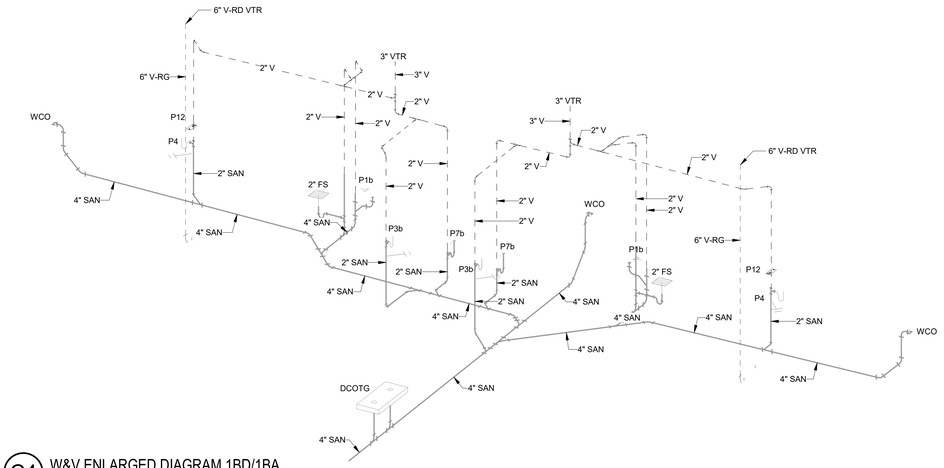
DRAWING NAME

PLUMBING DIAGRAMS

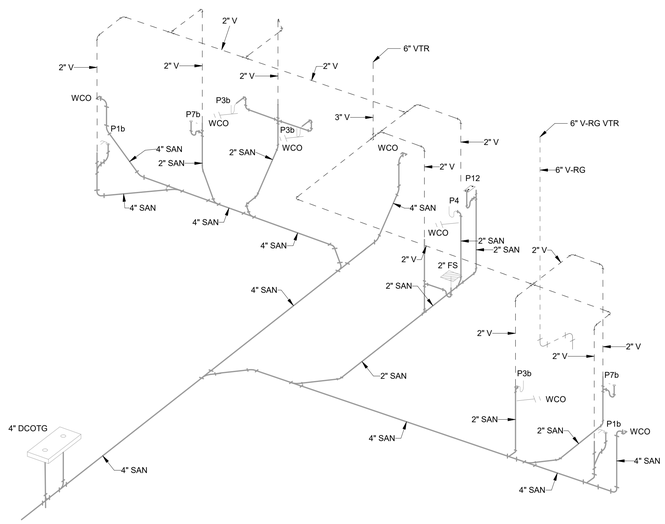
SHEET NO

P-601

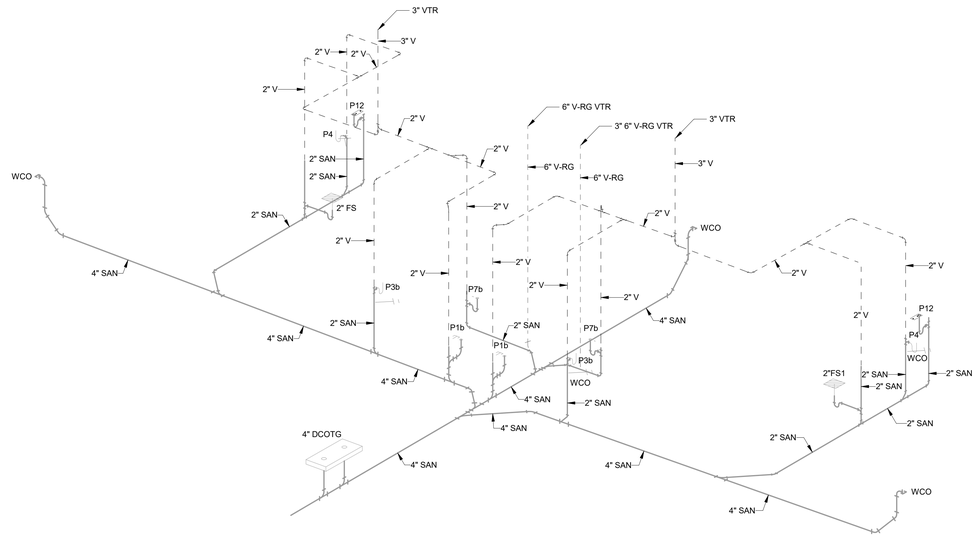
Bridgers & Paxton Project No: 8183 12/8/2020 2:58:10 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobers.rvt



C4 W&V ENLARGED DIAGRAM 1BD/1BA



B1 W&V ENLARGED DIAGRAM 3BD/2BA



A4 W&V ENLARGED DIAGRAM 2BD/1BA
SCALE:

DEKKER PERICH SABATINI
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SHIRIAN
DATE SIGNED
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	JRS/AGS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

PLUMBING DIAGRAMS

SHEET NO

P-602

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:11 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobeis.rvt

WATER HEATER SCHEDULE

Mark	MANUFACTURER	MODEL NO.	LOCATION	SERVICE	TYPE	SET POINT (DEGREES)	STORAGE VOLUME (GAL.)	OPERATION WEIGHT	ELECTRICAL				HOT WATER RECOVERY		EXPANSION TANK	STORAGE TANK	REMARKS:
									V	PH	HZ	AMPS	RATE (GPH)	Δ T ºF			
EWH-1	RHEEM	PROPH40 T2 RH375-SO	MECH 123	POTABLE	ELECTRIC	140	40	505	240	1	60	21	26	90	4	36	WATER HEATER FOR ALL 1 BED 1 BA UNITS.
EWH-1	RHEEM	PROPH50 T2 RH375-SO	MECH 103	POTABLE	ELECTRIC	140	40	505	240	1	60	21	26	90	4	36	WATER HEATER FOR ALL 1 BED 1 BA UNITS.
EWH-2	RHEEM	PROPH50 T2 RH375-SO	MECH 204	POTABLE	ELECTRIC	140	50	613	240	1	60	21	27	90	4	45	WATER HEATER FOR ALL 2 BED 1 BA AND 3 BED 2 BA UNITS.
EWH-2	RHEEM	PROPH50 T2 RH375-SO	MECH 224	POTABLE	ELECTRIC	140	50	613	240	1	60	21	27	90	4	45	WATER HEATER FOR ALL 2 BED 1 BA AND 3 BED 2 BA UNITS.
EWH-3	RHEEM	PROPH50 T2 RH375-SO	MECH 307	POTABLE	ELECTRIC	140	50	613	240	1	60	21	27	90	4	45	WATER HEATER FOR 3 BED 2 BA UNITS.

PLUMBING FIXTURE SCHEDULE

REFER TO DIVISION 22 4000 FOR ADDITIONAL INFORMATION

SYMBOL	FIXTURE			TRIM/FAUCET			REMARKS:
	TYPE	MANUFACTURER	MODEL	MANUFACTURER	MODEL	FLOW RATE	
P1b	WATER CLOSET (BARRIER FREE) - FLOOR MTD. - FLUSH TANK	AMERICAN STANDARD	2467.100	-	-	1.1 GPF	PRESSURE ASSIST, LOW FLOW. SEAT: HEAVY DUTY, OPEN FRONT LESS COVER, SOLID PLASTIC, WHITE, MFG: CHURCH 9500SSC OR EQUAL
P3b	LAVATORY (BARRIER FREE) COUNTER TOP - OVAL - MANUAL	AMERICAN STANDARD	0476.028	CHICAGO FAUCETS	802-VE2805ABCP	0.5 GPM	DECK MOUNT, CHROME, LEVER HANDLES, VANDAL PROOF, 4" CENTERS. PROVIDE ANGLE STOPS, FLEXIBLE RISERS, ADJUSTABLE P-TRAP. MIXING VALVE: WATTS MODEL LFUSG-B UNDER SINK.
P4	SINK - KITCHEN	ELKAY	DLR312210	CHICAGO FAUCETS	786-GN2AFCABCP	0.5 GPM	--- MIXING VALVE: WATTS MODEL LFUSG-B UNDER SINK.
P7b	BATH TUB	AMERICAN STANDARD	2390.202/2391.202	SYMMONS	S-9602-P-VP-B-X-SS-2.0	2.5 GPM	-
P9	HOSE BIBB	WOODFORD	B24	-	-	-	CHROME PLATED, FLUSH MOUNTED FACE PLATE, LOOSE KEY STOP.
P12	WASHER ROUGH-IN BOX	GUY GRAY	NO. WB200HA	-	-	-	1/2" COMBINATION NPT BRASS SWEAT SUPPLIES WITH HAMMER ARRESTER AND SINGLE LEVER CONTROL

EXPANSION TANK SCHEDULE

SYMBOL	MANUFACTURER	MODEL NO.	DESIGN DEG ºF	TANK VOLUME (GAL.)	TANK ACCEPTANCE (GAL.)	PSIG	WEIGHT (LBS.)	REMARKS:
EXP-1	AMTORL	ST-5	140	2	0.9	50	5	1 BED 1 BATH DUPLEX HOUSE
EXP-1	AMTROL	ST-5	140	2	0.9	50	5	1 BED 1 BATH DUPLEX HOUSE
EXP-2	AMTROL	ST-12	140	4.4	3.2	50	9	2 BED 1 BATH DUPLEX HOUSE
EXP-2	AMTROL	ST-12	140	4.4	3.2	50	9	2 BED 1 BATH DUPLEX HOUSE
EXP-3	AMTROL	ST-12	140	4.4	3.2	50	9	3 BED 2 BATH HOUSE

PLUMBING ROUGH-IN SCHEDULE

REFER TO DIVISION 22 4000 FOR ADDITIONAL INFORMATION

SYMBOL	FIXTURE	ROUGH-IN SIZE			*VENT*	*TRAP*	REMARKS:
		CW	HW	WASTE			
P1b	WATER CLOSET (BARRIER FREE) - FLOOR MTD. - FLUSH TANK	1/2"	-	4"	2"	INTEGRAL	ELONGATED BOWL, VITREOUS CHINA, 12" ROUGH-IN. FLOOR TO RIM HEIGHT: 16-1/2"
P3b	LAVATORY (BARRIER FREE) COUNTER TOP - OVAL - MANUAL	1/2"	1/2"	2"	1-1/2"	1-1/4" X 1-1/2"	COUNTER TOP, THREE HOLE, VITREOUS CHINA, OVAL, 20-3/8" X 17-3/8" x 7"DEEP
P4	SINK - KITCHEN	1/2"	1/2"	2"	1-1/2"	1-1/4" X 1-1/2"	XXX
P7b	BATH TUB	1/2"	1/2"	2"	2"	2"	WALL MOUNTED VALVE AND SPOUT FOR TUB.
P9	HOSE BIBB	1/2"	-	-	-	-	1/2" OUTLET, 1/2" INLET, "ANTI-SIPHON" AUTOMATIC DRAINING, INTEGRAL AIR GAP, RECESSED BOX,
P12	WASHER ROUGH-IN BOX	1/2"	1/2"	2"	2"	2"	9-1/2"x11-1/2" OUTSIDE AREA, FABRICATED WITH 20 GAUGE GALVANIZED METAL, 2" DRAIN PIPE CONNECTION..

ENTIRE BUILDING FIXTURE UNITS (2BD, 1BA) (2018 UPC)

Note: SEE SEPARATE SANITARY EXITS, DOMESTIC COLD WATER ENTRY AND HOT WATER DEMAND SCHEDULE IF BUILDING REQUIRES SEPERATE DEMANDS

FIXTURE	QUANTITY	SANITARY		DOMESTIC COLD WATER		TOTAL WATER SUPPLY		DOMESTIC HOT WATER	
		DFU	TOTAL DFU	DCWFU	TOTAL DCWFU	WSFU	TOTAL WSFU	DHWFU	TOTAL DHWFU
FLOOR SINK (2" TRAP)	2	4	8	0	0	0	0	0	0
BATH TUB	2	2	4	3	6	4	8	3	6
HOSE BIBB	4	0	0	0.75	3	1	4	0	0
LAVATORY	2	1	2	0.75	1.5	1	2	0.75	1.5
SINK	2	2	4	1.13	2.26	1.5	3	1.13	2.26
WASHER ROUGH-IN BOX	2	3	6	3	6	4	8	3	6
WATER CLOSET - TANK TYPE	2	4	8	2.5	5	2.5	5	0	0
Fixture Unit Totals:			32		23.76		30		15.76

ENTIRE BUILDING FIXTURE UNITS (3BD, 2BA) (2018 UPC)

Note: SEE SEPARATE SANITARY EXITS, DOMESTIC COLD WATER ENTRY AND HOT WATER DEMAND SCHEDULE IF BUILDING REQUIRES SEPERATE DEMANDS

FIXTURE	QUANTITY	SANITARY		DOMESTIC COLD WATER		TOTAL WATER SUPPLY		DOMESTIC HOT WATER	
		DFU	TOTAL DFU	DCWFU	TOTAL DCWFU	WSFU	TOTAL WSFU	DHWFU	TOTAL DHWFU
FLOOR SINK (2" TRAP)	1	4	4	0	0	0	0	0	0
BATH TUB	2	2	4	3	6	4	8	3	6
HOSE BIBB	2	0	0	0.75	1.5	1	2	0	0
LAVATORY	3	1	3	0.75	2.25	1	3	0.75	2.25
SINK	1	2	2	1.13	1.13	1.5	1.5	1.13	1.13
WASHER ROUGH-IN BOX	1	3	3	3	3	4	4	3	3
WATER CLOSET - TANK TYPE	2	4	8	2.5	5	2.5	5	0	0
Fixture Unit Totals:			24		18.88		23.5		12.38

ENTIRE BUILDING FIXTURE UNITS (1BD, 1BA) (2018 UPC)

Note: SEE SEPARATE SANITARY EXITS, DOMESTIC COLD WATER ENTRY AND HOT WATER DEMAND SCHEDULE IF BUILDING REQUIRES SEPERATE DEMANDS

FIXTURE	QUANTITY	SANITARY		DOMESTIC COLD WATER		TOTAL WATER SUPPLY		DOMESTIC HOT WATER	
		DFU	TOTAL DFU	DCWFU	TOTAL DCWFU	WSFU	TOTAL WSFU	DHWFU	TOTAL DHWFU
FLOOR SINK (2" TRAP)	2	4	8	0	0	0	0	0	0
BATH TUB	2	2	4	3	6	4	8	3	6
HOSE BIBB	4	0	0	0.75	3	1	4	0	0
LAVATORY	2	1	2	0.75	1.5	1	2	0.75	1.5
SINK	2	2	4	1.13	2.26	1.5	3	1.13	2.26
WASHER ROUGH-IN BOX	2	3	6	3	6	4	8	3	6
WATER CLOSET - TANK TYPE	2	4	8	2.5	5	2.5	5	0	0
Fixture Unit Totals:			32		23.76		30		15.76

DEKKER PERICH SABATINI
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DESIGN
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SEAL

Digitally signed by Abbas Shirian
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REGISTERED PROFESSIONAL ENGINEER (ARCHITECT)
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ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	JRS/AGS
REVIEWED BY	AS
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

PLUMBING SCHEDULES

SHEET NO

P-701

Bridgers & Paxton Project No: 8183 12/8/2020 2:58:13 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_AGSobers.rvt

ELECTRICAL SYMBOL LEGEND (NOT ALL SYMBOLS APPLY TO THIS PROJECT)

UPDATED: 09/07/2016

ABBREVIATIONS

ABBREV.	DEFINITION
A	AMPS, AMPERE, AMPERAGE
AC	ABOVE COUNTER
A/C	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AVAILABLE INTERRUPTING CURRENT
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ATSC	AUTOMATIC TRANSFER SWITCH CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
A/V	AUDIO/VISUAL
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CL	CLOCK
CLF	CURRENT LIMITING FUSE
CO	CONDUIT ONLY
CR	CONTROLLED RECEPTACLE
CU	COPPER
D	DIMMING
DC	DIRECT CURRENT
DL	DAY-LIGHTING
DIA	DIAMETER
E	EMERGENCY
EC	EMERGENCY, CRITICAL
EG	ENGINE GENERATOR
EL	EMERGENCY, LIFE SAFETY
EQ	EMERGENCY, EQUIPMENT
EX	EXISTING
FUT	FUTURE
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FDR	FEEDER
FMS	FACILITY MANAGEMENT SYSTEM
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
G OR GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFEP	GROUND FAULT EQUIPMENT PROTECTION
GFP	GROUND FAULT PROTECTION
GND	GROUND.
HOA	HAND-OFF-AUTOMATIC.
HP	HORSEPOWER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IG	ISOLATED GROUND
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPS
KVAR	KILOVOLT AMPS REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR.
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, AND GROUND FAULT PROTECTION
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MH	MANHOLE
MIN	MINIMUM
MM	MIXED MEDIA
MTS	MANUAL TRANSFER SWITCH
MVA	MEGAVOLT AMPS
N	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT	NEUTRAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NORMAL
NM	NEW MEXICO
NO	NORMALLY OPEN
O/H	OVERHEAD
P	POLE
PA	PUBLIC ADDRESS
PC	PHOTOCELL
PH	PHASE
PMCS	POWER MONITORING AND CONTROL SYSTEM
R	REMOVED/REMOVAL
RC	ROOM CONTROLLER
RSC	RIGID STEEL CONDUIT
SEC	SECURITY
SPD	SURGE PROTECTIVE DEVICE
SW	SWITCH
TEMP	TEMPORARY
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
TYP.	TYPICAL
UC	UNDER COUNTER
U/G	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTABLE POWER SUPPLY
V	VOLTS, VOLTAGE
VFD	VARIABLE FREQUENCY DRIVE
W	WALL MOUNTED
WG	WEATHERPROOF AND GFCI
WP	WEATHERPROOF
XFER	TRANSFER
XFMR (TRANSF)	TRANSFORMER

REFERENCE TAGS

SYMBOL	DEFINITION
⬡	KEYED NOTE REFERENCE
VAV-9	MECHANICAL EQUIPMENT REFERENCE
+44"	DENOTES MOUNTING HEIGHT AFF
▭	KITCHEN EQUIPMENT REFERENCE
⬭	MEDICAL EQUIPMENT REFERENCE

EQUIPMENT NAMING CONVENTION

- 1, 2, 3, . . = SUBFED PANEL
- A, B, C, . . = SEQUENCE OF PANELS OF THIS TYPE
- 0, 1, 2, 3, . . = FLOOR LEVEL (SB=SUB-BASEMENT, B=BASEMENT, M=MEZZANINE, P=PENTHOUSE)
  - T = TRANSFORMER
  - DB = DISTRIBUTION BOARD
  - DP = DISTRIBUTION PANEL
  - MSB= MAIN SWITCH BOARD
  - MCC= MOTOR CONTROL CENTER
  - I = ISOLATED PANELBOARD
  - ATS = AUTOMATIC TRANSFER SWITCH
  - PDU= POWER DISTRIBUTION UNIT
  - UPS = UNINTERRUPTABLE POWER SUPPLY
  - B = BUSWAY
  - H = HIGH VOLTAGE PANELBOARD (480Y/277V)
  - L = LOW VOLTAGE PANELBOARD (208Y/120V)
  - BLANK FOR NORMAL POWER
  - E = EMERGENCY
  - EL = EMERGENCY-LIFE SAFETY-BRANCH
  - EC = EMERGENCY-CRITICAL-BRANCH
  - EQ = EMERGENCY-EQUIPMENT-BRANCH
- SES = SERVICE ENTRANCE SECTION NUMBER OR MAIN EMERG SWBD NUMBER

EXAMPLES:
A. SES1 (SERVICE ENTRANCE SECTION #1)
B. 1H1A (SERVED FROM SES#1, 480/277 NORMAL, LEVEL 1, FIRST BOARD)
C. 1EQH1A (SERVED FROM MAIN EMER SWBD #1, 480/277 EQUIP POWER, LEVEL 1, FIRST BOARD)

RACEWAY & CONDUCTORS

BRANCH CIRCUIT GENERAL INFORMATION:
BRANCH CIRCUITS FROM OVERCURRENT PROTECTION (20A) TO FURTHEST DEVICE SHALL NOT EXCEED 75 FEET FOR #12AWG COPPER AND 150 FEET FOR #10AWG COPPER; MEASURED ALONG CONDUCTORS ROUTING PATH. BRANCH CIRCUITS EXCEEDING 150 FEET WILL BE SIZED SO THAT VOLTAGE DROP DOES NOT EXCEED 5%.

SYMBOL	DESCRIPTION
= GROUND = HOT/PHASE = NEUTRAL = SWITCH LEG	CONDUCTOR IDENTIFICATION SYMBOLS. REFER TO PLANS FOR COMBINATION USE. CONDUCTOR IDENTIFICATION MOSTLY USED IN HOMERUN LOCATION, BUT CAN ALSO BE USED IN BRANCH CIRCUITING WHERE APPLIED. GROUND CONDUCTORS WILL BE INSTALLED IN ALL RACEWAYS WHETHER SHOWN OR NOT.
LA-1	HOMERUN FROM EQUIPMENT LOCATION. THE CIRCUIT NUMBER ADJACENT TO HOMERUN INDICATES PANEL SOURCE AND INDIVIDUAL SINGLE POLE CIRCUIT BREAKER(S). CONDUCTOR IDENTIFICATION SYMBOL INDICATES NUMBER OF CONDUCTORS IN HOMERUN. MINIMUM #12 CONDUCTORS AND 3/4" RACEWAY PATH WILL BE PROVIDED IN HOMERUN UON. ALL HOMERUNS WILL INCLUDE GROUND CONDUCTOR.
LA-1,3 LA-5,7,9	HOMERUN FROM EQUIPMENT LOCATION. THE CIRCUIT NUMBER ADJACENT TO HOMERUN INDICATES PANEL SOURCE AND INDIVIDUAL SINGLE POLE CIRCUIT BREAKER(S). SYMBOL REPRESENTS A MULTI-BRANCH CIRCUIT. NUMBER OF CONDUCTORS IN HOMERUN WILL INCLUDE A SEPARATE NEUTRAL FOR EACH CIRCUIT PHASE CONDUCTOR. MINIMUM #12 CONDUCTORS AND 3/4" RACEWAY PATH WILL BE PROVIDED IN HOMERUN UON. ALL HOMERUNS WILL INCLUDE GROUND CONDUCTOR.
LA-1,3 LA-5,7,9	HOMERUN FROM EQUIPMENT LOCATION. THE CIRCUIT NUMBER ADJACENT TO HOMERUN INDICATES PANEL SOURCE AND INDIVIDUAL TWO OR THREE POLE CIRCUIT BREAKERS. CONDUCTOR IDENTIFICATION SYMBOL INDICATES NUMBER OF CONDUCTORS IN HOMERUN. MINIMUM #12 CONDUCTORS AND 3/4" RACEWAY PATH WILL BE PROVIDED IN HOMERUN UON. NEUTRAL MAY BE USED WHERE INDICATED ON PLAN. ALL HOMERUNS WILL INCLUDE GROUND CONDUCTOR.
	CONCEALED RACEWAY BETWEEN DEVICES AND OR EQUIPMENT IN WALLS OR IN CEILING SPACE
	UNDERGROUND RACEWAY BETWEEN DEVICES AND OR EQUIPMENT
	EXPOSED RACEWAY BETWEEN DEVICES AND OR EQUIPMENT ON WALLS OR CEILINGS
DOWN UP	CONDUIT TURNS
	CONDUIT STUBBED AND CAPPED
B	BUSWAY
G	GROUNDING CONDUCTOR
	CABLE TRAY - POWER AND TELECOMMUNICATIONS
T	TELECOMMUNICATIONS RACEWAY
D	DATA RACEWAY
V/D	VOICE/DATA COMBINATION RACEWAY
FA	FIRE ALARM RACEWAY

GENERAL DRAWING SYMBOLS

- A / E4 — SECTION/ELEVATION LETTER OR DETAIL NUMBER
- 6 / E4 — DRAWING NUMBER WHERE DETAILED
- 6 / E3 E4 — SECTION/ELEVATION LETTER OR DETAIL NUMBER
- A / E3 E4 — DRAWING NUMBER WHERE DETAILED
- DRAWING NUMBER WHERE TAKEN
- NORTH — NORTH ARROW OR MATCH ARCHITECT'S
- 0 10' 20' 40' 80' (1" = 40'-0") — SCALE BAR OR MATCH ARCHITECT'S

DEMOLITION

SYMBOL	DESCRIPTION	NOTES
	DASHED SYMBOL INDICATES EXISTING DEVICE OR EQUIPMENT TO BE REMOVED	REFER TO DEMOLITION PLANS FOR ADDITIONAL INFORMATION
R	REMOVE EXISTING RACEWAY IN ALL ACCESSIBLE AREAS. CAPPED AND ABANDONED IF IN UNACCESSIBLE AREA	
	SOLID SYMBOL, LIGHTER IN COLOR INDICATES EXISTING DEVICE OR EQUIPMENT TO REMAIN	
EX	EXISTING CONDUIT TO BE REUSED	

DEVICES

DEVICE INDICATOR LETTER. "X" EQUALS DESIGNATION BELOW (TYPICAL FOR MOST RECEPTACLE TYPES):
- BLANK FOR NORMAL POWER
- G = GFCI RATED
- IG = ISOLATED GROUND
- T = TAMPERPROOF
- WG = WEATHERPROOF (IN-USE COVER) AND GFCI
- WP = WEATHERPROOF (IN-USE COVER)
- CL = CLOCK
- TV = TELEVISION
- CR = CONTROLLED RECEPTACLE

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
X	IN FLOOR DUPLEX RECEPTACLE. CONFIGURATION AS INDICATED ON PLANS	FLOOR	VARIES
X	IN FLOOR DOUBLE DUPLEX (QUADPLEX) RECEPTACLE. CONFIGURATION AS INDICATED ON PLANS		
X	IN FLOOR EMERGENCY DUPLEX RECEPTACLE. CONFIGURATION AS INDICATED ON PLANS		
X	IN FLOOR EMERGENCY DOUBLE DUPLEX (QUADPLEX) RECEPTACLE. CONFIGURATION AS INDICATED ON PLANS		
X	COMBINATION DUPLEX RECEPTACLE AND COMMUNICATIONS FLOORBOX. DEVICE CONFIGURATION AS INDICATED ON PLANS.		
X	CEILING MOUNTED DUPLEX RECEPTACLE	CEILING	FLUSH
X	CEILING MOUNTED DOUBLE DUPLEX (QUADPLEX) RECEPTACLE		
X	CEILING MOUNTED EMERGENCY DUPLEX RECEPTACLE		
X	CEILING MOUNTED EMERGENCY DOUBLE DUPLEX (QUADPLEX) RECEPTACLE		
X	COMBINATION POWER/COMMUNICATION IN CEILING OUTLET. CONFIGURATION AS INDICATED ON PLANS		
X	SIMPLEX RECEPTACLE	WALL, UON	+18", UON
X	DUPLEX RECEPTACLE		
X	DOUBLE DUPLEX (QUADPLEX) RECEPTACLE		
X	EMERGENCY DUPLEX RECEPTACLE		
X	EMERGENCY DOUBLE DUPLEX (QUADPLEX) RECEPTACLE		
X	SPECIAL PURPOSE RECEPTACLE. NEMA CONFIGURATION AND AMPERAGE AS NOTED ON PLANS		
	MULTI-OUTLET ASSEMBLY (SURFACE MOUNTED RACEWAY)	VARIES SEE PLANS	VARIES SEE PLANS
	COMBINATION POWER/COMMUNICATION POLE. CONFIGURATION AS NOTED ON PLANS		
J	WALL MOUNTED CODE SIZE J-BOX	VARIES SEE PLANS	VARIES SEE PLANS
J	CODE SIZE JUNCTION BOX		
P	CODE SIZE PULLBOX (OR AS SIZED ON PLAN)		
•	PUSHBUTTON (EMERGENCY POWER OFF - EPO)		
PC	PHOTOCELL		
•	LIGHTNING PROTECTION AIR TERMINAL	ROOF	VARIES
T	THERMOSTAT	WALL	+44" UON
CB 30/3R	ENCLOSED CIRCUIT BREAKER. AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE UON	VARIES	VARIES
30/1	NON-FUSED DISCONNECT SWITCH. AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE UON		
30/3R	FUSED DISCONNECT SWITCH. AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE UON		
0/1	MOTOR STARTER. STARTER SIZE INDICATED BY NUMBER/NEMA ENCLOSURE RATING, SINGLE SPEED UON		
1/30/3R	COMBINATION FUSIBLE DISCONNECT SWITCH AND MOTOR STARTER. NEMA STARTER SIZE/AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE UON		
5	MOTOR. NUMBER INDICATES HORSEPOWER RATING FOR 1HP AND LARGER	N/A	N/A
F	MOTOR. "F" INDICATES FRACTIONAL HORSEPOWER		

EQUIPMENT

SYMBOL	DESCRIPTION
MSB	MAIN SWITCHBOARD. DASHED LINES INDICATE CLEARANCES.
DB	DISTRIBUTION BOARD OR PANEL. DASHED LINES INDICATE CLEARANCES.
H1A	FLUSH MOUNTED PANELBOARD. DASHED LINES INDICATE CLEARANCES.
L1A	SURFACE MOUNTED PANELBOARD. DASHED LINES INDICATE CLEARANCES.
MCC	MOTOR CONTROL CENTER. DASHED LINES INDICATE CLEARANCES.
T1A	DRY TYPE TRANSFORMER (15kVA OR ABOVE), WITH EQUIPMENT TAG (TAG INSIDE OR OUTSIDE, DEPENDING ON SIZE). IN MOST CASES, ACTUAL SIZE SHOWN ON PLANS (ELECTRICAL ROOMS).
T	DRY TYPE TRANSFORMER (LESS THAN 15kVA), WITH NO EQUIPMENT TAG. SIZE, TYPE AND LOCATION NOTED ON PLANS.
VFD	VARIABLE FREQUENCY DRIVE
UPS-A	UNINTERRUPTABLE POWER SUPPLY. DASHED LINES INDICATE CLEARANCES.
ATS-1	AUTOMATIC TRANSFER SWITCH. DASHED LINES INDICATE CLEARANCES.
G	GROUND BAR

LIGHTING

REFER TO LUMINAIRE SCHEDULE FOR ALL LUMINAIRE TYPES WHETHER WALL MOUNTED OR CEILING MOUNTED.

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
	HATCHING INDICATES EMERGENCY LIGHTING. HATCH WILL BE MODIFIED FOR EACH LUMINAIRE TYPE. EMERGENCY LUMINAIRE DESIGNATED WITH "E" IN TYPE DESIGNATION.	VARIES	REFER TO LIGHTING SCHEDULE
3 A a	RECESSED MOUNTED LUMINAIRE. SMALL CASE "a" DENOTES SWITCHING, NUMBER "3" DENOTES BRANCH CIRCUITING. SYMBOL "A" DENOTES LUMINAIRE TYPE	CEILING	
	SURFACE MOUNTED LUMINAIRE. LUMINAIRE TYPE AS INDICATED ON PLANS		
	LINEAR DIRECT/INDIRECT LUMINAIRE. CABLE OR STEM MOUNTED		
	DOWN LIGHT LUMINAIRE; CEILING MOUNTED		
	WALL MOUNTED LUMINAIRES	WALL	
	TRACK MOUNTED LUMINAIRES	SURFACE	
	STRIP LUMINAIRE		
WALL CEILING	EXIT LUMINAIRE. SHADED SIDE INDICATES FACE SIDE. PROVIDE DIRECTIONAL ARROW(S) AS INDICATED ON PLANS	VARIES	
WALL CEILING	DOUBLE FACE EXIT LUMINAIRE. SHADED SIDE INDICATES FACE SIDE. PROVIDE DIRECTIONAL ARROW(S) AS INDICATED ON PLANS		
WALL CEILING	EMERGENCY BATTERY PACK LUMINAIRE (BUG-EYE/FROG-EYE)		
	SINGLE HEAD, POLE MOUNTED LUMINAIRE	EXTERIOR	AS DETAILED
	DOUBLE HEAD, POLE MOUNTED LUMINAIRE		
$ X	DEVICE INDICATOR LETTER. "X" EQUALS DESIGNATION BELOW (TYPICAL FOR MOST SWITCH TYPES): a = SMALL CASE LETTER DENOTES SWITCHING CONTROL; 2 = DOUBLE POLE TOGGLE SWITCH; 3 = THREE-WAY TOGGLE SWITCH; 4 = FOUR-WAY TOGGLE SWITCH; P = PILOT LIGHT TOGGLE SWITCH; M = MOMENTARY CONTACT SWITCH; K = KEY OPERATED SWITCH; WP = WEATHERPROOF TOGGLE SWITCH; T = MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD PROTECTION; TW= TWIST TIMER SWITCH; D = DLM DIMMER SWITCH; DW = DLM TUNABLE WHITE CONTROL SWITCH; 3B= 3 BUTTON DLM SWITCH; 4B= 4 BUTTON DLM SWITCH	WALL	+44" UON
$ X	DLM PUSH BUTTON OR DIMMER SWITCH. TYPE AND QUANTITY OF BUTTONS INDICATED ON PLANS		
OS	WALL OR CORNER MOUNTED OCCUPANCY SENSOR; TYPE AS INDICATED ON PLANS		
VS	WALL OR CORNER MOUNTED VACANCY SENSOR; TYPE AS INDICATED ON PLANS		
OS	CEILING MOUNTED OCCUPANCY SENSOR; TYPE AS INDICATED ON PLANS	CEILING	SURFACE
VS	CEILING MOUNTED VACANCY SENSOR; TYPE AS INDICATED ON PLANS		
VS H	CEILING MOUNTED HIGH-BAY VACANCY SENSOR; TYPE AS INDICATED ON PLANS		
DL	DAY-LIGHTING SENSOR; TYPE AS INDICATED ON PLANS		
RC	ROOM CONTROLLER; TYPE AS INDICATED ON PLANS		

UTILITIES

SYMBOL	DESCRIPTION
•	DISTRIBUTION POLE FOR OVERHEAD ELECTRICAL OR COMMUNICATIONS AS INDICATED ON PLAN.
X X X	OVERHEAD UTILITY AND OR SYSTEM DISTRIBUTION. 3PH = THREE PHASE; 1PH = SINGLE PHASE; P = ELECTRICAL PRIMARY; S = ELECTRICAL SECONDARY; T = TELECOMMUNICATION; TV = TELEVISION; E = EMERGENCY POWER; ATSC = AUTOMATIC TRANSFER SWITCH CONTROL; N = NEW; EX = EXISTING
X X X	UNDERGROUND UTILITY AND OR SYSTEM DISTRIBUTION.
UT	UTILITY OR FACILITY TRANSFORMER
S	PAD MOUNTED SWITCH
CC	CONNECTION CABINET (UTILITY METER MOUNT)
PM	PRIMARY SITE METER ENCLOSURE
M	METER ENCLOSURE. EITHER ON BUILDING OR ON UTILITY EQUIPMENT
CT	CT ENCLOSURE. EITHER ON BUILDING OR ON UTILITY EQUIPMENT
MH	MANHOLE - POWER OR COMMUNICATION AS INDICATED ON PLANS
HH	HAND HOLE - POWER OR COMMUNICATION AS INDICATED ON PLANS
EG	ENGINE GENERATOR
TP	TELECOMMUNICATION PEDESTAL

FIRE ALARM

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
FACP	FIRE ALARM CONTROL PANEL	WALL	-
FATC	FIRE ALARM TERMINAL CABINET (EQUIPMENT NAMING CONVENTION PER PLANS)		
FAA	FIRE ALARM ANNUNCIATOR PANEL	WALL	+44"
F	PULL STATION		
F	FIREMAN'S TELEPHONE OUTLET		
F	HORN NOTIFICATION	WALL	+80" UON
S	SPEAKER NOTIFICATION		
C	CHIME NOTIFICATION		
	COMBINATION SPEAKER AND CHIME NOTIFICATION		
	SPEAKER/HORN WITH STROBE LIGHT		
	STROBE LIGHT ONLY		
B	BELL (GONG)		
P	PHOTOELECTRIC SMOKE DETECTOR	CEILING	SURFACE
I	IONIZATION SMOKE DETECTOR		
R/F	COMBINATION RATE OF RISE / FIXED TEMPERATURE		
F	FIXED TEMPERATURE; TEMPERATURE AS NOTED ON PLANS OR SPECS		
R	RATE OF RISE ONLY		
BT	BEAM TRANSMITTER	CEILING OR WALL	VARIES
BR	BEAM RECEIVER		
U	UNDER FLOOR SMOKE DETECTOR	UNDER FLOOR	SEE PLANS
	DUCT DETECTOR	AT DUCT	SEE PLANS
	FIRE/SMOKE DAMPER		
PS	PRESSURE SWITCH	PIPE	VARIES
TS	TAMPER SWITCH		
FS	FLOW SWITCH		
PIV	POST INDICATOR VALVE		
M	MAGNETIC DOOR HOLDER	VARIES	SEE PLANS
R	CONTROL RELAY		
MM	MONITOR MODULE		
	REMOTE ALARM INDICATING LIGHT		
R	ADDRESSABLE/SUPERVISED RELAY		

ONE-LINE DIAGRAM

SYMBOL	DESCRIPTION
300 / 400	CIRCUIT BREAKER; TRIP SETTING/FRAME SIZE OR NO. OF POLES. SETTINGS AND PROTECTION AS NOTED ON PLANS
300 / 400	DRAWOUT CIRCUIT BREAKER (TRIP SETTING / FRAME SIZE)
300 / 400	MEDIUM VOLTAGE DRAWOUT CIRCUIT BREAKER (TRIP SETTING / FRAME SIZE)
T1A 75kVA K-4 — 208Y/120V — Δ 480V	TRANSFORMER. TRANSFORMER NAME, TRANSFORMER kVA RATING, PRIMARY VOLTAGE AND WIRING CONFIGURATION, SECONDARY VOLTAGE, K RATING (IF APPLICABLE)
3000/5	CURRENT TRANSFORMER, NUMBER "3000/5" DENOTES RATIO.
	POTENTIAL TRANSFORMER.
300A	DISCONNECT SWITCH. "300A" DENOTES AMPERAGE RATING
300A	FUSE. "300A" DENOTES AMPERAGE RATING
G	GROUND FAULT PROTECTION
ST	SHUNT TRIP OPERATOR
	GROUND CONNECTION
	TRANSFER SWITCH. SEE PLANS FOR TYPE OF SWITCH
	SURGE ARRESTOR
SPD	SURGE PROTECTIVE DEVICE
KW	KILOWATT METER
M	ELECTRONIC METER
K1	KIRK KEY INTERLOCK No.1
R1	RELAY No.1
AS	AMMETER SWITCH
A	AMMETER
VS	VOLTMETER SWITCH
V	VOLTMETER
	DELTA CONNECTED
	WYE CONNECTED
	GENERATOR
VFD	VFD CONNECTION
5	MOTOR CONNECTION
UPS	UPS

DEKKER PERICH SABATINI
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DESIGN
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REGISTERED PROFESSIONAL ENGINEER — CERTIFICATE NO. 38934 — JOHN M. MONTAÑO — 10/9/20 — SIGNED — NEW MEXICO U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME
ELECTRICAL SYMBOL LEGEND

SHEET NO
E-001

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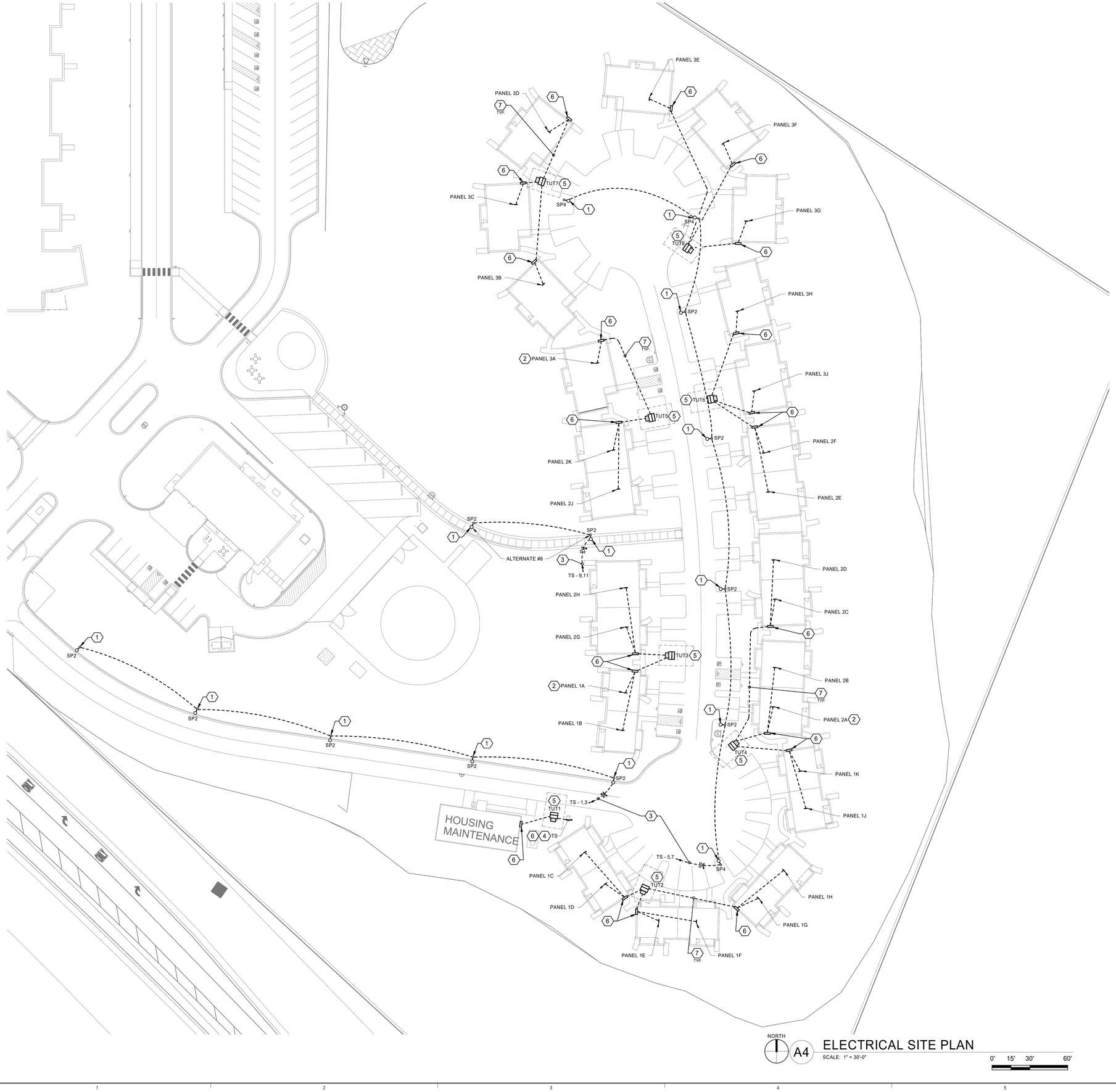
Bridgers & Paxton Project No: 8183



NORTH

A4

ELECTRICAL SITE PLAN

SCALE: 1" = 30'-0"

0' 15' 30' 60'

GENERAL SHEET NOTES

A. REFER TO SHEET E-701 FOR LUMINAIRE SCHEDULE.
B. REFER TO SHEET E-601 FOR ELECTRICAL EQUIPMENT, CONDUIT SIZE AND ADDITIONAL INFORMATION ON ELECTRICAL DISTRIBUTION SYSTEM.
C. REFER TO SHEET SERIES "C" FOR OTHER NEW AND EXISTING UTILITIES. COORDINATE THE INSTALLATION OF ANY UTILITIES SHOWN ON THIS SHEET PRIOR TO COMMENCEMENT OF ANY WORK FOR BEST LOCATION OF THESE UTILITIES.
D. ALL EXTERIOR POLE MOUNTED SITE LUMINAIRES WILL BE ROUTED THROUGH A TIMECLOCK LOCATED WHERE THE PANEL FEEDING THOSE LUMINAIRES IS LOCATED.
E. COORDINATE WITH CIVIL AND LANDSCAPE SHEETS PRIOR TO PLACEMENT OF SITE LUMINAIRE POLES. EACH POLE CAN BE ADJUSTED TO AVOID OBSTRUCTIONS, BUT ONLY UP TO 1'-0" MOVEMENT IN ANY DIRECTION. PROVIDE A 6" GAP BETWEEN EDGE OF SIDEWALK OR CURBS TO POLE BASE.

SHEET KEYNOTES

1. POLE MOUNTED LUMINAIRE. REFER TO POLE BASE DETAIL A5 ON SHEET E-501. METAL POLE TO BE PROVIDED WITH AN EQUIPMENT GROUND WIRE AND GROUND ROD AT EACH POLE LOCATION.
2. TYPICAL PANEL LOCATION FOR EACH UNIT. REFER TO ELECTRICAL ONE-LINE DIAGRAM AND SHEET E-702 FOR TYPICAL PANEL SCHEDULE.
3. ROUTE CIRCUIT THROUGH CONTACTOR/TIMECLOCK LOCATED AT PANEL SERVING THIS POLE. PROVIDE 3#10 & 1#10 GROUND IN A 1" CONDUIT. EXTEND THESE CONDUCTORS TO EACH POLE ON THE CIRCUIT INDICATED AND HOMERUN.
4. NEMA 3R PANEL, CONTACTOR, TIMECLOCK, AND PHOTOCELL MOUNTED ON UNISTRUT. REFER TO SHEET E-601 AND DETAIL A3 ON SHEET E-501 FOR ADDITIONAL INFORMATION.
5. UTILITY TRANSFORMER TO BE PROVIDED BY NTUA. REFER TO SHEET ES100 OF SITE GRADING PACKAGE FOR ADDITIONAL INFORMATION. COORDINATE CONNECTIONS WITH NTUA.
6. COMBINATION SERVICE DISCONNECT/METER ENCLOSURE. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION. CT AND METER WILL BE MOUNTED AT SERVICE ENTRANCE AND AS DIRECTED BY NTUA. CONTRACTOR WILL COORDINATE WITH NTUA REPRESENTATIVE AND NTUA SERVICE GUIDE FOR CORRECT INSTALLATION.
7. SINGLE PHASE SECONDARY FEEDERS. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.

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EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

19	10-30-20	ASI-007

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

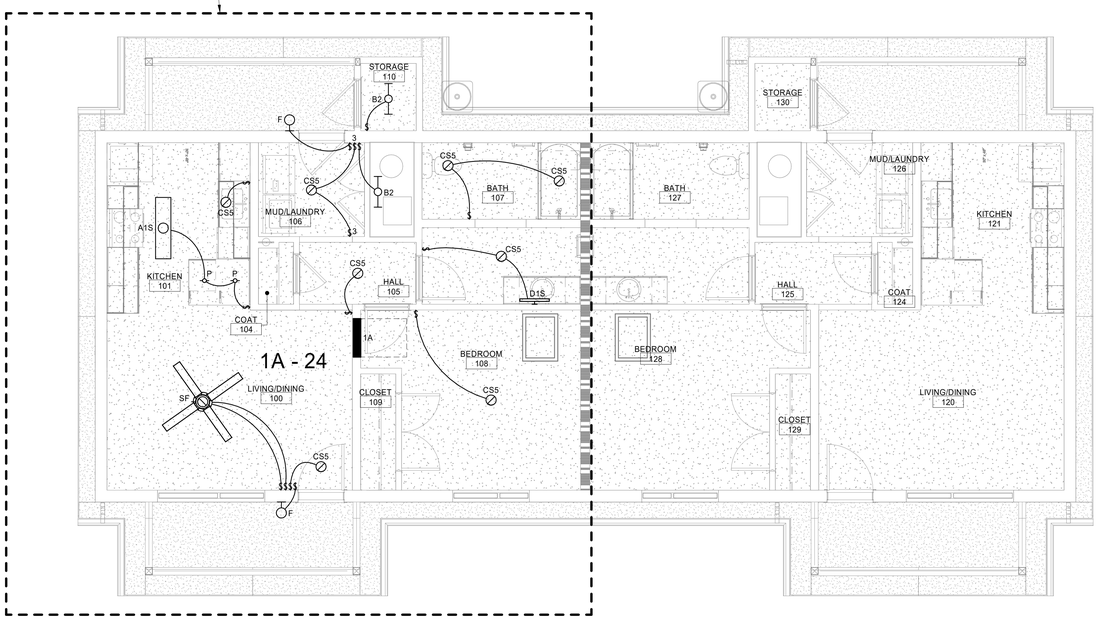
ELECTRICAL SITE PLAN

SHEET NO

ES101

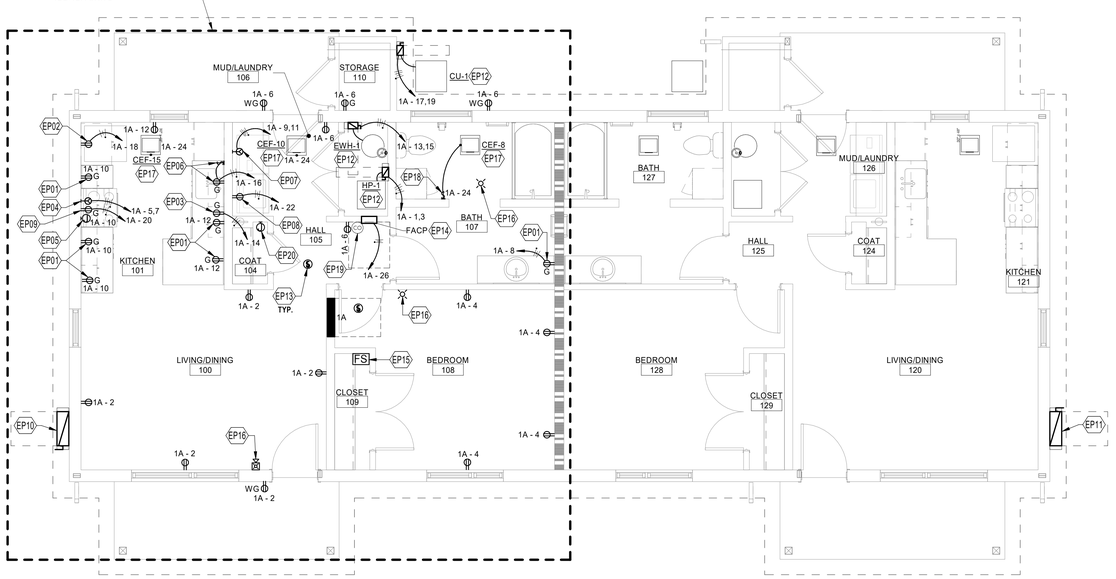
Bridgers & Paxton Project No: 8183 12/8/2020 8:19:35 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_mjlovejoy@bpce.com.rvt

TYPICAL LIGHTING LAYOUT AND CIRCUITING FOR ALL 1BD/1BA UNITS



C5 LIGHTING PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

TYPICAL ELECTRICAL DEVICE LAYOUT AND CIRCUITING FOR ALL 1BD/1BA UNITS



A5 POWER PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. FOR ELECTRICAL LUMINAIRE SCHEDULE, SEE SHEET E-701.
B. COVER PLATES OF ALL DEVICES WILL BE LABELED WITH CIRCUIT IT IS CONNECTED TO, SUCH DEVICES ARE, BUT NOT LIMITED TO, SWITCHES AND RECEPTACLES. REFER TO SPECIFICATION SECTION 260553 FOR ADDITIONAL INFORMATION.
C. PROVIDE ARC FAULT CIRCUIT PROTECTION AS REQUIRED BY N.E.C.
D. THE ELECTRICAL SERVICE FEEDER FROM THE UTILITY TRANSFORMER THROUGH THE METER ENCLOSURE TO THE PANELBOARD SHALL BE IN CONDUIT. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
E. GFCI RECEPTACLES WILL BE INSTALLED AT ALL LOCATIONS AS REQUIRED BY THE LATEST VERSION OF NEC, STATE AND LOCAL CODES WHETHER INDICATED ON PLANS OR NOT. SOME LOCATIONS WILL BE WITHIN 6'-0" OF SINKS, EXTERIOR DOORS AND WET LOCATIONS. ALL EXTERIOR RECEPTACLE LOCATIONS WILL BE GFCI RATED AND WEATHERPROOF.
F. COORDINATE ALL 120 VOLT POWER REQUIREMENTS AND LOCATIONS WITH THE CONTROLS / ACCESS / SECURITY CONTRACTORS IN THE FIELD. REFER TO SPECIFICATION 230549 FOR ADDITIONAL INFORMATION.
G. CONTROLS FOR ALL MECHANICAL EQUIPMENT WILL BE AS INDICATED ON SHEET SERIES "M". RACEWAY PATHS FOR CONTROLS AND WIRING WILL BE INSTALLED AS INDICATED ON CONTROL DIAGRAMS. ALSO REFER TO SPECIFICATION SECTION 230549 FOR ADDITIONAL INFORMATION. CONTRACTOR WILL PROVIDE A 3/4" CONDUIT FOR CONTROL WIRING AS REQUIRED BY SHEET SERIES "MI". CONTROL WILL EITHER BE BY FACILITY MANAGEMENT SYSTEM (FMS) OR LOCAL SWITCHES. PROVIDE PILOT LIGHT SWITCHES WHERE LOCAL SWITCHES ARE REQUIRED PER CONTROL DIAGRAMS.
H. SUBMIT THREE (3) COPIES OF THE FIRE DETECTION ALARM SYSTEM, SHOP DRAWINGS, MANUFACTURER'S EQUIPMENT CATALOG DATA SHEETS, BATTERY CALCULATIONS AND VOLTAGE DROP CALCULATIONS TO THE DSRM FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. BIA SAFETY & HEALTH HANDBOOK TOPIC 26.6A.4.

ALL 15A AND 20A, 120V AND 250V, NONLOCKINGTYPE RECEPTACLES WILL BE TAMPER-RESISTANT RECEPTACLES PER NEC 406.12. REFER TO NEC 406.12 FOR EXCEPTIONS.

SHEET KEYNOTES

EP01	MOUNT DEVICE(S) 6" ABOVE COUNTER TOP BACK SPLASH, TABLE TOP OR SINK. RECEPTACLE WILL BE GFCI RATED IF DESIGNATED WITH A "G".
EP02	MOUNT DEVICE 42" AFF BEHIND REFRIGERATOR. CONTRACTOR WILL MATCH NEMA CONFIGURATION OF RECEPTACLE WITH UNIT PLUG. COORDINATE PRIOR TO ORDERING RECEPTACLE DEVICE.
EP03	DISHWASHER. INSTALL OUTLET WITHIN BASE CABINETRY AT ACCESSIBLE LOCATION. COORDINATE WITH EQUIPMENT INSTALLER.
EP04	ELECTRIC RANGE/STOVE. MOUNT DEVICE BEHIND UNIT. CONTRACTOR WILL MATCH NEMA CONFIGURATION OF RECEPTACLE WITH UNIT PLUG. COORDINATE PRIOR TO ORDERING RECEPTACLE DEVICE. EXTEND 3#6 AND 1#10 GROUND IN 1" CONDUIT.
EP05	DEVICE TO SERVE RESIDENTIAL-TYPE EXHAUST HOOD (ABOVE COOKING RANGE). COORDINATE ROUGH-IN LOCATION AND REQUIREMENTS WITH EQUIPMENT INSTALLER AND CASEWORK INSTALLER.
EP06	RESIDENTIAL-TYPE SINK DISPOSAL UNIT. OUTLET TO BE SWITCHED BY TOGGLE SWITCH ABOVE COUNTER. COORDINATE WITH SHEET SERIES "A" FOR EXACT LOCATION.
EP07	DEVICE FOR DRYER. COORDINATE NEMA CONFIGURATION IN FIELD WITH EQUIPMENT. EXTEND 3#10 AND 1#10 GROUND IN 3/4" CONDUIT. MOUNT DEVICE AT 42" AFF.
EP08	DEVICE FOR WASHER. MOUNT DEVICE AT 42" AFF.
EP09	MOUNT GFCI RATED DEVICE FOR MICROWAVE. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN. PROVIDE DEDICATED CIRCUIT. LABEL COVER PLATE "MICROWAVE".
EP10	LOCATION OF METER AND SERVICE ENTRANCE EQUIPMENT. REFER TO ELECTRICAL SITE PLAN ON SHEET ES101 AND ELECTRICAL ONE-LINE DIAGRAM ON SHEET E-601 FOR SECONDARY FEEDER LOCATION. USE ALTERNATE LOCATION WHERE CONDITIONS DICTATE.
EP11	ALTERNATE LOCATION OF METER AND SERVICE ENTRANCE EQUIPMENT. REFER TO ELECTRICAL SITE PLAN ON SHEET ES101 FOR SECONDARY FEEDER LOCATIONS.
EP12	FOR EACH UNIT, REFER TO SHEET SERIES "M-700" AND "P-700" FOR MECHANICAL EQUIPMENT CHARACTERISTICS. REFER TO SHEET E-701 FOR ELECTRICAL CONNECTION AND OTHER INFORMATION.
EP13	PROVIDE SMOKE DETECTORS PER NFPA REQUIREMENTS.
EP14	FIRE ALARM CONTROL PANEL (FACP). REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP15	COORDINATE FLOW SWITCH LOCATION WITH FIRE PROTECTION DRAWINGS. REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP16	FIRE ALARM DEVICE FOR ADA UNITS ONLY.
EP17	INTEGRAL DISCONNECTING MEANS PROVIDED WITH EXHAUST FAN. CONTRACTOR TO TERMINATE WIRES AT INTERNAL PLUG ASSEMBLY.
EP18	SWITCH CONTROL PROVIDED BY DIVISION 23. ELECTRICAL CONTRACTOR TO INSTALL ALL INTERCONNECTIONS.
EP19	PROVIDE CARBON MONOXIDE DETECTOR. REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP20	PROVIDE JUNCTION BOX WITH BLANK COVERPLATE IN ATTIC SPACE AND 1" CONDUIT WITH PULL ROPE DOWN TO ELECTRICAL PANEL FOR FUTURE ACTIVE RADON VENTING. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

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SEAL

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

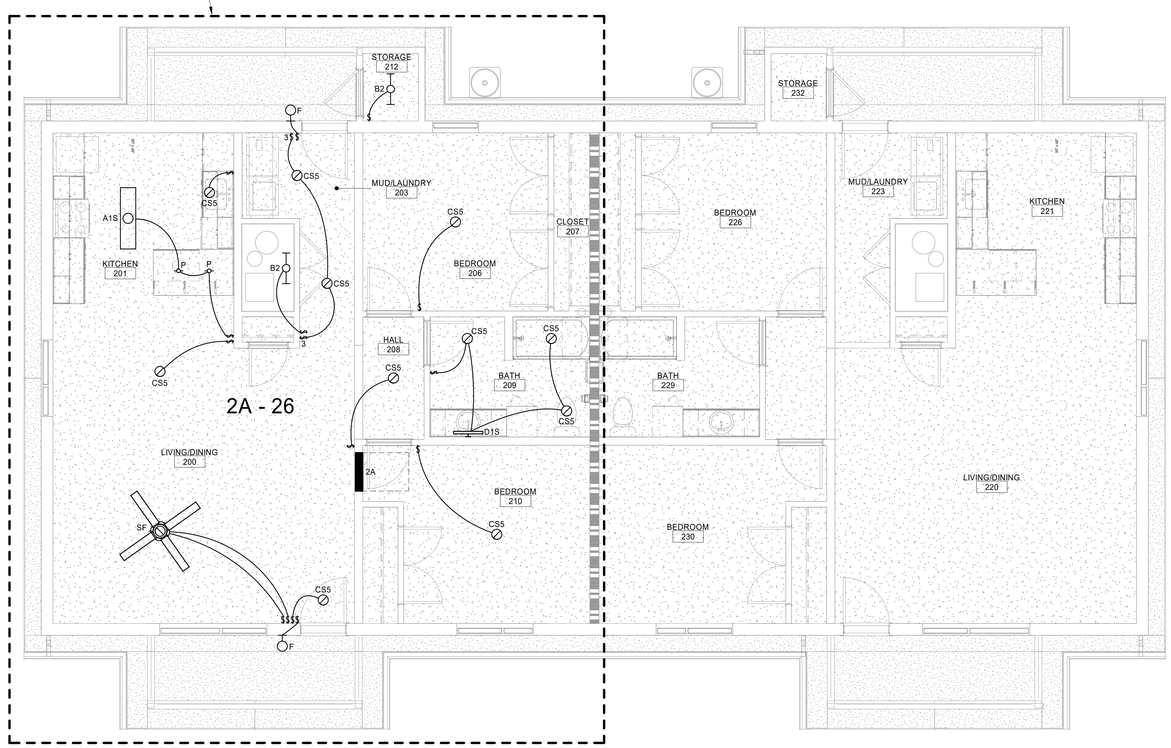
ELECTRICAL PLANS - 1BD/1BA DUPLEX

SHEET NO

E-101

Bridgers & Paxton Project No: 8183 12/8/2020 8:19:19 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_mjlovejoy@bpce.com.rvt

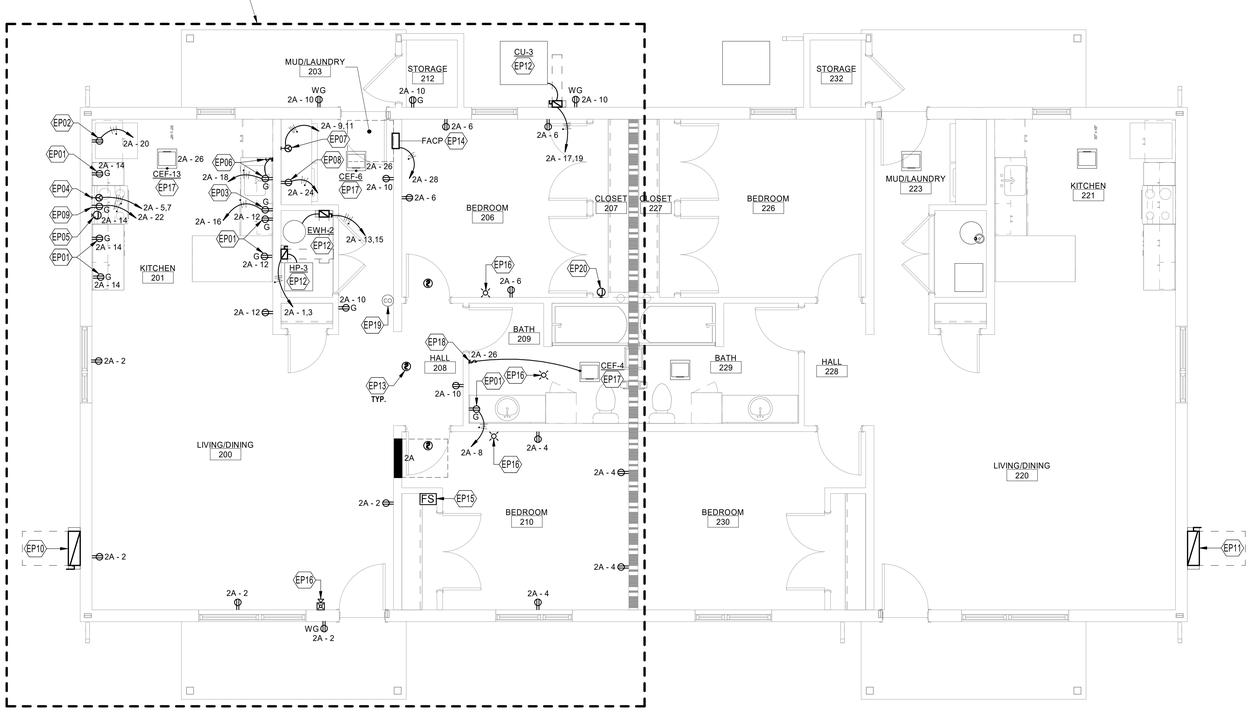
TYPICAL LIGHTING LAYOUT AND CIRCUITING FOR ALL 2BD/1BA UNITS



C5 LIGHTING PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"

0' 2' 4' 8'

TYPICAL ELECTRICAL DEVICE LAYOUT AND CIRCUITING FOR ALL 2BD/1BA UNITS



A5 POWER PLAN - 2BD/1BA DUPLEX
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EP18	SWITCH CONTROL PROVIDED BY DIVISION 23. ELECTRICAL CONTRACTOR TO INSTALL ALL INTERCONNECTIONS.
EP19	PROVIDE CARBON MONOXIDE DETECTOR. REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP20	PROVIDE JUNCTION BOX WITH BLANK COVERPLATE IN ATTIC SPACE AND 1" CONDUIT WITH PULL ROPE DOWN TO ELECTRICAL PANEL FOR FUTURE ACTIVE RADON VENTING. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

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ARCHITECTURE
DESIGN
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SEAL

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

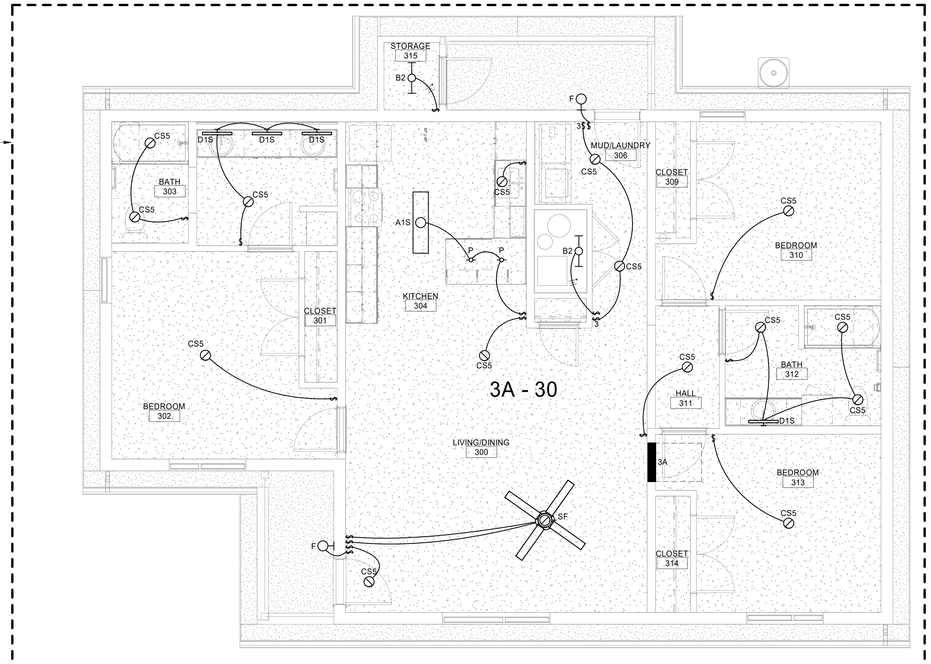
DRAWING NAME

ELECTRICAL PLANS - 2BD/1BA DUPLEX

SHEET NO

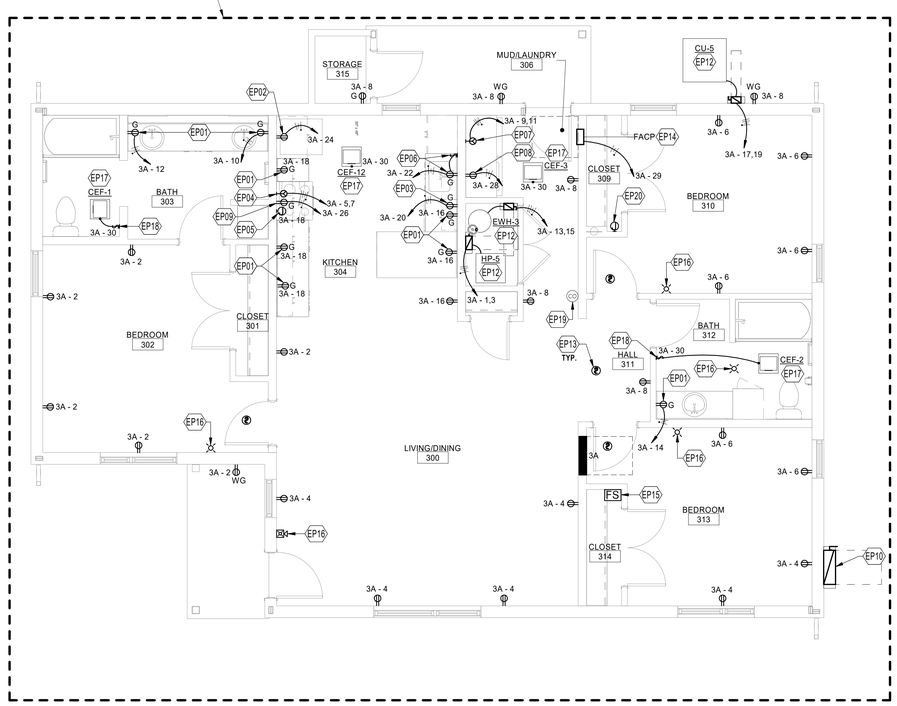
E-102

TYPICAL LIGHTING LAYOUT AND CIRCUITING FOR ALL 3BD/2BA UNITS



C5 LIGHTING PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'

TYPICAL ELECTRICAL DEVICE LAYOUT AND CIRCUITING FOR ALL 3BD/2BA UNITS



A5 POWER PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'

GENERAL SHEET NOTES

A. FOR ELECTRICAL LUMINAIRE SCHEDULE, SEE SHEET E-701.
B. COVER PLATES OF ALL DEVICES WILL BE LABELED WITH CIRCUIT IT IS CONNECTED TO, SUCH DEVICES ARE, BUT NOT LIMITED TO, SWITCHES AND RECEPTACLES. REFER TO SPECIFICATION SECTION 260553 FOR ADDITIONAL INFORMATION.
C. PROVIDE ARC FAULT CIRCUIT PROTECTION AS REQUIRED BY N.E.C.
D. THE ELECTRICAL SERVICE FEEDER FROM THE UTILITY TRANSFORMER THROUGH THE METER ENCLOSURE TO THE PANELBOARD SHALL BE IN CONDUIT. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
E. GFCI RECEPTACLES WILL BE INSTALLED AT ALL LOCATIONS AS REQUIRED BY THE LATEST VERSION OF NEC, STATE AND LOCAL CODES WHETHER INDICATED ON PLANS OR NOT. SOME LOCATIONS WILL BE WITHIN 6'-0" OF SINKS, EXTERIOR DOORS AND WET LOCATIONS. ALL EXTERIOR RECEPTACLE LOCATIONS WILL BE GFCI RATED AND WEATHERPROOF.
F. COORDINATE ALL 120 VOLT POWER REQUIREMENTS AND LOCATIONS WITH THE CONTROLS / ACCESS / SECURITY CONTRACTORS IN THE FIELD. REFER TO SPECIFICATION 230549 FOR ADDITIONAL INFORMATION.
G. CONTROLS FOR ALL MECHANICAL EQUIPMENT WILL BE AS INDICATED ON SHEET SERIES "M". RACEWAY PATHS FOR CONTROLS AND WIRING WILL BE INSTALLED AS INDICATED ON CONTROL DIAGRAMS. ALSO REFER TO SPECIFICATION SECTION 230549 FOR ADDITIONAL INFORMATION. CONTRACTOR WILL PROVIDE A 3/4" CONDUIT FOR CONTROL WIRING AS REQUIRED BY SHEET SERIES "MI". CONTROL WILL EITHER BE BY FACILITY MANAGEMENT SYSTEM (FMS) OR LOCAL SWITCHES. PROVIDE PILOT LIGHT SWITCHES WHERE LOCAL SWITCHES ARE REQUIRED PER CONTROL DIAGRAMS.
H. SUBMIT THREE (3) COPIES OF THE FIRE DETECTION ALARM SYSTEM, SHOP DRAWINGS, MANUFACTURER'S EQUIPMENT CATALOG DATA SHEETS, BATTERY CALCULATIONS AND VOLTAGE DROP CALCULATIONS TO THE DSRM FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. BIA SAFETY & HEALTH HANDBOOK TOPIC 26.6A.4.

ALL 15A AND 20A, 120V AND 250V, NONLOCKINGTYPE RECEPTACLES WILL BE TAMPER-RESISTANT RECEPTACLES PER NEC 406.12. REFER TO NEC 406.12 FOR EXCEPTIONS.

SHEET KEYNOTES

EP01 MOUNT DEVICE(S) 6" ABOVE COUNTER TOP BACK SPLASH, TABLE TOP OR SINK. RECEPTACLE WILL BE GFCI RATED IF DESIGNATED WITH A "G".
EP02 MOUNT DEVICE 42" AFF BEHIND REFRIGERATOR. CONTRACTOR WILL MATCH NEMA CONFIGURATION OF RECEPTACLE WITH UNIT PLUG. COORDINATE PRIOR TO ORDERING RECEPTACLE DEVICE.
EP03 DISHWASHER. INSTALL OUTLET WITHIN BASE CABINETRY AT ACCESSIBLE LOCATION. COORDINATE WITH EQUIPMENT INSTALLER.
EP04 ELECTRIC RANGE/STOVE. MOUNT DEVICE BEHIND UNIT. CONTRACTOR WILL MATCH NEMA CONFIGURATION OF RECEPTACLE WITH UNIT PLUG. COORDINATE PRIOR TO ORDERING RECEPTACLE DEVICE. EXTEND 3#6 AND 1#10 GROUND IN 1" CONDUIT.
EP05 DEVICE TO SERVE RESIDENTIAL-TYPE EXHAUST HOOD (ABOVE COOKING RANGE). COORDINATE ROUGH-IN LOCATION AND REQUIREMENTS WITH EQUIPMENT INSTALLER AND CASEWORK INSTALLER.
EP06 RESIDENTIAL-TYPE SINK DISPOSAL UNIT. OUTLET TO BE SWITCHED BY TOGGLE SWITCH ABOVE COUNTER. COORDINATE WITH SHEET SERIES "A" FOR EXACT LOCATION.
EP07 DEVICE FOR DRYER. COORDINATE NEMA CONFIGURATION IN FIELD WITH EQUIPMENT. EXTEND 3#10 AND 1#10 GROUND IN 3/4" CONDUIT. MOUNT DEVICE AT 42" AFF.
EP08 DEVICE FOR WASHER. MOUNT DEVICE AT 42" AFF.
EP09 MOUNT GFCI RATED DEVICE FOR MICROWAVE. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN. PROVIDE DEDICATED CIRCUIT. LABEL COVER PLATE "MICROWAVE".
EP10 LOCATION OF METER AND SERVICE ENTRANCE EQUIPMENT. REFER TO ELECTRICAL SITE PLAN ON SHEET ES101 AND ELECTRICAL ONE-LINE DIAGRAM ON SHEET E-601 FOR SECONDARY FEEDER LOCATION. USE ALTERNATE LOCATION WHERE CONDITIONS DICTATE.
EP12 FOR EACH UNIT, REFER TO SHEET SERIES "M-700" AND "P-700" FOR MECHANICAL EQUIPMENT CHARACTERISTICS. REFER TO SHEET E-701 FOR ELECTRICAL CONNECTION AND OTHER INFORMATION.
EP13 PROVIDE SMOKE DETECTORS PER NFPA REQUIREMENTS.
EP14 FIRE ALARM CONTROL PANEL (FACP). REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP15 COORDINATE FLOW SWITCH LOCATION WITH FIRE PROTECTION DRAWINGS. REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP16 FIRE ALARM DEVICE FOR ADA UNITS ONLY.
EP17 INTEGRAL DISCONNECTING MEANS PROVIDED WITH EXHAUST FAN. CONTRACTOR TO TERMINATE WIRES AT INTERNAL PLUG ASSEMBLY.
EP18 SWITCH CONTROL PROVIDED BY DIVISION 23. ELECTRICAL CONTRACTOR TO INSTALL ALL INTERCONNECTIONS.
EP19 PROVIDE CARBON MONOXIDE DETECTOR. REFER TO FIRE ALARM RISER DIAGRAM ON SHEET E-601 FOR ADDITIONAL INFORMATION.
EP20 PROVIDE JUNCTION BOX WITH BLANK COVERPLATE IN ATTIC SPACE AND 1" CONDUIT WITH PULL ROPE DOWN TO ELECTRICAL PANEL FOR FUTURE ACTIVE RADON VENTING. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

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SEAL
REGISTERED PROFESSIONAL ENGINEER
CERTIFICATE NO.
38934
JOHN M. MONTAÑO
12/8/20
SIGNED
ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

ELECTRICAL PLANS - 3BD/2BA SINGLE-FAMILY

SHEET NO

E-103

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EXPIRES 03/31/2021

PROJECT

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Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100%
CONSTRUCTION
DOCUMENTS

REVISIONS

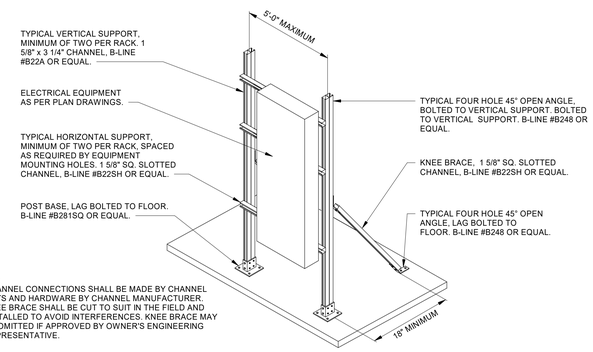
DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

ELECTRICAL
DETAILS

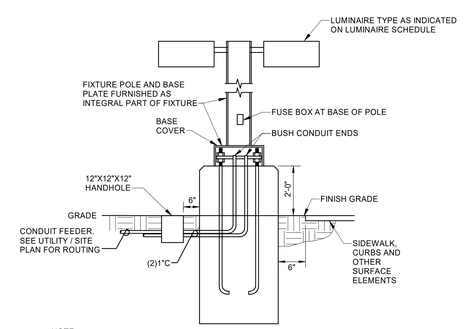
SHEET NO

E-501



NOTES:
A. CHANNEL CONNECTIONS SHALL BE MADE BY CHANNEL NUTS AND HARDWARE BY CHANNEL MANUFACTURER.
B. KNEE BRACE SHALL BE CUT TO SUIT IN THE FIELD AND INSTALLED TO AVOID INTERFERENCES. KNEE BRACE MAY BE OMITTED IF APPROVED BY OWNER'S ENGINEERING REPRESENTATIVE.

A3 UNISTRUT MOUNTED PANEL DETAIL
NO SCALE



NOTE:
1. POLE BASE DETAILS SHOWS INSTALLATION OF RACEWAY PATHS FOR POLE POWER AND GROUNDING ONLY. CONCRETE, REBAR AND MOUNTING SHALL BE SPECIFIED/APPROVED BY THE STRUCTURAL ENGINEER. REFER TO SHEET SERIES "AS" OF SCHOOL PACKAGE FOR BASE CONSTRUCTION.
2. HAND HOLE NEAR POLE BASE WILL BE A 12"x12"x12" VEHICULAR RATED FOR 15k LBS. WITH A TAMPER PROOF COVER LABELED "LIGHTING". QUAZITE OR APPROVED EQUAL.
3. PROVIDE GROUND FOR POLE AND STRUCTURE TO GROUND POLE AND LUMINAIRE.

A5 POLE BASE DETAIL
NO SCALE

Bridgers & Paxton Project No: 8183 12/8/2020 8:19:28 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_mjlovejoy@bpce.com.rvt

Electrical Service Calc.-Lukachukai 1 BD Unit - *Project #8183.*							
Description of Load		Connected Load KVA	Demand % Multiplier	Demand Load KVA	Service % Multiplier	Service Load KVA	Notes
Lighting		0	100%	0	125%	0	
	771 Sq. Ft.		0.40 watts/sq.ft. for lighting loads		=	312 VA	

Electrical Service Calc.-Lukachukai 2 BD Unit - *Project #8183.*							
Description of Load		Connected Load KVA	Demand % Multiplier	Demand Load KVA	Service % Multiplier	Service Load KVA	Notes
Lighting		0	100%	0	125%	0	
	1,208 Sq. Ft.		0.30 watts/sq.ft. for lighting loads		=	357 VA	

Electrical Service Calc.-Lukachukai 3 BD House - *Project #8183.*							
Description of Load		Connected Load KVA	Demand % Multiplier	Demand Load KVA	Service % Multiplier	Service Load KVA	Notes
Lighting		0	100%	0	125%	1	
	1,577 Sq. Ft.		0.30 watts/sq.ft. for lighting loads		=	477 VA	

E3 LIGHTING POWER DENSITY CALC.
NO SCALE

DWELLING UNIT LOAD SUMMARY (2017 NEC 220.5)
Service Load Calculations
Bldg. Square Ft: 771

Total Connected Loads:

General Lighting & Receptacles (3VA/Ft²) (Table 220.12)(NEC 220.14.J)		2313 VA
Small Appliances (At 1500VA Each)(NEC 220.5	5 total	7500 VA
Laundry (if unknown use 1500VA)(NEC 220.52)	1 total	1500 VA
Subtotal:		11313 VA
Dryer(s) (NEC 220.54)	5400	5400 VA
Range (NEC 220.55)	11700 VA x 0.8 =	9360 VA
HVAC @ 100%	7680	7680 VA
other:	7770	7770 VA
Net Computed Load:		30210 VA

Load Demand Factors:

Lighting Load (NEC 220.42):		
First 3000 VA or less @ 100%:	2313 @100% =	2313 VA
From 3001 VA to 120,000 @ 35%:	0 @35% =	0 VA
Remainder over 120,000 @ 25%:	0 @25% =	0 VA
Net Lighting Load:		2313 VA
Small Appliance Load (NEC 220.53):		
4 or more appliance @ 75%:		6750 VA
Total Computed Net Load:		41586 VA

Service Voltage 240 Volts 1 Phase,
Phase Service or Feeder
(Total Computed Net Load) / (volts) x √ Phase = 173 AMPS

200 Amp Service is Adequate for this load.

D3 ELEC. SERVICE CALC.-1BD/1BA UNIT
NO SCALE

DWELLING UNIT LOAD SUMMARY (2017 NEC 220.5)
Service Load Calculations
Bldg. Square Ft: 1208

Total Connected Loads:

General Lighting & Receptacles (3VA/Ft²) (Table 220.12)(NEC 220.14.J)		3624 VA
Small Appliances (At 1500VA Each)(NEC 220.5	5 total	7500 VA
Laundry (if unknown use 1500VA)(NEC 220.52)	1 total	1500 VA
Subtotal:		12624 VA
Dryer(s) (NEC 220.54)	5400	5400 VA
Range (NEC 220.55)	11700 VA x 0.8 =	9360 VA
HVAC @ 100%	9600	9600 VA
other:	8346	8346 VA
Net Computed Load:		32706 VA

Load Demand Factors:

Lighting Load (NEC 220.42):		
First 3000 VA or less @ 100%:	3000 @100% =	3000 VA
From 3001 VA to 120,000 @ 35%:	624 @35% =	218 VA
Remainder over 120,000 @ 25%:	0 @25% =	0 VA
Net Lighting Load:		3218 VA
Small Appliance Load (NEC 220.53):		
4 or more appliance @ 75%:		6750 VA
Total Computed Net Load:		46298 VA

Service Voltage 240 Volts 1 Phase,
Phase Service or Feeder
(Total Computed Net Load) / (volts) x √ Phase = 193 AMPS

200 Amp Service is Adequate for this load.

D4 ELEC. SERVICE CALC.-2BD/1BA UNIT
NO SCALE

DWELLING UNIT LOAD SUMMARY (2017 NEC 220.5)
Service Load Calculations
Bldg. Square Ft: 1577

Total Connected Loads:

General Lighting & Receptacles (3VA/Ft²) (Table 220.12)(NEC 220.14.J)		4731 VA
Small Appliances (At 1500VA Each)(NEC 220.5	5 total	7500 VA
Laundry (if unknown use 1500VA)(NEC 220.52)	1 total	1500 VA
Subtotal:		13731 VA
Dryer(s) (NEC 220.54)	5400	5400 VA
Range (NEC 220.55)	11700 VA x 0.8 =	9360 VA
HVAC @ 100%	14400	14400 VA
other:	8559	8559 VA
Net Computed Load:		37719 VA

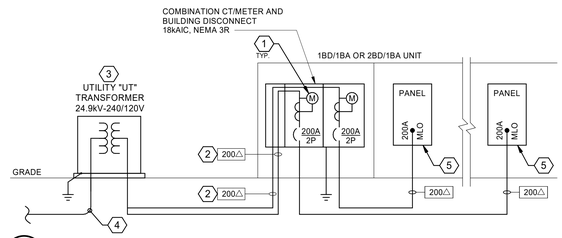
Load Demand Factors:

Lighting Load (NEC 220.42):		
First 3000 VA or less @ 100%:	3000 @100% =	3000 VA
From 3001 VA to 120,000 @ 35%:	1731 @35% =	606 VA
Remainder over 120,000 @ 25%:	0 @25% =	0 VA
Net Lighting Load:		3606 VA
Small Appliance Load (NEC 220.53):		
4 or more appliance @ 75%:		6750 VA
Total Computed Net Load:		52806 VA

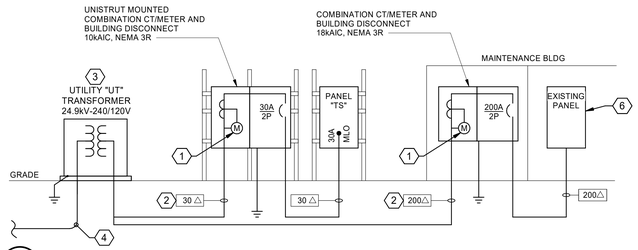
Service Voltage 240 Volts 1 Phase,
Phase Service or Feeder
(Total Computed Net Load) / (volts) x √ Phase = 220 AMPS

200 Amp Service is Adequate for this load.

D5 ELEC. SERVICE CALC.-3BD/2BA UNIT
NO SCALE



C1 TYPICAL 1BD/1BA OR 2BD/1BA UNIT ELECTRICAL ONE-LINE DIAGRAM
NO SCALE



C3 MAINT BLDG & SITE LIGHTING ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

COPPER FEEDER SCHEDULE

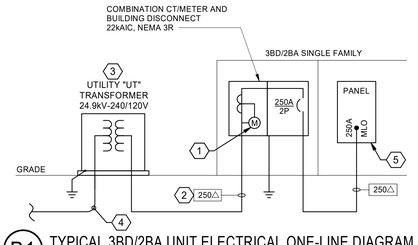
NOTE: ALL CONDUCTORS ARE COPPER, TYPE THWN/THHN UNLESS OTHERWISE NOTED.

DESIGNATION	CONDUCTORS	GROUND	CONDUIT	NOTES
THREE PHASE THREE WIRE & GROUND FEEDER				
20Δ	3#12	12	3/4"	
25Δ	3#10	10	3/4"	
30Δ	3#10	10	3/4"	
35Δ	3#8	10	3/4"	
40Δ	3#8	10	3/4"	
45Δ	3#8	10	3/4"	
50Δ	3#8	10	3/4"	
60Δ	3#6	10	1"	
70Δ	3#4	8	1 1/4"	
80Δ	3#4	8	1 1/4"	
90Δ	3#2	8	1 1/4"	
100Δ	3#2	8	1 1/4"	
125Δ	3#1/0	6	1 1/2"	
150Δ	3#1/0	6	1 1/2"	
175Δ	3#2/0	6	2"	
200Δ	3#3/0	6	2"	
225Δ	3#4/0	4	2 1/2"	
250Δ	3-250 KCMIL	4	3"	
300Δ	3-350 KCMIL	4	3"	
350Δ	3-500 KCMIL	2	4"	
400Δ	(2) 3#3/0	(2) 2	(2) 2"	
450Δ	(2) 3#4/0	(2) 2	(2) 2 1/2"	
500Δ	(2) 3-250 KCMIL	(2) 2	(2) 3"	
575Δ	(2) 3-300 KCMIL	(2) 1	(2) 3"	
600Δ	(2) 3-350 KCMIL	(2) 1	(2) 3"	
700Δ	(2) 3-500 KCMIL	(2) 1/0	(2) 4"	
800Δ	(3) 3-300 KCMIL	(3) 1/0	(3) 3"	
1000Δ	(3) 3-400 KCMIL	(3) 2/0	(3) 3"	
1200Δ	(4) 3-350 KCMIL	(4) 3/0	(4) 4"	
1600Δ	(5) 3-400 KCMIL	(5) 4/0	(5) 4"	
2000Δ	(6) 3-400 KCMIL	(6) 250 KCMIL	(6) 4"	
2500Δ	(7) 3-500 KCMIL	(7) 350 KCMIL	(7) 4"	
3000Δ	(8) 3-500 KCMIL	(8) 400 KCMIL	(8) 4"	
4000Δ	(11) 3-500 KCMIL	(11) 500 KCMIL	(11) 4"	
THREE PHASE FOUR WIRE & GROUND FEEDER				
20Y	4#12	12	3/4"	
25Y	4#10	10	3/4"	
30Y	4#10	10	3/4"	
35Y	4#8	10	3/4"	
40Y	4#8	10	3/4"	
45Y	4#8	10	3/4"	
50Y	4#8	10	3/4"	
60Y	4#6	10	1"	
70Y	4#4	8	1 1/4"	
80Y	4#4	8	1 1/4"	
90Y	4#2	8	1 1/4"	
100Y	4#2	8	1 1/4"	
125Y	4#1/0	6	1 1/2"	
150Y	4#1/0	6	2"	
175Y	4#2/0	6	2"	
200Y	4#3/0	6	2"	
225Y	4#4/0	4	2 1/2"	
250Y	4-250 KCMIL	4	3"	
300Y	4-350 KCMIL	4	3"	
350Y	4-500 KCMIL	2	4"	
400Y	(2) 4#3/0	(2) 2	(2) 2"	
450Y	(2) 4#4/0	(2) 2	(2) 2 1/2"	
500Y	(2) 4-250 KCMIL	(2) 2	(2) 3"	
575Y	(2) 4-300 KCMIL	(2) 1	(2) 3"	
600Y	(2) 4-350 KCMIL	(2) 1	(2) 3"	
700Y	(2) 4-500 KCMIL	(2) 1/0	(2) 4"	
800Y	(3) 4-300 KCMIL	(3) 1/0	(3) 3"	
1000Y	(3) 4-400 KCMIL	(3) 2/0	(3) 3"	
1200Y	(4) 4-350 KCMIL	(4) 3/0	(4) 4"	
1600Y	(5) 4-400 KCMIL	(5) 4/0	(5) 4"	
2000Y	(6) 4-400 KCMIL	(6) 250 KCMIL	(6) 4"	
2500Y	(7) 4-500 KCMIL	(7) 350 KCMIL	(7) 4"	
3000Y	(8) 4-500 KCMIL	(8) 400 KCMIL	(8) 4"	
4000Y	(11) 4-500 KCMIL	(11) 500 KCMIL	(11) 4"	
5000Y	(14) 4-500 KCMIL	(14) 500 KCMIL	(14) 4"	

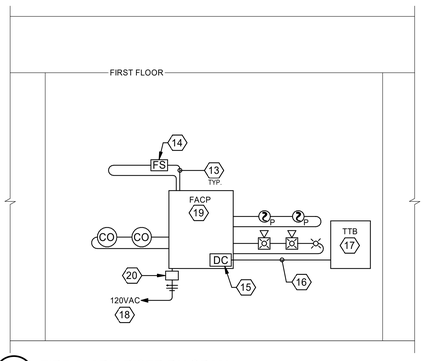
EQUIPMENT BONDING JUMPER FOR SEPARATELY DERIVED SYSTEMS PER NEC 250.66 (PROVIDE CONDUCTOR GROUND BELOW INSTEAD OF FEEDER GROUND FOR THREE PHASE, 4-WIRE SYSTEMS INDICATED ABOVE)

DESIGNATION	GROUND
20YS THRU 100YS	8
125YS THRU 150YS	6
175YS THRU 200YS	4
225YS THRU 300YS	2
350YS THRU 500YS	1/0
600YS THRU 700YS	2/0
800YS THRU 5000YS	3/0

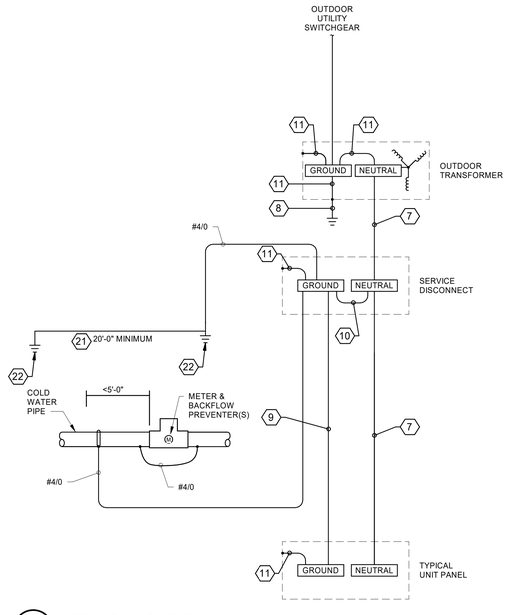
THREE PHASE FOUR WIRE 200% NEUTRAL & GROUND FEEDER				
100E	3#2, 1#4/0 NEUTRAL	8	2"	
150E	3#2/0, 2#2/0 NEUT.	6	2"	
225E	3-250 KCMIL, 2-250 KCMIL NEUT.	4	2 1/2"	
350E	(2) 3#3/0, (2) 2#3/0 NEUT.	(2) 2	(2) 2 1/2"	
400E	(2) 3#4/0, (2) 2#4/0 NEUT.	(2) 2	(2) 2 1/2"	
500E	(2) 3-350 KCMIL, (2) 2-350 KCMIL NEUT.	(2) 2	(2) 3"	



B1 TYPICAL 3BD/2BA UNIT ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

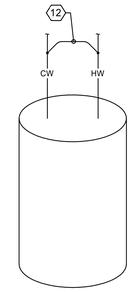


A1 FIRE ALARM RISER DIAGRAM
NO SCALE



A2 GROUNDING DIAGRAM
NO SCALE

GROUNDING ELECTRODE CONDUCTOR SCHEDULE	
NOTE: ALL CONDUCTORS ARE COPPER.	
SIZE OF LARGEST UNGROUNDED SERVICE-ENTRANCE CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS. (AWG OR kCMIL)	SIZE OF GROUNDING ELECTRODE CONDUCTOR (AWG)
<= #2	8
#1 OR 1/0	6
2/0 OR 3/0	4
OVER 3/0 THROUGH 350	2
OVER 350 THROUGH 600	1/0
OVER 600 THROUGH 1100	2/0
OVER 1100	SEE KEYED NOTE 10



GENERAL SHEET NOTES

A. PANELBOARD AIC RATINGS ARE INDICATED ON THE PANEL SCHEDULES.
B. INFORMATION SHOWN IS DIAGRAMMATIC AND IS NOT INTENDED TO REPRESENT PHYSICAL ARRANGEMENTS, LOCATIONS, ROUTING OR CONNECTIONS. PHYSICAL LAYOUTS ARE TO BE PER FIELD CONDITIONS AND AS INDICATED ELSEWHERE IN THE ELECTRICAL PLANS.
C. REFERENCE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS REGARDING EQUIPMENT AND INSTALLATION. NOT ALL INFORMATION SHOWN ON THIS DIAGRAM.
D. ALL PANELS WILL HAVE DOOR-IN-DOOR ACCESSIBILITY FOR EACH PANEL.
E. CONTRACTOR WILL MEGGER TEST AND TORQUE ALL PANEL FEEDERS, MEASURE RESISTANCE TO GROUND AT SERVICE GROUND AND PROVIDE WRITTEN DOCUMENTATION OF TEST RESULTS. CONTRACTOR WILL COORDINATE TIME SO THAT OWNER'S REPRESENTATIVE IS PRESENT DURING TEST.
F. CONTRACTOR WILL LABEL ALL DISTRIBUTION EQUIPMENT PRIOR TO FINAL OBSERVATION WALK THROUGH.
G. WHEN ALL EQUIPMENT IS INSTALLED REQUIRING PROGRAMMING AND TRAINING HAS BEEN COMPLETED, THE BUILDING'S IP ADDRESS WILL NEED TO BE GIVEN TO OWNER'S REPRESENTATIVE FOR ELECTRICAL M&O USE.
H. REFER TO SHEET E-701 FOR VOLTAGE DROP AND FAULT CURRENT CALCULATIONS.
I. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
J. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO SERVICE ENTRANCE EQUIPMENT GROUND BUS USING NEC TABLE 250.102 (C) (1).
K. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED EQUAL TO EQUIPMENT GROUNDING CONDUCTOR.
L. CLEAN COATED RE-BAR PRIOR TO PERFORMING ELECTRICAL CONNECTIONS.
M. FIRE ALARM DIAGRAM INDICATES GENERAL DIAGRAMMATIC CONNECTIONS ONLY. ALL CONNECTIONS AND INSTALLATION WILL BE PER FIRE ALARM SYSTEM MANUFACTURER'S SHOP DRAWINGS.
N. DEVICE QUANTITIES ARE NOT INDICATED ON THIS DRAWING. REFER TO FLOOR PLANS FOR QUANTITIES AND LOCATIONS.
O. REFER TO SPECIFICATION SECTION 283111 FOR FIRE ALARM SYSTEM REQUIREMENTS.
P. FIRE ALARM WIRING AND CABLING SHALL BE IN CONFORMANCE WITH NEC AND TYPE SHALL BE AS RECOMMENDED BY FIRE ALARM SYSTEM MANUFACTURER.
Q. SEAL ALL PENETRATIONS THROUGH WALLS, FLOOR, CEILINGS AND ROOF PER ARCHITECTURAL SPECIFIED REQUIREMENTS. SEAL WILL MATCH THE FIRE RATING OF EACH PENETRATION LOCATION.

IT IS THE INTENT OF THESE DOCUMENTS TO SHOW A BASIC REPRESENTATION OF THE FIRE ALARM SYSTEM. DEVICES INDICATED ON THESE DOCUMENTS ARE IN NO WAY IMPLIED TO BE COMPREHENSIVE OF THE FINAL DESIGN. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO PROVIDE A DESIGN/BUILD FIRE ALARM SYSTEM BASED UPON A THOROUGH REVIEW OF ALL CONTRACT DOCUMENTS. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO ENSURE THAT THE FIRE ALARM SYSTEM IS CODE COMPLIANT, MEETS THE REQUIREMENTS OF THE AHJ AND COMPREHENSIVELY COVERS AND INCLUDES ALL NECESSARY PARTS AND LABOR ASSOCIATED WITH OTHER TRADES AND SYSTEMS IMPACTING THE FIRE ALARM SYSTEM. NO CHANGE ORDERS SHALL BE APPROVED FOR THE BASE SCOPE OF WORK.

ENTIRE FIRE ALARM SYSTEM WILL BE IN RACEWAYS; NO EXCEPTIONS!

SHEET KEYNOTES

1. COMBINATION CT/METER AND DISCONNECT ENCLOSURE WILL BE MOUNTED AS DIRECTED BY NTUA. CONTRACTOR WILL COORDINATE WITH NTUA REPRESENTATIVE AND NTUA SERVICE GUIDE FOR CORRECT INSTALLATION.
2. DO NOT RUN EQUIPMENT GROUND CONDUCTOR IN SERVICE LATERAL.
3. UTILITY PAD MOUNTED TRANSFORMER. CONTRACTOR WILL COORDINATE INSTALLATION OF TRANSFORMER WITH NTUA FOR TRANSFORMER SIZE AND CONCRETE PAD REQUIREMENTS. REFERENCE NTUA STANDARD INSTALLATION GUIDE AS DIRECTED BY NTUA REPRESENTATIVE.
4. UTILITY UNDERGROUND PRIMARY DISTRIBUTION FROM SWITCHGEAR TO TRANSFORMER. REFER TO SHEET ES100 OF ROUGH GRADING PACKAGE FOR ADDITIONAL INFORMATION. COORDINATE WITH NTUA REPRESENTATIVE AND NTUA SERVICE GUIDE FOR CORRECT INSTALLATION.
5. REFER TO PANEL SCHEDULES AND PLANS FOR PANEL LOCATIONS AND SPECIFIC LOADS FOR INDIVIDUAL UNITS.
6. EXISTING PANEL/LOAD CENTER WILL BE PART OF EXISTING BUILDING BEING RELOCATED TO SITE. REFER TO SHEET ES101 FOR ADDITIONAL INFORMATION.
7. REFER TO ONE-LINE DIAGRAM AND FEEDER SCHEDULE FOR GROUNDED CONDUCTOR SIZE.
8. CONNECT GROUNDING ELECTRODE CONDUCTOR TO GROUND ROD.
9. FOR EQUIPMENT GROUNDING CONDUCTOR SIZE, REFER TO ONE-LINE DIAGRAM AND FEEDER SCHEDULE.
10. MAIN BONDING JUMPER AND/OR SYSTEM BONDING JUMPER SIZE BASED ON UNGROUNDED CONDUCTOR SIZE AND GROUNDING ELECTRODE CONDUCTOR SCHEDULE ON THIS SHEET UNLESS UNGROUNDED CONDUCTOR SIZE OR EQUIVALENT IS GREATER THAN 1100 KCMIL. IF GREATER THAN 1100 KCMIL (OR 1750 KCMIL FOR ALUMINUM) SIZE JUMPER PER NEC TABLE 250.102 (C)(1).
11. BONDING JUMPER SIZED PER GROUNDING ELECTRODE CONDUCTOR SCHEDULE THIS SHEET.
12. BOND HOT WATER PIPE TO COLD WATER PIPE AT EACH WATER HEATER WITH A #6 BARE COPPER CONDUCTOR.
13. MINIMUM 3/4" CONDUIT AND FIRE ALARM CABLING AS REQUIRED BY THE FIRE ALARM MANUFACTURER.
14. INDEPENDENTLY SUPERVISE EACH FLOW SWITCH WITH AN ADDRESSABLE MODULE. REFER TO FIRE PROTECTION/ PLUMBING PLANS FOR EACH LOCATION.
15. DIGITAL COMMUNICATOR FOR CENTRAL STATION MONITORING.
16. CONDUIT AND COMMUNICATIONS CABLING FOR CENTRAL STATION REPORTING.
17. PROVIDE NEW ANNUNCIATOR PANEL IN VESTIBULE 100 OR AS DIRECTED BY FIRE MARSHALL. FIELD COORDINATE EXACT LOCATION.
18. REFER TO SHEET SERIES "EP" FOR CIRCUITS SERVING THIS SYSTEM.
19. FIRE ALARM SYSTEM F.A.C.P.
20. PROVIDE SURGE PROTECTION FOR CIRCUIT TO FIRE ALARM PANEL.
21. PROVIDE A GROUNDING ELECTRODE SYSTEM PER 2017 NATIONAL ELECTRICAL CODE.
22. PROVIDE A GROUND ROD PER NEC 250.52 A.5.

DEKKER PERICH SABATINI
ARCHITECTURE DESIGN INSPIRATION

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NEW MEXICO REGISTERED PROFESSIONAL ENGINEER
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JOHN M. MONTAÑO
12/8/20
REGISTERED PROFESSIONAL ENGINEER
STATE OF ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS
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DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME
ELECTRICAL DIAGRAMS

SHEET NO
E-601

Bridgers & Paxton Project No: 8183 12/8/2020 8:19:30 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_mjlovejoy@bpcs.com.rvt

ELECTRICAL CONNECTIONS FOR MECHANICAL EQUIPMENT SCHEDULE NOTES:

A. STARTER, CONTROL SYSTEM FOR UNIT WILL BE PROVIDED BY DIVISION 23. CONTRACTOR WILL PROVIDE DISCONNECTING MEANS AND HAVE ONE POINT OF ELECTRICAL CONNECTION. FOR CONTROL EQUIPMENT INFORMATION, REFER TO SHEET SERIES "M-700".
B. RACEWAY SYSTEM AND CONDUCTORS FOR CONTROLS WILL BE PROVIDED BY DIVISION 26 UNLESS SPECIFICALLY CALLED OUT TO BE PROVIDED BY OTHER SECTIONS OF THESE DOCUMENTS. REFER TO SHEET SERIES "M" FOR CONTROL DIAGRAMS AND ALSO REFER TO SPECIFICATION SECTION 230549.
C. SIZE FUSES PER MANUFACTURER'S RECOMMENDATIONS OR A MINIMUM OF 1.25% OF UNIT FLA.

ELECTRICAL CONNECTIONS FOR MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT NUMBER	EQUIPMENT DESCRIPTION	VOLTAGE	PHASE	BRANCH CIRCUIT CONDUCTOR DESCRIPTION	CONDUIT SIZE	MOTOR STARTER CHRACTERISTICS: STARTER TYPE	STARTER SIZE	OFF/AUTO OR HOA	PILOT LIGHT: RED	PILOT LIGHT: GREEN	EXTRA CONTACTS: NO	EXTRA CONTACTS: NC	DISCONNECT SWITCH CHARACTERISTICS: VOLTS	FRAME AMPS	CIRCUIT BREAKER SIZE	SOLID NEUT. / GND LUG	NEMA RATING	KEY NOTE
CU-1	HEAT PUMP (OUTDOOR UNIT)	240 V	1	3#10 & 1#10 GND.	3/4"								250	30	C	YES	3R	A,B
CU-3	HEAT PUMP (OUTDOOR UNIT)	240 V	1	3#10 & 1#10 GND.	3/4"								250	30	C	YES	3R	A,B
CU-5	HEAT PUMP (OUTDOOR UNIT)	240 V	1	3#10 & 1#10 GND.	3/4"								250	30	C	YES	3R	A,B
EWH-1	ELECTRIC WATER HEATER	240 V	1	3#10 & 1#10 GND.	3/4"								250	30	C	YES	1	A,B
EWH-2	ELECTRIC WATER HEATER	240 V	1	3#10 & 1#10 GND.	3/4"								250	30	C	YES	1	A,B
EWH-3	ELECTRIC WATER HEATER	240 V	1	3#10 & 1#10 GND.	3/4"								250	30	C	YES	1	A,B
HP-1	HEAT PUMP	240 V	1	3#8 & 1#10 GND.	3/4"								250	60	C	YES	1	A,B
HP-3	HEAT PUMP	240 V	1	3#6 & 1#10 GND.	1"								250	100	C	YES	1	A,B
HP-5	HEAT PUMP	240 V	1	3#2 & 1#8 GND.	1-1/4"								250	100	C	YES	1	A,B

LUMINAIRE SCHEDULE NOTES:

1. MANUFACTURER'S CATALOG NUMBERS REPRESENT MANUFACTURER SERIES. SHOP DRAWING SUBMITTALS WILL INCLUDE ALL PART NUMBERS REPRESENTING ALL ITEMS OF THIS LUMINAIRE SCHEDULE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORDER LUMINAIRES TO INCLUDE ALL PARTS INDICATED ON SCHEDULE FOR EACH LUMINAIRE. SUBMITTAL WILL CALL OUT EACH PART CLEARLY.
2. LUMINAIRE REQUIRES MOUNTING COORDINATION WITH ARCHITECT PRIOR TO COMMENCEMENT OF ANY WORK. THIS LUMINAIRE MAY REQUIRE A HIGHER OR LOWER MOUNTING FROM THAT PROVIDED ON THIS SCHEDULE OR NOTES ON PLAN DUE TO ARCHITECTURAL REQUIREMENTS OR CONSTRUCTION CONDITIONS.
3. ALL LUMINAIRES ON THIS LUMINAIRE SCHEDULE ARE APPROVED FOR BID ON THIS PROJECT. IF A LUMINAIRE IS SUBMITTED THAT IS NOT ON THIS SCHEDULE, IT WILL BE REJECTED.
4. SHOULD ANY LUMINAIRE BE NOT AVAILABLE AT TIME OF SUBMITTAL, CONTRACTOR WILL USE ONE OF THE OTHER LUMINAIRES INDICATED IN EACH TYPE FOR REPLACEMENT. NO OTHERS WILL BE ACCEPTED.

ELECTRICAL LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	VOLTS	MOUNTING	LAMPS	BALLAST TYPE	EM. BAT. PK.	LENS	MANUFACTURER / MODEL	NOTES
A1S	1' x 4' LED HIGH ENERGY EFFICIENT LOW PROFILE SURFACE LUMINAIRE.	120	SURFACE	LED, 3000K, 40 MAX WATTS, 3600 MINIMUM DELIVERED LUMENS	LED DRIVER	NONE	ACRYLIC DIFFUSER	METALUX #14FPSL1SCT3(HI) FPXSURF14 ACCESS LIGHTING #20860LEDD-WH/ACR ELITE #14-FPL1-LED-4000L-DIM10-MVOLT-30K-85-14-FPL1-LED-SMK LITHONIA #EPANL LED-1X4-4000LM-80CRI-30K-MIN1-120-1X4SMKSH	1,2,3,4
B2	2' GENERAL PURPOSE LED STRIP FIXTURE, DIE FORMED STEEL HOUSING, BAKED WHITE ENAMEL FINISH, WITH DIFFUSING LENS.	120	SURFACE	LED, 3000K, 18 MAX WATTS, 1500 MINIMUM DELIVERED LUMENS	LED DRIVER 0-10V DIMMING	NONE	DIFFUSE ACRYLIC	METALUX #2SNLED-LD5-16SL-SLW-UNV-L830-CD1-U HE WILLIAMS #75S-2-L15-8-30-VRF/DSR-120 ELITE #2-OC4-LED-2000L-DIM10-120-30K-85 LITHONIA #ZL1N-L24-1500LM-FST-MVOLT-30K-80CRI-WH	1,2,3,4
CS5	5" ARCHITECTURAL SURFACE MOUNT DOWNLIGHT. COORDINATE FINISH COLOR WITH ARCHITECT AT SUBMITTAL OF LUMINAIRES.	120	SURFACE	LED, 3000K, 15 MAX WATTS, 900 MINIMUM DELIVERED LUMENS	LED DRIVER 0-10V DIMMING	NONE	POLYCARBONATE FROSTED WHITE	SUNLITE #LFX/MP/7R/15W/E/D/SCT/WH LITON #LCMPD5R-XX-UE-D10-T30 PROGRESS #P810015-030-30 JUNO #JSF-7IN 10LM-30K-90CRI-MVOLT ZT-WH	1,3,4
D1S	23" SLIM WALL AND VANITY LED LUMINAIRE.	120	WALL MOUNTED AT 7'-6" AFF	LED, 3000K, 20 MAX WATTS, 755 MINIMUM DELIVERED LUMENS	LED DRIVER 0-10V DIMMING	NONE	WHITE ACRYLIC DIFFUSER	SUNLITE #LFX/BAR/20W/30K/18"/CH/D/ACRYL KUZCO #VL10323-BN TLI #8900SP-V6922D-60-3000K BROWNLEE #1575S-24-BN-H16-30K	1,3,4
F	SLIM, LOW PROFILE, FULLY GASKETED DIE CAST ENCLOSURE, IP65 WET LOCATION RATED, HIGH IMPACT UV RESISTANT POLYCARBONATE LENS, FULL CUT OFF. COORDINATE FINISH COLOR WITH ARCHITECT AT SUBMITTAL OF LUMINAIRES.	120	EXTERIOR WALL SURFACE MOUNT AT 7'-0" AFF.	LED, 4000K, 36 MAX WATTS, 2900 MINIMUM DELIVERED LUMENS	LED DRIVER	NONE	IMPACT RESISTANT UV RESISTANT POLYCARBONATE	LUMARK #AXCS-3A-XX HEW #VWPV-L30/740-TFT-XX-SDGL-HSGX-DIM-UNV TRACELITE #WLZ2-4-4K-XX-BB LITHONIA #WPX1 LED P2-40K-MVOLT-XXX	1,2,3,4
P	SINGLE LED PENDANT, SLEEK CONICAL SHAPE WITH CLEAR ACRYLIC DIFFUSER. COORDINATE FINISH COLOR WITH ARCHITECT AT SUBMITTAL REVIEW.	120	PENDANT MOUNTED SO THAT BOTTOM OF LUMINAIRE IS AT HEIGHT AS DIRECTED BY ARCHITECT.	LED, 3000K, 10 MAX WATTS, 320 MINIMUM DELIVERED LUMENS	LED DRIVER 0-10V DIMMING 90 CRI	NONE	CLEAR ACRYLIC DIFFUSER	HEMERA #AIM-FINISH-60-LED-3W/90/30K-D010-UNV KUZCO #MINA 401215-LED TERON #OPL1-L6.5-LT350-120V-ELV-FINISH-30K MODERN FORMS #PD-418XX-XX	1,2,3,4
SF	LED LUMINAIRE AND FAN. COORDINATE FINISH COLOR WITH ARCHITECT AT SUBMITTAL OF LUMINAIRES.	120	SURFACE	LED, 3000K, 18 MAX WATTS, 1100 MINIMUM DELIVERED LUMENS	LED DRIVER 0-10V DIMMING	NONE	SATIN WHITE GLASS	RP LIGHTING #1079LED-XX EMERSON #CF252L-XX	1,3,4
SP2	ROUND POST TOP LUMINAIRE ON A STEEL POLE, SINGLE HEAD, DIE CAST ALUMINUM HOUSING, GASKETED DOOR, FOUR INSET QUICK RELEASE FASTENERS FOR EASY RELAMPING. TYPE 2 DISTRIBUTION, HORIZONTAL FULL CUT OFF, ROUND STRAIGHT POLE AND DARK SKY COMPLIANT. COORDINATE FINISH COLOR WITH ARCHITECT AT SUBMITTAL OF LUMINAIRES. PROVIDE FUSES AT BOTTOM OF POLE.	240V	POST TOP MOUNTED TO 16'-0" HIGH, 4" DIAMETER ROUND STEEL POLE ON 2'-0" HIGH CONCRETE PEDESTAL	LED, 4000K, 151 MAX WATTS, 9000 MINIMUM DELIVERED LUMENS	LED DRIVER	NONE	FLAT, CLEAR, HIGH IMPACT, TEMPERED GLASS	INVUE #(1) MSA-F05-LED-E1-SL2-CBA / VALMONT #DS340-400V160-FP-LG-V1-GROUND-KIT GARDCO #(1) SFRP-T2-4-105LA-6453-NW-UNV-AR-CBA-LF / HAPCO #RSS-16-B-4-4-XXX CREE #(1) ARE-EDR-2M-RX-06-E-UL-XX-525-40K / SPAULDING #RSS-S-16-40-A-PS LITHONIA #(1) MRP LED-42C-1000-40K-SR2-MVOLT-SF-CBA / LITHONIA #RSS-16-4B-DNA	1,3,4
SP4	ROUND POST TOP LUMINAIRE ON A STEEL POLE, SINGLE HEAD, DIE CAST ALUMINUM HOUSING, GASKETED DOOR, FOUR INSET QUICK RELEASE FASTENERS FOR EASY RELAMPING. TYPE 4 DISTRIBUTION, HORIZONTAL FULL CUT OFF, ROUND STRAIGHT POLE AND DARK SKY COMPLIANT. COORDINATE FINISH COLOR WITH ARCHITECT AT SUBMITTAL OF LUMINAIRES. PROVIDE FUSES AT BOTTOM OF POLE.	240V	POST TOP MOUNTED TO 16'-0" HIGH, 4" DIAMETER ROUND STEEL POLE ON 2'-0" HIGH CONCRETE PEDESTAL	LED, 4000K, 151 MAX WATTS, 9000 MINIMUM DELIVERED LUMENS	LED DRIVER	NONE	FLAT, CLEAR, HIGH IMPACT, TEMPERED GLASS	INVUE #(1) MSA-F05-LED-E1-SL4-CBA / VALMONT #DS340-400V160-FP-LG-V1-GROUND-KIT GARDCO #(1) SFRP-T3-4-105LA-6453-NW-UNV-AR-CBA-LF / HAPCO #RSS-16-B-4-4-XXX CREE #(1) ARE-EDR-4M-RX-06-E-UL-XX-525-40K / SPAULDING #RSS-S-16-40-A-PS LITHONIA #(1) MRP LED-42C-1000-40K-SR4-MVOLT-SF-CBA / LITHONIA #RSS-16-4B-DNA	1,3,4

Run	Feeder or Branch Circuit Run:	Type of Circuit	Voltage	Phase	Conductor Material	Length (ft)	Size	Load Current (Amps)	Qty Parrallel Runs	Load on feeder	Resistance	Voltage Drop	End Voltage	% Voltage Drop Feeder	% Voltage Drop Branch
1	UTILITY TO 1A	Feeder	240	1	C	60	3/0	200	1	200	0.077	**1.84**	**238.16**	**0.77%**	
2	UTILITY TO 1B	Feeder	240	1	C	90	3/0	200	1	200	0.077	**2.76**	**237.24**	**1.15%**	
3	UTILITY TO 1C	Feeder	240	1	C	80	3/0	200	1	200	0.077	**2.45**	**237.55**	**1.02%**	
4	UTILITY TO 1D	Feeder	240	1	C	50	3/0	200	1	200	0.077	**1.53**	**238.47**	**0.64%**	
5	UTILITY TO 1E	Feeder	240	1	C	50	3/0	200	1	200	0.077	**1.53**	**238.47**	**0.64%**	
6	UTILITY TO 1F	Feeder	240	1	C	60	3/0	200	1	200	0.077	**1.84**	**238.16**	**0.77%**	
7	UTILITY TO 1G	Feeder	240	1	C	105	3/0	200	1	200	0.077	**3.22**	**236.78**	**1.34%**	
8	UTILITY TO 1H	Feeder	240	1	C	135	3/0	200	1	200	0.077	**4.14**	**235.86**	**1.72%**	
9	UTILITY TO 1J	Feeder	240	1	C	105	3/0	200	1	200	0.077	**3.22**	**236.78**	**1.34%**	
10	UTILITY TO 1K	Feeder	240	1	C	75	3/0	200	1	200	0.077	**2.30**	**237.70**	**0.96%**	
11	UTILITY TO 2A	Feeder	240	1	C	65	3/0	200	1	200	0.077	**1.99**	**238.01**	**0.83%**	
12	UTILITY TO 2B	Feeder	240	1	C	95	3/0	200	1	200	0.077	**2.91**	**237.09**	**1.21%**	
13	UTILITY TO 2C	Feeder	240	1	C	145	3/0	200	1	200	0.077	**4.44**	**235.56**	**1.85%**	
14	UTILITY TO 2D	Feeder	240	1	C	175	3/0	200	1	200	0.077	**5.36**	**234.64**	**2.23%**	
15	UTILITY TO 2E	Feeder	240	1	C	105	3/0	200	1	200	0.077	**3.22**	**236.78**	**1.34%**	
16	UTILITY TO 2F	Feeder	240	1	C	75	3/0	200	1	200	0.077	**2.30**	**237.70**	**0.96%**	
17	UTILITY TO 2G	Feeder	240	1	C	65	3/0	200	1	200	0.077	**1.99**	**238.01**	**0.83%**	
18	UTILITY TO 2H	Feeder	240	1	C	95	3/0	200	1	200	0.077	**2.91**	**237.09**	**1.21%**	
19	UTILITY TO 2J	Feeder	240	1	C	90	3/0	200	1	200	0.077	**2.76**	**237.24**	**1.15%**	
20	UTILITY TO 2K	Feeder	240	1	C	35	3/0	200	1	200	0.077	**1.07**	**238.93**	**0.45%**	
21	UTILITY TO 3A	Feeder	240	1	C	110	250	250	1	250	0.052	**2.83**	**237.17**	**1.18%**	
22	UTILITY TO 3B	Feeder	240	1	C	95	250	250	1	250	0.052	**2.45**	**237.55**	**1.02%**	
23	UTILITY TO 3C	Feeder	240	1	C	45	250	250	1	250	0.052	**1.16**	**238.84**	**0.48%**	
24	UTILITY TO 3D	Feeder	240	1	C	85	250	250	1	250	0.052	**2.19**	**237.81**	**0.91%**	
25	UTILITY TO 3E	Feeder	240	1	C	95	250	250	1	250	0.052	**2.45**	**237.55**	**1.02%**	
26	UTILITY TO 3F	Feeder	240	1	C	50	250	250	1	250	0.052	**1.29**	**238.71**	**0.54%**	
27	UTILITY TO 3G	Feeder	240	1	C	90	250	250	1	250	0.052	**2.32**	**237.68**	**0.97%**	
28	UTILITY TO 3H	Feeder	240	1	C	85	250	250	1	250	0.052	**2.19**	**237.81**	**0.91%**	
29	UTILITY TO 3J	Feeder	240	1	C	30	250	250	1	250	0.052	**0.77**	**239.23**	**0.32%**	
30	UTILITY TO MAINT	Feeder	240	1	C	40	3/0	200	1	200	0.077	**1.23**	**238.77**	**0.51%**	
31	UTILITY TO TS	Feeder	240	1	C	30	10	30	1	30	1.240	**2.23**	**237.77**	**0.93%**	
32	TS TO SOUTH ROAD SITE POLES	Branch	240	1	C	625	10	4	1	4	1.240	**6.20**	**233.80**		**2.58%**
33	TS TO HOUSING SITE POLES	Branch	240	1	C	450	10	5	1	5	1.240	**5.58**	**234.42**		**2.33%**
34	TS TO WALKWAY SITE POLES	Branch	240	1	C	325	10	2	1	2	1.240	**1.61**	**238.39**		**0.67%**

A2 VOLTAGE DROP CALCULATION
NO SCALE

Source	DESCRIPTION
UNKNOWN	**Assumes infinite primary. Fault Current at Service entrance transformer secondary**

Fault Point	Equipment	SES Size (Amps):	XFMR Size (kVA):	XFMR mounting:	Primary Voltage:	Secondary Voltage:	Phase	Xfmr FLA (Amps):	Xfmr Impedence (Ohms):	Xfmr Impedence adjusted value:	Multiplier	Let-Thru Short Curcuit Current	Manual input Let-Thru Short Curcuit Current
SF	SES	200	75	PAD	12470	240	1	313	1.60		62.50	**19531**	

KNOWN FAULT INFORMATION: Fault Point	Equipment	Source of Fault	Available Fault Current	Voltage:	PHASE:	SECOND TRANSFORMER IN SYSTEM (DRY-TYPE): XFMR Size (kVA):	Secondary Voltage:	Xfmr Impedence (Ohms):	Xfmr Impedence (user input):	"f" factor	"M" factor	FEEDER/BRANCH CIRCUIT CALCULATION: Conductor Type	Conductor Size	3 single conductors?	Conduit Type	Number of sets	Length to fault	"C" value	"f" factor	"M" factor	RESULT: Available Short Circuit Current at Fault:
F1	1A	UTILITY	19531	240	1							C	3/0	Y	S	1	60	12844	0.760	0.568	**11095**
F2	1B	UTILITY	19531	240	1							C	3/0	Y	S	1	90	12844	1.140	0.467	**9125**
F3	1C	UTILITY	19531	240	1							C	3/0	Y	S	1	80	12844	1.014	0.497	**9699**
F4	1D	UTILITY	19531	240	1							C	3/0	Y	S	1	50	12844	0.634	0.612	**11956**
F5	1E	UTILITY	19531	240	1							C	3/0	Y	S	1	50	12844	0.634	0.612	**11956**
F6	1F	UTILITY	19531	240	1							C	3/0	Y	S	1	60	12844	0.760	0.568	**11095**
F7	1G	UTILITY	19531	240	1							C	3/0	Y	S	1	105	12844	1.331	0.429	**8380**
F8	1H	UTILITY	19531	240	1							C	3/0	Y	S	1	135	12844	1.711	0.369	**7205**
F9	1J	UTILITY	19531	240	1							C	3/0	Y	S	1	105	12844	1.331	0.429	**8380**
F10	1K	UTILITY	19531	240	1							C	3/0	Y	S	1	75	12844	0.950	0.513	**10014**
F11	2A	UTILITY	19531	240	1							C	3/0	Y	S	1	65	12844	0.824	0.548	**10710**
F12	2B	UTILITY	19531	240	1							C	3/0	Y	S	1	95	12844	1.204	0.454	**8862**
F13	2C	UTILITY	19531	240	1							C	3/0	Y	S	1	145	12844	1.837	0.352	**6883**
F14	2D	UTILITY	19531	240	1							C	3/0	Y	S	1	175	12844	2.218	0.311	**6070**
F15	2E	UTILITY	19531	240	1							C	3/0	Y	S	1	105	12844	1.331	0.429	**8380**
F16	2F	UTILITY	19531	240	1							C	3/0	Y	S	1	75	12844	0.950	0.513	**10014**
F17	2G	UTILITY	19531	240	1							C	3/0	Y	S	1	65	12844	0.824	0.548	**10710**
F18	2H	UTILITY	19531	240	1							C	3/0	Y	S	1	95	12844	1.204	0.454	**8862**
F19	2J	UTILITY	19531	240	1							C	3/0	Y	S	1	90	12844	1.140	0.467	**9125**
F20	2K	UTILITY	19531	240	1							C	3/0	Y	S	1	35	12844	0.444	0.693	**13530**
F21	3A	UTILITY	19531	240	1							C	250	Y	S	1	110	16483	1.086	0.479	**9362**
F22	3B	UTILITY	19531	240	1							C	250	Y	S	1	95	16483	0.938	0.516	**10078**
F23	3C	UTILITY	19531	240	1							C	250	Y	S	1	45	16483	0.444	0.692	**13523**
F24	3D	UTILITY	19531	240	1							C	250	Y	S	1	85	16483	0.839	0.544	**10619**
F25	3E	UTILITY	19531	240	1							C	250	Y	S	1	95	16483	0.938	0.516	**10078**
F26	3F	UTILITY	19531	240	1							C	250	Y	S	1	50	16483	0.494	0.669	**13076**
F27	3G	UTILITY	19531	240	1							C	250	Y	S	1	90	16483	0.889	0.529	**10341**
F28	3H	UTILITY	19531	240	1							C	250	Y	S	1	85	16483	0.839	0.544	**10619**
F29	3J	UTILITY	19531	240	1							C	250	Y	S	1	30	16483	0.296	0.771	**15068**
F30	MAINT	UTILITY	19531	240	1							C	3/0	Y	S	1	40	12844	0.507	0.664	**12961**
F31	TS	UTILITY	19531	240	1							C	10	Y	S	1	30	981	4.977	0.167	**3268**

A4 FAULT CURRENT CALCULATION
NO SCALE

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SEAL
38934 JOHN M. MONTANO
EXPIRES 03/31/2021

PROJECT

Teacherages
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME
ELECTRICAL SCHEDULES

SHEET NO
E-701

Branch Panel: 1A

Location: BEDROOM 108
Supply From:
Mounting: Recessed
Enclosure: Type 1

Volts: 120/240 Single
Phases: 1
Wires: 3
Spaces: 30

MINIMUM A.I.C. Rating: 18,000
Mains Type: MLO
Mains Rating: 200 A

Notes: 1) TYPICAL FOR ALL 1BD/1BA UNITS. 2) PROVIDE ARC FAULT CIRCUIT PROTECTION AS REQUIRED BY N.E.C.

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LM MECH. 103 HP-1	45 A	2	3840 VA	900 VA			1	20 A	REC LIVING/DINING 100, EXTERIOR	2
3	--	--	--			3840 VA	720 VA	1	20 A	REC BEDROOM 108	4
5	KIT KITCHEN 101 RANGE/OVEN	60 A	2	5850 VA	900 VA			1	20 A	REC HALL 105, MUD/LAUNDRY 106, STORAGE 110, EXTERIOR	6
7	--	--	--			5850 VA	1200 VA	1	20 A	REC BATH 107	8
9	NC MUD/LAUNDRY 106 DRYER	30 A	2	2700 VA	840 VA			1	20 A	REC KITCHEN 101, KIT HOOD	10
11	--	--	--			2700 VA	540 VA	1	20 A	REC KITCHEN 101	12
13	MTR MECH. 103 EWH-1	30 A	2	2520 VA	745 VA			1	20 A	KIT KITCHEN 101 DISHWASHER	14
15	--	--	--			2520 VA	500 VA	1	20 A	KIT KITCHEN 101 DISPOSAL	16
17	MTR CU-1	25 A	2	1344 VA	1000 VA			1	20 A	KIT KITCHEN 101 FRIDGE	18
19	--	--	--			1344 VA	1500 VA	1	20 A	KIT KITCHEN 101 MICROWAVE	20
21	SPARE	20 A	1	0 VA	1000 VA			1	20 A	NC MUD/LAUNDRY 106 WASHER	22
23	SPARE	20 A	1			0 VA	401 VA	1	20 A	LTG LIGHTING, MTR CLG EXHAUST FANS	24
25	SPARE	20 A	1	0 VA	0 VA			1	20 A	NC HALL 105 FIRE ALARM PANEL	26
27	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	28
29	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	30
			Total Load:	21639 VA		21115 VA					
			Total Amps:	180 A		176 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
NC	6400 VA	100.00%	6400 VA		
MTR	7803 VA	100.00%	7803 VA	**Total Conn. Load:**	42754 VA
LM	7680 VA	100.00%	7680 VA	**Total Est. Demand:**	37243 VA
REC	4800 VA	100.00%	4800 VA	**Total Conn. Current:**	178 A
KIT	15745 VA	65.00%	10234 VA	**Total Est. Demand Current:**	155 A
LTG	326 VA	100.00%	326 VA		

Branch Panel: 2A

Location: BEDROOM 210
Supply From:
Mounting: Recessed
Enclosure: Type 1

Volts: 120/240 Single
Phases: 1
Wires: 3
Spaces: 30

MINIMUM A.I.C. Rating: 18,000
Mains Type: MLO
Mains Rating: 200 A

Notes: 1) TYPICAL FOR ALL 2BD/1BA UNITS. 2) PROVIDE ARC FAULT CIRCUIT PROTECTION AS REQUIRED BY N.E.C.

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LM MECH. 204 HP-3	60 A	2	4800 VA	900 VA			1	20 A	REC LIVING/DINING 200, EXTERIOR	2
3	--	--	--			4800 VA	720 VA	1	20 A	REC BEDROOM 210	4
5	KIT KITCHEN 201 RANGE/OVEN	60 A	2	5850 VA	720 VA			1	20 A	REC BEDROOM 206	6
7	--	--	--			5850 VA	1200 VA	1	20 A	REC BATH 209	8
9	NC MUD/LAUNDRY 203 DRYER	30 A	2	2700 VA	1080 VA			1	20 A	REC MUD/LAUNDRY 203, HALL 208, STORAGE 212, EXTERIOR	10
11	--	--	--			2700 VA	540 VA	1	20 A	REC KITCHEN 201	12
13	MTR MECH. 204 EWH-2	30 A	2	2520 VA	840 VA			1	20 A	REC KITCHEN 201, KIT HOOD	14
15	--	--	--			2520 VA	745 VA	1	20 A	KIT KITCHEN 201 DISHWASHER	16
17	MTR CU-3	25 A	2	1632 VA	500 VA			1	20 A	KIT KITCHEN 201 DISPOSAL	18
19	--	--	--			1632 VA	1000 VA	1	20 A	KIT KITCHEN 201 FRIDGE	20
21	SPARE	20 A	1	0 VA	1500 VA			1	20 A	KIT KITCHEN 201 MICROWAVE	22
23	SPARE	20 A	1			0 VA	1000 VA	1	20 A	NC WASHER	24
25	SPARE	20 A	1	0 VA	446 VA			1	20 A	LTG LIGHTING, MTR CLG EXHAUST FANS	26
27	SPARE	20 A	1			0 VA	200 VA	1	20 A	NC MUD/LAUNDRY 203 FIRE ALARM PANEL	28
29	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	30
			Total Load:	23488 VA		22907 VA					
			Total Amps:	196 A		191 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
NC	6600 VA	100.00%	6600 VA		
MTR	8379 VA	100.00%	8379 VA	**Total Conn. Load:**	46395 VA
LM	9600 VA	100.00%	9600 VA	**Total Est. Demand:**	40884 VA
REC	5700 VA	100.00%	5700 VA	**Total Conn. Current:**	193 A
KIT	15745 VA	65.00%	10234 VA	**Total Est. Demand Current:**	170 A
LTG	371 VA	100.00%	371 VA		

Branch Panel: 3A

Location: BEDROOM 313
Supply From:
Mounting: Recessed
Enclosure: Type 1

Volts: 120/240 Single
Phases: 1
Wires: 3
Spaces: 30

MINIMUM A.I.C. Rating: 22,000
Mains Type: MLO
Mains Rating: 250 A

Notes: 1) TYPICAL FOR ALL 3BD/2BA UNITS. 2) PROVIDE ARC FAULT CIRCUIT PROTECTION AS REQUIRED BY N.E.C.

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LM MECH. 307 HP-5	90 A	2	7200 VA	1080 VA			1	20 A	REC LIVING/DINING 300, BEDROOM 302, EXTERIOR	2
3	--	--	--			7200 VA	1080 VA	1	20 A	REC LIVING/DINING 300, BEDROOM 313	4
5	KIT KITCHEN 304 RANGE/OVEN	60 A	2	5850 VA	1080 VA			1	20 A	REC BEDROOM 310/313, EXTERIOR	6
7	--	--	--			5850 VA	1080 VA	1	20 A	REC MUD/LAUNDRY 306, HALL 311, STORAGE 315, EXTERIOR	8
9	NC MUD/LAUNDRY 306 DRYER	30 A	2	2700 VA	1200 VA			1	20 A	REC BATH 303	10
11	--	--	--			2700 VA	1200 VA	1	20 A	REC BATH 303	12
13	MTR MECH. 307 EWH-3	30 A	2	2520 VA	1200 VA			1	20 A	REC BATH 312	14
15	--	--	--			2520 VA	540 VA	1	20 A	REC KITCHEN 304	16
17	MTR CU-5	30 A	2	1728 VA	840 VA			1	20 A	REC KITCHEN 304, KIT HOOD	18
19	--	--	--			1728 VA	745 VA	1	20 A	KIT KITCHEN 304 DISHWASHER	20
21	SPARE	20 A	1	0 VA	500 VA			1	20 A	KIT KITCHEN 304 DISPOSAL	22
23	SPARE	20 A	1			0 VA	1000 VA	1	20 A	KIT KITCHEN 304 FRIDGE	24
25	SPARE	20 A	1	0 VA	1500 VA			1	20 A	KIT KITCHEN 304 MICROWAVE	26
27	SPARE	20 A	1			0 VA	1000 VA	1	20 A	NC MUD/LAUNDRY 306 WASHER	28
29	NC MUD/LAUNDRY 306 FIRE ALARM PANEL	20 A	1	200 VA	591 VA			1	20 A	LTG LIGHTING, MTR CLG EXHAUST FANS	30
			Total Load:	28189 VA		26643 VA					
			Total Amps:	235 A		222 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
NC	6600 VA	100.00%	6600 VA		
MTR	8596 VA	100.00%	8596 VA	**Total Conn. Load:**	54832 VA
LM	14400 VA	100.00%	14400 VA	**Total Est. Demand:**	49321 VA
REC	9000 VA	100.00%	9000 VA	**Total Conn. Current:**	228 A
KIT	15745 VA	65.00%	10234 VA	**Total Est. Demand Current:**	206 A
LTG	491 VA	100.00%	491 VA		

Branch Panel: TS

Location:
Supply From:
Mounting: UNISTRUT
Enclosure: NEMA 3R

Volts: 120/240 Single
Phases: 1
Wires: 3
Spaces: 12

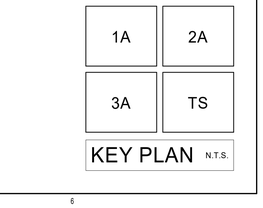
MINIMUM A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 30 A
MCB Rating: 30 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LTG-EXT SW ROAD SITE POLES	20 A	2	375 VA	200 VA			1	20 A	NC TIMECLOCK	2
3	--	--	--			375 VA	0 VA	1	20 A	SPARE	4
5	LTG-EXT MAIN ROAD SITE POLES	20 A	2	525 VA	0 VA			1	20 A	SPARE	6
7	--	--	--			525 VA	0 VA	--	--	SPACE ONLY	8
9	LTG-EXT WALKWAY SITE POLES	20 A	2	150 VA	0 VA			--	--	SPACE ONLY	10
11	--	--	--			150 VA	0 VA	--	--	SPACE ONLY	12
			Total Load:	1250 VA		1050 VA					
			Total Amps:	10 A		9 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
NC	200 VA	100.00%	200 VA		
LTG-EXT	2100 VA	125.00%	2625 VA	**Total Conn. Load:**	2300 VA
				Total Est. Demand:	2825 VA
				Total Conn. Current:	10 A
				Total Est. Demand Current:	12 A



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SEAL

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	MJL
REVIEWED BY	JM
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

ELECTRICAL PANEL SCHEDULES

SHEET NO

E-702

Bridgers & Paxton Project No: 8183 12/8/2020 8:19:33 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_mjlovejoy@bpce.com.rvt

TECHNOLOGY SYMBOL LEGEND

(NOT ALL SYMBOLS APPLY TO THIS PROJECT)

ABBREVIATIONS

ABBREV.	DEFINITION
A	AMPS, AMPERE, AMPERAGE
AC	ABOVE COUNTER
A/C	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AVAILABLE INTERRUPTING CURRENT
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ATSC	AUTOMATIC TRANSFER SWITCH CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
A/V	AUDIO/VISUAL
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CL	CLOCK
CLF	CURRENT LIMITING FUSE
CO	CONDUIT ONLY
CU	COPPER
D	DIMMING
DC	DIRECT CURRENT
DL	DAY-LIGHTING
DIA	DIAMETER
E	EMERGENCY
EC	EMERGENCY, CRITICAL
EG	ENGINE GENERATOR
EL	EMERGENCY, LIFE SAFETY
EQ	EMERGENCY, EQUIPMENT
EX	EXISTING
FUT	FUTURE
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FDR	FEEDER
FMS	FACILITY MANAGEMENT SYSTEM
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
G OR GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFEP	GROUND FAULT EQUIPMENT PROTECTION
GFP	GROUND FAULT PROTECTION
GND	GROUND.
HOA	HAND-OFF-AUTOMATIC.
HP	HORSEPOWER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IG	ISOLATED GROUND
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPS
KVAR	KILOVOLT AMPS REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR.
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, AND GROUND FAULT PROTECTION
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
MH	MANHOLE
MM	MIXED MEDIA
MTS	MANUAL TRANSFER SWITCH
MVA	MEGAVOLT AMPS
N	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT	NEUTRAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NORMAL
NM	NEW MEXICO
NO	NORMALLY OPEN
O/H	OVERHEAD
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
P	POLE
PA	PUBLIC ADDRESS
PC	PHOTOCELL
PH	PHASE
PMCS	POWER MONITORING AND CONTROL SYSTEM
R	REMOVED/REMOVAL
RC	ROOM CONTROLLER
RSC	RIGID STEEL CONDUIT
SEC	SECURITY
SPD	SURGE PROTECTIVE DEVICE
SW	SWITCH
TEMP	TEMPORARY
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
TYP.	TYPICAL
UC	UNDER COUNTER
U/G	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTABLE POWER SUPPLY
V	VOLTS, VOLTAGE
VFD	VARIABLE FREQUENCY DRIVE
VR	VANDAL RESISTANT
W	WALL MOUNTED
WG	WEATHERPROOF AND GFCI
WP	WEATHERPROOF
XFER	TRANSFER
XFMR (TRANSF)	TRANSFORMER

RACEWAY & CONDUCTORS

BRANCH CIRCUIT GENERAL INFORMATION:

BRANCH CIRCUITS FROM OVERCURRENT PROTECTION (20A) TO FURTHEST DEVICE SHALL NOT EXCEED 75 FEET FOR #12AWG COPPER AND 150 FEET FOR #10AWG COPPER; MEASURED ALONG CONDUCTORS ROUTING PATH. BRANCH CIRCUITS EXCEEDING 150 FEET WILL BE SIZED SO THAT VOLTAGE DROP DOES NOT EXCEED 5%.

SYMBOL	DESCRIPTION
= GROUND = HOT/PHASE = NEUTRAL = SWITCH LEG	CONDUCTOR IDENTIFICATION SYMBOLS. REFER TO PLANS FOR COMBINATION USE. CONDUCTOR IDENTIFICATION MOSTLY USED IN HOMERUN LOCATION, BUT CAN ALSO BE USED IN BRANCH CIRCUITING WHERE APPLIED. GROUND CONDUCTORS WILL BE INSTALLED IN ALL RACEWAYS WHETHER SHOWN OR NOT.
LA-1	HOMERUN FROM EQUIPMENT LOCATION. THE CIRCUIT NUMBER ADJACENT TO HOMERUN INDICATES PANEL SOURCE AND INDIVIDUAL SINGLE POLE CIRCUIT BREAKER(S). CONDUCTOR IDENTIFICATION SYMBOL INDICATES NUMBER OF CONDUCTORS IN HOMERUN. MINIMUM #12 CONDUCTORS AND 3/4" RACEWAY PATH WILL BE PROVIDED IN HOMERUN UON. ALL HOMERUNS WILL INCLUDE GROUND CONDUCTOR.
LA-1,3 LA-5,7,9	HOMERUN FROM EQUIPMENT LOCATION. THE CIRCUIT NUMBER ADJACENT TO HOMERUN INDICATES PANEL SOURCE AND INDIVIDUAL SINGLE POLE CIRCUIT BREAKER(S). SYMBOL REPRESENTS A MULTI-BRANCH CIRCUIT. NUMBER OF CONDUCTORS IN HOMERUN WILL INCLUDE A SEPARATE NEUTRAL FOR EACH CIRCUIT PHASE CONDUCTOR. MINIMUM #12 CONDUCTORS AND 3/4" RACEWAY PATH WILL BE PROVIDED IN HOMERUN UON. ALL HOMERUNS WILL INCLUDE GROUND CONDUCTOR.
LA-7 LA-13	HOMERUN FROM EQUIPMENT LOCATION. THE CIRCUIT NUMBER ADJACENT TO HOMERUN INDICATES PANEL SOURCE AND INDIVIDUAL TWO OR THREE POLE CIRCUIT BREAKERS. CONDUCTOR IDENTIFICATION SYMBOL INDICATES NUMBER OF CONDUCTORS IN HOMERUN. MINIMUM #12 CONDUCTORS AND 3/4" RACEWAY PATH WILL BE PROVIDED IN HOMERUN UON. NEUTRAL MAY BE USED WHERE INDICATED ON PLAN. ALL HOMERUNS WILL INCLUDE GROUND CONDUCTOR.
	CONCEALED RACEWAY BETWEEN DEVICES AND OR EQUIPMENT IN WALLS OR IN CEILING SPACE
	UNDERGROUND RACEWAY BETWEEN DEVICES AND OR EQUIPMENT
	EXPOSED RACEWAY BETWEEN DEVICES AND OR EQUIPMENT ON WALLS OR CEILINGS
DOWN UP	CONDUIT TURNS
	CONDUIT STUBBED AND CAPPED
B	BUSWAY
G	GROUNDING CONDUCTOR
	CABLE TRAY - POWER AND TELECOMMUNICATIONS
T	TELECOMMUNICATIONS RACEWAY
D	DATA RACEWAY
V/D	VOICE/DATA COMBINATION RACEWAY
FA	FIRE ALARM RACEWAY

EQUIPMENT

SYMBOL	DESCRIPTION
MSB	MAIN SWITCHBOARD. DASHED LINES INDICATE CLEARANCES.
DB	DISTRIBUTION BOARD. DASHED LINES INDICATE CLEARANCES.
H1A	FLUSH MOUNTED PANELBOARD. DASHED LINES INDICATE CLEARANCES.
L1A	SURFACE MOUNTED PANELBOARD. DASHED LINES INDICATE CLEARANCES.
MCC	MOTOR CONTROL CENTER. DASHED LINES INDICATE CLEARANCES.
T1A	DRY TYPE TRANSFORMER (15kVA OR ABOVE), WITH EQUIPMENT TAG (TAG INSIDE OR OUTSIDE, DEPENDING ON SIZE). IN MOST CASES, ACTUAL SIZE SHOWN ON PLANS (ELECTRICAL ROOMS).
T	DRY TYPE TRANSFORMER (LESS THAN 15kVA), WITH NO EQUIPMENT TAG. SIZE, TYPE AND LOCATION NOTED ON PLANS.
VF	VARIABLE FREQUENCY DRIVE
D UPS-A	UNINTERRUPTABLE POWER SUPPLY. DASHED LINES INDICATE CLEARANCES.
ATS-1	AUTOMATIC TRANSFER SWITCH. DASHED LINES INDICATE CLEARANCES.
G	GROUND BAR

REFERENCE TAGS

SYMBOL	DEFINITION
	KEYED NOTE REFERENCE
VAV-9	MECHANICAL EQUIPMENT REFERENCE
+44"	DENOTES MOUNTING HEIGHT AFF
	KITCHEN EQUIPMENT REFERENCE
	MEDICAL EQUIPMENT REFERENCE

SPECIAL SYSTEMS

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
	4 PORT FLOOR BOX WITH POWER AND DATA	FLOOR	VARIES SEE PLANS
Jxx	4 PORT FLOOR BOX WITH A/V. REFER TO J-BOX SCHEDULE ON 600 SERIES SHEETS.		
	2 PORT VOICE/DATA OUTLET	WALL	+18" UON
AC	2 PORT VOICE/DATA OUTLET ABOVE COUNTER TOP	WALL	+44" UON
W	TELEPHONE OUTLET WALL MOUNTED	WALL	+44" UON
IC	INTERCOM CALL SWITCH		
ICM	INTERCOM MASTER STATION		
VR	POLYCARBONITE VANDAL RESISTANT COVER		
S	COMMUNICATION HORN	WALL	+84" UON
B	COMMUNICATION BELL		
S	WALL SPEAKER	WALL	+108 UON
DA	DURESS ALARM PUSHBUTTON	WALL	SEE PLANS
LD	LOCK DOWN PUSHBUTTON		
J Jx	A/V JUNCTION BOX. REFER TO J-BOX SCHEDULE ON 600 SERIES SHEETS.	WALL	SEE PLANS
Jx Jx Jx J J J	A/V J- BOXES STACKED VERTICALLY. REFER TO J-BOX SCHEDULE ON 600 SERIES SHEETS.		
C S	COMBINATION CLOCK/SPEAKER. MOUNTED ABOVE AND CENTER TO WRITING/TACK BOARD	WALL	SEE PLANS
DSVD	DIGITAL SIGNAGE VIDEO DISPLAY	WALL	SEE PLANS
VP	VIDEO PROJECTOR	REFER TO	
S 2	CEILING SPEAKER: LOCAL SOUND SYSTEM	CEILING	FLUSH
S IC	CEILING SPEAKER: INTERCOM SYSTEM		
	CABLE TRAY FOR COMMUNICATIONS	ABOVE CEILING	SEE PLANS
J	J-HOOK ROUTING PATH		
	2 PORT CEILING MOUNTED VOICE/DATA OUTLET		
WAP	WIRELESS ACCESS POINT		
Jx J	CEILING MOUNTED A/V JUNCTION BOX. REFER TO J-BOX SCHEDULE ON 600 SERIES SHEETS.		

SECURITY

SYMBOL	DESCRIPTION	MOUNTING LOC.	MOUNTING HT.
CR	CARD READER.	WALL, UON	+44" UON
KP	KEY PAD		
	EXTERIOR SECURITY CAMERA	VARIES	SEE PLANS
	INTERIOR SECURITY CAMERA	VARIES	SEE PLANS
	INTERIOR SECURITY CAMERA 180°		
	INTERIOR SECURITY CAMERA 360°		
G	GLASS BREAK DETECTOR	WINDOW	SEE PLANS
MD	MOTION DETECTOR	CEILING	SEE PLANS
DS	DOOR SWITCH	DOOR	SEE PLANS
ES	ELECTRIC STRIKE		
M	MAGNETIC LOCK		

DEMOLITION

SYMBOL	DESCRIPTION	NOTES
	DASHED SYMBOL INDICATES EXISTING DEVICE OR EQUIPMENT TO BE REMOVED	REFER TO DEMOLITION PLANS FOR ADDITIONAL INFORMATION
R	REMOVE EXISTING RACEWAY IN ALL ACCESSIBLE AREAS. CAPPED AND ABANDONED IF IN UNACCESSIBLE AREA	
	SOLID SYMBOL, LIGHTER IN COLOR INDICATES EXISTING DEVICE OR EQUIPMENT TO REMAIN	
EX	EXISTING CONDUIT TO BE REUSED	

GENERAL DRAWING SYMBOLS

A / E4	SECTION/ELEVATION LETTER OR DETAIL NUMBER
6 / E4	DRAWING NUMBER WHERE DETAILED
6 / E3 E4	SECTION/ELEVATION LETTER OR DETAIL NUMBER
A / E3 E4	DRAWING NUMBER WHERE DETAILED
	DRAWING NUMBER WHERE TAKEN
NORTH	NORTH ARROW OR MATCH ARCHITECT'S
0 10' 20' 40' 80' 1" = 40'-0"	SCALE BAR OR MATCH ARCHITECT'S

DEKKER PERICH SABATINI

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DESIGN
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SEAL

REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL) CERTIFICATE NO. 38934 JOHN M. MONTAÑO 12/8/20 SIGNED ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	Author
REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

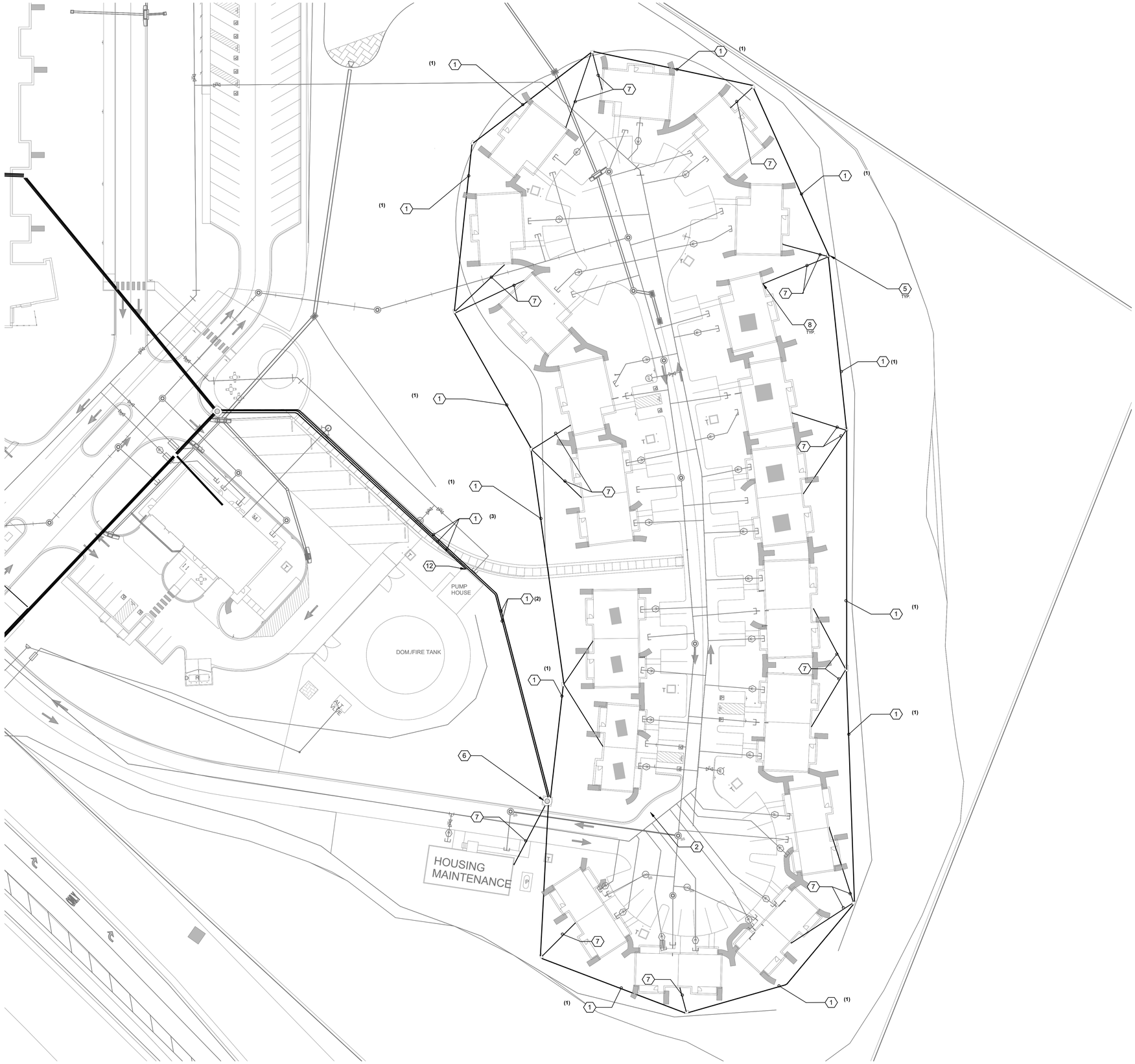
DRAWING NAME

TECHNOLOGY LEGEND

SHEET NO

T-001

Bridgers & Paxton Project No: 8183 12/8/2020 11:06:55 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_NDNanos.rvt



1 TECHNOLOGY SITE PLAN
SCALE: 1" = 30'-0"
0' 15' 30' 60'

GENERAL SHEET NOTES

A. THE CONDUIT RUNS, AS SHOWN ON PLANS, INDICATE APPROXIMATE ROUTING. EXACT LOCATION OF CONDUIT RUNS SHALL BE AS FIELD CONDITIONS DICTATE.
B. ALL LOW VOLTAGE CONDUCTORS SHALL BE RUN IN SEPARATE RACEWAYS FROM POWER CONDUCTORS (120VAC OR HIGHER PHASE TO NEUTRAL). NO EXCEPTIONS.
C. ALL UNDERGROUND CONDUITS LOCATED UNDER ROADWAYS AND PARKING LOTS SHALL BE CONCRETE ENCASED PATHWAYS TRAFFIC RATED TIER 22.
D. ALL HANDHOLES AND MANHOLES LOCATED IN ROADWAYS AND PARKING LOTS SHALL BE TRAFFIC RATED H20. ALL HANDHOLES AND MANHOLES NOT LOCATED IN ROADWAYS AND PARKING LOTS SHALL BE TRAFFIC RATED H10.
E. ALL UNDERGROUND CABLING TO BE OSP RATED.
F. ALL CONDUIT TURNS SHALL BE "SWEEP" TYPE, NO BEND FITTINGS ARE PERMITTED.
G. UNDERGROUND CONDUIT AT BUILDING POINT OF ENTRY TO BE SLOPED AWAY FROM BUILDING TO ALLOW DRAIN AND PREVENT WATER INGRESS.
H. WARNING TAPE SHALL BE PROVIDED FOR ALL UNDERGROUND CONDUITS OUTSIDE THE BUILDING ENVOLOPE.
I. REFER TO SHEET SERIES T-400 FOR MDF AND IDF ROOM LAYOUTS AND ADDITIONAL INFORMATION.
J. INSTALL "MAXCELL EDGE 3 CELL" INNERDUCT IN ALL COMMUNICATIONS DISTRIBUTION CONDUIT. CONTRACTOR IS TO SIZE APPROPRIATELY.

SHEET KEYNOTES

1. PROVIDE AND INSTALL QUANTITY AS INDICATED 4" SCHEDULE 40 CONDUIT BURIED UNDERGROUND 3' 6" (MINIMUM,) BELOW GRADE. PROVIDE (1) 4" 3-CELL MAXCELL EDGE INNERDUCT WITH PULLSTRINGS IN EACH 4" CONDUIT. INSTALL WITH MAXCELL INSTALLATION SWIVEL. SEAL CONDUITS TO PREVENT WATER INGRESS.
2. PROVIDE CONCRETE CONDUIT ENCASEMENT TO BE TRAFFIC RATED UNDER ROADWAYS AND PARKING LOTS.
3. LOCATION OF BUILDING ENTRY POINT.
4. PROVIDE AND INSTALL 12"x12"x4" OUTDOOR GRADE PULL BOX. BOX SHOULD BE WEATHER PROOF. WITH 2" AND 1" KNOCK OUTS TO ALLOW FOR FEED FROM HAND HOLE AND TRANSITION INTO DWELLING CEILING SPACE. SEE T-501 A4 FOR LABELING, AND T-501 FOR PATHWAYS TO ACCOMODATE INCOMING TELEPHONE AND DATA SERVICE.
5. PROVIDE AND INSTALL PEDISTAL, VERTIV BBE OPFO, OPFOP1830 OR EQUIVELENT PER SPECIFICATION 27 0528. GROUND AND BOND PER MANUFACTURERS RECOMMENDATIONS.
6. PROVIDE AND INSTALL 6'-0" BY 6'-0" MANHOLE. PROVIDE SUMP AND DRAIN PER DETAIL AS SHEET T-500 AND SPECIFICATION 27 0528. HANDHOLE TO HAVE PULLING IRONS. GROUND AND BOND PER MANUFACTURERS RECOMMENDATIONS. PROVIDE AND INSTALL WATER TIGHT HINGED LID.
7. PROVIDE AND INSTALL QUANTITY AS SHOWN 2" CONDUIT UNDERGROUND. SEAL CONDUITS TO PREVENT WATER INGRESS.
8. 12"X12"X4" OSP WALL MOUNTED PULL BOX. REFER TO T500 DETAIL C5 FOR LABELING DETAILS.

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SEAL
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CERTIFICATE NO.
38934
JOHN M. MONTAÑO
12/8/20
SIGNED
ARIZONA U.S.A.
EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	NDN
REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

TECHNOLOGY SITE PLAN

SHEET NO

TS101

Bridgers & Paxton Project No: 8183 12/8/2020 12:50:22 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_NDNarros.rvt

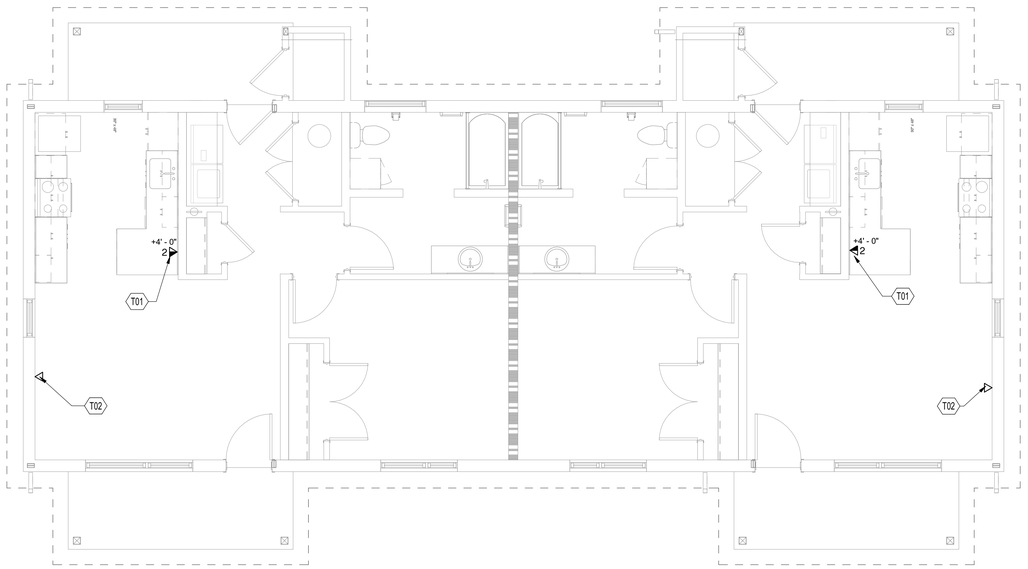
GENERAL SHEET NOTES

A. PROPERLY FIRE STOP AND SEAL ALL PENETRATIONS THROUGH WALLS, FLOORS, CEILINGS, AND ROOF AS PER OWNER, CODE, AND AHJ.
B. PRIOR TO INSTALLATION OF CABLE TRAY COORDINATE LOCATIONS WITH ALL OTHER TRADES.
C. NOT ALL PARTS AND PIECES ARE SHOWN FOR A COMPLETE SYSTEM. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE END-TO-END WARRANTED SOLUTION FOR THE HORIZONTAL CABLING.
D. ALL CABLING TO BE PLENUM RATED THROUGHOUT THE BUILDING.
E. ALL COMMUNICATIONS CABLING TO MEET OR EXCEED CATEGORY 6 STANDARDS.
F. TELECOMMUNICATIONS OUTLETS TO BE MOUNTED AT +18" AFF UNLESS OTHERWISE NOTED. FOR EXAMPLE, DEVICES SPECIFIED AT +18" AFF SHALL MATCH THE STANDARD MOUNTING HEIGHT FOR POWER RECEPTACLES AND TELECOMMUNICATIONS OUTLETS. DEVICES SPECIFIED AT +44" AFF SHALL MATCH THE STANDARD MOUNTING HEIGHT FOR LIGHT SWITCHES ETC.
G. ALL CONDUITS FOR TELECOMMUNICATIONS OUTLETS SHALL BE STEEL, THINWALL ELECTRICAL METALLIC TUBING (TYPE EMT) UNLESS OTHERWISE NOTED. UNDER NO CIRCUMSTANCES SHALL FLEXIBLE CONDUIT BE USED FOR PATHWAYS INDICATED ON THIS SHEET. ALL CONDUITS ARE TO BE, AT A MINIMUM, 1" TRADE SIZE, UNLESS OTHERWISE NOTED. ALL CONDUITS FOR TELECOMMUNICATIONS OUTLETS ARE TO BE STUBBED TO NEAREST CABLE TRAY. CONTRACTOR IS TO ENSURE THAT NO CONDUIT EXCEEDS 40% FILL.
H. CABLE TRAY SYSTEMS SHOWN ON THIS SHEET SHALL BE USED FOR VOICE AND DATA CABLING ONLY. ALL OTHER SYSTEMS INCLUDING, BUT NOT LIMITED TO, FIRE ALARM, SECURITY, HVAC CONTROL, ETC. SHALL BE SUPPORTED BY OTHER MEANS. J-HOOKS ATTACHED TO THE CABLE TRAY SUPPORTS WILL BE PERMITTED. LIKEWISE, ANY CONDUITS PROVIDED FOR VOICE AND DATA CABLING IS NOT TO BE USED BY ANY OTHER SYSTEM, HENCE, SEPARATE CONDUITS MAY NEED TO BE PROVIDED FOR THE SUPPORT OF THESE SYSTEMS.
I. NUMBER ADJACENT TO TELECOMMUNICATIONS OUTLET SYMBOL REPRESENTS NUMBER OF CATEGORY 6 CABLES TO BE INSTALLED AND TERMINATED AT THAT LOCATION. A "B" ADJACENT TO AN OUTLET LOCATION REPRESENTS A ROUGH-IN ONLY LOCATION. PROVIDE BOX, CONDUIT, AND BLANK FACEPLATE.
J. COORDINATE WITH FLOOR AND FURNITURE CONTRACTORS FOR PATHWAYS FOR VOICE/DATA OUTLETS FOR MODULAR FURNITURE SYSTEMS.

SHEET KEYNOTES

T01 STANDARD TELECOMMUNICATIONS WALL OUTLET. QUANTITY OF RJ45 OUTLETS AS SHOWN. INTERIOR PATHWAYS ARE DEPENDANT ON EACH BUILDING ENTRY POINT. REFER TO TS-101.

T02 STANDARD TELEVISION WALL OUTLET. QUANTITY OF (1) RG-6 COAXIAL OUTLET. INTERIOR PATHWAYS SHOULD LEAD TO SOUTHERN WALL FOR SATTELITE SERVICE PROVIDER AS PER PLACEMENT OF EACH BUILDING.



A5 TECHNOLOGY SYSTEMS PLAN - 1BD/1BA DUPLEX
1/4" = 1'-0"
0' 2' 4' 8'

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
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EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	Author
REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

TECHNOLOGY SYSTEMS PLAN - 1BD/1BA DUPLEX

SHEET NO

T-101

Bridgers & Paxton Project No: 8183 12/8/2020 11:10:43 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_NDNanos.rvt

GENERAL SHEET NOTES

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C. NOT ALL PARTS AND PIECES ARE SHOWN FOR A COMPLETE SYSTEM. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE END-TO-END WARRANTED SOLUTION FOR THE HORIZONTAL CABLING.
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J. COORDINATE WITH FLOOR AND FURNITURE CONTRACTORS FOR PATHWAYS FOR VOICE/DATA OUTLETS FOR MODULAR FURNITURE SYSTEMS.

SHEET KEYNOTES

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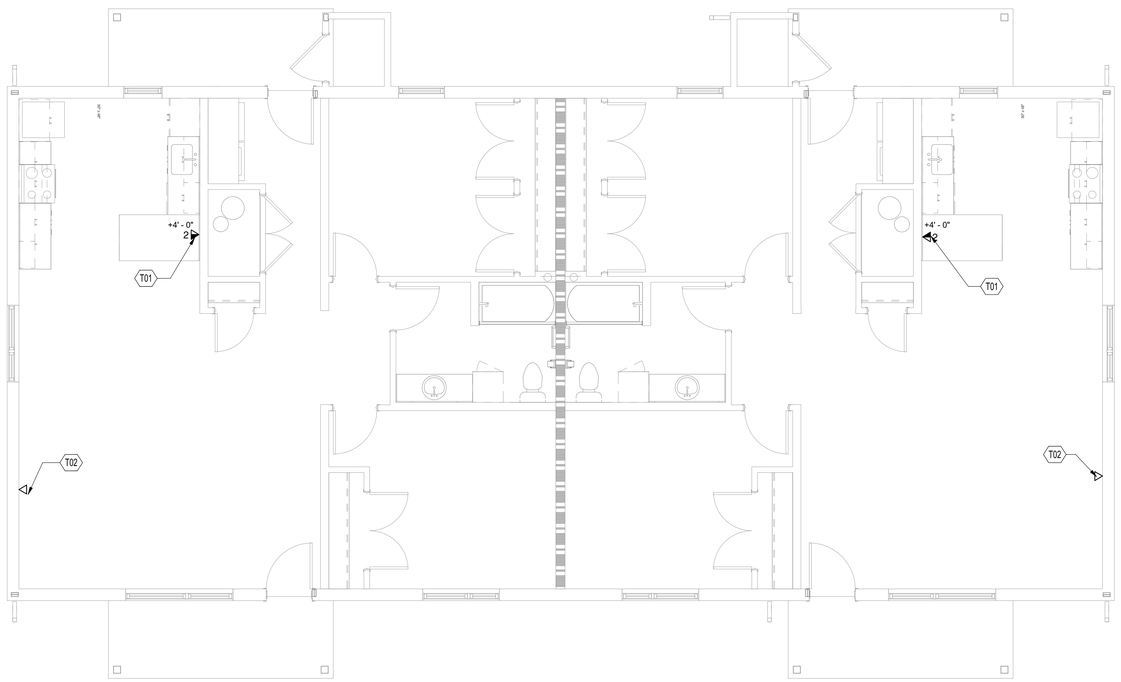

A5 TECHNOLOGY SYSTEMS PLAN - 2BD/1BA DUPLEX
1/4" = 1'-0"

0' 2' 4' 8'

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
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EXPIRES 03/31/2021

PROJECT

Teacherages
Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

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REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

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TECHNOLOGY SYSTEMS PLAN - 2BD/1BA DUPLEX

SHEET NO

T-102

Bridgers & Paxton Project No: 8183 12/8/2020 11:11:11 AM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_NDNanos.rvt

GENERAL SHEET NOTES

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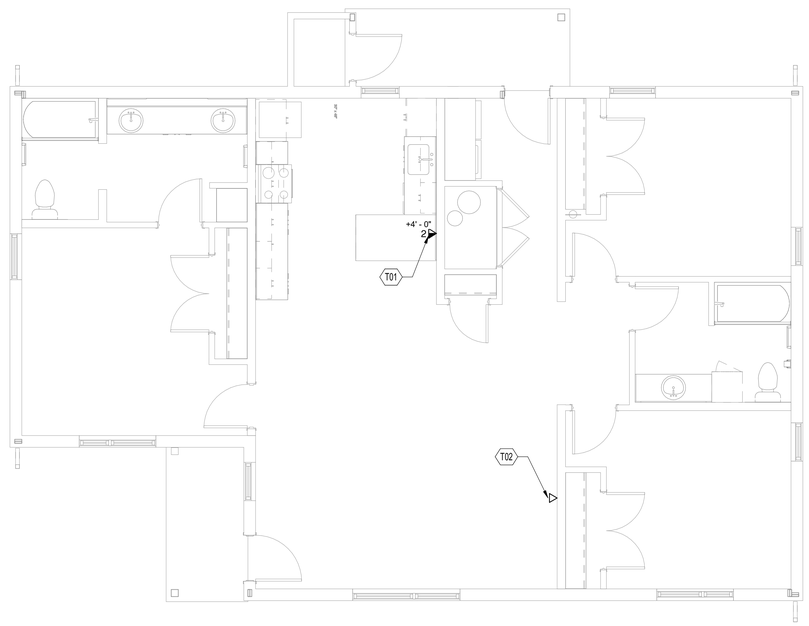

A5 TECHNOLOGY SYSTEMS PLAN - 3BD/2BA SINGLE-FAMILY
1/4" = 1'-0"
0' 2' 4' 8'

DEKKER PERICH SABATINI
ARCHITECTURE
DESIGN
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EXPIRES 03/31/2021

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Lukachukai Community Schools
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100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	Author
REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

TECHNOLOGY SYSTEMS PLAN - 3BD/2BA SINGLE-FAMILY

SHEET NO

T-103

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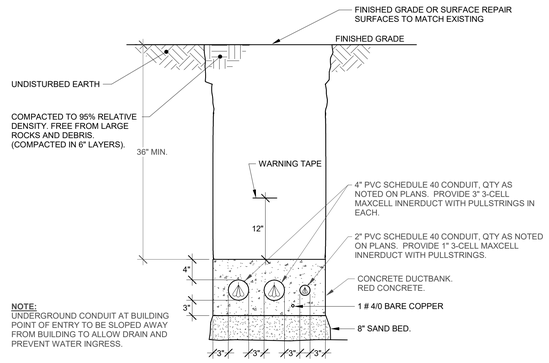

D5 TELECOM CONDUIT DUCTBANK SECTION
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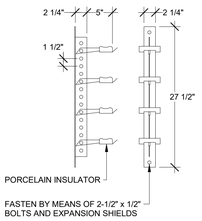
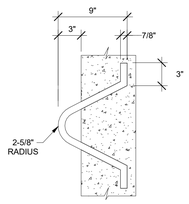
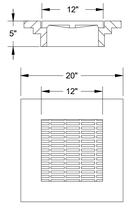


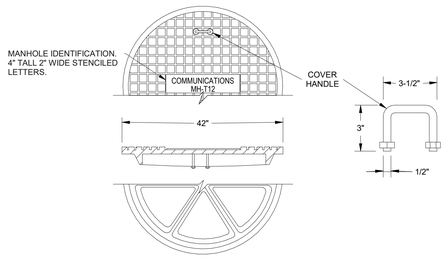
C1 CABLE RACKS DETAILS
SCALE: NOT TO SCALE



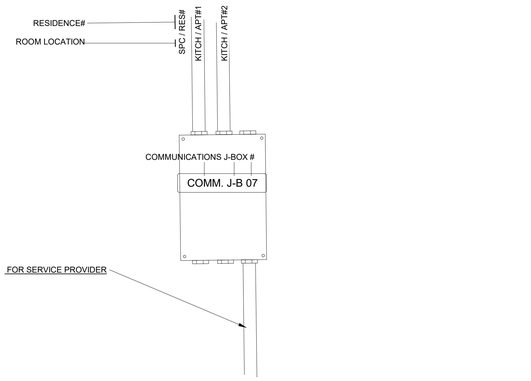
C2 PULLING IRON DETAILS
SCALE: NOT TO SCALE



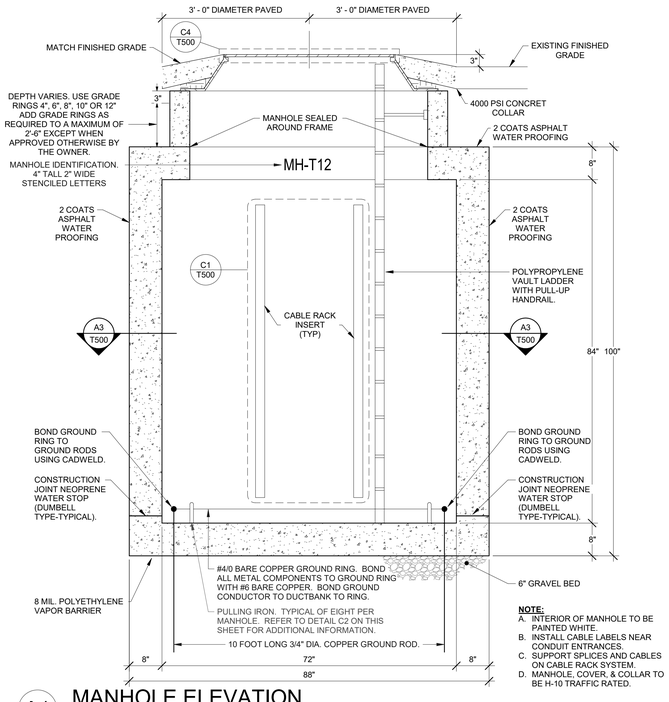
C3 SUMP FRAME & COVER DETAILS
SCALE: NOT TO SCALE



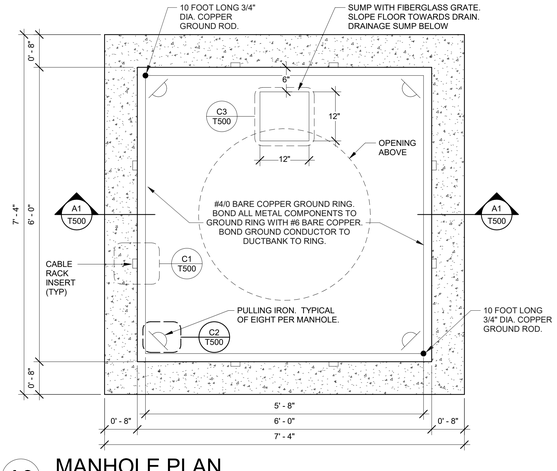
C4 ENTRANCE COVER DETIALS
SCALE: NOT TO SCALE



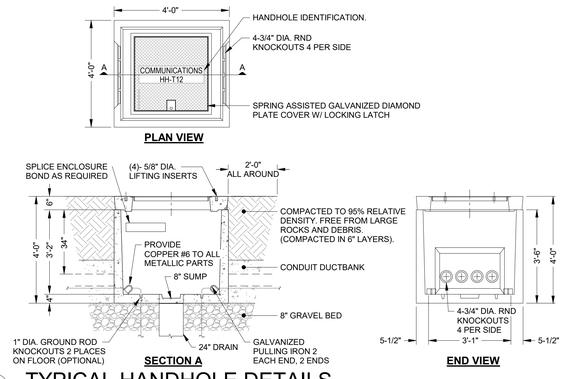
C5 TELECOMMUNICATIONS CONDUIT IDENTIFICATION SCHEME
SCALE: NOT TO SCALE



A1 MANHOLE ELEVATION
SCALE: NOT TO SCALE



A3 MANHOLE PLAN
SCALE: NOT TO SCALE



A5 TYPICAL HANDHOLE DETAILS
SCALE: NOT TO SCALE

DEKKER PERICH SABATINI
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100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	NDN
REVIEWED BY	
DATE	12-10-2020
PROJECT NO	20-7002.005

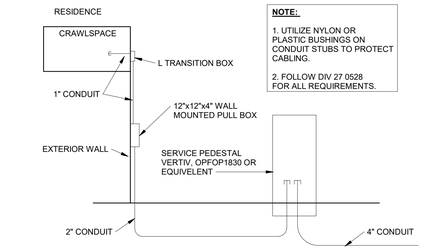
DRAWING NAME

VAULT DETAILS

SHEET NO

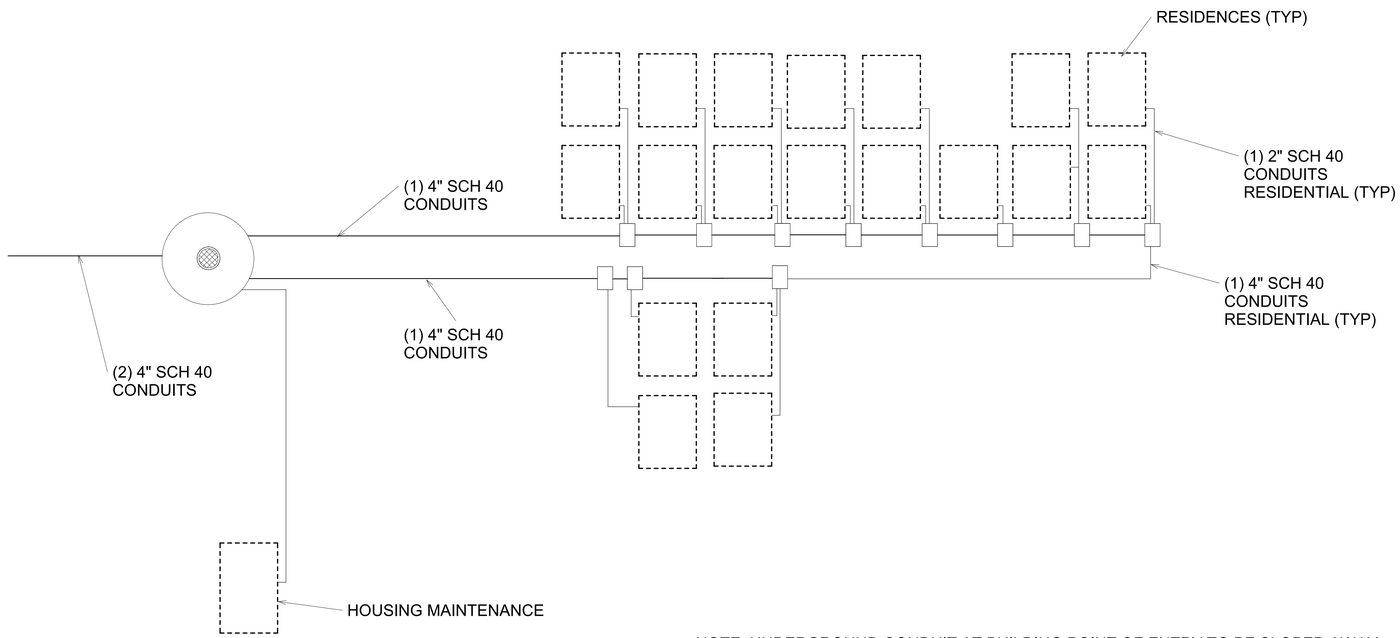
T500

Bridgers & Paxton Project No: 8183 12/8/2020 12:51:04 PM D:\Revit 2020\Projects\8183_MEP_Lukachukai School - Teacherages_NDNarvs.rvt



D5 PATHWAY INTO RESIDENCE/MAINTENANCE BLDG

SCALE: NOT TO SCALE



SYMBOL LEGEND

6'x6' MAN HOLE

RESIDENTIAL PEDISTAL

NOTE: UNDERGROUND CONDUIT AT BUILDING POINT OF ENTRY TO BE SLOPED AWAY FROM BUILDING TO ALLOW DRAIN AND PREVENT WATER INGRESS.

A1 OSP PATHWAY DIAGRAM

SCALE: NOT TO SCALE

DEKKER PERICH SABATINI

ARCHITECTURE
DESIGN
INSPIRATION

BRIDGERS & PAXTON

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SEAL

REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL) CERTIFICATE NO. 38934 JOHN M. MONTAÑO 12/8/20 SIGNED ARIZONA U.S.A.

EXPIRES 03/31/2021

PROJECT

Teacherages

Lukachukai Community Schools
Intersection IR 12 and IR 13
Lukachukai, AZ 86507

100% CONSTRUCTION DOCUMENTS

REVISIONS

DRAWN BY	NDN
REVIEWED BY	Approver
DATE	12-10-2020
PROJECT NO	20-7002.005

DRAWING NAME

TECHNOLOGY DIAGRAMS

SHEET NO

T-601

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