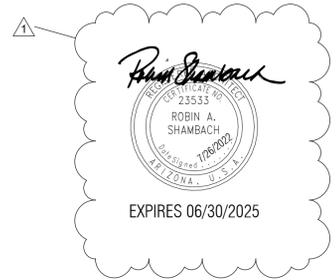


# PARKER INDIAN HEALTH CENTER DUPLEX DESIGN

IHS Project No: PH21CR03Q3  
Parker, Arizona

PARKER INDIAN HEALTH CENTER  
DUPLEX DESIGN

Parker, Arizona  
BWS Project No. 1818.900



# Construction Documents

## July 26, 2022

Construction Documents  
July 26, 2022

### OWNER

INDIAN HEALTH SERVICE  
FACILITIES DESIGN & CONSTRUCTION  
Two Renaissance Square  
40 N Central Ave  
Phoenix, AZ 85004  
Phone: (602) 364-5300

### CONSULTANTS

CIVIL  
EEC  
555 E River Road, Suite 301  
Tucson, AZ 85704  
Phone: (520) 321-4625

STRUCTURAL  
Turner Structural Eng.  
2806 N Alvernon Way, Ste 400  
Tucson, AZ 85712  
Phone: (520) 323-3422

MECHANICAL  
Zona Technical Engineering  
6422 E Speedway Blvd, Suite 130  
Tucson, AZ 85710  
Phone: (520) 200-2612

ELECTRICAL  
M3 Engineering  
2051 W Sunset Rd  
Tucson, AZ 85704  
Phone: (520) 293-1488

### REVIEWED FOR CODE COMPLIANCE

These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards no relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, nor local regulation.

BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023

bws | ARCHITECTS

BURNS WALD-HOPKINS SHAMBACH ARCHITECTS

261 North Court Avenue  
Tucson, Arizona 85701  
520.795.2705 Fax 520.795.6171  
www.bwsarchs.com



## GENERAL NOTES

- ALL CONSTRUCTION TO CONFORM TO THE LATEST PUBLISHED EDITION OF NATIONALLY RECOGNIZED CODES, STANDARDS AND GUIDELINES, INCLUDING THE FOLLOWING: NATIONAL FIRE CODES; INTERNATIONAL BUILDING CODE (IBC); INTERNATIONAL RESIDENTIAL CODE (IRC); ARCHITECTURAL BARRIERS ACT (ABA); INTERNATIONAL ENERGY CONSERVATION CODE (IECC); ASHRAE 62.1 – VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY.
- THE CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).
- CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.
- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.
- ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS, AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF HE CHOOSES AN OPTION, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES AND SHALL COORDINATE ALL DETAILS.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.
- CONTRACTOR SHALL VERIFY THE ADEQUACY AND LOCATION OF EXISTING UTILITIES. VERIFY INVERTS TO ASSURE THAT PROPER SLOPES CAN BE OBTAINED.

## PROJECT DESCRIPTION

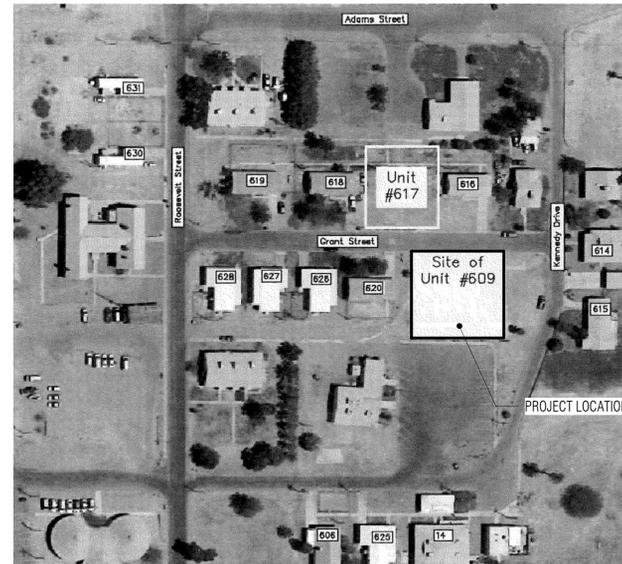
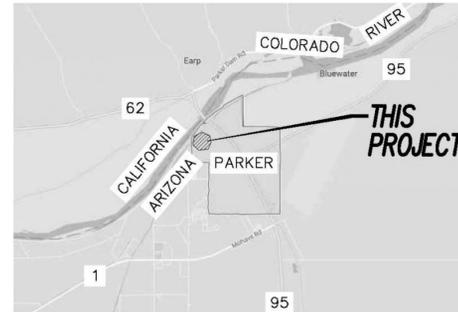
THIS PROJECT CONSISTS OF TWO NEW 2,740 SQUARE FOOT DUPLEX. ONE UNIT WILL BE AN ACCESSIBLE TYPE B DWELLING UNIT. BUILDING MATERIALS CONSIST OF WOOD FRAMED WALLS AND WOOD TRUSS ROOF STRUCTURE. UTILITIES AND SYSTEMS INCLUDE BUT ARE NOT LIMITED TO PLUMBING, FIRE PROTECTION, MECHANICAL, AND ELECTRICAL.

## LOCATION

OWNERS:  
PARKER INDIAN HEALTH CENTER  
PARKER, AZ

ADDRESS:  
GRANT ST  
PARKER, AZ

LEGAL DESCRIPTION:  
A PORTION OF SECTION 2  
T-19-N, R-20-W, G&SRM LA  
PAZ COUNTY, ARIZONA



## DRAWING INDEX

SHEET NUMBER	SHEET NAME	ISSUE DATE	CURRENT REVISION	REVISION DESCRIPTION	SHEET LOCATION
G0.0	COVER SHEET	6/17/2022	1	PERMIT REVISIONS	SHEET 1 OF 48
G1.0	ABBREVIATIONS & SYMBOLS	6/17/2022			SHEET 2 OF 48
G2.0	PROJECT INFORMATION & SHEET INDEX	6/17/2022			SHEET 3 OF 48
G3.0	CODE REVIEW	6/17/2022	1	PERMIT REVISIONS	SHEET 4 OF 48
C0.1	COVER SHEET	6/17/2022	1	PERMIT REVISIONS	SHEET 5 OF 48
C1.0	SITE SURVEY	6/17/2022			SHEET 6 OF 48
C2.0	CIVIL SITE PLAN	6/17/2022	1	PERMIT REVISIONS	SHEET 7 OF 48
C3.0	CIVIL UTILITY PLAN	6/17/2022			SHEET 8 OF 48
C4.0	DETAIL SHEET	6/17/2022	1	PERMIT REVISIONS	SHEET 9 OF 48
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LP501	LANDSCAPE DETAILS AND SCHEDULE	6/17/2022			SHEET 11 OF 48
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A2.0	FLOOR PLAN	6/17/2022			SHEET 15 OF 48
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A2.3	REFLECTED CEILING PLAN	6/17/2022			SHEET 18 OF 48
A3.0	ELEVATIONS & BUILDING SECTIONS	6/17/2022			SHEET 19 OF 48
A3.1	ELEVATIONS & BUILDING SECTIONS	6/17/2022			SHEET 20 OF 48
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F1.0	FURNITURE PLAN (FOR REFERENCE)	6/17/2022			SHEET 25 OF 48
S0.1	STANDARD STRUCTURAL NOTES	6/17/2022			SHEET 26 OF 48
S1.1	FOUNDATION PLAN	6/17/2022			SHEET 27 OF 48
S1.2	FOUNDATION AND ROOF FRAMING PLANS - CARPORT	6/17/2022			SHEET 28 OF 48
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S3.1	ROOF FRAMING PLAN	6/17/2022			SHEET 30 OF 48
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M1.2	MECHANICAL ROOF PLAN	6/17/2022	1	PERMIT REVISIONS	SHEET 33 OF 48
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EL101	LIGHTING PLAN	6/17/2022	1	PERMIT REVISIONS	SHEET 45 OF 48
EP101	POWER & SPECIAL SYSTEMS PLAN	6/17/2022	1	PERMIT REVISIONS	SHEET 46 OF 48
EP601	PANEL SCHEDULE	6/17/2022			SHEET 47 OF 48
EP701	SINGLE LINE DIAGRAM	6/17/2022			SHEET 48 OF 48

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BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023

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EXPIRES 06/30/2025

## PARKER INDIAN HEALTH CENTER DUPLEX DESIGN

Parker, AZ  
IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA



REVIEWED:

DFE ENGINEER/PROJECT MANAGER DATE

APPROVED:

DFE BRANCH CHIEF DATE

CONCURRENCE:

DFE CHIEF DATE

REV DATE DESCRIPTION

ISSUE: July 26, 2022 - Construction Documents

PROJECT NO: 1818.900

CAD DWG FILE:

DRAWN BY: CEM

CHECKED BY:

### SHEET TITLE

## PROJECT INFORMATION & SHEET INDEX

# G2.0

Sheet 3 of 48

FIRE PROTECTION NOTES

- FINAL FIRE SPRINKLER DESIGN TO BE PROVIDED BY THE CONTRACTOR AS A DEFERRED SUBMITTAL PER FIRE PROTECTION DRAWINGS AND SPECIFICATIONS

FIRE / EXITING LEGEND

- EXIT** EMERGENCY EGRESS
- \*** EXITING ROUTE STARTING POINT
- EXITING ROUTE
- FE** PROVIDE PORTABLE FIRE EXTINGUISHER UNDER KITCHEN SINK, CFCI, MAX 75' TRAVEL DISTANCE PER 2015 IBC TABLE 906.3 (1), REF SPECS
- FIRE PARTITION WITH 1/2 HOUR FIRE-RESISTANCE RATING PER IBC 708.3, EXCEPTION 2.

APPLICABLE CODES

- INTERNATIONAL BUILDING CODE 2018 EDITION
  - INTERNATIONAL PLUMBING CODE 2018 EDITION
  - INTERNATIONAL MECHANICAL CODE 2018 EDITION
  - INTERNATIONAL FIRE CODE 2018 EDITION
  - NATIONAL ELECTRIC CODE 2017 NFPA 70
  - SPRINKLER CODE 2022 NFPA 13R
  - INTERNATIONAL ENERGY CONSERVATION CODE 2018 EDITION
  - ANSI A117.1 ACCESSIBILITY CODE 2017 EDITION
  - INTERNATIONAL FUEL GAS CODE 2018 EDITION
- \* AND ALL OTHER CODES AND ORDINANCES AS ADOPTED BY THE GOVERNING AGENCIES HAVING JURISDICTION

CODE REVIEW

- ZONING (ZONING ORDINANCE): UNKNOWN, VERIFY "NONE"
- DIMENSIONAL STANDARDS
  - A. SETBACKS: SIDE: 11'-10", FRONT YARD: 29'-0", REAR: 43'-2"
  - B. HEIGHT LIMIT: N/A
  - C. MIN. LOT SIZE: N/A
  - D. MAX. LOT COVERAGE: N/A

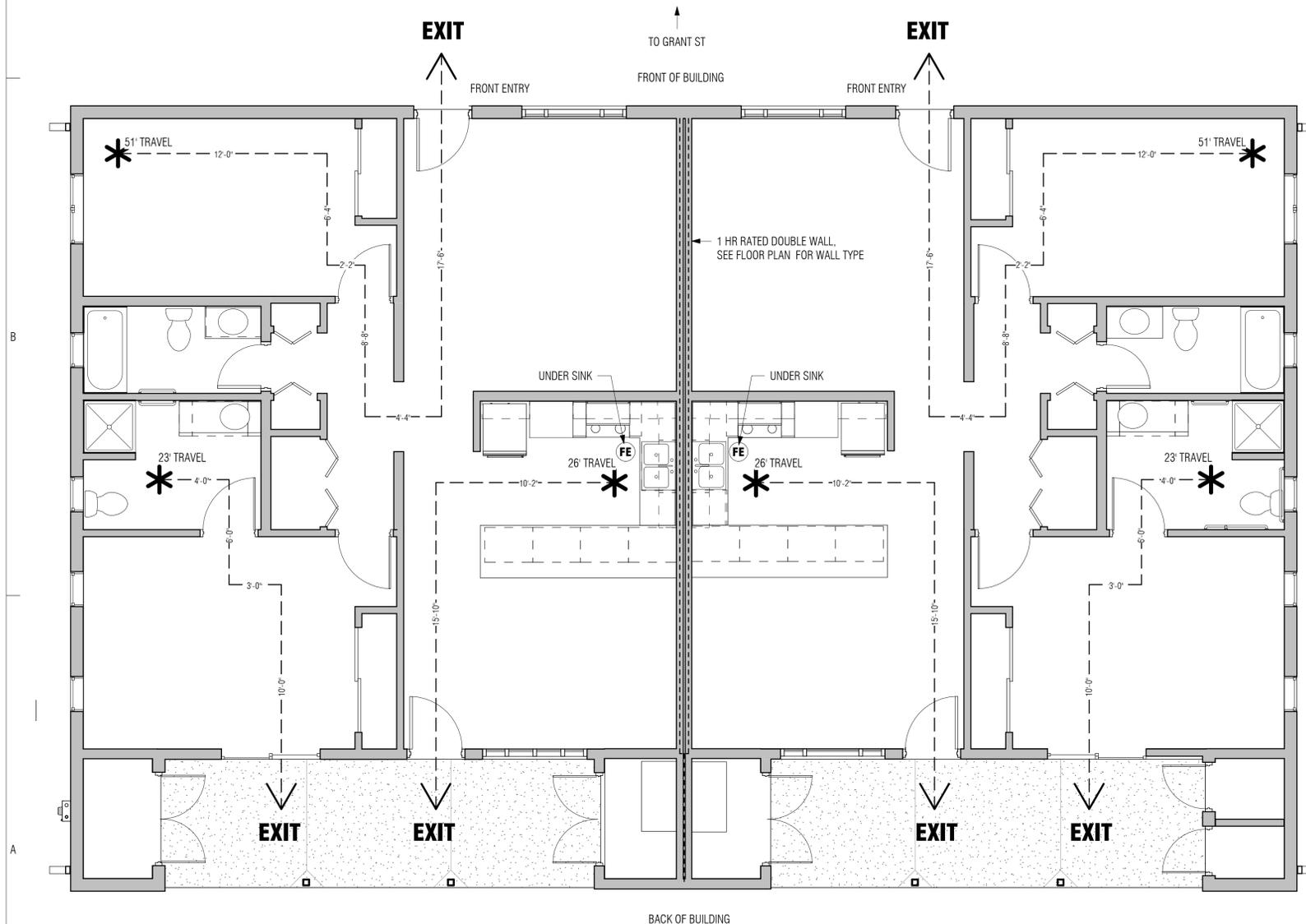
SOURCE: 2018 INTERNATIONAL BUILDING CODE
- OCCUPANCY GROUP (IBC SECTION 302): R-2 "APARTMENT HOUSES"
- TYPE OF CONSTRUCTION (IBC SECTION 601): U "CARPORT"
- ALLOWABLE HEIGHT (TABLE 504): 40' FT
- ALLOWABLE BUILDING AREA (TABLE 506): 2 STORIES (21,000 SF)
- AUTOMATIC SPRINKLER INCREASE: NOT USED - SPRINKLER REQUIRED
- ACTUAL AREA
  - a. RESIDENCE: 2,750 SF EACH BUILDING / 5,500 SF TOTAL
  - b. CARPORT: 465 SF EACH / 1,860 SF TOTAL
- FIRE RESISTANCE RATINGS (IBC TABLE 601/602):
  - A. EXTERIOR BEARING WALLS: 0 HOUR\*
  - B. EXTERIOR NON-BEARING WALLS: ACTUAL 11'-10", 0 HOUR\*
  - C. INTERIOR BEARING WALLS: ACTUAL 11'-10", 0 HOUR
  - D. INTERIOR NON-BEARING WALLS: 0 HOUR
  - E. STRUCTURAL FRAME: 0 HOUR
  - F. FLOORS: 0 HOUR
  - G. ROOFS: 0 HOUR
  - H. EXTERIOR DOORS & WINDOWS (TABLE 705.8): UNPROTECTED (ALL SIDES) = 10' > 15' 45%
- AUTOMATIC SPRINKLER SYSTEM: REQUIRED PER SECTION 903.2.8 (NFPA 13R)
- SEPARATION WALLS
  - A. SEPARATION OF OCCUPANCIES: NOT REQUIRED
  - B. DWELLING UNIT SEPARATION: 1/2 HOUR (708.3 EX 2)
  - C. SHAFT ENCLOSURES: NOT REQUIRED
  - D. VERTICAL EXIT ENCLOSURES: NOT REQUIRED
- CORRIDORS
  - A. RATING: N/A
  - B. WIDTH: N/A
  - C. DEAD END CORRIDOR: N/A
- EXITS AND OCCUPANCY LOADS FOR THIS PROJECT (IBC TABLE 1004.1.2):
 

USE:	AREA (SF):	OCCUPANT LOAD FACTORS:	# OF PEOPLE:
RESIDENTIAL	2,750 SF	1 PERSON/ 200 GSF	14

  - A. WIDTH OF STAIRS (1005.1): N/A
  - B. WIDTH OF EXITS (1005.1): OCCUPANT LOAD SERVED x .15 INCH
  - C. SIZE OF DOORS (1010): MIN. 32" CLEAR
  - D. COMMON PATH OF EGRESS TRAVEL (1006): 125'
  - E. RECD EXITS FROM SPACES (TABLE 1015.1): R-2 OCCUPANCY, >20 OCCUPANTS = 1 EXITS
  - F. EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2): 250'
- REQUIRED EXITS PER STORY: 11 OCC. < 50 = 1 EXIT (TABLE 1019.1)\*
 

\* 1 EXIT PER STORY PER TABLE 1019.2 IF EACH STORY SERVES LESS THAN 50 OCCUPANTS AND A HAS A MAXIMUM TRAVEL DISTANCE OF LESS THAN 75 FT (TABLE 1019.2)
- PLUMBING FIXTURES (TABLE 2902.1)
 

Classification: R-2	Water Closets	Lavatories	Tub/Shower	Kitchen Sink	Washer Connection
Factor	1 per Dwelling Unit	1 per 20 Dwelling Units			
Number of Dwelling Units	4	4	4	4	4
Required Number of Fixtures	4	4	4	4	1
Provided Number of Fixtures	8	8	8	4	4



1 EGRESS PLAN  
1/4" = 1'-0"

NOTE: ONLY SHOWING (1) BUILDING, BOTH DUPLEX FLOOR PLANS ARE IDENTICAL

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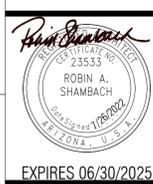
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**PARKER INDIAN HEALTH CENTER**  
 DUPLEX DESIGN

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
 INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA

REVIEWED:

DFE ENGINEER/PROJECT MANAGER \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED:

DFE BRANCH CHIEF \_\_\_\_\_ DATE \_\_\_\_\_

CONCURRENCE:

DFE CHIEF \_\_\_\_\_ DATE \_\_\_\_\_

REV	DATE	DESCRIPTION
1	01/20/23	PERMIT REVISIONS

ISSUE: July 26, 2022 - Construction Documents  
 PROJECT NO.: 1818.900  
 CAD DWG FILE:  
 DRAWN BY: CEM  
 CHECKED BY:

**SHEET TITLE**

**CODE REVIEW**

**G3.0**

Sheet 4 of 48

**GENERAL NOTES**

1. CUT/FILL SLOPE TREATMENT:
  - A. SLOPES 3:1 AND FLATTER SHALL BE REVEGETATED.
2. SEE DEMOLITION PLAN FOR EXISTING ITEMS TO BE REMOVED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE, MAINTENANCE, REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS IN THE WORK AREA WHICH HAVE BEEN REMOVED OR DAMAGED DURING THE COURSE OF CONSTRUCTION. ALL REPAIR REPLACEMENT, OR CLEANUP SHALL BE DONE TO THE SATISFACTION OF THE OWNER.
4. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
5. THE CONTRACTOR SHALL OBTAIN PERMITS INCLUDING THOSE FOR GRADING AND AIR POLLUTION, REQUIRED BY GOVERNMENTAL AGENCIES, NO WORK AS DELINEATED ON THESE PLANS, SHALL BE STARTED UNTIL THE CONTRACTOR HAS OBTAINED THE NECESSARY PERMITS.
6. THE CONTRACTOR SHALL LOCATE ALL STRUCTURES, UNDERGROUND PIPELINES, ELECTRICAL AND TELEPHONE CONDUITS, WHETHER SHOWN OR NOT SHOWN ON THE PLANS PRIOR TO CONSTRUCTION, AND SHALL OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO THESE FACILITIES.
7. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES, INCLUDING EXCAVATION, BORROW EMBANKMENT, SHRINK OR SWELL, GROUND COMPACTION, HAUL, AND ANY OTHER ITEMS AFFECTING THE BID TO COMPLETE THE GRADING TO THE ELEVATIONS SHOWN ON THESE PLANS AND TO BASE THE BID SOLELY UPON HIS OWN CALCULATED QUANTITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION OF ANY MAJOR DISCREPANCIES BETWEEN HIS ESTIMATED QUANTITIES AND THOSE SHOWN ON THE PLANS.
8. ALL WORK AND MATERIALS WHICH DO NOT CONFORM TO THESE PLANS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT TO CONSTRUCT/INSTALL THE IMPROVEMENTS SHOWN ON THESE PLANS UNLESS SPECIFICALLY NOTED OTHERWISE.
10. THE CONTRACTOR SHALL CALL BLUE STAKE (1-800-782-5348) TO VERIFY LOCATION OF ALL UTILITIES AT LEAST 2 (TWO) WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIVE REGULATIONS.
12. A COPY OF APPROVED PLANS SHALL BE KEPT IN AN EASILY ACCESSIBLE LOCATION ON THE SITE AT ALL TIMES DURING CONSTRUCTION.
13. IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY DEVELOPMENT SERVICES.
14. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
15. STREETS & PARKING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF PROPOSED FINISH GRADE ELEVATIONS AS SHOWN ON THIS PLAN.
16. THE AREA OF DISTURBANCE (GRADING AND UTILITY CONSTRUCTION) FOR THIS PROJECT IS 9,500 SQUARE FEET, OR 0.2 ACRES.
17. CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS IN GEOTECHNICAL REPORT 4122JD014 PREPARED BY WESTERN TECHNOLOGIES INC. SIGNED 2022-06-13. PER THIS REPORT, UNDOCUMENTED FILES EXIST ON THE SITE.

**PAVING AND GRADING NOTES**

1. ALL DESIGN STANDARDS, MATERIALS AND WORKMANSHIP FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND DETAILS AS ADOPTED BY: MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARDS SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (MAG), LATEST EDITION.
2. ALL CONCRETE SHALL BE CLASS S, 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED PER MAG STANDARD SPECIFICATIONS.
3. THE CONTRACTOR SHALL FURNISH, HAUL, AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY.
4. A SOILS ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL EARTHWORK AND PAVING OPERATIONS, INCLUDING BUT NOT LIMITED TO: CLEARING, GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION AND BACK FILL, TOGETHER WITH PLACEMENT AND COMPACTION OF FILL, PARKING ARE SURFACING, PAVING AND CONCRETE WORK.
5. THE CONTRACTOR SHALL ADJUST BOTH EXISTING AND NEW WATER VALVES, BOX COVERS, WATER METER BOXES, SANITARY SEWER MANHOLES AND CLEANOUT RING AND COVERS, TELEPHONE AND ELECTRIC MANHOLE RINGS AND COVERS TO FINISHED GRADE.
6. EXCAVATION AND BACKFILL FOR STRUCTURES SHALL CONFORM TO MAG STANDARD SPECIFICATIONS.
7. AGGREGATE BASE COURSE SHALL CONFORM TO MAG STANDARD SPECIFICATIONS.
8. ASPHALTIC CONCRETE SHALL CONFORM TO MAG STANDARD SPECIFICATIONS.

**EXISTING UTILITY NOTE**

EXISTING UTILITY LOCATIONS, AS SHOWN ON THE PLANS, WERE COMPILED FROM UTILITY COMPANY BASE MAPS, RECORD PLANS AND ABOVE GROUND FEATURES. HOWEVER, UTILITY LOCATIONS ARE NOT TO BE CONSIDERED EXACT OR COMPLETE. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL WITH THE APPROPRIATE ORGANIZATION AND, IF NECESSARY, POTHOLE ANY AND ALL UTILITY LOCATIONS IN QUESTION. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES "IN-PLACE" UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS.

**GENERAL NOTES**

1. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED WHEN CONNECTING A NEW SEWER LINE INTO AN EXISTING SEWER MANHOLE:
  2. CORE THROUGH THE CONCRETE AT THE BENCH LEVEL OR IN THE BARREL SECTION TO ACCOMMODATE NEW PIPE;
  3. AFTER THE NEW SEWER LINE IS LAID, THE OPENING THROUGH THE WALL AROUND THE NEW PIPE SHALL BE SEALED WITH MATERIAL COMPATIBLE WITH EXISTING MANHOLE WALL COMPONENTS;
  4. THE NEW BENCH AND CHANNEL SHALL BE FORMED WITH MORTAR OF CLASS "S" CONCRETE, USING AN EPOXY ADDITIVE TO ASSURE ADEQUATE BONDING TO THE EXISTING BENCH; AND
  5. ALL SURFACES SHALL BE STEEL-TROWELED TO CRETE SMOOTH, DENSE SURFACES.

**LEGEND**

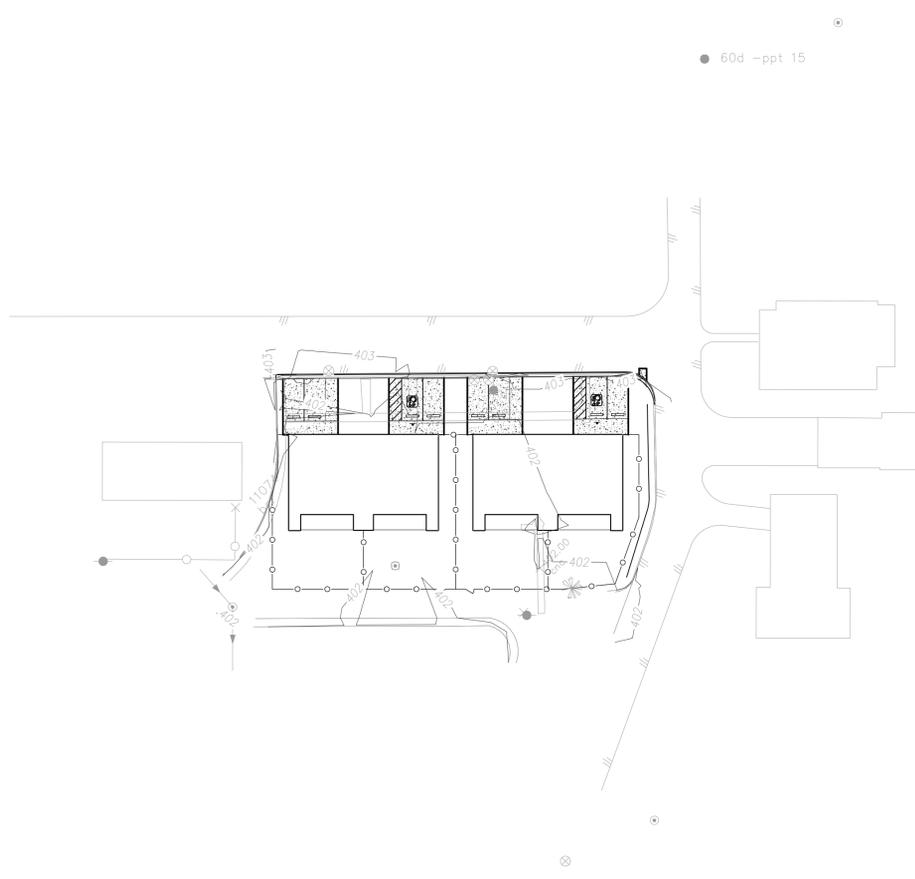
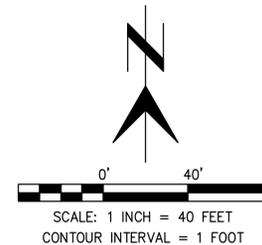
	EXISTING GAS - LOCATION APPROXIMATE		EXISTING SANITARY SEWER MANHOLE
	PROPOSED GAS - LOCATION APPROXIMATE		EXISTING CLEAN-OUT
	EXISTING WATER LINE - LOCATION APPROXIMATE		EXISTING LIGHT POLE
	PROPOSED WATER LINE - LOCATION APPROXIMATE		EXISTING UTILITY POLE
	EXISTING OVERHEAD UTILITY		PROPOSED CLEAN-OUT
	EXISTING SEWER - LOCATION APPROXIMATE		PROPOSED WATER METER
	PROPOSED SEWER LINE - LOCATION APPROXIMATE		PROPOSED FIRE HYDRANT
	EXISTING FENCE		PROPOSED WATER VALVE
	FLOWLINE/TOP OF SLOPE LINE		ABANDONED MANHOLE
	EXISTING CONTOUR (MAJOR)		FDC
	EXISTING CONTOUR (MINOR)		EXISTING SPOT GRADE
	EXISTING SPOT GRADE		PROPOSED SPOT GRADE. ALL GRADES REFLECT GUTTER LINE OR TOP OF SURFACE UNLESS OTHERWISE NOTED.

**ENGINEER'S ESTIMATED EARTHWORK QUANTITY**

CUBIC YARDS CUT.....1  
 CUBIC YARDS FILL (10% SHRINKAGE).....983

TOTAL (CUBIC YARD IMPORT).....982

\*NOTE: PER PROJECT GEOTECHNICAL REPORT, THIS SITE REQUIRES REMOVAL OF EXISTING "UNDOCUMENTED" FILL AS WELL AS ENGINEERED FILL UNDER THE FOUNDATIONS AND OTHER AREAS. THIS CUT AND FILL QUANTITY IS BASED ON THE EXISTING AND PROPOSED GRADES FOR THE SITE, AND DOES NOT INCLUDE ANY ANY OVER-EXCAVATION THE SITE MAY REQUIRE.



**SHEET INDEX**

SHEET C0.1	COVER SHEET AND NOTES
SHEET C1.0	SITE SURVEY
SHEET C2.0	CIVIL SITE/GRADING PLAN
SHEET C3.0	CIVIL UTILITY PLAN
SHEET C4.0	DETAIL SHEET

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SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023

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MECHANICAL Adams & Associates 6422 E Speedway Blvd, Suite 130 Tucson, AZ 85710 Phone: (520) 323-3858	ELECTRICAL M3 Engineering 2051 W Sunset Rd Tucson, AZ 85704 Phone: (520) 293-1488



**PARKER INDIAN HEALTH CENTER  
 DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH16CR07Q3

U. S. DEPARTMENT  
 OF HEALTH AND  
 HUMAN SERVICES

INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA



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DFE CHIEF	DATE

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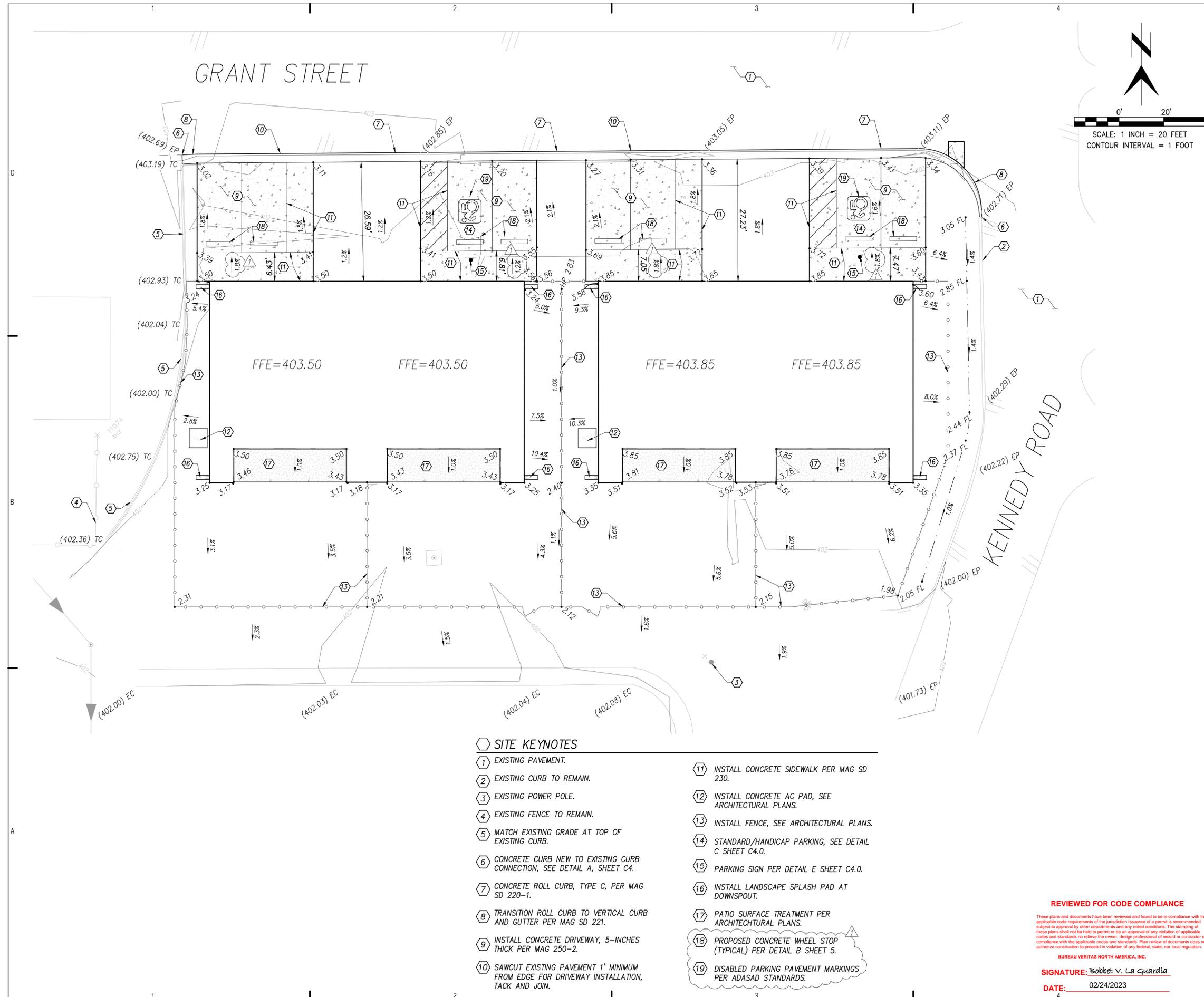
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**COVER SHEET**

**C0.1**

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**CIVIL SITE PLAN**

**C2.0**

Sheet 7 of 48

- SITE KEYNOTES**
- 1 EXISTING PAVEMENT.
  - 2 EXISTING CURB TO REMAIN.
  - 3 EXISTING POWER POLE.
  - 4 EXISTING FENCE TO REMAIN.
  - 5 MATCH EXISTING GRADE AT TOP OF EXISTING CURB.
  - 6 CONCRETE CURB NEW TO EXISTING CURB CONNECTION, SEE DETAIL A, SHEET C4.
  - 7 CONCRETE ROLL CURB, TYPE C, PER MAG SD 220-1.
  - 8 TRANSITION ROLL CURB TO VERTICAL CURB AND GUTTER PER MAG SD 221.
  - 9 INSTALL CONCRETE DRIVEWAY, 5-INCHES THICK PER MAG 250-2.
  - 10 SAWCUT EXISTING PAVEMENT 1' MINIMUM FROM EDGE FOR DRIVEWAY INSTALLATION, TACK AND JOIN.
  - 11 INSTALL CONCRETE SIDEWALK PER MAG SD 230.
  - 12 INSTALL CONCRETE AC PAD, SEE ARCHITECTURAL PLANS.
  - 13 INSTALL FENCE, SEE ARCHITECTURAL PLANS.
  - 14 STANDARD/HANDICAP PARKING, SEE DETAIL C SHEET C4.0.
  - 15 PARKING SIGN PER DETAIL E SHEET C4.0.
  - 16 INSTALL LANDSCAPE SPLASH PAD AT DOWNSPOUT.
  - 17 PATIO SURFACE TREATMENT PER ARCHITECTURAL PLANS.
  - 18 PROPOSED CONCRETE WHEEL STOP (TYPICAL) PER DETAIL B SHEET 5.
  - 19 DISABLED PARKING PAVEMENT MARKINGS PER ADASD STANDARDS.

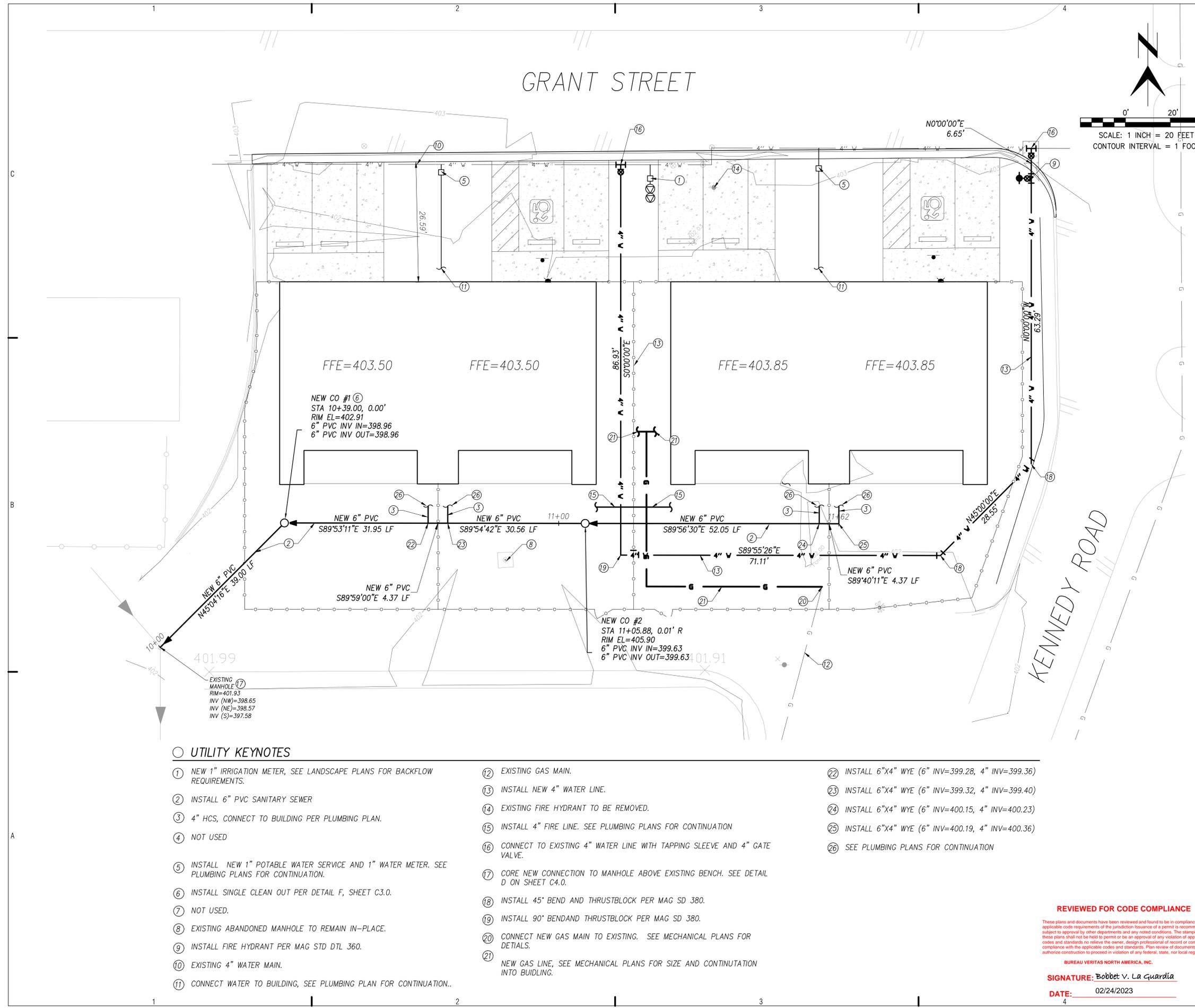
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**CIVIL UTILITY PLAN**

**C3.0**

Sheet 8 of 48

**UTILITY KEYNOTES**

- |  |  |  |
|--|--|--|
| <p>① NEW 1" IRRIGATION METER, SEE LANDSCAPE PLANS FOR BACKFLOW REQUIREMENTS.</p> <p>② INSTALL 6" PVC SANITARY SEWER</p> <p>③ 4" HCS, CONNECT TO BUILDING PER PLUMBING PLAN.</p> <p>④ NOT USED</p> <p>⑤ INSTALL NEW 1" POTABLE WATER SERVICE AND 1" WATER METER. SEE PLUMBING PLANS FOR CONTINUATION.</p> <p>⑥ INSTALL SINGLE CLEAN OUT PER DETAIL F, SHEET C3.0.</p> <p>⑦ NOT USED.</p> <p>⑧ EXISTING ABANDONED MANHOLE TO REMAIN IN-PLACE.</p> <p>⑨ INSTALL FIRE HYDRANT PER MAG STD DTL 360.</p> <p>⑩ EXISTING 4" WATER MAIN.</p> <p>⑪ CONNECT WATER TO BUILDING, SEE PLUMBING PLAN FOR CONTINUATION..</p> | <p>⑫ EXISTING GAS MAIN.</p> <p>⑬ INSTALL NEW 4" WATER LINE.</p> <p>⑭ EXISTING FIRE HYDRANT TO BE REMOVED.</p> <p>⑮ INSTALL 4" FIRE LINE. SEE PLUMBING PLANS FOR CONTINUATION</p> <p>⑯ CONNECT TO EXISTING 4" WATER LINE WITH TAPPING SLEEVE AND 4" GATE VALVE.</p> <p>⑰ CORE NEW CONNECTION TO MANHOLE ABOVE EXISTING BENCH. SEE DETAIL D ON SHEET C4.0.</p> <p>⑱ INSTALL 90° BEND AND THRUSTBLOCK PER MAG SD 380.</p> <p>⑲ INSTALL 90° BEND AND THRUSTBLOCK PER MAG SD 380.</p> <p>⑳ CONNECT NEW GAS MAIN TO EXISTING. SEE MECHANICAL PLANS FOR DETAILS.</p> <p>㉑ NEW GAS LINE, SEE MECHANICAL PLANS FOR SIZE AND CONTINUATION INTO BUILDING.</p> | <p>㉒ INSTALL 6"x4" WYE (6" INV=399.28, 4" INV=399.36)</p> <p>㉓ INSTALL 6"x4" WYE (6" INV=399.32, 4" INV=399.40)</p> <p>㉔ INSTALL 6"x4" WYE (6" INV=400.15, 4" INV=400.23)</p> <p>㉕ INSTALL 6"x4" WYE (6" INV=400.19, 4" INV=400.36)</p> <p>㉖ SEE PLUMBING PLANS FOR CONTINUATION</p> |
|--|--|--|

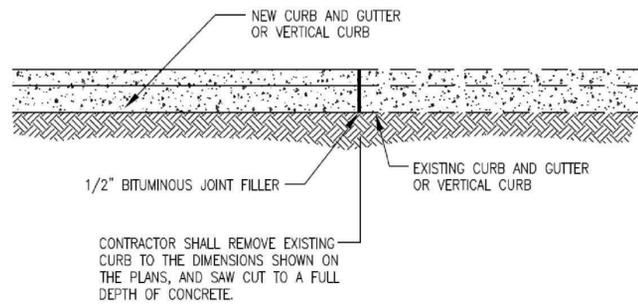
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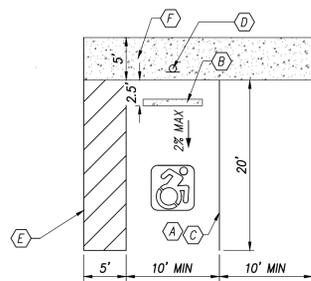
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**A** CONCRETE CURB NEW TO EXISTING CONNECTION  
NTS

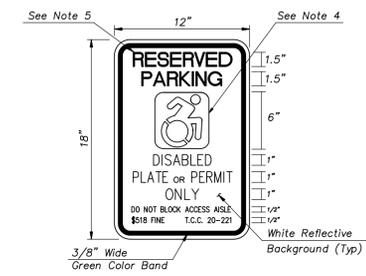


**C** HANDICAP/STANDARD PARKING DETAIL  
NTS

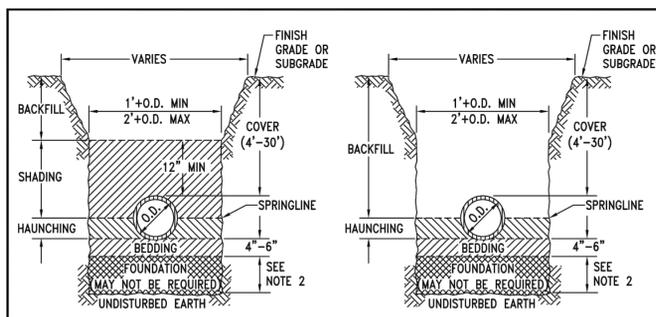
- A** A MAX 2% (1:48) SLOPE IN ALL DIRECTIONS AT ALL AREAS OF THE ACCESSIBLE PARKING LAYOUT AS PER 2010 ADASAD, SECTION 502.4.
- B** INSTALL CONCRETE WHEEL STOP PER MAG STANDARD DETAIL 150.
- C** 4" WHITE STRIPE
- D** DISABLED PARKING SIGN PER DETAIL E SHEET C4.0.
- E** DISABLED PARKING PAVEMENT MARKINGS PER ADASAD STANDARDS.
- F** INSTALL NEW CONCRETE SIDEWALK PER MAG SD 230

Notes:

1. THE BOTTOM OF THE SIGN SHOULD BE NO LESS THAN 7" ABOVE FINISH GRADE.
2. SIGNS SHALL BE PROPERLY CENTERED WITHIN THE PARKING SPACE.
3. THE SIGN FACE SHOULD BE LOCATED NO FARTHER THAN 6' FROM THE FRONT OF EACH PARKING SPACE.
4. INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOWN WHITE ON 6" X 6" BLUE FIELD WITH 1/2" ROUNDED CORNERS.
5. ALL LETTERING SERIES "C" GREEN COLOR.
6. ACCESSIBLE PARKING SIGN STANDARD AS DESIGNATED BY MUTCD, 2009 EDITION



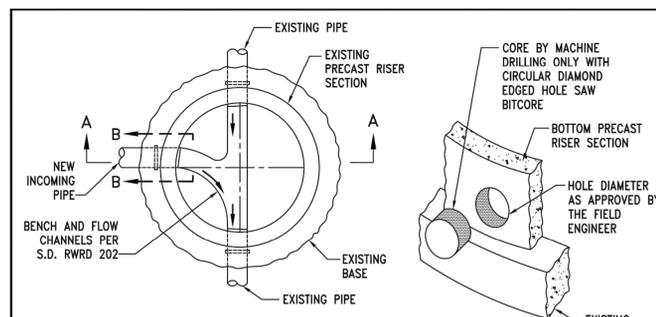
**E** ACCESSIBLE PARKING SIGN  
NTS



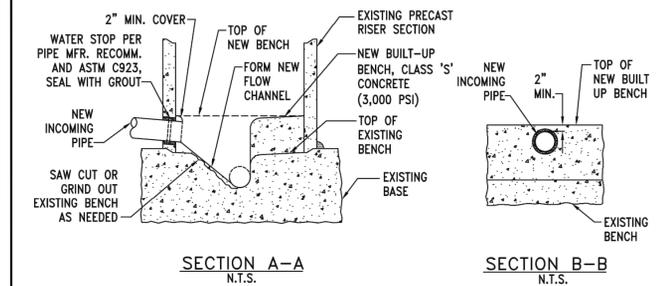
**B** TYPICAL TRENCH FOR GRAVITY SEWER LINES  
NTS

TABLE 1: APPROVED TRENCH MATERIALS AND GRADATION REQUIREMENTS							
CRUSHED STONE (FOUNDATION, BEDDING, HAUNCHING & SHADING)		SAND (BEDDING, HAUNCHING & SHADING)		EXCAVATED NATIVE MATERIAL (BACKFILL)		SELECT IMPORT MATERIAL (BACKFILL & FOUNDATION)	
NOM. SIZE	% PASSING	NOM. SIZE	% PASSING	NOM. SIZE	% PASSING	NOM. SIZE	% PASSING
1"	100	1"	100	6"	100	3"	100
3/4"	90-100	#4	60-100	ALSO SEE SUBSECTION 3.1.2(C)		3/4"	60-100
3/8"	20-55	#200	0-10			#8	35-80
#4	0-10	MAX. P.I.=5				SUM OF #200 + P.I. < 25	
#8	0-5	MAX. L.L.=30				ALSO SEE SUBSECTION 3.1.2(D)	
6.0 < pH < 12.0		6.0 < pH < 12.0					
MIN. RESISTIVITY = IN-PLACE MATERIAL OR 2,000 ohm-cm		MIN. RESISTIVITY = IN-PLACE MATERIAL OR 2,000 ohm-cm					
ALSO SEE SUBSECTION 3.1.2(A)		ALSO SEE SUBSECTION 3.1.2(B)					

- NOTES:
1. FOR SEWER LINES GREATER THAN 16 INCH DIAMETER OR COVER DEPTHS NOT CONFORMING TO THE STANDARD TRENCH DETAILS, SEE PLANS FOR MODIFIED TRENCH DETAILS.
  2. FOUNDATION IS REQUIRED FOR OVEREXCAVATION SUCH AS FOR ROCK OR UNSUITABLE MATERIALS. SEE SUBSECTION 3.1.3(B) FOR MORE INFORMATION.
  3. IN CASES WHERE GROUNDWATER IS ENCOUNTERED, INSTALLATION OF AN APPROVED GEOTEXTILE FABRIC ENCLOSING CRUSHED STONE SHALL BE REQUIRED FOR STABILIZATION.



**D** CONNECTION TO EXISTING MANHOLE BARREL  
NTS



**F** PRIVATE SEWER SINGLE CLEANOUT DETAIL  
NTS

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Sheet 9 of 48

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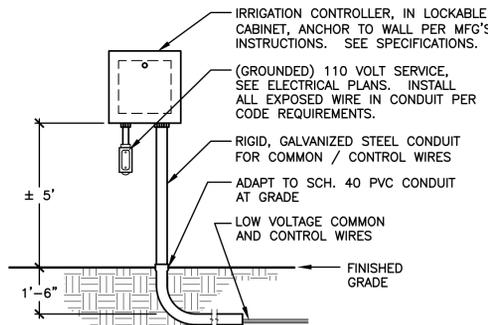
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**IRRIGATION DETAILS AND SCHEDULE**

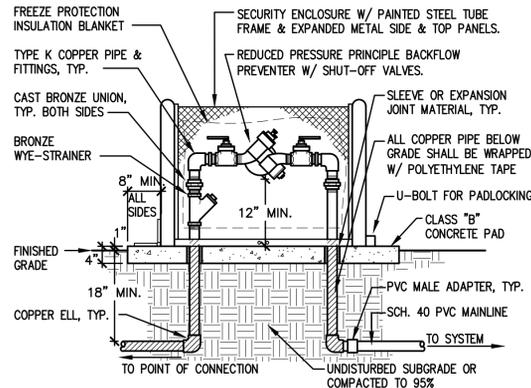
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IRRIGATION EQUIPMENT SCHEDULE		
SYMBOL	ITEM	DESCRIPTION
	BACKFLOW PREVENTER IN SECURITY ENCLOSURE	NEW 1" BACKFLOW PREVENTER: FEBCO MODEL 825Y SECURITY ENCLOSURE: GUARDSHACK MODEL GS-3, COLOR WOODLAND TAN FREEZE PROTECTION ENCLOSURE: GUARDSHACK MODEL FROSTGUARD
	AUTOMATIC CONTROLLER IN SECURITY ENCLOSURE	CONTROLLER "A": RAIN BIRD MODEL ESP4ME3- STATION CONTROLLER ENCLOSURE: LEMEUR SAFEGUARD MODEL SG-A (OR APPROVED EQUAL)
-----	MAINLINE PIPE	PIPE: SCHEDULE 40 PVC, SIZE AS NOTED FITTINGS: SCHEDULE 40 PVC FITTINGS FOR R.C.V. ASSEMBLIES: SCHEDULE 80 PVC FITTINGS
-----	LATERAL LINE PIPE	PIPE: SCHEDULE 40 PVC, SIZE AS NOTED FITTINGS: SCHEDULE 40 PVC
=====	SLEEVE	SLEEVE: SCHEDULE 40 PVC, SIZE AS NOTED
	BALL VALVE (ISOLATION VALVE IN ACCESS BOX)	VALVE: WATTS, MODEL FBV-3C-55 ACCESS BOX: CARSON MODEL 1419, COLOR TAN
	REMOTE CONTROL VALVE ASSEMBLY FOR DRIP ZONES IN ACCESS BOX	REMOTE CONTROL VALVE: RAIN BIRD, MODEL 100 PEB BALL VALVE: WATTS PRESSURE REGULATOR VALVE: RAIN BIRD, PSI-M-40X-075 IN-LINE FILTER: RAINBIRD MODEL RBV075MPTX ACCESS BOX: CARSON MODEL 1220, COLOR TAN
	MULTI-OUTLET EMITTER IN ACCESS BOX	MULTI-OUTLET EMITTER: RAINBIRD XBT-10-6 EMITTER RISER: SCH. 40 PVC RISER WITH SCH. 40 PVC MALE ADAPTER DISTRIBUTION TUBING: RAINBIRD XT-700 POLYETHYLENE TUBING ACCESS BOX: CARSON MODEL 809
	PVC LATERAL FLUSH CAP IN ACCESS BOX	FLUSH CAP FITTINGS: SCHEDULE 40 PVC RISER WITH SCH. 40 PVC MALE ADAPTER AND THREADED CAP. ACCESS BOX: CARSON MODEL 809
REMOTE CONTROL VALVE DESIGNATION		
	A-1	CONTROLLER AND STATION I.D.
	TREE	TYPE OF IRRIGATION ZONE
	1"	SIZE OF VALVE

NOTE: COORDINATE INSTALLATION OF IRRIGATION CONTROLLER WITH OWNER'S REPRESENTATIVE. BEFORE INSTALLATION, OBTAIN APPROVAL FOR CONTROLLER LOCATION, WIRE ROUTING, AND PROPOSED CONNECTION TO ELECTRICAL SERVICE.

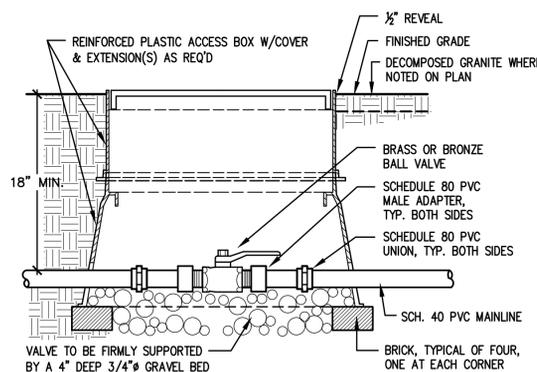


1 IRRIGATION CONTROLLER - WALL MOUNTED  
 SCALE: N.T.S. IR-2.20



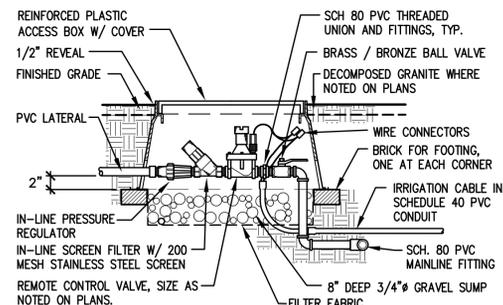
2 REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER IN SECURITY ENCLOSURE  
 SCALE: N.T.S. IR-3.20

NOTE: USE TEFLON TAPE ON ALL THREADED CONNECTIONS.



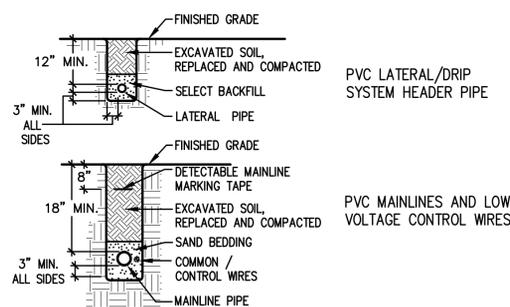
3 MAINLINE ISOLATION (BALL) VALVE (1/2" TO 1 1/2" SIZE)  
 SCALE: N.T.S. IR-5.11

NOTES:  
 1. ALL WIRES TO BE INSTALLED PER LOCAL CODE. TAPE AND BUNDLE WIRES EVERY 20'. PROVIDE EXPANSION COIL AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" Ø PIPE 15 TIMES).  
 2. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS ADJACENT UNDISTURBED SOIL.  
 3. ALL THREADED PVC JOINTS SHALL BE WRAPPED WITH TEFLON TAPE.

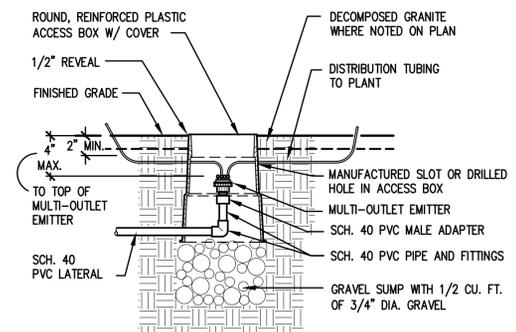


4 REMOTE CONTROL VALVE ASSEMBLY - DRIP ZONE  
 SCALE: N.T.S. IR-6.21

NOTES:  
 1. SELECT BACKFILL SHALL BE SAND OR SOIL FREE OF ROCKS AND STONES LARGER THAN 1/2" DIA.  
 2. BACKFILL MATERIAL SHALL BE WATERED IN AND COMPACTED TO DENSITY OF ADJACENT UNDISTURBED SOIL.

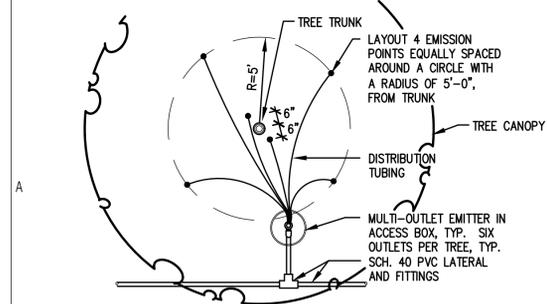


5 PIPE TRENCHING AND BACKFILL - MAINLINES, LATERALS AND MARKING TAPE  
 SCALE: N.T.S. IR-16.1



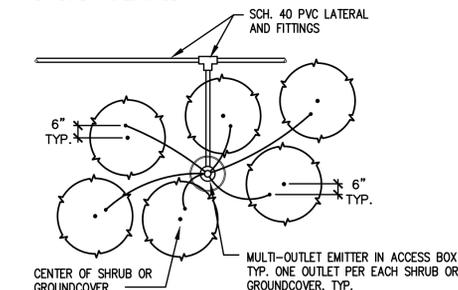
6 MULTI-OUTLET EMITTER - SIX OUTLET  
 SCALE: N.T.S. IR-11.2

NOTE: LAYOUT DISTRIBUTION TUBING AS SHOWN AND LOCATE DISCHARGE POINT ±2" ABOVE FINISHED GRADE.

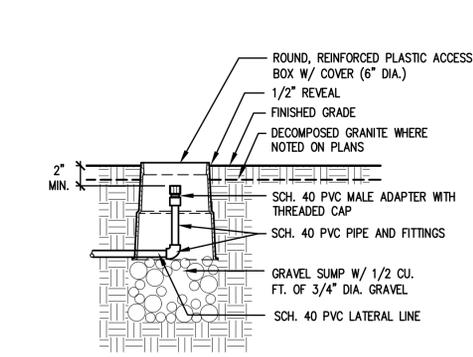


7 EMITTER DISTRIBUTION TUBING LAYOUT AT TREE - SIX OUTLET  
 SCALE: N.T.S. IR-12.1

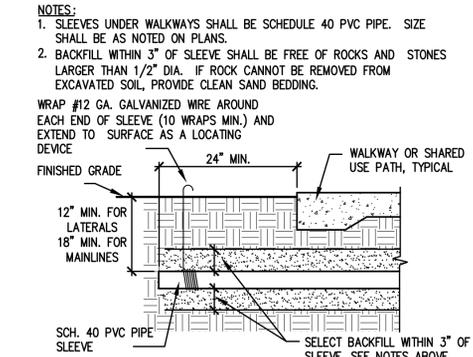
NOTES:  
 1. LENGTH OF DISTRIBUTION TUBING SHALL NOT EXCEED 8'-0".  
 2. LAYOUT DISTRIBUTION TUBING AS SHOWN AND LOCATE DISCHARGE POINT 2" ABOVE FINISHED GRADE.



8 EMITTER DISTRIBUTION TUBING LAYOUT AT SHRUBS  
 SCALE: N.T.S. IR-12.3



9 EMITTER LINE FLUSH CAP IN ACCESS BOX  
 SCALE: N.T.S. IR-13.1



10 SLEEVE UNDER WALKWAY OR SHARED USE PATH  
 SCALE: N.T.S. IR-13.1

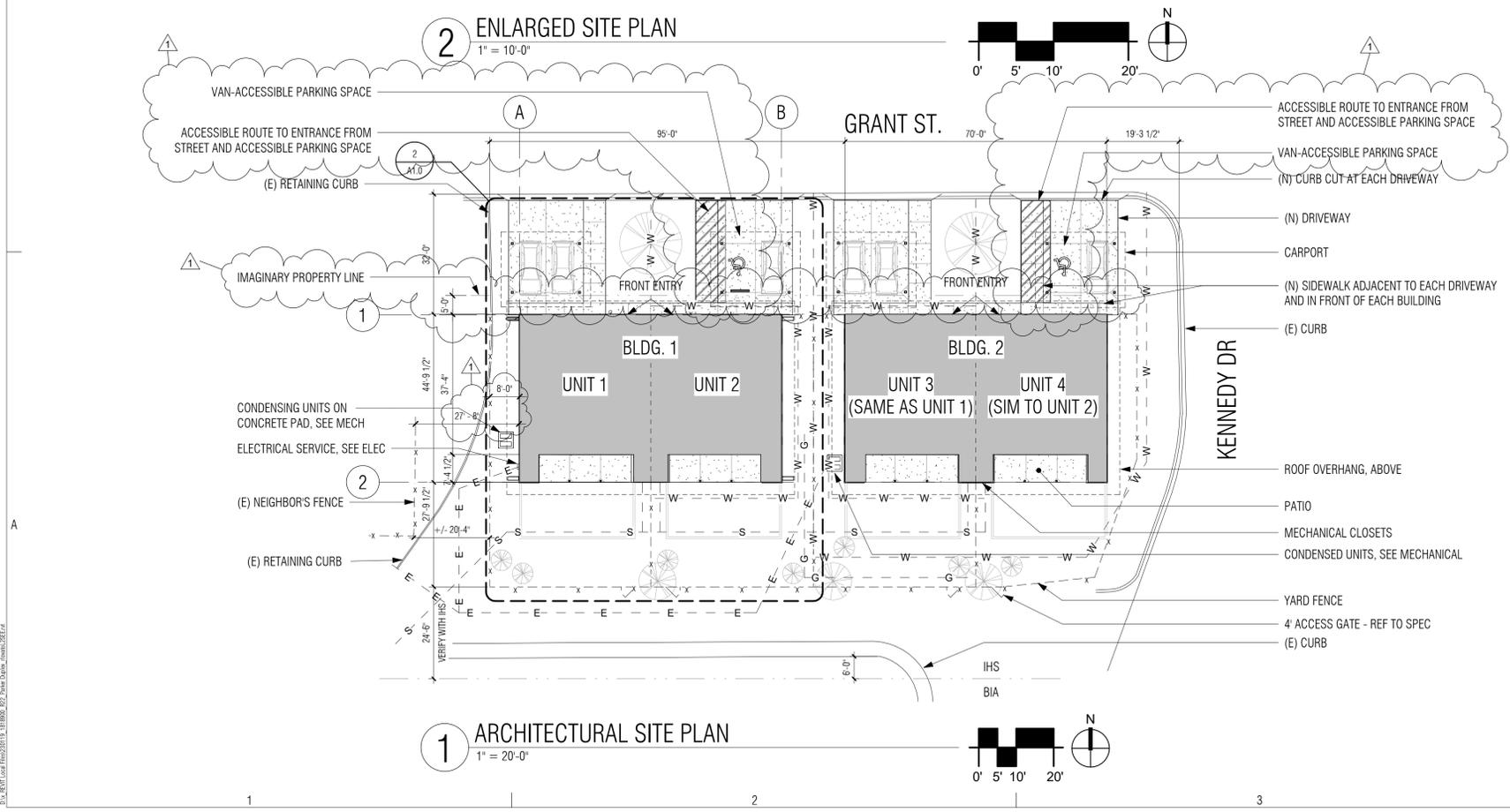
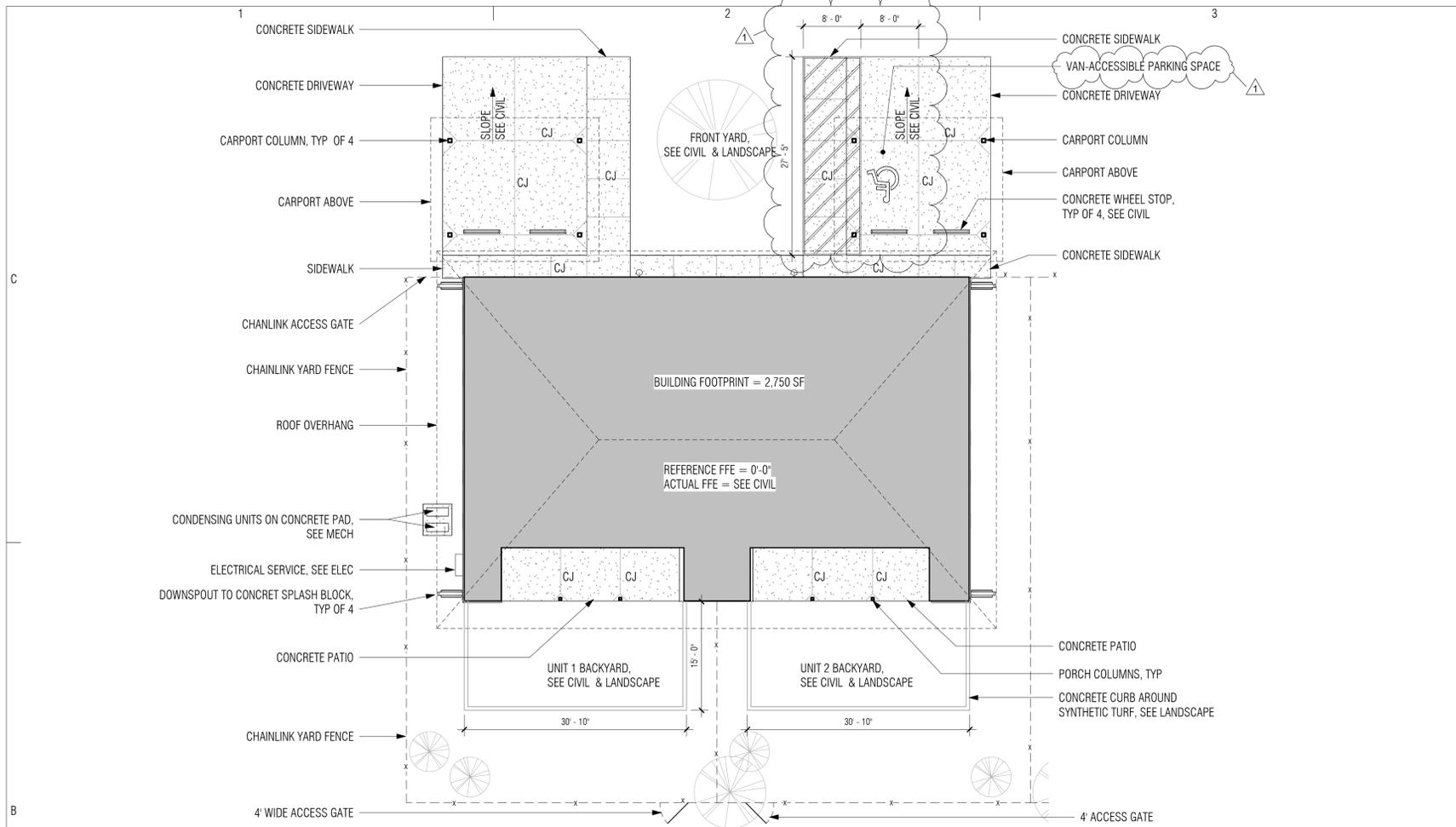
REVIEWED FOR CODE COMPLIANCE

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BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023



**SITE PLAN GENERAL NOTES**

- A. UNDERGROUND UTILITY LOCATIONS HAVE NOT BEEN VERIFIED FOR LOCATION OR SIZE. CONTRACTOR TO VERIFY LOCATION AND SIZE OF UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- B. CONTRACTOR IS RESPONSIBLE FOR ALL BARRICADES & SAFETY CONCERNS WITHIN & ADJACENT TO CONSTRUCTION.
- C. FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS PRIOR TO CONSTRUCTION.
- D. REFER TO CIVIL, LANDSCAPE, STRUCTURAL, MECHANICAL & ELECTRICAL DRAWINGS FOR MORE INFORMATION & UTILITY COORDINATION.
- E. CONTRACTOR SHALL PATCH & REPAIR ALL EXISTING FINISHES ADJACENT TO DEMOLITION AS REQUIRED.
- F. REFER TO CIVIL FOR BUILDING FINISH ELEVATION AND OTHER SITE INFORMATION.

**SITE DATA**

APARTMENT UNITS:	4 UNITS
REQUIRED PARKING:	8 SPACES
FOOTPRINT PER BUILDING:	2,750 SF
FOOTPRINT TOTAL:	5,312 SF
CONCRETE PAVING PER BUILDING:	985 SF
CONCRETE TOTAL PAVING:	1,970 SF

**SITE PLAN LEGEND**

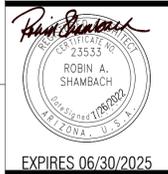
- CONCRETE SIDEWALKS, PATIO AND DRIVEWAYS
- BUILDING FOOTPRINT
- SITE VISIBILITY TRIANGLES
- SITE BOUNDARY
- (E) CHAINLINK FENCE
- PROPOSED CHAIN LINK FENCE
- (E) WATER LINE
- PROPOSED WATER LINE
- (E) SEWER LINE
- PROPOSED SEWER LINE
- (E) GAS LINES
- PROPOSED GAS LINES
- (E) UNDERGROUND ELECTRICAL LINES
- (E) OVERHEAD ELECTRICAL LINES
- PROPOSED UNDERGROUND ELECTRICAL LINES
- CONTOUR LINES
- SIDEWALK SCUPPER
- EXISTING SEWER MANHOLE
- REVIEWED FOR CODE COMPLIANCE**
- SEWER CLEANOUT

BUREAU VERITAS NORTH AMERICA, INC.  
 SIGNATURE: Bobbet V. La Guardia  
 DATE: 02/24/2023

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**PARKER INDIAN HEALTH CENTER  
 DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3



INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA



REVIEWED:  
 DFE ENGINEER/PROJECT MANAGER DATE  
 APPROVED:

DFE BRANCH CHIEF DATE  
 CONCURRENCE:  
 DFE CHIEF DATE

REV	DATE	DESCRIPTION
1	01/20/23	PERMIT REVISIONS
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PROJECT NO.:	1818.900	
CAD DWG FILE:		
DRAWN BY:	RL	
CHECKED BY:		

**SHEET TITLE**  
**ARCHITECTURAL SITE PLAN**

**A1.0**  
 Sheet 14 of 48

### FLOOR PLAN GENERAL NOTES

- DIMENSIONS ARE TO COLUMN CENTERLINE OR FACE OF STUD, U.N.O.
- REFER TO SHEET A4.0 FOR ROOM FINISHES
- REFER TO SHEET A5.0 FOR DOOR AND WINDOW SCHEDULE & TYPES
- REFER TO SHEET A6.0 FOR WALL TYPES
- FOR CARPORT FLOOR PLAN, SEE SHEET A2.2

### KEYNOTES

- |     |   |     |  |
|-----|---|-----|--|
| 104 | EQUIPMENT PAD, REF. STRUC.  | 121 | GAS METER, REFER PLUMBING  |
| 110 | CLOSET SHELF AND ROD LENGTH OF CLOSET, REF SPECS. MOUNT SHELF 84" AFF AND ROD 81-3/4" AFF | 606 | RECESSED MEDICINE CABINET W/ MIRROR, REF SPECS                       |
| 112 | MECH UNIT, REF MECH   | 610 | VENT DUCT, REF MECH  |
| 115 | ELECTRICAL PANELS, REF ELEC.  | 611 | WASHING MACHINE OUTLET BOX, REF PLUMB                                |
| 116 | TANKLESS WATER HEATER, REF PLUMBING   | 616 | BUILT-IN MICROWAVE OVER RANGE, REF FFE PACKAGE, ELEC & MECH DRAWINGS |
| 118 | DOWNSPOUT   | 617 | REFRIGERATOR, REF FFE PACKAGE  |
| 119 | ADA COMPLIANT COUNTER HEIGHT IN UNIT 2 ONLY   | 618 | RANGE, REF FFE PACKAGE   |
| 120 | CONCRETE SPLASH BLOCK   | 619 | DISHWATER BELOW COUNTER, REF FFE PACKAGE                             |
|     |   | 708 | PANTRY   |

**CONSULTANTS**

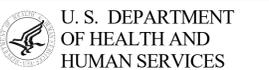
- |  |   |
|--|---|
| <b>CIVIL</b><br>EEC<br>555 E River Road, Suite 301<br>Tucson, AZ 85704<br>Phone: (520) 321-4625                                    | <b>STRUCTURAL</b><br>Turner Structural Eng.<br>2806 N Alvernon Way,<br>Ste 400<br>Tucson, AZ 85712<br>Phone: (520) 323-3422 |
| <b>MECHANICAL</b><br>Zona Technical Engineering<br>6422 E Speedway Blvd,<br>Suite 130<br>Tucson, AZ 85710<br>Phone: (520) 200-2612 | <b>ELECTRICAL</b><br>M3 Engineering<br>2051 W Sunset Rd<br>Tucson, AZ 85704<br>Phone: (520) 293-1488                        |



EXPIRES 06/30/2025

**PARKER INDIAN HEALTH CENTER  
 DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3



INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA



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DFE ENGINEER/PROJECT MANAGER DATE

APPROVED:

DFE BRANCH CHIEF DATE

CONCURRENCE:

DFE CHIEF DATE

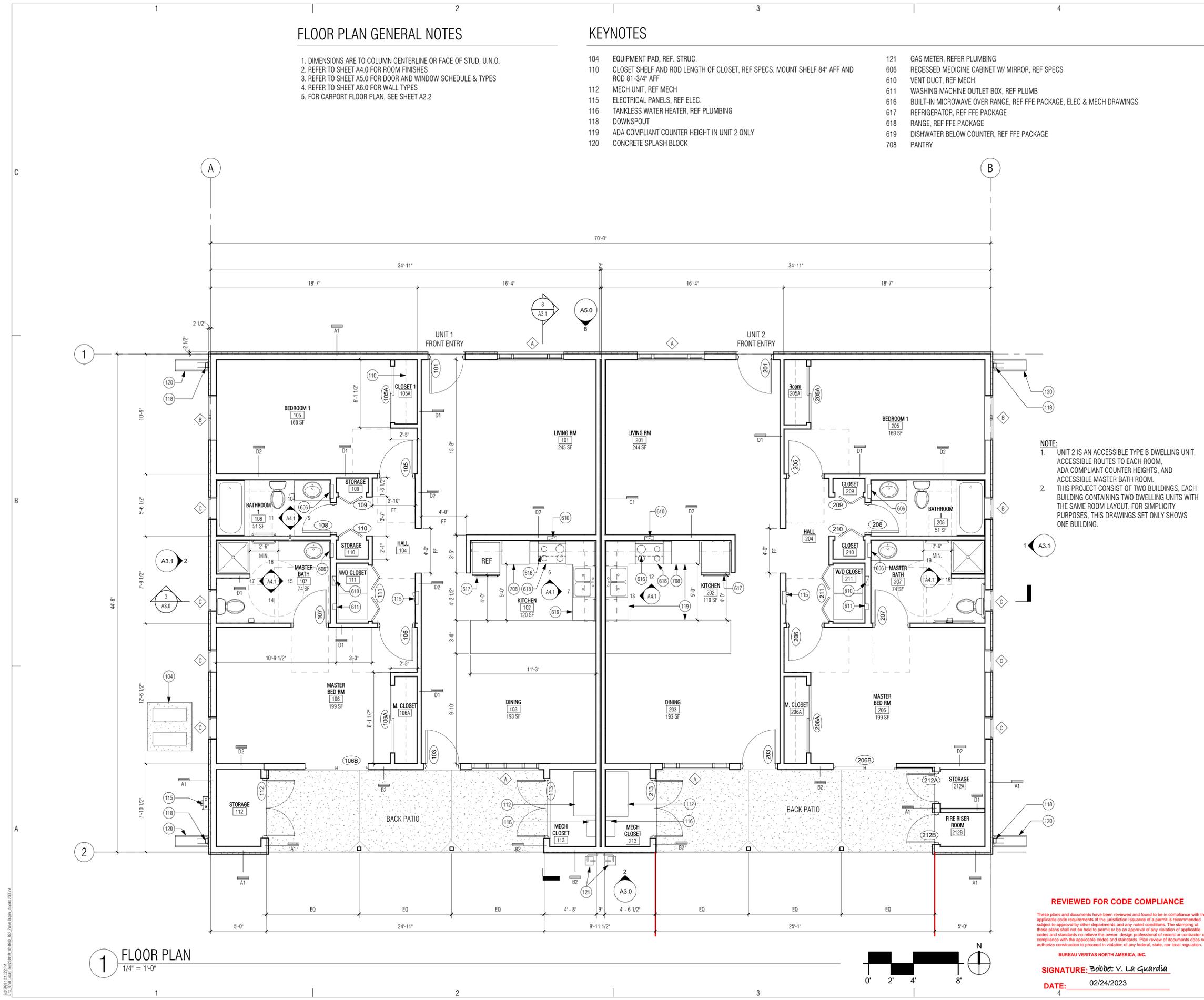
REV	DATE	DESCRIPTION
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PROJECT NO.:	1818.900	
CAD DWG FILE:		
DRAWN BY:	RL	
CHECKED BY:		

**SHEET TITLE**

**FLOOR PLAN**

**A2.0**

Sheet 15 of 48



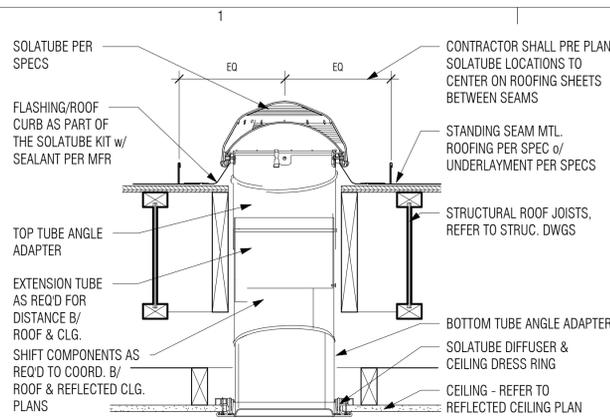
**NOTE:**  
 1. UNIT 2 IS AN ACCESSIBLE TYPE B DWELLING UNIT, ACCESSIBLE ROUTES TO EACH ROOM, ADA COMPLIANT COUNTER HEIGHTS, AND ACCESSIBLE MASTER BATH ROOM.  
 2. THIS PROJECT CONSIST OF TWO BUILDINGS, EACH BUILDING CONTAINING TWO DWELLING UNITS WITH THE SAME ROOM LAYOUT. FOR SIMPLICITY PURPOSES, THIS DRAWINGS SET ONLY SHOWS ONE BUILDING.

**REVIEWED FOR CODE COMPLIANCE**  
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**SIGNATURE: Bobbet V. La Guardia**  
**DATE: 02/24/2023**

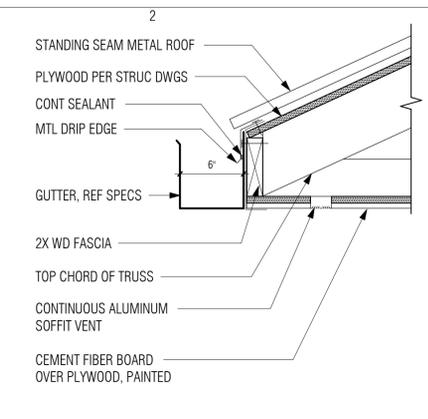
**1 FLOOR PLAN**  
 1/4" = 1'-0"



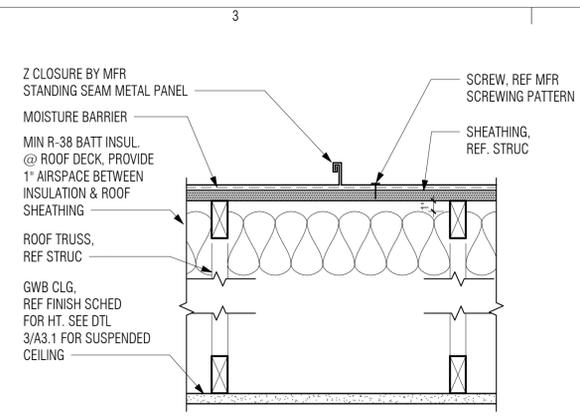
2/27/2023 10:15:57 PM  
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**2** TUBULAR SKYLIGHT @ STANDING SEAM ROOF  
1 1/2" = 1'-0"



**3** GUTTER @ STANDING METAL ROOF  
1 1/2" = 1'-0"



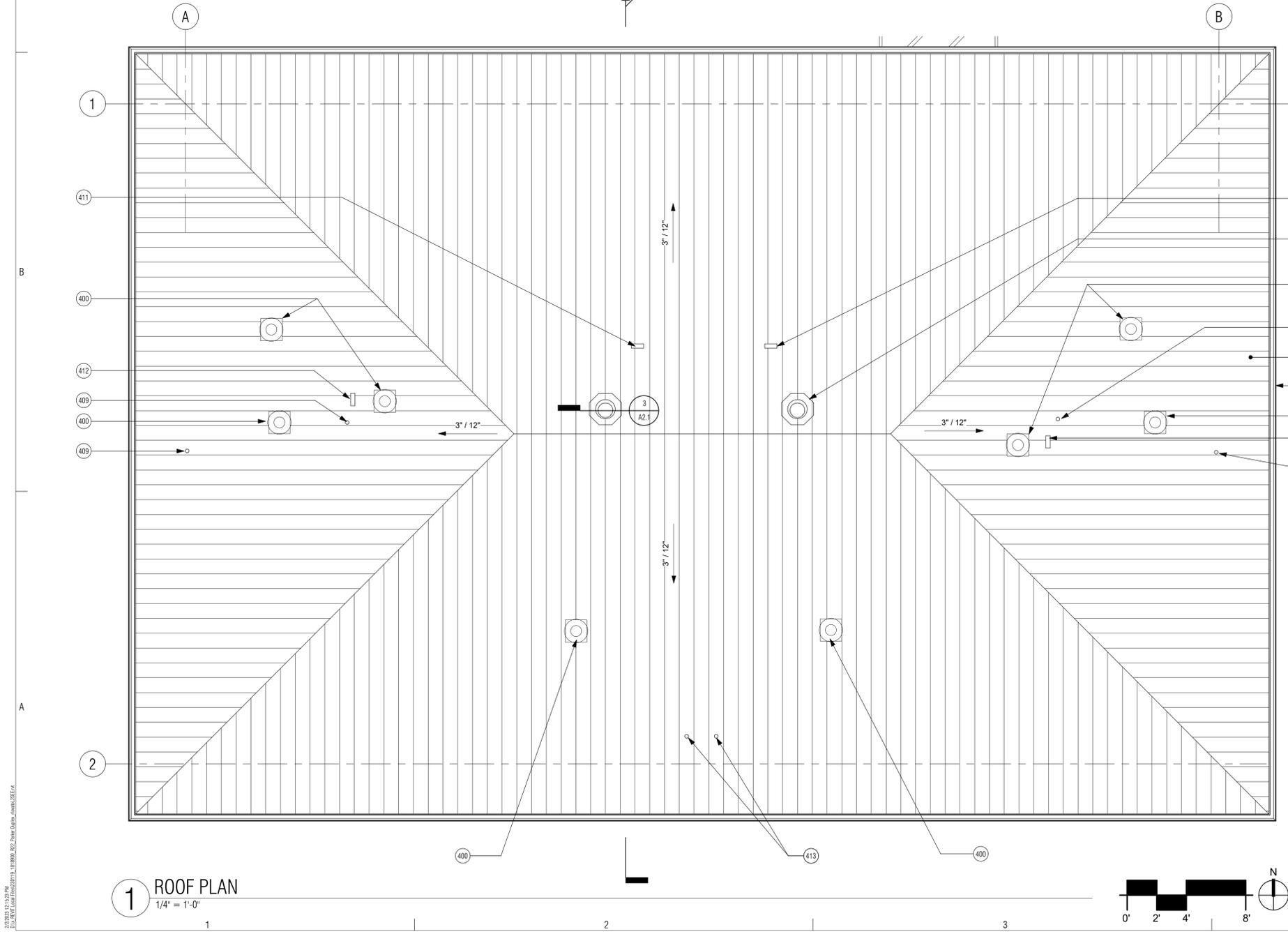
**4** ROOF TYPE A - STANDING SEAM MTL ROOF  
1 1/2" = 1'-0"

**GENERAL NOTES**

1. ROOF SLOPES AS INDICATED ON ROOF PLAN
2. COORDINATE THE ROOF PLAN WITH PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS.
3. REFER TO PLUMBING DRAWINGS FOR VENT STACK PENETRATIONS AND FLASH PER DETAILS.
4. FOR CARPORT PLANS SEE SHEET A2.2.

**KEYNOTES**

- 400 EXHAUST DUCT W/ ROOF CAP, REFER TO MECH DWGS
- 401 10" TUBULAR SKYLIGHT, TYPICAL
- 403 STANDING SEAM METAL ROOF. SEE DETAIL 4/A2.1
- 409 VENT PENETRATION, REFER TO PLUMB DWGS
- 410 CONTINUOUS METAL GUTTER OVER WOOD FASCIA, TYP ON ALL SIDES
- 411 RANGE HOOD ROOF VENT, REFER TO MECH DWGS
- 412 DRYER ROOF VENT, REFER TO MECH DWGS
- 413 WATER HEATER ROOF VENT, REFER TO MECH DWGS

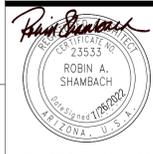


**1** ROOF PLAN  
1/4" = 1'-0"

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**PARKER INDIAN HEALTH CENTER  
 DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
 INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA

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 DFE ENGINEER/PROJECT MANAGER DATE  
 APPROVED:

DFE BRANCH CHIEF DATE  
 CONCURRENCE:  
 DFE CHIEF DATE

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ISSUE:	July 26, 2022	- Construction Documents
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CHECKED BY:		

**SHEET TITLE**  
**ROOF PLAN**

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 SIGNATURE: Bobbet V. La Guardia  
 DATE: 02/24/2023

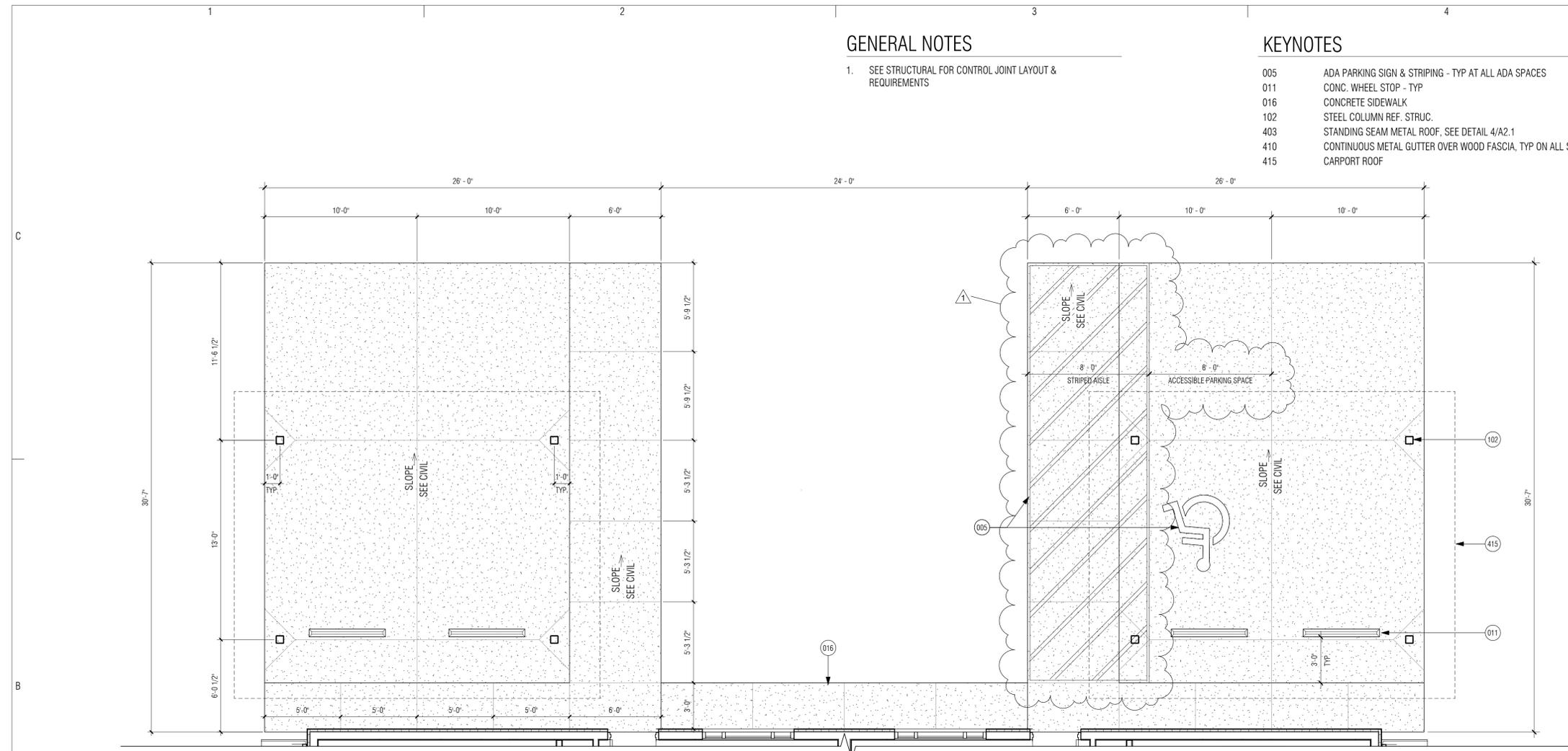
**A2.1**  
 Sheet 16 of 48

**GENERAL NOTES**

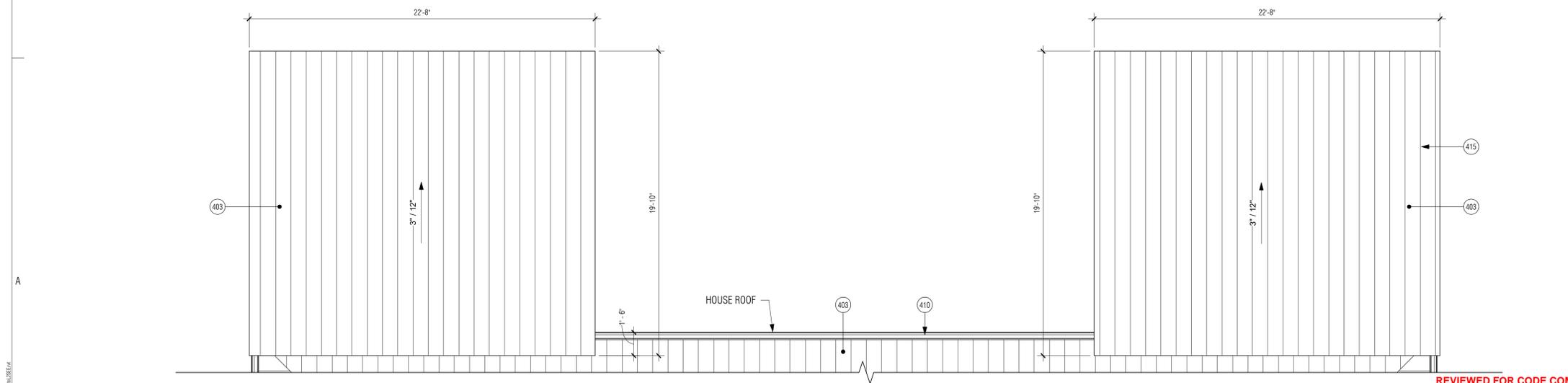
- 1. SEE STRUCTURAL FOR CONTROL JOINT LAYOUT & REQUIREMENTS

**KEYNOTES**

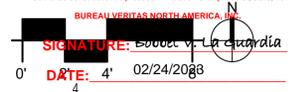
- 005 ADA PARKING SIGN & STRIPING - TYP AT ALL ADA SPACES
- 011 CONC. WHEEL STOP - TYP
- 016 CONCRETE SIDEWALK
- 102 STEEL COLUMN REF. STRUC.
- 403 STANDING SEAM METAL ROOF. SEE DETAIL 4/A2.1
- 410 CONTINUOUS METAL GUTTER OVER WOOD FASCIA, TYP ON ALL SIDES
- 415 CARPORT ROOF



**1 CARPORT FLOOR PLAN**  
1/4" = 1'-0"



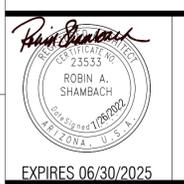
**2 CARPORT ROOF PLAN**  
1/4" = 1'-0"



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**PARKER INDIAN HEALTH CENTER  
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DFE CHIEF	DATE

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1	01/20/23	PERMIT REVISIONS

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**SHEET TITLE**  
**CARPORT FLOOR AND ROOF PLANS**

**A2.2**  
Sheet 17 of 48

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DATE: 02/24/2023



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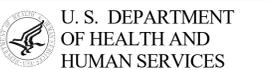
<b>CIVIL</b> EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	<b>STRUCTURAL</b> Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
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**PARKER INDIAN HEALTH CENTER**  
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Parker, AZ  
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INDIAN HEALTH SERVICE  
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DPE ENGINEER/PROJECT MANAGER DATE

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DPE BRANCH CHIEF DATE

CONCURRENCE:

DPE CHIEF DATE

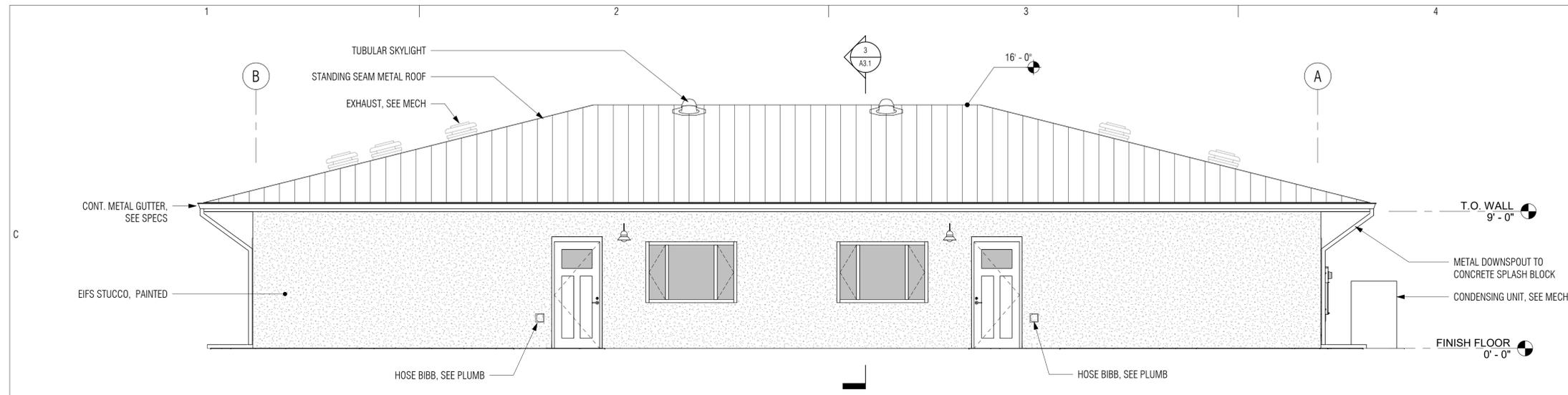
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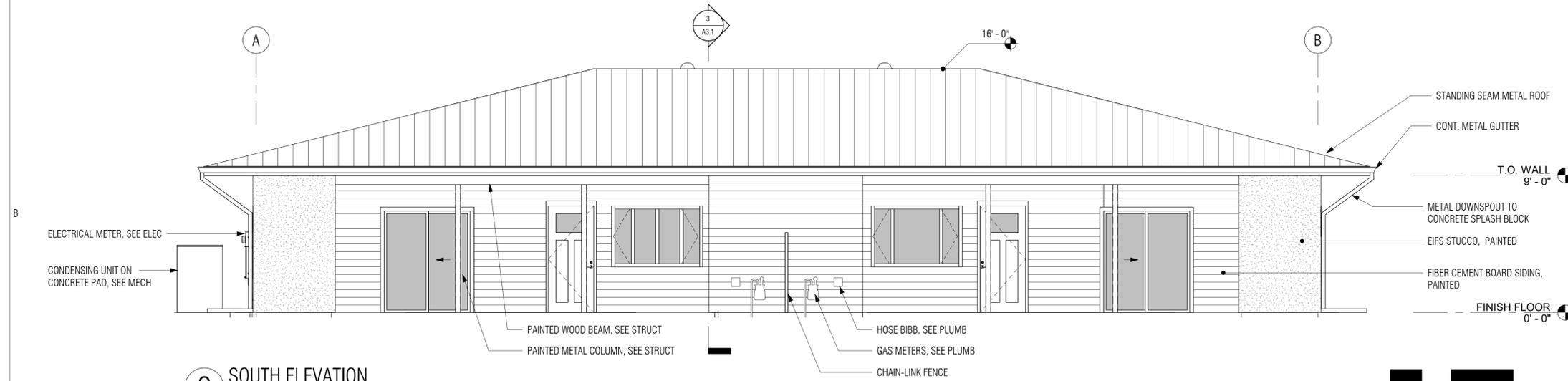
**ELEVATIONS & BUILDING SECTIONS**

**A3.0**

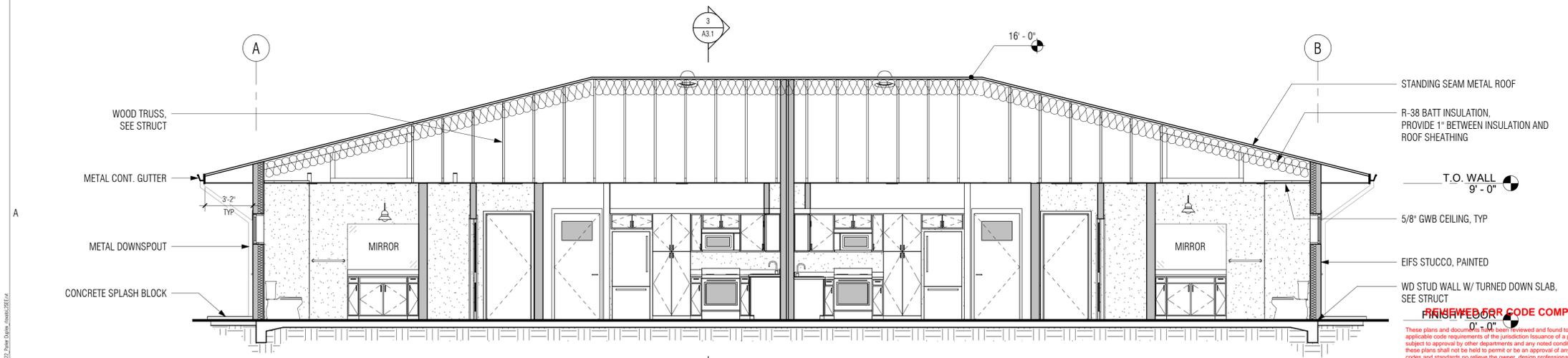
Sheet 19 of 48



**1 NORTH ELEVATION**  
 1/4" = 1'-0"



**2 SOUTH ELEVATION**  
 1/4" = 1'-0"



**3 LONGITUDINAL SECTION**  
 1/4" = 1'-0"



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BURNS WALD-HOPKINS NORTH AMERICA, INC.  
**SIGNATURE: Robert V. La Guardia**  
**DATE: 02/24/2023**

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 PROJECT: 1818.900  
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MATERIALS & FINISHES LEGEND

MATERIAL	TYPE/COLOR	APPLICATION
<b>EIFS STUCCO</b>		
ST-1	DUNN EDWARDS/ DRY CREEK, DE6122	EXTERIOR WALLS
<b>FIBER CEMENT</b>		
FC-1	DUNN EDWARDS/ TEA BISCUIT, DE6120	EXTERIOR SIDING & ROOF SOFFIT
<b>PAINT</b>		
PT-1	DUNN EDWARDS/ FADED GRAY, DEW382	INTERIOR WALLS
PT-2	DUNN EDWARDS/ WHISPER, DEW340	INTERIOR DOORS & TRIM
PT-3	DUNN EDWARDS/ BLUSTERY WIND, DE6304	EXTERIOR DOOR
<b>PORCELAIN TILE</b>		
T-1	MS INTERNATIONAL/ VOGUE BRUCIATIO	6" x 24" FLOOR TILE
T-2	DALTILE/ SKYBRIDGE/GRAY, SY96	10" x 14" WALL FIELD TILE
TB	DALTILE	4" x 12" BULLNOSE BASE
<b>GRANITE</b>		
GR-1	STONEMARK/BIANCO ROMANO	KITCHEN & BATH COUNTERTOP
<b>WOOD</b>		
WD-1	SIMPSON, PAINTED	INTERIOR DOOR PANELS
WD-2	KRAFTMAID, FOX HILL CHERRY SLATE	MILLWORK
<b>FIBERGLASS</b>		
FG-1	PELLA IMPERVA, BROWN	WINDOWS & SLIDING GLASS DOOR
<b>METAL</b>		
MTL-1	ATAS/ BOYSENBERRY, 25	STANDING SEAM METAL ROOF

FINISH SCHEDULE GENERAL NOTES

- A. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS AND EXTENT OF SOFFITS
- B. SEE PLANS AND INTERIOR ELEVATIONS FOR LOCATIONS AND EXTENTS OF VARIOUS FINISH MATERIALS
- C. FOR TILE WALLS PROVIDE COVE BASE AND BULLNOSE TRIM

ABBREVIATIONS

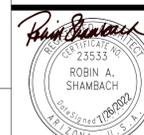
CONC	CONCRETE	PT	PAINT
CJ	CONTROL JOINT	PCT	PORCELAIN TILE
FF	FACTORY FINISH	RB	RUBBER BASE
FGL	FIBERGLASS	SGL	SAFETY GLASS
GWB	GYPSPUM WALL BOARD	SCWD	SOLID CORE WOOD
HM	HOLLOW METAL	WD	WOOD
LVT	LUXURY VINYL TILE		

ROOM SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR		WALLS								CEILING		REMARKS
		FINISH	BASE	NORTH		EAST		SOUTH		WEST		SURFACE	FINISH	
				SURFACE	FINISH	SURFACE	FINISH	SURFACE	FINISH	SURFACE	FINISH			
101	LIVING RM	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
102	KITCHEN	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
103	DINING	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
104	HALL	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
105	BEDROOM 1	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
105A	CLOSET 1	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
106	MASTER BED RM	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
106A	M. CLOSET	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
107	MASTER BATH	T-1	TB	GWB	PT / T-2	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
108	BATHROOM 1	T-1	TB	GWB	PT / T-2	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
109	STORAGE	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
110	STORAGE	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
111	W/D CLOSET	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
112	STORAGE	CONC	-	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
113	MECH CLOSET	CONC	-	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
201	LIVING RM	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
202	KITCHEN	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
203	DINING	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
204	HALL	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
205	BEDROOM 1	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
205A	Room	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
206	MASTER BED RM	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
206A	M. CLOSET	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
207	MASTER BATH	T-1	TB	GWB	PT / T-2	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
208	BATHROOM 1	T-1	TB	GWB	PT / T-2	GWB	PT / T-2	GWB	PT / T-2	GWB	PT	GWB	PT	
209	CLOSET	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
210	CLOSET	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
211	W/D CLOSET	T-1	TB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
212A	STORAGE	CONC	-	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
212B	FIRE RISER ROOM	CONC	-	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
213	MECH CLOSET	CONC	-	GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	

CONSULTANTS

CIVIL EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	STRUCTURAL Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
MECHANICAL Zona Technical Engineering 6422 E Speedway Blvd, Suite 130 Tucson, AZ 85710 Phone: (520) 200-2612	ELECTRICAL M3 Engineering 2051 W Sunset Rd Tucson, AZ 85704 Phone: (520) 293-1488



EXPIRES 06/30/2025

PARKER INDIAN HEALTH CENTER  
DUPLEX DESIGN

Parker, AZ  
IHS PROJECT NO. PH21CRO3Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA



REVIEWED:

DFE ENGINEER/PROJECT MANAGER DATE

APPROVED:

DFE BRANCH CHIEF DATE

CONCURRENCE:

DFE CHIEF DATE

REV DATE DESCRIPTION

ISSUE: July 26, 2022 - Construction Documents

PROJECT NO: 1818.900

CAD DWG FILE:

DRAWN BY: RL

CHECKED BY:

SHEET TITLE

FINISH PLAN, SCHEDULE & DETAILS

A4.0

Sheet 21 of 48

REVIEWED FOR CODE COMPLIANCE

These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction. Issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, nor local regulation.

BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023





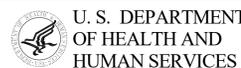
**CONSULTANTS**

<b>CIVIL</b> EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	<b>STRUCTURAL</b> Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
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**PARKER INDIAN HEALTH CENTER**  
**DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3



INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA

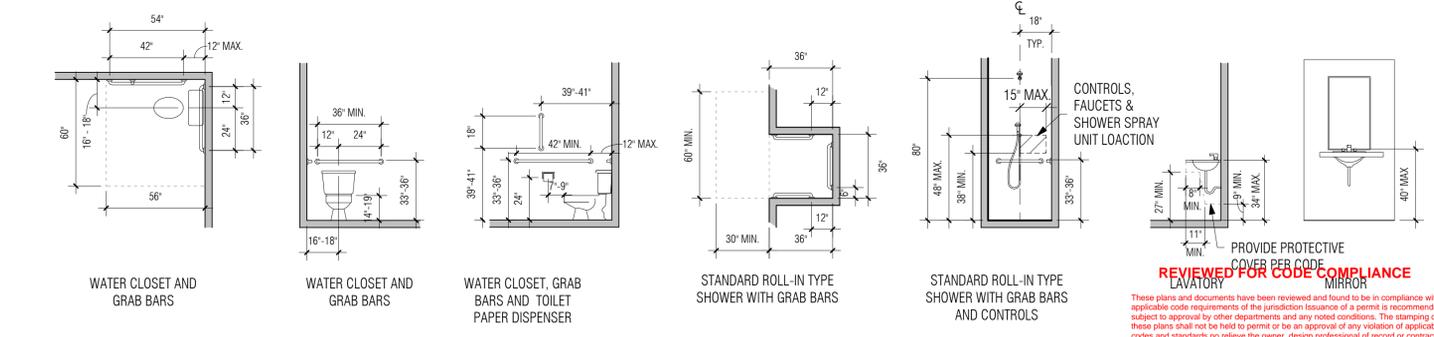
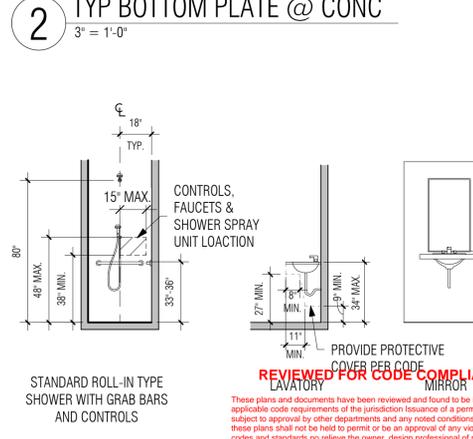
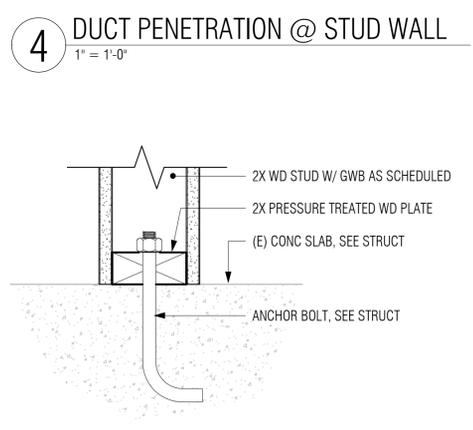
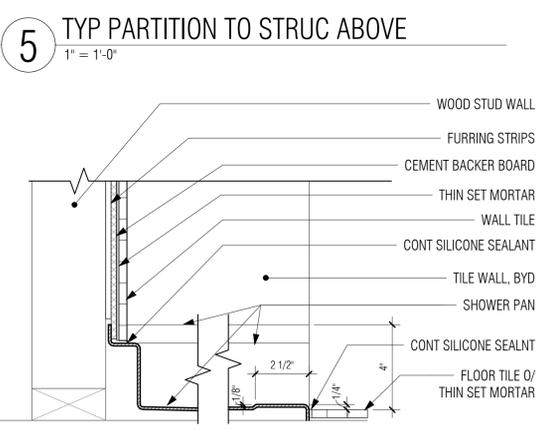
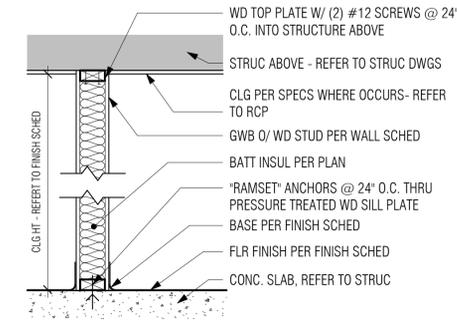
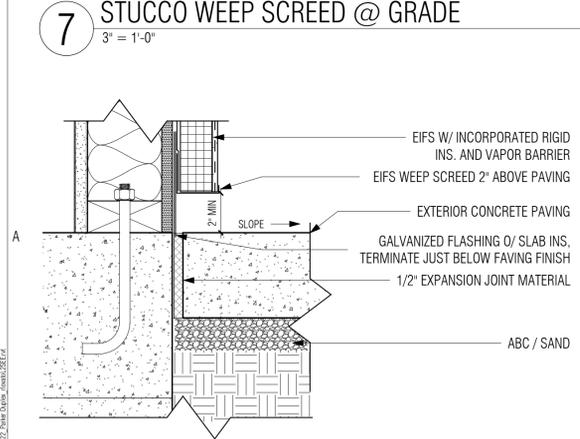
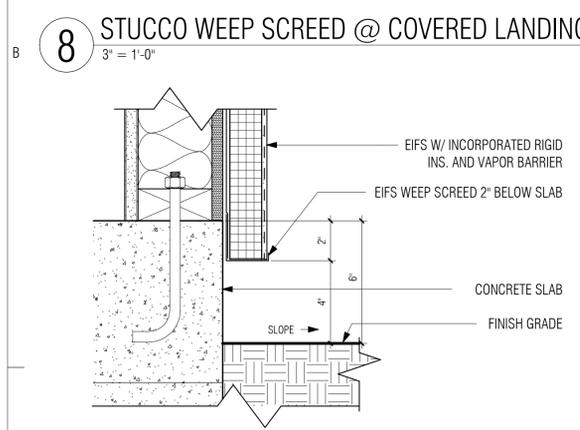
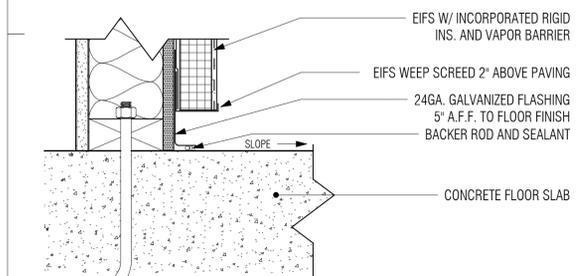
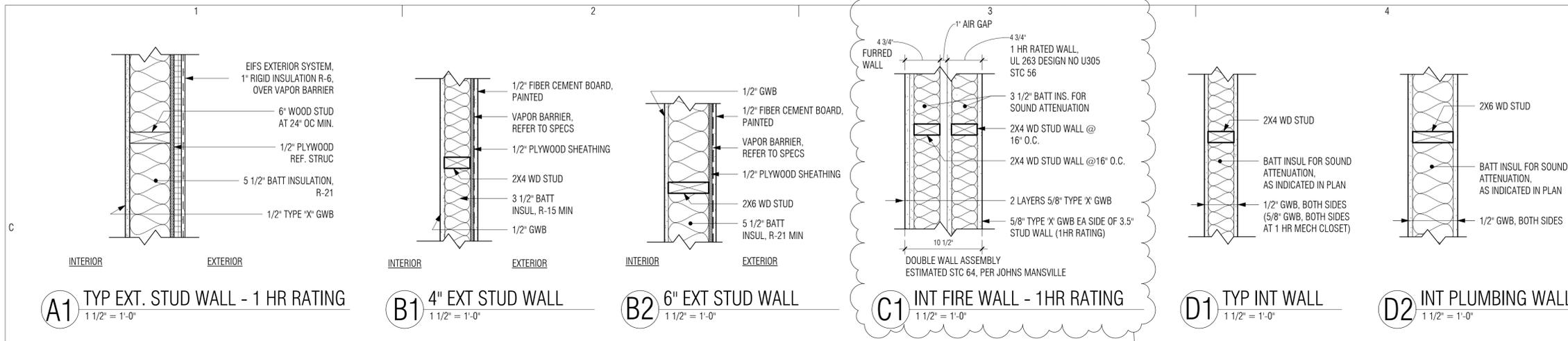
REVIEWED:	
DFE ENGINEER/PROJECT MANAGER	DATE
APPROVED:	
DFE BRANCH CHIEF	DATE
CONCURRENCE:	
DFE CHIEF	DATE

REV	DATE	DESCRIPTION
ISSUE:	July 26, 2022	- Construction Documents
PROJECT NO.:	1818.900	
CAD DWG FILE:		
DRAWN BY:	RL	
CHECKED BY:		

**WALL TYPES & DETAILS**

**A6.0**

Sheet 24 of 48



**REVIEWED FOR CODE COMPLIANCE**  
 THESE PLANS AND DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN COMPLIANCE WITH THE APPLICABLE CODE REQUIREMENTS OF THE JURISDICTION ISSUANCE OF A PERMIT IS RECOMMENDED SUBJECT TO APPROVAL BY OTHER DEPARTMENTS AND ANY NOTED CONDITIONS. THE STAMPING OF THESE PLANS SHALL NOT BE HELD TO PERMIT OR BE AN APPROVAL OF ANY VIOLATION OF APPLICABLE CODES AND STANDARDS NOR RELIEVE THE OWNER, DESIGN PROFESSIONAL OF RECORD OR CONTRACTOR OF COMPLIANCE WITH THE APPLICABLE CODES AND STANDARDS. PLAN REVIEW OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATION.

BUREAU VERITAS NORTH AMERICA, INC.  
 SIGNATURE: Bobbet V. La Guardia  
 DATE: 02/24/2023

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ABBREVIATIONS	
A.B.	ANCHOR BOLT
A.C.I.	AMERICAN CONCRETE INSTITUTE
A.E.	ARCHITECT ENGINEER
A.I.A.	AMERICAN INSTITUTE OF ARCHITECTS
ALT.	ALTERNATE
ARCH.	ARCHITECT (URAL)
@	AT
BOT.	BOTTOM
BD.	BOARD
BTWN.	BETWEEN
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.O.F.	BOTTOM OF FOOTING
BRG.	BEARING
BSMT.	BASEMENT
CHAN.	CHANNEL
CEM.	CEMENT
C.I.P.	CAST IN PLACE
C.J.	CONTROL/CONSTRUCTION JOINT
CLR.	CLEAR
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECT (ION)
CONST.	CONSTRUCT (ION)
CONT.	CONTINUOUS
∅	CENTER LINE
DBL.	DOUBLE
DEMO.	DEMOLITION
DET.	DETAIL
∅	DIAMETER
DM.	DIMENSION
DN.	DOWN
DO.	DITTO
DWG.	DRAWING
EA.	EACH
EL.	ELEVATION
ELEC.	ELECTRICAL
ENG.	ENGINEER
EQ.	EQUAL
EQUIP.	EQUIPMENT
EW.	EACH WAY
EXTG.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
FDN.	FOUNDATION
F.F.	FINISH FLOOR
FIN.	FINISH
FRMG.	FRAMING
FT.	FOOT
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
G.L.	GLU-LAM
GYP.	GYPSON
HORIZ.	HORIZONTAL
H.S.A.	HEADED STUD ANCHOR
HT.	HEIGHT
H.V.A.C.	HEATING/VENTILATING
IN.	INCH
INT.	INTERIOR
JST.	JOIST
JT.	JOINT
K	KIP (1000)
KO.	KNOCK OUT
L.L.	LIVE LOAD
L.L.H.	LONG LEG HORIZONTAL
L.L.V.	LONG LEG VERTICAL
MAT.	MATERIAL
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OPNG.	OPENING
PL.	PLATE
PT.	POINT
PWD.	PLYWOOD
REINF.	REINFORCE (D)
REQD.	REQUIRED
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION
SQ.	SQUARE
ST.	STEEL
SYM.	SYMMETRICAL
T. & B.	TOP AND BOTTOM
THK.	THICKNESS
T.O.B.	TOP OF BEAM
T.O.F.	TOP OF FOOTING
T.O.J.	TOP OF JOIST
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/	WITH
W/O	WITHOUT
W.W.M.	WELDED WIRE MESH

SYMBOLS and LEGENDS	
	C.M.U.
	GRANULAR BASE COURSE
	PLYWOOD SHEATHING
	STEEL
	SECTION CUT
	KEYNOTE
	SHEAR WALL
	DETAIL TITLE
	ELEVATION TARGET
	REVISION
	STEP IN FOOTING
	CENTER LINE
	COLUMN MARK
	FOOTING MARK
	SLAB DEPRESSION
	OPENINGS
	COLUMN GRID
	DECK SPAN
	CONTROL/ CONSTRUCTION JOINT
	PLYWOOD TRUSS JOIST
	"LH" SERIES JOIST MARK
	STEEL BEAM SIZE
	"K" SERIES JOIST MARK

**STANDARD STRUCTURAL NOTES**

**I. GENERAL:**

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2018 EDITION WITH LOCAL MODIFICATIONS.
- DESIGN LOADS:
  - ROOF LIVE LOAD: 20 PSF
  - ROOF DEAD LOAD: 20 PSF (10 PSF AT CARPORT)
  - WIND LOAD: BASIC WIND SPEED = 105 MPH  
RISK CATEGORY II  
EXPOSURE C
  - EARTHQUAKE DESIGN DATA: SEISMIC DESIGN CATEGORY C  
SDS = 0.206 S<sub>D1</sub> = 0.186  
SITE CLASS: D  
LATERAL SYSTEM: LIGHT FRAME WALLS WITH WOOD SHEAR PANELS  
LATERAL METHOD: EQUIVALENT LATERAL FORCE PROCEDURE
  - SOIL PRESSURE: 2,500 PSF PER GEOTECHNICAL ENGINEERING REPORT PREPARED BY WESTERN TECHNOLOGIES, JOB NUMBER 4122J014, DATED JUNE 13, 2022.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS.
- ALL DETAILS SHOWN APPLY WHETHER SPECIFICALLY REFERENCED OR NOT.
- ALL STRUCTURAL CALCULATIONS SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW, SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER (STRUCTURAL) REGISTERED IN THE STATE OF ARIZONA.

**II. FOUNDATION AND EARTHWORK:**

- ALL FOOTINGS SHALL BE FOUNDED AT THE DEPTHS INDICATED ON CONSTRUCTION DRAWINGS, OR 18 INCHES MINIMUM BELOW LOWEST ADJACENT GRADE.
- ENGINEERED FILL IS REQUIRED BELOW ENTIRE BUILDING PAD. SEE DETAIL 11/S2.1 AND THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
- EXTERIOR FINISHED GRADES SHALL SLOPE TO DRAIN AWAY FROM BUILDING WALLS TO ELIMINATE WATER POCKETS ADJACENT TO BUILDING FOUNDATIONS.
- PROVIDE 4" THICK GRANULAR BASE COURSE BELOW ALL SLABS ON GRADE UNLESS NOTED OTHERWISE.

**III. CONCRETE:**

- ALL CONCRETE SHALL CONFORM WITH ASTM C-94, HAVE A MAXIMUM WATER/CEMENTITIOUS MATERIALS RATIO OF 0.58, USE TYPE V CEMENT, AND ATTAIN THE FOLLOWING MINIMUM STRENGTHS AT 28 DAYS:
  - FOOTINGS, SLAB ON GRADE: 3,000 PSI
  - CURBS & SIDEWALKS: 2,500 PSI
- ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE PROVISIONS FOR THE FOLLOWING LATEST ACI STANDARDS:
  - ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
  - ACI 318 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
- CONCRETE FOOTINGS AND PADS MAY BE POURED AGAINST NEAT EXCAVATIONS, PROVIDED PLAN DIMENSIONS ARE ADHERED TO.
- MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE AS FOLLOWS:
  - CONCRETE POURED DIRECTLY AGAINST EARTH: 3 INCHES
  - FORMED CONCRETE: 1 1/2 INCHES
- ALL REINFORCING BARS, ANCHOR BOLTS, AND CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING CONCRETE. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CONSULT ARCHITECT/ENGINEER OF SUCH CONFLICTS.
- NO CONSTRUCTION JOINTS (OTHER THAN THOSE SHOWN ON DRAWINGS) SHALL BE INSTALLED WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER. PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS.
- CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER TO OBSERVE COMPLETED FOOTING EXCAVATION AND ALL REINFORCING BAR PLACEMENTS BEFORE ANY CONCRETE IS PLACED.
- REINFORCING STEEL:
  - ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615 GRADE 60.
  - ALL REINFORCING IN CONCRETE SHALL BE CONTINUOUS OR LAPPED IN ACCORDANCE WITH ACI 318, AND NOT LESS THAN 48 DIAMETERS.

**IV. METALS:**

- STRUCTURAL STEEL:
  - ALL STRUCTURAL STEEL CONSTRUCTION SHALL COMPLY WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AND AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" INCLUDING COMMENTARY, AND THE APPLICABLE PROVISIONS OF THE AWS, "STRUCTURAL WELDING CODE".
  - ALL TUBE STEEL SHALL BE ASTM A500 GRADE B. ALL OTHER SHAPES AND PLATES SHALL BE ASTM A36.
  - ALL UNFINISHED BOLTS AND NUTS SHALL BE ASTM A307.
  - E70XX ELECTRODES SHALL BE USED FOR ALL WELDS.
  - ALL ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 36.

**V. CARPENTRY:**

- ROUGH CARPENTRY:
  - ALL LUMBER SHALL BE DOUGLAS FIR-LARCH OF THE FOLLOWING GRADE:
 

STUDS & BLOCKING	Fb = 900 PSI	E = 1,600,000 PSI
POSTS	Fc = 1,500 PSI	E = 1,600,000 PSI
JOISTS	Fb = 1,000 PSI	E = 1,700,000 PSI
LEDGERS	Fb = 1,100 PSI	E = 1,800,000 PSI
  - ROOF AND WALL SHEATHING SHALL BE APA RATED SHEATHING PLYWOOD EXPOSURE I
  - CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER TO OBSERVE THE COMPLETED NAILING OF SHEATHING PRIOR TO ROOFING PLACEMENT.
  - ALL NAILING SHALL CONFORM TO THE 2021 IBC TABLE NO. 2304.10.2 AND AS NOTED ON DRAWINGS.
  - ALL LUMBER SHALL BEAR THE STAMP OF AN APPROVED GRADING AGENCY.
  - PROVIDE MULTIPLE TRUSSES BELOW ROOF MOUNTED EQUIPMENT AS REQUIRED BY THE TRUSS MANUFACTURER.
  - CONTRACTOR SHALL PROVIDE FRAMED OPENINGS AT ALL ROOF OPENINGS PER TYPICAL STRUCTURAL DETAILS. NOTE: ALL ROOF OPENINGS MAY NOT BE SHOWN ON THE STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ALL OPENINGS, SIZE, AND LOCATION INFORMATION.
- PREFABRICATED/PRE-ENGINEERED ROOF TRUSSES:
  - ROOF TRUSSES SHALL BE DESIGNED, FABRICATED, BRACED, AND INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND THE TRUSS PLATE INSTITUTE. MANUFACTURER SHALL SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS OF PROPOSED MATERIAL AND DETAILS TO THE ARCHITECT/ENGINEER FOR REVIEW AND TO THE BUILDING DEPARTMENT FOR ACCEPTANCE PRIOR TO FABRICATION.
- GLU-LAM BEAMS:
  - ALL LAMINATED BEAMS SHALL CONFORM TO AITC 117 "STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED TIMBER".
  - PROVIDE GLU-LAM BEAMS OF AITC COMBINATION SYMBOL 24F-V4.
  - PROVIDE STANDARD CAMBER OF GLU-LAM BEAMS UNLESS NOTED OTHERWISE ON DRAWINGS.

**GENERAL NOTES**

FOR COMPLETE DIMENSIONS SEE ARCHITECTURAL DRAWINGS

**SPECIAL INSPECTION:**

THE FOLLOWING PORTIONS OF THE WORK REQUIRE SPECIAL INSPECTION TO BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE. (NOTE: SPECIAL INSPECTION OF CONCRETE IS NOT REQUIRED. 3,000 PSI CONCRETE IS SPECIFIED FOR SERVICEABILITY, BUT IS DESIGNED FOR 2,500 PSI)

EARTHWORK			
REQUIRED SPECIAL INSPECTIONS AND TESTS	CONTINUOUS	PERIODIC	REFERENCE
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	---	X	THE GEOTECHNICAL REPORT SHALL BE USED TO DETERMINE COMPLIANCE.
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	---	X	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	---	X	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	---	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	---	X	

STRUCTURAL STEEL			
REQUIRED VERIFICATIONS & INSPECTION	CONTINUOUS	PERIODIC	REFERENCE
1. MATERIAL VERIFICATION OF STRUCTURAL STEEL: <ol style="list-style-type: none"> <li>IDENTIFICATION OF MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.</li> <li>MANUFACTURER'S CERTIFIED MILL TEST REPORTS.</li> </ol>	---	---	ASTM A6 OR A568
2. MATERIAL VERIFICATION OF WELD FILLER MATERIALS: <ol style="list-style-type: none"> <li>IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.</li> <li>MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.</li> </ol>	---	---	AISC 360 SEC. A3.5
3. INSPECTION OF WELDING: <ol style="list-style-type: none"> <li>SINGLE PASS FILLET WELDS ≤ 5/16"</li> </ol>	---	X	AWS D1.1
4. PLACEMENT OF ANCHOR RODS SUPPORTING STRUCTURAL STEEL.	---	X	AISC 360 SEC. N5.7

**DEFERRED SUBMITTALS:**

SHOP DRAWINGS SUBMITTALS, SUBMITTED DURING CONSTRUCTION AND REQUIRED BY THE GENERAL STRUCTURAL NOTES WHICH CONTAIN DESIGN CALCULATIONS AND SEALS BY REGISTERED ENGINEER OTHER THAN THE ENGINEER OF RECORD, SHALL FIRST BE REVIEWED BY THE ENGINEER OF RECORD AND DETERMINED TO BE IN GENERAL CONFORMANCE WITH THE BUILDING DESIGN AND SO STATE ON THE PLANS. THE DOCUMENTS SHALL THEN BE SUBMITTED TO THE BUILDING OFFICIAL FOR REVIEW. A BUILDING PERMIT WILL BE REQUIRED AND PLAN CHECK FEES COLLECTED. THESE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL AND ENGINEER OF RECORD.

DEFERRED SUBMITTALS SHALL INCLUDE THE FOLLOWING:

- PREFABRICATED ROOF TRUSSES

**REVIEWED FOR CODE COMPLIANCE**

These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction. Issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards to relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, or local regulation.

BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: *Jose Rely B. Chico*  
DATE: FEBRUARY 09, 2023

**TURNER STRUCTURAL ENGINEERING COMPANY**

2806 N. Alvernon Way Ste. 400 • Tucson, AZ, 85718 • (520) 323-3422

**bws ARCHITECTS**

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**CONSULTANTS**

CIVIL EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	STRUCTURAL Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
MECHANICAL Adams & Associates 6422 E Speedway Blvd, Suite 130 Tucson, AZ 85710 Phone: (520) 323-3858	ELECTRICAL M3 Engineering 2051 W Sunset Rd Tucson, AZ 85704 Phone: (520) 293-1488

**PARKER INDIAN HEALTH CENTER DUPLEX DESIGN**

Parker, AZ  
IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA

REVIEWED: \_\_\_\_\_  
DFE ENGINEER/PROJECT MANAGER DATE

APPROVED: \_\_\_\_\_  
DFE BRANCH CHIEF DATE

CONCURRENCE: \_\_\_\_\_  
DFE CHIEF DATE

REV	DATE	DESCRIPTION
1	01/20/23	REV. 1 - PERMIT REVISIONS

ISSUE: July 26, 2022 Construction Documents  
PROJECT NO: 1818.900  
CAD DWG FILE: 21112  
DRAWN BY: TBG  
CHECKED BY: JDH

**SHEET TITLE**

**STANDARD STRUCTURAL NOTES**

**S0.1**  
Sheet 26 of 48



**CONSULTANTS**

<b>CIVIL</b> EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	<b>STRUCTURAL</b> Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
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U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
**INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA**

REVIEWED:

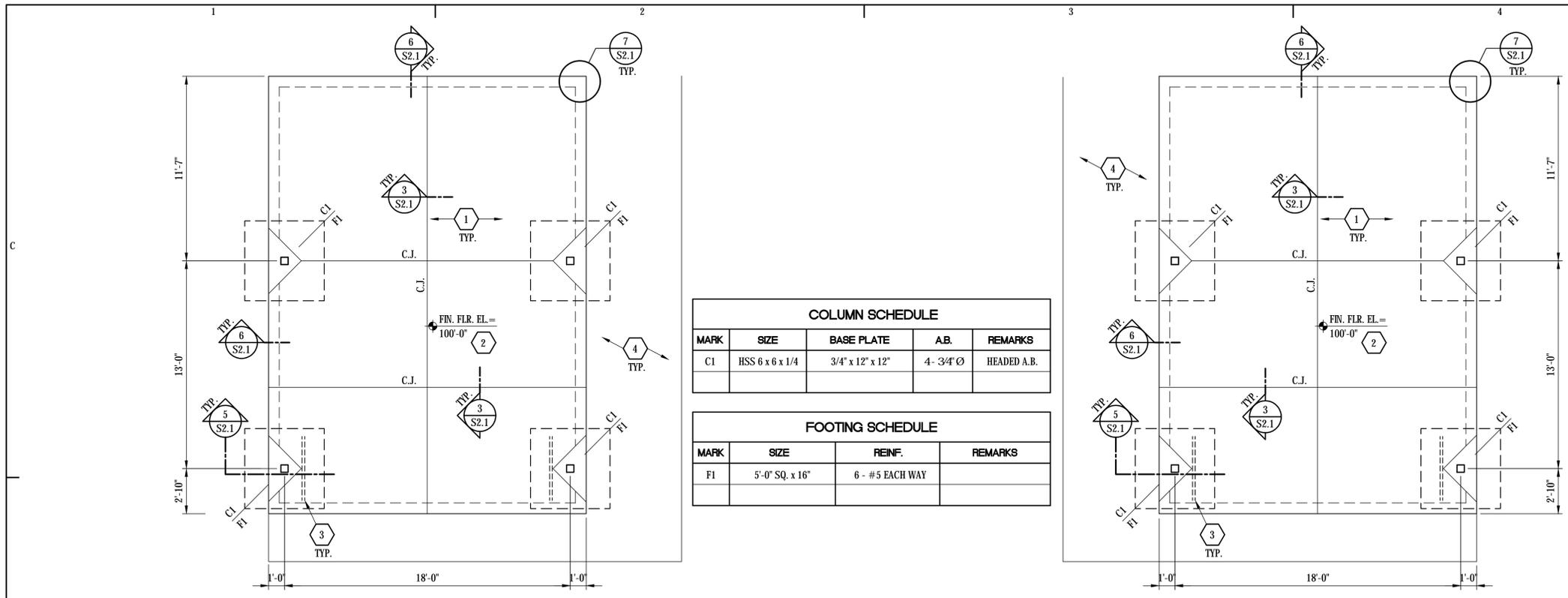
DFE ENGINEER/PROJECT MANAGER	DATE
APPROVED:	
DFE BRANCH CHIEF	DATE
CONCURRENCE:	
DFE CHIEF	DATE

REV	DATE	DESCRIPTION

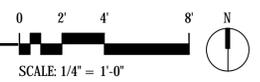
ISSUE: July 26, 2022 Construction Documents  
 PROJECT NO: 1818.900  
 CAD DWG FILE: 21112  
 DRAWN BY: TBC  
 CHECKED BY: JDH

**FOUNDATION AND ROOF FRAMING PLANS -  
 Carport**

**S1.2**  
 Sheet 28 of 48



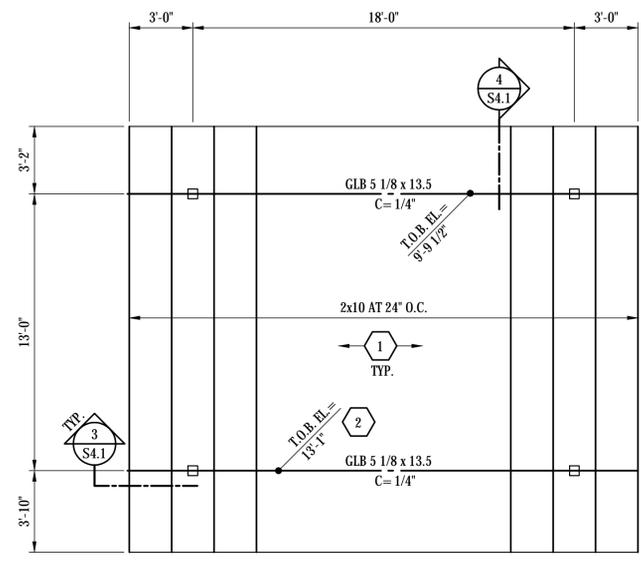
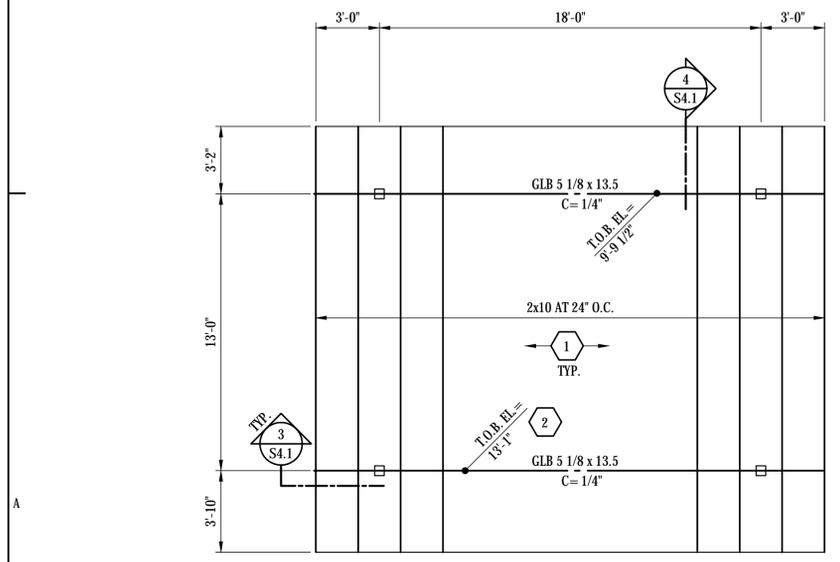
**1 FOUNDATION PLAN - Carport**



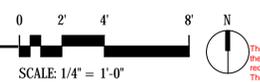
**FOUNDATION KEYNOTES:**

- 5" CONCRETE SLAB ON GRADE REINFORCED WITH #4 AT 24" O.C. EACH WAY ON 4" COMPACTED GRANULAR BASE COURSE, TYPICAL.
- T.O.F. (TOP OF FOOTING) ELEVATION SET RELATIVE TO REFERENCE FINISH FLOOR ELEVATION OF 100'-0".
- PROVIDE 2 - #4 BARS x 4'-0" LONG AT MID-DEPTH OF SLAB.
- FOR EXTERIOR CONCRETE SLAB WORK SEE CIVIL, LANDSCAPE, AND ARCHITECTURAL DRAWINGS.

**NOTES:**  
 1. T.O.F. (TOP OF FOOTING) ELEVATION SHALL BE A MINIMUM OF 1'-0" BELOW ADJACENT SLAB OR FINISH GRADE ELEVATION, WHICHEVER IS LOWER, TYPICAL U.N.O.  
 2. ENGINEERED FILL IS REQUIRED BELOW ENTIRE BUILDING PAD. SEE DETAIL 11/S2.1 AND THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.



**2 ROOF FRAMING PLAN - Carport**



**FRAMING KEYNOTES:**

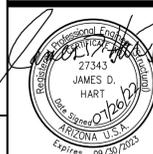
- 1/2" PLYWOOD SHEATHING (OR OSB), (PI = 32/16) WITH 8d NAILS AT 6" O.C. ALL SUPPORTED PANEL EDGES, AND 8d NAILS AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS, TYPICAL.
- T.O.B. (TOP OF BEAM), ELEVATIONS SET RELATIVE TO REFERENCE FINISH FLOOR ELEVATION OF 0'-0".

**REVIEWED FOR CODE COMPLIANCE**  
These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction. Issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards to relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, or local regulations.  
 BUREAU VERITAS NORTH AMERICA, INC.  
 SIGNATURE: *Jose Rely B. Chico*  
 DATE: FEBRUARY 09, 2023



CONSULTANTS

<b>CIVIL</b> EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	<b>STRUCTURAL</b> Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
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**PARKER INDIAN HEALTH CENTER  
 DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT  
 OF HEALTH AND  
 HUMAN SERVICES

INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA

REVIEWED:

DFE ENGINEER/PROJECT MANAGER	DATE
APPROVED:	
DFE BRANCH CHIEF	DATE
CONCURRENCE:	
DFE CHIEF	DATE

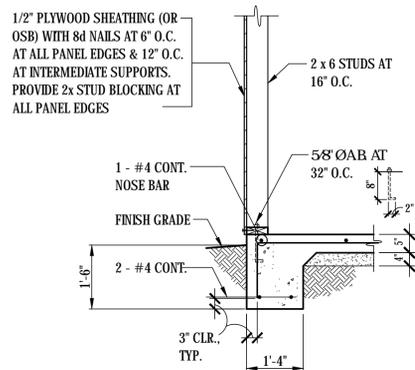
REV	DATE	DESCRIPTION

ISSUE: July 26, 2022 Construction Documents  
 PROJECT NO: 1818.900  
 CAD DWG FILE: 211112  
 DRAWN BY: TBC  
 CHECKED BY: JDH

SHEET TITLE  
**FOUNDATION DETAILS**

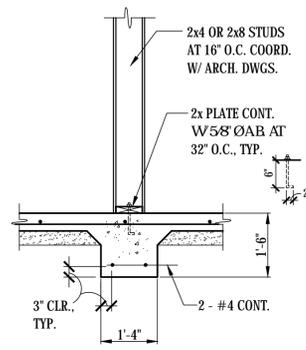
**S2.1**

Sheet 29 of 48

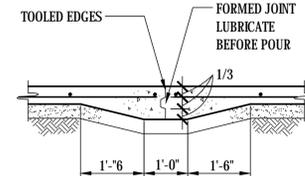


**1 TYP. WALL FOOTING**

1/2" = 1'-0" TYPICAL UNLESS NOTED OTHERWISE

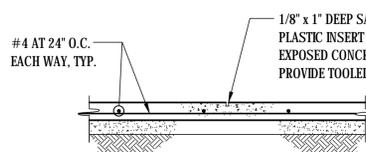


**2 STUD WALL FOOTING**

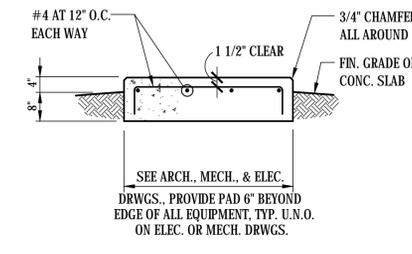


**CONSTRUCTION JOINT (C.J.)**

**NOTES:**  
 • C.J. CONTRACTORS OPTION KEYED JOINT MANDATORY AT ALL COLD JOINTS  
 • REFER TO ARCH. DRWGS. FOR SEALING ALL SLAB JOINTS

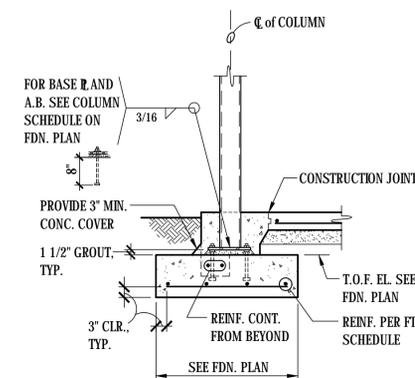


**3 TYPICAL CONTROL JOINT (C.J.)**

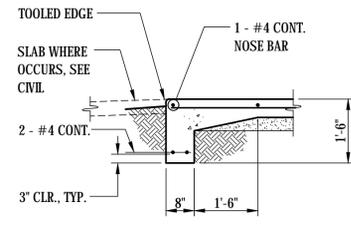


**4 EQUIPMENT PAD**

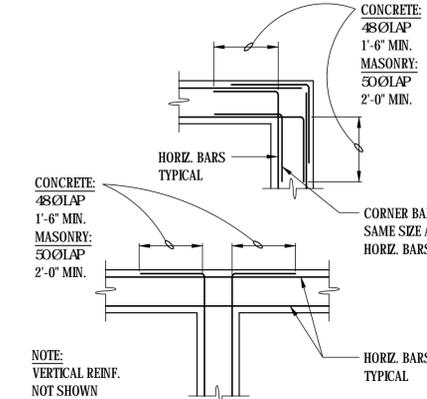
SEE ARCH., MECH., & ELEC. DRWGS., PROVIDE PAD 6" BEYOND EDGE OF ALL EQUIPMENT, TYP. U.N.O. ON ELEC. OR MECH. DRWGS.



**5 HSS COLUMN FOOTING**

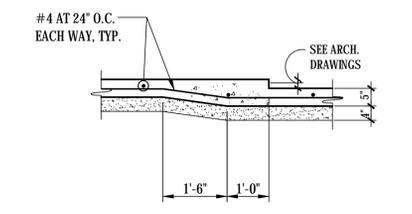


**6 EXTERIOR TOE DOWN SLAB**

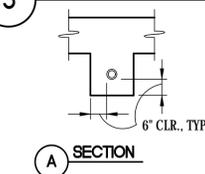


**7 FOUNDATION TIE JUNCTION**

**NOTE:**  
 ON SITE SOILS MAY NOT BE SUITABLE FOR RE-USE AS ENGINEERED FILL. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.



**8 TYPICAL DEPRESSED SLAB**



**9 UTILITY PIPE AT WALL FOOTING**

NO SCALE

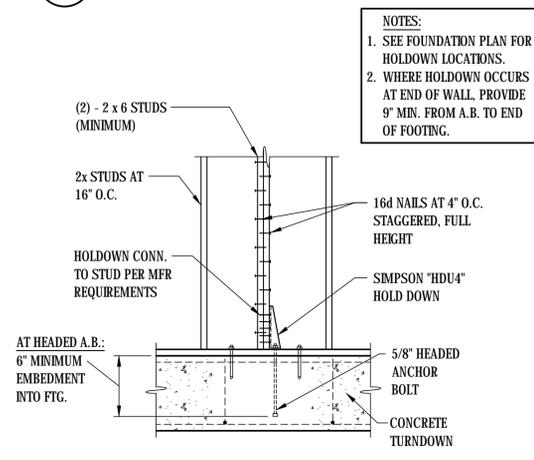
**NOTE:**  
 FOR INFORMATION NOT SHOWN, SEE WALL FOUNDATION DETAIL 1/S2.1

AT PIPE THRU STEM WALL PROVIDE METAL SLEEVE & 1 1/2" COMPRESSIBLE MATERIAL ALL AROUND

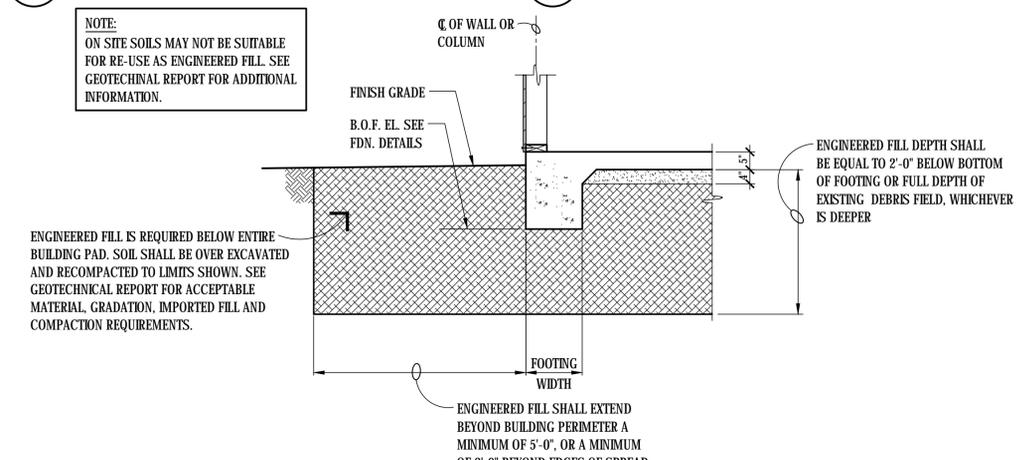
AT PIPE THRU FOOTING STEP DOWN FTG. TO CLEAR PIPE. SEE STEPPED FTG. DETAIL & NOTE ABOVE

AT PIPE DIRECTLY BELOW FTG. PROVIDE 1 1/2" COMPRESSIBLE MATERIAL ALL AROUND & CAST FTG. TO BOTTOM OF TRENCH

AT PIPE 4'-0" OR MORE BELOW FOOTING BACKFILL & COMPACT TRENCH TO 95% MAX. DENSITY



**10 HOLDOWN CONNECTION**



**11 ENGINEERED FILL**

ENGINEERED FILL IS REQUIRED BELOW ENTIRE BUILDING PAD. SOIL SHALL BE OVER EXCAVATED AND RECOMPACTED TO LIMITS SHOWN. SEE GEOTECHNICAL REPORT FOR ACCEPTABLE MATERIAL, GRADATION, IMPORTED FILL AND COMPACTION REQUIREMENTS.

ENGINEERED FILL DEPTH SHALL BE EQUAL TO 2'-0" BELOW BOTTOM OF FOOTING OR FULL DEPTH OF EXISTING DEBRIS FIELD, WHICHEVER IS DEEPER

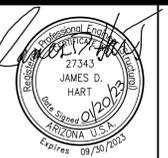
ENGINEERED FILL SHALL EXTEND BEYOND BUILDING PERIMETER A MINIMUM OF 5'-0", OR A MINIMUM OF 2'-0" BEYOND EDGES OF SPREAD FOOTINGS, WHICHEVER IS FARTHER

**REVIEWED FOR CODE COMPLIANCE**  
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 BUREAU VERITAS NORTH AMERICA, INC.  
 SIGNATURE: *Jose Rely B. Chico*  
 DATE: FEBRUARY 09, 2023



CONSULTANTS

<b>CIVIL</b> EEC 555 E River Road, Suite 301 Tucson, AZ 85704 Phone: (520) 321-4625	<b>STRUCTURAL</b> Turner Structural Eng. 2806 N Alvernon Way, Ste 400 Tucson, AZ 85712 Phone: (520) 323-3422
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**PARKER INDIAN HEALTH CENTER DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA

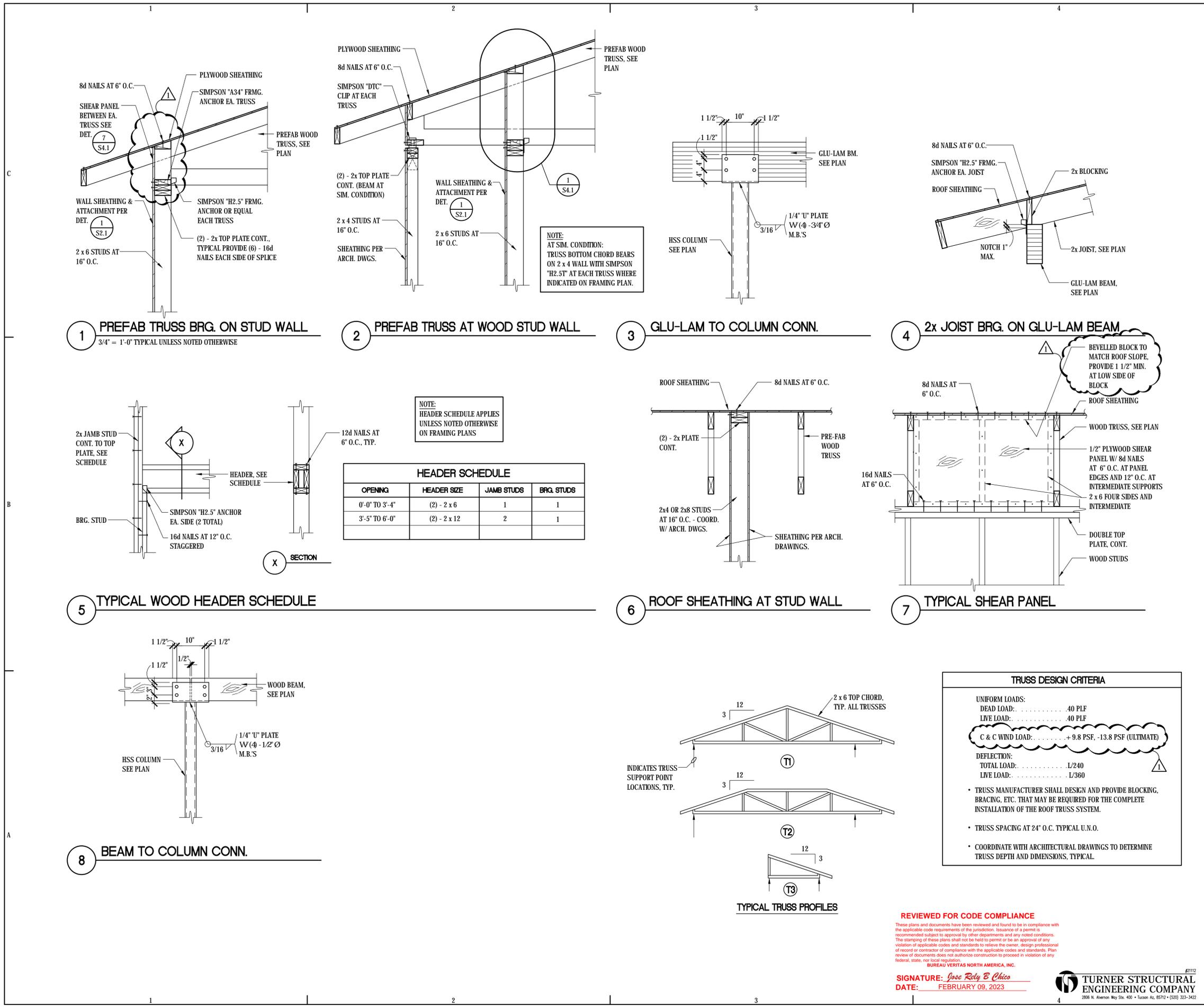


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 DFE ENGINEER/PROJECT MANAGER  
 APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
 DFE BRANCH CHIEF  
 CONCURRENCE: \_\_\_\_\_ DATE \_\_\_\_\_  
 DFE CHIEF

REV	DATE	DESCRIPTION
1	01/20/23	REV. 1 - PERMIT REVISIONS

SHEET TITLE

**FRAMING DETAILS**



**REVIEWED FOR CODE COMPLIANCE**

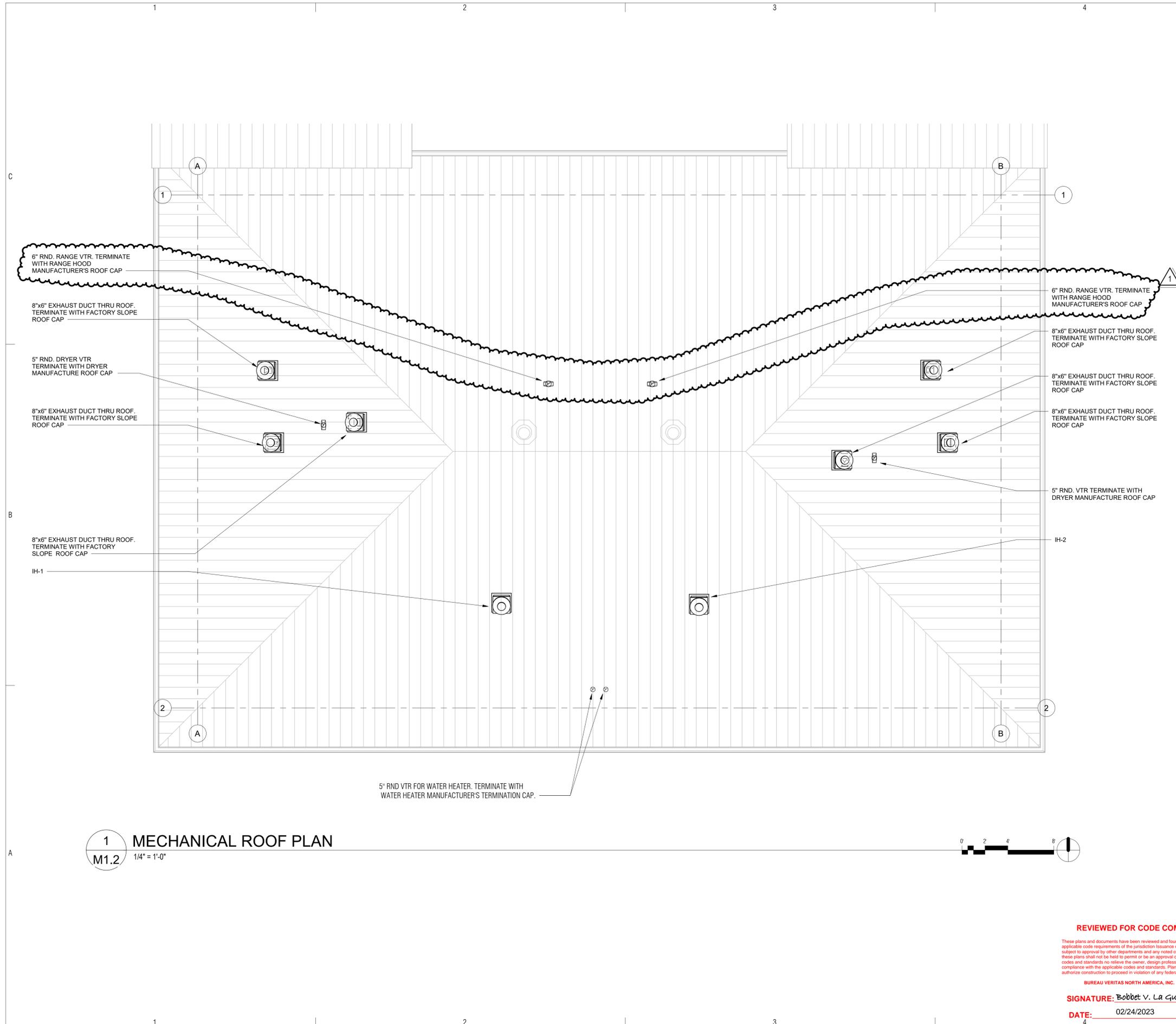
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BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: *Jose Rely E. Chico*  
 DATE: FEBRUARY 09, 2023

**TURNER STRUCTURAL ENGINEERING COMPANY**  
 2806 N. Alvernon Way Ste. 400 • Tucson Az, 85712 • (520) 323-3422





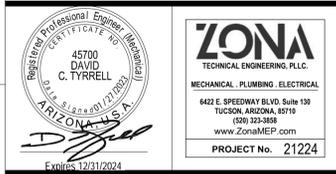
**1 MECHANICAL ROOF PLAN**  
 M1.2 1/4" = 1'-0"



**bws ARCHITECTS**  
 BURNS WALD-HOPKINS SHAMBACH ARCHITECTS  
 261 North Court Avenue  
 Tucson, Arizona 85711  
 520.795.2705 Fax 520.795.6171  
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**PARKER INDIAN HEALTH CENTER**  
 DUPLEX DESIGN

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3



REVIEWED:

DFE ENGINEER/PROJECT MANAGER	DATE
APPROVED:	
DFE BRANCH CHIEF	DATE
CONCURRENCE:	
DFE CHIEF	DATE

REV	DATE	DESCRIPTION
1	January 20, 2023	Rev 1 - Permit Revisions

ISSUE: July 26, 2022 - Construction Documents  
 PROJECT NO: 1818.900  
 CAD DWG FILE:  
 DRAWN BY:  
 CHECKED BY:

**SHEET TITLE**  
**MECHANICAL ROOF PLAN**

**M1.2**  
 Sheet 33 of 48

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BUREAU VERITAS NORTH AMERICA, INC.  
 SIGNATURE: Bobbet V. La Guardia  
 DATE: 02/24/2023

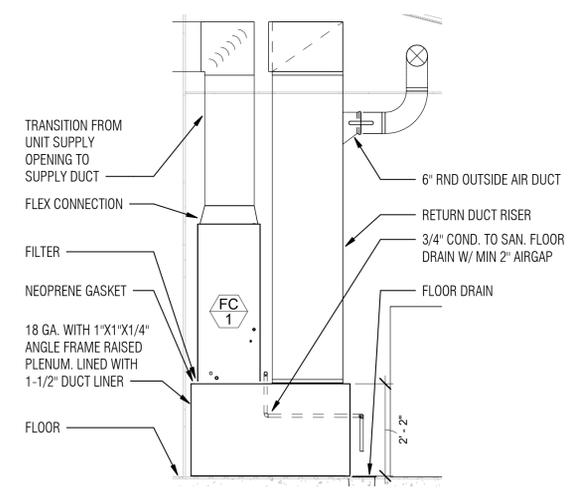
SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE																					
OUTDOOR UNIT MARK	INDOOR UNIT MARK	OUTDOOR UNIT MFR.	INDOOR UNIT MFR.	OUTDOOR UNIT MODEL	INDOOR UNIT MODEL	CFM	O.A. CFM	MIN. SEER	COOLING BTUH @ ARI (95/80/67) TOTAL / SENS.	MIN. HSPF	HEATING BTUH @ ARI - 17° F	ELECTRICAL						OUTDOOR UNIT WEIGHT	INDOOR UNIT WEIGHT	REMARKS	
												OUTDOOR UNIT				INDOOR UNIT					
				VOLTAGE	RLA	MCA	MOCP	VOLTAGE	MCA	MOCP											
HP 1	FC 1	DAIKIN	DAIKIN	RZQ36TAVJUA	FTQ36TAVJUA	1200	75	15.30	36,000	-	40,000	208-230/1/60	19	29.1	35	208-230/1/60	4.9	15	255 LBS.	140 LBS.	
HP 2	FC 2																				

NOTE: - COMPLETE WITH PROGRAMMABLE THERMOSTAT

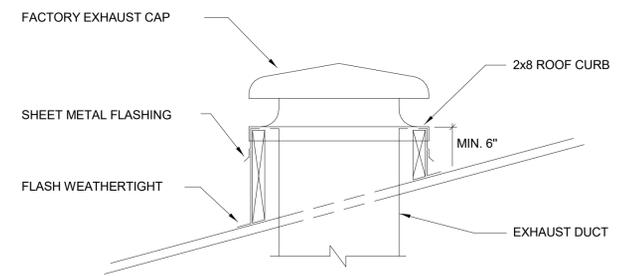
OUTSIDE AIR CALCULATIONS																																																	
<p><b>Building:</b> Parker Duplex #1  <b>System Tag Name:</b> CU1/FC1  <b>Operating Condition Description:</b> Units (select from pull-down list)  <b>Units (select from pull-down list):</b> HP</p>																																																	
<p><b>Inputs for System:</b></p> <table border="1"> <thead> <tr> <th>Name</th> <th>Units</th> <th>System</th> <th>Diversity</th> <th>System</th> </tr> </thead> <tbody> <tr> <td>Floor area served by system</td> <td>As</td> <td>sf</td> <td>6</td> <td>6</td> </tr> <tr> <td>Population of area served by system</td> <td>Po</td> <td>P</td> <td>100%</td> <td>6</td> </tr> <tr> <td>Design primary supply fan airflow rate</td> <td>Vpsd</td> <td>cfm</td> <td>675</td> <td>675</td> </tr> <tr> <td>OA req'd per unit area for system (Weighted average)</td> <td>Ras</td> <td>cfm/sf</td> <td>0.55</td> <td></td> </tr> <tr> <td>OA req'd per person for system area (Weighted average)</td> <td>Rps</td> <td>cfm/ps</td> <td>1.1</td> <td></td> </tr> <tr> <td>Percent increase in Vbz over minimum required</td> <td></td> <td>%</td> <td>0</td> <td></td> </tr> <tr> <td>Does system have Outdoor Air Economizer</td> <td></td> <td></td> <td>No</td> <td></td> </tr> </tbody> </table> <p>Outdoor air intake provided for system: OA cfm</p>										Name	Units	System	Diversity	System	Floor area served by system	As	sf	6	6	Population of area served by system	Po	P	100%	6	Design primary supply fan airflow rate	Vpsd	cfm	675	675	OA req'd per unit area for system (Weighted average)	Ras	cfm/sf	0.55		OA req'd per person for system area (Weighted average)	Rps	cfm/ps	1.1		Percent increase in Vbz over minimum required		%	0		Does system have Outdoor Air Economizer			No	
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Percent increase in Vbz over minimum required		%	0																																														
Does system have Outdoor Air Economizer			No																																														
<p><b>Inputs for Potentially Critical zones:</b></p> <table border="1"> <thead> <tr> <th>Zone Name</th> <th>Zone Tag</th> <th>Potentially Critical Zones</th> <th>Enter fan</th> <th>New zone ID</th> </tr> </thead> <tbody> <tr> <td>Bedroom</td> <td>BR</td> <td>Bedroom</td> <td>3.7</td> <td></td> </tr> </tbody> </table>										Zone Name	Zone Tag	Potentially Critical Zones	Enter fan	New zone ID	Bedroom	BR	Bedroom	3.7		Bedroom	BR	Bedroom	3.7		Bedroom	BR	Bedroom	3.7		Bedroom	BR	Bedroom	3.7																
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<p><b>Inputs for Operating Condition Analyzed:</b></p> <table border="1"> <thead> <tr> <th>Da</th> <th>%</th> <th>100%</th> <th>100%</th> <th>100%</th> </tr> </thead> <tbody> <tr> <td>Percent of total design airflow rate at conditioned analyzed</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Air distribution type at conditioned analyzed</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Zone air distribution effectiveness at conditioned analyzed</td> <td>Ez</td> <td>1.00</td> <td>1.00</td> <td>1.00</td> </tr> <tr> <td>Primary air fraction of supply air at conditioned analyzed</td> <td>Ep</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Da	%	100%	100%	100%	Percent of total design airflow rate at conditioned analyzed					Air distribution type at conditioned analyzed					Zone air distribution effectiveness at conditioned analyzed	Ez	1.00	1.00	1.00	Primary air fraction of supply air at conditioned analyzed	Ep																		
Da	%	100%	100%	100%																																													
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<p><b>Results:</b></p> <table border="1"> <thead> <tr> <th>Ev</th> <th>cfm</th> <th>1.00</th> </tr> </thead> <tbody> <tr> <td>System Ventilation Efficiency</td> <td></td> <td></td> </tr> <tr> <td>Outdoor air intake required for system</td> <td>Var</td> <td>68</td> </tr> <tr> <td>Outdoor air per unit floor area</td> <td>Var/ft²</td> <td>0.11</td> </tr> <tr> <td>Outdoor air per person served by system (including diversity)</td> <td>Var/ps</td> <td>11.0</td> </tr> <tr> <td>Outdoor air as a % of design primary supply air</td> <td>Ysd</td> <td>10%</td> </tr> </tbody> </table>										Ev	cfm	1.00	System Ventilation Efficiency			Outdoor air intake required for system	Var	68	Outdoor air per unit floor area	Var/ft²	0.11	Outdoor air per person served by system (including diversity)	Var/ps	11.0	Outdoor air as a % of design primary supply air	Ysd	10%																						
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EXHAUST FAN SCHEDULE											
MARK	MANUFACTURER	TYPE	MODEL	CFM	ESP	MAX. SONES	ELECTRIC		UNIT WEIGHT	REMARKS	
							VOLTAGE	AMPS			
EF 1	BROAN	CEILING MOUNTED DIRECT DRIVE	XB110	110	0.10"	.50	120/1/60	0.3	15 LBS.	FAN TO BE ACTIVATED BY WALL SWITCH - SEE ELECTRICAL DRAWINGS	
EF 2			XB110	110							
EF 3			XB80	80							
EF 4			XB110	110							
EF 5			XB110	110							
EF 6			XB80	80							

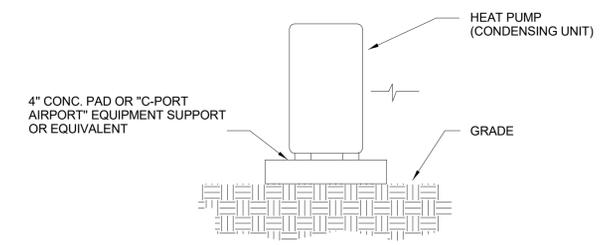
NOTE: UNITS COMPLETE PLUG-IN MOTOR. PROVIDE ROOF CAP WITH BUILT IN DAMPER. UNIT EQUIVALENT: NUTONE, PANASONIC



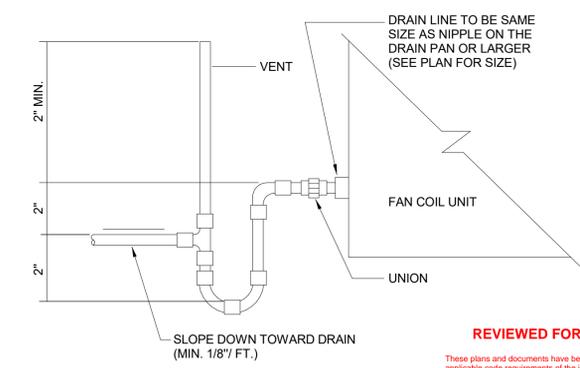
1 TYP. FAN COIL MOUNTING DETAIL  
M2.1 1/2" = 1'-0"



4 EXHAUST CAP DETAIL  
M2.1 N.T.S.



3 CONDENSING UNIT DETAIL  
M2.1 N.T.S.



2 CONDENSATE P-TRAP DETAIL  
M2.1 N.T.S.

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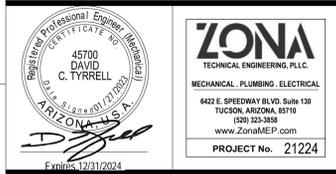
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**PARKER INDIAN HEALTH CENTER**  
 DUPLEX DESIGN

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3

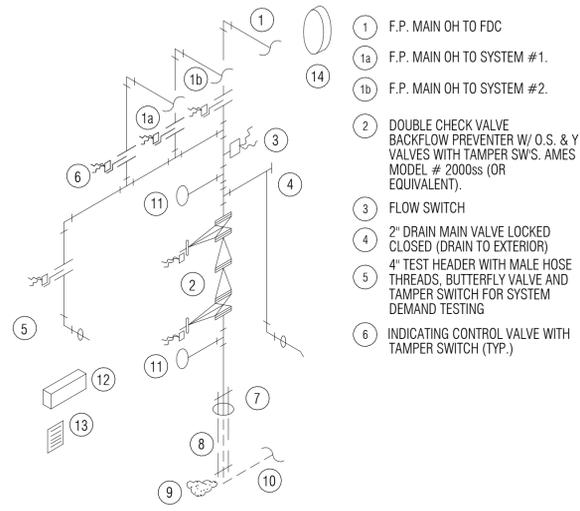
U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
 INDIAN HEALTH SERVICE  
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**SHEET TITLE**  
**MECHANICAL SCHEDULES & DETAILS**  
**M2.1**  
 Sheet 34 of 48





**1 FIRE RISER DETAIL**  
SCALE: N.T.S.

- 1 F.P. MAIN OH TO FDC
- 1a F.P. MAIN OH TO SYSTEM #1.
- 1b F.P. MAIN OH TO SYSTEM #2.
- 2 DOUBLE CHECK VALVE BACKFLOW PREVENTER W/ O.S. & Y VALVES WITH TAMPER SWS. AMES MODEL # 2000ss (OR EQUIVALENT).
- 3 FLOW SWITCH
- 4 2" DRAIN MAIN VALVE LOCKED CLOSED (DRAIN TO EXTERIOR)
- 5 4" TEST HEADER WITH MALE HOSE THREADS, BUTTERFLY VALVE AND TAMPER SWITCH FOR SYSTEM DEMAND TESTING
- 6 INDICATING CONTROL VALVE WITH TAMPER SWITCH (TYP.)
- 7 FLANGE @ 6" A.F.F.
- 8 SPIGOT PIECE WITH TIE RODS PER NFPA 24
- 9 THRUST BLOCK PER NFPA 24
- 10 FIRE MAIN U.G.
- 11 PRESSURE GAUGE (TYP. 2)
- 12 BOXED SPARE SPRINKLERS & WRENCH
- 13 HYDRAULIC CALC DATA INFO PLATE
- 14 EXTERIOR BELL, 120 VAC ELECTRIC BELL, CONNECTED TO DEDICATED CIRCUIT WITH LOCKOUT BREAKER. COORD. EXACT LOCATION WITH FLOOR PLAN.

**FP SYSTEM GENERAL NOTES**

1. DESIGN, FURNISH AND INSTALL A COMPLETE, FULLY AUTOMATIC WET-PIPE FIRE SPRINKLER SYSTEM IN ALL AREAS OF NEW CONSTRUCTION AS INDICATED IN THE DRAWINGS. THE WORK SHALL BEGIN AT A POINT 5'-0" OUTSIDE ALSO BE RESPONSIBLE FOR ALL UNDERGROUND PIPING TO THE REMOTE FIRE DEPARTMENT CONNECTION AS INDICATED ON THE ON THE SITE UTILITY PLANS.
2. THE FIRE SPRINKLER SYSTEM SHALL INCLUDE ALL ITEMS OF A MINOR NATURE NECESSARY TO COMPLETE THE INSTALLATION.
3. BEFORE PREPARATION OF SHOP DRAWINGS, THE CONTRACTOR SHALL VERIFY THE WATER FLOW DATA LISTED IN THE DESIGN CRITERIA WITH THE AUTHORITY HAVING JURISDICTION. ANY DISCREPANCY OBSERVED IN WATER PRESSURES SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT.
4. THE DESIGN SHALL BE BASED ON HYDRAULIC CALCULATIONS FOR THE HAZARD OCCUPANCIES NOTED ON THE DRAWINGS OR AS DETERMINED BY LOCAL AUTHORITIES. THE HYDRAULIC CALCULATIONS SHALL PROVIDE A MINIMUM OF 5 PSI OR 10 PERCENT (WHICHEVER IS GREATER) "CUSHION" BETWEEN C THE SYSTEM DEMAND AND THE AVAILABLE WATER SUPPLY. IN ADDITION, A 5 PSI FIXED PRESSURE LOSS SHALL BE INCLUDED IN THE HYDRAULIC CALCULATIONS AT THE BASE OF THE SPRINKLER RISER FOR A POSSIBLE FUTURE BACKFLOW PREVENTER INSTALLATION.
5. USE THE DRAWINGS FOR REFERENCE ONLY. ANY ITEM SUCH AS COVERAGE OF THE BUILDING, PIPE SIZES, HEAD SPACING AND OTHER REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION SHALL BE INCLUDED, WHETHER SPECIFICALLY SHOWN ON THE DRAWINGS OR NOT.
6. THE DESIGN OF THE SPRINKLER SYSTEM SHALL COMPLY WITH NFPA-13R, 2019 EDITION, 2021 INTERNATIONAL BUILDING CODE, CHAPTER 9 WITH LOCAL AMENDMENTS, 2021 INTERNATIONAL FIRE CODE WITH LOCAL AMENDMENTS AND THE REQUIREMENTS SPECIFIED HEREINAFTER.
7. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL CODES, LAWS, RULES AND REGULATIONS OF ALL NATIONAL, STATE, COUNTY AND LOCAL AUTHORITIES HAVING JURISDICTION OVER THE PREMISES. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO THE STATE FIRE MARSHAL, THE FIRE DEPARTMENT HAVING JURISDICTION, AND THE CARRIER OF THE BUILDING INSURANCE.
8. SECURE AND PAY FOR ALL PERMITS, INSPECTIONS AND CERTIFICATES REQUIRED BY THE FOREGOING AUTHORITIES.
9. SPRINKLER HEAD LOCATIONS SHALL BE COORDINATED WITH LIGHT FIXTURES AND HVAC. UNLESS NOTED OTHERWISE, PRIORITY OF LOCATION IS GIVEN TO LIGHT FIXTURES AND HVAC. CUTTING OF STRUCTURAL MEMBERS FOR THE PASSAGE OF SPRINKLER PIPING OR FOR PIPE HANGER FASTENINGS WILL NOT BE PERMITTED WITHOUT THE ARCHITECT'S AND STRUCTURAL ENGINEER'S APPROVAL.
10. FIRE RISER PIPING SHALL BE STEEL, ASTM A-53, GRADE A OR B, A-135 OR A-795, SCHEDULE 40 AND/OR THIN WALL PIPE OF A TYPE APPROVED FOR FIRE SPRINKLER SERVICES IN NFPA 13R. OVERHEAD PIPING SHALL BE NEW CORROSION RESISTANT CPVC FIRE SPRINKLER PIPE, LISTED BY UNDERWRITERS LABORATORY FOR WET PIPE SYSTEMS WITH RATED WORKING PRESSURE OF 175 PSI AT 150' F. SEE SECTION 211100 FOR ADDITIONAL REQUIREMENTS.
11. ALL HANGERS, HANGER SPACINGS, SWAY BRACING AND SWAY BRACE SPACING TO MEET REQUIREMENTS OF THE LATEST EDITION OF NFPA-13R.
12. COORDINATE CLOSELY WITH THE FIRE ALARM CONTRACTOR FOR ALL ALARM TIE-INS FOR A FULLY SUPERVISED SYSTEM.
13. BEFORE CONNECTING SPRINKLER SYSTEM TO UNDERGROUND SUPPLY CONNECTIONS, EACH SUPPLY CONNECTION SHALL BE FLUSHED OUT THOROUGHLY IN ACCORDANCE WITH REQUIREMENTS OF NFPA-13R.
14. EACH SYSTEM RISER SHALL BE EQUIPPED WITH ALL NECESSARY EQUIPMENT SUCH AS DRAINS, VALVES, PRESSURE GAUGES, ETC., PROPERLY INSTALLED AND WITH SUITABLE IDENTIFICATION. RISER PRESSURE GAUGES ARE TO BE PIPED TO THE RISER WITH AT LEAST 6-INCH VERTICAL SEPARATION TO THE MAIN DRAIN AND ARE NOT TO BE INSTALLED ON THE MAIN DRAIN PIPING UNDER ANY CONDITION.
15. SLEEVES ARE TO BE INSTALLED AT ALL PIPES PASSING THROUGH MASONRY FLOORS OR WALLS. INSTALL CHROME FINISHED CEILING AND WALL PLATES.

**FP LEGEND**

SYMBOL	ABBREVIATION	ITEM
(E)	FP	FIRE PROTECTION LINE
	FDC	FIRE DEPARTMENT CONNECTION
	EXIST.	EXISTING
	UG.	UNDERGROUND
	OH.	OVERHEAD
	DN	DOWN
	ABV.	ABOVE
	BLW.	BELOW
	CONN.	CONNECT
	A.F.G.	ABOVE FINISHED GRADE

**FIRE PROTECTION DESIGN CRITERIA**

TYPE OF SYSTEM:  
AUTOMATIC WET-PIPE FIRE SPRINKLER SYSTEM

OCCUPANCY CLASSIFICATION: RESIDENTIAL  
DESIGN DENSITY: 0.05 GPM/FT<sup>2</sup> OR THE SPRINKLER LISTING, WHICHEVER IS GREATER

INSIDE DWELLING UNIT ----- 0.05 GPM/FT<sup>2</sup> OR THE SPRINKLER LISTING, WHICHEVER IS GREATER  
OUTSIDE DWELLING UNIT ----- FOUR (4) MOST HYDRAULICALLY DEMANDING ADJACENT SPRINKLERS WITH DESIGN DISCHARGE AND DESIGN AREA CRITERIA FOR AREAS PROTECTED BY QUICK-RESPONSE SPRINKLERS PER NFPA-13, 2021 EDITION EXCEPT AS ALLOWED BY SECTION 7.2.3.1, NFPA-13R, 2019 EDITION.

CONSTRUCTION STANDARDS:  
NFPA 13R, 2019 EDITION, 2021 INTERNATIONAL BUILDING CODE, CHAPTER 9 & 2021 INTERNATIONAL FIRE CODE.

HYDRANT TEST DATA:  
STATIC: ----- 0 PSI  
RESIDUAL: ----- 0 PSI  
FLOW: ----- 0 GPM

SOURCE:  
UNAVAILABLE

AUTHORITIES HAVING JURISDICTION:  
PARKER WATER COMPANY AND PARKER FIRE DEPARTMENT

FIRE PROTECTION DATA WAS NOT AVAILABLE AT TIME OF DESIGN. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A CERTIFIED COPY OF THE FIRE FLOW INFORMATION TO THE FIRE PROTECTION ENGINEER, ARCHITECT AND MECHANICAL ENGINEER. CONTRACTOR SHALL PAY FOR ALL FEES AND/OR PERMITS.

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**PARKER INDIAN HEALTH CENTER**  
DUPLEX DESIGN

Parker, AZ  
IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA

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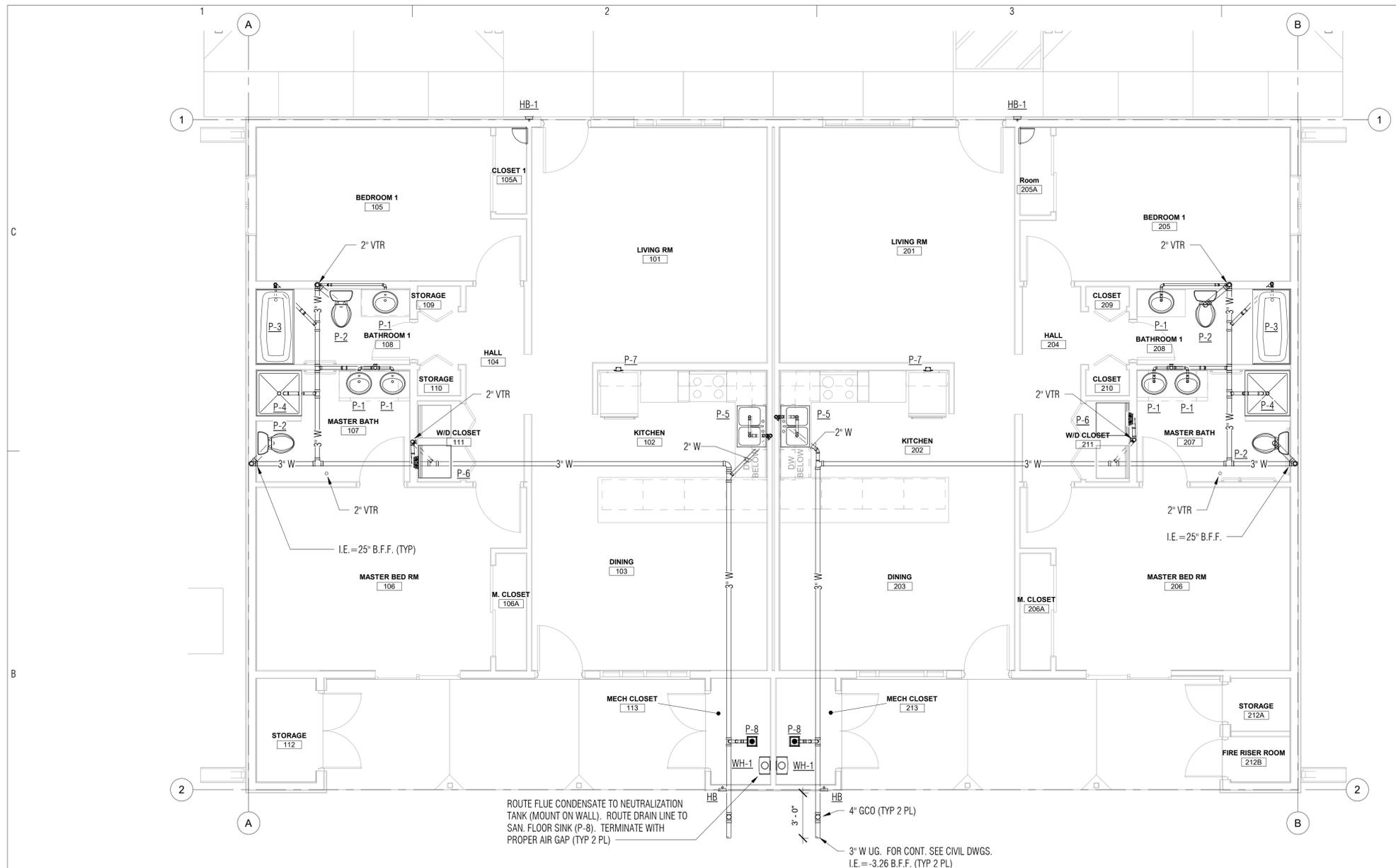
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**SHEET TITLE**

**FIRE PROTECTION NOTES AND DETAIL**

**FP2.1**  
Sheet 36 of 48



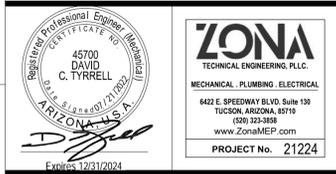
**1 PLUMBING WASTE FLOOR PLAN**  
**P1.1** 1/4" = 1'-0"



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**PLUMBING WASTE FLOOR PLAN**

**P1.1**  
 Sheet 37 of 48

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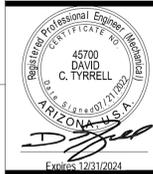
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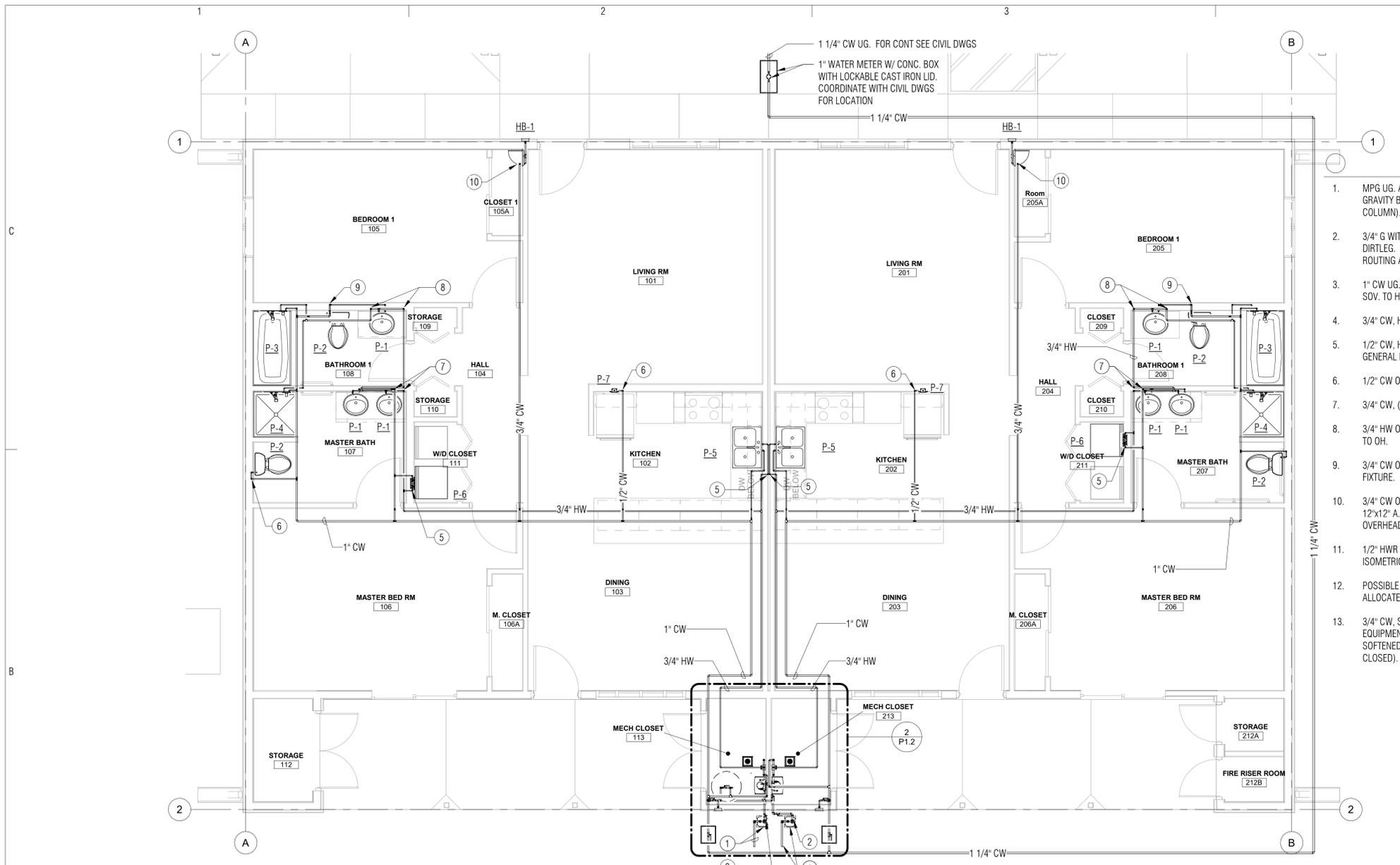


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**SHEET TITLE**  
**PLUMBING WATER AND GAS FLOOR PLAN**

**P1.2**  
 Sheet 38 of 48

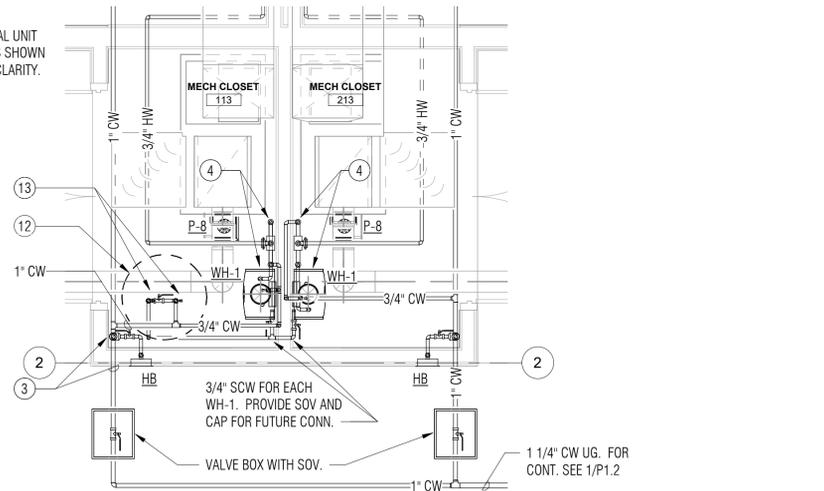


**KEYNOTES:**

- MPG UG. AND GAS METER BY SW GAS CO. (.60 SPECIFIC GRAVITY BASED ON A PRESSURE DROP OF 0.5 INCH WATER COLUMN). MAX. DEV. LENGTH=10 FT. MAX. LOAD=360 CFH.
- 3/4" G WITH GASCOCK, THRU WALL TO WH-1. PROVIDE 4" DIRTLEG. SEE GAS ISOMETRIC FOR ADDITIONAL INFORMATION, ROUTING AND CLARIFICATION.
- 1" CW UG. ROUTE UP ON WALL TO OH. PROVIDE 3/4" CW WITH SOV. TO HB.
- 3/4" CW, HW AND 1/2" HWR OH. AND DN TO WH-1 & TMV-1.
- 1/2" CW, HW OH. AND DN IN WALL TO FIXTURE (SEE PLUMBING GENERAL NOTES FOR DISHWASHER).
- 1/2" CW OH. AND DN IN WALL TO FIXTURE.
- 3/4" CW, (2) HW OH. AND DN IN WALL TO FIXTURES.
- 3/4" HW OH. AND DN IN WALL TO FIXTURE. 3/4" HW UP IN WALL TO OH.
- 3/4" CW OH. AND DN IN WALL. ROUTE 1/2" CW TO EACH FIXTURE.
- 3/4" CW OH. AND DN IN WALL TO HB-1. PROVIDE SOV. AND 12"x12" A.P. (IN WALL SHOWN, OWNERS CHOICE FOR OVERHEAD).
- 1/2" HWR OH. FOR CONT. SEE WATER HEATER DETAIL AND ISOMETRICS.
- POSSIBLE FUTURE WATER SOFTENING EQUIP. COORD. ALLOCATED SPACE WITH WATER HEATER SPECIFICATION.
- 3/4" CW, SCW OH. AND DN TO FUTURE WATER SOFTNER EQUIPMENT. PROVIDE SOV.'S FOR CW (NORMALLY OPEN, NON-SOFTENED WATER HEATER SUPPLY) AND SCW (NORMALLY CLOSED). SEE ISOMETRIC FOR CLARITY.

**1 PLUMBING WATER AND GAS FLOOR PLAN**  
 1/4" = 1'-0"

NOTE:  
 MECHANICAL UNIT AND DUCTS SHOWN ONLY FOR CLARITY.



**2 ENLARGED PLUMBING WATER AND GAS FLOOR PLAN**  
 1/2" = 1'-0"

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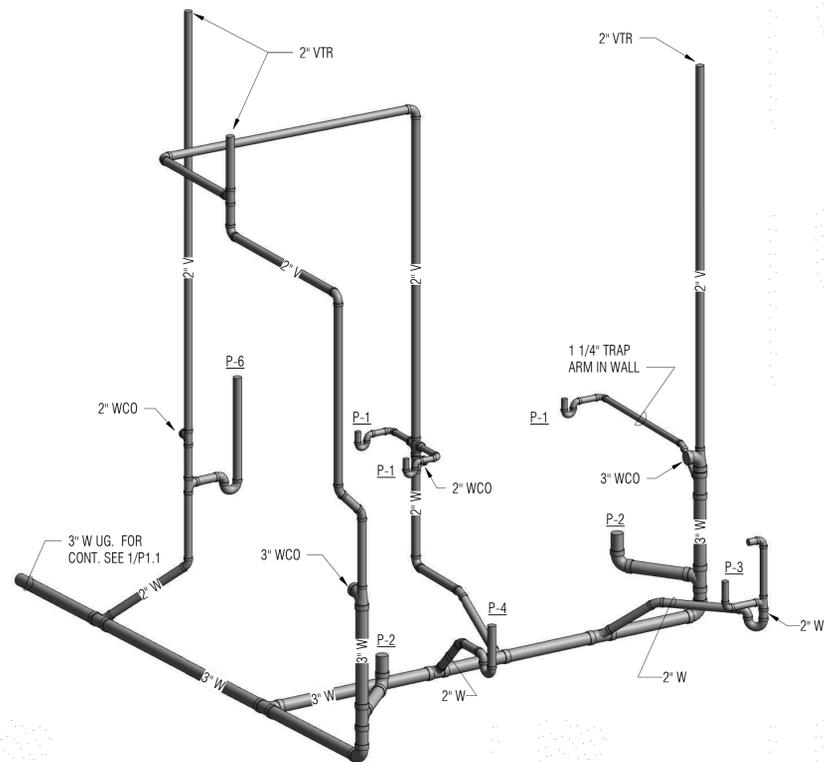
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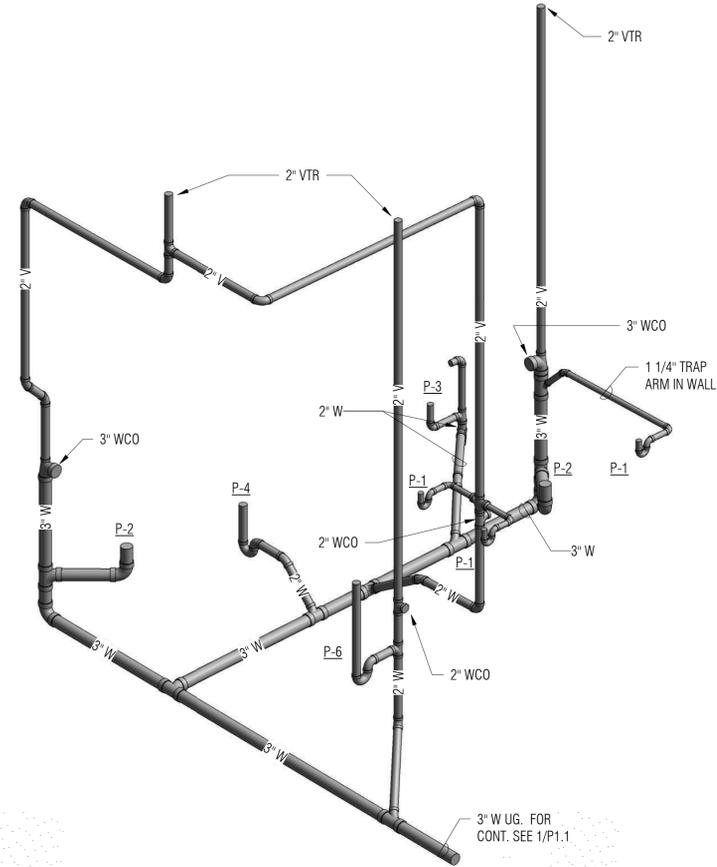
**SHEET TITLE**

**PLUMBING WASTE ISOMETRICS**

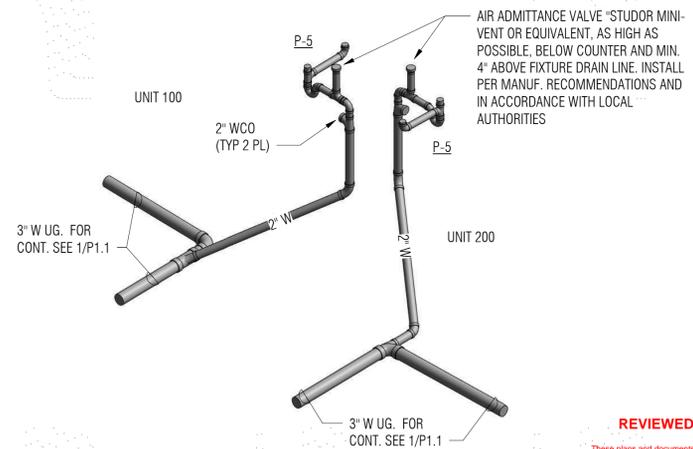
**P2.1**



**2 WASTE ISOMETRIC - UNIT 200**  
 P2.1



**1 WASTE ISOMETRIC - UNIT 100**  
 P2.1



**3 WASTE ISOMETRIC - KITCHEN**  
 P2.1

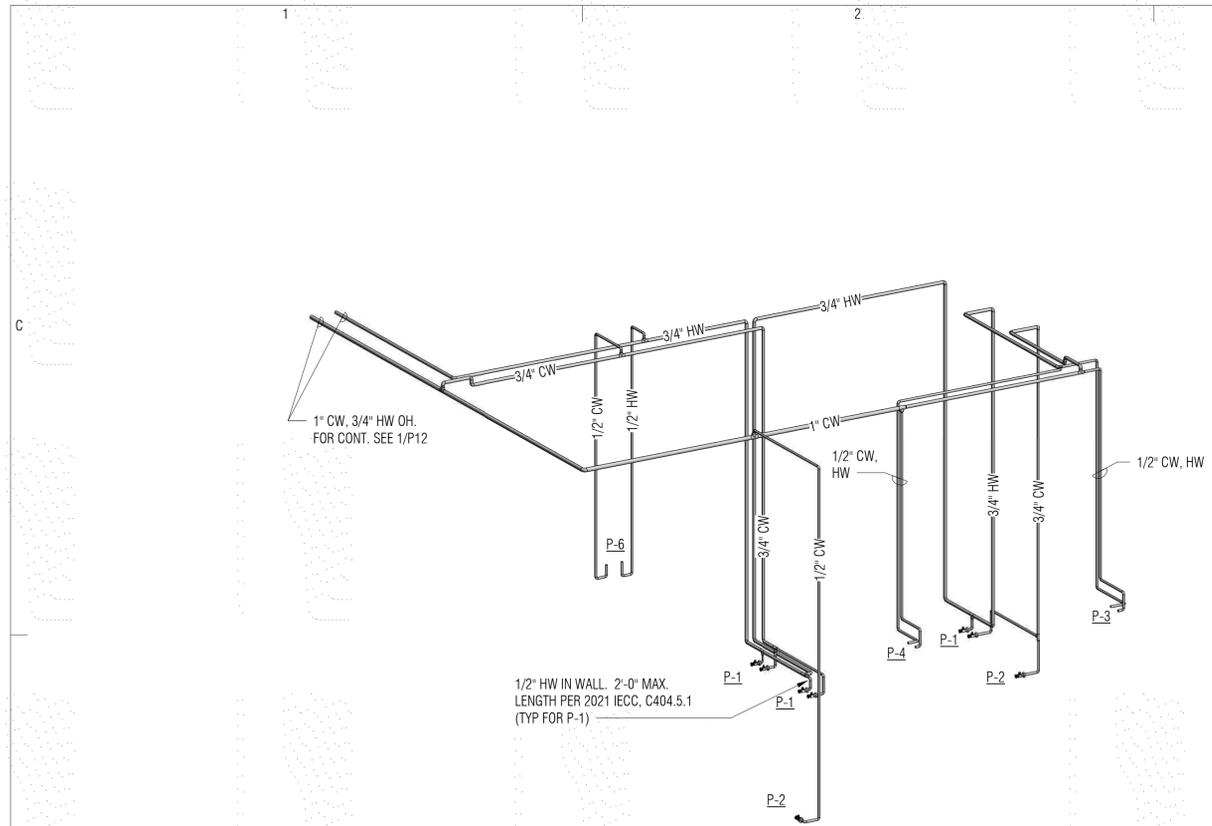
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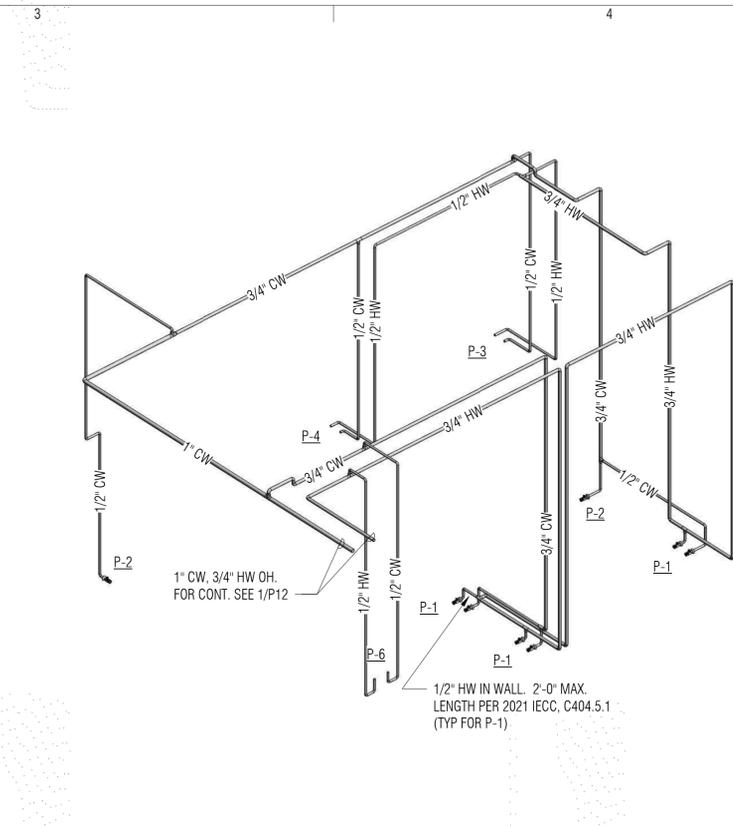
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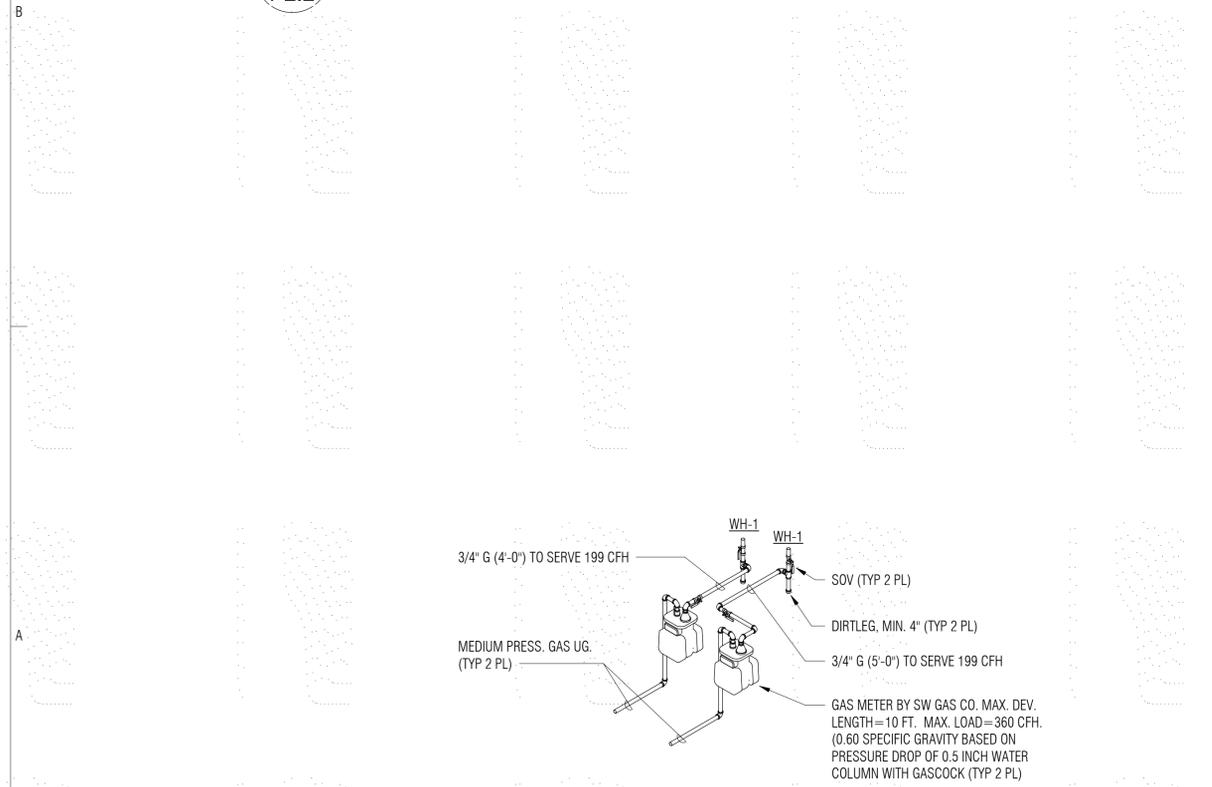
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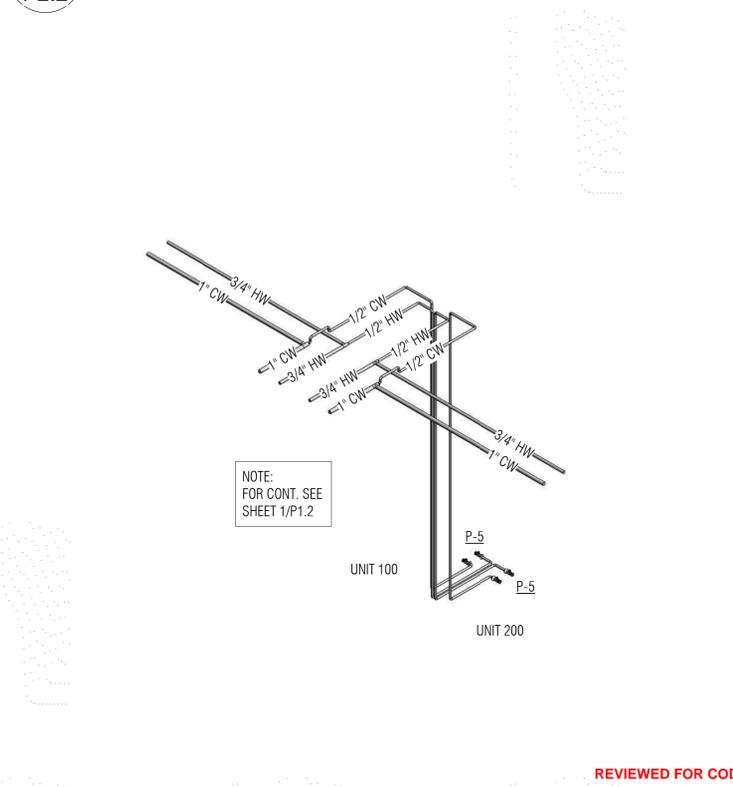
2 WATER ISOMETRIC - UNIT 200  
P2.2



1 WATER ISOMETRIC - UNIT 100  
P2.2



4 GAS ISOMETRIC  
P2.2



3 WATER ISOMETRIC - KITCHEN  
P2.2

**REVIEWED FOR CODE COMPLIANCE**

These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction. Issuance of a permit is recommended, subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional or record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, nor local regulation.

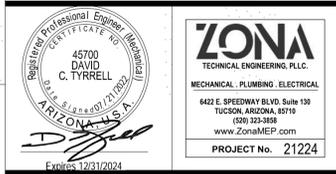
BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023

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**PARKER INDIAN HEALTH CENTER**  
DUPLEX DESIGN

Parker, AZ  
IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA

REVIEWED:

DFE ENGINEER/PROJECT MANAGER DATE

APPROVED:

DFE BRANCH CHIEF DATE

CONCURRENCE:

DFE CHIEF DATE

REV	DATE	DESCRIPTION
ISSUE:	July 26, 2022	- Construction Documents
PROJECT NO.:	1818.900	
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MARK	FIXTURE DESCRIPTION	QTY	WASTE		WATER		MINIMUM CONNECTION SIZE				COMMENTS
			FU	TOTAL	FU	TOTAL	HW	CW	W	V	
HB -1	HOSE BIBB	1	0	0	2	2	-	3/4"	-	-	
P-1	LAVATORY	2	5	10	3.6	7.2	1/2"	1/2"	2"	2"	WASTE FU-'S ARE CALCULATED PER 2021 IPC, TABLE 709.1 (BATHROOM GROUP, PRIVATE). WATER FU-'S ARE CALCULATED PER 2021 IPC, TABLE E103.3(2) (BATHROOM GROUP, PRIVATE, FLUSH TANK).
P-2	WATER CLOSET (FLUSH TANK)						-	1/2"	4"	2"	
P-3	TUB/SHOWER COMBO						1/2"	1/2"	2"	2"	
P-4	SHOWER						1/2"	1/2"	2"	2"	
P-5	KITCHEN SINK	1	2	2	1.4	1.4	1/2"	1/2"	2"	2"	
P-5A	DISHWASHER	1	0	0	1.4	1.4	1/2"	-	-	-	WASTE FU-'S ARE CALCULATED WITH P-5, PER 2021 IPC, TABLE 709.1.
P-6	CLOTHES WASHER	1	2	2	1.4	1.4	1/2"	1/2"	2"	2"	
P-7	REFRIGERATOR	1	0	0	0.25	0.25	-	1/2"	-	-	
WH-1	WATER HEATER	1	-	0	-	0	3/4"	3/4"	-	-	
PROJECT TOTAL			10		13.65						

WATER CALCULATION	
TOTAL FIXTURE UNITS = 13.65 = +/- 17 GPM	
WATER PIPE SIZE CRITERIA	
15.0 = PRESS. REQUIRED AT FURTHEST FIXTURE	
0.81 = PRESS. LOSS/100 FT. OF PIPE IS 2.5 FT. AT A VEL. OF 5 FT/SEC.	
2.6 = PRESS. REQUIRED FOR ELEVATION LOSS (0.43 x 6 = 2.58)	
2.3 = PRESS. REQUIRED THRU 3/4" WATER METER	
20.71 PSI = MINIMUM PRESSURE REQUIRED	
DEVELOPED PIPE LENGTH FROM METER TO FURTHEST FIXTURE.	
60.0 FT. (1.25) = 75.0 FT	
2.5 FT. (.43) = 1.075 PSI/100 FT. OF PIPE	
1.075 PSI / 100 FEET (75.0) = 0.81 PSI.	
NOTES:	
1. PLUMBING CONTRACTOR SHALL FIELD VERIFY AVAILABLE WATER PRESSURE TO PROJECT PRIOR TO THE START CONSTRUCTION. IF THE AVAILABLE WATER PRESSURE IS BELOW 20.7 PSI, NOTIFY THE OWNER/ARCHITECT IN WRITING.	
2. IF AVAILABLE WATER PRESSURE EXCEEDS 80 PSI, CONTRACTOR SHALL PROVIDE A PRESSURE REDUCING VALVE WITH ALL BRONZE STRAINER, SET AT 70 PSI. INSTALL WHERE WATER SERVICE PIPE ENTERS THE BUILDING.	

PLUMBING LEGEND		
SYMBOL	ABBREVIATION	ITEM
	CW	COLD WATER
	SCW	SOFTENED COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN
	W	WASTE PIPING
	V	VENT PIPING
	G	GAS
	FP	FIRE PROTECTION LINE
	D	DRAIN LINE
	VTR	VENT THRU ROOF
	HB	HOSE BIBB
	SOV	SHUT-OFF VALVE (1-TURN BALL VALVE)
		UNION
		CHECK VALVE
		CIRCUIT SETTER
		GAS COCK
	AP	ACCESS PANEL
	POC	POINT OF CONNECTION
	EXIST.	EXISTING
	UG.	UNDERGROUND
	OH.	OVERHEAD
	DN	DOWN
	ABV.	ABOVE
	BLW.	BELOW
	CONN.	CONNECT
	C.I.	CAST IRON
	CLG.	CEILING
	WCO	WALL CLEANOUT
	PT	PRESS./TEMP. RELIEF

PLUMBING GENERAL NOTES	
<ul style="list-style-type: none"> <li>COORDINATE ALL OVERHEAD PIPING WITH HVAC DUCTWORK AND WORK OF OTHER TRADES.</li> <li>OFFSET ALL NEW AND/OR EXISTING V.T.R.'S TO TERMINATE A MIN. OF 3'-0" FROM ALL VERTICAL SURFACES AND A MIN. OF 10'-0" FROM, OR AT LEAST 3'-0" ABOVE ALL OUTSIDE AIR INTAKES.</li> <li>PLUMBER TO VERIFY EXACT SIZE AND LOCATION OF ALL EXIST. PIPING AND TO VERIFY INVERTS TO ASSURE PROPER SLOPE MAY BE OBTAINED BEFORE BEGINNING WORK.</li> <li>RUN ALL WASTE LINES AT 2% SLOPE UNLESS NOTED OTHERWISE.</li> <li>PROVIDE GASCOCK, UNION, AND A MINIMUM 4" DIRTLEG AT EACH GAS APPLIANCE CONNECTION. INSTALL READILY ACCESSIBLE AND AS CLOSE AS POSSIBLE TO INLET.</li> <li>EXTEND P-T RELIEF (FULL SIZE) ON WALL FROM WH-1 TO DAYLIGHT. ELBOW DOWN TO A MIN. 6" AND MAX. 24" ABOVE FINISHED GRADE.</li> <li>COORDINATE LOCATION OF WATER METER, BACKFLOW PREVENTION ASSEMBLY AND PRESSURE REDUCING VALVE (IF REQUIRED) WITH CIVIL SITE DRAWINGS. COORDINATE EXACT SIZES OF WATER METER, BACKFLOW PREVENTION ASSEMBLY AND PRESSURE REDUCING VALVE WITH WATER CALCULATION TABLE ON THIS SHEET.</li> </ul>	
<ul style="list-style-type: none"> <li>PROVIDE DRAIN CONN. AND 1/2" HW SUPPLY FROM P-5 TO DISHWASHER. INSTALL PER MFG'S RECOMMENDATIONS AND IN ACCORDANCE WITH LOCAL AUTHORITIES AND THE 2018 INTERNATIONAL PLUMBING CODE.</li> <li>BACKWATER VALVE IS (NOT) REQUIRED ON THIS PROJECT. BUILDING FINISHED FLOOR ELEVATION = 403.0' UPSTREAM MANHOLE RIM ELEVATION = 401.93' UPSTREAM MANHOLE INVERT = 398.57' COORDINATE ELEVATIONS WITH CIVIL DRAWINGS.</li> </ul>	
THIS PROJECT SHALL BE IN CODE COMPLIANCE WITH THE 2018 IBC, THE 2018 IECC, THE 2018 IPC AND ALL LOCAL CODE AMENDMENTS.	

PLUMBING FIXTURE SPECIFICATIONS		
MARK	FIXTURE	NOMENCALTURE
HB	HOSE BIBB	ENCASED, ANTI-SIPHON, AUTOMATIC DRAINING FLUSH WALL HYDRANT, WITH NON-FREEZE INTEGRAL BACKFLOW PREVENTER, BRONZE CASING, ALL BRONZE INTERIOR PARTS, NON-TURNING OPERATING ROD, AND 3/4" INLET. NICKEL BRONZE BOX AND HINGED COVER WITH OPERATING KEY LOCK AND "WATER" CAST ON COVER.
HB-1	HOSE BIBB	SAME AS HB.
P-1	LAVATORY	BASIN: ADA COMPLIANT, SELF-RIMMING VITREOUS CHINA OVAL LAVATORY WITH WIDE SPREAD FAUCET CENTERS. COORDINATE COLOR/FINISH WITH OWNER AND/OR ARCHITECT. FAUCET, DRAIN & TRAP: TWO HANDLE WIDESPREAD, DECK MOUNTED, WATER MIXING, LAVATORY FAUCET WITH ADA COMPLIANT LEVER HANDLES WITH FAUCET INDICATORS, POP-UP DRAIN AND TAILPIECE. .5 GPM SPRAY AERATOR MODIFICATION. COORDINATE FINISH WITH OWNER AND/OR ARCHITECT. SUPPLIES: MCGUIRE MODEL #2165-LK-R15 FLEXIBLE SUPPLIES. COMPLETE WITH CHROME PLATED BRASS 1/2" I.P.S. X 3/8" OD ANGLE STOPS WITH LOOSE KEY HANDLES AND BRASS STEMS. PROVIDE 15" OPTIONAL RISER. INSULATE HOT AND COLD WATER PIPING AND WASTE PIPING BELOW LAVATORY WITH TRUEBRO #103-K INSULATION KIT.
P-2	WATER CLOSET	VITREOUS CHINA, DUAL FLUSHING SYSTEM, HIGH EFFICIENCY, 1.6 OR 1.1 GALLON PER FLUSH WATER CLOSET, WITH TOILET SEAT AND COVER, FLOOR HARDWARE AND TANK FITTINGS. 12" ROUGH-IN. PROVIDE ANGLE SUPPLY WITH STOP.
P-3	TUB W/ SHOWER	ACRYLIC BATHTUB 60" x 32" x 19" TALL, WITH INTEGRAL LUMBAR SUPPORT, INTEGRAL TILE FLANGE AND INTEGRAL APRON FOR THREE WALL ALCOVE INSTALLATION. PVC SLOTTED OVERFLOW BATH DRAIN WITH TOE TAP BATH DRAIN. SEE SPECIFIC FLOOR PLAN FOR RIGHT OR LEFT HAND INSTALLATION. TUB/SHOWER VALVE: SHALL BE A COMBINATION BALANCED-PRESSURE/THERMOSTATIC MIXING WITH MEANS TO LIMIT MAXIMUM TEMPERATURE SETTING OF 120°. VALVE TO INCLUDE LEVER HANDLE, PUSH BUTTON DIVERTER AND SCREWDRIVER STOPS. PROVIDE MULTI-FUNCTION SHOWER HEAD, ARM AND FLANGE. 2.5 GPM AT 80 PSI. COORDINATE FINISHES WITH OWNER/ARCHITECT.
P-4	SHOWER	ADA COMPLIANT, ONE PIECE, ACRYLIC SHOWER PAN WITH 1/2" BARRIER FREE THRESHOLD WITH PRE-LEVELED AND REINFORCED SHOWER BASE. TEXTURED FLOOR. PROVIDE ANCHORING ADHESIVE KIT, GRAB BARS, FOLDING SEAT, SOAP DISH, CURTAIN AND ROD, T-SHAPED RUBBER WATER STOPPER KIT AND CAULKLESS DRAIN. INTERIOR DIMENSIONS OF 36" x 36". SIMILAR TO FREEDOM SHOWERS, MODEL #APF3838BFPAN. SHOWER VALVE: SAME AS P-3 EXCEPT, PROVIDE MULTI-FUNCTION HAND-HELD SHOWER HEAD, ADJUSTABLE WALL BRACKET AND DIVERTER.
P-5	KITCHEN SINK	20 GAUGE, TYPE 304 STAINLESS STEEL, SELF-RIMMING, DOUBLE COMPARTMENT SINK, (2) 15-3/4" X 14" X 5-3/8" DEEP COMPARTMENTS, FOUR HOLES. FULL UNDERCOATING. PROVIDE TWO DRAIN FITTINGS WITH 1-1/2" CHROME PLATED BRASS TAILPIECE. FAUCET: DECK MOUNTED FAUCET WITH SINGLE LEVER AND AERATOR. 2.2 GPM AT 80 PSI. TRAP AND SUPPLIES: SAME AS P-1, EXCEPT PROVIDE 1-1/2" X 1-1/2" TRAP AND 1-1/2" 17 GAUGE CONTINUOUS WASTE. GARBAGE DISPOSAL: FOOD WASTE DISPOSER, STAINLESS STEEL, 3/4" RUBBER MOUNTING, CONTINUOUS FEED, DUAL DIRECTION WITH 1 HP (1725 RPM) MOTOR WITH BUILT-IN THERMAL OVERLOAD PROTECTION. 120/160 10.2 FLA.
P-5A	DISHWASHER, UNDERCOUNTER	SPECIFIED BY OWNER. CONTRACTOR INSTALLED. PROVIDE AND INSTALL DISHWASHER AIRGAP WITH CHROME CAP, SUPPLIES ETC. AND MAKE ALL FINAL CONNECTIONS TO RENDER A COMPLETE AND THOROUGH INSTALLATION.
P-6	CLOTHES WASHER	CLOTHES WASHER SUPPLIED BY OWNER. COORDINATE WASHER TYPE WITH OWNER. PROVIDE AND INSTALL WASHER-BOX (CATCH-A-DRIIP OR EQUIVALENT) WITH 2" STANDPIPE PER DRAWINGS AND WATER HAMMER ARRESTOR OPTION. PROVIDE TRAP, SUPPLIES ETC. AND MAKE ALL FINAL CONNECTIONS TO RENDER A COMPLETE AND THOROUGH INSTALLATION.
P-7	WALL BOX FOR REFRIGERATOR	PRECISION PLUMBING PRODUCTS, MODEL MM-500PIMB, WHITE PLASTIC ICE MAKER BOX W/ WATER HAMMER ARRESTOR, S.O.V. AND 1/4" COMP FITTING.
P-8	SANITARY FLOOR DRAIN	WADE MODEL #W-9143-16, 12" X 12" X 8" CAST IRON SANITARY FLOOR DRAIN WITH PORCELAIN COATED INTERIOR, PLASTIC DOME STRAINER, 3/4 GRADE, NICKEL BRONZE TOP AND 3" OUTLET. (PROVIDE DEEP SEAL TRAP AND "SURESEAL" MODEL #SS3000, IAPMO LISTED, IN-LINE, FLOOR DRAIN TRAP SEALER, OR EQUIVALENT).
WH-1	WATER HEATER	INDOOR INSTANTANEOUS GAS WATER HEATER WITH DIGITAL TEMPERATURE CONTROL SETTINGS TO DELIVER STEADY TEMPERATURE FLOWS, SET AT 110° F. UNIT INCLUDES OR PROVIDE WATER FLOW SENSOR, ELECTRONIC WATER CONTROL AND FIXED BYPASS. ALSO INCLUDES WI-FI REMOTE MONITORING. 199 MAX. GAS LOAD. 97 WATTS, 4 AMPS. INSTALL WATER HEATER WITH BOTTOM OF UNIT TO BE A MINIMUM OF 5'-0" ABOVE FINISHED FLOOR FOR POSSIBLE INSTALLATION OF FUTURE SOFTENER/FILTRATION SYSTEM. ET-1: EXPANSION TANK: EXPANSION TANK WITH PRE-CHARGED AIR CHAMBER, AIR VALVE, HEAVY-DUTY DIAPHRAGM AND POLYPROPYLENE LINER. MAXIMUM CAPACITY = 2.0 GALLONS. PROVIDE ACID NEUTRALIZER TANK/KIT AND SECURE ON WALL A MIN. OF 18" A.F.F. ROUTE ACID NEUTRALIZER DRAIN LINE TO EXTERIOR. PROVIDE PROPER AIR GAP.

**REVIEWED FOR CODE COMPLIANCE**

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BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet V. La Guardia

DATE: 02/24/2023

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PROJECT No. 21224

**PARKER INDIAN HEALTH CENTER**

**DUPLEX DESIGN**

Parker, AZ  
IHS PROJECT NO. PH21CR03Q3

INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA

REVIEWED:		
DFF ENGINEER/PROJECT MANAGER		DATE
APPROVED:		
DFF BRANCH CHIEF		DATE
CONCURRENCE:		
DFF CHIEF		DATE

1	January 20, 2023	Rev 1 - Permit Revisions
REV	DATE	DESCRIPTION

ISSUE: July 26, 2022 - Construction Documents  
PROJECT NO: 1818.900  
CAD DWG FILE:  
DRAWN BY: AES  
CHECKED BY: AES

**SHEET TITLE**

**PLUMBING SCHEDULES, NOTES AND SPECIFICATIONS**

**P4.1**

Sheet 42 of 48

**ELECTRICAL NOTES:**

**GENERAL :**

1. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, TRANSPORTATION, TOOLS, PERMITS FEES AND INCIDENTALS NECESSARY FOR THE INSTALLATION OF A COMPLETE ELECTRICAL SYSTEM.
2. ALL WORK SHALL BE IN COMPLIANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES AND ORDINANCES.
3. THE CONTRACTOR SHALL FURNISH COPIES OF MANUFACTURER'S LITERATURE AND DRAWINGS DESCRIBING ALL PROPOSED EQUIPMENT AND MATERIALS INDICATED IN THE DRAWINGS AND SPECIFICATIONS ELECTRONICALLY THROUGH THE CLOUD-BASED PROJECT MANAGEMENT SYSTEM. SUBMITTALS SHALL INCLUDE DETAILED SPECIFICATIONS AND CONSTRUCTION DATA. THESE SUBMITTALS SHALL BE IN ACCORDANCE WITH DIVISION 1 SPECIFICATIONS.
4. ALL MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE NEW. THE MANUFACTURER AND CATALOG NUMBERS SPECIFIED HEREIN AND ON THE DRAWINGS ARE TO ESTABLISH DESIGN, STYLE, AND LEVEL OF QUALITY. EQUAL PRODUCTS OF OTHER MANUFACTURERS ARE ACCEPTABLE.
5. THE CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIALS FURNISHED BY HIM FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ALL WORK FOUND TO BE DEFECTIVE WITHIN THIS PERIOD SHALL BE REPLACED AT NO COST TO THE OWNER. REFER TO DIVISION 1 SPECIFICATIONS FOR ADDITIONAL WARRANTY INFORMATION.
6. THE CONTRACTOR SHALL FURNISH A CLEAN SET OF DRAWINGS ON WHICH VARIATIONS TO THE ORIGINAL CONSTRUCTION DOCUMENTS ARE LEGIBLY RECORDED AND DESIGNATED "AS-BUILT" UPON COMPLETION AND ACCEPTANCE OF WORK.
7. PANELBOARDS, SWITCHBOARDS, DISCONNECTS, STARTERS, ETC. SHALL BE LABELED WITH ENGRAVED NAMEPLATES CONSTRUCTED OF LAMINATED PHENOLIC. LETTERS SHALL BE CONDENSED GOTHIC, 1/4 INCH HIGH. NAMEPLATES SHALL BE FASTENED WITH RIVETS OR SCREWS.
8. THESE DRAWINGS ARE SCHEMATIC IN NATURE. CONTRACTOR SHALL PROVIDE ALL BOXES, FITTING, ETC. FOR A COMPLETE INSTALLATION, EVEN IF NOT SHOWN ON CONSTRUCTION DOCUMENTS.

**BASIC MATERIALS AND METHODS:**

**1. CONDUIT**

- A. CONDUITS LOCATED INDOORS IN NON-HAZARDOUS AREAS AND NOT SUBJECT TO PHYSICAL DAMAGE SHALL BE ELECTRICAL METALLIC TUBING (EMT) WITH COMPRESSION COUPLINGS AND FITTINGS.
- B. CONDUITS LOCATED OUTDOORS, OR SUBJECT TO PHYSICAL DAMAGE, SHALL BE RIGID GALVANIZED STEEL (RGS) WITH THREADED COUPLINGS AND FITTINGS.
- C. FLEXIBLE METALLIC CONDUIT SHALL BE USED IN DRY LOCATIONS AND LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED IN WET LOCATIONS TO EXTEND CONDUIT CONNECTIONS TO MOTORS. THE LENGTH OF FLEXIBLE CONDUIT SHALL NOT EXCEED 24 INCHES.
- D. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED A MINIMUM OF 24 INCHES BELOW GRADE. CONDUIT RISERS FROM UNDERGROUND CONDUIT RUNS AND UNDERGROUND CONDUIT BENDS SHALL BE RIGID GALVANIZED STEEL. ALL RGS CONDUIT AND FITTINGS LOCATED BELOW GRADE SHALL BE WRAPPED WITH HALF-LAPPED 3M NO. 51 "SCOTCH RAP", OR APPROVED EQUAL, VINYL TAPE.

**2. CONDUCTORS**

- A. ALL CONDUCTORS LOCATED INDOORS SHALL BE TYPE NMC, NONMETALLIC-SHEATHED CABLE, WITH INTEGRAL EQUIPMENT GROUNDING CONDUCTOR.
- B. ALL CONDUCTORS LOCATED INDOORS IN CONDUIT SHALL BE COPPER, TYPE THHN/THWN. NUMBER 10 AWG AND BELOW SHALL BE SOLID AND NUMBER 8 AWG AND ABOVE SHALL BE STRANDED.
- C. ALL CONDUCTORS LOCATED OUTDOORS OR IN WET LOCATIONS IN CONDUIT SHALL BE COPPER, TYPE XHHW-2.
- D. MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHTING CIRCUITS SHALL BE NO. 12 AWG, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. MINIMUM CONDUCTOR SIZE FOR CONTROL AND SIGNAL CIRCUITS SHALL BE NO. 14 AWG, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

E. CONDUCTORS FOR 120/240 VOLT SYSTEMS SHALL BE COLOR CODED BLACK, RED AND WHITE FOR PHASES A,B AND NEUTRAL RESPECTIVELY.

F. ALL RACEWAYS SHALL CONTAIN AN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED PER THE NEC.

**3. DISCONNECT SWITCHES**

- A. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE HD.
- B. FUSIBLE DISCONNECT SWITCHES SHALL HAVE PROVISIONS FOR CLASS R FUSES.

C. DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED WHERE REQUIRED BY THE DRAWINGS OR CODES.

**4. FUSES**

A. ALL FUSES SHALL BE BUSSMANN "LOW-PEAK" OR APPROVED EQUAL.

B. FUSES RATED 1/10 TO 600 AMPERES SHALL BE UL CLASS R DUAL ELEMENT CURRENT LIMITING, EQUAL TO BUSSMANN TYPE LPN-RK (250V).

**5. WIRING DEVICES**

A. LIGHT SWITCHES SHALL BE 20 AMPERES, 120 VOLT, 'DECORA' TYPE SWITCHES.

B. RECEPTACLES SHALL BE TAMPER RESISTANT, 20 AMPERES, 125 VOLTS, SPECIFICATION GRADE, HUBBELL NO. SNAP53621TR OR APPROVED EQUAL.

C. GROUND FAULT RECEPTACLES SHALL BE TAMPER RESISTANT, 20 AMPERES, 125 VOLTS, HUBBELL NO. GFTR20SNAPINA, OR APPROVED EQUAL.

D. COLOR OF SWITCHES, RECEPTACLES AND DEVICE PLATES SHALL BE IVORY (COORDINATE WITH IHS PRIOR TO ORDERING).

E. DEVICE PLATES SHALL BE LEXAN.

F. RECEPTACLES SHALL BE FLUSH MOUNTED 18 INCHES TO BOTTOM OF BOX, ABOVE FINISHED FLOOR, UNLESS OTHERWISE SHOWN, WITH GROUNDING POLE AT TOP.

G. RECEPTACLES ABOVE COUNTERS SHALL BE VERTICALLY MOUNTED AT 44 INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE SHOWN.

H. SWITCHES SHALL BE FLUSH MOUNTED 44 INCHES ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.

**6. JUNCTION BOXES**

A. JUNCTION AND PULL BOXES SHALL BE OF CODE GALVANIZED STEEL.

B. DEVICE BOXES AND GENERAL PURPOSE JUNCTION BOXES SHALL BE ONE PIECE GALVANIZED PRESSED STEEL KNOCK-OUT TYPE WITH SIMILAR COVER, AND NOT LESS THAN 4" SQUARE.

**7. LOAD CENTERS**

A. LOAD CENTERS SHALL HAVE THE ELECTRICAL RATINGS AS SHOWN ON THE DRAWINGS.

B. LOAD CENTERS SHALL CONTAIN BOLT-ON THERMAL MAGNETIC CIRCUIT BREAKERS. CIRCUIT BREAKERS USED TO SWITCH LIGHTING CIRCUITS SHALL BE 'SWD' RATED AND CIRCUIT BREAKERS FEEDING HEATING AND AIR CONDITIONING EQUIPMENT SHALL BE 'HAGR' RATED.

C. BUS BARS SHALL BE COPPER. NEUTRAL BARS, WHERE SPECIFIED, SHALL BE FULL SIZE.

D. A DIRECTORY FRAME AND CARD HAVING A TRANSPARENT COVER SHALL BE FURNISHED ON EACH DOOR, NEATLY TYPED TO INDICATE LOADS.

**ABBREVIATIONS**

A	AMPERES	MLO	MAIN LUGS ONLY
AFF	ABOVE FINISHED FLOOR	M	MOTOR
AFG	ABOVE FINISHED GRADE	MFG	MANUFACTURER
AIC	AMPERES INTERRUPTING CAPACITY	NEC	NATIONAL ELECTRICAL CODE
A	AMPS	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
AMP	AMPACITY	(N)	NEW
AC	ALTERNATING CURRENT	N, NEU	NEUTRAL
AWG	AMERICAN WIRE GAUGE	PH	PHASE
#/C	NUMBER OF CONDUCTORS	LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
C	CONDUIT	PVC	POLYVINYL CHLORIDE
(E)	EXISTING	REM	REMARK
EC	EMPTY CONDUIT	RGS	RIGID GALVANIZED STEEL
EWC	ELECTRIC WATER COOLER	SDBC	STRANDED BARE COPPER
FU	FUSE	SHLD.SH	SHIELDED
GFI	GROUND FAULT INTERRUPTER	SN	SOLID NEUTRAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SP	SPARE
GND	GROUND	TEP	TUCSON ELECTRIC POWER TYPICAL
FMC	FLEXIBLE METAL CONDUIT	UL	UNDERWRITER'S LABORATORIES
EMT	ELECTRICAL METALLIC TUBING	UPS	UNINTEERRUPTABLE POWER SOURCE
HP	HORSEPOWER	UON	UNLESS OTHERWISE NOTED
KW	KILOWATTS	V	VOLTS
KVA	KILOVOLT AMPS	WP	WEATHERPROOF
MCB	MAIN CIRCUIT BREAKER	XFMR	TRANSFORMER
MCP	MOTOR CIRCUIT PROTECTOR		

**REVIEWED FOR CODE COMPLIANCE**

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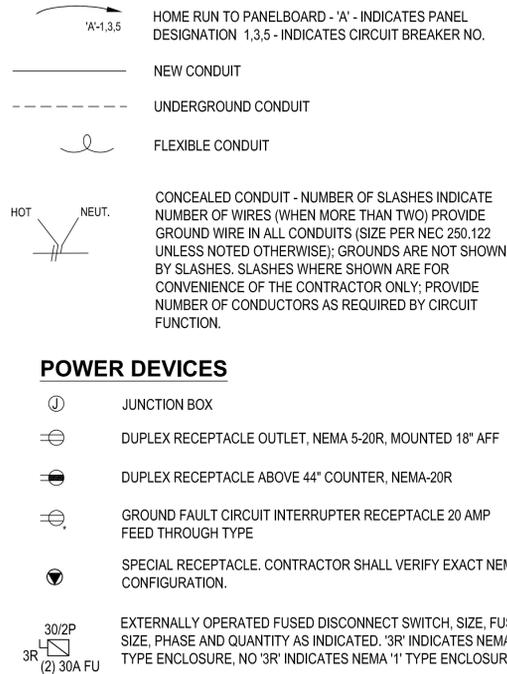
BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: Bobbet v. La Guardia

DATE: 02/24/2023

**SYMBOLS**

**WIRING LEGEND**



**LIGHT FIXTURE DESIGNATION**

LETTER INDICATES LIGHT FIXTURES TYPE, 2 INDICATES CIRCUIT NUMBER, 3 INDICATES SWITCH LOCATION.

**LIGHT FIXTURES**

- WALL MOUNTED LUMINAIRE
- RECESSED OR PENDANT MOUNTED LUMINAIRE
- STRIP FIXTURE / UNDER CABINET LIGHT

**LIGHTING CONTROL**

- § SINGLE POLE SWITCH, 20 A OR LOW VOLTAGE TYPE. MAX. HEIGHT = 42" TO CENTERLINE OR AS NOTED ON DRAWINGS.
- §3 3 WAY SWITCH
- § WALL MOUNTED OCCUPANCY SENSOR SWITCH EQUAL TO SENSOR SWITCH WSD SERIES.

**SPECIAL SYSTEM DEVICES**

- ▼ VOICE/DATA OUTLET. INSTALL SINGLE GANG MUD RING MOUNTED AT +18" (U.O.N) (WIRING BY OTHERS)
- ▽ TELEVISION OUTLET. INSTALL SINGLE GANG MUD RING MOUNTED AT +18" (U.O.N) (WIRING BY OTHERS)

**FIRE ALARM DEVICES**

- SD SMOKE & CARBON MONOXIDE ALARM, BRK SERIES #SC9120B. PROVIDE INTERCONNECT WIRING BETWEEN SMOKE ALARMS AS REQUIRED.
- SS COMBINATION SMOKE & CARBON MONOXIDE ALARM/STROBE LIGHT, BRK SERIES #7030BSL. PROVIDE INTERCONNECT WIRING BETWEEN SMOKE & CARBON MONOXIDE ALARMS/STROBES AS REQUIRED.
- FS FLOW SWITCH
- TS TAMPER SWITCH
- RISER BELL
- STROBE LIGHT, BRK SERIES #SLED177. PROVIDE INTERCONNECT WIRING BETWEEN SMOKE & CARBON MONOXIDE ALARMS/STROBES AS REQUIRED.

**LIGHT FIXTURE SCHEDULE**

TYPE	DESCRIPTION/ MANUFACTURER	VOLT	LAMPS	MOUNTING	FINISH	MAX VA	REMARKS
L2	18" LED UNDER CABINET LITHONIA LIGHTING UCLD-18IN-30K-90CRI-BN	120V	LED	UNDER CABINET	BRUSHED NICKEL	12.5 VA	
L3	24" LED STRIP LIGHT LITHONIA LIGHTING CLX-L24-2000LM-SEF-FDL-MVOLT-GZ10-40K-90CRI	120V	LED	SURFACE	STANDARD	34 VA	
R1	3" LED RECESSED CAN CONTECH LIGHTING LVR3164C 10M-CTR301WHT	120V	LED	RECESSED	WHITE	10 VA	• PROVIDE IC RATED
R2	4" LED RECESSED CAN CONTECH LIGHTING R4IC-3-30K-MVD-C4322W-CLR	120V	LED	RECESSED	CLEAR	20 VA	• PROVIDE IC RATED
R4	4" LED WET LOCATION RECESSED CAN CONTECH LIGHTING R4IC-3-30K-MVD-C4327-WHT-CLR	120V	LED	RECESSED	WHITE	20 VA	• PROVIDE IC RATED • PROVIDE WET LOCATION LISTED
R5	DECORATIVE LED FIXTURE SEA GULL LIGHTING 77282EN-962	120V	(2)-10W A19 MEDIUM BASE 2700K LED BULB	PENDANT	STANDARD	20 VA	
W1	LED WALL PACK LITHONIA LIGHTING OLWX1LED-13W-40K-PE	120V	LED	WALL	DARK BRONZE	14 VA	• PROVIDE INTEGRAL PHOTO CELL
W2	WALL MOUNTED LED LITHONIA LIGHTING FMV/CCL-24IN-MVOLT-35K-90CRI-BN	120V	LED	WALL	BRUSHED NICKEL	26 VA	
	CEILING FAN WITH LED LIGHT HUNTER SENTINEL #59157	120V	LED	CEILING	BRUSHED NICKEL	62 VA	• INSTALL REMOTE CONTROL PER MANUF. REQUIREMENTS

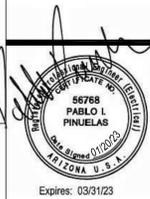
**NOTES:**

1. FIXTURE SCHEDULE INDICATES GENERAL DESCRIPTION OF LIGHTING FIXTURES AND MANUFACTURERS CATALOG NUMBERS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE CORRECT CEILING CONFIGURATION AND PROVIDE THE FIXTURES WITH ALL NECESSARY TRIMS AND MOUNTING HARDWARE SO THAT BOTH THE CEILING SYSTEM AND THE FIXTURE CONSTRUCTION MATCH.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY EXACT LOCATIONS OF ALL LIGHTING FIXTURES AND TYPE OF CEILING WITH THE ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO ANY WORK. REFER TO ARCHITECTURAL ELEVATION DRAWINGS FOR MOUNTING HEIGHTS OF WALL MOUNTED FIXTURES.
3. NOT LESS THAN 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS (IECC SECTION R404)

BURNS WALD-HOPKINS SHAMBACH ARCHITECTS  
261 North Court Avenue  
Tucson, Arizona 85711  
520.795.2705 Fax 520.795.6171  
www.bwsarch.com

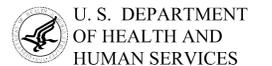
**CONSULTANTS**

- |   |  |
|---|--|
| CIVIL<br>EEC<br>555 E River Road, Suite 301<br>Tucson, AZ 85704<br>Phone: (520) 321-4625                            | STRUCTURAL<br>Turner Structural Eng.<br>2806 N Alvernon Way,<br>Ste 400<br>Tucson, AZ 85712<br>Phone: (520) 323-3422 |
| MECHANICAL<br>Adams & Associates<br>6422 E Speedway Blvd,<br>Suite 130<br>Tucson, AZ 85710<br>Phone: (520) 323-3858 | ELECTRICAL<br>M3 Engineering<br>2051 W Sunset Rd<br>Tucson, AZ 85704<br>Phone: (520) 293-1488                        |



**PARKER INDIAN HEALTH CENTER  
DUPLEX DESIGN**

Parker, AZ  
IHS PROJECT NO. PH21CR03Q3



INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA



**REVIEWED:**

DFE ENGINEER/PROJECT MANAGER \_\_\_\_\_ DATE \_\_\_\_\_

**APPROVED:**

DFE BRANCH CHIEF \_\_\_\_\_ DATE \_\_\_\_\_

**CONCURRENCE:**

DFE CHIEF \_\_\_\_\_ DATE \_\_\_\_\_

1	1/20/2023	Rev 1 - Permit Revisions
REV	DATE	DESCRIPTION
ISSUE:	July 26, 2022	- Construction Documents
PROJECT NO.:	1818.900	
CAD DWG FILE:		
DRAWN BY:	RL	
CHECKED BY:		

**SHEET TITLE**

**ELECTRICAL NOTES,  
SYMBOLS, FIXTURE  
SCHEDULE**

**E001**

Sheet 43 of 48

2051 W SUNSET RD,  
SUITE NO. 101  
TUCSON, ARIZONA 85704

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M3-PN180180.001

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<b>MECHANICAL</b> Zona Technical Engineering 6422 E Speedway Blvd, Suite 130 Tucson, AZ 85710 Phone: (520) 200-2612	<b>ELECTRICAL</b> M3 Engineering 2051 W Sunset Rd Tucson, AZ 85704 Phone: (520) 293-1488



**PARKER INDIAN HEALTH CENTER  
 DUPLEX DESIGN**

Parker, AZ  
 IHS PROJECT NO. PH21CR03Q3

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

INDIAN HEALTH SERVICE  
 DIVISION OF FACILITIES ENGINEERING  
 PHOENIX AREA



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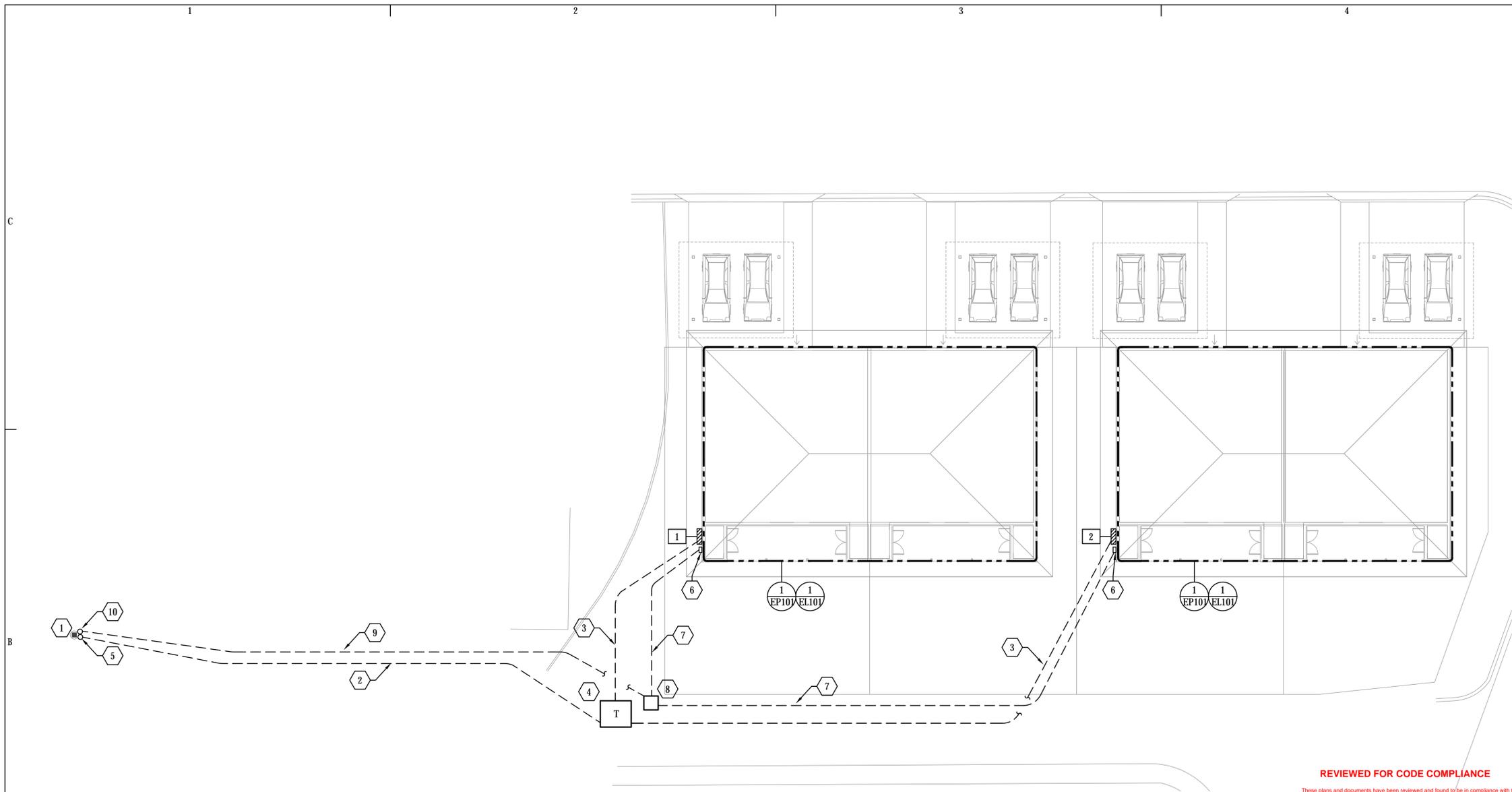
REV	DATE	DESCRIPTION

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 CHECKED BY:

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**ELECTRICAL SITE PLAN**

**ES101**



**1 ELECTRICAL SITE PLAN**  
 1" = 12'-0"



**REVIEWED FOR CODE COMPLIANCE**  
 These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction. Issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, nor local regulation.

BUREAU VERITAS NORTH AMERICA, INC.  
**SIGNATURE:** *Bobbet V. La Guardia*  
**DATE:** 02/24/2023

**KEYNOTES:**

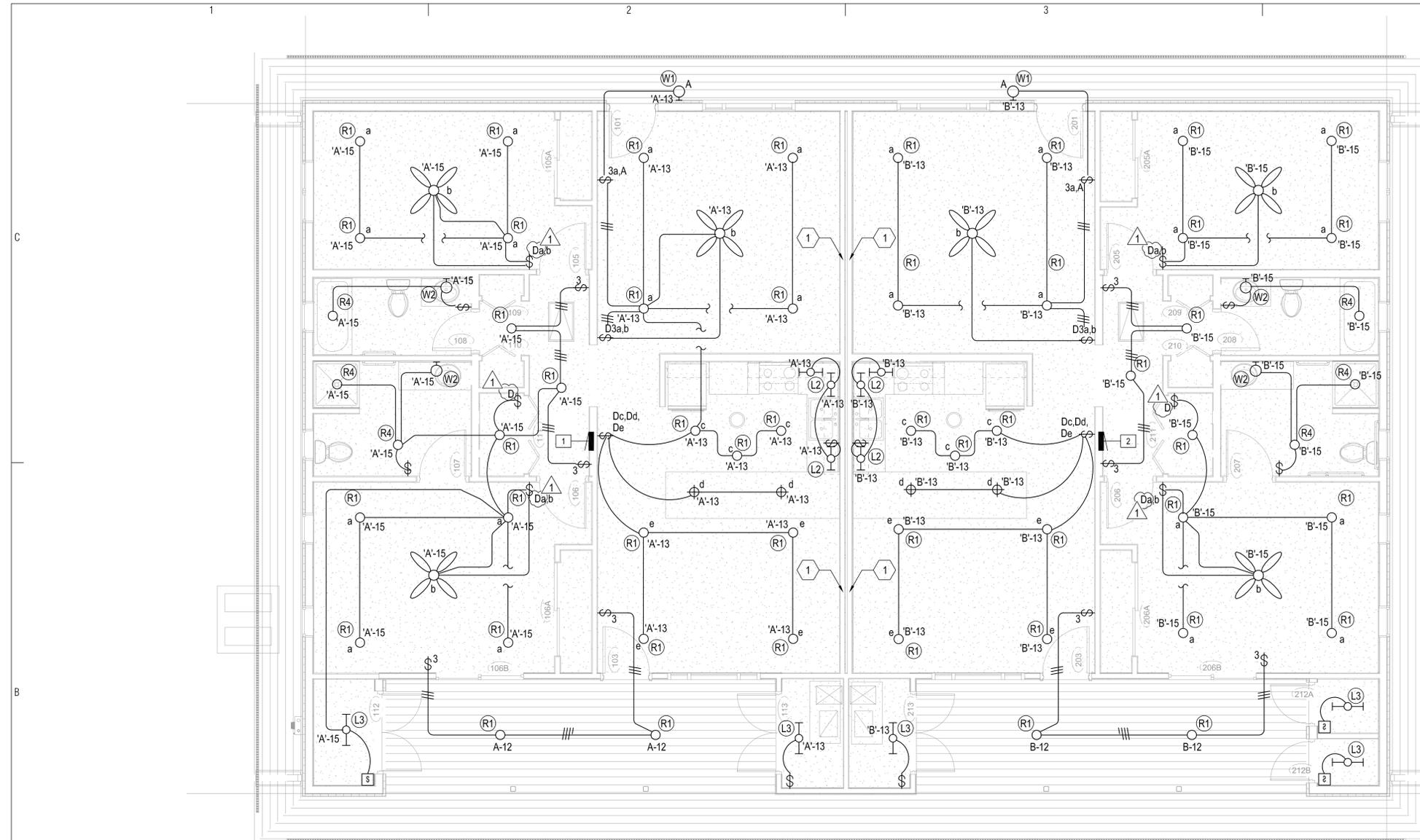
1. APPROXIMATE LOCATION OF (E) UTILITY POLE TO REMAIN.
2. (N) (1) 4" EC W/ PULLCORD FOR PRIMARY CONDUCTORS PROVIDED AND INSTALLED BY BIA. INSTALL CONDUIT PER BIA REQUIREMENTS.
3. (N) (1) 4" EC W/ PULLCORD FOR SECONDARY CONDUCTORS PROVIDED AND INSTALLED BY BIA. INSTALL CONDUIT PER BIA REQUIREMENTS.
4. (N) PAD MOUNT TRANSFORMER PROVIDED AND INSTALLED BY BIA. INSTALL PAD PER BIA REQUIREMENTS.
5. PROVIDE RISER PER BIA REQUIREMENTS.
6. TELECOMMUNICATION CABINET PER TELECOMMUNICATION COMPANY REQUIREMENTS.
7. 2" EMPTY CONDUIT W/ PULL CORD PER TELECOMMUNICATION REQUIREMENTS. CONTRACTOR TO VERIFY EXACT REQUIREMENTS WITH TELECOMMUNICATION COMPANY.
8. TELECOMMUNICATION PEDESTAL PER TELECOMMUNICATION REQUIREMENTS. CONTRACTOR TO VERIFY EXACT REQUIREMENTS WITH TELECOMMUNICATION COMPANY.
9. 4" EMPTY CONDUIT W/ PULL CORD PER TELECOMMUNICATION REQUIREMENTS. CONTRACTOR TO VERIFY EXACT REQUIREMENTS WITH TELECOMMUNICATION COMPANY.
10. PROVIDE RISER PER TELECOMMUNICATION REQUIREMENTS.

**GENERAL NOTES:**

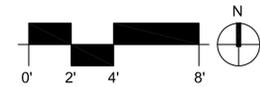
- A. PROVIDE A TRACER WIRE FOR ALL UNDERGROUND SITE CONDUITS PER ARIZONA STATE STATUTE REF. 40-360-22-M.
- B. CONTRACTOR TO BLUE STAKE ALL (E) UTILITIES PRIOR TO INSTALLING (N) CONDUITS).
- C. PROVIDE SAW CUTTING OF (E) ASPHALT/CONCRETE FOR (N) CONDUITS WHERE REQUIRED AS REQUIRED. PATCH TO MATCH (E).
- D. CONTRACTOR TO COORDINATE ALL WORK WITH BIA PRIOR TO INITIATING ANY WORK. COORDINATE AND DOCUMENT ALL DESIGN FEES/PERMIT FEES ASSOCIATED WITH BIA WITH OWNER.
- E. UTILITY CONDUIT ROUTING IS APPROXIMATELY. CONTRACTOR SHALL REFER TO UTILITY COMPANY DRAWINGS AND SHALL INSTALL THE CONDUITS AND TRENCHING PER THE UTILITY COMPANY REQUIREMENTS. PROVIDE ADDITIONAL PULL BOXES, HAND HOLES, CONDUIT AND EQUIPMENT AS REQUIRED PER UTILITY COMPANY REQUIREMENTS.
- F. PROVIDE A TRACER WIRE FOR ALL UNDERGROUND SITE CONDUITS PER ARIZONA STATE STATUTE REF. 40-360.22-M.

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**1 LIGHTING PLAN**  
1/4" = 1'-0"



**KEYNOTES:**

- ALL DEVICES IN FIRE WALL SHALL BE PROVIDED WITH 1 HOUR FIRE RATED ASSEMBLY BACK BOXES.

**GENERAL NOTES:**

- MAINTAIN ALL NEC REQUIRED WORKING CLEARANCES FOR ALL ELECTRICAL EQUIPMENT.
- ALL WIRING SHALL BE (2) #12, #12 GND., UNLESS OTHERWISE NOTED.
- ALL BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRALS. SHARED NEUTRALS ARE NOT ALLOWED. (U.O.N.) (NEC ARTICLE 200.4)

**ELECTRICAL EQUIPMENT KEYNOTES**

- PANEL 'A'.
- PANEL 'B'.

**REVIEWED FOR CODE COMPLIANCE**

These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards no relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, or local regulation.

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SIGNATURE: Bobbet V. La Guardia

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**PARKER INDIAN HEALTH CENTER**  
DUPLEX DESIGN

Parker, AZ  
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INDIAN HEALTH SERVICE  
DIVISION OF FACILITIES ENGINEERING  
PHOENIX AREA



REVIEWED:

DFE ENGINEER/PROJECT MANAGER DATE

APPROVED:

DFE BRANCH CHIEF DATE

CONCURRENCE:

DFE CHIEF DATE

1	1/20/2023	Rev 1 - Permit Revisions
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CAD DWG FILE:

DRAWN BY: RL

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**SHEET TITLE**

**LIGHTING PLAN**

**EL101**

Sheet 45 of 48



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