# SAN BERNARDINO COUNTY

# MOJAVE NARROWS REGIONAL PARK DRY CAMPSITE ADA RESTROOM

PROJECT # 10.10.1402

18000 YATES ROAD VICTORVILLE, CA 92392

SHEET INDEX

IMPROVEMENT PLAN

- ELECTRICAL LEGENDS AND NOTES

- ENLARGED ELECTRICAL PLAN

SINGLE LINE DIAGRAM - ELECTRICAL SITE PLAN

CONSULTANT

REGIONAL PARK DRY CAMPSITE ADA

RESTROOM

PROJECT #10.10.1402

18000 YATES ROAD

INFORMATION:

VICTORVILLE, CA 92392

# ISSUE INFORMATION:

STK ARCHITECTURE, INC. TONY FINALDI, ARCHITECT 42095 ZEVO DR., SUITE AI5 TEMECULA, CA 92590 PHONE: (951) 296-9110

PROJECT AND FACILITIES MANAGEMENT DEPARTMENT

# <u>CIVIL ENGINEER</u>

PROJECT TEAM

FAX: (951) 296-6079

<u>OWNER</u>

SAN BERNARDINO COUNTY

SAN BERNARDINO, CA 92415

PHONE: (909) 387-5000

<u>ARCHITECTURAL</u>

RYAN JOHNSON, PROJECT MANAGER III

385 N. ARROWHEAD AVE., THIRD FLOOR

A.J. FRICK CIVIL ENGINEERING ARNIE FRICK 42095 ZEVO DR., SUITE AIS TEMECULA, CA 92590 PHONE: (951) 296-9110 FAX: (951) 296-6079

### ELECT./PLUMBING ENGINEER

DESIGN WEST ENGINEERING ADRIAN JACQUEZ 1845 BUSINESS CENTER DR., SUITE 215 SAN BERNARDINO, CA 92408 (909) 890-3700 (909) 890-3770 FAX

PLOT DATE:

DRAWING NAME:



SHEET INFORMATION:

STK PROJECT NO.: 374-166-22

AS NOTED

MARCH 2023

TITLE SHEET

GENERAL CONTRACTOR SHALL PROVIDE SECURITY/TEMPORATY FENCING FOR DURATION OF THE PROJECT AS REQUIRED AT NO ADDITIONAL COST

2. GENERAL CONTRACTOR SHALL PROVIDE AND PAY FOR ANY SURVEY WORK BY A LICENSED CALIFORNIA SURVEYOR AS REQUIRED.

3. SINCE THERE ARE NO AS BUILT PLANS FOR UNDERGROUND UTILITIES AND IRRIGATION AVAILABLE, THE CONTRACTOR SHALL TAKE SPECIAL CARE TO LOCATE ALL UNDERGROUND UTILITIES AND IRRIGATION LINES TO AVOID DAMAGE PRIOR TO EXCAVATION. CONTRACTOR SHALL REPAIR, RELOCATE, AND OR RE-ROUTE ANY UTILITIES AND OR IRRIGATION LINES FOUND TO BE IN CONFLICT WITH THE NEW CONSTRUCTION AT NO ADDED COST TO OWNER TO PROVIDE A FULLY FUNCTIONAL SYSTEM.

4. OWNER FURNISHED PREFABRICATED RESTROOM/SHOWER BUILDING. CONTRACTOR SHALL PERFORM THE FOLLOWING:

- PREPARE THE SITE / BUILDING PAD TO ACCEPT THE BUILDING PER CIVIL DRAWING & BUILDING MANUFACTURER'S REQUIREMENTS.

- COORDINATE WITH OWNER & MANUFACTURER FOR ACCEPTANCE OF BUILDING, INCLUDING OFF-LAODING & BUILDING PLACEMENT.

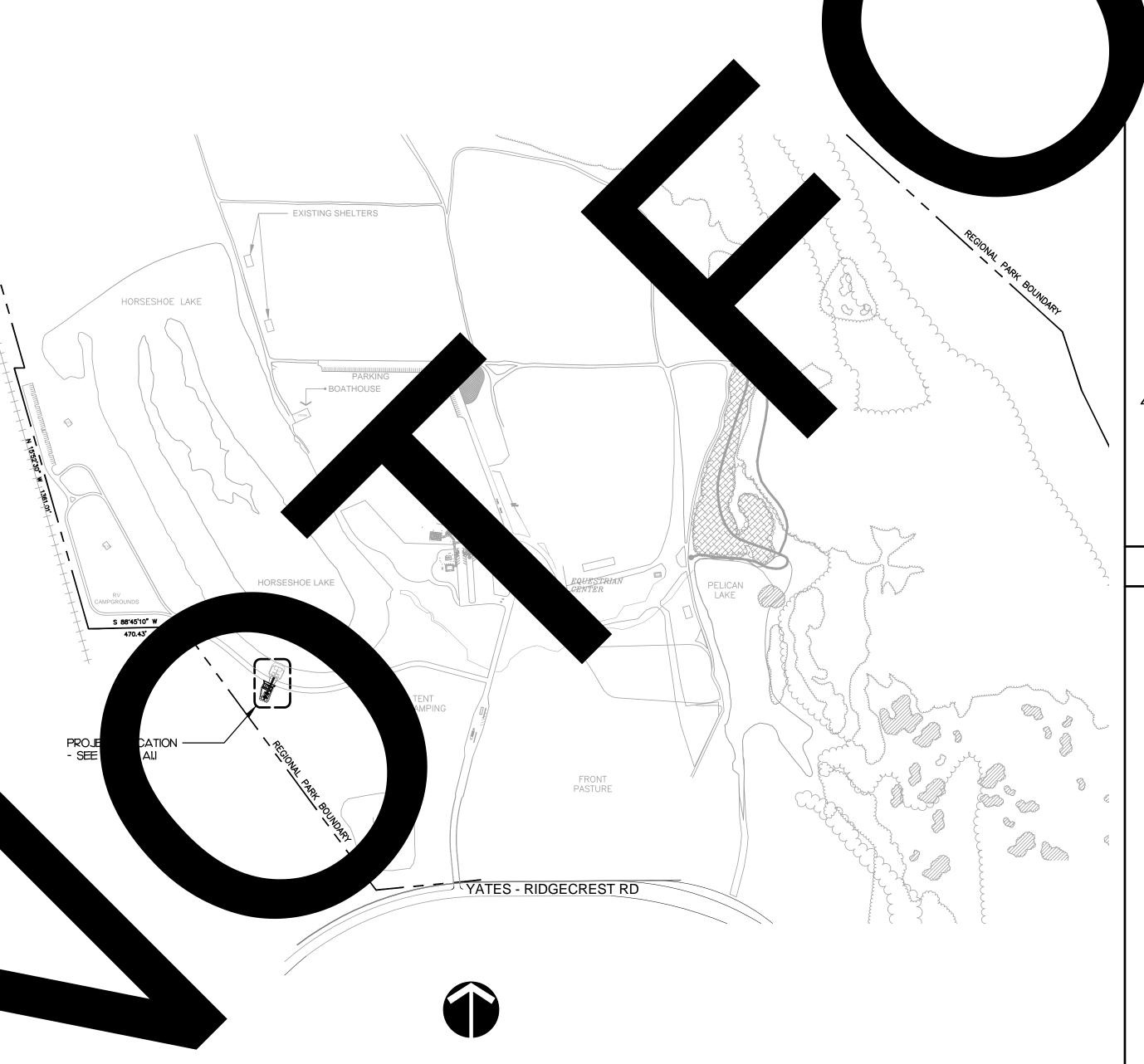
OWNER HAS INCLUDED & ALREADY PAID FOR DELIVERY & OFF-LOADING OF PREFABRICATED STRUCTURES AT THE JOB SITE. CONTRACTOR SHALL NOT INCLUDE SHIPPING, DELIVERY & OFF-LOAD IN SCOPE OF WORK.

- PROVIDE ALL UTILITY CONNECTIONS AS REQUIRED (WATER, SEWER & ELECTRICAL).

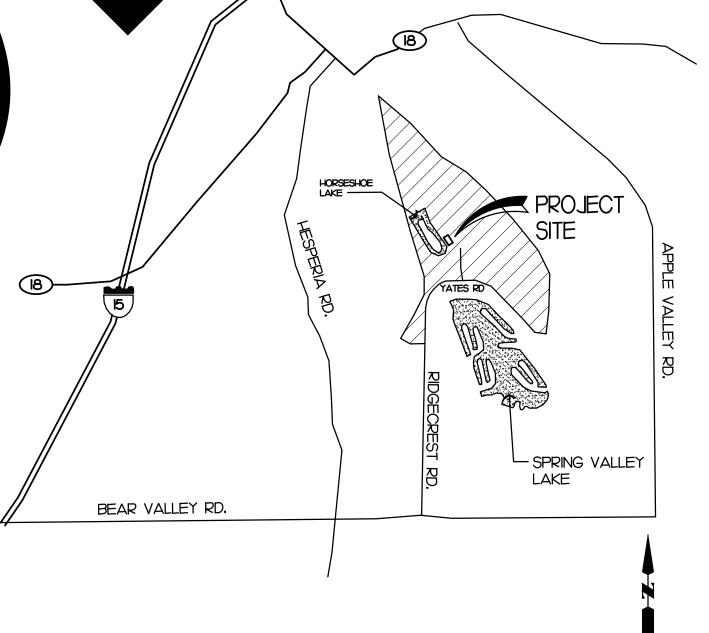
- PROVIDE ROUGH-IN FOR ALL UNDERGROUND SEWER UNDER THE PREFABRICATED BUILDING, CONTRACTOR SHALL COORDINATE WITH THE PREFABRICATED BUILDING MANUFACTURER TO ENSURE THE PLUMBING ROUGH-IN AND STUB-UPS MATCH THE PREFAB SHOP DRAWINGS.

- PROVIDE BABY CHANGING STATION AS REQUIRED BY CODE IN BOTH RESTROOMS: KOALA KARE KB200-0ISS HORIZONTAL BABY CHANGING STATION (OR APPROVED EQUAL), EXACT LOCATIONS TO BE FIELD DETERMINED BY OWNER.

NOTES TO GENERAL CONTRACTOR

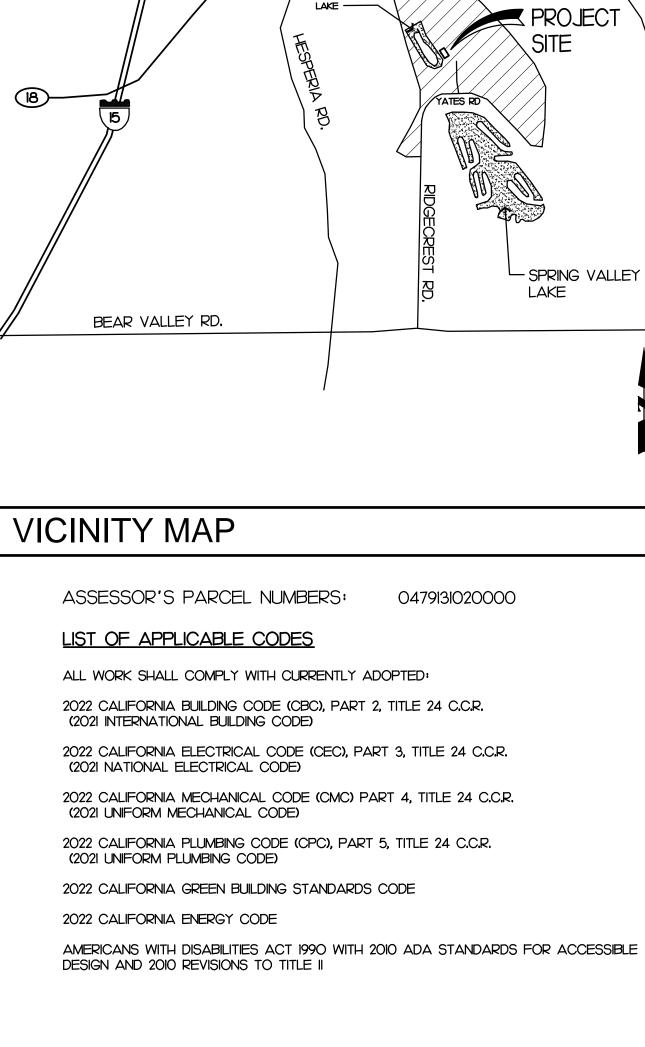


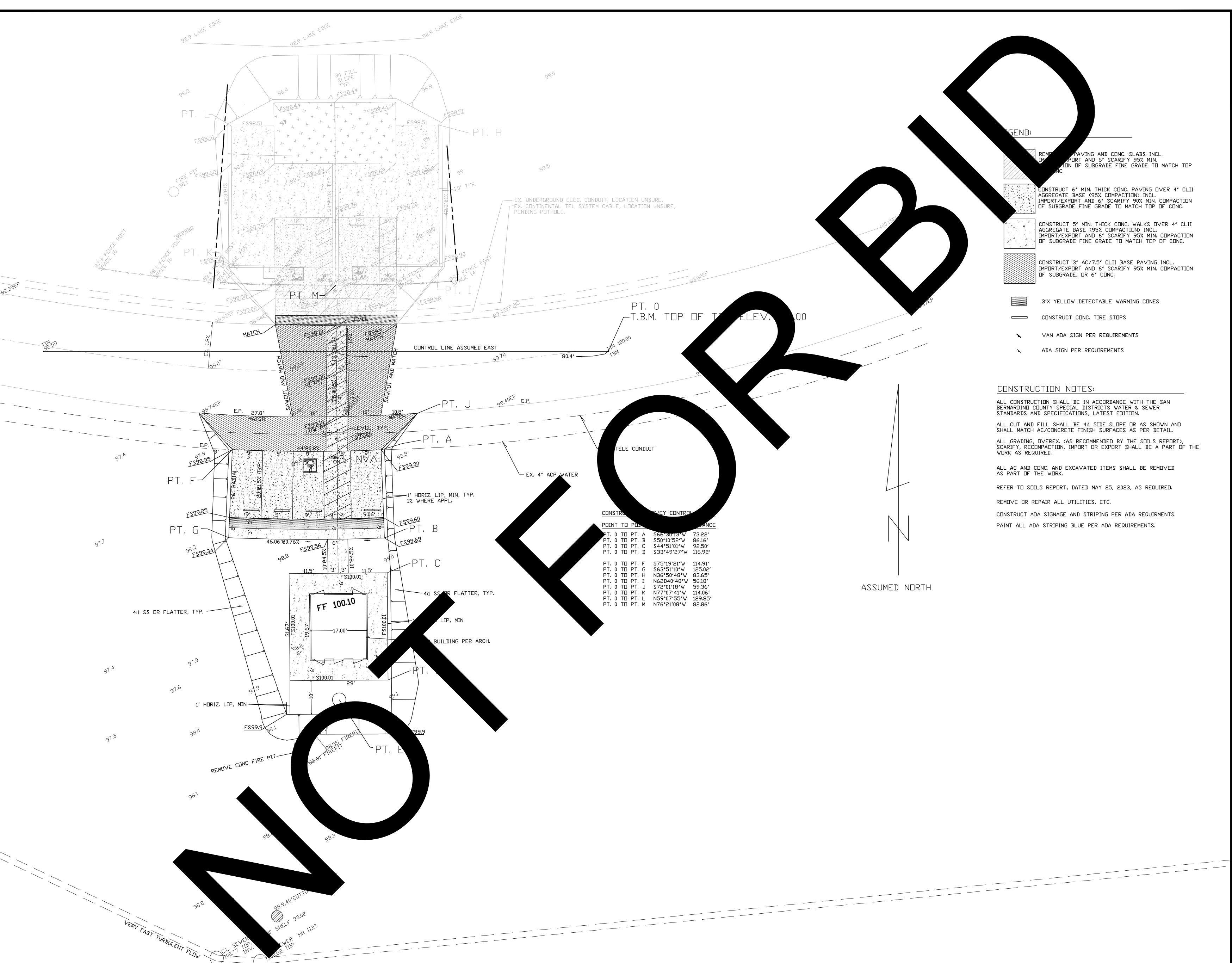
REFERENCE SITE PLAN



CODE ANALYSIS

N.T.S.







CONSULTANT:

# A.J. FRICK CIVIL ENGINEERING

42095 ZEVO DR., SUITE AI5 TEMECULA, CA 92590 PHONE: (951) 296-9110 FAX: (951) 296-6079

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT AND FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

# PROJECT NAME:

MOJAVE NARROWS REGIONAL PARK DRY CAMPSITE ADA

RESTROOM

PROJECT # 10.10.1402

18000 YATES ROAD VICTORVILLE, CA 92392

ISSUE INFORMATION:

DATE: INFORMATION:

SHEET INFORMATION:

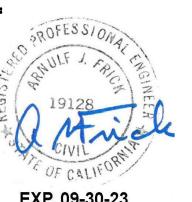
STK PROJECT NO.: 374-166-22

SCALE: AS NOTED

DATE: MARCH 2023

PLOT DATE: -

DRAWING NAME:



SHEET TITLE:

PRECISE GRADING PLAN

SHEET NO.:

C-1



### **GENERAL WATER NOTES**

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND TO THE LATEST SPECIAL DISTRICTS

- PERMITS FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS TRANSPORTATION, PRIOR
- 9. THE CONTRACTOR SHALL NOTIFY ALL SERVING UTILITY COMPANIES 48 HOURS PRIOR TO BEGINNING ANY
- 10. ALL PIPE SHALL BE CLASS 150 AND INSTALLED WITH LOCATION TAPE 18" BELOW FINISHED GRADE AND 14 GA
- 92415-0450: PHONE: (760) 955-9885 TO KEEP INTERRUPTIONS TO A MINIMUM, NO INTERRUPTIONS TO EXISTING SERVICES SHALL BE MADE UNLESS THE DISTRICT GRANTS PRIOR APPROVAL.
- 12. CONTRACTOR SHALL ENSURE THAT UTILITY EASEMENTS HAVE BEEN RECORDED PRIOR TO START OF WORK.
- 13. WATER MAIN SHALL HAVE A MINIMUM OF 48" OF COVER FROM TOP OF PIPE TO FINAL GRADE. 14. HYDRO TEST AT 200 PSI MINIMUM FOR A 2 HOUR DURATION AT LOWEST POINT IN THE WATER LINE.
- 15. 1" SERVICE LINES ARE TO BE INSTALLED PER STANDARD DRAWING H-4A AND H-9B.
- 16. METER BOXES SHALL BE PLACED WITHIN 1 FOOT MINIMUM, 3 FEET MAXIMUM FROM ADJACENT PROPERTY
- LINE. METER BOXES IN THE SIDEWALK SHALL HAVE CONCRETE LIDS. 17. ALL VALVES INSTALLED BY THE CONTRACTOR SHALL BE ACCESSIBLE FOR OPERATION WITH COMPLETE VALVE CAN TO GRADE DIRECTLY FOLLOWING CONNECTION TO EXISTING WATER SYSTEM. SEE STANDARD DRAWING H-11.
- 18. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE UNDERSIGNED ENGINEER AND THE COUNTY OF SAN BERNARDINO SPECIAL
- 19. THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE
- OF THE OWNER OR THE ENGINEER. 20. ALL STATIONING IS BASED ON THE CENTER LINE OF THE STREET.
- 21. ALL EXCAVATIONS SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY AND ROADS OPEN TO VEHICULAR TRAFFIC UNLESS OTHERWISE APPROVED BY THE SPECIAL DISTRICTS ENGINEER.
- 22. ALL PIPE DISTANCES SHOWN ARE HORIZONTAL.
- 23. ALL WORK SHALL BE CONSTRUCTED ACCORDING TO THE VERTICAL AND HORIZONTAL MEASUREMENTS OF THESE PLANS AND EXISTING DESIGN STANDARDS. ADEQUATE STAKES SHALL BE SET UNDER THE DIRECTION OF A LICENSED SURVEYOR/ENGINEER FOR THE CONSTRUCTOR. ALL CONSTRUCTION SURVEYING SHALL BE PERFORMED IN ACCORDANCE TO THE SURVEYING PROCEDURES OF THE SURVEYOR/ENGINEER OF RECORD. IF THIRD PARTY SUBCONTRACTORS PERFORM THE CONSTRUCTION LAYOUT AND SURVEYING FOR THIS PROJECT WITHOUT THE COORDINATION OF THE SURVEYOR/ENGINEER OR RECORD, THEY HAVE ASSUMED THE POSITION OF SURVEYOR/ENGINEER OF RECORD. THE FINAL CHECK OF THIS DESIGN IS TO BE THE CONSTRUCTION STAKING AS THE DESIGN MEETS THE EXISTING CONTROL AND ELEVATIONS. ALL EXISTING DISCREPANCIES TO THE STANDARD DESIGN CRITERIA SHALL BE BROUGHT TO THE SURVEYOR/ENGINEER OF RECORD'S ATTENTION PRIOR TO PROCEEDING WITH CONSTRUCTION. IF CONSTRUCTION CONTINUES WITHOUT VERIFICATION THE CONSTRUCTOR ASSUMES THE RESPONSIBILITY OF THE CORRECT SS OF THE
- 24. THE METHOD AND LOCATION OF CONNECTION TO THE PUBLIC WATER SUPPLY AND REQUIRE BACKFLOW PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH LOCAL WATER
- 25. CONTRACTOR TO COORDINATE WITH OTHER UTILITIES, TRADES, AND ARCHITECTURAL PLANS TO CONFLICTS AND VERIFY BUILDING TIE-IN LOCATIONS.
- 26. CONTRACTOR SHALL DISINFECT THE WATER LINE IN ACCORDANCE WITH\_THE AMERICAN WATER WORK ASSOCIATION (AWWA) STANDARD C651 PRIOR TO PLACING LINE IN SERVICE

# SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS SPECIAL DISTRICTS PROJECT NO. 10.10.1402

MOJAVE NARROWS DRY CAMPSITE RESTROWS APN: 0479131020000



9-23

DATE

|MARK | DATE |INITIAL

R.C.E. No.

### DECLARATION OF ENGINEER OF RECORD

ENSURING THAT THE PLANS COMPLY WITH SD PROCEDURES, APPLICABLE POLICES AND ORDINANCES. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. AS ENGINEER OF RECORD, I AGREE TO INDEMNIFY AND HOLD SD, IT'S OFFICERS, AGENTS, AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY, CLAIMS, DAMAGES OR INJURIES TO ANY PERSON OR PROPERTY WHICH MIGHT ARISE FROM THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE ENGINEER OF RECORD. I HAVE READ AND INFORMED THE PROJECT APPLICANT/DEVELOPER THAT APPROVAL OF THESE PLANS DO NOT RELIEVE THEM FROM THE REQUIREMENTS OF THE DESIGN CONDITIONS.

### **ENGINEER'S CERTIFICATION**

I CERTIFY THAT THE DESIGN OF THE WATER SYSTEM IS IN ACCORDANCE WITH THE REQUIREMENTS PRESCRIBED BY THE SAN BERNARDING COUNTY FIRE DEPARTMENT.

### NOTIFICATIONS

- AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL NOTIFY:
- SPECIAL DISTRICTS WATER AND SANITATION DIVISION: DEVELOPMENT SERVICES (760) 955-9885 PERMIT AGENCY: COUNTY OF SAN BERNARDINO - (909) 387-8311
- UNDERGROUND SERVICE ALERT (USA): 811
- ALL OTHER AFFECTED AGENCIES THAT ARE NOT MEMBERS OF USA ALERT

### TIME LIMITATION

THE TIME LIMIT ON DRAWING(S) APPROVAL SHALL BE TWELVE (12) MONTHS FROM THE DATE ON THE APPROVAL. IF CONSTRUCTION HAS NOT COMMENCED WITHIN STATED TIME, SD REQUIRES DRAWING(S) TO BE REVIEWED BY THE DEVELOPER/DESIGN ENGINEER AND RESUBMITTED TO SD FOR POSSIBLE CHANGES IN SPECIFICATIONS AND STANDARDS.

UNDERGROUND SERVICE ALERT

TWO WORKING DAYS BEFORE YOU DIG

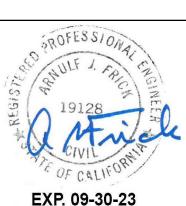


Call: TOLL FREE 1-800-227-2600

TOP OF NAIL AND TIN IN ROADWAY

ROL LINE IN ROADWAY

D EAST



ARNULF J. FRICK CIVIL ENGINEERING 42095 ZEVO DR., SUITE A15 TEMECULA, CA 92590 (951) 296-9110

PREPARED UNDER THE SUPERVISION OF: ARNULF J. FRICK

PROFESSIONAL ENGINEER

REVISIONS

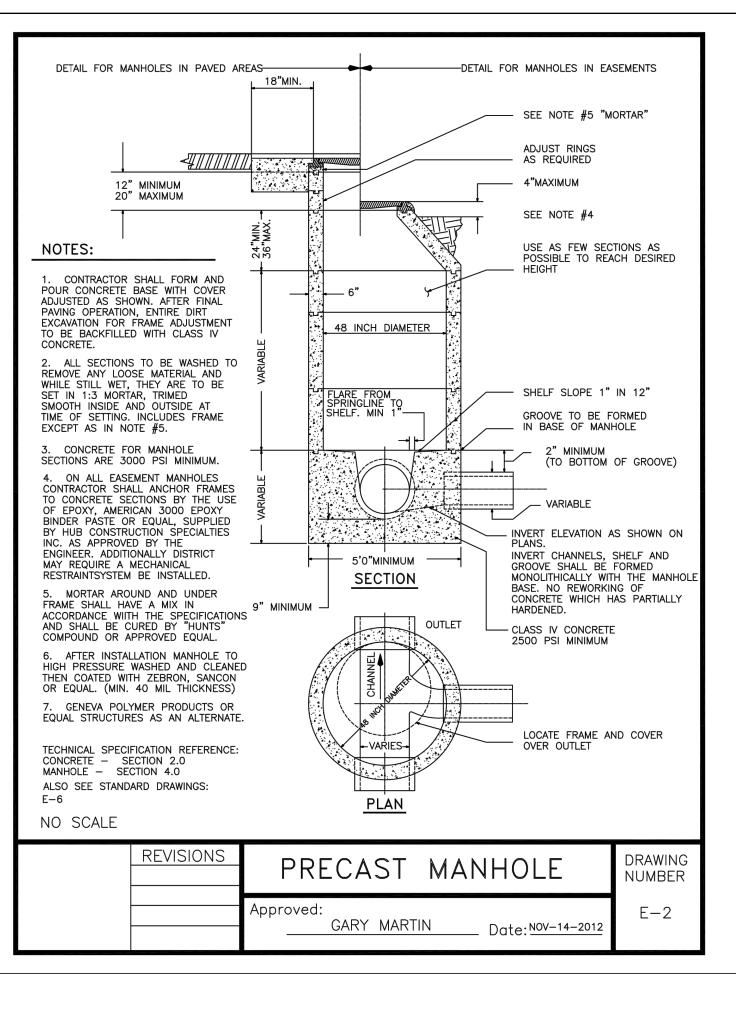
DESCRIPTION

APPR. DATE

WATER / SEWER PLANS APPROVED BY: SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS DIVISION MANAGER, WATER AND SANITATION

DATE REVIEWER **APPROVALS** 

DWG NO. WATER / SEWER IMPROVEMENT PLANS PROJECT NO. 10.10.1402 MOJAVE NARROWS DRY CAMPSITE RESTROOM STA.10+00 TO STA. 10+96.4 SHEET 1 OF 4 TITLE SHEET



DETAIL FOR MANHOLES IN PAVED AREAS-

12" MINIMUM 20" MAXIMUM

1. CONTRACTOR SHALL FORM AND POUR CONCRETE BASE WITH COVER

ADJUSTED AS SHOWN. AFTER FINAL

PAVING OPERATION, ENTIRE DIRT EXCAVATION FOR FRAME ADJUSTMENT

TO BE BACKFILLED WITH CLASS IV

REMOVE ANY LOOSE MATERIAL AND

WHILE STILL WET, THEY ARE TO BE SET IN 1:3 MORTAR, TRIMED SMOOTH INSIDE AND OUTSIDE AT

TIME OF SETTING. INCLUDES FRAME

3. CONCRETE FOR MANHOLE SECTIONS ARE 3000 PSI MINIMUM.

4. ON ALL EASEMENT MANHOLES

CONTRACTOR SHALL ANCHOR FRAMES TO CONCRETE SECTIONS BY THE USE

BINDER PASTE OR EQUAL, SUPPLIED BY HUB CONSTRUCTION SPECIALTIES

5. MORTAR AROUND AND UNDER
FRAME SHALL HAVE A MIX IN 9" MINIMUM ACCORDANCE WIITH THE SPECIFICATIONS

ENGINEER. ADDITIONALLY DISTRICT

RESTRAINTSYSTEM BE INSTALLED.

AND SHALL BE CURED BY "HUNTS" COMPOUND OR APPROVED EQUAL.

6. AFTER INSTALLATION MANHOLE TO

THEN COATED WITH ZEBRON, SANCON OR EQUAL. (MIN. 40 MIL THICKNESS)

ROL LINE IN ROADWAY,

EAST

HIGH PRESSURE WASHED AND CLEANED

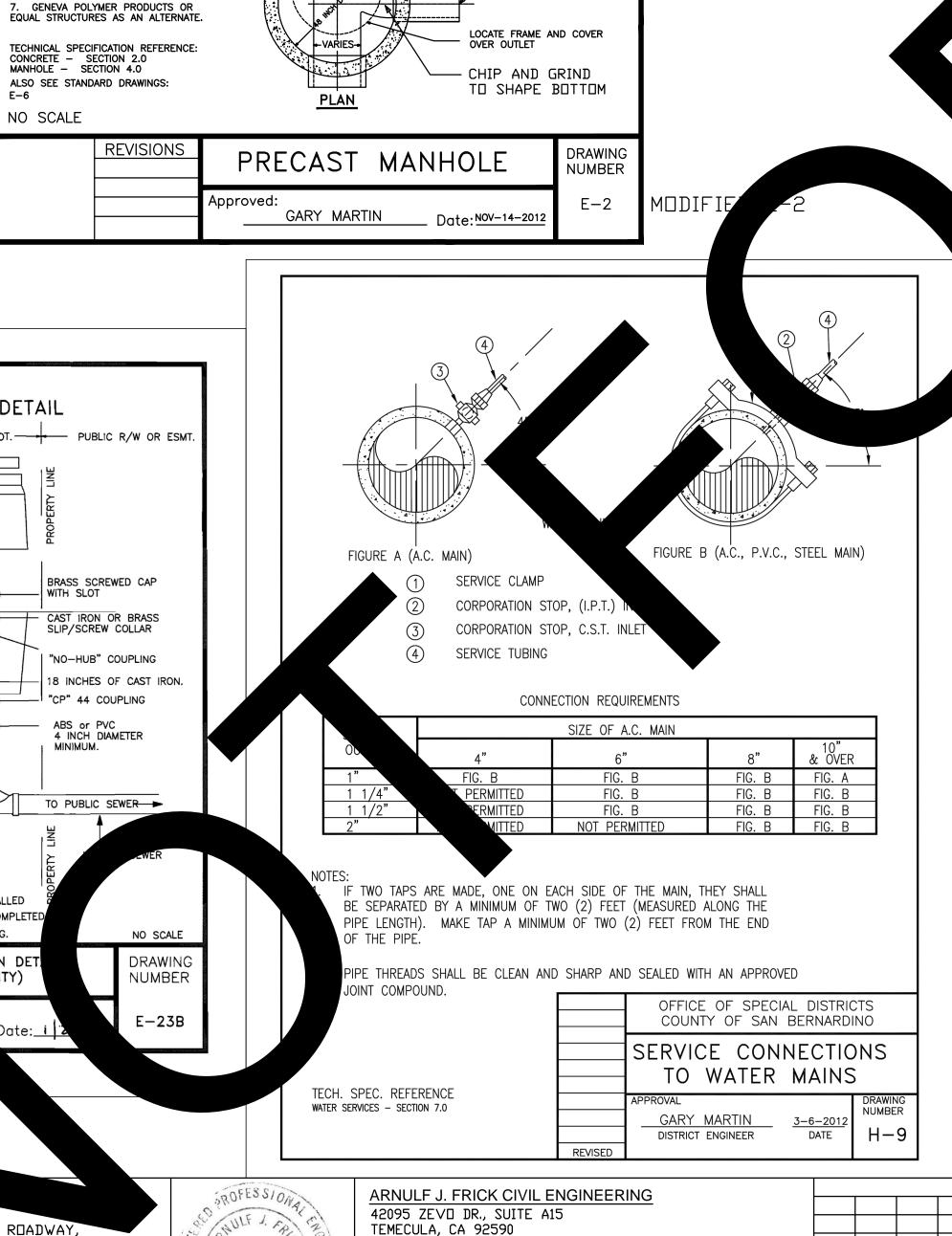
INC. AS APPROVED BY THE

MAY REQUIRE A MECHANICAL

EXCEPT AS IN NOTE #5.

ALL SECTIONS TO BE WASHED TO

NOTES:



TEMECULA, CA 92590

ARNULF J. FRICK

EXP. 09-30-23

PROFESSIONAL ENGINEER

PREPARED UNDER THE SUPERVISION OF:

9-23

DATE

MARK | DATE | INITIAL

R.C.E. No.

(951) 296-9110

-DETAIL FOR MANHOLES IN EASEMENTS

ADJUST RINGS

AS REQUIRED

4"MAXIMUM

SEE NOTE #4

48 INCH DIAMETER

— 5'0"мінімим <del>———</del>

OUTLET

SECTION

FLARE FROM SPRINGLINE TO SHELF. MIN 1"—

USE AS FEW SECTIONS AS

POSSIBLE TO REACH DESIRED

-CHIP AND GRIND 6"

DIA., 3" DEEP

FLOW-CHANNEL

SHELF SLOPE 1" IN 12"

GROOVE TO BE FORMED

- CONSTRUCT 4"

SEWER LATERAL

CONSTRUCT 4"

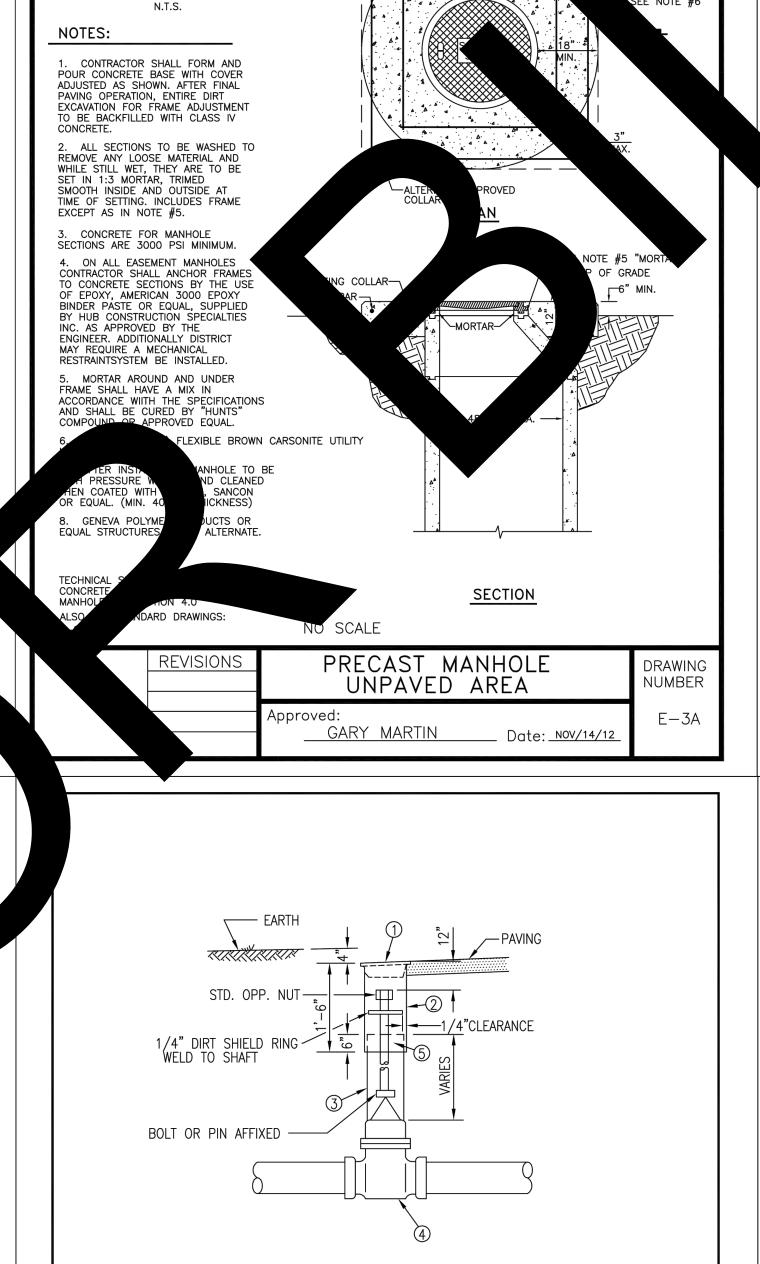
SEWER LATERAL

\_\_\_ IN BASE OF MANHOLE

CLASS IV CONCRETE

2500 PSI MINIMUM

— SEE NOTE #5 "MORTAR"



STABILIZING COLLAR-

#4 REBAR

CAST IRON FRAME AND COVER PER LONG

EACH IRON WORKS No. X-508B, OR

PROVED EQUAL, WITH 12" DIAMETER MARKED PER SPECIFICATIONS.

ALL BE DRILLED THROUGH

OR SELF CLEANING. -

ONE 3/4"x3/4" ALLEN SET SCREW

PAVING.

6" DIA, ACCESS ASSEMBLY ...

4" DIA. FLAPPER ASSEMBLY—

CLEANCHECK, INC. P.O. BOX 2437

H - 11

INITIAL

DATE

WATER / SEWER PLANS APPROVED BY:

SAN BERNARDINO COUNTY - PUBLIC WORKS

SPECIAL DISTRICTS

DIVISION MANAGER, WATER AND SANITATION

APPROVALS

APPR. DATE

REVIEWER

HAYDEN, ID 83835-2437

WWW.CLEANCHECK.NET

PHONE TOLL FREE 866-288-2583 TOLL FREE FAX: 866-288-5636

6" DIA. EXTERNAL RISER -

4" DIA. INTERNAL RISER —

4" SEWER LATERAL-

NOTE: IF IN DIRT, CAST IRON NOT REQUIRED

\_ 1/2" ALL AROUND

CLASS IV

- CUT PIPE TO SIZE

--- 4" SEWER LATERAL

4" ABS BW VALVE BODY

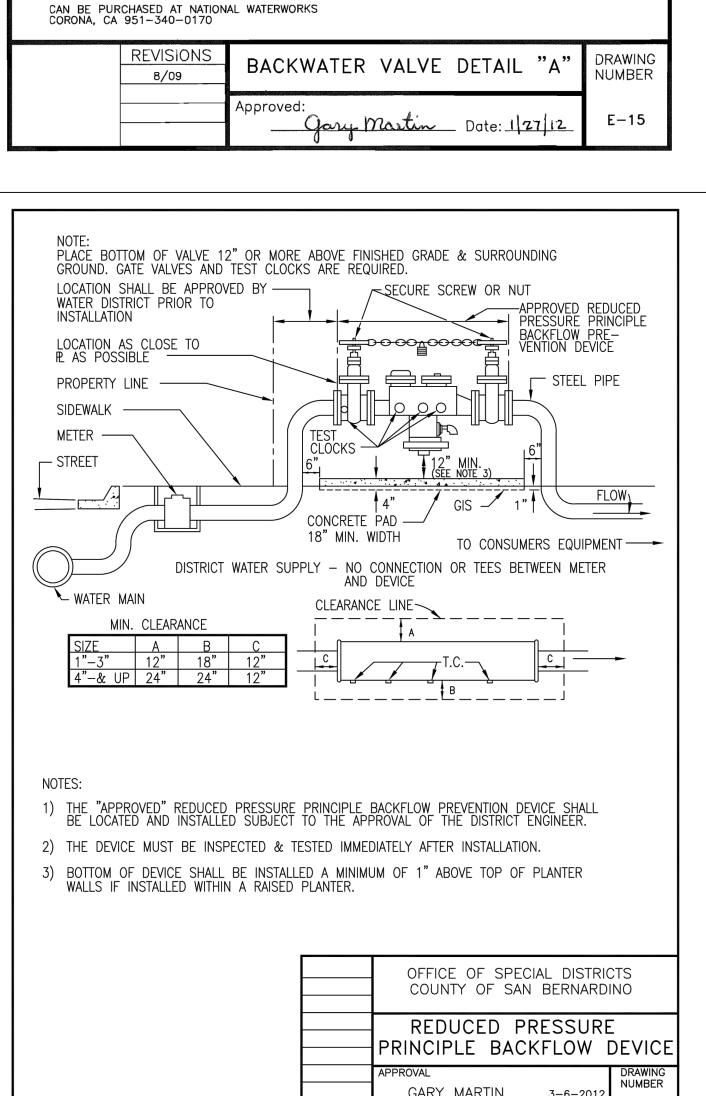
DETAIL FOR BACKWATER VALVE

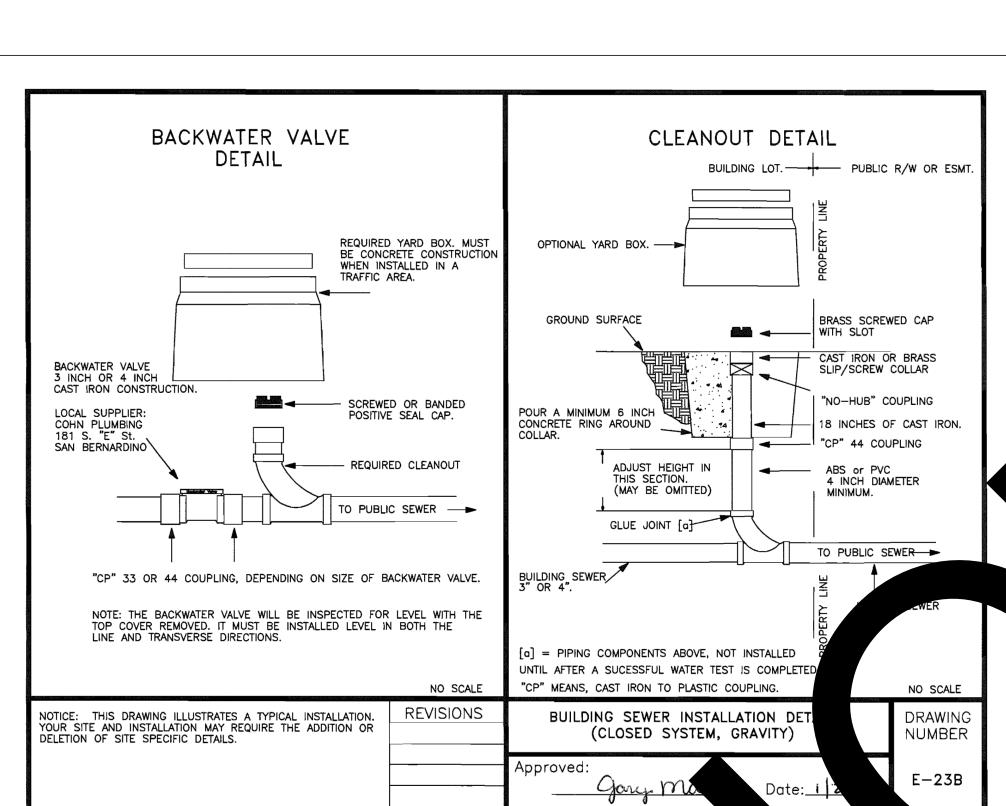
IN PAVED SURFACES

CONCRETE

17//////

LEAVE 6" ACCESS ASSEMBLY 3" ABOVE GRADE.





UNDERGROUND SERVICE ALERT

TWO WORKING DAYS BEFORE YOU DIG

Call: TOLL FREE

1-800-227-2600

OR

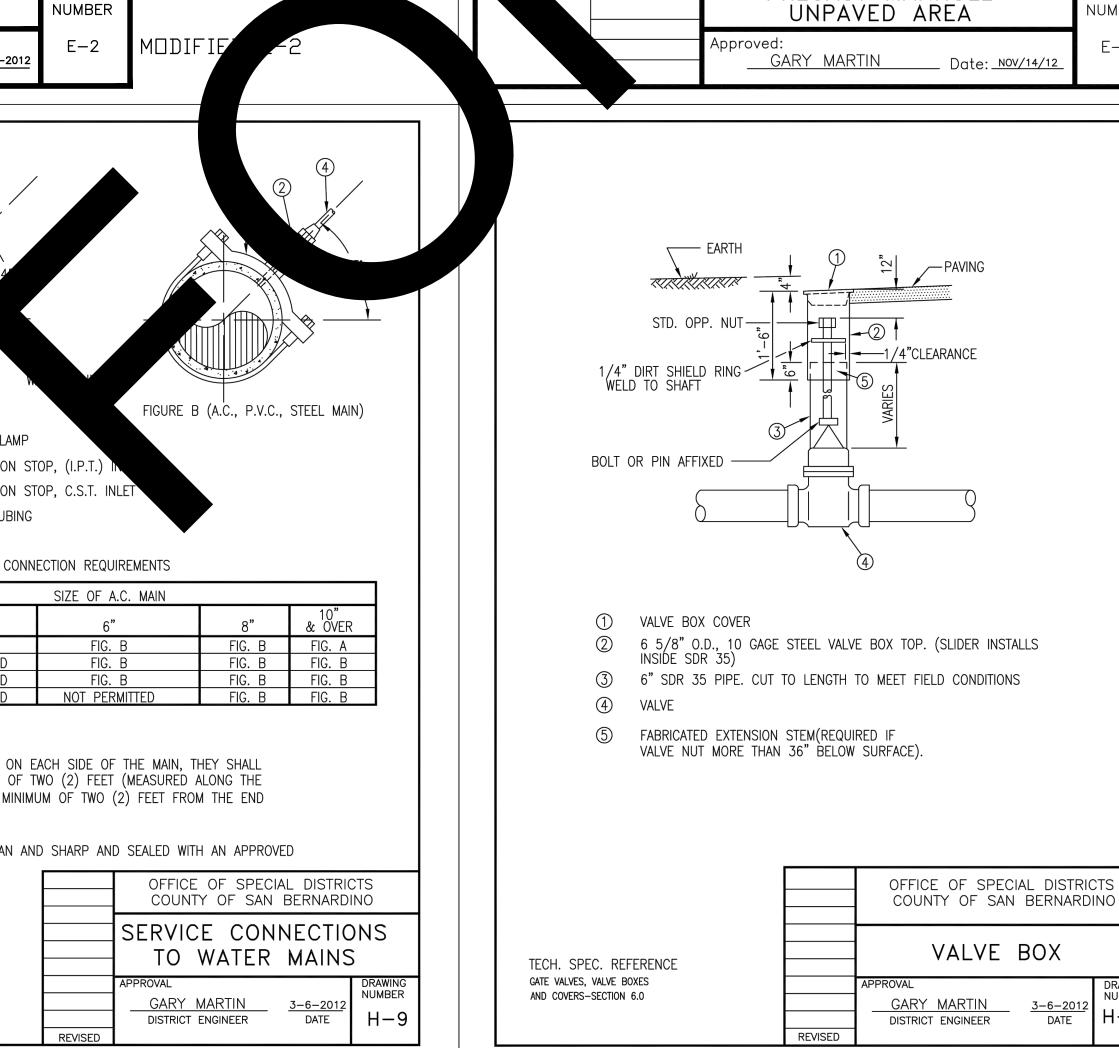
811

**BENCHMARK:** 

IN ROADWAY

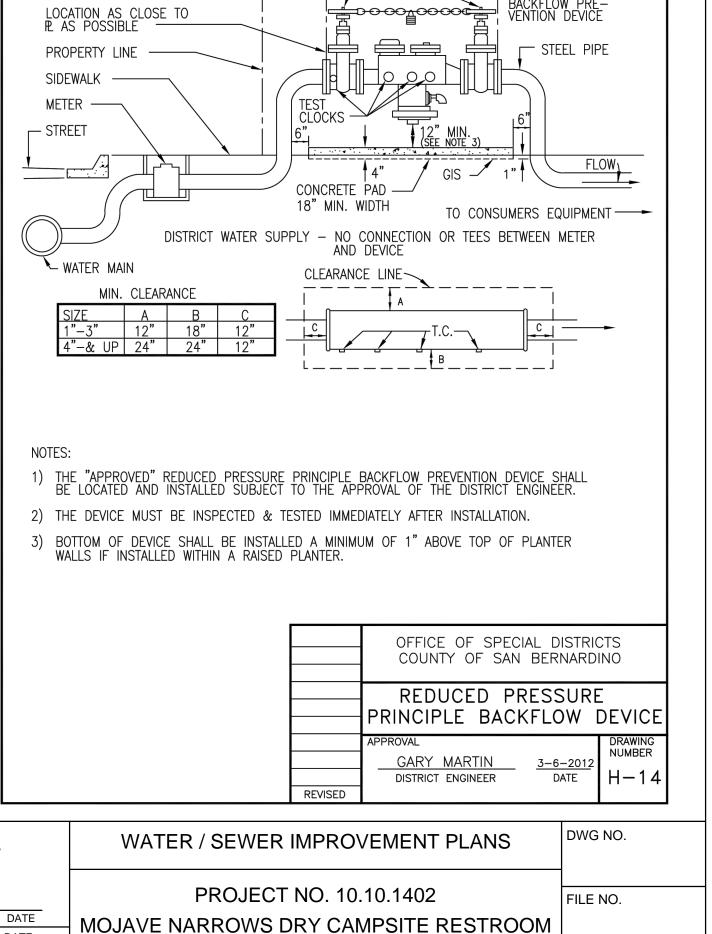
ELEV. 100.00 ASSUMED

TOP OF NAIL AND TIN



REVISIONS

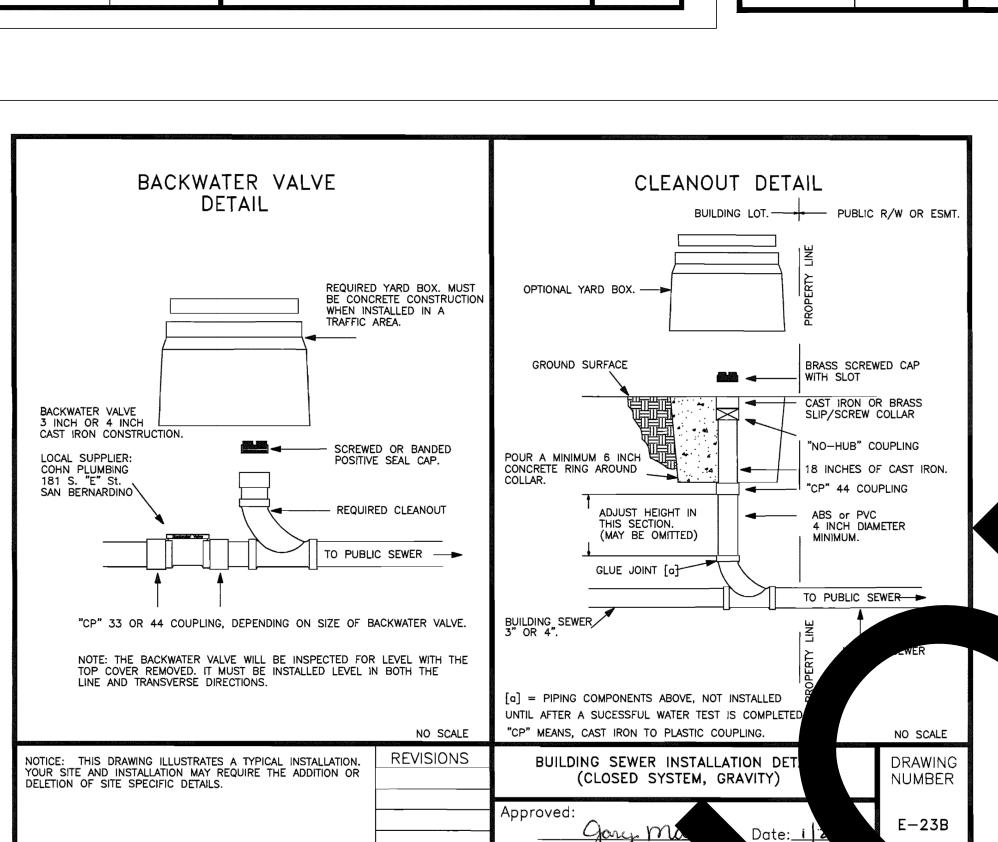
DESCRIPTION

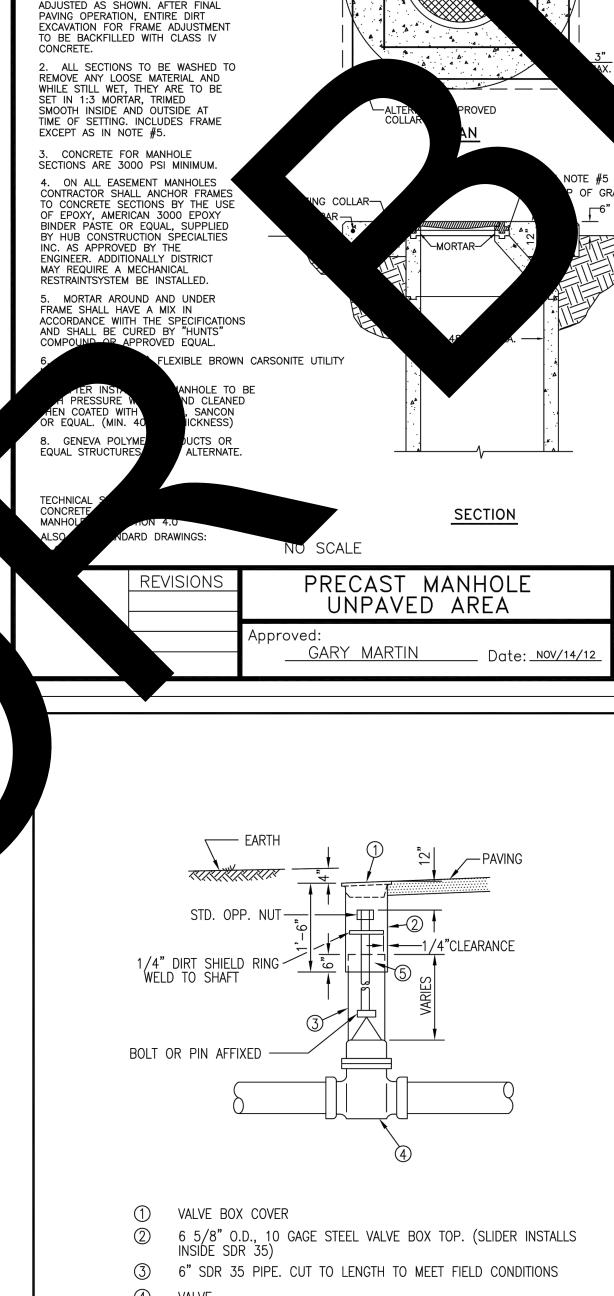


STA.10+00 TO STA. 10+96.4

**DETAILS** 

SHEET 2 OF 4



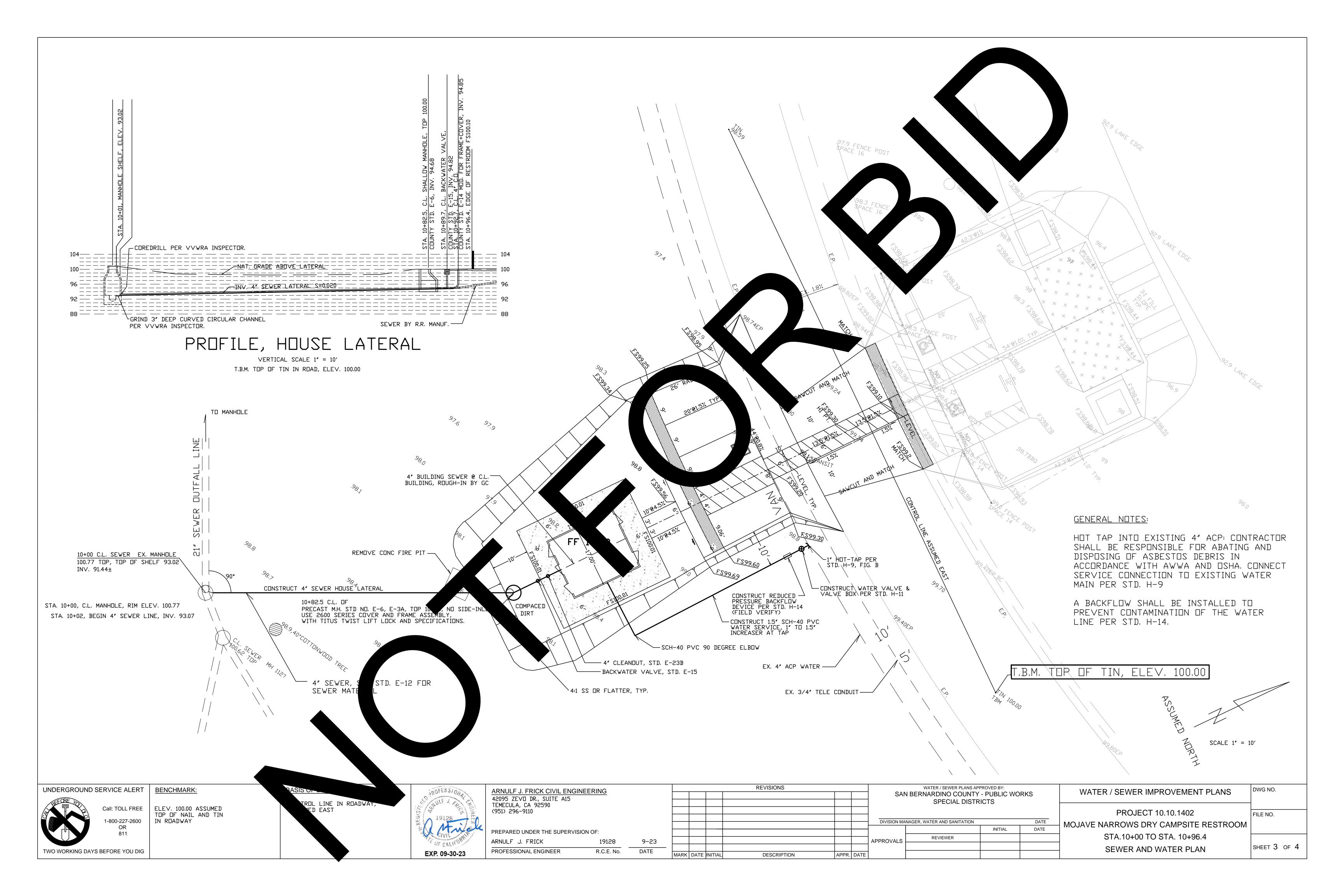


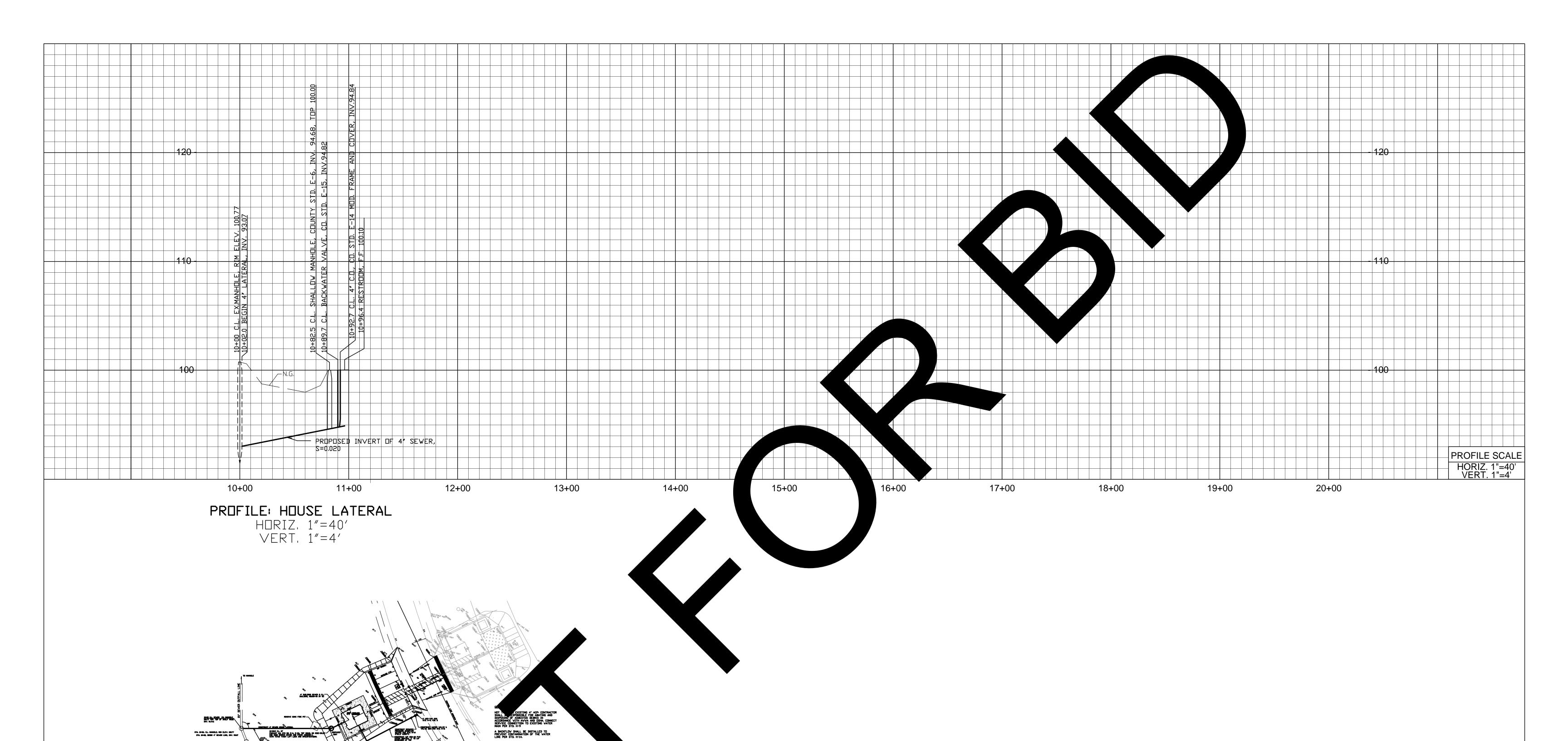
FOR UNPAVED ROADS COLLAR TO BE AT GRADE.

DETAIL "A"

#4 REBAR <u>DETAIL "A"</u>

ALTERNATE APPROVED







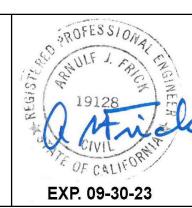


BENCHMARK:

ELEV. 100.00 ASSUMED

TOP NAIL AND TIN
IN ROADWAY

ROL LINE IN ROADWAY,
TO EAST



ARNULF J. FRICK CIVIL ENGINEERING 42095 ZEVO DR., SUITE A15 TEMECULA, CA 92590 (951) 296-9110

PREPARED UNDER THE SUPERVISION OF:
ARNULF J. FRICK 19128
PROFESSIONAL ENGINEER R.C.E. No.

9-23

DATE

SAI							
DIVISION MA							
DIVISION WA							
APPROVALS							
]							
	DATE	APPR.	DESCRIPTION	INITIAL	DATE	MARK	

REVISIONS

SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS

DIVISION MANAGER, WATER AND SANITATION DATE

REVIEWER

REVIEWER

WATER / SEWER IMPROVEMENT PLANS

PROJECT NO. 10.10.1402

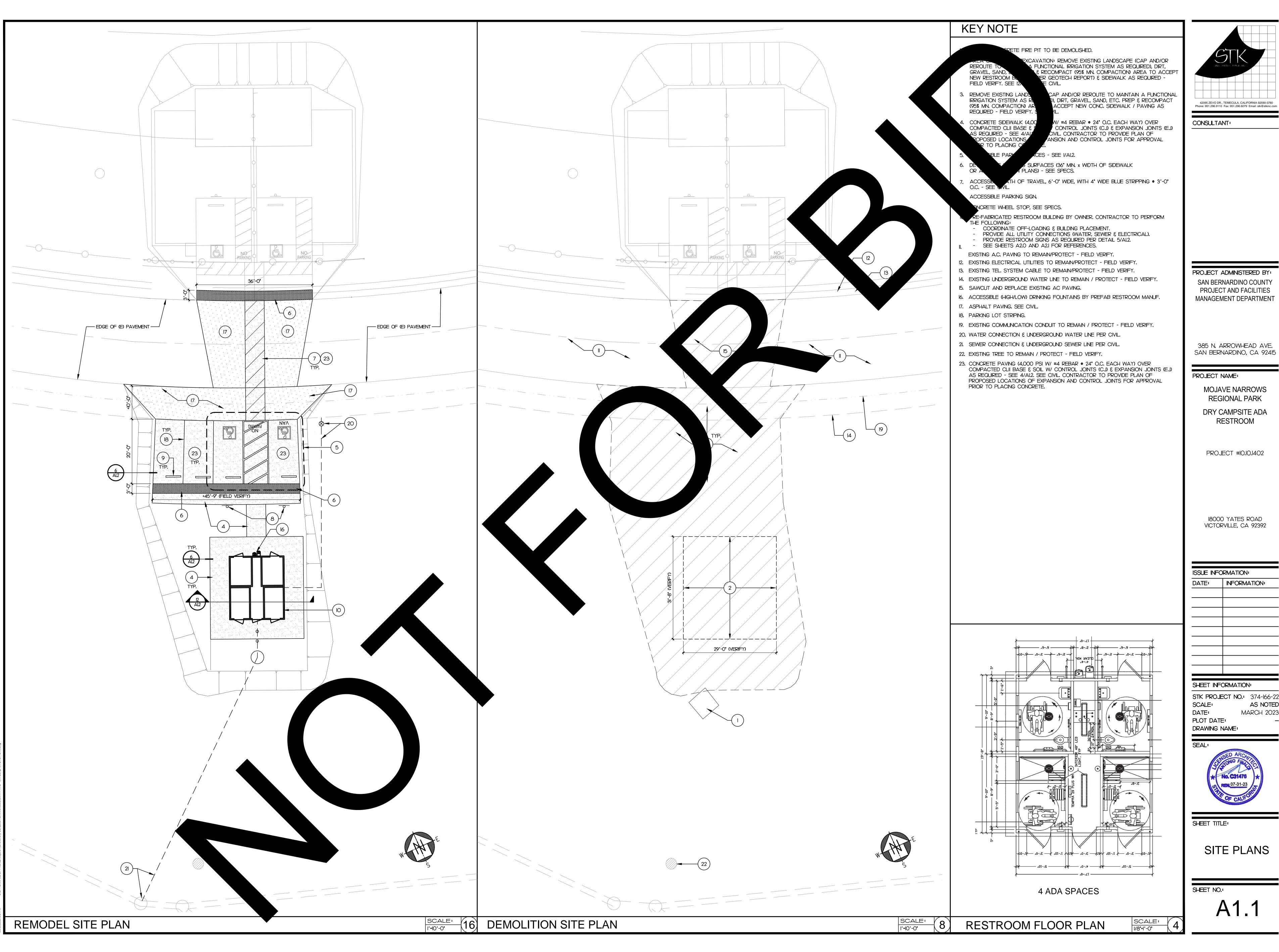
MOJAVE NARROWS DRY CAMPSITE RESTROOM
STA.10+00 TO STA. 10+96.4

PLAN AND PROFILE: SEWER LATERAL

DWG NO.

FILE NO.

SHEET 4 OF 4



PROJECT ADMINISTERED BY: SAN BERNARDINO COUNTY PROJECT AND FACILITIES

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

PROJECT NAME:

**MOJAVE NARROWS** REGIONAL PARK

DRY CAMPSITE ADA RESTROOM

PROJECT #10.10.1402

18000 YATES ROAD VICTORVILLE, CA 92392

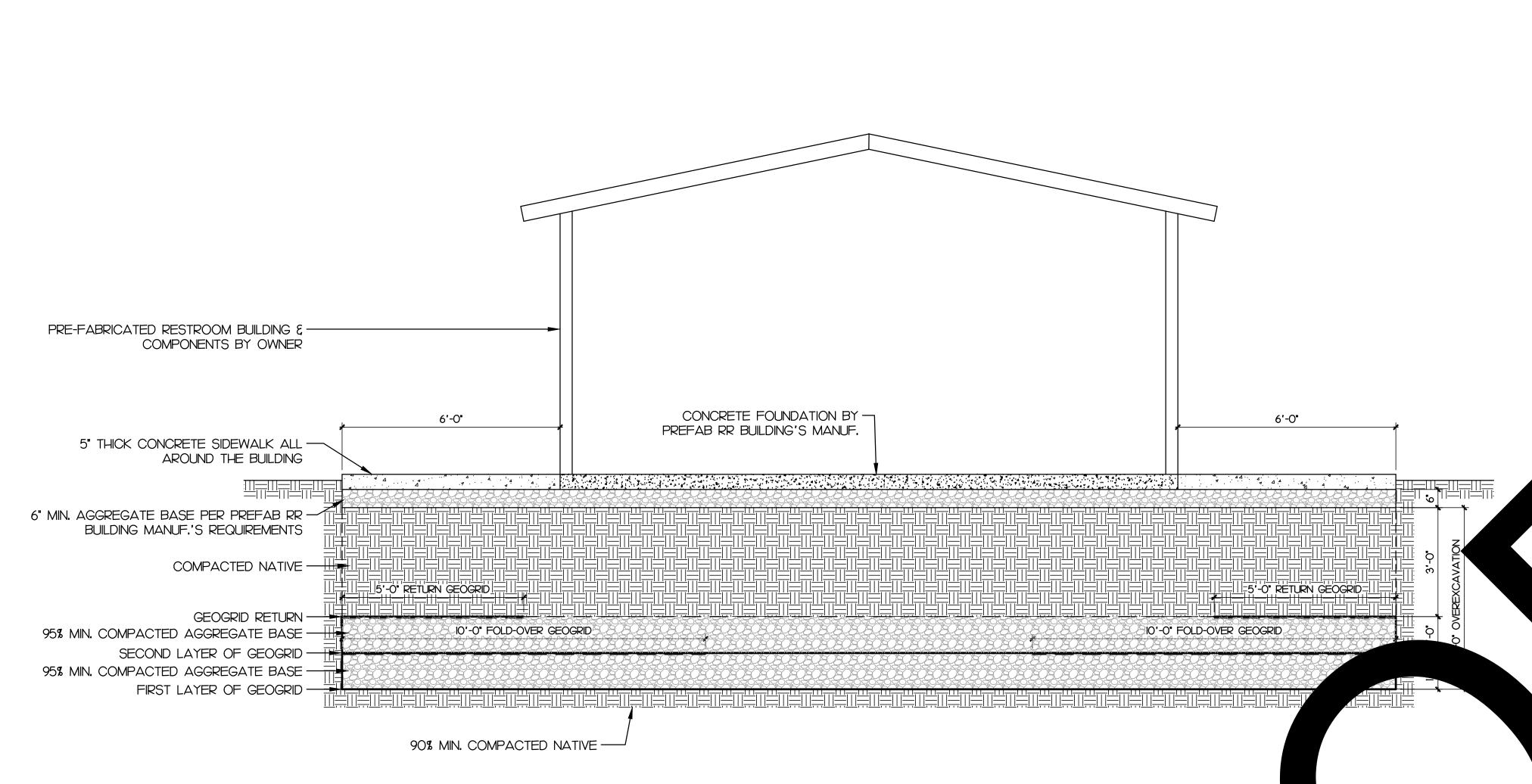
DATE: INFORMATION:

STK PROJECT NO.: 374-166-22 AS NOTED PLOT DATE:



SITE PLANS

A1.1



## GENERAL EARTHWORK AND GRADING NOTES:

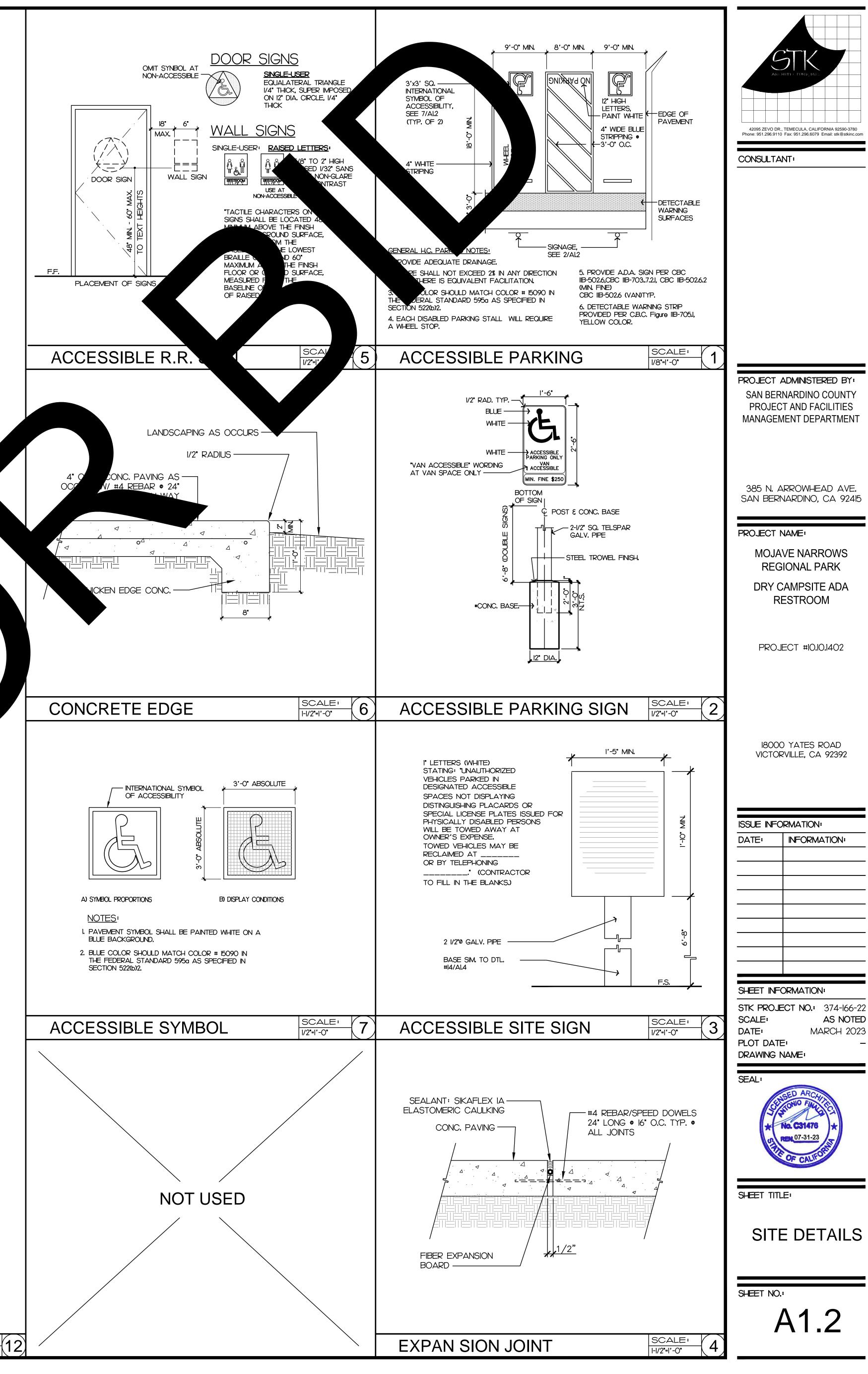
SECTION OF OVEREXCAVATION

ALL SITE GRADING SHOULD BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE LOCAL CODES AND IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS THAT ARE PREPARED BY THE APPROPRIATE DESIGN PROFESSIONAL. OVEREXCAVATION AND RECOMPACTION RECOMMENDATIONS ARE PRESENTED IN THE FOLLOWING PARAGRAPHS. THE GENERAL EARTHWORK AND GRADING RECOMMENDATIONS ARE INCLUDED IN SOILS REPORT.

- SITE PREPARATION: PRIOR TO CONSTRUCTION, THE SITE SHOULD BE CLEARED OF TRASH, AND/OR DEBRIS WITHIN THE AREA OF PROPOSED GRADING. ANY UNDERG OBSTRUCTIONS ONSITE INTERFERING WITH THE PROPOSED CONSTRUCTION SHOULD BE REMOVE REROUTED TO PRESERVE THEIR FUNCTION. RESULTING CAVITIES SHOULD BE PROPERLY BAS D AND COMPACTED. AFTER THE SITE HAS BEEN CLEARED, THE SOILS SHOULD BE CAREFULLY VED FOR THE REMOVAL OF ANY UNSUITABLE FILL MATERIALS (IF ENCOUNTERED) BY A REPRESE É OF THE GEOTECHNICAL ENGINEER.
- OVEREXCAVATION, GEOGRID AND RECOMPACTION: TO REDUC AND DIFFERENTIAL SETTLEMENT OF THE PROPOSED STRUCT. THE UNDERLYING SHOULD BE PREPARED IN SUCH A MANNER THAT A UNIFORM RESPONSE TO THE A ACHIEVED. FOR THE PROPOSED BUILDING PAD AREA, EXISTING SOILS SHOULD BE REM MINIMUM DEPTH OF 5 FEET BELOW CURRENT GRADES OR 2 FEET BELOW BOTTOM OF FOUNDATIONS, WHICHEVER IS DEEPER. DEEPER OVEREXCAVATION MAY BE RECOMMENDED ON EXPOSED CONDITIONS DURING GRADING, EXIS TER CONDITIONS SHOULD BE SHOULD EXTEND HORIZON CONSIDERED DURING EARTHWORK OPERATION MINIMUM OF 5 FEET BEYOND THE OUTSIDE BUILDINGS), OR A DISTANCE EQUAL TO BELOW THE FOOTINGS, WHICHEVER IS GREATER. IN-PLACE AL SOILS SHOULD BE DEEN TABLE FOR NEW FILL SITU RELATIVE COMPACTION PLACEMENT IF POSSESSING A MINIMU O PERCENT (ASTM TEST D AND EVALUATED BY AN METHOD DI557), SUITABILITY OF ALL VAL BOTTOMS SHOULD BE RE ENGINEERING GEOLOGIST OR A REP NTATIVE OF THE GEOTECHNICAL

GEOGRID: WE RECOMMEND THAT THE OPOSED RESTROOM BUILDING STA TWO LAYERS OF A TENSAR TRIAX TRIAXIAL GEOGRID. THE FIRST LA DF GEOGRID SHOULD BE PLACED ON THE RECOMPACTED REA BOTTOM APPROXIMATELY 5 FE ELOW EXISTING GRADE. THE FIRST LAYER OF FOGRID SHOUL LAID AT BOTTOM OF THE OVE CAVATION, EXTENDING A MINIMUM OF 5 FEE **BUILDING FOUNDATION LINE** EXTENDING UP THE SIDES OF THE EXCAVATION **Q** ALLOW FOR A MINIM FOOT FOLD-OVER RETURN R OF AGGREGATE BASE ONE FOOT ABOVE THE D LAYER ON SHOULD BE PLACED OVER TE BASE SHOULD BE ER ASTM DI557. THE SECOND OOT-THICK LATER SECOND SEGATE BASE SHOULD BE PLACED TENDED TO THE EDGE OF THE EXCAVATION FILL. THE 5-FOOT LAYER OF GEOGRID AND AND FOOT-THICK LA OVER THE INITIAL BASE LAYER A THE SECOND LAYER OF COMPACTED BASE. THE PETURN SHOULD THEN BE PLACED YEDEXCAVATION BACKE. G ONSITE SOILS SHOULD THEN CONTINUE TO

SCALE: 1/2"=1'-0"



42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780 Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

PROJECT ADMINISTERED BY: SAN BERNARDINO COUNTY PROJECT AND FACILITIES MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.

DRY CAMPSITE ADA

PROJECT #10.10.1402

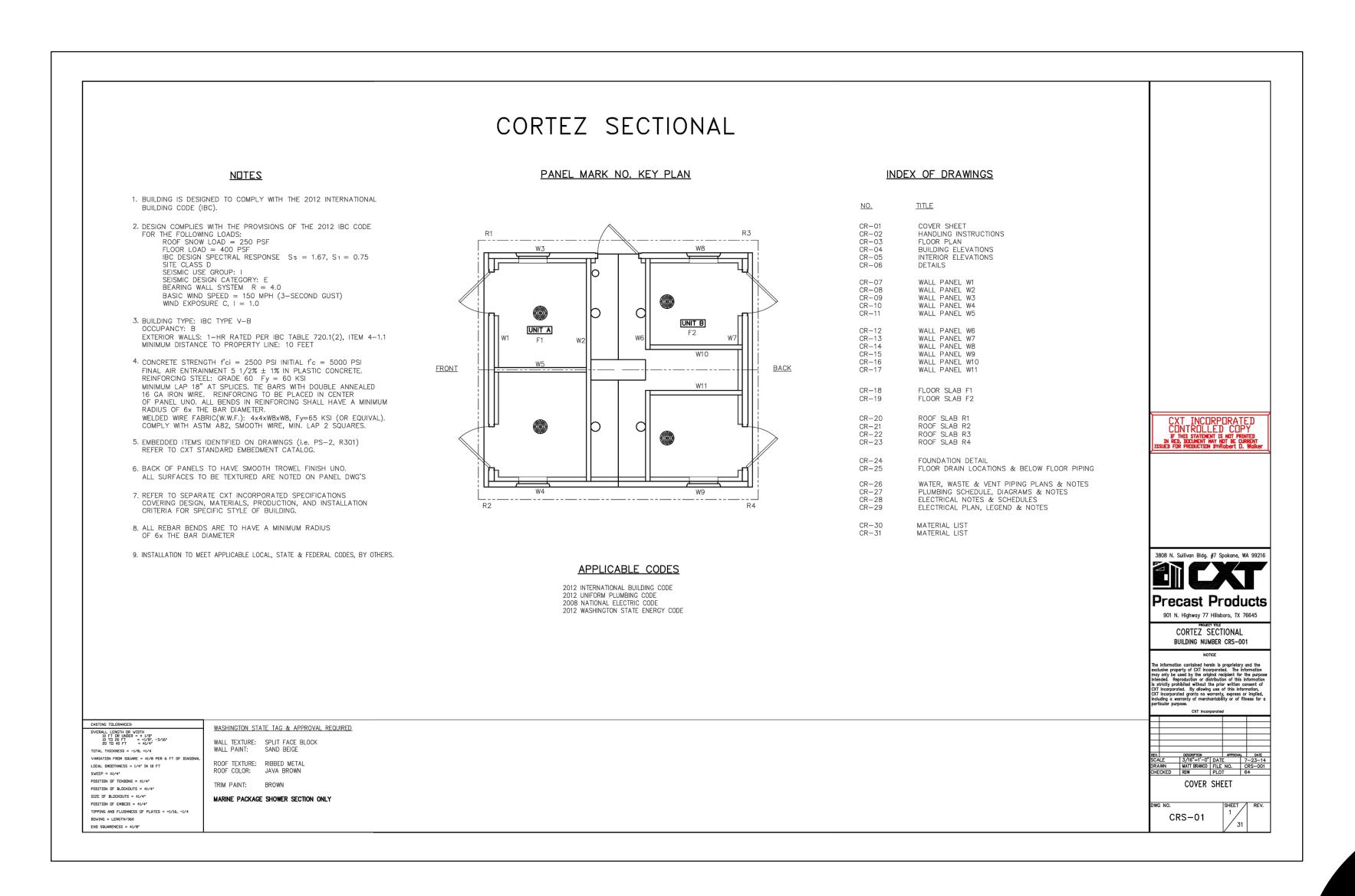
18000 YATES ROAD

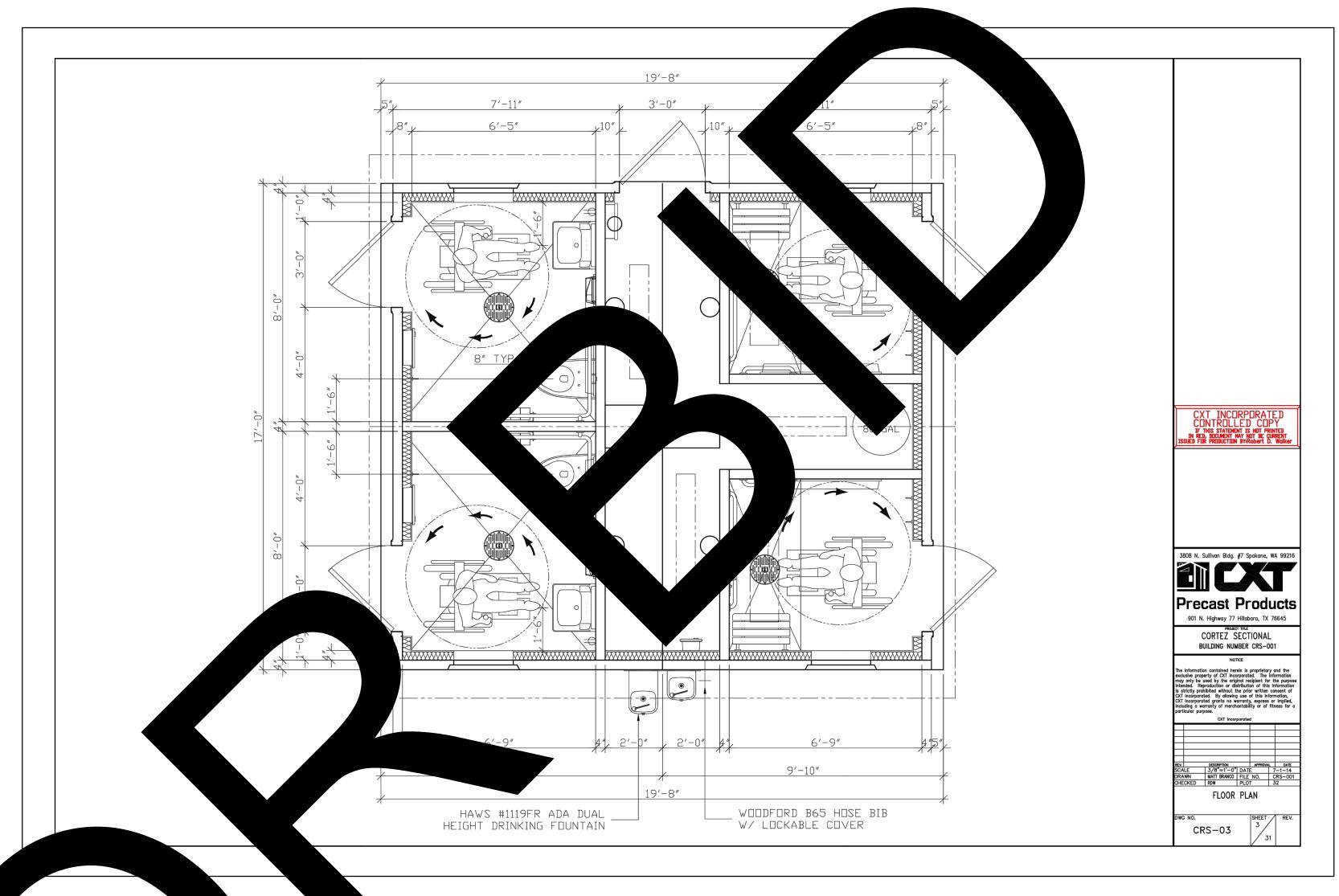
ISSUE INFORMATION: INFORMATION:

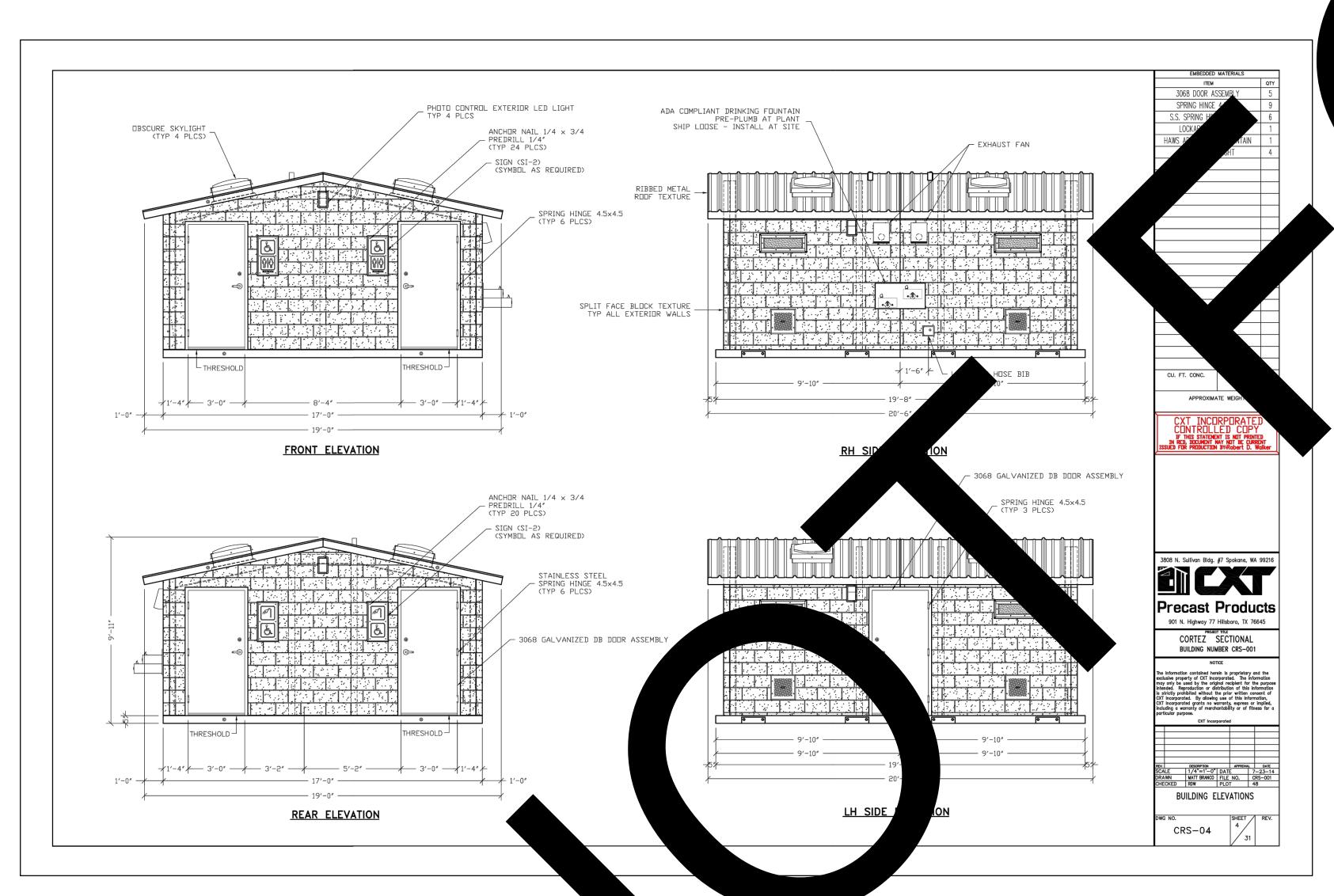
STK PROJECT NO.: 374-166-22 AS NOTED

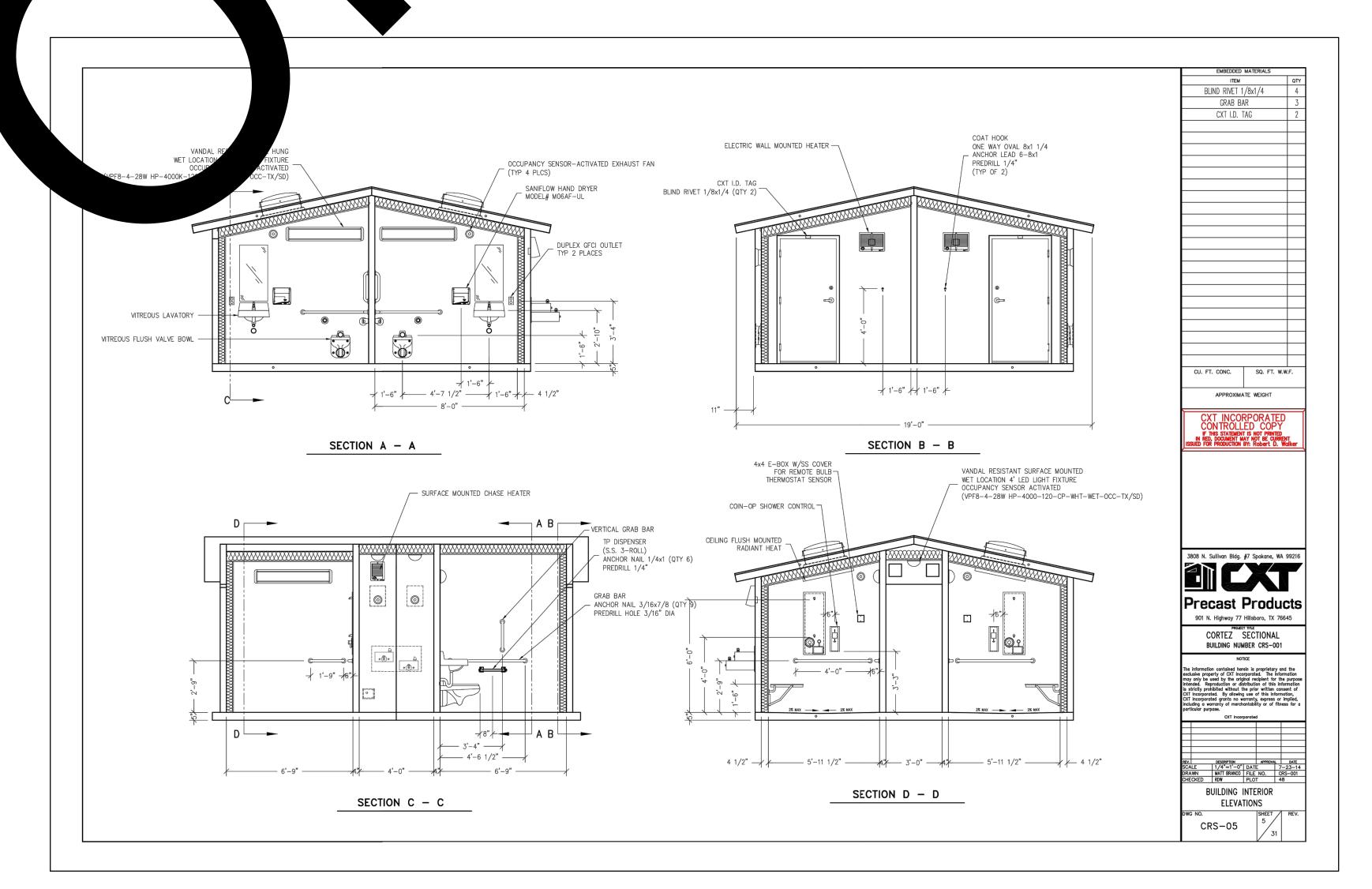


SITE DETAILS









NOTES:

THE DRAWING & NOTES SHOWN ON THIS SHEET IS FOR INFORMATION & REFERENCES ONLY. THIS IS AN OWNER PURCHASED & DELIVERED TO THE SITE, INCLUDING CRANE SERVICES. CONTRACTOR TO COORDINATE WITH OWNER FOR BUILDING DELIVERY & ACCEPTANCE

FOR REFERENCE ONLY



CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT AND FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

PROJECT NAME:

MOJAVE NARROWS REGIONAL PARK

RESTROOM

DRY CAMPSITE ADA

PROJECT #10,10,1402

18000 YATES ROAD VICTORVILLE, CA 92392

ISSUE INFORMATION:					
DATE:	INFORMATION:				

SHEET INFORMATION:

STK PROJECT NO.: 374-166-22
SCALE: AS NOTED
DATE: MARCH 2023
PLOT DATE: -

DRAWING NAME:

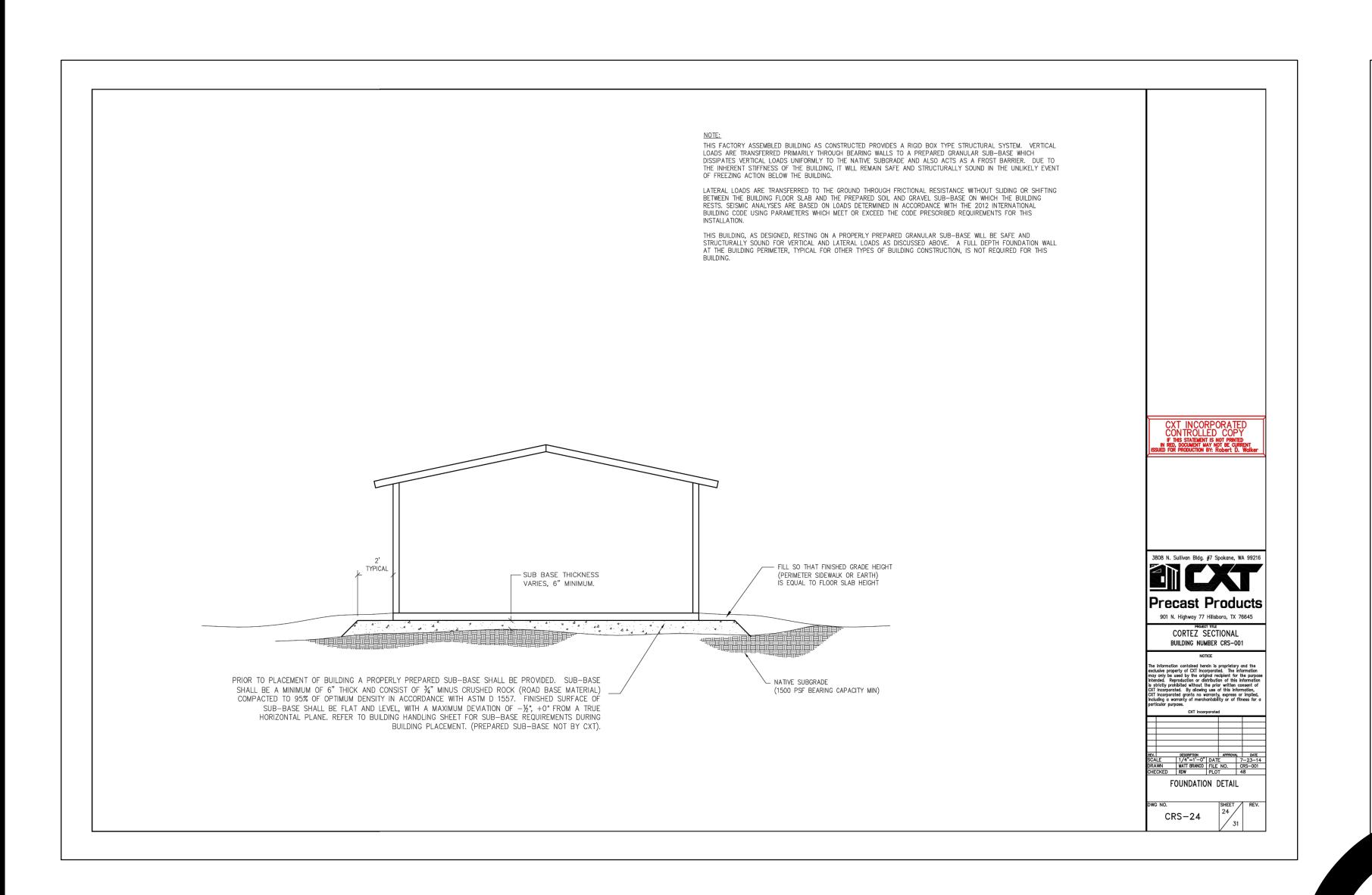


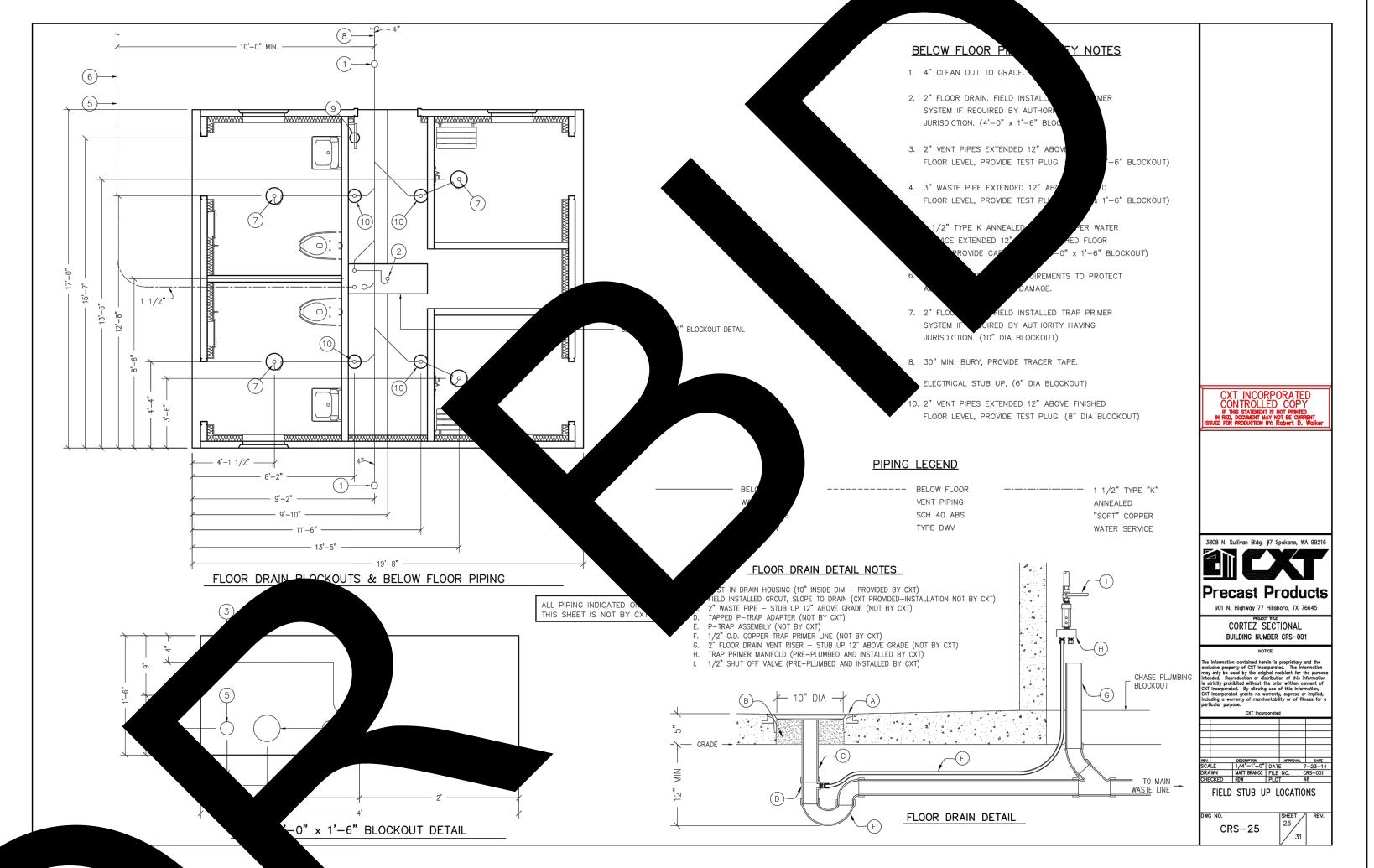
SHEET TITLE:

PREFABRICATED RESTROOM / SHOWER

SHEET NO

A2.0







CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT AND FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

PROJECT NAME:

MOJAVE NARROWS REGIONAL PARK

DRY CAMPSITE ADA RESTROOM

PROJECT #10,10,1402

18000 YATES ROAD VICTORVILLE, CA 92392

ISSUE INFORMATION:

DATE: INFORMATION:

SHEET INFORMATION:

STK PROJECT NO.: 374-166-22 SCALE: AS NOTED DATE: MARCH 2023

DRAWING NAME

SEAL



SHEET TITL

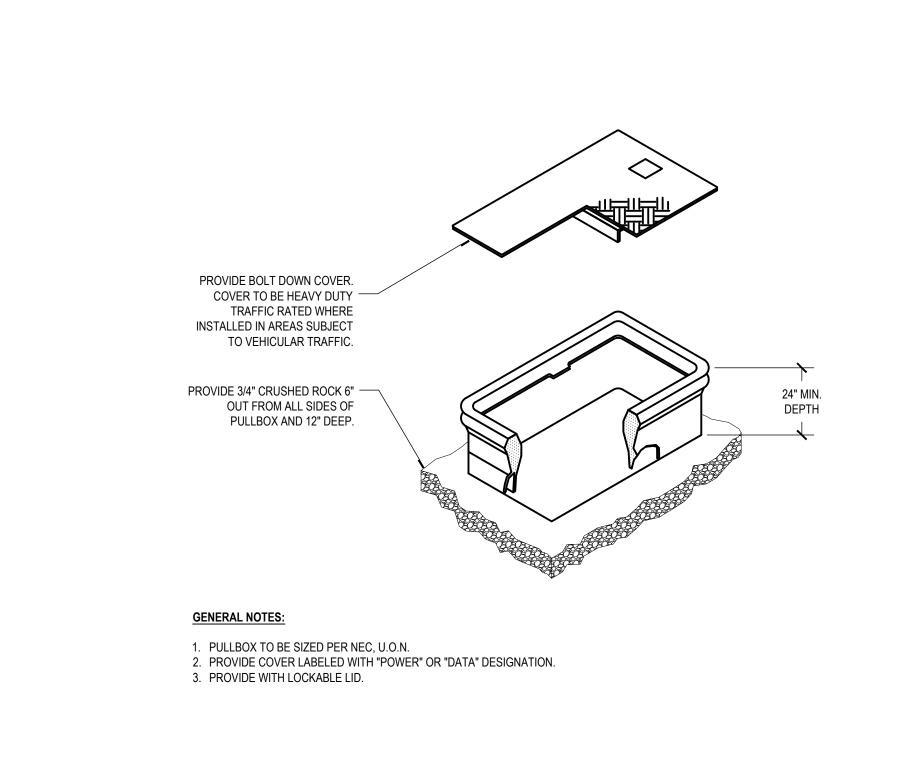
PREFABRICATED RESTROOM / SHOWER

SHEET NO.

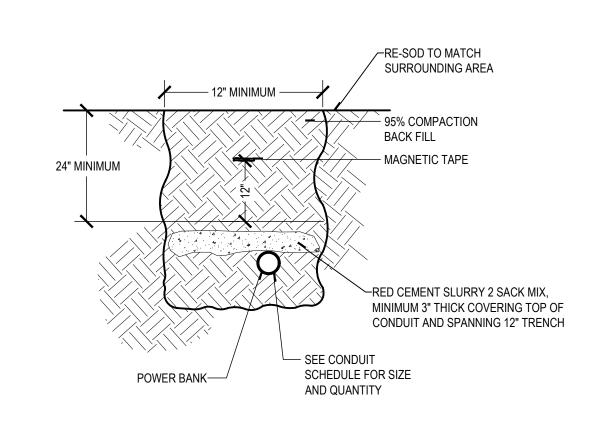
A2 1

NOTES:

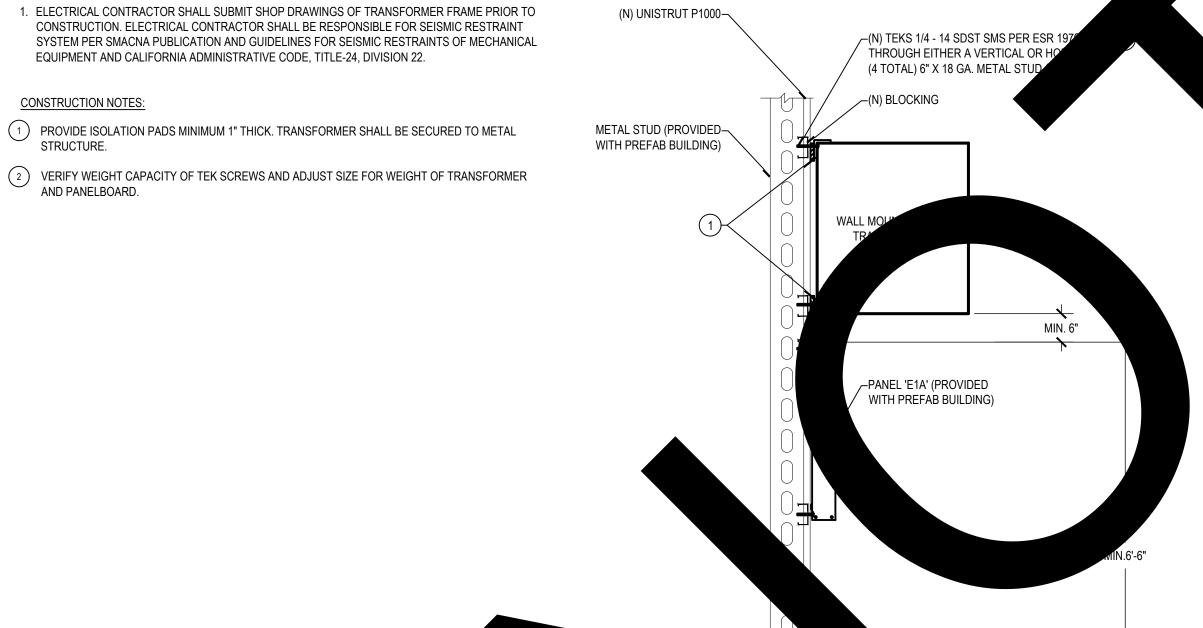
THE DRAWING & NOTES SHOWN ON THIS SHEET IS FOR INFORMATION & REFERENCES ONLY. THIS IS AN OWNER PURCHASED & DELIVERED TO THE SITE, INCLUDING CRANE SERVICES. CONTRACTOR TO COORDINATE WITH OWNER FOR BUILDING DELIVERY & ACCEPTANCE



# PULLBOX INSTALLATION



# TRENCH AND CONDUIT DETAIL



GENERAL NOTES:

WALL MOUNTED PANEL WITH TRANSFORMER ABOVE

### **GENERAL NOTES** ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST CODE OF FEDERAL REGULATIONS (CFR), NATIONAL ELECTRICAL CODE EDITION AND ALL APPLICABLE LOCAL CODES AND REGULATIONS. ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS IN COMPLIANCE TO UL REQUIREMENTS TO ACCOMMODATE CONDUCTORS SHOWN. WHERE WIRE SIZES ARE INDICATED ON PLANS, FOR INDIVIDUAL CIRCUITS, THE WIRE SIZE INDICATED SHALL APPLY TO THE COMPLETE CIRCUIT, UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF MECHANICAL, PLUMBING AND OTHER EQUIPMENT REQUIRING

ELECTRICAL CONNECTION PRIOR TO ANY WORK. CONTRACTOR SHALL EXTEND WIRING FROM ALL JUNCTION BOXES, SWITCHES, ETC. AND MAKE FINAL CONNECTION AS

REQUIRED TO ALL BUILDING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OR OTHER TRADES RELATING TO WORK TO VERIFY SPACE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND MINIMUM CODE REQUIRED WORKING CLEARANCES AT ALL

CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL OUTLET BOXES FOR SWITCHES, BELL/STROBES, FIRE ALARM PULL STATIONS. RECEPTACLES ETC. WITH CABINETS, FURNITURE, EQUIPMENT ETC., TO AVOID CONFLICT.

WHERE ELECTRIC MOTORS OR HEATERS ARE INSTALLED IN HUNG CEILINGS, PROVIDE DISCONNECT SWITCH IN HUNG CEILING WITHIN REACH FROM ACCESS POINT.

9. FURNISH PULL STRING IN EACH RACEWAY RUN OVER 10' IN LENGTH, IN WHICH PERMANENT WIRING IS NOT INSTALLED. PROVIDE PULL BOXES WHEREVER NECESSARY TO FACILITATE PULLING OF CONDUCTORS. COORDINATE LOCATIONS OF BOXES WITH OTHER TRADES TO AVOID CONFLICT. PULL BOXES SHALL BE ACCESSIBLE. THE SIZE OF PULL BOX SHALL COMPLY WITH N.E.C. REQUIREMENTS.

11. ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT INCLUDING THOSE THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT (UP TO 16') SHALL BE WEATHERPROOF TYPE, NEMA 3R.

12. NO CONDUIT RUNS SHALL BE ALLOWED IN CONCRETE SLABS. ALL CONDUITS WILL BE PLACED ABOVE ACCESSIBLE CEILING SPACES UNLESS SPECIFICALLY INDICATED TO BE UNDERGROUND. 13. DISCONNECT SWITCHES SHALL BE MOUNTED ON INDIVIDUAL SUPPORTS, OR OTHERWISE DIRECTLY ON EQUIPMENT,

PROVIDED NO MODIFICATION TO EQUIPMENT IS NECESSARY. 14. ALL ELECTRICAL POWER, LIGHTING, TELEPHONE OR SIGNAL WIRING IN FIRE RATED WALL IS TO BE INSTALLED IN A

METALLIC CONDUIT SYSTEM.

15. ALL ELECTRIC MATERIAL SHALL BE LISTED BY "UL" FOR THE TYPE OF APPLICATION AND "UL" LABEL SHALL APPEAR ON ALL ELECTRICAL EQUIPMENT. 16. ALL DISTRIBUTION AND CONTROL EQUIPMENT (SUCH AS CB's, SWITCHES, CONTACTORS, ETC.), TERMINATIONS SHALL BE

FULLY RATED PER UL AS FOLLOWS: a. 125A OR LESS: 60°C OR MORE; b. MORE THAN 125A: 75°C OR MORE.

17. ANY ERRORS, OMISSIONS, OR DESIGN DISCREPANCIES ON PLANS OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER FOR CLARIFICATION OR CORRECTION PRIOR TO CONSTRUCTION AND

PREPARATION OF SUBMITTAL PACKAGES. CONDUCTORS SHALL HAVE UNDERWRITER'S LABORATORIES, INC.(UL) LISTED, 600 VOLT INSULATION OF TYPE SPEC

BELOW OR ELSEWHERE IN THE SPECIFICATIONS. CONDUCTORS SHALL BE COPPER AND LISTED FOR 90 DEGREE

1. BRANCH CIRCUITS - LIGHTING AND POWER. a. #10 AWG AND SMALLER, SOLID WIRE TYPE THW OR THHN/THWN-2, THHW(THHN FOR DRY LOCATION ONLY).

c. #1 AWG AND LARGER, STRANDED TYPE XHHW-2. 2. FEEDERS: TYPE THW OR THHN/THWN-2, OR XHHW-2.

24. CONTRACTOR SHALL PROVIDE C

b. #8 AWG TO #2 AWG, STRANDED TYPE THW OR THHN/THHW.

19. WIRING METHOD SHALL BE EMT ABOVE GROUND AND MOUNTED IN CONCEALED UNDERGROUND INSTALLATION. USE RIGID WHEN ENCASED IN CONCRETE

20. ALL SWITCH LOCATIONS ARE REQUIRED TO HAVE A NEUTRAL CONDU

JUCTORS AMONG SINGLE PHASE BRANCH 21. UNLESS OTHERWISE INDICATED, SHARING OF NEUTRAL/GROUN CIRCUITS OF DIFFERENT PHASES INSTALLED IN THE SAME RAC NOT PERMITTED. PROVIDE DEDICATED NEUTRAL/GROUNDED CONDUCTOR FOR EACH INDIVIDUAL BR

22. BASIS OF ELECTRICAL DESIGN LIMITS VOLTAGE DROP TO 2% CHANGES MADE IN THE FIELD SHALL LIMIT VOLTAGE DROP T DERS AND 3% FOR BRANCH CIRCUITS. ANY

23. BRANCH CIRCUIT CONDUITS SHALL BE CONCEALED IN WALL G SPACES. EXPOSED CONDUITS ARE NOT ALLOWED WHERE CONCEALED METHOMS ARE AVAILABLE. R ALL BRANCH CIRCUITS AND FEEDERS. FOR

CIRCUIT SIZES NOT SHOWN, P EL SCHEDULES FOR C AND CONDUIT SIZES. S IN WOOD ROOF DECKS, WALL, 25. EXACT ROUTING METHO TION OF CONDUIT PENETRATION OR IN FIELD. PERFORM CORIN FLOORS OR STRUCT EMBERS SHALL BE DETERMINED BY EFINISHING OF EXISTING WALLS AND SURF

AND CONDUITS R

L BE SEALED IN AN APPROVED METHOD TO MEE ARTICULAR WALL, FLOOR OR CELING. ALL FIRE SEALS S RETE WALLS AND SLABS FOR TH SENCE OF REBAR AND/OR TE WORK IS INVOLVED. CONTRA PROVIDE CERTIFICATION OF CALIBRATION OF NG EQUIPMENT PRIOR TO F

NUMBER

E0.1

E0.2

E1.1

SCOPE OF WORK:

ELECTRICAL LEGENDS AND NOTES

CONNECTING NEW PREFABRICATED RESTROOM BUILDING TO EXISTING ON SITE UTILITIES.

SINGLE LINE DIAGRAM

ELECTRICAL SITE PLAN

ENLARGED ELECTRICAL PLAN

IP SHALL CONFORM TO THE LATEST CALIFORNIA ELECTRICAL 26. IN ADDITION MATERIALS AND Y CODE OF RE ELECTRICAL CODE (CEC).

### AMPERE NATIONAL ELECTRICAL CODE AMPERE FRAME RATING (CIRCUIT BREAKER) NEMA NATIONAL ELECTRICAL MANUFACTURER'S ABOVE FINISHED FLOOR ABOVE FINISHED GRADE NEW ( AMPERE FUSE RATING (FUSE) AMPERE INTERRUPTING CAPACITY AMPERE SWITCH RATING (FUSE) AMPERE TRIP RATING (CIRCUIT BREAKER) AMERICAN WIRE GAUGE BKBD BACKBOARD NTS BLDG BUILDING BREAKER CONDUIT CIRCUIT BREAKER CIRCUIT COMBINATION FIRE SMOKE DAMPER CONDUIT ONLY POC CURRENT TRANSFORMER COPPER CENTERLINE DISC DISCONNECT DSBN DISTRIBUTION SECTION DOWN DWG DRAWING EACH ELECTRICAL CONTRACTOR **EMERGENCY** ELECTRICAL METALLIC TUBING EXIST, (E) EXISTING EXTERNAL OPERABLE DISCONNECT FUSE FIRE ALARM FACP FIRE ALARM CONTROL PANEL FINISHED FLOOR FINISHED GRADE FULL LOAD CURRENT CIRCUIT INTERRUPTER HORSE POW HIGH VOLTA INTERMEDI**A** IBUTION FRAME KILO VOLT-AMPERE ISTRIBUTION FRAME INUOUS LOAD MOTOR CONTROL CENTER MANHOLE / METAL HALIDE METER AND MAIN SECTION MULTI-METER SECTION SHOWN ON PLAN MEDIUM VOLTAGE (NL) NEW LOCATION OF RELOCATED DEVICE NORMALLY CLOSED SHEET LIST TABLE

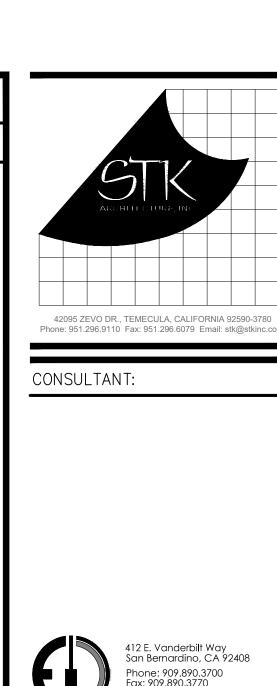
**ABBREVIATIONS** 

# SHEET TITLE

MA	NATIONAL ELECTRICAL MANUFACTURER'S		
-147 (41)	ASSOCIATION		NELBOARD, WALL MOUNTED, SEE PLANS AND SCHEDULE. (SURFACE MOUNTED)
W (N)	NEW, TO BE FURNISHED AND INSTALLED BY		BRAN ARD, WALL MOUNTED, SEE PLANS AND SCHEDULE. (RECESSED MOUNTED)
	CONTRACTOR		RD, WALL MOUNTED, SEE PLANS AND SCHEDULE. (RECESSED MOUNTED)
i	NON-FUSED		MAIN SWITE OWER OR LIGHT, FLOOR STANDING ENCLOSURE, (SEE SINGLE LINE
0	NOT IN CONTRACT	<i>\//////</i>	DIAGRAM AND MARY)
_	NIGHT LIGHT		DISCONNECT SWI
)	NUMBER, NORMALLY OPEN		APPROVED MANUF. SHOP DRAWINGS.
S	NOT TO SCALE		MOUNTING HEIGHT FA
	ON CENTER	+96" OR 7'-6" AFF	LIGHT FIXTURES, IT IS
)	OUTSIDE DIAMETER		
	POLE		CONDUIT STUBBED A
}	PULL BOX		
	POWER FACTOR		CONDUIT CONCE UNDER FLOOR, 3/4" UON, COORDINATE WITH G.C.: OR, BURIAL
IL	PANEL	_	CONDUIT UND IN SCHEDULE - 40 PVC UNLESS NOTED OTHERWISE. VERIFY DEPTH AND TRENC
C	POINT OF CONNECTION		AND TRENC
•	POWER POLE	$\bigcap$ D <sub>k</sub>	DET/
VR	POWER	SHEÈ	
'C	CHLORIDE	EQUIPMENT	ANT REFERENCE
		ID. No.	THE EXERCE
	QUAN		
	RIGID GAL		1" U.O.N HOMERUN TO CIRCUITS #1 AND #3 IN PANEL "A". (CROSSMARKS
1C	RIGID META		INDICATE NUMBER OF PHASES AND NEUTRAL. PROVIDE GROUND WIRE.)
1	ROOM		'
IC	RIGID NON		GROUND WELL
iT	SHEET	Γ <b>-</b>	EVIOTINO (DAGLI INDIGATEO) EL FOTDIGAL FOLIDMENT
 J	SOL	L	EXISTING (DASH INDICATES) ELECTRICAL EQUIPMENT
EC	IONS		
	ione		
	CHBOARD		MOLDED CASE CIRCUIT BREAKER
	IME CLOCK		
	TLEPHONE		
:RM	VNAL	<u> </u>	
IT IVI	RY POLE		SWITCH AND FUSE ASSEMBLY
P	RYPOLE	<b>│</b>	
		'	
SPS	UND		
	UNDERV. ORY UNINTERRO. WER SUPPLY	<b>→</b>	UTILITY COMPANY PULL SECTION LUGS
PS		'	
ON	UNLESS OTHER SE NOTED	$\bar{\tau}$	GROUNDING CONNECTION TO MAIN BUILDING GROUND SYSTEM U.O.N.
	VOLT, VOLTAGE	N	
١	VOLT-AMPERE	G $\rightarrow$	GROUNDING CONNECTION AT SWITCHGEAR/DISTRIBUTION BOARD WITH NEUTRAL BONDING.
.C	VARIABLE FREQUENCY CONTROLLER	1 7 1	
D	VARIABLE FREQUENCY DRIVE	I	
	WATT	M	IN-LINE UTILITY COMPANY METER
H	WATT-HOUR	Y	
-	WEATHERPROOF	<b>€M</b>	UTILITY METER WITH CIRCUIT TRANSFORMERS (CT'S) METER
W	WIREWAY		
)	EXPLOSION PROOF	TRANS. "T-X"	
	IMPEDANCE	300 KVA PRI:480V Δ	TRANSFORMER WITH SECONDARY GROUND. REFER TO SINGLE LINE DIAGRAM FOR KVA RATING
		T OR SEC:208Y/120	AND GROUNDING REQUIREMENTS.
	EQUID WIDE	$ \subseteq$ GND.	
V	FOUR-WIRE	↓ = GIND.	
V	THREE-WIRE		
i	JUNCTION BOX	(200-Y)	CONDUIT WIRING DESCRIPTION PER FEEDER SCHEDULE ON OTHER PLAN
	(4 11/16" SQUARED X2 1/8" DEEP)		
	DIAMETER, PHASE	PB	CONCRETE ELECTRICAL PULL BOX WITH LID APPROPRIATE FOR INSTALLATION LOCATION. LID
	NUMBER		SHALL BE LABELED "ELECTRICAL" OR "COMM" ACCORDING TO USE.
	DEGREE CELSIUS		
)	EXISTING DEVICE TO REMAIN		APPLICABLE CODES
)	REMOVE EXISTING DEVICE AND ASSOCIATED	<b>—</b>	
	CONDUIT AND WIRE	1. 2022 BUILDING	STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
L)	REMOVE EXISTING DEVICE AND RELOCATE AS		
	SHOWN ON PLAN	2. 2022 CALIFORN	IA BUILDING CODE (CBC),PART 2, TITLE 24 C.C.R. (IBC WITH AMENDMENTS)
١ /	NEWLOCATION OF BELOCATED DEVICE		

POWER LEGEND AND SYMBOLS

DESCRIPTION



DESIGN WEST ENGINEERING MECHANICAL • ELECTRICAL • ENERGY CONSULTANTS

SAN BERNARDINO COUNTY PROJECT AND FACILITIES MANAGEMENT DEPARTMENT

PROJECT ADMINISTERED BY:

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

**MOJAVE NARROWS** 

REGIONAL PARK DRY CAMPSITE ACCESSIBLE RESTROOMS

PROJECT #10.10.1402

18000 YATES ROAD VICTORVILLE, CA 92392

2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (NEC WITH AMENDMENTS)

4. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (UMC WITH AMENDMENTS)

2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (UPC WITH AMENDMENTS)

6. 2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (IFC WITH AMENDMENTS)

2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.

8. 2022 TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

10. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSG), PART 11, TITLE 24 C.C.R.

9. 2022 CALIFORNIA ENERGY CODE (PART 6, TITLE 24 C.C.R.)

# NOTE TO CONTRACTOR

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

ISSUE INFORMATION: INFORMATION:

> SHEET INFORMATION: STK PROJECT NO.: 374-166-22 SCALE: AS NOTED DATE: PLOT DATE: DRAWING NAME:

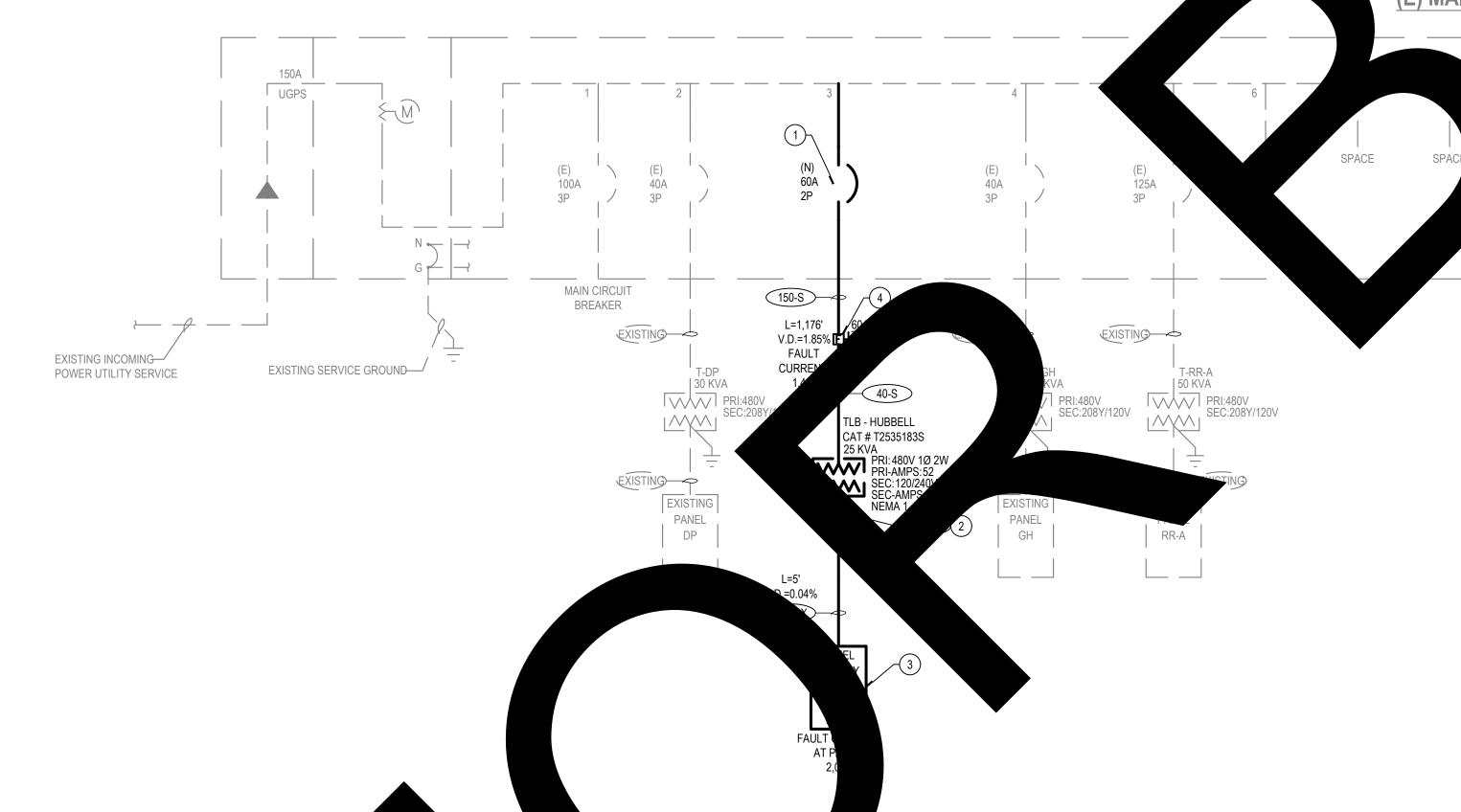


ELECTRICAL **LEGENDS AND NOTES** 

### (E) MAIN SW OARD 'DP2'

V 3Ø 4W 30KAIÇ

SPACE



600	V FEEDE	3W - XFMP				
LABEL	TYPE	SETS	PHASE			CONDU
30-BX	30A-4W	1	2 # 10		1#8	3/4"
50-BX	50A		2#6	1#6	1#8	1"
70-BX		1	2 # 4	1 # 4	1#8	1-1/4"
100-BX		1	2 # 1	1 # 1	1#6	1-1/2"
125-BX	A-4W	1	2 # 1	1 # 1	1#6	1-1/2"
₹	150A-4W	1	2 # 1/0	1 # 1/0	1 # 4	2"
	200A-4W	1	2 # 3/0	1 # 3/0	1#4	2"
C.	225A-4W	1	2 # 4/0	1 # 4/0	1 # 2	2 1/2"
300-1	30A-4W	1	2 # 350 KCM	1 # 350 KCM	1 # 2	3"
400-BX	W	1	2 # 600 KCM	1 # 600 KCM	1 # 1/0	3 1/2"
600-BX		2	2 # 350 KCM	1 # 350 KCM	1 # 2/0	3"
(1000-BX)	100	3	2 # 500 KCM	1 # 500 KCM	1 # 4/0	3 1/2"
(1200-BX)	1200A	3	2 # 600 KCM	1 # 600 KCM	1 #250 KCM	4"

ALL CONDUCTOR SIZES ARE BASED ON TYPE THHN COPPER CONDUCTOR UNLESS OTHERWISE NOTED. THE AMPACITY OF CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C FOR CONDUCTOR SIZE #14 THROUGH #1 AWG OR 75°C FOR CONDUCTOR SIZE OVER #1 AWG AS PER NEC 110.14(C). GROUNDING CONDUCTOR SIZED PER TABLE 250.102(C)(1) FOR SEPARATELY DERIVED SYSTEMS.

600V FEEDER SCHEDULE 1Ø 2W								
LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT		
20-S	20A-2W	1	2 # 12	N/A	1 # 12	3/4"		
30-S	30A-2W	1	2 # 10	N/A	1 # 10	3/4"		
40-S	40A-2W	1	2#8	N/A	1 # 10	1"		
50-S	50A-2W	1	2#6	N/A	1 # 10	1"		
60-S	60A-2W	1	2#6	N/A	1 # 10	1"		
70-S	70A-2W	1	2#4	N/A	1#8	1"		
80-S	80A-2W	1	2#3	N/A	1#8	1-1/4"		
90-S	90A-2W	1	2#2	N/A	1#8	1-1/4"		
100-S	100A-2W	1	2#1	N/A	1#8	1-1/4"		
125-S	125A-2W	1	2#1	N/A	1#6	1-1/2"		
150-S	150A-2W	1	2 # 1/0	N/A	1#6	1-1/2"		
175-S	175A-2W	1	2 # 2/0	N/A	1#6	2"		
200-S	200A-2W	1	2 # 3/0	N/A	1#6	2"		

ALL CONDUCTOR SIZES ARE BASED ON TYPE THHN COPPER CONDUCTOR UNLESS OTHERWISE NOTED. THE AMPACITY OF CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C FOR CONDUCTOR

SIZE #14 THROUGH #1 AWG OR 75°C FOR CONDUCTOR SIZE OVER #1 AWG AS PER NEC 110.14(C).

### G.E.C. SCHEDULE CONDUCTOR 110A-200A #4

3-GEC	225A-400A	#1/0	1"				
4-GEC	> 400A	#3/0	1-1/4"				
NOTE:							
ALL GROUNDING ELECTRODE CONDUCTOR SIZES ARE BASED ON BARE							

COPPER CONDUCTOR UNLESS OTHERWISE NOTED AND SIZE PER CEC TABLE

# **GENERAL NOTES**

- REFER TO 'GENERAL NOTES' ON ELECTRICAL LEGENDS AND NOTES SHEET FOR WIRING METHODS, MATERIALS, AND REQUIREMENTS.
- 2. ALL CIRCUIT BREAKERS, PANELBOARDS AND TRANSFORMERS SHALL BE OF THE SAME MANUFACTURER.
- 3. ALL GROUND CONNECTIONS SHALL BE CADWELD.
- AVAILABLE FAULT AT SERVICE POINT SHALL BE CONSIDERED AT 30,000
- L PANELBOARDS SHALL BE FULLY RATED FOR THE AVAILABLE FAULT
- ILESS OTHERWISE NOTED. FEEDER LENGTHS SHOWN ON THESE DRAWINGS ARE FOR
- LCULATION PURPOSES ONLY AND ARE NOT VALID FOR BIDDING. L SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS AT OTHER HAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT PER CEC 110.24. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT-CURRENT

CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY

TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE THE SYSTEM. WHEN MODIFICATIONS TO THE ELECTRICAL INSTALLATION OCCUR THAT AFFECT THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE, THE MAXIMUM AVAILABLE FAULT CURRENT SHALL BE VERIFIED OR RECALCULATED AS NECESSARY TO ENSURE THE SERVICE EQUIPMENT RATINGS ARE SUFFICIENT FOR THE MAXIMUM AVAILABLE FAULT CURRENT AT THE LINE TERMINALS OF THE EQUIPMENT. THE REQUIRED FIELD MARKING(S) IN 110.24(A) SHALL BE ADJUSTED TO REFLECT THE NEW LEVEL OF MAXIMUM AVAILABLE

FAULT CURRENT.

- B. EQUIPMENT DATA AND CONFIGURATIONS SHOWN ON THE SINGLE LINE DIAGRAM PROVIDE GENERAL EQUIPMENT INFORMATION. CONTRACTOR SHALL REVIEW ELECTRICAL PLANS AND SPECIFICATIONS TO VERIFY ALL EQUIPMENT ASSOCIATED DESIGN INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY COMPONENTS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. ANY DISCREPANCIES BETWEEN DESCRIPTIONS, SPECIFICATIONS, AND EXISTING CONDITIONS ARE TO BE PRESENTED TO THE ENGINEER OF RECORD PRIOR TO COMPLETION OF THE BID PROCESS FOR CLARIFICATION. NO EQUIPMENT SHALL BE ORDERED UNTIL DISCREPANCIES ARE RESOLVED THROUGH A FORMAL RFI PROCESS.
- 9. GROUND ALL ELECTRICAL EQUIPMENT, BRANCH CIRCUITS, FEEDERS, PANEL AND DISTRIBUTION BOARDS, ELECTRICAL SERVICES, ETC. PER ADOPTED NEC ARTICLES 250.
- 10. ALL ELECTRICAL EQUIPMENT (I.E. SWITCHGEAR, TRANSFORMERS, DISTRIBUTION BOARDS, PANELBOARDS, DISCONNECT SWITCHES, ETC.) SHALL BE PROVIDED WITH A PHENOLIC NAMEPLATE WITH ENGRAVED LETTERS PER SPECIFICATIONS. ALL NAMEPLATES SHALL BE FASTENED WITH A MINIMUM OF TWO (2) MACHINE SCREWS. NO SELF ADHESIVE NAMEPLATES ARE ALLOWED.
- 1. ANY FLOOR-STANDING ELECTRICAL EQUIPMENT (I.E. INVERTERS, DISTRIBUTION BOARDS, SWITCHBOARDS, ATS SWITCHES, MOTOR CONTROL CENTERS, ETC.) WHICH ARE MOUNTED AT/BELOW GRADE AND/OR SUSCEPTIBLE TO WATER DAMAGE SHALL BE MOUNTED ON A MINIMUM 4" HIGH HOUSEKEEPING PAD WHICH EXTENDS 4" BEYOND EQUIPMENT IN ALL DIRECTIONS.
- 12. ELECTRICAL CONTRACTOR TO INCLUDE IN BID ALL ASSOCIATED COSTS FOR THIRD PARTY TESTING OF ELECTRICAL EQUIPMENT, GROUND FAULT, CONDUCTORS, ETC.
- 13. CONTRACTOR SHALL FURNISH AND INSTALL MISSING FILLER PLATES IN PANELBOARD/SWITCHBOARD THAT IS BEING REUSED.
- 14. ALL CONDUCTOR TERMINATIONS SHALL BE TIGHTENED TO MANUFACTURER RECOMMENDATIONS USING AN APPROVED MEANS.
- 15. ALL ELECTRICAL EQUIPMENT SHALL BE IDENTIFIED WITH NAMEPLATES, REFER. TO SPECIFICATIONS. IN ADDITION, EACH DISCONNECT MUST BE MARKED TO IDENTIFY ITS PURPOSE AND INCLUDE IDENTIFICATION OF CIRCUIT SOURCE THAT SUPPLIES DISCONNECTING MEANS. (110.22)

# **CONSTRUCTION NOTES**

- PROVIDE NEW CIRCUIT BREAKER IN EXISTING DISTRIBUTION PANEL BOARD. TYPE TO MATCH EXISTING. AIC RATING TO BE GREATER THAN AVAILABLE FAULT CURRENT.
- (1)#6 CU. BOND TO DRIVEN GROUND ROD, SIZED PER NEC TABLE
- 3 ) NEW PANELBOARD TO BE SUPPLIED AS PART OF PREFAB RESTROOM
- (4) PROVIDE DISCONNECT TO CONNECT TO LARGE SIZE CONDUCTOR OR REDUCER TO CONNECT LARGER SIZED CONDUCTOR TO DISCONNECT.

	<b>5</b>	IRA-, INC	
42095 ZEVO Phone: 951.296.	DR., TEMECU 9110 Fax: 951		

CONSULTANT:



DESIGN WEST ENGINEERING MECHANICAL • ELECTRICAL • ENERGY CONSULTANTS

PROJECT ADMINISTERED BY: SAN BERNARDINO COUNTY

PROJECT AND FACILITIES

MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE. SAN BERNARDINO, CA 92415

PROJECT NAME:

MOJAVE NARROWS REGIONAL PARK DRY CAMPSITE ACCESSIBLE RESTROOMS

PROJECT #10.10.1402

18000 YATES ROAD

VICTORVILLE, CA 92392

ISSUE INFORMATION:

SHEET INFORMATION: STK PROJECT NO.: 374-166-22 AS NOTED

SCALE: DATE: MARCH 2023 PLOT DATE: DRAWING NAME:



SINGLE LINE DIAGRAM

E0.2

SINGLE LINE DIAGRAM

